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October 15, 2020

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

Subject: 2020 Third 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 2020 Third 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) 826-3644.

Sincerely,

TRC

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

Bruce Iverson  
Project Manager

Attachments: 2020 Third 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 October 2020**

**Summary of 2020 Third 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 third quarter of 2020 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 1.48 µg/L in July, 1.63 µg/L in August, and 1.27 µg/L in September.
- 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 2.1 µg/L on July 15, 1.9 µg/L on August 11, and <3.0 µg/L on September 2, 2020.
- 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 2,976 µg/L to 13,542 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 (%)
July 2020	91	84	91
August 2020	89	85	83
September 2020	88	85	83

- The dissolved oxygen concentration in the influent to the FBR averaged 2.1 mg/L in July, 2.0 mg/L in August, and 2.2 mg/L in September 2020.

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 <0.020 µg/L on July 15, <0.020 µg/L on August 11, and 0.027 µg/L on September 2, which are below the permit discharge limit of 1.6 µg/L. The mass loading for mercury in July and August was calculated using half the detection limit of 0.01 µg/L, at 0.00000264 lb/24 hours in July and 0.00000261 lb/24 hours in August, which are below the permit discharge limit of 0.00048 lb/24 hours. The mass loading for mercury in September was calculated at 0.00000753 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 21.95 gpm for July, 21.68 gpm for August, and 23.20 gpm for September 2020 (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**

Water table elevations for the month of July 2020 are included in Table 3. Monthly water table elevations have been discontinued, with only quarterly elevations being measured, and semi-annual preparation of water table maps as discussed in the 2014 Annual Groundwater Monitoring Report dated April 16, 2015. A water table map for the month of July 2020 is included as Drawing 1.

The product thickness data for July 2020 are summarized in Table 4. Measurements show minimal product present in July (e.g., 0.02 ft at PW16, 0.03 ft at W07, and 0.03 ft at W35).

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 – July 2, 2020

**TABLE 1a  
JULY 2020**

**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	7/15/2020	8.5	3.0				<	
Chemical Oxygen Demand	mg/L	7/15/2020	47	39				20	
Chloride	mg/L	7/15/2020	240	240				250	
Dissolved Oxygen	mg/L	7/1/2020	2.1	1.2	5.4				
	mg/L	7/9/2020	2	1.1	5.2				
	mg/L	7/15/2020	2.2	1.1	5.2				
	mg/L	7/22/2020	2	1.1	5.6				
	mg/L	7/30/2020	2	1	5.4				
Nitrogen, Ammonia	mg/L	7/1/2020	0.5	0.4	0.4				
	mg/L	7/9/2020	0.4	0.3	0.3				
	mg/L	7/15/2020	0.4	0.3	0.2				
	mg/L	7/22/2020	0.5	0.4	0.4				
	mg/L	7/30/2020	0.4	0.3	0.3				
Nitrogen, Nitrate	mg/L	7/1/2020	<	<	<				
	mg/L	7/9/2020	<	<	<				
	mg/L	7/15/2020	<	<	<				
	mg/L	7/22/2020	<	<	<				
	mg/L	7/30/2020	<	<	<				
Nitrogen, Total Kjeldahl	mg/L	7/15/2020	<	<				<	
Pentachlorophenol-Screen	µg/L	7/1/2020	2976	389	272			1	
	µg/L	7/2/2020						2	
	µg/L	7/3/2020						1	
	µg/L	7/4/2020						1	
	µg/L	7/5/2020						1	
	µg/L	7/6/2020						1	
	µg/L	7/7/2020						1	
	µg/L	7/8/2020						1	
	µg/L	7/9/2020	3156	261	287			1	
	µg/L	7/10/2020						2	
	µg/L	7/11/2020						1	
	µg/L	7/12/2020						1	
	µg/L	7/13/2020						1	
	µg/L	7/14/2020						1	
	µg/L	7/15/2020	5500	572	506		392	1	
	µg/L	7/16/2020						3	
	µg/L	7/17/2020						2	
	µg/L	7/18/2020						1	
	µg/L	7/19/2020						1	
	µg/L	7/20/2020						1	
	µg/L	7/21/2020						2	
	µg/L	7/22/2020	10433	1076	780			1	
	µg/L	7/23/2020						3	
	µg/L	7/24/2020						2	
	µg/L	7/25/2020						2	
	µg/L	7/26/2020						2	
	µg/L	7/27/2020						2	

