Wisconsin Public Service Corporation
700 North Adams Street
P.O. Box 19001
Green Bay, WI 54307-9001
www.wisconsinpublicservice.com

Mr. Brian Miller
City Engineer
City of Marinette
1905 Hall Avenue
Marinette, WI, 54143

June 26, 2019

Subject: **Recent Groundwater Sampling Results**
WPSC Former Marinette MGP Site, 1603 Ely Street, WDNR BRRTS # 02-38-000047
Marinette, Wisconsin

Dear Mr. Miller:

WEC Business Services, LLC (WBS), managing the Wisconsin Public Service Corporation (WPSC) former manufactured gas plant site at 1603 Ely Street, is providing groundwater samples results collected as part of semi-annual monitoring from locations MW01R, MW03R, MW05, MW302-MW305, MW307R, MW308, MW310-MW313, and P302-P305 collected between April 15 and 16, 2019. Wisconsin Administrative Code Chapter NR716.14 requires responsible parties (WPSC for the above mentioned site) to report sampling results to the property owner, and occupant, as applicable.

Results of the sampling are summarized in the attached. This includes a summary table of the results compared to State standards. Copies of the relevant portions of the associated laboratory report and a figure showing the locations of samples collected on your property are also included. The results will be presented in the future Remedial Design Report.

We appreciate your ongoing cooperation with the ongoing environmental activities at the site. If you need additional information, please contact Kevin McKnight from the WDNR at 920-424-7890 or myself at 414-221-2156.

Sincerely,

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

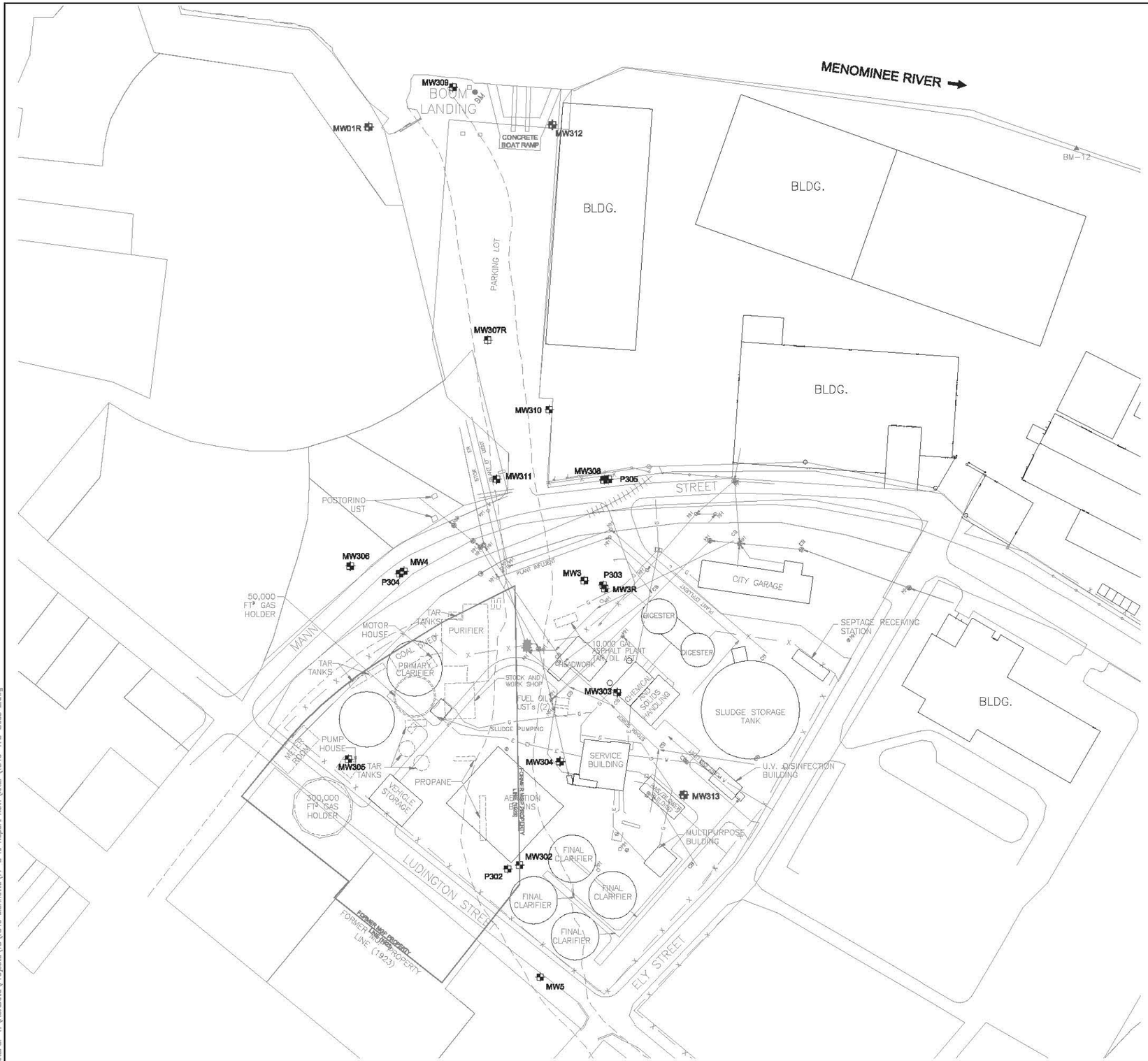
Enc: Figure 1. Monitoring Well Locations City of Marinette
Table 1. Groundwater Analytical Results for the City of Marinette
Laboratory Data Report 40185905_frc

CC: Project file
USEPA RPM – Margaret Gielniewski (email only)
WDNR PM – Kevin McKnight (email and hard copy)

RECENT SAMPLING RESULTS

WPSC Former Marinette MGP Site
1603 Ely Street, Marinette, Wisconsin
WDNR BRRTS Activity # 02-38-000047

FIGURES



MW312 — MONITORING WELL

P302 — PIEZOMETER

G — GAS LINE

W — WATER LINE

E — ELECTRICAL LINE

OEL — OVERHEAD ELECTRIC LINE

SAN — SANITARY SEWER LINE

STM — STORM SEWER LINE

UEL — UNDERGROUND ELECTRIC LINE

FORMER SLOUGH

FORMER MGP PROPERTY LINE (1923)

FORMER MGP STRUCTURE

EXISTING STRUCTURE

NOTE:
SAMPLING LOCATIONS IN BLUE WERE COMPLETED AS PART OF REMEDIAL INVESTIGATION ACTIVITIES IN 2012/2013/2014.

N

0 80 160

SCALE IN FEET

SOURCE NOTES:

1. THIS DRAWING WAS DEVELOPED FROM A MAP BY THE CITY OF MARINETTE.
2. PORTIONS OF THE DRAWING ARE FROM A DIGITAL FILE FROM STS CONSULTANTS, LTD. CONSULTING ENGINEERS, GREEN BAY, WISCONSIN, PROJECT NUMBER 26936, REVISED JANUARY 2001. HYDROGRAPHIC SURVEY OF RIVER WAS PERFORMED BY AYRES AND ASSOCIATES ON JULY 24-26, 2001. VERTICAL CONTROL IS U.S.G.S. DATUM. BUILDING AND STREET LOCATIONS NORTH OF RAILROAD TRACKS WERE SUPPLIED BY MARINETTE MARINE CORPORATION.
3. PORTIONS OF THIS DRAWING ARE FROM HYDRO-SEARCH DRAWING.
4. EXISTING STRUCTURES AND UTILITIES FROM FOTH & VAN DYKE ENGINEERS/ARCHITECTS, GRADING PLAN, DIGITAL FILE 7m755c06.DWG, RECORD DRAWING REVISIONS 2/22/50 AND FROM SMET CONSTRUCTION SERVICES PDF DRAWING SET "MARINETTE MARINE BLDG 32 OUTFITTING", SHEET C1.1, DATED APRIL 24, 2012.
5. WELL LOCATIONS FROM A SURVEY BY WPSC DATED OCTOBER 8, 2003, REVISED OCTOBER 31, 2003.
6. VERTICAL CONTROL IS NAVD88 DATUM
7. BRICK INTERCEPTOR SEWER REPLACEMENT TAKEN FROM DRAWING BY AYRES ASSOCIATES, GREEN BAY, WISCONSIN, JOB NO. 16-0189.10, DRAWING NO. P101, SHEET NO. 7, DATED 3/14/03.
8. MONITORING WELLS MW2R, MW3R, MW307R INSTALLED OCTOBER 2004 AND MW308, MW310, P305 INSTALLED JUNE 2004. SURVEYED BY WPSC IN JANUARY 2005. (NAVD88, MARINETTE COUNTY COORDINATES).
9. POSTORINO USTs WERE IDENTIFIED IN AYERS ASSOCIATES SITE ASSESSMENT AND REMEDIAL ACTION OPTIONS REPORT. CITY OF MARINETTE PROPERTY 500 MANN STREET MARINETTE WISCONSIN 54143 DATED AUGUST 2010.
10. BOOM LANDING SITE WAS DEVELOPED FROM A SURVEY DONE BY WISCONSIN PUBLIC SERVICE BY KJR BOOM LANDING SITE FEATURES DEVELOPED FROM A SURVEY ON 08/14/12, DRAWING "BOOM LANDING 8_12". THE CHANNEL LIMITS AND PORTIONS OF THE SHORELINE ARE FROM U.S. ARMY CORPS OF ENGINEERS DRAWING "CONDITION OF CHANNEL-SEP. 2005", SHEET 4 OF 4.
11. HORIZONTAL DATUM IS MARINETTE COUNTY COORDINATE SYSTEM, UNITS=US FOOT.
12. SOME OFF-SITE UPLAND FEATURES DIGITIZED FROM BING MAPS AERIAL - © 2012 MICROSOFT CORPORATION.
13. BM-SC IS LOCATED ON TOP OF SHEETPILE WALL EAST OF BOAT RAMP.
14. SAMPLING LOCATIONS SB352 THROUGH SB370 COLLECTED BY NRT, OCTOBER 2014.

DRAWN BY:	DMD	DATE: 11/13/14
CHECKED BY:	NDK	DATE: 11/24/14
APPROVED BY:	BGH	DATE: 01/21/15
DRAWING NO:	1549-175-B06	
REFERENCE:		

MONITORING WELL LOCATIONS
CITY OF MARINETTE

REMEDIAL INVESTIGATION REPORT - REVISION 2
FORMER MARINETTE MGP SITE
WISCONSIN PUBLIC SERVICE CORPORATION
MARINETTE, WISCONSIN

NATURAL RESOURCE TECHNOLOGY

PROJECT NO.
1549/17.5

FIGURE NO.
1

Jan 21, 2015 1:52pm PLOTTED BY: ddude SAVED BY: ddude
X:\ACADdata\Projects\15\1549 Marinette\17-5 RI Report Rev2\1549-175-B06.dwg —Layout1
IMAGES:
XREFS: Y:\ACADdata\Projects\15\1549 Marinette\17-5 RI Report Rev1\XREF\1549-175-Base 2.dwg

TABLES

Table 1. Groundwater Analytical Results for the City of Marinette

April 2019 Sample Results Notification
Wisconsin Public Service Corporation - Former Marinette Manufactured Gas Plant
Marinette, Wisconsin
BRRTS# 0238000047
CERCLIS ID -WIN000509952

			BTEX		BTEX		BTEX		BTEX		BTEX		PAH		PAH		PAH		PAH		PAH		PAH		PAH		PAH	
9-digit Code	Station Name	Sample Date	Benzene		Ethylbenzene		Toluene		Xylene, o		Xylenes, m + p		Xylenes, Total		Anthracene		Benzo(a)pyrene		Benzo(b)fluoranthene		Benzo(g,h,i)perylene		Chrysene		Fluoranthene		Fluorene		Naphthalene		Phenanthrene		Pyrene	
		Reporting Units:	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
			Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
		WI Groundwater ES:	**5**		**700**		**800**		**NS**		**NS**		**2,000**		**3,000**		**0.2**		**0.2**		**NS**		**0.2**		**400**		**400**		**100**		**NS**		**250**	
		WI Groundwater PAL:	0.5		140		160		NS		NS		400		600		0.02		0.02		NS		0.02		80		80		10		NS		50	
041619015	MW01R	4/16/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.011	U	<0.011	U	0.011	J	<0.0071	U	<0.014	U	<0.011	U	<0.0084	U	<0.019	U	<0.015	U	<0.0081	U
041619019	MW03R	4/16/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	0.016	J	0.020	J	0.029	J	0.018	J	0.027	J	0.021	J	<0.0088	U	<0.020	U	<0.015	U	0.020	J
041519007	MW05	4/15/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.011	U	<0.011	U	<0.0060	U	<0.0071	U	<0.014	U	<0.011	U	<0.0083	U	0.047	J	<0.014	U	<0.0080	U
041519008	MW05 (Dup)	4/15/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.011	U	<0.011	U	0.011	J	0.0080	J	0.020	J	0.025	J	<0.0085	U	<0.020	U	0.021	J	0.020	J
041519002	MW302	4/15/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	0.030	J	0.094		0.088		0.075		0.11		0.091		<0.0085	U	<0.020	U	0.025	J	0.091	
041519005	MW303	4/15/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	0.025	J	<0.011	U	0.014	J	0.0086	J	<0.014	U	<0.011	U	<0.0084	U	<0.019	U	<0.015	U	0.019	J
041519004	MW304	4/15/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	0.028	J	<0.012	U	<0.0068	U	<0.0080	U	<0.015	U	<0.013	U	<0.0094	U	<0.022	U	<0.016	U	<0.0090	U
041519001	MW305	4/15/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	0.023	J	<0.011	U	<0.0062	U	<0.0073	U	<0.014	U	<0.011	U	<0.0086	U	<0.020	U	<0.015	U	<0.0082	U
041519011	MW307R	4/15/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	0.077		0.041	J	0.063		0.031	J	0.093		0.20		0.19		0.033	J	0.13		0.19	
041519009	MW308	4/15/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.010	U	<0.010	U	<0.0057	U	<0.0067	U	<0.013	U	0.012	J	<0.0079	U	<0.018	U	<0.014	U	0.011	J
041619016	MW310	4/16/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	0.038	J	<0.012	U	<0.0065	U	<0.0077	U	0.017	J	0.090		0.80		0.069	J	0.017	J	0.088	
041619017	MW310 (Dup)	4/16/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	0.037	J	<0.012	U	<0.0063	U	<0.0075	U	0.019	J	0.081		0.73		0.069	J	0.019	J	0.082	
041619018	MW311	4/16/2019	**64.9**		74.0		6.0	J	45.1		14.5	J	59.6		3.3		<0.37	U	<0.20	U	<0.24	U	<0.46	U	1.6	J	18.2		**416**		16.8		1.7	
041619014	MW312	4/16/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	0.035	J	<0.012	U	<0.0067	U	<0.0079	U	<0.015	U	0.034	J	0.078		<0.021	U	0.049	J	0.034	J
041519006	MW313	4/15/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	0.019	J	<0.011	U	0.012	J	0.011	J	0.017	J	0.024	J	0.012	J	<0.020	U	<0.015	U	0.019	J
041519003	P302	4/15/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	<0.011	U	<0.011	U	<0.0060	U	<0.0071	U	<0.014	U	<0.011	U	<0.0084	U	<0.019	U	<0.015	U	<0.0081	U
041619020	P303	4/16/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	0.021	J	0.015	J	0.015	J	0.011	J	0.027	J	0.024	J	<0.0080	U	<0.018	U	0.022	J	0.030	J
041619021	P304	4/16/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	0.066	J	0.038	J	0.069		0.046		0.099		0.11		<0.010	U	<0.024	U	0.047	J	0.095	
041519010	P305	4/15/2019	<0.25	U	<0.22	U	<0.17	U	<0.26	U	<0.47	U	<1.5	U	0.041	J	<0.011	U	0.011	J	0.0075	J	0.017	J	0.20		0.36		0.11		0.075		0.14	

Notes
BOLD = concentration that attains or exceeds WDNR ES
Underline = concentration that attains or exceeds WDNR PAL

PAL and ES from Chapter NR 140 for Groundwater Quality from Wisconsin Admin Code (Feb 2017)
Lab comments can be found in associated laboratory reports.

< = Concentration is less than the Limit of Detection (LOD)
µg/L = micrograms per liter
BTEX = Benzene, Toluene, Ethylbenzene and Xylene
Dup = Quality Control Field Duplicate Sample
ES = Enforcement Standard

J = Concentration Estimated
NS = No Standard
PAH = Polycyclic Aromatic Hydrocarbon
PAL = Preventive Action Limit
U = Concentration was not detected above the reported limit

Table 1. Groundwater Analytical Results for the City of Marinette

April 2019 Sample Results Notification
Wisconsin Public Service Corporation - Former Marinette Manufactured Gas Plant
Marinette, Wisconsin
BRRTS# 0238000047
CERCLIS ID -WIN000509952

			Metal		Metal		Metal		Metal		Metal		Metal		Metal		Metal		Inorganic		Inorganic		Inorganic		Organic	
9-digit Code	Station Name	Sample Date	Aluminum, Dissolved		Antimony, Dissolved		Copper, Dissolved		Iron, Dissolved		Manganese, Dissolved		Nickel, Dissolved		Silver, Dissolved		Vanadium, Dissolved		Zinc, Dissolved		Alkalinity, Total		Nitrogen, NO2 + NO3, Total		Sulfate, Total		Methane	
		Reporting Units:	µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L		µg/L	
			Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
		WI Groundwater ES:	**200**		**6**		**1,300**		**300**		**50**		**100**		**50**		**30**		**5,000**		**NS**		**10,000**		**250,000**		**NS**	
		WI Groundwater PAL:	40		1.2		130		150		25		20		10		6		2,500		NS		2,000		125,000		NS	
041619015	MW01R	4/16/2019	<117	U	<0.30	U	<2.2	U	**7,980**		**723**		2.3	J	<0.20	U	1.1	J	9.5	J	411,000		<95	U	<5,000	U	16,800	
041619019	MW03R	4/16/2019	<117	U	0.87	J	6.4	J	<221	U	22.2		2.7		<0.20	U	0.81	J	27.5	J	281,000		9,000		53,700		10.4	
041519007	MW05	4/15/2019	<117	U	<0.30	U	2.7	J	<221	U	**178**		2.7		<0.20	U	<0.63	U	<9.2	U	252,000		2,200		73,600		<1.4	U
041519008	MW05 (Dup)	4/15/2019	<117	U	<0.30	U	2.3	J	<221	U	**219**		1.3	J	<0.20	U	<0.63	U	<9.2	U	256,000		2,100		73,700		<1.4	U
041519002	MW302	4/15/2019	<117	U	<0.30	U	4.1	J	286	J	<5.4	U	2.4	J	<0.20	U	<0.63	U	11.2	J	251,000		6,100		102,000		<1.4	U
041519005	MW303	4/15/2019	<117	U	0.72	J	3.8	J	**1,340**		**209**		2.0	J	<0.20	U	<0.63	U	12.0	J	314,000		1,800		**524,000**		111	
041519004	MW304	4/15/2019	<117	U	1.4	J	13.7		<221	U	**347**		2.2	J	<0.20	U	1.7	J	15.3	J	298,000		1,400		15,000		6.5	
041519001	MW305	4/15/2019	<117	U	<0.30	U	3.4	J	**686**	J	<5.4	U	2.4	J	<0.20	U	<0.63	U	15.7	J	264,000		5,200		105,000		<1.4	U
041519011	MW307R	4/15/2019	<117	U	<0.30	U	<2.2	U	**17,900**		**848**		13.1		<0.20	U	<0.63	U	<9.2	U	344,000		680		137,000		2,780	
041519009	MW308	4/15/2019	<117	U	0.87	J	11.0		**416**	J	**79.1**		30.3		<0.20	U	<0.63	U	373		610,000		2,300		**569,000**		<1.4	U
041619016	MW310	4/16/2019	<117	U	<0.30	U	<2.2	U	**17,400**		**1,040**		1.0	J	<0.20	U	1.3	J	10.9	J	420,000		130	J	108,000		1,350	
041619017	MW310 (Dup)	4/16/2019	<117	U	<0.30	U	<2.2	U	**17,200**		**1,040**		1.6	J	<0.20	U	1.2	J	15.8	J	481,000		<95	U	107,000		1,440	
041619018	MW311	4/16/2019	<117	U	<0.30	U	3.2	J	**33,300**		**688**		1.5	J	<0.20	U	1.5	J	15.7	J	764,000		<95	U	<5,000	U	6,440	
041619014	MW312	4/16/2019	<117	U	<0.30	U	<2.2	U	**19,400**		**903**		2.0	J	<0.20	U	<0.63	U	<9.2	U	775,000		<95	U	<5,000	U	20,500	
041519006	MW313	4/15/2019	<117	U	0.54	J	<2.2	U	**7,410**		**723**		3.7		<0.20	U	1.4	J	11.1	J	273,000		360		186,000		1,200	
041519003	P302	4/15/2019	<117	U	<0.30	U	<2.2	U	**1,540**		**351**		1.5	J	<0.20	U	0.77	J	<9.2	U	262,000		180	J	66,500		17.7	
041619020	P303	4/16/2019	140	J	<0.30	U	2.6	J	268	J	30.6		1.8	J	<0.20	U	0.94	J	15.7	J	147,000		210	J	**893,000**		<1.4	U
041619021	P304	4/16/2019	--		--		--		--		--		--		--		--		--		--		--		--		--	
041519010	P305	4/15/2019	<117	U	<0.30	U	<2.2	U	**685**	J	**218**		1.3	J	<0.20	U	0.74	J	41.1		333,000		180	J	30,400		58.5	

[O:ECK 5/30/2019, SGW 5/31/19, Q: JQW 6/4/19]

Notes
BOLD = concentration that attains or exceeds WDNR ES
Underline = concentration that attains or exceeds WDNR PAL

PAL and ES from Chapter NR 140 for Groundwater Quality from Wisconsin Admin Code (Feb 2017)
Lab comments can be found in associated laboratory reports.

