

Prepared for  
**We Energies**

Date  
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Project No.  
**1940102327**

# **2023 CCR ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT**

## **CALEDONIA ASH LANDFILL**

**2023 CCR ANNUAL GROUNDWATER MONITORING AND  
CORRECTIVE ACTION REPORT  
CALEDONIA ASH LANDFILL**

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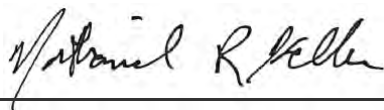
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## ACRONYMS AND ABBREVIATIONS

§	Section
40 C.F.R.	Title 40 of the Code of Federal Regulations
ACL	Alternative Concentration Limit
CAL	Caledonia Ash Landfill
CCR	coal combustion residuals
ES	Enforcement Standard
ESAP	Environmental Sampling and Analysis Plan
mg/L	milligrams per liter
NA	not applicable
NRT/OBG	Natural Resource Technology, Inc., an OBG Company
PAL	Preventive Action Limit
Ramboll	Ramboll Americas Engineering Solutions, Inc.
SAP	Sampling and Analysis Plan
SO <sub>4</sub>	sulfate
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) 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 Caledonia Ash Landfill (CAL) located in Caledonia, 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 13, 2023.

From 2016 through 2022 sampling at CAL 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 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 CAL located in Caledonia, WI.

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. (CAL 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. (CAL 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 CAL 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 CAL in 2023.)

This report provides the required information for CAL 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 CAL 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 13, 2023. Accordingly, no changes have occurred to the monitoring program status in calendar year 2023.

From 2016 through 2022 sampling at CAL 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 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** on the following page. The groundwater monitoring system, including the CCR unit and all background (upgradient) and downgradient monitoring wells, is presented in **Figure 1**. No changes were made to the monitoring system in 2023. In general, one groundwater sample was collected from each background and downgradient well during each monitoring event. All samples were collected and analyzed in accordance with the *Sampling and Analysis Plan (SAP), Revision 1, Caledonia 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**<sup>1</sup>.

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 that were 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 September 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, with the exception of Radium-226 and -228 combined, which were only analyzed for 2 sampling events for W49 and W50. Radium-226 and -228 will be analyzed in samples collected during future semiannual monitoring events until a total of 8 sampling events have been completed.

**Table A. 2022-2023 Detection Monitoring Program Summary**

Sampling Date	Purpose	Analytical Data Receipt Date	Parameters Analyzed
November 7, 2022	Detection Monitoring	January 6, 2023	40 C.F.R. § 257 Appendix III Total Alkalinity Total Copper Total Hardness Total Nitrate + Nitrite Total Silver Total Zinc
January 31, 2023	Baseline Sampling	July 7, 2023	<u>all wells</u> Total Alkalinity Total Calcium Total Copper Total Hardness Total Magnesium Total Manganese Total Nitrate + Nitrite

<sup>1</sup> 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
January 31, 2023 cont.	Baseline Sampling cont.	July 7, 2023	<u>all wells</u> Field pH Total Silver Total Zinc  <u>wells 49 &amp; 50 only</u> Total Antimony Total Arsenic Total Barium Total Beryllium Total Cadmium Total Cobalt Total Chromium Total Mercury Total Lithium Total Molybdenum Total Lead Total Selenium Total Thallium
March 7, 2023	Baseline Sampling	March 16, 2023	<u>all wells</u> Total Alkalinity Total Calcium Total Copper Total Hardness Total Magnesium Total Manganese Total Nitrate + Nitrite Field pH Total Silver Total Zinc  <u>wells 49 &amp; 50 only</u> Total Antimony Total Arsenic Total Barium Total Beryllium Total Cadmium Total Cobalt Total Chromium Total Mercury Total Lithium Total Molybdenum Total Lead Total Selenium Total Thallium
April 5, 2023	Baseline Sampling	April 18, 2023	<u>all wells</u> Total Calcium Total Copper

Sampling Date	Purpose	Analytical Data Receipt Date	Parameters Analyzed
April 5, 2023 cont.	Baseline Sampling cont.	April 18, 2023	<u>all wells</u> Total Hardness Total Magnesium Total Manganese Total Nitrate + Nitrite Field pH Total Silver Total Zinc  <u>wells 49 &amp; 50 only</u> Total Antimony Total Arsenic Total Barium Total Beryllium Total Cadmium Total Cobalt Total Chromium Total Mercury Total Lithium Total Molybdenum Total Lead Total Selenium Total Thallium  <u>well 49 only</u> Total Alkalinity
May 9-10, 2023	Detection Monitoring and Baseline Sampling	June 2, 2023	Ch. NR 507 App A Tables 1A and 3
June 8 and 12, 2023	Baseline Sampling	June 28, 2023	<u>all wells</u> Total Calcium Total Copper Total Hardness Total Magnesium Total Manganese Total Nitrate + Nitrite Field pH Total Silver Total Zinc  <u>wells 49 &amp; 50 only</u> Total Antimony Total Arsenic Total Barium Total Beryllium Total Cadmium Total Cobalt Total Chromium

Sampling Date	Purpose	Analytical Data Receipt Date	Parameters Analyzed
June 8 and 12, 2023 cont.	Baseline Sampling cont.	June 28, 2023	<u>wells 49 &amp; 50 only</u> Total Mercury Total Lithium Total Molybdenum Total Lead Total Selenium Total Thallium
July 13, 2023	Baseline Sampling	July 27, 2023	<u>all wells</u> Total Calcium Total Copper Total Hardness Total Magnesium Total Manganese Total Nitrate + Nitrite Field pH Total Silver Total Zinc  <u>wells 49 &amp; 50 only</u> Total Antimony Total Arsenic Total Barium Total Beryllium Total Cadmium Total Cobalt Total Chromium Total Mercury Total Lithium Total Molybdenum Total Lead Total Selenium Total Thallium
August 14 and 17, 2023	Baseline Sampling	September 25, 2023	<u>all wells</u> Total Calcium Total Copper Total Hardness Total Magnesium Total Manganese Total Nitrate + Nitrite Field pH Total Silver Total Zinc  <u>wells 49 &amp; 50 only</u> Total Mercury  <u>well 50 only</u> Total Antimony

Sampling Date	Purpose	Analytical Data Receipt Date	Parameters Analyzed
August 14 and 17, 2023 cont.	Baseline Sampling cont.	September 25, 2023	<u>well 50 only</u> Total Arsenic Total Lead Total Selenium Total Thallium
September 27, 2023	Baseline Sampling	October 10, 2023	<u>all wells</u> Total Manganese Field pH  <u>wells 49 &amp; 50 only</u> Total Antimony Total Arsenic Total Lead Total Selenium Total Thallium
November 6-7, 2023	Detection Monitoring	December 1, 2023	Ch. NR 507 App A Table 1A

## **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 indicate a source other than CAL 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, Caledonia Ash Landfill, Caledonia, Wisconsin*. December 12, 2023.



## TABLES

**TABLE 1**  
**GROUNDWATER ELEVATIONS**  
 2023 CCR ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
 CALEDONIA ASH LANDFILL  
 CALEDONIA, WI

Well ID	Well Type	Latitude (Decimal degrees)	Longitude (Decimal degrees)	Date	Groundwater Elevation (ft NAVD88)
W46D	Background (Upgradient/Side-gradient)	42.83840	-87.84685	11/07/2022	651.73
				5/9/2023	655.55
				11/6/2023	654.97
W48	Background (Upgradient)	42.83564	-87.84441	11/07/2022	655.11
				5/10/2023	657.49
				11/7/2023	656.85
W08D	Compliance (Downgradient)	42.83621	-87.83965	11/07/2022	650.23
				5/9/2023	655.07
				11/6/2023	654.48
W09D	Compliance (Downgradient)	42.83892	-87.83924	11/07/2022	652.92
				5/9/2023	656.14
				11/6/2023	653.23
W10D	Compliance (Downgradient)	42.83985	-87.84015	11/07/2022	651.57
				5/9/2023	654.19
				11/6/2023	652.44
W49	Compliance (Downgradient)	42.83987	-87.84187	11/07/2022	652.68
				5/10/2023	655.08
				11/7/2023	653.31
W50	Compliance (Downgradient)	42.83751	-87.83865	11/07/2022	653.06
				5/9/2023	655.54
				11/7/2023	653.70

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

**Caledonia**  
**Table 2. Analytical Results - Baseline and CCR Parameters**

**Date Range: 11/01/2022 to 12/31/2023**

**Lab Methods:**

<b>Well Id</b>	<b>Date Sampled</b>	<b>Lab Id</b>	<b>Alkalinity, lab, mg/L</b>	<b>Antimony, tot, ug/L</b>	<b>Arsenic, total, ug/L</b>	<b>Barium, total, ug/L</b>	<b>Beryllium, total, ug/L</b>	<b>Boron, total, mg/L</b>
W08D	11/7/2022	AE63530	158.0					0.460
	1/31/2023	AE64773	152.0					
	3/7/2023	AE65379	151.0					
	4/5/2023	AE65844						
	5/9/2023	AE66425	142.0					0.500
	11/6/2023	AE69873	155.0					0.436
W09D	11/7/2022	AE63529	142.0					0.422
	1/31/2023	AE64774	142.0					
	3/7/2023	AE65380	142.0					
	4/5/2023	AE65845						
	5/9/2023	AE66427	132.0					0.420
	11/6/2023	AE69874	145.0					0.394
W10D	11/7/2022	AE63528	136.0					0.443
	1/31/2023	AE64775	132.0					
	3/7/2023	AE65381	133.0					
	4/5/2023	AE65846						
	5/9/2023	AE66428	126.0					0.430
	11/6/2023	AE69875	143.0					0.411
W46D	11/7/2022	AE63526	164.0					0.368
	1/31/2023	AE64776	155.0					
	3/7/2023	AE65382	162.0					
	4/5/2023	AE65847						
	5/9/2023	AE66430	154.0					0.380
	11/6/2023	AE69876	161.0					0.344

**Caledonia**  
**Table 2. Analytical Results - Baseline and CCR Parameters**

**Date Range: 11/01/2022 to 12/31/2023**

**Lab Methods:**

			Alkalinity, lab, mg/L	Antimony, tot, ug/L	Arsenic, total, ug/L	Barium, total, ug/L	Beryllium, total, ug/L	Boron, total, mg/L
W48	11/7/2022	AE63525	227.0					0.386
	1/31/2023	AE64777	231.0					
	3/7/2023	AE65383	229.0					
	4/5/2023	AE65848						
	5/10/2023	AE66463	222.0					0.380
	11/7/2023	AE69877	233.0					0.375
W49	11/7/2022	AE63532	126.0					0.458
	1/31/2023	AE64778	119.0	<0.019	1.02	20.2000	<0.300000	
	3/7/2023	AE65384	123.0	<0.150	0.43	19.0000	<0.250000	
	4/5/2023	AE65849	<20.0	<0.150	0.59	20.0000	<0.530000	
	5/10/2023	AE66464	112.0	<40.000	<40.00	14.0000	<6.000000	0.450
	6/8/2023	AE67102		<40.000	<40.00	21.0000	<6.000000	
	7/13/2023	AE67711		0.360	1.00	21.8000	<0.530000	
	9/27/2023	40268803006		0.450	0.63			
11/7/2023	AE69878	132.0					0.429	
W50	11/7/2022	AE63531	148.0					0.541
	1/31/2023	AE64779	155.0	0.250	1.24	34.1000	<0.300000	
	3/7/2023	AE65385	151.0	<0.150	0.69	31.0000	<0.250000	
	4/5/2023	AE65850		<0.150	0.82	32.0000	<0.530000	
	5/9/2023	AE66426	144.0	<40.000	<40.00	25.0000	<6.000000	0.550
	6/12/2023	AE67140		<40.000	40.00	29.0000	<6.000000	
	7/13/2023	AE67714		0.760	1.20	37.9000	<0.530000	
	8/14/2023	AE68272		0.370	0.71			
	9/27/2023	40268803007		0.150	0.53			
	11/7/2023	AE69879	154.0					0.479

**Caledonia**  
**Table 2. Analytical Results - Baseline and CCR Parameters**

**Date Range: 11/01/2022 to 12/31/2023**

**Lab Methods:**

Well Id	Date Sampled	Lab Id	Cadmium,total, ug/L	Calcium, total, mg/L	Chloride, total, mg/L	Chromium, total, ug/L	Co, tot, ug/L	Copper, total, ug/L
W08D	11/7/2022	AE63530		48.6	9.5			<3.40000
	1/31/2023	AE64773		50.1				<0.92000
	3/7/2023	AE65379		55.6				<1.90000
	4/5/2023	AE65844		47.8				<3.40000
	5/9/2023	AE66425		46.5	9.6			<4.00000
	6/8/2023	AE67097		46.8				<4.00000
	7/13/2023	AE67716		48.6				<3.40000
	8/14/2023	AE68266		48.3				<3.40000
	11/6/2023	AE69873		45.8	11.4			
W09D	11/7/2022	AE63529		17.9	3.6			<3.40000
	1/31/2023	AE64774		19.0				<0.92000
	3/7/2023	AE65380		25.0				<1.90000
	4/5/2023	AE65845		19.2				<3.40000
	5/9/2023	AE66427		17.4	3.8			<4.00000
	6/8/2023	AE67098		17.0				<4.00000
	7/13/2023	AE67713		16.9				<3.40000
	8/14/2023	AE68267		18.1				<3.40000
	11/6/2023	AE69874		17.1	3.6			
W10D	11/7/2022	AE63528		20.2	3.9			<3.40000
	1/31/2023	AE64775		21.4				<0.92000
	3/7/2023	AE65381		25.0				<1.90000
	4/5/2023	AE65846		21.2				<3.40000
	5/9/2023	AE66428		20.4	4.1			5.00000
	6/8/2023	AE67099		20.3				<4.00000
	7/13/2023	AE67712		21.5				<3.40000

**Caledonia**  
**Table 2. Analytical Results - Baseline and CCR Parameters**

**Date Range: 11/01/2022 to 12/31/2023**

**Lab Methods:**

			<b>Cadmium, total, ug/L</b>	<b>Calcium, total, mg/L</b>	<b>Chloride, total, mg/L</b>	<b>Chromium, total, ug/L</b>	<b>Co, tot, ug/L</b>	<b>Copper, total, ug/L</b>
W10D	8/14/2023	AE68268		20.3				<3.40000
	11/6/2023	AE69875		19.2	3.7			
W46D	11/7/2022	AE63526		24.6	6.8			<3.40000
	1/31/2023	AE64776		26.3				<0.92000
	3/7/2023	AE65382		30.8				<1.90000
	4/5/2023	AE65847		25.8				<3.40000
	5/9/2023	AE66430		24.5	5.9			<4.00000
	6/8/2023	AE67100		24.3				<4.00000
	7/13/2023	AE67709		23.8				<3.40000
	8/14/2023	AE68269		25.6				<3.40000
	11/6/2023	AE69876		23.4	5.2			
W48	11/7/2022	AE63525		26.0	3.8			<3.40000
	1/31/2023	AE64777		26.8				<0.92000
	3/7/2023	AE65383		35.0				<1.90000
	4/5/2023	AE65848		25.9				<3.40000
	5/10/2023	AE66463		25.7	<10.0			<4.00000
	6/8/2023	AE67101		25.3				<4.00000
	7/13/2023	AE67710		26.3				<3.40000
	8/14/2023	AE68270		26.7				<3.40000
	11/7/2023	AE69877		25.3	3.7			
W49	11/7/2022	AE63532		15.6	4.3			<3.40000
	1/31/2023	AE64778	<0.800	16.2		<1.30000	<1.900	<1.60000
	3/7/2023	AE65384	<0.150	21.1		<1.00000	0.180	<1.90000
	4/5/2023	AE65849	<1.300	16.0		<2.50000	<1.400	<3.40000
	5/10/2023	AE66464	<4.000	15.3	10.2	<6.00000	<6.000	<4.00000
	6/8/2023	AE67102	<4.000	15.3		<6.00000	<6.000	<4.00000

**Caledonia**  
**Table 2. Analytical Results - Baseline and CCR Parameters**

**Date Range: 11/01/2022 to 12/31/2023**

**Lab Methods:**

			<b>Cadmium, total, ug/L</b>	<b>Calcium, total, mg/L</b>	<b>Chloride, total, mg/L</b>	<b>Chromium, total, ug/L</b>	<b>Co, tot, ug/L</b>	<b>Copper, total, ug/L</b>
W49	7/13/2023	AE67711	<1.300	18.7		<2.50000	<1.400	4.20000
	8/17/2023	AE68387		17.7				<3.40000
	11/7/2023	AE69878		16.3	5.6			
W50	11/7/2022	AE63531		28.9	5.8			<3.40000
	1/31/2023	AE64779	<0.800	29.6		<1.30000	<1.900	2.28000
	3/7/2023	AE65385	<0.150	35.1		<1.00000	0.140	<1.90000
	4/5/2023	AE65850	<1.300	27.9		<2.50000	<1.400	<3.40000
	5/9/2023	AE66426	<4.000	26.9	5.6	<6.00000	<6.000	<4.00000
	6/12/2023	AE67140	<4.000	27.1		<6.00000	<6.000	<4.00000
	7/13/2023	AE67714	<1.300	29.0		<2.50000	<1.400	5.90000
	8/14/2023	AE68272		30.2				4.40000
	11/7/2023	AE69879		26.5	13.1			

**Caledonia**  
**Table 2. Analytical Results - Baseline and CCR Parameters**

**Date Range: 11/01/2022 to 12/31/2023**

**Lab Methods:**

Well Id	Date Sampled	Lab Id	Fluoride, total, mg/L	Hardness, tot, mg/L	Lead, total, ug/L	Li, tot, ug/L	Magnesium, total, mg/L	Manganese, total, ug/L
W08D	11/7/2022	AE63530	1.20	213.00				
	1/31/2023	AE64773		210.00			21.6	148.0
	3/7/2023	AE65379		237.00			23.8	170.0
	4/5/2023	AE65844		207.00			21.1	150.0
	5/9/2023	AE66425	2.10	210.00			21.4	130.0
	6/8/2023	AE67097		203.00			20.9	150.0
	7/13/2023	AE67716		212.00			22.1	159.0
	8/14/2023	AE68266		209.00			21.5	149.0
	9/27/2023	40268803001						164.0
11/6/2023	AE69873	1.40	202.00					
W09D	11/7/2022	AE63529	1.30	86.80				
	1/31/2023	AE64774		91.00			10.6	7.5
	3/7/2023	AE65380		106.00			10.5	6.9
	4/5/2023	AE65845		92.10			10.7	7.9
	5/9/2023	AE66427	1.90	88.00			10.1	<4.0
	6/8/2023	AE67098		81.00			9.4	6.0
	7/13/2023	AE67713		80.80			9.3	6.4
	8/14/2023	AE68267		85.70			9.8	7.4
	9/27/2023	40268803002						7.4
11/6/2023	AE69874	1.30	87.30					
W10D	11/7/2022	AE63528	1.30	82.90				
	1/31/2023	AE64775		87.00			8.2	18.9
	3/7/2023	AE65381		99.00			8.9	20.0
	4/5/2023	AE65846		86.10			8.1	21.0
	5/9/2023	AE66428	2.10	84.00			8.2	10.0



**Caledonia**  
**Table 2. Analytical Results - Baseline and CCR Parameters**

**Date Range: 11/01/2022 to 12/31/2023**

**Lab Methods:**

			Fluoride, total, mg/L	Hardness, tot, mg/L	Lead, total, ug/L	Li, tot, ug/L	Magnesium, total, mg/L	Manganese, total, ug/L
W10D	6/8/2023	AE67099		83.40			7.9	20.0
	7/13/2023	AE67712		88.30			8.4	20.0
	8/14/2023	AE68268		82.90			7.8	18.7
	9/27/2023	40268803003						18.5
	11/6/2023	AE69875	1.30	82.00				
W46D	11/7/2022	AE63526	1.10	122.00				
	1/31/2023	AE64776		130.00			15.1	43.5
	3/7/2023	AE65382		146.00			16.7	47.0
	4/5/2023	AE65847		126.00			15.0	43.0
	5/9/2023	AE66430	1.70	130.00			14.7	40.0
	6/8/2023	AE67100		120.00			14.4	40.0
	7/13/2023	AE67709		116.00			13.8	34.3
	8/14/2023	AE68269		125.00			14.8	33.8
	9/27/2023	40268803004						37.4
	11/6/2023	AE69876	1.20	119.00				
W48	11/7/2022	AE63525	0.96	136.00				
	1/31/2023	AE64777		140.00			17.1	12.2
	3/7/2023	AE65383		161.00			17.9	12.0
	4/5/2023	AE65848		133.00			16.6	13.0
	5/10/2023	AE66463	1.10	140.00			17.3	9.0
	6/8/2023	AE67101		131.00			16.4	10.0
	7/13/2023	AE67710		136.00			17.1	13.8
	8/14/2023	AE68270		134.00			16.4	15.3
	9/27/2023	40268803005						12.9
	11/7/2023	AE69877	0.95	138.00				
W49	11/7/2022	AE63532	1.50	66.60				

**Caledonia**  
**Table 2. Analytical Results - Baseline and CCR Parameters**

**Date Range: 11/01/2022 to 12/31/2023**

**Lab Methods:**

			Fluoride, total, mg/L	Hardness, tot, mg/L	Lead, total, ug/L	Li, tot, ug/L	Magnesium, total, mg/L	Manganese, total, ug/L
W49	1/31/2023	AE64778		69.00	0.05	4.850	6.9	20.0
	3/7/2023	AE65384		83.80	<0.24	3.100	7.6	27.0
	4/5/2023	AE65849		67.30	<0.24	2.500	6.6	26.0
	5/10/2023	AE66464	1.60	65.00	<40.00		0.0	10.0
	6/8/2023	AE67102		64.60	<40.00	<40.000	6.4	20.0
	7/13/2023	AE67711		81.90	0.51	3.700	8.6	38.1
	8/17/2023	AE68387		73.30			7.1	49.3
	9/27/2023	40268803006			0.59			41.9
	11/7/2023	40270877006 AE69878	1.60	72.50		2.600		
W50	11/7/2022	AE63531	1.20	117.00				
	1/31/2023	AE64779		120.00	0.52	5.650	10.8	30.3
	3/7/2023	AE65385		133.00	<0.24	3.800	11.0	38.0
	4/5/2023	AE65850		112.00	<0.24	3.300	10.2	43.0
	5/9/2023	AE66426	1.70	110.00	<40.00		10.3	30.0
	6/12/2023	AE67140		111.00	<40.00	<40.000	10.5	40.0
	7/13/2023	AE67714		118.00	1.30	4.700	11.2	79.1
	8/14/2023	AE68272		120.00	0.78		10.7	41.0
	9/27/2023	40268803007			<0.24			35.5
	11/7/2023	40270877007 AE69879	2.20	110.00		4.400		

**Caledonia**  
**Table 2. Analytical Results - Baseline and CCR Parameters**

Date Range: 11/01/2022 to 12/31/2023

Lab Methods:

Well Id	Date Sampled	Lab Id	Mercury, total, ug/L	Molybdenum, total, ug/L	Nitrite + Nitrate, total, mg/L	pH (Field), SU	Selenium, total, ug/L	Silver, total, ug/L
W08D	11/7/2022	AE63530			<0.02	7.7		<3.200000
	1/31/2023	AE64773			0.22	7.5		<1.200000
	3/7/2023	AE65379			0.17	8.3		<0.130000
	4/5/2023	AE65844			2.50	7.5		<3.200000
	5/9/2023	AE66425			<0.40	7.9		<20.000000
	6/8/2023	AE67097			0.73	7.4		<20.000000
	7/13/2023	AE67716			0.74	7.4		<3.200000
	8/14/2023	AE68266			1.31	8.2		<3.200000
	9/27/2023	40268803001				7.5		
11/6/2023	AE69873				7.5			
W09D	11/7/2022	AE63529			<0.02	7.9		<3.200000
	1/31/2023	AE64774			<0.01	8.1		<1.200000
	3/7/2023	AE65380			<0.00	8.8		<0.130000
	4/5/2023	AE65845			2.90	8.0		<3.200000
	5/9/2023	AE66427			<0.40	8.5		<1.200000
	6/8/2023	AE67098			0.90	7.9		<20.000000
	7/13/2023	AE67713			0.90	7.6		<3.200000
	8/14/2023	AE68267			1.46	8.8		<3.200000
	9/27/2023	40268803002				8.1		
11/6/2023	AE69874				8.0			
W10D	11/7/2022	AE63528			<0.02	7.7		<3.200000
	1/31/2023	AE64775			0.06	7.9		<1.200000
	3/7/2023	AE65381			<0.00	8.7		<0.130000
	4/5/2023	AE65846			2.20	7.9		<3.200000
	5/9/2023	AE66428			<0.40	8.2		<20.000000

