Prepared for
We Energies

Date
January 31, 2024

Project No.
1940102327

2023 CCR ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

PLEASANT PRAIRIE POWER PLANT ASH LANDFILL

RAMBOLL Bright ideas. Sustainable change.

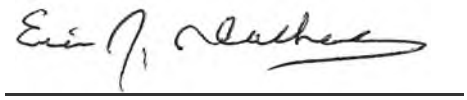
2023 CCR ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
PLEASANT PRAIRIE POWER PLANT ASH LANDFILL

Project name	**Pleasant Prairie Power Plant Ash Landfill**
Project no.	**1940102327**
Recipient	**We Energies**
Document type	**Annual CCR Groundwater Monitoring and Corrective Action Report**
Revision	**FINAL**
Date	**January 31, 2024**
Prepared by	**Kyle J. Schaefer**
Checked by	**Eric J. Tlachac, PE**
Approved by	**Nathaniel R. Keller, PG**

Ramboll
234 W. Florida Street
Fifth Floor
Milwaukee, WI 53204
USA

T 414-837-3607
F 414-837-3608
https://ramboll.com

Kyle J. Schaefer
Senior Project Scientist



Eric J. Tlachac, PE
Senior Project Manager

Nathaniel R. Keller, PG
Senior Technical Manager

CONTENTS

TABLES (IN TEXT)

TABLES (ATTACHED)

FIGURES (ATTACHED)

APPENDICES

ACRONYMS AND ABBREVIATIONS

§	Section
40 C.F.R.	Title 40 of the Code of Federal Regulations
ACL	Alternative Concentration Limit
CCR	coal combustion residuals
ES	Enforcement Standard
ESAP	Environmental Sampling and Analysis Plan
mg/L	milligrams per liter
NA	not applicable
P4	Pleasant Prairie Power Plant
PAL	Preventive Action Limit
Ramboll	Ramboll Americas Engineering Solutions, Inc.
SAP	Sampling and Analysis Plan
TBD	to be determined
TDS	total dissolved solids
WDNR	Wisconsin Department of Natural Resources
Wis. Adm. Code	Wisconsin Administrative Code

EXECUTIVE SUMMARY

On August 1, 2022, the Wisconsin Department of Natural Resources (WDNR) updated Wisconsin Administrative Code (Wis. Adm. Code) Chapter (Ch.) NR 500 to include additional requirements for new and existing Coal Combustion Residual (CCR) Landfills in the State of Wisconsin. This report has been prepared to provide the information required by Ch. NR 507.15(3)(m) for the Pleasant Prairie Power Plant (P4) Ash Landfill located near Pleasant Prairie, Wisconsin.

As required in Ch. NR 514.045, a Plan of Operation Modification (Plan Mod), including an Environmental Sampling and Analysis Plan (ESAP) Addendum, was prepared for the above referenced CCR landfill to fulfill additional requirements related to the August 1, 2022 revisions to Ch. NR 500 and submitted to WDNR by February 1, 2023 for review and approval. WDNR determined in a letter dated April 28, 2023 that the Plan Mod was incomplete and requested additional information. A revised Plan Mod was prepared and submitted on December 15, 2023.

From 2016 through 2022 sampling at the P4 Ash Landfill was completed in accordance with the Detection Monitoring Program requirements specified in Title 40 of the Code of Federal Regulations (40 C.F.R.) Section (§) 257.94.

No changes were made to the monitoring system in 2023 (no wells were installed or decommissioned).

Comparisons of the concentrations of detected parameters to Ch. NR 140 standards (Preventive Action Limits [PALs] and Enforcement Standards [ESs]) were not completed because Alternative Concentration Limits (ACLs) for these parameters and proposed monitoring locations are pending WDNR approval.

In 2023, groundwater sampling was completed in accordance with Ch. NR 507.15(3)(L) (Detection Monitoring). Additional samples were collected to establish baseline groundwater quality for parameters listed in Ch. NR 507 Appendix I, Tables 1A and 3 that were not analyzed as part of the 40 C.F.R. § 257.94 Detection Monitoring Program.

1. INTRODUCTION

This report has been prepared by Ramboll Americas Engineering Solutions, Inc. (Ramboll) on behalf of We Energies to provide the information required by Ch. NR 507.15(3)(m) at the P4 Ash Landfill located in Pleasant Prairie, Wisconsin.

In accordance with Ch. NR 507.15(3)(m), the owner or operator of a CCR landfill 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 landfill (**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 landfill and all upgradient and downgradient monitoring wells, including the well identification numbers, that are part of the groundwater monitoring for the CCR landfill (**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 Ch. NR 507.15(3)(L) (**Tables 1 and 2**), a summary including the number of groundwater samples that were collected for analysis for each upgradient and downgradient well, the dates the samples were collected, and whether the sample was required by Detection Monitoring or Assessment Monitoring (**Section 3 and Table A**).
4. A narrative discussion of any transition between monitoring including the date and circumstances for transitioning from Detection Monitoring to Assessment Monitoring (**Section 2**) in addition to identifying any constituents detected above Ch. NR 140 standards (**Table A**).
5. A section at the beginning of the annual report that provides an overview of the current status of groundwater monitoring and corrective action for the CCR landfill (**Executive Summary**). At a minimum, the summary shall include all of the following:
    i. At the start of the current annual reporting period, whether the CCR landfill was operating under Detection Monitoring or Assessment Monitoring. (The P4 Ash Landfill began 2023 in Detection Monitoring.)
    ii. At the end of the current annual reporting period, whether the CCR landfill was operating under Detection Monitoring or Assessment Monitoring. (The P4 Ash Landfill ended 2023 in Detection Monitoring.)
    iii. If it was determined by the owner or operator that there was a groundwater quality exceedance under Ch. NR 140 for one or more constituents listed under Ch. NR 507 Appendix I for CCR wells, a listing of those constituents, the names of the monitoring wells associated with the exceedances, and the date when the Assessment Monitoring was initiated for the CCR landfill. (Comparisons of the concentrations of detected parameters to NR 140 standards were not completed because ACLs for these parameters and proposed monitoring locations are pending WDNR approval.)

iv. If corrective action measures were required, the date when the assessment of corrective measures was initiated for the CCR landfill, the date when the public informational hearing under Ch. NR 508.06(3)(e) was held for the discussion of the results of the remedial action options report, and the date when the assessment of corrective measures was completed. (Corrective action measures were not required for the P4 Ash Landfill in 2023).

v. If a remedy was required under Ch. NR 508 during the annual reporting period, the date of remedy selection, and whether remedial activities were initiated or are ongoing during the annual reporting period. (A corrective action remedy was not required for the P4 Ash Landfill in 2023).

This report provides the required information for the P4 Ash Landfill for calendar year 2023.

2. MONITORING AND CORRECTIVE ACTION PROGRAM STATUS

As required in Ch. NR 514.045, a Plan Mod, including an ESAP Addendum, was prepared for the P4 Ash Landfill to fulfill additional requirements related to the August 1, 2022 revisions to Ch. NR 500 and submitted to WDNR by February 1, 2023 for review and approval. WDNR determined in a letter dated April 28, 2023 that the Plan Mod was incomplete and requested additional information. A revised Plan Mod was prepared and submitted on December 15, 2023. Accordingly, no changes have occurred to the monitoring program status in calendar year 2023.

From 2016 through 2022 sampling at the P4 Ash Landfill was completed in accordance with the Detection Monitoring Program requirements specified in Title 40 of the Code of Federal Regulations (40 C.F.R.) Section (§) 257.94.

In 2023, groundwater sampling was completed in accordance with Ch. NR 507.15(3)(L) (Detection Monitoring). Additional samples were collected to establish baseline groundwater quality for parameters listed in Ch. NR 507 Appendix I, Tables 1A and 3 that were not collected as part of the 40 C.F.R. § 257.94 Detection Monitoring Program.

Comparisons of the concentrations of detected parameters to Ch. NR 140 standards (Preventive Action Limits [PALs] and Enforcement Standards [ESs]) were not completed because Alternative Concentration Limits (ACLs) for these parameters and proposed monitoring locations are pending WDNR approval.

In 2024, groundwater sampling will continue to be completed in accordance with Ch. NR 507.15(3)(L).

3. KEY ACTIONS COMPLETED IN 2023

The Detection Monitoring Program is summarized in **Table A** below. 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 2023. In general, one groundwater sample was collected from each background (upgradient) and downgradient well during each monitoring event. All samples were collected and analyzed in accordance with the *Sampling and Analysis Plan* (SAP)*, Revision 1, Pleasant Prairie Power Plant Ash Landfill* (Ramboll, 2023) submitted as Appendix B of the ESAP Addendum. Potentiometric surface maps for the fourth quarter of 2022 and both monitoring events in 2023 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 Ch. NR 507.15(3)(L) (as applicable) in the fourth quarter of 2022 and all monitoring events in 2023 are presented in **Table 2**. Laboratory reports for all 2023 monitoring events are included in **Appendix A**[1].

In 2023, groundwater sampling was completed in accordance with Ch. NR 507.15(3)(L) with additional sampling to establish baseline groundwater quality for select parameters listed in Ch. NR 507 Appendix I, Tables 1A and 3 not analyzed as part of the 40 C.F.R. § 257.94 Detection Monitoring Program conducted from 2016-2022. Sampling occurred monthly starting in January of 2023 and extending through October of 2023. **Table 2** and **Appendix A** include all analytical results and laboratory reports for the monitoring events. A total of 8 samples have been collected from each monitoring well and analyzed for each parameter listed in Ch. NR 507 Appendix I Tables 1A and 3.

Table A. 2022-2023 Detection Monitoring Program Summary

Sampling Date	Purpose	Analytical Data Receipt Date	Parameters Analyzed
October 5, 2022	Detection Monitoring	December 5, 2022	40 C.F.R. § 257 Appendix III
January 30, 2023	Baseline Sampling	March 2, 2023	Total Alkalinity Total Calcium Total Copper Total Hardness Total Magnesium Total Manganese Total Nitrate + Nitrite Field pH Total Silver Total Zinc
March 6, 2023	Baseline Sampling	June 26, 2023	Total Alkalinity Total Calcium Total Copper Total Hardness Total Magnesium Total Manganese Total Nitrate + Nitrite

[1] Laboratory reports for the fourth quarter of 2022 monitoring event were provided in the 2022 annual report.

Sampling Date	Purpose	Analytical Data Receipt Date	Parameters Analyzed
March 6, 2023 cont.	Baseline Sampling	June 26, 2023	Field pH Total Silver Total Zinc
April 11, 2023	Detection Monitoring & Baseline Sampling	May 3, 2023	Ch. NR 507 App A Tables 1A and 3
May 15, 2023	Baseline Sampling	May 23, 2023	Total Alkalinity (W74 only) Total Calcium Total Copper Total Hardness Total Magnesium Total Manganese Total Nitrate + Nitrite Field pH Total Silver Total Zinc
June 14, 2023	Baseline Sampling	July 7, 2023	Total Calcium Total Copper Total Hardness Total Magnesium Total Manganese Total Nitrate + Nitrite Field pH Total Silver Total Zinc
July 17, 2023	Baseline Sampling	July 27, 2023	Total Calcium Total Copper Total Hardness Total Magnesium Total Manganese Total Nitrate + Nitrite Field pH Total Silver Total Zinc
August 17, 2023	Baseline Sampling	September 12, 2023	Total Calcium Total Copper Total Hardness Total Magnesium Total Manganese Total Nitrate + Nitrite Field pH Total Silver Total Zinc
September 21, 2023	Baseline Sampling	October 6, 2023	Total Calcium Total Copper Total Hardness Total Magnesium Total Manganese Total Nitrate + Nitrite Field pH

Sampling Date	Purpose	Analytical Data Receipt Date	Parameters Analyzed
September 21, 2023 cont.	Baseline Sampling	October 6, 2023	Total Silver Total Zinc
October 26 and 30, 2023	Detection Monitoring & Baseline Sampling	December 1, 2023	Ch. NR 507 App A Tables 1A and 3 (Except Total Alkalinity)

4. PROBLEMS ENCOUNTERED AND ACTIONS TO RESOLVE THE PROBLEMS

No problems were encountered with the Groundwater Monitoring Program during 2023. Groundwater samples were collected and analyzed in accordance with the SAP and all data were accepted.

5. KEY ACTIVITIES PLANNED FOR 2024

The following key activities are planned for 2024:

- Detection Monitoring in accordance with Ch. NR 507.15(3)(L) with semi-annual sampling scheduled for the second and fourth quarters of 2024. Expanded leachate sampling also to occur as listed in Ch. NR 507 Appendix I, Tables 4 and 5 as applicable.
- Complete evaluation of analytical data from the compliance wells against Ch. NR 140 standards including Preventive Action Limits, Enforcement Standards, and/or ACLs, following WDNR approval.
- A notification will be provided to WDNR when results indicate concentrations have attained or exceeded groundwater standards in accordance with Ch. NR 507.30. The notification shall specify the parameters that have attained or exceeded standards, the wells at which the standards (PAL, ES, or ACL) were attained or exceeded, and provide a preliminary analysis of the cause and significance of each concentration in accordance with Chs. NR 140.24(1)(a) or 140.26(1)(a). The notification shall also include the intent to either begin Assessment Monitoring or determine whether a false exceedance occurred.
- As described in Chs. NR 508.06(1)(c) and NR 507.28(3), if a groundwater standard exceedance is detected in a CCR well, a demonstration may be completed to indicating a source other than P4 is the cause or the exceedance is due to an error.
  - If WDNR concurs with the false exceedance demonstration within 30 days of receipt, Detection Monitoring will continue.
  - If WDNR does not concur within 30 days, an Assessment Monitoring Program in accordance with Ch. NR 508.06(2) will be initiated following discussion with WDNR.

6. REFERENCES

Ramboll Americas Engineering Solutions, Inc., 2023, *Sampling and Analysis Plan Revision 1, Pleasant Prairie Power Plant Ash Landfill, Pleasant Prairie, Wisconsin*. December 14, 2023.

TABLES

TABLE 1
GROUNDWATER ELEVATIONS
2023 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
PLEASANT PRAIRIE POWER PLANT ASH LANDFILL
PLEASANT PRAIRIE, WI

Well ID	Well Type	Latitude (Degrees, minutes, seconds)	Longitude (Degrees, minutes, seconds)	Date	Groundwater Elevation (ft NAVD88)
W20D	Background (Upgradient)	42°33'51.3592"	-87°54'15.0776"	10/05/2022	666.09
				4/11/2023	672.57
				10/26/2023	666.60
W77	Background (Upgradient)	42°33'45.2513"	-87°53'54.2383"	10/05/2022	666.86
				4/11/2023	671.20
				10/30/2023	666.99
W73	Compliance (Downgradient)	42°33'57.0560"	-87°53'57.3214"	10/05/2022	667.59
				4/11/2023	670.14
				10/30/2023	666.12
W74	Compliance (Downgradient)	42°33'56.9099"	-87°54'14.3343"	10/05/2022	663.50
				4/11/2023	668.92
				10/30/2023	663.83
W75	Compliance (Downgradient)	42°33'56.8116"	-87°54'08.8120"	10/05/2022	664.58
				4/11/2023	669.93
				10/30/2023	665.32
W76	Compliance (Downgradient)	42°33'56.4738"	-87°54'01.8036"	10/05/2022	665.38
				4/11/2023	669.88
				10/30/2023	665.62

Notes:
ft = foot/feet
NAVD88 = North American Vertical Datum of 1988

Pleasant Prairie Ash LF
Table 2. Analytical Results - Baseline and CCR Parameters

Date Range: 10/01/2022 to 12/31/2023

Lab Methods:

Well Id	Date Sampled	Lab Id	Alkalinity, lab, mg/L	Boron, total, mg/L	Calcium, total, mg/L	Chloride, total, mg/L	Copper, tot, ug/L	Fluoride, total, mg/L
W20D	10/5/2022	AE62999	116.0	0.403	23.7	11.9		1.10
	1/30/2023	AE64759	111.0		25.0		<0.65	
	3/6/2023	AE65326	118.0		25.5		<1.60	
	4/11/2023	AE65951	110.0	0.460	24.0	11.0	<4.00	1.00
	5/15/2023	AE66588			23.7		5.00	
	6/14/2023	AE67175			24.0		<4.00	
	7/17/2023	40265339001			25.4		<3.40	
	8/17/2023	AE68378			24.1		<3.40	
	9/21/2023	AE68994			25.6		<8.40	
	10/26/2023	AE69710	118.0	0.451	24.2	11.6		1.10
W73	10/5/2022	AE63007	115.0	0.437	21.2	11.6		1.10
	1/30/2023	AE64760	114.0		20.0		0.95	
	3/6/2023	AE65327	116.0		23.7		2.00	
	4/11/2023	AE65960	110.0	0.440	18.0	12.0	<4.00	1.00
	5/15/2023	AE66589			18.6		5.00	
	6/14/2023	AE67176			19.0		<4.00	
	7/17/2023	40265339002			18.6		<3.40	
	8/17/2023	AE68379			20.6		<3.40	
	9/21/2023	AE68995			23.2		<3.40	
	10/30/2023	AE69690	120.0	0.447	19.0	11.2		1.10
W74	10/5/2022	AE63003	107.0	0.395	19.4	15.5		1.10
	3/6/2023	AE65328	114.0		19.6		<1.60	
	4/11/2023	AE65954	100.0	0.410	19.0	14.0	<4.00	1.00
	5/15/2023	AE66590	102.0		18.9		<4.00	
	6/14/2023	AE67177			18.0		<4.00	

Pleasant Prairie Ash LF
Table 2. Analytical Results - Baseline and CCR Parameters

Date Range: 10/01/2022 to 12/31/2023

Lab Methods:

			Alkalinity, lab, mg/L	Boron, total, mg/L	Calcium, total, mg/L	Chloride, total, mg/L	Copper, tot, ug/L	Fluoride, total, mg/L
W74	7/17/2023	40265339003			20.0		<3.40	
	8/17/2023	AE68380			18.8		<3.40	
	9/21/2023	AE68996			18.7		3.70	
	10/30/2023	AE69691	112.0	0.423	19.4	13.2	<3.40	1.10
W75	10/5/2022	AE63004	124.0	0.404	18.2	9.6		1.10
	1/30/2023	AE64761	121.0		20.0		<0.65	
	3/6/2023	AE65329	126.0		20.2		<1.60	
	4/11/2023	AE65955	120.0	0.430	19.0	8.9	<4.00	1.00
	5/15/2023	AE66591			18.6		<4.00	
	6/14/2023	AE67178			19.0		<4.00	
	7/17/2023	40265339004			19.6		<3.40	
	8/17/2023	AE68381			18.9		<3.40	
	9/21/2023	AE68997			20.1		4.70	
	10/30/2023	AE69686	124.0	0.434	19.4	8.7		1.20
W76	10/5/2022	AE63005	118.0	0.428	18.8	11.0		1.00
	1/30/2023	AE64762	115.0		19.0		<0.65	
	3/6/2023	AE65330	118.0		19.4		<1.60	
	4/11/2023	AE65958	110.0	0.450	18.0	11.0	<4.00	0.90
	5/15/2023	AE66592			18.1		5.00	
	6/14/2023	AE67179			18.0		<4.00	
	7/17/2023	40265339005			19.3		3.50	
	8/17/2023	AE68382			18.4		<3.40	
	9/21/2023	AE68998			19.0		<3.40	
	10/30/2023	AE69688	122.0	0.450	18.9	10.6		1.10
W77	10/5/2022	AE63008	153.0	0.414	23.4	8.8		1.20
	1/30/2023	AE64763	150.0		25.0		1.50	

