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January 6, 2022

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

Subject: 2021 Fourth 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 fourth 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

Bruce Iverson
Project Manager

Attachments: 2021 Fourth 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 January 2022

Summary of 2021 Fourth 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 fourth 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 1.87 µg/L in October, 1.8 µg/L in November, and 1.84 µg/L in December.
- 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 October 13, <3.0 µg/L on November 17, and <3.0 µg/L on December 9, 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 2,657 µg/L to 5,101 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 (%)
October 2021	74	77	85
November 2021	75	76	81
December 2021	75	77	76

- The dissolved oxygen concentration in the influent to the FBR averaged 2.7 mg/L in October, 2.7 mg/L in November, and 2.7 mg/L in December 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 0.034 µg/L on October 13, 0.051 µg/L on November 17, and 0.027 µg/L on

December 9, which are below the permit discharge limit of 1.6 µg/L. The mass loading for mercury in October was calculated at 0.00000908 lb/24 hours, in November was calculated at 0.0000133 lb/24 hours, and December was calculated at 0.00000714 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 22.23 gpm for October, 21.66 gpm for November, and 22.01 gpm for December 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 October 2021 are summarized in Table 3

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

Water table elevations and product thickness data for November and December, 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 November and December 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

TABLE 1a
OCTOBER 2021

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

Parameter	UNIT	DATE	FBR Influent	FBR Effluent	FFR Effluent	Bag Filter Effluent	Filters1+2 Effluent	System Effluent	System Eff Dup
Biological Oxygen Demand	mg/L	10/13/2021	5.5	3.6				<	
Chemical Oxygen Demand	mg/L	10/13/2021	27	<				<	
Chloride	mg/L	10/13/2021	140	140				140	
Dissolved Oxygen	mg/L	10/7/2021	2.5	1.3	4.8				
	mg/L	10/13/2021	3.2	1.1	5				
	mg/L	10/20/2021	2.6	1.2	5.2				
	mg/L	10/27/2021	2.4	1	5.6				
Nitrogen, Ammonia	mg/L	10/7/2021	0.4	0.3	0.3				
	mg/L	10/13/2021	0.5	0.4	0.4				
	mg/L	10/20/2021	0.3	0.3	0.3				
	mg/L	10/27/2021	0.9	0.2	0.3				
Nitrogen, Nitrate	mg/L	10/7/2021	<	<	<				
	mg/L	10/13/2021	<	<	<				
	mg/L	10/20/2021	<	<	<				
	mg/L	10/27/2021	<	<	<				
Nitrogen, Nitrate + Nitrite	mg/L	10/13/2021	<	<				<	
Nitrogen, Total Kjeldahl	mg/L	10/13/2021	0.74	0.64				0.61	
Pentachlorophenol-Screen	µg/L	10/1/2021						3	
	µg/L	10/2/2021						3	
	µg/L	10/3/2021						3	
	µg/L	10/4/2021						3	
	µg/L	10/5/2021						2	
	µg/L	10/6/2021						2	
	µg/L	10/7/2021	3036	1055	979			2	
	µg/L	10/8/2021						2	
	µg/L	10/9/2021						2	
	µg/L	10/10/2021						2	
	µg/L	10/11/2021						2	
	µg/L	10/12/2021						3	
	µg/L	10/13/2021	3395	558	779		100	3	
	µg/L	10/14/2021						1	
	µg/L	10/15/2021						1	
	µg/L	10/16/2021						2	
	µg/L	10/17/2021						2	
	µg/L	10/18/2021						2	
	µg/L	10/19/2021						1	
	µg/L	10/20/2021	3132	1065	634			2	
	µg/L	10/21/2021						2	
	µg/L	10/22/2021						1	
	µg/L	10/23/2021						1	
	µg/L	10/24/2021						1	
	µg/L	10/25/2021						1	
	µg/L	10/26/2021						1	
	µg/L	10/27/2021	2657	893	706			1	
	µg/L	10/28/2021						1	