**Caledonia**  
**Table 2. Analytical Results - Baseline and CCR Parameters**

**Date Range: 11/01/2022 to 12/31/2023**

**Lab Methods:**

			Mercury, total, ug/L	Molybdenum, total, ug/L	Nitrite + Nitrate, total, mg/L	pH (Field), SU	Selenium, total, ug/L	Silver, total, ug/L
W10D	6/8/2023	AE67099			0.89	7.8		<20.000000
	7/13/2023	AE67712			1.40	7.7		<3.200000
	8/14/2023	AE68268			1.36	8.6		<3.200000
	9/27/2023	40268803003				7.9		
	11/6/2023	AE69875				7.6		
W46D	11/7/2022	AE63526			<0.02	7.1		<3.200000
	1/31/2023	AE64776			0.04	7.5		<1.200000
	3/7/2023	AE65382			<0.00	8.1		<0.130000
	4/5/2023	AE65847			3.20	7.4		<3.200000
	5/9/2023	AE66430			<0.40	7.8		<20.000000
	6/8/2023	AE67100			0.99	7.3		<20.000000
	7/13/2023	AE67709			0.10	7.3		<3.200000
	8/14/2023	AE68269			1.51	7.9		<3.200000
	9/27/2023	40268803004				7.5		
	11/6/2023	AE69876				7.6		
W48	11/7/2022	AE63525			<0.02	7.7		<3.200000
	1/31/2023	AE64777			0.03	7.9		<1.200000
	3/7/2023	AE65383			<0.00	8.7		<0.130000
	4/5/2023	AE65848			4.40	7.9		<3.200000
	5/10/2023	AE66463			<2.20	8.3		<20.000000
	6/8/2023	AE67101			1.40	7.8		<20.000000
	7/13/2023	AE67710			1.50	7.6		<3.200000
	8/14/2023	AE68270			1.98	8.6		<3.200000
	9/27/2023	40268803005				7.9		
	11/7/2023	AE69877				7.8		
W49	11/7/2022	AE63532			<0.02	8.1		<3.200000

**Caledonia**  
**Table 2. Analytical Results - Baseline and CCR Parameters**

**Date Range: 11/01/2022 to 12/31/2023**

**Lab Methods:**

			Mercury, total, ug/L	Molybdenum, total, ug/L	Nitrite + Nitrate, total, mg/L	pH (Field), SU	Selenium, total, ug/L	Silver, total, ug/L
W49	1/31/2023	AE64778	<0.000170	48.70	0.07	8.3	0.6	<2.900000
	3/7/2023	AE65384	0.000260	42.00	0.10	8.6	<0.3	<0.130000
	4/5/2023	AE65849	<0.001200	44.00	2.70	7.8	<0.3	<3.200000
	5/10/2023	AE66464	<0.001200	40.00	<2.20	8.4	<80.0	<20.000000
	6/8/2023	AE67102	0.001160	50.00	0.84	7.7	<80.0	<20.000000
	7/13/2023	AE67711		50.40	0.88	7.2	<0.3	<3.200000
	8/17/2023	AE68387	0.000380		<0.01	8.3		<3.200000
	9/27/2023	40268803006				7.8	<0.3	
	11/7/2023	AE69878				7.4		
W50	11/7/2022	AE63531			<0.02	7.6		<3.200000
	1/31/2023	AE64779	0.000770	40.60	0.08	7.4	0.6	<2.900000
	3/7/2023	AE65385	0.000190	36.00	0.07	8.4	<0.3	<0.130000
	4/5/2023	AE65850	<0.001200	35.00	2.80	7.6	<0.3	<3.200000
	5/9/2023	AE66426	<0.001200	40.00	1.51	7.9	<80.0	<20.000000
	6/12/2023	AE67140	0.000400	40.00	0.97	8.4	<80.0	<20.000000
	7/13/2023	AE67714		35.50	0.94	7.5	<0.3	<3.200000
	8/14/2023	AE68272	0.001300		1.43	8.1	<0.3	<3.200000
	9/27/2023	40268803007				7.6	<0.3	
	11/7/2023	AE69879				7.4		

**Caledonia**  
**Table 2. Analytical Results - Baseline and CCR Parameters**

**Date Range: 11/01/2022 to 12/31/2023**

**Lab Methods:**

Well Id	Date Sampled	Lab Id	Sulfate, total, mg/L	TDS, mg/L	Thallium, total, ug/L	Zinc, total, ug/L
W08D	11/7/2022	AE63530	210.0	482		<11.60000
	1/31/2023	AE64773				<1.80000
	3/7/2023	AE65379				<10.00000
	4/5/2023	AE65844				<12.00000
	5/9/2023	AE66425	196.0	458		<60.00000
	6/8/2023	AE67097				<60.00000
	7/13/2023	AE67716				<11.60000
	8/14/2023	AE68266				<11.60000
W09D	11/6/2023	AE69873	214.0	456		
	11/7/2022	AE63529	32.9	212		<11.60000
	1/31/2023	AE64774				<1.80000
	3/7/2023	AE65380				<10.00000
	4/5/2023	AE65845				<12.00000
	5/9/2023	AE66427	30.9	206		<1.80000
	6/8/2023	AE67098				<60.00000
	7/13/2023	AE67713				<11.60000
W10D	8/14/2023	AE68267				<11.60000
	11/6/2023	AE69874	34.6	206		
	11/7/2022	AE63528	42.2	218		<11.60000
	1/31/2023	AE64775				<1.80000
	3/7/2023	AE65381				<10.00000
	4/5/2023	AE65846				<12.00000
	5/9/2023	AE66428	39.8	202		<60.00000
6/8/2023	AE67099				<60.00000	
7/13/2023	AE67712				<11.60000	

**Caledonia**  
**Table 2. Analytical Results - Baseline and CCR Parameters**

**Date Range: 11/01/2022 to 12/31/2023**

**Lab Methods:**

			Sulfate, total, mg/L	TDS, mg/L	Thallium, total, ug/L	Zinc, total, ug/L
W10D	8/14/2023	AE68268				<11.60000
	11/6/2023	AE69875	42.8	194		
W46D	11/7/2022	AE63526	34.4	216		<11.60000
	1/31/2023	AE64776				<1.80000
	3/7/2023	AE65382				<10.00000
	4/5/2023	AE65847				<12.00000
	5/9/2023	AE66430	32.0	214		<60.00000
	6/8/2023	AE67100				<60.00000
	7/13/2023	AE67709				<11.60000
	8/14/2023	AE68269				<11.60000
	11/6/2023	AE69876	37.7	202		
W48	11/7/2022	AE63525	0.5	280		<11.60000
	1/31/2023	AE64777				<1.80000
	3/7/2023	AE65383				<10.00000
	4/5/2023	AE65848				<12.00000
	5/10/2023	AE66463	<20.0	226		<60.00000
	6/8/2023	AE67101				<60.00000
	7/13/2023	AE67710				<11.60000
	8/14/2023	AE68270				<11.60000
11/7/2023	AE69877	<0.4	234			
W49	11/7/2022	AE63532	50.0	220		<11.60000
	1/31/2023	AE64778			0.032000	<1.40000
	3/7/2023	AE65384			<0.140000	<10.00000
	4/5/2023	AE65849			<0.140000	<12.00000
	5/10/2023	AE66464	58.5	206	<0.080000	<60.00000
	6/8/2023	AE67102			<80.000000	<60.00000

**Caledonia**  
**Table 2. Analytical Results - Baseline and CCR Parameters**

**Date Range: 11/01/2022 to 12/31/2023**





**Lab Methods:**

			Sulfate, total, mg/L	TDS, mg/L	Thallium, total, ug/L	Zinc, total, ug/L
W49	7/13/2023	AE67711			<0.140000	<11.60000
	8/17/2023	AE68387				<11.60000
	9/27/2023	40268803006			<0.140000	
	11/7/2023	AE69878	48.2	200		
W50	11/7/2022	AE63531	67.0	292		<11.60000
	1/31/2023	AE64779			0.026000	7.78000
	3/7/2023	AE65385		260	<0.140000	<10.00000
	4/5/2023	AE65850			<0.140000	<12.00000
	5/9/2023	AE66426	75.4	276	<80.000000	<60.00000
	6/12/2023	AE67140			<80.000000	<60.00000
	7/13/2023	AE67714			0.170000	<11.60000
	8/14/2023	AE68272			<0.140000	42.70000
	9/27/2023	40268803007			<0.140000	
	11/7/2023	AE69879	86.1	266		



## FIGURES



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

NOTES  
IMAGERY DATE = 5/1/2022



### MONITORING WELL LOCATION MAP

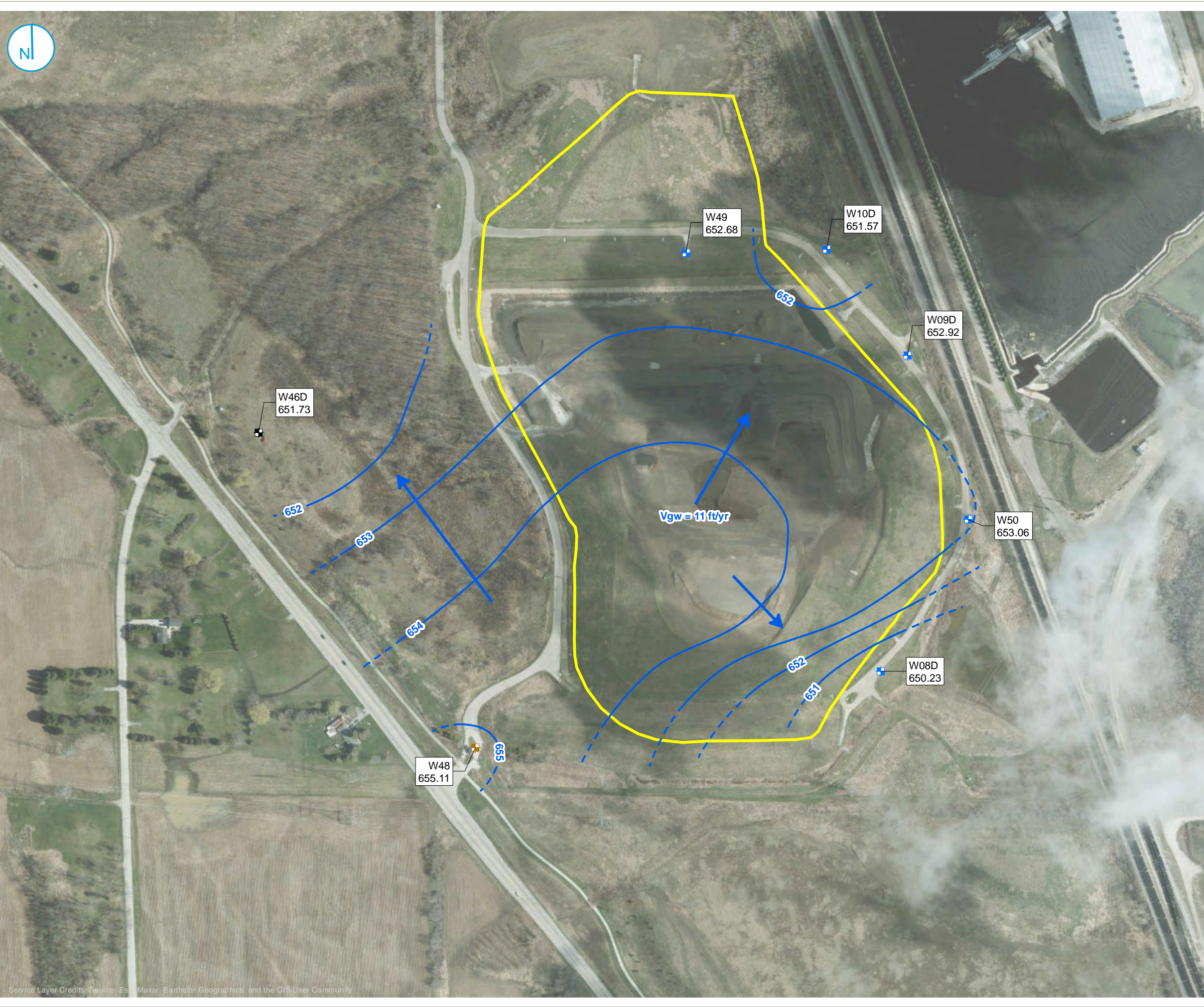
**2023 CCR ANNUAL GROUNDWATER MONITORING  
AND CORRECTIVE ACTION REPORT**  
**CALEDONIA ASH LANDFILL  
CALEDONIA POWER PLANT**  
CALEDONIA, WISCONSIN

**FIGURE 1**

RAMBOLL AMERICAS  
ENGINEERING SOLUTIONS, INC.







- CCR RULE BACKGROUND MONITORING WELL LOCATION
- CCR RULE DOWNGRAIDENT MONITORING WELL LOCATION
- CCR RULE UPGRADIENT MONITORING WELL LOCATION
- UNIT BOUNDARY
- GROUNDWATER ELEVATION CONTOUR (1-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- ➔ GROUNDWATER FLOW DIRECTION

**NOTES**  
 V<sub>gw</sub> = ESTIMATED FT/YR GROUNDWATER FLOW VELOCITY  
 IMAGERY DATE = 5/1/2022



**POTENTIOMETRIC SURFACE MAP  
 NOVEMBER 7, 2022**

**2023 CCR ANNUAL GROUNDWATER MONITORING  
 AND CORRECTIVE ACTION REPORT  
 CALEDONIA ASH LANDFILL  
 CALEDONIA POWER PLANT  
 CALEDONIA, WISCONSIN**

**FIGURE 2**

RAMBOLL AMERICAS  
 ENGINEERING SOLUTIONS, INC



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



**GROUNDWATER AVERAGE LINEAR VELOCITY CALCULATIONS  
 CALEDONIA ASH LANDFILL  
 CALEDONIA, WISCONSIN**

<b>NOVEMBER 2022</b>		$V = K i / n_e$	V = Groundwater Velocity		
			K = Hydraulic Conductivity		
			i = Hydraulic Gradient (unitless value)		
			$n_e$ = Effective Porosity		
<b>UPPERMOST AQUIFER</b>					
<b>Contours</b>	<b>654</b>	<b>to</b>	<b>653</b>	<b>North to Northeast Across the Landfill</b>	Elevation Change (ft)
K =	1.04E+03 ft/yr			Geometric mean for Landfill 3 (all)	Distance Change (ft)
i =	0.003			between contours identified above	
$n_e$ =	25 %				1 / 370
					0.003
V =	$\frac{1.04E+03 * 2.70E-03}{0.25}$				
V =	11 feet/year				

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





- ⊠ CCR RULE BACKGROUND MONITORING WELL LOCATION
- ⊞ CCR RULE DOWNGRADIENT MONITORING WELL LOCATION
- ⊞ CCR RULE UPGRADIENT MONITORING WELL LOCATION
- ▭ UNIT BOUNDARY
- GROUNDWATER ELEVATION CONTOUR (1-FT CONTOUR INTERVAL, NAVD88)
- - - INFERRED GROUNDWATER ELEVATION CONTOUR
- ➔ GROUNDWATER FLOW DIRECTION

**NOTES**  
 V<sub>gw</sub> = ESTIMATED FT/YR GROUNDWATER FLOW VELOCITY  
 IMAGERY DATE = 5/1/2022



**POTENTIOMETRIC SURFACE MAP  
 MAY 9-10, 2023**

**2023 CCR ANNUAL GROUNDWATER MONITORING  
 AND CORRECTIVE ACTION REPORT  
 CALEDONIA ASH LANDFILL  
 CALEDONIA POWER PLANT  
 CALEDONIA, WISCONSIN**

**FIGURE 3**

RAMBOLL AMERICAS  
 ENGINEERING SOLUTIONS, INC



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

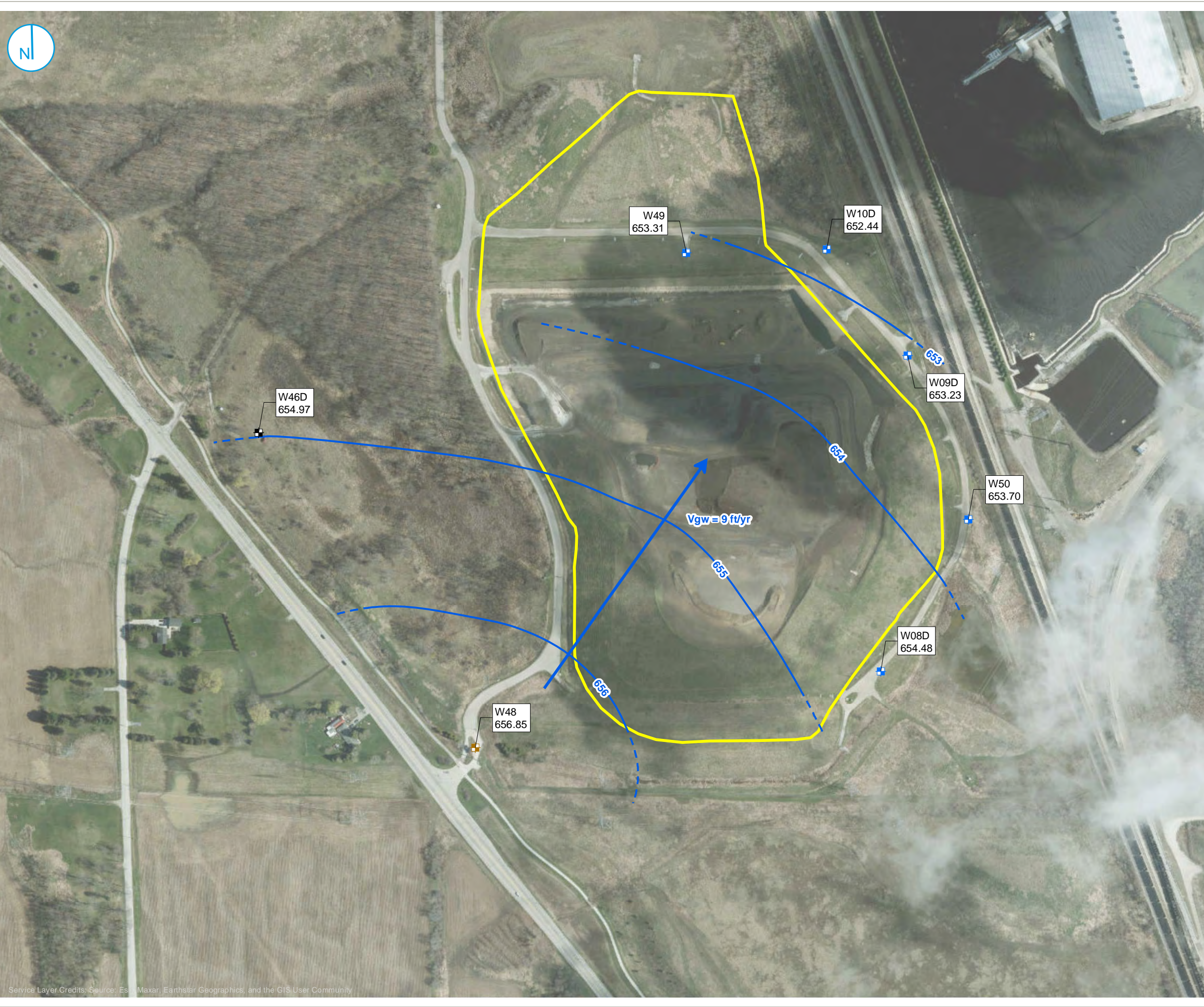


**GROUNDWATER AVERAGE LINEAR VELOCITY CALCULATIONS  
 CALEDONIA ASH LANDFILL  
 CALEDONIA, WISCONSIN**

<b>May 2023</b>	$V = K i / n_e$		V = Groundwater Velocity		
			K = Hydraulic Conductivity		
			i = Hydraulic Gradient (unitless value)		
			$n_e$ = Effective Porosity		
<b>UPPERMOST AQUIFER</b>					
<b>Contours</b>	<b>657</b>	<b>to</b>	<b>656</b>	<b>North to Northeast Across the Landfill</b>	Elevation Change (ft)
K =	1.04E+03 ft/yr			Geometric mean for Landfill 3 (all)	Distance Change (ft)
i =	0.001			between contours identified above	1 / 1398
$n_e$ =	25 %				0.001
V =	$\frac{1.04E+03 * 7.15E-04}{0.25}$				
V =	3 feet/year				

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





- CCR RULE BACKGROUND MONITORING WELL LOCATION
- CCR RULE DOWNGRADIENT MONITORING WELL LOCATION
- CCR RULE UPGRADIENT MONITORING WELL LOCATION
- UNIT BOUNDARY
- GROUNDWATER ELEVATION CONTOUR (1-FT CONTOUR INTERVAL, NAVD88)
- INFERRED GROUNDWATER ELEVATION CONTOUR
- GROUNDWATER FLOW DIRECTION

**NOTES**  
 V<sub>gw</sub> = ESTIMATED FT/YR GROUNDWATER FLOW VELOCITY  
 IMAGERY DATE = 5/1/2022



**POTENTIOMETRIC SURFACE MAP  
 NOVEMBER 6-7, 2023**

**2023 CCR ANNUAL GROUNDWATER MONITORING  
 AND CORRECTIVE ACTION REPORT  
 CALEDONIA ASH LANDFILL  
 CALEDONIA POWER PLANT  
 CALEDONIA, WISCONSIN**

**FIGURE 4**

RAMBOLL AMERICAS  
 ENGINEERING SOLUTIONS, INC



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



**GROUNDWATER AVERAGE LINEAR VELOCITY CALCULATIONS  
 CALEDONIA ASH LANDFILL  
 CALEDONIA, WISCONSIN**

<b>November 2023</b>		$V = K i / n_e$	V = Groundwater Velocity		
			K = Hydraulic Conductivity		
			i = Hydraulic Gradient (unitless value)		
			$n_e$ = Effective Porosity		
<b>UPPERMOST AQUIFER</b>					
<b>Contours</b>	<b>656</b>	<b>to</b>	<b>653</b>	<b>North to Northeast Across the Landfill</b>	Elevation Change (ft)
K =	1.04E+03 ft/yr	Geometric mean for Landfill 3 (all)			Distance Change (ft)
i =	0.002	between contours identified above			
$n_e$ =	25 %				3 / 1358
V =	$\frac{1.04E+03 * 2.21E-03}{0.25}$				0.002
V =	9 feet/year				

[O: KJS 1/19/2024, 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: Tuesday, January 23, 2024

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

Sample Description: **W08D Caledonia CCR Well Sample**  
 Sample ID: AE64773 Sample Collection Date/Time: 01/31/2023 13:56  
 Sample Received: 01/31/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	43.84	0.05	feet		1		H2OD	1/31/23	RAMBOLL
Field Temperature	6.9	0.1	Degrees t		1		TEMP	1/31/23	RAMBOLL
Field Conductivity	919	0	umhos		1		FCOND25	1/31/23	RAMBOLL
Field pH	7.5	0.1	Units	0.1	1		FIELDPH	1/31/23	RAMBOLL
Total Alkalinity as CaCO3	152	20	mg/L		1		SM 2320 B-1997	2/13/23	C153278
Total Copper	Less Than	0.92	ug/L	3.1	1		EPA 200.7	3/2/23	EDL
Total Calcium	50100	43	ug/L	140	1		EPA 200.7	3/2/23	EDL
Total Magnesium	21600	7.1	ug/L	24	1		EPA 200.7	3/2/23	EDL
Total Hardness as CaCO3	210	1	mg/L		1		Std Mtd 2340B	3/23/23	EDL
Total Manganese	148	0.11	ug/L	0.38	1		EPA 200.7	3/2/23	EDL
Total Silver	Less Than	1.2	ug/L	4.0	1		EPA 200.7	3/2/23	EDL
Total Zinc	Less Than	1.8	ug/L	6.0	1		EPA 200.7	3/2/23	EDL
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	1/31/23	JLM
Nitrate as N	0.22	0.008	mg/L	0.027	1		EPA 300.0	1/31/23	JLM
Nitrate-Nitrite as N	0.22	0.011	mg/L	0.036	1		EPA 300.0	1/31/23	JLM

Sample Comments:

Sample Description: **W09D Caledonia CCR Well Sample**  
 Sample ID: AE64774 Sample Collection Date/Time: 01/31/2023 12:12  
 Sample Received: 01/31/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	53.50	0.05	feet		1		H2OD	1/31/23	RAMBOLL
Field Temperature	9.3	0.0002	Degrees t		1		TEMP	1/31/23	RAMBOLL
Field Conductivity	423	0	umhos		1		FCOND25	1/31/23	RAMBOLL
Field pH	8.1	0.1	Units	0.1	1		FIELDPH	1/31/23	RAMBOLL
Total Alkalinity as CaCO3	142	20	mg/L		1		SM 2320 B-1997	2/13/23	C153278
Total Copper	Less Than	0.92	ug/L	3.1	1		EPA 200.7	3/2/23	EDL
Total Calcium	19000	43	ug/L	140	1		EPA 200.7	3/2/23	EDL
Total Magnesium	10600	7.1	ug/L	24	1		EPA 200.7	3/2/23	EDL
Total Hardness as CaCO3	91	1	mg/L		1		Std Mtd 2340B	3/23/23	EDL
Total Manganese	7.53	0.11	ug/L	0.38	1		EPA 200.7	3/2/23	EDL
Total Silver	Less Than	1.2	ug/L	4.0	1		EPA 200.7	3/2/23	EDL
Total Zinc	Less Than	1.8	ug/L	6.0	1		EPA 200.7	3/2/23	EDL
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	1/31/23	JLM