**TABLE 1a  
JULY 2020**

**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	7/28/2020						3	
	µg/L	7/29/2020						1	
	µg/L	7/30/2020	5076	548	428			1	
	µg/L	7/31/2020						2	
pH	S.U.	7/1/2020	6.6	6.6	6.6				
	S.U.	7/9/2020	6.7	6.7	6.7				
	S.U.	7/15/2020	6.95	6.8	6.8				
	S.U.	7/22/2020	6.8	6.8	6.8				
	S.U.	7/30/2020	7.1	7	7				
Phosphorus, Ortho	mg/L	7/15/2020	<	<				<	
Phosphorus, Phosphate	mg/L	7/1/2020	0.4	0.3	0.3				
	mg/L	7/9/2020	0.4	0.3	0.3				
	mg/L	7/15/2020	0.7	0.6	0.6				
	mg/L	7/22/2020	0.5	0.4	0.4				
	mg/L	7/30/2020	0.6	0.4	0.5				
Solids, Total Suspended	mg/L	7/15/2020	20	28				7.4	
Mercury	µg/L	7/15/2020	0.24					<	
<b>Phenol</b>									
2,3,4,6-Tetrachlorophenol	µg/L	7/15/2020	250	52	51		41	<	<
2,4,5-Trichlorophenol	µg/L	7/15/2020	<	<	<		<	<	<
2,4,6-Trichlorophenol	µg/L	7/15/2020	<	<	<		<	<	<
2,4-Dichlorophenol	µg/L	7/15/2020	<	<	<		<	<	<
2,4-Dimethylphenol	µg/L	7/15/2020	<	<	<		<	<	<
2,4-Dinitrophenol	µg/L	7/15/2020	<	<	<		<	<	<
2,6-Dichlorophenol	µg/L	7/15/2020	<	<	<		<	<	<
2-Chlorophenol	µg/L	7/15/2020	<	<	<		<	<	<
2-Methylphenol	µg/L	7/15/2020	<	<	<		<	<	<
2-Nitrophenol	µg/L	7/15/2020	<	<	<		<	<	<
3&4-Methylphenol	µg/L	7/15/2020	<	<	<		<	<	<
4,6-Dinitro-2-Methylphenol	µg/L	7/15/2020	<	<	<		<	<	<
4-Chloro-3-Methylphenol	µg/L	7/15/2020	<	<	<		<	<	<
4-Nitrophenol	µg/L	7/15/2020	<	<	<		<	<	<
Pentachlorophenol	µg/L	7/15/2020	3700	520	520		370	2.1	2.2
Phenol	µg/L	7/15/2020	<	<	<		<	<	<

**TABLE 1b  
AUGUST 2020**

**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	8/11/2020	8.7	4.4				<	
Chemical Oxygen Demand	mg/L	8/11/2020	49	47				22	
Chloride	mg/L	8/11/2020	210	210				220	
Dissolved Oxygen	mg/L	8/4/2020	2	1	5.7				
	mg/L	8/11/2020	2	1.1	5.6				
	mg/L	8/17/2020	2	1.2	5.8				
	mg/L	8/26/2020	2	1.2	5.3				
Nitrogen, Ammonia	mg/L	8/4/2020	0.3	0.4	0.3				
	mg/L	8/11/2020	0.5	0.5	0.4				
	mg/L	8/17/2020	0.3	0.3	0.3				
	mg/L	8/26/2020	0.4	0.5	0.5				
Nitrogen, Nitrate	mg/L	8/4/2020	<	<	<				
	mg/L	8/11/2020	<	<	<				
	mg/L	8/17/2020	<	<	<				
	mg/L	8/26/2020	<	<	<				
Nitrogen, Total Kjeldahl	mg/L	8/11/2020	<	0.86				0.61	
Pentachlorophenol-Screen	µg/L	8/1/2020						3	
	µg/L	8/2/2020						3	
	µg/L	8/3/2020						3	
	µg/L	8/4/2020	7293	1266	1217			4	
	µg/L	8/5/2020						3	
	µg/L	8/6/2020						1	
	µg/L	8/7/2020						3	
	µg/L	8/8/2020						3	
	µg/L	8/9/2020						3	
	µg/L	8/10/2020						3	
	µg/L	8/11/2020	6114	684	559		172	1	
	µg/L	8/12/2020						1	
	µg/L	8/13/2020						1	
	µg/L	8/14/2020						1	
	µg/L	8/15/2020						1	
	µg/L	8/16/2020						1	
	µg/L	8/17/2020	3303	476	241			1	
	µg/L	8/18/2020						1	
	µg/L	8/19/2020						1	
	µg/L	8/20/2020						1	
	µg/L	8/21/2020						1	
	µg/L	8/22/2020						1	
	µg/L	8/23/2020						1	
	µg/L	8/24/2020						1	
	µg/L	8/25/2020						1	
	µg/L	8/26/2020	8792	1222	921			1	
	µg/L	8/27/2020						1	

