

July 9, 2019



Environmental Programs Coordinator
Appleton Wastewater Treatment Facility
2006 East Newberry Street
Appleton, Wisconsin 54915-2758

Attn: Mr. Brian Kreski (electronic)
Phone: (920) 832-2353
Mobile: (920) 419-0649
Fax: (920) 832-5949

Re: **2019 Second Quarter Compliance Monitoring Report, Industrial User (Wastewater Discharge) Permit #18-21**
N.W. Mauthe Superfund Site
725 South Outagamie Street
Appleton, Wisconsin
Terracon Project No. 58117057
BRRTS No. 02-45-000127

Dear Mr. Kreski:

Terracon Consultants, Inc. (Terracon) is pleased to submit this quarterly process compliance report for the N.W. Mauthe Superfund site, 725 South Outagamie Street, Appleton, Wisconsin. This report is submitted in conformance with the City of Appleton Industrial User No. 18-21, issued on May 31, 2018, which expires on May 31, 2021. This report covers the period of April 1, 2019, through June 30, 2019, which included monthly effluent compliance monitoring sampling. The monthly results are summarized in the attached Table 1.

The flow monitoring and sampling activities were conducted monthly at the effluent discharge point, prior to Outfall 001. During this reporting period, local limit compliance monitoring samples were collected by the City of Appleton on April 18, 2019, but results from the City sampling are not yet available. Historical results are presented in the attached Table 2.

As noted in the 2012 Fourth Quarter Process Compliance Report the system was replumbed in October 2012. Consequently, a greater volume of water is retained within the equalization tank and sampling occurs directly from the port on the equalization tank discharge pipe. Due to the improvement in the system plumbing, Terracon has collected the composite effluent sample directly from the tank effluent piping during the 2019 sampling events.

Approximately 250 milliliters (mL) of the collected sample was transferred to a new, clean 250-mL plastic bottle provided by the laboratory. This unfiltered and unpreserved sample was



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submitted to Pace Analytical (Pace) laboratory (Green Bay, Wisconsin) for analysis of hexavalent chromium. An additional aliquot of the original sample was transferred to a clean, new 250-mL plastic bottle with nitric acid preservative provided by the laboratory. This unfiltered, preserved sample was submitted to Pace for analysis of total chromium. The laboratory analytic test reports and chain-of-custody record for each of the three monthly sampling rounds (April, May and June 2019) are attached. After the laboratory samples were prepared, the pH of the remaining collected discharge sample was measured with an Oakton pHTestrs.

The attached table summarizes the total metered discharge readings, pH measurements, and laboratory test results. Monthly discharge totals were calculated by linear interpolation of the actual meter readings. Total discharge during the reporting period was 360,727 gallons with a mean daily flow of approximately 3,964 gallons per day. Based on the laboratory results, there were no exceedances during this reporting period from Outfall 001.

Scott A. Hodgson, P.G. performed all the sample collection and monitoring during this reporting period. The following certification statement is required by Section 2 0-106, Chapter 20, Utilities:

"I (Scott Hodgson) certify under penalty of law that this document and all attachments were prepared under my direction or supervision in conformance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

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N.W. Mauthe Superfund Site ■ Appleton, Wisconsin

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Please call (920-791-9206) or email (sahodgson@terracon.com) if you have any questions or comments regarding the information provided or need additional information.

Sincerely,

Terracon

Scott A. Hodgson, P.G.

Senior Project Manager

SAH:sah/N:\Projects\2011\58117057\Working Files\Pre-Treatment Permit\Process Compliance reports\Terracon 2019\Second Quarter\Second Quarter 2019 Process Compliance.doc

Attachments: Table 1
Table 2
Laboratory Analytic Test Reports

Copies to: Jennifer Borski, WDNR-Oshkosh (Electronic)
File

TABLE 1
Influent - Effluent Compliance Summary

N.W. Mauthe Superfund Site
Appleton, Wisconsin
Terracon Project No. 58117057

Date Actual	OUTFALL 001							Manhole #1			Manhole #2		
	Date For Linear Interpolation	Metered Discharge Reading (gallons)	Gallons Discharged Between Meter Reading	Monthly Discharge (gallons)	pH	Hexavalent Chromium Lab Analysis (mg/L) [Local Limit 4.5 mg/L]	Total Chromium Lab Analysis ¹ (mg/L) [Local Limit 7.0 mg/L]	Flow Totalizer #1 Reading (gallons)	pH	Hexavalent Chromium Hach Test Kit (mg/L)	Flow Totalizer #2 Reading (gallons)	pH	Hexavalent Chromium Hach Test Kit (mg/L)
	05/01/17	15,703,639		April			Pounds Cr						
05/04/17		15,728,166	51,212	144,831			0.488						
05/04/17		15,728,166	0		7.6	0.28	0.257	2,387,552	7.1	0.36	5,185,807	6.8	0.21
	06/01/17	15,796,047		May			Pounds Cr						
06/08/17		15,812,038	83,872	92,408			0.198						
06/08/17		15,812,038	0		7.5	0.35	0.325	2,421,837	7.1	0.36	5,243,312	7.2	0.16
	07/01/17	15,888,740		June			Pounds Cr						
07/01/17		15,891,390	79,352	92,693			0.251						
07/06/17		15,902,647	11,257		7.5	0.57	0.525	2,453,044	7.1	0.69	5,309,639	7.0	0.50
07/31/17		15,945,154	42,507					2,472,011			5,337,122		
	08/01/17	15,945,504		July			Pounds Cr						
08/01/17		15,945,880	726	56,764			0.248	2,472,438			5,337,492		
08/09/17		15,958,437	12,557		7.4	0.68	0.624	2,478,016	7.0	0.66	5,347,291	6.9	0.38
	09/01/17	15,992,489		August			Pounds Cr						
09/07/17		16,001,926	43,489	46,985			0.244	2,472,438			5,337,492		
09/07/17		16,001,926	0		7.4	0.50	0.488	2,497,770	7.1	0.68	5,375,524	6.9	0.14
09/29/17		16,031,780	29,854					2,510,609			5,395,101		
	10/01/17	16,034,956		September			Pounds Cr						
10/03/17		16,035,404	3,624	42,467			0.173	2,512,318			5,397,338		
10/05/17		16,037,996	2,592		7.5	0.44	0.410	2,513,176	7.1	1.14	5,399,232	6.7	0.12
	11/01/17	16,080,246		October			Pounds Cr						
11/07/17		16,090,463	52,467	45,290			0.155	2,536,891			5,436,850		
11/09/17		16,092,667	2,204		7.6	0.76	0.718	2,538,180	7.2	0.99	5,437,985	7.2	0.22
11/15/17		16,098,379	5,712					2,541,643			5,441,055		
11/30/17		16,109,689	11,310					2,549,030			5,450,173		
	12/01/17	16,110,147		November			Pounds Cr						
12/03/17		16,112,117	2,428	29,901			0.179	2,550,308			5,451,687		
12/07/17		16,115,265	3,148		7.4	0.82	0.755	2,551,590	7.4	1.29	5,453,973	7.4	0.20
12/14/17		16,121,000	5,735					2,551,590			5,453,973		
12/31/17		16,131,936	10,936					2,560,147			5,464,203		
	01/01/18	16,132,116		December			Pounds Cr						
01/01/18		16,132,328	392	21,969			0.138	2,560,571			5,464,203		
01/04/18		16,133,697	1,369		--	0.78	0.734	2,560,993	--	0.41	5,465,331	--	0.04
	02/01/18	16,144,665		January			Pounds Cr						
02/01/18		16,144,863	11,166	12,549			0.077	2,566,068			5,472,876		
02/08/18		16,147,315	2,452		7.8	0.75	0.906	2,567,326	7.4	1.68	5,474,376	7.2	0.16
02/28/18		16,155,889	8,574					2,570,306			5,481,207		
	03/01/18	16,156,053		February			Pounds Cr						
03/01/18		16,156,211	322	11,388			0.086	2,570,306			5,481,586		
03/08/18		16,163,746	7,535		7.7	0.52	0.526	2,574,570	7.4	0.78	5,485,747	7.2	0.20
03/27/18		16,183,153	19,407					2,585,717			5,495,623		
03/31/18		16,188,615	5,462					2,472,869*			5,499,048		
	04/01/18	16,189,199		March			Pounds Cr						
04/01/18		16,190,057	1,442	33,146			0.145	2,473,316			5,500,204		
04/05/18		16,195,349	5,292		7.7	0.60	0.585	2,476,332	7.3	0.84	5,502,874	7.4	0.35
04/10/18		16,203,721	8,372					2,480,242			5,508,217		
04/25/18		16,302,239	98,518					2,508,161			5,586,326		
04/30/18		16,328,835	26,596					2,516,938			5,606,361		
	05/01/18	16,330,212		April			Pounds Cr						
05/01/18		16,331,044	2,209	141,013			0.687	2,517,809			5,607,864		
05/04/18		16,360,268	29,224					2,526,963			5,630,632		
05/10/18		16,409,694	49,426		7.6	0.30	0.315	2,541,347	7.2	0.51	5,667,843	6.8	0.19
05/22/18		16,428,757	19,063					2,547,991			5,681,939		
05/24/18		16,455,003	26,246					2,557,801			5,698,300		
05/29/18		16,462,967	7,964					2,562,178			5,702,537		
	06/01/18	16,466,594		May			Pounds Cr						
06/01/18		16,467,299	4,332	136,382			0.358	2,563,476			5,705,975		
06/05/18		16,476,100	8,801					2,566,515			5,712,597		

