



Gannett Fleming

Excellence Delivered *As Promised*

August 30, 2018

File #55929.005

Ms. Hai Xia Shan
5535 Wild Rose Lane
Eau Claire, WI 54701

Re: Laboratory Results for Water Samples Collected from PW-16 in May and August 2018

Dear Ms. Shan:

On May 9, 2018, Gannett Fleming, Inc. collected a water sample from your home at 5535 Wild Rose Lane. The sample was collected as a follow-up to the water samples collected from your home in September and October 2014, June 2015, and May 2016 and 2017 and in conjunction with on-going groundwater monitoring and remedial activities associated with the WRR Environmental Services facility on Ryder Road. The monitoring and remedial activities at the WRR site are being conducted under the oversight of the Wisconsin Department of Natural Resources (WDNR).

Our designation for your water sample is PW-16. The water sample collected from your home in May was sent to ALS Environmental Laboratory in Holland, Michigan, for analysis of 51 individual volatile organic compounds (VOCs). Only one VOC was detected in the sample: acetone at 1.5 micrograms per liter ($\mu\text{g}/\ell$), which is equivalent to 1.5 parts per billion (ppb). The state and federal drinking water standard for acetone is 9,000 ppb, so the concentration detected in the water sample was far below that value. Acetone was also detected at 1.7 ppb in the trip blank that accompanied the May 2018 sample. The trip blank is prepared in the laboratory using laboratory-grade distilled water and accompanies the sample containers from the lab when they are shipped to the field and then again when the filled sample containers are shipped back to the lab. The trip blank also contained 1.1 ppb of methylene chloride. The compounds detected in the May sample from PW-16 and the trip blank are used to clean glassware and are not indicative of the water quality in your well.

To determine if the compounds detected in PW-16 and the trip blank in May 2018 were due to laboratory contamination, Gannett Fleming collected another sample from your well on August 15, 2018. That sample and a trip blank were submitted to a different laboratory, Pace Analytical Laboratory of Green Bay, for VOC analyses. The sample collected from PW-16 only contained one compound, chloromethane. Chloromethane was once widely used as a refrigerant; however, it is no longer used in consumer products. The concentration of chloromethane measured in the sample collected from PW-16 in August (3.0 ppb) is far below its state and federal drinking water standard of 30 ppb. No other VOCs were detected in the August 2018 water sample collected from PW-11 or the trip blank that accompanied it.

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Gannett Fleming, Inc.

8025 Excelsior Drive, Madison, WI 53717-1900

t 608.836.1500 • f 608.831.3337

www.gannettfleming.com

Gannett Fleming

Ms. Hai Xia Shan
5535 Wild Rose Lane
August 30, 2018

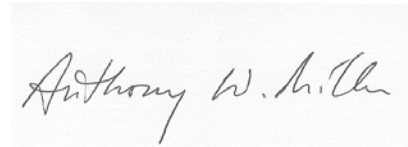
-2-

Taken collectively, we believe that the acetone and chloromethane detected in the PW-16 samples in May and August 2018, respectively, are likely due to laboratory contamination and not indicative of the water in your well. Enclosed are copies of the laboratory reports for the water samples collected from your home (PW-16) in May and August 2018.

A copy of this letter and the May and August 2018 lab reports are being sent to the WDNR for its records. We thank you for your cooperation. Someone from Gannett Fleming will contact you next spring to schedule a time convenient for you for us to collect the next sample. In the meantime, if you have any questions regarding the analytical results of the samples collected in May and August 2018, please call me at the number listed below.

Sincerely,

GANNETT FLEMING, INC.

A handwritten signature in cursive script that reads "Anthony W. Miller". The signature is written in black ink on a light-colored background.

Anthony W. Miller, P.S.S.
Senior Environmental Scientist
awmiller@gfnet.com
Ph: 800-899-3337 ext. 6716

AWM/jec/Enc.

cc: Mae Willkom (WDNR)



21-May-2018

Anthony Miller
Gannett Fleming, Inc.
8025 Excelsior Dr.
Madison, WI 53717-1900

Re: **WRR (55929.005)**

Work Order: **1805782**

Dear Anthony,

Revision: **1**

ALS Environmental received 2 samples on 11-May-2018 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 18.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Beamish".

Electronically approved by: Tom Beamish

Tom Beamish
Senior Project Manager

Certificate No: WI: 399084510

Report of Laboratory Analysis

ADDRESS 3352 128th Ave Holland, Michigan 49424 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Gannett Fleming, Inc.
Project: WRR (55929.005)
Work Order: 1805782

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1805782-01	PW-16	Water		05/09/18 17:15	05/11/18 09:30	<input type="checkbox"/>
1805782-02	Trip Blank	Water		05/09/18	05/11/18 09:30	<input type="checkbox"/>

Client: Gannett Fleming, Inc.
Project: WRR (55929.005)
WorkOrder: 1805782

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
µg/L	Micrograms per Liter

Client: Gannett Fleming, Inc.
Project: WRR (55929.005)
Work Order: 1805782

Case Narrative

Samples for the above noted Work Order were received on 05/11/18. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting. A copy of the laboratory's scope of accreditation is available upon request.

With the following exceptions, all sample analyses achieved analytical criteria.

Volatile Organics:

No deviations or anomalies were noted.

ALS Group, USA

Date: 21-May-18

Client: Gannett Fleming, Inc.
Project: WRR (55929.005)
Sample ID: PW-16
Collection Date: 05/09/18 05:15 PM

Work Order: 1805782
Lab ID: 1805782-01
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Method: SW8260C			Analyst: LSY	
1,1,1-Trichloroethane	U		0.33	1.0	µg/L	1	05/16/18 19:52
1,1,2,2-Tetrachloroethane	U		0.17	1.0	µg/L	1	05/16/18 19:52
1,1,2-Trichloroethane	U		0.22	1.0	µg/L	1	05/16/18 19:52
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/16/18 19:52
1,1-Dichloroethane	U		0.48	1.0	µg/L	1	05/16/18 19:52
1,1-Dichloroethene	U		0.36	1.0	µg/L	1	05/16/18 19:52
1,2,3-Trichlorobenzene	U		0.29	1.0	µg/L	1	05/16/18 19:52
1,2,4-Trichlorobenzene	U		0.25	1.0	µg/L	1	05/16/18 19:52
1,2-Dibromo-3-chloropropane	U		0.43	1.0	µg/L	1	05/16/18 19:52
1,2-Dibromoethane	U		0.17	1.0	µg/L	1	05/16/18 19:52
1,2-Dichlorobenzene	U		0.12	1.0	µg/L	1	05/16/18 19:52
1,2-Dichloroethane	U		0.11	1.0	µg/L	1	05/16/18 19:52
1,2-Dichloropropane	U		0.34	1.0	µg/L	1	05/16/18 19:52
1,3-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/16/18 19:52
1,4-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/16/18 19:52
2-Butanone	U		0.47	5.0	µg/L	1	05/16/18 19:52
2-Hexanone	U		0.50	5.0	µg/L	1	05/16/18 19:52
4-Methyl-2-pentanone	U		0.52	1.0	µg/L	1	05/16/18 19:52
Acetone	1.5	J	0.47	10	µg/L	1	05/16/18 19:52
Benzene	U		0.42	1.0	µg/L	1	05/16/18 19:52
Bromochloromethane	U		0.15	1.0	µg/L	1	05/16/18 19:52
Bromodichloromethane	U		0.22	1.0	µg/L	1	05/16/18 19:52
Bromoform	U		0.56	1.0	µg/L	1	05/16/18 19:52
Bromomethane	U		0.29	1.0	µg/L	1	05/16/18 19:52
Carbon disulfide	U		0.39	1.0	µg/L	1	05/16/18 19:52
Carbon tetrachloride	U		0.32	1.0	µg/L	1	05/16/18 19:52
Chlorobenzene	U		0.21	1.0	µg/L	1	05/16/18 19:52
Chloroethane	U		0.68	1.0	µg/L	1	05/16/18 19:52
Chloroform	U		0.46	1.0	µg/L	1	05/16/18 19:52
Chloromethane	U		0.68	1.0	µg/L	1	05/16/18 19:52
cis-1,2-Dichloroethene	U		0.38	1.0	µg/L	1	05/16/18 19:52
cis-1,3-Dichloropropene	U		0.13	1.0	µg/L	1	05/16/18 19:52
Cyclohexane	U		0.18	1.0	µg/L	1	05/16/18 19:52
Dibromochloromethane	U		0.20	1.0	µg/L	1	05/16/18 19:52
Dichlorodifluoromethane	U		0.30	1.0	µg/L	1	05/16/18 19:52
Ethylbenzene	U		0.29	1.0	µg/L	1	05/16/18 19:52
Isopropylbenzene	U		0.17	1.0	µg/L	1	05/16/18 19:52
m,p-Xylene	U		0.53	2.0	µg/L	1	05/16/18 19:52

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 21-May-18

Client: Gannett Fleming, Inc.
Project: WRR (55929.005)
Sample ID: PW-16
Collection Date: 05/09/18 05:15 PM

Work Order: 1805782
Lab ID: 1805782-01
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methyl acetate	U		0.26	2.0	µg/L	1	05/16/18 19:52
Methyl tert-butyl ether	U		0.21	1.0	µg/L	1	05/16/18 19:52
Methylcyclohexane	U		0.090	1.0	µg/L	1	05/16/18 19:52
Methylene chloride	U		0.16	5.0	µg/L	1	05/16/18 19:52
o-Xylene	U		0.19	1.0	µg/L	1	05/16/18 19:52
Styrene	U		0.19	1.0	µg/L	1	05/16/18 19:52
Tetrachloroethene	U		0.28	1.0	µg/L	1	05/16/18 19:52
Toluene	U		0.32	1.0	µg/L	1	05/16/18 19:52
trans-1,2-Dichloroethene	U		0.48	1.0	µg/L	1	05/16/18 19:52
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/16/18 19:52
Trichloroethene	U		0.33	1.0	µg/L	1	05/16/18 19:52
Trichlorofluoromethane	U		0.24	1.0	µg/L	1	05/16/18 19:52
Vinyl chloride	U		0.53	1.0	µg/L	1	05/16/18 19:52
Surr: 1,2-Dichloroethane-d4	104			75-120	%REC	1	05/16/18 19:52
Surr: 4-Bromofluorobenzene	99.2			80-110	%REC	1	05/16/18 19:52
Surr: Dibromofluoromethane	95.0			85-115	%REC	1	05/16/18 19:52
Surr: Toluene-d8	97.0			85-110	%REC	1	05/16/18 19:52

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 21-May-18

Client: Gannett Fleming, Inc.
Project: WRR (55929.005)
Sample ID: Trip Blank
Collection Date: 05/09/18

Work Order: 1805782
Lab ID: 1805782-02
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Method: SW8260C			Analyst: LSY	
1,1,1-Trichloroethane	U		0.33	1.0	µg/L	1	05/16/18 17:29
1,1,2,2-Tetrachloroethane	U		0.17	1.0	µg/L	1	05/16/18 17:29
1,1,2-Trichloroethane	U		0.22	1.0	µg/L	1	05/16/18 17:29
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/16/18 17:29
1,1-Dichloroethane	U		0.48	1.0	µg/L	1	05/16/18 17:29
1,1-Dichloroethene	U		0.36	1.0	µg/L	1	05/16/18 17:29
1,2,3-Trichlorobenzene	U		0.29	1.0	µg/L	1	05/16/18 17:29
1,2,4-Trichlorobenzene	U		0.25	1.0	µg/L	1	05/16/18 17:29
1,2-Dibromo-3-chloropropane	U		0.43	1.0	µg/L	1	05/16/18 17:29
1,2-Dibromoethane	U		0.17	1.0	µg/L	1	05/16/18 17:29
1,2-Dichlorobenzene	U		0.12	1.0	µg/L	1	05/16/18 17:29
1,2-Dichloroethane	U		0.11	1.0	µg/L	1	05/16/18 17:29
1,2-Dichloropropane	U		0.34	1.0	µg/L	1	05/16/18 17:29
1,3-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/16/18 17:29
1,4-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/16/18 17:29
2-Butanone	U		0.47	5.0	µg/L	1	05/16/18 17:29
2-Hexanone	U		0.50	5.0	µg/L	1	05/16/18 17:29
4-Methyl-2-pentanone	U		0.52	1.0	µg/L	1	05/16/18 17:29
Acetone	1.7	J	0.47	10	µg/L	1	05/16/18 17:29
Benzene	U		0.42	1.0	µg/L	1	05/16/18 17:29
Bromochloromethane	U		0.15	1.0	µg/L	1	05/16/18 17:29
Bromodichloromethane	U		0.22	1.0	µg/L	1	05/16/18 17:29
Bromoform	U		0.56	1.0	µg/L	1	05/16/18 17:29
Bromomethane	U		0.29	1.0	µg/L	1	05/16/18 17:29
Carbon disulfide	U		0.39	1.0	µg/L	1	05/16/18 17:29
Carbon tetrachloride	U		0.32	1.0	µg/L	1	05/16/18 17:29
Chlorobenzene	U		0.21	1.0	µg/L	1	05/16/18 17:29
Chloroethane	U		0.68	1.0	µg/L	1	05/16/18 17:29
Chloroform	U		0.46	1.0	µg/L	1	05/16/18 17:29
Chloromethane	U		0.68	1.0	µg/L	1	05/16/18 17:29
cis-1,2-Dichloroethene	U		0.38	1.0	µg/L	1	05/16/18 17:29
cis-1,3-Dichloropropene	U		0.13	1.0	µg/L	1	05/16/18 17:29
Cyclohexane	U		0.18	1.0	µg/L	1	05/16/18 17:29
Dibromochloromethane	U		0.20	1.0	µg/L	1	05/16/18 17:29
Dichlorodifluoromethane	U		0.30	1.0	µg/L	1	05/16/18 17:29
Ethylbenzene	U		0.29	1.0	µg/L	1	05/16/18 17:29
Isopropylbenzene	U		0.17	1.0	µg/L	1	05/16/18 17:29
m,p-Xylene	U		0.53	2.0	µg/L	1	05/16/18 17:29

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 21-May-18

Client: Gannett Fleming, Inc.
Project: WRR (55929.005)
Sample ID: Trip Blank
Collection Date: 05/09/18

Work Order: 1805782
Lab ID: 1805782-02
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methyl acetate	U		0.26	2.0	µg/L	1	05/16/18 17:29
Methyl tert-butyl ether	U		0.21	1.0	µg/L	1	05/16/18 17:29
Methylcyclohexane	U		0.090	1.0	µg/L	1	05/16/18 17:29
Methylene chloride	1.1	J	0.16	5.0	µg/L	1	05/16/18 17:29
o-Xylene	U		0.19	1.0	µg/L	1	05/16/18 17:29
Styrene	U		0.19	1.0	µg/L	1	05/16/18 17:29
Tetrachloroethene	U		0.28	1.0	µg/L	1	05/16/18 17:29
Toluene	U		0.32	1.0	µg/L	1	05/16/18 17:29
trans-1,2-Dichloroethene	U		0.48	1.0	µg/L	1	05/16/18 17:29
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/16/18 17:29
Trichloroethene	U		0.33	1.0	µg/L	1	05/16/18 17:29
Trichlorofluoromethane	U		0.24	1.0	µg/L	1	05/16/18 17:29
Vinyl chloride	U		0.53	1.0	µg/L	1	05/16/18 17:29
Surr: 1,2-Dichloroethane-d4	104			75-120	%REC	1	05/16/18 17:29
Surr: 4-Bromofluorobenzene	97.2			80-110	%REC	1	05/16/18 17:29
Surr: Dibromofluoromethane	98.5			85-115	%REC	1	05/16/18 17:29
Surr: Toluene-d8	95.8			85-110	%REC	1	05/16/18 17:29

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Gannett Fleming, Inc.
Work Order: 1805782
Project: WRR (55929.005)

QC BATCH REPORT

Batch ID: **R236015A** Instrument ID **VMS10** Method: **SW8260C**

MBLK		Sample ID: VBLKW1-180516-R236015A			Units: µg/L		Analysis Date: 05/16/18 03:33 PM				
Client ID:		Run ID: VMS10_180516A			SeqNo: 5038202		Prep Date:		DF: 1		
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	0.33	1.0								
1,1,2,2-Tetrachloroethane	U	0.17	1.0								
1,1,2-Trichloroethane	U	0.22	1.0								
1,1,2-Trichlorotrifluoroethane	U	0.18	1.0								
1,1-Dichloroethane	U	0.48	1.0								
1,1-Dichloroethene	U	0.36	1.0								
1,2,3-Trichlorobenzene	U	0.29	1.0								
1,2,4-Trichlorobenzene	U	0.25	1.0								
1,2-Dibromo-3-chloropropane	U	0.43	1.0								
1,2-Dibromoethane	U	0.17	1.0								
1,2-Dichlorobenzene	U	0.12	1.0								
1,2-Dichloroethane	U	0.11	1.0								
1,2-Dichloropropane	U	0.34	1.0								
1,3-Dichlorobenzene	U	0.13	1.0								
1,4-Dichlorobenzene	U	0.13	1.0								
2-Butanone	U	0.47	5.0								
2-Hexanone	U	0.5	5.0								
4-Methyl-2-pentanone	U	0.52	1.0								
Acetone	U	0.47	10								
Benzene	U	0.42	1.0								
Bromochloromethane	U	0.15	1.0								
Bromodichloromethane	U	0.22	1.0								
Bromoform	U	0.56	1.0								
Bromomethane	U	0.29	1.0								
Carbon disulfide	U	0.39	1.0								
Carbon tetrachloride	U	0.32	1.0								
Chlorobenzene	U	0.21	1.0								
Chloroethane	U	0.68	1.0								
Chloroform	U	0.46	1.0								
Chloromethane	U	0.68	1.0								
cis-1,2-Dichloroethene	U	0.38	1.0								
cis-1,3-Dichloropropene	U	0.13	1.0								
Cyclohexane	U	0.18	1.0								
Dibromochloromethane	U	0.2	1.0								
Dichlorodifluoromethane	U	0.3	1.0								
Ethylbenzene	U	0.29	1.0								
Isopropylbenzene	U	0.17	1.0								
m,p-Xylene	U	0.53	2.0								
Methyl acetate	U	0.26	2.0								
Methyl tert-butyl ether	U	0.21	1.0								
Methylcyclohexane	U	0.09	1.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Client: Gannett Fleming, Inc.

