

McIlheran, Adam S - DNR

From: Dave Lennon <dmlennon@yahoo.com>
Sent: Monday, November 13, 2017 5:16 PM
To: McIlheran, Adam S - DNR
Subject: Riemer's Flowers #02-46-560053; Potable Well Survey
Attachments: 10-30-17 Water Supply Well Lab Report.pdf; IMG_0729.JPG; IMG_0731.JPG; IMG_0732.JPG

Adam,

Thanks for all your input on our little research project regarding the potable wells located on the properties 128-136 N Main St. in Thiensville. In response to your earlier inquiry and discussions we had on 10/30 (the day I was in the field at the site), it appears there were ever only 2 potable wells on the combined properties. According to Moraine's 2013 case closure request there was a well at the former Riemer's Flowers (136 N Main) and a high capacity well at 128-134 N Main (Steingart well). No other on-site potable wells were discussed.

Now, from the construction report you provided, a 98 foot well was located at 134 Main, and installed in 1959. I believe that to be the Steingart well and I also believe it to be what has been referred to as the high capacity well. I obtained a sample and depth from this location on 10/30. Uncertain about the depth, I lowered a weight attached to some nylon twine and hit something solid at about 95 feet. This could have been the top of the well pump...could not tell. If it were the well pump, then 98 feet would be a fair total depth, and this would correspond to the Steingart well at 128-134 N Main, for which we have the construction form and an address of 134 Main St. The well pump wiring was in-place and riser piping yet connected to the pitless adaptor. What I learned was that the original intent for the well was to provide water to holding tanks within the building to be used for fire suppression. The Village subsequently was upgrading N Main street and utilities and the property owner opted to connect directly to municipal supply for both potable and fire suppression services. The "high capacity" well was no longer needed and is not being used.

The well abandoned in November 2015 was listed as 115 feet deep at an address of 128 N Main. By the time of abandonment, all buildings had been razed and the well driller may simply have used the wrong address when filling out the abandonment form. As Moraine had only identified 2 potable wells on the combined properties, I would say the abandoned well belonged to the former Riemer's site at 136 N Main. I researched available databases and found no well construction reports for 136 N Main.

Attached is a copy of the lab report and a few photographs. No VOCs were detected except toluene at 6.7 ug/L, below its PAL of 160 ug/L. I hope this information satisfies your earlier request, and you are able to provide an email response that we may proceed with a case closure request.

Thank You,

Dave Lennon, P.E.
Senior Project Manager
Moraine Environmental
Cell: 262-844-5343
Office: 262-692-3345

November 03, 2017

Tom Sweet
Moraine Environmental, Inc.
766 Tower Drive
Fredonia, WI 53021

RE: Project: 5613 RIEMER'S FLOWERS
Pace Project No.: 40159838

Dear Tom Sweet:

Enclosed are the analytical results for sample(s) received by the laboratory on November 01, 2017. 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,



Steven Mieczko
steve.mieczko@pacelabs.com
(920)469-2436
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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

CERTIFICATIONS

Project: 5613 RIEMER'S FLOWERS
Pace Project No.: 40159838

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

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

SAMPLE SUMMARY

Project: 5613 RIEMER'S FLOWERS
Pace Project No.: 40159838

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40159838001	HCPW-136 N. MAIN	Water	10/30/17 16:20	11/01/17 07:55

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: 5613 RIEMER'S FLOWERS

Pace Project No.: 40159838

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40159838001	HCPW-136 N. MAIN	EPA 8260	HNW	64	PASI-G

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 5613 RIEMER'S FLOWERS
Pace Project No.: 40159838