TABLE 1a
OCTOBER 2021

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

Parameter	UNIT	DATE	FBR Influent	FBR Effluent	FFR Effluent	Bag Filter Effluent	Filters1+2 Effluent	System Effluent	System Eff Dup
Pentachlorophenol-Screen	µg/L	10/29/2021						2	
	µg/L	10/30/2021						2	
	µg/L	10/31/2021						2	
pH	S.U.	10/7/2021	6.6	6.6	6.7				
	S.U.	10/13/2021	6.65	6.65	6.7				
	S.U.	10/20/2021	6.8	6.8	6.75				
	S.U.	10/27/2021	6.65	6.7	6.7				
Phosphorus, Ortho	mg/L	10/13/2021	<	<				<	
Phosphorus, Phosphate	mg/L	10/7/2021	0.4	0.3	0.2				
	mg/L	10/13/2021	0.4	0.3	0.3				
	mg/L	10/20/2021	1.2	0.3	0.3				
	mg/L	10/27/2021	0.9	1	0.9				
Solids, Total Suspended	mg/L	10/13/2021	17	18				13	
Mercury	µg/L	10/13/2021	0.29					0.034	
Phenol									
2,3,4,6-Tetrachlorophenol	µg/L	10/13/2021	230		76		15	<	<
2,4,5-Trichlorophenol	µg/L	10/13/2021	<		<		14	<	<
2,4,6-Trichlorophenol	µg/L	10/13/2021	<		<		<	<	<
2,4-Dichlorophenol	µg/L	10/13/2021	<		<		<	<	<
2,4-Dimethylphenol	µg/L	10/13/2021	<		<		<	<	<
2,4-Dinitrophenol	µg/L	10/13/2021	<		<		<	<	<
2,6-Dichlorophenol	µg/L	10/13/2021	<		<		<	<	<
2-Chlorophenol	µg/L	10/13/2021	<		<		<	<	<
2-Methylphenol	µg/L	10/13/2021	<		<		<	<	<
2-Nitrophenol	µg/L	10/13/2021	<		<		<	<	<
3&4-Methylphenol	µg/L	10/13/2021	<		<		<	<	<
4,6-Dinitro-2-Methylphenol	µg/L	10/13/2021	<		<		<	<	<
4-Chloro-3-Methylphenol	µg/L	10/13/2021	<		<		<	<	<
4-Nitrophenol	µg/L	10/13/2021	<		<		<	<	<
Pentachlorophenol	µg/L	10/13/2021	2800		780		140	<	<
Phenol	µg/L	10/13/2021	<		<		<	<	<

TABLE 1b
NOVEMBER 2021

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

Parameter	UNIT	DATE	FBR Influent	FBR Effluent	FFR Effluent	Bag Filter Effluent	Filters1+2 Effluent	System Effluent	System Eff Dup
Biological Oxygen Demand	mg/L	11/17/2021	6.7	4.5				<	
Chemical Oxygen Demand	mg/L	11/17/2021	34	34				20	
Chloride	mg/L	11/17/2021	140	130				140	
Dissolved Oxygen	mg/L	11/4/2021	2.6	1.2	5.6				
	mg/L	11/11/2021	2.6	1.2	5.5				
	mg/L	11/17/2021	2.6	1.2	5.6				
	mg/L	11/24/2021	3	1.4	5.4				
Nitrogen, Ammonia	mg/L	11/4/2021	0.6	0.5	0.4				
	mg/L	11/11/2021	0.4	0.2	0.4				
	mg/L	11/17/2021	0.4	0.3	0.4				
	mg/L	11/24/2021	0.4	0.3	0.4				
Nitrogen, Nitrate	mg/L	11/4/2021	<	<	<				
	mg/L	11/11/2021	<	<	<				
	mg/L	11/17/2021	<	<	<				
	mg/L	11/24/2021	<	<	<				
Nitrogen, Total Kjeldahl	mg/L	11/17/2021	<	<				<	
Pentachlorophenol-Screen	µg/L	11/1/2021						2	
	µg/L	11/2/2021						2	
	µg/L	11/3/2021						8	
	µg/L	11/4/2021	3906	958	763			2	
	µg/L	11/5/2021						3	
	µg/L	11/6/2021						3	
	µg/L	11/7/2021						3	
	µg/L	11/8/2021						3	
	µg/L	11/9/2021						2	
	µg/L	11/10/2021						1	
	µg/L	11/11/2021	4072	1208	939			1	
	µg/L	11/12/2021						1	
	µg/L	11/13/2021						1	
	µg/L	11/14/2021						1	
	µg/L	11/15/2021						1	
	µg/L	11/16/2021						1	
	µg/L	11/17/2021	3925	1029	1023		197	1	
	µg/L	11/18/2021						2	
	µg/L	11/19/2021						2	
	µg/L	11/20/2021						2	
	µg/L	11/21/2021						2	
	µg/L	11/22/2021						2	
	µg/L	11/23/2021						1	
	µg/L	11/24/2021	4482	1314	1328			1	
	µg/L	11/25/2021						1	
	µg/L	11/26/2021						1	
	µg/L	11/27/2021						1	