Work Order: 1805782

Project: WRR (55929.005)

QC BATCH REPORT

Batch ID: **R236015A** Instrument ID **VMS10** Method: **SW8260C**

Methylene chloride	U	0.16	5.0						
o-Xylene	U	0.19	1.0						
Styrene	U	0.19	1.0						
Tetrachloroethene	U	0.28	1.0						
Toluene	U	0.32	1.0						
trans-1,2-Dichloroethene	U	0.48	1.0						
trans-1,3-Dichloropropene	U	0.15	1.0						
Trichloroethene	U	0.33	1.0						
Trichlorofluoromethane	U	0.24	1.0						
Vinyl chloride	U	0.53	1.0						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.46</i>	<i>0</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.37</i>	<i>0</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.8</i>	<i>80-110</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>20.43</i>	<i>0</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>19.46</i>	<i>0</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.3</i>	<i>85-110</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

QC Page: 2 of 8

Client: Gannett Fleming, Inc.
 Work Order: 1805782
 Project: WRR (55929.005)

QC BATCH REPORT

Batch ID: **R236015A** Instrument ID **VMS10** Method: **SW8260C**

LCS		Sample ID: VLC5W1-180516-R236015A				Units: µg/L		Analysis Date: 05/16/18 03:01 PM			
Client ID:		Run ID: VMS10_180516A				SeqNo: 5039144		Prep Date:		DF: 1	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	20.26	0.33	1.0	20	0	101	75-130	0			
1,1,2,2-Tetrachloroethane	22.81	0.17	1.0	20	0	114	75-130	0			
1,1,2-Trichloroethane	20.54	0.22	1.0	20	0	103	75-125	0			
1,1-Dichloroethane	21.35	0.48	1.0	20	0	107	68-142	0			
1,1-Dichloroethene	21.95	0.36	1.0	20	0	110	70-145	0			
1,2,3-Trichlorobenzene	19.23	0.29	1.0	20	0	96.2	70-140	0			
1,2,4-Trichlorobenzene	19.22	0.25	1.0	20	0	96.1	70-135	0			
1,2-Dibromo-3-chloropropane	19.92	0.43	1.0	20	0	99.6	60-130	0			
1,2-Dibromoethane	24.02	0.17	1.0	20	0	120	67-155	0			
1,2-Dichlorobenzene	19.55	0.12	1.0	20	0	97.8	70-130	0			
1,2-Dichloroethane	19.95	0.11	1.0	20	0	99.8	78-125	0			
1,2-Dichloropropane	20.45	0.34	1.0	20	0	102	75-125	0			
1,3-Dichlorobenzene	19.65	0.13	1.0	20	0	98.2	75-130	0			
1,4-Dichlorobenzene	20.14	0.13	1.0	20	0	101	75-130	0			
2-Butanone	21.63	0.47	5.0	20	0	108	55-150	0			
2-Hexanone	22.68	0.5	5.0	20	0	113	60-135	0			
4-Methyl-2-pentanone	33.27	0.52	1.0	20	0	166	77-178	0			
Acetone	17.4	0.47	10	20	0	87	60-160	0			
Benzene	20.15	0.42	1.0	20	0	101	85-125	0			
Bromochloromethane	21.36	0.15	1.0	20	0	107	72-141	0			
Bromodichloromethane	20.12	0.22	1.0	20	0	101	75-125	0			
Bromoform	19.45	0.56	1.0	20	0	97.2	60-125	0			
Bromomethane	14.13	0.29	1.0	20	0	70.6	30-185	0			
Carbon disulfide	17.16	0.39	1.0	20	0	85.8	60-165	0			
Carbon tetrachloride	19.92	0.32	1.0	20	0	99.6	65-140	0			
Chlorobenzene	19.44	0.21	1.0	20	0	97.2	80-120	0			
Chloroethane	19.81	0.68	1.0	20	0	99	50-140	0			
Chloroform	20.62	0.46	1.0	20	0	103	80-130	0			
Chloromethane	19.92	0.68	1.0	20	0	99.6	46-148	0			
cis-1,2-Dichloroethene	22.35	0.38	1.0	20	0	112	75-134	0			
cis-1,3-Dichloropropene	21.39	0.13	1.0	20	0	107	70-130	0			
Dibromochloromethane	19.46	0.2	1.0	20	0	97.3	60-115	0			
Dichlorodifluoromethane	14.67	0.3	1.0	20	0	73.4	20-120	0			
Ethylbenzene	19.69	0.29	1.0	20	0	98.4	76-123	0			
Isopropylbenzene	20.07	0.17	1.0	20	0	100	80-127	0			
m,p-Xylene	39.55	0.53	2.0	40	0	98.9	75-130	0			
Methyl tert-butyl ether	24.08	0.21	1.0	20	0	120	68-129	0			
Methylene chloride	20.21	0.16	5.0	20	0	101	75-140	0			
o-Xylene	20.03	0.19	1.0	20	0	100	76-127	0			
Styrene	20.83	0.19	1.0	20	0	104	83-137	0			
Tetrachloroethene	19.8	0.28	1.0	20	0	99	68-166	0			
Toluene	19.12	0.32	1.0	20	0	95.6	76-125	0			
trans-1,2-Dichloroethene	22.36	0.48	1.0	20	0	112	80-140	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Client: Gannett Fleming, Inc.

Work Order: 1805782

Project: WRR (55929.005)

QC BATCH REPORT

Batch ID: R236015A	Instrument ID VMS10	Method: SW8260C							
trans-1,3-Dichloropropene	20.71	0.15	1.0	20	0	104	56-132	0	
Trichloroethene	19.23	0.33	1.0	20	0	96.2	84-130	0	
Trichlorofluoromethane	19.99	0.24	1.0	20	0	100	60-140	0	
Vinyl chloride	19.3	0.53	1.0	20	0	96.5	50-136	0	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.17</i>	<i>0</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.43</i>	<i>0</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>80-110</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>20.76</i>	<i>0</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>104</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>19.49</i>	<i>0</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.4</i>	<i>85-110</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Client: Gannett Fleming, Inc.
 Work Order: 1805782
 Project: WRR (55929.005)

QC BATCH REPORT

Batch ID: **R236015A** Instrument ID **VMS10** Method: **SW8260C**

MS		Sample ID: 1805785-07A MS				Units: µg/L		Analysis Date: 05/16/18 10:15 PM			
Client ID:		Run ID: VMS10_180516A				SeqNo: 5038218		Prep Date:		DF: 10	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	264.4	3.3	10	200	32.5	116	75-130	0			
1,1,2,2-Tetrachloroethane	236.4	1.7	10	200	0	118	75-130	0			
1,1,2-Trichloroethane	219.5	2.2	10	200	0	110	75-125	0			
1,1-Dichloroethane	383.8	4.8	10	200	155.7	114	68-142	0			
1,1-Dichloroethene	224.1	3.6	10	200	0	112	70-145	0			
1,2,3-Trichlorobenzene	204.7	2.9	10	200	0	102	70-140	0			
1,2,4-Trichlorobenzene	197.9	2.5	10	200	0	99	70-135	0			
1,2-Dibromo-3-chloropropane	211.8	4.3	10	200	0	106	60-130	0			
1,2-Dibromoethane	250.7	1.7	10	200	0	125	67-155	0			
1,2-Dichlorobenzene	248.3	1.2	10	200	42.3	103	70-130	0			
1,2-Dichloroethane	222.1	1.1	10	200	0	111	78-125	0			
1,2-Dichloropropane	231.2	3.4	10	200	0	116	75-125	0			
1,3-Dichlorobenzene	212.6	1.3	10	200	0	106	75-130	0			
1,4-Dichlorobenzene	214.6	1.3	10	200	0	107	75-130	0			
2-Butanone	342.3	4.7	50	200	116.3	113	55-150	0			
2-Hexanone	242.3	5	50	200	0	121	60-135	0			
4-Methyl-2-pentanone	334.5	5.2	10	200	0	167	77-178	0			
Acetone	327.6	4.7	100	200	133.8	96.9	60-160	0			
Benzene	235	4.2	10	200	0	118	85-125	0			
Bromochloromethane	246.6	1.5	10	200	0	123	72-141	0			
Bromodichloromethane	210.6	2.2	10	200	0	105	75-125	0			
Bromoform	185.2	5.6	10	200	0	92.6	60-125	0			
Bromomethane	159.3	2.9	10	200	0	79.6	30-185	0			
Carbon disulfide	186.3	3.9	10	200	0	93.2	60-165	0			
Carbon tetrachloride	232.5	3.2	10	200	0	116	65-140	0			
Chlorobenzene	210.4	2.1	10	200	0	105	80-120	0			
Chloroethane	250.7	6.8	10	200	11.8	119	50-140	0			
Chloroform	228	4.6	10	200	0	114	80-130	0			
Chloromethane	267.3	6.8	10	200	0	134	46-148	0			
cis-1,2-Dichloroethene	339.3	3.8	10	200	188.5	75.4	75-134	0			
cis-1,3-Dichloropropene	222.9	1.3	10	200	0	111	70-130	0			
Dibromochloromethane	190	2	10	200	0	95	60-115	0			
Dichlorodifluoromethane	232.7	3	10	200	82.4	75.2	20-120	0			
Ethylbenzene	2263	2.9	10	200	2179	42.1	76-123	0			SEO
Isopropylbenzene	377.7	1.7	10	200	149.9	114	80-127	0			
m,p-Xylene	7989	5.3	20	400	8149	-40	75-130	0			SEO
Methyl tert-butyl ether	257.6	2.1	10	200	0	129	68-129	0			
Methylene chloride	219.5	1.6	50	200	0	110	75-140	0			
o-Xylene	2392	1.9	10	200	2288	52	76-127	0			SEO
Styrene	299	1.9	10	200	0	150	83-137	0			S
Tetrachloroethene	231.2	2.8	10	200	15.7	108	68-166	0			
Toluene	852	3.2	10	200	700	76	76-125	0			
trans-1,2-Dichloroethene	258.4	4.8	10	200	0	129	80-140	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Client: Gannett Fleming, Inc.

Work Order: 1805782

Project: WRR (55929.005)

QC BATCH REPORT

Batch ID: R236015A	Instrument ID VMS10	Method: SW8260C							
trans-1,3-Dichloropropene	202.7	1.5	10	200	0	101	56-132	0	
Trichloroethene	233.4	3.3	10	200	0	117	84-130	0	
Trichlorofluoromethane	257.5	2.4	10	200	0	129	60-140	0	
Vinyl chloride	322	5.3	10	200	83.9	119	50-136	0	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>208</i>	<i>0</i>	<i>0</i>	<i>200</i>	<i>0</i>	<i>104</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>205.4</i>	<i>0</i>	<i>0</i>	<i>200</i>	<i>0</i>	<i>103</i>	<i>80-110</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>218.6</i>	<i>0</i>	<i>0</i>	<i>200</i>	<i>0</i>	<i>109</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>191.2</i>	<i>0</i>	<i>0</i>	<i>200</i>	<i>0</i>	<i>95.6</i>	<i>85-110</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Client: Gannett Fleming, Inc.
 Work Order: 1805782
 Project: WRR (55929.005)

QC BATCH REPORT

Batch ID: **R236015A** Instrument ID **VMS10** Method: **SW8260C**

MSD		Sample ID: 1805785-07A MSD				Units: µg/L		Analysis Date: 05/16/18 10:31 PM			
Client ID:		Run ID: VMS10_180516A				SeqNo: 5038219		Prep Date:		DF: 10	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	268.5	3.3	10	200	32.5	118	75-130	264.4	1.54	30	
1,1,2,2-Tetrachloroethane	245.3	1.7	10	200	0	123	75-130	236.4	3.7	30	
1,1,2-Trichloroethane	228.5	2.2	10	200	0	114	75-125	219.5	4.02	30	
1,1-Dichloroethane	405	4.8	10	200	155.7	125	68-142	383.8	5.38	30	
1,1-Dichloroethene	238.2	3.6	10	200	0	119	70-145	224.1	6.1	30	
1,2,3-Trichlorobenzene	213.3	2.9	10	200	0	107	70-140	204.7	4.11	30	
1,2,4-Trichlorobenzene	207.2	2.5	10	200	0	104	70-135	197.9	4.59	30	
1,2-Dibromo-3-chloropropane	214.7	4.3	10	200	0	107	60-130	211.8	1.36	30	
1,2-Dibromoethane	265.9	1.7	10	200	0	133	67-155	250.7	5.88	30	
1,2-Dichlorobenzene	256.2	1.2	10	200	42.3	107	70-130	248.3	3.13	30	
1,2-Dichloroethane	229.4	1.1	10	200	0	115	78-125	222.1	3.23	30	
1,2-Dichloropropane	241.2	3.4	10	200	0	121	75-125	231.2	4.23	30	
1,3-Dichlorobenzene	219.4	1.3	10	200	0	110	75-130	212.6	3.15	30	
1,4-Dichlorobenzene	223.7	1.3	10	200	0	112	75-130	214.6	4.15	30	
2-Butanone	370.3	4.7	50	200	116.3	127	55-150	342.3	7.86	30	
2-Hexanone	256.7	5	50	200	0	128	60-135	242.3	5.77	30	
4-Methyl-2-pentanone	357.3	5.2	10	200	0	179	77-178	334.5	6.59	30	S
Acetone	356.6	4.7	100	200	133.8	111	60-160	327.6	8.48	30	
Benzene	245	4.2	10	200	0	122	85-125	235	4.17	30	
Bromochloromethane	264.6	1.5	10	200	0	132	72-141	246.6	7.04	30	
Bromodichloromethane	223.6	2.2	10	200	0	112	75-125	210.6	5.99	30	
Bromoform	198.1	5.6	10	200	0	99	60-125	185.2	6.73	30	
Bromomethane	164.3	2.9	10	200	0	82.2	30-185	159.3	3.09	30	
Carbon disulfide	207.6	3.9	10	200	0	104	60-165	186.3	10.8	30	
Carbon tetrachloride	236.5	3.2	10	200	0	118	65-140	232.5	1.71	30	
Chlorobenzene	223.8	2.1	10	200	0	112	80-120	210.4	6.17	30	
Chloroethane	268.5	6.8	10	200	11.8	128	50-140	250.7	6.86	30	
Chloroform	245.1	4.6	10	200	0	123	80-130	228	7.23	30	
Chloromethane	294.3	6.8	10	200	0	147	46-148	267.3	9.62	30	
cis-1,2-Dichloroethene	344.8	3.8	10	200	188.5	78.2	75-134	339.3	1.61	30	
cis-1,3-Dichloropropene	232.2	1.3	10	200	0	116	70-130	222.9	4.09	30	
Dibromochloromethane	204.8	2	10	200	0	102	60-115	190	7.5	30	
Dichlorodifluoromethane	246.9	3	10	200	82.4	82.2	20-120	232.7	5.92	30	
Ethylbenzene	2383	2.9	10	200	2179	102	76-123	2263	5.18	30	EO
Isopropylbenzene	396.2	1.7	10	200	149.9	123	80-127	377.7	4.78	30	
m,p-Xylene	8298	5.3	20	400	8149	37.4	75-130	7989	3.8	30	SEO
Methyl tert-butyl ether	280.7	2.1	10	200	0	140	68-129	257.6	8.58	30	S
Methylene chloride	239.1	1.6	50	200	0	120	75-140	219.5	8.55	30	
o-Xylene	2516	1.9	10	200	2288	114	76-127	2392	5.03	30	EO
Styrene	312.9	1.9	10	200	0	156	83-137	299	4.54	30	S
Tetrachloroethene	241.4	2.8	10	200	15.7	113	68-166	231.2	4.32	30	
Toluene	892.2	3.2	10	200	700	96.1	76-125	852	4.61	30	
trans-1,2-Dichloroethene	277	4.8	10	200	0	138	80-140	258.4	6.95	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Client: Gannett Fleming, Inc.