Sample: HCPW-136 N. MAIN Lab ID: 40159838001 Collected: 10/30/17 16:20 Received: 11/01/17 07:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV									
Analytical Method: EPA 8260									
Benzene	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	71-43-2	
Bromobenzene	<0.23	ug/L	1.0	0.23	1		11/02/17 11:46	108-86-1	
Bromochloromethane	<0.34	ug/L	1.0	0.34	1		11/02/17 11:46	74-97-5	
Bromodichloromethane	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	75-27-4	
Bromoform	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	75-25-2	
Bromomethane	<2.4	ug/L	5.0	2.4	1		11/02/17 11:46	74-83-9	
n-Butylbenzene	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	104-51-8	
sec-Butylbenzene	<2.2	ug/L	5.0	2.2	1		11/02/17 11:46	135-98-8	
tert-Butylbenzene	<0.18	ug/L	1.0	0.18	1		11/02/17 11:46	98-06-6	
Carbon tetrachloride	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	56-23-5	
Chlorobenzene	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	108-90-7	
Chloroethane	<0.37	ug/L	1.0	0.37	1		11/02/17 11:46	75-00-3	
Chloroform	<2.5	ug/L	5.0	2.5	1		11/02/17 11:46	67-66-3	
Chloromethane	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	74-87-3	
2-Chlorotoluene	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	95-49-8	
4-Chlorotoluene	<0.21	ug/L	1.0	0.21	1		11/02/17 11:46	106-43-4	
1,2-Dibromo-3-chloropropane	<2.2	ug/L	5.0	2.2	1		11/02/17 11:46	96-12-8	
Dibromochloromethane	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	124-48-1	
1,2-Dibromoethane (EDB)	<0.18	ug/L	1.0	0.18	1		11/02/17 11:46	106-93-4	
Dibromomethane	<0.43	ug/L	1.0	0.43	1		11/02/17 11:46	74-95-3	
1,2-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	95-50-1	
1,3-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	541-73-1	
1,4-Dichlorobenzene	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	106-46-7	
Dichlorodifluoromethane	<0.22	ug/L	1.0	0.22	1		11/02/17 11:46	75-71-8	
1,1-Dichloroethane	<0.24	ug/L	1.0	0.24	1		11/02/17 11:46	75-34-3	
1,2-Dichloroethane	<0.17	ug/L	1.0	0.17	1		11/02/17 11:46	107-06-2	
1,1-Dichloroethene	<0.41	ug/L	1.0	0.41	1		11/02/17 11:46	75-35-4	
cis-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		11/02/17 11:46	156-59-2	
trans-1,2-Dichloroethene	<0.26	ug/L	1.0	0.26	1		11/02/17 11:46	156-60-5	
1,2-Dichloropropane	<0.23	ug/L	1.0	0.23	1		11/02/17 11:46	78-87-5	
1,3-Dichloropropane	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	142-28-9	
2,2-Dichloropropane	<0.48	ug/L	1.0	0.48	1		11/02/17 11:46	594-20-7	
1,1-Dichloropropene	<0.44	ug/L	1.0	0.44	1		11/02/17 11:46	563-58-6	
cis-1,3-Dichloropropene	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	10061-01-5	
trans-1,3-Dichloropropene	<0.23	ug/L	1.0	0.23	1		11/02/17 11:46	10061-02-6	
Diisopropyl ether	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	108-20-3	
Ethylbenzene	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	100-41-4	
Hexachloro-1,3-butadiene	<2.1	ug/L	5.0	2.1	1		11/02/17 11:46	87-68-3	
Isopropylbenzene (Cumene)	<0.14	ug/L	1.0	0.14	1		11/02/17 11:46	98-82-8	
p-Isopropyltoluene	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	99-87-6	
Methylene Chloride	<0.23	ug/L	1.0	0.23	1		11/02/17 11:46	75-09-2	
Methyl-tert-butyl ether	<0.17	ug/L	1.0	0.17	1		11/02/17 11:46	1634-04-4	
Naphthalene	<2.5	ug/L	5.0	2.5	1		11/02/17 11:46	91-20-3	
n-Propylbenzene	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	103-65-1	
Styrene	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	100-42-5	
1,1,1,2-Tetrachloroethane	<0.18	ug/L	1.0	0.18	1		11/02/17 11:46	630-20-6	

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: 5613 RIEMER'S FLOWERS
Pace Project No.: 40159838