**TABLE 1b  
AUGUST 2020**

**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	8/28/2020						1	
	µg/L	8/29/2020						1	
	µg/L	8/30/2020						1	
	µg/L	8/31/2020						1	
pH	S.U.	8/4/2020	6.95	7.1	7.1				
	S.U.	8/11/2020	7.2	7.2	7.2				
	S.U.	8/17/2020	7	7.2	7.1				
	S.U.	8/26/2020	7	7	7				
Phosphorus, Ortho	mg/L	8/11/2020	<	<				<	
Phosphorus, Phosphate	mg/L	8/4/2020	0.6	0.4	0.4				
	mg/L	8/11/2020	0.4	0.3	0.3				
	mg/L	8/17/2020	0.4	0.3	0.3				
	mg/L	8/26/2020	0.5	0.4	0.4				
Solids, Total Suspended	mg/L	8/11/2020	12	17				7.8	
Mercury	µg/L	8/11/2020						<	
<b>Phenol</b>									
2,3,4,6-Tetrachlorophenol	µg/L	8/11/2020	230		<			<	<
2,4,5-Trichlorophenol	µg/L	8/11/2020	<		<			<	<
2,4,6-Trichlorophenol	µg/L	8/11/2020	<		<			<	<
2,4-Dichlorophenol	µg/L	8/11/2020	<		<			<	<
2,4-Dimethylphenol	µg/L	8/11/2020	<		<			<	<
2,4-Dinitrophenol	µg/L	8/11/2020	<		<			<	<
2,6-Dichlorophenol	µg/L	8/11/2020	<		<			<	<
2-Chlorophenol	µg/L	8/11/2020	<		<			<	<
2-Methylphenol	µg/L	8/11/2020	<		<			<	<
2-Nitrophenol	µg/L	8/11/2020	<		<			<	<
3&4-Methylphenol	µg/L	8/11/2020	<		<			<	<
4,6-Dinitro-2-Methylphenol	µg/L	8/11/2020	<		<			<	<
4-Chloro-3-Methylphenol	µg/L	8/11/2020	<		<			<	<
4-Nitrophenol	µg/L	8/11/2020	<		<			<	<
Pentachlorophenol	µg/L	8/11/2020	3400		380			1.9	1.8
Phenol	µg/L	8/11/2020	<		<			<	<

**TABLE 1c  
SEPTEMBER 2020**

**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	9/2/2020	7.3	2.5				<	
Chemical Oxygen Demand	mg/L	9/2/2020	59	44				37	
Chloride	mg/L	9/2/2020	220	230				230	
Dissolved Oxygen	mg/L	9/2/2020	2.2	1.4	6.1				
	mg/L	9/8/2020	2.2	1.5	6.3				
	mg/L	9/18/2020	2.3	1.3	6				
	mg/L	9/24/2020	2.3	1.3	5.8				
	mg/L	9/30/2020	1.8	1	5.4				
Nitrogen, Ammonia	mg/L	9/2/2020	0.6	0.4	0.4				
	mg/L	9/8/2020	0.6	0.4	0.5				
	mg/L	9/18/2020	0.5	0.4	0.4				
	mg/L	9/24/2020	0.4	0.3	0.3				
	mg/L	9/30/2020	1.1	0.5	0.4				
Nitrogen, Nitrate	mg/L	9/2/2020	<	<	<				
	mg/L	9/8/2020	<	<	<				
	mg/L	9/18/2020	<	<	<				
	mg/L	9/24/2020	<	<	<				
	mg/L	9/30/2020	<	<	<				
Nitrogen, Total Kjeldahl	mg/L	9/2/2020	<	<				0.83	
Pentachlorophenol-Screen	µg/L	9/1/2020						1	
	µg/L	9/2/2020	6991	1445	1378		17	1	
	µg/L	9/3/2020						1	
	µg/L	9/4/2020						1	
	µg/L	9/5/2020						1	
	µg/L	9/6/2020						1	
	µg/L	9/7/2020						1	
	µg/L	9/8/2020	5838	1157	829			1	
	µg/L	9/9/2020						6	
	µg/L	9/10/2020						2	
	µg/L	9/11/2020						2	
	µg/L	9/12/2020						2	
	µg/L	9/13/2020						1	
	µg/L	9/14/2020						1	
	µg/L	9/15/2020						1	
	µg/L	9/16/2020						1	
	µg/L	9/17/2020						1	
	µg/L	9/18/2020	13542	2230	1284			1	
	µg/L	9/19/2020						1	
	µg/L	9/20/2020						1	
	µg/L	9/21/2020						1	
	µg/L	9/22/2020						1	
	µg/L	9/23/2020						1	
	µg/L	9/24/2020	6031	1338	97			1	
	µg/L	9/25/2020						1	



**TABLE 1c  
SEPTEMBER 2020**

**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	9/26/2020						1	
	µg/L	9/27/2020						1	
	µg/L	9/28/2020						1	
	µg/L	9/29/2020						1	
	µg/L	9/30/2020	6770	1248	1048			1	
pH	S.U.	9/2/2020	7.1	7.1	7.1				
	S.U.	9/8/2020	6.5	6.45	6.5				
	S.U.	9/18/2020	6.9	6.8	7.1				
	S.U.	9/24/2020	7.1	7	6.9				
	S.U.	9/30/2020	6.8	6.8	6.85				
Phosphorus, Ortho	mg/L	9/2/2020	<	<				<	
Phosphorus, Phosphate	mg/L	9/2/2020	0.4	0.3	0.3				
	mg/L	9/8/2020	0.4	0.3	0.4				
	mg/L	9/18/2020	0.4	0.3	0.3				
	mg/L	9/24/2020	0.4	0.3	0.2				
	mg/L	9/30/2020	0.4	0.4	0.4				
Solids, Total Suspended	mg/L	9/2/2020	15	23				3.0	
Mercury	µg/L	9/2/2020						0.027	
<b>Phenol</b>									
2,3,4,6-Tetrachlorophenol	µg/L	9/2/2020	220	45	<			<	<
2,4,5-Trichlorophenol	µg/L	9/2/2020	<	<	<			<	<
2,4,6-Trichlorophenol	µg/L	9/2/2020	<	<	<			<	<
2,4-Dichlorophenol	µg/L	9/2/2020	<	<	<			<	<
2,4-Dimethylphenol	µg/L	9/2/2020	<	<	<			<	<
2,4-Dinitrophenol	µg/L	9/2/2020	<	<	<			<	<
2,6-Dichlorophenol	µg/L	9/2/2020	<	<	<			<	<
2-Chlorophenol	µg/L	9/2/2020	<	<	<			<	<
2-Methylphenol	µg/L	9/2/2020	<	<	<			<	<
2-Nitrophenol	µg/L	9/2/2020	<	<	<			<	<
3&4-Methylphenol	µg/L	9/2/2020	<	<	<			<	<
4,6-Dinitro-2-Methylphenol	µg/L	9/2/2020	<	<	<			<	<
4-Chloro-3-Methylphenol	µg/L	9/2/2020	<	<	<			<	<
4-Nitrophenol	µg/L	9/2/2020	<	<	<			<	<
Pentachlorophenol	µg/L	9/2/2020	3400	500	540			<	<
Phenol	µg/L	9/2/2020	<	<	<			<	<

