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2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

WESTON UNITS 3 & 4 BOTTOM ASH BASINS

**2024 ANNUAL GROUNDWATER MONITORING AND
CORRECTIVE ACTION REPORT
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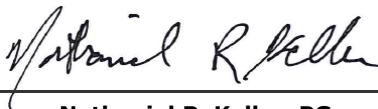
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ACRONYMS AND ABBREVIATIONS

§	Section
40 C.F.R.	Title 40 of the Code of Federal Regulations
ASD	Alternate Source Demonstration
CCR	Coal Combustion Residuals
GWPS	Groundwater Protection Standard
NA	not applicable
NRT/OBG	Natural Resource Technology, an OBG Company
Ramboll	Ramboll Americas Engineering Solutions, Inc.
SAP	Sampling and Analysis Plan
SSI	Statistically Significant Increase
TBD	to be determined
Weston	Weston Generating Station

EXECUTIVE SUMMARY

This report has been prepared to provide the information required by Title 40 of the Code of Federal Regulations (40 C.F.R.) Section (§) 257.90(e) for the Weston Generating Station (Weston) Units 3 & 4 Bottom Ash Basins (BABs) located in Rothschild, Wisconsin.

Groundwater is being monitored at Weston Units 3 & 4 BABs in accordance with the Detection Monitoring Program requirements specified in 40 C.F.R. § 257.94.

No changes were made to the monitoring system in 2024 (no wells were installed or decommissioned).

In 2024, groundwater analytical data was evaluated for statistically significant increases (SSIs) over background concentrations for 40 C.F.R. § 257 Appendix III constituents in groundwater monitoring wells at the Weston Units 3 & 4 BABs. The following constituents and wells had SSIs detected in 2024:

- Calcium (Ca) – OW-50
- pH – OW-50
- Sulfate (SO₄) – OW-50

Alternate Source Demonstrations (ASDs) prepared in prior years for these parameters and monitoring locations provide justification that the SSIs observed during the Detection Monitoring Program were not due to a release from the Weston Units 3 & 4 BABs but were likely due to naturally occurring conditions (*e.g.*, natural variation in groundwater quality).

The Weston Units 3 & 4 BABs remain in the Detection Monitoring Program in accordance with 40 C.F.R. § 257.94.

1. INTRODUCTION

This report has been prepared by Ramboll Americas Engineering Solutions, Inc. (Ramboll) on behalf of Wisconsin Public Service Corporation, to provide the information required by 40 C.F.R. § 257.90(e) for the Weston Units 3 & 4 BABs located in Rothschild, Wisconsin.

In accordance with 40 C.F.R. § 257.90(e), the owner or operator of a coal combustion residuals (CCR) unit must prepare an Annual Groundwater Monitoring and Corrective Action Report for the preceding calendar year that documents the status of the Groundwater Monitoring and Corrective Action Program for the CCR unit (**Section 2**), summarizes key actions completed (**Section 3**), describes any problems encountered, discusses actions to resolve the problems (**Section 4**), and projects key activities for the upcoming year (**Section 5**). At a minimum, the annual report must contain the following information, to the extent available:

1. A map, aerial image, or diagram showing the CCR unit and all background (or upgradient) and downgradient monitoring wells, to include the well identification numbers, that are part of the groundwater monitoring program for the CCR unit (**Figure 1**).
2. Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken (**Section 3**).
3. In addition to all the monitoring data obtained under §§ 257.90 through 257.98 (**Tables 1 and 2**), a summary including the number of groundwater samples that were collected for analysis for each background and downgradient well, the dates the samples were collected, and whether the sample was required by the Detection Monitoring or Assessment Monitoring Programs (**Section 3 and Table A**).
4. A narrative discussion of any transition between monitoring programs (*e.g.*, the date and circumstances for transitioning from Detection Monitoring to Assessment Monitoring (**Section 2**) in addition to identifying the constituent(s) detected at an SSI relative to background levels) (**Table A**).
5. Other information required to be included in the annual report as specified in §§ 257.90 through 257.98.
6. A section at the beginning of the annual report that provides an overview of the current status of groundwater monitoring and corrective action programs for the CCR unit (**Executive Summary**). At a minimum, the summary must specify all of the following:
 - i. At the start of the current annual reporting period, whether the CCR unit was operating under the Detection Monitoring Program in § 257.94 or the Assessment Monitoring Program in § 257.95.
 - ii. At the end of the current annual reporting period, whether the CCR unit was operating under the Detection Monitoring Program in § 257.94 or the Assessment Monitoring Program in § 257.95.
 - iii. If it was determined that there was an SSI over background for one or more constituents listed in Appendix III of § 257 pursuant to § 257.94(e):
 - A. Identify those constituents listed in Appendix III of § 257 and the names of the monitoring wells associated with such an increase.

- B. Provide the date when the Assessment Monitoring Program was initiated for the CCR unit.
- iv. If it was determined that there was a statistically significant level above the groundwater protection standard [GWPS] for one or more constituents listed in Appendix IV of § 257 pursuant to § 257.95(g) include all of the following:
 - A. Identify those constituents listed in Appendix IV of § 257 and the names of the monitoring wells associated with such an increase.
 - B. Provide the date when the assessment of corrective measures was initiated for the CCR unit.
 - C. Provide the date when the public meeting was held for the assessment of corrective measures for the CCR unit.
 - D. Provide the date when the assessment of corrective measures was completed for the CCR unit.
- v. Whether a remedy was selected pursuant to § 257.97 during the current annual reporting period, and if so, the date of remedy selection.
- vi. Whether remedial activities were initiated or are ongoing pursuant to § 257.98 during the current annual reporting period.

This report provides the required information for the Weston Units 3 & 4 BABs for calendar year 2024.

2. MONITORING AND CORRECTIVE ACTION PROGRAM STATUS

No changes have occurred to the monitoring program status in calendar year 2024 the Weston Units 3 & 4 Bottom Ash Basins remain in the Detection Monitoring Program in accordance with 40 C.F.R. § 257.94.

3. KEY ACTIONS COMPLETED IN 2024

The Detection Monitoring Program is summarized in **Table A** on the following page. The groundwater monitoring system, including the CCR unit and all background (upgradient) and downgradient monitoring wells, is presented in **Figure 1**. No changes were made to the monitoring system in 2024.

In general, one groundwater sample was collected from each background and downgradient well during each monitoring event. All samples were collected and analyzed in accordance with the *Sampling and Analysis Plan* (SAP; Natural Resource Technology, an OBG Company [NRT/OBG], 2017) prepared for Weston Units 3 & 4 BABs. Potentiometric surface maps for the fourth quarter of 2023 and both monitoring events in 2024 are included in **Figures 2 through 4**. Water level data, collected from background and downgradient monitoring wells, are included in **Table 1**. All monitoring data and analytical results obtained under 40 C.F.R. §§ 257.90 through 257.98 (as applicable) in the fourth quarter of 2023 and both monitoring events in 2024 are presented in **Table 2**. Laboratory reports for both 2024 monitoring events are included in **Appendix A**¹. Results for analysis of additional samples required by Ch. NR 507 Wisconsin Administrative Code are included in some reports because they were collected during the same sampling events, but are not summarized in this report.

Analytical data were evaluated in accordance with the *Statistical Analysis Plan, Weston Units 3 & 4 Bottom Ash Basins* (NRT/OBG, 2017) to determine any SSIs of Appendix III parameters relative to background concentrations. Statistical background values are provided in **Table 3**. A flow chart showing the statistical methodology for determination of background values is included as **Appendix B**.

