

January 30, 2023

Ms. Sherrel Henry Remedial Project Manager U.S. Environmental Protection Agency 290 Broadway – 20<sup>th</sup> Floor New York, New York 10007-1866

Re: Peter Cooper Markhams Site, Dayton, NY September 2022 Post-Remedial Groundwater Monitoring Event

**REVISED JUNE 9, 2023** 

Dear Ms. Henry:

On behalf of the cooperating Potentially Responsible Parties (cPRPs) for the above-referenced site, Benchmark Civil/Environmental Engineering & Geology, PLLC (Benchmark), has prepared this letter report to transmit the results of the September 2022 post-remedial groundwater monitoring event at the Peter Cooper Markhams Site in Dayton, New York (see Figure 1). A site maintenance summary is also included in this report. The work was performed in accordance with our approved (June 2009) Post-Remedial Operation, Maintenance and Monitoring (OM&M) Plan. Groundwater and surface water monitoring requirements are presented on Table 1.

#### FIELD SAMPLING PROCEDURE

On September 30<sup>th</sup>, 2022, Benchmark staff collected a round of static water level measurements from the seven monitoring wells shown on Figure 2; measurements and groundwater elevations are summarized on Table 2. Groundwater samples were collected from on-site monitoring wells MW-5S, MW-7S, MW-8S, and MW-9S and Wetland F.

The monitoring wells were sampled using a Mini-Typhoon® submersible pump and dedicated PVC tubing in accordance with low-flow groundwater purging procedures. Field measurements for pH, Eh, specific conductance, temperature, turbidity, and visual/olfactory observations were recorded and monitored for stabilization. Purging was considered complete when pH, specific conductivity, and temperature stabilized, and the turbidity measured below or stabilized above 50 NTU. Stability is defined as the variation between field measurements of 10 percent or less with no overall upward or downward trend in the measurements. Once the field parameters stabilized, groundwater samples were collected and analyzed for the parameters presented on Table 1. The submersible pump was decontaminated using Alconox and water following sample collection activities at each well. Wetland sample F was obtained by dipping a laboratory-provided unpreserved sample container into the water column.

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Attachment 1 includes sample collection logs. All water samples were transferred to laboratory supplied, pre-preserved sample containers and transported under chain-of-custody command to Eurofins Test America Laboratories for analysis in accordance with Table 1.

#### **ANALYTICAL RESULTS**

Attachment 2 includes the laboratory analytical data for the September 30<sup>th</sup>, 2022, sampling event. Routine parameters detected above method detection limits are shown on Table 3 with their associated sample concentrations. NYSDEC Groundwater Quality Standards and Guidance Values (GWQS/GV; TOGS 1.1.1, June 1998) are presented for comparison. Concentrations exceeding the GWQS/GVs are highlighted.

As indicated on Table 3, sample concentrations were reported as non-detect or below GWQS/GV at all the monitored locations with the exceptions of: total manganese and ammonia at MW-5S; total iron at MW-7S, and total manganese and total iron at Wetland F.

#### **HISTORICAL DATA**

Table 3 includes routine groundwater monitoring results for past monitoring events. Charts showing trending of the monitored parameters (excluding arsenic, hexavalent chromium and sulfide, which are consistently reported as non-detect or only sporadically at all locations) are presented in Attachment 3. In general, the data indicate similar concentrations for the monitored parameters at each of the sampling locations, with no apparent trending except for an increase in ammonia at MW-5S. No other parameters have shown similar trending at MW-5S, which is in a topographically low area where significant leaf accumulation/decay has been observed and the groundwater elevation is within a few inches of ground surface.

#### **DATA QUALITY**

Site-specific quality control (QC) sampling during each event included the collection of one blind duplicate sample (collected from MW-5S) and one matrix spike/matrix spike duplicate (MS/MSD) sample (collected from MW-9S) for total metal analysis only. Recoveries for the MS/MSDs were within the acceptable ranges with good reproducibility. Blind duplicate results correlated well with MW-5S results.

#### **GROUNDWATER ELEVATION DATA**

Groundwater monitoring includes a round of static water level measurements from seven monitoring wells across the site. Table 2 includes groundwater elevation data for the 2022 monitoring year. An isopotential map representing the shallow groundwater was prepared from the September 30<sup>th</sup>, 2022, depth-to-groundwater measurements and is presented as Figure 2. Based on those measurements, the inferred groundwater flow directions indicate that shallow groundwater migrates to the west towards wetland F, which is consistent with observations recorded during the site Remedial Investigation.



#### ANNUAL MAINTENANCE SUMMARY REPORT

Post remedial site inspections have been performed during each groundwater monitoring event since June 2009. The September 2022 site inspection indicated no irregularities or changes to the property access or security. The final cover system appears in good condition, with the gas vent monitoring system intact and operational. Overgrown vegetation near and along access paths to the monitoring well locations was cut on September 30<sup>th</sup>, 2022 and will be mowed again prior to the next sampling event summer early fall of 2023. A copy of the Field Inspection Form including a photolog is provided in Attachment 4.

#### **CONCLUSIONS**

The groundwater monitoring data and site inspection yielded no evidence of significant impact from leaching from the containment cell area into the water table. In addition, no toxic metals (arsenic, chromium, hexavalent chromium) were detected above their representative GWQS/GVs at any of the sample locations. Accordingly, the data indicate that the implemented remedy at the Site remains protective of public health and the environment.

More specifically, the 2022 groundwater monitoring data compared to prior events indicate that there have been no significant changes in groundwater flow or groundwater quality attributable to the landfill. Although groundwater at MW-5S indicates levels of ammonia slightly above the GWQS/GVs standard since 2015, no other monitored parameters have shown similar trending. It is noted that groundwater elevations at MW-5S are close to grade, and the elevated ammonia levels detected in MW-5S may be attributed to the decaying of organic matter from surrounding trees and leaf debris.

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

Att.

Cc: M. Joy

R. Biltekoff W. D'Angelo

M. Kuczka (NYSDEC)



## **TABLES**





# TABLE 1 MONITORING PROGRAM REQUIREMENTS

#### September 2022 Monitoring Event Peter Cooper Markhams Site Dayton, New York

							Param	eters				
Sample Location	Frequency	DTW	Field 1			Total Metals <sup>2</sup>	2			Water	Quality	
Location		DIW	Field	As	Cr	Hex. Cr.	Mn	Fe	Ammonia	Nitrate	Alkalinity	T. Sulfide
Groundwater												
MW-2SR (cross-gradient)		Х										
MW-4S		Х										
MW-5S		Х	Х	Х	Χ	Х	Χ	Х	Х	Х	Х	Х
MW-6S	15-month	Х										
MW-7S		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
MW-8S		Х	Х	Х	Х	Х	Х	Х	Х	Χ	Х	Х
MW-9S (upgradient)		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Surface Water												
Wetland F (surface water)	15-month		Х	Х	Х	Х	Х	Х	Х	Χ	Х	Х
QA/QC Samples <sup>3</sup>												
Blind Duplicate				Х	Х	Х	Х	Х				
Matrix Spike	15-month			Х	Х	Х	Х	Х				
Matrix Spike Duplicate				Х	Х	Х	Χ	Х				

#### Notes:

- 1. Field measurements include: pH, temperature, specific conductance, turbidity, Eh
- 2. If field measured turbidity is greater than 50 NTU, dissolved metals will also be collected.
- 3. QA/QC samples will be collected at a frequency of 1 per 20 for each matrix.
- 4. DTW = depth to water



#### **TABLE 2**

# SUMMARY OF GROUNDWATER ELEVATIONS 9/30/22

# Monitoring Event Peter Cooper Markhams Site Dayton, New York

Location	TOR Elevation (fmsl)	DTW (fbTOR)	GWE (fmsl)
MW-2SR	1313.33	6.41	1306.92
MW-4S	1313.11	9.58	1303.53
MW-5S	1302.70	3.13	1299.57
MW-6S	1315.47	14.32	1301.15
MW-7S	1312.82	12.62	1300.20
MW-8S	1304.10	4.48	1299.62
MW-9S	1314.13	5.80	1308.33

#### Notes:

- 1. DTW = depth to water
- 2. fbTOR = feet below top of riser
- 3. fmsl = feet above mean sea level
- 4. GWE = groundwater elevation
- 5. TOR = top of riser



#### TABLE 3

#### SUMMARY OF GROUNDWATER ANALYTICAL RESULTS 1,2

												Мс	nitorin	g Locat	ion and	Sampl	e Collec	ction Da	ate												
Parameter															MW	-5S															GWQS 4
	04/2	5/02	06/1	9/09	12/3	80/09	05/2	8/10	06/2	2/11	06/2	6/12	06/2	24/13	06/2	4/14	10/2	7/15	10/2	26/16	10/2	0/17	10/1	9/18	02/0	5/20	06/2	23/21	09/3	30/22	
Field Measurements 3:																															
Sample No.	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	-
pH (units)		6.81	6.75	6.78	6.58	6.68	6.80	6.86	6.90	7.00	6.88	6.88	6.89	6.92	7.12	7.13	6.92	6.92	6.69	6.70	6.91	6.88	6.89	7.12	6.94	6.92	6.86	6.98	6.75	6.78	6.5 - 8.5
Temperature (°C)		7.14	11.4	11.7	6.3	6.2	14.3	14.9	14.2	14.5	12.8	13.2	12.9	13.3	12.8	13.6	12.3	12.3	12.7	12.7	13.8	13.7	13.2	12.1	4.4	4.3	12.1	13.1	13.2	13.2	NA
Sp. Conductance (mS)		822	1004	993	1099	1090	985	966	1035	1029	1005	1008	955	941	986	974	1041	1048	1050	1062	947	949	1207	1234	879	908	992	978	1092	1111	NA
Turbidity (NTU)		2	4.6	2.4	2.9	2.9	37	5.47	4.29	3.11	4.04	3.42	9.82	5.32	8.77	6.79	5.53	5.53	4.39	2.77	1.96	1.53	10	6	31.5	25	8.91	1.4	7.84	7.8	NA
Eh (mV)		67.3	69	70	-29	-20	-38	21	-9	15	15	30	105	100	150	130	59	82	108	100	155	154	70	88	135	130	230	286	232	232	NA
Wet Chemistry (mg/L):																															
Alkalinity, Total	N	IA	538	3 D	47	0 D	47	1 D	4	78	47	73	4	74	4	39	5	18	4	86	51	11	51	17	45	3 B	4	69	6	614	NA
Ammonia	N	ID	N	ID	0.0	047	N	ID	N	ID	0	2	0.	13	0	.4	1	.2	3	3.5	3	.6	6	.5	13	2.9	17.	.2 B	2	0.4	2
Nitrate (as Nitrogen)	2	.8	0.2	271	0.3	347	0.443	3 CF6	N	ID	0.:	23	1	.2	N	D	1	.4	1-	4.1	1	.2	0.	43	13	2.7	1	.9	0.	.12	10
Total Inorganic Compounds (	mg/L):																														
Chromium	N	ID	0.0	056	N	1D	N	ID	0.0	064	0.0	05	0.0	051	0.0	047	0.0	042	0.0	0054	N	D	0.0	004	0.0	004	0.0	042	0.0	0044	0.05
Manganese	N	IA	1.	61	1.	.45	1.	50	1.	80	1.	.6	1	.7	2	.6	2	.3	2	2.2	1	.9	2	.2	4	.5	2.	5 B	2.	3 B	0.3
Iron	N	IA	0.4	108	0.	128	0.5	508	0.	560	0	2	0.0	053	0.	41	0.	49	0	.17	0.0	91	0.	16	1	.2	0.	.59	0.0	02 J	0.3
Soluble Inorganic Compound	ls (mg/L):																														
Chromium	N	IA	N	IA	١	1A	N	IA	N	IA	N	A	N	IA	N	IA	N	Α	١	NΑ	N	Α	0.0	004	l l	IA.	١	NΑ	١	NΑ	0.05
Manganese	N	IA	N	IA	N	1A	N	IA	N	IA	N	A	N	IA.	١	IA	N	Α	١	NΑ	N	Α	1	.6	N	IΑ	١	lΑ	N	NΑ	0.3

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- Definitions:

  B = Compound was found in the blank and sample.

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  ND = Parameter was not detected above laboratory reporting limit.

  D = Dilution required due to high concentration of target analyte(s).

  P = Sample filtered in the laboratory

  - CF6 = Results confirmed by reanalysis.