TABLE 1
Influent - Effluent Compliance Summary

N.W. Mauthe Superfund Site
Appleton, Wisconsin
Terracon Project No. 58117057

Date Actual	OUTFALL 001							Manhole #1			Manhole #2		
	Date For Linear Interpolation	Metered Discharge Reading (gallons)	Gallons Discharged Between Meter Reading	Monthly Discharge (gallons)	pH	Hexavalent Chromium Lab Analysis (mg/L) [Local Limit 4.5 mg/L]	Total Chromium Lab Analysis ¹ (mg/L) [Local Limit 7.0 mg/L]	Flow Totalizer #1 Reading (gallons)	pH	Hexavalent Chromium Hach Test Kit (mg/L)	Flow Totalizer #2 Reading (gallons)	pH	Hexavalent Chromium Hach Test Kit (mg/L)
06/07/18		16,480,044	3,944		7.6	0.38	0.382	2,568,258	7.1	0.53	5,715,101	7.3	0.21
06/30/18		16,537,167	57,123					2,588,614			5,756,117		
	07/01/18	16,537,690		June			Pounds Cr						
07/01/18		16,538,238	1,071	71,096			0.226	2,589,032			5,756,879		
07/05/18		16,542,427	4,189		7.6	0.31	0.311	2,591,176	7.2	0.57	5,759,920	7.1	0.16
07/12/18		16,545,145	2,718					2,594,639			5,763,368		
07/19/18		16,553,309	8,164					2,597,639			5,766,777		
07/31/18		16,571,725	18,416					2,604,452			5,779,752		
	08/01/18	16,571,996		July			Pounds Cr						
08/01/18		16,572,495	770	34,306			0.089	2,589,032			5,756,879		
08/08/18		16,581,462	8,967		--	0.43	0.438	2,608,818	7.1	0.55	5,785,813	7.0	0.27
08/31/18		16,637,913	56,451					2,629,840			5,828,591		
	09/01/18	16,640,165		August			Pounds Cr						
09/01/18		16,641,711	3,798	68,169			0.125	2,631,151			5,831,336		
09/06/18		16,695,169	53,458		7.5	0.24	0.256	2,646,502	7.1	0.59	5,871,311	6.7	0.08
09/17/18		16,734,724	39,555					2,659,921			5,899,762		
09/18/18		16,738,499	3,775					2,660,806			5,903,277		
09/30/18		16,775,825	37,326					2,672,955			5,932,062		
	10/01/18	16,776,168		September			Pounds Cr						
10/01/18		16,776,700	875	136,003			0.290	2,673,387			5,932,454		
10/03/18		16,785,853	9,153		7.8	0.30	0.303	2,675,556	7.3	0.60	5,940,463	7.1	0.22
10/25/18		16,899,216	113,363					2,709,668			6,027,153		
	11/01/18	16,908,245		October			Pounds Cr						
11/01/18		16,908,712	9,496	132,077			0.333	2,713,560			6,033,788		
11/07/18		16,921,099	12,387		7.7	0.38	0.424	2,717,458	7.1	0.36	6,044,211	6.8	0.34
11/12/18		16,936,140	15,041					2,723,181			6,054,634		
11/14/18		16,940,487	4,347					2,725,362			6,057,406		
11/16/18		16,944,318	3,831					2,727,099			6,059,771		
11/19/18		16,949,417	5,099					2,729,266			6,063,298		
	12/01/18	16,964,903		November			Pounds Cr						
12/06/18		16,972,133	22,716	56,658			0.200	2,738,784			6,080,566		
12/06/18		16,972,133	0		8.0	0.52	0.521	2,738,784	7.4	0.53	6,080,566	7.2	0.45
	01/01/19	17,020,007		December			Pounds Cr						
01/04/19		17,021,076	48,943	55,104			0.239	2,757,483			6,116,420		
01/10/19		17,051,054	29,978		7.8	0.26	0.246	2,765,903	7.2	0.41	6,140,244	7.0	0.18
	02/01/19	17,085,876		January			Pounds Cr						
02/01/19		17,086,762	35,708	65,869			0.135	2,779,438			6,166,376		
02/07/19		17,092,183	5,421		8.0	0.36	0.398	2,781,163	7.5	0.37	6,170,668	7.3	0.35
	03/01/19	17,108,085		February			Pounds Cr						
03/01/19		17,108,314	16,131	22,209			0.074	2,786,817			6,183,118		
03/07/19		17,112,149	3,835		7.9	0.29	0.296	2,788,121	7.4	--	6,186,219	7.4	--
03/26/19		17,201,867	89,718					2,810,744			6,261,318		
	04/01/19	17,220,303		March			Pounds Cr						
04/02/19		17,221,255	19,388	112,218			0.277	2,818,615			6,274,417		
04/02/19		17,221,255	0		7.7	0.40	0.408	2,818,615	7.2	0.53	6,274,417	7.2	0.15
04/18/19		17,270,735	49,480					2,834,848			6,312,336		
04/30/19		17,336,326	65,591					2,855,668			6,362,011		
	05/01/19	17,338,042		April			Pounds Cr						
05/01/19		17,340,509	4,183	117,739			0.400	2,856,981			6,365,212		
05/09/19		17,366,641	26,132		7.8	0.43	0.441	2,866,635	7.2	0.39	6,383,940	7.2	0.66
	06/01/19	17,467,893		May			Pounds Cr						
06/06/19		17,492,562	125,921	129,851			0.477	2,856,981			6,365,212		
06/06/19		17,492,562	0		7.6	0.23	0.249	2,908,632	7.2	0.32	6,478,871	7.0	0.22
06/11/19		17,502,105	9,543					2,912,952			6,486,321		
06/18/19		17,525,532	23,427					2,920,258			6,503,730		
	07/01/19	17,581,030		June			Pounds Cr						
07/08/19		17,613,923	88,391	113,137			0.235	2,947,437			6,572,415		

