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July 11, 2019

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

Subject: 2019 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 2019 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) 826-3644.

Sincerely,

TRC Environmental Corporation

Bruce Iverson
Project Manager

Attachments: 2019 Second Quarterly Report

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

**Wauleco, Inc. - Wausau, Wisconsin
Quarterly Report
Submitted July 2019**

Summary of 2019 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 first quarter of 2019 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 1.00 µg/L in April, 1.00 µg/L in May, and 1.21 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 17, <3.0 µg/L on May 29, and <3.0 µg/L on June 18, 2019.
- 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 April 26, a leak in the header pipe adjacent to the FBR tank caused the treatment system to be shutdown. Piping was replaced and repairs completed, and the treatment system was fully functional on May 22, 2019.

On-site screening PCP influent concentrations ranged from 3,228 µg/L to 8,687 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 2019	86	85	86
May 2019	91	86	86
June 2019	87	86	88

- The dissolved oxygen concentration in the influent to the FBR averaged 2.7 mg/L in April, 2.5 mg/L in May, and 2.8 mg/L in June 2019.

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 0.067 µg/L on April 17, 0.02 µg/L on May 29, and 0.039 µg/L on June 18, which are below the permit discharge limit of 1.6 µg/L. The mass loading for mercury in April was calculated at 0.0000168 lb/24 hours, 0.00000512 lb/24 hours in May, and 0.0000104 lb/24 hours in June, 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 21.24 gpm for April, 21.32 gpm for May, and 22.29 gpm for June 2019 (Tables 2a, b, and c). The April and May daily groundwater flow averages are for the days the treatment system was in operation. 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 April 2019 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.

The product thickness data for April 2019 are summarized in Table 4. Measurements show a small amount of product present in April. One monitoring well had free product: W7 had 0.23 ft..

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 2019

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>Filters1+2</u> <u>Effluent</u>	<u>System</u> <u>Effluent</u>	<u>System</u> <u>Eff Dup</u>
Biological Oxygen Demand	mg/L	4/17/2019	8.9	3.8				<	
Chemical Oxygen Demand	mg/L	4/17/2019	56	42				22	
Chloride	mg/L	4/17/2019	200	200				200	
Dissolved Oxygen	mg/L	4/3/2019	2.8	1.2	6.3				
	mg/L	4/11/2019	2.7	1.5	6.6				
	mg/L	4/17/2019	3.2	1.7	6.8				
	mg/L	4/25/2019	2	1	6.2				
Nitrogen, Ammonia	mg/L	4/3/2019	1	1	1				
	mg/L	4/11/2019	1.1	1	0.9				
	mg/L	4/17/2019	1.3	1	1				
	mg/L	4/25/2019	1	1	1				
Nitrogen, Nitrate	mg/L	4/3/2019	<	<	<				
	mg/L	4/11/2019	<	<	<				
	mg/L	4/17/2019	<	<	<				
	mg/L	4/25/2019	<	<	<				
Nitrogen, Nitrate + Nitrite	mg/L	4/17/2019	<	<				<	
Nitrogen, Total Kjeldahl	mg/L	4/17/2019	<	<				<	
Pentachlorophenol-Screen	µg/L	4/1/2019						1	
	µg/L	4/2/2019						1	
	µg/L	4/3/2019	4913	653	567			1	
	µg/L	4/4/2019						1	
	µg/L	4/5/2019						1	
	µg/L	4/6/2019						1	
	µg/L	4/7/2019						1	
	µg/L	4/8/2019						1	
	µg/L	4/9/2019						1	
	µg/L	4/10/2019						1	
	µg/L	4/11/2019	3273	553	512			1	
	µg/L	4/12/2019						1	
	µg/L	4/13/2019						1	
	µg/L	4/14/2019						1	
	µg/L	4/15/2019						1	
	µg/L	4/16/2019						1	
	µg/L	4/17/2019	3549	822	634		84	1	
	µg/L	4/18/2019						1	
	µg/L	4/19/2019						1	
	µg/L	4/20/2019						1	
	µg/L	4/21/2019						1	
	µg/L	4/22/2019						1	
	µg/L	4/23/2019						1	
	µg/L	4/24/2019						1	
	µg/L	4/25/2019	3228	597	398			1	
	µg/L	4/26/2019						1	
	µg/L	4/27/2019						1	
	µg/L	4/28/2019						1	