#### TABLE 3 (continued)

#### SUMMARY OF GROUNDWATER ANALYTICAL RESULTS 1,2

																			<u> </u>												
													Monitor	ing Loc			pie Coil	ection	Date												1
Parameter															M	W-7S															GWQS ⁴
	04/24	4/02	06/1	9/09	12/3	80/09	05/2	8/10	06/2	2/11	06/2	6/12	06/2	4/13	06/2	4/14	10/2	7/15	10/2	26/16	10/2	20/17	10/1	19/18	02/0	5/20	06/2	3/21	09/3	0/22	
Field Measurements 3:																															
Sample No.	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	-
pH (units)		6.80	6.74	6.79	6.77	6.82	6.79	6.78	6.31	6.41	6.80	6.78		7.23	7.06	7.05	7.02	7.03	6.91	7.00	7.05	7.07	7.04	(5)	7.03	7.01	6.95	6.96	6.92	6.93	6.5 - 8.5
Temperature (°C)		8.77	9.6	10.1	5.4	7.7	15.0	15.1	13.7	13.4	9.8	9.7		12.8	13.10	12.9	11.00	11.1	10.60	10.5	11.70	12.7	11.00	(5)	7.4	7.6	14.8	13.9	11.4	11.3	NA
Sp. Conductance (mS)		1959	1753	1754	1804	1799	1687	1785	1771	1660	1786	1776		1632	1648	1621	1612	1619	1595	1603	1498	1492	1715	(5)	1349	1375	1327	1340	1331	1330	NA
Turbidity (NTU)		12.4	>1000	180	405	537	190	27	96.8	40.4	47.6	49.4	-	32.3	443	80	120	40.1	778	351	16.9	8.12	586	(5)	365	205	71	70	38.6	33.7	NA
Eh (mV)		170	-56	-62	-62	-64	-83	-114	-86	-92	-63	-66		-26	-25	-41	-60	-60	-36	-36	-84	-92	-61	(5)	-9	-10	-40	-38	50	43	NA
Wet Chemistry (mg/L):																															
Alkalinity, Total	N/	A	519	) D	580	6 D	44	6 D	43	38	4:	37	4	10	4	48	43	31	43	34	43	39	39	91	43	8 B	39	8 B	43	32	NA
Ammonia	NI	D	0.0	063	0.	119	0.03	9 C	N	D	N	D	0.0	031	0.0	69	0.	02	0.0	033	N	ID	0	1.2	0	.2	0.01	8 JB	0.0	15 J	2
Nitrate (as Nitrogen)	NI	D	N	ID	N	1D	N	ID	N	D	N	D	N	ID	N	D	N	ID	N	1D	N	ID	N	1D	0.0	)3 J	0.0	13 J	0	.2	10
Total Inorganic Compounds (I	mg/L):																														
Chromium	NI	D	0.0	055	0.0	050	0.0	046	0.0	056	0.0	057	0.0	053	N	D	N	ID	0.0	051	N	ID	0.0	082	0.0	082	0.00	134 J	0.00	31 J	0.05
Hexavalent Chromium	NI	D	N	ID	N	1D	N	ID	N	D	N	D	N	D	N	D	N	ID	N	1D	N	ID	N	1D	N	ID	N	D	0.0	06 J	0.05
Manganese	N/	Α	0.2	264	0.4	428	0.2	213	0.2	200	0.2	100	0.	19	0.	24	0.	19	0.	.23	0.	18	0.	.39	0.	26	0.2	1 B	0.1	7 B	0.3
Iron	N/	A	10	04	83	3.3	17	7.8	25	5.0	17	7.8	14	<b>1.1</b>	1:	29	1	7	61	1.1	10	0.3	2:	37	2	25	3	2	10	1.9	0.3
Soluble Inorganic Compounds	s (mg/L):																														
Chromium	N/	A	0.00	)5 P	0.0	05 P	0.0	043	0.0	056	N	Α	N	IA	0.0	044	N	ID	N	1D	N	IA	N	ID.	0.0	03 J	N	ID	N	A	0.05
Manganese	N.	A	0.20	06 P	0.1	86 P	0.1	193	0	.2	N	Α	N	IA	0.	19	0.	17	0	).2	N	IA	0.	.17	0	.2	N	IA	N	A	0.3
Iron	N/	A	N	ID	N	1D	10.8	CF6	10	).2	N	A	N	IA	9	.8	8.	.3	1	10	N	IA	7	'.5	0.	43	N	IA	N	Α	0.3

- Only those compounds detected above the method detection limit at a minimum of one sample event are reported in this table.
   Shaded and bolded values represent an exceedance of the GWQS/GV.
- Field measurements were collected immediately before and after groundwater sample collection.
   NYSDEC Class "GA" Groundwater Quality Standards (GWQS) per 6 NYCRR Part 703.
- 5. Surface water was more turbid at time of metals collection.

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  J = Estimated value
  B = Compound was found in the blank and sample.
  NA = Not analyzed
  ND = Parameter was not detected above laboratory reporting limit.
- D = Dilution required due to high concentration of target analyte(s).
  P = Sample filtered in the laboratory
- CF6 = Results confirmed by reanalysis.



#### TABLE 3 (continued)

#### SUMMARY OF GROUNDWATER ANALYTICAL RESULTS 1,2

												Me	onitorin	g Locat	ion and	l Samp	e Colle	ction D	ate												
Parameter															MW	/-8S															GWQS 4
	04/2	3/02	06/1	9/09	12/	30/09	05/2	8/10	06/2	2/11	06/2	6/12	06/2	24/13	06/2	24/14	10/2	7/15	10/2	26/16	10/2	0/17	10/1	9/18	02/2	20/20	06/2	23/21	09/3	30/22	
Field Measurements 3:																															
Sample No.	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	-										
pH (units)		6.90	6.90	6.92	6.65	6.70	7.04	6.25	6.67	6.72	6.89	6.97	7.01	7.01	7.27	7.17	6.96	6.95	6.82	6.73	7.00	6.97	6.88	7.32	7.27	7.14	7.04	7.12	6.90	6.90	6.5 - 8.5
Temperature (°C)		7.6	11.5	12.2	6.9	6.9	16.1	12.7	13.5	14.3	12.0	12.8	13.9	14.3	13.0	14.0	12.9	13.2	12.4	12.5	14.1	14.5	13.4	12.7	4.8	5.2	11.3	11.8	13.9	15.1	NA
Sp. Conductance (mS)		755	754	764	767	767	653	635	886	879	822	809	700	691	781	766	811.5	817.4	894.0	892.0	759.3	773.6	811.0	823.0	575.7	593.5	627.0	595.0	698.8	692.1	NA
Turbidity (NTU)		17	32	22	30	19	63	5.38	34.6	20	11.3	7.96	8.52	4.88	12.3	5.97	9.17	10.8	6.81	4.96	4.85	6.11	9	9	52.1	27.8	2.92	2.22	12.4	11.6	NA
Eh (mV)		4.6	80	81	7	15	21	41	48	59	4	72	92	84	162	183	81	102	108	106	133	124	68	77	104	96	241	218	211	198	NA
Wet Chemistry (mg/L):																															
Alkalinity, Total	N	IA	291	1 D	28	5 D	30	) D	3	55	3	72	2	66	2	86	3	35	4	26	39	96	34	48	30	3 B	2	84	3	67	NA
Ammonia	0.	34	0.0	)38	0	.04	0.0	)42	0.0	28	N	ID	١	ID	N	ID	N	ID	N	ID	N	D	N	ID	١	۱D	N	1D	l,	ND	2
Nitrate (as Nitrogen)	14	1.6	9.4	8 D	0.	543	1.	98	2	.3	3	.8	€	.4		7		4	N	ID	0.	54	0.	82	6	6.9	8	3.8	0	.16	10
Total Inorganic Compounds	mg/L):																														
Chromium	N	ID	N	ID	1	ND	N	ID	0.0	093	0.0	044	N	D	N	ID	N	ID	0.0	042	N	D	N	ID	0.0	026 J	0.00	016 J	0.00	023 J	0.05
Hexavalent Chromium	N	ID	N	ID	1	ND	N	ID	N	D	N	ID	N	D	N	ID	N	ID	N	ID	N	D	N	ID	0.0	059 J	N	1D	1	ND	0.05
Manganese	N	IA	19	9.6	1	.54	2.	34	14	.30		6	1	.4	1	.7	1	.5	1	.9	0.	64	0.	61	0	.37	0.2	28 B	1.	1 B	0.3
Iron	N	IA	1.	93	1	ND	0.0	088	0.	61	0.	15	١	ID	0.	15	0.	11	0.0	097	N	D	0.	12	0	.91	0.0	47 J	0.	079	0.3

- Notes:

  1. Only those compounds detected above the method detection limit at a minimum of one sample event are reported in this table.
- 2. Shaded and bolied values represent an exceedance of the GWQS/GV.

  3. Field measurements were collected immediately before and after groundwater sample collection.

  4. NYSDEC Class "GA" Groundwater Quality Standards (GWQS) per 6 NYCRR Part 703.

- Definitions:

  B = Compound was found in the blank and sample.

  J = Estimated value

  NA = Not analyzed

  - NA = Not analyzed
    ND = Parameter was not detected above laboratory reporting limit.
    D = Dilution required due to high concentration of target analyte(s).
    P = Sample filtered in the laboratory
    CF6 = Results confirmed by reanalysis.



#### TABLE 3 (continued)

#### SUMMARY OF GROUNDWATER ANALYTICAL RESULTS 1,2

												Mo	onitorin	g Loca	ion and	l Samp	e Colle	ction D	ate												
Parameter															MW-	-9S <sup>5</sup>															GWQS 4
	04/2	3/02	06/1	9/09	12/3	0/09	05/2	8/10	06/2	2/11	06/2	6/12	06/2	4/13	06/2	4/14	10/2	7/15	10/2	26/16	10/2	0/17	10/1	19/18	02/0	5/20	06/2	23/21	09/3	0/22	
Field Measurements 3:																															
Sample No.	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	Initial	Final	-										
pH (units)		7.36	6.48	6.52	6.84	6.79	7.71	6.78	6.31	6.38	6.88	7.11	7.72	7.74	7.83	7.65	7.12	7.06	7.73	7.56	7.31	7.27	7.35	7.10	6.58	6.79	6.78	6.73	6.65	6.70	6.5 - 8.5
Temperature (°C)		6.02	12.2	12.6	6.5	5.4	12.2	12.4	15.7	16.1	13.0	13.4	14.6	15.3	12.8	14.0	12.6	12.7	12.9	12.9	13.0	13.2	12.7	12.4	4.6	4.6	11.8	11.9	14.6	14.6	NA
Sp. Conductance (mS)		540	337	337	369	369	402	299	266	280	297	274	320	301	381	417	364.7	342.9	402	400	423.4	416.8	368.0	386.0	322.8	341.2	339.0	335.0	303.4	305.5	NA
Turbidity (NTU)		11.2	6.2	4	2.43	2.02	18.6	2.98	7.26	9.45	9.51	5.84	12.5	10.4	24	14	1.66	2.38	0.7	0.23	0.96	0.89	13	10	23	20.9	2.99	2.99	6.05	8.39	NA
Eh (mV)		1.8	93	90	52	56	4	50	54	80	48	23	503	132	149	155	134	131	73	71	116	114	125	115	148	142	208	241	243	245	NA
Wet Chemistry (mg/L):																															
Alkalinity, Total	N	Α	98.4	4 D	98.	8 D	73.	5 C	39	9.1	8:	2.4	9:	2.2	90	0.5	1	16	1	29	13	37	1	06	10	4 B	81	.4 B	10	6 B	NA
Ammonia	ND	< 10	N	D	0.0	029	N	ID	N	D	1	ID	١	ID	N	ID	N	ID	١	ID	N	D	١	ND	0.0	14 J	N	ID	١	ID	2
Nitrate (as Nitrogen)	9	.3	7.19	9 D	11.	1 D	12.	1 D	13	8.8	5	.8	6	.1	13	3.7	8	.6	5	.5	5.	.4	8	3.1	12	.7 H	1:	2.9	0.	31	10
Total Inorganic Compounds	mg/L):																														
Chromium	N	D	0.0	051	N	ID	N	ID	N	D	١	ID	N	ID	N	ID	N	ID	N	ID.	N	D	١	ND	0.00	)18 J	N	ID	١	ID	0.05
Manganese	N	Α	1.	54	0.0	005	0.0	004	0.0	800	0.0	046	0.0	018	0.0	021	0.0	037	0.0	037	0.0	076	0.0	007	0	.11	0.00	23 JB	0.000	55 JB	0.3
Iron	N	Α	0.3	322	١	ID	0.0	076	0.0	77	0.	057	0.	13	0.	31	0.0	053	١	ID	0.	.1	0.0	069	1	.9	0.0	31 J	١	ID	0.3

- Only those compounds detected above the method detection limit at a minimum of one sample event are reported in this table.
- Shaded and bolded values represent an exceedance of the GWQS/GV.
- Field measurements were collected immediately before and after groundwater sample collection.
   NYSDEC Class "GA" Groundwater Quality Standards (GWQS) per 6 NYCRR Part 703.
- Surface water was more turbid at time of metals collection.

- Definitions:

  H = Sample was prepped or analyzed beyond the specified holding time.

  B = Compound was found in the blank and sample.