TABLE 1b
NOVEMBER 2021

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

Parameter	UNIT	DATE	FBR Influent	FBR Effluent	FFR Effluent	Bag Filter Effluent	Filters1+2 Effluent	System Effluent	System Eff Dup
Pentachlorophenol-Screen	µg/L	11/28/2021						1	
	µg/L	11/29/2021						1	
	µg/L	11/30/2021						1	
pH	S.U.	11/4/2021	6.65	6.65	6.7				
	S.U.	11/11/2021	6.95	6.9	6.95				
	S.U.	11/17/2021	6.65	6.6	6.65				
	S.U.	11/24/2021	6.75	6.75	6.8				
Phosphorus, Ortho	mg/L	11/17/2021	<	<				<	
Phosphorus, Phosphate	mg/L	11/4/2021	0.9	0.6	0.6				
	mg/L	11/11/2021	0.8	0.5	0.5				
	mg/L	11/17/2021	1	0.6	0.6				
	mg/L	11/24/2021	1	0.8	0.8				
Solids, Total Suspended	mg/L	11/17/2021	14	15				10	
Mercury	µg/L	11/17/2021						0.051	
Phenol									
2,3,4,6-Tetrachlorophenol	µg/L	11/17/2021	260	75	79			<	<
2,4,5-Trichlorophenol	µg/L	11/17/2021	<	<	<			<	<
2,4,6-Trichlorophenol	µg/L	11/17/2021	<	<	<			<	<
2,4-Dichlorophenol	µg/L	11/17/2021	<	<	<			<	<
2,4-Dimethylphenol	µg/L	11/17/2021	<	<	<			<	<
2,4-Dinitrophenol	µg/L	11/17/2021	<	<	<			<	<
2,6-Dichlorophenol	µg/L	11/17/2021	<	<	<			<	<
2-Chlorophenol	µg/L	11/17/2021	<	<	<			<	<
2-Methylphenol	µg/L	11/17/2021	<	<	<			<	<
2-Nitrophenol	µg/L	11/17/2021	<	<	<			<	<
3&4-Methylphenol	µg/L	11/17/2021	<	<	<			<	<
4,6-Dinitro-2-Methylphenol	µg/L	11/17/2021	<	<	<			<	<
4-Chloro-3-Methylphenol	µg/L	11/17/2021	<	<	<			<	<
4-Nitrophenol	µg/L	11/17/2021	<	<	<			<	<
Pentachlorophenol	µg/L	11/17/2021	3100	710	750			<	<
Phenol	µg/L	11/17/2021	<	<	<			<	<

TABLE 1c
DECEMBER 2021

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

Parameter	UNIT	DATE	FBR Influent	FBR Effluent	FFR Effluent	Bag Filter Effluent	Filters1+2 Effluent	System Effluent	System Eff Dup
Biological Oxygen Demand	mg/L	12/9/2021	6.2	2.8				<	
Chemical Oxygen Demand	mg/L	12/9/2021	29	27				<	
Chloride	mg/L	12/9/2021	130	130				140	
Dissolved Oxygen	mg/L	12/3/2021	3	1.3	5.4				
	mg/L	12/9/2021	2.5	1	5.2				
	mg/L	12/16/2021	2.5	1.2	5.1				
	mg/L	12/23/2021	2.7	1.1	5.6				
	mg/L	12/30/2021	2.8	1.1	5.6				
Nitrogen, Ammonia	mg/L	12/3/2021	0.4	0.3	0.2				
	mg/L	12/9/2021	0.6	0.5	0.5				
	mg/L	12/16/2021	0.3	0.3	0.4				
	mg/L	12/23/2021	0.5	0.4	0.4				
	mg/L	12/30/2021	0.5	0.3	0.4				
Nitrogen, Nitrate	mg/L	12/3/2021	<	<	<				
	mg/L	12/9/2021	<	<	<				
	mg/L	12/16/2021	<	<	<				
	mg/L	12/23/2021	<	<	<				
	mg/L	12/30/2021	<	<	<				
Nitrogen, Total Kjeldahl	mg/L	12/9/2021	<	<				<	
Pentachlorophenol-Screen	µg/L	12/1/2021						1	
	µg/L	12/2/2021						1	
	µg/L	12/3/2021	3816	1163	940			1	
	µg/L	12/4/2021						2	
	µg/L	12/5/2021						2	
	µg/L	12/6/2021						2	
	µg/L	12/7/2021						2	
	µg/L	12/8/2021						1	
	µg/L	12/9/2021	4635	994	1015		160	1	
	µg/L	12/10/2021						2	
	µg/L	12/11/2021						4	
	µg/L	12/12/2021						4	
	µg/L	12/13/2021						4	
	µg/L	12/14/2021						1	
	µg/L	12/15/2021						2	
	µg/L	12/16/2021	4887	1324	1194			1	
	µg/L	12/17/2021						1	
	µg/L	12/18/2021						2	
	µg/L	12/19/2021						2	
	µg/L	12/20/2021						2	
	µg/L	12/21/2021						1	
	µg/L	12/22/2021						2	
	µg/L	12/23/2021	3274	939	975			1	
	µg/L	12/24/2021						2	
	µg/L	12/25/2021						2	

