



**We Energies**  
333 West Everett St., A231  
Milwaukee, WI 53203  
[www.we-energies.com](http://www.we-energies.com)

May 27, 2022

Ms. Sarah Krueger  
Water Resources Management Specialist  
Remediation & Redevelopment Program  
Wisconsin Dept. of Natural Resources  
2984 Shawano Avenue  
Green Bay, WI 54313

**Subject: Transmittal of April 2022 Monitoring Well Sampling Results We Energies'  
Appleton MGP Site, WDNR ERP Case #02-45-000042, FID #445033380**

Dear Ms. Krueger:

We Energies received final analytical results for monitoring wells and piezometers for our April 2022 semi-annual sampling event on the Fox River Mills Apartments property, located adjacent to the above referenced site. A copy of the notification to the property owner and associated summary report are attached.

Please do not hesitate to contact me at (414) 221-2156 or via email at [frank.dombrowski@wecenergygroup.com](mailto:frank.dombrowski@wecenergygroup.com) if you have any questions or if further information may be required.

Sincerely,

A handwritten signature in black ink that reads "Frank Dombrowski".

Frank Dombrowski  
Principal Environmental Consultant  
WEC Energy Group - Business Services  
Environmental Dept.

Enclosures

Cc: Project File  
A. Cawrse, Ramboll

Mr. Frank Dombrowski  
Principal Environmental Consultant  
WEC Energy Group - Business Services  
333 W. Everett Street, A231  
Milwaukee, WI 53203  
(via email)

**April 2022 Sample Results Notification – Groundwater Results  
Collected in April 2022**

***Appleton City (Coal Tar), aka Appleton MGP  
343 West Water Street, Appleton, Wisconsin  
WDNR ERP Case #02-45-000042, FID #445033380***

May 27, 2022

Dear Mr. Dombrowski:

This sample results notification letter for the Appleton City former manufactured gas plant (MGP) site located at 343 West Water Street in Appleton, Wisconsin (Figure 1) summarizes routine groundwater sampling activities that occurred in April 2022 located on the property occupied by the Fox River Mills Apartments (Figure 1). Free product (oily material) was measured in PZ-26 and PZ-28. Groundwater samples were collected from monitoring wells and piezometers PZ-23, MW-26, MW-27, PZ-27, and MW-28 in accordance with the groundwater monitoring plan.

Ramboll  
234 W. Florida Street  
Fifth Floor  
Milwaukee, WI 53204  
USA

T 414-837-3607  
F 414-837-3608  
[www.ramboll.com](http://www.ramboll.com)

Groundwater monitoring wells PZ-23, PZ-26, PZ-27, and PZ-28 are screened within the shallow bedrock approximately 20 to 25 feet below ground surface. Consistent with previous monitoring events, free product was observed in PZ-26 (2.11 feet) and PZ-28 (trace amounts). Free product was not observed in any of the other wells. No attempt was made to recover free product during this sampling event. Groundwater analytical results (Table 1) collected from the remaining shallow bedrock wells are consistent with previous samples collected from these wells which indicate benzene and naphthalene in excess of the Wisconsin Department of Natural Resources (WDNR) preventive action limit (PAL) and/or enforcement standards (ES) in groundwater.

Groundwater monitoring wells MW-26, MW-27, and MW-28 are screened within the unlithified material above bedrock approximately 5 to 15 feet below ground surface. No free product was observed in any of these wells. Consistent with previous sampling events, groundwater analytical results indicate the presence of benzene, naphthalene, and iron in excess of the WDNR PAL and/or ES in groundwater.

The laboratory report containing groundwater results is included in Attachment A, and the results are summarized in Table 1. There are no indications that the observed groundwater impacts (or the presence of free product in wells with previous groundwater exceedances) are a recent occurrence or pose an immediate risk to the health of the occupants in the apartment building.



Sincerely,

*Andrew Cawrse*

**Andrew G. Cawrse**  
Environmental Scientist  
D 414 837 3645  
[andrew.cawrse@ramboll.com](mailto:andrew.cawrse@ramboll.com)

Attachments: Figure 1 – Site Features  
Table 1 – Summary of Groundwater Results – Heartland-Appleton Fox River Mills  
Attachment A – Laboratory Report

**FIGURE 1**



Y:\GIS\Projects\1511508\MXD\SSWP\Figure 1\_Site Features\_200420.mxd

PROJECT: 169000XXXXX | DATED: 4/20/2020 | DESIGNER: galammc



- ⊕ SUB-SLAB SOIL GAS PROBE
- ⊕ MONITORING WELL / PIEZOMETER
- STAFF GAUGE
- ⊕ SOIL VAPOR PROBE
- ⋯ FORMER MGP SITE PERIMETER
- ▨ POTENTIAL HISTORICAL NEEDLE DAM STRUCTURE
- - - TAX PARCEL AND OWNER
- BUILDING FOOTPRINT / CURB
- × FENCE
- ELEVATOR SHAFT
- SHORELINE

0 37.5 75 Feet

### SITE FEATURES

**FORMER APPLETON MANUFACTURED GAS PLANT (MGP) FACILITY**  
**WE ENERGIES**  
 APPLETON, WISCONSIN

**FIGURE 1**

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.  
 A RAMBOLL COMPANY





## TABLE

**Table 1. Summary of Groundwater Results - Heartland-Appleton Fox River Mills**

April 2022 Sample Results Notification  
 We Energies, Appleton City (Coal Tar), aka Appleton MGP  
 WDNR ERP Case #02-45-000042  
 FID #445033380