  J = Estimated value

  NA = Not analyzed

  ND = Parameter was not detected above laboratory reporting limit.

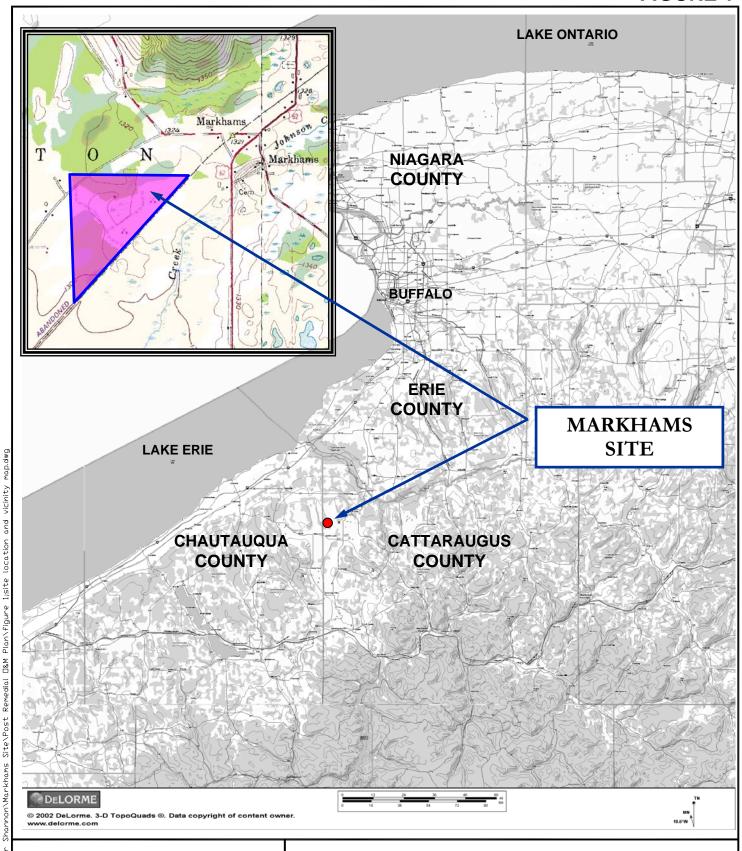
  D = Dilution required due to high concentration of target analyte(s).

  - P = Sample filtered in the laboratory
  - CF6 = Results confirmed by reanalysis.

# **FIGURES**



#### FIGURE 1





726 EXCHANGE STREET SUITE 624 (716) 856-0599

PROJECT NO.: 0021-003-400

DATE: JANUARY 2008

DRAFTED BY: AJZ

#### SITE LOCATION AND VICINITY MAP

POST-REMEDIAL OPERATION & MAINTENANCE PLAN

PETER COOPER MARKHAMS SITE DAYTON, NEW YORK

PREPARED FOR

RESPONDENTS FOR PETER COOPER MARKHAMS SITE

## **ATTACHMENT 1**

**SAMPLE COLLECTION LOGS** 





#### **TABLE 2**

#### **SUMMARY OF GROUNDWATER ELEVATIONS**

9 1 30 1 22

# Monitoring Event Peter Cooper Markhams Site Dayton, New York

Location	TOR	a Maria	
Location	Elevation (fmsl)	DTW (fbTOR)	GWE (fmsl)
MW-2SR	1313.33	6.41	1313.33
MW-4S	1313.11	9,58	1313.11
MW-5S	1302.70	3.13	1302.70
MW-6S	1315.47	14.32	1315.47
MW-7S	1312.82	12.62	1312.82
MW-8S	1304.10	4.48	1304.10
MW-9S	1314.13	5.8	1314.13

#### Notes

- 1 DTW = depth to water
- 2. fbTOR = feet below top of riser
- 3. fmsl = feet above mean sea level
- 4. GWE = groundwater elevation
- 5. TOR = top of riser



# PROJECT INFORMATION:

Project No Client: Project N

**EQUIPMENT CALIBRATION LOG** 

roject Name: Marthurg Girm	, s	Mar			Date:	9/30/12	2	
lient:					Instrumer	Instrument Source:	BM	Rental
METER TYPE	UNITS	TIME	MAKE/MODEL	SERIAL NUMBER	CAL. BY	STANDARD	POST CAL. READING	SETTINGS
; ;	units		Myron L Company Ultra Meter 6P	6213516		4.00	3.58	h
pH meter		270		6243003	143		20.7	1
				6223973		10.01	0:01	0)
30			Hach 2100P or	06120C020523 (P)		10 NTU verification < 0.4	9.76	0.01
XTurbidity meter	NTO .	0720	2100Q Turbidimeter	13120C030432 (Q) (4) 17110C062619 (Q)	JA13	20		
						800		
Sp. Cond. meter	Sm	870	Myron L Company Ultra Meter 6P		(7.4%)	1000 mS @ 25°C	6,957	7 600
				6243003	1.1.		a 3	<u> </u>
Old	maa		MinRAF 2000			open air zero		MIBK response
						ppm Iso. Gas		factor = 1.0
☐ Dissolved Oxygen	mdd		HACH Model HQ30d	080700023281				

DATE

100% Satuartion

100500041867 140200100319

mg/m³

Particulate meter Radiation Meter

uR/H

ADDITIONAL REMARKS:

PREPARED BY:

background area zero air



#### **GROUNDWATER FIELD FORM**

Project Name: Peter Cooper Markhams Site Date: 7(30/22

Location: Markhams Project No.: 0199-001-100 Field Team: TAGE

Well No	. M	w-96 85	Diameter (in	ches): 2"		Sample Date	e / Time: 9	130/22	1135 am
Product Dep	th (fbTOR):		Water Colur	nn (ft): (👯	3,09	DTW when s	sampled: 7	4.6	
DTW (static)	(fbTOR):	4,48	One Well Vo	olume (gal): 📶	1.32	Purpose:	] Development	: Sample	Purge & Sample
Total Depth	(fbTOR):	125	7 Total Volum	e Purged (gal):		Purge Metho	d: Lowf	low (mini mons	oon)
Time	Water Level (fbTOR)	Acc Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
11.22.	o Initial	D	7.19	19.1	672	70.7	~	227	clear no odar
11:25	1 4.60	.5	6.97	15.5	677	46.1	~	222	clear, no odar
11:27	24.6	Ĭ	6.93	15.7	693.7	242	~	219	clear no odor
11:30	3 4.6	1.25	6.90	15.8	683.3	15.0	·~~	2/6	clear macker
11:82	4 4 G	1.5	6.91	15.8	688.3	151		2/6	(A)
	5		-5%			dr= *_\$2			
	6								
	7								
	8								
	9								
	10								
Sample I	nformation:								
11 35	s1 4.6	1.75	6.9	139	698.8	12.4		211	11 11 1/
11:37	s2 4, C	2	6.909	145.01	692,7	11.6		198	11 11 11

Well No	. <b>M</b>	w-8595	Diameter (in	ches): 2"		Sample Date	e / Time: 9 /	30/22	9:40 am
Product Dep	th (fbTOR):		Water Colur	nn (ft): 7.	71	DTW when	sampled:	5.195	7 - 7 - 7
DTW (static)	(fbTOR): 5	.8	One Well Vo	olume (gal): /	26	Purpose:	Development	Sample	Purge & Sample
Total Depth	(fbTOR): /3	5/	Total Volum	e Purged (gal):		Purge Metho	od: Lowf	low (mini mons	oon)
Time	Water Level (fbTOR)	Acc Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
930	o Initial	0	5.76	14.1	207.5	6.75	-	235	clear, no oda
932	1 5.91	Total I	6.5	14.7	2673	5.67		240	11 11 11
934	25.95	2	6.36	14.8	2799	5.69		241	1 11 12
935	35.95	2.5	6.45	14.8	290.8	5.37	ĺ	043	
937	45 95	3.15	651	14.8	297.9	7,82		240	
	5				100				
	6								
	7								
	8								
	9								
	10								
Sample Ir	nformation:								
940	s15.95	3.75	6.65	14.6	3034	6.05	-	243	11 11 11
944	s25.45	4	6.40	14.6	305.5	8.37		245	11 17 11

REMARKS: MS MSD collected for MW-95

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

Volume (	Calculation
Diam.	Vol. (g/ft)
1"	0,041
2"	0.163
4"	0.653
6"	1.469

on Criteria
Criteria
± 0,1 unit
± 3%
± 10%
± 0.3 mg/L
± 10 mV

er Field Forms xls PREPARED BY:





#### **GROUNDWATER FIELD FORM**

Project Name: Peter Cooper Markhams Site Date: 7 30 127

Location: Markhams Project No.: 0199-001-100 Field Team:

								Inalah	
Well No	). M	W-5S	Diameter (in	ches): 2"		Sample Date	e / Time: 9	130/22	10:40 am
Product Depth (fbTOR):			Water Column (ft): 6.08		DTW when sampled: 3, 32				
DTW (static) (fbTOR): 3, 13		One Well Volume (gal):		Purpose: Development Sample Purge & Sample					
Total Depth (fbTOR): 9 21		Total Volum	e Purged (gal):	1	Purge Method: Lowflow (mini monsoon)			oon)	
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp (deg C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1028	o Initial	0	6.6	12.5	1208	23,5	_	259	
1030	1 3.42	.5	6.72	3.3	1074	199		244	* 181
1035	2 3.32	1,75	6.73	13.5	10:45	1.2		240	
1037	3 3.32	3	6.64	13-6	1098	12.2	Carried Control	238	
10.01	4	-	- W. V.	100	1000	12.2			
	5				(A	5.0			
	6								
	7				173				
	В								
	9								
	10								
Sample I	nformation:							***	
1 - 1 - 5	s1 3,62	3/15	6.75	132	1092	7.87		232	
1045	-	5	6.46	13.4	ill	7.8		232	

Well No	. М	W-7S	Diameter (ir	nches): 2"		Sample Date	e / Time: 🥠	130/22	12:00 pm
Product Depth (fbTOR):			Water Colu	Column (ft): 6, / DTW when sampled: / /3.15			15		
DTW (static) (fbTOR): 12, 62		One Well Volume (gal): 99		Purpose: Developmen Sample Purge & Sample			mple Purge & Sample		
Total Depth	(fbTOR):	8.72	Total Volum	e Purged (gal):		Purge Metho	d: Low	flow (mini mons	soon)
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1147	o Initial	Ô	6.97	11.3	1324	702	5	39	dear, no odor
1150	1 13.32	.5	6.93	11.1	1324	281	5	57	11 11 1)
*1152	2/3.35	1	6.93	11	1327	139	J	52	11 11 11
1155	3/3,35	1,25	6.93	11.2	1337	90.8	5	63	1111 11
1157	4/3 15	1.50	6.94	11.3	1332	143.8	_	54	11 11 11
	5				8 8				
	6								
	7								
	8 %								
	9								
	10 1,								
Sample Ir	nformation:								
1200	s1 13.15	1.75	6.92	11.4	1331	38.6	5	50	11 11 11
1205	s2/3.55	2	6.93	11.3	1330	33.7		43	11 11 11

REMARKS: Blind dup taken at 53

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

Volume Calculation
Diam. Vol. (g/ft)

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

Stabilization Criteria

Parameter	Criteria
pН	± 0,1 unit
sc	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY:

Markhams Groundwater Field Forms xls GWFF - BM (2)