Report Date: Tuesday, January 23, 2024

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

Sample Description: **W09D Caledonia CCR Well Sample**  
Sample ID: AE64774 Sample Collection Date/Time: 01/31/2023 12:12  
Sample Received: 01/31/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Nitrate as N	Less Than	0.008	mg/L	0.027	1		EPA 300.0	1/31/23	JLM
Nitrate-Nitrite as N	Less Than	0.011	mg/L	0.036	1		EPA 300.0	1/31/23	JLM

Sample Comments:

Sample Description: **W10D Caledonia CCR Well Sample**  
Sample ID: AE64775 Sample Collection Date/Time: 01/31/2023 11:36  
Sample Received: 01/31/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	49.96	0.05	feet		1		H2OD	1/31/23	RAMBOLL
Field Temperature	8.8	0.1	Degrees C		1		TEMP	1/31/23	RAMBOLL
Field Conductivity	438	0	umhos		1		FCOND25	1/31/23	RAMBOLL
Field pH	7.9	0.1	Units	0.1	1		FIELDPH	1/31/23	RAMBOLL
Total Alkalinity as CaCO3	132	20	mg/L		1		SM 2320 B-1997	2/13/23	C153278
Total Copper	Less Than	0.92	ug/L	3.1	1		EPA 200.7	3/2/23	EDL
Total Calcium	21400	43	ug/L	140	1		EPA 200.7	3/2/23	EDL
Total Magnesium	8220	7.1	ug/L	24	1		EPA 200.7	3/2/23	EDL
Total Hardness as CaCO3	87	1	mg/L		1		Std Mtd 2340B	3/23/23	EDL
Total Manganese	18.9	0.11	ug/L	0.38	1		EPA 200.7	3/2/23	EDL
Total Silver	Less Than	1.2	ug/L	4.0	1		EPA 200.7	3/2/23	EDL
Total Zinc	Less Than	1.8	ug/L	6.0	1		EPA 200.7	3/2/23	EDL
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	1/31/23	JLM
Nitrate as N	0.064	0.008	mg/L	0.027	1		EPA 300.0	1/31/23	JLM
Nitrate-Nitrite as N	0.064	0.011	mg/L	0.036	1		EPA 300.0	1/31/23	JLM

Sample Comments:

Sample Description: **W46D Caledonia CCR Well Sample**  
Sample ID: AE64776 Sample Collection Date/Time: 01/31/2023 08:23  
Sample Received: 01/31/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	46.50	0.05	feet		1		H2OD	1/31/23	RAMBOLL
Field Temperature	8.6	0.1	Degrees C		1		TEMP	1/31/23	RAMBOLL
Field Conductivity	477	0	umhos		1		FCOND25	1/31/23	RAMBOLL
Field pH	7.5	0.1	Units	0.1	1		FIELDPH	1/31/23	RAMBOLL
Total Alkalinity as CaCO3	155	20	mg/L		1		SM 2320 B-1997	2/13/23	C153278
Total Copper	Less Than	0.92	ug/L	3.1	1		EPA 200.7	3/2/23	EDL
Total Calcium	26300	43	ug/L	140	1		EPA 200.7	3/2/23	EDL
Total Magnesium	15100	7.1	ug/L	24	1		EPA 200.7	3/2/23	EDL
Total Hardness as CaCO3	130	1	mg/L		1		Std Mtd 2340B	3/23/23	EDL

Report Date: Tuesday, January 23, 2024

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

Sample Description: **W46D Caledonia CCR Well Sample**  
Sample ID: AE64776 Sample Collection Date/Time: 01/31/2023 08:23  
Sample Received: 01/31/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Manganese	43.5	0.11	ug/L	0.38	1		EPA 200.7	3/2/23	EDL
Total Silver	Less Than	1.2	ug/L	4.0	1		EPA 200.7	3/2/23	EDL
Total Zinc	Less Than	1.8	ug/L	6.0	1		EPA 200.7	3/2/23	EDL
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	1/31/23	JLM
Nitrate as N	0.039	0.008	mg/L	0.027	1		EPA 300.0	1/31/23	JLM
Nitrate-Nitrite as N	0.039	0.011	mg/L	0.036	1		EPA 300.0	1/31/23	JLM

Sample Comments:

Sample Description: **W48 Caledonia CCR Well Sample**  
Sample ID: AE64777 Sample Collection Date/Time: 01/31/2023 08:59  
Sample Received: 01/31/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	59.74	0.05	feet		1		H2OD	1/31/23	RAMBOLL
Field Temperature	9.5	0.1	Degrees t		1		TEMP	1/31/23	RAMBOLL
Field Conductivity	524	0	umhos		1		FCOND25	1/31/23	RAMBOLL
Field pH	7.9	0.1	Units	0.1	1		FIELDPH	1/31/23	RAMBOLL
Total Alkalinity as CaCO3	231	20	mg/L		1		SM 2320 B-1997	2/13/23	C153278
Total Copper	Less Than	0.92	ug/L	3.1	1		EPA 200.7	3/2/23	EDL
Total Calcium	26800	43	ug/L	140	1		EPA 200.7	3/2/23	EDL
Total Magnesium	17100	7.1	ug/L	24	1		EPA 200.7	3/2/23	EDL
Total Hardness as CaCO3	140	1	mg/L		1		Std Mtd 2340B	3/23/23	EDL
Total Manganese	12.2	0.11	ug/L	0.38	1		EPA 200.7	3/2/23	EDL
Total Silver	Less Than	1.2	ug/L	4.0	1		EPA 200.7	3/2/23	EDL
Total Zinc	Less Than	1.8	ug/L	6.0	1		EPA 200.7	3/2/23	EDL
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	1/31/23	JLM
Nitrate as N	0.025	0.008	mg/L	0.027	1		EPA 300.0	1/31/23	JLM
Nitrate-Nitrite as N	0.025	0.011	mg/L	0.036	1		EPA 300.0	1/31/23	JLM

Sample Comments:

Sample Description: **W49 Caledonia CCR Well Sample**  
Sample ID: AE64778 Sample Collection Date/Time: 01/31/2023 10:15  
Sample Received: 01/31/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	63.36	0.05	feet		1		H2OD	1/31/23	RAMBOLL
Field Temperature	5.8	0.1	Degrees t		1		TEMP	1/31/23	RAMBOLL
Field Conductivity	434	0	umhos		1		FCOND25	1/31/23	RAMBOLL
Field pH	8.3	0.1	Units	0.1	1		FIELDPH	1/31/23	RAMBOLL
Total Alkalinity as CaCO3	119	20	mg/L		1		SM 2320 B-1997	2/13/23	C153278

Report Date: Tuesday, January 23, 2024

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

Sample Description: **W49 Caledonia CCR Well Sample**  
 Sample ID: AE64778 Sample Collection Date/Time: 01/31/2023 10:15  
 Sample Received: 01/31/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Copper	Less Than	1.6	ug/L	5.2	1		EPA 200.7	3/23/23	EDL
Total Calcium	16200	12.4	ug/L	41.4	1		EPA 200.7	3/23/23	EDL
Total Magnesium	6900	7.1	ug/L	24	1		EPA 200.7	3/23/23	EDL
Total Hardness as CaCO3	69	1	mg/L		1		Std Mtd 2340B	3/29/23	EDL
Total Manganese	20.0	0.2	ug/L	0.7	1		EPA 200.7	3/23/23	EDL
Total Silver	Less Than	2.9	ug/L	9.6	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
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	1/31/23	JLM
Nitrate as N	0.066	0.008	mg/L	0.027	1		EPA 300.0	1/31/23	JLM
Nitrate-Nitrite as N	0.066	0.011	mg/L	0.036	1		EPA 300.0	1/31/23	JLM
Total Antimony	Less Than	0.019	ug/L	0.063	10		EPA 200.8	3/20/23	CMW
Total Arsenic	1.02	0.046	ug/L	0.150	10		EPA 200.8	3/20/23	CMW
Total Barium	20.2	0.4	ug/L	1.2	1		EPA 200.7	3/23/23	EDL
Total Beryllium	Less Than	0.3	ug/L	0.9	1		EPA 200.7	3/23/23	EDL
Total Cadmium	Less Than	0.8	ug/L	2.5	1		EPA 200.7	3/23/23	EDL
Total Cobalt	Less Than	1.9	ug/L	6.4	1		EPA 200.7	3/23/23	EDL
Total Chromium	Less Than	1.3	ug/L	4.3	1		EPA 200.7	3/23/23	EDL
Total Lithium	4.85	0.12	ug/L	0.39	1		EPA 200.7	3/23/23	EDL
Total Molybdenum	48.7	2.7	ug/L	9.2	1		EPA 200.7	3/23/23	EDL
Total Lead	0.052	0.0072	ug/L	0.0240	10		EPA 200.8	3/20/23	CMW
Total Selenium	0.62	1.6	ug/L	5.3	10		EPA 200.8	3/20/23	CMW
Total Thallium	0.032	0.023	ug/L	0.077	10		EPA 200.8	3/20/23	CMW
Total Mercury	Less Than	0.17	ng/L	0.57	1		EPA 1631E	2/6/23	JLM

Sample Comments:

Sample Description: **W50 Caledonia CCR Well Sample**  
 Sample ID: AE64779 Sample Collection Date/Time: 01/31/2023 13:04  
 Sample Received: 01/31/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	40.16	0.05	feet		1		H2OD	1/31/23	RAMBOLL
Field Temperature	4.5	0.1	Degrees C		1		TEMP	1/31/23	RAMBOLL
Field Conductivity	562	0	umhos		1		FCOND25	1/31/23	RAMBOLL
Field pH	7.4	0.1	Units	0.1	1		FIELDPH	1/31/23	RAMBOLL
Total Alkalinity as CaCO3	155	20	mg/L		1		SM 2320 B-1997	2/13/23	C153278
Total Copper	2.28	1.6	ug/L	5.2	1	J	EPA 200.7	3/23/23	EDL
Total Calcium	29600	12.4	ug/L	41.4	1		EPA 200.7	3/23/23	EDL
Total Magnesium	10800	7.1	ug/L	24	1		EPA 200.7	3/23/23	EDL
Total Hardness as CaCO3	120	1	mg/L		1		Std Mtd 2340B	3/29/23	EDL
Total Manganese	30.3	0.2	ug/L	0.7	1		EPA 200.7	3/23/23	EDL
Total Silver	Less Than	2.9	ug/L	9.6	1		EPA 200.7	3/23/23	EDL
Total Zinc	7.78	1.4	ug/L	4.7	1		EPA 200.7	3/23/23	EDL
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	1/31/23	JLM

Report Date: Tuesday, January 23, 2024

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

Sample Description: **W50 Caledonia CCR Well Sample**  
 Sample ID: AE64779 Sample Collection Date/Time: 01/31/2023 13:04  
 Sample Received: 01/31/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Nitrate as N	0.075	0.008	mg/L	0.027	1		EPA 300.0	1/31/23	JLM
Nitrate-Nitrite as N	0.075	0.011	mg/L	0.036	1		EPA 300.0	1/31/23	JLM
Total Antimony	0.25	0.019	ug/L	0.063	10		EPA 200.8	3/20/23	CMW
Total Arsenic	1.24	0.046	ug/L	0.150	10		EPA 200.8	3/20/23	CMW
Total Barium	34.1	0.4	ug/L	1.2	1		EPA 200.7	3/23/23	EDL
Total Beryllium	Less Than	0.3	ug/L	0.9	1		EPA 200.7	3/23/23	EDL
Total Cadmium	Less Than	0.8	ug/L	2.5	1		EPA 200.7	3/23/23	EDL
Total Cobalt	Less Than	1.9	ug/L	6.4	1		EPA 200.7	3/23/23	EDL
Total Chromium	Less Than	1.3	ug/L	4.3	1		EPA 200.7	3/23/23	EDL
Total Lithium	5.65	0.12	ug/L	0.39	1		EPA 200.7	3/23/23	EDL
Total Molybdenum	40.6	2.7	ug/L	9.2	1		EPA 200.7	3/23/23	EDL
Total Lead	0.52	0.0072	ug/L	0.0240	10		EPA 200.8	3/20/23	CMW
Total Selenium	0.59	1.6	ug/L	5.3	10		EPA 200.8	3/20/23	CMW
Total Thallium	0.026	0.023	ug/L	0.077	10		EPA 200.8	3/20/23	CMW
Total Mercury	0.77	0.17	ng/L	0.57	1		EPA 1631E	2/6/23	JLM

Sample Comments:

Sample Description: **QAQC1 Caledonia CCR Well Sample**  
 Sample ID: AE64780 Sample Collection Date/Time: 01/31/2023 10:20  
 Sample Received: 01/31/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Alkalinity as CaCO3	118	20	mg/L		1		SM 2320 B-1997	2/13/23	C153278
Total Copper	Less Than	1.6	ug/L	5.2	1		EPA 200.7	3/23/23	EDL
Total Calcium	16100	12.4	ug/L	41.4	1		EPA 200.7	3/23/23	EDL
Total Magnesium	6870	7.1	ug/L	24	1		EPA 200.7	3/23/23	EDL
Total Hardness as CaCO3	68	1	mg/L		1		Std Mtd 2340B	3/29/23	EDL
Total Manganese	19.9	0.2	ug/L	0.7	1		EPA 200.7	3/23/23	EDL
Total Silver	Less Than	2.9	ug/L	9.6	1		EPA 200.7	3/23/23	EDL
Total Zinc	3.66	1.4	ug/L	4.7	1		EPA 200.7	3/23/23	EDL
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	2/8/23	JLM
Nitrate as N	0.060	0.008	mg/L	0.027	1		EPA 300.0	2/8/23	JLM
Nitrate-Nitrite as N	0.060	0.011	mg/L	0.036	1		EPA 300.0	2/8/23	JLM
Total Antimony	0.028	0.019	ug/L	0.063	10		EPA 200.8	3/20/23	CMW
Total Arsenic	0.99	0.046	ug/L	0.150	10		EPA 200.8	3/20/23	CMW
Total Barium	20.1	0.4	ug/L	1.2	1		EPA 200.7	3/23/23	EDL
Total Beryllium	Less Than	0.3	ug/L	0.9	1		EPA 200.7	3/23/23	EDL
Total Cadmium	Less Than	0.8	ug/L	2.5	1		EPA 200.7	3/23/23	EDL
Total Cobalt	Less Than	1.9	ug/L	6.4	1		EPA 200.7	3/23/23	EDL
Total Chromium	Less Than	1.3	ug/L	4.3	1		EPA 200.7	3/23/23	EDL
Total Lithium	4.47	0.12	ug/L	0.39	1		EPA 200.7	3/23/23	EDL
Total Molybdenum	44.5	2.7	ug/L	9.2	1		EPA 200.7	3/23/23	EDL
Total Lead	0.086	0.0072	ug/L	0.0240	10		EPA 200.8	3/20/23	CMW

Report Date: Tuesday, January 23, 2024

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

Sample Description: **QAQC1 Caledonia CCR Well Sample**  
Sample ID: AE64780 Sample Collection Date/Time: 01/31/2023 10:20  
Sample Received: 01/31/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Selenium	0.64	1.6	ug/L	5.3	10		EPA 200.8	3/20/23	CMW
Total Thallium	Less Than	0.023	ug/L	0.077	10		EPA 200.8	3/20/23	CMW
Total Mercury	0.41	0.17	ng/L	0.57	1		EPA 1631E	2/6/23	JLM

Sample Comments:

Sample Description: **EB1 Caledonia CCR Well Sample**  
Sample ID: AE64781 Sample Collection Date/Time: 01/31/2023 14:35  
Sample Received: 01/31/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Alkalinity as CaCO3	Less Than	20	mg/L		1		SM 2320 B-1997	2/13/23	C153278
Total Copper	Less Than	1.6	ug/L	5.2	1		EPA 200.7	3/23/23	EDL
Total Calcium	223	12.4	ug/L	41.4	1		EPA 200.7	3/23/23	EDL
Total Magnesium	107	7.1	ug/L	24	1		EPA 200.7	3/23/23	EDL
Total Hardness as CaCO3	1.0	1	mg/L		1		Std Mtd 2340B	3/29/23	EDL
Total Manganese	0.47	0.2	ug/L	0.7	1		EPA 200.7	3/23/23	EDL
Total Silver	Less Than	2.9	ug/L	9.6	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
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	2/8/23	JLM
Nitrate as N	Less Than	0.008	mg/L	0.027	1		EPA 300.0	2/8/23	JLM
Nitrate-Nitrite as N	Less Than	0.011	mg/L	0.036	1		EPA 300.0	2/8/23	JLM
Total Antimony	Less Than	0.019	ug/L	0.063	10		EPA 200.8	3/20/23	CMW
Total Arsenic	Less Than	0.046	ug/L	0.150	10		EPA 200.8	3/20/23	CMW
Total Barium	0.58	0.4	ug/L	1.2	1	J	EPA 200.7	3/23/23	EDL
Total Beryllium	Less Than	0.3	ug/L	0.9	1		EPA 200.7	3/23/23	EDL
Total Cadmium	Less Than	0.8	ug/L	2.5	1		EPA 200.7	3/23/23	EDL
Total Cobalt	Less Than	1.9	ug/L	6.4	1		EPA 200.7	3/23/23	EDL
Total Chromium	1.60	1.3	ug/L	4.3	1		EPA 200.7	3/23/23	EDL
Total Lithium	Less Than	0.12	ug/L	0.39	1		EPA 200.7	3/23/23	EDL
Total Molybdenum	Less Than	2.7	ug/L	9.2	1		EPA 200.7	3/23/23	EDL
Total Lead	0.30	0.0072	ug/L	0.0240	10		EPA 200.8	3/20/23	CMW
Total Selenium	Less Than	1.6	ug/L	5.3	10		EPA 200.8	3/20/23	CMW
Total Thallium	Less Than	0.023	ug/L	0.077	10		EPA 200.8	3/20/23	CMW
Total Mercury	0.99	0.17	ng/L	0.57	1		EPA 1631E	2/6/23	JLM

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: Bob Meidl  
 PSB Annex A231

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



Report Date: Tuesday, January 23, 2024

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

Sample Description: **W08D Caledonia CCR Well Sample**  
 Sample ID: AE65379 Sample Collection Date/Time: 03/07/2023 14:33  
 Sample Received: 03/07/2023 Sample Collector: KYLE SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	42.71	0.05	feet		1		H2OD	3/7/23	K SCHAEFER
Field Temperature	8.4	0.1	Degrees t		1		TEMP	3/7/23	K SCHAEFER
Field Conductivity	1167	0	umhos		1		FCOND25	3/7/23	K SCHAEFER
Field pH	8.3	0.1	Units	0.1	1		FIELDPH	3/7/23	K SCHAEFER
Total Alkalinity as CaCO3	151	20	mg/L		1		SM 2320 B-1997	3/13/23	C153278
Total Hardness as CaCO3	237	0.32	mg/L	1.7	1		StdMtd 2340B	3/14/23	020
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	3/15/23	JLM
Nitrate as N	0.17	0.008	mg/L	0.027	1		EPA 300.0	3/15/23	JLM
Nitrate-Nitrite as N	0.17	0.011	mg/L	0.036	1		EPA 300.0	3/15/23	JLM
Total Calcium	55600	76	ug/L	250	1		EPA 200.8	3/14/23	020
Total Silver	Less Than	0.13	ug/L	0.50	1		EPA 200.8	3/14/23	020
Total Copper	Less Than	1.9	ug/L	6.4	1		EPA 200.8	3/14/23	020
Total Magnesium	23800	31	ug/L	250	1		EPA 200.8	3/14/23	020
Total Manganese	170	1.2	ug/L	4.0	1		EPA 200.8	3/14/23	020
Total Zinc	Less Than	10	ug/L	34	1		EPA 200.8	3/14/23	020

Sample Comments:

Sample Description: **W09D Caledonia CCR Well Sample**  
 Sample ID: AE65380 Sample Collection Date/Time: 03/07/2023 12:07  
 Sample Received: 03/07/2023 Sample Collector: KYLE SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	52.37	0.05	feet		1		H2OD	3/7/23	K SCHAEFER
Field Temperature	9.6	0.1	Degrees t		1		TEMP	3/7/23	K SCHAEFER
Field Conductivity	644	0	umhos		1		FCOND25	3/7/23	K SCHAEFER
Field pH	8.8	0.1	Units	0.1	1		FIELDPH	3/7/23	K SCHAEFER
Total Alkalinity as CaCO3	142	20	mg/L		1		SM 2320 B-1997	3/13/23	C153278
Total Hardness as CaCO3	106	0.32	mg/L	1.7	1		StdMtd 2340B	3/14/23	020
Nitrate-Nitrite as N	0.038	0.011	mg/L	0.036	1		EPA 300.0	3/14/23	JLM
Nitrate as N	0.038	0.008	mg/L	0.027	1		EPA 300.0	3/14/23	JLM
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	3/14/23	JLM
Total Calcium	25000	76	ug/L	250	1		EPA 200.8	3/14/23	020
Total Silver	Less Than	0.13	ug/L	0.50	1		EPA 200.8	3/14/23	020
Total Copper	Less Than	1.9	ug/L	6.4	1		EPA 200.8	3/14/23	020
Total Magnesium	10500	31	ug/L	250	1		EPA 200.8	3/14/23	020



Report Date: Tuesday, January 23, 2024

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

Sample Description: **W09D Caledonia CCR Well Sample**  
Sample ID: AE65380 Sample Collection Date/Time: 03/07/2023 12:07  
Sample Received: 03/07/2023 Sample Collector: KYLE SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Manganese	6.9	1.2	ug/L	4.0	1		EPA 200.8	3/14/23	020
Total Zinc	Less than	10	ug/L	34	1		EPA 200.8	3/14/23	020

Sample Comments:

Sample Description: **W10D Caledonia CCR Well Sample**  
Sample ID: AE65381 Sample Collection Date/Time: 03/07/2023 11:32  
Sample Received: 03/07/2023 Sample Collector: KYLE SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	48.83	0.05	feet		1		H2OD	3/7/23	K SCHAEFER
Field Temperature	9.9	0.1	Degrees C		1		TEMP	3/7/23	K SCHAEFER
Field Conductivity	658	0	umhos		1		FCOND25	3/7/23	K SCHAEFER
Field pH	8.7	0.1	Units	0.1	1		FIELDPH	3/7/23	K SCHAEFER
Total Alkalinity as CaCO3	133	20	mg/L		1		SM 2320 B-1997	3/13/23	C153278
Total Hardness as CaCO3	99.0	3.2	mg/L	17.0	10		StdMtd 2340B	3/13/23	020
Nitrate-Nitrite as N	0.16	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 300.0	3/14/23	JLM
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	3/14/23	JLM
Total Calcium	25000	760	ug/L	2500	10		EPA 200.8	3/13/23	020
Total Silver	Less Than	0.13	ug/L	0.50	1		EPA 200.8	3/14/23	020
Total Copper	Less Than	1.9	ug/L	6.4	1		EPA 200.8	3/14/23	020
Total Magnesium	8900	310	ug/L	2500	10		EPA 200.8	3/13/23	020
Total Manganese	20	1.2	ug/L	4.0	1		EPA 200.8	3/14/23	020
Total Zinc	Less Than	10	ug/L	34	1		EPA 200.8	3/14/23	020

Sample Comments:

Matrix spike recovery outside control limits due to a parent sample concentration

Sample Description: **W46D Caledonia CCR Well Sample**  
Sample ID: AE65382 Sample Collection Date/Time: 03/07/2023 09:10  
Sample Received: 03/07/2023 Sample Collector: KYLE SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	45.23	0.05	feet		1		H2OD	3/7/23	K SCHAEFER
Field Temperature	11	0.1	Degrees C		1		TEMP	3/7/23	K SCHAEFER
Field Conductivity	727	0	umhos		1		FCOND25	3/7/23	K SCHAEFER
Field pH	8.1	0.1	Units	0.1	1		FIELDPH	3/7/23	K SCHAEFER
Total Alkalinity as CaCO3	162	20	mg/L		1		SM 2320 B-1997	3/13/23	C153278
Total Hardness as CaCO3	146	0.32	mg/L	1.7	1		StdMtd 2340B	3/14/23	020
Nitrate-Nitrite as N	0.067	0.011	mg/L	0.036	1		EPA 300.0	3/14/23	JLM
Nitrate as N	0.067	0.008	mg/L	0.027	1		EPA 300.0	3/14/23	JLM
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	3/14/23	JLM