< = Concentration is less than the Limit of Detection (LOD)
µg/L = micrograms per liter
BTEX = Benzene, Toluene, Ethylbenzene and Xylene
Dup = Quality Control Field Duplicate Sample
ES = Enforcement Standard

J = Concentration Estimated
NS = No Standard
PAH = Polycyclic Aromatic Hydrocarbon
PAL = Preventive Action Limit
U = Concentration was not detected above the reported limit

LABORATORY DATA REPORTS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

April 30, 2019

Brian Hennings
OBG
234 W. Florida St, 5th Floor
Milwaukee, WI 53204

RE: Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Dear Brian Hennings:
Enclosed are the analytical results for sample(s) received by the laboratory on April 16, 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,

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

Enclosures

cc: NRT Data, OBG

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

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

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40185905001	041519001	Water	04/15/19 12:14	04/16/19 16:55
40185905002	041519002	Water	04/15/19 12:55	04/16/19 16:55
40185905003	041519003	Water	04/15/19 13:33	04/16/19 16:55
40185905004	041519004	Water	04/15/19 14:08	04/16/19 16:55
40185905005	041519005	Water	04/15/19 15:06	04/16/19 16:55
40185905006	041519006	Water	04/15/19 15:54	04/16/19 16:55
40185905007	041519007	Water	04/15/19 16:35	04/16/19 16:55
40185905008	041519008	Water	04/15/19 16:40	04/16/19 16:55
40185905009	041519009	Water	04/15/19 17:21	04/16/19 16:55
40185905010	041519010	Water	04/15/19 17:51	04/16/19 16:55
40185905011	041519011	Water	04/15/19 18:32	04/16/19 16:55
40185905012	041519012	Water	04/15/19 18:50	04/16/19 16:55
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
40185905014	041619014	Water	04/16/19 08:37	04/16/19 16:55
40185905015	041619015	Water	04/16/19 09:15	04/16/19 16:55
40185905016	041619016	Water	04/16/19 10:19	04/16/19 16:55
40185905017	041619017	Water	04/16/19 10:24	04/16/19 16:55
40185905018	041619018	Water	04/16/19 11:04	04/16/19 16:55
40185905019	041619019	Water	04/16/19 12:07	04/16/19 16:55
40185905020	041619020	Water	04/16/19 12:30	04/16/19 16:55
40185905021	041619021	Water	04/16/19 12:50	04/16/19 16:55
40185905022	041619022	Water	04/16/19 13:10	04/16/19 16:55
40185905023	041619023	Water	04/16/19 00:00	04/16/19 16:55

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40185905001	**041519001**	EPA 8015B Modified	ALD	1	PASI-G
		EPA 6020	DS1	9	PASI-G
		EPA 8270 by HVI	TPO	12	PASI-G
		EPA 8260	HNW	9	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
		EPA 353.2	DAW	1	PASI-G
40185905002	**041519002**	EPA 8015B Modified	ALD	1	PASI-G
		EPA 6020	DS1	9	PASI-G
		EPA 8270 by HVI	TPO	12	PASI-G
		EPA 8260	HNW	9	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
		EPA 353.2	DAW	1	PASI-G
40185905003	**041519003**	EPA 8015B Modified	ALD	1	PASI-G
		EPA 6020	DS1	9	PASI-G
		EPA 8270 by HVI	TPO	12	PASI-G
		EPA 8260	HNW	9	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
		EPA 353.2	DAW	1	PASI-G
40185905004	**041519004**	EPA 8015B Modified	ALD	1	PASI-G
		EPA 6020	DS1	9	PASI-G
		EPA 8270 by HVI	TPO	12	PASI-G
		EPA 8260	HNW	9	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
		EPA 353.2	DAW	1	PASI-G
40185905005	**041519005**	EPA 8015B Modified	ALD	1	PASI-G
		EPA 6020	DS1	9	PASI-G
		EPA 8270 by HVI	TPO	12	PASI-G
		EPA 8260	HNW	9	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
		EPA 353.2	DAW	1	PASI-G
40185905006	**041519006**	EPA 8015B Modified	ALD	1	PASI-G
		EPA 6020	DS1	9	PASI-G

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 8270 by HVI	TPO	12	PASI-G
		EPA 8260	HNW	9	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
		EPA 353.2	DAW	1	PASI-G
40185905007	**041519007**	EPA 8015B Modified	ALD	1	PASI-G
		EPA 6020	DS1	9	PASI-G
		EPA 8270 by HVI	TPO	12	PASI-G
		EPA 8260	HNW	9	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
		EPA 353.2	DAW	1	PASI-G
40185905008	**041519008**	EPA 8015B Modified	ALD	1	PASI-G
		EPA 6020	DS1	9	PASI-G
		EPA 8270 by HVI	TPO	12	PASI-G
		EPA 8260	HNW	9	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
		EPA 353.2	DAW	1	PASI-G
40185905009	**041519009**	EPA 8015B Modified	ALD	1	PASI-G
		EPA 6020	DS1	9	PASI-G
		EPA 8270 by HVI	TPO	12	PASI-G
		EPA 8260	HNW	9	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
		EPA 353.2	DAW	1	PASI-G
40185905010	**041519010**	EPA 8015B Modified	ALD	1	PASI-G
		EPA 6020	DS1	9	PASI-G
		EPA 8270 by HVI	TPO	12	PASI-G
		EPA 8260	HNW	9	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
		EPA 353.2	DAW	1	PASI-G
40185905011	**041519011**	EPA 8015B Modified	ALD	1	PASI-G
		EPA 6020	DS1	9	PASI-G
		EPA 8270 by HVI	TPO	12	PASI-G
		EPA 8260	HNW	9	PASI-G

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
		EPA 353.2	DAW	1	PASI-G
40185905012	**041519012**	EPA 8260	HNW	9	PASI-G
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
40185905014	**041619014**	EPA 8015B Modified	ALD	1	PASI-G
		EPA 6020	DS1	9	PASI-G
		EPA 8270 by HVI	TPO	12	PASI-G
		EPA 8260	HNW	9	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
		EPA 353.2	DAW	1	PASI-G
40185905015	**041619015**	EPA 8015B Modified	ALD	1	PASI-G
		EPA 6020	DS1	9	PASI-G
		EPA 8270 by HVI	TPO	12	PASI-G
		EPA 8260	HNW	9	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
		EPA 353.2	DAW	1	PASI-G
40185905016	**041619016**	EPA 8015B Modified	ALD	1	PASI-G
		EPA 6020	DS1	9	PASI-G
		EPA 8270 by HVI	TPO	12	PASI-G
		EPA 8260	HNW	9	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
		EPA 353.2	DAW	1	PASI-G
40185905017	**041619017**	EPA 8015B Modified	ALD	1	PASI-G
		EPA 6020	DS1	9	PASI-G
		EPA 8270 by HVI	TPO	12	PASI-G
		EPA 8260	HNW	9	PASI-G
		EPA 300.0	HMB	1	PASI-G

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 310.2	DAW	1	PASI-G
		EPA 353.2	DAW	1	PASI-G
40185905018	**041619018**	EPA 8015B Modified	ALD	1	PASI-G
		EPA 6020	DS1	9	PASI-G
		EPA 8270 by HVI	TPO	12	PASI-G
		EPA 8260	HNW	9	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
		EPA 353.2	DAW	1	PASI-G
40185905019	**041619019**	EPA 8015B Modified	ALD	1	PASI-G
		EPA 6020	DS1	9	PASI-G
		EPA 8270 by HVI	TPO	12	PASI-G
		EPA 8260	HNW	9	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
		EPA 353.2	DAW	1	PASI-G
40185905020	**041619020**	EPA 8015B Modified	ALD	1	PASI-G
		EPA 6020	DS1	9	PASI-G
		EPA 8270 by HVI	TPO	12	PASI-G
		EPA 8260	HNW	9	PASI-G
		EPA 300.0	HMB	1	PASI-G
		EPA 310.2	DAW	1	PASI-G
		EPA 353.2	DAW	1	PASI-G
40185905021	**041619021**	EPA 8270 by HVI	TPO	12	PASI-G
		EPA 8260	LAP	9	PASI-G
40185905022	**041619022**	EPA 8260	LAP	9	PASI-G
40185905023	**041619023**	EPA 8015B Modified	ALD	1	PASI-G
		EPA 8260	LAP	9	PASI-G

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PROJECT NARRATIVE

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Method: **EPA 8015B Modified**
Description: Methane, Ethane, Ethene GCV
Client: O'Brien & Gere Engineers, Inc Integrys WI
Date: April 30, 2019

General Information:
20 samples were analyzed for EPA 8015B Modified. 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.

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.

Surrogates:
All surrogates were within QC limits 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:

Pace Analytical Services, LLC
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PROJECT NARRATIVE

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Method: **EPA 6020**
Description: 6020 MET ICPMS, Dissolved
Client: O'Brien & Gere Engineers, Inc Integrys WI
Date: April 30, 2019

General Information:
19 samples were analyzed for EPA 6020. 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.

Internal Standards:
All internal standards were within QC limits 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:

Analyte Comments:

QC Batch: 318670

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

- 041519001 (Lab ID: 40185905001)
  - Silver, Dissolved
  - Aluminum, Dissolved
  - Copper, Dissolved
  - Iron, Dissolved
  - Manganese, Dissolved
  - Nickel, Dissolved
  - Antimony, Dissolved
  - Vanadium, Dissolved
  - Zinc, Dissolved

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PROJECT NARRATIVE

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Method: **EPA 6020**
Description: 6020 MET ICPMS, Dissolved
Client: O'Brien & Gere Engineers, Inc Integrys WI
Date: April 30, 2019

Analyte Comments:

QC Batch: 318670

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

- 041519002 (Lab ID: 40185905002)
  - Silver, Dissolved
  - Aluminum, Dissolved
  - Copper, Dissolved
  - Iron, Dissolved
  - Manganese, Dissolved
  - Nickel, Dissolved
  - Antimony, Dissolved
  - Vanadium, Dissolved
  - Zinc, Dissolved
- 041519003 (Lab ID: 40185905003)
  - Silver, Dissolved
  - Aluminum, Dissolved
  - Copper, Dissolved
  - Nickel, Dissolved
  - Antimony, Dissolved
  - Vanadium, Dissolved
  - Zinc, Dissolved
- 041519004 (Lab ID: 40185905004)
  - Silver, Dissolved
  - Aluminum, Dissolved
  - Iron, Dissolved
  - Nickel, Dissolved
  - Antimony, Dissolved
  - Vanadium, Dissolved
  - Zinc, Dissolved
- 041519005 (Lab ID: 40185905005)
  - Silver, Dissolved
  - Aluminum, Dissolved
  - Copper, Dissolved
  - Nickel, Dissolved
  - Antimony, Dissolved
  - Vanadium, Dissolved
  - Zinc, Dissolved
- 041519006 (Lab ID: 40185905006)
  - Silver, Dissolved
  - Aluminum, Dissolved
  - Copper, Dissolved
  - Antimony, Dissolved
  - Vanadium, Dissolved
  - Zinc, Dissolved
- 041519007 (Lab ID: 40185905007)
  - Silver, Dissolved

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PROJECT NARRATIVE

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Method: **EPA 6020**
Description: 6020 MET ICPMS, Dissolved
Client: O'Brien & Gere Engineers, Inc Integrys WI
Date: April 30, 2019

Analyte Comments:

QC Batch: 318670

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

- 041519007 (Lab ID: 40185905007)
  - Aluminum, Dissolved
  - Copper, Dissolved
  - Iron, Dissolved
  - Antimony, Dissolved
  - Vanadium, Dissolved
  - Zinc, Dissolved
- 041519008 (Lab ID: 40185905008)
  - Silver, Dissolved
  - Aluminum, Dissolved
  - Copper, Dissolved
  - Iron, Dissolved
  - Nickel, Dissolved
  - Antimony, Dissolved
  - Vanadium, Dissolved
  - Zinc, Dissolved
- 041519009 (Lab ID: 40185905009)
  - Silver, Dissolved
  - Aluminum, Dissolved
  - Iron, Dissolved
  - Antimony, Dissolved
  - Vanadium, Dissolved
- 041519010 (Lab ID: 40185905010)
  - Silver, Dissolved
  - Aluminum, Dissolved
  - Copper, Dissolved
  - Iron, Dissolved
  - Nickel, Dissolved
  - Antimony, Dissolved
  - Vanadium, Dissolved
- 041519011 (Lab ID: 40185905011)
  - Silver, Dissolved
  - Aluminum, Dissolved
  - Copper, Dissolved
  - Antimony, Dissolved
  - Vanadium, Dissolved
  - Zinc, Dissolved
- [redacted]

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PROJECT NARRATIVE

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Method: **EPA 6020**
Description: 6020 MET ICPMS, Dissolved
Client: O'Brien & Gere Engineers, Inc Integrys WI
Date: April 30, 2019

[redacted]

- 041619014 (Lab ID: 40185905014)
  - Silver, Dissolved
  - Aluminum, Dissolved
  - Copper, Dissolved
  - Nickel, Dissolved
  - Antimony, Dissolved
  - Vanadium, Dissolved
  - Zinc, Dissolved
- 041619015 (Lab ID: 40185905015)
  - Silver, Dissolved
  - Aluminum, Dissolved
  - Copper, Dissolved
  - Nickel, Dissolved
  - Antimony, Dissolved
  - Vanadium, Dissolved
  - Zinc, Dissolved
- 041619016 (Lab ID: 40185905016)
  - Silver, Dissolved
  - Aluminum, Dissolved
  - Copper, Dissolved
  - Nickel, Dissolved
  - Antimony, Dissolved
  - Vanadium, Dissolved
  - Zinc, Dissolved
- 041619017 (Lab ID: 40185905017)
  - Silver, Dissolved
  - Aluminum, Dissolved
  - Copper, Dissolved
  - Nickel, Dissolved
  - Antimony, Dissolved
  - Vanadium, Dissolved
  - Zinc, Dissolved
- 041619018 (Lab ID: 40185905018)
  - Silver, Dissolved
  - Aluminum, Dissolved
  - Copper, Dissolved
  - Nickel, Dissolved
  - Antimony, Dissolved
  - Vanadium, Dissolved
  - Zinc, Dissolved

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PROJECT NARRATIVE

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Method: **EPA 6020**
Description: 6020 MET ICPMS, Dissolved
Client: O'Brien & Gere Engineers, Inc Integrys WI
Date: April 30, 2019

Analyte Comments:

QC Batch: 318670

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

- 041619019 (Lab ID: 40185905019)
  - Silver, Dissolved
  - Aluminum, Dissolved
  - Copper, Dissolved
  - Iron, Dissolved
  - Antimony, Dissolved
  - Vanadium, Dissolved
  - Zinc, Dissolved
- 041619020 (Lab ID: 40185905020)
  - Silver, Dissolved
  - Aluminum, Dissolved
  - Copper, Dissolved
  - Iron, Dissolved
  - Nickel, Dissolved
  - Antimony, Dissolved
  - Vanadium, Dissolved
  - Zinc, Dissolved

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PROJECT NARRATIVE

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Method: **EPA 8270 by HVI**
Description: 8270 MSSV PAH by HVI
Client: O'Brien & Gere Engineers, Inc Integrys WI
Date: April 30, 2019

General Information:
20 samples were analyzed for EPA 8270 by HVI. 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 3510 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.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: 318761

S4: Surrogate recovery not evaluated against control limits due to sample dilution.
- 041619018 (Lab ID: 40185905018)
  - 2-Fluorobiphenyl (S)

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.

QC Batch: 318893

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

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PROJECT NARRATIVE

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Method: **EPA 8260**
Description: 8260 MSV UST
Client: O'Brien & Gere Engineers, Inc Integrys WI
Date: April 30, 2019

General Information:
23 samples were analyzed for EPA 8260. 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.

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.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits 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:

Analyte Comments:

QC Batch: 318626

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

- [redacted]
- 041619018 (Lab ID: 40185905018)
  - Dibromofluoromethane (S)

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PROJECT NARRATIVE

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: O'Brien & Gere Engineers, Inc Integrys WI
Date: April 30, 2019

General Information:
19 samples were analyzed for EPA 300.0. 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.

QC Batch: 319140

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40185905004,40185906002

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

- MS (Lab ID: 1854586)
  - Sulfate
- MSD (Lab ID: 1854587)
  - Sulfate

Additional Comments:

Analyte Comments:

QC Batch: 319140

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

- [redacted]
- 041619014 (Lab ID: 40185905014)
  - Sulfate
- 041619015 (Lab ID: 40185905015)
  - Sulfate
- 041619018 (Lab ID: 40185905018)
  - Sulfate

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Method: **EPA 310.2**
Description: 310.2 Alkalinity
Client: O'Brien & Gere Engineers, Inc Integrys WI
Date: April 30, 2019

General Information:
19 samples were analyzed for EPA 310.2. 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.

QC Batch: 319370

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40185905004,40186090001

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

- MS (Lab ID: 1855608)
  - Alkalinity, Total as CaCO3
- MS (Lab ID: 1855610)
  - Alkalinity, Total as CaCO3
- MSD (Lab ID: 1855611)
  - Alkalinity, Total as CaCO3

Additional Comments:

Pace Analytical Services, LLC
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PROJECT NARRATIVE

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 pres.
Client: O'Brien & Gere Engineers, Inc Integrys WI
Date: April 30, 2019

General Information:
19 samples were analyzed for EPA 353.2. 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.