TAB



# WATER SAMPLE COLLECTION LOG

Weather: Air Temperature: Parameter First Last Units	SAMPLE DESCRIPTION  I.D.: Velland  Matrix: Surface water   STORM    SEEP   OTHER  Sample Type: POINT   GRAB   COMPOSITE    SS / POLY. DIPPER   PERISTALTIC PUMP   ISCO SAMPLER   OTHER
SAMPLE INFORMATION Date Collected: 9 30 22  Time Collected: 9 30 22  Collected By: A-3  Cample Collection Method: DIRECT DIP  POLY. DISP. BAILER  SAMPLING INFORMATION  Weather: Air Temperature:  Parameter First Last Units	Matrix: Surface water Storm  SEEP OTHER  Sample Type: POINT GRAB COMPOSITE  SS / POLY. DIPPER PERISTALTIC PUMP ISCO SAMPLER OTHER
SAMPLE INFORMATION Date Collected: Date Shipped to Lab: Collected By: Dample Collection Method: Direct DIP Dir	Sample Type: POINT GRAB COMPOSITE  SS / POLY. DIPPER PERISTALTIC PUMP ISCO SAMPLER OTHER
SAMPLE INFORMATION Date Collected: 7 30 22 Time Collected: 9 30 22 Date Shipped to Lab: 9 30 22 Dollected By: 7 43 Date Shipped to Lab: 9 30 22 Dollected By: 7 43 Date Shipped to Lab: 9 30 22 Dollected By: 7 43 Date Collection Method: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Sample Type: POINT GRAB COMPOSITE  SS / POLY. DIPPER PERISTALTIC PUMP ISCO SAMPLER OTHER
SAMPLE INFORMATION Date Collected: 7 30 22 Time Collected: 9 30 22 Date Shipped to Lab: 9 30 22 Dollected By: 7 43 Date Shipped to Lab: 9 30 22 Dollected By: 7 43 Date Shipped to Lab: 9 30 22 Dollected By: 7 43 Date Collection Method: 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	COMPOSITE  SS / POLY. DIPPER PERISTALTIC PUMP ISCO SAMPLER OTHER
Collected By: Sample Collection Method: POLY. DISP. BAILER  SAMPLING INFORMATION Veather: Air Temperature:  Parameter First Last Units	ISCO SAMPLER OTHER
ample Collection Method: DIRECT DIP POLY. DISP. BAILER  SAMPLING INFORMATION Veather: ir Temperature:  Parameter First Last Units	ISCO SAMPLER OTHER
AMPLING INFORMATION Veather: ir Temperature:  Parameter First Last Units	ISCO SAMPLER OTHER
Veather: ir Temperature:  Parameter First Last Units	LJ OTHER
Veather: ir Temperature:  Parameter First Last Units	
reather: ir Temperature:  Parameter First Last Units	LOCATION SKETCH
Parameter First Last Units	not to scale, dimensions are approximate)
	-tie to approximate)
pH 7.37 — units	
Temp. 94 °C	
Cond. 4205 - ms	MW-6S
Turbidity 8.57 — NTU	
Eh / ORP 216 - mV	
D.O ppm	Myeas ) Myea
Odor - olfactory	
Appearance clear visual	
3	METLAND.
Northing (ft) Easting (ft) Surface Elevation (fmsl)	
AMPLE DESCRIPTION (appearance, olfactory):	
AMPLE ANALYSIS (depth, laboratory analysis required):	
F. March Soluble Matel	In Los
DDITIONAL REMARKS:	
REPARED BY: TAB	

## **ATTACHMENT 2**

TESTAMERICA LABORATORIES, INC. SAMPLE DATA SUMMARY PACKAGE SEPTEMBER 2022





# **Environment Testing America**

#### **ANALYTICAL REPORT**

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

Laboratory Job ID: 480-202195-1

Client Project/Site: Benchmark-Peter Cooper sites

Sampling Event: Annual sampling

For:

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

Attn: Mr. Tom Forbes

3

Authorized for release by:

10/7/2022 4:19:56 PM

Rebecca Jones, Project Management Assistant I

(716)504-9884

Rebecca.Jones@et.eurofinsus.com

Designee for

Brian Fischer, Manager of Project Management

(716)504-9835

Brian.Fischer@et.eurofinsus.com



----- LINKS -----

Visit us at:
www.eurofinsus.com/Env

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.

# **Table of Contents**

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QC Association Summary	18
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6

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10

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13

14

#### **Definitions/Glossary**

Client: Benchmark Env. Eng. & Science, PLLC

#### Job ID: 480-202195-1 Project/Site: Benchmark-Peter Cooper sites

#### **Metals**

**Qualifiers** 

Qualifier	Qualifier Description
В	Compound was found in the blank and sample.

#### **General Chemistry**

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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)
1401	EDA

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

**Practical Quantitation Limit** PQL

Presumptive **PRES** QC **Quality Control** 

RER Relative Error Ratio (Radiochemistry)

Reporting Limit or Requested Limit (Radiochemistry) RL

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

**Eurofins Buffalo** 

Page 3 of 27 10/7/2022

#### **Case Narrative**

Client: Benchmark Env. Eng. & Science, PLLC Project/Site: Benchmark-Peter Cooper sites

Job ID: 480-202195-1

Job ID: 480-202195-1

**Laboratory: Eurofins Buffalo** 

**Narrative** 

Job Narrative 480-202195-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 9/30/2022 2:31 PM. 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.

#### Metals

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

#### **General Chemistry**

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

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11

13

12

RL

0.0040

MDL Unit

0.0010 mg/L

Result Qualifier

0.0022 J

Client: Benchmark Env. Eng. & Science, PLLC Project/Site: Benchmark-Peter Cooper sites

Client Sample ID: WETLAND F

Analyte

Chromium

Job ID: 480-202195-1

**Prep Type** 

Total/NA

Lab Sample ID: 480-202195-1

Dil Fac D Method

6010C

4

5

7

10

12

14

0.0022	J	0.0040	0.0010	mg/L	1	6010C	Iotal/NA
1.3		0.050	0.019	mg/L	1	6010C	Total/NA
1.8	В	0.0030	0.00040	mg/L	1	6010C	Total/NA
0.0017	J	0.0040	0.0010	mg/L	1	6010C	Dissolved
0.059		0.050	0.019	mg/L	1	6010C	Dissolved
0.00087	J	0.0030	0.00040	mg/L	1	6010C	Dissolved
179		40.0	16.0	mg/L	4	310.2	Total/NA
0.080		0.020	0.0090	mg/L	1	350.1	Total/NA
0.021	J	0.050	0.020	mg/L	1	353.2	Total/NA
0.0072	J	0.010	0.0050	mg/L	1	7196A	Total/NA
0.0072	J	0.010	0.0050	mg/L	1	7196A	Dissolved
					Lab Sa	mple ID: 4	180-202195
Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
0.0044		0.0040	0.0010	mg/L		6010C	Total/NA
	J	0.050		_	1	6010C	Total/NA
		0.0030		_	1	6010C	Total/NA
					10		Total/NA
				-			Total/NA
				-			Total/NA
					Lab Sa	ilipie ib	
		RL					Prep Type
	J			-	1		Total/NA
				•	1		Total/NA
	В	0.0030			1		Total/NA
		100	40.0	mg/L	10		Total/NA
0.015	J	0.020	0.0090	mg/L	1	350.1	Total/NA
0.20		0.050			1	353.2	Total/NA
0.0060	J	0.010	0.0050	mg/L	1	7196A	Total/NA
					Lab Sa	mple ID: 4	180-202195-
Result	Qualifier	RL			Dil Fac	D Method	Prep Type
0.0023	J	0.0040	0.0010	mg/L	1	6010C	Total/NA
0.079		0.050	0.019	mg/L	1	6010C	Total/NA
1.1	В	0.0030	0.00040	mg/L	1	6010C	Total/NA
367		40.0	16.0	mg/L	4	310.2	Total/NA
0.16		0.050	0.020	mg/L	1	353.2	Total/NA
					Lab Sa	mple ID: 4	180-202195
Result	Qualifier	RL	MDL	Unit	Dil Fac	D Method	Prep Type
<b>Result</b> 0.00055		RL 0.0030	MDL 0.00040		Dil Fac	D Method 6010C	Prep Type Total/NA
			0.00040				
0.00055		0.0030	0.00040	mg/L mg/L	1	6010C	Total/NA
	1.3 1.8 0.0017 0.059 0.00087 179 0.080 0.021 0.0072 0.0072  Result 0.0044 0.020 2.3 614 20.4 0.12  Result 0.0031 10.9 0.17 432 0.015 0.20 0.0060  Result 0.0023 0.079 1.1 367	1.3 1.8 B 0.0017 J 0.059 0.00087 J 179 0.080 0.021 J 0.0072 J 0.0072 J 0.0072 J 0.0072 J  Result Qualifier 0.0044 0.020 J 2.3 B 614 20.4 0.12  Result Qualifier 0.0031 J 10.9 0.17 B 432 0.015 J 0.20 0.0060 J  Result Qualifier 0.0023 J 0.079 1.1 B 367	1.3	1.3         0.050         0.019           1.8         B         0.0030         0.00040           0.0017         J         0.0040         0.0010           0.059         0.050         0.019           0.00087         J         0.0030         0.00040           179         40.0         16.0           0.080         0.020         0.0090           0.021         J         0.050         0.022           0.0072         J         0.010         0.0050           0.0072         J         0.010         0.0050           0.0072         J         0.050         0.019           2.3         B         0.0030         0.0040         0.0010           20.4         0.40         0.18         0.12         0.050         0.020           Result         Qualifier         RL         MDL         MDL           0.0031         J         0.0040         0.0010         0.0010           10.9         0.050         0.019         0.0040         0.0010           0.17         B         0.0030         0.0040         0.0010           0.20         0.050         0.020         0.050         0.020	1.3         0.050         0.019         mg/L           1.8         B         0.0030         0.00040         mg/L           0.0017         J         0.0040         0.0010         mg/L           0.059         0.050         0.019         mg/L           0.00087         J         0.0030         0.00040         mg/L           0.080         0.020         0.0090         mg/L           0.021         J         0.050         0.020         mg/L           0.0072         J         0.010         0.0050         mg/L           0.0072         J         0.050         0.019         mg/L           0.0040         0.0040         0.0010         mg/L           0.020         J         0.050         0.0040         mg/L           0.021         MDL         Unit         mg/L         0.010         mg/L	1.3	1.3

This Detection Summary does not include radiochemical test results.

Result Qualifier

0.0044

Analyte

Chromium

**Eurofins Buffalo** 

**Prep Type** 

Total/NA

RL

0.0040

**MDL** Unit

0.0010 mg/L

Dil Fac D Method

6010C

### **Detection Summary**

Client: Benchmark Env. Eng. & Science, PLLC Project/Site: Benchmark-Peter Cooper sites

Job ID: 480-202195-1

#### **Client Sample ID: Blind Duplicate (Continued)**

#### Lab Sample ID: 480-202195-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	0.021	J	0.050	0.019	mg/L	1	_	6010C	Total/NA
Manganese	2.3	В	0.0030	0.00040	mg/L	1		6010C	Total/NA
Chromium (hexavalent)	0.0072	J	0.010	0.0050	mg/L	1		7196A	Total/NA

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Client: Benchmark Env. Eng. & Science, PLLC Project/Site: Benchmark-Peter Cooper sites

Lab Sample ID: 480-202195-1

**Matrix: Water** 

Job ID: 480-202195-1

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Date Collected: 09/30/22 11:35 Date Received: 09/30/22 14:31

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		10/03/22 11:52	10/04/22 15:19	1
Chromium	0.0022	J	0.0040	0.0010	mg/L		10/03/22 11:52	10/04/22 15:19	1
Iron	1.3		0.050	0.019	mg/L		10/03/22 11:52	10/04/22 15:19	1
Manganese	1.8	В	0.0030	0.00040	mg/L		10/03/22 11:52	10/04/22 15:19	1
Method: SW846 6010C - Metals	s (ICP) - Dis	ssolved							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	ND		0.015	0.0056	mg/L		10/05/22 15:55	10/06/22 14:20	1
Chromium, Dissolved	0.0017	J	0.0040	0.0010	mg/L		10/05/22 15:55	10/06/22 14:20	1
Iron, Dissolved	0.059		0.050	0.019	mg/L		10/05/22 15:55	10/06/22 14:20	1
Manganese, Dissolved	0.00087	J	0.0030	0.00040	mg/L		10/05/22 15:55	10/06/22 14:20	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total (MCAWW 310.2)	179		40.0	16.0	mg/L			10/06/22 15:34	4
Ammonia (as N) (MCAWW 350.1)	0.080		0.020	0.0090	mg/L			10/04/22 09:29	1
Nitrate as N (EPA 353.2)	0.021	J	0.050	0.020	mg/L			09/30/22 22:28	1
Chromium (hexavalent) (SW846 7196A)	0.0072	J	0.010	0.0050	mg/L			09/30/22 19:00	1
Sulfide (SM 4500 S2 F)	ND		1.0	0.67	mg/L			10/06/22 10:44	1
General Chemistry - Dissolved	l								
Analyte		Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium, hexavalent (dissolved)	0.0072	<u></u>	0.010	0.0050	mg/L			09/30/22 19:00	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark-Peter Cooper sites

Job ID: 480-202195-1

Client Sample ID: MW-5S Lab Sample ID: 480-202195-2

Date Collected: 09/30/22 10:40 Matrix: Water

Date Received: 09/30/22 14:31

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		10/03/22 11:52	10/04/22 15:23	1
Chromium	0.0044		0.0040	0.0010	mg/L		10/03/22 11:52	10/04/22 15:23	1
Iron	0.020	J	0.050	0.019	mg/L		10/03/22 11:52	10/04/22 15:23	1
Manganese	2.3	В	0.0030	0.00040	mg/L		10/03/22 11:52	10/04/22 15:23	1

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total (MCAWW 310.2)	614		100	40.0	mg/L			10/06/22 14:58	10
Ammonia (as N) (MCAWW 350.1)	20.4		0.40	0.18	mg/L			10/04/22 09:51	20
Nitrate as N (EPA 353.2)	0.12		0.050	0.020	mg/L			09/30/22 22:29	1
Chromium (hexavalent) (SW846 7196A)	ND		0.010	0.0050	mg/L			09/30/22 19:00	1
Sulfide (SM 4500 S2 F)	ND		1.0	0.67	mg/L			10/06/22 10:44	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark-Peter Cooper sites