Sample Location	Sample Date	VOC							MNA						
		Benzene	Ethylbenzene	Naphthalene	Toluene	Xylenes, m + p	Xylene, o	Total Xylenes <sup>1</sup>	Alkalinity, Total as CaCO3	Arsenic, Dissolved	Iron, Dissolved	Manganese, Dissolved	Methane	Nitrogen, NO2 + NO3	Sulfate
Reporting Units:		µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	mg/L	mg/L	mg/L	mg/L	µg/L	mg/L	mg/L
Wisconsin PAL:		<u>0.5</u>	<u>140</u>	<u>10</u>	<u>160</u>	<u>NS</u>	<u>NS</u>	<u>400</u>	<u>NS</u>	<u>0.001</u>	<u>0.15</u>	<u>0.06</u>	<u>NS</u>	<u>2</u>	<u>125</u>
Wisconsin ES:		<b>5</b>	<b>700</b>	<b>100</b>	<b>800</b>	<b>NS</b>	<b>NS</b>	<b>2,000</b>	<b>NS</b>	<b>0.01</b>	<b>0.3</b>	<b>0.3</b>	<b>NS</b>	<b>10</b>	<b>250</b>
MW-26	4/21/2022	<b>28.4</b>	0.33 U	<u>38.7</u>	0.29 U	0.83 J	2.0	2.83	438	<b>0.0646</b>	<b>1.73</b>	<u>0.258</u>	3620	0.059 U	11
MW-27	4/21/2022	<b>13.6</b>	2.8	<u>14.9</u>	0.29 U	0.7 U	0.41 J	0.41 J	220	<u>0.0053</u>	<u>0.162 J</u>	0.0453	464	0.46	16.6
MW-28	4/21/2022	0.3 U	0.33 U	1.1 U	0.29 U	0.7 U	0.35 U	1.05 U	248	<b>0.0328</b>	<b>1.66</b>	<b>0.598</b>	3390	0.059 U	37.6
PZ-23	4/21/2022	0.3 U	0.33 U	1.1 U	0.29 U	0.7 U	0.35 U	1.05 U	331	<u>0.0025</u>	<b>6.89</b>	<b>0.526</b>	3320	0.059 U	2.2 U
PZ-23 Dup	4/21/2022	0.3 U	0.33 U	1.1 U	0.29 U	0.7 U	0.35 U	1.05 U	351	<u>0.0026</u>	<b>7.16</b>	<b>0.55</b>	5190	0.059 U	2.2 U
PZ-27	4/21/2022	<b>143</b>	16.9	<b>224</b>	1.4 U	4.8 J	7.5	12.3	243	<u>0.002</u>	<b>1.24</b>	<u>0.104</u>	4430	0.059 U	1 J

[O:CMD 5/16/22, C:ECB 5/16/2022, QC:AGC 5/23/22]

NOTES:

Underlined concentration that attains or exceeds WDNR PAL  
**Bold** concentration that attains or exceeds WDNR ES

PAL and ES from WI Administrative Code NR 140 groundwater quality standard revised effective January 2020.  
 Results that attain or exceed the PAL or ES are considered to be in exceedance.

- < = Concentration is less than reported limit
- µg/L = micrograms per liter
- CaCO3 = Calcium carbonate
- Dup = Quality Control Field Duplicate Sample
- ES = Enforcement Standard
- FID = Facility ID
- J = Estimated concentration
- mg/L = milligrams per liter
- MGP = manufactured gas plant
- MNA = Monitored Natural Attenuation
- NO2 + NO3 = nitrite plus nitrate
- NS = No Standard
- PAL = Preventive Action Limit
- U = Parameter not detected above the Limit of Detection indicated
- VOC = Volatile Organic Compound
- WDNR ERP = Wisconsin Department of Natural Resources Environmental Repair Program

1. Total Xylenes were calculated by Ramboll as follows:
  - a. Where no detections were observed, the sum of the reporting limits is presented.
  - b. Where detections were observed, only the detected results were added together for the total summation.
  - c. Analytes used for the calculation are Xylene-o and Xylenes-m+p.

Lab comments and definitions can be found in associated laboratory report.

## **ATTACHMENT A**



May 06, 2022

Andrew Cawrse  
Ramboll Americas  
234 W Florida St  
Milwaukee, WI 53204

RE: Project: APPLETON MGP  
Pace Project No.: 40243868

Dear Andrew Cawrse:

Enclosed are the analytical results for sample(s) received by the laboratory on April 22, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

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

Sincerely,



Brian Basten  
brian.basten@pacelabs.com  
(920)469-2436  
Project Manager

Enclosures

cc: Alex Bartelme, Ramboll  
NRT Data, Ramboll  
Frank Dombrowski, WE Energies  
Brian Hennings, Ramboll Americas  
WE Energies Lab Reports, WE Energies  
Evván Plank, Ramboll



## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## CERTIFICATIONS

Project: APPLETON MGP

Pace Project No.: 40243868

---

### **Pace Analytical Services Green Bay**

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## SAMPLE SUMMARY

Project: APPLETON MGP

Pace Project No.: 40243868

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40243868001	MW-26	Water	04/21/22 11:12	04/22/22 15:00
40243868002	MW-28	Water	04/21/22 12:10	04/22/22 15:00
40243868003	PZ-27	Water	04/21/22 12:57	04/22/22 15:00
40243868004	MW-27	Water	04/21/22 13:23	04/22/22 15:00
40243868005	PZ-23	Water	04/21/22 13:54	04/22/22 15:00
40243868006	QAQC1	Water	04/21/22 14:00	04/22/22 15:00

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: APPLETON MGP  
Pace Project No.: 40243868