Work Order: 1805782

Project: WRR (55929.005)

QC BATCH REPORT

Batch ID: R236015A	Instrument ID VMS10	Method: SW8260C								
trans-1,3-Dichloropropene	219	1.5	10	200	0	110	56-132	202.7	7.73	30
Trichloroethene	236.4	3.3	10	200	0	118	84-130	233.4	1.28	30
Trichlorofluoromethane	277.2	2.4	10	200	0	139	60-140	257.5	7.37	30
Vinyl chloride	340.7	5.3	10	200	83.9	128	50-136	322	5.64	30
<i>Surr: 1,2-Dichloroethane-d4</i>	210.6	0	0	200	0	105	75-120	208	1.24	30
<i>Surr: 4-Bromofluorobenzene</i>	216.9	0	0	200	0	108	80-110	205.4	5.45	30
<i>Surr: Dibromofluoromethane</i>	214	0	0	200	0	107	85-115	218.6	2.13	30
<i>Surr: Toluene-d8</i>	196.2	0	0	200	0	98.1	85-110	191.2	2.58	30

The following samples were analyzed in this batch:

1805782-01A	1805782-02A
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Cincinnati, OH
+1 513 733 5336

Everett, WA
+1 425 356 2600

Fort Collins, CO
+1 970 490 1511

Holland, MI
+1 616 399 6070

Chain of Custody Form

Page 1 of 1

COC ID: 185398

Houston, TX
+1 281 530 5656

Middletown, PA
+1 717 944 5541

Spring City, PA
+1 610 948 4903

Salt Lake City, UT
+1 801 266 7700

South Charleston, WV
+1 304 356 3168

York, PA
+1 717 505 5280

ALS Project Manager: TBB

ALS Work Order #: 1805782

Customer Information		Project Information		Parameter/Method Request for Analysis											
Purchase Order	Quote 6934	Project Name	WRR	A	VOCs 8260										
Work Order		Project Number	55929,005	B											
Company Name	Gannett Fleming, Inc.	Bill To Company	Gannett Fleming, Inc.	C											
Send Report To	Anthony Miller	Invoice Attn	Accounts Payable	D											
Address	8025 Excelsior Dr.	Address	8025 Excelsior Dr.	E											
				F											
City/State/Zip	Madison, WI 53717	City/State/Zip	Madison, WI 53717	G											
Phone	(608) 836-1500	Phone	(608) 836-1500	H											
Fax		Fax		I											
e-Mail Address	awmiller@gfnet.com	e-Mail Address		J											

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	PW-16	5/9/18	17:15	GW	H4	3	3										
2	Trip Blank	"		"	"	2	2										
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign <u>Chebea Payne</u> <u>Chris Dye</u>		Shipment Method <u>FedEx</u>		Required Turnaround Time: (Check Box)				Results Due Date:			
Relinquished by: <u>Chris Dye</u>	Date: <u>5/10/18</u>	Time: <u>12:30</u>	Received by: <u>FedEx</u>		Notes:						
Relinquished by: <u>FedEx</u>	Date: <u>5/11/18</u>	Time: <u>0930</u>	Received by (Laboratory):		Cooler ID: <u>502</u>	Cooler Temp.: <u>3.4°C</u>	QC Package: (Check One Box Below)				
Logged by (Laboratory): <u>Kew</u>	Date: <u>5/11/18</u>	Time: <u>1335</u>	Checked by (Laboratory): <u>TBB</u>								
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035											

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
3. The Chain of Custody is a legal document. All information must be completed accurately.

Sample Receipt Checklist

Client Name: **GANNETT FLEMING - WI**

Date/Time Received: **11-May-18 09:30**

Work Order: **1805782**

Received by: **KRW**

Checklist completed by Keith Wierenga 11-May-18
eSignature Date

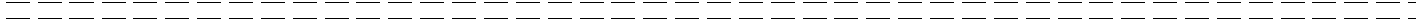
Reviewed by: Tom Bramish 11-May-18
eSignature Date

Matrices: Water

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>3.4/3.4 C</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u></u>		
Date/Time sample(s) sent to storage:	<u>5/11/2018 1:37:01 PM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:	<u></u>		

Login Notes:



Client Contacted: _____ Date Contacted: _____ Person Contacted: _____

Contacted By: _____ Regarding: _____

Comments:

CorrectiveAction:

August 27, 2018

Tony Miller
Gannett Fleming
8025 Excelsior Drive
Madison, WI 53717

RE: Project: 55929.005 WRR-PW-16
Pace Project No.: 40174239

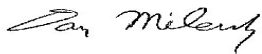
Dear Tony Miller:

Enclosed are the analytical results for sample(s) received by the laboratory on August 17, 2018. 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.

Revised Report: The Project ID has been corrected.

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

Sincerely,



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

Enclosures

cc: Chelsea Payne, Gannett Fleming Inc.



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 55929.005 WRR-PW-16

Pace Project No.: 40174239

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 55929.005 WRR-PW-16

Pace Project No.: 40174239

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40174239001	PW-16	Water	08/14/18 17:55	08/17/18 09:35
40174239002	TRIP BLANK	Water	08/15/18 00:00	08/17/18 09:35

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 55929.005 WRR-PW-16

Pace Project No.: 40174239

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40174239001	PW-16	EPA 8260	LAP	69
40174239002	TRIP BLANK	EPA 8260	LAP	69

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: 55929.005 WRR-PW-16

Pace Project No.: 40174239

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40174239001 EPA 8260	PW-16 Chloromethane	3.0J	ug/L	7.3	08/21/18 16:32	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 55929.005 WRR-PW-16

Pace Project No.: 40174239

Sample: PW-16 **Lab ID: 40174239001** Collected: 08/14/18 17:55 Received: 08/17/18 09:35 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates		Analytical Method: EPA 8260							
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		08/21/18 16:32	630-20-6	
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		08/21/18 16:32	71-55-6	
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		08/21/18 16:32	79-34-5	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		08/21/18 16:32	79-00-5	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		08/21/18 16:32	75-34-3	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		08/21/18 16:32	75-35-4	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		08/21/18 16:32	563-58-6	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		08/21/18 16:32	87-61-6	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		08/21/18 16:32	96-18-4	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		08/21/18 16:32	120-82-1	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		08/21/18 16:32	95-63-6	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		08/21/18 16:32	96-12-8	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		08/21/18 16:32	106-93-4	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		08/21/18 16:32	95-50-1	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		08/21/18 16:32	107-06-2	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		08/21/18 16:32	78-87-5	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		08/21/18 16:32	108-67-8	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		08/21/18 16:32	541-73-1	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		08/21/18 16:32	142-28-9	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		08/21/18 16:32	106-46-7	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		08/21/18 16:32	594-20-7	
2-Butanone (MEK)	<2.9	ug/L	20.0	2.9	1		08/21/18 16:32	78-93-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		08/21/18 16:32	95-49-8	
2-Propanol	<28.9	ug/L	250	28.9	1		08/21/18 16:32	67-63-0	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		08/21/18 16:32	106-43-4	
4-Methyl-2-pentanone (MIBK)	<1.5	ug/L	5.1	1.5	1		08/21/18 16:32	108-10-1	
Acetone	<2.7	ug/L	20.0	2.7	1		08/21/18 16:32	67-64-1	
Benzene	<0.25	ug/L	1.0	0.25	1		08/21/18 16:32	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		08/21/18 16:32	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		08/21/18 16:32	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		08/21/18 16:32	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		08/21/18 16:32	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		08/21/18 16:32	74-83-9	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		08/21/18 16:32	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		08/21/18 16:32	108-90-7	
Chloroethane	<1.3	ug/L	5.0	1.3	1		08/21/18 16:32	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		08/21/18 16:32	67-66-3	
Chloromethane	3.0J	ug/L	7.3	2.2	1		08/21/18 16:32	74-87-3	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		08/21/18 16:32	124-48-1	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		08/21/18 16:32	74-95-3	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		08/21/18 16:32	75-71-8	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		08/21/18 16:32	108-20-3	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		08/21/18 16:32	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		08/21/18 16:32	87-68-3	
Isopropylbenzene (Cumene)	<0.39	ug/L	2.7	0.39	1		08/21/18 16:32	98-82-8	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		08/21/18 16:32	1634-04-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 55929.005 WRR-PW-16

Pace Project No.: 40174239

Sample: PW-16 **Lab ID: 40174239001** Collected: 08/14/18 17:55 Received: 08/17/18 09:35 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates		Analytical Method: EPA 8260							
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		08/21/18 16:32	75-09-2	
Naphthalene	<1.2	ug/L	5.0	1.2	1		08/21/18 16:32	91-20-3	
Styrene	<0.47	ug/L	1.6	0.47	1		08/21/18 16:32	100-42-5	
Tetrachloroethene	<0.33	ug/L	1.1	0.33	1		08/21/18 16:32	127-18-4	
Toluene	<0.17	ug/L	5.0	0.17	1		08/21/18 16:32	108-88-3	
Trichloroethene	<0.26	ug/L	1.0	0.26	1		08/21/18 16:32	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		08/21/18 16:32	75-69-4	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		08/21/18 16:32	75-01-4	
Xylene (Total)	<1.5	ug/L	3.0	1.5	1		08/21/18 16:32	1330-20-7	
cis-1,2-Dichloroethene	<0.27	ug/L	1.0	0.27	1		08/21/18 16:32	156-59-2	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		08/21/18 16:32	10061-01-5	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		08/21/18 16:32	179601-23-1	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		08/21/18 16:32	104-51-8	
n-Propylbenzene	<0.81	ug/L	5.0	0.81	1		08/21/18 16:32	103-65-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		08/21/18 16:32	95-47-6	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		08/21/18 16:32	99-87-6	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		08/21/18 16:32	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		08/21/18 16:32	98-06-6	
trans-1,2-Dichloroethene	<1.1	ug/L	3.6	1.1	1		08/21/18 16:32	156-60-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		08/21/18 16:32	10061-02-6	
Surrogates									
Dibromofluoromethane (S)	102	%	70-130		1		08/21/18 16:32	1868-53-7	
Toluene-d8 (S)	100	%	70-130		1		08/21/18 16:32	2037-26-5	
4-Bromofluorobenzene (S)	90	%	70-130		1		08/21/18 16:32	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 55929.005 WRR-PW-16

Pace Project No.: 40174239

Sample: TRIP BLANK **Lab ID: 40174239002** Collected: 08/15/18 00:00 Received: 08/17/18 09:35 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates		Analytical Method: EPA 8260							
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		08/21/18 16:10	630-20-6	
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		08/21/18 16:10	71-55-6	
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		08/21/18 16:10	79-34-5	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		08/21/18 16:10	79-00-5	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		08/21/18 16:10	75-34-3	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		08/21/18 16:10	75-35-4	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		08/21/18 16:10	563-58-6	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		08/21/18 16:10	87-61-6	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		08/21/18 16:10	96-18-4	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		08/21/18 16:10	120-82-1	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		08/21/18 16:10	95-63-6	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		08/21/18 16:10	96-12-8	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		08/21/18 16:10	106-93-4	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		08/21/18 16:10	95-50-1	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		08/21/18 16:10	107-06-2	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		08/21/18 16:10	78-87-5	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		08/21/18 16:10	108-67-8	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		08/21/18 16:10	541-73-1	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		08/21/18 16:10	142-28-9	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		08/21/18 16:10	106-46-7	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		08/21/18 16:10	594-20-7	
2-Butanone (MEK)	<2.9	ug/L	20.0	2.9	1		08/21/18 16:10	78-93-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		08/21/18 16:10	95-49-8	
2-Propanol	<28.9	ug/L	250	28.9	1		08/21/18 16:10	67-63-0	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		08/21/18 16:10	106-43-4	
4-Methyl-2-pentanone (MIBK)	<1.5	ug/L	5.1	1.5	1		08/21/18 16:10	108-10-1	
Acetone	<2.7	ug/L	20.0	2.7	1		08/21/18 16:10	67-64-1	
Benzene	<0.25	ug/L	1.0	0.25	1		08/21/18 16:10	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		08/21/18 16:10	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		08/21/18 16:10	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		08/21/18 16:10	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		08/21/18 16:10	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		08/21/18 16:10	74-83-9	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		08/21/18 16:10	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		08/21/18 16:10	108-90-7	
Chloroethane	<1.3	ug/L	5.0	1.3	1		08/21/18 16:10	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		08/21/18 16:10	67-66-3	
Chloromethane	<2.2	ug/L	7.3	2.2	1		08/21/18 16:10	74-87-3	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		08/21/18 16:10	124-48-1	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		08/21/18 16:10	74-95-3	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		08/21/18 16:10	75-71-8	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		08/21/18 16:10	108-20-3	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		08/21/18 16:10	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		08/21/18 16:10	87-68-3	
Isopropylbenzene (Cumene)	<0.39	ug/L	2.7	0.39	1		08/21/18 16:10	98-82-8	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		08/21/18 16:10	1634-04-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 55929.005 WRR-PW-16

Pace Project No.: 40174239

Sample: TRIP BLANK **Lab ID: 40174239002** Collected: 08/15/18 00:00 Received: 08/17/18 09:35 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates		Analytical Method: EPA 8260							
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		08/21/18 16:10	75-09-2	
Naphthalene	<1.2	ug/L	5.0	1.2	1		08/21/18 16:10	91-20-3	
Styrene	<0.47	ug/L	1.6	0.47	1		08/21/18 16:10	100-42-5	
Tetrachloroethene	<0.33	ug/L	1.1	0.33	1		08/21/18 16:10	127-18-4	
Toluene	<0.17	ug/L	5.0	0.17	1		08/21/18 16:10	108-88-3	
Trichloroethene	<0.26	ug/L	1.0	0.26	1		08/21/18 16:10	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		08/21/18 16:10	75-69-4	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		08/21/18 16:10	75-01-4	
Xylene (Total)	<1.5	ug/L	3.0	1.5	1		08/21/18 16:10	1330-20-7	
cis-1,2-Dichloroethene	<0.27	ug/L	1.0	0.27	1		08/21/18 16:10	156-59-2	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		08/21/18 16:10	10061-01-5	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		08/21/18 16:10	179601-23-1	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		08/21/18 16:10	104-51-8	
n-Propylbenzene	<0.81	ug/L	5.0	0.81	1		08/21/18 16:10	103-65-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		08/21/18 16:10	95-47-6	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		08/21/18 16:10	99-87-6	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		08/21/18 16:10	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		08/21/18 16:10	98-06-6	
trans-1,2-Dichloroethene	<1.1	ug/L	3.6	1.1	1		08/21/18 16:10	156-60-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		08/21/18 16:10	10061-02-6	
Surrogates									
Dibromofluoromethane (S)	102	%	70-130		1		08/21/18 16:10	1868-53-7	
Toluene-d8 (S)	104	%	70-130		1		08/21/18 16:10	2037-26-5	
4-Bromofluorobenzene (S)	91	%	70-130		1		08/21/18 16:10	460-00-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 55929.005 WRR-PW-16

