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July 17, 2023

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

Subject: 2023 Second 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 2023 Second 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: 2023 Second Quarterly Report

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

**Wauleco, Inc. - Wausau, Wisconsin  
Quarterly Report  
Submitted July 2023**

**Summary of 2023 Second 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 second quarter of 2023 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 4.37 µg/L in April, 4.31 µg/L in May, and 3.23 µg/L in June.
- 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 April 12, <3.0 µg/L on May 10, and <3.0 µg/L on June 14, 2023.
- 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.
- The groundwater treatment system was shut down for maintenance on May 11, which included removal and replacement of granular activated carbon, cleaning of process tanks, and cleaning of several process pipes and flow meters. The treatment system was restarted on May 19.

On-site screening PCP influent concentrations ranged from 4,411 µg/L to 7,299 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 (%)
April 2023	59	63	71
May 2023	63	64	61
June 2023	72	64	72

- The dissolved oxygen concentration in the influent to the FBR averaged 2.8 mg/L in April, 2.9 mg/L in May, and 2.7 mg/L in June 2023.

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 0.038 µg/L on April 12, 0.022 µg/L on May 10, and 0.023 µg/L on June 14, which are below the permit discharge limit of 1.6 µg/L. The mass loading for mercury in April was calculated at 0.00000976 lb/24 hours, for May was calculated at 0.00000591 lb/24 hours, and for June was calculated at 0.00000626 lb/24 hours, which are 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 21.38 gpm for April, 22.36 gpm for the days the system was in operation in May, and 22.64 gpm for June 2023 (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 April 2023 are summarized in Table 3.

The product thickness data for April 2023 are summarized in Table 4. Measurements show minimal product present in April.

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

**TABLE 1a**  
**APRIL 2023**

**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	4/12/2023	7.7	7.5				<	
Chemical Oxygen Demand	mg/L	4/12/2023	42	30				<	
Chloride	mg/L	4/12/2023	350	350				330	
Dissolved Oxygen	mg/L	4/5/2023	3	1.1	5.2				
	mg/L	4/12/2023	2.6	1	5.6				
	mg/L	4/19/2023	2.8	1.2	5.2				
	mg/L	4/26/2023	2.8	1.2	5				
Nitrogen, Ammonia	mg/L	4/5/2023	0.6	0.6	0.5				
	mg/L	4/12/2023	0.6	0.5	0.4				
	mg/L	4/19/2023	0.5	0.4	0.4				
	mg/L	4/26/2023	0.4	0.3	0.3				
Nitrogen, Nitrate	mg/L	4/5/2023	<	<	<				
	mg/L	4/12/2023	<	<	<				
	mg/L	4/19/2023	<	<	<				
	mg/L	4/26/2023	<	<	<				
Nitrogen, Nitrate + Nitrite	mg/L	4/12/2023	<	<				<	
Nitrogen, Total Kjeldahl	mg/L	4/12/2023	<	<				<	
Pentachlorophenol-Screen	µg/L	4/1/2023						5	
	µg/L	4/2/2023						5	
	µg/L	4/3/2023						5	
	µg/L	4/4/2023						4	
	µg/L	4/5/2023	5499	2203	2407			4	
	µg/L	4/6/2023						4	
	µg/L	4/7/2023						5	
	µg/L	4/8/2023						4	
	µg/L	4/9/2023						4	
	µg/L	4/10/2023						4	
	µg/L	4/11/2023						4	
	µg/L	4/12/2023	5651	2245	2196		704	4	
	µg/L	4/13/2023						6	
	µg/L	4/14/2023						5	
	µg/L	4/15/2023						4	
	µg/L	4/16/2023						4	
	µg/L	4/17/2023						4	
	µg/L	4/18/2023						4	
	µg/L	4/19/2023	5103	2008	2226			3	
	µg/L	4/20/2023						5	
	µg/L	4/21/2023						4	
	µg/L	4/22/2023						4	
	µg/L	4/23/2023						4	
	µg/L	4/24/2023						4	
	µg/L	4/25/2023						4	
	µg/L	4/26/2023	5482	2138	2097			4	
	µg/L	4/27/2023						5	
	µg/L	4/28/2023						5	