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40243868001	MW-26	EPA 8015B Modified	KHB	1
		EPA 6020B	KXS	3
		EPA 8260	LAP	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40243868002	MW-28	EPA 8015B Modified	KHB	1
		EPA 6020B	KXS	3
		EPA 8260	LAP	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40243868003	PZ-27	EPA 8015B Modified	KHB	1
		EPA 6020B	KXS	3
		EPA 8260	LAP	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40243868004	MW-27	EPA 8015B Modified	KHB	1
		EPA 6020B	KXS	3
		EPA 8260	LAP	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40243868005	PZ-23	EPA 8015B Modified	KHB	1
		EPA 6020B	KXS	3
		EPA 8260	LAP	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1
40243868006	QAQC1	EPA 8015B Modified	KHB	1
		EPA 6020B	KXS	3
		EPA 8260	LAP	9
		EPA 300.0	HMB	1
		EPA 310.2	DAW	1
		EPA 353.2	DAW	1

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### SAMPLE ANALYTE COUNT

Project: APPLETON MGP  
Pace Project No.: 40243868

---

<b>Lab ID</b>	<b>Sample ID</b>	<b>Method</b>	<b>Analysts</b>	<b>Analytes Reported</b>
---------------	------------------	---------------	-----------------	--------------------------

---

PASI-G = Pace Analytical Services - Green Bay

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### ANALYTICAL RESULTS

Project: APPLETON MGP  
Pace Project No.: 40243868

**Sample: MW-26**      **Lab ID: 40243868001**      Collected: 04/21/22 11:12      Received: 04/22/22 15:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>Methane, Ethane, Ethene GCV</b>									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	<b>3620</b>	ug/L	56.0	11.5	20		04/26/22 12:41	74-82-8	
<b>6020B MET ICPMS, Dissolved</b>									
Analytical Method: EPA 6020B Preparation Method: EPA 3010A Pace Analytical Services - Green Bay									
Arsenic, Dissolved	<b>64.6</b>	ug/L	1.0	0.28	1	04/26/22 05:51	05/05/22 03:45	7440-38-2	
Iron, Dissolved	<b>1730</b>	ug/L	250	58.0	1	04/26/22 05:51	05/05/22 03:45	7439-89-6	
Manganese, Dissolved	<b>258</b>	ug/L	4.0	1.2	1	04/26/22 05:51	05/05/22 03:45	7439-96-5	
<b>8260 MSV UST</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	<b>28.4</b>	ug/L	1.0	0.30	1		04/27/22 08:07	71-43-2	
Ethylbenzene	<b>&lt;0.33</b>	ug/L	1.0	0.33	1		04/27/22 08:07	100-41-4	
Naphthalene	<b>38.7</b>	ug/L	5.0	1.1	1		04/27/22 08:07	91-20-3	
Toluene	<b>&lt;0.29</b>	ug/L	1.0	0.29	1		04/27/22 08:07	108-88-3	
m&p-Xylene	<b>0.83J</b>	ug/L	2.0	0.70	1		04/27/22 08:07	179601-23-1	
o-Xylene	<b>2.0</b>	ug/L	1.0	0.35	1		04/27/22 08:07	95-47-6	
<b>Surrogates</b>									
Toluene-d8 (S)	105	%	70-130		1		04/27/22 08:07	2037-26-5	
4-Bromofluorobenzene (S)	107	%	70-130		1		04/27/22 08:07	460-00-4	
1,2-Dichlorobenzene-d4 (S)	108	%	70-130		1		04/27/22 08:07	2199-69-1	
<b>300.0 IC Anions</b>									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	<b>11.0</b>	mg/L	2.0	0.44	1		05/03/22 04:22	14808-79-8	
<b>310.2 Alkalinity</b>									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	<b>438</b>	mg/L	50.0	10.4	2		04/29/22 12:56		
<b>353.2 Nitrogen, NO2/NO3 pres.</b>									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<b>&lt;0.059</b>	mg/L	0.25	0.059	1		04/25/22 13:41		

**Sample: MW-28**      **Lab ID: 40243868002**      Collected: 04/21/22 12:10      Received: 04/22/22 15:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>Methane, Ethane, Ethene GCV</b>									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	<b>3390</b>	ug/L	56.0	11.5	20		04/26/22 12:48	74-82-8	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: APPLETON MGP  
Pace Project No.: 40243868

**Sample: MW-28**      **Lab ID: 40243868002**      Collected: 04/21/22 12:10      Received: 04/22/22 15:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>6020B MET ICPMS, Dissolved</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3010A Pace Analytical Services - Green Bay									
Arsenic, Dissolved	32.8	ug/L	1.0	0.28	1	04/26/22 05:51	05/05/22 03:52	7440-38-2	
Iron, Dissolved	1660	ug/L	250	58.0	1	04/26/22 05:51	05/05/22 03:52	7439-89-6	
Manganese, Dissolved	598	ug/L	4.0	1.2	1	04/26/22 05:51	05/05/22 03:52	7439-96-5	
<b>8260 MSV UST</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	<0.30	ug/L	1.0	0.30	1		04/27/22 08:26	71-43-2	
Ethylbenzene	<0.33	ug/L	1.0	0.33	1		04/27/22 08:26	100-41-4	
Naphthalene	<1.1	ug/L	5.0	1.1	1		04/27/22 08:26	91-20-3	
Toluene	<0.29	ug/L	1.0	0.29	1		04/27/22 08:26	108-88-3	
m&p-Xylene	<0.70	ug/L	2.0	0.70	1		04/27/22 08:26	179601-23-1	
o-Xylene	<0.35	ug/L	1.0	0.35	1		04/27/22 08:26	95-47-6	
<b>Surrogates</b>									
Toluene-d8 (S)	106	%	70-130		1		04/27/22 08:26	2037-26-5	
4-Bromofluorobenzene (S)	108	%	70-130		1		04/27/22 08:26	460-00-4	
1,2-Dichlorobenzene-d4 (S)	110	%	70-130		1		04/27/22 08:26	2199-69-1	
<b>300.0 IC Anions</b>									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	37.6	mg/L	10.0	2.2	5		05/03/22 04:36	14808-79-8	
<b>310.2 Alkalinity</b>									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	248	mg/L	25.0	5.2	1		04/29/22 12:57		
<b>353.2 Nitrogen, NO2/NO3 pres.</b>									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		04/25/22 13:42		