TABLE 1a
APRIL 2019

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>Filters1+2</u> <u>Effluent</u>	<u>System</u> <u>Effluent</u>	<u>System</u> <u>Eff Dup</u>
pH	S.U.	4/3/2019	6.75	6.65	6.7				
	S.U.	4/11/2019	6.8	6.75	6.8				
	S.U.	4/17/2019	6.75	6.7	6.7				
	S.U.	4/25/2019	6.7	6.6	6.65				
Phosphorus, Ortho	mg/L	4/17/2019	<	<				<	
Phosphorus, Phosphate	mg/L	4/3/2019	1	1.1	1.1				
	mg/L	4/11/2019	1	1.1	1.2				
	mg/L	4/17/2019	0.9	1.1	1				
	mg/L	4/25/2019	1	1	1				
Solids, Total Suspended	mg/L	4/17/2019	10	28				<	
Mercury	µg/L	4/17/2019	0.25					0.067	
Phenol									
2,3,4,6-Tetrachlorophenol	µg/L	4/17/2019	240		13		11	<	<
2,4,5-Trichlorophenol	µg/L	4/17/2019	<		<		<	<	<
2,4,6-Trichlorophenol	µg/L	4/17/2019	<		<		<	<	<
2,4-Dichlorophenol	µg/L	4/17/2019	<		<		<	<	<
2,4-Dimethylphenol	µg/L	4/17/2019	<		<		<	<	<
2,4-Dinitrophenol	µg/L	4/17/2019	<		<		<	<	<
2,6-Dichlorophenol	µg/L	4/17/2019	<		<		<	<	<
2-Chlorophenol	µg/L	4/17/2019	<		<		<	<	<
2-Methylphenol	µg/L	4/17/2019	<		<		<	<	<
2-Nitrophenol	µg/L	4/17/2019	<		<		<	<	<
3&4-Methylphenol	µg/L	4/17/2019	<		<		<	<	<
4,6-Dinitro-2-Methylphenol	µg/L	4/17/2019	<		<		<	<	<
4-Chloro-3-Methylphenol	µg/L	4/17/2019	<		<		<	<	<
4-Nitrophenol	µg/L	4/17/2019	<		<		<	<	<
Pentachlorophenol	µg/L	4/17/2019	3700		130		130	<	<
Phenol	µg/L	4/17/2019	<		<		<	<	<

**TABLE 1b
MAY 2019**

**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	5/29/2019	8.9	22				<	
Chemical Oxygen Demand	mg/L	5/29/2019	45	26				19	
Chloride	mg/L	5/29/2019	170	170				180	
Dissolved Oxygen	mg/L	5/23/2019	2.6	1.4	6.4				
	mg/L	5/29/2019	2.4	1.4	6.7				
Nitrogen, Ammonia	mg/L	5/23/2019	1	1.2	1				
	mg/L	5/29/2019	0.9	0.7	0.7				
Nitrogen, Nitrate	mg/L	5/23/2019	<	<	<				
	mg/L	5/29/2019	<	<	<				
Nitrogen, Total Kjeldahl	mg/L	5/29/2019	5.5	1.1				0.37	
Pentachlorophenol-Screen	µg/L	5/4/2019						1	
	µg/L	5/21/2019						1	
	µg/L	5/22/2019						1	
	µg/L	5/23/2019	3696	421	267			1	
	µg/L	5/24/2019						1	
	µg/L	5/25/2019						1	
	µg/L	5/26/2019						1	
	µg/L	5/27/2019						1	
	µg/L	5/28/2019						1	
	µg/L	5/29/2019	6746	1000	787		31	1	
	µg/L	5/30/2019						1	
	µg/L	5/31/2019						1	
pH	S.U.	5/23/2019	6.8	6.8	6.85				
	S.U.	5/29/2019	6.75	6.7	6.7				
Phosphorus, Ortho	mg/L	5/29/2019	<	<				<	
Phosphorus, Phosphate	mg/L	5/23/2019	1	0.6	0.6				
Phosphorus, Phosphate	mg/L	5/29/2019	0.8	0.6	0.6				
Solids, Total Suspended	mg/L	5/29/2019	15	20				<	
Mercury	µg/L	5/29/2019						0.020	
Phenol									
2,3,4,6-Tetrachlorophenol	µg/L	5/29/2019	230	35	26			<	<
2,4,5-Trichlorophenol	µg/L	5/29/2019	<	8.8	6.5			<	<
2,4,6-Trichlorophenol	µg/L	5/29/2019	<	<	<			<	<
2,4-Dichlorophenol	µg/L	5/29/2019	<	<	<			<	<
2,4-Dimethylphenol	µg/L	5/29/2019	<	<	<			<	<
2,4-Dinitrophenol	µg/L	5/29/2019	<	<	<			<	<