**TABLE 1a**  
**APRIL 2023**

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

<u>Parameter</u>	<u>UNIT</u>	<u>DATE</u>	<u>FBR</u> <u>Influent</u>	<u>FBR</u> <u>Effluent</u>	<u>FFR</u> <u>Effluent</u>	<u>Bag Filter</u> <u>Effluent</u>	<u>Filters 1+2</u> <u>Effluent</u>	<u>System</u> <u>Effluent</u>	<u>System</u> <u>Eff Dup</u>
Pentachlorophenol-Screen	µg/L	4/29/2023						5	
	µg/L	4/30/2023						5	
pH	S.U.	4/5/2023	6.55	6.5	6.55				
	S.U.	4/12/2023	6.55	6.5	6.55				
	S.U.	4/19/2023	6.5	6.5	6.55				
	S.U.	4/26/2023	6.55	6.5	6.55				
Phosphorus, Ortho	mg/L	4/12/2023	<	<				<	
Phosphorus, Phosphate	mg/L	4/5/2023	0.4	0.2	0.3				
	mg/L	4/12/2023	0.4	0.4	0.3				
	mg/L	4/19/2023	0.8	0.3	0.4				
	mg/L	4/26/2023	0.5	0.3	0.3				
Solids, Total Suspended	mg/L	4/12/2023	28	29				15	
Mercury	µg/L	4/12/2023	0.11					0.038	
<b>Phenol</b>									
2,3,4,6-Tetrachlorophenol	µg/L	4/12/2023	150		75		65	<	<
2,4,5-Trichlorophenol	µg/L	4/12/2023	<		<		10	<	<
2,4,6-Trichlorophenol	µg/L	4/12/2023	<		<		<	<	<
2,4-Dichlorophenol	µg/L	4/12/2023	<		<		<	<	<
2,4-Dimethylphenol	µg/L	4/12/2023	<		<		<	<	<
2,4-Dinitrophenol	µg/L	4/12/2023	<		<		<	<	<
2,6-Dichlorophenol	µg/L	4/12/2023	<		<		<	<	<
2-Chlorophenol	µg/L	4/12/2023	<		<		<	<	<
2-Methylphenol	µg/L	4/12/2023	<		<		<	<	<
2-Nitrophenol	µg/L	4/12/2023	<		<		<	<	<
3&4-Methylphenol	µg/L	4/12/2023	<		<		<	<	<
4,6-Dinitro-2-Methylphenol	µg/L	4/12/2023	<		<		<	<	<
4-Chloro-3-Methylphenol	µg/L	4/12/2023	<		<		<	<	<
4-Nitrophenol	µg/L	4/12/2023	<		<		<	<	<
Pentachlorophenol	µg/L	4/12/2023	2000		820		550	<	<
Phenol	µg/L	4/12/2023	<		<		<	<	<

**TABLE 1b  
MAY 2023**

**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	5/10/2023	7.3	4.7				<	
Chemical Oxygen Demand	mg/L	5/10/2023	45	60				25	
Chloride	mg/L	5/10/2023	420	410				420	
Dissolved Oxygen	mg/L	5/3/2023	3	1.2	4.9				
	mg/L	5/10/2023	3.1	1.4	4.6				
	mg/L	5/24/2023	2.6	1.4	6.6				
Nitrogen, Ammonia	mg/L	5/3/2023	0.3	0.3	0.3				
	mg/L	5/10/2023	0.5	0.3	0.3				
	mg/L	5/24/2023	0.4	0.2	0.2				
Nitrogen, Nitrate	mg/L	5/3/2023	<	<	<				
	mg/L	5/10/2023	<	<	<				
	mg/L	5/24/2023	<	<	<				
Nitrogen, Total Kjeldahl	mg/L	5/10/2023	<	<				<	
Pentachlorophenol-Screen	µg/L	5/1/2023						4	
	µg/L	5/2/2023						4	
	µg/L	5/3/2023	6621	2848	3143			4	
	µg/L	5/4/2023						4	
	µg/L	5/5/2023						4	
	µg/L	5/6/2023						3	
	µg/L	5/7/2023						3	
	µg/L	5/8/2023						3	
	µg/L	5/9/2023						3	
	µg/L	5/10/2023	4411	2445	2258		682	5	
	µg/L	5/11/2023						5	
	µg/L	5/12/2023						5	
	µg/L	5/13/2023							
	µg/L	5/14/2023							
	µg/L	5/15/2023							
	µg/L	5/16/2023						5	
	µg/L	5/17/2023							
	µg/L	5/18/2023							
	µg/L	5/19/2023						8	
	µg/L	5/20/2023						8	
	µg/L	5/21/2023						8	
	µg/L	5/22/2023						8	
	µg/L	5/23/2023						4	
	µg/L	5/24/2023	7143	1203	891			2	
	µg/L	5/25/2023						4	
	µg/L	5/26/2023						3	
	µg/L	5/27/2023						3	
µg/L	5/28/2023						3		
µg/L	5/29/2023						3		
µg/L	5/30/2023						3		