Job ID: 480-202195-1

Client Sample ID: MW-7S

Lab Sample ID: 480-202195-3

**Matrix: Water** 

Date Collected: 09/30/22 12:00 Date Received: 09/30/22 14:31

Analyte	Result Qu	ualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND	0.015	0.0056	mg/L		10/03/22 11:52	10/04/22 15:27	1
Chromium	0.0031 J	0.0040	0.0010	mg/L		10/03/22 11:52	10/04/22 15:27	1
Iron	10.9	0.050	0.019	mg/L		10/03/22 11:52	10/04/22 15:27	1
Manganese	0.17 B	0.0030	0.00040	mg/L		10/03/22 11:52	10/04/22 15:27	1

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total (MCAWW 310.2)	432		100	40.0	mg/L			10/06/22 14:58	10
Ammonia (as N) (MCAWW 350.1)	0.015	J	0.020	0.0090	mg/L			10/04/22 09:31	1
Nitrate as N (EPA 353.2)	0.20		0.050	0.020	mg/L			09/30/22 22:31	1
Chromium (hexavalent) (SW846 7196A)	0.0060	J	0.010	0.0050	mg/L			09/30/22 19:00	1
Sulfide (SM 4500 S2 F)	ND		1.0	0.67	mg/L			10/06/22 10:44	1

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Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark-Peter Cooper sites

Job ID: 480-202195-1

Client Sample ID: MW-8S

Lab Sample ID: 480-202195-4

**Matrix: Water** 

Date Collected: 09/30/22 11:35 Date Received: 09/30/22 14:31

Method: SW846 6010C - M	etals (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	MD		0.015	0.0056	mg/L		10/03/22 11:52	10/04/22 15:31	1
Chromium	0.0023	J	0.0040	0.0010	mg/L		10/03/22 11:52	10/04/22 15:31	1
Iron	0.079		0.050	0.019	mg/L		10/03/22 11:52	10/04/22 15:31	1
Manganese	1.1	В	0.0030	0.00040	mg/L		10/03/22 11:52	10/04/22 15:31	1
General Chemistry									

General Chemistry Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total (MCAWW 310.2)	367		40.0	16.0	mg/L			10/06/22 14:59	4
Ammonia (as N) (MCAWW 350.1)	ND		0.020	0.0090	mg/L			10/04/22 09:32	1
Nitrate as N (EPA 353.2)	0.16		0.050	0.020	mg/L			09/30/22 22:32	1
Chromium (hexavalent) (SW846 7196A)	ND		0.010	0.0050	mg/L			09/30/22 19:00	1
Sulfide (SM 4500 S2 F)	ND		1.0	0.67	mg/L			10/06/22 10:44	1

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Client: Benchmark Env. Eng. & Science, PLLC Job ID: 480-202195-1 Project/Site: Benchmark-Peter Cooper sites

Lab Sample ID: 480-202195-5 **Client Sample ID: MW-9S** 

Date Collected: 09/30/22 09:40 **Matrix: Water** 

Date Received: 09/30/22 14:31

Analyte	Result (	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND ND		0.015	0.0056	mg/L		10/03/22 11:52	10/04/22 15:35	1
Chromium	ND		0.0040	0.0010	mg/L		10/03/22 11:52	10/04/22 15:35	1
Iron	ND		0.050	0.019	mg/L		10/03/22 11:52	10/04/22 15:35	1
Manganese	0.00055	JB	0.0030	0.00040	mg/L		10/03/22 11:52	10/04/22 15:35	1
General Chemistry									

General Chemistry Analyte	Result C	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total (MCAWW 310.2)	106		20.0	8.0	mg/L			10/06/22 14:59	2
Ammonia (as N) (MCAWW 350.1)	ND		0.020	0.0090	mg/L			10/04/22 09:38	1
Nitrate as N (EPA 353.2)	0.31		0.050	0.020	mg/L			09/30/22 22:23	1
Chromium (hexavalent) (SW846 7196A)	ND		0.010	0.0050	mg/L			09/30/22 19:00	1
Sulfide (SM 4500 S2 F)	ND		1.0	0.67	mg/L			10/06/22 10:44	1

Client: Benchmark Env. Eng. & Science, PLLC Project/Site: Benchmark-Peter Cooper sites

**Client Sample ID: Blind Duplicate** 

Lab Sample ID: 480-202195-6

**Matrix: Water** 

Job ID: 480-202195-1

Date Collected: 09/30/22 10:40 Date Received: 09/30/22 14:31

Method: SW846 6010C - Meta	Is (ICP)								
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		10/03/22 11:52	10/04/22 16:05	1
Chromium	0.0044		0.0040	0.0010	mg/L		10/03/22 11:52	10/04/22 16:05	1
Iron	0.021	J	0.050	0.019	mg/L		10/03/22 11:52	10/04/22 16:05	1
Manganese	2.3	В	0.0030	0.00040	mg/L		10/03/22 11:52	10/04/22 16:05	1
General Chemistry									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium (hexavalent) (SW846 7196A)	0.0072	J	0.010	0.0050	mg/L			09/30/22 19:00	1

Eurofins Buffalo

Client: Benchmark Env. Eng. & Science, PLLC Job ID: 480-202195-1 Project/Site: Benchmark-Peter Cooper sites

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-643720/1-A

**Matrix: Water** 

**Analysis Batch: 644071** 

**Client Sample ID: Method Blank** 

**Prep Type: Total/NA** 

**Prep Batch: 643720** 

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		0.015	0.0056	mg/L		10/03/22 11:52	10/04/22 15:12	1
Chromium	ND		0.0040	0.0010	mg/L		10/03/22 11:52	10/04/22 15:12	1
Iron	ND		0.050	0.019	mg/L		10/03/22 11:52	10/04/22 15:12	1
Manganese	0.00101	J	0.0030	0.00040	mg/L		10/03/22 11:52	10/04/22 15:12	1

MR MR

Lab Sample ID: LCS 480-643720/2-A

**Matrix: Water** 

**Analysis Batch: 644071** 

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

**Prep Batch: 643720** 

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Arsenic	0.201	0.211		mg/L		105	80 - 120	
Chromium	0.200	0.195		mg/L		97	80 - 120	
Iron	10.0	10.40		mg/L		104	80 - 120	
Manganese	0.200	0.214		mg/L		107	80 - 120	

Lab Sample ID: 480-202195-5 MS

**Matrix: Water** 

**Analysis Batch: 644071** 

Client Sample ID: MW-9S

Prep Type: Total/NA

**Prep Batch: 643720** 

-	Sample	Sample	Spike	MS	MS				%Rec	
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Arsenic	ND		0.201	0.208		mg/L		104	75 - 125	
Chromium	ND		0.200	0.190		mg/L		95	75 - 125	
Iron	ND		10.0	10.22		mg/L		102	75 - 125	
Manganese	0.00055	JB	0.200	0.208		mg/L		104	75 - 125	

Lab Sample ID: 480-202195-5 MSD

**Matrix: Water** 

Analysis Ratch: 644071

Client Sample ID: MW-9S

Prep Type: Total/NA Drop Botoby 642720

Analysis batch: 644071									Prep Da	ilch: 64	<del>1</del> 3/20
	Sample	Sample	Spike	MSD	MSD				%Rec		RPD
Analyte	Result	Qualifier	Added	Result	Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Arsenic	ND		0.201	0.211		mg/L		105	75 - 125	1	20
Chromium	ND		0.200	0.192		mg/L		96	75 - 125	1	20
Iron	ND		10.0	10.33		mg/L		103	75 - 125	1	20
Manganese	0.00055	JB	0.200	0.213		mg/L		106	75 - 125	2	20

Lab Sample ID: MB 480-644089/1-C

**Matrix: Water** 

Analysis Batch: 644420

**Client Sample ID: Method Blank Prep Type: Dissolved** 

Prep Batch: 644102

	IVIB IV	IIB						
Analyte	Result C	Qualifier RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic, Dissolved	ND ND	0.015	0.0056	mg/L		10/05/22 15:55	10/06/22 12:44	1
Chromium, Dissolved	ND	0.0040	0.0010	mg/L		10/05/22 15:55	10/06/22 12:44	1
Iron, Dissolved	ND	0.050	0.019	mg/L		10/05/22 15:55	10/06/22 12:44	1
Manganese, Dissolved	ND	0.0030	0.00040	mg/L		10/05/22 15:55	10/06/22 12:44	1

**Eurofins Buffalo** 

10/7/2022

Client: Benchmark Env. Eng. & Science, PLLC Project/Site: Benchmark-Peter Cooper sites

Job ID: 480-202195-1

**Client Sample ID: Method Blank** 

**Prep Type: Total/NA** 

#### Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-644089/2-C	Client Sample ID: Lab Control Sample
Matrix: Water	Prep Type: Dissolved
Analysis Batch: 644420	Prep Batch: 644102

	Spike	LCS	LCS				%Rec	
Analyte	Added	Result	Qualifier	Unit	D	%Rec	Limits	
Arsenic, Dissolved	0.201	0.209		mg/L		104	80 - 120	
Chromium, Dissolved	0.200	0.202		mg/L		101	80 - 120	
Iron, Dissolved	10.0	10.21		mg/L		102	80 - 120	
Manganese, Dissolved	0.200	0.210		mg/L		105	80 - 120	

#### Method: 310.2 - Alkalinity

Lab Sample ID: MB 480-644428/159

**Matrix: Water** 

Lab Sample ID: MB 480-644428/104	Client Sample ID: Method Blank
Matrix: Water	Prep Type: Total/NA
Analysis Batch: 644428	
MB MB	

	IVID	IAID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0	4.0	mg/L			10/06/22 15:33	1

Lab Sample ID: MB 480-644428/145	Client Sample ID: Method Blank
Matrix: Water	Prep Type: Total/NA
Analysis Batch: 644428	
MB MB	

Analyte	Result Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND	10.0	4.0	mg/L			10/06/22 15:50	1

Analysis Batch: 644428									
	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0	4.0	mg/L			10/06/22 16:39	1

Lab Sample ID: MB 480-644428/68	Client Sample ID: Method Blank
Matrix: Water	Pren Type: Total/NA

Analysis Batch: 644428									
-	MB	MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0	4.0	ma/L			10/06/22 14:41	1

Lab Sample ID: MB 480-644428/79	Client Sample ID: Method Blank
Matrix: Water	Prep Type: Total/NA
Analysis Batch: 644428	

		MB							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0	4.0	mg/L			10/06/22 14:44	1

Lab Sample ID: MB 480-644428/93	Client Sample ID: Method Blank
Matrix: Water	Prep Type: Total/NA
Analysis Batch: 644428	
MD MD	

	IVID	IVID							
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	ND		10.0	4.0	mg/L			10/06/22 14:56	1

**Eurofins Buffalo** 

Client: Benchmark Env. Eng. & Science, PLLC Job ID: 480-202195-1 Project/Site: Benchmark-Peter Cooper sites

Method: 310.2 - Alkalinity (Continued)

**Matrix: Water** 

**Analysis Batch: 644428** 

Spike LCS LCS %Rec Result Qualifier Added Limits Analyte Unit D %Rec 90 - 110 Alkalinity, Total 50.0 51.90 mg/L 104

Lab Sample ID: LCS 480-644428/158

Lab Sample ID: LCS 480-644428/103

**Matrix: Water** 

**Analysis Batch: 644428** 

Spike LCS LCS %Rec Added Result Qualifier D %Rec Limits Analyte Unit 50.0 90 - 110 Alkalinity, Total 52.64 mg/L 105

Lab Sample ID: LCS 480-644428/78

**Matrix: Water** 

**Analysis Batch: 644428** 

Spike LCS LCS %Rec Added Limits Analyte Result Qualifier Unit %Rec Alkalinity, Total 50.0 51.33 103 90 - 110 mg/L

Lab Sample ID: LCS 480-644428/92

**Matrix: Water** 

**Analysis Batch: 644428** 

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits 49.38 Alkalinity, Total 50.0 mg/L 90 - 110

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 480-643881/27

**Matrix: Water** 

**Analysis Batch: 643881** 

MB MB

Analyte Result Qualifier RL **MDL** Unit Prepared Analyzed Dil Fac Ammonia (as N) ND 0.020 0.0090 mg/L 10/04/22 09:09

Lab Sample ID: MB 480-643881/51

**Matrix: Water** 

Analysis Batch: 643881

MR MR **MDL** Unit Analyte Result Qualifier RL Prepared

0.020 10/04/22 09:36 ND 0.0090 mg/L Ammonia (as N)

Lab Sample ID: LCS 480-643881/28

**Matrix: Water** 

Analysis Batch: 643881

Spike LCS LCS %Rec Analyte Added Result Qualifier Unit %Rec Limits 1.00 Ammonia (as N) 1.06 mg/L 106 90 - 110