TABLE 1c
DECEMBER 2021

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

Parameter	UNIT	DATE	FBR Influent	FBR Effluent	FFR Effluent	Bag Filter Effluent	Filters1+2 Effluent	System Effluent	System Eff Dup
Pentachlorophenol-Screen	µg/L	12/26/2021						2	
	µg/L	12/27/2021						2	
	µg/L	12/28/2021						2	
	µg/L	12/29/2021						2	
	µg/L	12/30/2021	5101	1302	1167			1	
	µg/L	12/31/2021						2	
pH	S.U.	12/3/2021	7	6.9	6.95				
	S.U.	12/9/2021	6.85	6.8	6.85				
	S.U.	12/16/2021	6.7	6.65	6.7				
	S.U.	12/23/2021	6.8	6.75	6.8				
	S.U.	12/30/2021	6.8	6.75	6.8				
Phosphorus, Ortho	mg/L	12/9/2021	<	<				<	
Phosphorus, Phosphate	mg/L	12/3/2021	0.5	0.3	0.3				
	mg/L	12/9/2021	0.9	0.7	0.7				
	mg/L	12/16/2021	0.9	0.4	0.4				
	mg/L	12/23/2021	0.4	0.3	0.3				
	mg/L	12/30/2021	0.7	0.3	0.3				
Solids, Total Suspended	mg/L	12/9/2021	14	19				7.8	
Mercury	µg/L	12/9/2021						0.027	
Phenol									
2,3,4,6-Tetrachlorophenol	µg/L	12/9/2021	260		83			<	<
2,4,5-Trichlorophenol	µg/L	12/9/2021	<		<			<	<
2,4,6-Trichlorophenol	µg/L	12/9/2021	<		<			<	<
2,4-Dichlorophenol	µg/L	12/9/2021	<		<			<	<
2,4-Dimethylphenol	µg/L	12/9/2021	<		<			<	<
2,4-Dinitrophenol	µg/L	12/9/2021	<		<			<	<
2,6-Dichlorophenol	µg/L	12/9/2021	<		<			<	<
2-Chlorophenol	µg/L	12/9/2021	<		<			<	<
2-Methylphenol	µg/L	12/9/2021	<		<			<	<
2-Nitrophenol	µg/L	12/9/2021	<		<			<	<
3&4-Methylphenol	µg/L	12/9/2021	<		<			<	<
4,6-Dinitro-2-Methylphenol	µg/L	12/9/2021	<		<			<	<
4-Chloro-3-Methylphenol	µg/L	12/9/2021	<		<			<	<
4-Nitrophenol	µg/L	12/9/2021	<		<			<	<
Pentachlorophenol	µg/L	12/9/2021	3100		730			<	<
Phenol	µg/L	12/9/2021	<		<			<	<

TABLE 2a
OCTOBER 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)
10/1/2021	25.06	22.97	103629789
10/2/2021	24.84	22.89	103650513[5]
10/3/2021	24.75	22.81	103650513[5]
10/4/2021	24.55	22.68	103650513[5]
10/5/2021	24.53	22.54	103674243[5]
10/6/2021	24.65	22.35	103706422
10/7/2021	24.71	22.22	103738423
10/8/2021	24.61	22.17	103759483[5]
10/9/2021	24.58	22.05	103777626[5]
10/10/2021	24.09	21.93	103786579[5]
10/11/2021	23.95	21.87	103786579[5]
10/12/2021	23.99	21.85	103809502[5]
10/13/2021	23.91	21.82	103838880[5]
10/14/2021	24.69	22.69	103871552
10/15/2021	24.91	22.82	103904413
10/16/2021	24.88	22.66	103937045
10/17/2021	24.79	22.51	103969459
10/18/2021	24.71	22.53	104001896
10/19/2021	24.77	22.44	104034205
10/20/2021	24.79	22.50	104066601
10/21/2021	24.90	22.30	104098717
10/22/2021	24.99	22.35	104130905
10/23/2021	24.72	22.20	104162874
10/24/2021	24.72	22.21	104194855
10/25/2021	24.70	22.05	104226603
10/26/2021	25.01	22.32	104258739
10/27/2021	23.57	21.29	104289390
10/28/2021	23.53	21.36	104320144
10/29/2021	23.80	21.58	104351223
10/30/2021	23.88	21.62	104382360
10/31/2021	23.69	21.66	104413546
Average For The Month	24.49	22.23	
Total[2][5]:			992,478