Pace Project No.: 40174239

QC Batch: 297653

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV Oxygenates

Associated Lab Samples: 40174239001, 40174239002

METHOD BLANK: 1738613

Matrix: Water

Associated Lab Samples: 40174239001, 40174239002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.27	1.0	08/21/18 07:16	
1,1,1-Trichloroethane	ug/L	<0.24	1.0	08/21/18 07:16	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	1.0	08/21/18 07:16	
1,1,2-Trichloroethane	ug/L	<0.55	5.0	08/21/18 07:16	
1,1-Dichloroethane	ug/L	<0.27	1.0	08/21/18 07:16	
1,1-Dichloroethene	ug/L	<0.24	1.0	08/21/18 07:16	
1,1-Dichloropropene	ug/L	<0.54	1.8	08/21/18 07:16	
1,2,3-Trichlorobenzene	ug/L	<0.63	5.0	08/21/18 07:16	
1,2,3-Trichloropropane	ug/L	<0.59	5.0	08/21/18 07:16	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	08/21/18 07:16	
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	08/21/18 07:16	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	5.9	08/21/18 07:16	
1,2-Dibromoethane (EDB)	ug/L	<0.83	2.8	08/21/18 07:16	
1,2-Dichlorobenzene	ug/L	<0.71	2.4	08/21/18 07:16	
1,2-Dichloroethane	ug/L	<0.28	1.0	08/21/18 07:16	
1,2-Dichloropropane	ug/L	<0.28	1.0	08/21/18 07:16	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	08/21/18 07:16	
1,3-Dichlorobenzene	ug/L	<0.63	2.1	08/21/18 07:16	
1,3-Dichloropropane	ug/L	<0.83	2.8	08/21/18 07:16	
1,4-Dichlorobenzene	ug/L	<0.94	3.1	08/21/18 07:16	
2,2-Dichloropropane	ug/L	<2.3	7.6	08/21/18 07:16	
2-Butanone (MEK)	ug/L	<2.9	20.0	08/21/18 07:16	
2-Chlorotoluene	ug/L	<0.93	5.0	08/21/18 07:16	
2-Propanol	ug/L	<28.9	250	08/21/18 07:16	
4-Chlorotoluene	ug/L	<0.76	2.5	08/21/18 07:16	
4-Methyl-2-pentanone (MIBK)	ug/L	<1.5	5.1	08/21/18 07:16	
Acetone	ug/L	<2.7	20.0	08/21/18 07:16	
Benzene	ug/L	<0.25	1.0	08/21/18 07:16	
Bromobenzene	ug/L	<0.24	1.0	08/21/18 07:16	
Bromochloromethane	ug/L	<0.36	5.0	08/21/18 07:16	
Bromodichloromethane	ug/L	<0.36	1.2	08/21/18 07:16	
Bromoform	ug/L	<4.0	13.2	08/21/18 07:16	
Bromomethane	ug/L	<0.97	5.0	08/21/18 07:16	
Carbon tetrachloride	ug/L	<0.17	1.0	08/21/18 07:16	
Chlorobenzene	ug/L	<0.71	2.4	08/21/18 07:16	
Chloroethane	ug/L	<1.3	5.0	08/21/18 07:16	
Chloroform	ug/L	<1.3	5.0	08/21/18 07:16	
Chloromethane	ug/L	<2.2	7.3	08/21/18 07:16	
cis-1,2-Dichloroethene	ug/L	<0.27	1.0	08/21/18 07:16	
cis-1,3-Dichloropropene	ug/L	<3.6	12.1	08/21/18 07:16	
Dibromochloromethane	ug/L	<2.6	8.7	08/21/18 07:16	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 55929.005 WRR-PW-16

Pace Project No.: 40174239

METHOD BLANK: 1738613

Matrix: Water

Associated Lab Samples: 40174239001, 40174239002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	<0.94	3.1	08/21/18 07:16	
Dichlorodifluoromethane	ug/L	<0.50	5.0	08/21/18 07:16	
Diisopropyl ether	ug/L	<1.9	6.3	08/21/18 07:16	
Ethylbenzene	ug/L	<0.22	1.0	08/21/18 07:16	
Hexachloro-1,3-butadiene	ug/L	<1.2	5.0	08/21/18 07:16	
Isopropylbenzene (Cumene)	ug/L	<0.39	2.7	08/21/18 07:16	
m&p-Xylene	ug/L	<0.47	2.0	08/21/18 07:16	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	08/21/18 07:16	
Methylene Chloride	ug/L	<0.58	5.0	08/21/18 07:16	
n-Butylbenzene	ug/L	<0.71	2.4	08/21/18 07:16	
n-Propylbenzene	ug/L	<0.81	5.0	08/21/18 07:16	
Naphthalene	ug/L	<1.2	5.0	08/21/18 07:16	
o-Xylene	ug/L	<0.26	1.0	08/21/18 07:16	
p-Isopropyltoluene	ug/L	<0.80	2.7	08/21/18 07:16	
sec-Butylbenzene	ug/L	<0.85	5.0	08/21/18 07:16	
Styrene	ug/L	<0.47	1.6	08/21/18 07:16	
tert-Butylbenzene	ug/L	<0.30	1.0	08/21/18 07:16	
Tetrachloroethene	ug/L	<0.33	1.1	08/21/18 07:16	
Toluene	ug/L	<0.17	5.0	08/21/18 07:16	
trans-1,2-Dichloroethene	ug/L	<1.1	3.6	08/21/18 07:16	
trans-1,3-Dichloropropene	ug/L	<4.4	14.6	08/21/18 07:16	
Trichloroethene	ug/L	<0.26	1.0	08/21/18 07:16	
Trichlorofluoromethane	ug/L	<0.21	1.0	08/21/18 07:16	
Vinyl chloride	ug/L	<0.17	1.0	08/21/18 07:16	
Xylene (Total)	ug/L	<1.5	3.0	08/21/18 07:16	
4-Bromofluorobenzene (S)	%	92	70-130	08/21/18 07:16	
Dibromofluoromethane (S)	%	103	70-130	08/21/18 07:16	
Toluene-d8 (S)	%	102	70-130	08/21/18 07:16	

LABORATORY CONTROL SAMPLE: 1738614

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	55.1	110	70-130	
1,1,1-Trichloroethane	ug/L	50	48.4	97	70-133	
1,1,2,2-Tetrachloroethane	ug/L	50	51.5	103	67-130	
1,1,2-Trichloroethane	ug/L	50	52.1	104	70-130	
1,1-Dichloroethane	ug/L	50	48.3	97	70-134	
1,1-Dichloroethene	ug/L	50	53.6	107	75-132	
1,1-Dichloropropene	ug/L	50	48.5	97	70-130	
1,2,3-Trichlorobenzene	ug/L	50	51.4	103	70-130	
1,2,3-Trichloropropane	ug/L	50	50.9	102	70-130	
1,2,4-Trichlorobenzene	ug/L	50	50.9	102	68-130	
1,2,4-Trimethylbenzene	ug/L	50	55.0	110	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	51.4	103	60-126	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 55929.005 WRR-PW-16

Pace Project No.: 40174239

LABORATORY CONTROL SAMPLE: 1738614

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	50	51.4	103	70-130	
1,2-Dichlorobenzene	ug/L	50	52.0	104	70-130	
1,2-Dichloroethane	ug/L	50	45.3	91	73-134	
1,2-Dichloropropane	ug/L	50	49.9	100	79-128	
1,3,5-Trimethylbenzene	ug/L	50	55.5	111	70-130	
1,3-Dichlorobenzene	ug/L	50	52.3	105	70-130	
1,3-Dichloropropane	ug/L	50	53.2	106	70-130	
1,4-Dichlorobenzene	ug/L	50	51.7	103	70-130	
2,2-Dichloropropane	ug/L	50	47.3	95	70-130	
2-Butanone (MEK)	ug/L	50	45.1	90	51-187	
2-Chlorotoluene	ug/L	50	54.8	110	70-130	
2-Propanol	ug/L	500	396	79	50-150	
4-Chlorotoluene	ug/L	50	53.2	106	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	50	39.4	79	50-150	
Acetone	ug/L	50	51.8	104	50-150	
Benzene	ug/L	50	46.4	93	69-137	
Bromobenzene	ug/L	50	50.3	101	70-130	
Bromochloromethane	ug/L	50	48.2	96	70-130	
Bromodichloromethane	ug/L	50	44.3	89	70-130	
Bromoform	ug/L	50	49.6	99	64-133	
Bromomethane	ug/L	50	36.2	72	29-123	
Carbon tetrachloride	ug/L	50	47.9	96	73-142	
Chlorobenzene	ug/L	50	53.0	106	70-130	
Chloroethane	ug/L	50	50.7	101	59-133	
Chloroform	ug/L	50	46.0	92	80-129	
Chloromethane	ug/L	50	42.7	85	27-125	
cis-1,2-Dichloroethene	ug/L	50	46.4	93	70-134	
cis-1,3-Dichloropropene	ug/L	50	47.1	94	70-130	
Dibromochloromethane	ug/L	50	52.2	104	70-130	
Dibromomethane	ug/L	50	47.6	95	70-130	
Dichlorodifluoromethane	ug/L	50	39.6	79	12-127	
Diisopropyl ether	ug/L	50	45.7	91	70-130	
Ethylbenzene	ug/L	50	54.7	109	86-127	
Hexachloro-1,3-butadiene	ug/L	50	57.0	114	70-130	
Isopropylbenzene (Cumene)	ug/L	50	56.4	113	70-130	
m&p-Xylene	ug/L	100	115	115	70-131	
Methyl-tert-butyl ether	ug/L	50	45.3	91	65-136	
Methylene Chloride	ug/L	50	47.2	94	72-133	
n-Butylbenzene	ug/L	50	58.1	116	70-130	
n-Propylbenzene	ug/L	50	55.0	110	70-130	
Naphthalene	ug/L	50	51.8	104	70-130	
o-Xylene	ug/L	50	55.9	112	70-130	
p-Isopropyltoluene	ug/L	50	55.8	112	70-130	
sec-Butylbenzene	ug/L	50	56.9	114	70-130	
Styrene	ug/L	50	55.9	112	70-130	
tert-Butylbenzene	ug/L	50	54.7	109	70-130	
Tetrachloroethene	ug/L	50	54.9	110	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 55929.005 WRR-PW-16

Pace Project No.: 40174239

LABORATORY CONTROL SAMPLE: 1738614

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	50	53.9	108	84-124	
trans-1,2-Dichloroethene	ug/L	50	49.6	99	70-133	
trans-1,3-Dichloropropene	ug/L	50	51.6	103	67-130	
Trichloroethene	ug/L	50	49.2	98	70-130	
Trichlorofluoromethane	ug/L	50	51.7	103	69-147	
Vinyl chloride	ug/L	50	50.0	100	48-134	
Xylene (Total)	ug/L	150	171	114	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Dibromofluoromethane (S)	%			96	70-130	
Toluene-d8 (S)	%			108	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 55929.005 WRR-PW-16

Pace Project No.: 40174239

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 and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

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.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 55929.005 WRR-PW-16

Pace Project No.: 40174239

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40174239001	PW-16	EPA 8260	297653		
40174239002	TRIP BLANK	EPA 8260	297653		

REPORT OF LABORATORY ANALYSIS

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(Please Print Clearly)

Company Name: Gannett Fleming
 Branch/Location: Madison WI
 Project Contact: Anthony Miller
 Phone: 608-836-1500
 Project Number: 55929.005
 Project Name: WRR - PW.16
 Project State: WI
 Sampled By (Print): Chelsea Payne
 Sampled By (Sign): [Signature]
 PO #: _____ Regulatory Program: _____



UPPER MIDWEST REGION

MN: 612-607-1700 WI: 920-469-2436

40174239

SSM

CHAIN OF CUSTODY

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

FILTERED?
(YES/NO)
 PRESERVATION
(CODE)*

Y/N	Pick Letter	Analyses Requested	Matrix Codes																	
			A	B	C	D	E	F	G	H	I	J								
N	B	VOCs 8260																		

Data Package Options (billable)
 EPA Level III
 EPA Level IV

MS/MSD
 On your sample (billable)
 NOT needed on your sample

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

PACE LAB #	CLIENT FIELD ID	COLLECTION		MATRIX	Y/N	Pick Letter	Analyses Requested
		DATE	TIME				
001	PW.16	8-14-18	17:55	GW			3
002	Trip Blnk	8-15-18					2

Quote #: _____
Mail To Contact: Anthony Miller
Mail To Company: Gannett Fleming
Mail To Address: 8025 Excelsior Dr. Madison, WI 53717
Invoice To Contact: See
Invoice To Company: _____
Invoice To Address: mail to
Invoice To Phone: 608-836-1500
CLIENT COMMENTS | **LAB COMMENTS (Lab Use Only)** | **Profile #**

Rush Turnaround Time Requested - Prelims (Rush TAT subject to approval/surcharge)
 Date Needed: _____

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

Relinquished By: <u>[Signature]</u>	Date/Time: <u>8-16-18 10:00</u>	Received By: _____	Date/Time: _____
Relinquished By: <u>CS [Signature]</u>	Date/Time: <u>8/17/18 0935</u>	Received By: <u>[Signature]</u>	Date/Time: <u>8/17/18 0935</u>
Relinquished By: _____	Date/Time: _____	Received By: _____	Date/Time: _____
Relinquished By: _____	Date/Time: _____	Received By: _____	Date/Time: _____

Email #1: _____
 Email #2: _____
 Telephone: _____
 Fax: _____

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

PACE Project No. 40174239
 Receipt Temp = 20.7 °C
 Sample Receipt pH OK / Adjusted
 Cooler Custody Seal Present / Not Present
 Present / Not Present intact / Not intact

Sample Condition Upon Receipt Form (SCUR)

Client Name: Gannett Fleming
Courier: CS Logistics Fed Ex Speedee UPS Walco
 Client Pace Other: _____

Project #: _____

WO#: 40174239



40174239

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

Cooler Temperature Uncorr: 29 / Corr: _____
Temp Blank Present: yes no **Biological Tissue is Frozen:** yes no

Person examining contents:
Date: 8/17/18
Initials: _____

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

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time: _____
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>PEMMS3 W</u>		
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>402</u>		

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

Project Manager Review: Run for PM **Date:** 8/17/18



Gannett Fleming

Excellence Delivered *As Promised*

August 30, 2018

File #55929.005

Mr. Timothy Hauge
5699 South Lowes Creek Road
Eau Claire, WI 54701

Re: Laboratory Results for Water Samples Collected from PW-11 in May and August 2018

Dear Mr. Hauge:

On May 9, 2018, Gannett Fleming, Inc. collected a water sample from your home at 5699 South Lowes Creek Road. The sample was collected as a follow-up to the water samples collected from your home in September and October 2014, June 2015, and May 2016 and 2017 and in conjunction with on-going groundwater monitoring and remedial activities associated with the WRR Environmental Services facility on Ryder Road. The monitoring and remedial activities at the WRR site are being conducted under the oversight of the Wisconsin Department of Natural Resources (WDNR).

Our designation for your water sample is PW-11. The water sample collected from your home in May was sent to ALS Environmental Laboratory in Holland, Michigan, for analysis of 51 individual volatile organic compounds (VOCs). Only one VOC was detected in the sample: acetone at 6.6 micrograms per liter ($\mu\text{g}/\ell$), which is equivalent to 6.6 parts per billion (ppb). The state and federal drinking water standard for acetone is 9,000 ppb, so the concentration detected in the water sample was far below that value. Another compound, methylene chloride, was detected in the trip blank that accompanied the May 2018 sample. The trip blank is prepared in the laboratory using laboratory-grade distilled water and accompanies the sample containers from the lab when they are shipped to the field and then again when the filled sample containers are shipped back to the lab. The compounds detected in the May sample from PW-11 and the trip blank are used to clean glassware and are not indicative of the water quality in your well.

To determine if the compounds detected in PW-11 and the trip blank in May 2018 were due to laboratory contamination, Gannett Fleming collected another sample from your well on August 15, 2018. That sample and a trip blank were submitted to a different laboratory, Pace Analytical Laboratory of Green Bay, for VOC analyses. The sample collected from PW-11 only contained one compound, chloromethane. Chloromethane was once widely used as a refrigerant; however, it is no longer used in consumer products. The concentration of chloromethane measured in the sample collected from PW-11 in August (2.2 ppb) is far below its state and federal drinking water standard of 30 ppb. No other VOCs were detected in the August 2018 water sample collected from PW-11 or the trip blank that accompanied it.

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Gannett Fleming, Inc.

8025 Excelsior Drive, Madison, WI 53717-1900

t 608.836.1500 • f 608.831.3337

www.gannettfleming.com

Gannett Fleming

Mr. Timothy Hauge
5699 South Lowes Creek Road
August 30, 2018

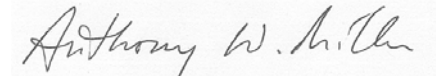
-2-

Taken collectively, we believe that the acetone and chloromethane detected in the PW-11 samples in May and August 2018, respectively, are likely due to laboratory contamination and not indicative of the water in your well. Enclosed are copies of the laboratory reports for the water samples collected from your home (PW-11) in May and August 2018.