**TABLE 1b
MAY 2019**

**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>
2,6-Dichlorophenol	µg/L	5/29/2019	<	<	<			<	<
2-Chlorophenol	µg/L	5/29/2019	<	<	<			<	<
2-Methylphenol	µg/L	5/29/2019	<	<	<			<	<
2-Nitrophenol	µg/L	5/29/2019	<	<	<			<	<
3&4-Methylphenol	µg/L	5/29/2019	<	<	<			<	<
4,6-Dinitro-2-Methylphenol	µg/L	5/29/2019	<	<	<			<	<
4-Chloro-3-Methylphenol	µg/L	5/29/2019	<	<	<			<	<
4-Nitrophenol	µg/L	5/29/2019	<	<	<			<	<
Pentachlorophenol	µg/L	5/29/2019	2600	290	210			<	<
Phenol	µg/L	5/29/2019	<	<	<			<	<

**TABLE 1c
JUNE 2019**

**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	6/18/2019	8.0	2.9				<	
Chemical Oxygen Demand	mg/L	6/18/2019	38	28				17	
Chloride	mg/L	6/18/2019	290	290				290	
Dissolved Oxygen	mg/L	6/7/2019	2.4	1.2	6.4				
	mg/L	6/12/2019	2.6	1.3	6.6				
	mg/L	6/18/2019	2.3	1.3	5.6				
	mg/L	6/26/2019	3.9	1.8	7.3				
Nitrogen, Ammonia	mg/L	6/7/2019	1.2	1	1.1				
	mg/L	6/12/2019	1.1	0.7	0.7				
	mg/L	6/18/2019	1.1	0.9	0.9				
	mg/L	6/26/2019	1.2	0.8	0.8				
Nitrogen, Nitrate	mg/L	6/7/2019	<	<	<				
	mg/L	6/12/2019	<	<	<				
	mg/L	6/18/2019	<	<	<				
	mg/L	6/26/2019	<	<	<				
Nitrogen, Total Kjeldahl	mg/L	6/18/2019	<	<				<	
Pentachlorophenol-Screen	µg/L	6/1/2019						1	
	µg/L	6/2/2019						1	
	µg/L	6/3/2019						1	
	µg/L	6/4/2019						1	
	µg/L	6/5/2019						1	
	µg/L	6/6/2019						1	
	µg/L	6/7/2019	4067	777	755			1	
	µg/L	6/8/2019						1	
	µg/L	6/9/2019						1	
	µg/L	6/10/2019						1	
	µg/L	6/11/2019						1	
	µg/L	6/12/2019	7234	642	1028			1	
	µg/L	6/13/2019						2	
	µg/L	6/14/2019						2	
	µg/L	6/15/2019						1	
	µg/L	6/16/2019						1	
	µg/L	6/17/2019						1	
	µg/L	6/18/2019	8687	1194	924		150	2	
	µg/L	6/19/2019						1	
	µg/L	6/20/2019						1	
	µg/L	6/21/2019						1	
	µg/L	6/22/2019						2	
	µg/L	6/23/2019						2	
	µg/L	6/24/2019						1	
	µg/L	6/25/2019						1	
	µg/L	6/26/2019	3522	595	510			1	
	µg/L	6/27/2019						2	
	µg/L	6/28/2019						1	