**Sample: PZ-27**      **Lab ID: 40243868003**      Collected: 04/21/22 12:57      Received: 04/22/22 15:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>Methane, Ethane, Ethene GCV</b>									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	4430	ug/L	56.0	11.5	20		04/26/22 12:55	74-82-8	
<b>6020B MET ICPMS, Dissolved</b>									
Analytical Method: EPA 6020B    Preparation Method: EPA 3010A Pace Analytical Services - Green Bay									
Arsenic, Dissolved	2.0	ug/L	1.0	0.28	1	04/26/22 05:51	05/05/22 03:59	7440-38-2	
Iron, Dissolved	1240	ug/L	250	58.0	1	04/26/22 05:51	05/05/22 03:59	7439-89-6	
Manganese, Dissolved	104	ug/L	4.0	1.2	1	04/26/22 05:51	05/05/22 03:59	7439-96-5	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: APPLETON MGP  
Pace Project No.: 40243868

**Sample: PZ-27**      **Lab ID: 40243868003**      Collected: 04/21/22 12:57      Received: 04/22/22 15:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	143	ug/L	5.0	1.5	5		04/27/22 10:26	71-43-2	
Ethylbenzene	16.9	ug/L	5.0	1.6	5		04/27/22 10:26	100-41-4	
Naphthalene	224	ug/L	25.0	5.6	5		04/27/22 10:26	91-20-3	
Toluene	<1.4	ug/L	5.0	1.4	5		04/27/22 10:26	108-88-3	
m&p-Xylene	4.8J	ug/L	10.0	3.5	5		04/27/22 10:26	179601-23-1	
o-Xylene	7.5	ug/L	5.0	1.7	5		04/27/22 10:26	95-47-6	
<b>Surrogates</b>									
Toluene-d8 (S)	103	%	70-130		5		04/27/22 10:26	2037-26-5	
4-Bromofluorobenzene (S)	107	%	70-130		5		04/27/22 10:26	460-00-4	
1,2-Dichlorobenzene-d4 (S)	109	%	70-130		5		04/27/22 10:26	2199-69-1	

<b>300.0 IC Anions</b>									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	1.0J	mg/L	2.0	0.44	1		05/03/22 04:50	14808-79-8	

<b>310.2 Alkalinity</b>									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	243	mg/L	25.0	5.2	1		04/29/22 13:01		

<b>353.2 Nitrogen, NO2/NO3 pres.</b>									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		04/25/22 13:43		

**Sample: MW-27**      **Lab ID: 40243868004**      Collected: 04/21/22 13:23      Received: 04/22/22 15:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>Methane, Ethane, Ethene GCV</b>									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	464	ug/L	7.0	1.4	2.5		04/26/22 13:02	74-82-8	
<b>6020B MET ICPMS, Dissolved</b>									
Analytical Method: EPA 6020B      Preparation Method: EPA 3010A Pace Analytical Services - Green Bay									
Arsenic, Dissolved	5.3	ug/L	1.0	0.28	1	04/26/22 05:51	05/05/22 04:07	7440-38-2	
Iron, Dissolved	162J	ug/L	250	58.0	1	04/26/22 05:51	05/05/22 04:07	7439-89-6	
Manganese, Dissolved	45.3	ug/L	4.0	1.2	1	04/26/22 05:51	05/05/22 04:07	7439-96-5	
<b>8260 MSV UST</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	13.6	ug/L	1.0	0.30	1		04/27/22 11:26	71-43-2	
Ethylbenzene	2.8	ug/L	1.0	0.33	1		04/27/22 11:26	100-41-4	
Naphthalene	14.9	ug/L	5.0	1.1	1		04/27/22 11:26	91-20-3	
Toluene	<0.29	ug/L	1.0	0.29	1		04/27/22 11:26	108-88-3	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: APPLETON MGP  
Pace Project No.: 40243868

**Sample: MW-27**      **Lab ID: 40243868004**      Collected: 04/21/22 13:23      Received: 04/22/22 15:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>8260 MSV UST</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
m&p-Xylene	<0.70	ug/L	2.0	0.70	1		04/27/22 11:26	179601-23-1	
o-Xylene	0.41J	ug/L	1.0	0.35	1		04/27/22 11:26	95-47-6	
<b>Surrogates</b>									
Toluene-d8 (S)	104	%	70-130		1		04/27/22 11:26	2037-26-5	
4-Bromofluorobenzene (S)	106	%	70-130		1		04/27/22 11:26	460-00-4	
1,2-Dichlorobenzene-d4 (S)	107	%	70-130		1		04/27/22 11:26	2199-69-1	
<b>300.0 IC Anions</b>									
Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	16.6	mg/L	2.0	0.44	1		05/03/22 20:29	14808-79-8	M0
<b>310.2 Alkalinity</b>									
Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	220	mg/L	25.0	5.2	1		04/29/22 13:02		
<b>353.2 Nitrogen, NO2/NO3 pres.</b>									
Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	0.46	mg/L	0.25	0.059	1		04/25/22 13:43		