TABLE 1
Influent - Effluent Compliance Summary

N.W. Mauthe Superfund Site
Appleton, Wisconsin
Terracon Project No. 58117057

Date Actual	OUTFALL 001						Manhole #1			Manhole #2		
	Date For Linear Interpolation	Metered Discharge Reading (gallons)	Gallons Discharged Between Meter Reading	Monthly Discharge (gallons)	pH	Hexavalent Chromium Lab Analysis (mg/L) [Local Limit 4.5 mg/L]	Total Chromium Lab Analysis ¹ (mg/L) [Local Limit 7.0 mg/L]	Flow Totalizer #1 Reading (gallons)	pH	Hexavalent Chromium Hach Test Kit (mg/L)	Flow Totalizer #2 Reading (gallons)	pH

Italicized red type metered discharge reading was calculated by linear interpolation to 12 midnight.

Industrial User (Wastewater Discharge) Permit 18-21 Outfall 001 Effluent Limits		
pH	Hexavalent Chromium	Total Chromium
Between 5.0 and 12.4 s.u.	<4.5 mg/L	<7.0 mg/L

¹ Beginning in September 2018, the Total Chromium lab sample was not filtered. Previously, through August 2018, the sample was filtered (0.45 micron filter).
* On 3/31/18, the MH1 flowmeter face was blank. Upon replacing the batteries, the totalizer reading reverted to 2,472,869 gallons, a difference of -112,848 gallons from the previous known total.

TABLE 2
City of Appleton Compliance Limits, Outfall 001
 N.W. Mauth Superfund Site - Appleton, WI