Sample: HCPW-136 N. MAIN Lab ID: 40159838001 Collected: 10/30/17 16:20 Received: 11/01/17 07:55 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV		Analytical Method: EPA 8260							
1,1,2,2-Tetrachloroethane	<0.25	ug/L	1.0	0.25	1		11/02/17 11:46	79-34-5	
Tetrachloroethene	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	127-18-4	
Toluene	6.7	ug/L	1.0	0.50	1		11/02/17 11:46	108-88-3	
1,2,3-Trichlorobenzene	<2.1	ug/L	5.0	2.1	1		11/02/17 11:46	87-61-6	
1,2,4-Trichlorobenzene	<2.2	ug/L	5.0	2.2	1		11/02/17 11:46	120-82-1	
1,1,1-Trichloroethane	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	71-55-6	
1,1,2-Trichloroethane	<0.20	ug/L	1.0	0.20	1		11/02/17 11:46	79-00-5	
Trichloroethene	<0.33	ug/L	1.0	0.33	1		11/02/17 11:46	79-01-6	
Trichlorofluoromethane	<0.18	ug/L	1.0	0.18	1		11/02/17 11:46	75-69-4	
1,2,3-Trichloropropane	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	96-18-4	
1,2,4-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	95-63-6	
1,3,5-Trimethylbenzene	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	108-67-8	
Vinyl chloride	<0.18	ug/L	1.0	0.18	1		11/02/17 11:46	75-01-4	
m&p-Xylene	<1.0	ug/L	2.0	1.0	1		11/02/17 11:46	179601-23-1	
o-Xylene	<0.50	ug/L	1.0	0.50	1		11/02/17 11:46	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	87	%	61-130		1		11/02/17 11:46	460-00-4	
Dibromofluoromethane (S)	93	%	67-130		1		11/02/17 11:46	1868-53-7	
Toluene-d8 (S)	95	%	70-130		1		11/02/17 11:46	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 5613 RIEMER'S FLOWERS
Pace Project No.: 40159838

QC Batch: 272695 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40159838001

METHOD BLANK: 1603842 Matrix: Water
Associated Lab Samples: 40159838001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.18	1.0	11/02/17 09:08	
1,1,1-Trichloroethane	ug/L	<0.50	1.0	11/02/17 09:08	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	1.0	11/02/17 09:08	
1,1,2-Trichloroethane	ug/L	<0.20	1.0	11/02/17 09:08	
1,1-Dichloroethane	ug/L	<0.24	1.0	11/02/17 09:08	
1,1-Dichloroethene	ug/L	<0.41	1.0	11/02/17 09:08	
1,1-Dichloropropene	ug/L	<0.44	1.0	11/02/17 09:08	
1,2,3-Trichlorobenzene	ug/L	<2.1	5.0	11/02/17 09:08	
1,2,3-Trichloropropane	ug/L	<0.50	1.0	11/02/17 09:08	
1,2,4-Trichlorobenzene	ug/L	<2.2	5.0	11/02/17 09:08	
1,2,4-Trimethylbenzene	ug/L	<0.50	1.0	11/02/17 09:08	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	5.0	11/02/17 09:08	
1,2-Dibromoethane (EDB)	ug/L	<0.18	1.0	11/02/17 09:08	
1,2-Dichlorobenzene	ug/L	<0.50	1.0	11/02/17 09:08	
1,2-Dichloroethane	ug/L	<0.17	1.0	11/02/17 09:08	
1,2-Dichloropropane	ug/L	<0.23	1.0	11/02/17 09:08	
1,3,5-Trimethylbenzene	ug/L	<0.50	1.0	11/02/17 09:08	
1,3-Dichlorobenzene	ug/L	<0.50	1.0	11/02/17 09:08	
1,3-Dichloropropane	ug/L	<0.50	1.0	11/02/17 09:08	
1,4-Dichlorobenzene	ug/L	<0.50	1.0	11/02/17 09:08	
2,2-Dichloropropane	ug/L	<0.48	1.0	11/02/17 09:08	
2-Chlorotoluene	ug/L	<0.50	1.0	11/02/17 09:08	
4-Chlorotoluene	ug/L	<0.21	1.0	11/02/17 09:08	
Benzene	ug/L	<0.50	1.0	11/02/17 09:08	
Bromobenzene	ug/L	<0.23	1.0	11/02/17 09:08	
Bromochloromethane	ug/L	<0.34	1.0	11/02/17 09:08	
Bromodichloromethane	ug/L	<0.50	1.0	11/02/17 09:08	
Bromoform	ug/L	<0.50	1.0	11/02/17 09:08	
Bromomethane	ug/L	<2.4	5.0	11/02/17 09:08	
Carbon tetrachloride	ug/L	<0.50	1.0	11/02/17 09:08	
Chlorobenzene	ug/L	<0.50	1.0	11/02/17 09:08	
Chloroethane	ug/L	<0.37	1.0	11/02/17 09:08	
Chloroform	ug/L	<2.5	5.0	11/02/17 09:08	
Chloromethane	ug/L	<0.50	1.0	11/02/17 09:08	
cis-1,2-Dichloroethene	ug/L	<0.26	1.0	11/02/17 09:08	
cis-1,3-Dichloropropene	ug/L	<0.50	1.0	11/02/17 09:08	
Dibromochloromethane	ug/L	<0.50	1.0	11/02/17 09:08	
Dibromomethane	ug/L	<0.43	1.0	11/02/17 09:08	
Dichlorodifluoromethane	ug/L	<0.22	1.0	11/02/17 09:08	
Diisopropyl ether	ug/L	<0.50	1.0	11/02/17 09:08	
Ethylbenzene	ug/L	<0.50	1.0	11/02/17 09:08	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 5613 RIEMER'S FLOWERS
Pace Project No.: 40159838