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 effluent meter reed switch malfunctioned on October 2-5 and 8-13, and the total flow was calculated using the daily flow rates from each meter. The additional flow was added to the monthly total.

TABLE 2b
NOVEMBER 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)
11/1/2021	23.71	21.56	104444592
11/2/2021	23.71	21.85	104476057
11/3/2021	23.56	21.57	104507113
11/4/2021	23.55	21.58	104538185
11/5/2021	23.69	21.66	104569379
11/6/2021	23.45	21.64	104600540
11/7/2021	24.58	22.55	104633009
11/8/2021	23.66	21.64	104664164
11/9/2021	23.65	21.40	104694982
11/10/2021	23.42	21.54	104726005
11/11/2021	23.53	21.82	104757429
11/12/2021	23.58	21.65	104788598
11/13/2021	23.65	21.58	104819679
11/14/2021	23.80	21.81	104851088
11/15/2021	23.85	21.65	104882257
11/16/2021	23.68	21.54	104913268
11/17/2021	23.63	21.67	104944476
11/18/2021	23.57	21.70	104975724
11/19/2021	23.60	21.70	105006975
11/20/2021	23.62	21.70	105020333[5]
11/21/2021	23.60	21.69	105030173[5]
11/22/2021	23.33	21.68	105030173[5]
11/23/2021	23.35	21.69	105060496[5]
11/24/2021	23.17	21.70	105078325[5]
11/25/2021	23.34	21.70	105107879[5]
11/26/2021	23.28	21.72	105139155
11/27/2021	23.17	21.05	105169460
11/28/2021	23.01	21.56	105200504
11/29/2021	23.03	21.45	105231386
11/30/2021	23.12	21.63	105262539
Average For The Month	23.53	21.66	
Total[2][5]:			935,508

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 effluent meter reed switch malfunctioned on August 13-15, and the total flow was calculated using the daily flow rates from each meter. The additional flow was added to the monthly total.

TABLE 2c
DECEMBER 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)
12/1/2021	23.22	21.64	105293702
12/2/2021	23.13	21.64	105324865
12/3/2021	23.18	21.57	105355920
12/4/2021	22.96	21.62	105387050
12/5/2021	23.01	21.39	105417850
12/6/2021	22.99	21.44	105448726
12/7/2021	23.01	21.50	105479686
12/8/2021	23.02	21.45	105510574
12/9/2021	22.85	21.30	105541251
12/10/2021	24.01	22.33	105573403
12/11/2021	24.46	23.31	105606968
12/12/2021	24.38	23.06	105640175
12/13/2021	24.50	22.97	105673247
12/14/2021	24.85	23.07	105706464
12/15/2021	24.76	22.99	105739570
12/16/2021	24.98	23.09	105772826
12/17/2021	24.52	22.51	105805236
12/18/2021	24.25	22.38	105837463
12/19/2021	24.17	22.31	105869596
12/20/2021	24.10	22.18	105901536
12/21/2021	24.10	22.03	105933263
12/22/2021	23.95	22.01	105964954
12/23/2021	23.74	21.95	105996561
12/24/2021	23.48	21.87	106028049
12/25/2021	23.46	21.68	106059273
12/26/2021	23.41	21.63	106090414
12/27/2021	22.59	21.16	106120891
12/28/2021	23.12	21.40	106151706
12/29/2021	23.22	21.64	106182869
12/30/2021	23.17	21.80	106214254
12/31/2021	23.30	21.48	106245178
Average For The Month	23.67	22.01	
Total[2][5]:			982,639