Pleasant Prairie Ash LF
Table 2. Analytical Results - Baseline and CCR Parameters

Date Range: 10/01/2022 to 12/31/2023

Lab Methods:

			Alkalinity, lab, mg/L	Boron, total, mg/L	Calcium, total, mg/L	Chloride, total, mg/L	Copper, tot, ug/L	Fluoride, total, mg/L
W77	3/6/2023	AE65331	157.0		25.1		<1.60	
	4/11/2023	AE65956	150.0	0.420	24.0	8.9	<4.00	1.10
	5/15/2023	AE66593			23.9		5.00	
	6/14/2023	AE67180			23.0		<4.00	
	7/17/2023	40265339006			24.1		7.50	
	8/17/2023	AE68383			22.4		4.10	
	9/21/2023	AE68999			25.4		<3.40	
	10/30/2023	AE69689	147.0	0.428	24.5	8.1		1.20

Pleasant Prairie Ash LF
Table 2. Analytical Results - Baseline and CCR Parameters

Date Range: 10/01/2022 to 12/31/2023

Lab Methods:

Well Id	Date Sampled	Lab Id	Hardness, tot, mg/L	Magnesium, total, mg/L	Manganese, total, ug/L	Nitrite + Nitrate, total, mg/L	pH (Field), SU	Silver, tot, ug/L
W20D	10/5/2022	AE62999					7.1	
	1/30/2023	AE64759	130.00	16.00	46.0	0.950	7.6	<2.600
	3/6/2023	AE65326	130.00	16.50	37.0	0.159	8.1	<0.800
	4/11/2023	AE65951	130.00	16.00	30.0	<0.400	7.8	<20.000
	5/15/2023	AE66588	126.00	16.10	40.0	0.600	7.7	<20.000
	6/14/2023	AE67175	130.00	16.00	30.0	0.640	8.5	20.000
	7/17/2023	40265339001	133.00	17.00	37.1		8.0	<3.200
		AE67784				0.680		
	8/17/2023	AE68378	125.00	15.60	61.4	1.720	8.1	<3.200
	9/21/2023	AE68994	133.00	16.80	21.9	1.300	7.9	<8.000
	10/26/2023	AE69710	131.00				7.5	
W73	10/5/2022	AE62974					8.3	
	1/30/2023	AE64760	100.00	13.00	8.7	0.130	8.1	<2.600
	3/6/2023	AE65327	120.00	14.70	26.0	0.129	8.7	<1.200
	4/11/2023	AE65960	94.00	12.00	7.0	<0.400		<20.000
		AE65978					8.3	
	5/15/2023	AE66589	108.00	14.90	10.0	<0.400	8.3	<20.000
	6/14/2023	AE67176	48.00	0.02	20.0	0.610	9.0	<20.000
	7/17/2023	40265339002	97.40	12.40	4.3		7.5	<3.200
		AE67785				0.590		
	8/17/2023	AE68379	104.00	12.90	21.5	1.600	9.1	<3.200
	9/21/2023	AE68995	118.00	14.60	26.9	2.200	8.4	<3.200
	10/30/2023	AE69690	98.70				8.2	
W74	10/5/2022	AE63003					7.9	
	3/6/2023	AE65328	110.00	15.20	24.0	0.157	8.2	<1.200
	4/11/2023	AE65954	110.00	15.00	50.0	<0.400	7.5	<20.000

Pleasant Prairie Ash LF
Table 2. Analytical Results - Baseline and CCR Parameters

Date Range: 10/01/2022 to 12/31/2023

Lab Methods:

			Hardness, tot, mg/L	Magnesium, total, mg/L	Manganese, total, ug/L	Nitrite + Nitrate, total, mg/L	pH (Field), SU	Silver, tot, ug/L
W74	5/15/2023	AE66590	109.00	15.10	10.0	0.660	8.0	<20.000
	6/14/2023	AE67177	110.00	15.00	10.0	0.620	8.8	<20.000
	7/17/2023	40265339003	113.00	15.40	14.3		7.6	<3.200
		AE67786				0.640		
	8/17/2023	AE68380	107.00	14.50	16.7	1.050	8.9	<3.200
	9/21/2023	AE68996	107.00	14.60	2.7	1.900	7.5	<3.200
	10/30/2023	AE69691	111.00		16.7	0.065	8.2	<3.200
W75	10/5/2022	AE63004					8.1	
	1/30/2023	AE64761	100.00	13.00	11.0	0.150	8.2	<2.600
	3/6/2023	AE65329	110.00	13.60	12.0	0.131	8.3	<1.200
	4/11/2023	AE65955	100.00	13.00	10.0	<0.400	8.1	<20.000
	5/15/2023	AE66591	99.80	13.00	5.0	<0.400	8.1	<20.000
	6/14/2023	AE67178	100.00	13.00	7.0	0.710	8.9	<20.000
	7/17/2023	40265339004	104.00	13.30	10.5		7.7	<3.200
		AE67787				0.690		
	8/17/2023	AE68381	98.90	12.50	10.1	1.230	8.8	<3.200
	9/21/2023	AE68997	106.00	13.40	2.1	1.600	7.4	<3.200
	10/30/2023	AE69686	102.00				7.4	
W76	10/5/2022	AE63005					8.2	
	1/30/2023	AE64762	97.00	12.00	35.0	0.140	8.3	<2.600
	3/6/2023	AE65330	100.00	12.50	30.0	0.132	8.8	<1.200
	4/11/2023	AE65958	95.00	12.00	20.0	<0.400	8.2	<20.000
	5/15/2023	AE66592	94.80	12.00	10.0	<0.400	8.3	<20.000
	6/14/2023	AE67179	94.00	12.00	8.0	0.680	9.1	<20.000
	7/17/2023	40265339005	99.90	12.60	10.8		7.2	<3.200
		AE67788				0.860		
	8/17/2023	AE68382	94.70	11.80	14.0	7.230	9.1	<3.200

Pleasant Prairie Ash LF
Table 2. Analytical Results - Baseline and CCR Parameters

Date Range: 10/01/2022 to 12/31/2023

Lab Methods:

			Hardness, tot, mg/L	Magnesium, total, mg/L	Manganese, total, ug/L	Nitrite + Nitrate, total, mg/L	pH (Field), SU	Silver, tot, ug/L
W76	9/21/2023	AE68998	98.00	12.20	12.2	1.900	8.5	<3.200
	10/30/2023	AE69688	96.90				8.3	
W77	10/5/2022	AE63008					7.6	
	1/30/2023	AE64763	120.00	14.00	90.0	0.150	7.7	<2.600
	3/6/2023	AE65331	120.00	13.90	73.0	0.129	7.9	<1.200
	4/11/2023	AE65956	120.00	13.00	70.0	<0.400	7.7	<20.000
	5/15/2023	AE66593	115.00	13.40	60.0	0.520	7.7	<20.000
	6/14/2023	AE67180	110.00	13.00	50.0	0.790	8.6	<20.000
	7/17/2023	40265339006	115.00	13.30	21.0		7.3	<3.200
		AE67789				0.890		
	8/17/2023	AE68383	107.00	12.30	19.6	1.530	8.3	<3.200
	9/21/2023	AE68999	121.00	14.00	64.9	1.900	7.9	<3.200
	10/30/2023	AE69689	117.00				7.8	

Pleasant Prairie Ash LF
Table 2. Analytical Results - Baseline and CCR Parameters

Date Range: 10/01/2022 to 12/31/2023

Lab Methods:

Well Id	Date Sampled	Lab Id	Sulfate, total, mg/L	TDS, mg/L	Zinc, tot, ug/L
W20D	10/5/2022	AE62999	178	388	
	1/30/2023	AE64759			4.50
	3/6/2023	AE65326			<1.40
	4/11/2023	AE65951	170	380	<20.00
	5/15/2023	AE66588			<60.00
	6/14/2023	AE67175			<60.00
	7/17/2023	40265339001			<11.60
	8/17/2023	AE68378			<11.60
	9/21/2023	AE68994			<28.90
	10/26/2023	AE69710	182	406	
W73	10/5/2022	AE63007	131	298	
	1/30/2023	AE64760			12.00
	3/6/2023	AE65327			5.00
	4/11/2023	AE65960	130	340	<20.00
	5/15/2023	AE66589			<60.00
	6/14/2023	AE67176			<60.00
	7/17/2023	40265339002			<11.60
	8/17/2023	AE68379			<11.60
	9/21/2023	AE68995			<11.60
	10/30/2023	AE69690	132	338	
W74	10/5/2022	AE63003	172	332	
	3/6/2023	AE65328			2.00
	4/11/2023	AE65954	150	370	<20.00
	5/15/2023	AE66590			<60.00
	6/14/2023	AE67177			<60.00

Pleasant Prairie Ash LF
Table 2. Analytical Results - Baseline and CCR Parameters

Date Range: 10/01/2022 to 12/31/2023

Lab Methods:

			Sulfate, total, mg/L	TDS, mg/L	Zinc, tot, ug/L
W74	7/17/2023	40265339003			<11.60
	8/17/2023	AE68380			22.20
	9/21/2023	AE68996			<11.60
	10/30/2023	AE69691	162	372	<11.60
W75	10/5/2022	AE63004	133	302	
	1/30/2023	AE64761			4.00
	3/6/2023	AE65329			<1.80
	4/11/2023	AE65955	120	340	<20.00
	5/15/2023	AE66591			<60.00
	6/14/2023	AE67178			<60.00
	7/17/2023	40265339004			<11.60
	8/17/2023	AE68381			<11.60
	9/21/2023	AE68997			13.80
	10/30/2023	AE69686	133	340	
W76	10/5/2022	AE63005	144	288	
	1/30/2023	AE64762			5.00
	3/6/2023	AE65330			2.00
	4/11/2023	AE65958	130	350	<20.00
	5/15/2023	AE66592			<60.00
	6/14/2023	AE67179			<60.00
	7/17/2023	40265339005			<11.60
	8/17/2023	AE68382			<11.60
	9/21/2023	AE68998			12.50
	10/30/2023	AE69688	139	344	
W77	10/5/2022	AE63008	132	328	
	1/30/2023	AE64763			4.80

Pleasant Prairie Ash LF
Table 2. Analytical Results - Baseline and CCR Parameters

Date Range: 10/01/2022 to 12/31/2023

Lab Methods:

			Sulfate, total, mg/L	TDS, mg/L	Zinc, tot, ug/L
W77	3/6/2023	AE65331			<1.80
	4/11/2023	AE65956	130	360	<20.00
	5/15/2023	AE66593			<60.00
	6/14/2023	AE67180			<60.00
	7/17/2023	40265339006			<11.60
	8/17/2023	AE68383			<11.60
	9/21/2023	AE68999			<11.60
	10/30/2023	AE69689	135	366	

FIGURES

Y:\GIS\Projects\161660\P4\MXD\2023Annual_GWM_CAR\Figure 1_GW Samp Well Loc_P4.mxd

PROJECT: 71202 | DATED: 1/29/2024 | DESIGNER: GALARNMC

UNIT BOUNDARY

CCR DOWNGRADIENT MONITORING WELL LOCATION

CCR UPGRADIENT MONITORING WELL LOCATION

IMAGERY DATE = 6/23/2022

0 150 300 Feet

MONITORING WELL LOCATION MAP

2023 CCR ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
PLEASANT PRAIRIE POWER PLANT
ASH LANDFILL
PLEASANT PRAIRIE, WISCONSIN

FIGURE 1

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.

RAMBOLL

Y:\GIS\Projects\161660\P4\MXD\2023Annual_GWM_CAR\Figure 2_GWE Contours 2210.mxd

PROJECT: 169000XXXX | DATED: 1/29/2024 | DESIGNER: GALARNMC

UNIT BOUNDARY

BEDROCK UNIT (UPPERMOST AQUIFER) CCR MONITORING WELL LOCATION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD 88)

INFERRED GROUNDWATER ELEVATION CONTOUR

GROUNDWATER FLOW DIRECTION

Vgw = ESTIMATED FT/YR GROUNDWATER FLOW VELOCITY
IMAGERY DATE = 6/23/2022

0 150 300 Feet

POTENTIOMETRIC SURFACE MAP
OCTOBER 5, 2022

2023 CCR ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
PLEASANT PRAIRIE POWER PLANT
ASH LANDFILL
PLEASANT PRAIRIE, WISCONSIN

FIGURE 2

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

GROUNDWATER AVERAGE LINEAR VELOCITY CALCULATIONS
PLEASANT PRAIRIE POWER PLANT ASH LANDFILL
PLEASANT PRAIRIE, WISCONSIN

OCTOBER 2022 **$V = K i / n_e$**

V = Groundwater Velocity
K = Hydraulic Conductivity
i = Hydraulic Gradient (unitless value)
n_e = Effective Porosity

UPPERMOST AQUIFER

Contours	**666.0**	**to**	**665.0**	**North to Northeast Across the Landfill**	Elevation Change (ft)		Distance Change (ft)
K =	1.04E+03	ft/yr	Geometric mean				
i =	0.006		between contours identified above			1 /	180 = 0.006
n_e =	25	%					

$$V = \frac{1.04E+03 * 5.56E-03}{0.25}$$

V = 23 feet/year

[O: KLT 1/31/2023, C:NMD 1/31/2023]

Y:\GIS\Projects\161660\P4\MXD\2023Annual_GWM_CAR\Figure 3_GWE Contours 2304.mxd

PROJECT: 169000XXXX | DATED: 1/29/2024 | DESIGNER: GALARNMC

UNIT BOUNDARY

BEDROCK UNIT (UPPERMOST AQUIFER) CCR MONITORING WELL LOCATION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD 88)

INFERRED GROUNDWATER ELEVATION CONTOUR

GROUNDWATER FLOW DIRECTION

Vgw = ESTIMATED FT/YR GROUNDWATER FLOW VELOCITY
IMAGERY DATE = 6/23/2022

0 150 300 Feet

POTENTIOMETRIC SURFACE MAP
APRIL 11, 2023

2023 CCR ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
PLEASANT PRAIRIE POWER PLANT
ASH LANDFILL
PLEASANT PRAIRIE, WISCONSIN

FIGURE 3

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

GROUNDWATER AVERAGE LINEAR VELOCITY CALCULATIONS
PLEASANT PRAIRIE POWER PLANT ASH LANDFILL
PLEASANT PRAIRIE, WISCONSIN

APRIL 2023 $V = K i / n_e$

V = Groundwater Velocity
K = Hydraulic Conductivity
i = Hydraulic Gradient (unitless value)
n_e = Effective Porosity

UPPERMOST AQUIFER

Contours	**672.5**	**to**	**672.0**	**North to Northeast Across the Landfill**	Elevation Change (ft)		Distance Change (ft)
K =	1.04E+03	ft/yr	Geometric mean for Landfill 3 (all)				
i =	0.004		between contours identified above		0.5	/	137 = 0.004
n_e =	25	%					

$$V = \frac{1.04E+03 * 3.65E-03}{0.25}$$

V = 15 feet/year

[O: KJS 1/29/2024, C:EJT 1/29/2024]

UNIT BOUNDARY

BEDROCK UNIT (UPPERMOST AQUIFER) CCR MONITORING WELL LOCATION

GROUNDWATER ELEVATION CONTOUR (1-FT INTERVAL, NAVD 88)

INFERRED GROUNDWATER ELEVATION CONTOUR

GROUNDWATER FLOW DIRECTION

Vgw = ESTIMATED FT/YR GROUNDWATER FLOW VELOCITY
IMAGERY DATE = 6/23/2022

0 150 300 Feet

POTENTIOMETRIC SURFACE MAP
OCTOBER 26 AND 30, 2023

2023 CCR ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
PLEASANT PRAIRIE POWER PLANT
ASH LANDFILL
PLEASANT PRAIRIE, WISCONSIN

FIGURE 4

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

RAMBOLL

GROUNDWATER AVERAGE LINEAR VELOCITY CALCULATIONS
PLEASANT PRAIRIE POWER PLANT ASH LANDFILL
PLEASANT PRAIRIE, WISCONSIN

OCTOBER 2023 $V = K i / n_e$

V = Groundwater Velocity
K = Hydraulic Conductivity
i = Hydraulic Gradient (unitless value)
n_e = Effective Porosity

UPPERMOST AQUIFER

Contours	**665.5**	**to**	**665.0**	**North to Northeast Across the Landfill**	Elevation Change (ft)		Distance Change (ft)
K =	1.04E+03	ft/yr	Geometric mean for Landfill 3 (all)				
i =	0.005		between contours identified above		0.5	/	106 = 0.005
n_e =	25	%					

$$V = \frac{1.04E+03 * 4.72E-03}{0.25}$$

V = 20 feet/year

[O: KJS 1/29/2024, C:EJT 1/29/2024]

APPENDIX A
LABORATORY REPORTS

To: Eric Kovatch
PSB Annex A231

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

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W20D P4 Landfill CCR Well Sample**
Sample ID: AE64759 Sample Collection Date/Time: 01/30/2023 09:19
Sample Received: 01/30/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	17.76	0.05	feet		1		H2OD	1/30/23	RAMBOLL
Field Temperature	9.4	0.1	Degrees (		1		TEMP	1/30/23	RAMBOLL
Field Conductivity	163	0	umhos		1		FCOND25	1/30/23	RAMBOLL
Field pH	7.6	0.1	Units	0.1	1		FIELDPH	1/30/23	RAMBOLL
Total Alkalinity as CaCO3	111	20	mg/L		1		SM 2320 B-1997	2/13/23	C153278
Nitrate-Nitrite as N	0.95	0.011	mg/L	0.036	1		EPA 300.0	1/31/23	JLM
Nitrate as N	0.95	0.008	mg/L	0.027	1		EPA 300.0	1/31/23	JLM
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	1/31/23	JLM
Total Silver	Less Than	2.6	ug/L	8.7	1		EPA 200.7	2/22/23	EDL
Total Copper	Less Than	0.65	ug/L	2.2	1		EPA 200.7	2/22/23	EDL
Total Manganese	46	0.27	ug/L	0.90	1		EPA 200.7	2/22/23	EDL
Total Calcium	25000	1.2	ug/L	4.0	1		EPA 200.7	2/22/23	EDL
Total Magnesium	16000	3.5	ug/L	12	1		EPA 200.7	2/22/23	EDL
Total Zinc	4.5	1.8	ug/L	6.0	1		EPA 200.7	2/22/23	EDL
Total Hardness as CaCO3	130	1	mg/L		1		Std Mtd 2340B	3/1/23	CMW

Sample Comments:

Sample Description: **W73 P4 Landfill CCR Well Sample**
Sample ID: AE64760 Sample Collection Date/Time: 01/30/2023 14:47
Sample Received: 01/30/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	22.25	0.05	feet		1		H2OD	1/30/23	RAMBOLL
Field Temperature	7.1	0.1	Degrees (		1		TEMP	1/30/23	RAMBOLL
Field Conductivity	562	0	umhos		1		FCOND25	1/30/23	RAMBOLL
Field pH	8.1	0.1	Units	0.1	1		FIELDPH	1/30/23	RAMBOLL
Total Alkalinity as CaCO3	114	20	mg/L		1		SM 2320 B-1997	2/13/23	C153278
Nitrate-Nitrite as N	0.13	0.011	mg/L	0.036	1		EPA 300.0	1/31/23	JLM
Nitrate as N	0.13	0.008	mg/L	0.027	1		EPA 300.0	1/31/23	JLM
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	1/31/23	JLM
Total Silver	Less Than	2.6	ug/L	8.7	1		EPA 200.7	2/22/23	EDL
Total Copper	0.95	0.65	ug/L	2.2	1		EPA 200.7	2/22/23	EDL
Total Manganese	8.7	0.27	ug/L	0.90	1		EPA 200.7	2/22/23	EDL
Total Calcium	20000	1.2	ug/L	4.0	1		EPA 200.7	2/22/23	EDL
Total Magnesium	13000	3.5	ug/L	12	1		EPA 200.7	2/22/23	EDL