**Sample: PZ-23**      **Lab ID: 40243868005**      Collected: 04/21/22 13:54      Received: 04/22/22 15:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>Methane, Ethane, Ethene GCV</b>									
Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	3320	ug/L	140	28.8	50		04/26/22 13:52	74-82-8	
<b>6020B MET ICPMS, Dissolved</b>									
Analytical Method: EPA 6020B      Preparation Method: EPA 3010A Pace Analytical Services - Green Bay									
Arsenic, Dissolved	2.5	ug/L	1.0	0.28	1	04/26/22 05:51	05/05/22 04:14	7440-38-2	
Iron, Dissolved	6890	ug/L	250	58.0	1	04/26/22 05:51	05/05/22 04:14	7439-89-6	
Manganese, Dissolved	526	ug/L	4.0	1.2	1	04/26/22 05:51	05/05/22 04:14	7439-96-5	
<b>8260 MSV UST</b>									
Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	<0.30	ug/L	1.0	0.30	1		04/27/22 10:46	71-43-2	
Ethylbenzene	<0.33	ug/L	1.0	0.33	1		04/27/22 10:46	100-41-4	
Naphthalene	<1.1	ug/L	5.0	1.1	1		04/27/22 10:46	91-20-3	
Toluene	<0.29	ug/L	1.0	0.29	1		04/27/22 10:46	108-88-3	
m&p-Xylene	<0.70	ug/L	2.0	0.70	1		04/27/22 10:46	179601-23-1	
o-Xylene	<0.35	ug/L	1.0	0.35	1		04/27/22 10:46	95-47-6	
<b>Surrogates</b>									
Toluene-d8 (S)	106	%	70-130		1		04/27/22 10:46	2037-26-5	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### ANALYTICAL RESULTS

Project: APPLETON MGP  
Pace Project No.: 40243868

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>Sample: PZ-23</b> <b>Lab ID: 40243868005</b> Collected: 04/21/22 13:54      Received: 04/22/22 15:00      Matrix: Water									
<b>8260 MSV UST</b> Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
<b>Surrogates</b>									
4-Bromofluorobenzene (S)	112	%	70-130		1		04/27/22 10:46	460-00-4	
1,2-Dichlorobenzene-d4 (S)	109	%	70-130		1		04/27/22 10:46	2199-69-1	
<b>300.0 IC Anions</b> Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay									
Sulfate	<2.2	mg/L	10.0	2.2	5		05/03/22 21:12	14808-79-8	D3
<b>310.2 Alkalinity</b> Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay									
Alkalinity, Total as CaCO3	331	mg/L	50.0	10.4	2		04/29/22 13:03		M0
<b>353.2 Nitrogen, NO2/NO3 pres.</b> Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay									
Nitrogen, NO2 plus NO3	<0.059	mg/L	0.25	0.059	1		04/25/22 13:44		M0

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>Sample: QAQC1</b> <b>Lab ID: 40243868006</b> Collected: 04/21/22 14:00      Received: 04/22/22 15:00      Matrix: Water									
<b>Methane, Ethane, Ethene GCV</b> Analytical Method: EPA 8015B Modified Pace Analytical Services - Green Bay									
Methane	5190	ug/L	140	28.8	50		04/26/22 13:59	74-82-8	
<b>6020B MET ICPMS, Dissolved</b> Analytical Method: EPA 6020B      Preparation Method: EPA 3010A Pace Analytical Services - Green Bay									
Arsenic, Dissolved	2.6	ug/L	1.0	0.28	1	04/26/22 05:51	05/05/22 04:21	7440-38-2	
Iron, Dissolved	7160	ug/L	250	58.0	1	04/26/22 05:51	05/05/22 04:21	7439-89-6	
Manganese, Dissolved	550	ug/L	4.0	1.2	1	04/26/22 05:51	05/05/22 04:21	7439-96-5	
<b>8260 MSV UST</b> Analytical Method: EPA 8260 Pace Analytical Services - Green Bay									
Benzene	<0.30	ug/L	1.0	0.30	1		04/27/22 08:46	71-43-2	
Ethylbenzene	<0.33	ug/L	1.0	0.33	1		04/27/22 08:46	100-41-4	
Naphthalene	<1.1	ug/L	5.0	1.1	1		04/27/22 08:46	91-20-3	
Toluene	<0.29	ug/L	1.0	0.29	1		04/27/22 08:46	108-88-3	
m&p-Xylene	<0.70	ug/L	2.0	0.70	1		04/27/22 08:46	179601-23-1	
o-Xylene	<0.35	ug/L	1.0	0.35	1		04/27/22 08:46	95-47-6	
<b>Surrogates</b>									
Toluene-d8 (S)	102	%	70-130		1		04/27/22 08:46	2037-26-5	
4-Bromofluorobenzene (S)	106	%	70-130		1		04/27/22 08:46	460-00-4	
1,2-Dichlorobenzene-d4 (S)	105	%	70-130		1		04/27/22 08:46	2199-69-1	

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



## ANALYTICAL RESULTS

Project: APPLETON MGP

Pace Project No.: 40243868

---

**Sample: QAQC1**      **Lab ID: 40243868006**      Collected: 04/21/22 14:00      Received: 04/22/22 15:00      Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
<b>300.0 IC Anions</b>	Analytical Method: EPA 300.0 Pace Analytical Services - Green Bay								
Sulfate	<b>&lt;2.2</b>	mg/L	10.0	2.2	5		05/03/22 21:26	14808-79-8	D3
<b>310.2 Alkalinity</b>	Analytical Method: EPA 310.2 Pace Analytical Services - Green Bay								
Alkalinity, Total as CaCO3	<b>351</b>	mg/L	25.0	5.2	1		04/29/22 13:06		
<b>353.2 Nitrogen, NO2/NO3 pres.</b>	Analytical Method: EPA 353.2 Pace Analytical Services - Green Bay								
Nitrogen, NO2 plus NO3	<b>&lt;0.059</b>	mg/L	0.25	0.059	1		04/25/22 13:48		

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

**QUALITY CONTROL DATA**

Project: APPLETON MGP

Pace Project No.: 40243868

QC Batch:	414082	Analysis Method:	EPA 8015B Modified
QC Batch Method:	EPA 8015B Modified	Analysis Description:	Methane, Ethane, Ethene GCV
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40243868001, 40243868002, 40243868003, 40243868004, 40243868005, 40243868006