Report Date: Tuesday, January 23, 2024

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

Sample Description: **W46D Caledonia CCR Well Sample**  
Sample ID: AE65382 Sample Collection Date/Time: 03/07/2023 09:10  
Sample Received: 03/07/2023 Sample Collector: KYLE SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Calcium	30800	76	ug/L	250	1		EPA 200.8	3/14/23	020
Total Silver	Less Than	0.13	ug/L	0.50	1		EPA 200.8	3/14/23	020
Total Copper	Less Than	1.9	ug/L	6.4	1		EPA 200.8	3/14/23	020
Total Magnesium	16700	31	ug/L	250	1		EPA 200.8	3/14/23	020
Total Manganese	47	1.2	ug/L	4.0	1		EPA 200.8	3/14/23	020
Total Zinc	Less Than	10	ug/L	34	1		EPA 200.8	3/14/23	020

Sample Comments:

Sample Description: **W48 Caledonia CCR Well Sample**  
Sample ID: AE65383 Sample Collection Date/Time: 03/07/2023 10:01  
Sample Received: 03/07/2023 Sample Collector: KYLE SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	58.51	0.05	feet		1		H2OD	3/7/23	K SCHAEFER
Field Temperature	10	0.1	Degrees t		1		TEMP	3/7/23	K SCHAEFER
Field Conductivity	768	0	umhos		1		FCOND25	3/7/23	K SCHAEFER
Field pH	8.7	0.1	Units	0.1	1		FIELDPH	3/7/23	K SCHAEFER
Total Alkalinity as CaCO3	229	20	mg/L		1		SM 2320 B-1997	3/13/23	C153278
Total Hardness as CaCO3	161	0.32	mg/L	1.7	1		StdMtd 2340B	3/14/23	020
Nitrate-Nitrite as N	0.026	0.011	mg/L	0.036	1		EPA 300.0	3/14/23	JLM
Nitrate as N	0.026	0.008	mg/L	0.027	1		EPA 300.0	3/14/23	JLM
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	3/14/23	JLM
Total Calcium	35000	76	ug/L	250	1		EPA 200.8	3/14/23	020
Total Silver	Less Than	0.13	ug/L	0.50	1		EPA 200.8	3/14/23	020
Total Copper	Less Than	1.9	ug/L	6.4	1		EPA 200.8	3/14/23	020
Total Magnesium	17900	31	ug/L	250	1		EPA 200.8	3/14/23	020
Total Manganese	12	1.2	ug/L	4.0	1		EPA 200.8	3/14/23	020
Total Zinc	Less Than	10	ug/L	34	1		EPA 200.8	3/14/23	020

Sample Comments:

Sample Description: **W49 Caledonia CCR Well Sample**  
Sample ID: AE65384 Sample Collection Date/Time: 03/07/2023 10:49  
Sample Received: 03/07/2023 Sample Collector: KYLE SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	62.25	0.05	feet		1		H2OD	3/7/23	K SCHAEFER
Field Temperature	10	0.1	Degrees t		1		TEMP	3/7/23	K SCHAEFER
Field Conductivity	644	0	umhos		1		FCOND25	3/7/23	K SCHAEFER
Field pH	8.6	0.1	Units	0.1	1		FIELDPH	3/7/23	K SCHAEFER
Total Alkalinity as CaCO3	123	20	mg/L		1		SM 2320 B-1997	3/13/23	C153278

Report Date: Tuesday, January 23, 2024

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

Sample Description: **W49 Caledonia CCR Well Sample**  
 Sample ID: AE65384 Sample Collection Date/Time: 03/07/2023 10:49  
 Sample Received: 03/07/2023 Sample Collector: KYLE SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Hardness as CaCO3	83.8	0.32	mg/L	1.7	1		StdMtd 2340B	3/14/23	020
Total Lead	Less Than	0.24	ug/L	1.0	1		EPA 200.8	3/14/23	020
Total Arsenic	0.43	0.28	ug/L	1.0	1	J	EPA 200.8	3/14/23	020
Total Antimony	Less Than	0.15	ug/L	1.0	1		EPA 200.8	3/14/23	020
Total Selenium	Less Than	0.32	ug/L	1.1	1		EPA 200.8	3/14/23	020
Total Thallium	Less Than	0.14	ug/L	1.0	1		EPA 200.8	3/14/23	020
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	3/14/23	JLM
Nitrate as N	0.095	0.008	mg/L	0.027	1		EPA 300.0	3/14/23	JLM
Nitrate-Nitrite as N	0.095	0.011	mg/L	0.036	1		EPA 300.0	3/14/23	JLM
Total Mercury	0.26	0.17	ng/L	0.57	1		EPA 1631E	3/14/23	JLM
Total Calcium	21100	76	ug/L	250	1		EPA 200.8	3/14/23	020
Total Silver	Less Than	0.13	ug/L	0.50	1		EPA 200.8	3/14/23	020
Total Copper	Less Than	1.9	ug/L	6.4	1		EPA 200.8	3/14/23	020
Total Magnesium	7600	31	ug/L	250	1		EPA 200.8	3/14/23	020
Total Manganese	27	1.2	ug/L	4.0	1		EPA 200.8	3/14/23	020
Total Zinc	Less Than	10	ug/L	34	1		EPA 200.8	3/14/23	020
Total Molybdenum	42	0.44	ug/L	1.5	1		EPA 200.8	3/14/23	020
Total Lithium	3.1	0.22	ug/L	1.0	1		EPA 200.8	3/14/23	020
Total Chromium	Less Than	1.0	ug/L	3.4	1		EPA 200.8	3/14/23	020
Total Cobalt	0.18	0.12	ug/L	1.0	1	J	EPA 200.8	3/14/23	020
Total Cadmium	Less Than	0.15	ug/L	1.0	1		EPA 200.8	3/14/23	020
Total Barium	19	0.7	ug/L	2.3	1		EPA 200.8	3/14/23	020
Total Beryllium	Less Than	0.25	ug/L	1.0	1		EPA 200.8	3/14/23	020

Sample Comments:

Sample Description: **W50 Caledonia CCR Well Sample**  
 Sample ID: AE65385 Sample Collection Date/Time: 03/07/2023 13:30  
 Sample Received: 03/07/2023 Sample Collector: KYLE SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	39.18	0.05	feet		1		H2OD	3/7/23	K SCHAEFER
Field Temperature	9.3	0.1	Degrees C		1		TEMP	3/7/23	K SCHAEFER
Field Conductivity	825	0	umhos		1		FCOND25	3/7/23	K SCHAEFER
Field pH	8.4	0.1	Units	0.1	1		FIELDPH	3/7/23	K SCHAEFER
Total Dissolved Solids	260	20	mg/L		1		Std Mtd 2540 C	3/13/23	JLM
Total Alkalinity as CaCO3	151	20	mg/L		1		SM 2320 B-1997	3/13/23	C153278
Total Hardness as CaCO3	133	0.32	mg/L	1.7	1		StdMtd 2340B	3/14/23	020
Total Lead	Less Than	0.24	ug/L	1.0	1		EPA 200.8	3/14/23	020
Total Arsenic	0.69	0.28	ug/L	1.0	1	J	EPA 200.8	3/14/23	020
Total Antimony	Less Than	0.15	ug/L	1.0	1		EPA 200.8	3/14/23	020
Total Selenium	Less Than	0.32	ug/L	1.1	1		EPA 200.8	3/14/23	020
Total Thallium	Less Than	0.14	ug/L	1.0	1		EPA 200.8	3/14/23	020
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	3/14/23	JLM

Report Date: Tuesday, January 23, 2024

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

Sample Description: **W50 Caledonia CCR Well Sample**  
 Sample ID: AE65385 Sample Collection Date/Time: 03/07/2023 13:30  
 Sample Received: 03/07/2023 Sample Collector: KYLE SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Nitrate as N	0.071	0.008	mg/L	0.027	1		EPA 300.0	3/14/23	JLM
Nitrate-Nitrite as N	0.071	0.011	mg/L	0.036	1		EPA 300.0	3/14/23	JLM
Total Mercury	0.19	0.17	ng/L	0.57	1		EPA 1631E	3/14/23	JLM
Total Calcium	35100	76	ug/L	250	1		EPA 200.8	3/14/23	020
Total Silver	Less Than	0.13	ug/L	0.50	1		EPA 200.8	3/14/23	020
Total Copper	Less Than	1.9	ug/L	6.4	1		EPA 200.8	3/14/23	020
Total Magnesium	11000	31	ug/L	250	1		EPA 200.8	3/14/23	020
Total Manganese	38	1.2	ug/L	4.0	1		EPA 200.8	3/14/23	020
Total Zinc	Less Than	10	ug/L	34	1		EPA 200.8	3/14/23	020
Total Molybdenum	36	0.44	ug/L	1.5	1		EPA 200.8	3/14/23	020
Total Lithium	3.8	0.22	ug/L	1.0	1		EPA 200.8	3/14/23	020
Total Barium	31	0.7	ug/L	2.3	1		EPA 200.8	3/14/23	020
Total Beryllium	Less Than	0.25	ug/L	1.0	1		EPA 200.8	3/14/23	020
Total Cadmium	Less Than	0.15	ug/L	1.0	1		EPA 200.8	3/14/23	020
Total Cobalt	0.14	0.12	ug/L	1.0	1	J	EPA 200.8	3/14/23	020
Total Chromium	Less Than	1.0	ug/L	3.4	1		EPA 200.8	3/14/23	020

Sample Comments:

Sample Description: **QA/QC 1 Caledonia CCR Well Sample**  
 Sample ID: AE65386 Sample Collection Date/Time: 03/07/2023 13:35  
 Sample Received: 03/07/2023 Sample Collector: KYLE SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Alkalinity as CaCO3	153	20	mg/L		1		SM 2320 B-1997	3/13/23	C153278
Total Hardness as CaCO3	129	0.32	mg/L	1.7	1		StdMtd 2340B	3/14/23	020
Total Lead	Less Than	0.24	ug/L	1.0	1		EPA 200.8	3/14/23	020
Total Arsenic	0.58	0.28	ug/L	1.0	1	J	EPA 200.8	3/14/23	020
Total Antimony	Less Than	0.15	ug/L	1.0	1		EPA 200.8	3/14/23	020
Total Selenium	Less Than	0.32	ug/L	1.1	1		EPA 200.8	3/14/23	020
Total Thallium	Less Than	0.14	ug/L	1.0	1		EPA 200.8	3/14/23	020
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	3/14/23	JLM
Nitrate as N	0.098	0.008	mg/L	0.027	1		EPA 300.0	3/14/23	JLM
Nitrate-Nitrite as N	0.098	0.011	mg/L	0.036	1		EPA 300.0	3/14/23	JLM
Total Mercury	0.21	0.17	ng/L	0.57	1		EPA 1631E	3/14/23	JLM
Total Calcium	33700	76	ug/L	250	1		EPA 200.8	3/14/23	020
Total Silver	Less Than	0.13	ug/L	0.50	1		EPA 200.8	3/14/23	020
Total Copper	Less Than	1.9	ug/L	6.4	1		EPA 200.8	3/14/23	020
Total Magnesium	10900	31	ug/L	250	1		EPA 200.8	3/14/23	020
Total Manganese	37	1.2	ug/L	4.0	1		EPA 200.8	3/14/23	020
Total Zinc	Less Than	10	ug/L	34	1		EPA 200.8	3/14/23	020
Total Barium	31	0.70	ug/L	2.3	1		EPA 200.8	3/14/23	020
Total Beryllium	Less Than	0.25	ug/L	1.0	1		EPA 200.8	3/14/23	020
Total Cadmium	Less Than	0.15	ug/L	1.0	1		EPA 200.8	3/14/23	020

Report Date: Tuesday, January 23, 2024

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

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Sample Description: **QA/QC 1 Caledonia CCR Well Sample**  
Sample ID: AE65386 Sample Collection Date/Time: 03/07/2023 13:35  
Sample Received: 03/07/2023 Sample Collector: KYLE SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Cobalt	0.12	0.12	ug/L	1.0	1	J	EPA 200.8	3/14/23	020
Total Chromium	Less Than	1.0	ug/L	3.4	1		EPA 200.8	3/14/23	020
Total Molybdenum	35	0.44	ug/L	1.5	1		EPA 200.8	3/14/23	020
Total Lithium	3.7	0.22	ug/L	1.0	1		EPA 200.8	3/14/23	020

Sample Comments:

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Sample Description: **EB1 Caledonia CCR Well Sample**  
Sample ID: AE65387 Sample Collection Date/Time: 03/07/2023 15:42  
Sample Received: 03/07/2023 Sample Collector: KYLE SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Alkalinity as CaCO3	Less Than	20	mg/L		1		SM 2320 B-1997	3/13/23	C153278
Total Hardness as CaCO3	Less Than	0.32	mg/L	1.7	1		StdMtd 2340B	3/14/23	020
Total Lead	Less Than	0.24	ug/L	1.0	1		EPA 200.8	3/14/23	020
Total Arsenic	Less Than	0.28	ug/L	1.0	1		EPA 200.8	3/14/23	020
Total Antimony	Less Than	0.15	ug/L	1.0	1		EPA 200.8	3/14/23	020
Total Selenium	Less Than	0.32	ug/L	1.1	1		EPA 200.8	3/14/23	020
Total Thallium	Less Than	0.14	ug/L	1.0	1		EPA 200.8	3/14/23	020
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	3/14/23	JLM
Nitrate as N	0.012	0.008	mg/L	0.027	1		EPA 300.0	3/14/23	JLM
Nitrate-Nitrite as N	0.012	0.011	mg/L	0.036	1		EPA 300.0	3/14/23	JLM
Total Mercury	0.27	0.17	ng/L	0.57	1		EPA 1631E	3/14/23	JLM
Total Calcium	Less Than	76	ug/L	250	1		EPA 200.8	3/14/23	020
Total Silver	Less Than	0.13	ug/L	0.50	1		EPA 200.8	3/14/23	020
Total Copper	Less Than	1.9	ug/L	6.4	1		EPA 200.8	3/14/23	020
Total Magnesium	Less Than	31	ug/L	250	1		EPA 200.8	3/14/23	020
Total Manganese	Less Than	1.2	ug/L	4.0	1		EPA 200.8	3/14/23	020
Total Zinc	Less Than	10	ug/L	34	1		EPA 200.8	3/14/23	020
Total Barium	Less than	0.7	ug/L	2.3	1		EPA 200.8	3/14/23	020
Total Beryllium	Less Than	0.25	ug/L	1.0	1		EPA 200.8	3/14/23	020
Total Cadmium	Less Than	0.15	ug/L	1.0	1		EPA 200.8	3/14/23	020
Total Cobalt	Less Than	0.12	ug/L	1.0	1		EPA 200.8	3/14/23	020
Total Chromium	Less Than	1.0	ug/L	3.4	1		EPA 200.8	3/14/23	020
Total Molybdenum	Less Than	0.44	ug/L	1.5	1		EPA 200.8	3/14/23	020
Total Lithium	Less Than	0.22	ug/L	1.0	1		EPA 200.8	3/14/23	020

Sample Comments:

Report Date: Tuesday, January 23, 2024

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

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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  
 RAMBOLL

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



Report Date: Tuesday, January 23, 2024

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

Sample Description:		<b>W08D Caledonia CCR Well Sample</b>								
Sample ID:	AE65844	Sample Collection Date/Time:	04/05/2023	14:32						
Sample Received:	04/06/2023	Sample Collector:	K SCHAEFER							
<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>	
Field Water Level	41.21	0.05	feet		1		H2OD	4/5/23	K SCHAEFER	
Field Temperature	11	0.1	Degrees t		1		TEMP	4/5/23	K SCHAEFER	
Field Conductivity	694	0	umhos		1		FCOND25	4/5/23	K SCHAEFER	
Field pH	7.5	0.1	Units	0.1	1		FIELDPH	4/5/23	K SCHAEFER	
Total Alkalinity as CaCO3	Less Than	20	mg/L		1		SM 2320 B-1997	4/6/23	C153278	
Total Copper	Less Than	0.0034	mg/L	0.010	1		EPA 200.7	4/11/23	020	
Total Calcium	47.8	0.11	mg/L	0.50	1		EPA 200.7	4/11/23	020	
Total Magnesium	21.1	0.18	mg/L	1.0	1		EPA 200.7	4/11/23	020	
Total Manganese	0.15	0.0015	mg/L	0.0050	1		EPA 200.7	4/11/23	020	
Nitrite as N	2.4	0.003	mg/L	0.009	1		EPA 300.0	4/6/23	JLM	
Nitrate as N	0.047	0.008	mg/L	0.027	1		EPA 300.0	4/6/23	JLM	
Nitrate-Nitrite as N	2.5	0.011	mg/L	0.036	1		EPA 300.0	4/6/23	JLM	
Total Silver	Less Than	0.0032	mg/L	0.010	1		EPA 200.7	4/11/23	020	
Total Zinc	Less Than	0.012	mg/L	0.040	1		EPA 200.7	4/11/23	020	
Total Hardness as CaCO3	207	1	mg/L	5.4	1		Std Mtd 2340B	4/11/23	020	

Sample Comments:  
 Metals analyzed by Pace Analytical (WDNR Lab Certification #405132750)

Sample Description:		<b>W09D Caledonia CCR Well Sample</b>								
Sample ID:	AE65845	Sample Collection Date/Time:	04/05/2023	12:16						
Sample Received:	04/06/2023	Sample Collector:	K SCHAEFER							
<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>	
Field Water Level	50.84	0.05	feet		1		H2OD	4/5/23	K SCHAEFER	
Field Temperature	11	0.1	Degrees t		1		TEMP	4/5/23	K SCHAEFER	
Field Conductivity	343	0	umhos		1		FCOND25	4/5/23	K SCHAEFER	
Field pH	8.0	0.1	Units	0.1	1		FIELDPH	4/5/23	K SCHAEFER	
Total Alkalinity as CaCO3	Less Than	20	mg/L		1		SM 2320 B-1997	4/6/23	C153278	
Total Copper	Less Than	0.0034	mg/L	0.010	1		EPA 200.7	4/11/23	020	
Total Calcium	19.2	0.11	mg/L	0.50	1		EPA 200.7	4/11/23	020	
Total Magnesium	10.7	0.18	mg/L	1.0	1		EPA 200.7	4/11/23	020	
Total Manganese	0.0079	0.0015	mg/L	0.0050	1		EPA 200.7	4/11/23	020	
Nitrite as N	2.9	0.003	mg/L	0.009	1		EPA 300.0	4/6/23	JLM	
Nitrate as N	0.034	0.008	mg/L	0.027	1		EPA 300.0	4/6/23	JLM	
Nitrate-Nitrite as N	2.9	0.011	mg/L	0.036	1		EPA 300.0	4/6/23	JLM	
Total Silver	Less Than	0.0032	mg/L	0.010	1		EPA 200.7	4/11/23	020	

Report Date: Tuesday, January 23, 2024

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

Sample Description: **W09D Caledonia CCR Well Sample**  
Sample ID: AE65845 Sample Collection Date/Time: 04/05/2023 12:16  
Sample Received: 04/06/2023 Sample Collector: K SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Zinc	Less Than	0.012	mg/L	0.040	1		EPA 200.7	4/11/23	020
Total Hardness as CaCO3	92.1	1	mg/L	5.4	1		Std Mtd 2340B	4/11/23	020

Sample Comments:  
Metals analyzed by Pace Analytical (WDNR Lab cert # 405132750)

Sample Description: **W10D Caledonia CCR Well Sample**  
Sample ID: AE65846 Sample Collection Date/Time: 04/05/2023 11:41  
Sample Received: 04/06/2023 Sample Collector: K SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	47.28	0.05	feet		1		H2OD	4/5/23	K SCHAEFER
Field Temperature	11	0.1	Degrees t		1		TEMP	4/5/23	K SCHAEFER
Field Conductivity	351	0	umhos		1		FCOND25	4/5/23	K SCHAEFER
Field pH	7.9	0.1	Units	0.1	1		FIELDPH	4/5/23	K SCHAEFER
Total Alkalinity as CaCO3	Less Than	20	mg/L		1		SM 2320 B-1997	4/6/23	C153278
Total Copper	Less Than	0.0034	mg/L	0.010	1		EPA 200.7	4/11/23	020
Total Calcium	21.2	0.11	mg/L	0.50	1		EPA 200.7	4/11/23	020
Total Magnesium	8.1	0.18	mg/L	1.0	1		EPA 200.7	4/11/23	020
Total Manganese	0.021	0.0015	mg/L	0.0050	1		EPA 200.7	4/11/23	020
Nitrite as N	2.2	0.003	mg/L	0.009	1		EPA 300.0	4/6/23	JLM
Nitrate as N	0.034	0.008	mg/L	0.027	1		EPA 300.0	4/6/23	JLM
Nitrate-Nitrite as N	2.2	0.011	mg/L	0.036	1		EPA 300.0	4/6/23	JLM
Total Silver	Less Than	0.0032	mg/L	0.010	1		EPA 200.7	4/11/23	020
Total Zinc	Less Than	0.012	mg/L	0.040	1		EPA 200.7	4/11/23	020
Total Hardness as CaCO3	86.1	1	mg/L	5.4	1		Std Mtd 2340B	4/11/23	020

Sample Comments:  
Metals analyzed by Pace Analytical (WDNR Lab cert # 405132750)

Sample Description: **W46D Caledonia CCR Well Sample**  
Sample ID: AE65847 Sample Collection Date/Time: 04/05/2023 09:08  
Sample Received: 04/06/2023 Sample Collector: K SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	43.75	0.05	feet		1		H2OD	4/5/23	K SCHAEFER
Field Temperature	11	0.1	Degrees t		1		TEMP	4/5/23	K SCHAEFER
Field Conductivity	383	0	umhos		1		FCOND25	4/5/23	K SCHAEFER
Field pH	7.4	0.1	Units	0.1	1		FIELDPH	4/5/23	K SCHAEFER
Total Alkalinity as CaCO3	20	20	mg/L		1		SM 2320 B-1997	4/6/23	C153278
Total Copper	Less Than	0.0034	mg/L	0.010	1		EPA 200.7	4/11/23	020
Total Calcium	25.8	0.11	mg/L	0.50	1		EPA 200.7	4/11/23	020
Total Magnesium	15.0	0.18	mg/L	1.0	1		EPA 200.7	4/11/23	020
Total Manganese	0.043	0.0015	mg/L	0.0050	1		EPA 200.7	4/11/23	020



Report Date: Tuesday, January 23, 2024

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

Sample Description: **W46D Caledonia CCR Well Sample**  
Sample ID: AE65847 Sample Collection Date/Time: 04/05/2023 09:08  
Sample Received: 04/06/2023 Sample Collector: K SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Nitrite as N	3.2	0.003	mg/L	0.009	1		EPA 300.0	4/6/23	JLM
Nitrate as N	0.035	0.008	mg/L	0.027	1		EPA 300.0	4/6/23	JLM
Nitrate-Nitrite as N	3.2	0.011	mg/L	0.036	1		EPA 300.0	4/6/23	JLM
Total Silver	Less Than	0.0032	mg/L	0.010	1		EPA 200.7	4/11/23	020
Total Zinc	Less Than	0.012	mg/L	0.040	1		EPA 200.7	4/11/23	020
Total Hardness as CaCO3	126	1	mg/L	5.4	1		Std Mtd 2340B	4/11/23	020

Sample Comments:  
Metals analyzed by Pace Analytical (WDNR Lab cert # 405132750)

Sample Description: **W48 Caledonia CCR Well Sample**  
Sample ID: AE65848 Sample Collection Date/Time: 04/05/2023 09:53  
Sample Received: 04/06/2023 Sample Collector: K SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	57.10	0.05	feet		1		H2OD	4/5/23	K SCHAEFER
Field Temperature	11	0.1	Degrees t		1		TEMP	4/5/23	K SCHAEFER
Field Conductivity	422	0	umhos		1		FCOND25	4/5/23	K SCHAEFER
Field pH	7.9	0.1	Units	0.1	1		FIELDPH	4/5/23	K SCHAEFER
Total Alkalinity as CaCO3	29	20	mg/L		1		SM 2320 B-1997	4/6/23	C153278
Total Copper	Less Than	0.0034	mg/L	0.010	1		EPA 200.7	4/11/23	020
Total Calcium	25.9	0.11	mg/L	0.50	1		EPA 200.7	4/11/23	020
Total Magnesium	16.6	0.18	mg/L	1.0	1		EPA 200.7	4/11/23	020
Total Manganese	0.013	0.00015	mg/L	0.0050	1		EPA 200.7	4/11/23	020
Nitrite as N	4.4	0.003	mg/L	0.009	1		EPA 300.0	4/6/23	JLM
Nitrate as N	0.035	0.008	mg/L	0.027	1		EPA 300.0	4/6/23	JLM
Nitrate-Nitrite as N	4.4	0.011	mg/L	0.036	1		EPA 300.0	4/6/23	JLM
Total Silver	Less Than	0.0032	mg/L	0.010	1		EPA 200.7	4/11/23	020
Total Zinc	Less Than	0.012	mg/L	0.040	1		EPA 200.7	4/11/23	020
Total Hardness as CaCO3	133	1	mg/L	5.4	1		Std Mtd 2340B	4/11/23	020

Sample Comments:  
Metals analyzed by Pace Analytical (WDNR Lab cert # 405132750)

