

Tel: 608-838-9120

May 21, 2020 PECFA #: 53807-9551-04

Ms. Janet Dimaggio WDNR – Bureau of Remediation and Redevelopment 3911 Fish Hatchery Road Fitchburg, Wisconsin 53711

RE: Groundwater Sampling Update

Rath Property- 1304 St. Rose Road - Cuba City, Wisconsin

BRRTS # 03-22-563937

Dear Ms. Dimaggio:

Seymour Environmental Services, Inc. (Seymour) is pleased to present the included groundwater monitoring data from April 2020 for the Rath Property located near Cuba City, Wisconsin. This is the second round of groundwater monitoring at the site. During the April site vist hydraulic testing and a water supply well reconnaissance was completed in addition to the groundwater sampling. The recent groundwater monitoring data shows that limited impacts from the petroleum release are present in the groundwater and no analytes were identified in the groundwater samples at concentrations exceeding NR140 standards.

#### GROUNDWATER MONITORING

On April 16, 2020 the second round of groundwater monitoring was conducted at the site. Groundwater monitoring consisted of water level measurement, and groundwater sample collection. Groundwater samples from the monitoring wells were analyzed for PVOCs. Additionally, a groundwater sample was collected from the water-supply well located at the property and analyzed for VOCs.

Water level data from the April monitoring are similar to those collected in Feburary 2020. Generally, the water table at the site rose ~0.6 feet between the February and April sampling events. In April the water table was present at a depth of ~32.5 feet below grade. Groundwater elevation data from the wells was contoured to construct a water table map (Figure 1). The contour map indicates that groundwater flow at the site generally is toward the northwest. This is consistent with data from February and the anticipated flow direction based on the topography in the area. The horizontal hydraulic gradient measured during the April monitoring was 0.0269 ft/ft. Monitoring well construction and groundwater level data collected during the monitoring is included on Table 1 and the laboratory report is included as Attachment A.

Analysis of the groundwater samples from the monitoring wells shows that no significant petroleum-related contamination is present in the area of the former tank system. No PVOCs were detected in the groundwater samples from two of the wells (MW-1 and MW-2). The groundwater sample collected from MW-3 contained trace levels of toluene (0.28 ug/l). Groundwater analytical data from the monitoring wells is summarized on Table 2 and data is posted on Figure 1.

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The water sample collected from the water-supply well at the site in April 2020 did not contain any VOCs above the laboratory detection limits. This is the fourth time a sample was collected from the well. No petroleum related VOCs have been detected in any of the water samples. Water supply analytical data is compiled in Table 3.

#### **AQUIFER HYDRAULICS**

A slug test was preformed at MW-1 to characterize the hydraulic conductivity of the carbonate bedrock aquifer. To conduct the test a small voluem of water, 0.5 gallons, was removed from the well and the recovery of the groundwater was measured. Data collected from the recovery curve was used to calculate the hydraulic conductivity of the aquifer using the methods developed by Bouwer and Rice (1976). Results of the test show that the aquifer condcutivity is 0.22 ft/day (7.93 x 10<sup>-5</sup> cm/sec). This conductivity determined at the site is consistent with published values for the aquifer. The recovery curve for the hydraulic test is included in Attachment B.

The groundwater flow rate at the site was estimated based on the conductivity and hydaulic gradient data collected in April 2020. Assuming an aquifer porosity of 0.3, the groundwater flow rate at the site is 7.2 feet/year.

#### RECEPTOR SURVEY

The site is located in an area that is not serviced by a public water-supply system and the local properties are serviced by private wells. A total of 19 were identified within a 1200 foot radius of the source area (Figure 2). The water-supply well at the site is the nearst of these wells and is located 100 feet downgradient from the contaminant source area. As discussed previously, no petroleum-related contaminants have been identified in the water from this water-supply well.

Well construction logs for the nearby water-supply wells were reviewed to evaluate the hydrostratigraphy and the well construction. The logs indicate that a thin layer of clayey soils is present in the area; these soils extend from the surface to a depth of ranging from 7 to 30 feet. The Galena Formation is present beneath the clayey soil and extends to a depth of  $\sim 115$  feet. Locally, the Galena is light brown in color and thickly-bedded to massive. The Platteville Formation is present from  $\sim 115$  to the maximum well depth of 180 feet. The Platteville is a gray fossiliferous dolomite. The unit is thinly bedded and appears to be the primary producer of the water for the private wells.

The logs show that the wells generally are similar in construction. All of the local water supply wells tap the Galena-Platteville carbonates for water. The total depths of the wells varies from ~125 to 180 feet. The water supply well casings extend into the bedrock aquifer. Most wells are cased to a depth of 80 to 120 feet. However, in some of the older water supply wells the casing was only extended to a depth of ~40 feet. We have been unable to locate a log for the water supply well present on the source property. Well construction logs from several of the nearby water-supply wells are included as Attachment C.

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#### DISCUSSION/RECOMMENDATIONS

Data collected show limited petroleum-related contamination remains at the site. A small amount of residual soil contamination is present along the south site of the old store building and no groundwater contamination exceeding NR140 standards is present. This soil contamination is located 10-13 feet below grade. Contaminant levels within the residual soil mass are fairly low and only trimethylbenzenes and naphthalene were detected. Based on the contaminant levels and the depth of the residual soil contamination the does not appear to be a significant vapor imtusion threat at the site.

Based on the information collected we believe that the site meets the WDNR closure criteria. Site closure require a GIS-registry for the residual soil contamination. It is our opinion that the old store building does not act as a substantial cover which limits groundwater infiltration. However, the building was a structural impediment to the remediation of the soil and an on-going obligation requiring assessment and proper management of the residual soil contamination if the building is removed seems to be appropriate for site closure.

If you have any questions, please feel free to give Mark Fryman or me a call at (608) 838-9120.

Sincerely,

Seymour Environmental Services

Rokyn Sugnow

Robyn Seymour Hydrogeologist

enclosures: Tables (3)

Figures (2)

Attachment A - Laboratory Report Attachment B - Hydraulic Testing Data

Attachment C - Water Supply Well Construction Reports

cc: Mr. -Richard Rath – RP

# **TABLES**

# TABLE 1 SUMMARY OF WELL CONSTRUCTION AND GROUNDWATER LEVEL DATA Rath Property

1304 Saint Rose Road - Cuba City, Wisconsin

#### WELL CONSTRUCTION DETAILS

WELL	Unique ID	Date Installed	Top of Casing Elevation	Well Depth	Screen Length	Top of Screen Elevation	Base of Screen Elevation
MW-1	VR-308	1/23/2020	996.1	995.63	40.6	15	970.03
MW-2	VR-037	1/24/2020	996.9	996.32	39.5	15	971.82
MW-3	VR-139	1/24/2020	996.1	995.70	40.0	15	970.70

#### WATER LEVEL DATA

WELL	02/24	02/24/2020		5/2020
	Depth	Elevation	Depth	Elevation
MW-1	32.43	963.20	31.92	963.71
MW-2	31.81	964.51	31.11	965.21
MW-3	31.24	964.46	30.45	965.25
Hydraulic Gradient	0.0224 ft/	ft N41°W	0.0269 ft	/ft N46°W

- Depth and Length values are listed in feet
- Elevation data listed in feet above mean sea level (NAVD 1984)

# TABLE 2 SUMMARY OF GROUNDWATER MONITORING DATA Rath Property

1304 Saint Rose Road - Cuba City, Wisconsin

Sample I.D.	MV	W-1	MV	W-2	MV	W-3	NR	140
Date	02/24/20	04/16/20	02/24/20	04/16/20	02/24/20	04/16/20	ES	PAL
VOCs								
Benzene	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	5	0.5
1,2 Dichloroethane	< 0.28	na	< 0.28	na	< 0.28	na	5	0.5
Ethylbenzene	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	< 0.32	700	140
Methyl-tert-butyl ether	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	60	12
Toluene	< 0.27	< 0.27	< 0.27	< 0.27	0.95	0.28 (J)	800	160
Total Trimethylbenzenes	<1.71	<1.71	<1.71	<1.71	<1.71	<1.71	480	96
Total Xylenes	< 0.73	< 0.73	< 0.73	< 0.73	< 0.73	< 0.73	2000	400
Naphthalene	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	100	10
n-Butylbenzene	< 0.71	na	< 0.71	na	< 0.71	na	ns	ns
Isopropylbenzene	<1.7	na	<1.7	na	<1.7	na	ns	ns
n-propylbenzene	< 0.81	na	< 0.81	na	< 0.81	na	ns	ns
PAHs								
Acenaphthrene	< 0.0055	na	< 0.0055	na	< 0.0055	na	ns	ns
Acenaphthylene	< 0.0045	na	< 0.0045	na	< 0.0045	na	ns	ns
Anthracene	< 0.0094	na	< 0.0095	na	< 0.0094	na	3000	600
Benzo(a)anthracene	< 0.0068	na	< 0.0069	na	< 0.0068	na	ns	ns
Benzo(a)pyrene	< 0.0095	na	< 0.0096	na	< 0.0095	na	0.2	0.02
Benzo(b)fluoranthene	< 0.0052	na	< 0.0052	na	< 0.0052	na	0.2	0.02
Benzo(g,h,i)perylene	< 0.0061	na	< 0.0062	na	< 0.0061	na	ns	ns
Benzo(k)fluoranthene	< 0.0068	na	< 0.0069	na	< 0.0068	na	ns	ns
Chrysene	< 0.012	na	< 0.012	na	< 0.012	na	0.2	0.02
Dibenzo(a,h)anthracene	< 0.0090	na	< 0.0091	na	< 0.0090	na	ns	ns
Fluoranthene	< 0.0096	na	< 0.0097	na	< 0.0096	na	400	80
Fluorene	< 0.0072	na	< 0.0072	na	< 0.0072	na	400	80
Indeno(1,2,3-cd)pyrene	< 0.016	na	< 0.016	na	< 0.016	na	ns	ns
1-Methylnaphthalene	< 0.0053	na	< 0.0054	na	< 0.0053	na	ns	ns
2-Methylnaphthalene	< 0.0044	na	< 0.0045	na	< 0.0044	na	ns	ns
Naphthalene	0.028 (J)	na	< 0.017	na	< 0.017	na	100	10
Phenanthrene	< 0.012	na	< 0.013	na	< 0.012	na	ns	ns
Pyrene	< 0.0069	na	< 0.0070	na	< 0.0069	na	250	50

- All results are reported in ug/l
- All detected compounds included in table
- na = not analyzed
- ns = no standard established

- (J) = Results estimated by lab; below quantitative limit
- NR140 PAL = Preventative action limit (exceedances underlined)
- NR140 ES = Enforcement standard (exceedances bold)

### TABLE 3 SUMMARY OF ANALYTICAL DATA FROM WATER SUPPLY WELL Rath Property

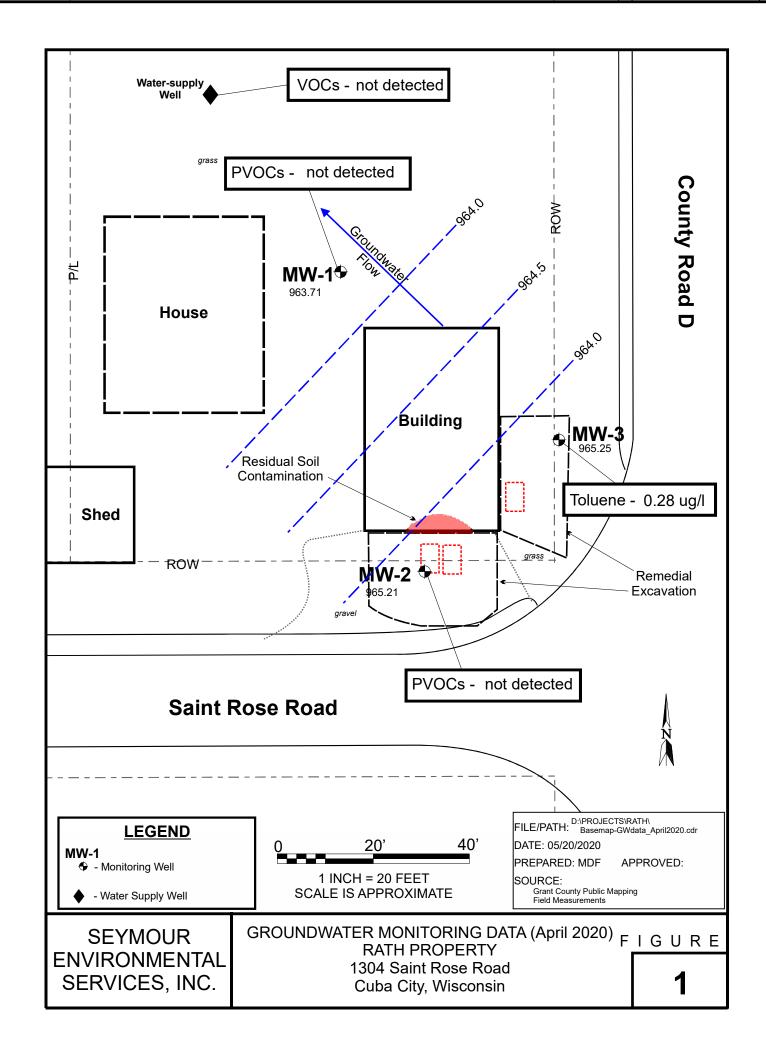
1304 Saint Rose Road - Cuba City, Wisconsin

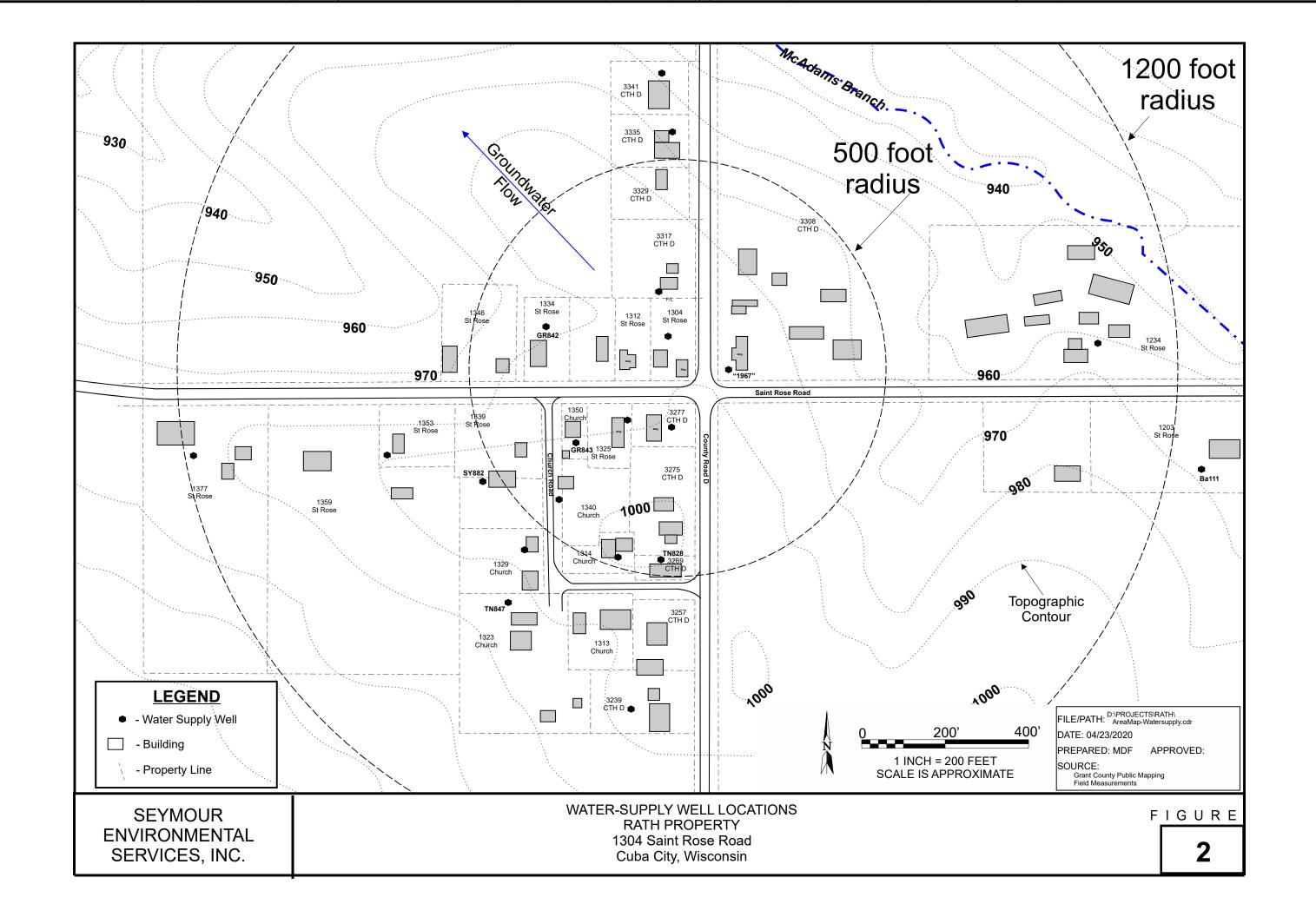
Sample I.D.		Water	Well		NR	140
Date	09/09/2010	06/07/2019	02/24/2020	04/16/2020	ES	PAL
VOCs						
Benzene	< 0.39	< 0.25	< 0.25	< 0.25	5	0.5
1,2 Dichloroethane	na	< 0.28	< 0.28	< 0.28	5	0.5
Ethylbenzene	< 0.41	< 0.22	< 0.32	< 0.32	700	140
Methyl-tert-butyl ether	< 0.38	<1.2	<1.2	<1.2	60	12
Toluene	< 0.42	< 0.17	< 0.27	< 0.27	800	160
1,3,5 Trimethylbenzene	< 0.40	< 0.87	< 0.87	< 0.87	ns	ns
1,2,4 Trimethylbenzene	< 0.43	< 0.84	< 0.84	< 0.84	ns	ns
Total Trimethylbenzenes	< 0.83	<1.71	<1.71	<1.71	480	96
m & p Xylenes	< 0.87	< 0.47	< 0.47	< 0.47	ns	ns
o Xylene	< 0.38	< 0.26	< 0.26	< 0.26	ns	ns
Total Xylenes	<1.25	< 0.73	< 0.73	< 0.73	2000	400
Naphthalene	< 0.40	<1.2	<1.2	<1.2	100	10
n-Butylbenzene	na	< 0.71	< 0.71	< 0.71	ns	ns
s-Butylbenzene	na	< 0.85	< 0.85	< 0.85	ns	ns
Isopropylbenzene	na	< 0.39	<1.7	<1.7	ns	ns
p-Isopropyltoluene	na	< 0.80	< 0.80	< 0.80	ns	ns
n-propylbenzene	na	< 0.81	< 0.81	< 0.81	ns	ns

- All results are reported in ug/lAll detected compounds included in table
- na = not analyzed
- ns = no standard established

- (J) = Results estimated by lab; below quantitative limit
   NR140 PAL = Preventative action limit (exceedances underlined)
- NR140 ES = Enforcement standard (exceedances bold)

# **FIGURES**





# ATTACHMENT A

# LABORATORY REPORT





April 27, 2020

Robyn Seymour Seymour Environmental Services, INC. 2531 Dyreson Road Mc Farland, WI 53558

RE: Project: 10565.00 RATH

Pace Project No.: 40206595

#### Dear Robyn Seymour:

Enclosed are the analytical results for sample(s) received by the laboratory on April 22, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

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

• Pace Analytical Services - Green Bay

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

Sincerely,

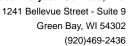
Dan Milewsky dan.milewsky@pacelabs.com (920)469-2436

Lan Miland

Project Manager

**Enclosures** 







#### **CERTIFICATIONS**

Project: 10565.00 RATH
Pace Project No.: 40206595

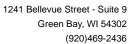
#### Pace Analytical Services Green Bay

1241 Bellevue Street, Green Bay, WI 54302 Florida/NELAP Certification #: E87948 Illinois Certification #: 200050 Kentucky UST Certification #: 82 Louisiana Certification #: 04168 Minnesota Certification #: 055-999-334 New York Certification #: 12064 North Dakota Certification #: R-150

Virginia VELAP ID: 460263
South Carolina Certification #: 83006001
Texas Certification #: T104704529-14-1
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444

Federal Fish & Wildlife Permit #: LE51774A-0

USDA Soil Permit #: P330-16-00157

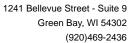




#### **SAMPLE SUMMARY**

Project: 10565.00 RATH Pace Project No.: 40206595

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40206595001	WATER SUPPLY	Water	04/16/20 11:00	04/22/20 08:40
40206595002	MW-1	Water	04/16/20 11:45	04/22/20 08:40
40206595003	MW-3	Water	04/16/20 12:10	04/22/20 08:40
40206595004	MW-2	Water	04/16/20 12:35	04/22/20 08:40



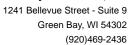


#### **SAMPLE ANALYTE COUNT**

Project: 10565.00 RATH Pace Project No.: 40206595

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40206595001	WATER SUPPLY	EPA 8260	HNW	64	PASI-G
40206595002	MW-1	EPA 8260	LAP	12	PASI-G
40206595003	MW-3	EPA 8260	LAP	12	PASI-G
40206595004	MW-2	EPA 8260	LAP	12	PASI-G

PASI-G = Pace Analytical Services - Green Bay





#### **SUMMARY OF DETECTION**

Project: 10565.00 RATH
Pace Project No.: 40206595

Lab Sample ID Method	Client Sample ID Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40206595003	MW-3					
EPA 8260	Toluene	0.28J	ug/L	0.90	04/24/20 12:39	

Matrix: Water



#### **ANALYTICAL RESULTS**

Collected: 04/16/20 11:00

Received: 04/22/20 08:40

Lab ID: 40206595001

< 0.32

<1.5

<1.7

< 0.80

<0.58

<1.2

<1.2

<0.81

<3.0

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

Project: 10565.00 RATH Pace Project No.: 40206595

Sample: WATER SUPPLY

Ethylbenzene

Naphthalene

Styrene

n-Propylbenzene

p-Isopropyltoluene

Methylene Chloride

Methyl-tert-butyl ether

Date: 04/27/2020 01:43 PM

Hexachloro-1,3-butadiene

Isopropylbenzene (Cumene)

LOQ DF Results Units LOD CAS No. **Parameters** Prepared Analyzed Qual Analytical Method: EPA 8260 8260 MSV Pace Analytical Services - Green Bay Benzene <0.25 ug/L 1.0 0.25 04/24/20 13:00 71-43-2 1 Bromobenzene <0.24 ug/L 1.0 0.24 1 04/24/20 13:00 108-86-1 Bromochloromethane < 0.36 ug/L 5.0 0.36 1 04/24/20 13:00 74-97-5 Bromodichloromethane < 0.36 ug/L 1.2 0.36 1 04/24/20 13:00 75-27-4 Bromoform <4.0 ug/L 13 2 4.0 1 04/24/20 13:00 75-25-2 Bromomethane < 0.97 ug/L 5.0 0.97 1 04/24/20 13:00 74-83-9 n-Butylbenzene <0.71 ug/L 2.4 0.71 1 04/24/20 13:00 104-51-8 04/24/20 13:00 135-98-8 sec-Butylbenzene <0.85 ug/L 5.0 0.85 1 tert-Butylbenzene < 0.30 ug/L 1.0 0.30 1 04/24/20 13:00 98-06-6 Carbon tetrachloride <1.1 ug/L 3.6 1.1 1 04/24/20 13:00 56-23-5 Chlorobenzene < 0.71 2.4 0.71 04/24/20 13:00 108-90-7 ug/L 1 Chloroethane <1.3 ug/L 5.0 1.3 1 04/24/20 13:00 75-00-3 Chloroform <1.3 ug/L 5.0 1.3 1 04/24/20 13:00 67-66-3 Chloromethane <2.2 ug/L 7.3 2.2 1 04/24/20 13:00 74-87-3 2-Chlorotoluene < 0.93 ug/L 5.0 0.93 1 04/24/20 13:00 95-49-8 0.76 4-Chlorotoluene < 0.76 ug/L 2.5 1 04/24/20 13:00 106-43-4 1,2-Dibromo-3-chloropropane <1.8 ug/L 5.9 1.8 1 04/24/20 13:00 96-12-8 2.6 Dibromochloromethane <2.6 1 04/24/20 13:00 124-48-1 ug/L 8.7 0.83 04/24/20 13:00 106-93-4 <0.83 2.8 1,2-Dibromoethane (EDB) ug/L 1 Dibromomethane <0.94 ug/L 3.1 0.94 1 04/24/20 13:00 74-95-3 1,2-Dichlorobenzene < 0.71 ug/L 2.4 0.71 1 04/24/20 13:00 95-50-1 1,3-Dichlorobenzene < 0.63 2.1 0.63 04/24/20 13:00 541-73-1 ug/L 1 1,4-Dichlorobenzene <0.94 ug/L 3.1 0.94 1 04/24/20 13:00 106-46-7 Dichlorodifluoromethane < 0.50 ug/L 5.0 0.50 1 04/24/20 13:00 75-71-8 1,1-Dichloroethane <0.27 ug/L 1.0 0.27 1 04/24/20 13:00 75-34-3 <0.28 ug/L 1.0 0.28 04/24/20 13:00 107-06-2 1.2-Dichloroethane 1 1,1-Dichloroethene <0.24 1.0 0.24 04/24/20 13:00 75-35-4 ug/L 1 cis-1,2-Dichloroethene <0.27 1.0 0.27 04/24/20 13:00 156-59-2 ug/L 1 trans-1,2-Dichloroethene < 0.46 ug/L 1.5 0.46 04/24/20 13:00 156-60-5 1 0.28 1,2-Dichloropropane <0.28 ug/L 1.0 1 04/24/20 13:00 78-87-5 1,3-Dichloropropane <0.83 ug/L 2.8 0.83 1 04/24/20 13:00 142-28-9 2,2-Dichloropropane <2.3 ug/L 7.6 2.3 1 04/24/20 13:00 594-20-7 1,1-Dichloropropene < 0.54 ug/L 1.8 0.54 1 04/24/20 13:00 563-58-6 cis-1,3-Dichloropropene <3.6 ug/L 12.1 3.6 1 04/24/20 13:00 10061-01-5 trans-1,3-Dichloropropene <4.4 ug/L 14.6 44 1 04/24/20 13:00 10061-02-6 Diisopropyl ether <1.9 ug/L 6.3 1.9 1 04/24/20 13:00 108-20-3

#### **REPORT OF LABORATORY ANALYSIS**

1.1

4.9

5.6

2.7

5.0

4.2

5.0

5.0

10.0

0.32

1.5

1.7

0.80

0.58

1.2

1.2

0.81

3.0

1

1

1

1

1

1

1

1

04/24/20 13:00 100-41-4

04/24/20 13:00 87-68-3

04/24/20 13:00 98-82-8

04/24/20 13:00 99-87-6

04/24/20 13:00 75-09-2

04/24/20 13:00 91-20-3

04/24/20 13:00 103-65-1 04/24/20 13:00 100-42-5

04/24/20 13:00 1634-04-4



#### **ANALYTICAL RESULTS**

Project: 10565.00 RATH Pace Project No.: 40206595

Sample: WATER SUPPLY	Lab ID: 4	0206595001	Collected	: 04/16/20	0 11:00	Received: 04	/22/20 08:40 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
8260 MSV	Analytical M	ethod: EPA 8	260						
	Pace Analyti	ical Services	- Green Bay						
1,1,1,2-Tetrachloroethane	<0.27	ug/L	1.0	0.27	1		04/24/20 13:00	630 20 6	
1,1,2,2-Tetrachloroethane	<0.28	ug/L ug/L	1.0	0.27	1		04/24/20 13:00		
Tetrachloroethene	<0.23	ug/L ug/L	1.0	0.28	1		04/24/20 13:00		
Toluene	<0.27	ug/L ug/L	0.90	0.33	1		04/24/20 13:00		
	<0.2 <i>1</i> <2.2	-	7.4	2.2	1		04/24/20 13:00		
1,2,3-Trichlorobenzene		ug/L							
1,2,4-Trichlorobenzene	<0.95	ug/L	5.0	0.95	1		04/24/20 13:00		
1,1,1-Trichloroethane	<0.24	ug/L	1.0	0.24	1		04/24/20 13:00		
1,1,2-Trichloroethane	<0.55	ug/L	5.0	0.55	1		04/24/20 13:00		
Trichloroethene	<0.26	ug/L	1.0	0.26	1		04/24/20 13:00		
Trichlorofluoromethane	<0.21	ug/L	1.0	0.21	1		04/24/20 13:00		
1,2,3-Trichloropropane	<0.59	ug/L	5.0	0.59	1		04/24/20 13:00		
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		04/24/20 13:00		
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		04/24/20 13:00	108-67-8	
Vinyl chloride	<0.17	ug/L	1.0	0.17	1		04/24/20 13:00	75-01-4	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		04/24/20 13:00	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		04/24/20 13:00	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	95	%	70-130		1		04/24/20 13:00	460-00-4	
Dibromofluoromethane (S)	100	%	70-130		1		04/24/20 13:00	1868-53-7	
Toluene-d8 (S)	102	%	70-130		1		04/24/20 13:00	2037-26-5	
Sample: MW-1	Lab ID: 4	0206595002	Collected	: 04/16/20	0 11:45	Received: 04	/22/20 08:40 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
8260 MSV UST	Analytical M	ethod: EPA 8	260						
	Pace Analyti	ical Services	- Green Bay						
Benzene	<0.25	ug/L	1.0	0.25	1		04/24/20 12:15	71-43-2	
Ethylbenzene	<0.32	ug/L	1.1	0.32	1		04/24/20 12:15		
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		04/24/20 12:15		
Naphthalene	<1.2	ug/L	5.0	1.2	1		04/24/20 12:15		
Toluene	<0.27	ug/L ug/L	0.90	0.27	1		04/24/20 12:15		
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		04/24/20 12:15		
1,3,5-Trimethylbenzene	<0.87		2.9	0.87	1		04/24/20 12:15		
		ug/L							
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		04/24/20 12:15		
o-Xylene Surregates	<0.26	ug/L	1.0	0.26	1		04/24/20 12:15	95-47-6	
Surrogates Dibromofluoromethane (S)	400	0/	70 120		4		04/24/20 12:15	1060 F2 7	
` '	100 97	%	70-130		1				
	97	%	70-130		1		04/24/20 12:15	ZU37-ZD-5	
Toluene-d8 (S) 4-Bromofluorobenzene (S)	96	%	70-130		1		04/24/20 12:15	400 00 4	

#### **REPORT OF LABORATORY ANALYSIS**

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#### **ANALYTICAL RESULTS**

Project: 10565.00 RATH Pace Project No.: 40206595

Sample: MW-3	Lab ID:	40206595003	Collected	d: 04/16/20	12:10	Received: 04	/22/20 08:40 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
8260 MSV UST	Analytical	Method: EPA 82	260						
	Pace Anal	ytical Services	Green Ba	y					
Benzene	<0.25	ug/L	1.0	0.25	1		04/24/20 12:39	71-43-2	
Ethylbenzene	<0.32	ug/L	1.1	0.32	1		04/24/20 12:39	100-41-4	
Methyl-tert-butyl ether	<1.2	ug/L	4.2	1.2	1		04/24/20 12:39		
Naphthalene	<1.2	ug/L	5.0	1.2	1		04/24/20 12:39	91-20-3	
Toluene	0.28J	ug/L	0.90	0.27	1		04/24/20 12:39	108-88-3	
1,2,4-Trimethylbenzene	<0.84	ug/L	2.8	0.84	1		04/24/20 12:39		
1,3,5-Trimethylbenzene	<0.87	ug/L	2.9	0.87	1		04/24/20 12:39	108-67-8	
m&p-Xylene	<0.47	ug/L	2.0	0.47	1		04/24/20 12:39	179601-23-1	
o-Xylene	<0.26	ug/L	1.0	0.26	1		04/24/20 12:39		
Surrogates		3/ =							
Dibromofluoromethane (S)	101	%	70-130		1		04/24/20 12:39	1868-53-7	
Toluene-d8 (S)	98	%	70-130		1		04/24/20 12:39	2037-26-5	
4-Bromofluorobenzene (S)	95	%	70-130		1		04/24/20 12:39	460-00-4	
Sample: MW-2	Lab ID:	40206595004	Collected	d: 04/16/20	12:35	Received: 04	./22/20 08:40 Ma	atrix: Water	
Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
- Talamotoro						Troparou			Gua
8260 MSV UST	Analytical	Method: EPA 82	260						
	Pace Anal	ytical Services	Green Bay	y					
Benzene	<0.25	/1							
		ua/L	1.0	0.25	1		04/24/20 13:02	71-43-2	
Ethylbenzene	<0.32	ug/L ug/L	1.0 1.1	0.25 0.32	1 1		04/24/20 13:02 04/24/20 13:02	-	
Ethylbenzene Methyl-tert-butyl ether		ug/L	1.1				04/24/20 13:02	100-41-4	
Methyl-tert-butyl ether	<0.32 <1.2	ug/L ug/L	1.1 4.2	0.32 1.2	1 1		04/24/20 13:02 04/24/20 13:02	100-41-4 1634-04-4	
Methyl-tert-butyl ether Naphthalene	<0.32 <1.2 <1.2	ug/L ug/L ug/L	1.1 4.2 5.0	0.32 1.2 1.2	1 1 1		04/24/20 13:02 04/24/20 13:02 04/24/20 13:02	100-41-4 1634-04-4 91-20-3	
Methyl-tert-butyl ether Naphthalene Toluene	<0.32 <1.2 <1.2 <0.27	ug/L ug/L ug/L ug/L	1.1 4.2 5.0 0.90	0.32 1.2 1.2 0.27	1 1 1 1		04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02	100-41-4 1634-04-4 91-20-3 108-88-3	
Methyl-tert-butyl ether Naphthalene Toluene 1,2,4-Trimethylbenzene	<0.32 <1.2 <1.2 <0.27 <0.84	ug/L ug/L ug/L ug/L ug/L	1.1 4.2 5.0 0.90 2.8	0.32 1.2 1.2 0.27 0.84	1 1 1		04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02	100-41-4 1634-04-4 91-20-3 108-88-3 95-63-6	
Methyl-tert-butyl ether Naphthalene Toluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene	<0.32 <1.2 <1.2 <0.27 <0.84 <0.87	ug/L ug/L ug/L ug/L ug/L ug/L	1.1 4.2 5.0 0.90 2.8 2.9	0.32 1.2 1.2 0.27 0.84 0.87	1 1 1 1		04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02	100-41-4 1634-04-4 91-20-3 108-88-3 95-63-6 108-67-8	
Methyl-tert-butyl ether Naphthalene Toluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene m&p-Xylene	<0.32 <1.2 <1.2 <0.27 <0.84 <0.87 <0.47	ug/L ug/L ug/L ug/L ug/L ug/L ug/L	1.1 4.2 5.0 0.90 2.8 2.9 2.0	0.32 1.2 1.2 0.27 0.84 0.87 0.47	1 1 1 1 1		04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02	100-41-4 1634-04-4 91-20-3 108-88-3 95-63-6 108-67-8 179601-23-1	
Methyl-tert-butyl ether Naphthalene Toluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene m&p-Xylene o-Xylene	<0.32 <1.2 <1.2 <0.27 <0.84 <0.87	ug/L ug/L ug/L ug/L ug/L ug/L	1.1 4.2 5.0 0.90 2.8 2.9	0.32 1.2 1.2 0.27 0.84 0.87	1 1 1 1 1		04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02	100-41-4 1634-04-4 91-20-3 108-88-3 95-63-6 108-67-8 179601-23-1	
Methyl-tert-butyl ether Naphthalene Toluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene m&p-Xylene o-Xylene Surrogates	<0.32 <1.2 <1.2 <0.27 <0.84 <0.87 <0.47	ug/L ug/L ug/L ug/L ug/L ug/L ug/L	1.1 4.2 5.0 0.90 2.8 2.9 2.0	0.32 1.2 1.2 0.27 0.84 0.87 0.47	1 1 1 1 1		04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02	100-41-4 1634-04-4 91-20-3 108-88-3 95-63-6 108-67-8 179601-23-1 95-47-6	
Methyl-tert-butyl ether Naphthalene Toluene 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene m&p-Xylene o-Xylene	<0.32 <1.2 <1.2 <0.27 <0.84 <0.87 <0.47	ug/L ug/L ug/L ug/L ug/L ug/L ug/L	1.1 4.2 5.0 0.90 2.8 2.9 2.0	0.32 1.2 1.2 0.27 0.84 0.87 0.47	1 1 1 1 1 1		04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02 04/24/20 13:02	100-41-4 1634-04-4 91-20-3 108-88-3 95-63-6 108-67-8 179601-23-1 95-47-6	

(920)469-2436



#### **QUALITY CONTROL DATA**

Project: 10565.00 RATH

Pace Project No.: 40206595

Date: 04/27/2020 01:43 PM

QC Batch: 353267 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40206595001

METHOD BLANK: 2045006 Matrix: Water

Associated Lab Samples: 40206595001

	•		Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.27	1.0	04/24/20 07:36	
1,1,1-Trichloroethane	ug/L	<0.24	1.0	04/24/20 07:36	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	1.0	04/24/20 07:36	
1,1,2-Trichloroethane	ug/L	< 0.55	5.0	04/24/20 07:36	
1,1-Dichloroethane	ug/L	<0.27	1.0	04/24/20 07:36	
1,1-Dichloroethene	ug/L	<0.24	1.0	04/24/20 07:36	
1,1-Dichloropropene	ug/L	<0.54	1.8	04/24/20 07:36	
1,2,3-Trichlorobenzene	ug/L	<2.2	7.4	04/24/20 07:36	
1,2,3-Trichloropropane	ug/L	< 0.59	5.0	04/24/20 07:36	
1,2,4-Trichlorobenzene	ug/L	< 0.95	5.0	04/24/20 07:36	
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	04/24/20 07:36	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	5.9	04/24/20 07:36	
1,2-Dibromoethane (EDB)	ug/L	< 0.83	2.8	04/24/20 07:36	
1,2-Dichlorobenzene	ug/L	<0.71	2.4	04/24/20 07:36	
1,2-Dichloroethane	ug/L	<0.28	1.0	04/24/20 07:36	
1,2-Dichloropropane	ug/L	<0.28	1.0	04/24/20 07:36	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	04/24/20 07:36	
1,3-Dichlorobenzene	ug/L	< 0.63	2.1	04/24/20 07:36	
1,3-Dichloropropane	ug/L	<0.83	2.8	04/24/20 07:36	
1,4-Dichlorobenzene	ug/L	< 0.94	3.1	04/24/20 07:36	
2,2-Dichloropropane	ug/L	<2.3	7.6	04/24/20 07:36	
2-Chlorotoluene	ug/L	< 0.93	5.0	04/24/20 07:36	
4-Chlorotoluene	ug/L	< 0.76	2.5	04/24/20 07:36	
Benzene	ug/L	<0.25	1.0	04/24/20 07:36	
Bromobenzene	ug/L	<0.24	1.0	04/24/20 07:36	
Bromochloromethane	ug/L	< 0.36	5.0	04/24/20 07:36	
Bromodichloromethane	ug/L	< 0.36	1.2	04/24/20 07:36	
Bromoform	ug/L	<4.0	13.2	04/24/20 07:36	
Bromomethane	ug/L	< 0.97	5.0	04/24/20 07:36	
Carbon tetrachloride	ug/L	<1.1	3.6	04/24/20 07:36	
Chlorobenzene	ug/L	<0.71	2.4	04/24/20 07:36	
Chloroethane	ug/L	<1.3	5.0	04/24/20 07:36	
Chloroform	ug/L	<1.3	5.0	04/24/20 07:36	
Chloromethane	ug/L	<2.2	7.3	04/24/20 07:36	
cis-1,2-Dichloroethene	ug/L	< 0.27	1.0	04/24/20 07:36	
cis-1,3-Dichloropropene	ug/L	<3.6	12.1	04/24/20 07:36	
Dibromochloromethane	ug/L	<2.6	8.7	04/24/20 07:36	
Dibromomethane	ug/L	< 0.94	3.1	04/24/20 07:36	
Dichlorodifluoromethane	ug/L	< 0.50	5.0	04/24/20 07:36	
Diisopropyl ether	ug/L	<1.9	6.3	04/24/20 07:36	

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.



#### **QUALITY CONTROL DATA**

Project: 10565.00 RATH
Pace Project No.: 40206595

METHOD BLANK: 2045006 Matrix: Water

Associated Lab Samples: 40206595001

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Ethylbenzene	ug/L	<0.32	1.1	04/24/20 07:36	
Hexachloro-1,3-butadiene	ug/L	<1.5	4.9	04/24/20 07:36	
Isopropylbenzene (Cumene)	ug/L	<1.7	5.6	04/24/20 07:36	
m&p-Xylene	ug/L	< 0.47	2.0	04/24/20 07:36	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	04/24/20 07:36	
Methylene Chloride	ug/L	<0.58	5.0	04/24/20 07:36	
n-Butylbenzene	ug/L	<0.71	2.4	04/24/20 07:36	
n-Propylbenzene	ug/L	<0.81	5.0	04/24/20 07:36	
Naphthalene	ug/L	<1.2	5.0	04/24/20 07:36	
o-Xylene	ug/L	<0.26	1.0	04/24/20 07:36	
p-Isopropyltoluene	ug/L	<0.80	2.7	04/24/20 07:36	
sec-Butylbenzene	ug/L	<0.85	5.0	04/24/20 07:36	
Styrene	ug/L	<3.0	10.0	04/24/20 07:36	
tert-Butylbenzene	ug/L	< 0.30	1.0	04/24/20 07:36	
Tetrachloroethene	ug/L	< 0.33	1.1	04/24/20 07:36	
Toluene	ug/L	<0.27	0.90	04/24/20 07:36	
trans-1,2-Dichloroethene	ug/L	< 0.46	1.5	04/24/20 07:36	
trans-1,3-Dichloropropene	ug/L	<4.4	14.6	04/24/20 07:36	
Trichloroethene	ug/L	<0.26	1.0	04/24/20 07:36	
Trichlorofluoromethane	ug/L	<0.21	1.0	04/24/20 07:36	
Vinyl chloride	ug/L	<0.17	1.0	04/24/20 07:36	
4-Bromofluorobenzene (S)	%	95	70-130	04/24/20 07:36	
Dibromofluoromethane (S)	%	101	70-130	04/24/20 07:36	
Toluene-d8 (S)	%	101	70-130	04/24/20 07:36	

LABORATORY CONTROL SAMPLE:	2045007					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	48.5	97	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	52.8	106	64-131	
1,1,2-Trichloroethane	ug/L	50	50.1	100	70-130	
1,1-Dichloroethane	ug/L	50	56.4	113	69-163	
1,1-Dichloroethene	ug/L	50	53.4	107	77-123	
1,2,4-Trichlorobenzene	ug/L	50	49.3	99	68-130	
1,2-Dibromo-3-chloropropane	ug/L	50	50.0	100	63-130	
1,2-Dibromoethane (EDB)	ug/L	50	48.5	97	70-130	
1,2-Dichlorobenzene	ug/L	50	50.3	101	70-130	
1,2-Dichloroethane	ug/L	50	54.9	110	78-142	
1,2-Dichloropropane	ug/L	50	49.7	99	86-134	
1,3-Dichlorobenzene	ug/L	50	50.5	101	70-130	
1,4-Dichlorobenzene	ug/L	50	49.5	99	70-130	
Benzene	ug/L	50	52.5	105	70-130	
Bromodichloromethane	ug/L	50	46.8	94	70-130	
Bromoform	ug/L	50	41.7	83	70-130	

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#### **QUALITY CONTROL DATA**

Project: 10565.00 RATH Pace Project No.: 40206595

LABORATORY CONTROL SAMPLE:	2045007					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Bromomethane	ug/L	50	41.6	83	39-129	
Carbon tetrachloride	ug/L	50	44.5	89	70-132	
hlorobenzene	ug/L	50	50.9	102	70-130	
nloroethane	ug/L	50	49.8	100	66-140	
nloroform	ug/L	50	47.4	95	75-132	
nloromethane	ug/L	50	43.5	87	32-143	
s-1,2-Dichloroethene	ug/L	50	46.5	93	70-130	
s-1,3-Dichloropropene	ug/L	50	50.5	101	70-130	
bromochloromethane	ug/L	50	46.7	93	70-130	
chlorodifluoromethane	ug/L	50	41.6	83	10-141	
nylbenzene	ug/L	50	53.4	107	80-120	
propylbenzene (Cumene)	ug/L	50	53.5	107	70-130	
kp-Xylene	ug/L	100	109	109	70-130	
ethyl-tert-butyl ether	ug/L	50	57.5	115	61-129	
thylene Chloride	ug/L	50	54.4	109	70-130	
(ylene	ug/L	50	52.0	104	70-130	
rene	ug/L	50	54.6	109	70-130	
trachloroethene	ug/L	50	46.3	93	70-130	
luene	ug/L	50	52.0	104	80-120	
ans-1,2-Dichloroethene	ug/L	50	54.8	110	70-130	
ans-1,3-Dichloropropene	ug/L	50	51.6	103	69-130	
chloroethene	ug/L	50	48.9	98	70-130	
chlorofluoromethane	ug/L	50	53.9	108	75-145	
yl chloride	ug/L	50	49.4	99	51-140	
romofluorobenzene (S)	%			105	70-130	
romofluoromethane (S)	%			101	70-130	
luene-d8 (S)	%			101	70-130	

MATRIX SPIKE & MATRIX SF	PIKE DUPL	ICATE: 2045	062 MS	MSD	2045063							
		40206595001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.24	50	50	52.6	53.5	105	107	70-130	2	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	50	50	52.6	55.5	105	111	64-137	5	20	
1,1,2-Trichloroethane	ug/L	< 0.55	50	50	52.8	53.4	106	107	70-137	1	20	
1,1-Dichloroethane	ug/L	< 0.27	50	50	60.7	61.7	121	123	69-163	2	20	
1,1-Dichloroethene	ug/L	< 0.24	50	50	54.8	56.0	110	112	77-129	2	20	
1,2,4-Trichlorobenzene	ug/L	< 0.95	50	50	51.8	54.2	104	108	68-130	5	20	
1,2-Dibromo-3- chloropropane	ug/L	<1.8	50	50	49.5	51.7	99	103	60-130	4	20	
1,2-Dibromoethane (EDB)	ug/L	< 0.83	50	50	51.0	52.4	102	105	70-130	3	20	
1,2-Dichlorobenzene	ug/L	< 0.71	50	50	52.8	55.5	106	111	70-130	5	20	
1,2-Dichloroethane	ug/L	<0.28	50	50	57.1	58.1	114	116	78-145	2	20	
1,2-Dichloropropane	ug/L	<0.28	50	50	52.9	54.0	106	108	86-135	2	20	
1,3-Dichlorobenzene	ug/L	< 0.63	50	50	52.6	56.0	105	112	70-130	6	20	

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#### **REPORT OF LABORATORY ANALYSIS**

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#### **QUALITY CONTROL DATA**

Project: 10565.00 RATH Pace Project No.: 40206595

MATRIX SPIKE & MATRIX SF	PIKE DUPLI	CATE: 2045	062		2045063							
		10000505001	MS	MSD	MC	MSD	МС	MSD	% Rec		M	
Parameter	Units	10206595001 Result	Spike Conc.	Spike Conc.	MS Result	Result	MS % Rec	% Rec	% Rec Limits	RPD	Max RPD	Qua
1,4-Dichlorobenzene	ug/L	<0.94	50	50	52.5	55.1	105	110	70-130	5	20	
Benzene	ug/L	< 0.25	50	50	55.6	56.1	111	112	70-136	1	20	
Bromodichloromethane	ug/L	< 0.36	50	50	50.2	51.7	100	103	70-130	3	20	
Bromoform	ug/L	<4.0	50	50	42.4	44.7	85	89	69-130	5	20	
Bromomethane	ug/L	< 0.97	50	50	41.6	43.3	83	87	39-138	4	20	
Carbon tetrachloride	ug/L	<1.1	50	50	48.9	49.3	98	99	70-142	1	20	
Chlorobenzene	ug/L	< 0.71	50	50	55.3	55.8	111	112	70-130	1	20	
Chloroethane	ug/L	<1.3	50	50	47.2	46.9	94	94	61-149	1	20	
Chloroform	ug/L	<1.3	50	50	50.4	51.4	101	103	75-133	2	20	
Chloromethane	ug/L	<2.2	50	50	36.4	35.9	73	72	32-143	1	20	
cis-1,2-Dichloroethene	ug/L	< 0.27	50	50	50.2	50.0	100	100	70-130	0	20	
sis-1,3-Dichloropropene	ug/L	<3.6	50	50	52.7	55.8	105	112	70-130	6	20	
Dibromochloromethane	ug/L	<2.6	50	50	48.6	51.7	97	103	70-130	6	20	
Dichlorodifluoromethane	ug/L	< 0.50	50	50	27.2	27.2	54	54	10-141	0	20	
Ethylbenzene	ug/L	< 0.32	50	50	58.6	59.2	117	118	80-120	1	20	
sopropylbenzene Cumene)	ug/L	<1.7	50	50	58.8	60.2	118	120	70-130	2	20	
n&p-Xylene	ug/L	< 0.47	100	100	120	122	120	122	70-130	2	20	
Methyl-tert-butyl ether	ug/L	<1.2	50	50	59.4	60.3	119	121	61-136	2	20	
Methylene Chloride	ug/L	<0.58	50	50	58.2	58.4	116	117	68-137	0	20	
o-Xylene	ug/L	< 0.26	50	50	57.1	58.1	114	116	70-130	2	20	
Styrene	ug/L	<3.0	50	50	58.0	59.7	116	119	70-130	3	20	
Tetrachloroethene	ug/L	< 0.33	50	50	51.1	52.7	102	105	70-130	3	20	
Toluene	ug/L	< 0.27	50	50	55.7	57.0	111	114	80-120	2	20	
rans-1,2-Dichloroethene	ug/L	< 0.46	50	50	58.9	60.3	118	121	70-130	2	20	
rans-1,3-Dichloropropene	ug/L	<4.4	50	50	55.0	56.0	110	112	69-130	2	20	
richloroethene	ug/L	< 0.26	50	50	52.5	53.9	105	108	70-130	3	20	
richlorofluoromethane	ug/L	<0.21	50	50	53.9	53.8	108	108	74-157	0	20	
/inyl chloride	ug/L	<0.17	50	50	44.8	44.9	90	90	51-140	0	20	
I-Bromofluorobenzene (S)	%						106	104	70-130			
Dibromofluoromethane (S)	%						101	100	70-130			
Toluene-d8 (S)	%						102	101	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.

(920)469-2436



Date: 04/27/2020 01:43 PM

#### **QUALITY CONTROL DATA**

Project: 10565.00 RATH Pace Project No.: 40206595

QC Batch: 353216 Analysis Method: EPA 8260

QC Batch Method: EPA 8260 Analysis Description: 8260 MSV UST-WATER

Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40206595002, 40206595003, 40206595004

METHOD BLANK: 2044663 Matrix: Water

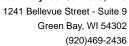
Associated Lab Samples: 40206595002, 40206595003, 40206595004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	04/24/20 07:25	
1,3,5-Trimethylbenzene	ug/L	< 0.87	2.9	04/24/20 07:25	
Benzene	ug/L	< 0.25	1.0	04/24/20 07:25	
Ethylbenzene	ug/L	< 0.32	1.1	04/24/20 07:25	
m&p-Xylene	ug/L	< 0.47	2.0	04/24/20 07:25	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	04/24/20 07:25	
Naphthalene	ug/L	<1.2	5.0	04/24/20 07:25	
o-Xylene	ug/L	< 0.26	1.0	04/24/20 07:25	
Toluene	ug/L	< 0.27	0.90	04/24/20 07:25	
4-Bromofluorobenzene (S)	%	94	70-130	04/24/20 07:25	
Dibromofluoromethane (S)	%	96	70-130	04/24/20 07:25	
Toluene-d8 (S)	%	96	70-130	04/24/20 07:25	

LABORATORY CONTROL SAMPLE:	2044664					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Benzene	ug/L	50	49.5	99	70-130	
Ethylbenzene	ug/L	50	52.8	106	80-120	
m&p-Xylene	ug/L	100	104	104	70-130	
Methyl-tert-butyl ether	ug/L	50	47.2	94	61-129	
o-Xylene	ug/L	50	52.7	105	70-130	
Toluene	ug/L	50	50.5	101	80-120	
4-Bromofluorobenzene (S)	%			102	70-130	
Dibromofluoromethane (S)	%			102	70-130	
Toluene-d8 (S)	%			99	70-130	

MATRIX SPIKE & MATRIX SF	PIKE DUPLI	CATE: 2044	807		2044808	1						
Parameter	Units	40206597006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	<0.25	50	50	50.8	53.3	102	107	70-136	5	20	
Ethylbenzene	ug/L	< 0.32	50	50	54.8	56.1	110	112	80-120	2	20	
m&p-Xylene	ug/L	< 0.47	100	100	108	110	108	110	70-130	2	20	
Methyl-tert-butyl ether	ug/L	<1.2	50	50	50.1	52.2	100	104	61-136	4	20	
o-Xylene	ug/L	<0.26	50	50	55.0	56.3	110	113	70-130	2	20	
Toluene	ug/L	<0.27	50	50	52.6	54.1	105	108	80-120	3	20	
4-Bromofluorobenzene (S)	%						100	102	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.





#### **QUALITY CONTROL DATA**

Project: 10565.00 RATH Pace Project No.: 40206595

MATRIX SPIKE & MATRIX SP	PIKE DUPL	ICATE: 2044	807		2044808	3						
		40000507000	MS	MSD	N/O	MOD	140	MOD	0/ D			
	40206597006	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max		
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Dibromofluoromethane (S)	%						103	103	70-130			
Toluene-d8 (S)	%						99	100	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.



#### **QUALIFIERS**

Project: 10565.00 RATH
Pace Project No.: 40206595

#### **DEFINITIONS**

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

ND - Not Detected at or above LOD.

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

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

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

S - Surrogate

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

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

**DUP - Sample Duplicate** 

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

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

TNI - The NELAC Institute.

Date: 04/27/2020 01:43 PM

(920)469-2436



Date: 04/27/2020 01:43 PM

#### **QUALITY CONTROL DATA CROSS REFERENCE TABLE**

Project: 10565.00 RATH Pace Project No.: 40206595

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40206595001	WATER SUPPLY	EPA 8260	353267	-	
40206595002	MW-1	EPA 8260	353216		
40206595003	MW-3	EPA 8260	353216		
40206595004	MW-2	EPA 8260	353216		

C019a(27Jun2006)

0840

Receipt Temp = (40 T SESTIMBLE

PACE Project No.

Sample Receipt pH

OK / Adjusted

Cooler Custedy Seal Present / Not Present

intact / Not Intact

**UPPER MIDWEST REGION** 

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

Face Analytical®

Branch/Location:

McFarland

Company Name:

Please Print Clearly,

Seymour Environmental Services

Page

COC No.

2531 Dyreson Road McFarland, Wisconsin 53558

LAB COMMENTS (Lab Use Only)

Profile #

Robyn Seymour

2531 Dyreson Road McFarland, Wisconsin 53558

Seymour Environmental Services

Robyn Seymour

으

age 17 of 19

# Sample Preservation Receipt Form

Client Name: DUMOUS Environmental Serves Project # SESTIBLE

All containers needing preservation have been checked and noted below: a Yes a No a MA

Lab Lot# of pH paper: Lab Std #ID of preservation (if pH adjusted): Initial when completed: Date/ Time:

019 018 <u>917</u> 016 015 014 013 012 010 Pace Lab# 020 009 800 007 900 005 004 002 003 001 Exceptions to preservation check (VOA, &oliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other, AG1U BG1U AG1H Glass AG4S AG4U AG5U AG2S BG3U BP1U BP3U **Plastic** 3 BP3B アは、名 BP3N BP3S VG9A DG9T VG9U Vials  $\omega |\omega$ رن  $\omega$ VG9H VG9M VG9D Headspace in VOA Vials (>6mm) : Xes □No □N/A \*If yes look in headspace column **JGFU** JG9U Jars WGFU **WPFU** SP5T General **ZPLC** GN 4 VOA Vials (>6mm) H2SO4 pH ≤2 NaOH+Zn Act pH ≥9 NaOH pH ≥12 HNO3 pH ≤2 pH after adjusted 2.5/5/10 Volume (mL)

F-GB-C-046-Rev.03 (11Feb2020) Sample Preservation Receipt Form

AG4S

125 mL amber glass H2SO4 liter amber glass HCL

BP3N BP3B

250 mL plastic H2SO4 250 mL plastic HNO3 250 mL plastic NaOH

VG9M VG9H VG9U

V<sub>G9D</sub>

40 mL clear vial DI 40 mL clear vial MeOH 40 mL clear vial HCL 40 mL clear vial unpres

**ZPLC** 

ziploc bag

Page 1 of

WPFU WGFU **JG9U** 

> 4 oz clear jar unpres 9 oz amber jar unpres 4 oz amber jar unpres

4 oz plastic jar unpres

20 mL plastic Na Thiosulfate

SP5T

AG1H

BG1U 1 liter clear glass AG1U 1 liter amber glass

BP3U

250 mL plastic unpres 1 liter plastic unpres

DG9T

40 mL amber Na Thio

40 mL clear ascorbic

JGFU

VG9A

BP1U

AG2S

500 mL amber glass H2SO<sub>4</sub>

AG5U 100 mL amber glass unpres AG4U 120 mL amber glass unpres

BG3U 250 mL clear glass unpres

Pace Analytical Services, LLCo 1241 Bellevue Street, Suite 9-Green Bay, WI 543020

11-19-19-Verboy			45.55	. 1975
	<b>5</b> /			
	/ _/		. •	
I /	Pace.	Analytica	7/	
l /-		u iai y cioc		
l				
1241 Bell	evue Street	i, Green Ba	ay, WI 5	4302

Document Name:
Sample Condition Upon Receipt (SCUR)

Document No.:

ENV-FRM-GBAY-0014-Rev.00

Document Revised: 26Mar2020

Author:

Pace Green Bay Quality Office

## Sample Condition Upon Receipt Form (SCUR)

Custody Seal on Samples Present: 🗀 yes 🏾			40205505	
Custody Seal on Cooler/Box Present:  yes Custody Seal on Samples Present:  yes f			_~~	
	no Seals	intact:	T yes T no	
그렇게 하는 사람들은 아니는 그들은 그들은 사람들은 사람들은 사람들이 되었다. 그는 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은 사람들은				
Packing Material: 🔲 Bubble Wrap 🔀 Bu		<i>-</i> / \		
Thermometer Used SR - n/a  Cooler Temperature Uncorr: NOT /Corr:	Type of Ice	: (Wet	Blue Dry None 😕 Samples	on ice, cooling process has begun  Person examining contents:
에 # 18 등 1. 요즘 1일 등로 다 회사를 하실어 # 18 등의 # 10				
Temp Blank Present:  yes  no	DIOIC	gicai i	lissue is Frozen: ☐ yes ☐ no	Date: 4-22-70 /Initials: MUR
Temp should be above freezing to 6°C. Biota Samples may be received at ≤ 0°C if shipped on	Dry Ice.			Labeled By Initials: 3
Chain of Custody Present:	XYes □No	□n/a		
Chain of Custody Filled Out:			2 invoice to draw POF	MUL 4-22-21
Chain of Custody Relinquished:	The second secon		3. no time only "om"	MUL4-22.00
Sampler Name & Signature on COC:	<b>Y</b> Z∫Yes □No	□n/a	4.	
Samples Arrived within Hold Time:	XYes □No		5.	
- VOA Samples frozen upon receipt	□Yes □No		Date/Time:	
Short Hold Time Analysis (<72hr):	□Yes Mo		6.	
Rush Turn Around Time Requested:	□Yes Mo		7.	
Sufficient Volume:	SD: □Yes ⊠No	- ΠΝ/Δ	8.	
Correct Containers Used:	Yes □No	ШМА	9.	
-Pace Containers Used:	⊠yes □No	□n/a		
-Pace IR Containers Used:	□Yes □No	MIN/A		
Containers Intact:	Yes □No	yzs/IN/A	10.	
Filtered volume received for Dissolved tests	□Yes □No	<b>3</b> €1,07,0		
Sample Labels match COC:			12.001 LINGait time is	11:02 003 (D V69 H
-Includes date/time/ID/Analysis Matrix:	W	шил	time is "12:16" 12:00"	MULY-2
Trip Blank Present:	□Yes <b>X</b> No		MUNU-22-20 #1144 20	
Trip Blank Custody Seals Present	□Yes □No			
Pace Trip Blank Lot # (if purchased):				
Client Notification/ Resolution: Person Contacted: Comments/ Resolution:		_Date/		ched form for additional comments

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

# ATTACHMENT B

# HYDRAULIC TESTING DATA

## HYDRAULIC TEST DATA (MW-1) RATH PROPERTY - Cuba City, WI

Well Depth	40.6
Top of Screen	25.6
GW Depth	31.92
Water Column	8.86
Well Diameter	2.08"
Borehole Diameter	8.25"
Slug Volume	0.5 gallon

$$K = \frac{r_c^2 \ln(R_e/r_w)}{2L} \frac{1}{t} \ln \frac{y_o}{y_t}$$

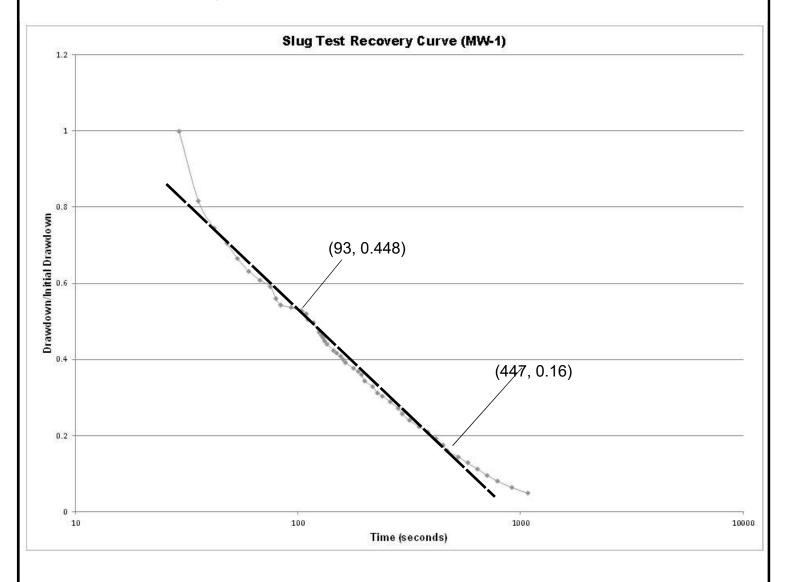
Fully Penetrating Well

$$ln(R_e/r_w) = \left[\frac{1.1}{ln(H/r_w)} + \frac{C}{(L/r_w)}\right]^{-1}$$

C = 1.798 (from curve match)

$$ln(R_e/r_w) = 2.112$$

 $K = 0.22 \text{ ft/day or } 7.93 \times 10^{-5} \text{ cm/sec}$ 



# **ATTACHMENT C**

# CONSTRUCTION LOGS OF SELECT NEARBY WATER-SUPPLY WELLS

WELL CO	NSTRUCTOR	'S REPORT		WISCO	NSIN STA	TE BOARD OF	HEALTH				Wel 6
I. COUNTY	Yuni	1		CHECK Town			AME	lees.			<del>"</del>
2. LOCATI	ON (Number an	d Street or 1	•	<del></del>		dso give subdivisio	n name, lot and	block number	s when ava	lable.)	
3 OWNER	AT TIME OF	S.E.	<u>Sec. 2</u>	1-T2N-	R   W.	-				<del>" </del>	
o. Owning.	AT TIME OF	Dimining		Lan	د دسیره	Luk					
4. OWNER	S COMPLETE	MAIL ADD	RESS	-	,	P	RD.		····		
5. Distance	e in feet fro	om well to	nearest: 1	y CV BUILDING SAY	VITARY SEV	/\ VER FLOOR DRA	<del></del>	NDATION DRA	AIN J	WASTE WA	TER DRAIN
	ınşwer in appro			18	C. 1.   TI	E C.I. TIL.	E SEWER CON	NECTED INDI	EPENDENT		A THE
CLEAR WA	TER DRAIN	SEPTIC TAN	K PRIVY	SEEPAGE PIT	   ABSORP1	NO D   TON FIELD   BA	RN SILO	  ABANDON	WELL   SI	NK HOLE	meeter
gali, d	awasp	78	/   .		12	12		ible			
OTHER PO	! '; LLUTION SOU	RCES (Give	description	such as dump,	quarry, dra	inage well, stream	, pond, lake, etc	(x)	caud		<u></u>
<del>/ 14 H ·</del>	• • • • •		<del> </del>		A	<del></del>	<del></del>				
o. Well is	s intended	to supply	water to	···	o-m	e					
7. DRILLH	OLE					10. FORMA	TIONS				····-
Dia. (in.)	From (ft.)	To (ft.)	Dia. (in.)	From (ft.)	To (ft.)	<u>-</u>	Kind			From (ft.)	To (ft.)
10	Surface	40	6	40	160		clay			Surface	20
						W. L	1	3.11		20	113
8. CASIN	G, LINER, CI	URBING, A	ND SCRE	Ņ	1	1 20	D.	10-	<u> </u>	-	116
Dia. (in.)		ind and Weig		From (ft.)	To (ft.)	- Tue	ytem	e sto	ne	1/3	160
_6_	Stand	land of	Teel	Surface	40		<u> </u>	i.			
	new By	be 19.45	For It	-	## 				ĺ		
	280	wall	<i></i>						·		
					- - -				}		
9 GROUT	OR OTHER	SEALING	MATERIA	 \1		-		·			
	Kir	_	170 1121()	From (ft.)	To (ft.)						
11.2	e Cem	ent		Surface	40					•	
- July					·	M-11	uction comp	1-1	1	<u></u>	10 / 7
11. MISC	ELLANEOUS	DAŢA		1					/ <b>→</b> _	above ,	1967
Yield test	):	12	Hrs.	at /	GPN	Well is ten	minated	<i>] 4</i> in	ches 📶	below_ fi	nal grade
Depth fro	m surface to	o normal v	watêr leve	J 2	70 ft	. Well disinf	ected upon	completion		X Yes	i □ No
Depth to	water level	when pun	nping	7.	O ft	. Well sealed	watertight	upon comp	letion	X Yes	□ No
				Laboras	<del></del>	34.	labo	ratory on:	19.7	- 11	1967
			•		1 %	n concerning	<i>1</i> :	•	111	a relating	
wells, scr	reens, seals,	type of	casing jo	ints, methodould be give	d of finis	hing the well	, amount of	cement us	ed in gro	outing, bla	sting, sub-
SIGNATUR	<u> </u>				<u></u>	COMPLETE	MAIL ADDRESS	3			·····
art	hurf. E	Bouer	, F	Registered W	/ell Drille	RR2	Cuba	city 4	Vis	532	807
COLIFORM	TEST RESULT	<u>r</u>	.	Please GAS — 24 HRS		write in space AS — 48 HRS.	CONFIR	MED	REMARK	is .	<del></del>
Qu i	u.		•				į				
# 84	Ø										

Well Construction Report For WISCONSIN UNIQUE WELL NUMBER TN847  Property POPP, DALE Owner Telephone 608-744-373 Number							State of WI - Private Water Systems - DG/2 Form 3300 Department of Natural Resources, Box 7921 (R 8/00) Madison, WI 53707					
							Trease ose Beelmais histead of Tractions.					
Mailing Address 1323 CHURCH RD			•	_		e#(if avail	(if available)					
City CUBA CITY State VI Cip Code WI 53807							of SMELSER Grid or Street Address or Road Name an 1323 CHURCH RD	d Number				
County of Well Location  Grant	1 ' 1			Well Co 07/13/	mpletion Dar /2007	te	Subdivision Name L	ot#	Block	#		
Well Constructor (Business Name) JEFFERY A FAHERTY	)	License # <b>6819</b>	Facility	ID Numbe	er (Public We	ells)	Gov't Lot # or	<b>NE</b> 1/4 of	f NI	E 1/4 of		
Address FAHERTY & SON WELL DRLG				Vell Plan A	Approval #		Latitude Deg. Min.	N; R 1	X W			
City PLATTEVILLE	- Date of			Approval (	(mm/dd/yyyy	y)	Longitude Deg. Min.  2. Well Type X New Replacement Rec	v	Lat/Long	Method		
Hicap Permanent well #	Common Well # Specific Capacity				.8	gpm/ft	1 –	nstructed in				
3. Well serves 1 # of home	s and or			High cap Well?	pacity	Yes X No	SHARED WELL					
(e.g. barn, restaurant, church, scho	ol, industr	y, etc.)		Property		Yes X No	X Drilled Driven Point Je	etted Other	:			
1. Landfill 2. Building Overhang 45 3. Septic X Holding Ta 100 4. Sewage Absorption Un 5. Nonconforming Pit 6. Buried Home Heating C 7. Buried Petroleum Tank  8. Shoreline Swimmi  5. Drillhole Dimensions and Constru From To Dia (in.) (ft.) (ft.)  10 0 80  6 80 160	ng Pool Cition Metl Upper Enlargec Cition Metl Upper Cition Metl U	30 14 1: 30 14 1: 30 14 1: 31 10 10 10 11 11 11 11 11 11 11 11 11 11 1	2. Foundation 3. Building I Cast 4. Building I X Cast 5. Collector San Sto. Clearwate Circulation d Foam Casing Hami	on Drain to Drain Iron or Pla Sewer X Iron or Pl Or Street S intary Iron or Pl Or Street S Iron or P	Gravity astic  Gravity astic  Sewer: units  =< 6  ver	Other Pressure Other in. diam. > 6  8. CLL-	19. Animal Yard or Shelte. 20. Silo 21. Barn Gutter 22. Manure Pipe  Gra  Cast Iron or Plasti 23. Other Manure Storage 24. Ditch  25. Other NR 812 Waste S Geology Type, Caving/Noncaving, Color, Hardne CLAY GALENA LIMESTONE UPPER PLATTEVILLE DOLO	avity Pre- fic Other  torage  ess, etc.	From (ft.)  0 19 150	19 150 160		
		hod of Assembly		(ft.)	(ft.)			_				
6 A-53B 19.45 LBS./F		ATLAND T&	.C	0	80	9. Static Wa	ft. above ground surface 50 ft. below ground surface st	11. Well is:  18 in. Developed? Disinfected?	Be X Yes	=		
Dia. (in.) Screen type, material & slot size					Pumping L Pumping at		Capped?	X Yes	=			
7. Grout or Other Sealing Material. Method: <b>PRES. PUMPED TR</b> Kind of Sealing Material.	RMI		From (ft.)	To (ft.)	# Sacks Cement	12. Did you in this property.  Yes			ill all unuse	ed wells on		
NEAT CEMENT 0 80 35					35	13. Signature of the Well Constructor or Supervisory Driller Date signed 07/17/2007						
							of Drill Rig Operator (Mandatory unless sa					
Make additional comments on reve	orce cide al	nout geology, add	itional core	one water	quality etc	Variance	issued Voc X No					

Well Construction Report For WISCONSIN UNIQUE WELL NUMBER TN828  Property MITCHELL, BILL Owner Telephone 847-774-2466 Number							State of WI - Private Water Systems - Department of Natural Resources, Box Madison, WI 53707					
							Please type or Print using a black Pen Please Use Decimals Instead of Fractions.					
Mailing 2545 W HOMER S	T #2					1. Well Location  X Town City Villof SMELSER	City Village Fire					
City CHICAGO State IL Zip Code 60647							Grid or Street Address or Road Name an 3269 CO HWY D	d Number				
County of Well Location  Grant	County	y Well Permit No		Well Cor 01/17/	npletion Dat 2007	te	Subdivision Name L	ot#	Block 7	#		
Well Constructor (Business Name JEFFERY A FAHERTY	-	License # <b>6819</b>	Facility	ID Numbe	r (Public We	ells)	Gov't Lot # or	<b>NE</b> 1/4 of	NI	E 1/4 of		
Address FAHERTY & SON WELL DRLG			Public V W	Vell Plan A	approval #		Section 28 T 2  Latitude Deg. Min.  Longitude Deg. Min.	N; R 1	E	X W		
City PLATTEVILLE	City State Zip Code Date of			Approval (	mm/dd/yyyy	y)	2. Well Type X New	v construction	Lat/Long Method			
Hicap Permanent well #	Common W	/ell #	Specific	Capacity	1	gpm/ft		ell?				
3. Well serves 1 # of hom	es and or			High cap Well?	pacity [	Yes X No	NEW WELL					
(e.g. barn, restaurant, church, school 4. Is the well located upslope or side		•		Property		Yes X No		etted Other:				
5. Drillhole Dimensions and Construction To Dia (in.) (ft.) (ft.)  10 0 80  6 80 173	Oil Tank k  ing Pool uction Metl Upper Enlargec  N N N N	12. 15. 15. 16. 16. 17. 18. 18. 18. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19	2. Foundation Cast Building Cast Building X Cast Storm Storm Storm Storm Storm Circulation—  2. Foundation Cast Cast Cast Cast Cast Cast Cast Cast	on Drain to Drain Iron or Pla Sewer X Iron or Pla Or Street S iitary Iron or Pla Or Street S iitary Iron or Pla Or Street S Iron or Pla Ir	Gravity astic Gravity astic Gravity astic Gravity astic Gravity units =< 6 Gravity astic Gravity ast	Other Pressure Other in. diam. > 6  8. CL-	19. Animal Yard or Shelte: 20. Silo 21. Barn Gutter 22. Manure Pipe Gra Grat Iron or Plasti 23. Other Manure Storage 24. Ditch 25. Other NR 812 Waste S Geology Type, Caving/Noncaving, Color, Hardne CLAY GALENA LIMESTONE	avity Pres to Other torage	From (ft.)  0 12	10 (ft.) 12 173		
=	, ,	hod of Assembly		(ft.)	(ft.)							
6 A-53B 19.45 LBS/F	T IPSCO	)T&C		0	80	9. Static Wa	ft. above ground surface 65 ft. below ground surface	11. Well is:  18 in. Developed?	Be X Yes	elow Grade		
Dia. (in.) Screen type, material & slot size						Pumping L Pumping at		Disinfected? Capped?	X Yes X Yes	=		
7. Grout or Other Sealing Material.  Method: PRESS PUMPED T			From	То	# Sacks	12. Did you this property	notify the owner of the need to permanently?	abandon and fill	all unuse	d wells on		
Kind of Sealing Mate			(ft.)	(ft.)	Cement							
NEATA CEMENT			0	80	40	JF 01/19/2007  Signature of Drill Rig Operator (Mandatory unless same as above) Date signed						
Make additional comments on rev	anaa aide -1	out coology - 13	:::1		1:64-	Signature		ame as above) [	oate signe	u		

Well Construction Report For WISCONSIN UNIQUE WELL NUMBER SY882							State of WI - Private Water Systems - DG/2 Form 3 Department of Natural Resources, Box 7921 (R 8/00 Madison, WI 53707						
Property <b>JENAMANN</b> , <b>DAN</b> Owner	IEL			lephone 60 mber	9	Please type or Print using a black Pen Please Use Decimals Instead of Fraction	ons.						
Mailing Address 1339 ST ROSE RD			,			1. Well Location  X Town City Vi  of SMELSER	Fire	Fire # (if available)					
City CUBA CITY State WI 53807							of SMELSER  Grid or Street Address or Road Name and Number						
County of Well Location  Grant	County Well Permit No. Well Completion D  W  05/23/2005				-	te	Subdivision Name I	Lot #	Block	#			
Well Constructor (Business Name CORPIAN WELL DRILLIN		License # 61	Facility	ID Numbe	er (Public We	ells)	Gov't Lot # or	<b>NE</b> 1/4 of	· NI	E 1/4 of			
Address 4747 OLD C RD			Public V W	Well Plan	Approval #		Section 28 T 2  Latitude Deg. Min.  Longitude Deg. Min.	N; R 1	E	X W			
City BOSCOBEL	State WI	Zip Code <b>53805</b>	Date of	Approval	(mm/dd/yyyy	7)	2. Well Type X Ne	ew construction	Lat/Long <b>GP</b> S	Method 8008			
Hicap Permanent well #	Common W	Vell#	Specific	Capacity	.1	gpm/ft	1 –	nstructed in Vell?					
3. Well serves 1 # of home	es and or			High ca Well?	pacity	Yes X No							
(e.g. barn, restaurant, church, school.) 4. Is the well located upslope or side				Propert		Yes X No		etted Other	:				
1. Landfill  20 2. Building Overhang  >60 3. Septic X Holding Ta  >60 4. Sewage Absorption Un  5. Nonconforming Pit  6. Buried Home Heating O  7. Buried Petroleum Tank  8. Shoreline Swimmi  5. Drillhole Dimensions and Constru  From To  Dia (in.) (ft.) (ft.)	oil Tank ing Pool action Metl Upper Enlarged	12 13 14 15	2. Foundation 3. Building	on Drain to Drain Iron or Ple Sewer to Iron or Ple I Iron or Ple or Street S nitary rm er Sump Lov Ope	astic Gravity lastic Sewer: units =< 6 certain series of the certa	Other Pressure Other in. diam. > 6  8.	19. Animal Yard or Shelto 20. Silo 21. Barn Gutter 22. Manure Pipe  Gr	ravity Pre- tic Other	From (ft.)	To (ft.)			
10 0 84	X2	2. Rotary - Air				L-	LIMEROCK & SOAPSON	11	78				
6 84 160  6. Casing, Liner, Screen Materia		If no, why not?	Casing Ham in. di	mer a dia.	To	L-	LIMEROCK		78	160			
<u> </u>		Specification hod of Assembly		(ft.)	(ft.)								
6 NEW BLACK STE WHEATLAND AS				0	84	9. Static Wa	ft. above ground surface 77 ft. below ground surface st	11. Well is:  24 in.  Developed?	Be X Yes				
Dia. (in.) Screen type, material & slot size					Pumping Level 145 ft. below surface Disinfected? X Yes Disinfected? X Yes Capped? X Yes								
7. Grout or Other Sealing Material. Method: <b>TREMIE PUMPED</b> Kind of Sealing Mate			From (ft.)	To (ft.)	# Sacks Cement	12. Did you i this property			ill all unuse	ed wells on			
NEAT CEMENT 0 84 28					13. Signature of the Well Constructor or Supervisory Driller  SAA  Date signed  06/14/2005								
							of Drill Rig Operator (Mandatory unless s	same as above)	Date signe 06/14/200	d			
Make additional comments on reve	ana aida ah	ant analogy add	itiamal aana		124	Variance	issued Vac X No						

# AUG 18 1976

Rev. 10-75

1120 Broadway

PLATTEVILLE, WISCONSIN 53818

State of Wisconsin Department of Natural Resources Box 450

# NOTE:

- Division's Copy White Copy Green Copy - Driller's Copy

WELL CONSTRUCTOR'S REPORT Form 3300-15

Madison, Wisconsin 53701 Yellow Copy - Owner's Copy 1. COUNTY CHECK (✓) ONE: Name Town Village City % Section Section Range 3. NAME WNER Township AGENT AT TIME OF DRILLING CHECK (/) ONE 2. LOCATION OR Grid or Street No. Street Name ADDRESS AND - If available subdivision name, lot & block No. POST OFFICE 4. Distance in feet from well Floor Dra Connected Building Sanitary Bldg. Drain Sanitary Bldg. Sewer Storm Bldg, Drain Storm Bldg, Sewer to nearest: (Record C.1. Other C.1. Other C.I. Sewer |Other Sewer| C.I. Other CJ. Other answer in appropriate block) Foundation Drain Connected to: Street Sewer Other Sewers Septic Holding Sewage Absorption Unit Sewage Sump Clearwater Sump Tank Sewage C.I. Other Tank Seepage Pit San. Storm C.F. Other Sewer Sump Clearwater Seepage Bed Clearwater Dr. Sump Seepage Trench Pit: Nonconforming Existing Privy Pet Subsurface Pumproom Animal Barn Animal Silo Glass Lined Silo Earthen Silage Waste Storage Facility With Pit Gutter Barn Yard Storage Trench Or w/o Well Nonconforming Existing Pen Pít Pump Tank Temporary Watertight Solid Manure Subsurface Waste Pond or Land Other (Give Description) Manure Liquid Manure Storage Gasoline or Disposal Unit Stack Tank Structure Oil Tank (Specify Type) 5. Well is intended to supply water for: 9. FORMATIONS To (ft.) From (ft.) Kind 6. DRILLHOLE Dia. (in.) From (tt.) To (ft.) Dia. (in.) From (ft.) To (ft.) Surface Surface 7. CASING, LINER, CURBING AND SCREEN Material, Weight, Specification Dia. (in.) & Method of Assembly | From (ft.) To (ft.) Surface 10. TYPE OF DRILLING MACHINE USED Rotary-hammer w/drilling 8. GROUT OR OTHER SEALING MATERIAL Jetting with Cable Tool mud & air To (ft.) Rotary-air w/drilling mud From/(ft.) Rotary-hammer Air Water Rotary-w/drilling 🔲 Reverse Rotary Surface \_l mud Well construction completed on MISCELLANEOUS DATA -above final grade **GPM** Well is terminated below Yield Test: Well disinfected upon completion Depth from surface to normal water level Ft. No Depth of water level Tes 🗆 No ☐ Yes Stabilized No Well sealed watertight upon completion when pumping Water sample sent to laboratory on Your opinion concerning other pollution hazards, information concerning difficulties encountered, and data relating to nearby wells, screens, seals, method of finishing the well, amount of cement used in grouting, blasting, etc., should be given on reverse side. Complete Mail Address HERTY DRILLING CO., INC. 842 Signature

Registered Well Driller

# FEB 1 8 1977

State of Wisconsin
Department of Natural Resources
Box 450
Madison, Wisconsin 53701

NOTE:

WELL CONSTRUCTOR'S REPORT

Form 3300-15 Rev. 10-75

White Copy - Division's Copy Green Copy - Driller's Copy Yellow Copy - Owner's Copy

1. <b>CO</b>	UNTY	Licen	1	CHECK (V		∕illage		Na Sity	me	401	<u>ر</u>	
2.10	CATION	1/4 Section	Section	Township	Range	3. NA	ME 🔼	OWNER	AGENT AT	1	٠.	HECK (4) ONE
OR	CATION - Gr	rid or Street No.	Street Name	TON	1/ 1/2	AD	DRESS	A CA	ne of	me		— —- : <del></del> - =
AN	D – If	available subdiv	ision name, lot	& block No.		POS	ST OFFIC	<u> (人</u>	<del>/-</del> .			
				th olova 1101	<u> </u>		0	uhu	City			<del></del>
to r	n <mark>earest:</mark> wer in ap	eet from well (Record propriate	Building S	C,I. O	ther C.I.	ry Bldg. S		Floor Di Connecte J. Sewer (O	-· <del></del>	C.I.		otorm Bldg. Sewe
Stree	t Sewer	Other Sewer:	<del>-1</del> 1	Drain Connecto Sewage		Sump	Clearwate Sump		T 400 L	ige Absorp age Pit	tion Unit	
San,	Storm	C.I. Other	Sewer Clearwater	Sump Clearwater				50	Seep	age Bed	65	
Privy	Pet	Pit: Nonconfo	Dr. rming Existing	Sump Subsurface F	Pumproom			nimal Silo 'ard With	Glass Line		Earthen Silag Storage Tren	—————————————————————————————————————
	Waste Pit	Well Pump		Nonconform	ning Existing	Gutter	Barn Y Pen	ard With	Pit Storage Facility	Pit	Pit	cii O.
Temp	Orary	Tank Watertight	Solid Manure	Subsurface	Waste Pond or	Land C	) Other (Give	Description	1)			
Manur Stack		Liquid Manure Tank		Gasoline or Oil Tank	Disposal Unit (Specify Type		,	A Secret				
5. We	ll is inten	des to supply w	ater for:	1		9. F	ORMATIC	₩.		· · · · · · · · · · · · · · · · · · ·		
- DE	ULLHOI	wone				<del>-                                     </del>	2	Kind		<u> </u>	From (ft.)	To (ft.)
		om (tt.)  To (ft	i.) Dia. (in.)	From (ft.)	To (ft.)	_   C	lay	<u></u>			Surface	30
10	ク   s	urface 12	0			A	ales	na	Rade	9	30	120
	1	20 12	14		:		Louis	Du	1		120	124
7. CA	SINGL	INER, CURBING terial, Weight, S	G AND SCREI	EN EN			wy	V-7 -				<u> </u>
Dia.		& Method of A	Assembly	From (ft.)	<u>To (ft.)</u>					<del></del>		
6" Y	الهادا	Stall	tac.	9. Surface	120	,						
0	A	53 y	uncol	Tun					-			
•				J		<u> </u>						
	-			4		10.	TYPE OF	DRILLING	MACHINE U	SED		<del></del>
_				<u> </u>		_	Cable	Tool	Rotary- w/drilli mud &	hammer ng air	بر ا	etting with
8. GI	ROUT OF	R OTHER SEAL Kind	ING MATERI	AL From (ft.)	To (ft.)		Rotar	y-air	Rotary	-hammer	! [	Air
A	··- ·	4	-	1 3 12 12 (2.3)	120		Rotar	ling mud y-w/drilling	& air		Ę	Water
- ('4	m	inf	<i>[</i>	Surface	120	+	mud		Reverse	Rotary	<del></del>	
		· · ·	<del></del>		i :	Well	construction	on complete	d on		14	<u>19 7</u> _
11.		est:	DATA 2	Hys. at	<u> 30 G</u> P	M Well	is termi <u>nat</u>	ed	inches_	<b>1</b>	bove final elow	grade 
	Depth	from surface to	normal water le	evel	Ft.	Well	lisinfected	ироп сотр	letion	<u> </u>	es 🗆 No	
	•	of water level	60 FL	Stabilized	☐ Yes □	No Well s	sealed wate	rtight upon	completion	Y	es 🗆 No	
	Water s	sample sent to	Ma	lism				laborate		Ful	-10	<u>19_7_7</u>
Your	r opinion hing the v	concerning other	er pollution has cement used in	zards, informati grouting, blast	ion concerning ing, etc., shouk	difficultie 1 be given	s encounter on reverse	red, and dat side.	a relating to n	earby well	s, screens, sea	ls, method of
Signa G <b>184</b>	ture	alph	11		Well Driller	Com	plete Mail	Address		To Downie	1940 -	*
		<del></del>	<del>/</del>		/	<u> </u>						