A copy of this letter and the May and August 2018 lab reports are being sent to the WDNR for its records. We thank you for your cooperation. Someone from Gannett Fleming will contact you next spring to schedule a time convenient for you for us to collect the next sample. In the meantime, if you have any questions regarding the analytical results of the samples collected in May and August 2018, please call me at the number listed below.

Sincerely,

GANNETT FLEMING, INC.



Anthony W. Miller, P.S.S.
Senior Environmental Scientist
awmiller@gfnet.com
Ph: 800-899-3337 ext. 6716

AWM/jec/Enc.

cc: Mae Willkom (WDNR)



21-May-2018

Anthony Miller
Gannett Fleming, Inc.
8025 Excelsior Dr.
Madison, WI 53717-1900

Re: **WRR (55929.005)**

Work Order: **1805783**

Dear Anthony,

Revision: **1**

ALS Environmental received 2 samples on 11-May-2018 for the analyses presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental - Holland and for only the analyses requested.

Sample results are compliant with industry accepted practices and Quality Control results achieved laboratory specifications. Any exceptions are noted in the Case Narrative, or noted with qualifiers in the report or QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained from ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

The total number of pages in this report is 18.

If you have any questions regarding this report, please feel free to contact me:

ADDRESS: 3352 128th Avenue, Holland, MI, USA
PHONE: +1 (616) 399-6070 FAX: +1 (616) 399-6185

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Beamish".

Electronically approved by: Tom Beamish

Tom Beamish
Senior Project Manager

Certificate No: WI: 399084510

Report of Laboratory Analysis

ADDRESS 3352 128th Ave Holland, Michigan 49424 | PHONE (616) 399-6070 | FAX (616) 399-6185

ALS GROUP USA, CORP Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental ALS

www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

Client: Gannett Fleming, Inc.
Project: WRR (55929.005)
Work Order: 1805783

Work Order Sample Summary

<u>Lab Samp ID</u>	<u>Client Sample ID</u>	<u>Matrix</u>	<u>Tag Number</u>	<u>Collection Date</u>	<u>Date Received</u>	<u>Hold</u>
1805783-01	PW-11	Water		05/09/18 17:30	05/11/18 09:30	<input type="checkbox"/>
1805783-02	Trip Blank	Water		05/09/18	05/11/18 09:30	<input type="checkbox"/>

Client: Gannett Fleming, Inc.
Project: WRR (55929.005)
WorkOrder: 1805783

**QUALIFIERS,
ACRONYMS, UNITS**

<u>Qualifier</u>	<u>Description</u>
*	Value exceeds Regulatory Limit
**	Estimated Value
a	Analyte is non-accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte is present at an estimated concentration between the MDL and Report Limit
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL
X	Analyte was detected in the Method Blank between the MDL and Reporting Limit, sample results may exhibit background or reagent contamination at the observed level.

<u>Acronym</u>	<u>Description</u>
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
LOD	Limit of Detection (see MDL)
LOQ	Limit of Quantitation (see PQL)
MBLK	Method Blank
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PQL	Practical Quantitation Limit
RPD	Relative Percent Difference
TDL	Target Detection Limit
TNTC	Too Numerous To Count
A	APHA Standard Methods
D	ASTM
E	EPA
SW	SW-846 Update III

<u>Units Reported</u>	<u>Description</u>
µg/L	Micrograms per Liter

Client: Gannett Fleming, Inc.
Project: WRR (55929.005)
Work Order: 1805783

Case Narrative

Samples for the above noted Work Order were received on 05/11/18. The attached "Sample Receipt Checklist" documents the status of custody seals, container integrity, preservation, and temperature compliance.

Samples were analyzed according to the analytical methodology previously transmitted in the "Work Order Acknowledgement". Methodologies are also documented in the "Analytical Result" section for each sample. Quality control results are listed in the "QC Report" section. Sample association for the reported quality control is located at the end of each batch summary. If applicable, results are appropriately qualified in the Analytical Result and QC Report sections. The "Qualifiers" section documents the various qualifiers, units, and acronyms utilized in reporting. A copy of the laboratory's scope of accreditation is available upon request.

With the following exceptions, all sample analyses achieved analytical criteria.

Volatile Organics:

No deviations or anomalies were noted.

ALS Group, USA

Date: 21-May-18

Client: Gannett Fleming, Inc.
Project: WRR (55929.005)
Sample ID: PW-11
Collection Date: 05/09/18 05:30 PM

Work Order: 1805783
Lab ID: 1805783-01
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Method: SW8260C			Analyst: LSY	
1,1,1-Trichloroethane	U		0.33	1.0	µg/L	1	05/16/18 20:08
1,1,2,2-Tetrachloroethane	U		0.17	1.0	µg/L	1	05/16/18 20:08
1,1,2-Trichloroethane	U		0.22	1.0	µg/L	1	05/16/18 20:08
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/16/18 20:08
1,1-Dichloroethane	U		0.48	1.0	µg/L	1	05/16/18 20:08
1,1-Dichloroethene	U		0.36	1.0	µg/L	1	05/16/18 20:08
1,2,3-Trichlorobenzene	U		0.29	1.0	µg/L	1	05/16/18 20:08
1,2,4-Trichlorobenzene	U		0.25	1.0	µg/L	1	05/16/18 20:08
1,2-Dibromo-3-chloropropane	U		0.43	1.0	µg/L	1	05/16/18 20:08
1,2-Dibromoethane	U		0.17	1.0	µg/L	1	05/16/18 20:08
1,2-Dichlorobenzene	U		0.12	1.0	µg/L	1	05/16/18 20:08
1,2-Dichloroethane	U		0.11	1.0	µg/L	1	05/16/18 20:08
1,2-Dichloropropane	U		0.34	1.0	µg/L	1	05/16/18 20:08
1,3-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/16/18 20:08
1,4-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/16/18 20:08
2-Butanone	U		0.47	5.0	µg/L	1	05/16/18 20:08
2-Hexanone	U		0.50	5.0	µg/L	1	05/16/18 20:08
4-Methyl-2-pentanone	U		0.52	1.0	µg/L	1	05/16/18 20:08
Acetone	6.6	J	0.47	10	µg/L	1	05/16/18 20:08
Benzene	U		0.42	1.0	µg/L	1	05/16/18 20:08
Bromochloromethane	U		0.15	1.0	µg/L	1	05/16/18 20:08
Bromodichloromethane	U		0.22	1.0	µg/L	1	05/16/18 20:08
Bromoform	U		0.56	1.0	µg/L	1	05/16/18 20:08
Bromomethane	U		0.29	1.0	µg/L	1	05/16/18 20:08
Carbon disulfide	U		0.39	1.0	µg/L	1	05/16/18 20:08
Carbon tetrachloride	U		0.32	1.0	µg/L	1	05/16/18 20:08
Chlorobenzene	U		0.21	1.0	µg/L	1	05/16/18 20:08
Chloroethane	U		0.68	1.0	µg/L	1	05/16/18 20:08
Chloroform	U		0.46	1.0	µg/L	1	05/16/18 20:08
Chloromethane	U		0.68	1.0	µg/L	1	05/16/18 20:08
cis-1,2-Dichloroethene	U		0.38	1.0	µg/L	1	05/16/18 20:08
cis-1,3-Dichloropropene	U		0.13	1.0	µg/L	1	05/16/18 20:08
Cyclohexane	U		0.18	1.0	µg/L	1	05/16/18 20:08
Dibromochloromethane	U		0.20	1.0	µg/L	1	05/16/18 20:08
Dichlorodifluoromethane	U		0.30	1.0	µg/L	1	05/16/18 20:08
Ethylbenzene	U		0.29	1.0	µg/L	1	05/16/18 20:08
Isopropylbenzene	U		0.17	1.0	µg/L	1	05/16/18 20:08
m,p-Xylene	U		0.53	2.0	µg/L	1	05/16/18 20:08

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 21-May-18

Client: Gannett Fleming, Inc.
Project: WRR (55929.005)
Sample ID: PW-11
Collection Date: 05/09/18 05:30 PM

Work Order: 1805783
Lab ID: 1805783-01
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methyl acetate	U		0.26	2.0	µg/L	1	05/16/18 20:08
Methyl tert-butyl ether	U		0.21	1.0	µg/L	1	05/16/18 20:08
Methylcyclohexane	U		0.090	1.0	µg/L	1	05/16/18 20:08
Methylene chloride	U		0.16	5.0	µg/L	1	05/16/18 20:08
o-Xylene	U		0.19	1.0	µg/L	1	05/16/18 20:08
Styrene	U		0.19	1.0	µg/L	1	05/16/18 20:08
Tetrachloroethene	U		0.28	1.0	µg/L	1	05/16/18 20:08
Toluene	U		0.32	1.0	µg/L	1	05/16/18 20:08
trans-1,2-Dichloroethene	U		0.48	1.0	µg/L	1	05/16/18 20:08
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/16/18 20:08
Trichloroethene	U		0.33	1.0	µg/L	1	05/16/18 20:08
Trichlorofluoromethane	U		0.24	1.0	µg/L	1	05/16/18 20:08
Vinyl chloride	U		0.53	1.0	µg/L	1	05/16/18 20:08
Surr: 1,2-Dichloroethane-d4	104			75-120	%REC	1	05/16/18 20:08
Surr: 4-Bromofluorobenzene	95.8			80-110	%REC	1	05/16/18 20:08
Surr: Dibromofluoromethane	95.4			85-115	%REC	1	05/16/18 20:08
Surr: Toluene-d8	94.0			85-110	%REC	1	05/16/18 20:08

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 21-May-18

Client: Gannett Fleming, Inc.
Project: WRR (55929.005)
Sample ID: Trip Blank
Collection Date: 05/09/18

Work Order: 1805783
Lab ID: 1805783-02
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
VOLATILE ORGANIC COMPOUNDS			Method: SW8260C				Analyst: LSY
1,1,1-Trichloroethane	U		0.33	1.0	µg/L	1	05/16/18 17:45
1,1,2,2-Tetrachloroethane	U		0.17	1.0	µg/L	1	05/16/18 17:45
1,1,2-Trichloroethane	U		0.22	1.0	µg/L	1	05/16/18 17:45
1,1,2-Trichlorotrifluoroethane	U		0.18	1.0	µg/L	1	05/16/18 17:45
1,1-Dichloroethane	U		0.48	1.0	µg/L	1	05/16/18 17:45
1,1-Dichloroethene	U		0.36	1.0	µg/L	1	05/16/18 17:45
1,2,3-Trichlorobenzene	U		0.29	1.0	µg/L	1	05/16/18 17:45
1,2,4-Trichlorobenzene	U		0.25	1.0	µg/L	1	05/16/18 17:45
1,2-Dibromo-3-chloropropane	U		0.43	1.0	µg/L	1	05/16/18 17:45
1,2-Dibromoethane	U		0.17	1.0	µg/L	1	05/16/18 17:45
1,2-Dichlorobenzene	U		0.12	1.0	µg/L	1	05/16/18 17:45
1,2-Dichloroethane	U		0.11	1.0	µg/L	1	05/16/18 17:45
1,2-Dichloropropane	U		0.34	1.0	µg/L	1	05/16/18 17:45
1,3-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/16/18 17:45
1,4-Dichlorobenzene	U		0.13	1.0	µg/L	1	05/16/18 17:45
2-Butanone	U		0.47	5.0	µg/L	1	05/16/18 17:45
2-Hexanone	U		0.50	5.0	µg/L	1	05/16/18 17:45
4-Methyl-2-pentanone	U		0.52	1.0	µg/L	1	05/16/18 17:45
Acetone	U		0.47	10	µg/L	1	05/16/18 17:45
Benzene	U		0.42	1.0	µg/L	1	05/16/18 17:45
Bromochloromethane	U		0.15	1.0	µg/L	1	05/16/18 17:45
Bromodichloromethane	U		0.22	1.0	µg/L	1	05/16/18 17:45
Bromoform	U		0.56	1.0	µg/L	1	05/16/18 17:45
Bromomethane	U		0.29	1.0	µg/L	1	05/16/18 17:45
Carbon disulfide	U		0.39	1.0	µg/L	1	05/16/18 17:45
Carbon tetrachloride	U		0.32	1.0	µg/L	1	05/16/18 17:45
Chlorobenzene	U		0.21	1.0	µg/L	1	05/16/18 17:45
Chloroethane	U		0.68	1.0	µg/L	1	05/16/18 17:45
Chloroform	U		0.46	1.0	µg/L	1	05/16/18 17:45
Chloromethane	U		0.68	1.0	µg/L	1	05/16/18 17:45
cis-1,2-Dichloroethene	U		0.38	1.0	µg/L	1	05/16/18 17:45
cis-1,3-Dichloropropene	U		0.13	1.0	µg/L	1	05/16/18 17:45
Cyclohexane	U		0.18	1.0	µg/L	1	05/16/18 17:45
Dibromochloromethane	U		0.20	1.0	µg/L	1	05/16/18 17:45
Dichlorodifluoromethane	U		0.30	1.0	µg/L	1	05/16/18 17:45
Ethylbenzene	U		0.29	1.0	µg/L	1	05/16/18 17:45
Isopropylbenzene	U		0.17	1.0	µg/L	1	05/16/18 17:45
m,p-Xylene	U		0.53	2.0	µg/L	1	05/16/18 17:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

ALS Group, USA

Date: 21-May-18

Client: Gannett Fleming, Inc.
Project: WRR (55929.005)
Sample ID: Trip Blank
Collection Date: 05/09/18

Work Order: 1805783
Lab ID: 1805783-02
Matrix: WATER

Analyses	Result	Qual	MDL	Report Limit	Units	Dilution Factor	Date Analyzed
Methyl acetate	U		0.26	2.0	µg/L	1	05/16/18 17:45
Methyl tert-butyl ether	U		0.21	1.0	µg/L	1	05/16/18 17:45
Methylcyclohexane	U		0.090	1.0	µg/L	1	05/16/18 17:45
Methylene chloride	1.0	J	0.16	5.0	µg/L	1	05/16/18 17:45
o-Xylene	U		0.19	1.0	µg/L	1	05/16/18 17:45
Styrene	U		0.19	1.0	µg/L	1	05/16/18 17:45
Tetrachloroethene	U		0.28	1.0	µg/L	1	05/16/18 17:45
Toluene	U		0.32	1.0	µg/L	1	05/16/18 17:45
trans-1,2-Dichloroethene	U		0.48	1.0	µg/L	1	05/16/18 17:45
trans-1,3-Dichloropropene	U		0.15	1.0	µg/L	1	05/16/18 17:45
Trichloroethene	U		0.33	1.0	µg/L	1	05/16/18 17:45
Trichlorofluoromethane	U		0.24	1.0	µg/L	1	05/16/18 17:45
Vinyl chloride	U		0.53	1.0	µg/L	1	05/16/18 17:45
Surr: 1,2-Dichloroethane-d4	104			75-120	%REC	1	05/16/18 17:45
Surr: 4-Bromofluorobenzene	95.4			80-110	%REC	1	05/16/18 17:45
Surr: Dibromofluoromethane	98.2			85-115	%REC	1	05/16/18 17:45
Surr: Toluene-d8	98.3			85-110	%REC	1	05/16/18 17:45

Note: See Qualifiers page for a list of qualifiers and their definitions.

Client: Gannett Fleming, Inc.
Work Order: 1805783
Project: WRR (55929.005)

QC BATCH REPORT

Batch ID: **R236015A** Instrument ID **VMS10** Method: **SW8260C**

MBLK		Sample ID: VBK1-180516-R236015A			Units: µg/L		Analysis Date: 05/16/18 03:33 PM				
Client ID:		Run ID: VMS10_180516A			SeqNo: 5038202		Prep Date:		DF: 1		
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	U	0.33	1.0								
1,1,2,2-Tetrachloroethane	U	0.17	1.0								
1,1,2-Trichloroethane	U	0.22	1.0								
1,1,2-Trichlorotrifluoroethane	U	0.18	1.0								
1,1-Dichloroethane	U	0.48	1.0								
1,1-Dichloroethene	U	0.36	1.0								
1,2,3-Trichlorobenzene	U	0.29	1.0								
1,2,4-Trichlorobenzene	U	0.25	1.0								
1,2-Dibromo-3-chloropropane	U	0.43	1.0								
1,2-Dibromoethane	U	0.17	1.0								
1,2-Dichlorobenzene	U	0.12	1.0								
1,2-Dichloroethane	U	0.11	1.0								
1,2-Dichloropropane	U	0.34	1.0								
1,3-Dichlorobenzene	U	0.13	1.0								
1,4-Dichlorobenzene	U	0.13	1.0								
2-Butanone	U	0.47	5.0								
2-Hexanone	U	0.5	5.0								
4-Methyl-2-pentanone	U	0.52	1.0								
Acetone	U	0.47	10								
Benzene	U	0.42	1.0								
Bromochloromethane	U	0.15	1.0								
Bromodichloromethane	U	0.22	1.0								
Bromoform	U	0.56	1.0								
Bromomethane	U	0.29	1.0								
Carbon disulfide	U	0.39	1.0								
Carbon tetrachloride	U	0.32	1.0								
Chlorobenzene	U	0.21	1.0								
Chloroethane	U	0.68	1.0								
Chloroform	U	0.46	1.0								
Chloromethane	U	0.68	1.0								
cis-1,2-Dichloroethene	U	0.38	1.0								
cis-1,3-Dichloropropene	U	0.13	1.0								
Cyclohexane	U	0.18	1.0								
Dibromochloromethane	U	0.2	1.0								
Dichlorodifluoromethane	U	0.3	1.0								
Ethylbenzene	U	0.29	1.0								
Isopropylbenzene	U	0.17	1.0								
m,p-Xylene	U	0.53	2.0								
Methyl acetate	U	0.26	2.0								
Methyl tert-butyl ether	U	0.21	1.0								
Methylcyclohexane	U	0.09	1.0								

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Client: Gannett Fleming, Inc.