		Aluminum (mg/L)	Arsenic (mg/L)	Cadmium (mg/L)	Chromium Total ¹ (mg/L)	Copper (mg/L)	Cyanide (mg/L)	Lead (mg/L)	Mercury (mg/L)	Nickel (mg/L)	Zinc (mg/L)	Hexavalent Chromium (mg/L)
Permit #18-21 Limits		70	1.0	0.3	7.0	3.5	1.0	2.0	0.002	2.0	10.0	4.5
Sampler	Sample Date											
CH2M Hill	02/20/97	<.02	<.003	<.00050	0.04	<.01	<.00001	<.005	<.0002	<.005	0.0051	<.01
CH2M Hill	03/24/98	0.0152	<.002	<.00004	0.0637	<.0095	<.0017	<.0006	<.000015	<.0095	0.0046	0.1000
Appleton	04/29/98	<.011	<.002	<.005	0.2200	<.05	0.0020	<.1	<.0002	<.04	<.005	NA
Appleton	10/07/98	<.011	<.002	0.0050	0.1700	<.05	<.001	<.1	<.0002	<.04	0.0250	NA
MCO	03/18/99	<.009	<.003	<.00031	NA	.00068****	<.000032	<.0024	<.00005	.00351****	<.012	<.0036
Appleton	03/18/99	<.011	<.002	<.005	<.05	<.05	0.0010	0.1000	<.00005	0.0400	0.0180	NA
Appleton	09/21/99	<.011	<.002	<.005	<.05	<.05	0.0030	<.1	<.00015	<.04	0.0080	NA
Appleton	02/15/00	<.015	<.0020	<.005	0.0900	<.05	<.001	<.1	<.00013	<.04	0.0280	NA
MCO	03/13/00	<.009	<.003	<.00031	0.1400	<.0006	<.0044	<.0024	<.00005	0.0012	<.012	NA
Appleton	02/21/01	<.015	<.002	<.005	0.11	<.05	0.001	<.1	<.00013	<.04	0.042	NA
MCO	03/01/01	<.034	<.0027	.012****	0.25	.0088****	<.0033	<.17	<.00005	.036****	0.015	<.0036
Appleton	10/02/01	0.016	<.002	<.005	0.14	<.05	<.001	<.1	<.00013	<.04	0.065	NA
MCO	03/19/02	<.034	<.0027	<.0075	0.36	<.0077	<.0027	<.17	<.00005	<.017	<.012	<.0036
Appleton	05/02/02	<.049	<.012	<.014	0.362	<.015	<.0014	<.060	<.00011	<.011	<.009	NA
Appleton	11/12/02	0.027	<.0082	<.00053	0.23	<.009	<.0007	<.00084	<.000028	0.0044	0.0081	NA
Appleton	02/11/03	<.027	<.0082	<.00053	0.086	<.0009	<.0014	<.0013	<.000028	0.0036	<.0025	NA
Appleton	03/24/03	<.045	<.0027	<.0088	0.13	0.075	<.0050	<.16	<.000050	<.019	<.0044	<.0036
Appleton	10/23/03	0.0045	0.0013	<.00001	0.221	<.00008	<.0005	<.00006	0.0002	<.025	<.010	NA
Appleton	03/24/04	<.050	<.0026	<.010	0.15	<.0060	<.0050	<.16	<.000025	<.020	<.010	NA
Appleton	11/09/04	0.0071	<.0012	<.00001	0.04	0.0008	<.0005	<.008	<.0002	0.0013	<.01	NA
MCO	08/08/05	0.023	<.0035	<.00003	0.039	0.0019	<.0037	<.0011	<.000026	<.0044	0.0024	<.0005
Appleton	11/05/06	0.0052	<.0012	<.00001	0.088	<.00005	<.0005	<.00008	<.0002	0.0017	<.010	NA
Appleton	02/23/06	0.0021	<.0012	<.00001	0.08	<.00005	<.00005	<.00008	<.0002	0.0022	<.010	NA
MCO	03/23/06	<.020	<.0076	<.000074	0.32	0.0018	0.0043	<.00034	<.000026	0.0033	<.020	NA
Appleton	06/27/06	<.0200	<.0076	<.000074	0.700	0.0016	<.0094	<.00034	<.000072	0.0021	<.020	<.0350
Appleton	10/05/06	0.037	<.00011	<.00001	4.575	0.0068	0.01	<.001	<.0002	0.0026	<.010	NA
Appleton	03/22/07	<.07	<.07	<.01	1.9	3.5	<.004	<.03	<.0002	<.04	<.01	NA
MCO	04/02/07	0.0383	0.00024	0.000086	1.41	0.0041	<.0094	0.00013	<.000019	0.0035	0.009	NA
Appleton	12/04/07	<.07	<.001	<.01	3.4	<.01	0.008	<.03	<.0002	<.04	<.01	1.5
Appleton	01/16/08	0.21	<.005	<.01	<.03	0.02	0.017	0.06	0.0003	<.04	0.04	NA
OMNNI	04/08/08	0.0114	0.00043	0.00011	0.864	0.0043	0.014 J	0.000095 J	<.0001	0.0024	0.0071	0.063
Appleton	08/19/08	<.08	<.001	<.01	0.95	<.01	0.005	<.03	0.0002	<.02	<.01	NA
Appleton	03/31/09	<.09	<.012	<.01	0.99	<.01	<.008	<.05	<.0002	<.02	<.01	NA
OMNNI	04/07/09	<.0151	0.003 J	0.00040 J	0.767	0.0024 J	<.0060	<.0014	<.00010	0.0016 J	0.0137 J	0.84
Appleton	09/22/09	<.08	<.006	<.01	2.3	<.01	<.008	<.05	<.0002	<.02	<.01	NA
Appleton	03/02/10	<.06	<.002	<.01	1.6	<.01	<.008	<.03	<.0002	<.01	<.01	NA
OMNNI	04/06/10	0.0501 J	<.0014	0.00043 J	1.16	0.0024 J	<.0061	<.00075	<.0001	0.0023 J	0.0046 J	1.3
Appleton	11/02/10	<.10	<.010	<.01	0.71	<.01	<.008	<.03	<.0002	<.01	<.01	NA
Appleton	02/24/11	<.08	<.001	<.01	1.5	<.01	0.008	<.04	<.0002	<.02	<.01	NA
OMNNI	04/05/11	0.0725 J	0.0025 J	<.00026	0.401	0.0028 J	<.0061	<.0014	<.00010	0.00053 J	0.0023 J	0.40
Appleton	10/26/11	<.08	<.005	<.01	1.2	<.01	0.007	<.04	<.0002	<.02	<.01	NA
Appleton	03/21/12	<.11	<.004	<.01	1.3	0.01	0.007	<.04	<.0002	<.02	<.01	NA
Terracon	04/05/12	<.0695	<.0047	<.00039	0.696	0.014 J	<.0061	<.0014	<.00010	0.001 J	<.0053	0.83
Appleton	10/04/12	0.0865	0.0051	0.00049	1.43	0.0028 J	0.026	0.0022	0.0001	0.00019 J	<.0053	NA
Terracon	04/11/13	0.078	<.004	<.00048	0.431	0.0024 J	<.0038	<.027	<.00010	0.00013 J	<.0024	0.42
Appleton	04/17/13	<.0714	<.0042	<.00048	0.279	0.0029 J	<.0038	<.027	<.00010	0.00062 J	<.0024	NA
Appleton	11/20/13	<.0714	<.0042	<.00048	1.13	0.0018 J	0.0044 J	<.027	<.00010	0.00085 J	0.0034 J	NA
Appleton	04/15/14	0.119 J	<.0068	<.001	0.27	0.0036 J	<.060	<.0016	<.00010	<.0013	<.0058	NA
Terracon	05/13/14	0.116 J	<.0068	<.001	0.273	0.0034 J	<.060	0.0040 J	<.00010	<.0013	0.0064 J	0.28
Appleton	9/24/2014	<.0655	<.0068	<.001	0.757	<.0034	<.010	<.0016	<.00010	<.0013	<.0058	NA
Terracon	4/15/2015	0.054 J	<.0072	<.00060	0.858	0.0041 J	<.010	<.0030	<.00010	<.0014	0.0026 J	0.92
Appleton	6/3/2015	<.0655	<.0068	<.001	0.504	<.0034	<.020	<.0016	<.00010	0.0013 J	<.0058	NA
Appleton	10/21/2015	0.105 J	<.0068	<.0010	0.676	<.0034	<.010	0.0024 J	<.00010	<.0013	0.0078 J	NA
Terracon	5/12/2016	0.0637 J	<.0072	<.00060	0.645	<.0036	<.0068	<.0030	<.00013	0.0018 J	<.0013	0.70
Appleton	5/17/2016	<.090	<.001	<.010	0.530	<.010	<.007	<.030	<.0002	<.020	<.01	NA
Appleton	11/1/2016	<.090	<.010	<.010	0.560	<.010	<.007	<.030	<.0002	<.020	<.010	NA
Appleton	4/27/2017	<.060	<.001	<.010	0.370	<.010	0.007	<.030	<.0002	<.020	<.010	NA
Terracon	6/8/2017	<.0555	<.0083	<.0013	0.345	<.0063	<.0068	<.0043	<.00013	<.0026	<.0093	0.35
Appleton	11/9/2017	<.060	0.001	0.010	0.770	<.010	<.007	<.030	<.0002	<.020	<.010	NA
Appleton	5/22/2018	NA	<.015	<.0006	0.319	0.005	0.010	<.005	<.0002	0.005	<.002	NA
Terracon	6/7/2018	0.0713 J	<.0083	<.0013	0.382	<.0063	<.014	<.0043	<.00013	<.0026	<.0093	0.38
Appleton	11/14/2018	NA	0.020	0.001	0.325	0.004	<.009	<.005	<.0002	0.004	0.004	NA
Appleton	4/18/2019	NA	Results not yet received									NA

¹ Beginning in September 2018, the Total Chromium lab sample was not filtered. Previously, through August 2018, the sample was filtered (0.45 micron filter).