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ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041519001 **Lab ID: 40185905001** Collected: 04/15/19 12:14 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV	Analytical Method: EPA 8015B Modified								
Methane	**<1.4**	ug/L	2.8	1.4	1		04/17/19 11:22	74-82-8	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum, Dissolved	**<117**	ug/L	500	117	2	04/18/19 07:09	04/23/19 01:49	7429-90-5	D3
Antimony, Dissolved	**<0.30**	ug/L	2.0	0.30	2	04/18/19 07:09	04/23/19 01:49	7440-36-0	D3
Copper, Dissolved	**3.4J**	ug/L	7.3	2.2	2	04/18/19 07:09	04/23/19 01:49	7440-50-8	D3
Iron, Dissolved	**686J**	ug/L	737	221	2	04/18/19 07:09	04/23/19 01:49	7439-89-6	D3
Manganese, Dissolved	**<5.4**	ug/L	18.0	5.4	2	04/18/19 07:09	04/23/19 01:49	7439-96-5	D3
Nickel, Dissolved	**2.4J**	ug/L	2.7	0.80	2	04/18/19 07:09	04/23/19 01:49	7440-02-0	D3
Silver, Dissolved	**<0.20**	ug/L	1.0	0.20	2	04/18/19 07:09	04/23/19 01:49	7440-22-4	D3
Vanadium, Dissolved	**<0.63**	ug/L	2.1	0.63	2	04/18/19 07:09	04/23/19 01:49	7440-62-2	D3
Zinc, Dissolved	**15.7J**	ug/L	30.7	9.2	2	04/18/19 07:09	04/23/19 01:49	7440-66-6	D3
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Anthracene	**0.023J**	ug/L	0.056	0.011	1	04/18/19 08:04	04/18/19 11:56	120-12-7	
Benzo(a)pyrene	**<0.011**	ug/L	0.057	0.011	1	04/18/19 08:04	04/18/19 11:56	50-32-8	
Benzo(b)fluoranthene	**<0.0062**	ug/L	0.031	0.0062	1	04/18/19 08:04	04/18/19 11:56	205-99-2	
Benzo(g,h,i)perylene	**<0.0073**	ug/L	0.036	0.0073	1	04/18/19 08:04	04/18/19 11:56	191-24-2	
Chrysene	**<0.014**	ug/L	0.070	0.014	1	04/18/19 08:04	04/18/19 11:56	218-01-9	
Fluoranthene	**<0.011**	ug/L	0.057	0.011	1	04/18/19 08:04	04/18/19 11:56	206-44-0	
Fluorene	**<0.0086**	ug/L	0.043	0.0086	1	04/18/19 08:04	04/18/19 11:56	86-73-7	
Naphthalene	**<0.020**	ug/L	0.099	0.020	1	04/18/19 08:04	04/18/19 11:56	91-20-3	
Phenanthrene	**<0.015**	ug/L	0.074	0.015	1	04/18/19 08:04	04/18/19 11:56	85-01-8	
Pyrene	**<0.0082**	ug/L	0.041	0.0082	1	04/18/19 08:04	04/18/19 11:56	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	56	%	30-85		1	04/18/19 08:04	04/18/19 11:56	321-60-8	
Terphenyl-d14 (S)	81	%	10-120		1	04/18/19 08:04	04/18/19 11:56	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/17/19 18:33	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/17/19 18:33	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/17/19 18:33	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/17/19 18:33	1330-20-7	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/17/19 18:33	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/17/19 18:33	95-47-6	
Surrogates									
Dibromofluoromethane (S)	94	%	70-130		1		04/17/19 18:33	1868-53-7	
Toluene-d8 (S)	100	%	70-130		1		04/17/19 18:33	2037-26-5	
4-Bromofluorobenzene (S)	91	%	70-130		1		04/17/19 18:33	460-00-4	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**105**	mg/L	15.0	5.0	5		04/24/19 18:53	14808-79-8	
310.2 Alkalinity	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3	**264**	mg/L	23.5	7.0	1		04/25/19 09:15		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041519001 **Lab ID: 40185905001** Collected: 04/15/19 12:14 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**5.2**	mg/L	0.25	0.095	1		04/18/19 11:35		

Sample: 041519002 **Lab ID: 40185905002** Collected: 04/15/19 12:55 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV	Analytical Method: EPA 8015B Modified								
Methane	**<1.4**	ug/L	2.8	1.4	1		04/17/19 09:58	74-82-8	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum, Dissolved	**<117**	ug/L	500	117	2	04/18/19 07:09	04/23/19 02:03	7429-90-5	D3
Antimony, Dissolved	**<0.30**	ug/L	2.0	0.30	2	04/18/19 07:09	04/23/19 02:03	7440-36-0	D3
Copper, Dissolved	**4.1J**	ug/L	7.3	2.2	2	04/18/19 07:09	04/23/19 02:03	7440-50-8	D3
Iron, Dissolved	**286J**	ug/L	737	221	2	04/18/19 07:09	04/23/19 02:03	7439-89-6	D3
Manganese, Dissolved	**<5.4**	ug/L	18.0	5.4	2	04/18/19 07:09	04/23/19 02:03	7439-96-5	D3
Nickel, Dissolved	**2.4J**	ug/L	2.7	0.80	2	04/18/19 07:09	04/23/19 02:03	7440-02-0	D3
Silver, Dissolved	**<0.20**	ug/L	1.0	0.20	2	04/18/19 07:09	04/23/19 02:03	7440-22-4	D3
Vanadium, Dissolved	**<0.63**	ug/L	2.1	0.63	2	04/18/19 07:09	04/23/19 02:03	7440-62-2	D3
Zinc, Dissolved	**11.2J**	ug/L	30.7	9.2	2	04/18/19 07:09	04/23/19 02:03	7440-66-6	D3
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Anthracene	**0.030J**	ug/L	0.056	0.011	1	04/18/19 08:04	04/18/19 12:14	120-12-7	
Benzo(a)pyrene	**0.094**	ug/L	0.056	0.011	1	04/18/19 08:04	04/18/19 12:14	50-32-8	
Benzo(b)fluoranthene	**0.088**	ug/L	0.031	0.0061	1	04/18/19 08:04	04/18/19 12:14	205-99-2	
Benzo(g,h,i)perylene	**0.075**	ug/L	0.036	0.0072	1	04/18/19 08:04	04/18/19 12:14	191-24-2	
Chrysene	**0.11**	ug/L	0.069	0.014	1	04/18/19 08:04	04/18/19 12:14	218-01-9	
Fluoranthene	**0.091**	ug/L	0.057	0.011	1	04/18/19 08:04	04/18/19 12:14	206-44-0	
Fluorene	**<0.0085**	ug/L	0.042	0.0085	1	04/18/19 08:04	04/18/19 12:14	86-73-7	
Naphthalene	**<0.020**	ug/L	0.097	0.020	1	04/18/19 08:04	04/18/19 12:14	91-20-3	
Phenanthrene	**0.025J**	ug/L	0.073	0.015	1	04/18/19 08:04	04/18/19 12:14	85-01-8	
Pyrene	**0.091**	ug/L	0.041	0.0081	1	04/18/19 08:04	04/18/19 12:14	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	52	%	30-85		1	04/18/19 08:04	04/18/19 12:14	321-60-8	
Terphenyl-d14 (S)	76	%	10-120		1	04/18/19 08:04	04/18/19 12:14	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/17/19 18:55	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/17/19 18:55	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/17/19 18:55	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/17/19 18:55	1330-20-7	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/17/19 18:55	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/17/19 18:55	95-47-6	
Surrogates									
Dibromofluoromethane (S)	96	%	70-130		1		04/17/19 18:55	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041519002 **Lab ID: 40185905002** Collected: 04/15/19 12:55 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Surrogates									
Toluene-d8 (S)	97	%	70-130		1		04/17/19 18:55	2037-26-5	
4-Bromofluorobenzene (S)	89	%	70-130		1		04/17/19 18:55	460-00-4	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**102**	mg/L	15.0	5.0	5		04/25/19 02:49	14808-79-8	
310.2 Alkalinity	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3	**251**	mg/L	23.5	7.0	1		04/25/19 09:15		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**6.1**	mg/L	0.25	0.095	1		04/18/19 11:36		

Sample: 041519003 **Lab ID: 40185905003** Collected: 04/15/19 13:33 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV	Analytical Method: EPA 8015B Modified								
Methane	**17.7**	ug/L	2.8	1.4	1		04/17/19 10:06	74-82-8	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum, Dissolved	**<117**	ug/L	500	117	2	04/18/19 07:09	04/23/19 02:10	7429-90-5	D3
Antimony, Dissolved	**<0.30**	ug/L	2.0	0.30	2	04/18/19 07:09	04/23/19 02:10	7440-36-0	D3
Copper, Dissolved	**<2.2**	ug/L	7.3	2.2	2	04/18/19 07:09	04/23/19 02:10	7440-50-8	D3
Iron, Dissolved	**1540**	ug/L	737	221	2	04/18/19 07:09	04/23/19 02:10	7439-89-6	
Manganese, Dissolved	**351**	ug/L	18.0	5.4	2	04/18/19 07:09	04/23/19 02:10	7439-96-5	
Nickel, Dissolved	**1.5J**	ug/L	2.7	0.80	2	04/18/19 07:09	04/23/19 02:10	7440-02-0	D3
Silver, Dissolved	**<0.20**	ug/L	1.0	0.20	2	04/18/19 07:09	04/23/19 02:10	7440-22-4	D3
Vanadium, Dissolved	**0.77J**	ug/L	2.1	0.63	2	04/18/19 07:09	04/23/19 02:10	7440-62-2	D3
Zinc, Dissolved	**<9.2**	ug/L	30.7	9.2	2	04/18/19 07:09	04/23/19 02:10	7440-66-6	D3
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Anthracene	**<0.011**	ug/L	0.055	0.011	1	04/18/19 08:04	04/18/19 12:32	120-12-7	
Benzo(a)pyrene	**<0.011**	ug/L	0.055	0.011	1	04/18/19 08:04	04/18/19 12:32	50-32-8	
Benzo(b)fluoranthene	**<0.0060**	ug/L	0.030	0.0060	1	04/18/19 08:04	04/18/19 12:32	205-99-2	
Benzo(g,h,i)perylene	**<0.0071**	ug/L	0.036	0.0071	1	04/18/19 08:04	04/18/19 12:32	191-24-2	
Chrysene	**<0.014**	ug/L	0.069	0.014	1	04/18/19 08:04	04/18/19 12:32	218-01-9	
Fluoranthene	**<0.011**	ug/L	0.056	0.011	1	04/18/19 08:04	04/18/19 12:32	206-44-0	
Fluorene	**<0.0084**	ug/L	0.042	0.0084	1	04/18/19 08:04	04/18/19 12:32	86-73-7	
Naphthalene	**<0.019**	ug/L	0.096	0.019	1	04/18/19 08:04	04/18/19 12:32	91-20-3	
Phenanthrene	**<0.015**	ug/L	0.073	0.015	1	04/18/19 08:04	04/18/19 12:32	85-01-8	
Pyrene	**<0.0081**	ug/L	0.040	0.0081	1	04/18/19 08:04	04/18/19 12:32	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	55	%	30-85		1	04/18/19 08:04	04/18/19 12:32	321-60-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041519003 **Lab ID: 40185905003** Collected: 04/15/19 13:33 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Surrogates									
Terphenyl-d14 (S)	80	%	10-120		1	04/18/19 08:04	04/18/19 12:32	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/17/19 19:16	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/17/19 19:16	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/17/19 19:16	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/17/19 19:16	1330-20-7	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/17/19 19:16	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/17/19 19:16	95-47-6	
Surrogates									
Dibromofluoromethane (S)	95	%	70-130		1		04/17/19 19:16	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		04/17/19 19:16	2037-26-5	
4-Bromofluorobenzene (S)	88	%	70-130		1		04/17/19 19:16	460-00-4	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**66.5**	mg/L	15.0	5.0	5		04/25/19 03:02	14808-79-8	
310.2 Alkalinity	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3	**262**	mg/L	47.0	14.1	2		04/25/19 09:18		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**0.18J**	mg/L	0.25	0.095	1		04/18/19 11:36		

Sample: 041519004 **Lab ID: 40185905004** Collected: 04/15/19 14:08 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV	Analytical Method: EPA 8015B Modified								
Methane	**6.5**	ug/L	2.8	1.4	1		04/17/19 10:13	74-82-8	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum, Dissolved	**<117**	ug/L	500	117	2	04/18/19 07:09	04/23/19 01:22	7429-90-5	D3
Antimony, Dissolved	**1.4J**	ug/L	2.0	0.30	2	04/18/19 07:09	04/23/19 01:22	7440-36-0	D3
Copper, Dissolved	**13.7**	ug/L	7.3	2.2	2	04/18/19 07:09	04/23/19 01:22	7440-50-8	
Iron, Dissolved	**<221**	ug/L	737	221	2	04/18/19 07:09	04/23/19 01:22	7439-89-6	D3
Manganese, Dissolved	**347**	ug/L	18.0	5.4	2	04/18/19 07:09	04/23/19 01:22	7439-96-5	
Nickel, Dissolved	**2.2J**	ug/L	2.7	0.80	2	04/18/19 07:09	04/23/19 01:22	7440-02-0	D3
Silver, Dissolved	**<0.20**	ug/L	1.0	0.20	2	04/18/19 07:09	04/23/19 01:22	7440-22-4	D3
Vanadium, Dissolved	**1.7J**	ug/L	2.1	0.63	2	04/18/19 07:09	04/23/19 01:22	7440-62-2	D3
Zinc, Dissolved	**15.3J**	ug/L	30.7	9.2	2	04/18/19 07:09	04/23/19 01:22	7440-66-6	D3

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041519004 **Lab ID: 40185905004** Collected: 04/15/19 14:08 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Anthracene	**0.028J**	ug/L	0.061	0.012	1	04/18/19 08:04	04/18/19 11:01	120-12-7	
Benzo(a)pyrene	**<0.012**	ug/L	0.062	0.012	1	04/18/19 08:04	04/18/19 11:01	50-32-8	
Benzo(b)fluoranthene	**<0.0068**	ug/L	0.034	0.0068	1	04/18/19 08:04	04/18/19 11:01	205-99-2	
Benzo(g,h,i)perylene	**<0.0080**	ug/L	0.040	0.0080	1	04/18/19 08:04	04/18/19 11:01	191-24-2	
Chrysene	**<0.015**	ug/L	0.077	0.015	1	04/18/19 08:04	04/18/19 11:01	218-01-9	
Fluoranthene	**<0.013**	ug/L	0.063	0.013	1	04/18/19 08:04	04/18/19 11:01	206-44-0	
Fluorene	**<0.0094**	ug/L	0.047	0.0094	1	04/18/19 08:04	04/18/19 11:01	86-73-7	
Naphthalene	**<0.022**	ug/L	0.11	0.022	1	04/18/19 08:04	04/18/19 11:01	91-20-3	
Phenanthrene	**<0.016**	ug/L	0.081	0.016	1	04/18/19 08:04	04/18/19 11:01	85-01-8	
Pyrene	**<0.0090**	ug/L	0.045	0.0090	1	04/18/19 08:04	04/18/19 11:01	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	60	%	30-85		1	04/18/19 08:04	04/18/19 11:01	321-60-8	
Terphenyl-d14 (S)	80	%	10-120		1	04/18/19 08:04	04/18/19 11:01	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/17/19 17:29	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/17/19 17:29	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/17/19 17:29	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/17/19 17:29	1330-20-7	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/17/19 17:29	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/17/19 17:29	95-47-6	
Surrogates									
Dibromofluoromethane (S)	94	%	70-130		1		04/17/19 17:29	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		04/17/19 17:29	2037-26-5	
4-Bromofluorobenzene (S)	91	%	70-130		1		04/17/19 17:29	460-00-4	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**15.0**	mg/L	3.0	1.0	1		04/24/19 13:27	14808-79-8	
310.2 Alkalinity	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3	**298**	mg/L	47.0	14.1	2		04/25/19 09:19		M0
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**1.4**	mg/L	0.25	0.095	1		04/18/19 11:37		

Sample: 041519005 **Lab ID: 40185905005** Collected: 04/15/19 15:06 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV	Analytical Method: EPA 8015B Modified								
Methane	**111**	ug/L	2.8	1.4	1		04/17/19 10:20	74-82-8	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum, Dissolved	**<117**	ug/L	500	117	2	04/18/19 07:09	04/23/19 02:30	7429-90-5	D3

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041519005 **Lab ID: 40185905005** Collected: 04/15/19 15:06 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Antimony, Dissolved	**0.72J**	ug/L	2.0	0.30	2	04/18/19 07:09	04/23/19 02:30	7440-36-0	D3
Copper, Dissolved	**3.8J**	ug/L	7.3	2.2	2	04/18/19 07:09	04/23/19 02:30	7440-50-8	D3
Iron, Dissolved	**1340**	ug/L	737	221	2	04/18/19 07:09	04/23/19 02:30	7439-89-6	
Manganese, Dissolved	**209**	ug/L	18.0	5.4	2	04/18/19 07:09	04/23/19 02:30	7439-96-5	
Nickel, Dissolved	**2.0J**	ug/L	2.7	0.80	2	04/18/19 07:09	04/23/19 02:30	7440-02-0	D3
Silver, Dissolved	**<0.20**	ug/L	1.0	0.20	2	04/18/19 07:09	04/23/19 02:30	7440-22-4	D3
Vanadium, Dissolved	**<0.63**	ug/L	2.1	0.63	2	04/18/19 07:09	04/23/19 02:30	7440-62-2	D3
Zinc, Dissolved	**12.0J**	ug/L	30.7	9.2	2	04/18/19 07:09	04/23/19 02:30	7440-66-6	D3
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Anthracene	**0.025J**	ug/L	0.055	0.011	1	04/18/19 08:04	04/18/19 12:50	120-12-7	
Benzo(a)pyrene	**<0.011**	ug/L	0.055	0.011	1	04/18/19 08:04	04/18/19 12:50	50-32-8	
Benzo(b)fluoranthene	**0.014J**	ug/L	0.030	0.0060	1	04/18/19 08:04	04/18/19 12:50	205-99-2	
Benzo(g,h,i)perylene	**0.0086J**	ug/L	0.036	0.0071	1	04/18/19 08:04	04/18/19 12:50	191-24-2	
Chrysene	**<0.014**	ug/L	0.069	0.014	1	04/18/19 08:04	04/18/19 12:50	218-01-9	
Fluoranthene	**<0.011**	ug/L	0.056	0.011	1	04/18/19 08:04	04/18/19 12:50	206-44-0	
Fluorene	**<0.0084**	ug/L	0.042	0.0084	1	04/18/19 08:04	04/18/19 12:50	86-73-7	
Naphthalene	**<0.019**	ug/L	0.096	0.019	1	04/18/19 08:04	04/18/19 12:50	91-20-3	
Phenanthrene	**<0.015**	ug/L	0.073	0.015	1	04/18/19 08:04	04/18/19 12:50	85-01-8	
Pyrene	**0.019J**	ug/L	0.040	0.0081	1	04/18/19 08:04	04/18/19 12:50	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	53	%	30-85		1	04/18/19 08:04	04/18/19 12:50	321-60-8	
Terphenyl-d14 (S)	73	%	10-120		1	04/18/19 08:04	04/18/19 12:50	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/17/19 19:38	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/17/19 19:38	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/17/19 19:38	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/17/19 19:38	1330-20-7	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/17/19 19:38	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/17/19 19:38	95-47-6	
Surrogates									
Dibromofluoromethane (S)	96	%	70-130		1		04/17/19 19:38	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		04/17/19 19:38	2037-26-5	
4-Bromofluorobenzene (S)	88	%	70-130		1		04/17/19 19:38	460-00-4	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**524**	mg/L	150	50.0	50		04/25/19 03:56	14808-79-8	
310.2 Alkalinity	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3	**314**	mg/L	23.5	7.0	1		04/25/19 09:20		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**1.8**	mg/L	0.25	0.095	1		04/18/19 11:39		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041519006 **Lab ID: 40185905006** Collected: 04/15/19 15:54 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV	Analytical Method: EPA 8015B Modified								
Methane	**1200**	ug/L	56.0	27.4	20		04/17/19 11:43	74-82-8	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum, Dissolved	**<117**	ug/L	500	117	2	04/18/19 07:09	04/23/19 02:37	7429-90-5	D3
Antimony, Dissolved	**0.54J**	ug/L	2.0	0.30	2	04/18/19 07:09	04/23/19 02:37	7440-36-0	D3
Copper, Dissolved	**<2.2**	ug/L	7.3	2.2	2	04/18/19 07:09	04/23/19 02:37	7440-50-8	D3
Iron, Dissolved	**7410**	ug/L	737	221	2	04/18/19 07:09	04/23/19 02:37	7439-89-6	
Manganese, Dissolved	**723**	ug/L	18.0	5.4	2	04/18/19 07:09	04/23/19 02:37	7439-96-5	
Nickel, Dissolved	**3.7**	ug/L	2.7	0.80	2	04/18/19 07:09	04/23/19 02:37	7440-02-0	
Silver, Dissolved	**<0.20**	ug/L	1.0	0.20	2	04/18/19 07:09	04/23/19 02:37	7440-22-4	D3
Vanadium, Dissolved	**1.4J**	ug/L	2.1	0.63	2	04/18/19 07:09	04/23/19 02:37	7440-62-2	D3
Zinc, Dissolved	**11.1J**	ug/L	30.7	9.2	2	04/18/19 07:09	04/23/19 02:37	7440-66-6	D3
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Anthracene	**0.019J**	ug/L	0.056	0.011	1	04/18/19 08:04	04/18/19 13:09	120-12-7	
Benzo(a)pyrene	**<0.011**	ug/L	0.057	0.011	1	04/18/19 08:04	04/18/19 13:09	50-32-8	
Benzo(b)fluoranthene	**0.012J**	ug/L	0.031	0.0062	1	04/18/19 08:04	04/18/19 13:09	205-99-2	
Benzo(g,h,i)perylene	**0.011J**	ug/L	0.036	0.0073	1	04/18/19 08:04	04/18/19 13:09	191-24-2	
Chrysene	**0.017J**	ug/L	0.070	0.014	1	04/18/19 08:04	04/18/19 13:09	218-01-9	
Fluoranthene	**0.024J**	ug/L	0.057	0.011	1	04/18/19 08:04	04/18/19 13:09	206-44-0	
Fluorene	**0.012J**	ug/L	0.043	0.0086	1	04/18/19 08:04	04/18/19 13:09	86-73-7	
Naphthalene	**<0.020**	ug/L	0.099	0.020	1	04/18/19 08:04	04/18/19 13:09	91-20-3	
Phenanthrene	**<0.015**	ug/L	0.074	0.015	1	04/18/19 08:04	04/18/19 13:09	85-01-8	
Pyrene	**0.019J**	ug/L	0.041	0.0082	1	04/18/19 08:04	04/18/19 13:09	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	67	%	30-85		1	04/18/19 08:04	04/18/19 13:09	321-60-8	
Terphenyl-d14 (S)	99	%	10-120		1	04/18/19 08:04	04/18/19 13:09	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/17/19 19:59	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/17/19 19:59	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/17/19 19:59	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/17/19 19:59	1330-20-7	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/17/19 19:59	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/17/19 19:59	95-47-6	
Surrogates									
Dibromofluoromethane (S)	98	%	70-130		1		04/17/19 19:59	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		04/17/19 19:59	2037-26-5	
4-Bromofluorobenzene (S)	90	%	70-130		1		04/17/19 19:59	460-00-4	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**186**	mg/L	30.0	10.0	10		04/25/19 04:09	14808-79-8	
310.2 Alkalinity	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3	**273**	mg/L	47.0	14.1	2		04/25/19 09:21		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041519006 **Lab ID: 40185905006** Collected: 04/15/19 15:54 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**0.36**	mg/L	0.25	0.095	1		04/18/19 11:40		