Statistical evaluation, including SSI determinations, of analytical data from the Detection Monitoring Program for the December 5, 2023 (Detection Monitoring Round 13) and June 19, 2024 (Detection Monitoring Round 14) sampling events were completed in 2024 and within 90 days of receipt of the analytical data. The SSIs determined in 2024 were also determined in previous sampling events. Potential alternate sources and natural variation were evaluated following those previous sampling events as outlined in the 40 C.F.R. § 257.94(e)(2). ASDs were completed and certified by a qualified professional engineer. The dates ASDs were completed are provided in the notes of **Table A**.

¹ Laboratory reports for the fourth quarter of 2023 monitoring event were provided in the 2023 annual report.

Table A. 2023-2024 Detection Monitoring Program Summary

Detection Round	Sampling Date	Analytical Data Receipt Date	Parameters Collected	SSI Wells (Parameters)	SSI(s) Determination Date	ASD Completion Date ¹
13	December 5, 2023	January 24, 2023	Appendix III	OW-50 (SO ₄ , and pH - low)	April 23, 2024	NA
14	June 19, 2024	July 12, 2024	Appendix III	OW-50 (Ca, pH - low, and SO ₄)	October 10, 2024	NA
15	December 10, 2024	January 23, 2025	Appendix III	TBD	TBD Before April 23, 2025	TBD

Notes:

NA = not applicable

TBD = to be determined

¹ The ASDs dated April 15, 2018, January 8, 2022, and July 5, 2023 for Weston Units 3 & 4 BABs provided a description, data, and pertinent information supporting an alternate source for the wells and parameters with SSIs identified during the December 5, 2023 and June 19, 2024 sampling events.

4. PROBLEMS ENCOUNTERED AND ACTIONS TO RESOLVE THE PROBLEMS

No problems were encountered with the groundwater monitoring program during 2024. Groundwater samples were collected and analyzed in accordance with the SAP and all data were accepted.

5. KEY ACTIVITIES PLANNED FOR 2025

The following key activities are planned for 2025:

- Continuation of the Detection Monitoring Program with semi-annual sampling scheduled for the second and fourth quarters of 2025.
- Complete evaluation of analytical data from the downgradient wells using background data to determine whether an SSI of Appendix III parameters detected at concentrations greater than background concentrations has occurred.
- If an SSI is identified, potential alternate sources (*i.e.*, a source other than the CCR unit caused the SSI or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality) will be evaluated.
 - If an alternate source is identified to be the cause of the SSI, a written demonstration will be completed within 90 days of SSI determination and included in the 2025 Annual Groundwater Monitoring and Corrective Action Report.
 - If an alternate source(s) is not identified to be the cause of the SSI, the applicable requirements of 40 C.F.R. §§ 257.94 through 257.98 as may apply in 2025 (*e.g.*, Assessment Monitoring) will be met, including associated recordkeeping/notifications required by 40 C.F.R. §§ 257.105 through 257.108.

6. REFERENCES

Natural Resource Technology, an OBG Company (NRT/OBG), 2017, *Sampling and Analysis Plan, Weston Units 3 & 4 Bottom Ash Basins, Rothschild, Wisconsin, October 2, 2017.*

Natural Resource Technology, an OBG Company (NRT/OBG), 2017, *Statistical Analysis Plan, Weston Units 3 & 4 Bottom Ash Basins, Rothschild, Wisconsin, October 17, 2017.*

TABLES

TABLE 1. GROUNDWATER ELEVATIONS

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 WESTON GENERATING STATION UNITS 3 & 4 BOTTOM ASH BASINS
 ROTHSCHILD, WI

Well ID	Well Type	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	Date	Groundwater Elevation (ft NAVD88)
OW-45	Background (Upgradient)	44.853310	-89.649109	6/18/2024	1148.19
				12/10/2024	1148.76
OW-46	Background (Upgradient)	44.852081	-89.649947	6/18/2024	1148.53
				12/10/2024	1149.07
OW-47R	Compliance (Downgradient)	44.854553	-89.654607	6/18/2024	1145.66
				12/10/2024	1145.84
OW-48	Compliance (Downgradient)	44.854558	-89.655273	6/18/2024	1145.32
				12/10/2024	1145.43
OW-49	Compliance (Downgradient)	44.854477	-89.656204	6/18/2024	1145.11
				12/10/2024	1145.16
OW-50	Compliance (Downgradient)	44.853785	-89.656657	6/18/2024	1145.18
				12/10/2024	1145.19

Notes:

ft = foot/feet

NAVD88 = North American Vertical Datum of 1988

Weston Unit 3&4 Bottom Ash CCR
Table 2. Analytical Results - Appendix III Parameters

Date Range: 12/01/2023 to 12/31/2024

Lab Methods:

Well Id	Date Sampled	Lab Id	B, tot, mg/L	Ca, tot, mg/L	Cl, tot, mg/L	F, tot, mg/L	pH (field), STD	SO4, tot, mg/L
OW-45	12/5/2023	AE70576	0.0304	24.5000	56.7	<0.48	6.5	12.3
	6/19/2024	AE73710	0.0291	16.4000	30.5	<0.10	6.7	11.7
	12/10/2024	AE76240	0.0553	18.9000	40.9	<0.10	6.7	11.8
OW-46	12/5/2023	AE70577	0.0278	12.2000	51.0	<0.48	6.6	9.5
	6/19/2024	AE73711	0.0212	18.2000	68.8	<0.10	6.4	10.8
	12/10/2024	AE76241	0.0518	14.3000	52.8	<0.48	6.6	12.0
OW-47R	12/5/2023	AE70578	0.0536	25.7000	68.0	<0.48	6.1	26.0
	6/19/2024	AE73712	0.0357	24.3000	78.6	<0.10	6.0	15.0
	12/10/2024	AE76242	0.0464	24.4000	73.6	<0.48	6.2	21.8
OW-48	12/5/2023	AE70579	0.2220	34.8000	64.3	<0.48	6.4	86.5
	6/19/2024	AE73713	0.3210	38.1000	67.1	<0.48	6.3	86.6
	12/10/2024	AE76243	0.2180	30.5000	74.5	<0.48	6.4	63.4
OW-49	12/5/2023	AE70580	0.1520	25.4000	91.9	<0.48	6.1	53.0
	6/19/2024	AE73714	0.1980	32.6000	98.3	<0.48	6.0	86.7
	12/11/2024	AE76244	0.1860	34.7000	105.0	<0.48	6.2	77.1
OW-50	12/5/2023	AE70581	0.0322	27.4000	64.4	<0.48	5.7	28.3
	6/19/2024	AE73715	0.0314	28.3000	74.8	<0.48	5.7	33.9
	12/11/2024	AE76245	0.0433	24.3000	60.7	<0.48	5.8	33.1

Weston Unit 3&4 Bottom Ash CCR
Table 2. Analytical Results - Appendix III Parameters

Date Range: 12/01/2023 to 12/31/2024

Lab Methods:

Well Id	Date Sampled	Lab Id	TDS, mg/L
OW-45	12/5/2023	AE70576	180.0
	6/19/2024	AE73710	138.0
	12/10/2024	AE76240	138.0
OW-46	12/5/2023	AE70577	148.0
	6/19/2024	AE73711	192.0
	12/10/2024	AE76241	142.0
OW-47R	12/5/2023	AE70578	188.0
	6/19/2024	AE73712	246.0
	12/10/2024	AE76242	176.0
OW-48	12/5/2023	AE70579	292.0
	6/19/2024	AE73713	336.0
	12/10/2024	AE76243	248.0
OW-49	12/5/2023	AE70580	298.0
	6/19/2024	AE73714	348.0
	12/11/2024	AE76244	310.0
OW-50	12/5/2023	AE70581	232.0
	6/19/2024	AE73715	258.0
	12/11/2024	AE76245	176.0