**TABLE 1c
JUNE 2019**

**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	6/29/2019						1	
	µg/L	6/30/2019						1	
pH	S.U.	6/7/2019	6.85	6.85	6.9				
	S.U.	6/12/2019	6.7	6.6	6.6				
	S.U.	6/18/2019	6.7	6.55	6.55				
	S.U.	6/26/2019	6.8	6.65	6.7				
Phosphorus, Ortho	mg/L	6/18/2019	<	<				<	
Phosphorus, Phosphate	mg/L	6/7/2019	1.4	0.9	0.9				
	mg/L	6/12/2019	0.5	0.3	0.3				
	mg/L	6/18/2019	0.7	0.2	0.3				
	mg/L	6/26/2019	0.8	0.3	0.3				
Solids, Total Suspended	mg/L	6/18/2019	16	120				<	
Mercury	µg/L	6/18/2019						0.039	
Phenol									
2,3,4,6-Tetrachlorophenol	µg/L	6/18/2019	180		29			<	<
2,4,5-Trichlorophenol	µg/L	6/18/2019	<		4.5			<	<
2,4,6-Trichlorophenol	µg/L	6/18/2019	<		<			<	<
2,4-Dichlorophenol	µg/L	6/18/2019	<		<			<	<
2,4-Dimethylphenol	µg/L	6/18/2019	<		<			<	<
2,4-Dinitrophenol	µg/L	6/18/2019	<		<			<	<
2,6-Dichlorophenol	µg/L	6/18/2019	<		<			<	<
2-Chlorophenol	µg/L	6/18/2019	<		<			<	<
2-Methylphenol	µg/L	6/18/2019	<		<			<	<
2-Nitrophenol	µg/L	6/18/2019	<		<			<	<
3&4-Methylphenol	µg/L	6/18/2019	<		<			<	<
4,6-Dinitro-2-Methylphenol	µg/L	6/18/2019	<		<			<	<
4-Chloro-3-Methylphenol	µg/L	6/18/2019	<		<			<	<
4-Nitrophenol	µg/L	6/18/2019	<		<			<	<
Pentachlorophenol	µg/L	6/18/2019	1900		230			<	<
Phenol	µg/L	6/18/2019	<		<			0.39	0.34

TABLE 2a
APRIL 2019

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)
4/1/2019	17.30	22.20	75407859
4/2/2019	17.20	21.54	75438870
4/3/2019	17.18	21.73	75470162
4/4/2019	17.28	22.27	75502227
4/5/2019	17.32	22.49	75534613
4/6/2019	17.08	22.21	75566589
4/7/2019	16.95	22.85	75599497
4/8/2019	16.98	22.59	75632033
4/9/2019	17.04	22.31	75664153
4/10/2019	17.14	23.37	75697802
4/11/2019	17.14	23.26	75731294
4/12/2019	17.15	22.17	75763217
4/13/2019	16.95	21.67	75794417
4/14/2019	16.89	21.17	75824899
4/15/2019	16.90	21.26	75855507
4/16/2019	16.85	23.00	75888625
4/17/2019	16.68	23.41	75922332
4/18/2019	16.78	23.16	75955685
4/19/2019	16.80	22.78	75988483
4/20/2019	17.00	22.30	76020600
4/21/2019	17.24	21.79	76051977
4/22/2019	17.35	20.50	76081492
4/23/2019	17.48	22.33	76113654
4/24/2019	17.69	20.10	76142602
4/25/2019	18.33	20.07	76171500
4/26/2019	19.02	19.49	76199563
4/27/2019	9.76	9.51	76213261
4/28/2019	0.00	1.56	76215502
4/29/2019	0.00	0.00	76215502
4/30/2019	0.00	0.00	76215502
Average For The Month	16.34	20.82	
Average, Minus System Days Off, For The Month	16.94	21.54	
Total ⁽²⁾ :			839,606