Sample: 041519007 **Lab ID: 40185905007** Collected: 04/15/19 16:35 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV	Analytical Method: EPA 8015B Modified								
Methane	**<1.4**	ug/L	2.8	1.4	1		04/17/19 10:34	74-82-8	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum, Dissolved	**<117**	ug/L	500	117	2	04/18/19 07:09	04/23/19 02:44	7429-90-5	D3
Antimony, Dissolved	**<0.30**	ug/L	2.0	0.30	2	04/18/19 07:09	04/23/19 02:44	7440-36-0	D3
Copper, Dissolved	**2.7J**	ug/L	7.3	2.2	2	04/18/19 07:09	04/23/19 02:44	7440-50-8	D3
Iron, Dissolved	**<221**	ug/L	737	221	2	04/18/19 07:09	04/23/19 02:44	7439-89-6	D3
Manganese, Dissolved	**178**	ug/L	18.0	5.4	2	04/18/19 07:09	04/23/19 02:44	7439-96-5	
Nickel, Dissolved	**2.7**	ug/L	2.7	0.80	2	04/18/19 07:09	04/23/19 02:44	7440-02-0	
Silver, Dissolved	**<0.20**	ug/L	1.0	0.20	2	04/18/19 07:09	04/23/19 02:44	7440-22-4	D3
Vanadium, Dissolved	**<0.63**	ug/L	2.1	0.63	2	04/18/19 07:09	04/23/19 02:44	7440-62-2	D3
Zinc, Dissolved	**<9.2**	ug/L	30.7	9.2	2	04/18/19 07:09	04/23/19 02:44	7440-66-6	D3
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Anthracene	**<0.011**	ug/L	0.054	0.011	1	04/18/19 08:04	04/18/19 13:27	120-12-7	
Benzo(a)pyrene	**<0.011**	ug/L	0.055	0.011	1	04/18/19 08:04	04/18/19 13:27	50-32-8	
Benzo(b)fluoranthene	**<0.0060**	ug/L	0.030	0.0060	1	04/18/19 08:04	04/18/19 13:27	205-99-2	
Benzo(g,h,i)perylene	**<0.0071**	ug/L	0.035	0.0071	1	04/18/19 08:04	04/18/19 13:27	191-24-2	
Chrysene	**<0.014**	ug/L	0.068	0.014	1	04/18/19 08:04	04/18/19 13:27	218-01-9	
Fluoranthene	**<0.011**	ug/L	0.056	0.011	1	04/18/19 08:04	04/18/19 13:27	206-44-0	
Fluorene	**<0.0083**	ug/L	0.042	0.0083	1	04/18/19 08:04	04/18/19 13:27	86-73-7	
Naphthalene	**0.047J**	ug/L	0.095	0.019	1	04/18/19 08:04	04/18/19 13:27	91-20-3	
Phenanthrene	**<0.014**	ug/L	0.072	0.014	1	04/18/19 08:04	04/18/19 13:27	85-01-8	
Pyrene	**<0.0080**	ug/L	0.040	0.0080	1	04/18/19 08:04	04/18/19 13:27	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	64	%	30-85		1	04/18/19 08:04	04/18/19 13:27	321-60-8	
Terphenyl-d14 (S)	96	%	10-120		1	04/18/19 08:04	04/18/19 13:27	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/17/19 20:21	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/17/19 20:21	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/17/19 20:21	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/17/19 20:21	1330-20-7	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/17/19 20:21	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/17/19 20:21	95-47-6	
Surrogates									
Dibromofluoromethane (S)	97	%	70-130		1		04/17/19 20:21	1868-53-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041519007 **Lab ID: 40185905007** Collected: 04/15/19 16:35 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Surrogates									
Toluene-d8 (S)	99	%	70-130		1		04/17/19 20:21	2037-26-5	
4-Bromofluorobenzene (S)	90	%	70-130		1		04/17/19 20:21	460-00-4	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**73.6**	mg/L	15.0	5.0	5		04/25/19 13:06	14808-79-8	
310.2 Alkalinity	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3	**252**	mg/L	23.5	7.0	1		04/25/19 09:21		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**2.2**	mg/L	0.25	0.095	1		04/18/19 11:42		

Sample: 041519008 **Lab ID: 40185905008** Collected: 04/15/19 16:40 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV	Analytical Method: EPA 8015B Modified								
Methane	**<1.4**	ug/L	2.8	1.4	1		04/17/19 10:41	74-82-8	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum, Dissolved	**<117**	ug/L	500	117	2	04/18/19 07:09	04/23/19 02:51	7429-90-5	D3
Antimony, Dissolved	**<0.30**	ug/L	2.0	0.30	2	04/18/19 07:09	04/23/19 02:51	7440-36-0	D3
Copper, Dissolved	**2.3J**	ug/L	7.3	2.2	2	04/18/19 07:09	04/23/19 02:51	7440-50-8	D3
Iron, Dissolved	**<221**	ug/L	737	221	2	04/18/19 07:09	04/23/19 02:51	7439-89-6	D3
Manganese, Dissolved	**219**	ug/L	18.0	5.4	2	04/18/19 07:09	04/23/19 02:51	7439-96-5	
Nickel, Dissolved	**1.3J**	ug/L	2.7	0.80	2	04/18/19 07:09	04/23/19 02:51	7440-02-0	D3
Silver, Dissolved	**<0.20**	ug/L	1.0	0.20	2	04/18/19 07:09	04/23/19 02:51	7440-22-4	D3
Vanadium, Dissolved	**<0.63**	ug/L	2.1	0.63	2	04/18/19 07:09	04/23/19 02:51	7440-62-2	D3
Zinc, Dissolved	**<9.2**	ug/L	30.7	9.2	2	04/18/19 07:09	04/23/19 02:51	7440-66-6	D3
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Anthracene	**<0.011**	ug/L	0.056	0.011	1	04/18/19 08:04	04/18/19 13:45	120-12-7	
Benzo(a)pyrene	**<0.011**	ug/L	0.056	0.011	1	04/18/19 08:04	04/18/19 13:45	50-32-8	
Benzo(b)fluoranthene	**0.011J**	ug/L	0.031	0.0061	1	04/18/19 08:04	04/18/19 13:45	205-99-2	
Benzo(g,h,i)perylene	**0.0080J**	ug/L	0.036	0.0072	1	04/18/19 08:04	04/18/19 13:45	191-24-2	
Chrysene	**0.020J**	ug/L	0.069	0.014	1	04/18/19 08:04	04/18/19 13:45	218-01-9	
Fluoranthene	**0.025J**	ug/L	0.057	0.011	1	04/18/19 08:04	04/18/19 13:45	206-44-0	
Fluorene	**<0.0085**	ug/L	0.042	0.0085	1	04/18/19 08:04	04/18/19 13:45	86-73-7	
Naphthalene	**<0.020**	ug/L	0.097	0.020	1	04/18/19 08:04	04/18/19 13:45	91-20-3	
Phenanthrene	**0.021J**	ug/L	0.073	0.015	1	04/18/19 08:04	04/18/19 13:45	85-01-8	
Pyrene	**0.020J**	ug/L	0.041	0.0081	1	04/18/19 08:04	04/18/19 13:45	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	62	%	30-85		1	04/18/19 08:04	04/18/19 13:45	321-60-8	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041519008 **Lab ID: 40185905008** Collected: 04/15/19 16:40 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Surrogates									
Terphenyl-d14 (S)	91	%	10-120		1	04/18/19 08:04	04/18/19 13:45	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/17/19 20:42	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/17/19 20:42	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/17/19 20:42	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/17/19 20:42	1330-20-7	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/17/19 20:42	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/17/19 20:42	95-47-6	
Surrogates									
Dibromofluoromethane (S)	96	%	70-130		1		04/17/19 20:42	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		04/17/19 20:42	2037-26-5	
4-Bromofluorobenzene (S)	90	%	70-130		1		04/17/19 20:42	460-00-4	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**73.7**	mg/L	15.0	5.0	5		04/25/19 13:19	14808-79-8	
310.2 Alkalinity	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3	**256**	mg/L	23.5	7.0	1		04/25/19 09:22		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**2.1**	mg/L	0.25	0.095	1		04/18/19 11:43		

Sample: 041519009 **Lab ID: 40185905009** Collected: 04/15/19 17:21 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV	Analytical Method: EPA 8015B Modified								
Methane	**<1.4**	ug/L	2.8	1.4	1		04/24/19 08:57	74-82-8	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum, Dissolved	**<117**	ug/L	500	117	2	04/18/19 07:09	04/23/19 02:58	7429-90-5	D3
Antimony, Dissolved	**0.87J**	ug/L	2.0	0.30	2	04/18/19 07:09	04/23/19 02:58	7440-36-0	D3
Copper, Dissolved	**11.0**	ug/L	7.3	2.2	2	04/18/19 07:09	04/23/19 02:58	7440-50-8	
Iron, Dissolved	**416J**	ug/L	737	221	2	04/18/19 07:09	04/23/19 02:58	7439-89-6	D3
Manganese, Dissolved	**79.1**	ug/L	18.0	5.4	2	04/18/19 07:09	04/23/19 02:58	7439-96-5	
Nickel, Dissolved	**30.3**	ug/L	2.7	0.80	2	04/18/19 07:09	04/23/19 02:58	7440-02-0	
Silver, Dissolved	**<0.20**	ug/L	1.0	0.20	2	04/18/19 07:09	04/23/19 02:58	7440-22-4	D3
Vanadium, Dissolved	**<0.63**	ug/L	2.1	0.63	2	04/18/19 07:09	04/23/19 02:58	7440-62-2	D3
Zinc, Dissolved	**373**	ug/L	30.7	9.2	2	04/18/19 07:09	04/23/19 02:58	7440-66-6	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041519009 **Lab ID: 40185905009** Collected: 04/15/19 17:21 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Anthracene	**<0.010**	ug/L	0.052	0.010	1	04/18/19 08:04	04/18/19 14:04	120-12-7	
Benzo(a)pyrene	**<0.010**	ug/L	0.052	0.010	1	04/18/19 08:04	04/18/19 14:04	50-32-8	
Benzo(b)fluoranthene	**<0.0057**	ug/L	0.028	0.0057	1	04/18/19 08:04	04/18/19 14:04	205-99-2	
Benzo(g,h,i)perylene	**<0.0067**	ug/L	0.034	0.0067	1	04/18/19 08:04	04/18/19 14:04	191-24-2	
Chrysene	**<0.013**	ug/L	0.065	0.013	1	04/18/19 08:04	04/18/19 14:04	218-01-9	
Fluoranthene	**0.012J**	ug/L	0.053	0.011	1	04/18/19 08:04	04/18/19 14:04	206-44-0	
Fluorene	**<0.0079**	ug/L	0.039	0.0079	1	04/18/19 08:04	04/18/19 14:04	86-73-7	
Naphthalene	**<0.018**	ug/L	0.091	0.018	1	04/18/19 08:04	04/18/19 14:04	91-20-3	
Phenanthrene	**<0.014**	ug/L	0.068	0.014	1	04/18/19 08:04	04/18/19 14:04	85-01-8	
Pyrene	**0.011J**	ug/L	0.038	0.0076	1	04/18/19 08:04	04/18/19 14:04	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	53	%	30-85		1	04/18/19 08:04	04/18/19 14:04	321-60-8	
Terphenyl-d14 (S)	75	%	10-120		1	04/18/19 08:04	04/18/19 14:04	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/17/19 21:04	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/17/19 21:04	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/17/19 21:04	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/17/19 21:04	1330-20-7	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/17/19 21:04	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/17/19 21:04	95-47-6	
Surrogates									
Dibromofluoromethane (S)	97	%	70-130		1		04/17/19 21:04	1868-53-7	
Toluene-d8 (S)	97	%	70-130		1		04/17/19 21:04	2037-26-5	
4-Bromofluorobenzene (S)	89	%	70-130		1		04/17/19 21:04	460-00-4	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**569**	mg/L	300	100	100		04/25/19 13:32	14808-79-8	
310.2 Alkalinity	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3	**610**	mg/L	47.0	14.1	2		04/25/19 09:58		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**2.3**	mg/L	0.25	0.095	1		04/18/19 11:43		

Sample: 041519010 **Lab ID: 40185905010** Collected: 04/15/19 17:51 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV	Analytical Method: EPA 8015B Modified								
Methane	**58.5**	ug/L	2.8	1.4	1		04/24/19 09:04	74-82-8	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum, Dissolved	**<117**	ug/L	500	117	2	04/18/19 07:09	04/23/19 03:05	7429-90-5	D3

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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(920)469-2436

ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041519010 **Lab ID: 40185905010** Collected: 04/15/19 17:51 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Antimony, Dissolved	**<0.30**	ug/L	2.0	0.30	2	04/18/19 07:09	04/23/19 03:05	7440-36-0	D3
Copper, Dissolved	**<2.2**	ug/L	7.3	2.2	2	04/18/19 07:09	04/23/19 03:05	7440-50-8	D3
Iron, Dissolved	**685J**	ug/L	737	221	2	04/18/19 07:09	04/23/19 03:05	7439-89-6	D3
Manganese, Dissolved	**218**	ug/L	18.0	5.4	2	04/18/19 07:09	04/23/19 03:05	7439-96-5	
Nickel, Dissolved	**1.3J**	ug/L	2.7	0.80	2	04/18/19 07:09	04/23/19 03:05	7440-02-0	D3
Silver, Dissolved	**<0.20**	ug/L	1.0	0.20	2	04/18/19 07:09	04/23/19 03:05	7440-22-4	D3
Vanadium, Dissolved	**0.74J**	ug/L	2.1	0.63	2	04/18/19 07:09	04/23/19 03:05	7440-62-2	D3
Zinc, Dissolved	**41.1**	ug/L	30.7	9.2	2	04/18/19 07:09	04/23/19 03:05	7440-66-6	
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Anthracene	**0.041J**	ug/L	0.057	0.011	1	04/18/19 08:04	04/18/19 15:54	120-12-7	
Benzo(a)pyrene	**<0.011**	ug/L	0.057	0.011	1	04/18/19 08:04	04/18/19 15:54	50-32-8	
Benzo(b)fluoranthene	**0.011J**	ug/L	0.031	0.0062	1	04/18/19 08:04	04/18/19 15:54	205-99-2	
Benzo(g,h,i)perylene	**0.0075J**	ug/L	0.037	0.0074	1	04/18/19 08:04	04/18/19 15:54	191-24-2	
Chrysene	**0.017J**	ug/L	0.071	0.014	1	04/18/19 08:04	04/18/19 15:54	218-01-9	
Fluoranthene	**0.20**	ug/L	0.058	0.012	1	04/18/19 08:04	04/18/19 15:54	206-44-0	
Fluorene	**0.36**	ug/L	0.043	0.0087	1	04/18/19 08:04	04/18/19 15:54	86-73-7	
Naphthalene	**0.11**	ug/L	0.10	0.020	1	04/18/19 08:04	04/18/19 15:54	91-20-3	
Phenanthrene	**0.075**	ug/L	0.075	0.015	1	04/18/19 08:04	04/18/19 15:54	85-01-8	
Pyrene	**0.14**	ug/L	0.042	0.0083	1	04/18/19 08:04	04/18/19 15:54	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	58	%	30-85		1	04/18/19 08:04	04/18/19 15:54	321-60-8	
Terphenyl-d14 (S)	85	%	10-120		1	04/18/19 08:04	04/18/19 15:54	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/17/19 21:25	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/17/19 21:25	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/17/19 21:25	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/17/19 21:25	1330-20-7	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/17/19 21:25	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/17/19 21:25	95-47-6	
Surrogates									
Dibromofluoromethane (S)	96	%	70-130		1		04/17/19 21:25	1868-53-7	
Toluene-d8 (S)	96	%	70-130		1		04/17/19 21:25	2037-26-5	
4-Bromofluorobenzene (S)	88	%	70-130		1		04/17/19 21:25	460-00-4	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**30.4**	mg/L	3.0	1.0	1		04/24/19 15:14	14808-79-8	
310.2 Alkalinity	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3	**333**	mg/L	23.5	7.0	1		04/25/19 09:23		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**0.18J**	mg/L	0.25	0.095	1		04/18/19 11:44		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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(920)469-2436

ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041519011 **Lab ID: 40185905011** Collected: 04/15/19 18:32 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV	Analytical Method: EPA 8015B Modified								
Methane	**2780**	ug/L	28.0	13.7	10		04/24/19 11:48	74-82-8	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum, Dissolved	**<117**	ug/L	500	117	2	04/18/19 07:09	04/23/19 03:12	7429-90-5	D3
Antimony, Dissolved	**<0.30**	ug/L	2.0	0.30	2	04/18/19 07:09	04/23/19 03:12	7440-36-0	D3
Copper, Dissolved	**<2.2**	ug/L	7.3	2.2	2	04/18/19 07:09	04/23/19 03:12	7440-50-8	D3
Iron, Dissolved	**17900**	ug/L	737	221	2	04/18/19 07:09	04/23/19 03:12	7439-89-6	
Manganese, Dissolved	**848**	ug/L	18.0	5.4	2	04/18/19 07:09	04/23/19 03:12	7439-96-5	
Nickel, Dissolved	**13.1**	ug/L	2.7	0.80	2	04/18/19 07:09	04/23/19 03:12	7440-02-0	
Silver, Dissolved	**<0.20**	ug/L	1.0	0.20	2	04/18/19 07:09	04/23/19 03:12	7440-22-4	D3
Vanadium, Dissolved	**<0.63**	ug/L	2.1	0.63	2	04/18/19 07:09	04/23/19 03:12	7440-62-2	D3
Zinc, Dissolved	**<9.2**	ug/L	30.7	9.2	2	04/18/19 07:09	04/23/19 03:12	7440-66-6	D3
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Anthracene	**0.077**	ug/L	0.056	0.011	1	04/18/19 08:04	04/18/19 16:13	120-12-7	
Benzo(a)pyrene	**0.041J**	ug/L	0.057	0.011	1	04/18/19 08:04	04/18/19 16:13	50-32-8	
Benzo(b)fluoranthene	**0.063**	ug/L	0.031	0.0062	1	04/18/19 08:04	04/18/19 16:13	205-99-2	
Benzo(g,h,i)perylene	**0.031J**	ug/L	0.036	0.0073	1	04/18/19 08:04	04/18/19 16:13	191-24-2	
Chrysene	**0.093**	ug/L	0.070	0.014	1	04/18/19 08:04	04/18/19 16:13	218-01-9	
Fluoranthene	**0.20**	ug/L	0.057	0.011	1	04/18/19 08:04	04/18/19 16:13	206-44-0	
Fluorene	**0.19**	ug/L	0.043	0.0086	1	04/18/19 08:04	04/18/19 16:13	86-73-7	
Naphthalene	**0.033J**	ug/L	0.099	0.020	1	04/18/19 08:04	04/18/19 16:13	91-20-3	
Phenanthrene	**0.13**	ug/L	0.074	0.015	1	04/18/19 08:04	04/18/19 16:13	85-01-8	
Pyrene	**0.19**	ug/L	0.041	0.0082	1	04/18/19 08:04	04/18/19 16:13	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	55	%	30-85		1	04/18/19 08:04	04/18/19 16:13	321-60-8	
Terphenyl-d14 (S)	82	%	10-120		1	04/18/19 08:04	04/18/19 16:13	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/17/19 21:47	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/17/19 21:47	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/17/19 21:47	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/17/19 21:47	1330-20-7	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/17/19 21:47	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/17/19 21:47	95-47-6	
Surrogates									
Dibromofluoromethane (S)	98	%	70-130		1		04/17/19 21:47	1868-53-7	
Toluene-d8 (S)	97	%	70-130		1		04/17/19 21:47	2037-26-5	
4-Bromofluorobenzene (S)	88	%	70-130		1		04/17/19 21:47	460-00-4	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**137**	mg/L	15.0	5.0	5		04/24/19 15:27	14808-79-8	
310.2 Alkalinity	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3	**344**	mg/L	47.0	14.1	2		04/25/19 09:26		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041519011 **Lab ID: 40185905011** Collected: 04/15/19 18:32 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**0.68**	mg/L	0.25	0.095	1		04/18/19 11:45		

Sample: 041519012 **Lab ID: 40185905012** Collected: 04/15/19 18:50 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/17/19 22:08	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/17/19 22:08	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/17/19 22:08	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/17/19 22:08	1330-20-7	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/17/19 22:08	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/17/19 22:08	95-47-6	
Surrogates									
Dibromofluoromethane (S)	95	%	70-130		1		04/17/19 22:08	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		04/17/19 22:08	2037-26-5	
4-Bromofluorobenzene (S)	88	%	70-130		1		04/17/19 22:08	460-00-4	

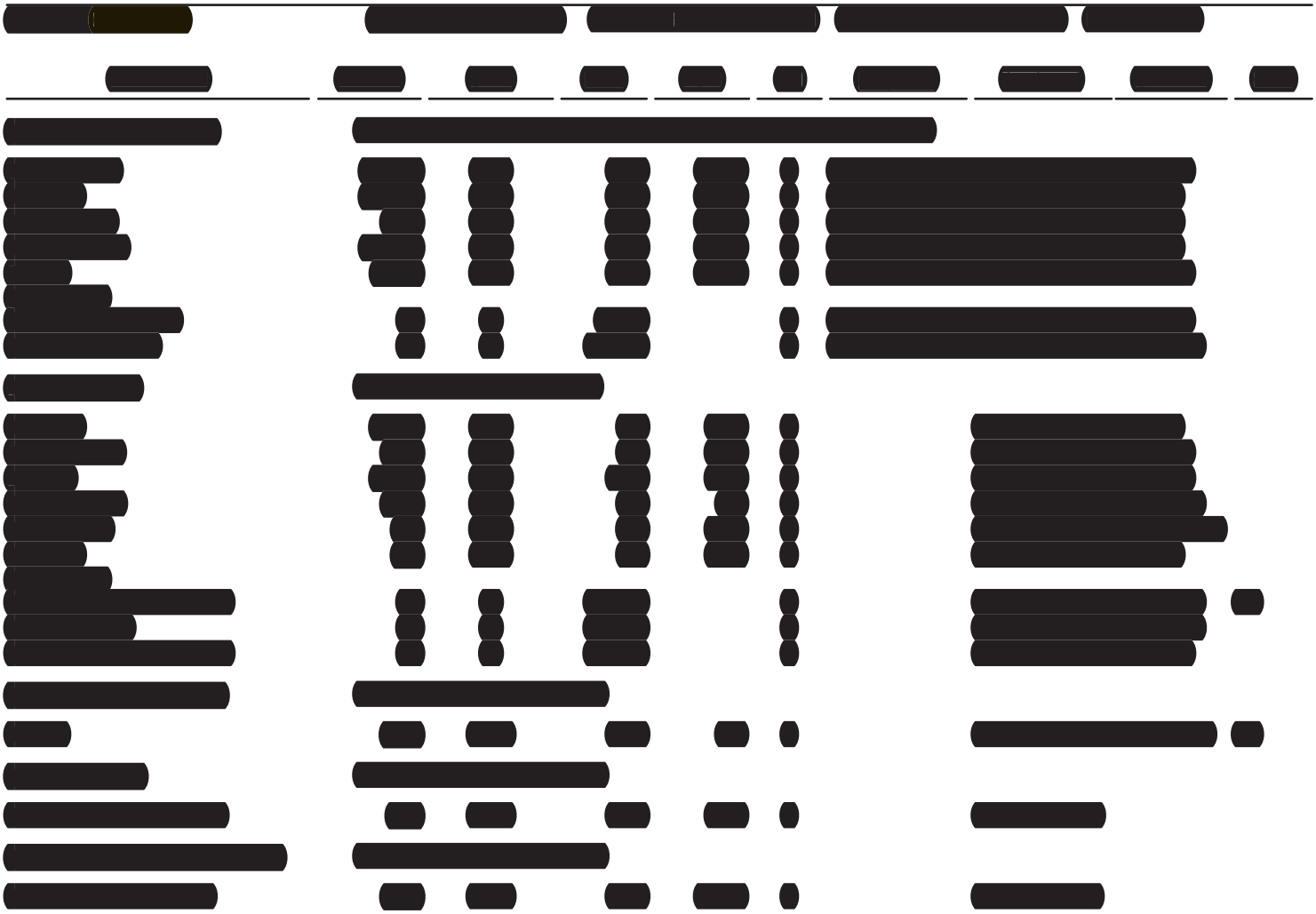
[redacted]

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905



Sample: 041619014 **Lab ID: 40185905014** Collected: 04/16/19 08:37 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV	Analytical Method: EPA 8015B Modified								
Methane	**20500**	ug/L	280	137	100		04/24/19 12:02	74-82-8	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum, Dissolved	**<117**	ug/L	500	117	2	04/18/19 07:09	04/23/19 03:26	7429-90-5	D3
Antimony, Dissolved	**<0.30**	ug/L	2.0	0.30	2	04/18/19 07:09	04/23/19 03:26	7440-36-0	D3
Copper, Dissolved	**<2.2**	ug/L	7.3	2.2	2	04/18/19 07:09	04/23/19 03:26	7440-50-8	D3
Iron, Dissolved	**19400**	ug/L	737	221	2	04/18/19 07:09	04/23/19 03:26	7439-89-6	
Manganese, Dissolved	**903**	ug/L	18.0	5.4	2	04/18/19 07:09	04/23/19 03:26	7439-96-5	
Nickel, Dissolved	**2.0J**	ug/L	2.7	0.80	2	04/18/19 07:09	04/23/19 03:26	7440-02-0	D3

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041619014 **Lab ID: 40185905014** Collected: 04/16/19 08:37 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Silver, Dissolved	**<0.20**	ug/L	1.0	0.20	2	04/18/19 07:09	04/23/19 03:26	7440-22-4	D3
Vanadium, Dissolved	**<0.63**	ug/L	2.1	0.63	2	04/18/19 07:09	04/23/19 03:26	7440-62-2	D3
Zinc, Dissolved	**<9.2**	ug/L	30.7	9.2	2	04/18/19 07:09	04/23/19 03:26	7440-66-6	D3
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Anthracene	**0.035J**	ug/L	0.061	0.012	1	04/18/19 08:04	04/18/19 14:22	120-12-7	
Benzo(a)pyrene	**<0.012**	ug/L	0.061	0.012	1	04/18/19 08:04	04/18/19 14:22	50-32-8	
Benzo(b)fluoranthene	**<0.0067**	ug/L	0.033	0.0067	1	04/18/19 08:04	04/18/19 14:22	205-99-2	
Benzo(g,h,i)perylene	**<0.0079**	ug/L	0.039	0.0079	1	04/18/19 08:04	04/18/19 14:22	191-24-2	
Chrysene	**<0.015**	ug/L	0.076	0.015	1	04/18/19 08:04	04/18/19 14:22	218-01-9	
Fluoranthene	**0.034J**	ug/L	0.062	0.012	1	04/18/19 08:04	04/18/19 14:22	206-44-0	
Fluorene	**0.078**	ug/L	0.046	0.0093	1	04/18/19 08:04	04/18/19 14:22	86-73-7	
Naphthalene	**<0.021**	ug/L	0.11	0.021	1	04/18/19 08:04	04/18/19 14:22	91-20-3	
Phenanthrene	**0.049J**	ug/L	0.080	0.016	1	04/18/19 08:04	04/18/19 14:22	85-01-8	
Pyrene	**0.034J**	ug/L	0.044	0.0089	1	04/18/19 08:04	04/18/19 14:22	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	59	%	30-85		1	04/18/19 08:04	04/18/19 14:22	321-60-8	
Terphenyl-d14 (S)	83	%	10-120		1	04/18/19 08:04	04/18/19 14:22	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/17/19 22:30	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/17/19 22:30	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/17/19 22:30	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/17/19 22:30	1330-20-7	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/17/19 22:30	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/17/19 22:30	95-47-6	
Surrogates									
Dibromofluoromethane (S)	96	%	70-130		1		04/17/19 22:30	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		04/17/19 22:30	2037-26-5	
4-Bromofluorobenzene (S)	89	%	70-130		1		04/17/19 22:30	460-00-4	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**<5.0**	mg/L	15.0	5.0	5		04/24/19 16:34	14808-79-8	D3
310.2 Alkalinity	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3	**775**	mg/L	47.0	14.1	2		04/25/19 09:27		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**<0.095**	mg/L	0.25	0.095	1		04/18/19 11:46		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(920)469-2436

ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041619015 **Lab ID: 40185905015** Collected: 04/16/19 09:15 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV	Analytical Method: EPA 8015B Modified								
Methane	**16800**	ug/L	280	137	100		04/24/19 12:09	74-82-8	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum, Dissolved	**<117**	ug/L	500	117	2	04/18/19 07:09	04/23/19 03:32	7429-90-5	D3
Antimony, Dissolved	**<0.30**	ug/L	2.0	0.30	2	04/18/19 07:09	04/23/19 03:32	7440-36-0	D3
Copper, Dissolved	**<2.2**	ug/L	7.3	2.2	2	04/18/19 07:09	04/23/19 03:32	7440-50-8	D3
Iron, Dissolved	**7980**	ug/L	737	221	2	04/18/19 07:09	04/23/19 03:32	7439-89-6	
Manganese, Dissolved	**723**	ug/L	18.0	5.4	2	04/18/19 07:09	04/23/19 03:32	7439-96-5	
Nickel, Dissolved	**2.3J**	ug/L	2.7	0.80	2	04/18/19 07:09	04/23/19 03:32	7440-02-0	D3
Silver, Dissolved	**<0.20**	ug/L	1.0	0.20	2	04/18/19 07:09	04/23/19 03:32	7440-22-4	D3
Vanadium, Dissolved	**1.1J**	ug/L	2.1	0.63	2	04/18/19 07:09	04/23/19 03:32	7440-62-2	D3
Zinc, Dissolved	**9.5J**	ug/L	30.7	9.2	2	04/18/19 07:09	04/23/19 03:32	7440-66-6	D3
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Anthracene	**<0.011**	ug/L	0.055	0.011	1	04/18/19 08:04	04/18/19 14:41	120-12-7	
Benzo(a)pyrene	**<0.011**	ug/L	0.055	0.011	1	04/18/19 08:04	04/18/19 14:41	50-32-8	
Benzo(b)fluoranthene	**0.011J**	ug/L	0.030	0.0060	1	04/18/19 08:04	04/18/19 14:41	205-99-2	
Benzo(g,h,i)perylene	**<0.0071**	ug/L	0.036	0.0071	1	04/18/19 08:04	04/18/19 14:41	191-24-2	
Chrysene	**<0.014**	ug/L	0.069	0.014	1	04/18/19 08:04	04/18/19 14:41	218-01-9	
Fluoranthene	**<0.011**	ug/L	0.056	0.011	1	04/18/19 08:04	04/18/19 14:41	206-44-0	
Fluorene	**<0.0084**	ug/L	0.042	0.0084	1	04/18/19 08:04	04/18/19 14:41	86-73-7	
Naphthalene	**<0.019**	ug/L	0.096	0.019	1	04/18/19 08:04	04/18/19 14:41	91-20-3	
Phenanthrene	**<0.015**	ug/L	0.073	0.015	1	04/18/19 08:04	04/18/19 14:41	85-01-8	
Pyrene	**<0.0081**	ug/L	0.040	0.0081	1	04/18/19 08:04	04/18/19 14:41	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	40	%	30-85		1	04/18/19 08:04	04/18/19 14:41	321-60-8	
Terphenyl-d14 (S)	59	%	10-120		1	04/18/19 08:04	04/18/19 14:41	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/17/19 22:51	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/17/19 22:51	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/17/19 22:51	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/17/19 22:51	1330-20-7	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/17/19 22:51	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/17/19 22:51	95-47-6	
Surrogates									
Dibromofluoromethane (S)	97	%	70-130		1		04/17/19 22:51	1868-53-7	
Toluene-d8 (S)	100	%	70-130		1		04/17/19 22:51	2037-26-5	
4-Bromofluorobenzene (S)	91	%	70-130		1		04/17/19 22:51	460-00-4	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**<5.0**	mg/L	15.0	5.0	5		04/24/19 16:47	14808-79-8	D3
310.2 Alkalinity	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3	**411**	mg/L	117	35.2	5		04/25/19 09:27		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041619015 **Lab ID: 40185905015** Collected: 04/16/19 09:15 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**<0.095**	mg/L	0.25	0.095	1		04/18/19 11:47		

Sample: 041619016 **Lab ID: 40185905016** Collected: 04/16/19 10:19 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV	Analytical Method: EPA 8015B Modified								
Methane	**1350**	ug/L	28.0	13.7	10		04/24/19 12:16	74-82-8	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum, Dissolved	**<117**	ug/L	500	117	2	04/18/19 07:09	04/23/19 03:53	7429-90-5	D3
Antimony, Dissolved	**<0.30**	ug/L	2.0	0.30	2	04/18/19 07:09	04/23/19 03:53	7440-36-0	D3
Copper, Dissolved	**<2.2**	ug/L	7.3	2.2	2	04/18/19 07:09	04/23/19 03:53	7440-50-8	D3
Iron, Dissolved	**17400**	ug/L	737	221	2	04/18/19 07:09	04/23/19 03:53	7439-89-6	
Manganese, Dissolved	**1040**	ug/L	18.0	5.4	2	04/18/19 07:09	04/23/19 03:53	7439-96-5	
Nickel, Dissolved	**1.0J**	ug/L	2.7	0.80	2	04/18/19 07:09	04/23/19 03:53	7440-02-0	D3
Silver, Dissolved	**<0.20**	ug/L	1.0	0.20	2	04/18/19 07:09	04/23/19 03:53	7440-22-4	D3
Vanadium, Dissolved	**1.3J**	ug/L	2.1	0.63	2	04/18/19 07:09	04/23/19 03:53	7440-62-2	D3
Zinc, Dissolved	**10.9J**	ug/L	30.7	9.2	2	04/18/19 07:09	04/23/19 03:53	7440-66-6	D3
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Anthracene	**0.038J**	ug/L	0.059	0.012	1	04/18/19 08:04	04/18/19 16:31	120-12-7	
Benzo(a)pyrene	**<0.012**	ug/L	0.060	0.012	1	04/18/19 08:04	04/18/19 16:31	50-32-8	
Benzo(b)fluoranthene	**<0.0065**	ug/L	0.033	0.0065	1	04/18/19 08:04	04/18/19 16:31	205-99-2	
Benzo(g,h,i)perylene	**<0.0077**	ug/L	0.039	0.0077	1	04/18/19 08:04	04/18/19 16:31	191-24-2	
Chrysene	**0.017J**	ug/L	0.074	0.015	1	04/18/19 08:04	04/18/19 16:31	218-01-9	
Fluoranthene	**0.090**	ug/L	0.061	0.012	1	04/18/19 08:04	04/18/19 16:31	206-44-0	
Fluorene	**0.80**	ug/L	0.045	0.0091	1	04/18/19 08:04	04/18/19 16:31	86-73-7	
Naphthalene	**0.069J**	ug/L	0.10	0.021	1	04/18/19 08:04	04/18/19 16:31	91-20-3	
Phenanthrene	**0.017J**	ug/L	0.078	0.016	1	04/18/19 08:04	04/18/19 16:31	85-01-8	
Pyrene	**0.088**	ug/L	0.043	0.0087	1	04/18/19 08:04	04/18/19 16:31	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	58	%	30-85		1	04/18/19 08:04	04/18/19 16:31	321-60-8	
Terphenyl-d14 (S)	83	%	10-120		1	04/18/19 08:04	04/18/19 16:31	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/17/19 23:13	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/17/19 23:13	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/17/19 23:13	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/17/19 23:13	1330-20-7	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/17/19 23:13	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/17/19 23:13	95-47-6	
Surrogates									
Dibromofluoromethane (S)	95	%	70-130		1		04/17/19 23:13	1868-53-7	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041619016 **Lab ID: 40185905016** Collected: 04/16/19 10:19 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Surrogates									
Toluene-d8 (S)	99	%	70-130		1		04/17/19 23:13	2037-26-5	
4-Bromofluorobenzene (S)	88	%	70-130		1		04/17/19 23:13	460-00-4	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**108**	mg/L	15.0	5.0	5		04/24/19 17:01	14808-79-8	
310.2 Alkalinity	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3	**420**	mg/L	117	35.2	5		04/25/19 09:28		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**0.13J**	mg/L	0.25	0.095	1		04/18/19 11:47		