Work Order: 1805783

Project: WRR (55929.005)

QC BATCH REPORT

Batch ID: **R236015A** Instrument ID **VMS10** Method: **SW8260C**

Methylene chloride	U	0.16	5.0						
o-Xylene	U	0.19	1.0						
Styrene	U	0.19	1.0						
Tetrachloroethene	U	0.28	1.0						
Toluene	U	0.32	1.0						
trans-1,2-Dichloroethene	U	0.48	1.0						
trans-1,3-Dichloropropene	U	0.15	1.0						
Trichloroethene	U	0.33	1.0						
Trichlorofluoromethane	U	0.24	1.0						
Vinyl chloride	U	0.53	1.0						
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.46</i>	<i>0</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>19.37</i>	<i>0</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>96.8</i>	<i>80-110</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>20.43</i>	<i>0</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>19.46</i>	<i>0</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.3</i>	<i>85-110</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Client: Gannett Fleming, Inc.
 Work Order: 1805783
 Project: WRR (55929.005)

QC BATCH REPORT

Batch ID: **R236015A** Instrument ID **VMS10** Method: **SW8260C**

LCS		Sample ID: VLC5W1-180516-R236015A				Units: µg/L		Analysis Date: 05/16/18 03:01 PM			
Client ID:		Run ID: VMS10_180516A				SeqNo: 5039144		Prep Date:		DF: 1	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	20.26	0.33	1.0	20	0	101	75-130	0			
1,1,2,2-Tetrachloroethane	22.81	0.17	1.0	20	0	114	75-130	0			
1,1,2-Trichloroethane	20.54	0.22	1.0	20	0	103	75-125	0			
1,1-Dichloroethane	21.35	0.48	1.0	20	0	107	68-142	0			
1,1-Dichloroethene	21.95	0.36	1.0	20	0	110	70-145	0			
1,2,3-Trichlorobenzene	19.23	0.29	1.0	20	0	96.2	70-140	0			
1,2,4-Trichlorobenzene	19.22	0.25	1.0	20	0	96.1	70-135	0			
1,2-Dibromo-3-chloropropane	19.92	0.43	1.0	20	0	99.6	60-130	0			
1,2-Dibromoethane	24.02	0.17	1.0	20	0	120	67-155	0			
1,2-Dichlorobenzene	19.55	0.12	1.0	20	0	97.8	70-130	0			
1,2-Dichloroethane	19.95	0.11	1.0	20	0	99.8	78-125	0			
1,2-Dichloropropane	20.45	0.34	1.0	20	0	102	75-125	0			
1,3-Dichlorobenzene	19.65	0.13	1.0	20	0	98.2	75-130	0			
1,4-Dichlorobenzene	20.14	0.13	1.0	20	0	101	75-130	0			
2-Butanone	21.63	0.47	5.0	20	0	108	55-150	0			
2-Hexanone	22.68	0.5	5.0	20	0	113	60-135	0			
4-Methyl-2-pentanone	33.27	0.52	1.0	20	0	166	77-178	0			
Acetone	17.4	0.47	10	20	0	87	60-160	0			
Benzene	20.15	0.42	1.0	20	0	101	85-125	0			
Bromochloromethane	21.36	0.15	1.0	20	0	107	72-141	0			
Bromodichloromethane	20.12	0.22	1.0	20	0	101	75-125	0			
Bromoform	19.45	0.56	1.0	20	0	97.2	60-125	0			
Bromomethane	14.13	0.29	1.0	20	0	70.6	30-185	0			
Carbon disulfide	17.16	0.39	1.0	20	0	85.8	60-165	0			
Carbon tetrachloride	19.92	0.32	1.0	20	0	99.6	65-140	0			
Chlorobenzene	19.44	0.21	1.0	20	0	97.2	80-120	0			
Chloroethane	19.81	0.68	1.0	20	0	99	50-140	0			
Chloroform	20.62	0.46	1.0	20	0	103	80-130	0			
Chloromethane	19.92	0.68	1.0	20	0	99.6	46-148	0			
cis-1,2-Dichloroethene	22.35	0.38	1.0	20	0	112	75-134	0			
cis-1,3-Dichloropropene	21.39	0.13	1.0	20	0	107	70-130	0			
Dibromochloromethane	19.46	0.2	1.0	20	0	97.3	60-115	0			
Dichlorodifluoromethane	14.67	0.3	1.0	20	0	73.4	20-120	0			
Ethylbenzene	19.69	0.29	1.0	20	0	98.4	76-123	0			
Isopropylbenzene	20.07	0.17	1.0	20	0	100	80-127	0			
m,p-Xylene	39.55	0.53	2.0	40	0	98.9	75-130	0			
Methyl tert-butyl ether	24.08	0.21	1.0	20	0	120	68-129	0			
Methylene chloride	20.21	0.16	5.0	20	0	101	75-140	0			
o-Xylene	20.03	0.19	1.0	20	0	100	76-127	0			
Styrene	20.83	0.19	1.0	20	0	104	83-137	0			
Tetrachloroethene	19.8	0.28	1.0	20	0	99	68-166	0			
Toluene	19.12	0.32	1.0	20	0	95.6	76-125	0			
trans-1,2-Dichloroethene	22.36	0.48	1.0	20	0	112	80-140	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Client: Gannett Fleming, Inc.

Work Order: 1805783

Project: WRR (55929.005)

QC BATCH REPORT

Batch ID: R236015A	Instrument ID VMS10	Method: SW8260C							
trans-1,3-Dichloropropene	20.71	0.15	1.0	20	0	104	56-132	0	
Trichloroethene	19.23	0.33	1.0	20	0	96.2	84-130	0	
Trichlorofluoromethane	19.99	0.24	1.0	20	0	100	60-140	0	
Vinyl chloride	19.3	0.53	1.0	20	0	96.5	50-136	0	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>20.17</i>	<i>0</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>101</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>20.43</i>	<i>0</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>102</i>	<i>80-110</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>20.76</i>	<i>0</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>104</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>19.49</i>	<i>0</i>	<i>0</i>	<i>20</i>	<i>0</i>	<i>97.4</i>	<i>85-110</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Client: Gannett Fleming, Inc.
 Work Order: 1805783
 Project: WRR (55929.005)

QC BATCH REPORT

Batch ID: **R236015A** Instrument ID **VMS10** Method: **SW8260C**

MS		Sample ID: 1805785-07A MS				Units: µg/L		Analysis Date: 05/16/18 10:15 PM			
Client ID:		Run ID: VMS10_180516A				SeqNo: 5038218		Prep Date:		DF: 10	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	264.4	3.3	10	200	32.5	116	75-130	0			
1,1,2,2-Tetrachloroethane	236.4	1.7	10	200	0	118	75-130	0			
1,1,2-Trichloroethane	219.5	2.2	10	200	0	110	75-125	0			
1,1-Dichloroethane	383.8	4.8	10	200	155.7	114	68-142	0			
1,1-Dichloroethene	224.1	3.6	10	200	0	112	70-145	0			
1,2,3-Trichlorobenzene	204.7	2.9	10	200	0	102	70-140	0			
1,2,4-Trichlorobenzene	197.9	2.5	10	200	0	99	70-135	0			
1,2-Dibromo-3-chloropropane	211.8	4.3	10	200	0	106	60-130	0			
1,2-Dibromoethane	250.7	1.7	10	200	0	125	67-155	0			
1,2-Dichlorobenzene	248.3	1.2	10	200	42.3	103	70-130	0			
1,2-Dichloroethane	222.1	1.1	10	200	0	111	78-125	0			
1,2-Dichloropropane	231.2	3.4	10	200	0	116	75-125	0			
1,3-Dichlorobenzene	212.6	1.3	10	200	0	106	75-130	0			
1,4-Dichlorobenzene	214.6	1.3	10	200	0	107	75-130	0			
2-Butanone	342.3	4.7	50	200	116.3	113	55-150	0			
2-Hexanone	242.3	5	50	200	0	121	60-135	0			
4-Methyl-2-pentanone	334.5	5.2	10	200	0	167	77-178	0			
Acetone	327.6	4.7	100	200	133.8	96.9	60-160	0			
Benzene	235	4.2	10	200	0	118	85-125	0			
Bromochloromethane	246.6	1.5	10	200	0	123	72-141	0			
Bromodichloromethane	210.6	2.2	10	200	0	105	75-125	0			
Bromoform	185.2	5.6	10	200	0	92.6	60-125	0			
Bromomethane	159.3	2.9	10	200	0	79.6	30-185	0			
Carbon disulfide	186.3	3.9	10	200	0	93.2	60-165	0			
Carbon tetrachloride	232.5	3.2	10	200	0	116	65-140	0			
Chlorobenzene	210.4	2.1	10	200	0	105	80-120	0			
Chloroethane	250.7	6.8	10	200	11.8	119	50-140	0			
Chloroform	228	4.6	10	200	0	114	80-130	0			
Chloromethane	267.3	6.8	10	200	0	134	46-148	0			
cis-1,2-Dichloroethene	339.3	3.8	10	200	188.5	75.4	75-134	0			
cis-1,3-Dichloropropene	222.9	1.3	10	200	0	111	70-130	0			
Dibromochloromethane	190	2	10	200	0	95	60-115	0			
Dichlorodifluoromethane	232.7	3	10	200	82.4	75.2	20-120	0			
Ethylbenzene	2263	2.9	10	200	2179	42.1	76-123	0			SEO
Isopropylbenzene	377.7	1.7	10	200	149.9	114	80-127	0			
m,p-Xylene	7989	5.3	20	400	8149	-40	75-130	0			SEO
Methyl tert-butyl ether	257.6	2.1	10	200	0	129	68-129	0			
Methylene chloride	219.5	1.6	50	200	0	110	75-140	0			
o-Xylene	2392	1.9	10	200	2288	52	76-127	0			SEO
Styrene	299	1.9	10	200	0	150	83-137	0			S
Tetrachloroethene	231.2	2.8	10	200	15.7	108	68-166	0			
Toluene	852	3.2	10	200	700	76	76-125	0			
trans-1,2-Dichloroethene	258.4	4.8	10	200	0	129	80-140	0			

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Client: Gannett Fleming, Inc.

Work Order: 1805783

Project: WRR (55929.005)

QC BATCH REPORT

Batch ID: R236015A	Instrument ID VMS10	Method: SW8260C							
trans-1,3-Dichloropropene	202.7	1.5	10	200	0	101	56-132	0	
Trichloroethene	233.4	3.3	10	200	0	117	84-130	0	
Trichlorofluoromethane	257.5	2.4	10	200	0	129	60-140	0	
Vinyl chloride	322	5.3	10	200	83.9	119	50-136	0	
<i>Surr: 1,2-Dichloroethane-d4</i>	<i>208</i>	<i>0</i>	<i>0</i>	<i>200</i>	<i>0</i>	<i>104</i>	<i>75-120</i>	<i>0</i>	
<i>Surr: 4-Bromofluorobenzene</i>	<i>205.4</i>	<i>0</i>	<i>0</i>	<i>200</i>	<i>0</i>	<i>103</i>	<i>80-110</i>	<i>0</i>	
<i>Surr: Dibromofluoromethane</i>	<i>218.6</i>	<i>0</i>	<i>0</i>	<i>200</i>	<i>0</i>	<i>109</i>	<i>85-115</i>	<i>0</i>	
<i>Surr: Toluene-d8</i>	<i>191.2</i>	<i>0</i>	<i>0</i>	<i>200</i>	<i>0</i>	<i>95.6</i>	<i>85-110</i>	<i>0</i>	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Client: Gannett Fleming, Inc.
 Work Order: 1805783
 Project: WRR (55929.005)

QC BATCH REPORT

Batch ID: **R236015A** Instrument ID **VMS10** Method: **SW8260C**

MSD		Sample ID: 1805785-07A MSD				Units: µg/L		Analysis Date: 05/16/18 10:31 PM			
Client ID:		Run ID: VMS10_180516A				SeqNo: 5038219		Prep Date:		DF: 10	
Analyte	Result	MDL	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,1-Trichloroethane	268.5	3.3	10	200	32.5	118	75-130	264.4	1.54	30	
1,1,2,2-Tetrachloroethane	245.3	1.7	10	200	0	123	75-130	236.4	3.7	30	
1,1,2-Trichloroethane	228.5	2.2	10	200	0	114	75-125	219.5	4.02	30	
1,1-Dichloroethane	405	4.8	10	200	155.7	125	68-142	383.8	5.38	30	
1,1-Dichloroethene	238.2	3.6	10	200	0	119	70-145	224.1	6.1	30	
1,2,3-Trichlorobenzene	213.3	2.9	10	200	0	107	70-140	204.7	4.11	30	
1,2,4-Trichlorobenzene	207.2	2.5	10	200	0	104	70-135	197.9	4.59	30	
1,2-Dibromo-3-chloropropane	214.7	4.3	10	200	0	107	60-130	211.8	1.36	30	
1,2-Dibromoethane	265.9	1.7	10	200	0	133	67-155	250.7	5.88	30	
1,2-Dichlorobenzene	256.2	1.2	10	200	42.3	107	70-130	248.3	3.13	30	
1,2-Dichloroethane	229.4	1.1	10	200	0	115	78-125	222.1	3.23	30	
1,2-Dichloropropane	241.2	3.4	10	200	0	121	75-125	231.2	4.23	30	
1,3-Dichlorobenzene	219.4	1.3	10	200	0	110	75-130	212.6	3.15	30	
1,4-Dichlorobenzene	223.7	1.3	10	200	0	112	75-130	214.6	4.15	30	
2-Butanone	370.3	4.7	50	200	116.3	127	55-150	342.3	7.86	30	
2-Hexanone	256.7	5	50	200	0	128	60-135	242.3	5.77	30	
4-Methyl-2-pentanone	357.3	5.2	10	200	0	179	77-178	334.5	6.59	30	S
Acetone	356.6	4.7	100	200	133.8	111	60-160	327.6	8.48	30	
Benzene	245	4.2	10	200	0	122	85-125	235	4.17	30	
Bromochloromethane	264.6	1.5	10	200	0	132	72-141	246.6	7.04	30	
Bromodichloromethane	223.6	2.2	10	200	0	112	75-125	210.6	5.99	30	
Bromoform	198.1	5.6	10	200	0	99	60-125	185.2	6.73	30	
Bromomethane	164.3	2.9	10	200	0	82.2	30-185	159.3	3.09	30	
Carbon disulfide	207.6	3.9	10	200	0	104	60-165	186.3	10.8	30	
Carbon tetrachloride	236.5	3.2	10	200	0	118	65-140	232.5	1.71	30	
Chlorobenzene	223.8	2.1	10	200	0	112	80-120	210.4	6.17	30	
Chloroethane	268.5	6.8	10	200	11.8	128	50-140	250.7	6.86	30	
Chloroform	245.1	4.6	10	200	0	123	80-130	228	7.23	30	
Chloromethane	294.3	6.8	10	200	0	147	46-148	267.3	9.62	30	
cis-1,2-Dichloroethene	344.8	3.8	10	200	188.5	78.2	75-134	339.3	1.61	30	
cis-1,3-Dichloropropene	232.2	1.3	10	200	0	116	70-130	222.9	4.09	30	
Dibromochloromethane	204.8	2	10	200	0	102	60-115	190	7.5	30	
Dichlorodifluoromethane	246.9	3	10	200	82.4	82.2	20-120	232.7	5.92	30	
Ethylbenzene	2383	2.9	10	200	2179	102	76-123	2263	5.18	30	EO
Isopropylbenzene	396.2	1.7	10	200	149.9	123	80-127	377.7	4.78	30	
m,p-Xylene	8298	5.3	20	400	8149	37.4	75-130	7989	3.8	30	SEO
Methyl tert-butyl ether	280.7	2.1	10	200	0	140	68-129	257.6	8.58	30	S
Methylene chloride	239.1	1.6	50	200	0	120	75-140	219.5	8.55	30	
o-Xylene	2516	1.9	10	200	2288	114	76-127	2392	5.03	30	EO
Styrene	312.9	1.9	10	200	0	156	83-137	299	4.54	30	S
Tetrachloroethene	241.4	2.8	10	200	15.7	113	68-166	231.2	4.32	30	
Toluene	892.2	3.2	10	200	700	96.1	76-125	852	4.61	30	
trans-1,2-Dichloroethene	277	4.8	10	200	0	138	80-140	258.4	6.95	30	

Note: See Qualifiers Page for a list of Qualifiers and their explanation.