**TABLE 2a  
JULY 2020**

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

Date	Influent Groundwater Flow Rate <sup>(1)(3)</sup> (gpm)	POTW Discharge Flow Rate <sup>(1)(4)</sup> (gpm)	POTW Totalized Discharge <sup>(3)</sup> (gal)
7/1/2020	20.63	20.70	89454854
7/2/2020	20.95	20.85	89484872
7/3/2020	21.13	21.04	89515171
7/4/2020	20.84	20.85	89545201
7/5/2020	20.73	20.31	89574449
7/6/2020	20.49	20.06	89603330
7/7/2020	20.10	18.98	89630666
7/8/2020	20.47	23.79	89664921
7/9/2020	19.95	23.28	89698441
7/10/2020	19.79	23.33	89732034
7/11/2020	19.58	23.23	89765486
7/12/2020	19.53	22.98	89798575
7/13/2020	19.61	22.68	89831238
7/14/2020	19.64	22.35	89863419
7/15/2020	19.85	22.23	89895424
7/16/2020	19.86	21.59	89926513
7/17/2020	19.84	20.93	89956649
7/18/2020	19.76	20.75	89986531
7/19/2020	19.85	20.82	90016505
7/20/2020	20.07	20.67	90046264
7/21/2020	20.15	24.12	90080993
7/22/2020	20.01	24.39	90116114
7/23/2020	20.15	23.92	90150553
7/24/2020	19.90	23.28	90184072
7/25/2020	19.86	22.06	90215840
7/26/2020	19.95	22.13	90247709
7/27/2020	19.94	22.14	90279592
7/28/2020	19.95	21.76	90310927
7/29/2020	20.09	21.86	90342399
7/30/2020	20.00	21.77	90373742
7/31/2020	20.10	21.68	90404958
Average For The Month	20.09	21.95	
Total <sup>(2)</sup> :			979,915

**Footnotes:**

- <sup>(1)</sup> 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.
- <sup>(2)</sup> 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.
- <sup>(3)</sup> Totalizers were reset to 0 on August 23, 2012 during the system shutdown for maintenance.
- <sup>(4)</sup> A new effluent meter was installed in April, 2017 during the system shutdown for maintenance.

**TABLE 2b**  
**AUGUST 2020**

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

Date	Influent Groundwater Flow Rate <sup>(1)(3)</sup> (gpm)	POTW Discharge Flow Rate <sup>(1)(4)</sup> (gpm)	POTW Totalized Discharge <sup>(3)</sup> (gal)
8/1/2020	20.21	21.27	90435582
8/2/2020	20.10	21.32	90466289
8/3/2020	20.22	21.14	90496726
8/4/2020	20.40	20.96	90526902
8/5/2020	20.38	20.91	90557013
8/6/2020	20.30	20.86	90587057
8/7/2020	20.10	20.90	90617159
8/8/2020	19.76	21.92	90648719
8/9/2020	19.56	22.19	90680679
8/10/2020	19.50	22.18	90712622
8/11/2020	19.64	21.17	90743106
8/12/2020	19.73	20.99	90773325
8/13/2020	19.80	20.83	90803320
8/14/2020	19.66	20.56	90832921
8/15/2020	19.64	20.67	90862684
8/16/2020	19.60	20.88	90892751
8/17/2020	19.08	20.41	90922140
8/18/2020	18.32	19.16	90949736
8/19/2020	18.30	19.29	90977518
8/20/2020	18.22	19.53	91005636
8/21/2020	19.08	21.89	91037159
8/22/2020	18.77	21.76	91068496
8/23/2020	18.71	21.69	91099723
8/24/2020	18.55	21.29	91130376
8/25/2020	21.48	23.31	91163947
8/26/2020	22.45	24.38	91199061
8/27/2020	22.43	24.30	91234055
8/28/2020	22.46	23.96	91268559
8/29/2020	22.66	24.05	91303185
8/30/2020	22.71	24.16	91337982
8/31/2020	22.57	24.11	91372696
Average For The Month	20.14	21.68	
Total <sup>(2)</sup> :			967,738