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W73 P4 Landfill CCR Well Sample**
Sample ID: AE64760 Sample Collection Date/Time: 01/30/2023 14:47
Sample Received: 01/30/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Zinc	12	1.8	ug/L	6.0	1		EPA 200.7	2/22/23	EDL
Total Hardness as CaCO3	100	1	mg/L		1		Std Mtd 2340B	3/1/23	CMW

Sample Comments:

Sample Description: **W75 P4 Landfill CCR Well Sample**
Sample ID: AE64761 Sample Collection Date/Time: 01/30/2023 11:11
Sample Received: 01/30/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	22.04	0.05	feet		1		H2OD	1/30/23	RAMBOLL
Field Temperature	9.2	0.1	Degrees (		1		TEMP	1/30/23	RAMBOLL
Field Conductivity	467	0	umhos		1		FCOND25	1/30/23	RAMBOLL
Field pH	8.2	0.1	Units	0.1	1		FIELDPH	1/30/23	RAMBOLL
Total Alkalinity as CaCO3	121	20	mg/L		1		SM 2320 B-1997	2/13/23	C153278
Nitrate-Nitrite as N	0.15	0.011	mg/L	0.036	1		EPA 300.0	1/31/23	JLM
Nitrate as N	0.15	0.008	mg/L	0.027	1		EPA 300.0	1/31/23	JLM
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	1/31/23	JLM
Total Silver	Less Than	2.6	ug/L	8.7	1		EPA 200.7	2/22/23	EDL
Total Copper	Less Than	0.65	ug/L	2.2	1		EPA 200.7	2/22/23	EDL
Total Manganese	11	0.27	ug/L	0.90	1		EPA 200.7	2/22/23	EDL
Total Calcium	20000	1.2	ug/L	4.0	1		EPA 200.7	2/22/23	EDL
Total Magnesium	13000	3.5	ug/L	12	1		EPA 200.7	2/22/23	EDL
Total Zinc	4.0	1.8	ug/L	6.0	1		EPA 200.7	2/22/23	EDL
Total Hardness as CaCO3	100	1	mg/L		1		Std Mtd 2340B	3/1/23	CMW

Sample Comments:

Sample Description: **W76 P4 Landfill CCR Well Sample**
Sample ID: AE64762 Sample Collection Date/Time: 01/30/2023 12:37
Sample Received: 01/30/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	23.50	0.05	feet		1		H2OD	1/30/23	RAMBOLL
Field Temperature	9.1	0.1	Degrees (		1		TEMP	1/30/23	RAMBOLL
Field Conductivity	563	0	umhos		1		FCOND25	1/30/23	RAMBOLL
Field pH	8.3	0.1	Units	0.1	1		FIELDPH	1/30/23	RAMBOLL
Total Alkalinity as CaCO3	115	20	mg/L		1		SM 2320 B-1997	2/13/23	C153278
Nitrate-Nitrite as N	0.14	0.011	mg/L	0.036	1		EPA 300.0	1/31/23	JLM
Nitrate as N	0.14	0.008	mg/L	0.027	1		EPA 300.0	1/31/23	JLM
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	1/31/23	JLM
Total Silver	Less Than	2.6	ug/L	8.7	1		EPA 200.7	2/22/23	EDL

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W76 P4 Landfill CCR Well Sample**
Sample ID: AE64762 Sample Collection Date/Time: 01/30/2023 12:37
Sample Received: 01/30/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Copper	Less Than	0.65	ug/L	2.2	1		EPA 200.7	2/22/23	EDL
Total Manganese	35	0.27	ug/L	0.90	1		EPA 200.7	2/22/23	EDL
Total Calcium	19000	1.2	ug/L	4.0	1		EPA 200.7	2/22/23	EDL
Total Magnesium	12000	3.5	ug/L	12	1		EPA 200.7	2/22/23	EDL
Total Zinc	5.0	1.8	ug/L	6.0	1		EPA 200.7	2/22/23	EDL
Total Hardness as CaCO3	97	1	mg/L		1		Std Mtd 2340B	3/1/23	CMW

Sample Comments:

Sample Description: **W77 P4 Landfill CCR Well Sample**
Sample ID: AE64763 Sample Collection Date/Time: 01/30/2023 13:49
Sample Received: 01/30/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	18.15	0.05	feet		1		H2OD	1/30/23	RAMBOLL
Field Temperature	9.1	0.1	Degrees C		1		TEMP	1/30/23	RAMBOLL
Field Conductivity	637	0	umhos		1		FCOND25	1/30/23	RAMBOLL
Field pH	7.7	0.1	Units	0.1	1		FIELDPH	1/30/23	RAMBOLL
Total Alkalinity as CaCO3	150	20	mg/L		1		SM 2320 B-1997	2/13/23	C153278
Nitrate-Nitrite as N	0.15	0.011	mg/L	0.036	1		EPA 300.0	1/31/23	JLM
Nitrate as N	0.15	0.008	mg/L	0.027	1		EPA 300.0	1/31/23	JLM
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	1/31/23	JLM
Total Silver	Less Than	2.6	ug/L	8.7	1		EPA 200.7	2/22/23	EDL
Total Copper	1.5	0.65	ug/L	2.2	1		EPA 200.7	2/22/23	EDL
Total Manganese	90	0.27	ug/L	0.90	1		EPA 200.7	2/22/23	EDL
Total Calcium	25000	1.2	ug/L	4.0	1		EPA 200.7	2/22/23	EDL
Total Magnesium	14000	3.5	ug/L	12	1		EPA 200.7	2/22/23	EDL
Total Zinc	4.8	1.8	ug/L	6.0	1		EPA 200.7	2/22/23	EDL
Total Hardness as CaCO3	120	1	mg/L		1		Std Mtd 2340B	3/1/23	CMW

Sample Comments:

Sample Description: **QAQC1 P4 Landfill CCR Well Sample**
Sample ID: AE64764 Sample Collection Date/Time: 01/30/2023 13:54
Sample Received: 01/30/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Alkalinity as CaCO3	147	20	mg/L		1		SM 2320 B-1997	2/13/23	C153278
Nitrate-Nitrite as N	0.45	0.011	mg/L	0.036	1		EPA 300.0	1/31/23	JLM
Nitrate as N	0.45	0.008	mg/L	0.027	1		EPA 300.0	1/31/23	JLM
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	1/31/23	JLM
Total Silver	Less Than	2.6	ug/L	8.7	1		EPA 200.7	2/22/23	EDL

Report Date: Wednesday, January 24, 2024

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

Sample Description: **QAQC1 P4 Landfill CCR Well Sample**
Sample ID: AE64764 Sample Collection Date/Time: 01/30/2023 13:54
Sample Received: 01/30/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Copper	Less Than	0.65	ug/L	2.2	1		EPA 200.7	2/22/23	EDL
Total Manganese	89	0.27	ug/L	0.90	1		EPA 200.7	2/22/23	EDL
Total Calcium	25000	1.2	ug/L	4.0	1		EPA 200.7	2/22/23	EDL
Total Magnesium	14000	3.5	ug/L	12	1		EPA 200.7	2/22/23	EDL
Total Zinc	2.1	1.8	ug/L	6.0	1		EPA 200.7	2/22/23	EDL
Total Hardness as CaCO3	120	1	mg/L		1		Std Mtd 2340B	3/1/23	CMW

Sample Comments:

Sample Description: **EB1 P4 Landfill CCR Well Sample**
Sample ID: AE64765 Sample Collection Date/Time: 01/30/2023 15:30
Sample Received: 01/30/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Alkalinity as CaCO3	Less Than	20	mg/L		1		SM 2320 B-1997	2/13/23	C153278
Nitrate-Nitrite as N	Less Than	0.011	mg/L	0.036	1		EPA 300.0	1/31/23	JLM
Nitrate as N	Less Than	0.008	mg/L	0.027	1		EPA 300.0	1/31/23	JLM
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	1/31/23	JLM
Total Silver	Less Than	2.6	ug/L	8.7	1		EPA 200.7	2/22/23	EDL
Total Copper	0.78	0.65	ug/L	2.2	1		EPA 200.7	2/22/23	EDL
Total Manganese	0.43	0.27	ug/L	0.90	1		EPA 200.7	2/22/23	EDL
Total Calcium	300	1.2	ug/L	4.0	1		EPA 200.7	2/22/23	EDL
Total Magnesium	130	3.5	ug/L	12	1		EPA 200.7	2/22/23	EDL
Total Zinc	Less Than	1.8	ug/L	6.0	1		EPA 200.7	2/22/23	EDL
Total Hardness as CaCO3	1.3	1	mg/L		1		Std Mtd 2340B	3/1/23	CMW

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: Laboratory Services at (414) 221-4595.

To: Eric Kovatch
PSB Annex A231

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

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W20D P4 Landfill CCR Well Sample**
Sample ID: AE65326 Sample Collection Date/Time: 03/06/2023 09:16
Sample Received: 03/06/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	17.29	0.05	feet		1		H2OD	3/6/23	RAMBOLL
Field Temperature	10	0.1	Degrees (		1		TEMP	3/6/23	RAMBOLL
Field Conductivity	598	0	umhos		1		FCOND25	3/6/23	RAMBOLL
Field pH	8.1	0.1	Units	0.1	1		FIELDPH	3/6/23	RAMBOLL
Total Calcium	25500	12.4	ug/L	41.4	1		EPA 200.7	3/23/23	EDL
Total Zinc	Less Than	1.4	ug/L	4.7	1		EPA 200.7	3/23/23	EDL
Total Silver	Less Than	0.8	ug/L	2.8	1		EPA 200.7	3/23/23	EDL
Total Manganese	37	0.2	ug/L	0.7	1		EPA 200.7	3/23/23	EDL
Total Magnesium	16500	7.1	ug/L	24	1		EPA 200.7	3/23/23	EDL
Total Copper	Less Than	1.6	ug/L	5.2	1		EPA 200.7	3/23/23	EDL
Nitrate-Nitrite as N	0.1585	0.011	mg/L	0.036	1		EPA 300.0	3/15/23	JLM
Total Alkalinity as CaCO3	118	20	mg/L		1		SM 2320 B-1997	3/14/23	C153278
Nitrate as N	0.16	0.008	mg/L	0.027	1		EPA 353.2	3/15/23	JLM
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	3/15/23	JLM
Total Hardness as CaCO3	130	1	mg/L		1		Std Mtd 2340B	3/23/23	EDL

Sample Comments:

Sample Description: **W73 P4 Landfill CCR Well Sample**
Sample ID: AE65327 Sample Collection Date/Time: 03/06/2023 13:11
Sample Received: 03/06/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	21.24	0.05	feet		1		H2OD	3/6/23	RAMBOLL
Field Temperature	11	0.1	Degrees (		1		TEMP	3/6/23	RAMBOLL
Field Conductivity	504	0	umhos		1		FCOND25	3/6/23	RAMBOLL
Field pH	8.7	0.1	Units	0.1	1		FIELDPH	3/6/23	RAMBOLL
Total Calcium	23700	43	ug/L	140	1		EPA 200.7	3/23/23	EDL
Total Alkalinity as CaCO3	116	20	mg/L		1		SM 2320 B-1997	3/14/23	C153278
Total Zinc	5	1.8	ug/L	6.0	1		EPA 200.7	3/23/23	EDL
Total Silver	Less Than	1.2	ug/L	4.0	1		EPA 200.7	3/23/23	EDL
Total Manganese	26	0.11	ug/L	0.38	1		EPA 200.7	3/23/23	EDL
Total Magnesium	14700	7.1	ug/L	24	1		EPA 200.7	3/23/23	EDL
Total Copper	2	1.6	ug/L	5.2	1	J	EPA 200.7	3/23/23	EDL
Nitrate-Nitrite as N	0.1290	0.011	mg/L	0.036	1		EPA 300.0	3/14/23	JLM
Nitrate as N	0.13	0.008	mg/L	0.027	1		EPA 353.2	3/14/23	JLM

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W73 P4 Landfill CCR Well Sample**
Sample ID: AE65327 Sample Collection Date/Time: 03/06/2023 13:11
Sample Received: 03/06/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	3/14/23	JLM
Total Hardness as CaCO3	120	1	mg/L		1		Std Mtd 2340B	5/1/23	EDL

Sample Comments:

Sample Description: **W74 P4 Landfill CCR Well Sample**
Sample ID: AE65328 Sample Collection Date/Time: 03/06/2023 10:10
Sample Received: 03/06/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	18.29	0.05	feet		1		H2OD	3/6/23	RAMBOLL
Field Temperature	10	0.1	Degrees C		1		TEMP	3/6/23	RAMBOLL
Field Conductivity	559	0	umhos		1		FCOND25	3/6/23	RAMBOLL
Field pH	8.2	0.1	Units	0.1	1		FIELDPH	3/6/23	RAMBOLL
Total Calcium	19600	43	ug/L	140	1		EPA 200.7	4/25/23	EDL
Total Alkalinity as CaCO3	114	20	mg/L		1		SM 2320 B-1997	3/14/23	C153278
Total Zinc	2	1.8	ug/L	6.0	1	J	EPA 200.7	4/25/23	EDL
Total Silver	Less Than	1.2	ug/L	4.0	1		EPA 200.7	4/27/23	JLM
Total Manganese	24	0.11	ug/L	0.38	1		EPA 200.7	4/25/23	EDL
Total Magnesium	15200	7.1	ug/L	24	1		EPA 200.7	4/25/23	EDL
Total Copper	Less Than	1.6	ug/L	5.2	1		EPA 200.7	4/25/23	EDL
Nitrate-Nitrite as N	0.1569	0.011	mg/L	0.036	1		EPA 300.0	3/14/23	JLM
Nitrate as N	0.16	0.008	mg/L	0.027	1		EPA 353.2	3/14/23	JLM
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	3/14/23	JLM
Total Hardness as CaCO3	110	1	mg/L		1		Std Mtd 2340B	4/25/23	EDL

Sample Comments:

Sample Description: **W75 P4 Landfill CCR Well Sample**
Sample ID: AE65329 Sample Collection Date/Time: 03/06/2023 10:45
Sample Received: 03/06/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	20.95	0.05	feet		1		H2OD	3/6/23	RAMBOLL
Field Temperature	10	0.1	Degrees C		1		TEMP	3/6/23	RAMBOLL
Field Conductivity	515	0	umhos		1		FCOND25	3/6/23	RAMBOLL
Field pH	8.3	0.1	Units	0.1	1		FIELDPH	3/6/23	RAMBOLL
Total Calcium	20200	43	ug/L	140	1		EPA 200.7	4/25/23	EDL
Total Alkalinity as CaCO3	126	20	mg/L		1		SM 2320 B-1997	3/14/23	C153278
Total Zinc	Less Than	1.8	ug/L	6.0	1		EPA 200.7	4/25/23	EDL
Total Silver	Less Than	1.2	ug/L	4.0	1		EPA 200.7	4/27/23	JLM
Total Manganese	12	0.11	ug/L	0.38	1		EPA 200.7	4/25/23	EDL

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W75 P4 Landfill CCR Well Sample**
Sample ID: AE65329 Sample Collection Date/Time: 03/06/2023 10:45
Sample Received: 03/06/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Magnesium	13600	7.1	ug/L	24	1		EPA 200.7	4/25/23	EDL
Total Copper	Less Than	1.6	ug/L	5.2	1		EPA 200.7	4/25/23	EDL
Nitrate-Nitrite as N	0.1306	0.011	mg/L	0.036	1		EPA 300.0	3/14/23	JLM
Nitrate as N	0.13	0.008	mg/L	0.027	1		EPA 353.2	3/14/23	JLM
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	3/14/23	JLM
Total Hardness as CaCO3	110	1	mg/L		1		Std Mtd 2340B	4/25/23	EDL

Sample Comments:

Sample Description: **W76 P4 Landfill CCR Well Sample**
Sample ID: AE65330 Sample Collection Date/Time: 03/06/2023 11:26
Sample Received: 03/06/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	22.45	0.05	feet		1		H2OD	3/6/23	RAMBOLL
Field Temperature	9.8	0.1	Degrees (		1		TEMP	3/6/23	RAMBOLL
Field Conductivity	517	0	umhos		1		FCOND25	3/6/23	RAMBOLL
Field pH	8.8	0.1	Units	0.1	1		FIELDPH	3/6/23	RAMBOLL
Total Calcium	19400	43	ug/L	140	1		EPA 200.7	4/25/23	EDL
Total Alkalinity as CaCO3	118	20	mg/L		1		SM 2320 B-1997	3/14/23	C153278
Total Zinc	2	1.8	ug/L	6.0	1	J	EPA 200.7	4/25/23	EDL
Total Silver	Less Than	1.2	ug/L	4.0	1		EPA 200.7	4/27/23	JLM
Total Manganese	30	0.11	ug/L	0.38	1		EPA 200.7	4/25/23	EDL
Total Magnesium	12500	7.1	ug/L	24	1		EPA 200.7	4/25/23	EDL
Total Copper	Less Than	1.6	ug/L	5.2	1		EPA 200.7	4/25/23	EDL
Nitrate-Nitrite as N	0.1319	0.011	mg/L	0.036	1		EPA 300.0	3/14/23	JLM
Nitrate as N	0.13	0.008	mg/L	0.027	1		EPA 353.2	3/14/23	JLM
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	3/14/23	JLM
Total Hardness as CaCO3	100	1	mg/L		1		Std Mtd 2340B	4/25/23	EDL

Sample Comments:

Sample Description: **W77 P4 Landfill CCR Well Sample**
Sample ID: AE65331 Sample Collection Date/Time: 03/06/2023 12:08
Sample Received: 03/06/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	17.18	0.05	feet		1		H2OD	3/6/23	RAMBOLL
Field Temperature	11	0.1	Degrees (		1		TEMP	3/6/23	RAMBOLL
Field Conductivity	560	0	umhos		1		FCOND25	3/6/23	RAMBOLL
Field pH	7.9	0.1	Units	0.1	1		FIELDPH	3/6/23	RAMBOLL
Total Calcium	25100	43	ug/L	140	1		EPA 200.7	4/25/23	EDL

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W77 P4 Landfill CCR Well Sample**
Sample ID: AE65331 Sample Collection Date/Time: 03/06/2023 12:08
Sample Received: 03/06/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Alkalinity as CaCO3	157	20	mg/L		1		SM 2320 B-1997	3/14/23	C153278
Total Zinc	Less Than	1.8	ug/L	6.0	1		EPA 200.7	4/25/23	EDL
Total Silver	Less Than	1.2	ug/L	4.0	1		EPA 200.7	4/27/23	JLM
Total Manganese	73	0.11	ug/L	0.38	1		EPA 200.7	4/25/23	EDL
Total Magnesium	13900	7.1	ug/L	24	1		EPA 200.7	4/25/23	EDL
Total Copper	Less Than	1.6	ug/L	5.2	1		EPA 200.7	4/25/23	EDL
Nitrate-Nitrite as N	0.1285	0.011	mg/L	0.036	1		EPA 300.0	3/14/23	JLM
Nitrate as N	0.13	0.008	mg/L	0.027	1		EPA 353.2	3/14/23	JLM
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	3/14/23	JLM
Total Hardness as CaCO3	120	1	mg/L		1		Std Mtd 2340B	4/25/23	EDL