April 10, 2019

Scott Hodgson
Terracon, Inc. - Franklin
9856 South 57th Street
Franklin, WI 53132

RE: Project: 58117057 MAUTHE
Pace Project No.: 40185074

Dear Scott Hodgson:

Enclosed are the analytical results for sample(s) received by the laboratory on April 02, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Dan Milewsky
dan.milewsky@pacelabs.com
(920)469-2436
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,
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CERTIFICATIONS

Project: 58117057 MAUTHE

Pace Project No.: 40185074

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 58117057 MAUTHE

Pace Project No.: 40185074

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40185074001	OUTFALL-001	Water	04/02/19 07:40	04/02/19 12:33

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 58117057 MAUTHE
Pace Project No.: 40185074

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40185074001	OUTFALL-001	EPA 6010	TXW	1	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: 58117057 MAUTHE

Pace Project No.: 40185074

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40185074001	OUTFALL-001					
EPA 6010	Chromium	408	ug/L	10.0	04/04/19 16:31	
SM 3500-Cr B (Online)	Chromium, Hexavalent	0.40	mg/L	0.043	04/02/19 13:10	

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 58117057 MAUTHE

Pace Project No.: 40185074

Method: EPA 6010

Description: 6010 MET ICP

Client: Terracon, Inc. - Franklin

Date: April 10, 2019

General Information:

1 sample was analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 58117057 MAUTHE

Pace Project No.: 40185074

Method: SM 3500-Cr B (Online)

Description: Chromium, Hexavalent

Client: Terracon, Inc. - Franklin

Date: April 10, 2019

General Information:

1 sample was analyzed for SM 3500-Cr B (Online). All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 58117057 MAUTHE

Pace Project No.: 40185074

Sample: OUTFALL-001 **Lab ID: 40185074001** Collected: 04/02/19 07:40 Received: 04/02/19 12:33 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP									
Analytical Method: EPA 6010 Preparation Method: EPA 3010									
Chromium	408	ug/L	10.0	2.5	1	04/04/19 09:09	04/04/19 16:31	7440-47-3	
Chromium, Hexavalent									
Analytical Method: SM 3500-Cr B (Online)									
Chromium, Hexavalent	0.40	mg/L	0.043	0.013	2.5		04/02/19 13:10		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 58117057 MAUTHE
Pace Project No.: 40185074

QC Batch: 317361	Analysis Method: EPA 6010
QC Batch Method: EPA 3010	Analysis Description: 6010 MET
Associated Lab Samples: 40185074001	

METHOD BLANK: 1845268 Matrix: Water
Associated Lab Samples: 40185074001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium	ug/L	<2.5	10.0	04/04/19 16:01	

LABORATORY CONTROL SAMPLE: 1845269

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	ug/L	500	482	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1845270 1845271

Parameter	Units	40185050001 Result	MS	MSD	MS	MSD	MS	MSD	% Rec	Max		Qual
			Spike Conc.	Spike Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	
Chromium	ug/L	14.9	500	500	508	496	99	96	75-125	3	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 58117057 MAUTHE

Pace Project No.: 40185074

QC Batch: 317154

Analysis Method: SM 3500-Cr B (Online)

QC Batch Method: SM 3500-Cr B (Online)

Analysis Description: Chromium, Hexavalent by 3500

Associated Lab Samples: 40185074001

METHOD BLANK: 1844114

Matrix: Water

Associated Lab Samples: 40185074001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.0051	0.017	04/02/19 13:10	

LABORATORY CONTROL SAMPLE: 1844115

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.3	0.30	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1844116 1844117

Parameter	Units	1844116		1844117		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40185074001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Chromium, Hexavalent	mg/L	0.40	0.75	0.75	1.1	1.1	98	96	90-110	2	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 58117057 MAUTHE

Pace Project No.: 40185074

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 58117057 MAUTHE

Pace Project No.: 40185074

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40185074001	OUTFALL-001	EPA 3010	317361	EPA 6010	317454
40185074001	OUTFALL-001	SM 3500-Cr B (Online)	317154		

REPORT OF LABORATORY ANALYSIS

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CHAIN OF CUSTODY

A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
 H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)

Company Name: **Terracon**

Branch/Location: **Milwaukee**

Project Contact: **Scott Hodgson**

Phone: **414-209-7640**

Project Number: **58117057**

Project Name: **Mauthe**

Project State: **WI**

Sampled By (Print): **Scott A. Hodgson**

Sampled By (Sign): *Scott A. Hodgson*

PO #:

Data Package Options (billable)

EPA Level III

EPA Level IV

MS/MSD

On your sample (billable)

NOT needed on your sample

Matrix Codes

A = Air
B = Biota
C = Charcoal
O = Oil
S = Soil
SI = Sludge
W = Water
DW = Drinking Water
GW = Ground Water
SW = Surface Water
WW = Waste Water
WP = Wipe

CLIENT FIELD ID

PACE LAB # **061**

OUTFALL-001

COLLECTION DATE **4/19/07**

MATRIX **WW**

Quote #:

Mail To Contact:

Mail To Company:

Mail To Address:

Invoice To Contact:

Invoice To Company:

Invoice To Address:

Invoice To Phone:

CLIENT COMMENTS

LAB COMMENTS (Lab Use Only)

Profile #

Y/N	Pick Letter	ANALYSES REQUESTED
N	N	Total Chromium
N	A	Hex Chromium

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)

Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:

Email #2:

Telephone:

Fax:

Samples on HOLD are subject to special pricing and release of liability

Relinquished By: *Scott A. Hodgson* Date/Time: **4/19/07 0830**

Relinquished By: *Scott A. Hodgson* Date/Time: **4/21/07 1233**

Relinquished By: _____ Date/Time: _____

Relinquished By: _____ Date/Time: _____

Relinquished By: _____ Date/Time: _____

Received By: *Scott A. Hodgson* Date/Time: **4/21/07 0845**

Received By: *Scott A. Hodgson* Date/Time: **4-2-19 0333**

Received By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

PACE Project No. **40185074**

Receipt Temp = **801** °C

Sample Receipt pH **OK/Adjusted**

Cooler Custody Seal **Present/Not Present**

Intact / Not Intact



1241 Bellevue Street, Green Bay, WI 54302

Document Name: Sample Condition Upon Receipt (SCUR)

Document Revised: 25Apr2018

Document No.: F-GB-C-031-Rev.07

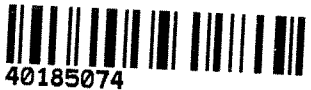
Issuing Authority: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Client Name: Tennison

Project #: **WO# : 40185074**

Courier: CS Logistics Fed Ex Speedee UPS Waltco
 Client Pace Other: _____



Tracking #: _____
Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Custody Seal on Samples Present: yes no Seals intact: yes no
Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used SR - N/A Type of Ice: Wet Blue Dry None Samples on ice, cooling process has begun

Cooler Temperature Uncorr: R01 /Corr: _____
Temp Blank Present: yes no Biological Tissue is Frozen: yes no

Person examining contents:
Date: 4-2-19
Initials: pb

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C.