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  
SEPTEMBER 2020**

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

<u>Date</u>	<u>Influent Groundwater Flow Rate <sup>(1) (3)</sup> (gpm)</u>	<u>POTW Discharge Flow Rate <sup>(1) (4)</sup> (gpm)</u>	<u>POTW Totalized Discharge <sup>(3)</sup> (gal)</u>
9/1/2020	22.42	24.17	91407496
9/2/2020	22.38	24.27	91442450
9/3/2020	22.40	24.27	91477397
9/4/2020	22.40	24.42	91512568
9/5/2020	22.42	24.32	91547591
9/6/2020	22.46	24.44	91582791
9/7/2020	22.49	24.17	91617595
9/8/2020	22.62	24.23	91652488
9/9/2020	22.74	24.07	91687154
9/10/2020	22.86	24.21	91722012
9/11/2020	22.96	24.40	91757154
9/12/2020	22.96	24.32	91792170
9/13/2020	22.51	24.23	91827068
9/14/2020	20.11	22.59	91859604
9/15/2020	20.18	22.29	91891698
9/16/2020	20.16	22.51	91924116
9/17/2020	20.22	22.50	91956518
9/18/2020	20.25	22.56	91989002
9/19/2020	20.37	22.57	92021502
9/20/2020	20.31	22.42	92053790
9/21/2020	20.40	22.38	92086020
9/22/2020	20.43	22.65	92118641
9/23/2020	20.49	22.71	92151346
9/24/2020	20.49	22.55	92183816
9/25/2020	20.38	22.42	92216102
9/26/2020	20.34	22.46	92248446
9/27/2020	20.37	22.23	92280456
9/28/2020	20.49	22.19	92312403
9/29/2020	20.35	21.59	92343499
9/30/2020	20.38	21.90	92375040
Average For The Month	21.31	23.20	
Total <sup>(2)</sup> :			1,002,344

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>	<u>July 02, 2020 (ft msl)</u>	<u>August 2020</u>	<u>September 2020</u>
PW01	1165.17	----	----
PW02	Abandoned	----	----
PW03	1164.91	----	----
PW3S	1164.64	----	----
PW04	1164.38	----	----
PW05	1164.38	----	----
PW06	1164.43	----	----
PW07	1164.32	----	----
PW08	1165.3	----	----
PW09I	----	----	----
PW09O	1164.49	----	----
PW10	1164.69	----	----
PW11	1163.51	----	----
PW12	1165.01	----	----
PW13	1164.58	----	----
PW14	1164.36	----	----
PW15	1164.48	----	----
PW16	1163.53	----	----
PW17	1164.12	----	----
PW18	1164.59	----	----
PW19	1162.86	----	----
PW20	1163.65	----	----
PW21	1163.55	----	----
PW22	1164.33	----	----
PW23	1164.28	----	----
PW24	1163.06	----	----
PW25	1162.83	----	----
PW26	1162.94	----	----
PW27	1162.09	----	----
PW28	1164.82	----	----
PW29	1164.94	----	----
P01	1164.39	----	----
OW01	1166.21	----	----
W01A	1165.38	----	----
W01B	1165.39	----	----
W02	1164.58	----	----
W03A	1163.77	----	----
W03B	1163.01	----	----
W04A	1164.50	----	----
W04B	1164.48	----	----
W05	1164.41	----	----
W06R	1165.28	----	----
W07	1165.21	----	----
W08	1174.99	----	----
W09	1163.15	----	----
W10A	1161.57	----	----
W10B	1161.58	----	----
W11	1161.49	----	----
W12	1160.97	----	----
W13	1162.62	----	----
W14	1161.23	----	----
W16	1163.27	----	----
W17	1164.04	----	----
W18	1161.37	----	----
W19	Abandoned	----	----

TABLE 3 (continued)

Groundwater Elevation Data  
 Wauleco, Inc.  
 Wausau, Wisconsin

Well	July 02, 2020 (ft msl)	August 2020	September 2020
W21	1161.07	----	----
W22	1163.49	----	----
W23	1161.36	----	----
W24A	1161.3	----	----
W25	1165.41	----	----
W26/W26R	1161.59	----	----
W27	1162.72	----	----
W28	1161.28	----	----
W29/W29R	1161.26	----	----
W30	1164.37	----	----
W31	1160.99	----	----
W32	1161.01	----	----
W33	1164.35	----	----
W34	1164.28	----	----
W35	1164.53	----	----
W36	1164.89	----	----
W39	Abandoned	----	----
W40/W40R	1163.17	----	----
W41	1163.89	----	----
W42	1164.88	----	----
W44	1164.29	----	----
W45	1164.57	----	----
W46	1164.29	----	----
W47	1163.53	----	----
W48	1164	----	----
W49	1164.52	----	----
W66	1165.06	----	----
W67	1165.02	----	----
W68A	1165.15	----	----
W68B	1164.93	----	----
W69	1164.9	----	----
W70B	Abandoned	----	----
River	-----	----	----
IW01	1164.47	----	----
IW01A	1164.41	----	----
FP01	1163.20	----	----
FP02	1163.21	----	----
FP03	1162.42	----	----
FP04	1163.37	----	----
3M Basin	Water in both Basins	----	----
DFOWM 5	1164.35	----	----
DFOWM 9	Abandoned	----	----
DFOWM 10A	Abandoned	----	----
DFOWM 11	1162.51	----	----
DFOWM 12	1164.24	----	----
W71	1166.88	----	----
W72	1165.7	----	----
W73	1164.57	----	----
W74	1163.91	----	----

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.