Notes:

Exceedance of Background

TABLE 3**STATISTICAL BACKGROUND VALUES**

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

WESTON GENERATING STATION

UNITS 3 & 4 BOTTOM ASH BASINS

ROTHSCHILD, WISCONSIN

Parameter	Well ID	Statistical Background Value (LPL/UPL)
40 C.F.R. Part 257 Appendix III		
Boron (mg/L)	OW-45	0.0442
Boron (mg/L)	OW-46	0.0402
Boron (mg/L)	OW-47/OW-47R	0.481
Boron (mg/L)	OW-48	1.02
Boron (mg/L)	OW-49	0.699
Boron (mg/L)	OW-50	0.0578
Calcium (mg/L)	OW-45	22.4
Calcium (mg/L)	OW-46	26.1
Calcium (mg/L)	OW-47/OW-47R	100
Calcium (mg/L)	OW-48	105
Calcium (mg/L)	OW-49	98.6
Calcium (mg/L)	OW-50	28.2
Chloride (mg/L)	OW-45	85.7
Chloride (mg/L)	OW-46	117
Chloride (mg/L)	OW-47/OW-47R	126
Chloride (mg/L)	OW-48	116
Chloride (mg/L)	OW-49	331
Chloride (mg/L)	OW-50	112
Fluoride (mg/L)	OW-45	0.840
Fluoride (mg/L)	OW-46	DQR
Fluoride (mg/L)	OW-47/OW-47R	0.100
Fluoride (mg/L)	OW-48	0.110
Fluoride (mg/L)	OW-49	DQR
Fluoride (mg/L)	OW-50	0.11
pH (field) (SU)	OW-45	6.0/9.0
pH (field) (SU)	OW-46	4.7/9.6
pH (field) (SU)	OW-47/OW-47R	4.8/9.7
pH (field) (SU)	OW-48	4.9/9.9
pH (field) (SU)	OW-49	5.0/9.8
pH (field) (SU)	OW-50	6.1/7.4
Sulfate (mg/L)	OW-45	31.3
Sulfate (mg/L)	OW-46	93.6
Sulfate (mg/L)	OW-47/OW-47R	171
Sulfate (mg/L)	OW-48	192
Sulfate (mg/L)	OW-49	171
Sulfate (mg/L)	OW-50	20.3
Total Dissolved Solids (mg/L)	OW-45	234
Total Dissolved Solids (mg/L)	OW-46	301

TABLE 3

STATISTICAL BACKGROUND VALUES

2024 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

WESTON GENERATING STATION

UNITS 3 & 4 BOTTOM ASH BASINS

ROTHSCHILD, WISCONSIN

Parameter	Well ID	Statistical Background Value (LPL/UPL)
40 C.F.R. Part 257 Appendix III		
Total Dissolved Solids (mg/L)	OW-47/OW-47R	601
Total Dissolved Solids (mg/L)	OW-48	515
Total Dissolved Solids (mg/L)	OW-49	552
Total Dissolved Solids (mg/L)	OW-50	273

Notes:

40 C.F.R. = Title 40 of the Code of Federal Regulations

LPL = Lower Prediction Limit (applicable for pH only)

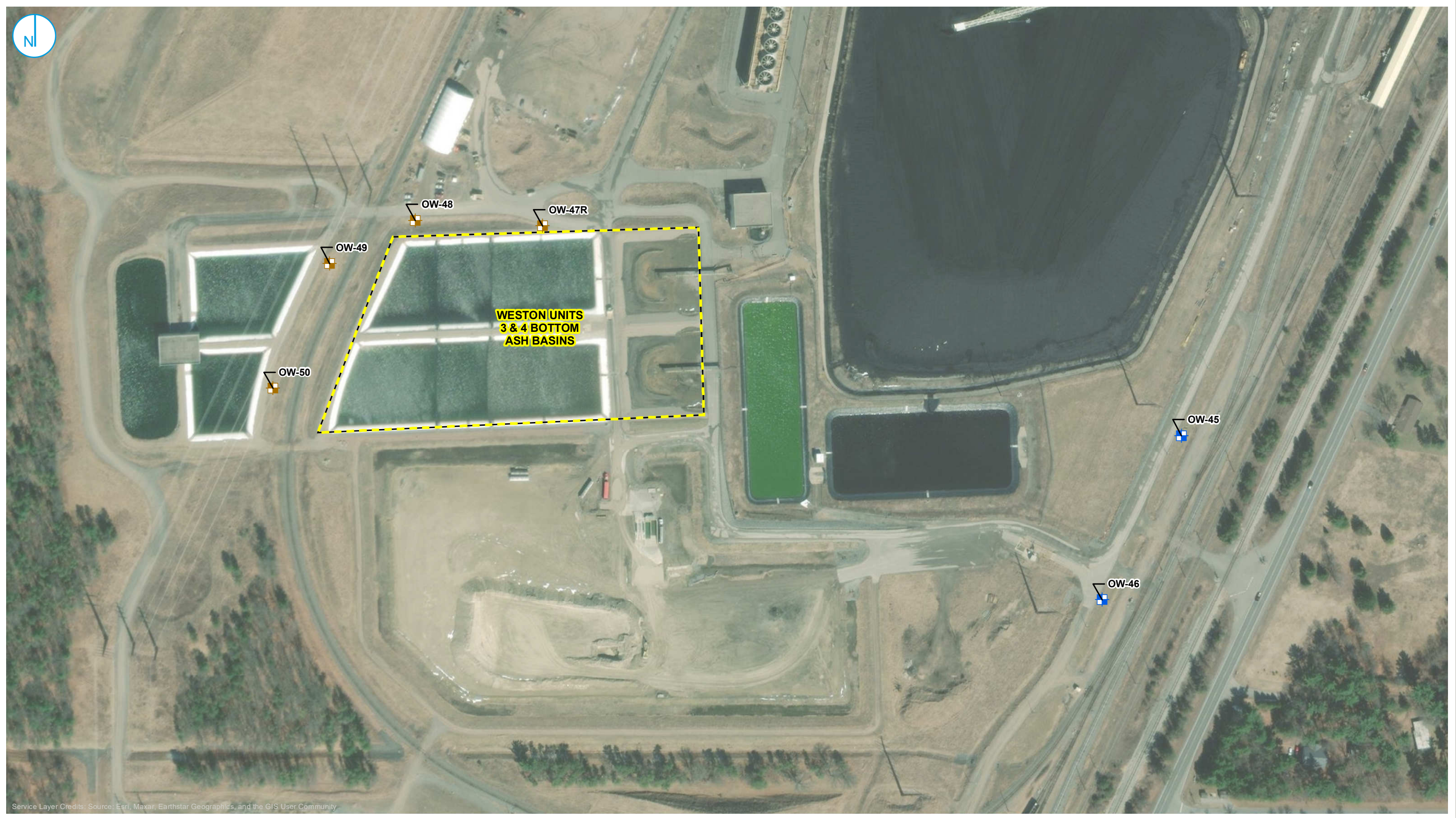
mg/L = milligrams per liter

DQR = Double quantification rule, background data set is non-detect. If parameter is detected in both the sample event and a resample it is considered an exceedance.