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

Well	October 15, 2021 (ft msl)	November 08, 2021 (ft msl)	December 02, 2021 (ft msl)
PW01	1163.96	-----	-----
PW02	Abandoned	Abandoned	Abandoned
PW03	1163.76	-----	-----
PW3S	1162.83	-----	-----
PW04	1162.63	-----	-----
PW05	1162.64	-----	-----
PW06	1163.02	-----	-----
PW07	1162.77	-----	-----
PW08	1164.22	-----	-----
PW09I	-----	-----	-----
PW09O	1162.7	-----	-----
PW10	1162.94	-----	-----
PW11	1161.25	-----	-----
PW12	1164.16	-----	-----
PW13	1162.73	-----	-----
PW14	1161.91	-----	-----
PW15	1162.05	-----	-----
PW16	1161.42	-----	-----
PW17	1159.65	-----	-----
PW18	1162.68	-----	-----
PW19	1161.06	-----	-----
PW20	1161.29	-----	-----
PW21	1161.77	-----	-----
PW22	1162.7	-----	-----
PW23	1162.59	-----	-----
PW24	1160.61	-----	-----
PW25	1158.99	-----	-----
PW26	1160.08	-----	-----
PW27	1157.27	-----	-----
PW28	1163.92	-----	-----
PW29	1164.06	-----	-----
P01	1162.62	-----	-----
OW01	1165.29	-----	-----
W01A	Abandoned	Abandoned	Abandoned
W01B	Abandoned	Abandoned	Abandoned
W02	1163.67	-----	-----
W03A	1161.64	-----	-----
W03B	1161.78	-----	-----
W04A	1163.09	-----	-----
W04B	1163.02	-----	-----
W05	1162.71	-----	-----
W06R	1164.38	-----	-----
W07	1164.05	-----	-----
W08	1174.64	-----	-----
W09	1162.69	-----	-----
W10A	1160.92	1160.81	1160.85
W10B	1160.76	-----	-----
W11	1159.97	1160.00	1160.22
W12	1159.59	1159.66	1159.90
W13	1161.69	-----	-----
W14	1159.5	1159.59	1159.99
W16	1161.65	1161.33	1161.33
W17	1161.96	-----	-----

TABLE 3 (continued)

Groundwater Elevation Data
Wauleco, Inc.
Wausau, Wisconsin

Well	October 15, 2021 (ft msl)	November 08, 2021 (ft msl)	December 02, 2021 (ft msl)
W18	1161.1	-----	-----
W19	Abandoned	Abandoned	Abandoned
W21	1159.62	1159.79	1160.21
W22	1161.45	1160.99	1160.87
W23	1159.63	-----	-----
W24A	1159.58	-----	-----
W25	1164.47	-----	-----
W26/W26R	1160.52	1160.49	1160.60
W27	1161.08	1160.88	1160.93
W28	1161.09	-----	-----
W29/W29R	1160.35	1160.39	1160.54
W30	1162.6	-----	-----
W31	1160.74	-----	-----
W32	1160.71	1160.68	1160.85
W33	1162.81	-----	-----
W34	1162.75	-----	-----
W35	1162.90	-----	-----
W36	1163.57	-----	-----
W39	Abandoned	Abandoned	Abandoned
W40/W40R	1161.224	-----	-----
W41	1162.44	-----	-----
W42	1163.55	-----	-----
W44	1162.61	-----	-----
W45	1162.93	-----	-----
W46	1162.51	-----	-----
W47	1161.32	-----	-----
W48	1161.55	-----	-----
W49	1162.13	-----	-----
W66	1164.21	-----	-----
W67	1164.17	-----	-----
W68A	1164.23	-----	-----
W68B	1164.1	-----	-----
W69	1163.03	-----	-----
W70B	Abandoned	Abandoned	Abandoned
River	-----	-----	-----
IW01	1162.73	-----	-----
IW01A	1162.68	-----	-----
FP01	1160.73	-----	-----
FP02	1160.86	-----	-----
FP03	1159.73	-----	-----
FP04	1160.79	-----	-----
3M Basin	Water in first Basin	----	-----
DFOWM 5	-----	-----	-----
DFOWM 9	Abandoned	Abandoned	Abandoned
DFOWM 10A	Abandoned	Abandoned	Abandoned
DFOWM 11	-----	-----	-----
DFOWM 12	-----	-----	-----
W71	-----	-----	-----
W72	1165.65	-----	-----
W73	1166.12	-----	-----
W74	1154.28	-----	-----

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

Well	October 15, 2021 (ft)	November 08, 2021 (ft msl)	December 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	0.03	-----	-----
PW17	0.00	-----	-----
PW18	0.00	-----	-----
PW19	0.17	-----	-----
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	Abandoned	Abandoned	Abandoned
W01B	Abandoned	Abandoned	Abandoned
W02	0.00	-----	-----
W03A	0.00	-----	-----
W03B	0.00	-----	-----
W04A	0.13	-----	-----
W04B	0.00	-----	-----
W05	0.00	-----	-----
W06R	0.00	-----	-----
W07	0.12	-----	-----
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	-----	-----