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

<u>Well</u>	July 02, 2020 (ft)	August 2020	September 2020
PW01	0.00	----	----
PW02	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	0.02	----	----
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	0.01	----	----
W04B	0.00	----	----
W05	0.00	----	----
W06R	0.00	----	----
W07	0.03	----	----
W08	0.00	----	----
W09	0.00	----	----
W10A	0.00	----	----
W10B	0.00	----	----
W11	0.00	----	----
W12	0.00	----	----
W13	0.00	----	----
W14	0.00	----	----
W16	0.00	----	----
W17	0.00	----	----

Free Product Measurements  
 Wauleco, Inc.  
 Wausau, Wisconsin

Well	July 02, 2020 (ft)	August 2020	September 2020
W18	0.00	----	----
W19	Abandoned	----	----
W21	0.00	----	----
W22	0.00	----	----
W23	0.00	----	----
W24A	0.00	----	----
W25	0.00	----	----
W26/W26R	0.00	----	----
W27	0.00	----	----
W28	0.00	----	----
W29/W29R	0.00	----	----
W30	0.00	----	----
W31	0.00	----	----
W32	0.00	----	----
W33	0.00	----	----
W34	0.00	----	----
W35	0.03	----	----
W36	0.00	----	----
W39	Abandoned	----	----
W40/W40R	0.00	----	----
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	----	----
River	----	----	----
IW01	0.00	----	----
IW01A	0.00	----	----
FP01	0.00	----	----
FP02	0.00	----	----
FP03	0.00	----	----
FP04	0.00	----	----
3M Basin	0.00	----	----
DFOWM 5	0.00	----	----
DFOWM 9	Abandoned	----	----
DFOWM 10A	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**