**TABLE 1b  
MAY 2023**

**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	5/31/2023						3	
pH	S.U.	5/3/2023	6.55	6.55	6.6				
	S.U.	5/10/2023	6.55	6.55	6.6				
	S.U.	5/24/2023	6.6	6.6	6.6				
Phosphorus, Ortho	mg/L	5/10/2023	<	<				<	
Phosphorus, Phosphate	mg/L	5/3/2023	0.4	0.2	0.4				
	mg/L	5/10/2023	0.8	0.3	0.3				
	mg/L	5/24/2023	0.6	0.3	0.3				
Solids, Total Suspended	mg/L	5/10/2023	27	26				21	
Mercury	µg/L	5/10/2023						0.022	
<b>Phenol</b>									
2,3,4,6-Tetrachlorophenol	µg/L	5/10/2023	180	87	91			<	<
2,4,5-Trichlorophenol	µg/L	5/10/2023	<	<	<			<	<
2,4,6-Trichlorophenol	µg/L	5/10/2023	<	<	<			<	<
2,4-Dichlorophenol	µg/L	5/10/2023	<	<	<			<	<
2,4-Dimethylphenol	µg/L	5/10/2023	<	<	<			<	<
2,4-Dinitrophenol	µg/L	5/10/2023	<	<	<			<	<
2,6-Dichlorophenol	µg/L	5/10/2023	<	<	<			<	<
2-Chlorophenol	µg/L	5/10/2023	<	<	<			<	<
2-Methylphenol	µg/L	5/10/2023	<	<	<			<	<
2-Nitrophenol	µg/L	5/10/2023	<	<	<			<	<
3&4-Methylphenol	µg/L	5/10/2023	<	<	<			<	<
4,6-Dinitro-2-Methylphenol	µg/L	5/10/2023	<	<	<			<	<
4-Chloro-3-Methylphenol	µg/L	5/10/2023	<	<	<			<	<
4-Nitrophenol	µg/L	5/10/2023	<	<	<			<	<
Pentachlorophenol	µg/L	5/10/2023	2200	880	990			<	<
Phenol	µg/L	5/10/2023	<	<	<			<	<