Sample Comments:

Sample Description: **QA/QC 1 P4 Landfill CCR Well Sample**
Sample ID: AE65332 Sample Collection Date/Time: 03/06/2023 10:50
Sample Received: 03/06/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Calcium	20300	43	ug/L	140	1		EPA 200.7	4/25/23	EDL
Total Alkalinity as CaCO3	124	20	mg/L		1		SM 2320 B-1997	3/14/23	C153278
Total Zinc	Less Than	1.8	ug/L	6.0	1		EPA 200.7	4/25/23	EDL
Total Silver	Less Than	1.2	ug/L	4.0	1		EPA 200.7	4/27/23	JLM
Total Manganese	12	0.11	ug/L	0.38	1		EPA 200.7	4/25/23	EDL
Total Magnesium	13700	7.1	ug/L	24	1		EPA 200.7	4/25/23	EDL
Total Copper	Less Than	1.6	ug/L	5.2	1		EPA 200.7	4/25/23	EDL
Nitrate-Nitrite as N	0.1165	0.011	mg/L	0.036	1		EPA 300.0	3/14/23	JLM
Nitrate as N	0.12	0.008	mg/L	0.027	1		EPA 353.2	3/14/23	JLM
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	3/14/23	JLM
Total Hardness as CaCO3	110	1	mg/L		1		Std Mtd 2340B	4/25/23	EDL

Sample Comments:

Sample Description: **EB1 P4 Landfill CCR Well Sample**
Sample ID: AE65333 Sample Collection Date/Time: 03/06/2023 13:48
Sample Received: 03/06/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Calcium	148	43	ug/L	140	1		EPA 200.7	4/25/23	EDL
Total Alkalinity as CaCO3	1.91	20	mg/L		1		SM 2320 B-1997	3/14/23	C153278
Total Zinc	Less Than	1.8	ug/L	6.0	1		EPA 200.7	4/25/23	EDL
Total Silver	Less Than	1.2	ug/L	4.0	1		EPA 200.7	4/27/23	JLM
Total Manganese	Less Than	0.11	ug/L	0.38	1		EPA 200.7	4/25/23	EDL

Report Date: Wednesday, January 24, 2024

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

Sample Description: **EB1 P4 Landfill CCR Well Sample**

Sample ID: AE65333 Sample Collection Date/Time: 03/06/2023 13:48

Sample Received: 03/06/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Magnesium	81	7.1	ug/L	24	1		EPA 200.7	4/25/23	EDL
Total Copper	Less Than	1.6	ug/L	5.2	1		EPA 200.7	4/25/23	EDL
Nitrate-Nitrite as N	0.0086	0.011	mg/L	0.036	1		EPA 300.0	3/14/23	JLM
Nitrate as N	0.0086	0.008	mg/L	0.027	1		EPA 353.2	3/14/23	JLM
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	3/14/23	JLM
Total Hardness as CaCO3	0.70	1	mg/L		1		Std Mtd 2340B	4/25/23	EDL

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: Laboratory Services at (414) 221-4595.

To: Eric Kovatch
PSB Annex A231

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

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W-20D P4 Landfill CCR Well Sample**
Sample ID: AE65951 Sample Collection Date/Time: 04/11/2023 09:09
Sample Received: 04/12/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	17.21	0.05	feet		1		H2OD	4/11/23	RAMBOLL
Field Temperature	12.0	0.1	Degrees (		1		TEMP	4/11/23	RAMBOLL
Field Conductivity	620	0	umhos		1		FCOND25	4/11/23	RAMBOLL
Field pH	7.8	0.1	Units	0.1	1		FIELDPH	4/11/23	RAMBOLL
Total Fluoride	1.0	0.6	mg/L	2.0	20	J	EPA 300.0	4/13/23	057
Total Chloride	11	1.0	mg/L	3.4	20		EPA 300.0	4/13/23	057
Total Sulfate	170	2.0	mg/L	6.8	20		EPA 300.0	4/13/23	057
Total Boron	460	10	ug/L	50	1		EPA 200.7	4/25/23	057
Total Calcium	24000	40	ug/L	100	1		EPA 200.7	4/24/23	057
Total Alkalinity as CaCO3	110	2	mg/L	6	1		SM 2320 B-1997	4/21/23	057
Total Copper	Less Than	4	ug/L	10	1		EPA 200.7	4/24/23	057
Total Hardness as CaCO3	130	1	mg/L		1		Std Mtd 2340B	4/24/23	057
Total Magnesium	16000	40	ug/L	100	1		EPA 200.7	4/24/23	057
Total Manganese	30	4	ug/L	10	1		EPA 200.7	4/24/23	057
Nitrate-Nitrite as N	Less Than	0.40	mg/L	0.72	20		EPA 300.0	4/24/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	4/17/23	057
Total Zinc	Less Than	20	ug/L	70	1		EPA 200.7	4/24/23	057
Total Dissolved Solids	380	10	mg/L	10	1	H1	Std Mtd 2540 C	4/20/23	057

Sample Comments:

Sample Description: **W-74 P4 Landfill CCR Well Sample**
Sample ID: AE65954 Sample Collection Date/Time: 04/11/2023 11:16
Sample Received: 04/12/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	17.93	0.05	feet		1		H2OD	4/11/23	RAMBOLL
Field Temperature	18.2	0.1	Degrees (		1		TEMP	4/11/23	RAMBOLL
Field Conductivity	584	0	umhos		1		FCOND25	4/11/23	RAMBOLL
Field pH	7.5	0.1	Units	0.1	1		FIELDPH	4/11/23	RAMBOLL
Total Fluoride	1.0	0.6	mg/L	2.0	20	J	EPA 300.0	4/13/23	057
Total Chloride	14	1.0	mg/L	3.4	20		EPA 300.0	4/13/23	057
Total Sulfate	150	2.0	mg/L	6.8	20		EPA 300.0	4/13/23	057
Total Boron	410	10	ug/L	50	1		EPA 200.7	4/25/23	057
Total Calcium	19000	40	ug/L	100	1		EPA 200.7	4/24/23	057
Total Alkalinity as CaCO3	100	2	mg/L	6	1		SM 2320 B-1997	4/21/23	057

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W-74 P4 Landfill CCR Well Sample**
Sample ID: AE65954 Sample Collection Date/Time: 04/11/2023 11:16
Sample Received: 04/12/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Copper	Less Than	4	ug/L	10	1		EPA 200.7	4/24/23	057
Total Hardness as CaCO3	110	1	mg/L		1		Std Mtd 2340B	4/24/23	057
Total Magnesium	15000	40	ug/L	100	1		EPA 200.7	4/24/23	057
Total Manganese	50	4	ug/L	10	1		EPA 200.7	4/24/23	057
Nitrate-Nitrite as N	Less Than	0.40	mg/L	0.72	20		EPA 300.0	4/13/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	4/17/23	057
Total Zinc	Less Than	20	ug/L	70	1		EPA 200.7	4/24/23	057
Total Dissolved Solids	370	10	mg/L	10	1	H1	Std Mtd 2540 C	4/20/23	057

Sample Comments:

Sample Description: **W-75 P4 Landfill CCR Well Sample**
Sample ID: AE65955 Sample Collection Date/Time: 04/11/2023 11:58
Sample Received: 04/12/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	20.08	0.05	feet		1		H2OD	4/11/23	RAMBOLL
Field Temperature	11.7	0.1	Degrees C		1		TEMP	4/11/23	RAMBOLL
Field Conductivity	530	0	umhos		1		FCOND25	4/11/23	RAMBOLL
Field pH	8.1	0.1	Units	0.1	1		FIELDPH	4/11/23	RAMBOLL
Total Fluoride	1.0	0.6	mg/L	2.0	20	J	EPA 300.0	4/13/23	057
Total Chloride	8.9	1.0	mg/L	3.4	20		EPA 300.0	4/13/23	057
Total Sulfate	120	2.0	mg/L	6.8	20		EPA 300.0	4/13/23	057
Total Boron	430	10	ug/L	50	1		EPA 200.7	4/25/23	057
Total Calcium	19000	40	ug/L	100	1		EPA 200.7	4/24/23	057
Total Alkalinity as CaCO3	120	2	mg/L	6	1		SM 2320 B-1997	4/21/23	057
Total Copper	Less Than	4	ug/L	10	1		EPA 200.7	4/24/23	057
Total Hardness as CaCO3	100	1	mg/L		1		Std Mtd 2340B	4/24/23	057
Total Magnesium	13000	40	ug/L	100	1		EPA 200.7	4/24/23	057
Total Manganese	10	4	ug/L	10	1		EPA 200.7	4/24/23	057
Nitrate-Nitrite as N	Less Than	0.40	mg/L	0.72	20		EPA 300.0	4/13/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	4/17/23	057
Total Zinc	Less Than	20	ug/L	70	1		EPA 200.7	4/24/23	057
Total Dissolved Solids	340	10	mg/L	10	1	H1	Std Mtd 2540 C	4/20/23	057

Sample Comments:

Sample Description: **W-77 P4 Landfill CCR Well Sample**
Sample ID: AE65956 Sample Collection Date/Time: 04/11/2023 12:46
Sample Received: 04/12/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W-77 P4 Landfill CCR Well Sample**
Sample ID: AE65956 Sample Collection Date/Time: 04/11/2023 12:46
Sample Received: 04/12/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	16.25	0.05	feet		1		H2OD	4/11/23	RAMBOLL
Field Temperature	11.5	0.1	Degrees (		1		TEMP	4/11/23	RAMBOLL
Field Conductivity	560	0	umhos		1		FCOND25	4/11/23	RAMBOLL
Field pH	7.7	0.1	Units	0.1	1		FIELDPH	4/11/23	RAMBOLL
Total Fluoride	1.1	0.6	mg/L	2.0	20	J	EPA 300.0	4/13/23	057
Total Chloride	8.9	1.0	mg/L	3.4	20		EPA 300.0	4/13/23	057
Total Sulfate	130	2.0	mg/L	6.8	20		EPA 300.0	4/13/23	057
Total Boron	420	10	ug/L	50	1		EPA 200.7	4/25/23	057
Total Calcium	24000	40	ug/L	100	1		EPA 200.7	4/24/23	057
Total Alkalinity as CaCO3	150	2	mg/L	6	1		SM 2320 B-1997	4/21/23	057
Total Copper	Less Than	4	ug/L	10	1		EPA 200.7	4/24/23	057
Total Hardness as CaCO3	120	1	mg/L		1		Std Mtd 2340B	4/24/23	057
Total Magnesium	13000	40	ug/L	100	1		EPA 200.7	4/24/23	057
Total Manganese	70	4	ug/L	10	1		EPA 200.7	4/24/23	057
Nitrate-Nitrite as N	Less Than	0.40	mg/L	0.72	20		EPA 300.0	4/13/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	4/17/23	057
Total Zinc	Less Than	20	ug/L	70	1		EPA 200.7	4/24/23	057
Total Dissolved Solids	360	10	mg/L	10	1	H1	Std Mtd 2540 C	4/20/23	057

Sample Comments:

Sample Description: **QAQC01 P4 Landfill CCR Well Sample**
Sample ID: AE65957 Sample Collection Date/Time: 04/11/2023 12:51
Sample Received: 04/12/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Fluoride	1.0	0.6	mg/L	2.0	20	J	EPA 300.0	4/13/23	057
Total Chloride	9.0	1.0	mg/L	3.4	20		EPA 300.0	4/13/23	057
Total Sulfate	130	2.0	mg/L	6.8	20		EPA 300.0	4/13/23	057
Total Boron	430	10	ug/L	50	1		EPA 200.7	4/25/23	057
Total Calcium	24000	40	ug/L	100	1		EPA 200.7	4/24/23	057
Total Alkalinity as CaCO3	140	2	mg/L	6	1		SM 2320 B-1997	4/21/23	057
Total Copper	Less Than	4	ug/L	10	1		EPA 200.7	4/24/23	057
Total Hardness as CaCO3	120	1	mg/L		1		Std Mtd 2340B	4/24/23	057
Total Magnesium	13000	40	ug/L	100	1		EPA 200.7	4/24/23	057
Total Manganese	70	4	ug/L	10	1		EPA 200.7	4/24/23	057
Nitrate-Nitrite as N	Less Than	0.40	mg/L	0.72	20		EPA 300.0	4/13/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	4/17/23	057
Total Zinc	Less Than	20	ug/L	70	1		EPA 200.7	4/24/23	057
Total Dissolved Solids	390	10	mg/L	10	1	H1	Std Mtd 2540 C	4/20/23	057

Report Date: Wednesday, January 24, 2024

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

Sample Comments:

Sample Description: **W-76 P4 Landfill CCR Well Sample**
Sample ID: AE65958 Sample Collection Date/Time: 04/11/2023 13:45
Sample Received: 04/12/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	22.48	0.05	feet		1		H2OD	4/11/23	RAMBOLL
Field Temperature	12.6	0.1	Degrees C		1		TEMP	4/11/23	RAMBOLL
Field Conductivity	533	0	umhos		1		FCOND25	4/11/23	RAMBOLL
Field pH	8.2	0.1	Units	0.1	1		FIELDPH	4/11/23	RAMBOLL
Total Fluoride	0.9	0.6	mg/L	2.0	20	J	EPA 300.0	4/13/23	057
Total Chloride	11	1.0	mg/L	3.4	20		EPA 300.0	4/13/23	057
Total Sulfate	130	2.0	mg/L	6.8	20		EPA 300.0	4/13/23	057
Total Boron	450	10	ug/L	50	1		EPA 200.7	4/25/23	057
Total Calcium	18000	40	ug/L	100	1		EPA 200.7	4/24/23	057
Total Alkalinity as CaCO3	110	2	mg/L	6	1		SM 2320 B-1997	4/21/23	057
Total Copper	Less Than	4	ug/L	10	1		EPA 200.7	4/24/23	057
Total Hardness as CaCO3	95	1	mg/L		1		Std Mtd 2340B	4/24/23	057
Total Magnesium	12000	40	ug/L	100	1		EPA 200.7	4/24/23	057
Total Manganese	20	4	ug/L	10	1		EPA 200.7	4/24/23	057
Nitrate-Nitrite as N	Less Than	0.40	mg/L	0.72	20		EPA 300.0	4/13/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	4/17/23	057
Total Zinc	Less Than	20	ug/L	70	1		EPA 200.7	4/24/23	057
Total Dissolved Solids	350	10	mg/L	10	1	H1	Std Mtd 2540 C	4/20/23	057

Sample Comments:

Sample Description: **W-73 P4 Landfill CCR Well Sample**
Sample ID: AE65960 Sample Collection Date/Time: 04/11/2023 15:05
Sample Received: 04/12/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	20.68	0.05	feet		1		H2OD	4/11/23	RAMBOLL
Field Temperature	11.8	0.1	Degrees C		1		TEMP	4/11/23	RAMBOLL
Field Conductivity	522	0	umhos		1		FCOND25	4/11/23	RAMBOLL
Field pH	8.3	0.1	Units	0.1	1		FIELDPH	4/11/23	RAMBOLL
Total Fluoride	1.0	0.6	mg/L	2.0	20	J	EPA 300.0	4/13/23	057
Total Chloride	12	1.0	mg/L	3.4	20		EPA 300.0	4/13/23	057
Total Sulfate	130	2.0	mg/L	6.8	20		EPA 300.0	4/13/23	057
Total Boron	440	10	ug/L	50	1		EPA 200.7	4/25/23	057
Total Calcium	18000	40	ug/L	100	1		EPA 200.7	4/24/23	057
Total Alkalinity as CaCO3	110	2	mg/L	6	1		SM 2320 B-1997	4/21/23	057
Total Copper	Less Than	4	ug/L	10	1		EPA 200.7	4/24/23	057
Total Hardness as CaCO3	94	1	mg/L		1		Std Mtd 2340B	4/24/23	057
Total Magnesium	12000	40	ug/L	100	1		EPA 200.7	4/24/23	057

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W-73 P4 Landfill CCR Well Sample**
Sample ID: AE65960 Sample Collection Date/Time: 04/11/2023 15:05
Sample Received: 04/12/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Manganese	7.0	4	ug/L	10	1	J	EPA 200.7	4/24/23	057
Nitrate-Nitrite as N	Less Than	0.40	mg/L	0.72	20		EPA 300.0	4/13/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	4/13/23	057
Total Zinc	Less Than	20	ug/L	70	1		EPA 200.7	4/24/23	057
Dissolved Boron	460	8	ug/L	30	1		EPA 200.7	4/24/23	057
Dissolved Calcium	18000	20	ug/L	60	1		EPA 200.7	4/24/23	057
Dissolved Sulfate	130	1.0	mg/L	3.4	10		EPA 300.0	4/24/23	057
Dissolved Chloride	15	0.5	mg/L	1.7	10		EPA 300.0	4/22/23	057
Total Dissolved Solids	340	10	mg/L	10	1	H1	Std Mtd 2540 C	4/20/23	057

Sample Comments:

Sample Description: **EB-1 P4 Landfill CCR Well Sample**
Sample ID: AE65961 Sample Collection Date/Time: 04/11/2023 16:20
Sample Received: 04/12/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Temperature	19.1	0.1	Degrees (		1		TEMP	4/11/23	RAMBOLL
Field Conductivity	16	0	umhos		1		FCOND25	4/11/23	RAMBOLL
Field pH	6.9	0.1	Units	0.1	1		FIELDPH	4/11/23	RAMBOLL
Total Fluoride	Less Than	0.6	mg/L	2.0	20		EPA 300.0	4/13/23	057
Total Chloride	Less Than	1.0	mg/L	3.4	20		EPA 300.0	4/13/23	057
Total Sulfate	Less Than	2.0	mg/L	6.8	20		EPA 300.0	4/13/23	057
Total Boron	Less Than	10	ug/L	50	1		EPA 200.7	4/25/23	057
Total Calcium	60	40	ug/L	100	1	J	EPA 200.7	4/24/23	057
Total Alkalinity as CaCO3	2	2	mg/L	6	1	J	SM 2320 B-1997	4/21/23	057
Total Copper	Less Than	4	ug/L	10	1		EPA 200.7	4/24/23	057
Total Hardness as CaCO3	Less Than	0.27	mg/L	1.0	1		Std Mtd 2340B	4/24/23	057
Total Magnesium	Less Than	40	ug/L	100	1		EPA 200.7	4/24/23	057
Total Manganese	Less Than	4	ug/L	10	1		EPA 200.7	4/24/23	057
Nitrate-Nitrite as N	Less Than	0.40	mg/L	0.72	20		EPA 300.0	4/13/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	4/17/23	057
Total Zinc	Less Than	20	ug/L	70	1		EPA 200.7	4/24/23	057
Total Dissolved Solids	Less Than	10	mg/L	10	1	H1	Std Mtd 2540 C	4/20/23	057

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: Laboratory Services at (414) 221-4595.