METHOD BLANK: 2384263 Matrix: Water  
Associated Lab Samples: 40243868001, 40243868002, 40243868003, 40243868004, 40243868005, 40243868006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methane	ug/L	<0.58	2.8	04/26/22 09:07	

LABORATORY CONTROL SAMPLE & LCSD: 2384264 2384265

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	28.6	27.3	28.0	95	98	73-120	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2384266 2384267

Parameter	Units	40243866008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Methane	ug/L	3040	571	571	8060	8530	878	960	10-200	6	20	E,M1

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**

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: APPLETON MGP  
Pace Project No.: 40243868

QC Batch: 414058 Analysis Method: EPA 6020B  
QC Batch Method: EPA 3010A Analysis Description: 6020B MET Dissolved  
Laboratory: Pace Analytical Services - Green Bay  
Associated Lab Samples: 40243868001, 40243868002, 40243868003, 40243868004, 40243868005, 40243868006

METHOD BLANK: 2384200 Matrix: Water  
Associated Lab Samples: 40243868001, 40243868002, 40243868003, 40243868004, 40243868005, 40243868006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic, Dissolved	ug/L	<0.28	1.0	05/04/22 23:17	
Iron, Dissolved	ug/L	<58.0	250	05/04/22 23:17	
Manganese, Dissolved	ug/L	<1.2	4.0	05/04/22 23:17	

LABORATORY CONTROL SAMPLE: 2384201

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic, Dissolved	ug/L	250	249	100	80-120	
Iron, Dissolved	ug/L	10000	10300	103	80-120	
Manganese, Dissolved	ug/L	250	246	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2384202 2384203

Parameter	Units	MS		MSD		MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		40243866008 Result	Spike Conc.	Spike Conc.	Result								
Arsenic, Dissolved	ug/L	5.3	250	250	260	257	102	101	75-125	1	20		
Iron, Dissolved	ug/L	146J	10000	10000	10400	10300	102	101	75-125	1	20		
Manganese, Dissolved	ug/L	63.0	250	250	315	309	101	98	75-125	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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: APPLETON MGP

Pace Project No.: 40243868

---

QC Batch:	414030	Analysis Method:	EPA 8260
QC Batch Method:	EPA 8260	Analysis Description:	8260 MSV UST-WATER
		Laboratory:	Pace Analytical Services - Green Bay

Associated Lab Samples: 40243868001, 40243868002, 40243868003, 40243868004, 40243868005, 40243868006

---

METHOD BLANK: 2384096 Matrix: Water

Associated Lab Samples: 40243868001, 40243868002, 40243868003, 40243868004, 40243868005, 40243868006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	<0.30	1.0	04/26/22 15:30	
Ethylbenzene	ug/L	<0.33	1.0	04/26/22 15:30	
m&p-Xylene	ug/L	<0.70	2.0	04/26/22 15:30	
Naphthalene	ug/L	<1.1	5.0	04/26/22 15:30	
o-Xylene	ug/L	<0.35	1.0	04/26/22 15:30	
Toluene	ug/L	<0.29	1.0	04/26/22 15:30	
1,2-Dichlorobenzene-d4 (S)	%	106	70-130	04/26/22 15:30	
4-Bromofluorobenzene (S)	%	106	70-130	04/26/22 15:30	
Toluene-d8 (S)	%	106	70-130	04/26/22 15:30	

LABORATORY CONTROL SAMPLE: 2384097

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	48.5	97	70-130	
Ethylbenzene	ug/L	50	53.5	107	80-120	
m&p-Xylene	ug/L	100	104	104	70-130	
o-Xylene	ug/L	50	50.9	102	70-130	
Toluene	ug/L	50	53.3	107	80-120	
1,2-Dichlorobenzene-d4 (S)	%			103	70-130	
4-Bromofluorobenzene (S)	%			110	70-130	
Toluene-d8 (S)	%			106	70-130	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: APPLETON MGP  
Pace Project No.: 40243868

QC Batch: 414594 Analysis Method: EPA 300.0  
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions  
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40243868001, 40243868002, 40243868003

METHOD BLANK: 2387229 Matrix: Water  
Associated Lab Samples: 40243868001, 40243868002, 40243868003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	<0.44	2.0	05/02/22 20:08	

LABORATORY CONTROL SAMPLE: 2387230

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	20	19.6	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2387231 2387232

Parameter	Units	40243833008		2387231		2387232		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result					MS % Rec
Sulfate	mg/L	20.5	20	20	20	42.4	42.5	110	110	90-110	0	15

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2387241 2387242

Parameter	Units	40243866008		2387241		2387242		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result					MS % Rec
Sulfate	mg/L	8.4	20	20	20	30.9	31.0	112	113	90-110	0	15 M0

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.



### QUALITY CONTROL DATA

Project: APPLETON MGP  
Pace Project No.: 40243868

QC Batch: 414615 Analysis Method: EPA 300.0  
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions  
Laboratory: Pace Analytical Services - Green Bay  
Associated Lab Samples: 40243868004, 40243868005, 40243868006

METHOD BLANK: 2387292 Matrix: Water  
Associated Lab Samples: 40243868004, 40243868005, 40243868006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	<0.44	2.0	05/03/22 20:00	

LABORATORY CONTROL SAMPLE: 2387293

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	20	21.4	107	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2387294 2387295

Parameter	Units	40243868004		2387294		2387295		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Result				
Sulfate	mg/L	16.6	20	20	39.0	38.8	112	111	90-110	0	15 M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2387296 2387297

Parameter	Units	40244020023		2387296		2387297		% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Result				
Sulfate	mg/L	148	100	100	246	243	98	95	90-110	1	15