Sample Description: **W49 Caledonia CCR Well Sample**  
Sample ID: AE65849 Sample Collection Date/Time: 04/05/2023 10:37  
Sample Received: 04/06/2023 Sample Collector: K SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	61.30	0.05	feet		1		H2OD	4/5/23	K SCHAEFER
Field Temperature	13	0.1	Degrees t		1		TEMP	4/5/23	K SCHAEFER
Field Conductivity	349	0	umhos		1		FCOND25	4/5/23	K SCHAEFER
Field pH	7.8	0.1	Units	0.1	1		FIELDPH	4/5/23	K SCHAEFER
Total Alkalinity as CaCO3	Less Than	20	mg/L		1		SM 2320 B-1997	4/6/23	C153278

Report Date: Tuesday, January 23, 2024

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

Sample Description: **W49 Caledonia CCR Well Sample**  
 Sample ID: AE65849 Sample Collection Date/Time: 04/05/2023 10:37  
 Sample Received: 04/06/2023 Sample Collector: K SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Nitrite as N	2.6	0.003	mg/L	0.009	1		EPA 300.0	4/6/23	JLM
Nitrate as N	0.035	0.008	mg/L	0.027	1		EPA 300.0	4/6/23	JLM
Nitrate-Nitrite as N	2.7	0.011	mg/L	0.036	1		EPA 300.0	4/6/23	JLM
Mercury	Less Than	1.2	ng/L		1		EPA 245.7	4/11/23	CMW
Total Hardness as CaCO3	67.3	1	mg/L	5.4	1		Std Mtd 2340B	4/11/23	020
Total Copper	Less Than	0.0034	mg/L	0.010	1		EPA 200.7	4/11/23	020
Total Calcium	16.0	0.11	mg/L	0.50	1		EPA 200.7	4/11/23	020
Total Magnesium	6.6	0.18	mg/L	1.0	1		EPA 200.7	4/11/23	020
Total Manganese	0.026	0.0015	mg/L	0.0050	1		EPA 200.7	4/11/23	020
Total Silver	Less Than	0.0032	mg/L	0.010	1		EPA 200.7	4/11/23	020
Total Zinc	Less Than	0.012	mg/L	0.040	1		EPA 200.7	4/11/23	020
Total Arsenic	0.59	0.28	ug/L	1.0	1	J	EPA 200.8	4/14/23	020
Total Barium	0.020	0.0015	mg/L	0.0050	1		EPA 200.7	4/11/23	020
Total Antimony	Less Than	0.15	ug/L	1.0	1		EPA 200.8	4/14/23	020
Total Beryllium	Less Than	0.00053	mg/L	0.0040	1		EPA 6010C	4/11/23	020
Total Cadmium	Less Than	0.0013	mg/L	0.0050	1		EPA 200.7	4/11/23	020
Total Cobalt	Less Than	0.0014	mg/L	0.0050	1		EPA 200.7	4/11/23	020
Total Chromium	Less Than	0.0025	mg/L	0.010	1		EPA 200.7	4/11/23	020
Total Lithium	2.5	0.22	ug/L	1.0	1		EPA 200.7	4/14/23	020
Total Lead	Less Than	0.24	ug/L	0.1.0	1		EPA 200.8	4/14/23	020
Total Selenium	Less Than	0.32	ug/L	1.1	1		EPA 200.8	4/14/23	020
Total Thallium	Less Than	0.14	ug/L	1.0	1		EPA 200.8	4/14/23	020
Total Molybdenum	0.044	0.0024	mg/L	0.010	1		EPA 200.7	4/11/23	020

Sample Comments:  
 Metals analyzed by Pace Analytical (WDNR Lab cert # 405132750)

Sample Description: **W50 Caledonia CCR Well Sample**  
 Sample ID: AE65850 Sample Collection Date/Time: 04/05/2023 13:48  
 Sample Received: 04/06/2023 Sample Collector: K SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	38.10	0.05	feet		1		H2OD	4/5/23	K SCHAEFER
Field Temperature	11	0.1	Degrees C		1		TEMP	4/5/23	K SCHAEFER
Field Conductivity	430	0	umhos		1		FCOND25	4/5/23	K SCHAEFER
Field pH	7.6	0.1	Units	0.1	1		FIELDPH	4/5/23	K SCHAEFER
Total Alkalinity as CaCO3	Less Than	20	mg/L		1		SM 2320 B-1997	4/6/23	C153278
Nitrite as N	2.7	0.003	mg/L	0.009	1		EPA 300.0	4/6/23	JLM
Nitrate as N	0.042	0.008	mg/L	0.027	1		EPA 300.0	4/6/23	JLM
Nitrate-Nitrite as N	2.8	0.011	mg/L	0.036	1		EPA 300.0	4/6/23	JLM
Mercury	Less Than	1.2	ng/L		1		EPA 245.7	4/11/23	CMW
Total Hardness as CaCO3	112	1	mg/L	5.4	1		Std Mtd 2340B	4/11/23	020
Total Copper	Less Than	0.0034	mg/L	0.010	1		EPA 200.7	4/11/23	020
Total Calcium	27.9	0.11	mg/L	0.50	1		EPA 200.7	4/11/23	020
Total Magnesium	10.2	0.18	mg/L	1.0	1		EPA 200.7	4/11/23	020

Report Date: Tuesday, January 23, 2024

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

Sample Description: **W50 Caledonia CCR Well Sample**  
 Sample ID: AE65850 Sample Collection Date/Time: 04/05/2023 13:48  
 Sample Received: 04/06/2023 Sample Collector: K SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Manganese	0.043	0.0015	mg/L	0.0050	1		EPA 200.7	4/11/23	020
Total Silver	Less Than	0.0032	mg/L	0.010	1		EPA 200.7	4/11/23	020
Total Zinc	Less Than	0.012	mg/L	0.040	1		EPA 200.7	4/11/23	020
Total Arsenic	0.82	0.28	ug/L	1.0	1	J	EPA 200.8	4/14/23	020
Total Barium	0.032	0.0015	mg/L	0.0050	1		EPA 200.7	4/11/23	020
Total Antimony	Less Than	0.15	ug/L	1.0	1		EPA 200.8	4/14/23	020
Total Beryllium	Less Than	0.00053	mg/L	0.0040	1		EPA 6010C	4/11/23	020
Total Cadmium	Less Than	0.0013	mg/L	0.0050	1		EPA 200.7	4/11/23	020
Total Cobalt	Less Than	0.0014	mg/L	0.0050	1		EPA 200.7	4/11/23	020
Total Chromium	Less Than	0.0025	mg/L	0.010	1		EPA 200.7	4/11/23	020
Total Lithium	3.3	0.22	ug/L	1.0	1		EPA 200.7	4/14/23	020
Total Lead	Less Than	0.24	ug/L	1.0	1		EPA 200.8	4/14/23	020
Total Selenium	Less Than	0.32	ug/L	1.1	1		EPA 200.8	4/14/23	020
Total Thallium	Less Than	0.14	ug/L	1.0	1		EPA 200.8	4/14/23	020
Total Molybdenum	0.035	0.0024	mg/L	0.010	1		EPA 200.7	4/11/23	020

Sample Comments:

Sample Description: **QAQC01 Caledonia CCR Well Sample**  
 Sample ID: AE65851 Sample Collection Date/Time: 04/05/2023 10:42  
 Sample Received: 04/06/2023 Sample Collector: K SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Alkalinity as CaCO3	Less Than	20	mg/L		1		SM 2320 B-1997	4/6/23	C153278
Nitrite as N	2.7	0.003	mg/L	0.009	1		EPA 300.0	4/6/23	JLM
Nitrate as N	0.035	0.008	mg/L	0.027	1		EPA 300.0	4/6/23	JLM
Nitrate-Nitrite as N	2.7	0.011	mg/L	0.036	1		EPA 300.0	4/6/23	JLM
Mercury	Less Than	1.2	ng/L		1		EPA 245.7	4/11/23	CMW
Total Hardness as CaCO3	68.7	1	mg/L	5.4	1		Std Mtd 2340B	4/11/23	020
Total Copper	Less Than	0.0034	mg/L	0.010	1		EPA 200.7	4/11/23	020
Total Calcium	16.4	0.11	mg/L	0.50	1		EPA 200.7	4/11/23	020
Total Magnesium	6.8	0.18	mg/L	1.0	1		EPA 200.7	4/11/23	020
Total Manganese	0.026	0.0015	mg/L	0.0050	1		EPA 200.7	4/11/23	020
Total Silver	Less Than	0.0032	mg/L	0.010	1		EPA 200.7	4/11/23	020
Total Zinc	Less Than	0.012	mg/L	0.040	1		EPA 200.7	4/11/23	020
Total Arsenic	0.53	0.28	ug/L	1.0	1	J	EPA 200.8	4/14/23	020
Total Barium	0.020	0.0015	mg/L	0.0050	1		EPA 200.7	4/11/23	020
Total Antimony	Less Than	0.15	ug/L	1.0	1		EPA 200.8	4/14/23	020
Total Beryllium	Less Than	0.00053	mg/L	0.0040	1		EPA 6010C	4/11/23	020
Total Cadmium	Less Than	0.0013	mg/L	0.0050	1		EPA 200.7	4/11/23	020
Total Cobalt	Less Than	0.0014	mg/L	0.0050	1		EPA 200.7	4/11/23	020
Total Chromium	Less Than	0.0025	mg/L	0.010	1		EPA 200.7	4/11/23	020
Total Lithium	2.5	0.22	ug/L	1.0	1		EPA 200.7	4/14/23	020
Total Lead	Less Than	0.24	ug/L	1.0	1		EPA 200.8	4/14/23	020

Report Date: Tuesday, January 23, 2024

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

Sample Description: **QAQC01 Caledonia CCR Well Sample**  
Sample ID: AE65851 Sample Collection Date/Time: 04/05/2023 10:42  
Sample Received: 04/06/2023 Sample Collector: K SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Selenium	Less Than	0.32	ug/L	1.1	1		EPA 200.8	4/14/23	020
Total Thallium	Less Than	0.14	ug/L	1.0	1		EPA 200.8	4/14/23	020
Total Molybdenum	0.045	0.0024	mg/L	0.010	1		EPA 200.7	4/11/23	020

Sample Comments:  
Metals analyzed by Pace Analytical (WDNR Lab cert # 405132750)

Sample Description: **EB1 Caledonia CCR Well Sample**  
Sample ID: AE65852 Sample Collection Date/Time: 04/05/2023 15:00  
Sample Received: 04/06/2023 Sample Collector: K SCHAEFER

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Alkalinity as CaCO3	Less Than	20	mg/L		1		SM 2320 B-1997	4/6/23	C153278
Nitrite as N	0.29	0.003	mg/L	0.009	1		EPA 300.0	4/6/23	JLM
Nitrate as N	0.034	0.008	mg/L	0.027	1		EPA 300.0	4/6/23	JLM
Nitrate-Nitrite as N	0.32	0.011	mg/L	0.036	1		EPA 300.0	4/6/23	JLM
Mercury	7.2	1.2	ng/L		1		EPA 245.7	4/11/23	CMW
Total Hardness as CaCO3	Less Than	1	mg/L	5.4	1		Std Mtd 2340B	4/11/23	020
Total Copper	Less Than	0.0034	mg/L	0.010	1		EPA 200.7	4/11/23	020
Total Calcium	Less Than	0.11	mg/L	0.50	1		EPA 200.7	4/11/23	020
Total Magnesium	Less Than	0.18	mg/L	1.0	1		EPA 200.7	4/11/23	020
Total Manganese	Less Than	0.0015	mg/L	0.0050	1		EPA 200.7	4/11/23	020
Total Silver	Less Than	0.0032	mg/L	0.010	1		EPA 200.7	4/11/23	020
Total Zinc	Less Than	0.012	mg/L	0.040	1		EPA 200.7	4/11/23	020
Total Arsenic	Less Than	0.28	ug/L	1.0	1		EPA 200.8	4/14/23	020
Total Barium	Less Than	0.0015	mg/L	0.0050	1		EPA 200.7	4/11/23	020
Total Antimony	Less Than	0.15	ug/L	1.0	1		EPA 200.8	4/14/23	020
Total Beryllium	Less Than	0.00053	mg/L	0.0040	1		EPA 6010C	4/11/23	020
Total Cadmium	Less Than	0.0013	mg/L	0.0050	1		EPA 200.7	4/11/23	020
Total Cobalt	Less Than	0.0014	mg/L	0.0050	1		EPA 200.7	4/11/23	020
Total Chromium	Less Than	0.0025	mg/L	0.010	1		EPA 200.7	4/11/23	020
Total Lithium	0.25	0.22	ug/L	1.0	1	J	EPA 200.7	4/14/23	020
Total Lead	Less Than	0.24	ug/L	1.0	1		EPA 200.8	4/14/23	020
Total Selenium	Less than	0.32	ug/L	1.0	1		EPA 200.8	4/14/23	020
Total Thallium	Less Than	0.14	ug/L	1.0	1		EPA 200.8	4/14/23	020
Total Molybdenum	Less Than	0.0024	mg/L	0.010	1		EPA 200.7	4/11/23	020

Sample Comments:  
Metals analyzed by Pace Analytical (WDNR Lab cert # 405132750)

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:		<b>W08D Caledonia CCR Well Sample</b>								
Sample ID:	AE66425	Sample Collection Date/Time:		05/09/2023	09:52					
Sample Received:	05/09/2023	Sample Collector:		NATE DUDA						
<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>	
Field Water Level	43.21	0.05	feet		1		H2OD	5/9/23	RAMBOLL	
Field Temperature	12	0.1	Degrees t		1		TEMP	5/9/23	RAMBOLL	
Field Conductivity	740	0	umhos		1		FCOND25	5/9/23	RAMBOLL	
Field pH	7.9	0.1	Units	0.1	1		FIELDPH	5/9/23	RAMBOLL	
Total Dissolved Solids	458	10	mg/L	10	1		Std Mtd 2540 C	5/16/23	057	
Total Chloride	9.6	1.0	mg/L	3.4	20		EPA 300.0	5/11/23	057	
Total Sulfate	196	2.0	mg/L	6.8	20		EPA 300.0	5/11/23	057	
Total Calcium	46500	2800	ug/L	9100	5		EPA 200.7	5/16/23	057	
Total Boron	500	10	ug/L	50	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	21400	60	ug/L	100	1		EPA 200.7	5/16/23	057	
Total Manganese	130	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 Fluoride	2.1	1.5	mg/L	5.0	50	J	EPA 300.0	5/16/23	057	
Total Filtered Alkalinity as CaCO3	142	2	mg/l	6	1		Std Mtd 2320 B	5/18/23	057	
Total Hardness as CaCO3	210	1	mg/L		1		Std Mtd 2340B	5/30/23	JLM	
Dissolved Calcium	47200	1600	ug/L	5100	5		EPA 200.7	5/18/23	057	
Dissolved Magnesium	22300	200	ug/L	400	5		EPA 200.7	5/18/23	057	
Nitrate	Less Than	0.2	mg/L	0.68	1	H1	EPA 300.0	5/11/23	057	
Nitrite	Less Than	0.2	mg/L	0.8	1	H1	EPA 300.0	5/11/23	057	

Sample Comments:

Sample Description:		<b>W50 Caledonia CCR Well Sample</b>								
Sample ID:	AE66426	Sample Collection Date/Time:		05/09/2023	10:49					
Sample Received:	05/09/2023	Sample Collector:		NATE DUDA						
<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>	
Field Water Level	39.14	0.05	feet		1		H2OD	5/9/23	RAMBOLL	
Field Temperature	11	0.1	Degrees t		1		TEMP	5/9/23	RAMBOLL	
Field Conductivity	470	0	umhos		1		FCOND25	5/9/23	RAMBOLL	
Field pH	7.9	0.1	Units	0.1	1		FIELDPH	5/9/23	RAMBOLL	
Total Dissolved Solids	276	10	mg/L	10	1		Std Mtd 2540 C	5/16/23	057	
Total Chloride	5.6	1.0	mg/L	3.4	20		EPA 300.0	5/11/23	057	
Total Sulfate	75.4	2.0	mg/L	6.8	20		EPA 300.0	5/11/23	057	

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W50 Caledonia CCR Well Sample**  
 Sample ID: AE66426 Sample Collection Date/Time: 05/09/2023 10:49  
 Sample Received: 05/09/2023 Sample Collector: NATE DUDA

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Calcium	26900	600	ug/L	1800	1		EPA 200.7	5/16/23	057
Total Boron	550	10	ug/L	50	1		EPA 200.7	5/18/23	057
Total Copper	Less Than	4	ug/L	10	1		EPA 200.7	5/16/23	057
Total Magnesium	10300	60	ug/L	100	1		EPA 200.7	5/16/23	057
Total Manganese	30	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 Fluoride	1.7	1.5	mg/L	5.0	50	J	EPA 300.0	5/16/23	057
Total Filtered Alkalinity as CaCO3	144	2	mg/l	6	1		Std Mtd 2320 B	5/18/23	057
Total Hardness as CaCO3	110	1	mg/L		1		Std Mtd 2340B	5/30/23	JLM
Dissolved Calcium	27200	1600	ug/L	5100	5		EPA 200.7	5/16/23	057
Dissolved Magnesium	10200	30	ug/L	80	1		EPA 200.7	5/16/23	057
Total Mercury	Less Than	0.76	ng/L	2.5	1		EPA 245.7	5/16/23	JLM
Nitrate	1.51	0.20	mg/L	0.68	20		EPA 300.0	5/11/23	057
Nitrite	Less Than	0.2	mg/L	0.8	1		EPA 300.0	5/11/23	057
Mercury	Less Than	1.2	ng/L		1		EPA 245.7	5/16/23	JLM

Sample Comments:

Sample Description: **W09D Caledonia CCR Well Sample**  
 Sample ID: AE66427 Sample Collection Date/Time: 05/09/2023 11:31  
 Sample Received: 05/09/2023 Sample Collector: NATE DUDA

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	57.21	0.05	feet		1		H2OD	5/9/23	RAMBOLL
Field Temperature	11	0.1	Degrees C		1		TEMP	5/9/23	RAMBOLL
Field Conductivity	343	0	umhos		1		FCOND25	5/9/23	RAMBOLL
Field pH	8.5	0.1	Units	0.1	1		FIELDPH	5/9/23	RAMBOLL
Total Dissolved Solids	206	10	mg/L	10	1		Std Mtd 2540 C	5/16/23	057
Total Chloride	3.8	1.0	mg/L	3.4	20		EPA 300.0	5/11/23	057
Total Sulfate	30.9	2.0	mg/L	6.8	20		EPA 300.0	5/11/23	057
Total Calcium	17400	600	ug/L	1800	1		EPA 200.7	5/16/23	057
Total Boron	420	10	ug/L	50	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	10100	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	1.2	ug/L	4.0	1		EPA 200.7	5/22/23	057
Total Zinc	Less Than	1.8	ug/L	6.0	1		EPA 200.7	5/16/23	057
Total Fluoride	1.9	1.5	mg/L	5.0	50	J	EPA 300.0	5/16/23	057
Total Filtered Alkalinity as CaCO3	132	2	mg/l	6	1		Std Mtd 2320 B	5/18/23	057
Total Hardness as CaCO3	88	1	mg/L		1		Std Mtd 2340B	5/30/23	JLM
Dissolved Calcium	18200	300	ug/L	1000	1		EPA 200.7	5/18/23	057
Dissolved Magnesium	10400	30	ug/L	80	1		EPA 200.7	5/18/23	057
Nitrate	0.24	0.20	mg/L	0.68	20	JB	EPA 300.0	5/11/23	057

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W09D Caledonia CCR Well Sample**  
Sample ID: AE66427 Sample Collection Date/Time: 05/09/2023 11:31  
Sample Received: 05/09/2023 Sample Collector: NATE DUDA

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Nitrite	Less Than	0.2	mg/L	0.8	1		EPA 300.0	5/11/23	057

Sample Comments:

Sample Description: **W10D Caledonia CCR Well Sample**  
Sample ID: AE66428 Sample Collection Date/Time: 05/09/2023 11:53  
Sample Received: 05/09/2023 Sample Collector: NATE DUDA

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	48.91	0.05	feet		1		H2OD	5/9/23	RAMBOLL
Field Temperature	14	0.1	Degrees C		1		TEMP	5/9/23	RAMBOLL
Field Conductivity	341	0	umhos		1		FCOND25	5/9/23	RAMBOLL
Field pH	8.2	0.1	Units	0.1	1		FIELDPH	5/9/23	RAMBOLL
Total Dissolved Solids	202	10	mg/L	10	1		Std Mtd 2540 C	5/16/23	057
Total Chloride	4.1	1.0	mg/L	3.4	20		EPA 300.0	5/11/23	057
Total Sulfate	39.8	2.0	mg/L	6.8	20		EPA 300.0	5/11/23	057
Total Calcium	20400	600	ug/L	1800	1		EPA 200.7	5/16/23	057
Total Boron	430	10	ug/L	50	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	8200	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 Fluoride	2.1	1.5	mg/L	5.0	50	J	EPA 300.0	5/16/23	057
Total Filtered Alkalinity as CaCO3	126	2	mg/l	6	1		Std Mtd 2320 B	5/18/23	057
Total Hardness as CaCO3	84	1	mg/L		1		Std Mtd 2340B	5/31/23	JLM
Dissolved Calcium	20300	300	ug/L	1000	1		EPA 200.7	5/16/23	057
Dissolved Magnesium	8200	30	ug/L	80	1		EPA 200.7	5/16/23	057
Nitrate	0.27	0.20	mg/L	0.68	20	JB	EPA 300.0	5/11/23	057
Nitrite	Less Than	0.2	mg/L	0.8	20		EPA 300.0	5/11/23	057

Sample Comments:

Sample Description: **QA/QC1 Caledonia CCR Well Sample**  
Sample ID: AE66429 Sample Collection Date/Time: 05/09/2023 11:58  
Sample Received: 05/09/2023 Sample Collector: NATE DUDA

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Dissolved Solids	200	10	mg/L	10	1		Std Mtd 2540 C	5/16/23	057
Total Chloride	4.2	1.0	mg/L	3.4	20		EPA 300.0	5/11/23	057
Total Sulfate	39.4	2.0	mg/L	6.8	20		EPA 300.0	5/11/23	057
Total Calcium	19600	600	ug/L	1800	1		EPA 200.7	5/16/23	057

Report Date: Wednesday, January 24, 2024

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

Sample Description: **QA/QC1 Caledonia CCR Well Sample**  
 Sample ID: AE66429 Sample Collection Date/Time: 05/09/2023 11:58  
 Sample Received: 05/09/2023 Sample Collector: NATE DUDA

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Boron	430	10	ug/L	50	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	8000	60	ug/L	100	1		EPA 200.7	5/16/23	057
Total Manganese	20	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 Fluoride	1.9	1.5	mg/L	5.0	50	J	EPA 300.0	5/16/23	057
Total Filtered Alkalinity as CaCO3	128	2	mg/l	6	1		Std Mtd 2320 B	5/18/23	057
Total Hardness as CaCO3	85	1	mg/L		1		Std Mtd 2340B	5/31/23	JLM
Dissolved Calcium	20500	300	ug/L	1000	1		EPA 200.7	5/16/23	057
Dissolved Magnesium	8200	30	ug/L	80	1		EPA 200.7	5/16/23	057
Nitrate	Less Than	0.20	mg/L	0.68	20	H1	EPA 300.0	5/11/23	057
Nitrite	Less Than	0.2	mg/L	0.8	20	H1	EPA 300.0	5/11/23	057

Sample Comments:

Sample Description: **W46D Caledonia CCR Well Sample**  
 Sample ID: AE66430 Sample Collection Date/Time: 05/09/2023 12:26  
 Sample Received: 05/09/2023 Sample Collector: NATE DUDA

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	45.71	0.05	feet		1		H2OD	5/9/23	RAMBOLL
Field Temperature	11	0.1	Degrees t		1		TEMP	5/9/23	RAMBOLL
Field Conductivity	373	0	umhos		1		FCOND25	5/9/23	RAMBOLL
Field pH	7.8	0.1	Units	0.1	1		FIELDPH	5/9/23	RAMBOLL
Total Dissolved Solids	214	10	mg/L	10	1		Std Mtd 2540 C	5/16/23	057
Total Chloride	5.9	1.0	mg/L	3.4	20		EPA 300.0	5/11/23	057
Total Sulfate	32.0	2.0	mg/L	6.8	20		EPA 300.0	5/11/23	057
Total Calcium	24500	600	ug/L	1800	1		EPA 200.7	5/16/23	057
Total Boron	380	10	ug/L	50	1		EPA 200.7	5/18/23	057
Total Copper	Less Than	4	ug/L	10	1		EPA 200.7	5/16/23	057
Total Magnesium	14700	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 Fluoride	1.7	1.5	mg/L	5.0	50	J	EPA 300.0	5/16/23	057
Total Filtered Alkalinity as CaCO3	154	2	mg/l	6	1		Std Mtd 2320 B	5/18/23	057
Total Hardness as CaCO3	130	1	mg/L		1		Std Mtd 2340B	5/31/23	JLM
Dissolved Calcium	25300	1600	ug/L	5100	5		EPA 200.7	5/16/23	057
Dissolved Magnesium	15200	30	ug/L	80	1		EPA 200.7	5/16/23	057
Nitrate	Less Than	0.20	mg/L	0.68	20		EPA 300.0	5/11/23	057
Nitrite	Less Than	0.20	mg/L	0.8	20		EPA 300.0	5/11/23	057