Sample: 041619017 **Lab ID: 40185905017** Collected: 04/16/19 10:24 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV	Analytical Method: EPA 8015B Modified								
Methane	**1440**	ug/L	28.0	13.7	10		04/24/19 12:23	74-82-8	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum, Dissolved	**<117**	ug/L	500	117	2	04/18/19 07:09	04/23/19 04:00	7429-90-5	D3
Antimony, Dissolved	**<0.30**	ug/L	2.0	0.30	2	04/18/19 07:09	04/23/19 04:00	7440-36-0	D3
Copper, Dissolved	**<2.2**	ug/L	7.3	2.2	2	04/18/19 07:09	04/23/19 04:00	7440-50-8	D3
Iron, Dissolved	**17200**	ug/L	737	221	2	04/18/19 07:09	04/23/19 04:00	7439-89-6	
Manganese, Dissolved	**1040**	ug/L	18.0	5.4	2	04/18/19 07:09	04/23/19 04:00	7439-96-5	
Nickel, Dissolved	**1.6J**	ug/L	2.7	0.80	2	04/18/19 07:09	04/23/19 04:00	7440-02-0	D3
Silver, Dissolved	**<0.20**	ug/L	1.0	0.20	2	04/18/19 07:09	04/23/19 04:00	7440-22-4	D3
Vanadium, Dissolved	**1.2J**	ug/L	2.1	0.63	2	04/18/19 07:09	04/23/19 04:00	7440-62-2	D3
Zinc, Dissolved	**15.8J**	ug/L	30.7	9.2	2	04/18/19 07:09	04/23/19 04:00	7440-66-6	D3
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Anthracene	**0.037J**	ug/L	0.057	0.011	1	04/18/19 08:04	04/18/19 16:50	120-12-7	
Benzo(a)pyrene	**<0.012**	ug/L	0.058	0.012	1	04/18/19 08:04	04/18/19 16:50	50-32-8	
Benzo(b)fluoranthene	**<0.0063**	ug/L	0.032	0.0063	1	04/18/19 08:04	04/18/19 16:50	205-99-2	
Benzo(g,h,i)perylene	**<0.0075**	ug/L	0.037	0.0075	1	04/18/19 08:04	04/18/19 16:50	191-24-2	
Chrysene	**0.019J**	ug/L	0.072	0.014	1	04/18/19 08:04	04/18/19 16:50	218-01-9	
Fluoranthene	**0.081**	ug/L	0.059	0.012	1	04/18/19 08:04	04/18/19 16:50	206-44-0	
Fluorene	**0.73**	ug/L	0.044	0.0088	1	04/18/19 08:04	04/18/19 16:50	86-73-7	
Naphthalene	**0.069J**	ug/L	0.10	0.020	1	04/18/19 08:04	04/18/19 16:50	91-20-3	
Phenanthrene	**0.019J**	ug/L	0.076	0.015	1	04/18/19 08:04	04/18/19 16:50	85-01-8	
Pyrene	**0.082**	ug/L	0.042	0.0084	1	04/18/19 08:04	04/18/19 16:50	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	55	%	30-85		1	04/18/19 08:04	04/18/19 16:50	321-60-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041619017 **Lab ID: 40185905017** Collected: 04/16/19 10:24 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Surrogates									
Terphenyl-d14 (S)	77	%	10-120		1	04/18/19 08:04	04/18/19 16:50	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/17/19 23:34	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/17/19 23:34	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/17/19 23:34	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/17/19 23:34	1330-20-7	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/17/19 23:34	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/17/19 23:34	95-47-6	
Surrogates									
Dibromofluoromethane (S)	99	%	70-130		1		04/17/19 23:34	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		04/17/19 23:34	2037-26-5	
4-Bromofluorobenzene (S)	89	%	70-130		1		04/17/19 23:34	460-00-4	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**107**	mg/L	15.0	5.0	5		04/24/19 17:14	14808-79-8	
310.2 Alkalinity	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3	**481**	mg/L	117	35.2	5		04/25/19 09:29		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**<0.095**	mg/L	0.25	0.095	1		04/18/19 11:48		

Sample: 041619018 **Lab ID: 40185905018** Collected: 04/16/19 11:04 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV	Analytical Method: EPA 8015B Modified								
Methane	**6440**	ug/L	350	171	125		04/24/19 13:33	74-82-8	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum, Dissolved	**<117**	ug/L	500	117	2	04/18/19 07:09	04/23/19 04:07	7429-90-5	D3
Antimony, Dissolved	**<0.30**	ug/L	2.0	0.30	2	04/18/19 07:09	04/23/19 04:07	7440-36-0	D3
Copper, Dissolved	**3.2J**	ug/L	7.3	2.2	2	04/18/19 07:09	04/23/19 04:07	7440-50-8	D3
Iron, Dissolved	**33300**	ug/L	737	221	2	04/18/19 07:09	04/23/19 04:07	7439-89-6	
Manganese, Dissolved	**688**	ug/L	18.0	5.4	2	04/18/19 07:09	04/23/19 04:07	7439-96-5	
Nickel, Dissolved	**1.5J**	ug/L	2.7	0.80	2	04/18/19 07:09	04/23/19 04:07	7440-02-0	D3
Silver, Dissolved	**<0.20**	ug/L	1.0	0.20	2	04/18/19 07:09	04/23/19 04:07	7440-22-4	D3
Vanadium, Dissolved	**1.5J**	ug/L	2.1	0.63	2	04/18/19 07:09	04/23/19 04:07	7440-62-2	D3
Zinc, Dissolved	**15.7J**	ug/L	30.7	9.2	2	04/18/19 07:09	04/23/19 04:07	7440-66-6	D3

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041619018 **Lab ID: 40185905018** Collected: 04/16/19 11:04 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Anthracene	**3.3**	ug/L	1.8	0.37	33	04/18/19 08:04	04/18/19 15:36	120-12-7	
Benzo(a)pyrene	**<0.37**	ug/L	1.8	0.37	33	04/18/19 08:04	04/18/19 15:36	50-32-8	
Benzo(b)fluoranthene	**<0.20**	ug/L	1.0	0.20	33	04/18/19 08:04	04/18/19 15:36	205-99-2	
Benzo(g,h,i)perylene	**<0.24**	ug/L	1.2	0.24	33	04/18/19 08:04	04/18/19 15:36	191-24-2	
Chrysene	**<0.46**	ug/L	2.3	0.46	33	04/18/19 08:04	04/18/19 15:36	218-01-9	
Fluoranthene	**1.6J**	ug/L	1.9	0.37	33	04/18/19 08:04	04/18/19 15:36	206-44-0	
Fluorene	**18.2**	ug/L	1.4	0.28	33	04/18/19 08:04	04/18/19 15:36	86-73-7	
Naphthalene	**416**	ug/L	3.2	0.64	33	04/18/19 08:04	04/18/19 15:36	91-20-3	
Phenanthrene	**16.8**	ug/L	2.4	0.48	33	04/18/19 08:04	04/18/19 15:36	85-01-8	
Pyrene	**1.7**	ug/L	1.3	0.27	33	04/18/19 08:04	04/18/19 15:36	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	0	%	30-85		33	04/18/19 08:04	04/18/19 15:36	321-60-8	S4
Terphenyl-d14 (S)	81	%	10-120		33	04/18/19 08:04	04/18/19 15:36	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**64.9**	ug/L	10.0	2.5	10		04/17/19 18:12	71-43-2	
Ethylbenzene	**74.0**	ug/L	10.0	2.2	10		04/17/19 18:12	100-41-4	
Toluene	**6.0J**	ug/L	50.0	1.7	10		04/17/19 18:12	108-88-3	
Xylene (Total)	**59.6**	ug/L	30.0	15.0	10		04/17/19 18:12	1330-20-7	
m&p-Xylene	**14.5J**	ug/L	20.0	4.7	10		04/17/19 18:12	179601-23-1	
o-Xylene	**45.1**	ug/L	10.0	2.6	10		04/17/19 18:12	95-47-6	
Surrogates									
Dibromofluoromethane (S)	94	%	70-130		10		04/17/19 18:12	1868-53-7	D3
Toluene-d8 (S)	100	%	70-130		10		04/17/19 18:12	2037-26-5	
4-Bromofluorobenzene (S)	93	%	70-130		10		04/17/19 18:12	460-00-4	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**<5.0**	mg/L	15.0	5.0	5		04/24/19 17:27	14808-79-8	D3
310.2 Alkalinity	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3	**764**	mg/L	47.0	14.1	2		04/25/19 09:29		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**<0.095**	mg/L	0.25	0.095	1		04/18/19 11:51		

Sample: 041619019 **Lab ID: 40185905019** Collected: 04/16/19 12:07 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV	Analytical Method: EPA 8015B Modified								
Methane	**10.4**	ug/L	2.8	1.4	1		04/24/19 10:01	74-82-8	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum, Dissolved	**<117**	ug/L	500	117	2	04/18/19 07:09	04/23/19 04:14	7429-90-5	D3

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041619019 **Lab ID: 40185905019** Collected: 04/16/19 12:07 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Antimony, Dissolved	**0.87J**	ug/L	2.0	0.30	2	04/18/19 07:09	04/23/19 04:14	7440-36-0	D3
Copper, Dissolved	**6.4J**	ug/L	7.3	2.2	2	04/18/19 07:09	04/23/19 04:14	7440-50-8	D3
Iron, Dissolved	**<221**	ug/L	737	221	2	04/18/19 07:09	04/23/19 04:14	7439-89-6	D3
Manganese, Dissolved	**22.2**	ug/L	18.0	5.4	2	04/18/19 07:09	04/23/19 04:14	7439-96-5	
Nickel, Dissolved	**2.7**	ug/L	2.7	0.80	2	04/18/19 07:09	04/23/19 04:14	7440-02-0	
Silver, Dissolved	**<0.20**	ug/L	1.0	0.20	2	04/18/19 07:09	04/23/19 04:14	7440-22-4	D3
Vanadium, Dissolved	**0.81J**	ug/L	2.1	0.63	2	04/18/19 07:09	04/23/19 04:14	7440-62-2	D3
Zinc, Dissolved	**27.5J**	ug/L	30.7	9.2	2	04/18/19 07:09	04/23/19 04:14	7440-66-6	D3
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Anthracene	**0.016J**	ug/L	0.057	0.011	1	04/18/19 08:04	04/18/19 14:59	120-12-7	
Benzo(a)pyrene	**0.020J**	ug/L	0.058	0.012	1	04/18/19 08:04	04/18/19 14:59	50-32-8	
Benzo(b)fluoranthene	**0.029J**	ug/L	0.032	0.0063	1	04/18/19 08:04	04/18/19 14:59	205-99-2	
Benzo(g,h,i)perylene	**0.018J**	ug/L	0.037	0.0075	1	04/18/19 08:04	04/18/19 14:59	191-24-2	
Chrysene	**0.027J**	ug/L	0.072	0.014	1	04/18/19 08:04	04/18/19 14:59	218-01-9	
Fluoranthene	**0.021J**	ug/L	0.059	0.012	1	04/18/19 08:04	04/18/19 14:59	206-44-0	
Fluorene	**<0.0088**	ug/L	0.044	0.0088	1	04/18/19 08:04	04/18/19 14:59	86-73-7	
Naphthalene	**<0.020**	ug/L	0.10	0.020	1	04/18/19 08:04	04/18/19 14:59	91-20-3	
Phenanthrene	**<0.015**	ug/L	0.076	0.015	1	04/18/19 08:04	04/18/19 14:59	85-01-8	
Pyrene	**0.020J**	ug/L	0.042	0.0084	1	04/18/19 08:04	04/18/19 14:59	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	53	%	30-85		1	04/18/19 08:04	04/18/19 14:59	321-60-8	
Terphenyl-d14 (S)	74	%	10-120		1	04/18/19 08:04	04/18/19 14:59	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/17/19 23:56	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/17/19 23:56	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/17/19 23:56	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/17/19 23:56	1330-20-7	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/17/19 23:56	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/17/19 23:56	95-47-6	
Surrogates									
Dibromofluoromethane (S)	98	%	70-130		1		04/17/19 23:56	1868-53-7	
Toluene-d8 (S)	97	%	70-130		1		04/17/19 23:56	2037-26-5	
4-Bromofluorobenzene (S)	87	%	70-130		1		04/17/19 23:56	460-00-4	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**53.7**	mg/L	3.0	1.0	1		04/24/19 17:41	14808-79-8	
310.2 Alkalinity	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3	**281**	mg/L	47.0	14.1	2		04/25/19 09:30		
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**9.0**	mg/L	0.25	0.095	1		04/18/19 11:51		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041619020 **Lab ID: 40185905020** Collected: 04/16/19 12:30 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV	Analytical Method: EPA 8015B Modified								
Methane	**<1.4**	ug/L	2.8	1.4	1		04/24/19 10:26	74-82-8	
6020 MET ICPMS, Dissolved	Analytical Method: EPA 6020 Preparation Method: EPA 3010								
Aluminum, Dissolved	**140J**	ug/L	500	117	2	04/18/19 07:09	04/23/19 04:21	7429-90-5	D3
Antimony, Dissolved	**<0.30**	ug/L	2.0	0.30	2	04/18/19 07:09	04/23/19 04:21	7440-36-0	D3
Copper, Dissolved	**2.6J**	ug/L	7.3	2.2	2	04/18/19 07:09	04/23/19 04:21	7440-50-8	D3
Iron, Dissolved	**268J**	ug/L	737	221	2	04/18/19 07:09	04/23/19 04:21	7439-89-6	D3
Manganese, Dissolved	**30.6**	ug/L	18.0	5.4	2	04/18/19 07:09	04/23/19 04:21	7439-96-5	
Nickel, Dissolved	**1.8J**	ug/L	2.7	0.80	2	04/18/19 07:09	04/23/19 04:21	7440-02-0	D3
Silver, Dissolved	**<0.20**	ug/L	1.0	0.20	2	04/18/19 07:09	04/23/19 04:21	7440-22-4	D3
Vanadium, Dissolved	**0.94J**	ug/L	2.1	0.63	2	04/18/19 07:09	04/23/19 04:21	7440-62-2	D3
Zinc, Dissolved	**15.7J**	ug/L	30.7	9.2	2	04/18/19 07:09	04/23/19 04:21	7440-66-6	D3
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Anthracene	**0.021J**	ug/L	0.052	0.010	1	04/19/19 08:22	04/19/19 20:55	120-12-7	
Benzo(a)pyrene	**0.015J**	ug/L	0.053	0.011	1	04/19/19 08:22	04/19/19 20:55	50-32-8	
Benzo(b)fluoranthene	**0.015J**	ug/L	0.029	0.0057	1	04/19/19 08:22	04/19/19 20:55	205-99-2	
Benzo(g,h,i)perylene	**0.011J**	ug/L	0.034	0.0068	1	04/19/19 08:22	04/19/19 20:55	191-24-2	
Chrysene	**0.027J**	ug/L	0.065	0.013	1	04/19/19 08:22	04/19/19 20:55	218-01-9	
Fluoranthene	**0.024J**	ug/L	0.053	0.011	1	04/19/19 08:22	04/19/19 20:55	206-44-0	
Fluorene	**<0.0080**	ug/L	0.040	0.0080	1	04/19/19 08:22	04/19/19 20:55	86-73-7	
Naphthalene	**<0.018**	ug/L	0.092	0.018	1	04/19/19 08:22	04/19/19 20:55	91-20-3	
Phenanthrene	**0.022J**	ug/L	0.069	0.014	1	04/19/19 08:22	04/19/19 20:55	85-01-8	
Pyrene	**0.030J**	ug/L	0.038	0.0076	1	04/19/19 08:22	04/19/19 20:55	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	52	%	30-85		1	04/19/19 08:22	04/19/19 20:55	321-60-8	
Terphenyl-d14 (S)	59	%	10-120		1	04/19/19 08:22	04/19/19 20:55	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/18/19 00:17	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/18/19 00:17	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/18/19 00:17	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/18/19 00:17	1330-20-7	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/18/19 00:17	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/18/19 00:17	95-47-6	
Surrogates									
Dibromofluoromethane (S)	98	%	70-130		1		04/18/19 00:17	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		04/18/19 00:17	2037-26-5	
4-Bromofluorobenzene (S)	90	%	70-130		1		04/18/19 00:17	460-00-4	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Sulfate	**893**	mg/L	300	100	100		04/25/19 13:59	14808-79-8	
310.2 Alkalinity	Analytical Method: EPA 310.2								
Alkalinity, Total as CaCO3	**147**	mg/L	23.5	7.0	1		04/25/19 09:31		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041619020 **Lab ID: 40185905020** Collected: 04/16/19 12:30 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
353.2 Nitrogen, NO2/NO3 pres.	Analytical Method: EPA 353.2								
Nitrogen, NO2 plus NO3	**0.21J**	mg/L	0.25	0.095	1		04/18/19 11:52		

Sample: 041619021 **Lab ID: 40185905021** Collected: 04/16/19 12:50 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270 MSSV PAH by HVI	Analytical Method: EPA 8270 by HVI Preparation Method: EPA 3510								
Anthracene	**0.066J**	ug/L	0.068	0.014	1	04/22/19 08:33	04/23/19 11:39	120-12-7	
Benzo(a)pyrene	**0.038J**	ug/L	0.068	0.014	1	04/22/19 08:33	04/23/19 11:39	50-32-8	
Benzo(b)fluoranthene	**0.069**	ug/L	0.037	0.0075	1	04/22/19 08:33	04/23/19 11:39	205-99-2	
Benzo(g,h,i)perylene	**0.046**	ug/L	0.044	0.0088	1	04/22/19 08:33	04/23/19 11:39	191-24-2	
Chrysene	**0.099**	ug/L	0.085	0.017	1	04/22/19 08:33	04/23/19 11:39	218-01-9	
Fluoranthene	**0.11**	ug/L	0.069	0.014	1	04/22/19 08:33	04/23/19 11:39	206-44-0	
Fluorene	**<0.010**	ug/L	0.052	0.010	1	04/22/19 08:33	04/23/19 11:39	86-73-7	
Naphthalene	**<0.024**	ug/L	0.12	0.024	1	04/22/19 08:33	04/23/19 11:39	91-20-3	
Phenanthrene	**0.047J**	ug/L	0.090	0.018	1	04/22/19 08:33	04/23/19 11:39	85-01-8	
Pyrene	**0.095**	ug/L	0.050	0.0099	1	04/22/19 08:33	04/23/19 11:39	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	60	%	30-85		1	04/22/19 08:33	04/23/19 11:39	321-60-8	
Terphenyl-d14 (S)	72	%	10-120		1	04/22/19 08:33	04/23/19 11:39	1718-51-0	
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/17/19 21:40	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/17/19 21:40	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/17/19 21:40	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/17/19 21:40	1330-20-7	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/17/19 21:40	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/17/19 21:40	95-47-6	
Surrogates									
Dibromofluoromethane (S)	121	%	70-130		1		04/17/19 21:40	1868-53-7	
Toluene-d8 (S)	94	%	70-130		1		04/17/19 21:40	2037-26-5	
4-Bromofluorobenzene (S)	90	%	70-130		1		04/17/19 21:40	460-00-4	

Sample: 041619022 **Lab ID: 40185905022** Collected: 04/16/19 13:10 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/17/19 22:02	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/17/19 22:02	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/17/19 22:02	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/17/19 22:02	1330-20-7	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Sample: 041619022 **Lab ID: 40185905022** Collected: 04/16/19 13:10 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV UST	Analytical Method: EPA 8260								
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/17/19 22:02	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/17/19 22:02	95-47-6	
Surrogates									
Dibromofluoromethane (S)	121	%	70-130		1		04/17/19 22:02	1868-53-7	
Toluene-d8 (S)	97	%	70-130		1		04/17/19 22:02	2037-26-5	
4-Bromofluorobenzene (S)	86	%	70-130		1		04/17/19 22:02	460-00-4	

Sample: 041619023 **Lab ID: 40185905023** Collected: 04/16/19 00:00 Received: 04/16/19 16:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
Methane, Ethane, Ethene GCV	Analytical Method: EPA 8015B Modified								
Methane	**<1.4**	ug/L	2.8	1.4	1		04/24/19 10:33	74-82-8	
8260 MSV UST	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		04/17/19 20:55	71-43-2	
Ethylbenzene	**<0.22**	ug/L	1.0	0.22	1		04/17/19 20:55	100-41-4	
Toluene	**<0.17**	ug/L	5.0	0.17	1		04/17/19 20:55	108-88-3	
Xylene (Total)	**<1.5**	ug/L	3.0	1.5	1		04/17/19 20:55	1330-20-7	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		04/17/19 20:55	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		04/17/19 20:55	95-47-6	
Surrogates									
Dibromofluoromethane (S)	119	%	70-130		1		04/17/19 20:55	1868-53-7	HS
Toluene-d8 (S)	99	%	70-130		1		04/17/19 20:55	2037-26-5	
4-Bromofluorobenzene (S)	92	%	70-130		1		04/17/19 20:55	460-00-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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QUALITY CONTROL DATA

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

QC Batch: 318622 Analysis Method: EPA 8015B Modified
QC Batch Method: EPA 8015B Modified Analysis Description: Methane, Ethane, Ethene GCV
Associated Lab Samples: 40185905001, 40185905002, 40185905003, 40185905004, 40185905005, 40185905006, 40185905007, 40185905008

METHOD BLANK: 1851674 Matrix: Water
Associated Lab Samples: 40185905001, 40185905002, 40185905003, 40185905004, 40185905005, 40185905006, 40185905007, 40185905008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methane	ug/L	<1.4	2.8	04/17/19 09:04	

LABORATORY CONTROL SAMPLE & LCSD: 1851675 1851676

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	28.6	28.2	28.1	99	98	80-120	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1851801 1851802

Parameter	Units	40185905004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Methane	ug/L	6.5	28.6	28.6	35.1	36.4	100	105	77-122	4	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