Revision: 1

Client: Gannett Fleming, Inc.

Work Order: 1805783

Project: WRR (55929.005)

QC BATCH REPORT

Batch ID: R236015A	Instrument ID VMS10	Method: SW8260C								
trans-1,3-Dichloropropene	219	1.5	10	200	0	110	56-132	202.7	7.73	30
Trichloroethene	236.4	3.3	10	200	0	118	84-130	233.4	1.28	30
Trichlorofluoromethane	277.2	2.4	10	200	0	139	60-140	257.5	7.37	30
Vinyl chloride	340.7	5.3	10	200	83.9	128	50-136	322	5.64	30
<i>Surr: 1,2-Dichloroethane-d4</i>	210.6	0	0	200	0	105	75-120	208	1.24	30
<i>Surr: 4-Bromofluorobenzene</i>	216.9	0	0	200	0	108	80-110	205.4	5.45	30
<i>Surr: Dibromofluoromethane</i>	214	0	0	200	0	107	85-115	218.6	2.13	30
<i>Surr: Toluene-d8</i>	196.2	0	0	200	0	98.1	85-110	191.2	2.58	30

The following samples were analyzed in this batch:

1805783-01A	1805783-02A
-------------	-------------



Cincinnati, OH
+1 513 733 5336

Everett, WA
+1 425 356 2600

Fort Collins, CO
+1 970 490 1511

Holland, MI
+1 616 399 6070

Chain of Custody Form

Page 1 of 1

COC ID: 185399

Houston, TX
+1 281 530 5656

Middletown, PA
+1 717 944 5541

Spring City, PA
+1 610 948 4903

Salt Lake City, UT
+1 801 266 7700

South Charleston, WV
+1 304 356 3168

York, PA
+1 717 505 5280

ALS Project Manager: BB

ALS Work Order #: 1805783

Customer Information		Project Information		Parameter/Method Request for Analysis												
Purchase Order	Quote 6934	Project Name	WRR	A	VOCs 8260											
Work Order		Project Number	55929,005	B												
Company Name	Gannett Fleming, Inc.	Bill To Company	Gannett Fleming, Inc	C												
Send Report To	Anthony Miller	Invoice Attn	Accounts Payable	D												
Address	8025 Excelsior Dr.	Address	8025 Excelsior Dr.	E												
				F												
City/State/Zip	Madison, WI 53717	City/State/Zip	Madison, WI 53717	G												
Phone	(608) 836-1500	Phone	(608) 836-1500	H												
Fax		Fax		I												
e-Mail Address	awmiller@gfnet.com	e-Mail Address		J												

No.	Sample Description	Date	Time	Matrix	Pres.	# Bottles	A	B	C	D	E	F	G	H	I	J	Hold
1	PW-11	5/9/18	17:30	GW	HCl	3	3										
2	Trip Blank	"		"	"	2	2										
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Sampler(s) Please Print & Sign <u>Chelsea Payne</u>		Shipment Method <u>FedEx</u>		Required Turnaround Time: (Check Box)								Results Due Date:		
Relinquished by: <u>Chelsea Payne</u>	Date: <u>5/10/18</u>	Time: <u>12:30</u>	Received by: <u>FedEx</u>		Notes:									
Relinquished by: <u>FedEx</u>	Date: <u>5/11/18</u>	Time: <u>0930</u>	Received by (Laboratory): <u>[Signature]</u>		Cooler ID	Cooler Temp.	QC Package: (Check One Box Below)							
Logged by (Laboratory): <u>Kw</u>	Date: <u>5/11/18</u>	Time: <u>1335</u>	Checked by (Laboratory): <u>BB</u>		<u>SR2</u>	<u>3.4°C</u>								
Preservative Key: 1-HCl 2-HNO ₃ 3-H ₂ SO ₄ 4-NaOH 5-Na ₂ S ₂ O ₃ 6-NaHSO ₄ 7-Other 8-4°C 9-5035														

Note: 1. Any changes must be made in writing once samples and COC Form have been submitted to ALS Environmental.
 2. Unless otherwise agreed in a formal contract, services provided by ALS Environmental are expressly limited to the terms and conditions stated on the reverse.
 3. The Chain of Custody is a legal document. All information must be completed accurately.

Sample Receipt Checklist

Client Name: **GANNETFLEMING - WI**

Date/Time Received: **11-May-18 09:30**

Work Order: **1805783**

Received by: **KRW**

Checklist completed by Keith Wierenga 11-May-18
eSignature Date

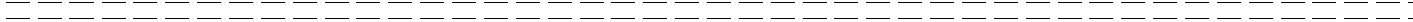
Reviewed by: Tom Bramish 11-May-18
eSignature Date

Matrices: Water

Carrier name: FedEx

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on shipping container/cooler?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Container/Temp Blank temperature in compliance?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample(s) received on ice?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temperature(s)/Thermometer(s):	<u>3.4/3.4 C</u>		<u>SR2</u>
Cooler(s)/Kit(s):	<u> </u>		
Date/Time sample(s) sent to storage:	<u>5/11/2018 1:38:42 PM</u>		
Water - VOA vials have zero headspace?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
pH adjusted by:	<u> </u>		

Login Notes:



Client Contacted: _____ Date Contacted: _____ Person Contacted: _____

Contacted By: _____ Regarding: _____

Comments:

CorrectiveAction:

August 23, 2018

Tony Miller
Gannett Fleming
8025 Excelsior Drive
Madison, WI 53717

RE: Project: 55929.005 WRR-PW-11
Pace Project No.: 40174236

Dear Tony Miller:

Enclosed are the analytical results for sample(s) received by the laboratory on August 17, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Chelsea Payne, Gannett Fleming Inc.



REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: 55929.005 WRR-PW-11

Pace Project No.: 40174236

Green Bay Certification IDs

1241 Bellevue Street, Green Bay, WI 54302

Florida/NELAP Certification #: E87948

Illinois Certification #: 200050

Kentucky UST Certification #: 82

Louisiana Certification #: 04168

Minnesota Certification #: 055-999-334

New York Certification #: 12064

North Dakota Certification #: R-150

Virginia VELAP ID: 460263

South Carolina Certification #: 83006001

Texas Certification #: T104704529-14-1

Wisconsin Certification #: 405132750

Wisconsin DATCP Certification #: 105-444

USDA Soil Permit #: P330-16-00157

Federal Fish & Wildlife Permit #: LE51774A-0

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: 55929.005 WRR-PW-11

Pace Project No.: 40174236

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40174236001	PW-11	Water	08/14/18 18:10	08/17/18 09:35
40174236002	TRIP BLANK	Water	08/15/18 00:00	08/17/18 09:35

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 55929.005 WRR-PW-11
Pace Project No.: 40174236

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40174236001	PW-11	EPA 8260	LAP	69
40174236002	TRIP BLANK	EPA 8260	LAP	69

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: 55929.005 WRR-PW-11

Pace Project No.: 40174236

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40174236001 EPA 8260	PW-11 Chloromethane	2.2J	ug/L	7.3	08/21/18 16:55	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 55929.005 WRR-PW-11

Pace Project No.: 40174236

Sample: PW-11 **Lab ID: 40174236001** Collected: 08/14/18 18:10 Received: 08/17/18 09:35 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates		Analytical Method: EPA 8260							
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		08/21/18 16:55	630-20-6	
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		08/21/18 16:55	71-55-6	
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		08/21/18 16:55	79-34-5	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		08/21/18 16:55	79-00-5	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		08/21/18 16:55	75-34-3	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		08/21/18 16:55	75-35-4	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		08/21/18 16:55	563-58-6	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		08/21/18 16:55	87-61-6	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		08/21/18 16:55	96-18-4	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		08/21/18 16:55	120-82-1	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		08/21/18 16:55	95-63-6	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		08/21/18 16:55	96-12-8	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		08/21/18 16:55	106-93-4	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		08/21/18 16:55	95-50-1	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		08/21/18 16:55	107-06-2	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		08/21/18 16:55	78-87-5	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		08/21/18 16:55	108-67-8	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		08/21/18 16:55	541-73-1	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		08/21/18 16:55	142-28-9	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		08/21/18 16:55	106-46-7	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		08/21/18 16:55	594-20-7	
2-Butanone (MEK)	<2.9	ug/L	20.0	2.9	1		08/21/18 16:55	78-93-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		08/21/18 16:55	95-49-8	
2-Propanol	<28.9	ug/L	250	28.9	1		08/21/18 16:55	67-63-0	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		08/21/18 16:55	106-43-4	
4-Methyl-2-pentanone (MIBK)	<1.5	ug/L	5.1	1.5	1		08/21/18 16:55	108-10-1	
Acetone	<2.7	ug/L	20.0	2.7	1		08/21/18 16:55	67-64-1	
Benzene	<0.25	ug/L	1.0	0.25	1		08/21/18 16:55	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		08/21/18 16:55	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		08/21/18 16:55	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		08/21/18 16:55	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		08/21/18 16:55	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		08/21/18 16:55	74-83-9	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		08/21/18 16:55	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		08/21/18 16:55	108-90-7	
Chloroethane	<1.3	ug/L	5.0	1.3	1		08/21/18 16:55	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		08/21/18 16:55	67-66-3	
Chloromethane	2.2J	ug/L	7.3	2.2	1		08/21/18 16:55	74-87-3	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		08/21/18 16:55	124-48-1	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		08/21/18 16:55	74-95-3	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		08/21/18 16:55	75-71-8	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		08/21/18 16:55	108-20-3	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		08/21/18 16:55	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		08/21/18 16:55	87-68-3	
Isopropylbenzene (Cumene)	<0.39	ug/L	2.7	0.39	1		08/21/18 16:55	98-82-8	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		08/21/18 16:55	1634-04-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 55929.005 WRR-PW-11

Pace Project No.: 40174236

Sample: PW-11 **Lab ID: 40174236001** Collected: 08/14/18 18:10 Received: 08/17/18 09:35 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates		Analytical Method: EPA 8260							
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		08/21/18 16:55	75-09-2	
Naphthalene	<1.2	ug/L	5.0	1.2	1		08/21/18 16:55	91-20-3	
Styrene	<0.47	ug/L	1.6	0.47	1		08/21/18 16:55	100-42-5	
Tetrachloroethene	<0.33	ug/L	1.1	0.33	1		08/21/18 16:55	127-18-4	
Toluene	<0.17	ug/L	5.0	0.17	1		08/21/18 16:55	108-88-3	
Trichloroethene	<0.26	ug/L	1.0	0.26	1		08/21/18 16:55	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		08/21/18 16:55	75-69-4	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		08/21/18 16:55	75-01-4	
Xylene (Total)	<1.5	ug/L	3.0	1.5	1		08/21/18 16:55	1330-20-7	
cis-1,2-Dichloroethene	<0.27	ug/L	1.0	0.27	1		08/21/18 16:55	156-59-2	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		08/21/18 16:55	10061-01-5	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		08/21/18 16:55	179601-23-1	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		08/21/18 16:55	104-51-8	
n-Propylbenzene	<0.81	ug/L	5.0	0.81	1		08/21/18 16:55	103-65-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		08/21/18 16:55	95-47-6	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		08/21/18 16:55	99-87-6	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		08/21/18 16:55	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		08/21/18 16:55	98-06-6	
trans-1,2-Dichloroethene	<1.1	ug/L	3.6	1.1	1		08/21/18 16:55	156-60-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		08/21/18 16:55	10061-02-6	
Surrogates									
Dibromofluoromethane (S)	106	%	70-130		1		08/21/18 16:55	1868-53-7	
Toluene-d8 (S)	99	%	70-130		1		08/21/18 16:55	2037-26-5	
4-Bromofluorobenzene (S)	91	%	70-130		1		08/21/18 16:55	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 55929.005 WRR-PW-11

Pace Project No.: 40174236

Sample: TRIP BLANK **Lab ID: 40174236002** Collected: 08/15/18 00:00 Received: 08/17/18 09:35 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates		Analytical Method: EPA 8260							
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		08/21/18 15:24	630-20-6	
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		08/21/18 15:24	71-55-6	
1,1,2,2-Tetrachloroethane	<0.28	ug/L	1.0	0.28	1		08/21/18 15:24	79-34-5	
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		08/21/18 15:24	79-00-5	
1,1-Dichloroethane	<0.27	ug/L	1.0	0.27	1		08/21/18 15:24	75-34-3	
1,1-Dichloroethene	<0.24	ug/L	1.0	0.24	1		08/21/18 15:24	75-35-4	
1,1-Dichloropropene	<0.54	ug/L	1.8	0.54	1		08/21/18 15:24	563-58-6	
1,2,3-Trichlorobenzene	<0.63	ug/L	5.0	0.63	1		08/21/18 15:24	87-61-6	
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		08/21/18 15:24	96-18-4	
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		08/21/18 15:24	120-82-1	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		08/21/18 15:24	95-63-6	
1,2-Dibromo-3-chloropropane	<1.8	ug/L	5.9	1.8	1		08/21/18 15:24	96-12-8	
1,2-Dibromoethane (EDB)	<0.83	ug/L	2.8	0.83	1		08/21/18 15:24	106-93-4	
1,2-Dichlorobenzene	<0.71	ug/L	2.4	0.71	1		08/21/18 15:24	95-50-1	
1,2-Dichloroethane	<0.28	ug/L	1.0	0.28	1		08/21/18 15:24	107-06-2	
1,2-Dichloropropane	<0.28	ug/L	1.0	0.28	1		08/21/18 15:24	78-87-5	
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		08/21/18 15:24	108-67-8	
1,3-Dichlorobenzene	<0.63	ug/L	2.1	0.63	1		08/21/18 15:24	541-73-1	
1,3-Dichloropropane	<0.83	ug/L	2.8	0.83	1		08/21/18 15:24	142-28-9	
1,4-Dichlorobenzene	<0.94	ug/L	3.1	0.94	1		08/21/18 15:24	106-46-7	
2,2-Dichloropropane	<2.3	ug/L	7.6	2.3	1		08/21/18 15:24	594-20-7	
2-Butanone (MEK)	<2.9	ug/L	20.0	2.9	1		08/21/18 15:24	78-93-3	
2-Chlorotoluene	<0.93	ug/L	5.0	0.93	1		08/21/18 15:24	95-49-8	
2-Propanol	<28.9	ug/L	250	28.9	1		08/21/18 15:24	67-63-0	
4-Chlorotoluene	<0.76	ug/L	2.5	0.76	1		08/21/18 15:24	106-43-4	
4-Methyl-2-pentanone (MIBK)	<1.5	ug/L	5.1	1.5	1		08/21/18 15:24	108-10-1	
Acetone	<2.7	ug/L	20.0	2.7	1		08/21/18 15:24	67-64-1	
Benzene	<0.25	ug/L	1.0	0.25	1		08/21/18 15:24	71-43-2	
Bromobenzene	<0.24	ug/L	1.0	0.24	1		08/21/18 15:24	108-86-1	
Bromochloromethane	<0.36	ug/L	5.0	0.36	1		08/21/18 15:24	74-97-5	
Bromodichloromethane	<0.36	ug/L	1.2	0.36	1		08/21/18 15:24	75-27-4	
Bromoform	<4.0	ug/L	13.2	4.0	1		08/21/18 15:24	75-25-2	
Bromomethane	<0.97	ug/L	5.0	0.97	1		08/21/18 15:24	74-83-9	
Carbon tetrachloride	<0.17	ug/L	1.0	0.17	1		08/21/18 15:24	56-23-5	
Chlorobenzene	<0.71	ug/L	2.4	0.71	1		08/21/18 15:24	108-90-7	
Chloroethane	<1.3	ug/L	5.0	1.3	1		08/21/18 15:24	75-00-3	
Chloroform	<1.3	ug/L	5.0	1.3	1		08/21/18 15:24	67-66-3	
Chloromethane	<2.2	ug/L	7.3	2.2	1		08/21/18 15:24	74-87-3	
Dibromochloromethane	<2.6	ug/L	8.7	2.6	1		08/21/18 15:24	124-48-1	
Dibromomethane	<0.94	ug/L	3.1	0.94	1		08/21/18 15:24	74-95-3	
Dichlorodifluoromethane	<0.50	ug/L	5.0	0.50	1		08/21/18 15:24	75-71-8	
Diisopropyl ether	<1.9	ug/L	6.3	1.9	1		08/21/18 15:24	108-20-3	
Ethylbenzene	<0.22	ug/L	1.0	0.22	1		08/21/18 15:24	100-41-4	
Hexachloro-1,3-butadiene	<1.2	ug/L	5.0	1.2	1		08/21/18 15:24	87-68-3	
Isopropylbenzene (Cumene)	<0.39	ug/L	2.7	0.39	1		08/21/18 15:24	98-82-8	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		08/21/18 15:24	1634-04-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: 55929.005 WRR-PW-11