Table 4 (continued)

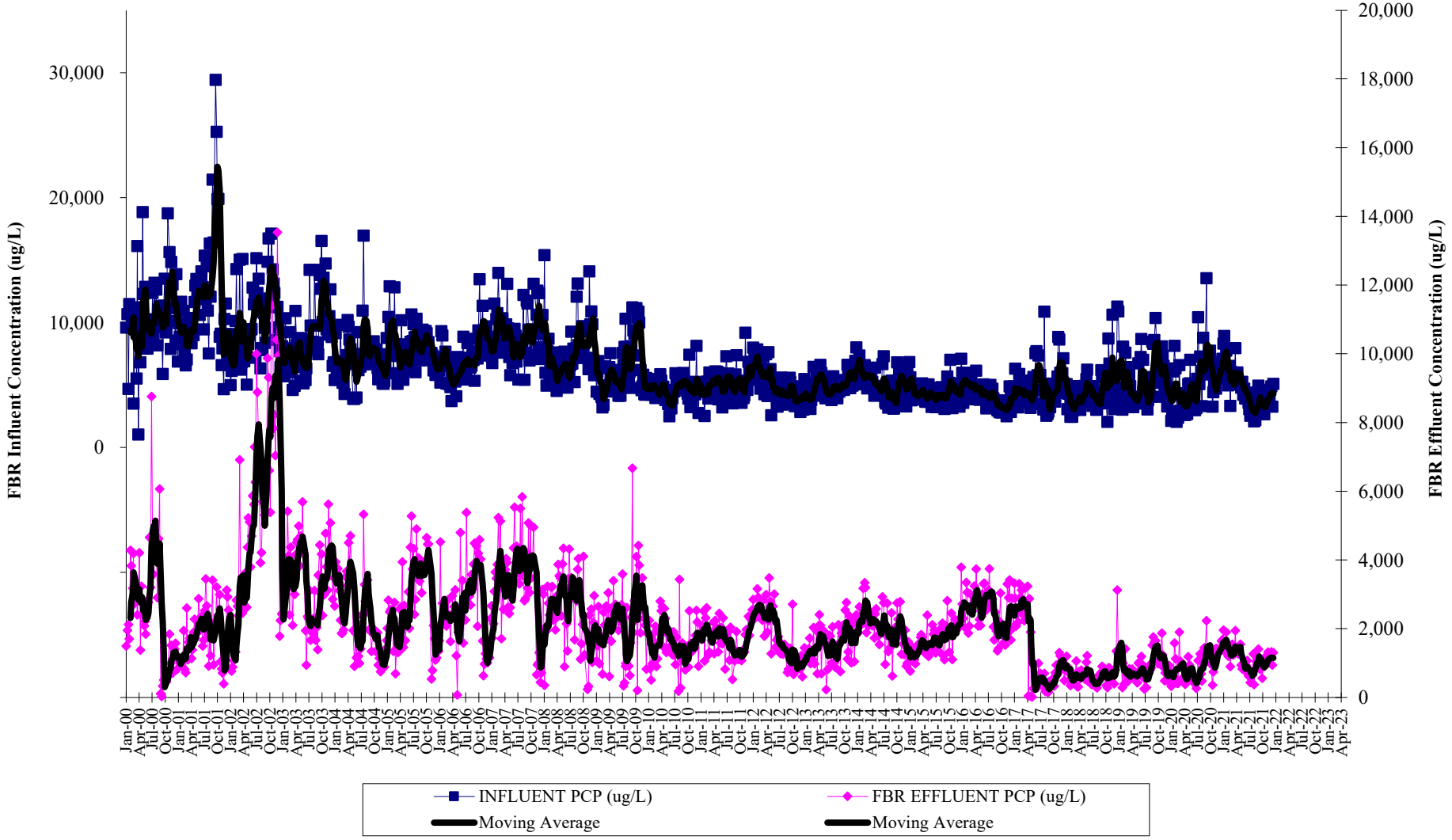
Free Product Measurements
Wauleco, Inc.
Wausau, Wisconsin