METHOD BLANK: 1603842 Matrix: Water
Associated Lab Samples: 40159838001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<2.1	5.0	11/02/17 09:08	
Isopropylbenzene (Cumene)	ug/L	<0.14	1.0	11/02/17 09:08	
m&p-Xylene	ug/L	<1.0	2.0	11/02/17 09:08	
Methyl-tert-butyl ether	ug/L	<0.17	1.0	11/02/17 09:08	
Methylene Chloride	ug/L	<0.23	1.0	11/02/17 09:08	
n-Butylbenzene	ug/L	<0.50	1.0	11/02/17 09:08	
n-Propylbenzene	ug/L	<0.50	1.0	11/02/17 09:08	
Naphthalene	ug/L	<2.5	5.0	11/02/17 09:08	
o-Xylene	ug/L	<0.50	1.0	11/02/17 09:08	
p-Isopropyltoluene	ug/L	<0.50	1.0	11/02/17 09:08	
sec-Butylbenzene	ug/L	<2.2	5.0	11/02/17 09:08	
Styrene	ug/L	<0.50	1.0	11/02/17 09:08	
tert-Butylbenzene	ug/L	<0.18	1.0	11/02/17 09:08	
Tetrachloroethene	ug/L	<0.50	1.0	11/02/17 09:08	
Toluene	ug/L	<0.50	1.0	11/02/17 09:08	
trans-1,2-Dichloroethene	ug/L	<0.26	1.0	11/02/17 09:08	
trans-1,3-Dichloropropene	ug/L	<0.23	1.0	11/02/17 09:08	
Trichloroethene	ug/L	<0.33	1.0	11/02/17 09:08	
Trichlorofluoromethane	ug/L	<0.18	1.0	11/02/17 09:08	
Vinyl chloride	ug/L	<0.18	1.0	11/02/17 09:08	
4-Bromofluorobenzene (S)	%	88	61-130	11/02/17 09:08	
Dibromofluoromethane (S)	%	97	67-130	11/02/17 09:08	
Toluene-d8 (S)	%	96	70-130	11/02/17 09:08	

LABORATORY CONTROL SAMPLE: 1603843

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	49.6	45.4	92	70-130	
1,1,2,2-Tetrachloroethane	ug/L	49.6	36.2	73	70-130	
1,1,2-Trichloroethane	ug/L	49.6	39.6	80	70-130	
1,1-Dichloroethane	ug/L	49.6	56.5	114	71-132	
1,1-Dichloroethene	ug/L	49.6	55.8	112	75-130	
1,2,4-Trichlorobenzene	ug/L	49.6	42.4	86	70-130	
1,2-Dibromo-3-chloropropane	ug/L	49.6	33.5	67	63-123	
1,2-Dibromoethane (EDB)	ug/L	49.6	37.9	76	70-130	
1,2-Dichlorobenzene	ug/L	49.6	44.4	90	70-130	
1,2-Dichloroethane	ug/L	49.6	43.1	87	70-131	
1,2-Dichloropropane	ug/L	49.6	44.9	91	80-120	
1,3-Dichlorobenzene	ug/L	49.6	45.6	92	70-130	
1,4-Dichlorobenzene	ug/L	49.6	44.5	90	70-130	
Benzene	ug/L	49.6	46.3	93	73-145	
Bromodichloromethane	ug/L	49.6	44.3	89	70-130	
Bromoform	ug/L	49.6	34.6	70	67-130	
Bromomethane	ug/L	50	40.1	80	26-128	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 5613 RIEMER'S FLOWERS
Pace Project No.: 40159838

LABORATORY CONTROL SAMPLE: 1603843

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	49.6	42.5	86	70-133	
Chlorobenzene	ug/L	49.6	46.0	93	70-130	
Chloroethane	ug/L	50	53.9	108	58-120	
Chloroform	ug/L	49.6	45.8	92	80-121	
Chloromethane	ug/L	50	34.2	68	40-127	
cis-1,2-Dichloroethene	ug/L	49.6	43.8	88	70-130	
cis-1,3-Dichloropropene	ug/L	49.6	39.4	79	70-130	
Dibromochloromethane	ug/L	49.6	36.3	73	70-130	
Dichlorodifluoromethane	ug/L	50	38.8	78	20-135	
Ethylbenzene	ug/L	49.6	48.9	98	87-129	
Isopropylbenzene (Cumene)	ug/L	49.6	44.9	91	70-130	
m&p-Xylene	ug/L	99.2	89.0	90	70-130	
Methyl-tert-butyl ether	ug/L	49.6	47.6	96	66-143	
Methylene Chloride	ug/L	49.6	50.4	102	70-130	
o-Xylene	ug/L	49.6	48.5	98	70-130	
Styrene	ug/L	49.6	43.4	87	70-130	
Tetrachloroethene	ug/L	49.6	43.7	88	70-130	
Toluene	ug/L	49.6	45.2	91	82-130	
trans-1,2-Dichloroethene	ug/L	49.6	55.5	112	75-132	
trans-1,3-Dichloropropene	ug/L	49.6	35.4	71	70-130	
Trichloroethene	ug/L	49.6	48.7	98	70-130	
Trichlorofluoromethane	ug/L	50	55.8	112	76-133	
Vinyl chloride	ug/L	50	56.4	113	57-136	
4-Bromofluorobenzene (S)	%			103	61-130	
Dibromofluoromethane (S)	%			98	67-130	
Toluene-d8 (S)	%			96	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1603845 1603846

Parameter	Units	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual	
		40159836002 Result	Spike Conc.	Spike Conc.	MS Result							MSD Result
1,1,1-Trichloroethane	ug/L	<0.50	49.6	49.6	49.6	49.1	100	99	70-134	1	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.25	49.6	49.6	39.2	38.7	79	78	70-130	1	20	
1,1,2-Trichloroethane	ug/L	<0.20	49.6	49.6	41.1	40.4	83	82	70-130	2	20	
1,1-Dichloroethane	ug/L	<0.24	49.6	49.6	58.9	59.7	119	120	71-133	1	20	
1,1-Dichloroethene	ug/L	<0.41	49.6	49.6	57.0	57.1	115	115	75-136	0	20	
1,2,4-Trichlorobenzene	ug/L	<2.2	49.6	49.6	44.9	44.0	90	89	70-130	2	20	
1,2-Dibromo-3-chloropropane	ug/L	<2.2	49.6	49.6	34.5	35.8	70	72	63-123	4	20	
1,2-Dibromoethane (EDB)	ug/L	<0.18	49.6	49.6	40.2	39.2	81	79	70-130	3	20	
1,2-Dichlorobenzene	ug/L	<0.50	49.6	49.6	45.2	45.0	91	91	70-130	1	20	
1,2-Dichloroethane	ug/L	<0.17	49.6	49.6	48.1	46.6	97	94	70-131	3	20	
1,2-Dichloropropane	ug/L	<0.23	49.6	49.6	47.7	46.1	96	93	80-120	3	20	
1,3-Dichlorobenzene	ug/L	<0.50	49.6	49.6	47.4	46.6	95	94	70-130	2	20	
1,4-Dichlorobenzene	ug/L	<0.50	49.6	49.6	45.5	45.7	92	92	70-130	0	20	