**TABLE 1c  
JUNE 2023**

**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	6/14/2023	7.1	2.7				<	
Chemical Oxygen Demand	mg/L	6/14/2023	47	42				40	
Chloride	mg/L	6/14/2023	420	420				440	
Dissolved Oxygen	mg/L	6/1/2023	2.6	1.2	6.3				
	mg/L	6/8/2023	2.7	1.2	5.9				
	mg/L	6/14/2023	2.7	1.2	5.9				
	mg/L	6/22/2023	2.6	1.2	6.2				
	mg/L	6/30/2023	2.8	1.3	6.4				
Nitrogen, Ammonia	mg/L	6/1/2023	0.4	0.2	0.3				
	mg/L	6/8/2023	0.5	0.2	0.3				
	mg/L	6/14/2023	0.5	0.2	0.3				
	mg/L	6/22/2023	0.4	0.3	0.3				
	mg/L	6/30/2023	0.5	0.3	0.3				
Nitrogen, Nitrate	mg/L	6/1/2023	<	<	<				
	mg/L	6/8/2023	<	<	<				
	mg/L	6/14/2023	<	<	<				
	mg/L	6/22/2023	<	<	<				
	mg/L	6/30/2023	<	<	<				
Nitrogen, Total Kjeldahl	mg/L	6/14/2023	<	<				<	
Pentachlorophenol-Screen	µg/L	6/1/2023	6669	1143	1193				2
	µg/L	6/2/2023							4
	µg/L	6/3/2023							4
	µg/L	6/4/2023							4
	µg/L	6/5/2023							4
	µg/L	6/6/2023							4
	µg/L	6/7/2023							4
	µg/L	6/8/2023	5130	1744	1360				3
	µg/L	6/9/2023							4
	µg/L	6/10/2023							3
	µg/L	6/11/2023							3
	µg/L	6/12/2023							3
	µg/L	6/13/2023							3
	µg/L	6/14/2023	5161	1703	1614		29		3
	µg/L	6/15/2023							3
	µg/L	6/16/2023							3
	µg/L	6/17/2023							3
	µg/L	6/18/2023							3
	µg/L	6/19/2023							3
	µg/L	6/20/2023							3
	µg/L	6/21/2023							2
	µg/L	6/22/2023	5681	1910	1912				2
	µg/L	6/23/2023							4
	µg/L	6/24/2023							4
	µg/L	6/25/2023							4



**TABLE 1c  
JUNE 2023**

**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	6/26/2023						4	
	µg/L	6/27/2023						3	
	µg/L	6/28/2023						3	
	µg/L	6/29/2023						2	
	µg/L	6/30/2023	7299	2062	2094			3	
pH	S.U.	6/1/2023	6.55	6.5	6.5				
	S.U.	6/8/2023	6.55	6.5	6.5				
	S.U.	6/14/2023	6.55	6.55	6.55				
	S.U.	6/22/2023	6.55	6.55	6.55				
	S.U.	6/30/2023	6.55	6.55	6.55				
Phosphorus, Ortho	mg/L	6/14/2023	<	<				<	
Phosphorus, Phosphate	mg/L	6/1/2023	1	0.3	0.3				
	mg/L	6/8/2023	0.8	0.2	0.2				
	mg/L	6/14/2023	0.8	0.2	0.2				
	mg/L	6/22/2023	0.5	0.2	0.3				
	mg/L	6/30/2023	0.9	0.2	0.2				
Solids, Total Suspended	mg/L	6/14/2023	25	11				<	
Mercury	µg/L	6/14/2023						0.023	
<b>Phenol</b>									
2,3,4,6-Tetrachlorophenol	µg/L	6/14/2023	150		27			<	<
2,4,5-Trichlorophenol	µg/L	6/14/2023	<		<			<	<
2,4,6-Trichlorophenol	µg/L	6/14/2023	<		<			<	<
2,4-Dichlorophenol	µg/L	6/14/2023	<		<			<	<
2,4-Dimethylphenol	µg/L	6/14/2023	<		<			<	<
2,4-Dinitrophenol	µg/L	6/14/2023	<		<			<	<
2,6-Dichlorophenol	µg/L	6/14/2023	<		<			<	<
2-Chlorophenol	µg/L	6/14/2023	<		<			<	<
2-Methylphenol	µg/L	6/14/2023	<		<			<	<
2-Nitrophenol	µg/L	6/14/2023	<		<			<	<
3&4-Methylphenol	µg/L	6/14/2023	<		<			<	<
4,6-Dinitro-2-Methylphenol	µg/L	6/14/2023	<		<			<	<
4-Chloro-3-Methylphenol	µg/L	6/14/2023	<		<			<	<
4-Nitrophenol	µg/L	6/14/2023	<		<			<	<
Pentachlorophenol	µg/L	6/14/2023	2000		390			<	<
Phenol	µg/L	6/14/2023	<		<			<	<