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
MAY 2019

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)
5/1/2019	0.00	0.00	76215502
5/2/2019	0.00	0.00	76215502
5/3/2019	0.00	0.00	76215502
5/4/2019	0.00	0.85	76216732
5/5/2019	0.00	0.00	76216732
5/6/2019	0.00	0.00	76216732
5/7/2019	0.00	0.00	76216732
5/8/2019	0.00	0.00	76216732
5/9/2019	0.00	0.00	76216732
5/10/2019	0.00	0.00	76216732
5/11/2019	0.00	0.00	76216732
5/12/2019	0.00	0.00	76216732
5/13/2019	0.00	0.00	76216732
5/14/2019	1.21	0.00	76216732
5/15/2019	0.00	0.00	76216732
5/16/2019	0.00	0.00	76216732
5/17/2019	0.00	0.00	76216732
5/18/2019	0.00	0.00	76216732
5/19/2019	0.00	0.00	76216732
5/20/2019	0.00	0.00	76216732
5/21/2019	0.00	0.00	76216732
5/22/2019	13.39	12.38	76234566
5/23/2019	19.30	21.98	76266216
5/24/2019	19.34	23.37	76299875
5/25/2019	19.93	23.41	76333582
5/26/2019	21.06	23.52	76367449
5/27/2019	22.50	23.10	76400714
5/28/2019	24.05	22.56	76433196
5/29/2019	25.57	21.94	76464784
5/30/2019	26.28	20.73	76494639
5/31/2019	26.45	20.21	76523747
Average For The Month	5.03	5.40	
Average, Minus System Days Off, For The Month	21.79	21.32	
Total ⁽²⁾ :			308,245

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
JUNE 2019**

**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>
6/1/2019	25.80	17.25	76548581
6/2/2019	25.39	16.28	76572025
6/3/2019	25.25	15.47	76594308
6/4/2019	24.91	21.53	76625317
6/5/2019	23.05	20.81	76655277
6/6/2019	21.83	20.36	76684592
6/7/2019	20.44	19.00	76711958
6/8/2019	19.95	22.08	76743748
6/9/2019	17.72	20.50	76773267
6/10/2019	17.54	19.99	76802053
6/11/2019	15.20	21.11	76832448
6/12/2019	20.82	24.15	76867231
6/13/2019	22.66	24.20	76902079
6/14/2019	22.73	23.69	76936191
6/15/2019	23.19	25.68	76973170
6/16/2019	23.26	25.73	77010214
6/17/2019	23.41	25.54	77046988
6/18/2019	23.74	24.76	77082649
6/19/2019	23.92	24.37	77117748
6/20/2019	23.43	23.48	77151555
6/21/2019	22.91	22.98	77184648
6/22/2019	22.86	22.36	77216842
6/23/2019	23.04	22.16	77248754
6/24/2019	23.47	21.86	77280228
6/25/2019	23.12	21.42	77311068
6/26/2019	22.83	27.85	77351169
6/27/2019	22.69	28.01	77391509
6/28/2019	23.18	22.76	77424288
6/29/2019	23.20	21.67	77455490
6/30/2019	23.19	21.67	77486696
Average For The Month	22.49	22.29	
Total ⁽²⁾ :			962,949