Report Date: Wednesday, January 24, 2024

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

Sample Comments:

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Sample Description: **EB1 Caledonia CCR Well Sample**  
Sample ID: AE66431 Sample Collection Date/Time: 05/09/2023 14:00  
Sample Received: 05/09/2023 Sample Collector: NATE DUDA

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Temperature	18	0.1	Degrees C		1		TEMP	5/9/23	RAMBOLL
Field Conductivity	21	0	umhos		1		FCOND25	5/9/23	RAMBOLL
Field pH	8.2	0.1	Units	0.1	1		FIELDPH	5/9/23	RAMBOLL
Total Dissolved Solids	Less Than	10	mg/L	10	1		Std Mtd 2540 C	5/16/23	057
Total Chloride	Less Than	1.0	mg/L	3.4	20		EPA 300.0	5/11/23	057
Total Sulfate	Less Than	2.0	mg/L	6.8	20		EPA 300.0	5/11/23	057
Total Calcium	1900	600	ug/L	1800	1		EPA 200.7	5/16/23	057
Total Boron	Less Than	10	ug/L	50	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 Fluoride	Less Than	1.5	mg/L	5.0	50		EPA 300.0	5/16/23	057
Total Filtered Alkalinity as CaCO3	10	2	mg/l	6	1		Std Mtd 2320 B	5/18/23	057
Total Hardness as CaCO3	9.1	1	mg/L		1		Std Mtd 2340B	5/31/23	JLM
Dissolved Calcium	2000	300	ug/L	1000	1		EPA 200.7	5/16/23	057
Dissolved Magnesium	1000	30	ug/L	80	1		EPA 200.7	5/16/23	057
Nitrate	1.19	0.20	mg/L	0.68	20		EPA 300.0	5/11/23	057
Nitrite	Less Than	0.2	mg/L	0.8	20		EPA 300.0	5/11/23	057

Sample Comments:

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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: **W08D Caledonia CCR catchup Sample**  
 Sample ID: AE67097 Sample Collection Date/Time: 06/08/2023 13:59  
 Sample Received: 06/09/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	44.72	0.05	feet		1		H2OD	6/8/23	RAMBOLL
Field Temperature	14	0.1	Degrees t		1		TEMP	6/8/23	RAMBOLL
Field Conductivity	711	0	umhos		1		FCOND25	6/8/23	RAMBOLL
Field pH	7.4	0.1	Units	0.1	1		FIELDPH	6/8/23	RAMBOLL
Nitrate-Nitrite as N	0.73	0.011	mg/L	0.036	1		EPA 300.0	6/9/23	AEU
Nitrite as N	0.70	0.003	mg/L	0.009	1		EPA 300.0	6/12/23	AEU
Nitrate as N	0.031	0.008	mg/L	0.027	1		EPA 300.0	6/12/23	AEU
Total Copper	Less Than	0.004	mg/L	0.01	1		EPA 200.7	6/19/23	057
Total Calcium	46.8	1.1	mg/L	3.8	2		EPA 200.7	6/19/23	057
Total Magnesium	20.9	0.06	mg/L	0.1	1		EPA 200.7	6/19/23	057
Total Manganese	0.15	0.004	mg/L	0.01	1		EPA 200.7	6/19/23	057
Total Silver	Less Than	0.02	mg/L	0.07	1		EPA 200.7	6/15/23	057
Total Zinc	Less Than	0.06	mg/L	0.20	1		EPA 200.7	6/19/23	057
Total Hardness as CaCO3	203	2.0	mg/L		2		Std Mtd 2340B	6/19/23	057

Sample Comments:

Sample Description: **W09D Caledonia CCR catchup Sample**  
 Sample ID: AE67098 Sample Collection Date/Time: 06/08/2023 12:22  
 Sample Received: 06/09/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	54.76	0.05	feet		1		H2OD	6/8/23	RAMBOLL
Field Temperature	12	0.1	Degrees t		1		TEMP	6/8/23	RAMBOLL
Field Conductivity	336	0	umhos		1		FCOND25	6/8/23	RAMBOLL
Field pH	7.9	0.1	Units	0.1	1		FIELDPH	6/8/23	RAMBOLL
Nitrate-Nitrite as N	0.90	0.011	mg/L	0.036	1		EPA 300.0	6/9/23	AEU
Nitrite as N	0.90	0.003	mg/L	0.009	1		EPA 300.0	6/12/23	AEU
Nitrate as N	Less Than	0.008	mg/L	0.027	1		EPA 300.0	6/12/23	AEU
Total Copper	Less Than	0.004	mg/L	0.01	1		EPA 200.7	6/15/23	057
Total Calcium	17.0	0.55	mg/L	1.9	1		EPA 200.7	6/15/23	057
Total Magnesium	9.4	0.06	mg/L	0.1	1		EPA 200.7	6/15/23	057
Total Manganese	0.006	0.004	mg/L	0.01	1	J	EPA 200.7	6/15/23	057
Total Silver	Less Than	0.02	mg/L	0.07	1		EPA 200.7	6/15/23	057
Total Zinc	Less Than	0.06	mg/L	0.20	1		EPA 200.7	6/15/23	057
Total Hardness as CaCO3	81.0	1	mg/L		1		Std Mtd 2340B	6/15/23	057

Report Date: Wednesday, January 24, 2024

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

Sample Comments:

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Sample Description: **W10D Caledonia CCR catchup Sample**  
Sample ID: AE67099 Sample Collection Date/Time: 06/08/2023 11:50  
Sample Received: 06/09/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	51.49	0.05	feet		1		H2OD	6/8/23	RAMBOLL
Field Temperature	11	0.1	Degrees t		1		TEMP	6/8/23	RAMBOLL
Field Conductivity	345	0	umhos		1		FCOND25	6/8/23	RAMBOLL
Field pH	7.8	0.1	Units	0.1	1		FIELDPH	6/8/23	RAMBOLL
Nitrate-Nitrite as N	0.89	0.011	mg/L	0.036	1		EPA 300.0	6/9/23	AEU
Nitrite as N	0.89	0.003	mg/L	0.009	1		EPA 300.0	6/12/23	AEU
Nitrate as N	Less Than	0.008	mg/L	0.027	1		EPA 300.0	6/12/23	AEU
Total Copper	Less Than	0.004	mg/L	0.01	1		EPA 200.7	6/15/23	057
Total Calcium	20.3	0.55	mg/L	1.9	1		EPA 200.7	6/15/23	057
Total Magnesium	7.9	0.06	mg/L	0.1	1		EPA 200.7	6/15/23	057
Total Manganese	0.02	0.004	mg/L	0.01	1		EPA 200.7	6/15/23	057
Total Silver	Less Than	0.02	mg/L	0.07	1		EPA 200.7	6/15/23	057
Total Zinc	Less Than	0.06	mg/L	0.20	1		EPA 200.7	6/15/23	057
Total Hardness as CaCO3	83.4	1	mg/L		1		Std Mtd 2340B	6/15/23	057

Sample Comments:

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Sample Description: **W46D Caledonia CCR catchup Sample**  
Sample ID: AE67100 Sample Collection Date/Time: 06/08/2023 08:56  
Sample Received: 06/09/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	47.98	0.05	feet		1		H2OD	6/8/23	RAMBOLL
Field Temperature	12	0.1	Degrees t		1		TEMP	6/8/23	RAMBOLL
Field Conductivity	381	0	umhos		1		FCOND25	6/8/23	RAMBOLL
Field pH	7.3	0.1	Units	0.1	1		FIELDPH	6/8/23	RAMBOLL
Nitrate-Nitrite as N	0.99	0.011	mg/L	0.036	1		EPA 300.0	6/9/23	AEU
Nitrite as N	0.99	0.003	mg/L	0.009	1		EPA 300.0	6/12/23	AEU
Nitrate as N	Less Than	0.008	mg/L	0.027	1		EPA 300.0	6/12/23	AEU
Total Copper	Less Than	0.004	mg/L	0.01	1		EPA 200.7	6/15/23	057
Total Calcium	24.3	0.55	mg/L	1.9	1		EPA 200.7	6/15/23	057
Total Magnesium	14.4	0.06	mg/L	0.1	1		EPA 200.7	6/15/23	057
Total Manganese	0.04	0.004	mg/L	0.01	1		EPA 200.7	6/15/23	057
Total Silver	Less Than	0.02	mg/L	0.07	1		EPA 200.7	6/15/23	057
Total Zinc	Less Than	0.06	mg/L	0.20	1		EPA 200.7	6/15/23	057
Total Hardness as CaCO3	120	1	mg/L		1		Std Mtd 2340B	6/15/23	057

Report Date: Wednesday, January 24, 2024

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

Sample Comments:

Sample Description: **W48 Caledonia CCR catchup Sample**  
Sample ID: AE67101 Sample Collection Date/Time: 06/08/2023 09:43  
Sample Received: 06/09/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	61.30	0.05	feet		1		H2OD	6/8/23	RAMBOLL
Field Temperature	13	0.1	Degrees C		1		TEMP	6/8/23	RAMBOLL
Field Conductivity	416	0	umhos		1		FCOND25	6/8/23	RAMBOLL
Field pH	7.8	0.1	Units	0.1	1		FIELDPH	6/8/23	RAMBOLL
Nitrate-Nitrite as N	1.4	0.011	mg/L	0.036	1		EPA 300.0	6/9/23	AEU
Nitrite as N	1.4	0.003	mg/L	0.009	1		EPA 300.0	6/12/23	AEU
Nitrate as N	Less Than	0.008	mg/L	0.027	1		EPA 300.0	6/12/23	AEU
Total Copper	Less Than	0.004	mg/L	0.01	1		EPA 200.7	6/15/23	057
Total Calcium	25.3	0.55	mg/L	1.9	1		EPA 200.7	6/15/23	057
Total Magnesium	16.4	0.06	mg/L	0.1	1		EPA 200.7	6/15/23	057
Total Manganese	0.01	0.004	mg/L	0.01	1		EPA 200.7	6/15/23	057
Total Silver	Less Than	0.02	mg/L	0.07	1		EPA 200.7	6/15/23	057
Total Zinc	Less Than	0.06	mg/L	0.20	1		EPA 200.7	6/15/23	057
Total Hardness as CaCO3	131	1	mg/L		1		Std Mtd 2340B	6/15/23	057

Sample Comments:

Sample Description: **W49 Caledonia CCR catchup Sample**  
Sample ID: AE67102 Sample Collection Date/Time: 06/08/2023 10:42  
Sample Received: 06/09/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	64.64	0.05	feet		1		H2OD	6/8/23	RAMBOLL
Field Temperature	15	0.1	Degrees C		1		TEMP	6/8/23	RAMBOLL
Field Conductivity	336	0	umhos		1		FCOND25	6/8/23	RAMBOLL
Field pH	7.7	0.1	Units	0.1	1		FIELDPH	6/8/23	RAMBOLL
Nitrate-Nitrite as N	0.84	0.011	mg/L	0.036	1		EPA 300.0	6/9/23	AEU
Total Copper	Less Than	0.004	mg/L	0.01	1		EPA 200.7	6/15/23	057
Total Thallium	Less Than	80	ug/L	270	1		EPA 200.7	6/20/23	057
Nitrite as N	0.82	0.003	mg/L	0.009	1		EPA 300.0	6/12/23	AEU
Nitrate as N	0.023	0.008	mg/L	0.027	1		EPA 300.0	6/12/23	AEU
Total Mercury	1.16	0.17	ng/L	0.57	1		EPA 1631E	6/27/23	JLM
Total Calcium	15.3	0.55	mg/L	1.9	1		EPA 200.7	6/15/23	057
Total Magnesium	6.4	0.06	mg/L	0.1	1		EPA 200.7	6/15/23	057
Total Manganese	0.02	0.004	mg/L	0.01	1		EPA 200.7	6/15/23	057
Total Silver	Less Than	0.02	mg/L	0.07	1		EPA 200.7	6/15/23	057
Total Zinc	Less Than	0.06	mg/L	0.20	1		EPA 200.7	6/15/23	057
Total Hardness as CaCO3	64.6	1	mg/L		1		Std Mtd 2340B	6/15/23	057
Total Antimony	Less Than	0.04	mg/L	0.13	1		EPA 200.7	6/15/23	057

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W49 Caledonia CCR catchup Sample**  
 Sample ID: AE67102 Sample Collection Date/Time: 06/08/2023 10:42  
 Sample Received: 06/09/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Arsenic	Less Than	0.04	mg/L	0.13	1		EPA 200.7	6/15/23	057
Total Barium	0.021	0.012	mg/L	0.040	1	J	EPA 200.7	6/15/23	057
Total Beryllium	Less Than	0.006	mg/L	0.02	1		EPA 6010C	6/15/23	057
Total Cadmium	Less Than	0.004	mg/L	0.013	1		EPA 200.7	6/15/23	057
Total Cobalt	Less Than	0.006	mg/L	0.02	1		EPA 200.7	6/15/23	057
Total Chromium	Less Than	0.006	mg/L	0.02	1		EPA 200.7	6/15/23	057
Total Lithium	Less Than	0.04	mg/L	0.13	1		EPA 200.7	6/15/23	057
Total Molybdenum	0.05	0.01	mg/L	0.03	1		EPA 200.7	6/15/23	057
Total Lead	Less Than	0.04	mg/L	0.13	1		EPA 200.7	6/15/23	057
Total Selenium	Less Than	0.08	mg/L	0.27	1		EPA 200.7	6/15/23	057

Sample Comments:

Sample Description: **QAQC1 Caledonia CCR catchup Sample**  
 Sample ID: AE67103 Sample Collection Date/Time: 06/08/2023 10:47  
 Sample Received: 06/09/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Nitrate-Nitrite as N	0.87	0.011	mg/L	0.036	1		EPA 300.0	6/9/23	AEU
Total Copper	Less Than	0.004	mg/L	0.01	1		EPA 200.7	6/15/23	057
Total Thallium	Less Than	80	ug/L	270	1		EPA 200.7	6/20/23	057
Nitrite as N	0.82	0.003	mg/L	0.009	1		EPA 300.0	6/12/23	AEU
Nitrate as N	0.053	0.008	mg/L	0.027	1		EPA 300.0	6/12/23	AEU
Total Mercury	1.00	0.17	ng/L	0.57	1		EPA 1631E	6/27/23	JLM
Total Calcium	15.3	0.55	mg/L	1.9	1		EPA 200.7	6/15/23	057
Total Magnesium	6.5	0.06	mg/L	0.1	1		EPA 200.7	6/15/23	057
Total Manganese	0.02	0.004	mg/L	0.01	1		EPA 200.7	6/15/23	057
Total Silver	Less Than	0.02	mg/L	0.07	1		EPA 200.7	6/15/23	057
Total Zinc	Less Than	0.06	mg/L	0.20	1		EPA 200.7	6/15/23	057
Total Hardness as CaCO3	64.9	1	mg/L		1		Std Mtd 2340B	6/15/23	057
Total Antimony	Less Than	0.04	mg/L	0.13	1		EPA 200.7	6/15/23	057
Total Arsenic	Less Than	0.04	mg/L	0.13	1		EPA 200.7	6/15/23	057
Total Barium	0.021	0.012	mg/L	0.040	1	J	EPA 200.7	6/15/23	057
Total Beryllium	Less Than	0.006	mg/L	0.02	1		EPA 6010C	6/15/23	057
Total Cadmium	Less Than	0.004	mg/L	0.013	1		EPA 200.7	6/15/23	057
Total Cobalt	Less Than	0.006	mg/L	0.02	1		EPA 200.7	6/15/23	057
Total Chromium	Less Than	0.006	mg/L	0.02	1		EPA 200.7	6/15/23	057
Total Lithium	Less Than	0.04	mg/L	0.13	1		EPA 200.7	6/15/23	057
Total Molybdenum	0.05	0.01	mg/L	0.03	1		EPA 200.7	6/15/23	057
Total Lead	Less Than	0.04	mg/L	0.13	1		EPA 200.7	6/15/23	057
Total Selenium	Less Than	0.08	mg/L	0.27	1		EPA 200.7	6/15/23	057

Report Date: Wednesday, January 24, 2024

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

Sample Comments:

Sample Description: **EB1 Caledonia CCR catchup Sample**  
 Sample ID: AE67104 Sample Collection Date/Time: 06/08/2023 15:03  
 Sample Received: 06/09/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Nitrate-Nitrite as N	Less Than	0.011	mg/L	0.036	1		EPA 300.0	6/9/23	AEU
Total Copper	Less Than	0.004	mg/L	0.01	1		EPA 200.7	6/15/23	057
Total Thallium	Less Than	80	ug/L	270	1		EPA 200.7	6/20/23	057
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	6/12/23	AEU
Nitrate as N	Less Than	0.008	mg/L	0.027	1		EPA 300.0	6/12/23	AEU
Total Mercury	0.68	0.17	ng/L	0.57	1		EPA 1631E	6/15/23	JLM
Total Calcium	Less Than	0.55	mg/L	1.9	1		EPA 200.7	6/15/23	057
Total Magnesium	0.08	0.06	mg/L	0.1	1		EPA 200.7	6/15/23	057
Total Manganese	Less Than	0.004	mg/L	0.01	1		EPA 200.7	6/15/23	057
Total Silver	Less Than	0.02	mg/L	0.07	1		EPA 200.7	6/15/23	057
Total Zinc	Less Than	0.06	mg/L	0.20	1		EPA 200.7	6/15/23	057
Total Hardness as CaCO3	Less Than	1.65	mg/L		1		Std Mtd 2340B	6/15/23	057
Total Antimony	Less Than	0.04	mg/L	0.13	1		EPA 200.7	6/15/23	057
Total Arsenic	Less Than	0.04	mg/L	0.13	1		EPA 200.7	6/15/23	057
Total Barium	Less Than	0.012	mg/L	0.040	1		EPA 200.7	6/15/23	057
Total Beryllium	Less Than	0.006	mg/L	0.02	1		EPA 6010C	6/15/23	057
Total Cadmium	Less Than	0.004	mg/L	0.013	1		EPA 200.7	6/15/23	057
Total Cobalt	Less Than	0.006	mg/L	0.02	1		EPA 200.7	6/15/23	057
Total Chromium	Less Than	0.006	mg/L	0.02	1		EPA 200.7	6/15/23	057
Total Lithium	Less Than	0.04	mg/L	0.13	1		EPA 200.7	6/15/23	057
Total Molybdenum	Less Than	0.01	mg/L	0.03	1		EPA 200.7	6/15/23	057
Total Lead	Less Than	0.04	mg/L	0.13	1		EPA 200.7	6/15/23	057
Total Selenium	Less Than	0.08	mg/L	0.27	1		EPA 200.7	6/15/23	057

Sample Comments:

Sample Description: **W50 Caledonia CCR Well Catchup Sample**  
 Sample ID: AE67140 Sample Collection Date/Time: 06/12/2023 12:28  
 Sample Received: 06/12/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	42.86	0.05	feet		1		H2OD	6/12/23	RAMBOLL
Field Temperature	14	0.1	Degrees C		1		TEMP	6/12/23	RAMBOLL
Field Conductivity	437	0	umhos		1		FCOND25	6/12/23	RAMBOLL
Field pH	8.4	0.1	Units	0.1	1		FIELDPH	6/12/23	RAMBOLL
Total Hardness as CaCO3	111	1	mg/L		1		Std Mtd 2340B	6/26/23	057
Total Thallium	Less Than	80	ug/L	270	1		EPA 200.7	6/26/23	057
Nitrite as N	0.86	0.003	mg/L	0.009	1		EPA 300.0	6/12/23	AEU
Nitrate as N	0.10	0.008	mg/L	0.027	1		EPA 300.0	6/12/23	AEU

Report Date: Wednesday, January 24, 2024

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

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Sample Description: **W50 Caledonia CCR Well Catchup Sample**  
Sample ID: AE67140 Sample Collection Date/Time: 06/12/2023 12:28  
Sample Received: 06/12/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Nitrate-Nitrite as N	0.97	0.011	mg/L	0.036	1		EPA 300.0	6/12/23	AEU
Total Mercury	0.40	0.17	ng/L	0.57	1		EPA 1631E	6/15/23	JLM
Total Antimony	Less Than	0.04	mg/L	0.13	1		EPA 200.7	6/26/23	057
Total Arsenic	0.04	0.04	mg/L	0.13	1	J	EPA 200.7	6/26/23	057
Total Barium	0.029	0.012	mg/L	0.040	1	J	EPA 200.7	6/26/23	057
Total Beryllium	Less Than	0.006	mg/L	0.02	1		EPA 6010C	6/26/23	057
Total Cadmium	Less Than	0.004	mg/L	0.013	1		EPA 200.7	6/26/23	057
Total Calcium	27.1	0.6	mg/L	1.8	1		EPA 200.7	6/26/23	057
Total Chromium	Less Than	0.006	mg/L	0.02	1		EPA 200.7	6/26/23	057
Total Cobalt	Less Than	0.006	mg/L	0.02	1		EPA 200.7	6/26/23	057
Total Copper	Less Than	0.004	mg/L	0.01	1		EPA 200.7	6/26/23	057
Total Lead	Less Than	0.04	mg/L	0.13	1		EPA 200.7	6/26/23	057
Total Lithium	Less Than	0.04	mg/L	0.13	1		EPA 200.7	6/26/23	057
Total Magnesium	10.5	0.06	mg/L	0.1	1		EPA 200.7	6/26/23	057
Total Manganese	0.04	0.004	mg/L	0.01	1		EPA 200.7	6/26/23	057
Total Molybdenum	0.04	0.01	mg/L	0.03	1		EPA 200.7	6/26/23	057
Total Selenium	Less Than	0.08	mg/L	0.27	1		EPA 200.7	6/26/23	057
Total Silver	Less Than	0.02	mg/L	0.07	1		EPA 200.7	6/26/23	057
Total Titanium	0.01	0.004	mg/L	0.01	1		EPA 200.7	6/26/23	057
Total Zinc	Less Than	0.06	mg/L	0.20	1		EPA 200.7	6/26/23	057

Sample Comments:

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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: **W46D Caledonia Catchup CCR Well Sample**  
 Sample ID: AE67709 Sample Collection Date/Time: 07/13/2023 09:56  
 Sample Received: 07/13/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	49.54	0.05	feet		1		H2OD	7/13/23	RAMBOLL
Field Conductivity	430	0	umhos		1		FCOND25	7/13/23	RAMBOLL
Field pH	7.3	0.1	Units	0.1	1		FIELDPH	7/13/23	RAMBOLL
Nitrite as N	0.10	0.003	mg/L	0.009	1		EPA 300.0	7/14/23	AEU
Nitrate as N	Less Than	0.008	mg/L	0.027	1		EPA 300.0	7/14/23	AEU
Nitrate-Nitrite as N	0.10	0.011	mg/L	0.036	1		EPA 300.0	7/14/23	AEU
Total Calcium	23800	110	ug/L	500	1		EPA 200.7	7/20/23	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	7/20/23	020
Total Magnesium	13800	180	ug/L	1000	1		EPA 200.7	7/20/23	020
Total Manganese	34.3	1.5	ug/L	5.0	1		EPA 200.7	7/20/23	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	7/20/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	7/20/23	020
Total Hardness as CaCO3	116	1.0	mg/L	5.4	1		Std Mtd 2340B	7/20/23	020

Sample Comments:

Sample Description: **W48 Caledonia Catchup CCR Well Sample**  
 Sample ID: AE67710 Sample Collection Date/Time: 07/13/2023 10:30  
 Sample Received: 07/13/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	62.94	0.05	feet		1		H2OD	7/13/23	RAMBOLL
Field Conductivity	485	0	umhos		1		FCOND25	7/13/23	RAMBOLL
Field pH	7.6	0.1	Units	0.1	1		FIELDPH	7/13/23	RAMBOLL
Nitrite as N	1.4	0.003	mg/L	0.009	1		EPA 300.0	7/14/23	AEU
Nitrate as N	0.11	0.008	mg/L	0.027	1		EPA 300.0	7/14/23	AEU
Nitrate-Nitrite as N	1.5	0.011	mg/L	0.036	1		EPA 300.0	7/14/23	AEU
Total Calcium	26300	110	ug/L	500	1		EPA 200.7	7/20/23	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	7/20/23	020
Total Magnesium	17100	180	ug/L	1000	1		EPA 200.7	7/20/23	020
Total Manganese	13.8	1.5	ug/L	5.0	1		EPA 200.7	7/20/23	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	7/20/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	7/20/23	020
Total Hardness as CaCO3	136	1.0	mg/L	5.4	1		Std Mtd 2340B	7/20/23	020



Report Date: Wednesday, January 24, 2024

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

Sample Comments:

Sample Description: **W49 Caledonia Catchup CCR Well Sample**  
 Sample ID: AE67711 Sample Collection Date/Time: 07/13/2023 11:13  
 Sample Received: 07/13/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	66.62	0.05	feet		1		H2OD	7/13/23	RAMBOLL
Field Conductivity	340	0	umhos		1		FCOND25	7/13/23	RAMBOLL
Field pH	7.2	0.1	Units	0.1	1		FIELDPH	7/13/23	RAMBOLL
Nitrite as N	0.87	0.003	mg/L	0.009	1		EPA 300.0	7/14/23	AEU
Nitrate as N	0.010	0.008	mg/L	0.027	1		EPA 300.0	7/14/23	AEU
Nitrate-Nitrite as N	0.88	0.011	mg/L	0.036	1		EPA 300.0	7/14/23	AEU
Total Calcium	18700	110	ug/L	500	1		EPA 200.7	7/20/23	020
Total Copper	4.2	3.4	ug/L	10.0	1	J	EPA 200.7	7/20/23	020
Total Magnesium	8600	180	ug/L	1000	1		EPA 200.7	7/20/23	020
Total Manganese	38.1	1.5	ug/L	5.0	1		EPA 200.7	7/20/23	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	7/20/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	7/20/23	020
Total Hardness as CaCO3	81.9	1.0	mg/L	5.4	1		Std Mtd 2340B	7/20/23	020
Total Barium	21.8	1.5	ug/L	5.0	1		EPA 200.7	7/20/21	020
Total Beryllium	Less Than	0.53	ug/L	4.0	1		EPA 200.7	7/20/21	020
Total Cadmium	Less Than	1.3	ug/L	5.0	1		EPA 200.7	7/20/21	020
Total Chromium	Less Than	2.5	ug/L	10.0	1		EPA 200.7	7/20/21	020
Total Cobalt	Less Than	1.4	ug/L	5.0	1		EPA 200.7	7/20/21	020
Total Molybdenum	50.4	2.4	ug/L	10.0	1		EPA 200.7	7/20/21	020
Total Lithium	3.7	0.22	ug/L	1.0	1		EPA 200.8	7/21/23	020
Total Arsenic	1.0	0.28	ug/L	1.0	1	J	EPA 200.8	7/21/23	020
Total Selenium	Less Than	0.32	ug/L	1.1	1		EPA 200.8	7/21/23	020
Total Antimony	0.36	0.15	ug/L	1.0	1	J	EPA 200.8	7/21/23	020
Total Thallium	Less Than	0.14	ug/L	1.0	1		EPA 200.8	7/21/23	020
Total Lead	0.51	0.24	ug/L	1.0	1	J	EPA 200.8	7/21/23	020

Sample Comments:

Sample Description: **W10D Caledonia Catchup CCR Well Sample**  
 Sample ID: AE67712 Sample Collection Date/Time: 07/13/2023 12:25  
 Sample Received: 07/13/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	52.95	0.05	feet		1		H2OD	7/13/23	RAMBOLL
Field Conductivity	405	0	umhos		1		FCOND25	7/13/23	RAMBOLL
Field pH	7.7	0.1	Units	0.1	1		FIELDPH	7/13/23	RAMBOLL
Nitrite as N	0.90	0.003	mg/L	0.009	1		EPA 300.0	7/14/23	AEU
Nitrate as N	0.45	0.008	mg/L	0.027	1		EPA 300.0	7/14/23	AEU
Nitrate-Nitrite as N	1.4	0.011	mg/L	0.036	1		EPA 300.0	7/14/23	AEU

Report Date: Wednesday, January 24, 2024

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

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Sample Description: **W10D Caledonia Catchup CCR Well Sample**  
Sample ID: AE67712 Sample Collection Date/Time: 07/13/2023 12:25  
Sample Received: 07/13/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Calcium	21500	110	ug/L	500	1		EPA 200.7	7/20/23	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	7/20/23	020
Total Magnesium	8400	180	ug/L	1000	1		EPA 200.7	7/20/23	020
Total Manganese	20	1.5	ug/L	5.0	1		EPA 200.7	7/20/23	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	7/20/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	7/20/23	020
Total Hardness as CaCO3	88.3	1.0	mg/L	5.4	1		Std Mtd 2340B	7/20/23	020

Sample Comments:

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Sample Description: **W09D Caledonia Catchup CCR Well Sample**  
Sample ID: AE67713 Sample Collection Date/Time: 07/13/2023 12:52  
Sample Received: 07/13/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	56.5	0.05	feet		1		H2OD	7/13/23	RAMBOLL
Field Conductivity	397	0	umhos		1		FCOND25	7/13/23	RAMBOLL
Field pH	7.6	0.1	Units	0.1	1		FIELDPH	7/13/23	RAMBOLL
Nitrite as N	0.90	0.003	mg/L	0.009	1		EPA 300.0	7/14/23	AEU
Nitrate as N	Less Than	0.008	mg/L	0.027	1		EPA 300.0	7/14/23	AEU
Nitrate-Nitrite as N	0.90	0.011	mg/L	0.036	1		EPA 300.0	7/14/23	AEU
Total Calcium	16900	110	ug/L	500	1		EPA 200.7	7/20/23	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	7/20/23	020
Total Magnesium	9300	180	ug/L	1000	1		EPA 200.7	7/20/23	020
Total Manganese	6.4	1.5	ug/L	5.0	1		EPA 200.7	7/20/23	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	7/20/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	7/20/23	020
Total Hardness as CaCO3	80.8	1.0	mg/L	5.4	1		Std Mtd 2340B	7/21/23	020

Sample Comments:

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Sample Description: **W50 Caledonia Catchup CCR Well Sample**  
Sample ID: AE67714 Sample Collection Date/Time: 07/13/2023 13:37  
Sample Received: 07/13/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	43.58	0.05	feet		1		H2OD	7/13/23	RAMBOLL
Field Conductivity	339	0	umhos		1		FCOND25	7/13/23	RAMBOLL
Field pH	7.5	0.1	Units	0.1	1		FIELDPH	7/13/23	RAMBOLL
Nitrite as N	0.91	0.003	mg/L	0.009	1		EPA 300.0	7/14/23	AEU
Nitrate as N	0.032	0.008	mg/L	0.027	1		EPA 300.0	7/14/23	AEU
Nitrate-Nitrite as N	0.94	0.011	mg/L	0.036	1		EPA 300.0	7/14/23	AEU

Report Date: Wednesday, January 24, 2024

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

Sample Description: **W50 Caledonia Catchup CCR Well Sample**  
 Sample ID: AE67714 Sample Collection Date/Time: 07/13/2023 13:37  
 Sample Received: 07/13/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Calcium	29000	110	ug/L	500	1		EPA 200.7	7/21/23	020
Total Copper	5.9	3.4	ug/L	10.0	1	J	EPA 200.7	7/21/23	020
Total Magnesium	11200	180	ug/L	1000	1		EPA 200.7	7/21/23	020
Total Manganese	79.1	1.5	ug/L	5.0	1		EPA 200.7	7/21/23	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	7/21/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	7/21/23	020
Total Hardness as CaCO3	118	1.0	mg/L	5.4	1		Std Mtd 2340B	7/20/23	020
Total Barium	37.9	1.5	ug/L	5.0	1		EPA 200.7	7/20/21	020
Total Beryllium	Less Than	0.53	ug/L	4.0	1		EPA 200.7	7/20/21	020
Total Cadmium	Less Than	1.3	ug/L	5.0	1		EPA 200.7	7/20/21	020
Total Chromium	Less Than	2.5	ug/L	10.0	1		EPA 200.7	7/20/21	020
Total Cobalt	Less Than	1.4	ug/L	5.0	1		EPA 200.7	7/20/21	020
Total Molybdenum	35.5	2.4	ug/L	10.0	1		EPA 200.7	7/20/21	020
Total Lithium	4.7	0.22	ug/L	1.0	1		EPA 200.8	7/21/23	020
Total Arsenic	1.2	0.28	ug/L	1.0	1		EPA 200.8	7/21/23	020
Total Selenium	Less Than	0.32	ug/L	1.1	1		EPA 200.8	7/21/23	020
Total Antimony	0.76	0.15	ug/L	1.0	1	J	EPA 200.8	7/21/23	020
Total Thallium	0.17	0.14	ug/L	1.0	1	J	EPA 200.8	7/21/23	020
Total Lead	1.3	0.24	ug/L	1.0	1		EPA 200.8	7/21/23	020

Sample Comments:

Sample Description: **QAQC01 Caledonia Catchup CCR Well Sample**  
 Sample ID: AE67715 Sample Collection Date/Time: 07/13/2023 13:42  
 Sample Received: 07/13/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Nitrite as N	0.90	0.003	mg/L	0.009	1		EPA 300.0	7/14/23	AEU
Nitrate as N	0.082	0.008	mg/L	0.027	1		EPA 300.0	7/14/23	AEU
Nitrate-Nitrite as N	0.98	0.011	mg/L	0.036	1		EPA 300.0	7/14/23	AEU
Total Calcium	28500	110	ug/L	500	1		EPA 200.7	7/20/23	020
Total Copper	6.5	3.4	ug/L	10.0	1	J	EPA 200.7	7/20/23	020
Total Magnesium	11000	180	ug/L	1000	1		EPA 200.7	7/20/23	020
Total Manganese	79.8	1.5	ug/L	5.0	1		EPA 200.7	7/20/23	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	7/20/23	020
Total Zinc	14.1	11.6	ug/L	40.0	1	J	EPA 200.7	7/20/23	020
Total Hardness as CaCO3	116	1.0	mg/L	5.4	1		Std Mtd 2340B	7/20/23	020
Total Barium	35.1	1.5	ug/L	5.0	1		EPA 200.7	7/20/21	020
Total Beryllium	Less Than	0.53	ug/L	4.0	1		EPA 200.7	7/20/21	020
Total Cadmium	Less Than	1.3	ug/L	5.0	1		EPA 200.7	7/20/21	020
Total Chromium	Less Than	2.5	ug/L	10.0	1		EPA 200.7	7/20/21	020
Total Cobalt	Less Than	1.4	ug/L	5.0	1		EPA 200.7	7/20/21	020
Total Molybdenum	35.7	2.4	ug/L	10.0	1		EPA 200.7	7/20/21	020
Total Lithium	4.5	0.22	ug/L	1.0	1		EPA 200.8	7/21/23	020

Report Date: Wednesday, January 24, 2024

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

Sample Description: **QAQC01 Caledonia Catchup CCR Well Sample**  
Sample ID: AE67715 Sample Collection Date/Time: 07/13/2023 13:42  
Sample Received: 07/13/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Arsenic	0.87	0.28	ug/L	1.0	1	J	EPA 200.8	7/21/23	020
Total Selenium	Less Than	0.32	ug/L	1.1	1		EPA 200.8	7/21/23	020
Total Antimony	0.50	0.15	ug/L	1.0	1	J	EPA 200.8	7/21/23	020
Total Thallium	Less Than	0.14	ug/L	1.0	1		EPA 200.8	7/21/23	020
Total Lead	0.98	0.24	ug/L	1.0	1	J	EPA 200.8	7/21/23	020

Sample Comments:

Sample Description: **W08D Caledonia Catchup CCR Well Sample**  
Sample ID: AE67716 Sample Collection Date/Time: 07/13/2023 14:06  
Sample Received: 07/13/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	47.11	0.05	feet		1		H2OD	7/13/23	RAMBOLL
Field Conductivity	568	0	umhos		1		FCOND25	7/13/23	RAMBOLL
Field pH	7.4	0.1	Units	0.1	1		FIELDPH	7/13/23	RAMBOLL
Nitrite as N	0.73	0.003	mg/L	0.009	1		EPA 300.0	7/14/23	AEU
Nitrate as N	0.0027	0.008	mg/L	0.027	1		EPA 300.0	7/14/23	AEU
Nitrate-Nitrite as N	0.74	0.011	mg/L	0.036	1		EPA 300.0	7/14/23	AEU
Total Calcium	48600	110	ug/L	500	1		EPA 200.7	7/20/23	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	7/20/23	020
Total Magnesium	22100	180	ug/L	1000	1		EPA 200.7	7/20/23	020
Total Manganese	159	1.5	ug/L	5.0	1		EPA 200.7	7/20/23	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	7/20/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	7/20/23	020
Total Hardness as CaCO3	212	1.0	mg/L	5.4	1		Std Mtd 2340B	7/20/23	020

Sample Comments:

Sample Description: **EB1 Caledonia Catchup CCR Well Sample**  
Sample ID: AE67717 Sample Collection Date/Time: 07/13/2023 14:20  
Sample Received: 07/13/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Conductivity	19.0	0	umhos		1		FCOND25	7/13/23	RAMBOLL
Field pH	8.2	0.1	Units	0.1	1		FIELDPH	7/13/23	RAMBOLL
Nitrite as N	0.14	0.003	mg/L	0.009	1		EPA 300.0	7/14/23	AEU
Nitrate as N	Less Than	0.008	mg/L	0.027	1		EPA 300.0	7/14/23	AEU
Nitrate-Nitrite as N	0.14	0.011	mg/L	0.036	1		EPA 300.0	7/14/23	AEU
Total Calcium	Less Than	110	ug/L	500	1		EPA 200.7	7/20/23	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	7/20/23	020
Total Magnesium	Less Than	180	ug/L	1000	1		EPA 200.7	7/20/23	020

Report Date: Wednesday, January 24, 2024

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

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Sample Description: **EB1 Caledonia Catchup CCR Well Sample**  
Sample ID: AE67717 Sample Collection Date/Time: 07/13/2023 14:20  
Sample Received: 07/13/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Manganese	Less Than	1.5	ug/L	5.0	1		EPA 200.7	7/20/23	020
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	7/20/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	7/20/23	020
Total Hardness as CaCO3	Less Than	1.0	mg/L	5.4	1		Std Mtd 2340B	7/20/23	020
Total Barium	Less Than	1.5	ug/L	5.0	1		EPA 200.7	7/20/21	020
Total Beryllium	Less Than	0.53	ug/L	4.0	1		EPA 200.7	7/20/21	020
Total Cadmium	Less Than	1.3	ug/L	5.0	1		EPA 200.7	7/20/21	020
Total Chromium	Less Than	2.5	ug/L	10.0	1		EPA 200.7	7/20/21	020
Total Cobalt	Less Than	1.4	ug/L	5.0	1		EPA 200.7	7/20/21	020
Total Molybdenum	Less Than	2.4	ug/L	10.0	1		EPA 200.7	7/20/21	020
Total Lithium	Less Than	0.22	ug/L	1.0	1		EPA 200.8	7/21/23	020
Total Arsenic	Less Than	0.28	ug/L	1.0	1		EPA 200.8	7/21/23	020
Total Selenium	Less Than	0.32	ug/L	1.1	1		EPA 200.8	7/21/23	020
Total Antimony	Less Than	0.15	ug/L	1.0	1		EPA 200.8	7/21/23	020
Total Thallium	Less Than	0.14	ug/L	1.0	1		EPA 200.8	7/21/23	020
Total Lead	Less Than	0.24	ug/L	1.0	1		EPA 200.8	7/21/23	020

Sample Comments:

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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: **W08D Caledonia CCR Well Catchup Sample**  
 Sample ID: AE68266 Sample Collection Date/Time: 08/14/2023 11:41  
 Sample Received: 08/15/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	47.17	0.05	feet		1		H2OD	8/14/23	RAMBOLL
Field Temperature	14	0.1	Degrees t		1		TEMP	8/14/23	RAMBOLL
Field Conductivity	698	0	umhos		1		FCOND25	8/14/23	RAMBOLL
Field pH	8.2	0.1	Units	0.1	1		FIELDPH	8/14/23	RAMBOLL
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	8/17/23	020
Total Calcium	48300	114	ug/L	500	1		EPA 200.7	8/17/23	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	8/17/23	020
Total Magnesium	21500	182	ug/L	1000	1		EPA 200.7	8/17/23	020
Total Manganese	149	1.5	ug/L	5.0	1		EPA 200.7	8/17/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	8/17/23	020
Total Hardness as CaCO3	209	1.0	mg/L	5.4	1		Std Mtd 2340B	8/17/23	020
Nitrite as N	1.31	0.003	mg/L	0.009	1		EPA 300.0	8/16/23	CMW
Nitrate as N	Less Than	0.008	mg/L	0.027	1		EPA 300.0	8/16/23	CMW
Nitrate-Nitrite as N	1.31	0.011	mg/L	0.036	1		EPA 300.0	8/16/23	CMW

Sample Comments:

Sample Description: **W09D Caledonia CCR Well Catchup Sample**  
 Sample ID: AE68267 Sample Collection Date/Time: 08/14/2023 10:49  
 Sample Received: 08/15/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	56.87	0.05	feet		1		H2OD	8/14/23	RAMBOLL
Field Temperature	12	0.1	Degrees t		1		TEMP	8/14/23	RAMBOLL
Field Conductivity	316	0	umhos		1		FCOND25	8/14/23	RAMBOLL
Field pH	8.8	0.1	Units	0.1	1		FIELDPH	8/14/23	RAMBOLL
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	8/17/23	020
Total Calcium	18100	114	ug/L	500	1		EPA 200.7	8/17/23	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	8/17/23	020
Total Magnesium	9810	182	ug/L	1000	1		EPA 200.7	8/17/23	020
Total Manganese	7.4	1.5	ug/L	5.0	1		EPA 200.7	8/17/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	8/17/23	020
Total Hardness as CaCO3	85.7	1.0	mg/L	5.4	1		Std Mtd 2340B	8/17/23	020
Nitrite as N	1.39	0.003	mg/L	0.009	1		EPA 300.0	8/16/23	CMW
Nitrate as N	0.068	0.008	mg/L	0.027	1		EPA 300.0	8/16/23	CMW
Nitrate-Nitrite as N	1.46	0.011	mg/L	0.036	1		EPA 300.0	8/16/23	CMW

Report Date: Wednesday, January 24, 2024

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

Sample Comments:

Sample Description: **W10D Caledonia CCR Well Catchup Sample**  
 Sample ID: AE68268 Sample Collection Date/Time: 08/14/2023 10:15  
 Sample Received: 08/15/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	53.30	0.05	feet		1		H2OD	8/14/23	RAMBOLL
Field Temperature	12	0.1	Degrees t		1		TEMP	8/14/23	RAMBOLL
Field Conductivity	344	0	umhos		1		FCOND25	8/14/23	RAMBOLL
Field pH	8.6	0.1	Units	0.1	1		FIELDPH	8/14/23	RAMBOLL
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	8/17/23	020
Total Calcium	20300	114	ug/L	500	1		EPA 200.7	8/17/23	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	8/17/23	020
Total Magnesium	7800	182	ug/L	1000	1		EPA 200.7	8/17/23	020
Total Manganese	18.7	1.5	ug/L	5.0	1		EPA 200.7	8/17/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	8/17/23	020
Total Hardness as CaCO3	82.9	1.0	mg/L	5.4	1		Std Mtd 2340B	8/17/23	020
Nitrite as N	1.36	0.003	mg/L	0.009	1		EPA 300.0	8/16/23	CMW
Nitrate as N	Less Than	0.008	mg/L	0.027	1		EPA 300.0	8/16/23	CMW
Nitrate-Nitrite as N	1.36	0.011	mg/L	0.036	1		EPA 300.0	8/16/23	CMW

Sample Comments:

Sample Description: **W46D Caledonia CCR Well Catchup Sample**  
 Sample ID: AE68269 Sample Collection Date/Time: 08/14/2023 08:51  
 Sample Received: 08/15/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	50.45	0.05	feet		1		H2OD	8/14/23	RAMBOLL
Field Temperature	17	0.1	Degrees t		1		TEMP	8/14/23	RAMBOLL
Field Conductivity	392	0	umhos		1		FCOND25	8/14/23	RAMBOLL
Field pH	7.9	0.1	Units	0.1	1		FIELDPH	8/14/23	RAMBOLL
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	8/17/23	020
Total Calcium	25600	114	ug/L	500	1		EPA 200.7	8/17/23	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	8/17/23	020
Total Magnesium	14800	182	ug/L	1000	1		EPA 200.7	8/17/23	020
Total Manganese	33.8	1.5	ug/L	5.0	1		EPA 200.7	8/17/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	8/17/23	020
Total Hardness as CaCO3	125	1.0	mg/L	5.4	1		Std Mtd 2340B	8/17/23	020
Nitrite as N	1.49	0.003	mg/L	0.009	1		EPA 300.0	8/16/23	CMW
Nitrate as N	0.018	0.008	mg/L	0.027	1	J	EPA 300.0	8/16/23	CMW
Nitrate-Nitrite as N	1.51	0.011	mg/L	0.036	1		EPA 300.0	8/16/23	CMW

Report Date: Wednesday, January 24, 2024

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

Sample Comments:

Sample Description: **W48 Caledonia CCR Well Catchup Sample**  
Sample ID: AE68270 Sample Collection Date/Time: 08/14/2023 09:40  
Sample Received: 08/15/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	63.52	0.05	feet		1		H2OD	8/14/23	RAMBOLL
Field Temperature	14	0.1	Degrees C		1		TEMP	8/14/23	RAMBOLL
Field Conductivity	367	0	umhos		1		FCOND25	8/14/23	RAMBOLL
Field pH	8.6	0.1	Units	0.1	1		FIELDPH	8/14/23	RAMBOLL
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	8/17/23	020
Total Calcium	26700	114	ug/L	500	1		EPA 200.7	8/17/23	020
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	8/17/23	020
Total Magnesium	16400	182	ug/L	1000	1		EPA 200.7	8/17/23	020
Total Manganese	15.3	1.5	ug/L	5.0	1		EPA 200.7	8/17/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	8/17/23	020
Total Hardness as CaCO3	134	1.0	mg/L	5.4	1		Std Mtd 2340B	8/17/23	020
Nitrite as N	1.98	0.003	mg/L	0.009	1		EPA 300.0	8/16/23	CMW
Nitrate as N	Less Than	0.008	mg/L	0.027	1		EPA 300.0	8/16/23	CMW
Nitrate-Nitrite as N	1.98	0.011	mg/L	0.036	1		EPA 300.0	8/16/23	CMW

Sample Comments:

Sample Description: **W49 Caledonia CCR Well Catchup Sample**  
Sample ID: AE68271 Sample Collection Date/Time: 08/14/2023 13:35  
Sample Received: 08/15/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	66.63	0.05	feet		1		H2OD	8/14/23	RAMBOLL
Field Temperature	18	0.1	Degrees C		1		TEMP	8/14/23	RAMBOLL
Field Conductivity	357	0	umhos		1		FCOND25	8/14/23	RAMBOLL
Field pH	8.7	0.1	Units	0.1	1		FIELDPH	8/14/23	RAMBOLL

Sample Comments:

Sample Description: **W50 Caledonia CCR Well Catchup Sample**  
Sample ID: AE68272 Sample Collection Date/Time: 08/14/2023 12:21  
Sample Received: 08/15/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	43.75	0.05	feet		1		H2OD	8/14/23	RAMBOLL
Field Temperature	16	0.1	Degrees C		1		TEMP	8/14/23	RAMBOLL
Field Conductivity	457	0	umhos		1		FCOND25	8/14/23	RAMBOLL



Report Date: Wednesday, January 24, 2024

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

Sample Description: **W50 Caledonia CCR Well Catchup Sample**  
Sample ID: AE68272 Sample Collection Date/Time: 08/14/2023 12:21  
Sample Received: 08/15/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field pH	8.1	0.1	Units	0.1	1		FIELDPH	8/14/23	RAMBOLL
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	8/17/23	020
Total Calcium	30200	114	ug/L	500	1		EPA 200.7	8/17/23	020
Total Copper	4.4	3.4	ug/L	10.0	1	J	EPA 200.7	8/17/23	020
Total Magnesium	10700	182	ug/L	1000	1		EPA 200.7	8/17/23	020
Total Manganese	41.0	1.5	ug/L	5.0	1		EPA 200.7	8/17/23	020
Total Zinc	42.7	11.6	ug/L	40.0	1		EPA 200.7	8/17/23	020
Total Antimony	0.37	0.15	ug/L	1.0	1	J	EPA 200.8	8/18/23	020
Total Arsenic	0.71	0.28	ug/L	1.0	1	J	EPA 200.8	8/18/23	020
Total Lead	0.78	0.24	ug/L	1.0	1	J	EPA 200.8	8/18/23	020
Total Selenium	Less Than	0.32	ug/L	1.1	1		EPA 200.8	8/18/23	020
Total Thallium	Less Than	0.14	ug/L	1.0	1		EPA 200.8	8/18/23	020
Total Hardness as CaCO3	120	1.0	mg/L	5.4	1		Std Mtd 2340B	8/17/23	020
Nitrite as N	1.41	0.003	mg/L	0.009	1		EPA 300.0	8/16/23	CMW
Nitrate as N	0.025	0.008	mg/L	0.027	1	J	EPA 300.0	8/16/23	CMW
Nitrate-Nitrite as N	1.43	0.011	mg/L	0.036	1		EPA 300.0	8/16/23	CMW
Total Mercury	1.30	0.17	ng/L	0.57	1		EPA 1631E	8/22/23	JLM
Total Mercury Field Duplicate	1.56	0.17	ng/L	0.57	1		EPA 1631E	8/22/23	JLM