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: APPLETON MGP  
Pace Project No.: 40243868

QC Batch: 414339 Analysis Method: EPA 310.2  
QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity  
Laboratory: Pace Analytical Services - Green Bay  
Associated Lab Samples: 40243868001, 40243868002, 40243868003, 40243868004, 40243868005, 40243868006

METHOD BLANK: 2385459 Matrix: Water  
Associated Lab Samples: 40243868001, 40243868002, 40243868003, 40243868004, 40243868005, 40243868006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<5.2	25.0	04/29/22 12:34	

LABORATORY CONTROL SAMPLE: 2385460

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	100	98.4	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2385461 2385462

Parameter	Units	40243866008		2385461		2385462		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Result					
Alkalinity, Total as CaCO3	mg/L	410	500	500	500	978	997	114	117	90-110	2	20 M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2385463 2385464

Parameter	Units	40243868005		2385463		2385464		% Rec Limits	RPD	Max RPD	Qual	
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Result					
Alkalinity, Total as CaCO3	mg/L	331	200	200	200	564	566	117	118	90-110	0	20 M0

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA

Project: APPLETON MGP  
Pace Project No.: 40243868

QC Batch: 413991 Analysis Method: EPA 353.2  
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved  
Laboratory: Pace Analytical Services - Green Bay  
Associated Lab Samples: 40243868001, 40243868002, 40243868003, 40243868004, 40243868005, 40243868006

METHOD BLANK: 2383947 Matrix: Water  
Associated Lab Samples: 40243868001, 40243868002, 40243868003, 40243868004, 40243868005, 40243868006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.059	0.25	04/25/22 13:30	

LABORATORY CONTROL SAMPLE: 2383948

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.5	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2383949 2383950

Parameter	Units	40243866008		2383949		2383950		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Nitrogen, NO2 plus NO3	mg/L	<0.059	2.5	2.5	2.5	2.6	2.5	101	100	90-110	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2383951 2383952

Parameter	Units	40243868005		2383951		2383952		% Rec	% Rec	% Rec Limits	RPD	Max RPD	Qual
		MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.						
Nitrogen, NO2 plus NO3	mg/L	<0.059	2.5	2.5	2.2	2.2	86	86	90-110	0	20	M0	

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

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

## QUALIFIERS

Project: APPLETON MGP

Pace Project No.: 40243868

---

### 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.

### ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

E Analyte concentration exceeded the calibration range. The reported result is estimated.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

M1 Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

## REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

### QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: APPLETON MGP

Pace Project No.: 40243868

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40243868001	MW-26	EPA 8015B Modified	414082		
40243868002	MW-28	EPA 8015B Modified	414082		
40243868003	PZ-27	EPA 8015B Modified	414082		
40243868004	MW-27	EPA 8015B Modified	414082		
40243868005	PZ-23	EPA 8015B Modified	414082		
40243868006	QAQC1	EPA 8015B Modified	414082		
40243868001	MW-26	EPA 3010A	414058	EPA 6020B	414131
40243868002	MW-28	EPA 3010A	414058	EPA 6020B	414131
40243868003	PZ-27	EPA 3010A	414058	EPA 6020B	414131
40243868004	MW-27	EPA 3010A	414058	EPA 6020B	414131
40243868005	PZ-23	EPA 3010A	414058	EPA 6020B	414131
40243868006	QAQC1	EPA 3010A	414058	EPA 6020B	414131
40243868001	MW-26	EPA 8260	414030		
40243868002	MW-28	EPA 8260	414030		
40243868003	PZ-27	EPA 8260	414030		
40243868004	MW-27	EPA 8260	414030		
40243868005	PZ-23	EPA 8260	414030		
40243868006	QAQC1	EPA 8260	414030		
40243868001	MW-26	EPA 300.0	414594		
40243868002	MW-28	EPA 300.0	414594		
40243868003	PZ-27	EPA 300.0	414594		
40243868004	MW-27	EPA 300.0	414615		
40243868005	PZ-23	EPA 300.0	414615		
40243868006	QAQC1	EPA 300.0	414615		
40243868001	MW-26	EPA 310.2	414339		
40243868002	MW-28	EPA 310.2	414339		
40243868003	PZ-27	EPA 310.2	414339		
40243868004	MW-27	EPA 310.2	414339		
40243868005	PZ-23	EPA 310.2	414339		
40243868006	QAQC1	EPA 310.2	414339		
40243868001	MW-26	EPA 353.2	413991		
40243868002	MW-28	EPA 353.2	413991		
40243868003	PZ-27	EPA 353.2	413991		
40243868004	MW-27	EPA 353.2	413991		
40243868005	PZ-23	EPA 353.2	413991		
40243868006	QAQC1	EPA 353.2	413991		

### REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full,  
without the written consent of Pace Analytical Services, LLC.

Pace

QC: LTR

### CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at <https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>.