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>April 24, 2019 (ft msl)</u>	<u>May 2019</u>	<u>June 2019</u>
PW01	1164.93	----	----
PW02	Abandoned	----	----
PW03	1165.15	----	----
PW3S	1164.76	----	----
PW04	1164.72	----	----
PW05	1164.77	----	----
PW06	1164.91	----	----
PW07	1164.78	----	----
PW08	1165.25	----	----
PW09I	----	----	----
PW09O	1164.76	----	----
PW10	1164.72	----	----
PW11	1164.37	----	----
PW12	1165.03	----	----
PW13	1164.62	----	----
PW14	1165.41	----	----
PW15	1165.4	----	----
PW16	1164.06	----	----
PW17	1163.45	----	----
PW18	1164.89	----	----
PW19	1163.91	----	----
PW20	1164.12	----	----
PW21	1164.06	----	----
PW22	1164.75	----	----
PW23	1164.74	----	----
PW24	1164.17	----	----
PW25	1163.55	----	----
PW26	1164.16	----	----
PW27	1164.06	----	----
PW28	1165.05	----	----
PW29	1165.03	----	----
P01	1164.74	----	----
OW01	1166.15	----	----
W01A	1165.1	----	----
W01B	1165.15	----	----
W02	1164.81	----	----
W03A	1164.99	----	----
W03B	1164.06	----	----
W04A	1165.00	----	----
W04B	1164.9	----	----
W05	1164.65	----	----
W06R	1165.03	----	----
W07	1164.94	----	----
W08	1174.16	----	----
W09	1164.35	----	----
W10A	1163.52	----	----
W10B	1163.24	----	----
W11	1162.66	----	----
W12	1161.92	----	----
W13	1164.62	----	----
W14	1162.1	----	----
W16	1164.7	----	----
W17	1165.29	----	----

TABLE 3 (continued)

Groundwater Elevation Data
 Wauleco, Inc.
 Wausau, Wisconsin

Well	April 24, 2019 (ft msl)	May 2019	June 2019
W18	1163.51	----	----
W19	Abandoned	----	----
W21	1162.36	----	----
W22	1164.59	----	----
W23	1162.27	----	----
W24A	1162.19	----	----
W25	1165.19	----	----
W26	Abandoned	----	----
W27	1164.1	----	----
W28	1163.49	----	----
W29	Abandoned	----	----
W30	1164.68	----	----
W31	1162.62	----	----
W32	1162.65	----	----
W33	1164.78	----	----
W34	1164.8	----	----
W35	1164.72	----	----
W36	1164.78	----	----
W39	Abandoned	----	----
W40	Abandoned	----	----
W41	1164.86	----	----
W42	1165.11	----	----
W44	1164.71	----	----
W45	1164.82	----	----
W46	1164.53	----	----
W47	1164.4	----	----
W48	1164.93	----	----
W49	1165.51	----	----
W66	1165.06	----	----
W67	1165.04	----	----
W68A	1165.08	----	----
W68B	1165	----	----
W69	1164.76	----	----
W70B	Abandoned	----	----
River	----	----	----
IW01	1164.64	----	----
IW01A	1164.68	----	----
FP01	1164.25	----	----
FP02	1164.15	----	----
FP03	1163.25	----	----
FP04	1164.06	----	----
3M Basin	Water in both Basins	----	----
DFOWM 5	----	----	----
DFOWM 9	Abandoned	----	----
DFOWM 10A	Abandoned	----	----
DFOWM 11	----	----	----
DFOWM 12	----	----	----
W71	1166.05	----	----
W72	1165.4	----	----
W73	1165.05	----	----
W74	1165.03	----	----

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 24, 2019 (ft)</u>	<u>May 2019</u>	<u>June 2019</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	0.00	----	----
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	0.23	----	----
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	April 24, 2019 (ft)	May 2019	June 2019
W18	0.00	----	----
W19	Abandoned	----	----
W21	0.00	----	----
W22	0.00	----	----
W23	0.00	----	----
W24A	0.00	----	----
W25	0.00	----	----
W26	Abandoned	----	----
W27	0.00	----	----
W28	0.00	----	----
W29	Abandoned	----	----
W30	0.00	----	----
W31	0.00	----	----
W32	0.00	----	----
W33	0.00	----	----
W34	0.00	----	----
W35	0.00	----	----
W36	0.00	----	----
W39	Abandoned	----	----
W40	Abandoned	----	----
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	----	----	----
DFOWM 9	Abandoned	----	----
DFOWM 10A	Abandoned	----	----
DFOWM 11	----	----	----
DFOWM 12	----	----	----
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