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. <u>U2 pg # 4-2-19 pb</u>
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>Client used water-soluble permeable ink and it is bleeding. 4-2-19 pb</u>
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: _____
Person Contacted: _____ Date/Time: _____
Comments/ Resolution: _____
If checked, see attached form for additional comments

Project Manager Review: AL for DM Date: 4/2/19

May 16, 2019

Scott Hodgson
Terracon, Inc. - Franklin
9856 South 57th Street
Franklin, WI 53132

RE: Project: 58117057 MAUTHE
Pace Project No.: 40187309

Dear Scott Hodgson:

Enclosed are the analytical results for sample(s) received by the laboratory on May 09, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Dan Milewsky
dan.milewsky@pacelabs.com
(920)469-2436
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 58117057 MAUTHE

Pace Project No.: 40187309

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 58117057 MAUTHE

Pace Project No.: 40187309

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40187309001	OUTFALL-001	Water	05/09/19 07:50	05/09/19 14:10

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 58117057 MAUTHE

Pace Project No.: 40187309

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40187309001	OUTFALL-001	EPA 6010	TXW	1	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: 58117057 MAUTHE

Pace Project No.: 40187309

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40187309001	OUTFALL-001					
EPA 6010	Chromium	441	ug/L	10.0	05/13/19 21:10	
SM 3500-Cr B (Online)	Chromium, Hexavalent	0.43	mg/L	0.043	05/09/19 15:10	

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 58117057 MAUTHE

Pace Project No.: 40187309

Method: EPA 6010

Description: 6010 MET ICP

Client: Terracon, Inc. - Franklin

Date: May 16, 2019

General Information:

1 sample was analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 58117057 MAUTHE

Pace Project No.: 40187309

Method: SM 3500-Cr B (Online)

Description: Chromium, Hexavalent

Client: Terracon, Inc. - Franklin

Date: May 16, 2019

General Information:

1 sample was analyzed for SM 3500-Cr B (Online). All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 58117057 MAUTHE

Pace Project No.: 40187309

Sample: OUTFALL-001 **Lab ID: 40187309001** Collected: 05/09/19 07:50 Received: 05/09/19 14:10 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Chromium	441	ug/L	10.0	2.5	1	05/13/19 07:11	05/13/19 21:10	7440-47-3	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent	0.43	mg/L	0.043	0.013	2.5		05/09/19 15:10		

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QUALITY CONTROL DATA

Project: 58117057 MAUTHE
Pace Project No.: 40187309

QC Batch: 321047	Analysis Method: EPA 6010
QC Batch Method: EPA 3010	Analysis Description: 6010 MET
Associated Lab Samples: 40187309001	

METHOD BLANK: 1865178 Matrix: Water
Associated Lab Samples: 40187309001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium	ug/L	<2.5	10.0	05/13/19 20:15	

LABORATORY CONTROL SAMPLE: 1865179

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	ug/L	500	468	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1865180 1865181

Parameter	Units	40187412001 Result	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	MS Result	Spike Conc.	MSD Result	% Rec	% Rec						
Chromium	ug/L	0.031 mg/L	500	518	500	515	97	97	75-125	0	20			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 58117057 MAUTHE
Pace Project No.: 40187309

QC Batch: 320881 Analysis Method: SM 3500-Cr B (Online)
QC Batch Method: SM 3500-Cr B (Online) Analysis Description: Chromium, Hexavalent by 3500
Associated Lab Samples: 40187309001

METHOD BLANK: 1863795 Matrix: Water
Associated Lab Samples: 40187309001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.0051	0.017	05/09/19 11:20	

LABORATORY CONTROL SAMPLE: 1863796

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.3	0.29	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1863797 1863798

Parameter	Units	40187272002		1863797		1863798		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Result					
Chromium, Hexavalent	mg/L	<0.0051	0.3	0.3	0.3	0.28	0.27	92	91	90-110	1	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 58117057 MAUTHE
Pace Project No.: 40187309

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 58117057 MAUTHE

Pace Project No.: 40187309

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40187309001	OUTFALL-001	EPA 3010	321047	EPA 6010	321177
40187309001	OUTFALL-001	SM 3500-Cr B (Online)	320881		

REPORT OF LABORATORY ANALYSIS

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UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436



CHAIN OF CUSTODY

Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=Q Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)

Company Name: TERRACON

Branch/Location: M. Iwawker

Project Contact: Scott Hodgson

Phone: 414-209-7440

Project Number: 58117057

Project Name: MaerThe

Project State: WI

Sampled By (Print): Scott A. Hodgson

Sampled By (Sign): *Scott A. Hodgson*

PO #: _____

Regulatory Program: _____

Data Package Options
 EPA Level III
 EPA Level IV

On your sample (billable)
 NOT needed on your sample

Matrix Codes
 W = Water
 DW = Drinking Water
 GW = Ground Water
 SW = Surface Water
 WW = Waste Water
 WP = Wipe

COLLECTION

DATE: 5/19/19 0750 TIME: 410 MATRIX: _____

PACE LAB # 001

CLIENT FIELD ID OUTFALL-001

Y/N	Pick Letter	FILTERED? (YES/NO)	PRESERVATION (CODE)	Analyses Requested	Matrix Code	DATE	TIME	MATRIX	Received By			Relinquished By			
									Date/Time	Date/Time	Date/Time	Date/Time	Date/Time	Date/Time	
N				Total Chromium		5/19/19	0750	410	Scott A. Hodgson	5/19/19	0830	Fuller	5/19/19	1410	
N				Hex Chromium		5/19/19	1330								

Quote #: _____

Mail To Contact: same

Mail To Company: _____

Mail To Address: _____

Invoice To Contact: _____

Invoice To Company: _____

Invoice To Address: _____

Invoice To Phone: _____

CLIENT COMMENTS

LAB COMMENTS (Lab Use Only)

Profile # _____

Received By: *Fuller* Date/Time: 5/19/19 0930

Received By: *Fuller by Pace* Date/Time: 5-19-19 1410

Received By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

Received By: _____ Date/Time: _____

PACE Project No. C6187309

Receipt Temp = ROT °C

Sample Receipt pH pk / Adjusted

Cooler Custody Seal Present / Not Present Intact / Not Intact

Sample Preservation Receipt Form

Client Name: Terracon Project # 40187351

All containers needing preservation have been checked and noted below: Yes No N/A
 Lab Lot# of pH paper: 1053281

Initial when completed: JK

Date/Time:

Lab Std #ID of preservation (if pH adjusted):

Pace Lab #	Glass				Plastic				Vials				Jars		General			VOA Vials (>6mm) *	H2SO4 pH ≤ 2	NaOH+Zn Act pH ≥ 9	NaOH pH ≥ 12	HNO3 pH ≤ 2	pH after adjusted	Volume (mL)				
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3B	BP3N	BP3S	DG9A	DG9T	VG9U								VG9H	VG9M	VG9D	JGFU
001																											2.5 / 5 / 10	
002																												2.5 / 5 / 10
003																												2.5 / 5 / 10
004																												2.5 / 5 / 10
005																												2.5 / 5 / 10
006																												2.5 / 5 / 10
007																												2.5 / 5 / 10
008																												2.5 / 5 / 10
009																												2.5 / 5 / 10
010																												2.5 / 5 / 10
011																												2.5 / 5 / 10
012																												2.5 / 5 / 10
013																												2.5 / 5 / 10
014																												2.5 / 5 / 10
015																												2.5 / 5 / 10
016																												2.5 / 5 / 10
017																												2.5 / 5 / 10
018																												2.5 / 5 / 10
019																												2.5 / 5 / 10
020																												2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm): Yes N/A *If yes look in headspace column