**TABLE 2a**  
**APRIL 2023**

**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>
4/1/2023	20.61	20.60	119743708
4/2/2023	20.52	20.47	119773181
4/3/2023	20.80	20.37	119802516
4/4/2023	21.18	20.47	119831991
4/5/2023	21.40	20.50	119861518
4/6/2023	21.20	20.44	119890950
4/7/2023	21.30	20.31	119920203
4/8/2023	23.31	21.57	119951264
4/9/2023	23.94	21.74	119982568
4/10/2023	23.75	21.40	120013386
4/11/2023	23.77	21.22	120043949
4/12/2023	23.82	21.33	120074661
4/13/2023	23.79	21.35	120105411
4/14/2023	23.91	21.98	120137069
4/15/2023	20.09	22.03	120168789
4/16/2023	19.38	22.17	120200717
4/17/2023	19.69	22.07	120232493
4/18/2023	20.53	21.88	120264004
4/19/2023	20.74	21.60	120295103
4/20/2023	20.65	21.30	120325774
4/21/2023	20.93	21.56	120356826
4/22/2023	21.14	21.30	120387504
4/23/2023	21.24	21.42	120418350
4/24/2023	21.43	21.03	120448637
4/25/2023	21.36	21.97	120480272
4/26/2023	21.44	22.19	120512225
4/27/2023	21.30	21.98	120543871
4/28/2023	21.28	21.86	120575350
4/29/2023	21.31	21.87	120606843
4/30/2023	21.17	21.54	120637862
Average For The Month	21.57	21.38	
Total <sup>(2)</sup> :			923,815

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**  
**MAY 2023**

**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>
5/1/2023	21.50	20.37	120667198
5/2/2023	22.13	21.04	120697490
5/3/2023	27.56	24.32	120732514
5/4/2023	25.67	22.31	120764644
5/5/2023	25.57	22.14	120796532
5/6/2023	25.92	22.17	120828456
5/7/2023	26.08	22.09	120860263
5/8/2023	26.36	21.91	120891810
5/9/2023	26.24	21.81	120923217
5/10/2023	26.18	21.46	120954121
5/11/2023	25.90	22.26	120986177
5/12/2023	2.93	6.94	120996174
5/13/2023	0.00	2.31	120999497
5/14/2023	0.00	0.00	120999497
5/15/2023	0.00	0.00	120999497
5/16/2023	0.00	0.40	121000069
5/17/2023	0.00	0.00	121000069
5/18/2023	2.35	0.00	121000070
5/19/2023	1.68	0.00	121000070
5/20/2023	20.11	21.06	121030395
5/21/2023	22.61	25.40	121066964
5/22/2023	23.15	25.40	121103546
5/23/2023	18.66	21.96	121135166
5/24/2023	18.29	21.50	121166124
5/25/2023	18.08	21.06	121196451
5/26/2023	19.08	21.77	121227796
5/27/2023	18.99	21.88	121259304
5/28/2023	19.20	21.72	121290575
5/29/2023	19.28	22.24	121322595
5/30/2023	19.26	22.74	121355336
5/31/2023	20.10	25.79	121392479
Average For The Month	16.87	16.90	
Average For The Month With System Running	22.43	22.36	
Total <sup>(2)</sup> :			754,617

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 2c  
JUNE 2023**

**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) (5)</sup> (gpm)</u>	<u>POTW Totalized Discharge <sup>(3)</sup> (gal)</u>
6/1/2023	20.86	26.40	121430496
6/2/2023	18.47	23.96	121464995
6/3/2023	20.08	25.09	121501120
6/4/2023	20.05	24.52	121536422
6/5/2023	19.84	24.31	121571429
6/6/2023	19.49	23.91	121605861
6/7/2023	19.30	23.96	121640360
6/8/2023	19.12	23.64	121674407
6/9/2023	18.93	23.44	121708164
6/10/2023	18.65	23.44	121741913
6/11/2023	18.22	22.91	121774903
6/12/2023	18.23	22.85	121807800
6/13/2023	17.27	22.24	121839823
6/14/2023	17.34	22.28	121871911
6/15/2023	17.22	22.10	121903734
6/16/2023	17.02	22.02	121935442
6/17/2023	17.07	22.14	121967322
6/18/2023	17.02	21.96	121998948
6/19/2023	17.10	22.10	122030769
6/20/2023	16.96	21.91	122062314
6/21/2023	16.60	21.72	122093587
6/22/2023	16.55	21.70	122124832
6/23/2023	16.68	21.74	122156143
6/24/2023	16.56	21.62	122187274
6/25/2023	14.52	20.21	122216375
6/26/2023	14.40	20.07	122245277
6/27/2023	16.70	21.82	122276700
6/28/2023	16.94	21.81	122308107
6/29/2023	16.92	21.64	122339262
6/30/2023	16.79	21.74	122370566
Average For The Month	17.70	22.64	
Total <sup>(2)</sup> :			978,087

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.
- (5) The reed switch was replaced in early December, 2021.