To: Eric Kovatch
PSB Annex A231

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

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W20D P4 Landfill CCR Well Catchup Sample**
Sample ID: AE66588 Sample Collection Date/Time: 05/15/2023 09:26
Sample Received: 05/15/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	18.57	0.05	feet		1		H2OD	5/15/23	RAMBOLL
Field Temperature	12	0.1	Degrees C		1		TEMP	5/15/23	RAMBOLL
Field Conductivity	613	0	umhos		1		FCOND25	5/15/23	RAMBOLL
Field pH	7.7	0.1	Units	0.1	1		FIELDPH	5/15/23	RAMBOLL
Nitrite as N	Less Than	0.2	mg/L	0.8	20		EPA 300.0	5/17/23	057
Nitrate as N	0.60	0.20	mg/L	0.68	20	J	EPA 300.0	5/17/23	057
Nitrate-Nitrite as N	0.60	0.4	mg/L	0.036	20		EPA 300.0	5/17/23	057
Total Calcium	23700	600	ug/L	1800	1		EPA 200.7	5/16/23	057
Total Copper	5	4	ug/L	10	1	J	EPA 200.7	5/16/23	057
Total Magnesium	16100	60	ug/L	100	1		EPA 200.7	5/16/23	057
Total Manganese	40	4	ug/L	10	1		EPA 200.7	5/16/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	5/22/23	057
Total Zinc	Less Than	60	ug/L	160	1		EPA 200.7	5/16/23	057
Total Hardness as CaCO3	126	1	mg/L		1		Std Mtd 2340B	5/16/23	057

Sample Comments:

Sample Description: **W73 P4 Landfill CCR Well Catchup Sample**
Sample ID: AE66589 Sample Collection Date/Time: 05/15/2023 13:02
Sample Received: 05/15/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	21.41	0.05	feet		1		H2OD	5/15/23	RAMBOLL
Field Temperature	11	0.1	Degrees C		1		TEMP	5/15/23	RAMBOLL
Field Conductivity	517	0	umhos		1		FCOND25	5/15/23	RAMBOLL
Field pH	8.3	0.1	Units	0.1	1		FIELDPH	5/15/23	RAMBOLL
Nitrite as N	Less Than	0.2	mg/L	0.8	20		EPA 300.0	5/17/23	057
Nitrate as N	Less Than	0.20	mg/L	0.68	20		EPA 300.0	5/17/23	057
Nitrate-Nitrite as N	Less Than	0.4	mg/L	0.036	20		EPA 300.0	5/17/23	057
Total Calcium	18600	600	ug/L	1800	1		EPA 200.7	5/16/23	057
Total Copper	5	4	ug/L	10	1	J	EPA 200.7	5/16/23	057
Total Magnesium	14900	60	ug/L	100	1		EPA 200.7	5/16/23	057
Total Manganese	10	4	ug/L	10	1		EPA 200.7	5/16/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	5/22/23	057
Total Zinc	Less Than	60	ug/L	160	1		EPA 200.7	5/16/23	057
Total Hardness as CaCO3	108	1	mg/L		1		Std Mtd 2340B	5/16/23	057

Report Date: Wednesday, January 24, 2024

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

Sample Comments:

Sample Description: **W74 P4 Landfill CCR Well Catchup Sample**
Sample ID: AE66590 Sample Collection Date/Time: 05/15/2023 10:16
Sample Received: 05/15/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	19.28	0.05	feet		1		H2OD	5/15/23	RAMBOLL
Field Temperature	11	0.1	Degrees C		1		TEMP	5/15/23	RAMBOLL
Field Conductivity	578	0	umhos		1		FCOND25	5/15/23	RAMBOLL
Field pH	8.0	0.1	Units	0.1	1		FIELDPH	5/15/23	RAMBOLL
Nitrite as N	Less Than	0.2	mg/L	0.8	20		EPA 300.0	5/17/23	057
Nitrate as N	0.66	0.20	mg/L	0.68	20		EPA 300.0	5/17/23	057
Nitrate-Nitrite as N	0.66	0.4	mg/L	0.036	20		EPA 300.0	5/17/23	057
Total Calcium	18900	600	ug/L	1800	1		EPA 200.7	5/16/23	057
Total Copper	Less Than	4	ug/L	10	1		EPA 200.7	5/16/23	057
Total Magnesium	15100	60	ug/L	100	1		EPA 200.7	5/16/23	057
Total Manganese	10	4	ug/L	10	1		EPA 200.7	5/16/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	5/22/23	057
Total Zinc	Less Than	60	ug/L	160	1		EPA 200.7	5/16/23	057
Total Alkalinity as CaCO3	102	2	mg/L	6	1		SM 2320 B-1997	5/18/23	057
Total Hardness as CaCO3	109	1	mg/L		1		Std Mtd 2340B	5/16/23	057

Sample Comments:

Sample Description: **W75 P4 Landfill CCR Well Catchup Sample**
Sample ID: AE66591 Sample Collection Date/Time: 05/15/2023 10:56
Sample Received: 05/15/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	21.41	0.05	feet		1		H2OD	5/15/23	RAMBOLL
Field Temperature	11	0.1	Degrees C		1		TEMP	5/15/23	RAMBOLL
Field Conductivity	529	0	umhos		1		FCOND25	5/15/23	RAMBOLL
Field pH	8.1	0.1	Units	0.1	1		FIELDPH	5/15/23	RAMBOLL
Nitrite as N	Less Than	0.2	mg/L	0.8	20		EPA 300.0	5/17/23	057
Nitrate as N	Less Than	0.20	mg/L	0.68	20		EPA 300.0	5/17/23	057
Nitrate-Nitrite as N	Less Than	0.4	mg/L	0.036	20		EPA 300.0	5/17/23	057
Total Calcium	18600	600	ug/L	1800	1		EPA 200.7	5/16/23	057
Total Copper	Less Than	4	ug/L	10	1		EPA 200.7	5/16/23	057
Total Magnesium	13000	60	ug/L	100	1		EPA 200.7	5/16/23	057
Total Manganese	5	4	ug/L	10	1	J	EPA 200.7	5/16/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	5/22/23	057
Total Zinc	Less Than	60	ug/L	160	1		EPA 200.7	5/16/23	057
Total Hardness as CaCO3	99.8	1	mg/L		1		Std Mtd 2340B	5/16/23	057

Report Date: Wednesday, January 24, 2024

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

Sample Comments:

Sample Description: **W76 P4 Landfill CCR Well Catchup Sample**
Sample ID: AE66592 Sample Collection Date/Time: 05/15/2023 11:35
Sample Received: 05/15/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	22.75	0.05	feet		1		H2OD	5/15/23	RAMBOLL
Field Temperature	11	0.1	Degrees C		1		TEMP	5/15/23	RAMBOLL
Field Conductivity	531	0	umhos		1		FCOND25	5/15/23	RAMBOLL
Field pH	8.3	0.1	Units	0.1	1		FIELDPH	5/15/23	RAMBOLL
Nitrite as N	Less Than	0.20	mg/L	0.80	20		EPA 300.0	5/17/23	057
Nitrate as N	Less Than	0.20	mg/L	0.68	20		EPA 300.0	5/17/23	057
Nitrate-Nitrite as N	Less Than	0.4	mg/L	0.036	20		EPA 300.0	5/17/23	057
Total Calcium	18100	600	ug/L	1800	1		EPA 200.7	5/16/23	057
Total Copper	5	4	ug/L	10	1	J	EPA 200.7	5/16/23	057
Total Magnesium	12000	60	ug/L	100	1		EPA 200.7	5/16/23	057
Total Manganese	10	4	ug/L	10	1		EPA 200.7	5/16/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	5/22/23	057
Total Zinc	Less Than	60	ug/L	160	1		EPA 200.7	5/22/23	057
Total Hardness as CaCO3	94.8	1	mg/L		1		Std Mtd 2340B	5/31/23	CMW

Sample Comments:

Sample Description: **W77 P4 Landfill CCR Well Catchup Sample**
Sample ID: AE66593 Sample Collection Date/Time: 05/15/2023 12:06
Sample Received: 05/15/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	17.30	0.05	feet		1		H2OD	5/15/23	RAMBOLL
Field Temperature	11	0.1	Degrees C		1		TEMP	5/15/23	RAMBOLL
Field Conductivity	570	0	umhos		1		FCOND25	5/15/23	RAMBOLL
Field pH	7.7	0.1	Units	0.1	1		FIELDPH	5/15/23	RAMBOLL
Nitrite as N	Less Than	0.2	mg/L	0.8	20		EPA 300.0	5/17/23	057
Nitrate as N	0.52	0.20	mg/L	0.68	20	J	EPA 300.0	5/17/23	057
Nitrate-Nitrite as N	0.52	0.4	mg/L	0.036	20		EPA 300.0	5/17/23	057
Total Calcium	23900	600	ug/L	1800	1		EPA 200.7	5/16/23	057
Total Copper	5	4	ug/L	10	1	J	EPA 200.7	5/16/23	057
Total Magnesium	13400	60	ug/L	100	1		EPA 200.7	5/16/23	057
Total Manganese	60	4	ug/L	10	1		EPA 200.7	5/16/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	5/22/23	057
Total Zinc	Less Than	60	ug/L	160	1		EPA 200.7	5/16/23	057
Total Hardness as CaCO3	115	1	mg/L		1		Std Mtd 2340B	5/31/23	CMW

Report Date: Wednesday, January 24, 2024

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

Sample Comments:

Sample Description: **QAQC01 P4 Landfill CCR Well Catchup Sample**
Sample ID: AE66594 Sample Collection Date/Time: 05/15/2023 10:21
Sample Received: 05/15/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Nitrite as N	Less Than	0.2	mg/L	0.8	20		EPA 300.0	5/17/23	057
Nitrate as N	0.64	0.20	mg/L	0.68	20	J	EPA 300.0	5/17/23	057
Nitrate-Nitrite as N	0.64	0.4	mg/L	0.036	20		EPA 300.0	5/17/23	057
Total Calcium	20200	600	ug/L	1800	1		EPA 200.7	5/16/23	057
Total Copper	6	4	ug/L	10	1	J	EPA 200.7	5/16/23	057
Total Magnesium	13400	60	ug/L	100	1		EPA 200.7	5/16/23	057
Total Manganese	10	4	ug/L	10	1		EPA 200.7	5/16/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	5/22/23	057
Total Zinc	Less Than	60	ug/L	160	1		EPA 200.7	5/16/23	057
Total Alkalinity as CaCO3	110	2	mg/L	6	1		SM 2320 B-1997	5/18/23	057
Total Hardness as CaCO3	106	1	mg/L		1		Std Mtd 2340B	5/31/23	CMW

Sample Comments:

Sample Description: **EB1 P4 Landfill CCR Well Catchup Sample**
Sample ID: AE66595 Sample Collection Date/Time: 05/15/2023 13:20
Sample Received: 05/15/2023 Sample Collector: KYLE SCHAEFER

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Nitrite as N	Less Than	0.2	mg/L	0.8	20		EPA 300.0	5/17/23	057
Nitrate as N	Less Than	0.20	mg/L	0.68	20		EPA 300.0	5/17/23	057
Nitrate-Nitrite as N	Less Than	0.4	mg/L	0.036	20		EPA 300.0	5/17/23	057
Total Calcium	1900	600	ug/L	1800	1		EPA 200.7	5/16/23	057
Total Copper	10	4	ug/L	10	1		EPA 200.7	5/16/23	057
Total Magnesium	1000	60	ug/L	100	1		EPA 200.7	5/16/23	057
Total Manganese	Less Than	4	ug/L	10	1		EPA 200.7	5/16/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	5/22/23	057
Total Zinc	Less Than	60	ug/L	160	1		EPA 200.7	5/16/23	057
Total Alkalinity as CaCO3	10	2	mg/L	6	1		SM 2320 B-1997	5/18/23	057
Total Hardness as CaCO3	8.9	1	mg/L		1		Std Mtd 2340B	5/16/23	057

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: Laboratory Services at (414) 221-4595.

To: Eric Kovatch
PSB Annex A231

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

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W20D P4 Landfill CCR Well Catchup Sample**
Sample ID: AE67175 Sample Collection Date/Time: 06/14/2023 09:17
Sample Received: 06/15/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	21.08	0.05	feet		1		H2OD	6/14/23	RAMBOLL
Field Temperature	14	0.1	Degrees (		1		TEMP	6/14/23	RAMBOLL
Field Conductivity	633	0	umhos		1		FCOND25	6/14/23	RAMBOLL
Field pH	8.5	0.1	Units	0.1	1		FIELDPH	6/14/23	RAMBOLL
Total Calcium	24000	600	ug/L	1800	1		EPA 200.7	7/5/23	057
Total Copper	Less Than	4	ug/L	10	1		EPA 200.7	7/6/23	057
Total Magnesium	16000	60	ug/L	100	1		EPA 200.7	7/5/23	057
Total Manganese	30	4	ug/L	10	1	J	EPA 200.7	7/5/23	057
Total Silver	20	20	ug/L	70	1		EPA 200.7	6/28/23	057
Total Zinc	Less Than	60	ug/L	200	1		EPA 200.7	7/5/23	057
Total Hardness as CaCO3	130	1	mg/L		1		Std Mtd 2340B	7/17/23	057
Nitrite as N	0.61	0.003	mg/L	0.009	1		EPA 300.0	6/16/23	AEU
Nitrate as N	0.031	0.008	mg/L	0.027	1		EPA 300.0	6/16/23	AEU
Nitrate-Nitrite as N	0.64	0.011	mg/L	0.036	1		EPA 300.0	6/16/23	AEU

Sample Comments:

Sample Description: **W73 P4 Landfill CCR Well Catchup Sample**
Sample ID: AE67176 Sample Collection Date/Time: 06/14/2023 13:51
Sample Received: 06/15/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	24.15	0.05	feet		1		H2OD	6/14/23	RAMBOLL
Field Temperature	15	0.1	Degrees (		1		TEMP	6/14/23	RAMBOLL
Field Conductivity	535	0	umhos		1		FCOND25	6/14/23	RAMBOLL
Field pH	9.0	0.1	Units	0.1	1		FIELDPH	6/14/23	RAMBOLL
Total Calcium	19000	600	ug/L	1800	1		EPA 200.7	7/5/23	057
Total Copper	Less Than	4	ug/L	10	1		EPA 200.7	7/6/23	057
Total Magnesium	20	4	ug/L	10	1		EPA 200.7	7/5/23	057
Total Manganese	20	4	ug/L	10	1		EPA 200.7	7/5/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	6/28/23	057
Total Zinc	Less Than	60	ug/L	200	1		EPA 200.7	6/28/23	057
Total Hardness as CaCO3	48	1	mg/L		1		Std Mtd 2340B	7/17/23	057
Nitrite as N	0.60	0.003	mg/L	0.009	1		EPA 300.0	6/16/23	AEU
Nitrate as N	Less Than	0.008	mg/L	0.027	1		EPA 300.0	6/16/23	AEU
Nitrate-Nitrite as N	0.61	0.011	mg/L	0.036	1		EPA 300.0	6/16/23	AEU

Report Date: Wednesday, January 24, 2024

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

Sample Comments:

Sample Description: **W74 P4 Landfill CCR Well Catchup Sample**
Sample ID: AE67177 Sample Collection Date/Time: 06/14/2023 10:09
Sample Received: 06/15/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	22.08	0.05	feet		1		H2OD	6/14/23	RAMBOLL
Field Temperature	11	0.1	Degrees (		1		TEMP	6/14/23	RAMBOLL
Field Conductivity	591	0	umhos		1		FCOND25	6/14/23	RAMBOLL
Field pH	8.8	0.1	Units	0.1	1		FIELDPH	6/14/23	RAMBOLL
Total Calcium	18000	600	ug/L	1800	1		EPA 200.7	6/30/23	057
Total Copper	Less Than	4	ug/L	10	1		EPA 200.7	6/30/23	057
Total Magnesium	15000	60	ug/L	100	1		EPA 200.7	6/30/23	057
Total Manganese	10	4	ug/L	10	1		EPA 200.7	6/30/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	6/28/23	057
Total Zinc	Less Than	60	ug/L	200	1		EPA 200.7	6/30/23	057
Total Hardness as CaCO3	110	1	mg/L		1		Std Mtd 2340B	7/17/23	AEU
Nitrite as N	0.59	0.003	mg/L	0.009	1		EPA 300.0	6/16/23	AEU
Nitrate as N	0.025	0.008	mg/L	0.027	1		EPA 300.0	6/16/23	AEU
Nitrate-Nitrite as N	0.62	0.011	mg/L	0.036	1		EPA 300.0	6/16/23	AEU

Sample Comments:

Sample Description: **W75 P4 Landfill CCR Well Catchup Sample**
Sample ID: AE67178 Sample Collection Date/Time: 06/14/2023 11:01
Sample Received: 06/15/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	24.14	0.05	feet		1		H2OD	6/14/23	RAMBOLL
Field Temperature	11	0.1	Degrees (		1		TEMP	6/14/23	RAMBOLL
Field Conductivity	544	0	umhos		1		FCOND25	6/14/23	RAMBOLL
Field pH	8.9	0.1	Units	0.1	1		FIELDPH	6/14/23	RAMBOLL
Total Calcium	19000	600	ug/L	1800	1		EPA 200.7	6/30/23	057
Total Copper	Less Than	4	ug/L	10	1		EPA 200.7	6/30/23	057
Total Magnesium	13000	60	ug/L	100	1		EPA 200.7	6/30/23	057
Total Manganese	7	4	ug/L	10	1	J	EPA 200.7	6/30/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	6/28/23	057
Total Zinc	Less Than	60	ug/L	200	1		EPA 200.7	6/28/23	057
Total Hardness as CaCO3	100	1	mg/L		1		Std Mtd 2340B	7/17/23	AEU
Nitrite as N	0.69	0.003	mg/L	0.009	1		EPA 300.0	6/16/23	AEU
Nitrate as N	0.013	0.008	mg/L	0.027	1		EPA 300.0	6/16/23	AEU
Nitrate-Nitrite as N	0.71	0.011	mg/L	0.036	1		EPA 300.0	6/16/23	AEU

Report Date: Wednesday, January 24, 2024

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

Sample Comments:

Sample Description: **W76 P4 Landfill CCR Well Catchup Sample**
Sample ID: AE67179 Sample Collection Date/Time: 06/14/2023 11:41
Sample Received: 06/15/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	25.53	0.05	feet		1		H2OD	6/14/23	RAMBOLL
Field Temperature	12	0.1	Degrees (		1		TEMP	6/14/23	RAMBOLL
Field Conductivity	447	0	umhos		1		FCOND25	6/14/23	RAMBOLL
Field pH	9.1	0.1	Units	0.1	1		FIELDPH	6/14/23	RAMBOLL
Total Calcium	18000	600	ug/L	1800	1		EPA 200.7	6/30/23	057
Total Copper	Less Than	4	ug/L	10	1		EPA 200.7	6/30/23	057
Total Magnesium	12000	60	ug/L	100	1		EPA 200.7	6/30/23	057
Total Manganese	8	4	ug/L	10	1	J	EPA 200.7	6/30/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	6/28/23	057
Total Zinc	Less Than	60	ug/L	200	1		EPA 200.7	6/30/23	057
Total Hardness as CaCO3	94	1	mg/L		1		Std Mtd 2340B	7/17/23	057
Nitrite as N	0.65	0.003	mg/L	0.009	1		EPA 300.0	6/16/23	AEU
Nitrate as N	0.025	0.008	mg/L	0.027	1		EPA 300.0	6/16/23	AEU
Nitrate-Nitrite as N	0.68	0.011	mg/L	0.036	1		EPA 300.0	6/16/23	AEU

Sample Comments:

Sample Description: **W77 P4 Landfill CCR Well Catchup Sample**
Sample ID: AE67180 Sample Collection Date/Time: 06/14/2023 12:37
Sample Received: 06/15/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	20.25	0.05	feet		1		H2OD	6/14/23	RAMBOLL
Field Temperature	11	0.1	Degrees (		1		TEMP	6/14/23	RAMBOLL
Field Conductivity	583	0	umhos		1		FCOND25	6/14/23	RAMBOLL
Field pH	8.6	0.1	Units	0.1	1		FIELDPH	6/14/23	RAMBOLL
Total Calcium	23000	600	ug/L	1800	1		EPA 200.7	6/30/23	057
Total Copper	Less Than	4	ug/L	10	1		EPA 200.7	6/30/23	057
Total Magnesium	13000	60	ug/L	100	1		EPA 200.7	6/30/23	057
Total Manganese	50	4	ug/L	10	1		EPA 200.7	6/30/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	6/28/23	057
Total Zinc	Less Than	60	ug/L	200	1		EPA 200.7	6/30/23	057
Total Hardness as CaCO3	110	1	mg/L		1		Std Mtd 2340B	7/17/23	057
Nitrite as N	0.78	0.003	mg/L	0.009	1		EPA 300.0	6/16/23	AEU
Nitrate as N	Less Than	0.008	mg/L	0.027	1		EPA 300.0	6/16/23	AEU
Nitrate-Nitrite as N	0.79	0.011	mg/L	0.036	1		EPA 300.0	6/16/23	AEU

Report Date: Wednesday, January 24, 2024

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

Sample Comments:

Sample Description: **QAQC01 P4 Landfill CCR Well Catchup Sample**
Sample ID: AE67181 Sample Collection Date/Time: 06/14/2023 10:14
Sample Received: 06/15/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Calcium	19000	600	ug/L	1800	1		EPA 200.7	6/30/23	057
Total Copper	Less Than	4	ug/L	10	1		EPA 200.7	6/30/23	057
Total Magnesium	13000	60	ug/L	100	1		EPA 200.7	6/30/23	057
Total Manganese	10	4	ug/L	10	1		EPA 200.7	6/30/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	6/28/23	057
Total Zinc	Less Than	60	ug/L	200	1		EPA 200.7	6/30/23	057
Total Hardness as CaCO3	100	1	mg/L		1		Std Mtd 2340B	7/17/23	057
Nitrite as N	0.65	0.003	mg/L	0.009	1		EPA 300.0	6/16/23	AEU
Nitrate as N	0.11	0.008	mg/L	0.027	1		EPA 300.0	6/16/23	AEU
Nitrate-Nitrite as N	0.76	0.011	mg/L	0.036	1		EPA 300.0	6/16/23	AEU

Sample Comments:

Sample Description: **EB1 P4 Landfill CCR Well Catchup Sample**
Sample ID: AE67182 Sample Collection Date/Time: 06/14/2023 14:25
Sample Received: 06/15/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Calcium	Less Than	600	ug/L	1800	1		EPA 200.7	6/30/23	057
Total Copper	Less Than	4	ug/L	10	1		EPA 200.7	6/30/23	057
Total Magnesium	60	60	ug/L	100	1	J	EPA 200.7	6/30/23	057
Total Manganese	Less Than	4	ug/L	10	1		EPA 200.7	6/30/23	057
Total Silver	Less Than	20	ug/L	70	1		EPA 200.7	6/28/23	057
Total Zinc	Less Than	60	ug/L	200	1		EPA 200.7	6/30/23	057
Total Hardness as CaCO3	Less Than	1	mg/L		1		Std Mtd 2340B	6/30/23	057
Nitrite as N	0.28	0.003	mg/L	0.009	1		EPA 300.0	6/16/23	AEU
Nitrate as N	0.038	0.008	mg/L	0.027	1		EPA 300.0	6/16/23	AEU
Nitrate-Nitrite as N	0.32	0.011	mg/L	0.036	1		EPA 300.0	6/16/23	AEU

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: Laboratory Services at (414) 221-4595.

To: Eric Kovatch
PSB Annex A231

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

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W20D P4 Landfill CCR Well Sample**
Sample ID: AE67784 Sample Collection Date/Time: 07/17/2023 12:39
Sample Received: 07/18/2023 Sample Collector: ND

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	22.48	0.05	feet		1		H2OD	7/17/23	N DUDA
Field Temperature	15.2	0.1	Degrees (		1		TEMP	7/17/23	N DUDA
Field Conductivity	706	0	umhos		1		FCOND25	7/17/23	N DUDA
Field pH	7.4	0.1	Units	0.1	1		FIELDPH	7/17/23	N DUDA
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	7/20/23	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	7/20/33	020
Total Magnesium	17000	180	ug/L	1000	1		EPA 200.7	7/20/33	020
Total Manganese	37.1	1.5	ug/L	5.0	1		EPA 200.7	7/20/33	020
Total Hardness as CaCO3	133	1.0	mg/L	5.4	1		Std Mtd 2340B	7/20/33	020
Total Calcium	25400	110	ug/L	500	1		EPA 200.7	7/20/33	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	7/20/33	020
Total Alkalinity as CaCO3	110	20	mg/L		1		SM 2320 B-1997	7/19/23	AEU
Nitrite as N	0.52	0.003	mg/L	0.009	1		EPA 300.0	7/18/23	AEU
Nitrate as N	0.16	0.008	mg/L	0.027	1		EPA 300.0	7/18/23	AEU
Nitrate-Nitrite as N	0.68	0.011	mg/L	0.036	1	M1	EPA 300.0	7/18/23	AEU

Sample Comments:

Sample Description: **W73 P4 Landfill CCR Well Sample**
Sample ID: AE67785 Sample Collection Date/Time: 07/17/2023 15:16
Sample Received: 07/18/2023 Sample Collector: ND

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	25.48	0.05	feet		1		H2OD	7/17/23	N DUDA
Field Temperature	14.4	0.1	Degrees (		1		TEMP	7/17/23	N DUDA
Field Conductivity	484	0	umhos		1		FCOND25	7/17/23	N DUDA
Field pH	7.5	0.1	Units	0.1	1		FIELDPH	7/17/23	N DUDA
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	7/20/33	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	7/20/33	020
Total Magnesium	12400	180	ug/L	1000	1		EPA 200.7	7/20/33	020
Total Manganese	4.3	1.5	ug/L	5.0	1	J	EPA 200.7	7/20/33	020
Total Hardness as CaCO3	97.4	1.0	mg/L	5.4	1		Std Mtd 2340B	7/20/33	020
Total Calcium	18600	110	ug/L	500	1		EPA 200.7	7/20/33	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	7/20/33	020
Total Alkalinity as CaCO3	110	20	mg/L		1		SM 2320 B-1997	7/19/23	AEU
Nitrite as N	0.56	0.003	mg/L	0.009	1		EPA 300.0	7/18/23	AEU

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W73 P4 Landfill CCR Well Sample**
Sample ID: AE67785 Sample Collection Date/Time: 07/17/2023 15:16
Sample Received: 07/18/2023 Sample Collector: ND

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Nitrate as N	0.026	0.008	mg/L	0.027	1	J	EPA 300.0	7/18/23	AEU
Nitrate-Nitrite as N	0.59	0.011	mg/L	0.036	1	M1	EPA 300.0	7/18/23	AEU

Sample Comments:

Sample Description: **W74 P4 Landfill CCR Well Sample**
Sample ID: AE67786 Sample Collection Date/Time: 07/17/2023 13:09
Sample Received: 07/18/2023 Sample Collector: ND

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	24.38	0.05	feet		1		H2OD	7/17/23	N DUDA
Field Temperature	14.2	0.1	Degrees (		1		TEMP	7/17/23	N DUDA
Field Conductivity	545	0	umhos		1		FCOND25	7/17/23	N DUDA
Field pH	7.6	0.1	Units	0.1	1		FIELDPH	7/17/23	N DUDA
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	7/20/33	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	7/20/33	020
Total Magnesium	15400	180	ug/L	1000	1		EPA 200.7	7/20/33	020
Total Manganese	14.3	1.5	ug/L	5.0	1		EPA 200.7	7/20/33	020
Total Hardness as CaCO3	113	1.0	mg/L	5.4	1		Std Mtd 2340B	7/20/33	020
Total Calcium	20000	110	ug/L	500	1		EPA 200.7	7/20/33	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	7/20/33	020
Total Alkalinity as CaCO3	100	20	mg/L		1		SM 2320 B-1997	7/19/23	AEU
Nitrite as N	0.49	0.003	mg/L	0.009	1		EPA 300.0	7/18/23	AEU
Nitrate as N	0.15	0.008	mg/L	0.027	1		EPA 300.0	7/18/23	AEU
Nitrate-Nitrite as N	0.64	0.011	mg/L	0.036	1	M1	EPA 300.0	7/18/23	AEU

Sample Comments:

Sample Description: **W75 P4 Landfill CCR Well SamplE**
Sample ID: AE67787 Sample Collection Date/Time: 07/17/2023 13:37
Sample Received: 07/18/2023 Sample Collector: ND

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	25.64	0.05	feet		1		H2OD	7/17/23	N DUDA
Field Temperature	12.2	0.1	Degrees (		1		TEMP	7/17/23	N DUDA
Field Conductivity	465	0	umhos		1		FCOND25	7/17/23	N DUDA
Field pH	7.7	0.1	Units	0.1	1		FIELDPH	7/17/23	N DUDA
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	7/20/33	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	7/20/33	020
Total Magnesium	13300	180	ug/L	1000	1		EPA 200.7	7/20/33	020
Total Manganese	10.5	1.5	ug/L	5.0	1		EPA 200.7	7/20/33	020
Total Hardness as CaCO3	104	1.0	mg/L	5.4	1		Std Mtd 2340B	7/20/33	020

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W75 P4 Landfill CCR Well SamplE**
Sample ID: AE67787 Sample Collection Date/Time: 07/17/2023 13:37
Sample Received: 07/18/2023 Sample Collector: ND

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Calcium	19600	110	ug/L	500	1		EPA 200.7	7/20/33	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	7/20/33	020
Total Alkalinity as CaCO3	110	20	mg/L		1		SM 2320 B-1997	7/19/23	AEU
Nitrite as N	0.60	0.003	mg/L	0.009	1		EPA 300.0	7/18/23	AEU
Nitrate as N	0.085	0.008	mg/L	0.027	1		EPA 300.0	7/18/23	AEU
Nitrate-Nitrite as N	0.69	0.011	mg/L	0.036	1	M1	EPA 300.0	7/18/23	AEU

Sample Comments:

Sample Description: **W76 P4 Landfill CCR Well Sample**
Sample ID: AE67788 Sample Collection Date/Time: 07/17/2023 14:03
Sample Received: 07/18/2023 Sample Collector: ND

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	27.11	0.05	feet		1		H2OD	7/17/23	N DUDA
Field Temperature	18.9	0.1	Degrees (		1		TEMP	7/17/23	N DUDA
Field Conductivity	636	0	umhos		1		FCOND25	7/17/23	N DUDA
Field pH	7.2	0.1	Units	0.1	1		FIELDPH	7/17/23	N DUDA
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	7/20/33	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	7/20/33	020
Total Magnesium	12600	180	ug/L	1000	1		EPA 200.7	7/20/33	020
Total Manganese	10.8	1.5	ug/L	5.0	1		EPA 200.7	7/20/33	020
Total Hardness as CaCO3	99.9	1.0	mg/L	5.4	1		Std Mtd 2340B	7/20/33	020
Total Calcium	19300	110	ug/L	500	1		EPA 200.7	7/20/33	020
Total Copper	3.5	3.4	ug/L	10.0	1	J	EPA 200.7	7/20/33	020
Total Alkalinity as CaCO3	110	20	mg/L		1		SM 2320 B-1997	7/19/23	AEU
Nitrite as N	0.56	0.003	mg/L	0.009	1		EPA 300.0	7/18/23	AEU
Nitrate as N	0.29	0.008	mg/L	0.027	1		EPA 300.0	7/18/23	AEU
Nitrate-Nitrite as N	0.86	0.011	mg/L	0.036	1	M1	EPA 300.0	7/18/23	AEU

Sample Comments:

Sample Description: **W77 P4 Landfill CCR Well Sample**
Sample ID: AE67789 Sample Collection Date/Time: 07/17/2023 14:36
Sample Received: 07/18/2023 Sample Collector: ND

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	21.35	0.05	feet		1		H2OD	7/17/23	N DUDA
Field Temperature	15.1	0.1	Degrees (		1		TEMP	7/17/23	N DUDA
Field Conductivity	679	0	umhos		1		FCOND25	7/17/23	N DUDA
Field pH	7.3	0.1	Units	0.1	1		FIELDPH	7/17/23	N DUDA
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	7/20/33	020

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W77 P4 Landfill CCR Well Sample**
Sample ID: AE67789 Sample Collection Date/Time: 07/17/2023 14:36
Sample Received: 07/18/2023 Sample Collector: ND

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	7/20/33	020
Total Magnesium	13300	180	ug/L	1000	1		EPA 200.7	7/20/33	020
Total Manganese	21.0	1.5	ug/L	5.0	1		EPA 200.7	7/20/33	020
Total Hardness as CaCO3	115	1.0	mg/L	5.4	1		Std Mtd 2340B	7/20/33	020
Total Calcium	24100	110	ug/L	500	1		EPA 200.7	7/20/33	020
Total Copper	7.5	3.4	ug/L	10.0	1	J	EPA 200.7	7/20/33	020
Total Alkalinity as CaCO3	150	20	mg/L		1		SM 2320 B-1997	7/19/23	AEU
Nitrite as N	0.70	0.003	mg/L	0.009	1		EPA 300.0	7/18/23	AEU
Nitrate as N	0.20	0.008	mg/L	0.027	1		EPA 300.0	7/18/23	AEU
Nitrate-Nitrite as N	0.89	0.011	mg/L	0.036	1	M1	EPA 300.0	7/18/23	AEU

Sample Comments:

Sample Description: **QAQC1 P4 Landfill CCR Well Sample**
Sample ID: AE67790 Sample Collection Date/Time: 07/17/2023 12:44
Sample Received: 07/18/2023 Sample Collector: ND

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	7/20/33	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	7/20/33	020
Total Magnesium	16600	180	ug/L	1000	1		EPA 200.7	7/20/33	020
Total Manganese	74.0	1.5	ug/L	5.0	1		EPA 200.7	7/20/33	020
Total Hardness as CaCO3	130	1.0	mg/L	5.4	1		Std Mtd 2340B	7/20/33	020
Total Calcium	24900	110	ug/L	500	1		EPA 200.7	7/20/33	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	7/20/33	020
Total Alkalinity as CaCO3	110	20	mg/L		1		SM 2320 B-1997	7/19/23	AEU
Nitrite as N	0.52	0.003	mg/L	0.009	1		EPA 300.0	7/18/23	AEU
Nitrate as N	0.077	0.008	mg/L	0.027	1		EPA 300.0	7/18/23	AEU
Nitrate-Nitrite as N	0.59	0.011	mg/L	0.036	1	M1	EPA 300.0	7/18/23	AEU

Sample Comments:

Sample Description: **EB 1 P4 Landfill CCR Well Sample**
Sample ID: AE67791 Sample Collection Date/Time: 07/17/2023 15:35
Sample Received: 07/18/2023 Sample Collector: ND

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Temperature	25.1	0.1	Degrees (		1		TEMP	7/17/23	N DUDA
Field Conductivity	26.2	0	umhos		1		FCOND25	7/17/23	N DUDA
Field pH	7.2	0.1	Units	0.1	1		FIELDPH	7/17/23	N DUDA
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	7/24/23	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	7/24/23	020

Report Date: Wednesday, January 24, 2024

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

Sample Description: **EB 1 P4 Landfill CCR Well Sample**

Sample ID: AE67791 Sample Collection Date/Time: 07/17/2023 15:35

Sample Received: 07/18/2023 Sample Collector: ND

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Magnesium	Less Than	180	ug/L	1000	1		EPA 200.7	7/24/23	020
Total Manganese	Less Than	1.5	ug/L	5.0	1		EPA 200.7	7/24/23	020
Total Hardness as CaCO3	Less Than	1	mg/L	5.4	1		Std Mtd 2340B	7/24/23	020
Total Calcium	170	110	ug/L	500	1	JB	EPA 200.7	7/24/23	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	7/24/23	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: Laboratory Services at (414) 221-4595.

To: Eric Kovatch
PSB Annex A231

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

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W20D P4 Landfill CCR Well Sample**
Sample ID: AE68378 Sample Collection Date/Time: 08/17/2023 10:03
Sample Received: 08/18/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	23.27	0.05	feet		1		H2OD	8/17/23	RAMBOLL
Field Temperature	17	0.1	Degrees C		1		TEMP	8/17/23	RAMBOLL
Field Conductivity	490	0	umhos		1		FCOND25	8/17/23	RAMBOLL
Field pH	8.1	0.1	Units	0.1	1		FIELDPH	8/17/23	RAMBOLL
Total Calcium	24100	114	ug/L	500	1		EPA 200.7	8/24/23	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	8/24/23	020
Total Magnesium	15600	182	ug/L	1000	1		EPA 200.7	8/24/23	020
Total Hardness as CaCO3	125	1	mg/L	5.4	1		Std Mtd 2340B	8/24/23	020
Total Manganese	61.4	1.5	ug/L	5.0	1		EPA 200.7	8/24/23	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	8/24/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	8/24/23	020
Nitrite as N	1.06	0.003	mg/L	0.009	1		EPA 300.0	8/18/23	CMW
Nitrate as N	0.66	0.008	mg/L	0.027	1		EPA 300.0	8/18/23	CMW
Nitrate-Nitrite as N	1.72	0.011	mg/L	0.036	1		EPA 300.0	8/18/23	CMW

Sample Comments:

Sample Description: **W73 P4 Landfill CCR Well Sample**
Sample ID: AE68379 Sample Collection Date/Time: 08/17/2023 09:29
Sample Received: 08/18/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	25.78	0.05	feet		1		H2OD	8/17/23	RAMBOLL
Field Temperature	12	0.1	Degrees C		1		TEMP	8/17/23	RAMBOLL
Field Conductivity	535	0	umhos		1		FCOND25	8/17/23	RAMBOLL
Field pH	9.1	0.1	Units	0.1	1		FIELDPH	8/17/23	RAMBOLL
Total Calcium	20600	114	ug/L	500	1		EPA 200.7	8/24/23	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	8/24/23	020
Total Magnesium	12900	182	ug/L	1000	1		EPA 200.7	8/24/23	020
Total Hardness as CaCO3	104	1	mg/L	5.4	1		Std Mtd 2340B	8/24/23	020
Total Manganese	21.5	1.5	ug/L	5.0	1		EPA 200.7	8/24/23	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	8/24/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	8/24/23	020
Nitrite as N	1.08	0.003	mg/L	0.009	1		EPA 300.0	8/18/23	CMW
Nitrate as N	0.52	0.008	mg/L	0.027	1		EPA 300.0	8/18/23	CMW
Nitrate-Nitrite as N	1.60	0.011	mg/L	0.036	1		EPA 300.0	8/18/23	CMW

Report Date: Wednesday, January 24, 2024

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

Sample Comments:

Sample Description: **W74 P4 Landfill CCR Well Sample**
Sample ID: AE68380 Sample Collection Date/Time: 08/17/2023 11:00
Sample Received: 08/18/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	25.05	0.05	feet		1		H2OD	8/17/23	RAMBOLL
Field Temperature	11	0.1	Degrees (		1		TEMP	8/17/23	RAMBOLL
Field Conductivity	500	0	umhos		1		FCOND25	8/17/23	RAMBOLL
Field pH	8.9	0.1	Units	0.1	1		FIELDPH	8/17/23	RAMBOLL
Total Calcium	18800	114	ug/L	500	1		EPA 200.7	8/24/23	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	8/24/23	020
Total Magnesium	14500	182	ug/L	1000	1		EPA 200.7	8/24/23	020
Total Hardness as CaCO3	107	1	mg/L	5.4	1		Std Mtd 2340B	8/24/23	020
Total Manganese	16.7	1.5	ug/L	5.0	1		EPA 200.7	8/24/23	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	8/24/23	020
Total Zinc	22.2	11.6	ug/L	40.0	1	J	EPA 200.7	8/24/23	020
Nitrite as N	1.00	0.003	mg/L	0.009	1		EPA 300.0	8/18/23	CMW
Nitrate as N	0.048	0.008	mg/L	0.027	1		EPA 300.0	8/18/23	CMW
Nitrate-Nitrite as N	1.05	0.011	mg/L	0.036	1		EPA 300.0	8/18/23	CMW

Sample Comments:

Sample Description: **W75 P4 Landfill CCR Well SamplE**
Sample ID: AE68381 Sample Collection Date/Time: 08/17/2023 11:41
Sample Received: 08/18/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	26.48	0.05	feet		1		H2OD	8/17/23	RAMBOLL
Field Temperature	14	0.1	Degrees (		1		TEMP	8/17/23	RAMBOLL
Field Conductivity	437	0	umhos		1		FCOND25	8/17/23	RAMBOLL
Field pH	8.8	0.1	Units	0.1	1		FIELDPH	8/17/23	RAMBOLL
Total Calcium	18900	114	ug/L	500	1		EPA 200.7	8/24/23	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	8/24/23	020
Total Magnesium	12500	182	ug/L	1000	1		EPA 200.7	8/24/23	020
Total Hardness as CaCO3	98.9	1	mg/L	5.4	1		Std Mtd 2340B	8/24/23	020
Total Manganese	10.1	1.5	ug/L	5.0	1		EPA 200.7	8/24/23	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	8/24/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	8/24/23	020
Nitrite as N	1.14	0.003	mg/L	0.009	1		EPA 300.0	8/18/23	CMW
Nitrate as N	0.091	0.008	mg/L	0.027	1		EPA 300.0	8/18/23	CMW
Nitrate-Nitrite as N	1.23	0.011	mg/L	0.036	1		EPA 300.0	8/18/23	CMW

Report Date: Wednesday, January 24, 2024

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

Sample Comments:

Sample Description: **W76 P4 Landfill CCR Well Sample**
Sample ID: AE68382 Sample Collection Date/Time: 08/17/2023 12:25
Sample Received: 08/18/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	27.8	0.05	feet		1		H2OD	8/17/23	RAMBOLL
Field Temperature	14	0.1	Degrees (		1		TEMP	8/17/23	RAMBOLL
Field Conductivity	445	0	umhos		1		FCOND25	8/17/23	RAMBOLL
Field pH	9.1	0.1	Units	0.1	1		FIELDPH	8/17/23	RAMBOLL
Total Calcium	18400	114	ug/L	500	1		EPA 200.7	8/24/23	020
Total Copper	Less Than	3.4	ug/L	10	1		EPA 200.7	8/24/23	020
Total Magnesium	11800	182	ug/L	1000	1		EPA 200.7	8/24/23	020
Total Hardness as CaCO3	94.7	1	mg/L	5.4	1		Std Mtd 2340B	8/24/23	020
Total Manganese	14.0	1.5	ug/L	5.0	1		EPA 200.7	8/24/23	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	8/24/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	8/24/23	020
Nitrite as N	1.01	0.003	mg/L	0.009	1		EPA 300.0	8/18/23	CMW
Nitrate as N	6.22	0.008	mg/L	0.027	1		EPA 300.0	8/18/23	CMW
Nitrate-Nitrite as N	7.23	0.011	mg/L	0.036	1		EPA 300.0	8/18/23	CMW

Sample Comments:

Sample Description: **W77 P4 Landfill CCR Well Sample**
Sample ID: AE68383 Sample Collection Date/Time: 08/17/2023 12:55
Sample Received: 08/18/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	21.52	0.05	feet		1		H2OD	8/17/23	RAMBOLL
Field Temperature	14	0.1	Degrees (		1		TEMP	8/17/23	RAMBOLL
Field Conductivity	580	0	umhos		1		FCOND25	8/17/23	RAMBOLL
Field pH	8.3	0.1	Units	0.1	1		FIELDPH	8/17/23	RAMBOLL
Total Calcium	22400	114	ug/L	500	1		EPA 200.7	8/24/23	020
Total Copper	4.1	3.4	ug/L	10.0	1	J	EPA 200.7	8/24/23	020
Total Magnesium	12300	182	ug/L	1000	1		EPA 200.7	8/24/23	020
Total Hardness as CaCO3	107	1	mg/L	5.4	1		Std Mtd 2340B	8/24/23	020
Total Manganese	19.6	1.5	ug/L	5.0	1		EPA 200.7	8/24/23	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	8/24/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	8/24/23	020
Nitrite as N	1.38	0.003	mg/L	0.009	1		EPA 300.0	8/23/23	CMW
Nitrate as N	0.16	0.008	mg/L	0.027	1		EPA 300.0	8/23/23	CMW
Nitrate-Nitrite as N	1.53	0.011	mg/L	0.036	1		EPA 300.0	8/23/23	CMW

Report Date: Wednesday, January 24, 2024

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

Sample Comments:

Sample Description: **QAQC1 P4 Landfill CCR Well Sample**
Sample ID: AE68384 Sample Collection Date/Time: 08/17/2023 10:08
Sample Received: 08/18/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Calcium	23300	114	ug/L	500	1		EPA 200.7	8/24/23	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	8/24/23	020
Total Magnesium	15400	182	ug/L	1000	1		EPA 200.7	8/24/23	020
Total Hardness as CaCO3	122	1	mg/L	5.4	1		Std Mtd 2340B	8/24/23	020
Total Manganese	66.5	1.5	ug/L	5.0	1		EPA 200.7	8/24/23	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	8/24/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	8/24/23	020
Nitrite as N	1.04	0.003	mg/L	0.009	1		EPA 300.0	8/18/23	CMW
Nitrate as N	1.00	0.008	mg/L	0.027	1		EPA 300.0	8/18/23	CMW
Nitrate-Nitrite as N	2.04	0.011	mg/L	0.036	1		EPA 300.0	8/18/23	CMW

Sample Comments:

Sample Description: **EB1 P4 Landfill CCR Well Sample**
Sample ID: AE68385 Sample Collection Date/Time: 08/17/2023 13:10
Sample Received: 08/18/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Temperature	24	0.1	Degrees (		1		TEMP	8/17/23	RAMBOLL
Field Conductivity	37	0	umhos		1		FCOND25	8/17/23	RAMBOLL
Field pH	8.7	0.1	Units	0.1	1		FIELDPH	8/17/23	RAMBOLL
Total Calcium	1640	114	ug/L	500	1		EPA 200.7	8/24/23	020
Total Copper	4.8	3.4	ug/L	10.0	1	J	EPA 200.7	8/24/23	020
Total Magnesium	785	182	ug/L	1000	1	J	EPA 200.7	8/24/23	020
Total Hardness as CaCO3	7.32	1	mg/L	5.4	1		Std Mtd 2340B	8/24/23	020
Total Manganese	3.5	1.5	ug/L	5.0	1		EPA 200.7	8/24/23	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	8/24/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	8/24/23	020
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	8/18/23	CMW
Nitrate as N	0.21	0.008	mg/L	0.027	1		EPA 300.0	8/18/23	CMW
Nitrate-Nitrite as N	0.21	0.011	mg/L	0.036	1		EPA 300.0	8/18/23	CMW
Total Mercury	4.03	0.17	ng/L	0.57	1		EPA 1631E	8/25/23	JLM

Sample Comments:

Report Date: Wednesday, January 24, 2024

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

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: Laboratory Services at (414) 221-4595.

To: Eric Kovatch
PSB Annex A231

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

Report Date: Wednesday, January 24, 2024

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

Sample Description: **P4 Landfill CCR Well Sample W20D**
Sample ID: AE68994 Sample Collection Date/Time: 09/21/2023 09:24
Sample Received: 09/22/2023 Sample Collector:

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	23.17	0.05	feet		1		H2OD	9/21/23	RAMBOLL
Field Temperature	13.3	0.1	Degrees (		1		TEMP	9/21/23	RAMBOLL
Field Conductivity	678	0	umhos		1		FCOND25	9/21/23	RAMBOLL
Field pH	7.9	0.1	Units	0.1	1		FIELDPH	9/21/23	RAMBOLL
Total Hardness as CaCO3	133	2.5	mg/L	13.5	1		Std Mtd 2340B	10/3/23	020
Nitrate-Nitrite as N	1.3	0.011	mg/L	0.036	1		EPA 300.0	9/21/23	AEU
Total Calcium	25600	284	ug/L	1500	1		EPA 200.7	10/3/23	020
Total Copper	Less Than	8.4	ug/L	25.0	1		EPA 200.7	10/3/23	020
Total Magnesium	16800	455	ug/L	2500	1		EPA 200.7	10/3/23	020
Total Manganese	21.9	3.9	ug/L	12.5	1		EPA 200.7	10/3/23	020
Total Silver	Less Than	8.0	ug/L	25.0	1		EPA 200.7	10/3/23	020
Total Zinc	Less Than	28.9	ug/L	100	1		EPA 200.7	10/3/23	020

Sample Comments:

Sample Description: **P4 Landfill CCR Well Sample W73**
Sample ID: AE68995 Sample Collection Date/Time: 09/21/2023 14:31
Sample Received: 09/22/2023 Sample Collector:

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	25.85	0.05	feet		1		H2OD	9/21/23	RAMBOLL
Field Temperature	12.5	0.1	Degrees (		1		TEMP	9/21/23	RAMBOLL
Field Conductivity	580	0	umhos		1		FCOND25	9/21/23	RAMBOLL
Field pH	8.4	0.1	Units	0.1	1		FIELDPH	9/21/23	RAMBOLL
Total Hardness as CaCO3	118	1.0	mg/L	5.4	1		Std Mtd 2340B	10/3/23	020
Nitrate-Nitrite as N	2.2	0.011	mg/L	0.036	1		EPA 300.0	9/21/23	AEU
Total Calcium	23200	114	ug/L	500	1		EPA 200.7	10/9/23	020
Total Copper	Less Than	3.4	ug/L	10	1		EPA 200.7	10/3/23	020
Total Magnesium	14600	182	ug/L	1000	1		EPA 200.7	10/3/23	020
Total Manganese	26.9	1.5	ug/L	5.0	1		EPA 200.7	10/3/23	020
Total Silver	Less Than	3.2	ug/L	10	1		EPA 200.7	10/3/23	020
Total Zinc	Less Than	11.6	ug/L	40	1		EPA 200.7	10/3/23	020

Report Date: Wednesday, January 24, 2024

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

Sample Comments:

Sample Description: **P4 Landfill CCR Well Sample W74**
Sample ID: AE68996 Sample Collection Date/Time: 09/21/2023 10:16
Sample Received: 09/22/2023 Sample Collector:

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	24.36	0.05	feet		1		H2OD	9/21/23	RAMBOLL
Field Temperature	16.9	0.1	Degrees (		1		TEMP	9/21/23	RAMBOLL
Field Conductivity	638	0	umhos		1		FCOND25	9/21/23	RAMBOLL
Field pH	7.5	0.1	Units	0.1	1		FIELDPH	9/21/23	RAMBOLL
Total Hardness as CaCO3	107	1.0	mg/L	5.4	1		Std Mtd 2340B	10/3/23	020
Nitrate-Nitrite as N	1.9	0.011	mg/L	0.036	1		EPA 300.0	9/21/23	AEU
Total Calcium	18700	114	ug/L	500	1		EPA 200.7	10/3/23	020
Total Copper	3.7	3.4	ug/L	10	1	J	EPA 200.7	10/3/23	020
Total Magnesium	14600	182	ug/L	1000	1		EPA 200.7	10/3/23	020
Total Manganese	2.7	1.5	ug/L	5	1	J	EPA 200.7	10/3/23	020
Total Silver	Less Than	3.2	ug/L	10	1		EPA 200.7	10/3/23	020
Total Zinc	Less Than	11.6	ug/L	40	1		EPA 200.7	10/3/23	020

Sample Comments:

Sample Description: **P4 Landfill CCR Well Sample W75**
Sample ID: AE68997 Sample Collection Date/Time: 09/21/2023 11:11
Sample Received: 09/22/2023 Sample Collector:

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	25.89	0.05	feet		1		H2OD	9/21/23	RAMBOLL
Field Temperature	17.6	0.1	Degrees (		1		TEMP	9/21/23	RAMBOLL
Field Conductivity	591	0	umhos		1		FCOND25	9/21/23	RAMBOLL
Field pH	7.4	0.1	Units	0.1	1		FIELDPH	9/21/23	RAMBOLL
Total Hardness as CaCO3	106	1.0	mg/L	5.4	1		Std Mtd 2340B	10/3/23	020
Nitrate-Nitrite as N	1.6	0.011	mg/L	0.036	1		EPA 300.0	9/21/23	AEU
Total Calcium	20100	114	ug/L	500	1		EPA 200.7	10/3/23	020
Total Copper	4.7	3.4	ug/L	10	1	J	EPA 200.7	10/3/23	020
Total Magnesium	13400	182	ug/L	1000	1		EPA 200.7	10/3/23	020
Total Manganese	2.1	1.5	ug/L	5	1	J	EPA 200.7	10/3/23	020
Total Silver	Less Than	3.2	ug/L	10	1		EPA 200.7	10/3/23	020
Total Zinc	13.8	11.6	ug/L	40	1	J	EPA 200.7	10/3/23	020

Sample Comments:

Report Date: Wednesday, January 24, 2024

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

Sample Description: **P4 Landfill CCR Well Sample W76**
Sample ID: AE68998 Sample Collection Date/Time: 09/21/2023 12:19
Sample Received: 09/22/2023 Sample Collector:

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	27.94	0.05	feet		1		H2OD	9/21/23	RAMBOLL
Field Temperature	12.1	0.1	Degrees C		1		TEMP	9/21/23	RAMBOLL
Field Conductivity	588	0	umhos		1		FCOND25	9/21/23	RAMBOLL
Field pH	8.5	0.1	Units	0.1	1		FIELDPH	9/21/23	RAMBOLL
Total Hardness as CaCO3	98	1.0	mg/L	5.4	1		Std Mtd 2340B	10/3/23	020
Nitrate-Nitrite as N	1.9	0.011	mg/L	0.036	1		EPA 300.0	9/21/23	AEU
Total Calcium	19000	114	ug/L	500	1		EPA 200.7	10/3/23	020
Total Copper	Less Than	3.4	ug/L	10	1		EPA 200.7	10/3/23	020
Total Magnesium	12200	182	ug/L	1000	1		EPA 200.7	10/3/23	020
Total Manganese	12.2	1.5	ug/L	5	1		EPA 200.7	10/3/23	020
Total Silver	Less Than	3.2	ug/L	10	1		EPA 200.7	10/3/23	020
Total Zinc	12.5	11.6	ug/L	40	1	J	EPA 200.7	10/3/23	020

Sample Comments:

Sample Description: **P4 Landfill CCR Well Sample W77**
Sample ID: AE68999 Sample Collection Date/Time: 09/21/2023 13:27
Sample Received: 09/22/2023 Sample Collector:

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	21.68	0.05	feet		1		H2OD	9/21/23	RAMBOLL
Field Temperature	11.4	0.1	Degrees C		1		TEMP	9/21/23	RAMBOLL
Field Conductivity	621	0	umhos		1		FCOND25	9/21/23	RAMBOLL
Field pH	7.9	0.1	Units	0.1	1		FIELDPH	9/21/23	RAMBOLL
Total Hardness as CaCO3	121	1.0	mg/L	5.4	1		Std Mtd 2340B	10/3/23	020
Nitrate-Nitrite as N	1.9	0.011	mg/L	0.036	1		EPA 300.0	9/21/23	AEU
Total Calcium	25400	114	ug/L	500	1		EPA 200.7	10/3/23	020
Total Copper	Less Than	3.4	ug/L	10	1		EPA 200.7	10/3/23	020
Total Magnesium	14000	182	ug/L	1000	1		EPA 200.7	10/3/23	020
Total Manganese	64.9	1.5	ug/L	5	1		EPA 200.7	10/3/23	020
Total Silver	Less Than	3.2	ug/L	10	1		EPA 200.7	10/3/23	020
Total Zinc	Less Than	11.6	ug/L	40	1		EPA 200.7	10/3/23	020

Sample Comments:

Sample Description: **P4 Landfill CCR Well Sample QA/QC1**
Sample ID: AE69000 Sample Collection Date/Time: 09/21/2023 11:16
Sample Received: 09/22/2023 Sample Collector:

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Hardness as CaCO3	106	1.0	mg/L	5.4	1		Std Mtd 2340B	10/3/23	020
Nitrate-Nitrite as N	1.7	0.011	mg/L	0.036	1		EPA 300.0	9/21/23	AEU

Report Date: Wednesday, January 24, 2024

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

Sample Description: **P4 Landfill CCR Well Sample QA/QC1**
Sample ID: AE69000 Sample Collection Date/Time: 09/21/2023 11:16
Sample Received: 09/22/2023 Sample Collector:

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Calcium	20300	114	ug/L	500	1		EPA 200.7	10/3/23	020
Total Copper	Less Than	3.4	ug/L	10	1		EPA 200.7	10/3/23	020
Total Magnesium	13500	182	ug/L	1000	1		EPA 200.7	10/3/23	020
Total Manganese	3.8	1.5	ug/L	5	1	J	EPA 200.7	10/3/23	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	10/3/23	020
Total Zinc	Less Than	11.6	ug/L	40	1		EPA 200.7	10/3/23	020

Sample Comments:

Sample Description: **P4 Landfill CCR Well Sample EB1**
Sample ID: AE69001 Sample Collection Date/Time: 09/21/2023 15:00
Sample Received: 09/22/2023 Sample Collector:

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Temperature	24.2	0.1	Degrees (		1		TEMP	9/21/23	RAMBOLL
Field Conductivity	14	0	umhos		1		FCOND25	9/21/23	RAMBOLL
Field pH	6.0	0.1	Units	0.1	1		FIELDPH	9/21/23	RAMBOLL
Total Hardness as CaCO3	Less Than	1.0	mg/L	5.4	1		Std Mtd 2340B	10/3/23	020
Nitrate-Nitrite as N	0.062	0.011	mg/L	0.036	1		EPA 300.0	9/21/23	AEU
Total Calcium	124	114	ug/L	500	1	J	EPA 200.7	10/3/23	020
Total Copper	Less Than	3.4	ug/L	10	1		EPA 200.7	10/3/23	020
Total Magnesium	Less Than	182	ug/L	1000	1		EPA 200.7	10/3/23	020
Total Manganese	Less Than	1.5	ug/L	5	1		EPA 200.7	10/3/23	020
Total Silver	Less Than	3.2	ug/L	10	1		EPA 200.7	10/3/23	020
Total Zinc	Less Than	11.6	ug/L	40	1		EPA 200.7	10/3/23	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: Laboratory Services at (414) 221-4595.