AG1U	AG1H	AG4S	AG4U	AG5U	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3B	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN:
1 liter amber glass	1 liter amber glass HCL	125 mL amber glass H2SO4	120 mL amber glass unpres	100 mL amber glass unpres	500 mL amber glass H2SO4	250 mL clear glass unpres	1 liter plastic unpres	500 mL plastic HNO3	500 mL plastic NaOH, Znact	250 mL plastic unpres	250 mL plastic NaOH	250 mL plastic HNO3	250 mL plastic H2SO4	40 mL amber ascobic	40 mL amber Na Thio	40 mL clear vial unpres	40 mL clear vial HCL	40 mL clear vial MeOH	40 mL clear vial DI	4 oz amber jar unpres	4 oz clear jar unpres	4 oz plastic jar unpres	120 mL plastic Na Thiosulfate	ziploc bag



Document Name:
Sample Condition Upon Receipt (SCUR)
 Document No.:
F-GB-C-031-Rev.07

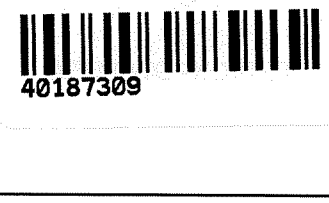
Document Revised: 25Apr2018
 Issuing Authority:
 Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Client Name: Torricon

Project #: **WO#: 40187309**

Courier: CS Logistics Fed Ex Speedee UPS Waltco
 Client Pace Other: _____



Tracking #: _____

Custody Seal on Cooler/Box Present: yes no Seals intact: yes no

Custody Seal on Samples Present: yes no Seals intact: yes no

Packing Material: Bubble Wrap Bubble Bags None Other

Thermometer Used SR - NA Type of Ice: Wet Blue Dry None Samples on ice, cooling process has begun

Cooler Temperature Uncorr: _____ /Corr: ROI

Temp Blank Present: yes no Biological Tissue is Frozen: yes no

Person examining contents:
 Date: 5-9-19
 Initials: JK

Temp should be above freezing to 6°C.
 Biota Samples may be received at ≤ 0°C.

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	2. <u>No pg #</u>
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time:
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>Client used water soluble ink</u>
-Includes date/time/ID/Analysis Matrix: <u>W</u>		<u>5-9-19 JK</u>
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: _____ If checked, see attached form for additional comments
 Person Contacted: _____ Date/Time: _____
 Comments/ Resolution: _____

Project Manager Review: [Signature]

Date: 05/09/19

June 17, 2019

Scott Hodgson
Terracon, Inc. - Franklin
9856 South 57th Street
Franklin, WI 53132

RE: Project: 58117057 MAUTHE
Pace Project No.: 40188937

Dear Scott Hodgson:

Enclosed are the analytical results for sample(s) received by the laboratory on June 06, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Dan Milewsky
dan.milewsky@pacelabs.com
(920)469-2436
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 58117057 MAUTHE

Pace Project No.: 40188937

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 58117057 MAUTHE

Pace Project No.: 40188937

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40188937001	OUTFALL-001	Water	06/06/19 07:37	06/06/19 12:45

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 58117057 MAUTHE
Pace Project No.: 40188937

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40188937001	OUTFALL-001	EPA 6010	TXW	1	PASI-G
		SM 3500-Cr B (Online)	DEY	1	PASI-G

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: 58117057 MAUTHE

Pace Project No.: 40188937

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40188937001	OUTFALL-001					
EPA 6010	Chromium	249	ug/L	10.0	06/10/19 12:17	
SM 3500-Cr B (Online)	Chromium, Hexavalent	0.23	mg/L	0.043	06/06/19 13:20	

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 58117057 MAUTHE
Pace Project No.: 40188937

Method: EPA 6010
Description: 6010 MET ICP
Client: Terracon, Inc. - Franklin
Date: June 17, 2019

General Information:

1 sample was analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:

The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):

All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:

All criteria were within method requirements with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: 58117057 MAUTHE

Pace Project No.: 40188937

Method: SM 3500-Cr B (Online)

Description: Chromium, Hexavalent

Client: Terracon, Inc. - Franklin

Date: June 17, 2019

General Information:

1 sample was analyzed for SM 3500-Cr B (Online). All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:

The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:

All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:

All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:

All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 58117057 MAUTHE

Pace Project No.: 40188937

Sample: OUTFALL-001 **Lab ID: 40188937001** Collected: 06/06/19 07:37 Received: 06/06/19 12:45 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Chromium	249	ug/L	10.0	2.5	1	06/07/19 06:56	06/10/19 12:17	7440-47-3	
Chromium, Hexavalent	Analytical Method: SM 3500-Cr B (Online)								
Chromium, Hexavalent	0.23	mg/L	0.043	0.013	2.5		06/06/19 13:20		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 58117057 MAUTHE
Pace Project No.: 40188937

QC Batch: 323685 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 40188937001

METHOD BLANK: 1879410 Matrix: Water
Associated Lab Samples: 40188937001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium	ug/L	<2.5	10.0	06/10/19 11:15	

LABORATORY CONTROL SAMPLE: 1879411

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	ug/L	500	510	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1879412 1879413

Parameter	Units	1879412		1879413		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40188772001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result						
Chromium	ug/L	<2.5	500	500	510	494	102	99	75-125	3	20

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 58117057 MAUTHE
Pace Project No.: 40188937

QC Batch: 323635 Analysis Method: SM 3500-Cr B (Online)
QC Batch Method: SM 3500-Cr B (Online) Analysis Description: Chromium, Hexavalent by 3500
Associated Lab Samples: 40188937001

METHOD BLANK: 1879031 Matrix: Water
Associated Lab Samples: 40188937001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium, Hexavalent	mg/L	<0.0051	0.017	06/06/19 13:20	

LABORATORY CONTROL SAMPLE: 1879032

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium, Hexavalent	mg/L	0.3	0.30	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1879033 1879034

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		Result	Spike Conc.	Spike Conc.	Result								
Chromium, Hexavalent	mg/L	0.23	0.75	0.75	0.96	0.96	97	98	90-110	1	20		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 58117057 MAUTHE

Pace Project No.: 40188937

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 58117057 MAUTHE

Pace Project No.: 40188937

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40188937001	OUTFALL-001	EPA 3010	323685	EPA 6010	323847
40188937001	OUTFALL-001	SM 3500-Cr B (Online)	323635		

REPORT OF LABORATORY ANALYSIS

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(Please Print Clearly)

Company Name: TERRACON
 Branch/Location: Waukegan, IL
 Project Contact: Scott Hodgson
 Phone: 914-209-7646
 Project Number: 58 117 057
 Project Name: Maunthe
 Project State: WI
 Sampled By (Print): Scott A. Hodgson
 Sampled By (Sign): *Scott A. Hodgson*
 PO #:

UPPER MIDWEST REGION
 MN: 612-607-1700 WI: 920-469-2436

40188937

CHAIN OF CUSTODY

"Preservation Codes"
 A=None B=HCL C=H2SO4 D=HNO3 E=D1 Water F=Methanol G=NaOH
 H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

DATA PACKAGE OPTIONS (billable)
 EPA Level III
 EPA Level IV
 On your sample (billable)
 NOT needed on your sample

MS/MSD Matrix Codes
 W = Water
 DW = Drinking Water
 GW = Ground Water
 SW = Surface Water
 WW = Waste Water
 WP = Wipe