**TABLE 3**

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

<u>Well</u>	<u>April 11, 2023 (ft msl)</u>	<u>May 2023</u>	<u>June 2023</u>
PW01	1163.44	----	----
PW02	Abandoned	----	----
PW03	1163.38	----	----
PW3S	1163.24	----	----
PW04	1163.16	----	----
PW05	1163.16	----	----
PW06	1163.31	----	----
PW07	1163.18	----	----
PW08	1163.59	----	----
PW09I	----	----	----
PW09O	1163.33	----	----
PW10	1163.22	----	----
PW11	1162.72	----	----
PW12	1163.56	----	----
PW13	1163.15	----	----
PW14	1163.85	----	----
PW15	1163.88	----	----
PW16	1160.73	----	----
PW17	1160.13	----	----
PW18	1163.25	----	----
PW19	1161.85	----	----
PW20	1162.416	----	----
PW21	1161.686	----	----
PW22	1163.14	----	----
PW23	1163.15	----	----
PW24	1161.75	----	----
PW25	1161.54	----	----
PW26	1161.88	----	----
PW27	1161.48	----	----
PW28	1163.35	----	----
PW29	1163.38	----	----
P01	1163.17	----	----
OW01	1164.59	----	----
W01A	Abandoned	----	----
W01B	Abandoned	----	----
W02	1163.19	----	----
W03A	1163.49	----	----
W03B	1163.07	----	----
W04A	1163.39	----	----
W04B	1163.34	----	----
W05	1163.12	----	----
W06R	1163.53	----	----
W07	1163.45	----	----
W08	1172.84	----	----
W09	1163.75	----	----
W10A	1163.31	----	----
W10B	1162.89	----	----
W11	1161.95	----	----
W12	1161.33	----	----
W13	1163.92	----	----
W14	1161.5	----	----
W16	1163.04	----	----
W17	1163.83	----	----
W18	1164.12	----	----
W19	Abandoned	----	----

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

<u>Well</u>	<u>April 11, 2023 (ft msl)</u>	<u>May 2023</u>	<u>June 2023</u>
W21	1162.02	----	----
W22	1163.02	----	----
W23	1161.67	----	----
W24A	1161.63	----	----
W25	1163.61	----	----
W26/W26R	1162.36	----	----
W27	1162.72	----	----
W28	1164.41	----	----
W29/W29R	1162.54	----	----
W30	1163.14	----	----
W31	1163.09	----	----
W32	1163.17	----	----
W33	1163.21	----	----
W34	1163.1	----	----
W35	1163.16	----	----
W36	1163.4	----	----
W39	Abandoned	----	----
W40/W40R	1162.95	----	----
W41	1163.21	----	----
W42	1163.46	----	----
W44	1163.13	----	----
W45	1163.81	----	----
W46	1162.92	----	----
W47	1162.77	----	----
W48	1163.3	----	----
W49	1163.95	----	----
W66	1163.58	----	----
W67	1163.57	----	----
W68A	1163.48	----	----
W68B	1163.54	----	----
W69	1163.19	----	----
W70B	Abandoned	----	----
River	----	----	----
IW01	1163.1	----	----
IW01A	1163.14	----	----
FP01	1162.60	----	----
FP02	1162.32	----	----
FP03	1161.41	----	----
FP04	1162.4	----	----
3M Basin	Water in both Basins	----	----
DFOWM 5	----	----	----
DFOWM 9	Abandoned	----	----
DFOWM 10A	Abandoned	----	----
DFOWM 11	----	----	----
DFOWM 12	----	----	----
W71	1164.68	----	----
W72	1163.8	----	----
W73	1163.42	----	----
W74	1163.38	----	----

**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>	<u>April 11, 2023 (ft)</u>	<u>May 2023</u>	<u>June 2023</u>
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	0.00	----	----
PW17	0.00	----	----
PW18	0.00	----	----
PW19	0.00	----	----
PW20	0.37	----	----
PW21	0.07	----	----
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	Abandoned	----	----
W01B	Abandoned	----	----
W02	0.00	----	----
W03A	0.00	----	----
W03B	0.00	----	----
W04A	0.00	----	----
W04B	0.00	----	----
W05	0.00	----	----
W06R	0.00	----	----
W07	0.02	----	----
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	January 05, 2023 (ft)	May 2023	June 2023
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	0.60	----	----
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**

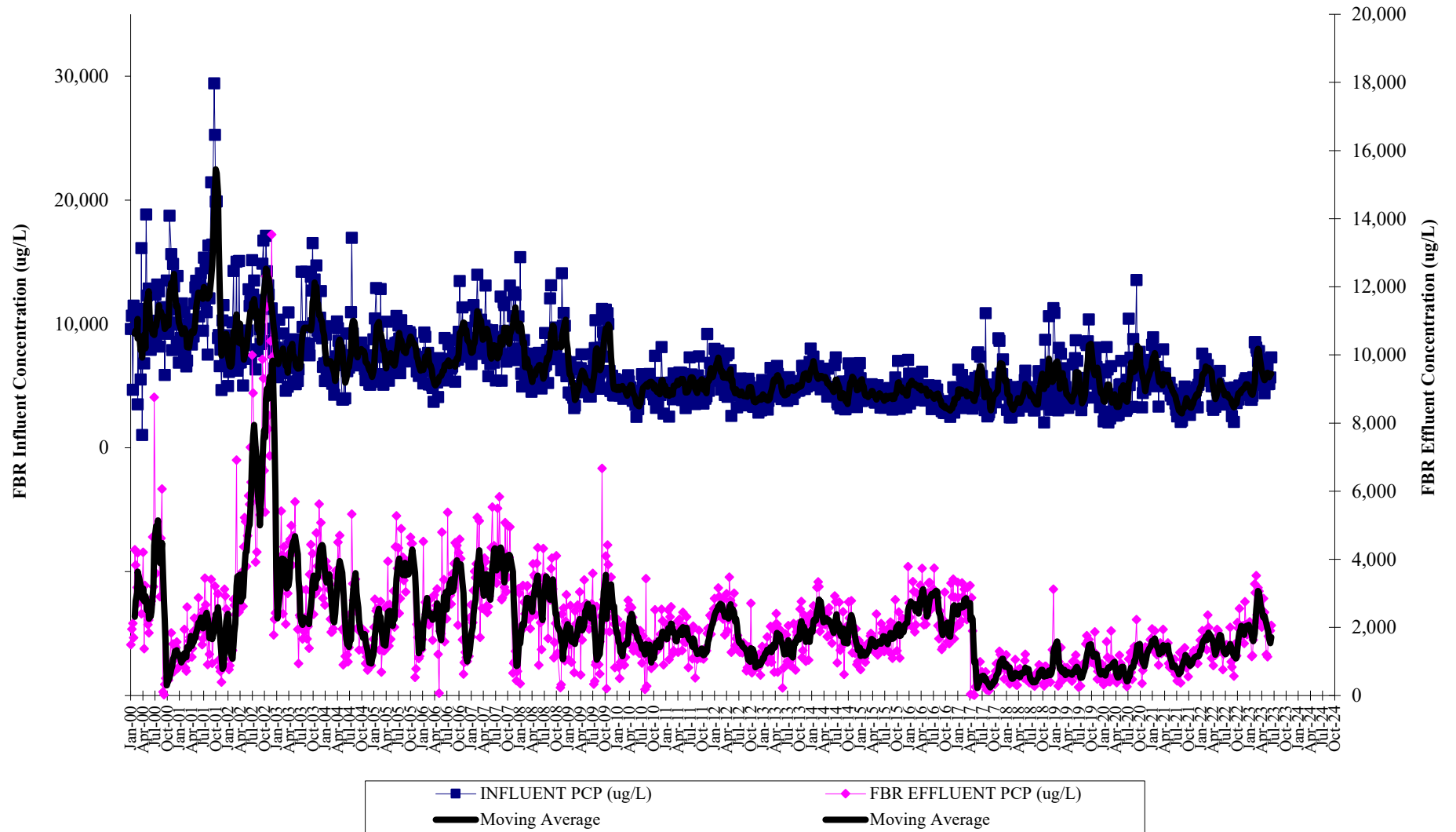
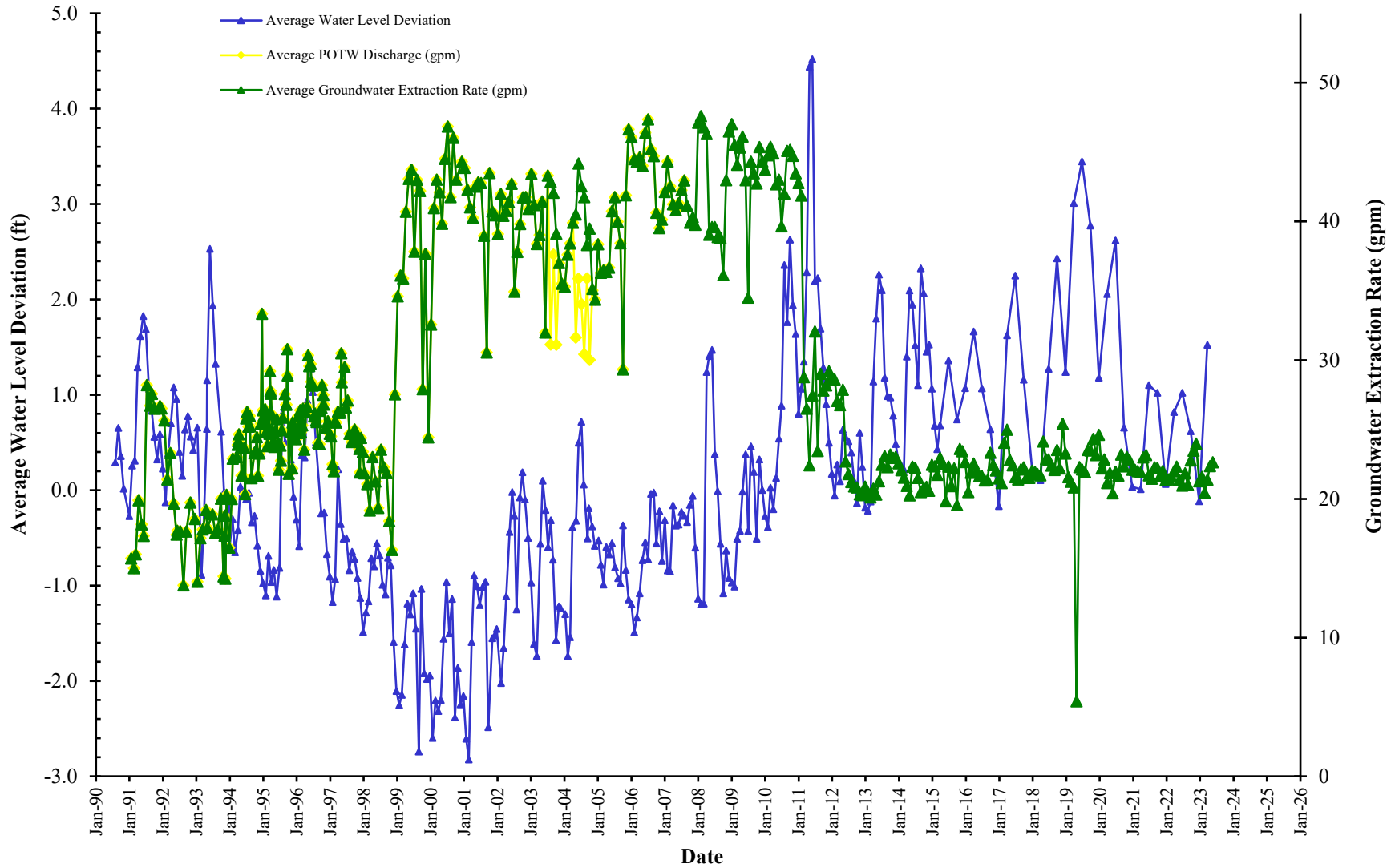


FIGURE 2

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.