QC Batch: 319301 Analysis Method: EPA 8015B Modified
QC Batch Method: EPA 8015B Modified Analysis Description: Methane, Ethane, Ethene GCV
Associated Lab Samples: 40185905009, 40185905010, 40185905011, 40185905013, 40185905014, 40185905015, 40185905016, 40185905017, 40185905018, 40185905019, 40185905020, 40185905023

METHOD BLANK: 1855319 Matrix: Water
Associated Lab Samples: 40185905009, 40185905010, 40185905011, 40185905013, 40185905014, 40185905015, 40185905016, 40185905017, 40185905018, 40185905019, 40185905020, 40185905023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Methane	ug/L	<1.4	2.8	04/24/19 08:16	

LABORATORY CONTROL SAMPLE & LCSD: 1855320 1855321

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Methane	ug/L	28.6	27.6	28.8	97	101	80-120	4	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1855589 1855590

Parameter	Units	40185905009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Methane	ug/L	<1.4	28.6	28.6	25.5	27.5	89	96	77-122	7	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

QC Batch: 318670 Analysis Method: EPA 6020
QC Batch Method: EPA 3010 Analysis Description: 6020 MET Dissolved
Associated Lab Samples: 40185905001, 40185905002, 40185905003, 40185905004, 40185905005, 40185905006, 40185905007, 40185905008, 40185905009, 40185905010, 40185905011, 40185905013, 40185905014, 40185905015, 40185905016, 40185905017, 40185905018, 40185905019, 40185905020

METHOD BLANK: 1851857 Matrix: Water
Associated Lab Samples: 40185905001, 40185905002, 40185905003, 40185905004, 40185905005, 40185905006, 40185905007, 40185905008, 40185905009, 40185905010, 40185905011, 40185905013, 40185905014, 40185905015, 40185905016, 40185905017, 40185905018, 40185905019, 40185905020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Aluminum, Dissolved	ug/L	<58.7	250	04/23/19 01:08	
Antimony, Dissolved	ug/L	<0.15	1.0	04/23/19 01:08	
Copper, Dissolved	ug/L	<1.1	3.6	04/23/19 01:08	
Iron, Dissolved	ug/L	<111	368	04/23/19 01:08	
Manganese, Dissolved	ug/L	<2.7	9.0	04/23/19 01:08	
Nickel, Dissolved	ug/L	<0.40	1.3	04/23/19 01:08	
Silver, Dissolved	ug/L	<0.10	0.50	04/23/19 01:08	
Vanadium, Dissolved	ug/L	<0.32	1.0	04/23/19 01:08	
Zinc, Dissolved	ug/L	<4.6	15.3	04/23/19 01:08	

LABORATORY CONTROL SAMPLE: 1851858

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Aluminum, Dissolved	ug/L	5000	5020	100	80-120	
Antimony, Dissolved	ug/L	500	499	100	80-120	
Copper, Dissolved	ug/L	500	474	95	80-120	
Iron, Dissolved	ug/L	5000	4920	98	80-120	
Manganese, Dissolved	ug/L	500	463	93	80-120	
Nickel, Dissolved	ug/L	500	475	95	80-120	
Silver, Dissolved	ug/L	250	246	99	80-120	
Vanadium, Dissolved	ug/L	500	470	94	80-120	
Zinc, Dissolved	ug/L	500	480	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1851859 1851860

Parameter	Units	40185905004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Aluminum, Dissolved	ug/L	<117	5000	5000	5070	5070	101	101	75-125	0	20	
Antimony, Dissolved	ug/L	1.4J	500	500	518	527	103	105	75-125	2	20	
Copper, Dissolved	ug/L	13.7	500	500	482	492	94	96	75-125	2	20	
Iron, Dissolved	ug/L	<221	5000	5000	5040	5160	100	102	75-125	2	20	
Manganese, Dissolved	ug/L	347	500	500	818	828	94	96	75-125	1	20	
Nickel, Dissolved	ug/L	2.2J	500	500	475	488	95	97	75-125	3	20	
Silver, Dissolved	ug/L	<0.20	250	250	247	252	99	101	75-125	2	20	
Vanadium, Dissolved	ug/L	1.7J	500	500	484	494	96	99	75-125	2	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1851859 1851860

Parameter	Units	40185905004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Zinc, Dissolved	ug/L	15.3J	500	500	488	503	95	98	75-125	3	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

QC Batch: 318624 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 40185905021, 40185905022, 40185905023

METHOD BLANK: 1851679 Matrix: Water
Associated Lab Samples: 40185905021, 40185905022, 40185905023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	<0.25	1.0	04/17/19 17:32	
Ethylbenzene	ug/L	<0.22	1.0	04/17/19 17:32	
m&p-Xylene	ug/L	<0.47	2.0	04/17/19 17:32	
o-Xylene	ug/L	<0.26	1.0	04/17/19 17:32	
Toluene	ug/L	<0.17	5.0	04/17/19 17:32	
Xylene (Total)	ug/L	<1.5	3.0	04/17/19 17:32	
4-Bromofluorobenzene (S)	%	91	70-130	04/17/19 17:32	
Dibromofluoromethane (S)	%	110	70-130	04/17/19 17:32	
Toluene-d8 (S)	%	98	70-130	04/17/19 17:32	

LABORATORY CONTROL SAMPLE: 1851680

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	58.7	117	70-130	
Ethylbenzene	ug/L	50	53.9	108	80-124	
m&p-Xylene	ug/L	100	111	111	70-130	
o-Xylene	ug/L	50	53.6	107	70-130	
Toluene	ug/L	50	54.7	109	80-126	
Xylene (Total)	ug/L	150	164	110	70-130	
4-Bromofluorobenzene (S)	%			96	70-130	
Dibromofluoromethane (S)	%			115	70-130	
Toluene-d8 (S)	%			99	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1851703 1851704

Parameter	Units	40185869001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	<0.00025 mg/L	50	50	55.2	57.7	110	115	70-130	4	20	
Ethylbenzene	ug/L	<0.00022 mg/L	50	50	52.6	51.8	105	104	80-125	2	20	
m&p-Xylene	ug/L	<0.00047 mg/L	100	100	106	108	106	108	70-130	2	20	
o-Xylene	ug/L	<0.00026 mg/L	50	50	53.2	53.1	106	106	70-130	0	20	
Toluene	ug/L	<0.00017 mg/L	50	50	52.6	52.6	105	105	80-131	0	20	
Xylene (Total)	ug/L	<0.0015 mg/L	150	150	159	161	106	108	70-130	1	20	
4-Bromofluorobenzene (S)	%						96	96	70-130			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1851703 1851704

Parameter	Units	40185869001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Dibromofluoromethane (S)	%						111	116	70-130			
Toluene-d8 (S)	%						100	99	70-130			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

QC Batch: 318626 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER
Associated Lab Samples: 40185905001, 40185905002, 40185905003, 40185905004, 40185905005, 40185905006, 40185905007, 40185905008, 40185905009, 40185905010, 40185905011, 40185905012, 40185905013, 40185905014, 40185905015, 40185905016, 40185905017, 40185905018, 40185905019, 40185905020

METHOD BLANK: 1851683 Matrix: Water
Associated Lab Samples: 40185905001, 40185905002, 40185905003, 40185905004, 40185905005, 40185905006, 40185905007, 40185905008, 40185905009, 40185905010, 40185905011, 40185905012, 40185905013, 40185905014, 40185905015, 40185905016, 40185905017, 40185905018, 40185905019, 40185905020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Benzene	ug/L	<0.25	1.0	04/17/19 16:03	
Ethylbenzene	ug/L	<0.22	1.0	04/17/19 16:03	
m&p-Xylene	ug/L	<0.47	2.0	04/17/19 16:03	
o-Xylene	ug/L	<0.26	1.0	04/17/19 16:03	
Toluene	ug/L	<0.17	5.0	04/17/19 16:03	
Xylene (Total)	ug/L	<1.5	3.0	04/17/19 16:03	
4-Bromofluorobenzene (S)	%	89	70-130	04/17/19 16:03	
Dibromofluoromethane (S)	%	96	70-130	04/17/19 16:03	
Toluene-d8 (S)	%	98	70-130	04/17/19 16:03	

LABORATORY CONTROL SAMPLE: 1851684

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	50	50.7	101	70-130	
Ethylbenzene	ug/L	50	55.5	111	80-124	
m&p-Xylene	ug/L	100	113	113	70-130	
o-Xylene	ug/L	50	55.8	112	70-130	
Toluene	ug/L	50	53.3	107	80-126	
Xylene (Total)	ug/L	150	169	112	70-130	
4-Bromofluorobenzene (S)	%			96	70-130	
Dibromofluoromethane (S)	%			97	70-130	
Toluene-d8 (S)	%			98	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1851685 1851686

Parameter	Units	40185905004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	<0.25	50	50	51.8	50.1	104	100	70-130	3	20	
Ethylbenzene	ug/L	<0.22	50	50	57.6	56.7	115	113	80-125	2	20	
m&p-Xylene	ug/L	<0.47	100	100	116	115	116	115	70-130	1	20	
o-Xylene	ug/L	<0.26	50	50	57.8	57.5	116	115	70-130	0	20	
Toluene	ug/L	<0.17	50	50	54.7	53.5	109	107	80-131	2	20	
Xylene (Total)	ug/L	<1.5	150	150	174	172	116	115	70-130	1	20	
4-Bromofluorobenzene (S)	%						98	98	70-130			
Dibromofluoromethane (S)	%						98	96	70-130			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1851685 1851686

Parameter	Units	40185905004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Toluene-d8 (S)	%						98	97	70-130			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

QC Batch: 318761 Analysis Method: EPA 8270 by HVI
QC Batch Method: EPA 3510 Analysis Description: 8270 Water PAH by HVI
Associated Lab Samples: 40185905001, 40185905002, 40185905003, 40185905004, 40185905005, 40185905006, 40185905007, 40185905008, 40185905009, 40185905010, 40185905011, 40185905013, 40185905014, 40185905015, 40185905016, 40185905017, 40185905018, 40185905019

METHOD BLANK: 1852404 Matrix: Water
Associated Lab Samples: 40185905001, 40185905002, 40185905003, 40185905004, 40185905005, 40185905006, 40185905007, 40185905008, 40185905009, 40185905010, 40185905011, 40185905013, 40185905014, 40185905015, 40185905016, 40185905017, 40185905018, 40185905019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Anthracene	ug/L	<0.010	0.052	04/18/19 10:26	
Benzo(a)pyrene	ug/L	<0.011	0.053	04/18/19 10:26	
Benzo(b)fluoranthene	ug/L	<0.0057	0.029	04/18/19 10:26	
Benzo(g,h,i)perylene	ug/L	<0.0068	0.034	04/18/19 10:26	
Chrysene	ug/L	<0.013	0.065	04/18/19 10:26	
Fluoranthene	ug/L	<0.011	0.053	04/18/19 10:26	
Fluorene	ug/L	<0.0080	0.040	04/18/19 10:26	
Naphthalene	ug/L	<0.018	0.092	04/18/19 10:26	
Phenanthrene	ug/L	<0.014	0.069	04/18/19 10:26	
Pyrene	ug/L	<0.0076	0.038	04/18/19 10:26	
2-Fluorobiphenyl (S)	%	64	30-85	04/18/19 10:26	
Terphenyl-d14 (S)	%	93	10-120	04/18/19 10:26	

LABORATORY CONTROL SAMPLE: 1852405

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Anthracene	ug/L	2	1.9	95	52-105	
Benzo(a)pyrene	ug/L	2	1.8	88	57-117	
Benzo(b)fluoranthene	ug/L	2	1.7	86	54-117	
Benzo(g,h,i)perylene	ug/L	2	1.1	53	32-82	
Chrysene	ug/L	2	2.4	118	63-122	
Fluoranthene	ug/L	2	1.9	96	52-112	
Fluorene	ug/L	2	1.7	87	46-116	
Naphthalene	ug/L	2	1.5	73	37-84	
Phenanthrene	ug/L	2	1.5	76	50-104	
Pyrene	ug/L	2	1.8	92	57-123	
2-Fluorobiphenyl (S)	%			69	30-85	
Terphenyl-d14 (S)	%			100	10-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1852406 1852407

Parameter	Units	40185905004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Anthracene	ug/L	0.028J	2.3	2.2	1.9	1.4	82	64	27-107	28	34	
Benzo(a)pyrene	ug/L	<0.012	2.3	2.2	1.3	1.1	58	52	10-117	15	50	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1852406 1852407

Parameter	Units	40185905004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzo(b)fluoranthene	ug/L	<0.0068	2.3	2.2	1.4	1.3	61	58	10-121	10	49	
Benzo(g,h,i)perylene	ug/L	<0.0080	2.3	2.2	0.60	0.53	26	24	10-82	12	50	
Chrysene	ug/L	<0.015	2.3	2.2	2.4	2.1	103	97	17-122	11	36	
Fluoranthene	ug/L	<0.013	2.3	2.2	1.8	1.7	80	76	27-112	9	42	
Fluorene	ug/L	<0.0094	2.3	2.2	1.8	1.5	77	69	38-116	15	29	
Naphthalene	ug/L	<0.022	2.3	2.2	1.7	1.4	73	64	35-85	17	28	
Phenanthrene	ug/L	<0.016	2.3	2.2	1.6	1.4	69	62	31-106	15	42	
Pyrene	ug/L	<0.0090	2.3	2.2	2.0	1.7	85	77	30-123	15	31	
2-Fluorobiphenyl (S)	%						68	60	30-85			
Terphenyl-d14 (S)	%						87	80	10-120			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

QC Batch: 318893
QC Batch Method: EPA 3510
Analysis Method: EPA 8270 by HVI
Analysis Description: 8270 Water PAH by HVI
Associated Lab Samples: 40185905020

METHOD BLANK: 1853146
Matrix: Water
Associated Lab Samples: 40185905020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Anthracene	ug/L	<0.010	0.052	04/19/19 15:04	
Benzo(a)pyrene	ug/L	<0.011	0.053	04/19/19 15:04	
Benzo(b)fluoranthene	ug/L	<0.0057	0.029	04/19/19 15:04	
Benzo(g,h,i)perylene	ug/L	<0.0068	0.034	04/19/19 15:04	
Chrysene	ug/L	<0.013	0.065	04/19/19 15:04	
Fluoranthene	ug/L	<0.011	0.053	04/19/19 15:04	
Fluorene	ug/L	<0.0080	0.040	04/19/19 15:04	
Naphthalene	ug/L	<0.018	0.092	04/19/19 15:04	
Phenanthrene	ug/L	<0.014	0.069	04/19/19 15:04	
Pyrene	ug/L	<0.0076	0.038	04/19/19 15:04	
2-Fluorobiphenyl (S)	%	69	30-85	04/19/19 15:04	
Terphenyl-d14 (S)	%	109	10-120	04/19/19 15:04	

LABORATORY CONTROL SAMPLE & LCSD: 1853147 1853148

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Anthracene	ug/L	2	1.9	1.5	93	73	52-105	24	36	
Benzo(a)pyrene	ug/L	2	1.9	1.4	94	69	57-117	31	39	
Benzo(b)fluoranthene	ug/L	2	1.9	1.3	93	67	54-117	33	41	
Benzo(g,h,i)perylene	ug/L	2	1.3	0.93	64	46	32-82	31	44	
Chrysene	ug/L	2	2.3	1.6	117	81	63-122	36	38	
Fluoranthene	ug/L	2	1.9	1.4	96	71	52-112	30	35	
Fluorene	ug/L	2	1.8	1.4	91	69	46-116	27	33	
Naphthalene	ug/L	2	1.4	1.2	72	62	37-84	15	29	
Phenanthrene	ug/L	2	1.7	1.3	84	63	50-104	29	36	
Pyrene	ug/L	2	2.1	1.6	107	78	57-123	32	36	
2-Fluorobiphenyl (S)	%				73	57	30-85			
Terphenyl-d14 (S)	%				117	81	10-120			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

QC Batch: 319032
QC Batch Method: EPA 3510
Analysis Method: EPA 8270 by HVI
Analysis Description: 8270 Water PAH by HVI
Associated Lab Samples: 40185905021

METHOD BLANK: 1854277 Matrix: Water
Associated Lab Samples: 40185905021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Anthracene	ug/L	<0.010	0.052	04/22/19 11:40	
Benzo(a)pyrene	ug/L	<0.011	0.053	04/22/19 11:40	
Benzo(b)fluoranthene	ug/L	<0.0057	0.029	04/22/19 11:40	
Benzo(g,h,i)perylene	ug/L	<0.0068	0.034	04/22/19 11:40	
Chrysene	ug/L	<0.013	0.065	04/22/19 11:40	
Fluoranthene	ug/L	<0.011	0.053	04/22/19 11:40	
Fluorene	ug/L	<0.0080	0.040	04/22/19 11:40	
Naphthalene	ug/L	<0.018	0.092	04/22/19 11:40	
Phenanthrene	ug/L	<0.014	0.069	04/22/19 11:40	
Pyrene	ug/L	<0.0076	0.038	04/22/19 11:40	
2-Fluorobiphenyl (S)	%	65	30-85	04/22/19 11:40	
Terphenyl-d14 (S)	%	103	10-120	04/22/19 11:40	

LABORATORY CONTROL SAMPLE: 1854278

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Anthracene	ug/L	2	1.8	88	52-105	
Benzo(a)pyrene	ug/L	2	1.7	85	57-117	
Benzo(b)fluoranthene	ug/L	2	1.6	82	54-117	
Benzo(g,h,i)perylene	ug/L	2	1.0	52	32-82	
Chrysene	ug/L	2	2.4	121	63-122	
Fluoranthene	ug/L	2	1.7	83	52-112	
Fluorene	ug/L	2	1.5	75	46-116	
Naphthalene	ug/L	2	1.2	61	37-84	
Phenanthrene	ug/L	2	1.4	69	50-104	
Pyrene	ug/L	2	2.0	98	57-123	
2-Fluorobiphenyl (S)	%			60	30-85	
Terphenyl-d14 (S)	%			105	10-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1854348 1854349

Parameter	Units	40186129009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Anthracene	ug/L	<0.010	2	2	1.5	1.5	76	76	27-107	0	34	
Benzo(a)pyrene	ug/L	<0.011	2	2	0.97	1.0	48	50	10-117	5	50	
Benzo(b)fluoranthene	ug/L	<0.0057	2	2	0.95	1.0	48	51	10-121	7	49	
Benzo(g,h,i)perylene	ug/L	<0.0068	2	2	0.47	0.45	23	23	10-82	3	50	
Chrysene	ug/L	<0.013	2	2	1.9	1.9	93	94	17-122	1	36	

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QUALITY CONTROL DATA

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1854348 1854349

Parameter	Units	40186129009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Fluoranthene	ug/L	<0.011	2	2	1.4	1.4	70	68	27-112	3	42	
Fluorene	ug/L	<0.0080	2	2	1.4	1.4	71	70	38-116	1	29	
Naphthalene	ug/L	<0.018	2	2	1.3	1.3	63	63	35-85	1	28	
Phenanthrene	ug/L	<0.014	2	2	1.2	1.2	62	60	31-106	2	42	
Pyrene	ug/L	<0.0076	2	2	1.7	1.6	83	80	30-123	4	31	
2-Fluorobiphenyl (S)	%						61	58	30-85			
Terphenyl-d14 (S)	%						80	82	10-120			

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

QC Batch: 318978
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Associated Lab Samples: 40185905001

METHOD BLANK: 1853664
Matrix: Water
Associated Lab Samples: 40185905001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	<1.0	3.0	04/23/19 10:30	

LABORATORY CONTROL SAMPLE: 1853665

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	20	19.5	97	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1853668 1853669

Parameter	Units	40186027011 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	133	200	200	350	352	108	109	90-110	1	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1854576 1854577

Parameter	Units	40185892002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	<5.0	100	100	108	108	106	106	90-110	0	15	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

QC Batch: 319140 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 40185905002, 40185905003, 40185905004, 40185905005, 40185905006, 40185905007, 40185905008, 40185905009, 40185905010, 40185905011, 40185905013, 40185905014, 40185905015, 40185905016, 40185905017, 40185905018, 40185905019, 40185905020

METHOD BLANK: 1854582 Matrix: Water
Associated Lab Samples: 40185905002, 40185905003, 40185905004, 40185905005, 40185905006, 40185905007, 40185905008, 40185905009, 40185905010, 40185905011, 40185905013, 40185905014, 40185905015, 40185905016, 40185905017, 40185905018, 40185905019, 40185905020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	<1.0	3.0	04/24/19 11:53	