941043  
67973-422-001  
40243868

<b>Section A</b>		<b>Section B</b>		<b>Section C</b>	
<b>Required Client Information:</b>		<b>Required Project Information:</b>		<b>Invoice Information:</b>	
Company: Ramboll	Report To: <del>Steford, Duncan</del> GDS DATA @ RAMBOLL.COM	Report To: ANDREW CAURSE @ RAMBOLL.COM	Company Name: ACCOUNTS PAYABLE	Company Name: WTE ENERGY	Company Name: WTE ENERGY
Address: 415A S 3rd St.	Address: 333 WEVERETT ST MILWAUKEE, WI	Address: 333 WEVERETT ST MILWAUKEE, WI	Regulatory Agency:	Regulatory Agency:	Regulatory Agency:
Milwaukee, WI 53204	Project Name: Appleton MGP	Project Name: Appleton MGP	State / Location:	State / Location:	State / Location:
Email: <del>steford@ramboll.com</del> ANDREW.CAURSE@RAMBOLL.COM	Requested Due Date:	Requested Due Date:	State / Location:	State / Location:	State / Location:
Phone: 262-719-4512	Project #:	Project #:	State / Location:	State / Location:	State / Location:
Fax:	Project #:	Project #:	State / Location:	State / Location:	State / Location:
Requested Due Date:	Project #:	Project #:	State / Location:	State / Location:	State / Location:
	Project #:	Project #:	State / Location:	State / Location:	State / Location:

Page: 1 of 7

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 / .)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives								Analyses Test Y/N	Requested Analysis Filtered (Y/N)	Residual Chlorine (Y/N)							
				START		END				Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other				BTEX+NAP by 8260	Dissolved As, Fe, Mn 6020	Nitrate + Nitrite	Sulfate & Alkalinity	Methane by 8015B	Benzene+Nap 8260	Trip BLANK
				DATE	TIME	DATE	TIME																				
1	MW-26	W	G	4-21-22	1112			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	3	001			
2	MW-28				1210			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	3	002			
3	PZ-27				1257			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	3	003			
4	MW-27				1323			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	3	004			
5	PZ-23				1354			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	3	005			
6	QAQC1				1400			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	3	006			
7	MW-24				1505			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2				
8	MW-19				1559			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	2				
9	MW-25				1647			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1				
10	MW-12B				1718			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1				
11	PZ-12B				1812			3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1				
12	MW-13R				1845			9	X	X	X	X	X	X	X	X	X	X	X	X	X	X	1				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	DeGard RAMBOLL	4-22-22	1500	Mary [Signature]	4/22/22	1500	1.5% N

PACE DROP OFF

<b>SAMPLER NAME AND SIGNATURE</b>		TEMP in C	Received on Ice (Y/N)	Custody Sealed (Y/N)	Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:						
SIGNATURE of SAMPLER:	DATE Signed:					



QA: LTA

### CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at <https://info.pacelabs.com/hubfs/pas-standard-terms.pdf>.

40243868  
67973-4-22-001  
4/22/22  
40243866

Page: 2 of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Ramboll	Report To:	Stasford, Demetra EDS DATA RAMBOLL	Attention:	ACCOUNTS PAYABLE
Address:	415A S 3rd St.	Copy To:	ANDREW.CAWRSE@RAMBOLL.COM	Company Name:	LWE ENERGIES
Milwaukee, WI 53204		Order #:		Address:	333 W EVERETT ST. MILWAUKEE
Email:	stasford@ramboll.com	Project Name:	Appleton MGP	Pace Quote:	
Phone:	262-719-4512	Project #:		Pace Project Manager:	brian.basten@pacelabs.com,
Requested Due Date:				Pace Profile #:	829 #1

ITEM #	SAMPLE ID One Character per box. (A-Z, 0-9 /, -) Sample ids must be unique	MATRIX Drinking Water DW Water WT Waste Water WW Product P Soil/Solid SL Oil OL Wipe WP Air AR Other OT Tissue TS	CODE DW WT WW P SL OL WP AR OT TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED				SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives										Residual Chlorine (Y/N)						
						START		END				Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	BTEX+NAP by 8260	Dissolved As, Fe, Mn 6020		Nitrate + Nitrite	Sulfate & Alkalinity	Methane by 8015B	Benzene+Nap 8260	Tip BLANK	
						DATE	TIME	DATE	TIME																			
	QA QC 2			UT	G	4-21-22	1850			9	X	X	X	X												1	005	
	EB-01			WT	G		1900			3				X												1	006	
	TB-1			WT	-	-	-			2				X												1	007	
	MW-22			WT	G	4-22-22	740			27	X	X	X	X												1	008	
	P2-22B						841			3				X												1	009	
	MW-21						917			X	X	X	X	X												1	010	
	P2-21B						954			3				X												1	011	
	MW-20						1028			X	X	X	X	X												1	012	
	P2-20B						1103			3				X												1	013	
	MW-02R						1153			9	X	X	X	X												1	014	
	EB-01						1200			3				X												1	015	
	<del>P2-20B</del>																											
ADDITIONAL CONTAINERS		SAMPLER		LOCATION		DATE/TIME		VOLUME		INITIALS		DATE/TIME		VOLUME		TEMP IN C		RECEIVED ON ICE (Y/N)		CUSTODY SEALED COOLER (Y/N)		SAMPLES INTACT (Y/N)						
		Ramboll		4-22-22		1500		MWA/DDP/pave		4/22/22		1500		1.5		N		Y		N		Y						

PACE Drop Off

PRINT Name of SAMPLER:	DATE Signed:	TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
SIGNATURE of SAMPLER:					





Sample Condition Upon Receipt Form (SCUR)

Client Name: Ramboll

Project #:

WO#: 40243868



40243868

Courier:  CS Logistics  Fed Ex  Speedee  UPS  Walto  
 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-107 Type of Ice:  Wet  Blue  Dry  None

Cooler Temperature Uncorr: 5/5 / Corr: 1.5/1.5

Samples on ice, cooling process has begun

Temp Blank Present:  yes  no

Biological Tissue is Frozen:  yes  no

Person examining contents:

Date: 4/22/22 Initials: [Signature]

Labeled By Initials: [Signature]

Temp should be above freezing to 6°C.

Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

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>proj#</u>
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3. <u>[Signature]</u>
Sampler Name & Signature on COC:	<input type="checkbox"/> Yes <input checked="" 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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input 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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input 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:

If checked, see attached form for additional comments

Person Contacted: \_\_\_\_\_ Date/Time: \_\_\_\_\_

Comments/ Resolution: \_\_\_\_\_

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample login