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April 8, 2021

Mr. Matt Thompson
Wisconsin Department of Natural Resources
1300 W. Clairemont Avenue
Eau Claire, WI 54701

Subject: 2021 First Quarterly Report - Wauleco, Inc., Wausau, Wisconsin
BRRTS #02-37-000006

Dear Mr. Thompson:

On behalf of Wauleco, Inc., TRC is submitting a copy (enclosed) of the 2021 First Quarterly Report for the Wauleco, Inc., site in Wausau, Wisconsin.

If you have any questions or comments regarding this information, please call me at (608) 235-4963.

Sincerely,

TRC

A handwritten signature in blue ink, appearing to read "Bruce Iverson".

Bruce Iverson
Project Manager

Attachments: 2021 First Quarterly Report

cc: Evan Schreiner – Wauleco, Inc. (2 copies)
David Crass – Michael Best & Friedrich, LLP (electronic copy only)
Tom Dushek – TRC Wauleco (1 copy)
Ken Quinn – TRC (1 copy)

**Wauleco, Inc. - Wausau, Wisconsin
Quarterly Report
Submitted April 2021**

Summary of 2021 First Quarter Activities

Groundwater Extraction and Treatment System Operation

Tables 1a, b, and c summarize the extraction and treatment system performance data for this reporting period. The results of the water discharged to the municipal sewer during the first quarter of 2021 are summarized as follows:

- Pentachlorophenol (PCP) screening (on-site gas chromatograph) results for the system effluent samples, which represent the water discharged to the municipal sanitary sewer, averaged 3.48 µg/L in January, 3.43 µg/L in February, and 6.71 µg/L in March.
- Laboratory results for the sampling event conducted this quarter are included in Tables 1a, b, and c for each month. The laboratory results for PCP in the system effluent was <3.0 µg/L on January 14, <3.0 µg/L on February 10, and <3.0 µg/L on March 10, 2021.
- Both laboratory and on-site screening results indicate that the effluent PCP concentrations were below the monthly average permit level of 150 µg/L and the daily maximum concentration of 300 µg/L.
- Total treatment system efficiency (including carbon polishing units) removed more than 99 percent of the PCP between the influent and the effluent.

On-site screening PCP influent concentrations ranged from 3,328 µg/L to 8,923 µg/L during the quarter (Tables 1a, b, and c). PCP influent and effluent concentrations in the fluidized bed reactor (FBR) are presented graphically, both as individual data points and as moving averages, on Figure 1. FBR results included the following:

- As shown on Figure 1 and in Tables 1a, b, and c, PCP concentrations in the FBR influent fluctuated during the quarter, and generally remain within normal concentrations.
- The average PCP removal efficiency for the biological portion (*i.e.*, FBR influent to the fixed film reactor [FFR] effluent) of the system during this quarter is compared to the following:

Month	Average PCP Removal (%)	Previous 12 Month Average (%)	Average 1 Year Ago (%)
January 2021	78	84	83
February 2021	79	84	84
March 2021	75	83	80

- The dissolved oxygen concentration in the influent to the FBR averaged 2.3 mg/L in January, 2.4 mg/L in February, and 2.1 mg/L in March 2021.

Laboratory results for the mercury analysis of the system effluent samples are included in Tables 1a, b, and c. The mercury concentration in the system effluent sample (discharged to the sanitary sewer) was 0.11 µg/L on January 14, 0.049 µg/L on February 10, and 0.047 µg/L on March 10, which are below the permit discharge limit of 1.6 µg/L. The mass loading for mercury in January was calculated at 0.0000292 lb/24 hours, February was calculated at 0.0000130 lb/24 hours, and March was calculated at 0.0000124 lb/24 hours which is below the permit discharge limit of 0.00048 lb/24 hours.

The daily groundwater flow of the effluent to the Wausau Wastewater Treatment Plant averaged 22.10 gpm for January, 22.09 gpm for February, and 21.99 gpm for March 2021 (Tables 2a, b, and c). Since June, 2012 the pumping rate has been operated at approximately 22 gpm.

Figure 2 shows the average groundwater flow extracted and the average daily flow discharged to the Wausau Wastewater Treatment Plant.

Groundwater Monitoring

A complete round of water table elevations for the month of January 2021 are summarized in Table 3. A water table map for the month of January is included as Drawing 1.

The product thickness data for January 2021 are summarized in Table 4. Measurements show minimal product present in January.

Water table elevations and product thickness data for February and March, 2021 for eleven select monitoring wells being measured in association with the City of Wausau Wastewater Treatment Plant dewatering are also summarized in Tables 3 and 4, respectively. Measurements show no product present in February and March for these wells.

Enclosures: Tables 1a, b, and c – Above Ground Treatment System Data
Tables 2a, b, and c – Treatment System Flows
Table 3 – Groundwater Elevation Data
Table 4 – Free Product Measurements
Figure 1 – FBR Influent and Effluent PCP Concentrations
Figure 2 – Average Groundwater Extraction Rates and Water Level Deviation Versus Time
Drawing 1 – Water Table Map – January 6, 2021

**TABLE 1a
JANUARY 2021**

**Above Ground Treatment System Data
Wauleco, Inc.
Wausau, Wisconsin**

<u>Parameter</u>	<u>UNIT</u>	<u>DATE</u>	<u>FBR Influent</u>	<u>FBR Effluent</u>	<u>FFR Effluent</u>	<u>Bag Filter Effluent</u>	<u>Filters1+2 Effluent</u>	<u>System Effluent</u>	<u>System Eff Dup</u>
Biological Oxygen Demand	mg/L	1/14/2021	9.8	5.7				<	
Chemical Oxygen Demand	mg/L	1/14/2021	40	30				20	
Chloride	mg/L	1/14/2021	150	150				150	
Dissolved Oxygen	mg/L	1/8/2021	2	1.1	6.1				
	mg/L	1/14/2021	2.4	1.3	6.2				
	mg/L	1/21/2021	2.4	1.2	6.6				
	mg/L	1/28/2021	2.5	1.3	6.4				
Nitrogen, Ammonia	mg/L	1/8/2021	0.4	0.6	0.5				
	mg/L	1/14/2021	0.4	0.3	0.3				
	mg/L	1/21/2021	0.5	0.4	0.3				
	mg/L	1/28/2021	0.4	0.4	0.4				
Nitrogen, Nitrate	mg/L	1/8/2021	<	<	<				
	mg/L	1/14/2021	<	<	<				
	mg/L	1/21/2021	<	<	<				
	mg/L	1/28/2021	<	<	<				
Nitrogen, Nitrate + Nitrite	mg/L	1/14/2021	<	<			<		
Nitrogen, Total Kjeldahl	mg/L	1/14/2021	<	<			<		
Pentachlorophenol-Screen	µg/L	1/1/2021						5	
	µg/L	1/2/2021						5	
	µg/L	1/3/2021						5	
	µg/L	1/4/2021						5	
	µg/L	1/5/2021						2	
	µg/L	1/6/2021						2	
	µg/L	1/7/2021						2	
	µg/L	1/8/2021	7108	1681	1707			2	
	µg/L	1/9/2021						4	
	µg/L	1/10/2021						4	
	µg/L	1/11/2021						4	
	µg/L	1/12/2021						3	
	µg/L	1/13/2021						4	
	µg/L	1/14/2021	8309	1959	1734		442	4	
	µg/L	1/15/2021						7	
	µg/L	1/16/2021						4	
	µg/L	1/17/2021						4	
	µg/L	1/18/2021						4	
	µg/L	1/19/2021						4	
	µg/L	1/20/2021						4	
	µg/L	1/21/2021	8923	1436	1783			3	
	µg/L	1/22/2021						4	
	µg/L	1/23/2021						3	
	µg/L	1/24/2021						3	
	µg/L	1/25/2021						3	
	µg/L	1/26/2021						2	
	µg/L	1/27/2021						2	
	µg/L	1/28/2021	6127	1411	1462			1	

**TABLE 1a
JANUARY 2021**

**Above Ground Treatment System Data
Wauleco, Inc.
Wausau, Wisconsin**

<u>Parameter</u>	<u>UNIT</u>	<u>DATE</u>	<u>FBR Influent</u>	<u>FBR Effluent</u>	<u>FFR Effluent</u>	<u>Bag Filter Effluent</u>	<u>Filters1+2 Effluent</u>	<u>System Effluent</u>	<u>System Eff Dup</u>
Pentachlorophenol-Screen	µg/L	1/29/2021						3	
	µg/L	1/30/2021						3	
	µg/L	1/31/2021						3	
pH	S.U.	1/8/2021	6.9	6.9	6.9				
	S.U.	1/14/2021	7.05	7	7				
	S.U.	1/21/2021	6.85	6.85	6.85				
	S.U.	1/28/2021	7	7	7				
Phosphorus, Ortho	mg/L	1/14/2021	<	<				<	
Phosphorus, Phosphate	mg/L	1/8/2021	0.4	0.3	0.3				
	mg/L	1/14/2021	0.5	0.4	0.4				
	mg/L	1/21/2021	0.4	0.3	0.3				
	mg/L	1/28/2021	0.4	0.3	0.3				
Solids, Total Suspended	mg/L	1/14/2021	13	16				3.4	
Mercury	µg/L	1/14/2021	0.22					0.11	
Phenol									
2,3,4,6-Tetrachlorophenol	µg/L	1/14/2021	270	56	55		45	<	<
2,4,5-Trichlorophenol	µg/L	1/14/2021	<	<	<		19	<	<
2,4,6-Trichlorophenol	µg/L	1/14/2021	<	<	<		<	<	<
2,4-Dichlorophenol	µg/L	1/14/2021	<	<	<		<	<	<
2,4-Dimethylphenol	µg/L	1/14/2021	<	<	<		<	<	<
2,4-Dinitrophenol	µg/L	1/14/2021	<	<	<		<	<	<
2,6-Dichlorophenol	µg/L	1/14/2021	<	<	<		<	<	<
2-Chlorophenol	µg/L	1/14/2021	<	<	<		<	<	<
2-Methylphenol	µg/L	1/14/2021	<	<	<		<	<	<
2-Nitrophenol	µg/L	1/14/2021	<	<	<		<	<	<
3&4-Methylphenol	µg/L	1/14/2021	<	<	<		<	<	<
4,6-Dinitro-2-Methylphenol	µg/L	1/14/2021	<	<	<		<	<	<
4-Chloro-3-Methylphenol	µg/L	1/14/2021	<	<	<		<	<	<
4-Nitrophenol	µg/L	1/14/2021	<	<	<		<	<	<
Pentachlorophenol	µg/L	1/14/2021	3700	640	600		440	<	<
Phenol	µg/L	1/14/2021	<	<	<		<	<	<

**TABLE 1b
FEBRUARY 2021**

**Above Ground Treatment System Data
Wauleco, Inc.
Wausau, Wisconsin**

<u>Parameter</u>	<u>UNIT</u>	<u>DATE</u>	<u>FBR Influent</u>	<u>FBR Effluent</u>	<u>FFR Effluent</u>	<u>Bag Filter Effluent</u>	<u>Filters1+2 Effluent</u>	<u>System Effluent</u>	<u>System Eff Dup</u>
Biological Oxygen Demand	mg/L	2/10/2021	6.5	3.9				<	
Chemical Oxygen Demand	mg/L	2/10/2021	47	47				20	
Chloride	mg/L	2/10/2021	160	170				160	
Dissolved Oxygen	mg/L	2/4/2021	2.3	1.5	6.6				
	mg/L	2/10/2021	2.5	1.2	6.8				
	mg/L	2/18/2021	2.4	1.3	6.6				
	mg/L	2/25/2021	2.6	1.2	6.6				
Nitrogen, Ammonia	mg/L	2/4/2021	0.4	0.3	0.2				
	mg/L	2/10/2021	0.6	0.4	0.4				
	mg/L	2/18/2021	0.5	0.4	0.4				
	mg/L	2/25/2021	0.5	0.3	0.4				
Nitrogen, Nitrate	mg/L	2/4/2021	<	<	<				
	mg/L	2/10/2021	<	<	<				
	mg/L	2/18/2021	<	<	<				
	mg/L	2/25/2021	<	<	<				
Nitrogen, Total Kjeldahl	mg/L	2/10/2021	<	<				<	
Pentachlorophenol-Screen	µg/L	2/1/2021						4	
	µg/L	2/2/2021						6	
	µg/L	2/3/2021						3	
	µg/L	2/4/2021	7752	1898	1724			2	
	µg/L	2/5/2021						2	
	µg/L	2/6/2021						2	
	µg/L	2/7/2021						2	
	µg/L	2/8/2021						2	
	µg/L	2/9/2021						2	
	µg/L	2/10/2021	5567	1263	1217		546	3	
	µg/L	2/11/2021						6	
	µg/L	2/12/2021						7	
	µg/L	2/13/2021						4	
	µg/L	2/14/2021						4	
	µg/L	2/15/2021						4	
	µg/L	2/16/2021						2	
	µg/L	2/17/2021						4	
	µg/L	2/18/2021	4975	1196	1111			3	
	µg/L	2/19/2021						3	
	µg/L	2/20/2021						2	
	µg/L	2/21/2021						2	
	µg/L	2/22/2021						2	
	µg/L	2/23/2021						2	
	µg/L	2/24/2021						8	
µg/L	2/25/2021	6524	1309	1176			3		
µg/L	2/26/2021						4		
µg/L	2/27/2021						4		

**TABLE 1b
FEBRUARY 2021**

**Above Ground Treatment System Data
Wauleco, Inc.
Wausau, Wisconsin**

<u>Parameter</u>	<u>UNIT</u>	<u>DATE</u>	<u>FBR Influent</u>	<u>FBR Effluent</u>	<u>FFR Effluent</u>	<u>Bag Filter Effluent</u>	<u>Filters1+2 Effluent</u>	<u>System Effluent</u>	<u>System Eff Dup</u>
Pentachlorophenol-Screen	µg/L	2/28/2021						4	
pH	S.U.	2/4/2021	6.6	6.6	6.65				
	S.U.	2/10/2021	6.7	6.65	6.75				
	S.U.	2/18/2021	6.9	6.8	6.65				
	S.U.	2/25/2021	6.6	6.6	6.6				
Phosphorus, Ortho	mg/L	2/10/2021	<	<				<	
Phosphorus, Phosphate	mg/L	2/4/2021	0.4	0.3	0.3				
	mg/L	2/10/2021	0.3	0.3	0.3				
	mg/L	2/18/2021	0.4	0.3	0.3				
	mg/L	2/25/2021	0.4	0.3	0.3				
Solids, Total Suspended	mg/L	2/10/2021	14	17				5.0	
Mercury	µg/L	2/10/2021						0.049	
Phenol									
2,3,4,6-Tetrachlorophenol	µg/L	2/10/2021	240		59			<	<
2,4,5-Trichlorophenol	µg/L	2/10/2021	<		<			<	<
2,4,6-Trichlorophenol	µg/L	2/10/2021	<		<			<	<
2,4-Dichlorophenol	µg/L	2/10/2021	<		<			<	<
2,4-Dimethylphenol	µg/L	2/10/2021	<		<			<	<
2,4-Dinitrophenol	µg/L	2/10/2021	<		<			<	<
2,6-Dichlorophenol	µg/L	2/10/2021	<		<			<	<
2-Chlorophenol	µg/L	2/10/2021	<		<			<	<
2-Methylphenol	µg/L	2/10/2021	<		<			<	<
2-Nitrophenol	µg/L	2/10/2021	<		<			<	<
3&4-Methylphenol	µg/L	2/10/2021	<		<			<	<
4,6-Dinitro-2-Methylphenol	µg/L	2/10/2021	<		<			<	<
4-Chloro-3-Methylphenol	µg/L	2/10/2021	<		<			<	<
4-Nitrophenol	µg/L	2/10/2021	<		<			<	<
Pentachlorophenol	µg/L	2/10/2021	3000		660			<	<
Phenol	µg/L	2/10/2021	<		<			<	<

**TABLE 1c
MARCH 2021**

**Above Ground Treatment System Data
Wauleco, Inc.
Wausau, Wisconsin**

<u>Parameter</u>	<u>UNIT</u>	<u>DATE</u>	<u>FBR Influent</u>	<u>FBR Effluent</u>	<u>FFR Effluent</u>	<u>Bag Filter Effluent</u>	<u>Filters 1+2 Effluent</u>	<u>System Effluent</u>	<u>System Eff Dup</u>
Biological Oxygen Demand	mg/L	3/10/2021	6.6	3.4				<	
Chemical Oxygen Demand	mg/L	3/10/2021	47	47				33	
Chloride	mg/L	3/10/2021	180	180				180	
Dissolved Oxygen	mg/L	3/4/2021	2.6	1.4	6.8				
	mg/L	3/10/2021	2.2	0.8	5.5				
	mg/L	3/18/2021	1.8	1	6.2				
	mg/L	3/25/2021	1.8	1.1	5.8				
Nitrogen, Ammonia	mg/L	3/4/2021	0.4	0.3	0.4				
	mg/L	3/10/2021	0.5	0.4	0.4				
	mg/L	3/18/2021	0.5	0.5	0.3				
	mg/L	3/25/2021	0.4	0.3	0.3				
Nitrogen, Nitrate	mg/L	3/4/2021	<	<	<				
	mg/L	3/10/2021	<	<	<				
	mg/L	3/18/2021	<	<	<				
	mg/L	3/25/2021	<	<	<				
Nitrogen, Total Kjeldahl	mg/L	3/10/2021	<	<				<	
Pentachlorophenol-Screen	µg/L	3/1/2021						4	
	µg/L	3/2/2021						3	
	µg/L	3/3/2021						2	
	µg/L	3/4/2021	3328	894	1075			1	
	µg/L	3/5/2021						3	
	µg/L	3/6/2021						2	
	µg/L	3/7/2021						2	
	µg/L	3/8/2021						2	
	µg/L	3/9/2021						1	
	µg/L	3/10/2021	6048	1400	1013		471	2	
	µg/L	3/11/2021						5	
	µg/L	3/12/2021						10	
	µg/L	3/13/2021						8	
	µg/L	3/14/2021						8	
	µg/L	3/15/2021						8	
	µg/L	3/16/2021						4	
	µg/L	3/17/2021						14	
	µg/L	3/18/2021	5468	1545	1610			12	
	µg/L	3/19/2021						7	
	µg/L	3/20/2021						9	
	µg/L	3/21/2021						9	
	µg/L	3/22/2021						9	
	µg/L	3/23/2021						7	
	µg/L	3/24/2021						13	
	µg/L	3/25/2021	5032	1233	989			11	
	µg/L	3/26/2021						8	
	µg/L	3/27/2021						9	
	µg/L	3/28/2021						9	

**TABLE 1c
MARCH 2021**

**Above Ground Treatment System Data
Wauleco, Inc.
Wausau, Wisconsin**

<u>Parameter</u>	<u>UNIT</u>	<u>DATE</u>	<u>FBR Influent</u>	<u>FBR Effluent</u>	<u>FFR Effluent</u>	<u>Bag Filter Effluent</u>	<u>Filters 1+2 Effluent</u>	<u>System Effluent</u>	<u>System Eff Dup</u>
Pentachlorophenol-Screen	µg/L	3/29/2021						9	
	µg/L	3/30/2021						8	
	µg/L	3/31/2021						9	
pH	S.U.	3/4/2021	6.65	6.6	6.7				
	S.U.	3/10/2021	6.65	6.6	6.65				
	S.U.	3/18/2021	6.65	6.65	6.65				
	S.U.	3/25/2021	6.65	6.9	6.9				
Phosphorus, Ortho	mg/L	3/10/2021	<	<				<	
Phosphorus, Phosphate	mg/L	3/4/2021	0.4	0.3	0.3				
	mg/L	3/10/2021	0.4	0.3	0.3				
	mg/L	3/18/2021	0.4	0.3	0.3				
	mg/L	3/25/2021	0.4	0.3	0.3				
Solids, Total Suspended	mg/L	3/10/2021	9.4	13				4.8	
Mercury	µg/L	3/10/2021						0.047	
Phenol									
2,3,4,6-Tetrachlorophenol	µg/L	3/10/2021	330	70	69			<	<
2,4,5-Trichlorophenol	µg/L	3/10/2021	<	<	<			<	<
2,4,6-Trichlorophenol	µg/L	3/10/2021	<	<	<			<	<
2,4-Dichlorophenol	µg/L	3/10/2021	<	<	<			<	<
2,4-Dimethylphenol	µg/L	3/10/2021	<	<	<			<	<
2,4-Dinitrophenol	µg/L	3/10/2021	<	<	<			<	<
2,6-Dichlorophenol	µg/L	3/10/2021	<	<	<			<	<
2-Chlorophenol	µg/L	3/10/2021	<	<	<			<	<
2-Methylphenol	µg/L	3/10/2021	<	<	<			<	<
2-Nitrophenol	µg/L	3/10/2021	<	<	<			<	<
3&4-Methylphenol	µg/L	3/10/2021	<	<	<			<	<
4,6-Dinitro-2-Methylphenol	µg/L	3/10/2021	<	<	<			<	<
4-Chloro-3-Methylphenol	µg/L	3/10/2021	<	<	<			<	<
4-Nitrophenol	µg/L	3/10/2021	<	<	<			<	<
Pentachlorophenol	µg/L	3/10/2021	3800	680	670			<	<
Phenol	µg/L	3/10/2021	<	<	<			<	<

TABLE 2a
JANUARY 2021

Treatment System Flows
Wauleco, Inc.
Wausau, Wisconsin

Date	Influent Groundwater Flow Rate ⁽¹⁾⁽³⁾ (gpm)	POTW Discharge Flow Rate ⁽¹⁾⁽⁴⁾ (gpm)	POTW Totalized Discharge ⁽³⁾ (gal)
1/1/2021	21.08	21.81	95416641
1/2/2021	21.22	22.08	95448436
1/3/2021	21.18	22.07	95480215
1/4/2021	21.15	21.99	95511884
1/5/2021	21.17	21.82	95543298
1/6/2021	21.04	22.01	95574996
1/7/2021	21.90	22.08	95606786
1/8/2021	22.07	22.37	95639000
1/9/2021	22.14	22.08	95670796
1/10/2021	22.25	22.39	95703043
1/11/2021	22.28	22.24	95735067
1/12/2021	22.40	22.21	95767043
1/13/2021	22.30	22.37	95799255
1/14/2021	22.35	22.09	95831062
1/15/2021	22.38	22.30	95863179
1/16/2021	21.37	21.70	95894421
1/17/2021	20.79	21.77	95925767
1/18/2021	20.75	21.70	95957021
1/19/2021	21.36	22.25	95989065
1/20/2021	21.45	22.47	96021415
1/21/2021	21.19	22.04	96053150
1/22/2021	21.10	22.07	96084937
1/23/2021	21.17	21.98	96116593
1/24/2021	21.23	22.20	96148566
1/25/2021	21.26	22.04	96180300
1/26/2021	21.22	21.97	96211938
1/27/2021	21.25	21.86	96243419
1/28/2021	21.33	21.95	96275023
1/29/2021	21.33	22.28	96307108
1/30/2021	21.30	22.23	96339120
1/31/2021	21.24	22.52	96371554
Average For The Month	21.49	22.10	
Total ⁽²⁾ :			986,321

Footnotes:

- ⁽¹⁾ Influent and POTW discharge flow rates are daily averages. These may not be equal due to balancing in the treatment system and calibration of individual flowmeters. The influent groundwater flow rate is calculated by adding the instantaneous flow rate from each pumping well (i.e., 16 meters). The POTW discharge flow rate is recorded directly from the effluent meter.
- ⁽²⁾ Total is the cumulative gallons discharged to the POTW during the reporting period. This number is calculated by subtracting the total of the previous month's last day from the total of the current month's last day, see previous month's report for the number used. The total from the first day of the current month is not used in the calculation.
- ⁽³⁾ Totalizers were reset to 0 on August 23, 2012 during the system shutdown for maintenance.
- ⁽⁴⁾ A new effluent meter was installed in April, 2017 during the system shutdown for maintenance.

**TABLE 2b
FEBRUARY 2021**

**Treatment System Flows
Wauleco, Inc.
Wausau, Wisconsin**

Date	Influent Groundwater Flow Rate ^{(1) (3)} (gpm)	POTW Discharge Flow Rate ^{(1) (4)} (gpm)	POTW Totalized Discharge ⁽³⁾ (gal)
2/1/2021	21.14	22.46	96403903
2/2/2021	21.22	22.00	96435579
2/3/2021	21.18	22.04	96467321
2/4/2021	21.38	22.26	96499377
2/5/2021	21.38	22.26	96531429
2/6/2021	21.30	21.94	96563025
2/7/2021	21.25	22.48	96595397
2/8/2021	21.17	22.16	96627306
2/9/2021	21.22	22.20	96659270
2/10/2021	21.34	22.01	96690971
2/11/2021	21.32	22.22	96722962
2/12/2021	21.19	22.08	96754756
2/13/2021	21.20	21.91	96786301
2/14/2021	21.39	22.36	96818494
2/15/2021	21.34	22.13	96850366
2/16/2021	21.39	22.13	96882229
2/17/2021	21.33	21.85	96913694
2/18/2021	21.23	22.11	96945531
2/19/2021	21.26	21.92	96977095
2/20/2021	21.38	21.83	97008529
2/21/2021	21.22	22.20	97040494
2/22/2021	21.28	21.95	97072105
2/23/2021	21.31	21.98	97103759
2/24/2021	21.24	21.80	97135148
2/25/2021	21.40	21.30	97165821
2/26/2021	21.39	22.73	97198549
2/27/2021	21.22	21.82	97229971
2/28/2021	21.16	22.29	97262064
Average For The Month	21.28	22.09	
Total ⁽²⁾ :			890,510

Footnotes:

- (1) Influent and POTW discharge flow rates are daily averages. These may not be equal due to balancing in the treatment system and calibration of individual flowmeters. The influent groundwater flow rate is calculated by adding the instantaneous flow rate from each pumping well (i.e., 16 meters). The POTW discharge flow rate is recorded directly from the effluent meter.
- (2) Total is the cumulative gallons discharged to the POTW during the reporting period. This number is calculated by subtracting the total of the previous month's last day from the total of the current month's last day, see previous month's report for the number used. The total from the first day of the current month is not used in the calculation.
- (3) Totalizers were reset to 0 on August 23, 2012 during the system shutdown for maintenance.
- (4) A new effluent meter was installed in April, 2017 during the system shutdown for maintenance.

TABLE 2c
MARCH 2021

Treatment System Flows
Wauleco, Inc.
Wausau, Wisconsin

<u>Date</u>	<u>Influent Groundwater Flow Rate ^{(1) (3)} (gpm)</u>	<u>POTW Discharge Flow Rate ^{(1) (4)} (gpm)</u>	<u>POTW Totalized Discharge ⁽³⁾ (gal)</u>
3/1/2021	21.17	22.77	97294854
3/2/2021	21.09	22.88	97327802
3/3/2021	21.18	22.91	97360795
3/4/2021	21.24	22.85	97393700
3/5/2021	21.28	22.91	97426693
3/6/2021	21.22	22.68	97459357
3/7/2021	21.24	23.03	97492516
3/8/2021	21.24	22.86	97525435
3/9/2021	21.32	22.84	97558326
3/10/2021	21.37	22.89	97591281
3/11/2021	21.06	22.81	97624128
3/12/2021	21.00	22.68	97656786
3/13/2021	21.05	22.60	97689330
3/14/2021	20.22	21.75	97720650
3/15/2021	21.14	22.55	97753124
3/16/2021	20.98	22.49	97785512
3/17/2021	21.12	22.43	97817817
3/18/2021	21.10	22.51	97850228
3/19/2021	21.31	20.56	97879834
3/20/2021	21.46	19.74	97908261
3/21/2021	21.36	20.31	97937503
3/22/2021	21.32	20.02	97966327
3/23/2021	21.32	20.90	97996430
3/24/2021	21.40	21.38	98027213
3/25/2021	21.18	21.60	98058317
3/26/2021	21.08	21.49	98089265
3/27/2021	20.95	21.25	98119863
3/28/2021	21.08	21.69	98151102
3/29/2021	21.07	21.51	98182078
3/30/2021	21.12	21.42	98212919
3/31/2021	21.22	21.45	98243808
Average For The Month	21.16	21.99	
Total ⁽²⁾ :			981,744

Footnotes:

- (1) Influent and POTW discharge flow rates are daily averages. These may not be equal due to balancing in the treatment system and calibration of individual flowmeters. The influent groundwater flow rate is calculated by adding the instantaneous flow rate from each pumping well (i.e., 16 meters). The POTW discharge flow rate is recorded directly from the effluent meter.
- (2) Total is the cumulative gallons discharged to the POTW during the reporting period. This number is calculated by subtracting the total of the previous month's last day from the total of the current month's last day, see previous month's report for the number used. The total from the first day of the current month is not used in the calculation.
- (3) Totalizers were reset to 0 on August 23, 2012 during the system shutdown for maintenance.
- (4) A new effluent meter was installed in April, 2017 during the system shutdown for maintenance.

TABLE 3

**Groundwater Elevation Data
Wauleco, Inc.
Wausau, Wisconsin**

<u>Well</u>	January 06, 2021 (ft msl)	February 02, 2021 (ft msl)	March 02, 2021 (ft msl)
PW01	1162.9	----	----
PW02	Abandoned	Abandoned	Abandoned
PW03	1162.84	----	----
PW3S	1161.75	----	----
PW04	1161.59	----	----
PW05	1161.65	----	----
PW06	1162.07	----	----
PW07	1161.83	----	----
PW08	1163.19	----	----
PW09I	----	----	----
PW09O	1161.63	----	----
PW10	1161.85	----	----
PW11	1160.24	----	----
PW12	1163.15	----	----
PW13	1161.66	----	----
PW14	1160.9	----	----
PW15	1160.97	----	----
PW16	1160.68	----	----
PW17	1156.49	----	----
PW18	1161.6	----	----
PW19	1160.33	----	----
PW20	1159.67	----	----
PW21	1160.32	----	----
PW22	1161.69	----	----
PW23	1161.58	----	----
PW24	1159.43	----	----
PW25	1158.63	----	----
PW26	1159.05	----	----
PW27	1157.63	----	----
PW28	1163	----	----
PW29	1163.08	----	----
P01	1161.57	----	----
OW01	1164.2	----	----
W01A	1163.35	----	----
W01B	1163.4	----	----
W02	1162.72	----	----
W03A	1160.69	----	----
W03B	1161.32	----	----
W04A	1162.18	----	----
W04B	1162.06	----	----
W05	1161.64	----	----
W06R	1163.27	----	----
W07	1162.96	----	----
W08	1171.35	----	----
W09	1162.37	----	----
W10A	1160.95	1160.99	1161.02
W10B	1160.77	----	----
W11	1160.09	1160.11	1160.76
W12	1159.74	1159.76	1160.37
W13	1161.54	----	----
W14	1159.75	1159.82	1160.65
W16	1161.19	1161.10	1161.37
W17	1160.92	----	----
W18	1161.17	----	----
W19	Abandoned	Abandoned	Abandoned

TABLE 3 (continued)

**Groundwater Elevation Data
Wauleco, Inc.
Wausau, Wisconsin**

<u>Well</u>	January 06, 2021 (ft msl)	February 02, 2021 (ft msl)	March 02, 2021 (ft msl)
W21	1159.88	1160.12	1160.79
W22	1160.65	1160.48	1160.52
W23	1159.87	-----	-----
W24A	1159.81	-----	-----
W25	1163.33	-----	-----
W26/W26R	1160.58	1160.57	1160.98
W27	1160.76	1160.70	1161.07
W28	1161.22	-----	-----
W29/W29R	1160.47	1160.64	1160.94
W30	1161.57	-----	-----
W31	1160.76	-----	-----
W32	1160.62	1160.91	1160.94
W33	1161.85	-----	-----
W34	1161.77	-----	-----
W35	1161.83	-----	-----
W36	1162.5	-----	-----
W39	Abandoned	Abandoned	Abandoned
W40/W40R	1160.69	-----	-----
W41	1161.51	-----	-----
W42	1162.54	-----	-----
W44	1161.59	-----	-----
W45	1161.65	-----	-----
W46	1161.45	-----	-----
W47	1160.33	-----	-----
W48	1160.62	-----	-----
W49	1160.95	-----	-----
W66	1163.18	-----	-----
W67	1163.15	-----	-----
W68A	1163.19	-----	-----
W68B	1163.11	-----	-----
W69	1161.97	-----	-----
W70B	Abandoned	Abandoned	Abandoned
River	-----	-----	-----
IW01	1161.61	-----	-----
IW01A	1161.61	-----	-----
FP01	1159.52	-----	-----
FP02	1159.82	-----	-----
FP03	1158.42	-----	-----
FP04	1159.92	-----	-----
3M Basin	Ice & Water in both Basins	-----	-----
DFOWM 5	1162.86	-----	-----
DFOWM 9	Abandoned	Abandoned	Abandoned
DFOWM 10A	Abandoned	Abandoned	Abandoned
DFOWM 11	1161.75	-----	-----
DFOWM 12	1162.56	-----	-----
W71	1165.13	-----	-----
W72	1163.61	-----	-----
W73	1162.46	-----	-----
W74	1161.86	-----	-----

Notes:

1. ft msl = feet mean sea level
2. PW09O denotes the outer well and PW09I denotes the inner well
3. ----- = Well not measured
4. Groundwater elevations have been adjusted for product thickness.
5. Top of casing elevations were resurveyed for the on-site wells on December 4, 2009 . Use of the new data began in January 2010.

Table 4

**Free Product Measurements
Wauleco, Inc.
Wausau, Wisconsin**

<u>Well</u>	January 06, 2021 (ft)	February 02, 2021 (ft msl)	March 02, 2021 (ft msl)
PW01	0.00	----	----
PW02	Abandoned	Abandoned	Abandoned
PW03	0.00	----	----
PW3S	0.00	----	----
PW04	0.00	----	----
PW05	0.00	----	----
PW06	0.00	----	----
PW07	0.00	----	----
PW08	0.00	----	----
PW09I	----	----	----
PW09O	0.00	----	----
PW10	0.00	----	----
PW11	0.00	----	----
PW12	0.00	----	----
PW13	0.00	----	----
PW14	0.00	----	----
PW15	0.00	----	----
PW16	0.00	----	----
PW17	0.00	----	----
PW18	0.00	----	----
PW19	0.00	----	----
PW20	0.00	----	----
PW21	0.00	----	----
PW22	0.00	----	----
PW23	0.00	----	----
PW24	0.00	----	----
PW25	0.00	----	----
PW26	0.00	----	----
PW27	0.00	----	----
PW28	0.00	----	----
PW29	0.00	----	----
P01	0.00	----	----
OW01	0.00	----	----
W01A	0.00	----	----
W01B	0.00	----	----
W02	0.00	----	----
W03A	0.00	----	----
W03B	0.00	----	----
W04A	0.00	----	----
W04B	0.00	----	----
W05	0.00	----	----
W06R	0.00	----	----
W07	0.04	----	----
W08	0.00	----	----
W09	0.00	----	----
W10A	0.00	0.00	0.00
W10B	0.00	----	----
W11	0.00	0.00	0.00
W12	0.00	0.00	0.00
W13	0.00	----	----
W14	0.00	0.00	0.00
W16	0.00	0.00	0.00
W17	0.00	----	----

**Free Product Measurements
Wauleco, Inc.
Wausau, Wisconsin**

<u>Well</u>	<u>January 06, 2021 (ft)</u>	<u>February 02, 2021 (ft msl)</u>	<u>March 02, 2021 (ft msl)</u>
W18	0.00	----	----
W19	Abandoned	Abandoned	Abandoned
W21	0.00	0.00	0.00
W22	0.00	0.00	0.00
W23	0.00	----	----
W24A	0.00	----	----
W25	0.00	----	----
W26/W26R	0.00	0.00	0.00
W27	0.00	0.00	0.00
W28	0.00	----	----
W29/W29R	0.00	0.00	0.00
W30	0.00	----	----
W31	0.00	----	----
W32	0.00	0.00	0.00
W33	0.00	----	----
W34	0.00	----	----
W35	0.11	----	----
W36	0.00	----	----
W39	Abandoned	Abandoned	Abandoned
W40/W40R	0.10	----	----
W41	0.00	----	----
W42	0.00	----	----
W44	0.00	----	----
W45	0.00	----	----
W46	0.00	----	----
W47	0.00	----	----
W48	0.00	----	----
W49	0.00	----	----
W66	0.00	----	----
W67	0.00	----	----
W68A	0.00	----	----
W68B	0.00	----	----
W69	0.00	----	----
W70B	Abandoned	Abandoned	Abandoned
River	----	----	----
IW01	0.00	----	----
IW01A	0.00	----	----
FP01	0.00	----	----
FP02	0.00	----	----
FP03	0.00	----	----
FP04	0.00	----	----
3M Basin	----	----	----
DFOWM 5	0.00	----	----
DFOWM 9	Abandoned	Abandoned	Abandoned
DFOWM 10A	Abandoned	Abandoned	Abandoned
DFOWM 11	0.00	----	----
DFOWM 12	0.00	----	----
W71	0.00	----	----
W72	0.00	----	----
W73	0.00	----	----
W74	0.00	----	----

Notes:

1. PW09O denotes the outer well and PW09I denotes the inner well
2. ---- = Well not measured

FIGURE 1
FBR Influent and Effluent PCP Concentrations
Wauleco, Inc.
Wausau, WI

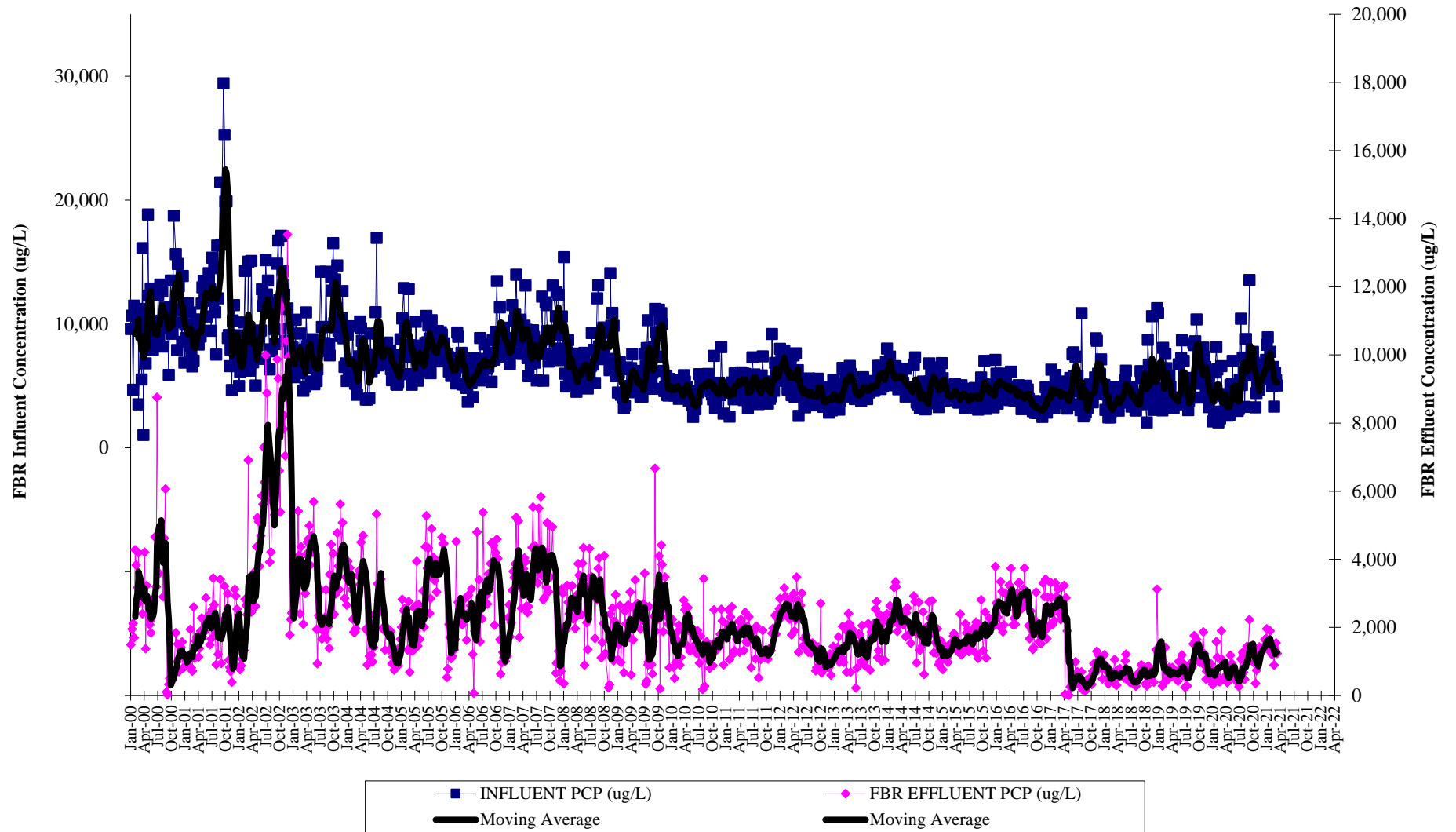
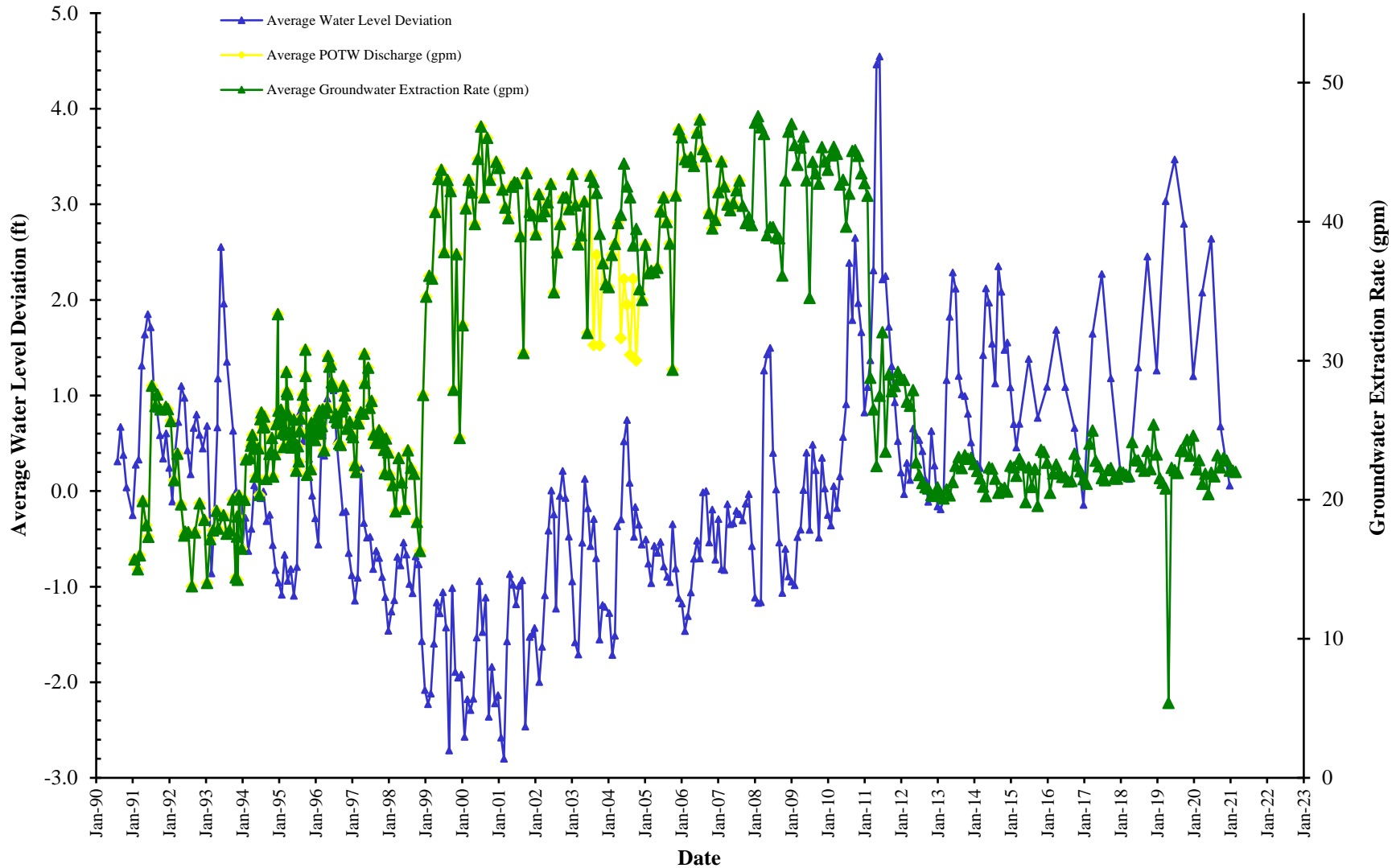


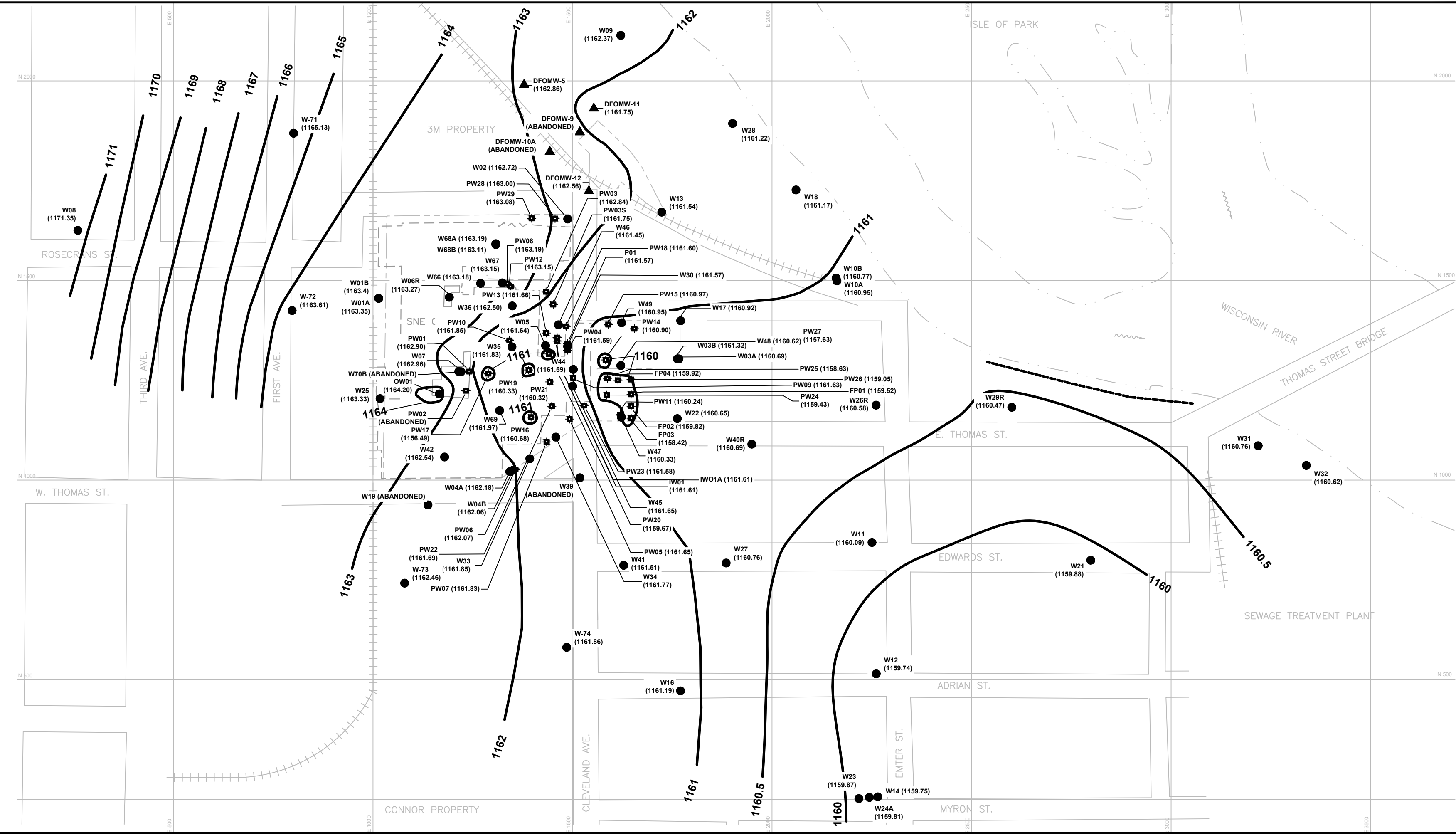
FIGURE 2

Average Groundwater Extraction Rates and Water Level Deviation Versus Time
Wauleco, Inc.
Wausau, WI



Note: The Average Groundwater Extraction Rate is a monthly average of the flow into the treatment system. The monthly average POTW discharge is less than the total extraction rate during the PPT pilot test due to the injection of treated water into IW01.

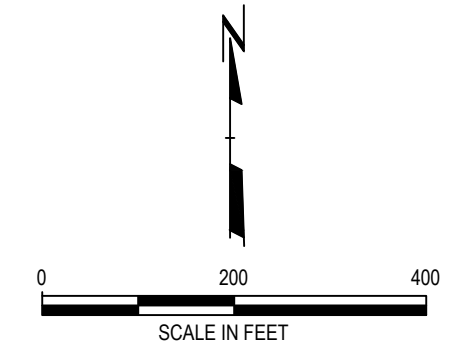
1164 - USER: T:\Users\T.Fiebranz - ATTACHED FILES - Baume & Mercier - Annual 2021\0101189597\010121\WT - LAYOUT: WATER TABLE MAP (JANUARY 2021)
 DRAWING NAME: J:\Wausau\189597 - Annual 2021\0101189597\010121\WT - LAYOUT: WATER TABLE MAP (JANUARY 2021)
 Version: 2017-10-21



LEGEND

- W17 ● (1162.42) MONITORING WELL LOCATION, NUMBER AND WATER TABLE ELEVATION
- PW12 ■ (1164.12) EXTRACTION WELL LOCATION, NUMBER AND WATER TABLE ELEVATION
- APPROXIMATE PROPERTY LINE
- - - - - FORMER BUILDING OUTLINE
- APPROXIMATE LOCATION OF SHEET PILE WALL
- 1161— WATER TABLE ELEVATION CONTOUR
- DFOMW-5 ▲ 3M GROUNDWATER MONITORING WELL

- NOTES**
1. BASE MAP DEVELOPED FROM DRAWING A107250-1 OF THE SEPTEMBER 1992 SEMI-ANNUAL GROUNDWATER MONITORING REPORT BY KEYSTONE ENVIRONMENTAL, MWH DRAWING 2082658.302160101-B1, AND 3M WELLS LOCATION BASED ON 3M MAPS.
 2. WATER ELEVATIONS OBTAINED BY TRC ON JANUARY 6, 2021. ON THIS DATE, THE PUMPING RATE OF THE GROUNDWATER EXTRACTION SYSTEM WAS APPROXIMATELY 21.7 GPM.
 3. WAULECO WELLS PW02 AND W70B WERE ABANDONED ON 7/21/16 DURING SOIL MOUND REMOVAL ACTIVITIES BY TRC. 3M WELLS DFOMW9 AND DFOMW10A WERE ABANDONED BY 3M IN THE SUMMER OF 2015.
 4. WAULECO WELLS W19 AND W39 WERE ABANDONED ON 3/28/19 PRIOR TO THOMAS STREET RECONSTRUCTION. WELLS W26, W29, AND W40 WERE ALSO ABANDONED ON 3/28/19, WITH REPLACEMENT WELLS W26R, W29R, AND W40R INSTALLED ON 6/24/19.
 5. THE CITY OF WAUSAU INSTALLED A STEEL SHEET PILING WALL IN 2020 TO REPLACE A ROCK WALL ON THE WISCONSIN RIVER BANK LOCATED WEST OF THE THOMAS STREET BRIDGE.



PROJECT:		WAULECO, INC. QUARTERLY REPORT WAUSAU, WISCONSIN	
TITLE:		WATER TABLE MAP (JANUARY 2021)	
DRAWN BY:	T.FIEBRANZ	PROJ NO.:	189597.0010
CHECKED BY:	T. DUSHEK	DRAWING 1	
APPROVED BY:	K. QUINN		
DATE:	AUGUST 2020		
		708 Heartland Trail Suite 3000 Madison, WI 53717 Phone: 608.826.3600	
FILE NO.:	189597.0010.12.WT January 21.dwg		