Well	October 15, 2021 (ft)	November 08, 2021 (ft msl)	December 02, 2021 (ft msl)
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	0.06	-----	-----
W36	0.00	-----	-----
W39	Abandoned	Abandoned	Abandoned
W40/W40R	0.13	-----	-----
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	-----	-----	-----
DFOWM 9	Abandoned	Abandoned	Abandoned
DFOWM 10A	Abandoned	Abandoned	Abandoned
DFOWM 11	-----	-----	-----
DFOWM 12	-----	-----	-----
W71	-----	-----	-----
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

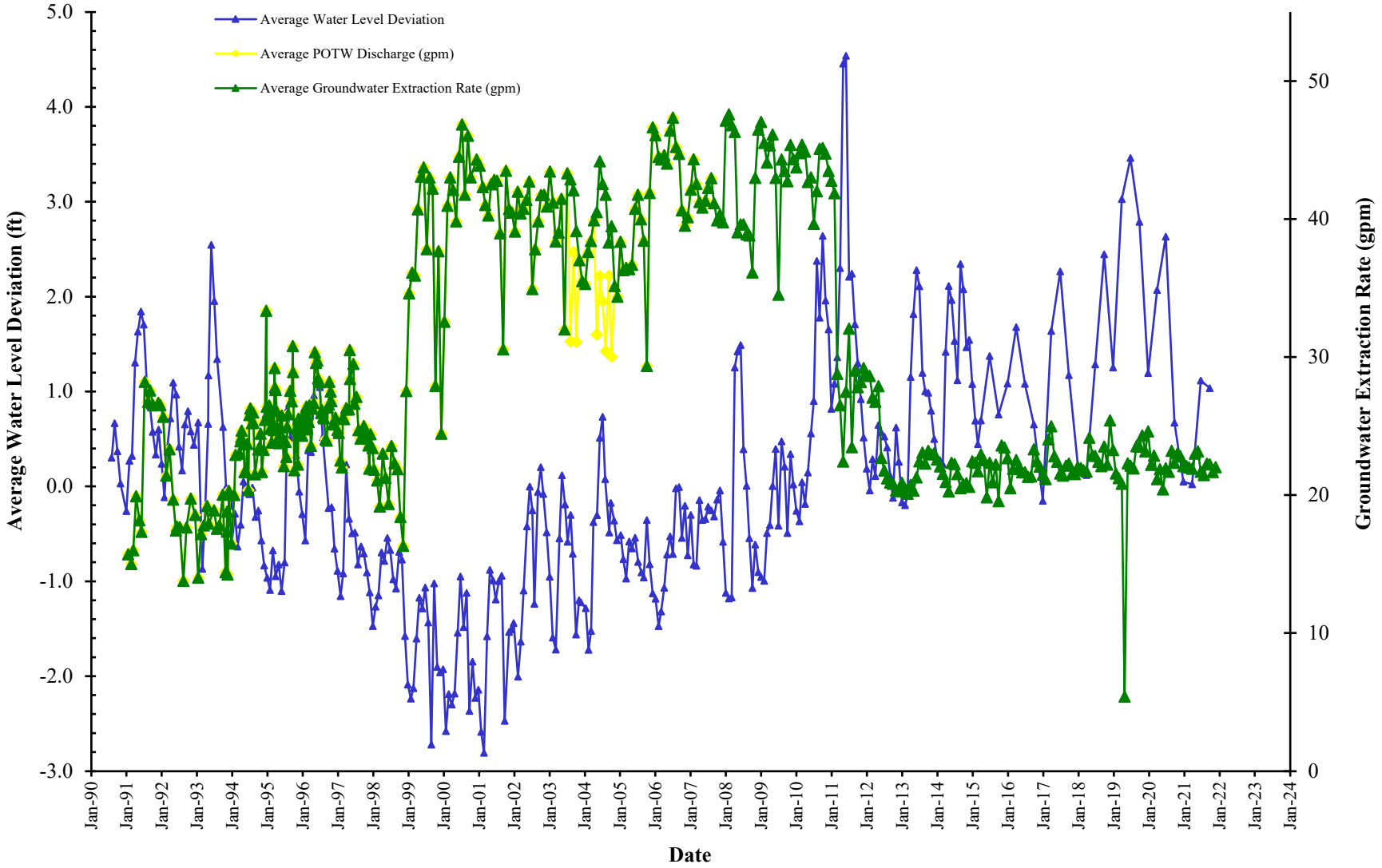
FIGURE 1
FBR Influent and Effluent PCP Concentrations
Wauleco, Inc.
Wausau, WI



\\madison-vfp\Records\-\WPMSN\PJT2\189597\0011\000001\1895970011PH1-001_F1-F2.xlsx

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.