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

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: 5613 RIEMER'S FLOWERS
Pace Project No.: 40159838

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE:				1603845		1603846		% Rec	% Rec	Limits	Max RPD	Qual
		40159836002	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec						
Benzene	ug/L	<0.50	49.6	49.6	49.2	50.3	99	101	73-145	2	20			
Bromodichloromethane	ug/L	<0.50	49.6	49.6	47.2	46.6	95	94	70-130	1	20			
Bromoform	ug/L	<0.50	49.6	49.6	35.3	34.7	71	70	67-130	2	20			
Bromomethane	ug/L	<2.4	50	50	38.0	30.3	76	61	26-129	22	20	R1		
Carbon tetrachloride	ug/L	<0.50	49.6	49.6	45.7	46.3	92	93	70-134	1	20			
Chlorobenzene	ug/L	<0.50	49.6	49.6	47.8	48.5	96	98	70-130	1	20			
Chloroethane	ug/L	<0.37	50	50	75.7	72.0	151	144	58-120	5	20	M1		
Chloroform	ug/L	<2.5	49.6	49.6	49.5	49.0	100	99	80-121	1	20			
Chloromethane	ug/L	<0.50	50	50	34.8	37.1	70	74	40-128	6	20			
cis-1,2-Dichloroethene	ug/L	<0.26	49.6	49.6	46.8	48.8	94	98	70-130	4	20			
cis-1,3-Dichloropropene	ug/L	<0.50	49.6	49.6	41.0	40.3	83	81	70-130	2	20			
Dibromochloromethane	ug/L	<0.50	49.6	49.6	37.8	38.0	76	77	70-130	0	20			
Dichlorodifluoromethane	ug/L	<0.22	50	50	42.2	43.8	84	88	20-146	4	20			
Ethylbenzene	ug/L	<0.50	49.6	49.6	49.9	49.7	101	100	87-129	0	20			
Isopropylbenzene (Cumene)	ug/L	<0.14	49.6	49.6	45.4	45.6	92	92	70-130	1	20			
m&p-Xylene	ug/L	<1.0	99.2	99.2	89.6	90.3	90	91	70-130	1	20			
Methyl-tert-butyl ether	ug/L	<0.17	49.6	49.6	50.6	49.9	102	101	66-143	1	20			
Methylene Chloride	ug/L	<0.23	49.6	49.6	53.6	52.2	108	105	70-130	3	20			
o-Xylene	ug/L	<0.50	49.6	49.6	49.2	48.7	99	98	70-130	1	20			
Styrene	ug/L	<0.50	49.6	49.6	44.4	43.9	90	89	70-130	1	20			
Tetrachloroethene	ug/L	<0.50	49.6	49.6	45.3	45.5	91	92	70-130	0	20			
Toluene	ug/L	<0.50	49.6	49.6	45.9	46.6	93	94	82-131	1	20			
trans-1,2-Dichloroethene	ug/L	<0.26	49.6	49.6	58.0	59.0	117	119	75-135	2	20			
trans-1,3-Dichloropropene	ug/L	<0.23	49.6	49.6	36.1	35.3	73	71	70-130	2	20			
Trichloroethene	ug/L	<0.33	49.6	49.6	50.2	49.3	101	99	70-130	2	20			
Trichlorofluoromethane	ug/L	<0.18	50	50	59.5	56.1	119	112	76-150	6	20			
Vinyl chloride	ug/L	<0.18	50	50	56.7	56.7	113	113	56-143	0	20			
4-Bromofluorobenzene (S)	%						102	101	61-130					
Dibromofluoromethane (S)	%						102	103	67-130					
Toluene-d8 (S)	%						94	94	70-130					

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

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: 5613 RIEMER'S FLOWERS
Pace Project No.: 40159838

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.