**Eurofins Buffalo** 

Client Sample ID: Lab Control Sample

**Client Sample ID: Lab Control Sample** 

**Client Sample ID: Lab Control Sample** 

**Client Sample ID: Lab Control Sample** 

Client Sample ID: Method Blank

Client Sample ID: Method Blank

Client Sample ID: Lab Control Sample

Analyzed

Prep Type: Total/NA

Prep Type: Total/NA

Prep Type: Total/NA

**Prep Type: Total/NA** 

**Prep Type: Total/NA** 

Prep Type: Total/NA

Prep Type: Total/NA

Dil Fac

Client: Benchmark Env. Eng. & Science, PLLC Job ID: 480-202195-1

Project/Site: Benchmark-Peter Cooper sites

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: LCS 480-643881/52 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

**Matrix: Water** 

Analysis Batch: 643881

Spike LCS LCS %Rec Result Qualifier Added Unit Limits Analyte D %Rec Ammonia (as N) 1.00 1.07 mg/L 107 90 - 110

Lab Sample ID: 480-202195-5 MS Client Sample ID: MW-9S Prep Type: Total/NA

**Matrix: Water** 

Analysis Batch: 643881

Sample Sample Spike MS MS %Rec Result Qualifier Added Result Qualifier Unit D %Rec Limits Analyte 0.200 90 - 110 Ammonia (as N) ND 0.198 mg/L 99

Lab Sample ID: 480-202195-5 DU Client Sample ID: MW-9S Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 643881** 

Sample Sample DU DU RPD Result Qualifier Result Qualifier **RPD** Analyte Unit Limit Ammonia (as N) ND ND 20 mg/L

Method: 7196A - Chromium, Hexavalent

Lab Sample ID: MB 480-643589/3 Client Sample ID: Method Blank Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 643589** 

Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Chromium (hexavalent)  $\overline{\mathsf{ND}}$ 0.010 0.0050 mg/L 09/30/22 19:00

MB MB

Lab Sample ID: LCS 480-643589/4 **Client Sample ID: Lab Control Sample** Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 643589** 

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Chromium (hexavalent) 0.0500 0.0524 mg/L 105 85 - 115

Lab Sample ID: 480-202195-5 MS Client Sample ID: MW-9S

**Matrix: Water** 

Analysis Batch: 643589

Spike MS MS %Rec Sample Sample Result Qualifier Added Analyte Result Qualifier Unit %Rec Limits Chromium (hexavalent) ND 0.0500 0.0499 mg/L 100 85 - 115

Lab Sample ID: 480-202195-5 MSD Client Sample ID: MW-9S Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 643589** 

**RPD** Sample Sample Spike MSD MSD %Rec Result Qualifier Added Result Qualifier Unit D %Rec Limits **RPD** Limit ND 0.0500 102 Chromium (hexavalent) 0.0511 mg/L 85 - 115

**Eurofins Buffalo** 

Prep Type: Total/NA

Job ID: 480-202195-1

Client: Benchmark Env. Eng. & Science, PLLC Project/Site: Benchmark-Peter Cooper sites

Method: 7196A - Chromium, Hexavalent (Continued)

Lab Sample ID: 480-202195-6 MS Client Sample ID: Blind Duplicate Prep Type: Total/NA

**Matrix: Water** 

Analysis Batch: 643589

Sample Sample Spike MS MS %Rec Result Qualifier Result Qualifier Added %Rec Limits Analyte Unit D Chromium (hexavalent) 0.0072 J 0.0500 0.0524 mg/L 90 85 - 115

Lab Sample ID: 480-202195-6 MSD **Client Sample ID: Blind Duplicate Prep Type: Total/NA** 

**Matrix: Water** 

**Analysis Batch: 643589** 

Sample Sample Spike MSD MSD %Rec **RPD** Result Qualifier Added Result Qualifier D %Rec Limits RPD Limit Analyte Unit 0.0500 85 - 115 Chromium (hexavalent) 0.0072 J 0.0511 mg/L 88 2

Lab Sample ID: 480-202195-6 DU **Client Sample ID: Blind Duplicate Matrix: Water Prep Type: Total/NA** 

**Analysis Batch: 643589** 

Sample Sample DU DU **RPD** Result Qualifier Result Qualifier **RPD** Analyte Unit Limit Chromium (hexavalent) 0.0072 J 0.00722 J 20 mg/L

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 480-644283/3 Client Sample ID: Method Blank Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 644283** 

MB MB Analyte Result Qualifier RL MDL Unit Prepared Analyzed Dil Fac Sulfide  $\overline{\mathsf{ND}}$ 1.0 0.67 mg/L 10/06/22 10:44

Lab Sample ID: LCS 480-644283/4 **Client Sample ID: Lab Control Sample Matrix: Water** Prep Type: Total/NA

**Analysis Batch: 644283** 

LCS LCS Spike %Rec Analyte Added Result Qualifier Unit %Rec Limits Sulfide 9.20 9.20 mg/L 100 90 - 110

Lab Sample ID: 480-202195-4 MS Client Sample ID: MW-8S Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 644283** 

Spike MS MS %Rec Sample Sample Result Qualifier Added Analyte Result Qualifier Unit %Rec Limits Sulfide ND 9.80 8.40 mg/L 86 40 - 150

Lab Sample ID: 480-202195-2 DU Client Sample ID: MW-5S Prep Type: Total/NA

**Matrix: Water** 

**Analysis Batch: 644283** 

DU DU **RPD** Sample Sample Analyte Result Qualifier Result Qualifier Unit D **RPD** Limit Sulfide ND ND mg/L NC 20

**Eurofins Buffalo** 

10/7/2022

# **QC Association Summary**

Client: Benchmark Env. Eng. & Science, PLLC Project/Site: Benchmark-Peter Cooper sites

Job ID: 480-202195-1

#### **Metals**

<b>Prep</b>	<b>Batcl</b>	h: 64	3720
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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202195-1	WETLAND F	Total/NA	Water	3005A	
480-202195-2	MW-5S	Total/NA	Water	3005A	
480-202195-3	MW-7S	Total/NA	Water	3005A	
480-202195-4	MW-8S	Total/NA	Water	3005A	
480-202195-5	MW-9S	Total/NA	Water	3005A	
480-202195-6	Blind Duplicate	Total/NA	Water	3005A	
MB 480-643720/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-643720/2-A	Lab Control Sample	Total/NA	Water	3005A	
480-202195-5 MS	MW-9S	Total/NA	Water	3005A	
480-202195-5 MSD	MW-9S	Total/NA	Water	3005A	

#### **Analysis Batch: 644071**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202195-1	WETLAND F	Total/NA	Water	6010C	643720
480-202195-2	MW-5S	Total/NA	Water	6010C	643720
480-202195-3	MW-7S	Total/NA	Water	6010C	643720
480-202195-4	MW-8S	Total/NA	Water	6010C	643720
480-202195-5	MW-9S	Total/NA	Water	6010C	643720
480-202195-6	Blind Duplicate	Total/NA	Water	6010C	643720
MB 480-643720/1-A	Method Blank	Total/NA	Water	6010C	643720
LCS 480-643720/2-A	Lab Control Sample	Total/NA	Water	6010C	643720
480-202195-5 MS	MW-9S	Total/NA	Water	6010C	643720
480-202195-5 MSD	MW-9S	Total/NA	Water	6010C	643720

#### Filtration Batch: 644089

Lab Sample ID 480-202195-1	Client Sample ID WETLAND F	Prep Type	Matrix	Method FILTRATION	Prep Batch
MB 480-644089/1-C	Method Blank	Dissolved Dissolved	Water Water	FILTRATION	
LCS 480-644089/2-C	Lab Control Sample	Dissolved	Water	FILTRATION	

#### **Prep Batch: 644102**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202195-1	WETLAND F	Dissolved	Water	3005A	644089
MB 480-644089/1-C	Method Blank	Dissolved	Water	3005A	644089
LCS 480-644089/2-C	Lab Control Sample	Dissolved	Water	3005A	644089

#### **Analysis Batch: 644420**

Lab Sample ID 480-202195-1	Client Sample ID WETLAND F	Prep Type Dissolved	Matrix Water	Method 6010C	Prep Batch 644102
MB 480-644089/1-C	Method Blank	Dissolved	Water	6010C	644102
LCS 480-644089/2-C	Lab Control Sample	Dissolved	Water	6010C	644102

#### **General Chemistry**

#### Filtration Batch: 643587

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202195-1	WETLAND F	Dissolved	Water	Filtration	

#### **Analysis Batch: 643589**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202195-1	WETLAND F	Dissolved	Water	7196A	643587

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Client: Benchmark Env. Eng. & Science, PLLC Project/Site: Benchmark-Peter Cooper sites

Job ID: 480-202195-1

# **General Chemistry (Continued)**

#### **Analysis Batch: 643589 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202195-1	WETLAND F	Total/NA	Water	7196A	
480-202195-2	MW-5S	Total/NA	Water	7196A	
480-202195-3	MW-7S	Total/NA	Water	7196A	
480-202195-4	MW-8S	Total/NA	Water	7196A	
480-202195-5	MW-9S	Total/NA	Water	7196A	
480-202195-6	Blind Duplicate	Total/NA	Water	7196A	
MB 480-643589/3	Method Blank	Total/NA	Water	7196A	
LCS 480-643589/4	Lab Control Sample	Total/NA	Water	7196A	
480-202195-5 MS	MW-9S	Total/NA	Water	7196A	
480-202195-5 MSD	MW-9S	Total/NA	Water	7196A	
480-202195-6 MS	Blind Duplicate	Total/NA	Water	7196A	
480-202195-6 MSD	Blind Duplicate	Total/NA	Water	7196A	
480-202195-6 DU	Blind Duplicate	Total/NA	Water	7196A	

#### **Analysis Batch: 643591**

Lab Sample ID 480-202195-1	Client Sample ID WETLAND F	Prep Type Total/NA	Matrix Water	Method 353.2	Prep Batch
480-202195-2	MW-5S	Total/NA	Water	353.2	
480-202195-3	MW-7S	Total/NA	Water	353.2	
480-202195-4	MW-8S	Total/NA	Water	353.2	
480-202195-5	MW-9S	Total/NA	Water	353.2	

#### **Analysis Batch: 643881**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202195-1	WETLAND F	Total/NA	Water	350.1	
480-202195-2	MW-5S	Total/NA	Water	350.1	
480-202195-3	MW-7S	Total/NA	Water	350.1	
480-202195-4	MW-8S	Total/NA	Water	350.1	
480-202195-5	MW-9S	Total/NA	Water	350.1	
MB 480-643881/27	Method Blank	Total/NA	Water	350.1	
MB 480-643881/51	Method Blank	Total/NA	Water	350.1	
LCS 480-643881/28	Lab Control Sample	Total/NA	Water	350.1	
LCS 480-643881/52	Lab Control Sample	Total/NA	Water	350.1	
480-202195-5 MS	MW-9S	Total/NA	Water	350.1	
480-202195-5 DU	MW-9S	Total/NA	Water	350.1	

#### **Analysis Batch: 644283**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202195-1	WETLAND F	Total/NA	Water	SM 4500 S2 F	
480-202195-2	MW-5S	Total/NA	Water	SM 4500 S2 F	
480-202195-3	MW-7S	Total/NA	Water	SM 4500 S2 F	
480-202195-4	MW-8S	Total/NA	Water	SM 4500 S2 F	
480-202195-5	MW-9S	Total/NA	Water	SM 4500 S2 F	
MB 480-644283/3	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 480-644283/4	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
480-202195-4 MS	MW-8S	Total/NA	Water	SM 4500 S2 F	
480-202195-2 DU	MW-5S	Total/NA	Water	SM 4500 S2 F	

#### Analysis Batch: 644428

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Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202195-1	WETLAND F	Total/NA	Water	310.2	

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# **QC Association Summary**

Client: Benchmark Env. Eng. & Science, PLLC Project/Site: Benchmark-Peter Cooper sites

Job ID: 480-202195-1

# **General Chemistry (Continued)**

#### **Analysis Batch: 644428 (Continued)**

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-202195-2	MW-5S	Total/NA	Water	310.2	
480-202195-3	MW-7S	Total/NA	Water	310.2	
480-202195-4	MW-8S	Total/NA	Water	310.2	
480-202195-5	MW-9S	Total/NA	Water	310.2	
MB 480-644428/104	Method Blank	Total/NA	Water	310.2	
MB 480-644428/145	Method Blank	Total/NA	Water	310.2	
MB 480-644428/159	Method Blank	Total/NA	Water	310.2	
MB 480-644428/68	Method Blank	Total/NA	Water	310.2	
MB 480-644428/79	Method Blank	Total/NA	Water	310.2	
MB 480-644428/93	Method Blank	Total/NA	Water	310.2	
LCS 480-644428/103	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-644428/158	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-644428/78	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-644428/92	Lab Control Sample	Total/NA	Water	310.2	