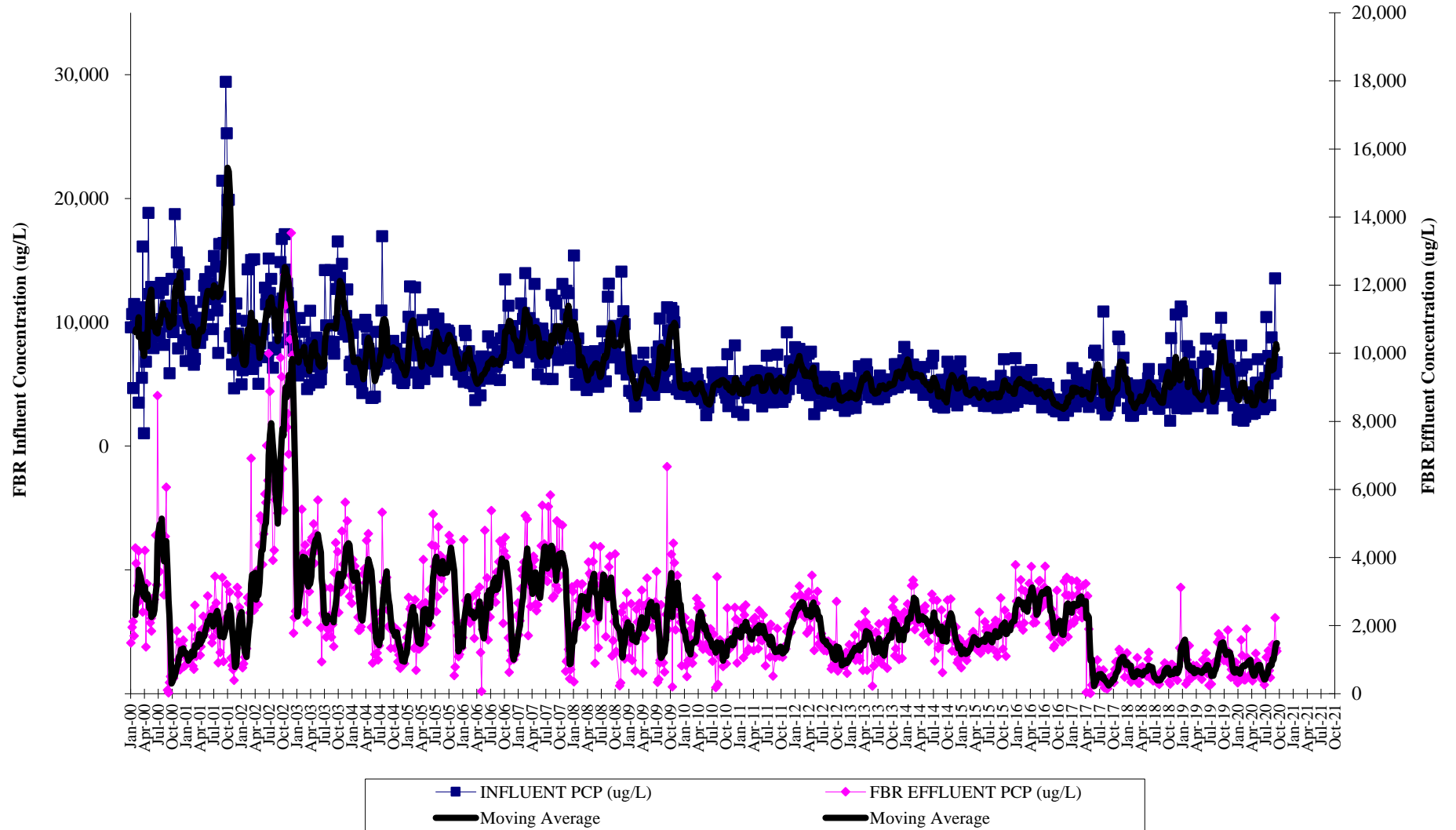
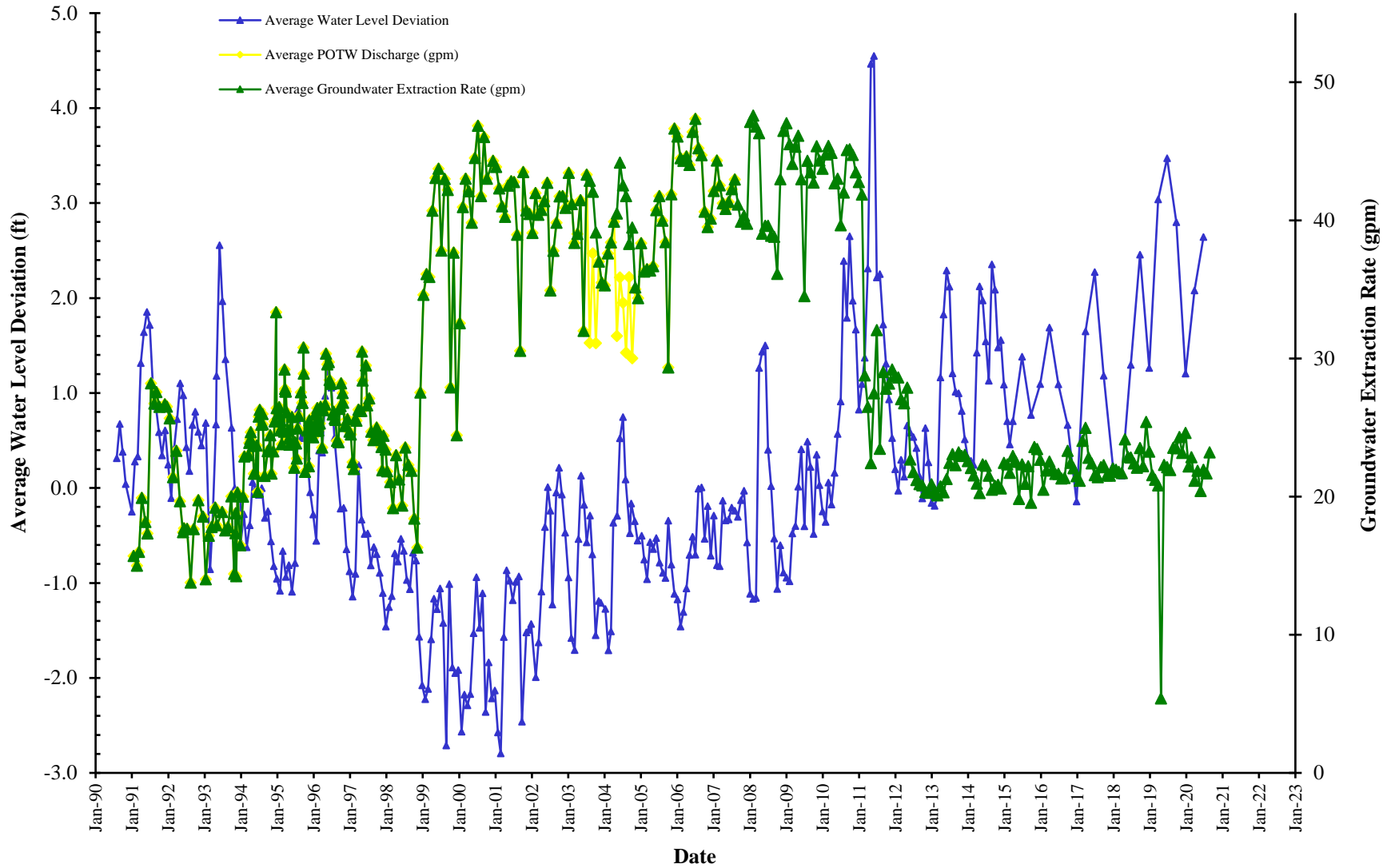