SU = Standard Units

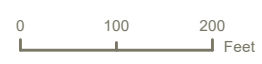
UPL = Upper Prediction Limit

FIGURES



Service Layer Credits: Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

-  CCR RULE UPGRADIENT MONITORING WELL LOCATION
-  CCR RULE DOWNGRADIENT MONITORING WELL LOCATION
-  UNIT BOUNDARY



GROUNDWATER SAMPLING WELL LOCATION MAP

FIGURE 1

2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
WESTON GENERATING STATION UNITS 3 & 4 BOTTOM ASH BASINS
ROTHSCHILD, WISCONSIN

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.





- CCR RULE MONITORING WELL LOCATION
- GROUNDWATER ELEVATION CONTOUR (1-FT CONTOUR INTERVAL, NAVD 88)
- GROUNDWATER FLOW DIRECTION
- UNIT BOUNDARY



**POTENTIOMETRIC SURFACE MAP
DECEMBER 5, 2023**

**2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
WESTON GENERATING STATION UNITS 3 & 4
BOTTOM ASH BASINS
ROTHSCHILD, WISCONSIN**

FIGURE 2





- CCR RULE MONITORING WELL LOCATION
- GROUNDWATER ELEVATION CONTOUR (1-FT CONTOUR INTERVAL, NAVD 88)
- GROUNDWATER FLOW DIRECTION
- UNIT BOUNDARY



**POTENTIOMETRIC SURFACE MAP
JUNE 18, 2024**

**2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
WESTON GENERATING STATION UNITS 3 & 4
BOTTOM ASH BASINS
ROTHSCHILD, WISCONSIN**

FIGURE 3





- CCR RULE MONITORING WELL LOCATION
- GROUNDWATER ELEVATION CONTOUR (1-FT CONTOUR INTERVAL, NAVD 88)
- GROUNDWATER FLOW DIRECTION
- UNIT BOUNDARY



**POTENTIOMETRIC SURFACE MAP
DECEMBER 10, 2024**

**2024 ANNUAL GROUNDWATER MONITORING
AND CORRECTIVE ACTION REPORT
WESTON GENERATING STATION UNITS 3 & 4
BOTTOM ASH BASINS
ROTHSCHILD, WISCONSIN**

FIGURE 4



APPENDICES

APPENDIX A
LABORATORY REPORTS

To: Eric Kovatch
 PSB Annex A231

From: WEC Business Services
 Laboratory Services PSBA-A070
 WDNR Cert # 241329000



Report Date: Friday, July 12, 2024

The following are the analytical results for samples received by Laboratory Services:

Sample Description: **OW-45 Weston Units 3-4 Bottom Ash Basins Well Sample**
 Sample ID: AE73710 Sample Collection Date/Time: 06/19/2024 13:00
 Sample Received: 07/09/2024 Sample Collector: J OETTINGER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	26.94	0.05	feet		1		H2OD	6/19/24	R E LEE
Field Temperature	7.7	0.1	Degrees C		1		TEMP	6/19/24	R E LEE
Field Conductivity	250	0	umhos		1		FCOND25	6/19/24	R E LEE
Field pH	6.7	0.1	Units	0.1	1		FIELDPH	6/19/24	R E LEE
Dissolved Oxygen-Field	10.3	0.1	mg/l		1		FIELDDO	6/19/24	R E LEE
Turbidity	4.21	0.1	NTU'S		1		EPA 180.1	6/19/24	R E LEE
Redox Potential	179	1	mV		1		ASTM D1498-93	6/19/24	R E LEE
Total Boron	29.1	17.3	ug/L	40.0	1	J	EPA 200.7	6/24/24	020
Total Calcium	16400	114	ug/L	500	1		EPA 200.7	6/24/24	020
Total Dissolved Solids	138	8.7	mg/L	20.0	1		Std Mtd 2540 C	6/25/24	020
Total Chloride	30.5	0.59	mg/L	2.0	1		EPA 300.0	7/3/24	020
Total Fluoride	Less Than	0.095	mg/L	0.32	1		EPA 300.0	7/3/24	020
Total Sulfate	11.7	0.44	mg/L	2.0	1		EPA 300.0	7/3/24	020

Sample Comments:

Sample Description: **OW-46 Weston Units 3-4 Bottom Ash Basins Well Sample**
 Sample ID: AE73711 Sample Collection Date/Time: 06/19/2024 14:16
 Sample Received: 07/09/2024 Sample Collector: J OETTINGER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	28.15	0.05	feet		1		H2OD	6/19/24	R E LEE
Field Temperature	8.0	0.1	Degrees C		1		TEMP	6/19/24	R E LEE
Field Conductivity	316	0	umhos		1		FCOND25	6/19/24	R E LEE
Field pH	6.4	0.1	Units	0.1	1		FIELDPH	6/19/24	R E LEE
Dissolved Oxygen-Field	9.23	0.1	mg/l		1		FIELDDO	6/19/24	R E LEE
Turbidity	3.07	0.1	NTU'S		1		EPA 180.1	6/19/24	R E LEE
Redox Potential	202	1	mV		1		ASTM D1498-93	6/19/24	R E LEE
Total Boron	21.2	17.3	ug/L	40.0	1	J	EPA 200.7	6/24/24	020
Total Calcium	18200	114	ug/L	500	1		EPA 200.7	6/24/24	020
Total Dissolved Solids	192	8.7	mg/L	20.0	1		Std Mtd 2540 C	6/25/24	020
Total Chloride	68.8	3.0	mg/L	10.0	5		EPA 300.0	7/2/24	020
Total Fluoride	Less Than	0.095	mg/L	0.32	1		EPA 300.0	7/3/24	020
Total Sulfate	10.8	0.44	mg/L	2.0	1		EPA 300.0	7/3/24	020

Report Date: Friday, July 12, 2024

The following are the analytical results for samples received by Laboratory Services:

Sample Comments:

Sample Description: **OW-47R Weston Units 3-4 Bottom Ash Basins Well Sample**
 Sample ID: AE73712 Sample Collection Date/Time: 06/19/2024 15:00
 Sample Received: 07/09/2024 Sample Collector: J OETTINGER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	37.85	0.05	feet		1		H2OD	6/19/24	RE LEE
Field Temperature	9.4	0.1	Degrees t		1		TEMP	6/19/24	RE LEE
Field Conductivity	340	0	umhos		1		FCOND25	6/19/24	RE LEE
Field pH	6.0	0.1	Units	0.1	1		FIELDPH	6/19/24	RE LEE
Dissolved Oxygen-Field	3.04	0.1	mg/l		1		FIELDDO	6/19/24	RE LEE
Turbidity	2.08	0.1	NTU'S		1		EPA 180.1	6/19/24	RE LEE
Redox Potential	210	1	mV		1		ASTM D1498-93	6/19/24	RE LEE
Total Boron	35.7	17.3	ug/L	40.0	1	J	EPA 200.7	6/24/24	020
Total Calcium	24300	114	ug/L	500	1		EPA 200.7	6/24/24	020
Total Dissolved Solids	246	8.7	mg/L	20.0	1		Std Mtd 2540 C	6/25/24	020
Total Chloride	78.6	3.0	mg/L	10.0	5		EPA 300.0	7/2/24	020
Total Fluoride	Less Than	0.095	mg/L	0.32	1		EPA 300.0	7/3/24	020
Total Sulfate	15.0	0.44	mg/L	2.0	1		EPA 300.0	7/3/24	020

Sample Comments:

Sample Description: **OW-48 Weston Units 3-4 Bottom Ash Basins Well Sample**
 Sample ID: AE73713 Sample Collection Date/Time: 06/19/2024 15:36
 Sample Received: 07/09/2024 Sample Collector: J OETTINGER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	31.10	0.05	feet		1		H2OD	6/19/24	RE LEE
Field Temperature	9.2	0.1	Degrees t		1		TEMP	6/19/24	RE LEE
Field Conductivity	547	0	umhos		1		FCOND25	6/19/24	RE LEE
Field pH	6.3	0.1	Units	0.1	1		FIELDPH	6/19/24	RE LEE
Dissolved Oxygen-Field	7.76	0.1	mg/l		1		FIELDDO	6/19/24	RE LEE
Turbidity	2.87	0.1	NTU'S		1		EPA 180.1	6/19/24	RE LEE
Redox Potential	214	1	mV		1		ASTM D1498-93	6/19/24	RE LEE
Total Boron	321	17.3	ug/L	40.0	1		EPA 200.7	6/24/24	020
Total Calcium	38100	114	ug/L	500	1		EPA 200.7	6/24/24	020
Total Dissolved Solids	336	8.7	mg/L	20.0	1		Std Mtd 2540 C	6/25/24	020
Total Chloride	67.1	3.0	mg/L	10.0	5	M0	EPA 300.0	7/3/24	020
Total Fluoride	Less Than	0.48	mg/L	1.60	5	D3, M0	EPA 300.0	7/3/24	020
Total Sulfate	86.6	2.2	mg/L	10	5	M0	EPA 300.0	7/3/24	020

Report Date: Friday, July 12, 2024

The following are the analytical results for samples received by Laboratory Services:

Sample Comments:

Sample Description: **OW-49 Weston Units 3-4 Bottom Ash Basins Well Sample**
 Sample ID: AE73714 Sample Collection Date/Time: 06/19/2024 16:08
 Sample Received: 07/09/2024 Sample Collector: J OETTINGER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	30.00	0.05	feet		1		H2OD	6/19/24	RE LEE
Field Temperature	9.3	0.1	Degrees t		1		TEMP	6/19/24	RE LEE
Field Conductivity	579	0	umhos		1		FCOND25	6/19/24	RE LEE
Field pH	6.0	0.1	Units	0.1	1		FIELDPH	6/19/24	RE LEE
Dissolved Oxygen-Field	6.68	0.1	mg/l		1		FIELDDO	6/19/24	RE LEE
Turbidity	2.31	0.1	NTU'S		1		EPA 180.1	6/19/24	RE LEE
Redox Potential	223	1	mV		1		ASTM D1498-93	6/19/24	RE LEE
Total Boron	198	17.3	ug/L	40.0	1		EPA 200.7	6/24/24	020
Total Calcium	32600	114	ug/L	500	1		EPA 200.7	6/24/24	020
Total Dissolved Solids	348	8.7	mg/L	20.0	1		Std Mtd 2540 C	6/25/24	020
Total Chloride	98.3	3.0	mg/L	10.0	5		EPA 300.0	7/3/24	020
Total Fluoride	Less Than	0.48	mg/L	1.6	5	D3	EPA 300.0	7/3/24	020
Total Sulfate	86.7	2.2	mg/L	10	5		EPA 300.0	7/3/24	020

Sample Comments:

Sample Description: **OW-50 Weston Units 3-4 Bottom Ash Basins Well Sample**
 Sample ID: AE73715 Sample Collection Date/Time: 06/19/2024 16:40
 Sample Received: 07/09/2024 Sample Collector: J OETTINGER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	30.41	0.05	feet		1		H2OD	6/19/24	RE LEE
Field Temperature	9.0	0.1	Degrees t		1		TEMP	6/19/24	RE LEE
Field Conductivity	385	0	umhos		1		FCOND25	6/19/24	RE LEE
Field pH	5.7	0.1	Units	0.1	1		FIELDPH	6/19/24	RE LEE
Dissolved Oxygen-Field	4.83	0.1	mg/l		1		FIELDDO	6/19/24	RE LEE
Turbidity	2.64	0.1	NTU'S		1		EPA 180.1	6/19/24	RE LEE
Redox Potential	235	1	mV		1		ASTM D1498-93	6/19/24	RE LEE
Total Boron	31.4	17.3	ug/L	40.0	1	J	EPA 200.7	6/24/24	020
Total Calcium	28300	114	ug/L	500	1		EPA 200.7	6/24/24	020
Total Dissolved Solids	258	8.7	mg/L	20.0	1		Std Mtd 2540 C	6/25/24	020
Total Chloride	74.8	3.0	mg/L	10.0	5		EPA 300.0	7/3/24	020
Total Fluoride	Less Than	0.48	mg/L	1.60	5	D3	EPA 300.0	7/3/24	020
Total Sulfate	33.9	2.2	mg/L	10	5		EPA 300.0	7/3/24	020

Report Date: Friday, July 12, 2024

The following are the analytical results for samples received by Laboratory Services:

Sample Comments:

Sample Description: **QAQC 1 Weston Units 3-4 Bottom Ash Basins Well Sample**
Sample ID: AE73716 Sample Collection Date/Time: 06/19/2024 00:00
Sample Received: 07/09/2024 Sample Collector: J OETTINGER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Boron	27.1	17.3	ug/L	40.0	1	J	EPA 200.7	6/24/24	020
Total Calcium	16500	114	ug/L	500	1		EPA 200.7	6/24/24	020
Total Dissolved Solids	144	8.7	mg/L	20.0	1		Std Mtd 2540 C	6/25/24	020
Total Chloride	29.6	3.0	mg/L	10.0	5		EPA 300.0	7/3/24	020
Total Fluoride	Less Than	0.48	mg/L	1.60	5	D3	EPA 300.0	7/3/24	020
Total Sulfate	12.7	2.2	mg/L	10	5		EPA 300.0	7/3/24	020

Sample Comments:

Sample Description: **EB 1 Weston Units 3-4 Bottom Ash Basins Well Sample**
Sample ID: AE73717 Sample Collection Date/Time: 06/19/2024 17:00
Sample Received: 07/09/2024 Sample Collector: J OETTINGER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Temperature	23	0.1	Degrees C		1		TEMP	6/19/24	R E LEE
Field Conductivity	3.3	0	umhos		1		FCOND25	6/19/24	R E LEE
Field pH	7.9	0.1	Units	0.1	1		FIELDPH	6/19/24	R E LEE
Turbidity	0.24	0.1	NTU'S		1		EPA 180.1	6/19/24	R E LEE
Total Boron	Less Than	17.3	ug/L	40.0	1		EPA 200.7	6/24/24	020
Total Calcium	Less Than	114	ug/L	500	1		EPA 200.7	6/24/24	020
Total Dissolved Solids	Less Than	8.7	mg/L	20.0	1		Std Mtd 2540 C	6/25/24	020
Total Chloride	Less Than	0.59	mg/L	2.0	1		EPA 300.0	7/3/24	020
Total Fluoride	Less Than	0.095	mg/L	0.32	1		EPA 300.0	7/3/24	020
Total Sulfate	Less Than	0.44	mg/L	2.0	1		EPA 300.0	7/3/24	020

Sample Comments:

LOD and LOQ are adjusted for dilution factor.

'J' Flag, if present indicates an estimated concentration at or above the LOD and below the LOQ.