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Client: Benchmark Env. Eng. & Science, PLLC Project/Site: Benchmark-Peter Cooper sites

Client Sample ID: WETLAND F

Lab Sample ID: 480-202195-1 Date Collected: 09/30/22 11:35 **Matrix: Water** Date Received: 09/30/22 14:31

Batch Dilution **Batch** Batch Prepared Method or Analyzed **Prep Type** Type Run **Factor** Number Analyst Lab Dissolved Filtration **FILTRATION** 644089 NZG EET BUF 10/05/22 10:40 10/05/22 15:55 Dissolved 3005A 644102 NZG Prep **EET BUF** Dissolved Analysis 6010C 1 644420 LMH **EET BUF** 10/06/22 14:20 Total/NA 10/03/22 11:52 Prep 3005A 643720 VAK **EET BUF** Total/NA Analysis 6010C 1 644071 LMH **EET BUF** 10/04/22 15:19 Total/NA Analysis 310.2 4 644428 STR **EET BUF** 10/06/22 15:34 Total/NA 350.1 643881 CLT **EET BUF** 10/04/22 09:29 Analysis 1 Total/NA 353.2 **EET BUF** 09/30/22 22:28 Analysis 1 643591 CSS Dissolved Filtration Filtration 643587 CSS **EET BUF** 09/30/22 18:45 7196A CSS EET BUF Dissolved Analysis 1 643589 09/30/22 19:00 Total/NA Analysis 7196A 1 643589 CSS **EET BUF** 09/30/22 19:00 Total/NA 10/06/22 10:44 Analysis SM 4500 S2 F 1 644283 CC **EET BUF** 

Client Sample ID: MW-5S Lab Sample ID: 480-202195-2 Date Collected: 09/30/22 10:40 **Matrix: Water** 

Date Received: 09/30/22 14:31

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	3005A			643720	VAK	EET BUF	10/03/22 11:52
Total/NA	Analysis	6010C		1	644071	LMH	EET BUF	10/04/22 15:23
Total/NA	Analysis	310.2		10	644428	STR	EET BUF	10/06/22 14:58
Total/NA	Analysis	350.1		20	643881	CLT	EET BUF	10/04/22 09:51
Total/NA	Analysis	353.2		1	643591	CSS	EET BUF	09/30/22 22:29
Total/NA	Analysis	7196A		1	643589	CSS	EET BUF	09/30/22 19:00
Total/NA	Analysis	SM 4500 S2 F		1	644283	CC	EET BUF	10/06/22 10:44

Client Sample ID: MW-7S Lab Sample ID: 480-202195-3

Date Collected: 09/30/22 12:00 Date Received: 09/30/22 14:31

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	3005A			643720	VAK	EET BUF	10/03/22 11:52
Total/NA	Analysis	6010C		1	644071	LMH	EET BUF	10/04/22 15:27
Total/NA	Analysis	310.2		10	644428	STR	EET BUF	10/06/22 14:58
Total/NA	Analysis	350.1		1	643881	CLT	EET BUF	10/04/22 09:31
Total/NA	Analysis	353.2		1	643591	CSS	EET BUF	09/30/22 22:31
Total/NA	Analysis	7196A		1	643589	CSS	EET BUF	09/30/22 19:00
Total/NA	Analysis	SM 4500 S2 F		1	644283	CC	EET BUF	10/06/22 10:44

**Eurofins Buffalo** 

**Matrix: Water** 

#### **Lab Chronicle**

Client: Benchmark Env. Eng. & Science, PLLC Project/Site: Benchmark-Peter Cooper sites

Lab Sample ID: 480-202195-4

**Matrix: Water** 

Job ID: 480-202195-1

Date Collected: 09/30/22 11:35 Date Received: 09/30/22 14:31

**Client Sample ID: MW-8S** 

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	3005A			643720	VAK	EET BUF	10/03/22 11:52
Total/NA	Analysis	6010C		1	644071	LMH	EET BUF	10/04/22 15:31
Total/NA	Analysis	310.2		4	644428	STR	EET BUF	10/06/22 14:59
Total/NA	Analysis	350.1		1	643881	CLT	EET BUF	10/04/22 09:32
Total/NA	Analysis	353.2		1	643591	CSS	EET BUF	09/30/22 22:32
Total/NA	Analysis	7196A		1	643589	CSS	EET BUF	09/30/22 19:00
Total/NA	Analysis	SM 4500 S2 F		1	644283	CC	EET BUF	10/06/22 10:44

**Client Sample ID: MW-9S** Lab Sample ID: 480-202195-5

Date Collected: 09/30/22 09:40 **Matrix: Water** Date Received: 09/30/22 14:31

Batch **Batch** Dilution Batch **Prepared** Method or Analyzed **Prep Type** Type Run **Factor** Number Analyst Lab 10/03/22 11:52 Total/NA Prep 3005A 643720 VAK **EET BUF** Total/NA 6010C 644071 LMH **EET BUF** 10/04/22 15:35 Analysis 1 Total/NA Analysis 310.2 2 644428 STR **EET BUF** 10/06/22 14:59 Total/NA 350.1 643881 CLT **EET BUF** 10/04/22 09:38 Analysis 1 Total/NA Analysis 353.2 1 643591 CSS **EET BUF** 09/30/22 22:23 643589 CSS Total/NA Analysis 7196A **EET BUF** 09/30/22 19:00 1 Total/NA Analysis SM 4500 S2 F 644283 CC **EET BUF** 10/06/22 10:44 1

**Client Sample ID: Blind Duplicate** Lab Sample ID: 480-202195-6

Date Collected: 09/30/22 10:40 **Matrix: Water** 

Date Received: 09/30/22 14:31

	Batch	Batch		Dilution	Batch			Prepared
Prep Type	Type	Method	Run	Factor	Number	Analyst	Lab	or Analyzed
Total/NA	Prep	3005A			643720	VAK	EET BUF	10/03/22 11:52
Total/NA	Analysis	6010C		1	644071	LMH	EET BUF	10/04/22 16:05
Total/NA	Analysis	7196A		1	643589	CSS	EET BUF	09/30/22 19:00

#### **Laboratory References:**

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

# **Accreditation/Certification Summary**

Client: Benchmark Env. Eng. & Science, PLLC Project/Site: Benchmark-Peter Cooper sites

Job ID: 480-202195-1

#### **Laboratory: Eurofins Buffalo**

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

Authority	Program	<b>Identification Number</b>	<b>Expiration Date</b>
New York	NELAP	10026	03-31-23

### **Method Summary**

Client: Benchmark Env. Eng. & Science, PLLC Project/Site: Benchmark-Peter Cooper sites

Job ID: 480-202195-1

Method	Method Description	Protocol	Laboratory
6010C	Metals (ICP)	SW846	EET BUF
310.2	Alkalinity	MCAWW	EET BUF
350.1	Nitrogen, Ammonia	MCAWW	EET BUF
353.2	Nitrate	EPA	EET BUF
7196A	Chromium, Hexavalent	SW846	EET BUF
SM 4500 S2 F	Sulfide, Total	SM	EET BUF
3005A	Preparation, Total Metals	SW846	EET BUF
3005A	Preparation, Total Recoverable or Dissolved Metals	SW846	EET BUF
FILTRATION	Sample Filtration	None	EET BUF

#### **Protocol References:**

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

None = None

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

#### **Laboratory References:**

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

# **Sample Summary**

Client: Benchmark Env. Eng. & Science, PLLC Project/Site: Benchmark-Peter Cooper sites

Job ID: 480-202195-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-202195-1	WETLAND F	Water	09/30/22 11:35	09/30/22 14:31
480-202195-2	MW-5S	Water	09/30/22 10:40	09/30/22 14:31
480-202195-3	MW-7S	Water	09/30/22 12:00	09/30/22 14:31
480-202195-4	MW-8S	Water	09/30/22 11:35	09/30/22 14:31
480-202195-5	MW-9S	Water	09/30/22 09:40	09/30/22 14:31
480-202195-6	Blind Duplicate	Water	09/30/22 10:40	09/30/22 14:31

Latinam Matels Special Instructions/Note: Ver: 06/08/2021 Company 0 - AsNaO2 P - Na2O4S Months Sample Disposal ( A fee may be assessed if samples are retained longer than 1 month) COC No: 480-177033-27561.1 480-202195 Chain of Custody Preservation Codes 16.3 A - HCL
B - NaOH
C - Zn Acetate
D - Nitric Acid Page: Page 1 of 1 Job#: Archive For Total Number of 6 Date/Time: Date/Time: Date/Time Method of Shipment Carrier Tracking No(s) Disposal By Lab State of Origin **Analysis Requested** Missilu Cooler Temperature(s) °C and Other Remarks Special Instructions/QC Requirements 310.2 - (MOD) Local Method E-Mail: Brian.Fischer@et.eurofinsus.com 53.2, 353.2 Nitrite, Nitrate\_Calc Return To Client CB W4200 25 D - Focsi Wethod Received Received by: Received by: 2010C - (MOD)As/Cr/Fe/Mn only (Markhams) Lab PM: Fischer, Brian J Perform MS/MSD (Yes or No.) Time: (W=water. S=solid. O=waste/oil, Water Matrix Preservation Code: Water Water Water Water Water Water Water Company Radiological (C=comp, G=grab) Sample Type 300 Compliance Project: △ Yes △ No Behrond 22 35am 11.35am 9.40am 9.40am 12:00pm 9.40am 10:40am Purchase Order Requested 10-40am Sample Time Date: Poison B Unknown ten AT Requested (days **Due Date Requested:** Date/Time:  $\int \int \mathcal{S} / \mathcal{L} \mathcal{L}$  Date/Time: 9 30/22 Sample Date Project #: 48004066 Sampler: Date/Time \*MOSS Skin Irritant Deliverable Requested: I, II, III, IV, Other (specify) Custody Seal No. Company: Benchmark Env. Eng. & Science, PLLC Benchmark-Peter Cooper (Markhams) 2558 Hamburg Turnpike Suite 300 Flammable Empty Kit Relinquished by: Custody Seals Intact: △ Yes △ No Client Information Sample Identification rdubisz@bm-tk.com BLIND DUPLICATE Mr. Rick Dubisz 0 **WETLAND F** elinquished by: inquished by ackawanna State, Zip NY, 14218 New York MW-5S MW-7S MW-8S MW-9S MSD MS

Environment Testing

: eurofins

Chain of Custody Record

Phone: 716-691-2600 Fax: 716-691-7991

Amherst, NY 14228-2298

10 Hazelwood Drive

**Eurofins Buffalo** 

### **Login Sample Receipt Checklist**

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-202195-1

Login Number: 202195 List Source: Eurofins Buffalo

List Number: 1

Creator: Wallace, Cameron

Creator. Wallace, Califeron		
Question	Answer	Commen
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.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	BM
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

**Eurofins Buffalo** 

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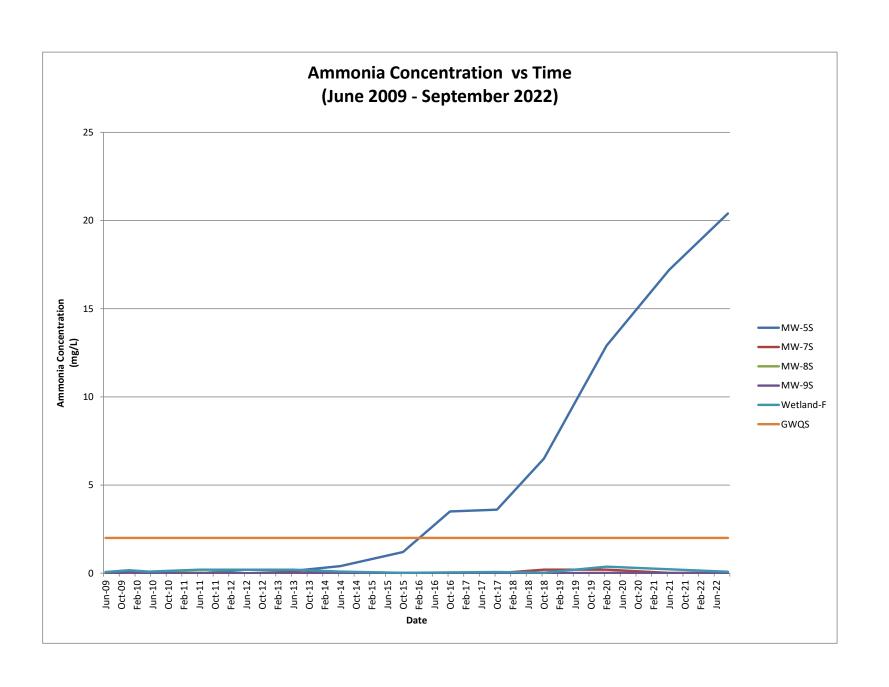
13