LABORATORIES

PASI-G Pace Analytical Services - Green Bay

WORKORDER QUALIFIERS

WO: 40159838

[1] Revised - client - Revised to correct sample ID. SVM 11/3/17

ANALYTE QUALIFIERS

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

R1 RPD value was outside control limits.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 5613 RIEMER'S FLOWERS

Pace Project No.: 40159838

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40159838001	HCPW-136 N. MAIN	EPA 8260	272695		

REPORT OF LABORATORY ANALYSIS

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

Please Print Clearly)

Maurice Elm.
 Fredonia
 Dave Leonard
 262-692-3345
 5613
 Riemer's Fluors
 WI
 Dave Leonard
 Dave Leonard

Options
 vel III
 vel IV
 On your sample (billable)
 NOT needed on your sample

MS/MSD
 A = Air
 B = Biotia
 C = Charcoal
 O = Oil
 S = Soil
 Sl = Sludge
 W = Water
 DW = Drinking Water
 GW = Ground Water
 SW = Surface Water
 WW = Waste Water
 WP = Wipe

CLIENT FIELD ID
 CRU - 136 N. Main
 DATE COLLECTION TIME MATRIX
 10/30/17 16:20 DW

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

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



CHAIN OF CUSTODY

UPPER MIDWEST REGION
 MN: 612-807-1700 WI: 920-469-2436

AKB

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

Y/N	Pick Letter	ANALYSES REQUESTED
N	B	(0928) 20N X

Round Time Requested - Prelims
 subject to approval/surcharge)
 Date Needed:
 Rush Results by (complete what you want):

Relinquished By:
 Relinquished By:
 Relinquished By:
 Relinquished By:

Received By:
 Received By:
 Received By:
 Received By:

Receipt Temp =
 Sample OK /
 COOLING Present / Intact /

Items on HOLD are subject to pricing and release of liability

Sample Condition Upon Receipt

Pace Analytical Services, LLC. - Green Bay WI
1241 Bellevue Street, Suite 9
Green Bay, WI 54302



Project #:

WO#: 40159838



Client Name: Morraine Env

Courier: Fed Ex UPS Client Pace Other: CS Logistics

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

Cooler Temperature: Uncorr: ROI /Corr: ROI Biological Tissue is Frozen: yes no

Temp Blank Present: yes no

Person examining contents:
Date: 11/11/17
Initials: RS

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

Comments:

Chain of Custody Present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody Filled Out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody Relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler Name & Signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples Arrived within Hold Time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	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 <input type="checkbox"/> N/A	6.
Rush Turn Around Time Requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient Volume:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	8. no MS/MSD <u>RS</u> 11/11/17
Correct Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
-Pace Containers Used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
-Pace IR Containers Used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Containers Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. no time <u>RS</u> 11/11/17
-Includes date/time/ID/Analysis Matrix:		
All containers needing preservation have been checked. (Non-Compliance noted in 13.)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	13. <input type="checkbox"/> HNO3 <input type="checkbox"/> H2SO4 <input type="checkbox"/> NaOH <input type="checkbox"/> NaOH + ZnAct
All containers needing preservation are found to be in compliance with EPA recommendation. (HNO3, H2SO4 ≤2; NaOH+ZnAct ≥9, NaOH ≥12)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
exceptions: (VOA, coliform, TOC, TOX, TOH, O&G, WIDROW, Phenolics, OTHER:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
		Lab Std #/ID of preservative
		Date/Time:
Headspace in VOA Vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
Trip Blank Present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	15.
Trip Blank Custody Seals Present	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution:

If checked, see attached form for additional comments

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review:

Date: 11/11/17