CLIENT FIELD ID: 001 OUTFALL-001
 DATE: 6/6/19
 TIME: 0757
 MATRIX: LUW

Quote #:
 Mail To Contact:
 Mail To Company:
 Mail To Address:
 Invoice To Contact:
 Invoice To Company:
 Invoice To Address:
 Invoice To Phone:
 CLIENT COMMENTS
 LAB COMMENTS (Lab Use Only)
 Profile #

Y/N	Pick Letter	ANALYSES REQUESTED	FILTERED? (YES/NO)	PRESERVATION (CODE)*	COLLECTION DATE	TIME	MATRIX	Relinquished By:		Date/Time:	
								Relinquished By:	Date/Time:	Relinquished By:	Date/Time:
N	N							<i>Scott A. Hodgson</i>	6/6/19	0730	6/6/19 0935
N	D							<i>Scott A. Hodgson</i>	6/6/19	1245	6/6/19 1245
N	A							<i>Scott A. Hodgson</i>	6/6/19	1245	6/6/19 1245
N								<i>Scott A. Hodgson</i>	6/6/19	1245	6/6/19 1245

Rush Turnaround Time Requested - Prelims
 (Rush TAT subject to approval/surcharge)
 Date Needed:
 Transmit Prelim Rush Results by (complete what you want):
 Email #1:
 Email #2:
 Telephone:
 Fax:

Relinquished By: *Scott A. Hodgson* Date/Time: 6/6/19 0730
 Relinquished By: *Scott A. Hodgson* Date/Time: 6/6/19 1245
 Relinquished By: *Scott A. Hodgson* Date/Time: 6/6/19 1245
 Relinquished By: *Scott A. Hodgson* Date/Time: 6/6/19 1245
 Relinquished By: *Scott A. Hodgson* Date/Time: 6/6/19 1245

Received By: *Scott A. Hodgson* Date/Time: 6/6/19 0935
 Received By: *Scott A. Hodgson* Date/Time: 6/6/19 1245
 Received By: *Scott A. Hodgson* Date/Time: 6/6/19 1245

Sample Receipt pH: 6.5 Adjusted
 Cooler Custody Seal: Present / Not Present
 Intact / Not Intact

PAGE Project No: 40188937
 Receipt Temp = ROT °C

Client Name: Terracon Project # 40188937

All containers needing preservation have been checked and noted below: Yes No N/A
 Lab Lot# of pH paper: 10453581

Lab Std #ID of preservation (if pH adjusted): _____


Initial when Started Date/Time: _____

Pace Lab #	Glass				Plastic				Vials				Jars			General			VOA Vials (>6mm) *					H2SO4 pH ≤ 2	NaOH+Zn Act pH ≥ 9	NaOH pH ≥ 12	HNO3 pH ≤ 2	pH after adjusted	Volume (mL)							
	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3B	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU							SP5T	ZP1C	GN				
001	/																																			
002	/																																			
003	/																																			
004	/																																			
005	/																																			
006	/																																			
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016	/																																			
017	/																																			
018	/																																			
019	/																																			
020	/																																			

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WIDRO, Phenolics, Other: _____


Headspace in VOA Vials (>6mm) : Yes No N/A *If yes look in headspace column

AG1U	1 liter amber glass	BPIU <td>1 liter plastic unpres</td> <td>DG9A <td>40 mL amber ascorbic</td> <td>JGFU <td>4 oz amber jar unpres</td> </td></td>	1 liter plastic unpres	DG9A <td>40 mL amber ascorbic</td> <td>JGFU <td>4 oz amber jar unpres</td> </td>	40 mL amber ascorbic	JGFU <td>4 oz amber jar unpres</td>	4 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP2N <td>500 mL plastic HNO3</td> <td>DG9T <td>40 mL amber Na Thio</td> <td>WGFU <td>4 oz clear jar unpres</td> </td></td>	500 mL plastic HNO3	DG9T <td>40 mL amber Na Thio</td> <td>WGFU <td>4 oz clear jar unpres</td> </td>	40 mL amber Na Thio	WGFU <td>4 oz clear jar unpres</td>	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP2Z <td>500 mL plastic NaOH, Znact</td> <td>VG9U <td>40 mL clear vial unpres</td> <td>WPFU <td>4 oz plastic jar unpres</td> </td></td>	500 mL plastic NaOH, Znact	VG9U <td>40 mL clear vial unpres</td> <td>WPFU <td>4 oz plastic jar unpres</td> </td>	40 mL clear vial unpres	WPFU <td>4 oz plastic jar unpres</td>	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3U <td>250 mL plastic unpres</td> <td>VG9H <td>40 mL clear vial HCL</td> <td></td> <td></td> </td>	250 mL plastic unpres	VG9H <td>40 mL clear vial HCL</td> <td></td> <td></td>	40 mL clear vial HCL		
AG5U	100 mL amber glass unpres	BP3B <td>250 mL plastic NaOH</td> <td>VG9M <td>40 mL clear vial MeOH</td> <td></td> <td></td> </td>	250 mL plastic NaOH	VG9M <td>40 mL clear vial MeOH</td> <td></td> <td></td>	40 mL clear vial MeOH		
AG2S	500 mL amber glass H2SO4	BP3N <td>250 mL plastic HNO3</td> <td>VG9D <td>40 mL clear vial DI</td> <td></td> <td></td> </td>	250 mL plastic HNO3	VG9D <td>40 mL clear vial DI</td> <td></td> <td></td>	40 mL clear vial DI		
BG3U	250 mL clear-glass unpres	BP3S <td>250 mL plastic H2SO4</td> <td></td> <td></td> <td>SP5T</td> <td>120 mL plastic Na Thiosulfate</td>	250 mL plastic H2SO4			SP5T	120 mL plastic Na Thiosulfate
						ZP1C	ziploc bag
						GN:	

 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 25Apr2018
	Document No.: F-GB-C-031-Rev.07	Issuing Authority: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Client Name: Terracon
Courier: CS Logistics Fed Ex Speedee UPS Walto
 Client Pace Other: _____

Project #: _____
WO# : 40188937

 40188937

Tracking #: _____
Custody Seal on Cooler/Box Present: yes no **Seals intact:** yes no
Custody Seal on Samples Present: yes no **Seals intact:** yes no
Packing Material: Bubble Wrap Bubble Bags None Other
Thermometer Used SR - N/A **Type of Ice:** (w/ice) Blue Dry None Samples on ice, cooling process has begun
Cooler Temperature Uncorr: ROT /Corr: _____

Temp Blank Present: yes no **Biological Tissue is Frozen:** yes no
 Temp should be above freezing to 6°C.
 Biota Samples may be received at ≤ 0°C.

Person examining contents:
 Date: 6/6/19
 Initials: [Signature]

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time: _____
Short Hold Time Analysis (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>W</u>		
Trip Blank Present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: _____
 Person Contacted: _____ Date/Time: _____
 Comments/ Resolution: _____

If checked, see attached form for additional comments

Project Manager Review: [Signature] **Date:** 6/6/19