If there are any questions concerning this report, please contact Lab Services: 414-221-4595

To: Eric Kovatch
 PSB Annex A231

From: WEC Business Services
 Laboratory Services PSBA-A070
 WDNR Cert # 241329000



Report Date: Thursday, January 23, 2025

The following are the analytical results for samples received by Laboratory Services:

Sample Description: **OW-45 Weston Units 3-4 Bottom Ash Basins Well Sample**
 Sample ID: AE76240 Sample Collection Date/Time: 12/10/2024 10:58
 Sample Received: 01/03/2025 Sample Collector: JONAH OETTINGER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	26.39	0.05	feet		1		H2OD	12/10/24	REL
Field Temperature	7.9	0.1	Degrees C		1		TEMP	12/10/24	REL
Field Conductivity	275	0	umhos		1		FCOND25	12/10/24	REL
Field pH	6.7	0.1	Units	0.1	1		FIELDPH	12/10/24	REL
Dissolved Oxygen-Field	11.3	0.1	mg/l		1		FIELDDO	12/10/24	REL
Turbidity	1.4	0.1	NTU'S		1		EPA 180.1	12/10/24	REL
Redox Potential	224	1	mV		1		ASTM D1498-93	12/10/24	REL
Total Boron	55.3	17.3	ug/L	40.0	1		EPA 200.7	12/17/24	020
Total Calcium	18900	114	ug/L	500	1		EPA 200.7	12/17/24	020
Dissolved Calcium	19000	114	ug/L	500	1	D9	EPA 200.7	12/13/24	020
Dissolved Magnesium	4290	182	ug/L	1000	1		EPA 200.7	12/13/24	020
Dissolved Potassium	1620	325	ug/L	1000	1		EPA 200.8	12/13/24	020
Dissolved Sodium	28000	350	ug/L	500	1		EPA 200.7	12/13/24	020
Total Filtered Alkalinity as CaCO3	59.1	5.0	mg/l	10.0	1		Std Mtd 2320 B	12/24/24	020
Bicarbonate Ion	59.1	5.0	mg/L	10.0	1		HCO3	12/24/24	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	12/24/24	020
Total Dissolved Solids	138	8.7	mg/L	20.0	1		Std Mtd 2540 C	12/17/24	020
Total Chloride	40.9	0.59	mg/L	2.0	1		EPA 300.0	12/24/24	020
Total Fluoride	Less Than	0.095	mg/L	0.32	1		EPA 300.0	12/24/24	020
Total Sulfate	11.8	0.44	mg/L	2.0	1		EPA 300.0	12/24/24	020
Dissolved Chloride	43.0	3.0	mg/L	10.0	5		EPA 300.0	12/24/24	020
Dissolved Sulfate	12.5	2.2	mg/L	10.0	5		EPA 300.0	12/24/24	020

Sample Comments:

Sample Description: **OW-46 Weston Units 3-4 Bottom Ash Basins Well Sample**
 Sample ID: AE76241 Sample Collection Date/Time: 12/10/2024 13:37
 Sample Received: 01/03/2025 Sample Collector: JONAH OETTINGER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	27.58	0.05	feet		1		H2OD	12/10/24	REL
Field Temperature	7.5	0.1	Degrees C		1		TEMP	12/10/24	REL
Field Conductivity	274	0	umhos		1		FCOND25	12/10/24	REL
Field pH	6.6	0.1	Units	0.1	1		FIELDPH	12/10/24	REL

Report Date: Thursday, January 23, 2025

The following are the analytical results for samples received by Laboratory Services:

Sample Description: **OW-46 Weston Units 3-4 Bottom Ash Basins Well Sample**
 Sample ID: AE76241 Sample Collection Date/Time: 12/10/2024 13:37
 Sample Received: 01/03/2025 Sample Collector: JONAH OETTINGER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Dissolved Oxygen-Field	10.5	0.1	mg/l		1		FIELDDO	12/10/24	REL
Turbidity	9.0	0.1	NTU'S		1		EPA 180.1	12/10/24	REL
Redox Potential	269	1	mV		1		ASTM D1498-93	12/10/24	REL
Total Boron	51.8	17.3	ug/L	40.0	1		EPA 200.7	12/17/24	020
Total Calcium	14300	114	ug/L	500	1		EPA 200.7	12/17/24	020
Dissolved Calcium	14500	114	ug/L	500	1		EPA 200.7	12/13/24	020
Dissolved Magnesium	3300	182	ug/L	1000	1		EPA 200.7	12/13/24	020
Dissolved Potassium	1470	325	ug/L	1000	1		EPA 200.8	12/13/24	020
Dissolved Sodium	32100	350	ug/L	500	1		EPA 200.7	12/13/24	020
Total Filtered Alkalinity as CaCO3	35.9	5.0	mg/l	10.0	1		Std Mtd 2320 B	12/24/24	020
Bicarbonate Ion	35.9	5.0	mg/L	10.0	1		HCO3	12/24/24	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	12/24/24	020
Total Dissolved Solids	142	8.7	mg/L	20.0	1		Std Mtd 2540 C	12/17/24	020
Total Chloride	52.8	3.0	mg/L	10.0	5		EPA 300.0	12/24/24	020
Total Fluoride	Less Than	0.48	mg/L	1.6	5	D3	EPA 300.0	12/24/24	020
Total Sulfate	12.0	2.2	mg/L	10.0	5		EPA 300.0	12/24/24	020
Dissolved Chloride	55.0	3.0	mg/L	10.0	5		EPA 300.0	12/24/24	020
Dissolved Sulfate	11.7	2.2	mg/L	10.0	5		EPA 300.0	12/24/24	020

Sample Comments:

Sample Description: **OW-47R Weston Units 3-4 Bottom Ash Basins Well Sample**
 Sample ID: AE76242 Sample Collection Date/Time: 12/10/2024 14:30
 Sample Received: 01/03/2025 Sample Collector: JONAH OETTINGER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	37.65	0.05	feet		1		H2OD	12/10/24	REL
Field Temperature	7.5	0.1	Degrees C		1		TEMP	12/10/24	REL
Field Conductivity	353	0	umhos		1		FCOND25	12/10/24	REL
Field pH	6.2	0.1	Units	0.1	1		FIELDPH	12/10/24	REL
Dissolved Oxygen-Field	6.0	0.1	mg/l		1		FIELDDO	12/10/24	REL
Turbidity	1.4	0.1	NTU'S		1		EPA 180.1	12/10/24	REL
Redox Potential	274	1	mV		1		ASTM D1498-93	12/10/24	REL
Total Boron	46.4	17.3	ug/L	40.0	1		EPA 200.7	12/17/24	020
Total Calcium	24400	114	ug/L	500	1		EPA 200.7	12/17/24	020
Dissolved Calcium	25100	114	ug/L	500	1	D9	EPA 200.7	12/13/24	020
Dissolved Magnesium	6760	182	ug/L	1000	1		EPA 200.7	12/13/24	020
Dissolved Potassium	1970	325	ug/L	500	1		EPA 200.8	12/13/24	020
Dissolved Sodium	30600	350	ug/L	500	1		EPA 200.7	12/13/24	020
Total Filtered Alkalinity as CaCO3	34.9	5.0	mg/l	10.0	1		Std Mtd 2320 B	12/24/24	020
Bicarbonate Ion	34.9	5.0	mg/L	10.0	1		HCO3	12/24/24	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	12/24/24	020

Report Date: Thursday, January 23, 2025

The following are the analytical results for samples received by Laboratory Services:

Sample Description: **OW-47R Weston Units 3-4 Bottom Ash Basins Well Sample**
 Sample ID: AE76242 Sample Collection Date/Time: 12/10/2024 14:30
 Sample Received: 01/03/2025 Sample Collector: JONAH OETTINGER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Dissolved Solids	176	8.7	mg/L	20.0	1		Std Mtd 2540 C	12/17/24	020
Total Chloride	73.6	3.0	mg/L	10.0	5		EPA 300.0	12/24/24	020
Total Fluoride	Less Than	0.48	mg/L	1.6	5	D3	EPA 300.0	12/24/24	020
Total Sulfate	21.8	2.2	mg/L	10.0	5		EPA 300.0	12/24/24	020
Dissolved Chloride	75.8	3.0	mg/L	10.0	5		EPA 300.0	12/24/24	020
Dissolved Sulfate	22.7	2.2	mg/L	10.0	5		EPA 300.0	12/24/24	020