LABORATORY CONTROL SAMPLE: 1854583

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	20	19.7	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1854584 1854585

Parameter	Units	40185905004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	15.0	20	20	37.0	37.0	110	110	90-110	0	15	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1854586 1854587

Parameter	Units	40185906002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	3.8	20	20	26.6	27.2	114	117	90-110	2	15	M0

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QUALITY CONTROL DATA

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

QC Batch: 319370 Analysis Method: EPA 310.2
QC Batch Method: EPA 310.2 Analysis Description: 310.2 Alkalinity
Associated Lab Samples: 40185905001, 40185905002, 40185905003, 40185905004, 40185905005, 40185905006, 40185905007, 40185905008, 40185905009, 40185905010, 40185905011, 40185905013, 40185905014, 40185905015, 40185905016, 40185905017, 40185905018, 40185905019, 40185905020

METHOD BLANK: 1855606 Matrix: Water
Associated Lab Samples: 40185905001, 40185905002, 40185905003, 40185905004, 40185905005, 40185905006, 40185905007, 40185905008, 40185905009, 40185905010, 40185905011, 40185905013, 40185905014, 40185905015, 40185905016, 40185905017, 40185905018, 40185905019, 40185905020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	<7.0	23.5	04/25/19 09:14	

LABORATORY CONTROL SAMPLE: 1855607

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	100	102	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1855608 1855609

Parameter	Units	40185905004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	298	200	200	472	484	87	93	90-110	3	20	M0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1855610 1855611

Parameter	Units	40186090001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Alkalinity, Total as CaCO3	mg/L	1150	2000	2000	2920	2860	88	86	90-110	2	20	M0

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

QC Batch: 318784 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, preserved
Associated Lab Samples: 40185905001, 40185905002, 40185905003, 40185905004, 40185905005, 40185905006, 40185905007, 40185905008, 40185905009, 40185905010, 40185905011, 40185905013, 40185905014, 40185905015, 40185905016, 40185905017, 40185905018, 40185905019, 40185905020

METHOD BLANK: 1852504 Matrix: Water
Associated Lab Samples: 40185905001, 40185905002, 40185905003, 40185905004, 40185905005, 40185905006, 40185905007, 40185905008, 40185905009, 40185905010, 40185905011, 40185905013, 40185905014, 40185905015, 40185905016, 40185905017, 40185905018, 40185905019, 40185905020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	<0.095	0.25	04/18/19 11:34	

LABORATORY CONTROL SAMPLE: 1852505

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, NO2 plus NO3	mg/L	2.5	2.4	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1852506 1852507

Parameter	Units	40185905004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	1.4	2.5	2.5	3.9	3.9	99	99	90-110	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1852508 1852509

Parameter	Units	40185972001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Nitrogen, NO2 plus NO3	mg/L	<0.48	12.5	12.5	12.0	12.2	95	96	90-110	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

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

BATCH QUALIFIERS

Batch: 318936

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
HS	Results are from sample aliquot taken from VOA vial with headspace (air bubble greater than 6 mm diameter).
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40185905001	041519001	EPA 8015B Modified	318622		
40185905002	041519002	EPA 8015B Modified	318622		
40185905003	041519003	EPA 8015B Modified	318622		
40185905004	041519004	EPA 8015B Modified	318622		
40185905005	041519005	EPA 8015B Modified	318622		
40185905006	041519006	EPA 8015B Modified	318622		
40185905007	041519007	EPA 8015B Modified	318622		
40185905008	041519008	EPA 8015B Modified	318622		
40185905009	041519009	EPA 8015B Modified	319301		
40185905010	041519010	EPA 8015B Modified	319301		
40185905011	041519011	EPA 8015B Modified	319301		
[redacted]	[redacted]	[redacted]	[redacted]		
40185905014	041619014	EPA 8015B Modified	319301		
40185905015	041619015	EPA 8015B Modified	319301		
40185905016	041619016	EPA 8015B Modified	319301		
40185905017	041619017	EPA 8015B Modified	319301		
40185905018	041619018	EPA 8015B Modified	319301		
40185905019	041619019	EPA 8015B Modified	319301		
40185905020	041619020	EPA 8015B Modified	319301		
40185905023	041619023	EPA 8015B Modified	319301		
40185905001	041519001	EPA 3010	318670	EPA 6020	318835
40185905002	041519002	EPA 3010	318670	EPA 6020	318835
40185905003	041519003	EPA 3010	318670	EPA 6020	318835
40185905004	041519004	EPA 3010	318670	EPA 6020	318835
40185905005	041519005	EPA 3010	318670	EPA 6020	318835
40185905006	041519006	EPA 3010	318670	EPA 6020	318835
40185905007	041519007	EPA 3010	318670	EPA 6020	318835
40185905008	041519008	EPA 3010	318670	EPA 6020	318835
40185905009	041519009	EPA 3010	318670	EPA 6020	318835
40185905010	041519010	EPA 3010	318670	EPA 6020	318835
40185905011	041519011	EPA 3010	318670	EPA 6020	318835
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
40185905014	041619014	EPA 3010	318670	EPA 6020	318835
40185905015	041619015	EPA 3010	318670	EPA 6020	318835
40185905016	041619016	EPA 3010	318670	EPA 6020	318835
40185905017	041619017	EPA 3010	318670	EPA 6020	318835
40185905018	041619018	EPA 3010	318670	EPA 6020	318835
40185905019	041619019	EPA 3010	318670	EPA 6020	318835
40185905020	041619020	EPA 3010	318670	EPA 6020	318835
40185905001	041519001	EPA 3510	318761	EPA 8270 by HVI	318798
40185905002	041519002	EPA 3510	318761	EPA 8270 by HVI	318798
40185905003	041519003	EPA 3510	318761	EPA 8270 by HVI	318798
40185905004	041519004	EPA 3510	318761	EPA 8270 by HVI	318798
40185905005	041519005	EPA 3510	318761	EPA 8270 by HVI	318798
40185905006	041519006	EPA 3510	318761	EPA 8270 by HVI	318798
40185905007	041519007	EPA 3510	318761	EPA 8270 by HVI	318798
40185905008	041519008	EPA 3510	318761	EPA 8270 by HVI	318798

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40185905009	041519009	EPA 3510	318761	EPA 8270 by HVI	318798
40185905010	041519010	EPA 3510	318761	EPA 8270 by HVI	318798
40185905011	041519011	EPA 3510	318761	EPA 8270 by HVI	318798
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
40185905014	041619014	EPA 3510	318761	EPA 8270 by HVI	318798
40185905015	041619015	EPA 3510	318761	EPA 8270 by HVI	318798
40185905016	041619016	EPA 3510	318761	EPA 8270 by HVI	318798
40185905017	041619017	EPA 3510	318761	EPA 8270 by HVI	318798
40185905018	041619018	EPA 3510	318761	EPA 8270 by HVI	318798
40185905019	041619019	EPA 3510	318761	EPA 8270 by HVI	318798
40185905020	041619020	EPA 3510	318893	EPA 8270 by HVI	318936
40185905021	041619021	EPA 3510	319032	EPA 8270 by HVI	319113
40185905001	041519001	EPA 8260	318626		
40185905002	041519002	EPA 8260	318626		
40185905003	041519003	EPA 8260	318626		
40185905004	041519004	EPA 8260	318626		
40185905005	041519005	EPA 8260	318626		
40185905006	041519006	EPA 8260	318626		
40185905007	041519007	EPA 8260	318626		
40185905008	041519008	EPA 8260	318626		
40185905009	041519009	EPA 8260	318626		
40185905010	041519010	EPA 8260	318626		
40185905011	041519011	EPA 8260	318626		
40185905012	041519012	EPA 8260	318626		
[redacted]	[redacted]	[redacted]	[redacted]		
40185905014	041619014	EPA 8260	318626		
40185905015	041619015	EPA 8260	318626		
40185905016	041619016	EPA 8260	318626		
40185905017	041619017	EPA 8260	318626		
40185905018	041619018	EPA 8260	318626		
40185905019	041619019	EPA 8260	318626		
40185905020	041619020	EPA 8260	318626		
40185905021	041619021	EPA 8260	318624		
40185905022	041619022	EPA 8260	318624		
40185905023	041619023	EPA 8260	318624		
40185905001	041519001	EPA 300.0	318978		
40185905002	041519002	EPA 300.0	319140		
40185905003	041519003	EPA 300.0	319140		
40185905004	041519004	EPA 300.0	319140		
40185905005	041519005	EPA 300.0	319140		
40185905006	041519006	EPA 300.0	319140		
40185905007	041519007	EPA 300.0	319140		
40185905008	041519008	EPA 300.0	319140		
40185905009	041519009	EPA 300.0	319140		
40185905010	041519010	EPA 300.0	319140		
40185905011	041519011	EPA 300.0	319140		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 67979/232 MARINETTE FORMER MGP
Pace Project No.: 40185905

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
[redacted]	[redacted]	[redacted]	[redacted]		
40185905014	041619014	EPA 300.0	319140		
40185905015	041619015	EPA 300.0	319140		
40185905016	041619016	EPA 300.0	319140		
40185905017	041619017	EPA 300.0	319140		
40185905018	041619018	EPA 300.0	319140		
40185905019	041619019	EPA 300.0	319140		
40185905020	041619020	EPA 300.0	319140		
40185905001	041519001	EPA 310.2	319370		
40185905002	041519002	EPA 310.2	319370		
40185905003	041519003	EPA 310.2	319370		
40185905004	041519004	EPA 310.2	319370		
40185905005	041519005	EPA 310.2	319370		
40185905006	041519006	EPA 310.2	319370		
40185905007	041519007	EPA 310.2	319370		
40185905008	041519008	EPA 310.2	319370		
40185905009	041519009	EPA 310.2	319370		
40185905010	041519010	EPA 310.2	319370		
40185905011	041519011	EPA 310.2	319370		
[redacted]	[redacted]	[redacted]	[redacted]		
40185905014	041619014	EPA 310.2	319370		
40185905015	041619015	EPA 310.2	319370		
40185905016	041619016	EPA 310.2	319370		
40185905017	041619017	EPA 310.2	319370		
40185905018	041619018	EPA 310.2	319370		
40185905019	041619019	EPA 310.2	319370		
40185905020	041619020	EPA 310.2	319370		
40185905001	041519001	EPA 353.2	318784		
40185905002	041519002	EPA 353.2	318784		
40185905003	041519003	EPA 353.2	318784		
40185905004	041519004	EPA 353.2	318784		
40185905005	041519005	EPA 353.2	318784		
40185905006	041519006	EPA 353.2	318784		
40185905007	041519007	EPA 353.2	318784		
40185905008	041519008	EPA 353.2	318784		
40185905009	041519009	EPA 353.2	318784		
40185905010	041519010	EPA 353.2	318784		
40185905011	041519011	EPA 353.2	318784		
[redacted]	[redacted]	[redacted]	[redacted]		
40185905014	041619014	EPA 353.2	318784		
40185905015	041619015	EPA 353.2	318784		
40185905016	041619016	EPA 353.2	318784		
40185905017	041619017	EPA 353.2	318784		
40185905018	041619018	EPA 353.2	318784		
40185905019	041619019	EPA 353.2	318784		
40185905020	041619020	EPA 353.2	318784		

REPORT OF LABORATORY ANALYSIS

Pace Analytical™ www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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

COC#: 67979-0419-001
Samples dropped off Pace lab
40185905

QC: KTB 4/16/19 26

Page: 1 of 2

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	O'Brien and Gere Engineers, Inc.	Report To:	GDSdata@OBG.com	Attention:	Accounts Payable
Address:	234 W. Florida St	Copy To:	Marcus Byker	Company Name:	WEC Business Services, LLC
	Milwaukee, WI		Alex Bartelme	Address:	PO Box 19800, Green Bay, WI 54307
Email To:	GDSdata@OBG.com	Purchase Order No.:	3400010643 / 4700004930	Pace Quote Reference:	3400010643
Phone: 773-796-4359	Fax:	Project Name:	Marinette Former MGP	Pace Project Manager:	
Requested Due Date/TAT:	standard	Project Number:	67979/232	Pace Profile #:	

REGULATORY AGENCY: ☐ NPDES ☑ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: WI

Section D Required Client Information

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N): BTEX 8260B N; Methane 8015B N; PAH 8270-SIM N; Metals 6020A* Y; Alkalinity 310.2 N; Sulfate 300.0 N; Nitrate & Nitrite 353.2 N

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	Composite Start DATE	Composite Start TIME	Composite End/Grab DATE	Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	BTEX 8260B	Methane 8015B	PAH 8270-SIM	Metals 6020A*	Alkalinity 310.2	Sulfate 300.0	Nitrate & Nitrite 353.2	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	041519001	GW	G			4-15-19	1214	N	11	X	X	X	X					X	X	X	X	X	X	X	N	001
2	041519002	↓	↓			↓	1255	↓	↓	X	X	X	X					X	X	X	X	X	X	X	↓	002
3	041519003						1333		↓	X	X	X	X					X	X	X	X	X	X	X		003
4	041519004						1409		33	X	X	X	X					X	X	X	X	X	X	X		MS/MSD 004
5	041519005						1506		11	X	X	X	X					X	X	X	X	X	X	X		005
6	041519006						1554			X	X	X	X					X	X	X	X	X	X	X		006
7	041519007						1635			X	X	X	X					X	X	X	X	X	X	X		007
8	041519008						1640			X	X	X	X					X	X	X	X	X	X	X		008
9	041519009						1721			X	X	X	X					X	X	X	X	X	X	X		009
10	041519010						1751			X	X	X	X					X	X	X	X	X	X	X		010
11	041519011	↓					1832		↓	X	X	X	X					X	X	X	X	X	X	X		011
12	041519012	DI	↓			↓	1950	↓	5				X					X							↓	012

ALB 4-15-19

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
EPA Level 2	[signature] / OBG	4/16/19	1655	[signature] Pace	4/16/19	1655	ROI	Y	N	Y
*Dissolved Metals: Aluminum, Antimony, Copper, Iron, Manganese, Nickel, Silver, Vandium, Zinc,										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Alex Bartelme

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 04/15/19

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

67979-0419-001 60185905

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

QC: KTB 4/16/19

Samples dropped off at Pace GB

Section A Required Client Information:

Company:	O'Brien and Gere Engineers, Inc.
Address:	234 W. Florida St
	Milwaukee, WI
Email To:	GDSdata@OBG.com
Phone: 773-796-4359	Fax:
Requested Due Date/TAT:	standard

Section B Required Project Information:

Report To:	GDSdata@OBG.com
Copy To:	Marcus Byker
	Alex Bartelme
Purchase Order No.:	3400010643 / 470000 4930
Project Name:	Marinette Former MGP
Project Number:	67979/232

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	WEC Business Services, LLC
Address:	PO Box 19800, Green Bay, WI 54307
Pace Quote Reference:	3400010643
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☑ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: WI

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	BTEX 8260B	Methane 8015B	PAH 8270-SIM	Metals 6020A *	Alkalinity 310.2	Sulfate 300.0	Nitrate & Nitrite 353.2						Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
	Analysis Test Y/N																		N	N	N	Y	N	N	N						
1	041619013	GW	G			4-16-19	0747	N	11	X	X	X	X						X	X	X	X	Y	X	Y					N	013
2	041619014						0837		1	X	X	X	X						X	X	X	X	X	X	X						014
3	041619015						0915			X	X	X	X						X	X	X	X	X	X	X						015
4	041619016						1019			X	X	X	X						X	X	X	X	X	X	X						016
5	041619017						1024			X	X	X	X						X	X	X	X	X	X	X						017
6	041619018						1104			X	X	X	X						X	X	X	X	X	X	X						018
7	041619019						1207		↓	X	X	X	X						X	X	X	X	X	X	X						019
8	041619020						1230		9	X	X	X	X						X	X	X	X	X	X	X					Low volume	020
9	041619021	↓					1250		4	X			X						X		X									Low volume	021
10	041619022	OI					1310		3				X						X												022
11	041619023	WP	↓			↓	NA	✓	2				X						X	X										↓	023
12																															

RBB 4/16/19

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
EPA Level 2	4/16/19 KTS	04/16/19	1655	[signature] Pace	4/16/19	1655	ROI	Y	N	Y
*Dissolved Metals: Aluminum, Antimony, Copper, Iron, Manganese, Nickel, Silver, Vandium, Zinc.										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Alex Bartelme

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 04/16/19

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical Services, LLC
1241 Bellevue Street, Suite
Green Bay, WI 54430

Sample Preservation Receipt Form

Client Name: DBG Project # 60185905

All containers needing preservation have been checked and noted below: ☑Yes ☐No ☐N/A Initial when completed: JK Date/ Time:

Lab Lot# of pH paper: 10033581 Lab Std #ID of preservation (if pH adjusted):

	Glass							Plastic							Vials						Jars			General			VOA Vials (>6mm) *					
Pace Lab #	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN		H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001					2						1		1	1				6										✓			✓		2.5 / 5 / 10
002					2						1		1	1				6										✓			✓		2.5 / 5 / 10
003					2						1		1	1				6										✓			✓		2.5 / 5 / 10
004					6						3		3	3				18										✓			✓		2.5 / 5 / 10
005					2						1		1	1				6										✓			✓		2.5 / 5 / 10
006					2						1		1	1				6										✓			✓		2.5 / 5 / 10
007					2						1		1	1				6										✓			✓		2.5 / 5 / 10
008					2						1		1	1				6										✓			✓		2.5 / 5 / 10
009					2						1		1	1				6										✓			✓		2.5 / 5 / 10
010					2						1		1	1				6										✓			✓		2.5 / 5 / 10
011					2						1		1	1				6										✓			✓		2.5 / 5 / 10
012																		3															2.5 / 5 / 10
013					2						1		1	1				6										✓			✓		2.5 / 5 / 10
014					2						1		1	1				6										✓			✓		2.5 / 5 / 10
015					2						1		1	1				6										✓			✓		2.5 / 5 / 10
016					2						1		1	1				6										✓			✓		2.5 / 5 / 10
017					2						1		1	1				6										✓			✓		2.5 / 5 / 10
018					2						1		1	1				6										✓			✓		2.5 / 5 / 10
019					2						1		1	1				6										✓			✓		2.5 / 5 / 10
020					2						1		1	1				4										✓			✓		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 ☐No ☐N/A ***If yes look in headspace column**

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	DG9A	40 mL amber ascorbic	JGFU	4 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP2N	500 mL plastic HNO3	DG9T	40 mL amber Na Thio	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH, Znact	VG9U	40 mL clear vial unpres	WPFU	4 oz plastic jar unpres
AG4U	120 mL amber glass unpres	BP3U	250 mL plastic unpres	VG9H	40 mL clear vial HCL		
AG5U	100 mL amber glass unpres	BP3C	250 mL plastic NaOH	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres	BP3S	250 mL plastic H2SO4			GN:	

Sample Preservation Receipt Form

Client Name: OB 6

Project #: 40185905

	Glass							Plastic							Vials						Jars			General									
Pace Lab #	AG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	BP3C	BP3N	BP3S	DG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
021					2													2															2.5 / 5 / 10
022																		3															2.5 / 5 / 10
023																		2									1						2.5 / 5 / 10
~~024~~ (4-16-19 JL)																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
																																	2.5 / 5 / 10
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																																	2.5 / 5 / 20
																																	2.5 / 5 / 21
																																	2.5 / 5 / 22
																																	2.5 / 5 / 23

Page 2 of 3

Sample Condition Upon Receipt Form (SCUR)

Project #: WO# : 40185905

Client Name: OBG

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: 1.1 /Corr:

Temp Blank Present: ☐ yes ☑ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Person examining contents: Date: 4-16-19 Initials: JK

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

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☑Yes ☐No MS/MSD: ☑Yes ☐No ☐N/A		8. D21-A65V 1 is about 30mL, the other 80mL received, D20-BP3U-100mL 4-16-19 JK
Correct Containers Used:	☑Yes ☐No	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☑Yes ☐No ☐N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: W	☑Yes ☐No ☐N/A	12.
Trip Blank Present:	☑Yes ☐No ☐N/A	13.
Trip Blank Custody Seals Present	☑Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): 416		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ **Date:** 4-17-19