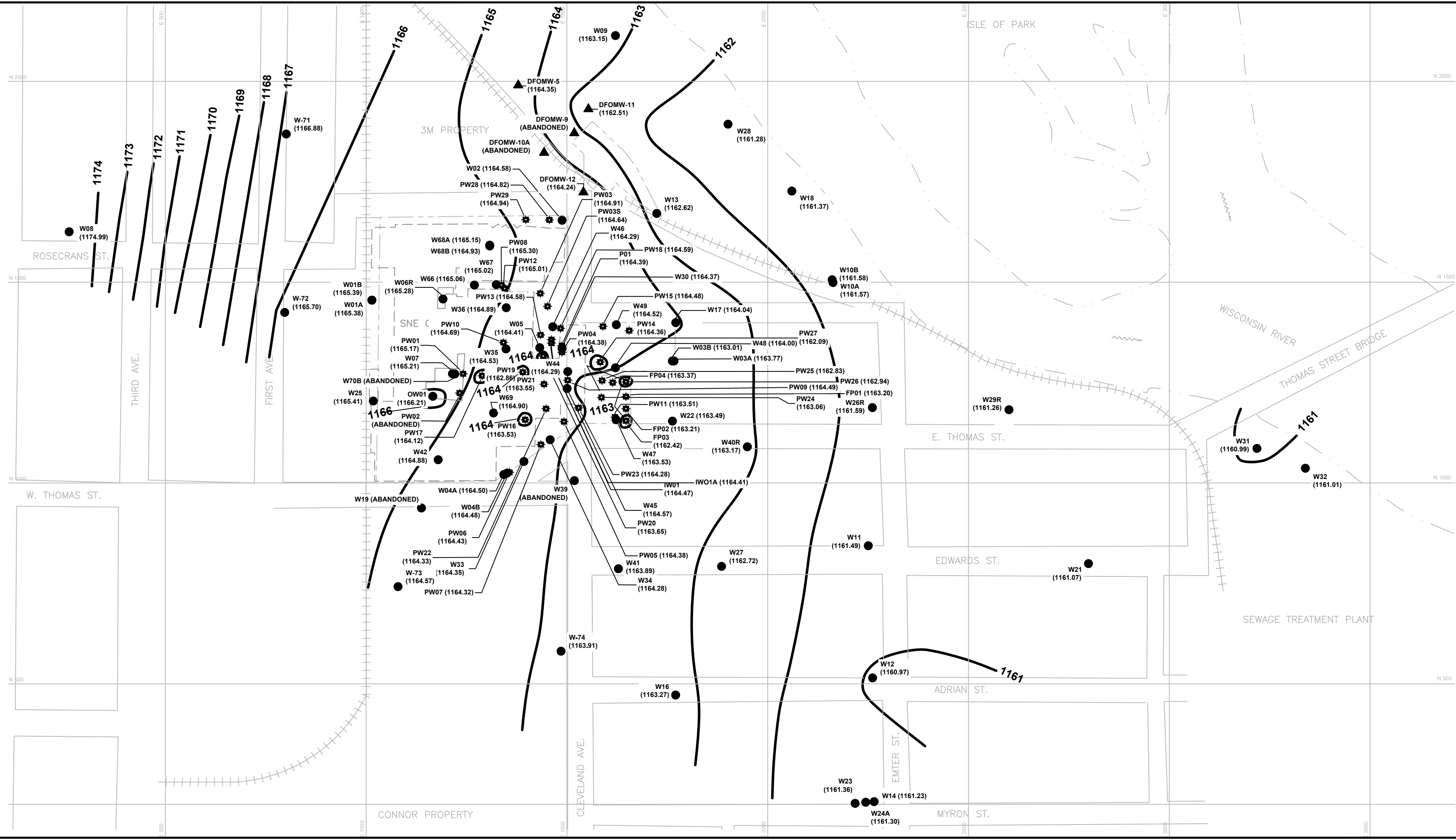
FIGURE 2

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.

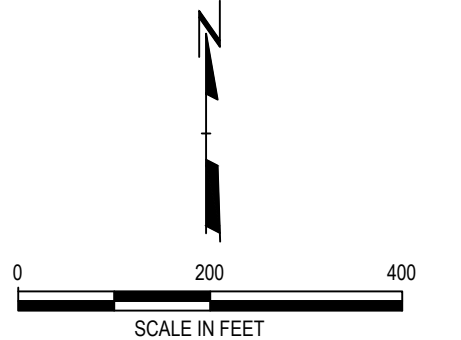
1164 - USER: T:\Users\T.FIEBRANZ - ATTACHED XREFS - Baumeer - July 2020\W Data - ATTACHED IMAGES -  
 DRAWING NAME: J:\Wauleco\189597 - Annual 2020\0009189597.009.12.WT July 20.dwg -- PLOT DATE: August 31, 2020 - 2:39PM -- LAYOUT: WATER TABLE MAP (JULY 2020)  
 Version: 2017.10.21



**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
- 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 JULY 2, 2020. ON THIS DATE, THE PUMPING RATE OF THE GROUNDWATER EXTRACTION SYSTEM WAS APPROXIMATELY 20.8 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.



PROJECT:		<b>WAULECO, INC.</b>	
		QUARTERLY REPORT	
		WAUSAU, WISCONSIN	
TITLE:			
<b>WATER TABLE MAP</b>			
<b>(JULY 2020)</b>			
DRAWN BY:	T.FIEBRANZ	PROJ NO.:	189597.0009
CHECKED BY:	T. DUSHEK	<b>DRAWING 1</b>	
APPROVED BY:	K. QUINN		
DATE:	AUGUST 2020		
		708 Heartland Trail Suite 3000 Madison, WI 53717 Phone: 608.826.3600	
FILE NO.:		189597.0009.12.WT July 20.dwg	