Sample Comments:

Sample Description: **OW-48 Weston Units 3-4 Bottom Ash Basins Well Sample**
 Sample ID: AE76243 Sample Collection Date/Time: 12/10/2024 15:34
 Sample Received: 01/03/2025 Sample Collector: JONAH OETTINGER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	30.94	0.05	feet		1		H2OD	12/10/24	REL
Field Temperature	8.0	0.1	Degrees t		1		TEMP	12/10/24	REL
Field Conductivity	478	0	umhos		1		FCOND25	12/10/24	REL
Field pH	6.4	0.1	Units	0.1	1		FIELDPH	12/10/24	REL
Dissolved Oxygen-Field	7.9	0.1	mg/l		1		FIELDDO	12/10/24	REL
Turbidity	1.7	0.1	NTU'S		1		EPA 180.1	12/10/24	REL
Redox Potential	272	1	mV		1		ASTM D1498-93	12/10/24	REL
Total Boron	218	17.3	ug/L	40.0	1		EPA 200.7	12/17/24	020
Total Calcium	30500	114	ug/L	500	1		EPA 200.7	12/17/24	020
Dissolved Calcium	31600	114	ug/L	500	1	D9	EPA 200.7	12/13/24	020
Dissolved Magnesium	4480	182	ug/L	1000	1		EPA 200.7	12/13/24	020
Dissolved Potassium	2570	325	ug/L	1000	1		EPA 200.8	12/13/24	020
Dissolved Sodium	54600	350	ug/L	500	1		EPA 200.7	12/13/24	020
Total Filtered Alkalinity as CaCO3	48.8	5.0	mg/l	10.0	1		Std Mtd 2320 B	12/24/24	020
Bicarbonate Ion	48.8	5.0	mg/L	10.0	1		HCO3	12/24/24	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	12/24/24	020
Total Dissolved Solids	248	8.7	mg/L	20.0	1		Std Mtd 2540 C	12/17/24	020
Total Chloride	74.5	3.0	mg/L	10.0	5		EPA 300.0	12/24/24	020
Total Fluoride	Less Than	0.48	mg/L	1.6	5	D3	EPA 300.0	12/24/24	020
Total Sulfate	63.4	2.2	mg/L	10.0	5		EPA 300.0	12/24/24	020
Dissolved Chloride	78.6	3.0	mg/L	10.0	5		EPA 300.0	12/24/24	020
Dissolved Sulfate	65.8	2.2	mg/L	10.0	5		EPA 300.0	12/24/24	020

Report Date: Thursday, January 23, 2025

The following are the analytical results for samples received by Laboratory Services:

Sample Comments:

Sample Description: **OW-49 Weston Units 3-4 Bottom Ash Basins Well Sample**
 Sample ID: AE76244 Sample Collection Date/Time: 12/11/2024 09:32
 Sample Received: 01/03/2025 Sample Collector: JONAH OETTINGER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	29.92	0.05	feet		1		H2OD	12/10/24	REL
Field Temperature	8.3	0.1	Degrees t		1		TEMP	12/11/24	REL
Field Conductivity	604	0	umhos		1		FCOND25	12/11/24	REL
Field pH	6.2	0.1	Units	0.1	1		FIELDPH	12/11/24	REL
Dissolved Oxygen-Field	7.2	0.1	mg/l		1		FIELDDO	12/11/24	REL
Turbidity	1.7	0.1	NTU'S		1		EPA 180.1	12/11/24	REL
Redox Potential	225	1	mV		1		ASTM D1498-93	12/11/24	REL
Total Boron	186	17.3	ug/L	40.0	1		EPA 200.7	12/17/24	020
Total Calcium	34700	114	ug/L	500	1		EPA 200.7	12/17/24	020
Dissolved Calcium	35800	114	ug/L	500	1	D9	EPA 200.7	12/13/24	020
Dissolved Magnesium	5800	182	ug/L	1000	1		EPA 200.7	12/13/24	020
Dissolved Potassium	3100	325	ug/L	1000	1		EPA 200.8	12/13/24	020
Dissolved Sodium	74100	350	ug/L	1000	1		EPA 200.7	12/13/24	020
Total Filtered Alkalinity as CaCO3	49.5	5.0	mg/l	10.0	1		Std Mtd 2320 B	12/24/24	020
Bicarbonate Ion	49.5	5.0	mg/L	10.0	1		HCO3	12/24/24	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	12/24/24	020
Total Dissolved Solids	310	8.7	mg/L	20.0	1		Std Mtd 2540 C	12/17/24	020
Total Chloride	105	3.0	mg/L	10.0	5		EPA 300.0	12/24/24	020
Total Fluoride	Less Than	0.48	mg/L	1.6	5	D3	EPA 300.0	12/24/24	020
Total Sulfate	77.1	2.2	mg/L	10.0	5		EPA 300.0	12/24/24	020
Dissolved Chloride	119	3.0	mg/L	10.0	5		EPA 300.0	12/24/24	020
Dissolved Sulfate	84.5	2.2	mg/L	10.0	5		EPA 300.0	12/24/24	020

Sample Comments:

Sample Description: **OW-50 Weston Units 3-4 Bottom Ash Basins Well Sample**
 Sample ID: AE76245 Sample Collection Date/Time: 12/11/2024 10:12
 Sample Received: 01/03/2025 Sample Collector: JONAH OETTINGER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	30.37	0.05	feet		1		H2OD	12/10/24	REL
Field Temperature	7.2	0.1	Degrees t		1		TEMP	12/11/24	REL
Field Conductivity	347	0	umhos		1		FCOND25	12/11/24	REL
Field pH	5.8	0.1	Units	0.1	1		FIELDPH	12/11/24	REL
Dissolved Oxygen-Field	4.4	0.1	mg/l		1		FIELDDO	12/11/24	REL

Report Date: Thursday, January 23, 2025

The following are the analytical results for samples received by Laboratory Services:

Sample Description: **OW-50 Weston Units 3-4 Bottom Ash Basins Well Sample**
 Sample ID: AE76245 Sample Collection Date/Time: 12/11/2024 10:12
 Sample Received: 01/03/2025 Sample Collector: JONAH OETTINGER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Turbidity	3.3	0.1	NTU'S		1		EPA 180.1	12/11/24	REL
Redox Potential	246	1	mV		1		ASTM D1498-93	12/11/24	REL
Total Boron	43.3	17.3	ug/L	40.0	1		EPA 200.7	12/17/24	020
Total Calcium	24300	114	ug/L	500	1		EPA 200.7	12/17/24	020
Dissolved Calcium	24500	114	ug/L	500	1	D9	EPA 200.7	12/13/24	020
Dissolved Magnesium	5940	182	ug/L	1000	1		EPA 200.7	12/13/24	020
Dissolved Potassium	2090	325	ug/L	1000	1		EPA 200.8	12/13/24	020
Dissolved Sodium	30500	350	ug/L	500	1		EPA 200.7	12/13/24	020
Total Filtered Alkalinity as CaCO3	35.5	5.0	mg/l	10.0	1		Std Mtd 2320 B	12/24/24	020
Bicarbonate Ion	35.5	5.0	mg/L	10.0	1		HCO3	12/24/24	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	12/24/24	020
Total Dissolved Solids	176	8.7	mg/L	20.0	1		Std Mtd 2540 C	12/17/24	020
Total Chloride	60.7	3.0	mg/L	10.0	5		EPA 300.0	12/24/24	020
Total Fluoride	Less Than	0.48	mg/L	1.6	5	D3	EPA 300.0	12/24/24	020
Total Sulfate	33.1	2.2	mg/L	10.0	5		EPA 300.0	12/24/24	020
Dissolved Chloride	67.7	3.0	mg/L	10.0	5		EPA 300.0	12/24/24	020
Dissolved Sulfate	35.1	2.2	mg/L	10.0	5		EPA 300.0	12/24/24	020