Pace Project No.: 40174236

Sample: TRIP BLANK **Lab ID: 40174236002** Collected: 08/15/18 00:00 Received: 08/17/18 09:35 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Oxygenates		Analytical Method: EPA 8260							
Methylene Chloride	<0.58	ug/L	5.0	0.58	1		08/21/18 15:24	75-09-2	
Naphthalene	<1.2	ug/L	5.0	1.2	1		08/21/18 15:24	91-20-3	
Styrene	<0.47	ug/L	1.6	0.47	1		08/21/18 15:24	100-42-5	
Tetrachloroethene	<0.33	ug/L	1.1	0.33	1		08/21/18 15:24	127-18-4	
Toluene	<0.17	ug/L	5.0	0.17	1		08/21/18 15:24	108-88-3	
Trichloroethene	<0.26	ug/L	1.0	0.26	1		08/21/18 15:24	79-01-6	
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		08/21/18 15:24	75-69-4	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		08/21/18 15:24	75-01-4	
Xylene (Total)	<1.5	ug/L	3.0	1.5	1		08/21/18 15:24	1330-20-7	
cis-1,2-Dichloroethene	<0.27	ug/L	1.0	0.27	1		08/21/18 15:24	156-59-2	
cis-1,3-Dichloropropene	<3.6	ug/L	12.1	3.6	1		08/21/18 15:24	10061-01-5	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		08/21/18 15:24	179601-23-1	
n-Butylbenzene	<0.71	ug/L	2.4	0.71	1		08/21/18 15:24	104-51-8	
n-Propylbenzene	<0.81	ug/L	5.0	0.81	1		08/21/18 15:24	103-65-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		08/21/18 15:24	95-47-6	
p-Isopropyltoluene	<0.80	ug/L	2.7	0.80	1		08/21/18 15:24	99-87-6	
sec-Butylbenzene	<0.85	ug/L	5.0	0.85	1		08/21/18 15:24	135-98-8	
tert-Butylbenzene	<0.30	ug/L	1.0	0.30	1		08/21/18 15:24	98-06-6	
trans-1,2-Dichloroethene	<1.1	ug/L	3.6	1.1	1		08/21/18 15:24	156-60-5	
trans-1,3-Dichloropropene	<4.4	ug/L	14.6	4.4	1		08/21/18 15:24	10061-02-6	
Surrogates									
Dibromofluoromethane (S)	103	%	70-130		1		08/21/18 15:24	1868-53-7	
Toluene-d8 (S)	105	%	70-130		1		08/21/18 15:24	2037-26-5	
4-Bromofluorobenzene (S)	90	%	70-130		1		08/21/18 15:24	460-00-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 55929.005 WRR-PW-11

Pace Project No.: 40174236

QC Batch: 297653

Analysis Method: EPA 8260

QC Batch Method: EPA 8260

Analysis Description: 8260 MSV Oxygenates

Associated Lab Samples: 40174236001, 40174236002

METHOD BLANK: 1738613

Matrix: Water

Associated Lab Samples: 40174236001, 40174236002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.27	1.0	08/21/18 07:16	
1,1,1-Trichloroethane	ug/L	<0.24	1.0	08/21/18 07:16	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	1.0	08/21/18 07:16	
1,1,2-Trichloroethane	ug/L	<0.55	5.0	08/21/18 07:16	
1,1-Dichloroethane	ug/L	<0.27	1.0	08/21/18 07:16	
1,1-Dichloroethene	ug/L	<0.24	1.0	08/21/18 07:16	
1,1-Dichloropropene	ug/L	<0.54	1.8	08/21/18 07:16	
1,2,3-Trichlorobenzene	ug/L	<0.63	5.0	08/21/18 07:16	
1,2,3-Trichloropropane	ug/L	<0.59	5.0	08/21/18 07:16	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	08/21/18 07:16	
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	08/21/18 07:16	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	5.9	08/21/18 07:16	
1,2-Dibromoethane (EDB)	ug/L	<0.83	2.8	08/21/18 07:16	
1,2-Dichlorobenzene	ug/L	<0.71	2.4	08/21/18 07:16	
1,2-Dichloroethane	ug/L	<0.28	1.0	08/21/18 07:16	
1,2-Dichloropropane	ug/L	<0.28	1.0	08/21/18 07:16	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	08/21/18 07:16	
1,3-Dichlorobenzene	ug/L	<0.63	2.1	08/21/18 07:16	
1,3-Dichloropropane	ug/L	<0.83	2.8	08/21/18 07:16	
1,4-Dichlorobenzene	ug/L	<0.94	3.1	08/21/18 07:16	
2,2-Dichloropropane	ug/L	<2.3	7.6	08/21/18 07:16	
2-Butanone (MEK)	ug/L	<2.9	20.0	08/21/18 07:16	
2-Chlorotoluene	ug/L	<0.93	5.0	08/21/18 07:16	
2-Propanol	ug/L	<28.9	250	08/21/18 07:16	
4-Chlorotoluene	ug/L	<0.76	2.5	08/21/18 07:16	
4-Methyl-2-pentanone (MIBK)	ug/L	<1.5	5.1	08/21/18 07:16	
Acetone	ug/L	<2.7	20.0	08/21/18 07:16	
Benzene	ug/L	<0.25	1.0	08/21/18 07:16	
Bromobenzene	ug/L	<0.24	1.0	08/21/18 07:16	
Bromochloromethane	ug/L	<0.36	5.0	08/21/18 07:16	
Bromodichloromethane	ug/L	<0.36	1.2	08/21/18 07:16	
Bromoform	ug/L	<4.0	13.2	08/21/18 07:16	
Bromomethane	ug/L	<0.97	5.0	08/21/18 07:16	
Carbon tetrachloride	ug/L	<0.17	1.0	08/21/18 07:16	
Chlorobenzene	ug/L	<0.71	2.4	08/21/18 07:16	
Chloroethane	ug/L	<1.3	5.0	08/21/18 07:16	
Chloroform	ug/L	<1.3	5.0	08/21/18 07:16	
Chloromethane	ug/L	<2.2	7.3	08/21/18 07:16	
cis-1,2-Dichloroethene	ug/L	<0.27	1.0	08/21/18 07:16	
cis-1,3-Dichloropropene	ug/L	<3.6	12.1	08/21/18 07:16	
Dibromochloromethane	ug/L	<2.6	8.7	08/21/18 07:16	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 55929.005 WRR-PW-11

Pace Project No.: 40174236

METHOD BLANK: 1738613

Matrix: Water

Associated Lab Samples: 40174236001, 40174236002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromomethane	ug/L	<0.94	3.1	08/21/18 07:16	
Dichlorodifluoromethane	ug/L	<0.50	5.0	08/21/18 07:16	
Diisopropyl ether	ug/L	<1.9	6.3	08/21/18 07:16	
Ethylbenzene	ug/L	<0.22	1.0	08/21/18 07:16	
Hexachloro-1,3-butadiene	ug/L	<1.2	5.0	08/21/18 07:16	
Isopropylbenzene (Cumene)	ug/L	<0.39	2.7	08/21/18 07:16	
m&p-Xylene	ug/L	<0.47	2.0	08/21/18 07:16	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	08/21/18 07:16	
Methylene Chloride	ug/L	<0.58	5.0	08/21/18 07:16	
n-Butylbenzene	ug/L	<0.71	2.4	08/21/18 07:16	
n-Propylbenzene	ug/L	<0.81	5.0	08/21/18 07:16	
Naphthalene	ug/L	<1.2	5.0	08/21/18 07:16	
o-Xylene	ug/L	<0.26	1.0	08/21/18 07:16	
p-Isopropyltoluene	ug/L	<0.80	2.7	08/21/18 07:16	
sec-Butylbenzene	ug/L	<0.85	5.0	08/21/18 07:16	
Styrene	ug/L	<0.47	1.6	08/21/18 07:16	
tert-Butylbenzene	ug/L	<0.30	1.0	08/21/18 07:16	
Tetrachloroethene	ug/L	<0.33	1.1	08/21/18 07:16	
Toluene	ug/L	<0.17	5.0	08/21/18 07:16	
trans-1,2-Dichloroethene	ug/L	<1.1	3.6	08/21/18 07:16	
trans-1,3-Dichloropropene	ug/L	<4.4	14.6	08/21/18 07:16	
Trichloroethene	ug/L	<0.26	1.0	08/21/18 07:16	
Trichlorofluoromethane	ug/L	<0.21	1.0	08/21/18 07:16	
Vinyl chloride	ug/L	<0.17	1.0	08/21/18 07:16	
Xylene (Total)	ug/L	<1.5	3.0	08/21/18 07:16	
4-Bromofluorobenzene (S)	%	92	70-130	08/21/18 07:16	
Dibromofluoromethane (S)	%	103	70-130	08/21/18 07:16	
Toluene-d8 (S)	%	102	70-130	08/21/18 07:16	

LABORATORY CONTROL SAMPLE: 1738614

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	50	55.1	110	70-130	
1,1,1-Trichloroethane	ug/L	50	48.4	97	70-133	
1,1,2,2-Tetrachloroethane	ug/L	50	51.5	103	67-130	
1,1,2-Trichloroethane	ug/L	50	52.1	104	70-130	
1,1-Dichloroethane	ug/L	50	48.3	97	70-134	
1,1-Dichloroethene	ug/L	50	53.6	107	75-132	
1,1-Dichloropropene	ug/L	50	48.5	97	70-130	
1,2,3-Trichlorobenzene	ug/L	50	51.4	103	70-130	
1,2,3-Trichloropropane	ug/L	50	50.9	102	70-130	
1,2,4-Trichlorobenzene	ug/L	50	50.9	102	68-130	
1,2,4-Trimethylbenzene	ug/L	50	55.0	110	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	51.4	103	60-126	

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QUALITY CONTROL DATA

Project: 55929.005 WRR-PW-11

Pace Project No.: 40174236

LABORATORY CONTROL SAMPLE: 1738614

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,2-Dibromoethane (EDB)	ug/L	50	51.4	103	70-130	
1,2-Dichlorobenzene	ug/L	50	52.0	104	70-130	
1,2-Dichloroethane	ug/L	50	45.3	91	73-134	
1,2-Dichloropropane	ug/L	50	49.9	100	79-128	
1,3,5-Trimethylbenzene	ug/L	50	55.5	111	70-130	
1,3-Dichlorobenzene	ug/L	50	52.3	105	70-130	
1,3-Dichloropropane	ug/L	50	53.2	106	70-130	
1,4-Dichlorobenzene	ug/L	50	51.7	103	70-130	
2,2-Dichloropropane	ug/L	50	47.3	95	70-130	
2-Butanone (MEK)	ug/L	50	45.1	90	51-187	
2-Chlorotoluene	ug/L	50	54.8	110	70-130	
2-Propanol	ug/L	500	396	79	50-150	
4-Chlorotoluene	ug/L	50	53.2	106	70-130	
4-Methyl-2-pentanone (MIBK)	ug/L	50	39.4	79	50-150	
Acetone	ug/L	50	51.8	104	50-150	
Benzene	ug/L	50	46.4	93	69-137	
Bromobenzene	ug/L	50	50.3	101	70-130	
Bromochloromethane	ug/L	50	48.2	96	70-130	
Bromodichloromethane	ug/L	50	44.3	89	70-130	
Bromoform	ug/L	50	49.6	99	64-133	
Bromomethane	ug/L	50	36.2	72	29-123	
Carbon tetrachloride	ug/L	50	47.9	96	73-142	
Chlorobenzene	ug/L	50	53.0	106	70-130	
Chloroethane	ug/L	50	50.7	101	59-133	
Chloroform	ug/L	50	46.0	92	80-129	
Chloromethane	ug/L	50	42.7	85	27-125	
cis-1,2-Dichloroethene	ug/L	50	46.4	93	70-134	
cis-1,3-Dichloropropene	ug/L	50	47.1	94	70-130	
Dibromochloromethane	ug/L	50	52.2	104	70-130	
Dibromomethane	ug/L	50	47.6	95	70-130	
Dichlorodifluoromethane	ug/L	50	39.6	79	12-127	
Diisopropyl ether	ug/L	50	45.7	91	70-130	
Ethylbenzene	ug/L	50	54.7	109	86-127	
Hexachloro-1,3-butadiene	ug/L	50	57.0	114	70-130	
Isopropylbenzene (Cumene)	ug/L	50	56.4	113	70-130	
m&p-Xylene	ug/L	100	115	115	70-131	
Methyl-tert-butyl ether	ug/L	50	45.3	91	65-136	
Methylene Chloride	ug/L	50	47.2	94	72-133	
n-Butylbenzene	ug/L	50	58.1	116	70-130	
n-Propylbenzene	ug/L	50	55.0	110	70-130	
Naphthalene	ug/L	50	51.8	104	70-130	
o-Xylene	ug/L	50	55.9	112	70-130	
p-Isopropyltoluene	ug/L	50	55.8	112	70-130	
sec-Butylbenzene	ug/L	50	56.9	114	70-130	
Styrene	ug/L	50	55.9	112	70-130	
tert-Butylbenzene	ug/L	50	54.7	109	70-130	
Tetrachloroethene	ug/L	50	54.9	110	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: 55929.005 WRR-PW-11

Pace Project No.: 40174236

LABORATORY CONTROL SAMPLE: 1738614

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Toluene	ug/L	50	53.9	108	84-124	
trans-1,2-Dichloroethene	ug/L	50	49.6	99	70-133	
trans-1,3-Dichloropropene	ug/L	50	51.6	103	67-130	
Trichloroethene	ug/L	50	49.2	98	70-130	
Trichlorofluoromethane	ug/L	50	51.7	103	69-147	
Vinyl chloride	ug/L	50	50.0	100	48-134	
Xylene (Total)	ug/L	150	171	114	70-130	
4-Bromofluorobenzene (S)	%			100	70-130	
Dibromofluoromethane (S)	%			96	70-130	
Toluene-d8 (S)	%			108	70-130	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: 55929.005 WRR-PW-11

Pace Project No.: 40174236

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 and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 55929.005 WRR-PW-11

Pace Project No.: 40174236


Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40174236001	PW-11	EPA 8260	297653		
40174236002	TRIP BLANK	EPA 8260	297653		

REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt Form (SCUR)

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

Project #: UAD-11111
WO# : 40174236

40174236

Tracking #: _____
Custody Seal on Cooler/Box Present: yes no **Seals intact:** yes no
Custody Seal on Samples Present: yes no **Seals intact:** yes no
Packing Material: Bubble Wrap Bubble Bags None Other
Thermometer Used SR - N/A **Type of Ice:** Wet Blue Dry None Samples on ice, cooling process has begun
Cooler Temperature Uncorr: 20 /Corr: _____

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

Person examining contents:
Date: 8/17/18
Initials: [Signature]

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	5.
- VOA Samples frozen upon receipt	<input type="checkbox"/> Yes <input type="checkbox"/> No	Date/Time: _____
Short Hold Time Analysis (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7.
Sufficient Volume:		8.
For Analysis: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No MS/MSD: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	10.
Filtered volume received for Dissolved tests	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11.
Sample Labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	12.
-Includes date/time/ID/Analysis Matrix: <u>8/17/18 5 W</u>		
Trip Blank Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	13.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased): <u>402</u>		

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

Project Manager Review: Ron for Dr **Date:** 8/17/18