To: Eric Kovatch
PSB Annex A231

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

Report Date: Friday, December 1, 2023

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

Sample Description: **W75 P4 Landfill CCR Well Sample**
Sample ID: AE69686 Sample Collection Date/Time: 10/30/2023 09:46
Sample Received: 10/31/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	25.09	0.05	feet		1		H2OD	10/30/23	RAMBOLL
Field Temperature	9.0	0.1	Degrees (		1		TEMP	10/30/23	RAMBOLL
Field Conductivity	528	0	umhos		1		FCOND25	10/30/23	RAMBOLL
Field pH	7.4	0.1	Units	0.1	1		FIELDPH	10/30/23	RAMBOLL
Total Dissolved Solids	340	8.7	mg/L	20	1		Std Mtd 2540 C	11/2/23	020
Total Fluoride	1.2	0.095	mg/L	0.32	1		EPA 300.0	11/16/23	020
Total Chloride	8.7	0.59	mg/L	2.0	1		EPA 300.0	11/16/23	020
Total Sulfate	133	4.4	mg/L	20	10		EPA 300.0	11/15/23	020
Total Boron	434	17.3	ug/L	40	1		EPA 200.7	11/2/23	020
Total Calcium	19400	114	ug/L	500	1		EPA 200.7	11/2/23	020
Dissolved Calcium	21100	114	ug/L	500	1		EPA 200.7	11/2/23	020
Dissolved Chloride	8.7	0.59	mg/L	2	1		EPA 300.0	11/14/23	020
Dissolved Magnesium	14300	182	ug/L	1000	1		EPA 200.7	11/2/23	020
Dissolved Sodium	81500	350	ug/L	500	1		EPA 200.7	11/2/23	020
Dissolved Sulfate	129	4.4	mg/L	20	10		EPA 300.0	11/14/23	020
Bicarbonate Ion	123	5.0	mg/L	10.0	1		HCO3	11/13/23	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	11/13/23	020
Dissolved Potassium	3120	325	ug/L	1000	1		EPA 200.7	11/2/23	020
Total Alkalinity as CaCO3	124	5.0	mg/L	10.0	1		SM 2320 B-1997	11/9/23	020
Total Hardness as CaCO3	102	1.0	mg/L	5.4	1		Std Mtd 2340B	11/2/23	020
Dissolved Oxygen-Field	1.13	0.1	mg/l		1		FIELDDO	10/30/23	RAMBOLL
Turbidity	0.0	0.1	NTU'S		1		EPA 180.1	10/30/23	RAMBOLL
Redox Potential	167	1	mV		1		ASTM D1498-93	10/30/23	RAMBOLL

Sample Comments:

Sample Description: **QA/QC1 P4 Landfill CCR Well Sample**
Sample ID: AE69687 Sample Collection Date/Time: 10/30/2023 09:51
Sample Received: 10/31/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Dissolved Solids	340	8.7	mg/L	20	1		Std Mtd 2540 C	11/2/23	020
Total Fluoride	1.1	0.095	mg/L	0.32	1		EPA 300.0	11/16/23	020
Total Chloride	8.7	0.59	mg/L	2.0	1		EPA 300.0	11/16/23	020
Total Sulfate	132	4.4	mg/L	20.0	10		EPA 300.0	11/15/23	020
Total Boron	416	17.3	ug/L	40.0	1		EPA 200.7	11/2/23	020

Report Date: Friday, December 1, 2023

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

Sample Description: **QA/QC1 P4 Landfill CCR Well Sample**
Sample ID: AE69687 Sample Collection Date/Time: 10/30/2023 09:51
Sample Received: 10/31/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Calcium	18500	114	ug/L	500	1		EPA 200.7	11/2/23	020
Dissolved Calcium	19500	114	ug/L	500	1		EPA 200.7	11/2/23	020
Dissolved Chloride	8.7	0.59	mg/L	2.0	1		EPA 300.0	11/14/23	020
Dissolved Magnesium	13200	182	ug/L	1000	1		EPA 200.7	11/2/23	020
Dissolved Sodium	75400	350	ug/L	500	1		EPA 200.7	11/2/23	020
Dissolved Sulfate	133	4.4	mg/L	20	10		EPA 300.0	11/14/23	020
Bicarbonate Ion	126	5.0	mg/L	10.0	1		HCO3	11/13/23	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	11/13/23	020
Dissolved Potassium	2820	325	ug/L	1000	1		EPA 200.7	11/2/23	020
Total Alkalinity as CaCO3	127	5.0	mg/L	10.0	1		SM 2320 B-1997	11/9/23	020
Total Hardness as CaCO3	97.5	1.0	mg/L	5.4	1		Std Mtd 2340B	11/2/23	020

Sample Comments:

Sample Description: **W76 P4 Landfill CCR Well Sample**
Sample ID: AE69688 Sample Collection Date/Time: 10/30/2023 10:54
Sample Received: 10/31/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	26.01	0.05	feet		1		H2OD	10/30/23	RAMBOLL
Field Temperature	10.1	0.1	Degrees C		1		TEMP	10/30/23	RAMBOLL
Field Conductivity	523	0	umhos		1		FCOND25	10/30/23	RAMBOLL
Field pH	8.3	0.1	Units	0.1	1		FIELDPH	10/30/23	RAMBOLL
Total Dissolved Solids	344	8.7	mg/L	20.0	1		Std Mtd 2540 C	11/2/23	020
Total Fluoride	1.1	0.095	mg/L	0.32	1		EPA 300.0	11/16/23	020
Total Chloride	10.6	0.59	mg/L	2.0	1		EPA 300.0	11/16/23	020
Total Sulfate	139	4.4	mg/L	20.0	10		EPA 300.0	11/15/23	020
Total Boron	450	17.3	ug/L	40	1		EPA 200.7	11/2/23	020
Total Calcium	18900	114	ug/L	500	1		EPA 200.7	11/2/23	020
Dissolved Calcium	19400	114	ug/L	500	1		EPA 200.7	11/2/23	020
Dissolved Chloride	10.6	0.59	mg/L	2	1		EPA 300.0	11/14/23	020
Dissolved Magnesium	12600	182	ug/L	1000	1		EPA 200.7	11/2/23	020
Dissolved Sodium	81800	350	ug/L	500	1		EPA 200.7	11/2/23	020
Dissolved Sulfate	138	4.4	mg/L	20	10		EPA 300.0	11/2/23	020
Bicarbonate Ion	121	5.0	mg/L	10.0	1		HCO3	11/13/23	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	11/13/23	020
Dissolved Potassium	2310	325	ug/L	1000	1		EPA 200.7	11/2/23	020
Total Alkalinity as CaCO3	122	5.0	mg/L	10.0	1		SM 2320 B-1997	11/9/23	020
Total Hardness as CaCO3	96.9	1.0	mg/L	5.4	1		Std Mtd 2340B	11/2/23	020
Dissolved Oxygen-Field	1.2	0.1	mg/l		1		FIELDDO	10/30/23	RAMBOLL
Turbidity	2.1	0.1	NTU'S		1		EPA 180.1	10/30/23	RAMBOLL
Redox Potential	-81	1	mV		1		ASTM D1498-93	10/30/23	RAMBOLL

Report Date: Friday, December 1, 2023

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

Sample Comments:

Sample Description: **W77 P4 Landfill CCR Well Sample**
Sample ID: AE69689 Sample Collection Date/Time: 10/30/2023 11:49
Sample Received: 10/31/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	20.43	0.05	feet		1		H2OD	10/30/23	RAMBOLL
Field Temperature	10.4	0.1	Degrees (		1		TEMP	10/30/23	RAMBOLL
Field Conductivity	543	0	umhos		1		FCOND25	10/30/23	RAMBOLL
Field pH	7.8	0.1	Units	0.1	1		FIELDPH	10/30/23	RAMBOLL
Total Dissolved Solids	366	8.7	mg/L	20.0	1		Std Mtd 2540 C	11/2/23	020
Total Fluoride	1.2	0.095	mg/L	0.32	1		EPA 300.0	11/16/23	020
Total Chloride	8.1	0.59	mg/L	2.0	1		EPA 300.0	11/16/23	020
Total Sulfate	135	4.4	mg/L	20	10		EPA 300.0	11/15/23	020
Total Boron	428	17.3	ug/L	40.0	1		EPA 200.7	11/2/23	020
Total Calcium	24500	114	ug/L	500	1		EPA 200.7	11/2/23	020
Dissolved Calcium	25400	114	ug/L	500	1		EPA 200.7	11/2/23	020
Dissolved Chloride	8.1	0.59	mg/L	2.0	1		EPA 300.0	11/16/23	020
Dissolved Magnesium	14100	182	ug/L	1000	1		EPA 200.7	11/2/23	020
Dissolved Sodium	84300	350	ug/L	500	1		EPA 200.7	11/2/23	020
Dissolved Sulfate	135	4.4	mg/L	20.0	10		EPA 300.0	11/14/23	020
Bicarbonate Ion	147	5.0	mg/L	10.0	1		HCO3	11/13/23	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	11/13/23	020
Dissolved Potassium	2280	325	ug/L	1000	1		EPA 200.7	11/2/23	020
Total Alkalinity as CaCO3	147	5.0	mg/L	10.0	1		SM 2320 B-1997	11/9/23	020
Total Hardness as CaCO3	117	1.0	mg/L	5.4	1		Std Mtd 2340B	11/2/23	020
Redox Potential	-63	1	mV		1		ASTM D1498-93	10/30/23	RAMBOLL
Turbidity	2.4	0.1	NTU'S		1		EPA 180.1	10/30/23	RAMBOLL
Dissolved Oxygen-Field	1.2	0.1	mg/l		1		FIELDDO	10/30/23	RAMBOLL

Sample Comments:

Sample Description: **W73 P4 Landfill CCR Well Sample**
Sample ID: AE69690 Sample Collection Date/Time: 10/30/2023 12:53
Sample Received: 10/31/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	24.96	0.05	feet		1		H2OD	10/30/23	RAMBOLL
Field Temperature	11.8	0.1	Degrees (		1		TEMP	10/30/23	RAMBOLL
Field Conductivity	459	0	umhos		1		FCOND25	10/30/23	RAMBOLL
Field pH	8.24	0.1	Units	0.1	1		FIELDPH	10/30/23	RAMBOLL
Total Dissolved Solids	338	8.7	mg/L	20.0	1		Std Mtd 2540 C	11/1/23	020
Total Fluoride	1.1	0.095	mg/L	0.32	1		EPA 300.0	11/1/23	020
Total Chloride	11.2	0.59	mg/L	2.0	1		EPA 300.0	11/1/23	020
Total Sulfate	132	4.4	mg/L	20.0	1		EPA 300.0	11/1/23	020

Report Date: Friday, December 1, 2023

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

Sample Description: **W73 P4 Landfill CCR Well Sample**
Sample ID: AE69690 Sample Collection Date/Time: 10/30/2023 12:53
Sample Received: 10/31/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Boron	447	17.3	ug/L	40.0	1		EPA 200.7	11/2/23	020
Total Calcium	19000	114	ug/L	500	1		EPA 200.7	11/2/23	020
Dissolved Calcium	18200	114	ug/L	500	1		EPA 200.7	11/2/23	020
Dissolved Chloride	11.1	0.59	mg/L	2.0	1		EPA 300.0	11/1/23	020
Dissolved Magnesium	12100	182	ug/L	1000	1		EPA 200.7	11/2/23	020
Dissolved Sodium	75800	350	ug/L	500	1		EPA 200.7	11/2/23	020
Dissolved Sulfate	134	4.4	mg/L	20.0	1		EPA 300.0	11/1/23	020
Bicarbonate Ion	117	5.0	mg/L	10.0	1		HCO3	11/8/23	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	11/8/23	020
Dissolved Potassium	1460	325	ug/L	1000	1		EPA 200.7	11/2/23	020
Total Alkalinity as CaCO3	120	5.0	mg/L	10.0	1		SM 2320 B-1997	11/1/23	020
Total Hardness as CaCO3	98.7	1	mg/L	5.4	1		Std Mtd 2340B	11/2/23	020
Total Filtered Alkalinity as CaCO3	117	5.0	mg/l	10.0	1		Std Mtd 2320 B	11/1/23	020
Dissolved Boron	0.445	0.0173	mg/L	0.040	1		EPA 200.7	11/2/23	020
Dissolved Selenium	Less Than	0.0122	mg/L	0.04	1		EPA 200.7	11/2/23	020
Dissolved Organic Carbon	2.1	0.19	ppm	0.50	1		Std Mtd 5310C	11/1/23	020
Dissolved Molybdenum	0.105	0.0024	mg/L	0.010	1		EPA 200.7	11/2/23	020
Redox Potential	-150	1	mV		1		ASTM D1498-93	10/30/23	RAMBOLL
Turbidity	14.1	0.1	NTU'S		1		EPA 180.1	10/30/23	RAMBOLL
Dissolved Oxygen-Field	0.9	0.1	mg/l		1		FIELDDO	10/30/23	RAMBOLL

Sample Comments:

Sample Description: **W74 P4 Landfill CCR Well Sample**
Sample ID: AE69691 Sample Collection Date/Time: 10/30/2023 13:52
Sample Received: 10/31/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Field Water Level	23.03	0.05	feet		1		H2OD	10/30/23	RAMBOLL
Field Temperature	10.7	0.1	Degrees C		1		TEMP	10/30/23	RAMBOLL
Field Conductivity	556	0	umhos		1		FCOND25	10/30/23	RAMBOLL
Field pH	8.2	0.1	Units	0.1	1		FIELDPH	10/30/23	RAMBOLL
Total Dissolved Solids	372	8.7	mg/L	20.0	1		Std Mtd 2540 C	11/2/23	020
Total Fluoride	1.1	0.095	mg/L	0.32	1		EPA 300.0	11/1/23	020
Total Chloride	13.2	0.59	mg/L	2.0	1		EPA 300.0	11/1/23	020
Total Sulfate	162	4.4	mg/L	20.0	10		EPA 300.0	11/2/23	020
Total Boron	423	17.3	ug/L	40.0	1		EPA 200.7	11/2/23	020
Total Calcium	19400	114	ug/L	500	1		EPA 200.7	11/2/23	020
Dissolved Calcium	19700	114	ug/L	500	1		EPA 200.7	11/2/23	020
Dissolved Chloride	14.5	0.59	mg/L	2.0	1		EPA 300.0	11/14/23	020
Dissolved Magnesium	15500	182	ug/L	1000	1		EPA 200.7	11/2/23	020
Dissolved Sodium	85200	350	ug/L	500	1		EPA 200.7	11/2/23	020
Dissolved Sulfate	158	4.4	mg/L	20.0	10		EPA 300.0	11/15/23	020
Bicarbonate Ion	113	5.0	mg/L	10.0	1		HCO3	11/13/23	020

Report Date: Friday, December 1, 2023

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

Sample Description: **W74 P4 Landfill CCR Well Sample**
Sample ID: AE69691 Sample Collection Date/Time: 10/30/2023 13:52
Sample Received: 10/31/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	11/13/23	020
Dissolved Potassium	2180	325	ug/L	1000	1		EPA 200.7	11/2/23	020
Nitrite	Less Than	0.021	mg/L	0.10	1		EPA 300.0	11/1/23	020
Nitrate	Less Than	0.044	mg/L	0.15	1		EPA 300.0	11/1/23	020
Total Copper	Less Than	0.0034	mg/L	0.010	1		EPA 200.7	11/2/23	020
Total Manganese	0.0167	0.0015	mg/L	0.005	1		EPA 200.7	11/2/23	020
Total Silver	Less Than	0.0032	mg/L	0.010	1		EPA 200.7	11/2/23	020
Total Zinc	Less Than	0.0116	mg/L	0.040	1		EPA 200.7	11/2/23	020
Total Alkalinity as CaCO3	112	5	mg/L	10	1		SM 2320 B-1997	11/9/23	020
Total Hardness as CaCO3	111	1.0	mg/L	5.4	1		Std Mtd 2340B	11/3/23	020
Dissolved Oxygen-Field	0.2	0.1	mg/l		1		FIELDDO	10/30/23	RAMBOLL
Turbidity	0.0	0.1	NTU'S		1		EPA 180.1	10/30/23	RAMBOLL
Redox Potential	-183	1	mV		1		ASTM D1498-93	10/30/23	RAMBOLL

Sample Comments:

Sample Description: **EB-3 P4 Landfill CCR Well Sample**
Sample ID: AE69692 Sample Collection Date/Time: 10/30/2023 15:00
Sample Received: 10/31/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Total Dissolved Solids	26	8.7	mg/L	20	1		Std Mtd 2540 C	11/2/23	020
Total Fluoride	Less Than	0.095	mg/L	0.32	1		EPA 300.0	11/2/23	020
Total Chloride	Less Than	0.59	mg/L	2.0	1		EPA 300.0	11/2/23	020
Total Sulfate	Less Than	0.44	mg/L	2.0	1		EPA 300.0	11/2/23	020
Total Boron	Less Than	17.3	ug/L	40	1		EPA 200.7	11/2/23	020
Total Calcium	Less Than	114	ug/L	500	1		EPA 200.7	11/2/23	020
Dissolved Calcium	Less Than	114	ug/L	500	1		EPA 200.7	11/2/23	020
Dissolved Chloride	Less Than	0.59	mg/L	2.0	1		EPA 300.0	11/14/23	020
Dissolved Magnesium	Less Than	182	ug/L	1000	1		EPA 200.7	11/2/23	020
Dissolved Sodium	383	350	ug/L	500	1	J	EPA 200.7	11/2/23	020
Dissolved Sulfate	Less Than	0.44	mg/L	2.0	1		EPA 300.0	11/14/23	020
Bicarbonate Ion	Less Than	5.0	mg/L	10.0	1		HCO3	11/13/23	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	11/13/23	020
Dissolved Potassium	Less Than	325	ug/L	1000	1		EPA 200.7	11/2/23	020
Total Copper	Less Than	0.0034	mg/L	0.010	1		EPA 200.7	11/2/23	020
Total Manganese	Less Than	0.0015	mg/L	0.005	1		EPA 200.7	11/2/23	020
Total Silver	Less Than	0.0032	mg/L	0.010	1		EPA 200.7	11/2/23	020
Total Zinc	Less Than	0.0116	mg/L	0.040	1		EPA 200.7	11/2/23	020
Total Alkalinity as CaCO3	Less Than	5	mg/L	10	1		SM 2320 B-1997	11/9/23	020
Total Hardness as CaCO3	Less Than	1.0	mg/L	5.4	1		Std Mtd 2340B	11/2/23	020
Dissolved Organic Carbon	Less Than	0.19	ppm	0.50	1		Std Mtd 5310C	11/8/23	020
Total Hardness as CaCO3	Less Than	1.0	mg/L	5.4	1		Std Mtd 2340B	11/2/23	020
Nitrite	Less Than	0.021	mg/L	0.10	1	H1	EPA 300.0	11/2/23	020

Report Date: Friday, December 1, 2023

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

Sample Description: **EB-3 P4 Landfill CCR Well Sample**

Sample ID: AE69692 Sample Collection Date/Time: 10/30/2023 15:00

Sample Received: 10/31/2023 Sample Collector: RAMBOLL

Parameter	Result	LOD	Units	LOQ	DIL	Result Flag	Analysis Method	Analysis Date	Analyst
Nitrate	Less Than	0.044	mg/L	0.15	1	H1	EPA 300.0	11/2/23	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: Laboratory Services at (414) 221-4595.