Sample Comments:

Sample Description: **QAQC 1 Weston Units 3-4 Bottom Ash Basins Well Sample**
 Sample ID: AE76246 Sample Collection Date/Time: 12/10/2024 00:00
 Sample Received: 01/03/2025 Sample Collector: JONAH OETTINGER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Boron	43.4	17.3	ug/L	40.0	1		EPA 200.7	12/17/24	020
Total Calcium	19100	114	ug/L	500	1		EPA 200.7	12/17/24	020
Dissolved Calcium	19300	114	ug/L	500	1	D9	EPA 200.7	12/13/24	020
Dissolved Magnesium	4370	182	ug/L	1000	1		EPA 200.7	12/13/24	020
Dissolved Potassium	1610	325	ug/L	1000	1		EPA 200.8	12/13/24	020
Dissolved Sodium	28600	350	ug/L	500	1		EPA 200.7	12/13/24	020
Total Filtered Alkalinity as CaCO3	60.0	5.0	mg/l	10.0	1		Std Mtd 2320 B	12/24/24	020
Bicarbonate Ion	60.0	5.0	mg/L	10.0	1		HCO3	12/24/24	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	12/24/24	020
Total Dissolved Solids	110	8.7	mg/L	20.0	1		Std Mtd 2540 C	12/17/24	020
Total Chloride	42.2	0.59	mg/L	2.0	1		EPA 300.0	12/24/24	020
Total Fluoride	Less Than	0.059	mg/L	0.32	1		EPA 300.0	12/24/24	020
Total Sulfate	12.0	0.44	mg/L	2.0	1		EPA 300.0	12/24/24	020
Dissolved Chloride	41.2	0.59	mg/L	2.0	1		EPA 300.0	12/24/24	020
Dissolved Sulfate	14.9	0.44	mg/L	2.0	1		EPA 300.0	12/24/24	020

Report Date: Thursday, January 23, 2025

The following are the analytical results for samples received by Laboratory Services:

Sample Comments:

Sample Description: **EB 1 Weston Units 3-4 Bottom Ash Basins Well Sample**
Sample ID: AE76247 Sample Collection Date/Time: 12/10/2024 16:50
Sample Received: 01/03/2025 Sample Collector: JONAH OETTINGER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Temperature	2.4	0.1	Degrees C		1		TEMP	12/11/24	REL
Field Conductivity	1.9	0	umhos		1		FCOND25	12/11/24	REL
Field pH	6.0	0.1	Units	0.1	1		FIELDPH	12/11/24	REL
Turbidity	0.32	0.1	NTU'S		1		EPA 180.1	12/11/24	REL
Total Boron	Less Than	17.3	ug/L	40.0	1		EPA 200.7	12/17/24	020
Total Calcium	Less Than	114	ug/L	500	1		EPA 200.7	12/17/24	020
Dissolved Calcium	Less Than	114	ug/L	500	1		EPA 200.7	12/13/24	020
Dissolved Magnesium	Less Than	182	ug/L	1000	1		EPA 200.7	12/13/24	020
Dissolved Potassium	Less Than	325	ug/L	1000	1		EPA 200.8	12/13/24	020
Dissolved Sodium	Less Than	350	ug/L	500	1		EPA 200.7	12/13/24	020
Total Filtered Alkalinity as CaCO3	Less Than	5.0	mg/l	10.0	1		Std Mtd 2320 B	12/24/24	020
Bicarbonate Ion	Less Than	5.0	mg/L	10.0	1		HCO3	12/24/24	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	12/24/24	020
Total Dissolved Solids	Less Than	8.7	mg/L	20.0	1		Std Mtd 2540 C	12/17/24	020
Total Chloride	Less Than	0.59	mg/L	2.0	1		EPA 300.0	12/24/24	020
Total Fluoride	Less Than	0.095	mg/L	0.32	1		EPA 300.0	12/24/24	020
Total Sulfate	Less Than	0.44	mg/L	2.0	1		EPA 300.0	12/24/24	020
Dissolved Chloride	Less Than	0.59	mg/L	2.0	1		EPA 300.0	12/24/24	020
Dissolved Sulfate	Less Than	0.44	mg/L	2.0	1		EPA 300.0	12/24/24	020

Sample Comments:

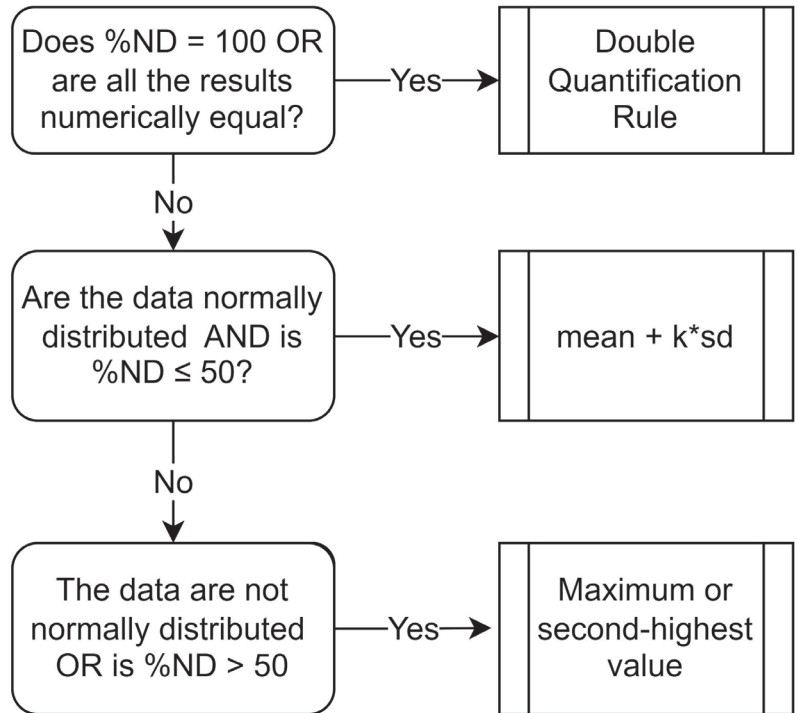
LOD and LOQ are adjusted for dilution factor.

'J' Flag, if present indicates an estimated concentration at or above the LOD and below the LOQ.

If there are any questions concerning this report, please contact Lab Services: 414-221-4595

APPENDIX B
STATISTICAL METHODOLOGY FOR DETERMINATION OF BACKGROUND
VALUES

Notes
%ND = Percent non-detected samples
sd = standard deviation
k = kappa for site-wide false positive rate
<u>Alpha Levels</u>
Confidence Limit = 0.1



When data are not normally distributed or %ND > 50, the maximum value is used if the background sample size is < 60. Where the background sample size is ≥ 60, the achievable per-constituent false positive rates for the maximum and second-highest background values will be compared, and the background value with the achievable per-constituent false positive rate that is closest to, but does not exceed, the target per-constituent false positive rate of 0.015% is used.