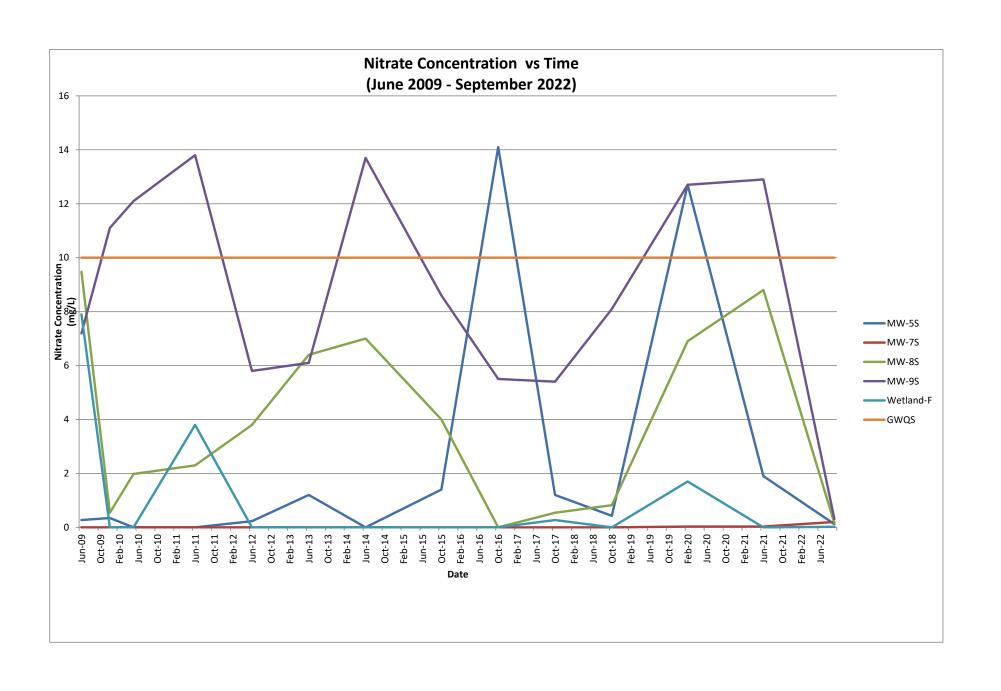
14

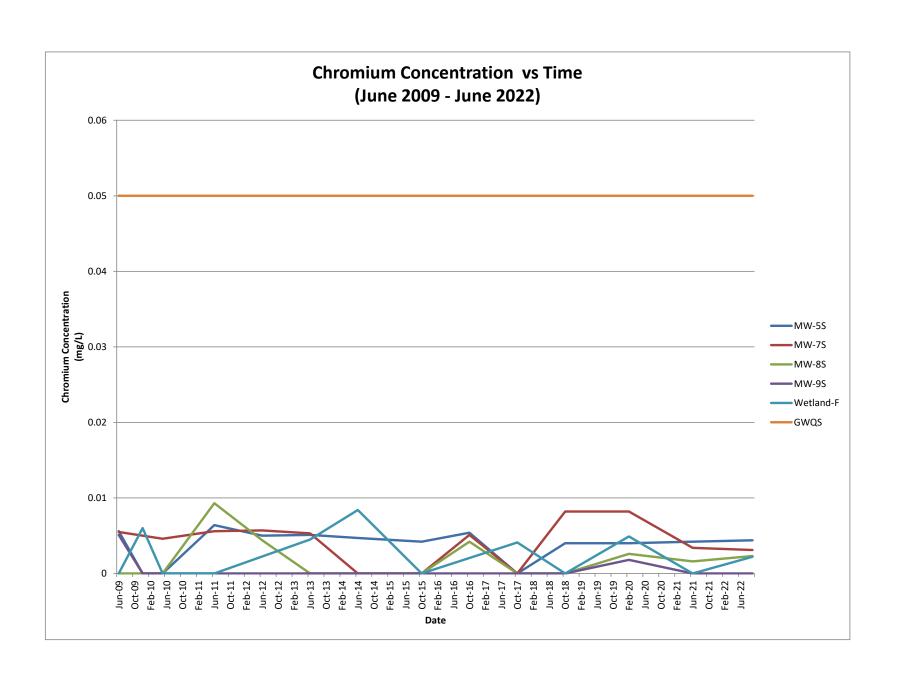
# **ATTACHMENT 3**

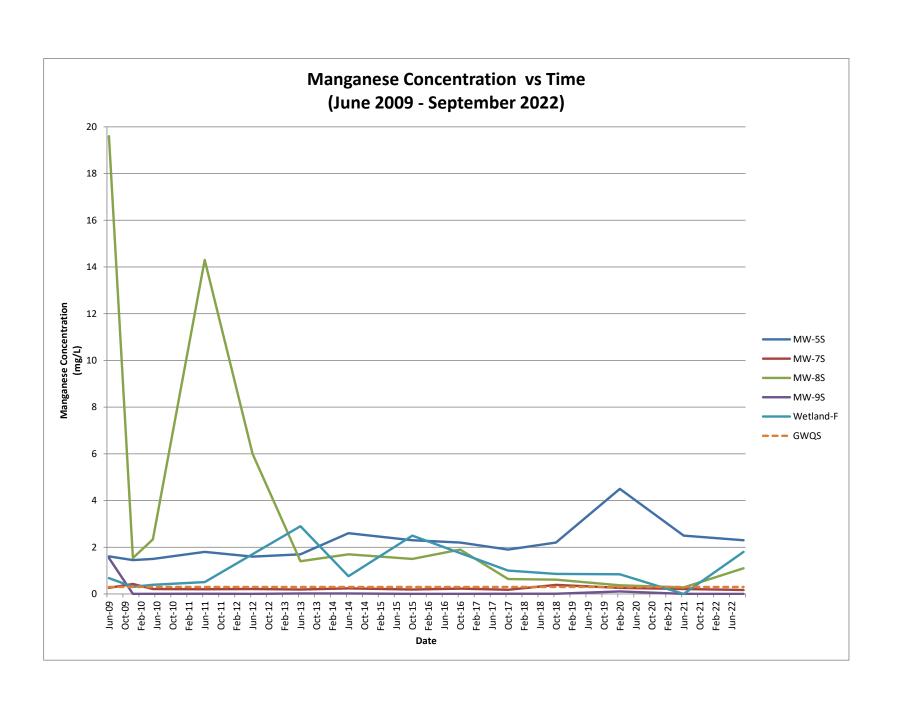
**HISTORIC DATA CHARTS** 

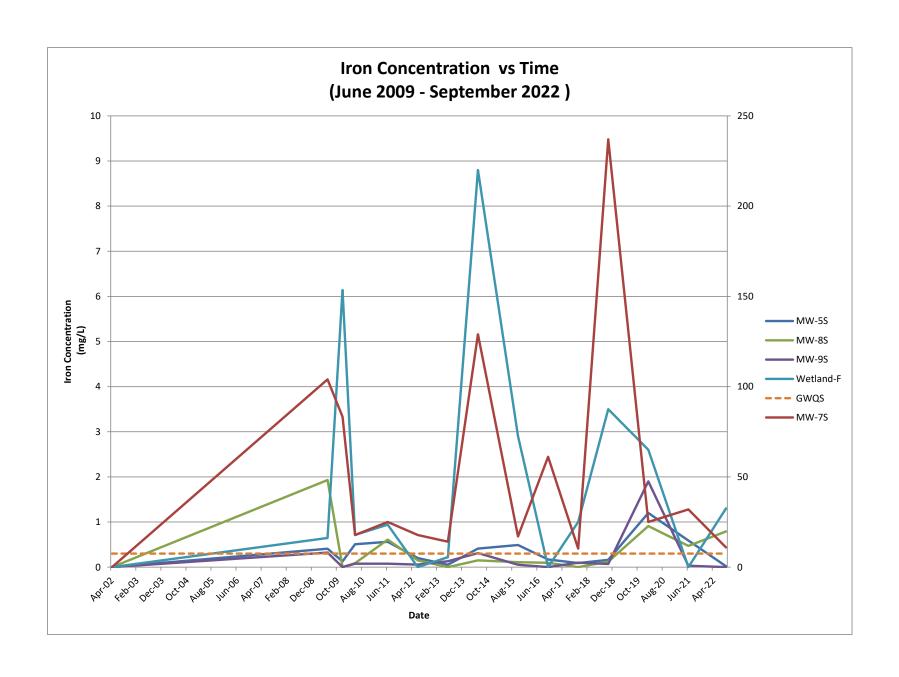












# **ATTACHMENT 4**

FIELD INSPECTION FORM & PHOTO LOG





# Field Inspection Report Post-Remedial Operation & Maintenance Plan

Property Name: Peter Cooper Markhams Site	Project No.:	0199-001-10	00
Client: Biltekoff & Pullen			
Property Address: Bentley Road	Dayton, NY	14041	
Property ID: (Tax Assessment Map) Section:	Block:		Lot(s):
Preparer's Name: Ton Behrand	Date/Time:	9/30/2	2
CERTIFICATION			
The results of this inspection were discussed with the have been identified and noted in this report, and a scompleted. Proper implementation of these corrective Manager, agreed upon, and scheduled.	upplemental Corr re actions have b	ective Action	Form has been I with the Site
Preparer / Inspector: Signature: 1000000 ABC War Believed	F	Date:	5/30122
Next Scheduled Inspection Date:	-		
Property Access			
		N/20	ı⊐ N/A
Is the access road in need of repair?     Sufficient signage posted (No Treasurer)?	yes yes	no no	□ N/A
<ul><li>2. Sufficient signage posted (No Trespassing)?</li><li>3. Has there been any noted or reported trespassing</li></ul>	V	no	□ N/A
Please note any irregularities/ changes in site acce	ss and security:		
Final Surface Cover / Vegetation			
The integrity of the vegetative soil cover or other surf entire Site must be maintained. The following documents	• •	-	•
1. Final Cover is in Place and in good condition?	🚺 yes [	no	□ N/A
Cover consists of (mainly): Wild Vegatative Gra	ass Cover		
2. Evidence of erosion?	yes Y	√ no	∏ N/A
3. Cracks visible in pavement?	¬ves [	□ no	₩ N/A
·		_	
<ul><li>4. Evidence of distressed vegetation/turf?</li><li>5. Evidence of unintended traffic and/or rutting?</li></ul>	yes □ yes	no	□ N/A
6. Evidence of uneven settlement and/or ponding?	yes ↑	no	□ N/A
o. Litablico of allevell combinent allafor perfamig:		K	



# Field Inspection Report Post-Remedial Operation & Maintenance Plan

Final Surface Cover / Vegetation				
7. Damage to any surface coverage?	yes	no 📈		I/A
If yes to any question above, please provide more	e information	n below.		G.
Gas Vent System Monitoring and Maintenand	ce			
Are there signs of stressed vegetation around g	as vents?	☐ yes	No	□ N/A
Are the gas vents currently intact and operations	al?	yes	☐ no	□ N/A
Has regular maintenance and monitoring been o	documented	l and enclosed o □ yes	r referenced	d? □ N/A
Groundwater Monitoring				
Is there a plan in place and currently being follo	wed?	yes	□ no	□ N/A
Are the wells currently intact and operational?		yes	☐ no	□ N/A
When was the most recent sampling event repower. When is the next projected sampling event?	ort and subm Date: 4 <sup>LL</sup>	nittal? Date:	9/30l 3	22
Property Use Changes / Site Development				
Has the property usage changed, or site been re	edeveloped	since the last ins	spection?	□ N/A
If yes, please list with date:				



# Field Inspection Report Post-Remedial Operation & Maintenance Plan

New Information			
Has any new information been brought to the owner/engineer's attention regarding any and/or all engineering and institutional controls and their operation and effectiveness?			
Comments:	☐ yes	no	□ N/A
This space for Notes and Comments			
Please include the following Attachments:			
<ol> <li>Site Sketch</li> <li>Photographs</li> </ol>			



# **PHOTOGRAPHIC LOG**

**Client Name:** 

**Site Location:** 

Project No.:

Peter Cooper -Markhams Site

0199-001-100

Photo No.

Date

1

09/30/22

**Direction Photo Taken:** 

East

**Description:** 

Elevated fill area.



Photo No.

Date

2

09/30/22

**Direction Photo Taken:** 

East

**Description:** 

Mowing elevated fill area



Prepared By: \_\_\_\_\_TAB



# **PHOTOGRAPHIC LOG**

**Client Name:** 

**Site Location:** 

Peter Cooper -Markhams Site

Project No.: 0199-001-100

Photo No.

Date

3

09/30/22

**Direction Photo Taken:** 

North east

**Description:** 

Elevated fill area facing northeast.



Photo No.

Date

4

06/23/21

**Direction Photo Taken:** 

West

**Description:** 

Top of containment fill area facing west.



Prepared By: \_\_\_\_\_TAB