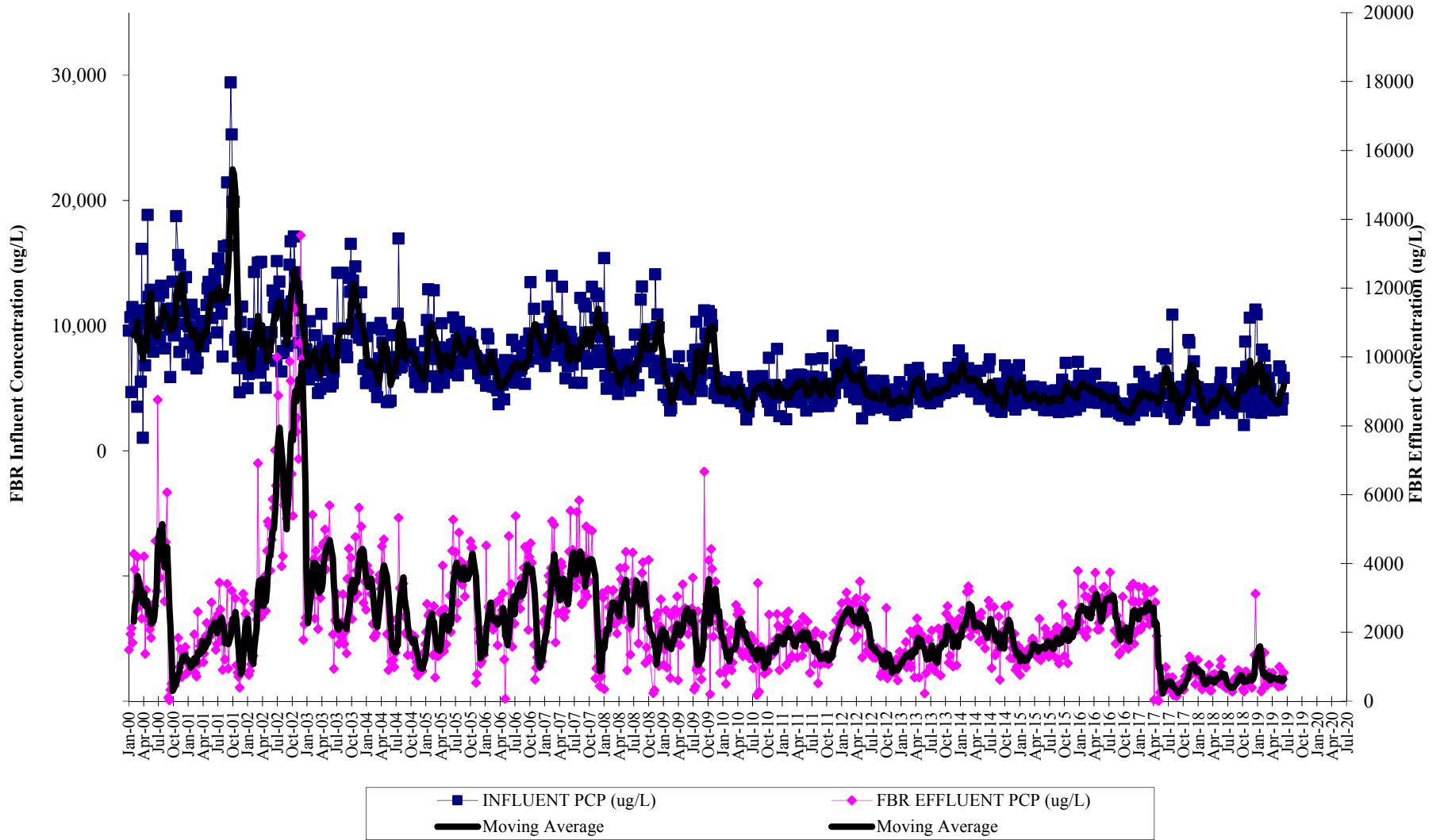
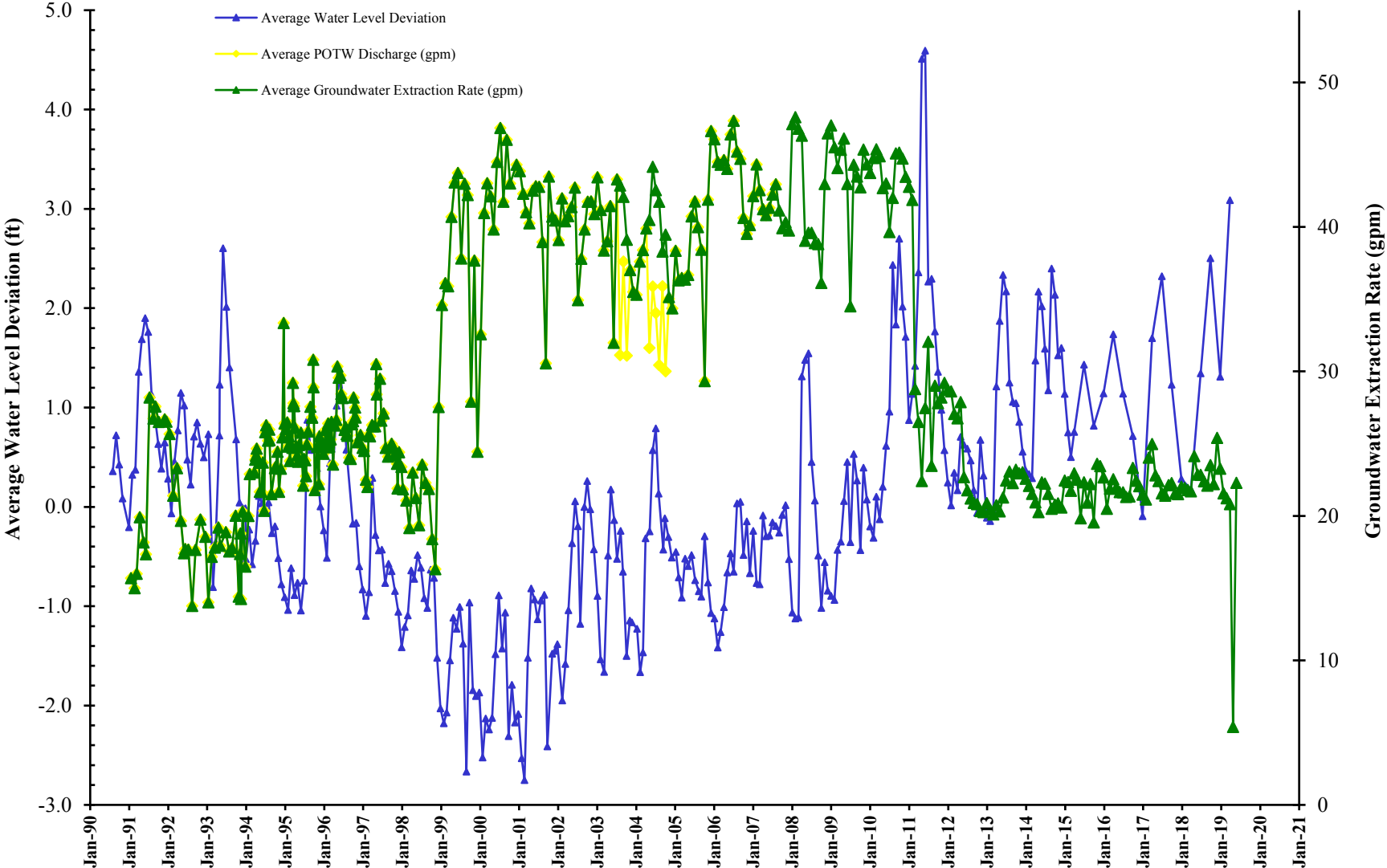


FIGURE 2

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.