Sample Comments:

Sample Description: **QAQC1 Caledonia CCR Well Catchup Sample**  
Sample ID: AE68273 Sample Collection Date/Time: 08/14/2023 11:26  
Sample Received: 08/15/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	8/17/23	020
Total Calcium	29300	114	ug/L	500	1		EPA 200.7	8/17/23	020
Total Copper	3.5	3.4	ug/L	10.0	1	J	EPA 200.7	8/17/23	020
Total Magnesium	10500	182	ug/L	1000	1		EPA 200.7	8/17/23	020
Total Manganese	46.5	1.5	ug/L	5.0	1		EPA 200.7	8/17/23	020
Total Zinc	43.6	11.6	ug/L	40.0	1		EPA 200.7	8/17/23	020
Total Hardness as CaCO3	117	1.0	mg/L	5.4	1		Std Mtd 2340B	8/17/23	020
Nitrite as N	1.36	0.003	mg/L	0.009	1		EPA 300.0	8/16/23	CMW
Nitrate as N	0.37	0.008	mg/L	0.027	1		EPA 300.0	8/16/23	CMW
Nitrate-Nitrite as N	1.73	0.011	mg/L	0.036	1		EPA 300.0	8/16/23	CMW

Sample Comments:

Report Date: Wednesday, January 24, 2024

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

Sample Description: **EB1 Caledonia CCR Well Catchup Sample**  
 Sample ID: AE68274 Sample Collection Date/Time: 08/14/2023 14:50  
 Sample Received: 08/15/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Temperature	11	0.1	Degrees t		1		TEMP	8/14/23	RAMBOLL
Field Conductivity	36	0	umhos		1		FCOND25	8/14/23	RAMBOLL
Field pH	8.1	0.1	Units	0.1	1		FIELDPH	8/14/23	RAMBOLL
Total Silver	Less Than	3.2	ug/L	10.0	1		EPA 200.7	8/17/23	020
Total Calcium	1690	114	ug/L	500	1		EPA 200.7	8/17/23	020
Total Copper	4.9	3.4	ug/L	10.0	1	J	EPA 200.7	8/17/23	020
Total Magnesium	803	182	ug/L	1000	1	J	EPA 200.7	8/17/23	020
Total Manganese	3.7	1.5	ug/L	5.0	1	J	EPA 200.7	8/17/23	020
Total Zinc	Less Than	11.6	ug/L	40.0	1		EPA 200.7	8/17/23	020
Total Antimony	Less Than	0.15	ug/L	1.0	1		EPA 200.8	8/18/23	020
Total Arsenic	Less Than	0.28	ug/L	1.0	1		EPA 200.8	8/18/23	020
Total Lead	Less Than	0.24	ug/L	1.0	1		EPA 200.8	8/18/23	020
Total Selenium	Less Than	0.32	ug/L	1.1	1		EPA 200.8	8/18/23	020
Total Thallium	Less Than	0.14	ug/L	1.0	1		EPA 200.8	8/18/23	020
Total Hardness as CaCO3	7.52	1.0	mg/L	5.4	1		Std Mtd 2340B	8/17/23	020
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	9/20/23	CMW
Nitrate as N	0.062	0.008	mg/L	0.027	1		EPA 300.0	8/16/23	CMW
Nitrate-Nitrite as N	0.062	0.011	mg/L	0.036	1		EPA 300.0	8/16/23	CMW
Total Mercury	1.43	0.17	ng/L	0.57	1		EPA 1631E	8/22/23	JLM

Sample Comments:

Sample Description: **W49 Caledonia CCR Well Sample**  
 Sample ID: AE68387 Sample Collection Date/Time: 08/17/2023 13:40  
 Sample Received: 08/18/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	66.2	0.05	feet		1		H2OD	8/17/23	RAMBOLL
Field Temperature	16	0.1	Degrees t		1		TEMP	8/17/23	RAMBOLL
Field Conductivity	403	0	umhos		1		FCOND25	8/17/23	RAMBOLL
Field pH	8.3	0.1	Units	0.1	1		FIELDPH	8/17/23	RAMBOLL
Total Copper	Less Than	3.4	ug/L	10.0	1		EPA 200.7	8/24/23	020
Total Manganese	49.3	1.5	ug/L	5.0	1		EPA 200.7	8/24/23	020
Total Hardness as CaCO3	73.3	1	mg/L	5.4	1		Std Mtd 2340B	8/24/23	020
Total Mercury	0.38	0.17	ng/L	0.57	1		EPA 1631E	8/25/23	JLM
Nitrite as N	Less Than	0.003	mg/L	0.009	1		EPA 300.0	8/18/23	CMW
Nitrate as N	Less Than	0.008	mg/L	0.027	1		EPA 300.0	8/18/23	CMW
Nitrate-Nitrite as N	Less Than	0.011	mg/L	0.036	1		EPA 300.0	8/18/23	CMW
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
Total Magnesium	7100	182	ug/L	1000	1		EPA 200.7	8/24/23	020
Total Calcium	17700	114	ug/L	500	1		EPA 200.7	8/24/23	020

Report Date: Wednesday, January 24, 2024

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

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Sample Comments:

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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: **W08D Caledonia CCR CATCHUP Well Sample**  
 Sample ID: AE69112 Sample Collection Date/Time: 09/27/2023 12:10  
 Sample Received: 09/27/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	50.35	0.05	feet		1		H2OD	9/27/23	RAMBOLL
Field Temperature	13	0.1	Degrees t		1		TEMP	9/27/23	RAMBOLL
Field Conductivity	695	0	umhos		1		FCOND25	9/27/23	RAMBOLL
Field pH	7.5	0.1	Units	0.1	1		FIELDPH	9/27/23	RAMBOLL
Total Manganese	164	1.5	ug/L	5.0	1		EPA 200.7	10/2/23	020

Sample Comments:

Sample Description: **W09D Caledonia CCR CATCHUP Well Sample**  
 Sample ID: AE69113 Sample Collection Date/Time: 09/27/2023 11:32  
 Sample Received: 09/27/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	56.68	0.05	feet		1		H2OD	9/27/23	RAMBOLL
Field Temperature	12	0.1	Degrees t		1		TEMP	9/27/23	RAMBOLL
Field Conductivity	332	0	umhos		1		FCOND25	9/27/23	RAMBOLL
Field pH	8.1	0.1	Units	0.1	1		FIELDPH	9/27/23	RAMBOLL
Total Manganese	7.4	1.5	ug/L	5.0	1		EPA 200.7	10/2/23	020

Sample Comments:

Sample Description: **W10D Caledonia CCR CATCHUP Well Sample**  
 Sample ID: AE69114 Sample Collection Date/Time: 09/27/2023 11:01  
 Sample Received: 09/27/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	53.38	0.05	feet		1		H2OD	9/27/23	RAMBOLL
Field Temperature	12	0.1	Degrees t		1		TEMP	9/27/23	RAMBOLL
Field Conductivity	344	0	umhos		1		FCOND25	9/27/23	RAMBOLL
Field pH	7.9	0.1	Units	0.1	1		FIELDPH	9/27/23	RAMBOLL
Total Manganese	18.5	1.5	ug/L	5.0	1		EPA 200.7	10/2/23	020

Report Date: Wednesday, January 24, 2024

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

Sample Comments:

Sample Description: **W46D Caledonia CCR CATCHUP Well Sample**  
Sample ID: AE69115 Sample Collection Date/Time: 09/27/2023 09:43  
Sample Received: 09/27/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	51.37	0.05	feet		1		H2OD	9/27/23	RAMBOLL
Field Temperature	12	0.1	Degrees t		1		TEMP	9/27/23	RAMBOLL
Field Conductivity	367	0	umhos		1		FCOND25	9/27/23	RAMBOLL
Field pH	7.5	0.1	Units	0.1	1		FIELDPH	9/27/23	RAMBOLL
Total Manganese	37.4	1.5	ug/L	5.0	1		EPA 200.7	10/2/23	020

Sample Comments:

Sample Description: **W48 Caledonia CCR CATCHUP Well Sample**  
Sample ID: AE69116 Sample Collection Date/Time: 09/27/2023 10:22  
Sample Received: 09/27/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	53.16	0.05	feet		1		H2OD	9/27/23	RAMBOLL
Field Temperature	12	0.1	Degrees t		1		TEMP	9/27/23	RAMBOLL
Field Conductivity	414	0	umhos		1		FCOND25	9/27/23	RAMBOLL
Field pH	7.9	0.1	Units	0.1	1		FIELDPH	9/27/23	RAMBOLL
Total Manganese	12.9	1.5	ug/L	5.0	1		EPA 200.7	10/2/23	020

Sample Comments:

Sample Description: **W49 Caledonia CCR CATCHUP Well Sample**  
Sample ID: AE69117 Sample Collection Date/Time: 09/27/2023 13:50  
Sample Received: 09/27/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	67.12	0.05	feet		1		H2OD	9/27/23	RAMBOLL
Field Temperature	15	0.1	Degrees t		1		TEMP	9/27/23	RAMBOLL
Field Conductivity	347	0	umhos		1		FCOND25	9/27/23	RAMBOLL
Field pH	7.8	0.1	Units	0.1	1		FIELDPH	9/27/23	RAMBOLL
Total Manganese	41.9	1.2	ug/L	4.0	1		EPA 200.7	10/2/23	020
Total Antimony	0.45	0.15	ug/L	1.0	1	J	EPA 200.8	10/2/23	020
Total Arsenic	0.63	0.28	ug/L	1.0	1	J	EPA 200.8	10/2/23	020
Total Lead	0.59	0.24	ug/L	1.0	1	J	EPA 200.8	10/2/23	020
Total Selenium	Less Than	0.32	ug/L	1.1	1		EPA 200.8	10/2/23	020
Total Thallium	Less Than	0.14	ug/L	1.0	1		EPA 200.8	10/2/23	020

Report Date: Wednesday, January 24, 2024

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

Sample Comments:

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Sample Description: **W50 Caledonia CCR CATCHUP Well Sample**  
Sample ID: AE69118 Sample Collection Date/Time: 09/27/2023 12:46  
Sample Received: 09/27/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	43.35	0.05	feet		1		H2OD	9/27/23	RAMBOLL
Field Temperature	13	0.1	Degrees C		1		TEMP	9/27/23	RAMBOLL
Field Conductivity	450	0	umhos		1		FCOND25	9/27/23	RAMBOLL
Field pH	7.6	0.1	Units	0.1	1		FIELDPH	9/27/23	RAMBOLL
Total Manganese	35.5	1.2	ug/L	4.0	1		EPA 200.7	10/2/23	020
Total Antimony	0.15	0.15	ug/L	1.0	1	J	EPA 200.8	10/2/23	020
Total Arsenic	0.53	0.28	ug/L	1.0	1	J	EPA 200.8	10/2/23	020
Total Lead	Less Than	0.24	ug/L	1.0	1		EPA 200.8	10/2/23	020
Total Selenium	Less Than	0.32	ug/L	1.1	1		EPA 200.8	10/2/23	020
Total Thallium	Less Than	0.14	ug/L	1.0	1		EPA 200.8	10/2/23	020

Sample Comments:

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Sample Description: **QAQC1 Caledonia CCR CATCHUP Well Sample**  
Sample ID: AE69119 Sample Collection Date/Time: 09/27/2023 12:51  
Sample Received: 09/27/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Manganese	35.8	1.2	ug/L	4.0	1		EPA 200.7	10/2/23	020
Total Antimony	0.16	0.15	ug/L	1.0	1	J	EPA 200.8	10/2/23	020
Total Arsenic	0.55	0.28	ug/L	1.0	1	J	EPA 200.8	10/2/23	020
Total Lead	0.45	0.24	ug/L	1.0	1	J	EPA 200.8	10/2/23	020
Total Selenium	Less Than	0.32	ug/L	1.1	1		EPA 200.8	10/2/23	020
Total Thallium	Less Than	0.14	ug/L	1.0	1		EPA 200.8	10/2/23	020

Sample Comments:

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Sample Description: **EB 1 Caledonia CCR CATCHUP Well Sample**  
Sample ID: AE69120 Sample Collection Date/Time: 09/27/2023 13:56  
Sample Received: 09/27/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Temperature	17	0.1	Degrees C		1		TEMP	9/27/23	RAMBOLL
Field Conductivity	20	0	umhos		1		FCOND25	9/27/23	RAMBOLL
Field pH	8.1	0.1	Units	0.1	1		FIELDPH	9/27/23	RAMBOLL
Total Manganese	3.9	1.2	ug/L	4.0	1	J	EPA 200.7	10/2/23	020
Total Antimony	Less Than	0.15	ug/L	1.0	1		EPA 200.8	10/2/23	020

Report Date: Wednesday, January 24, 2024

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

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Sample Description: **EB 1 Caledonia CCR CATCHUP Well Sample**  
Sample ID: AE69120 Sample Collection Date/Time: 09/27/2023 13:56  
Sample Received: 09/27/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Arsenic	Less Than	0.28	ug/L	1.0	1		EPA 200.8	10/2/23	020
Total Lead	Less Than	0.24	ug/L	1.0	1		EPA 200.8	10/2/23	020
Total Selenium	Less Than	0.32	ug/L	1.1	1		EPA 200.8	10/2/23	020
Total Thallium	Less Than	0.14	ug/L	1.0	1		EPA 200.8	10/2/23	020

Sample Comments:

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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: Tuesday, December 26, 2023

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

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Sample Description: **W08D Caledonia Landfill Semi Annual Sample**  
 Sample ID: AE69873 Sample Collection Date/Time: 11/06/2023 12:01  
 Sample Received: 11/08/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	43.80	0.05	feet		1		H2OD	11/6/23	RAMBOLL
Field Temperature	15	0.1	Degrees t		1		TEMP	11/6/23	RAMBOLL
Field Conductivity	780	0	umhos		1		FCOND25	11/6/23	RAMBOLL
Field pH	7.5	0.1	Units	0.1	1		FIELDPH	11/6/23	RAMBOLL
Total Alkalinity as CaCO3	155	5.0	mg/L	10.0	1		SM 2320 B-1997	11/15/23	020
Total Hardness as CaCO3	202	0.32	mg/L	1.7	1		StdMtd 2340B	11/15/23	020
Total Dissolved Solids	456	8.7	mg/L	20.0	1		Std Mtd 2540 C	11/13/23	020
Total Fluoride	1.4	0.48	mg/L	1.6	5	J	EPA 300.0	11/27/23	020
Total Chloride	11.4	3.0	mg/L	10.0	5		EPA 300.0	11/27/23	020
Total Sulfate	214	2.2	mg/L	10.0	5		EPA 300.0	11/30/23	020
Carbonate Ion	Less than	5.0	mg/L	10.0	1		CO3	11/15/23	020
Bicarbonate Ion	155	5.0	mg/L		1		HCO3	11/15/23	020
Dissolved Chloride	10.3	0.59	mg/L	2.0	1		EPA 300.0	11/27/23	020
Dissolved Sulfate	200	4.4	mg/L	20.0	10		EPA 300.0	11/27/23	020
Total Boron	436	30.3	ug/L	100	10		EPA 200.8	11/15/23	020
Total Sodium	72900	420	ug/L	2500	10	M0	EPA 200.8	11/15/23	020
Total Potassium	2790	237	ug/L	789	1		EPA 200.8	11/15/23	020
Total Magnesium	21400	31.2	ug/L	250	1		EPA 200.8	11/15/23	020
Total Calcium	45800	76.2	ug/L	254	1		EPA 200.8	11/15/23	020
Dissolved Calcium	51000	762	ug/L	2540	10	M0	EPA 200.8	11/16/23	020
Dissolved Magnesium	20900	31.2	ug/L	250	1		EPA 200.8	11/16/23	020
Dissolved Potassium	2900	237	ug/L	789	1		EPA 200.8	11/16/23	020
Dissolved Sodium	69900	420	ug/L	2500	10		EPA 200.8	11/16/23	020

Sample Comments:

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Sample Description: **W09D Caledonia Landfill Semi Annual Sample**  
 Sample ID: AE69874 Sample Collection Date/Time: 11/06/2023 10:31  
 Sample Received: 11/08/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	54.12	0.05	feet		1		H2OD	11/6/23	RAMBOLL
Field Temperature	12	0.1	Degrees t		1		TEMP	11/6/23	RAMBOLL
Field Conductivity	300	0	umhos		1		FCOND25	11/6/23	RAMBOLL
Field pH	8.0	0.1	Units	0.1	1		FIELDPH	11/6/23	RAMBOLL
Total Alkalinity as CaCO3	145	5.0	mg/L	10.0	1		SM 2320 B-1997	11/15/23	020



Report Date: Tuesday, December 26, 2023

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

Sample Description: **W09D Caledonia Landfill Semi Annual Sample**  
 Sample ID: AE69874 Sample Collection Date/Time: 11/06/2023 10:31  
 Sample Received: 11/08/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Hardness as CaCO3	87.3	0.32	mg/L	1.7	1		StdMtd 2340B	11/15/23	020
Total Dissolved Solids	206	8.7	mg/L	20.0	1		Std Mtd 2540 C	11/13/23	020
Total Fluoride	1.3	0.095	mg/L	0.32	1		EPA 300.0	11/27/23	020
Total Chloride	3.6	0.59	mg/L	2.0	1		EPA 300.0	11/27/23	020
Total Sulfate	34.6	0.44	mg/L	2.0	1		EPA 300.0	11/30/23	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	11/15/23	020
Bicarbonate Ion	145	5.0	mg/L	10.0	1		HCO3	11/15/23	020
Dissolved Chloride	3.9	0.59	mg/L	2.0	1		EPA 300.0	11/27/23	020
Dissolved Sulfate	34.3	0.44	mg/L	2.0	1		EPA 300.0	11/27/23	020
Total Boron	394	3.0	ug/L	10.0	1		EPA 200.8	11/15/23	020
Total Sodium	42400	42.0	ug/L	250	1		EPA 200.8	11/15/23	020
Total Potassium	920	237	ug/L	789	1		EPA 200.8	11/15/23	020
Total Magnesium	10800	31.2	ug/L	250	1		EPA 200.8	11/15/23	020
Total Calcium	17100	76.2	ug/L	254	1		EPA 200.8	11/15/23	020
Dissolved Calcium	16800	76.2	ug/L	254	1		EPA 200.8	11/21/23	020
Dissolved Magnesium	9840	31.2	ug/L	250	1		EPA 200.8	11/16/23	020
Dissolved Potassium	1000	237	ug/L	789	1		EPA 200.8	11/16/23	020
Dissolved Sodium	41900	42.0	ug/L	250	1		EPA 200.8	11/16/23	020

Sample Comments:

Sample Description: **W10D Caledonia Landfill Semi Annual Sample**  
 Sample ID: AE69875 Sample Collection Date/Time: 11/06/2023 09:02  
 Sample Received: 11/08/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	50.66	0.05	feet		1		H2OD	11/6/23	RAMBOLL
Field Temperature	11	0.1	Degrees t		1		TEMP	11/6/23	RAMBOLL
Field Conductivity	380	0	umhos		1		FCOND25	11/6/23	RAMBOLL
Field pH	7.6	0.1	Units	0.1	1		FIELDPH	11/6/23	RAMBOLL
Total Alkalinity as CaCO3	143	5.0	mg/L	10.0	1		SM 2320 B-1997	11/15/23	020
Total Hardness as CaCO3	82.0	0.32	mg/L	1.7	1		StdMtd 2340B	11/15/23	020
Total Dissolved Solids	194	8.7	mg/L	20.0	1		Std Mtd 2540 C	11/13/23	020
Total Fluoride	1.3	0.095	mg/L	0.32	1		EPA 300.0	11/27/23	020
Total Chloride	3.7	0.59	mg/L	2.0	1		EPA 300.0	11/27/23	020
Total Sulfate	42.8	2.2	mg/L	10.0	5		EPA 300.0	11/30/23	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	11/15/23	020
Bicarbonate Ion	143	5.0	mg/L	10.0	1		HCO3	11/15/23	020
Dissolved Chloride	4.1	0.59	mg/L	2.0	1	B	EPA 300.0	11/27/23	020
Dissolved Sulfate	42.5	0.44	mg/L	2.0	1		EPA 300.0	11/27/23	020
Total Boron	411	3.0	ug/L	10.0	1		EPA 200.8	11/15/23	020
Total Sodium	44900	42.0	ug/L	250	1		EPA 200.8	11/15/23	020
Total Potassium	1320	237	ug/L	789	1		EPA 200.8	11/15/23	020
Total Magnesium	8290	31.2	ug/L	250	1		EPA 200.8	11/15/23	020

Report Date: Tuesday, December 26, 2023

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

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Sample Description: **W10D Caledonia Landfill Semi Annual Sample**  
Sample ID: AE69875 Sample Collection Date/Time: 11/06/2023 09:02  
Sample Received: 11/08/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Calcium	19200	76.2	ug/L	254	1		EPA 200.8	11/15/23	020
Dissolved Calcium	23400	76.2	ug/L	254	1		EPA 200.8	11/16/23	020
Dissolved Magnesium	8020	31.2	ug/L	250	1		EPA 200.8	11/16/23	020
Dissolved Potassium	1380	237	ug/L	789	1		EPA 200.8	11/16/23	020
Dissolved Sodium	43100	42.0	ug/L	250	1		EPA 200.8	11/16/23	020

Sample Comments:

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Sample Description: **W46D Caledonia Landfill Semi Annual Sample**  
Sample ID: AE69876 Sample Collection Date/Time: 11/06/2023 14:55  
Sample Received: 11/08/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	46.29	0.05	feet		1		H2OD	11/6/23	RAMBOLL
Field Temperature	12	0.1	Degrees t		1		TEMP	11/6/23	RAMBOLL
Field Conductivity	410	0	umhos		1		FCOND25	11/6/23	RAMBOLL
Field pH	7.6	0.1	Units	0.1	1		FIELDPH	11/6/23	RAMBOLL
Total Alkalinity as CaCO3	161	5.0	mg/L	10.0	1		SM 2320 B-1997	11/15/23	020
Total Hardness as CaCO3	119	0.32	mg/L	1.7	1		StdMtd 2340B	11/15/23	020
Total Dissolved Solids	202	8.7	mg/L	20.0	1		Std Mtd 2540 C	11/13/23	020
Total Fluoride	1.2	0.095	mg/L	0.32	1		EPA 300.0	11/27/23	020
Total Chloride	5.2	0.59	mg/L	2.0	1		EPA 300.0	11/27/23	020
Total Sulfate	37.7	2.2	mg/L	10.0	5		EPA 300.0	11/30/23	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	11/15/23	020
Bicarbonate Ion	161	5.0	mg/L	10.0	1		HCO3	11/15/23	020
Dissolved Chloride	5.7	0.59	mg/L	2.0	1	B	EPA 300.0	11/27/23	020
Dissolved Sulfate	37.6	0.44	mg/L	2.0	1		EPA 300.0	11/27/23	020
Total Boron	344	3.0	ug/L	10.0	1		EPA 200.8	11/15/23	020
Total Sodium	34900	42.0	ug/L	250	1		EPA 200.8	11/15/23	020
Total Potassium	1580	237	ug/L	789	1		EPA 200.8	11/15/23	020
Total Magnesium	14700	31.2	ug/L	250	1		EPA 200.8	11/15/23	020
Total Calcium	23400	76.2	ug/L	254	1		EPA 200.8	11/15/23	020
Dissolved Calcium	26200	76.2	ug/L	254	1		EPA 200.8	11/16/23	020
Dissolved Magnesium	13900	31.2	ug/L	250	1		EPA 200.8	11/16/23	020
Dissolved Potassium	1710	237	ug/L	789	1		EPA 200.8	11/16/23	020
Dissolved Sodium	33200	42.0	ug/L	250	1		EPA 200.8	11/16/23	020

Sample Comments:

Report Date: Tuesday, December 26, 2023

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

Sample Description: **W48 Caledonia Landfill Semi Annual Sample**  
 Sample ID: AE69877 Sample Collection Date/Time: 11/07/2023 12:13  
 Sample Received: 11/08/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	59.03	0.05	feet		1		H2OD	11/7/23	RAMBOLL
Field Temperature	11	50	Degrees C		460		TEMP	11/7/23	RAMBOLL
Field Conductivity	460	0	umhos		1		FCOND25	11/7/23	RAMBOLL
Field pH	7.8	0.1	Units	0.1	1		FIELDPH	11/7/23	RAMBOLL
Total Alkalinity as CaCO3	233	5.0	mg/L	10.0	1		SM 2320 B-1997	11/15/23	020
Total Hardness as CaCO3	138	0.32	mg/L	1.7	1		StdMtd 2340B	11/15/23	020
Total Dissolved Solids	234	8.7	mg/L	20.0	1		Std Mtd 2540 C	11/13/23	020
Total Fluoride	0.95	0.095	mg/L	0.32	1		EPA 300.0	11/27/23	020
Total Chloride	3.7	0.59	mg/L	2.0	1		EPA 300.0	11/27/23	020
Total Sulfate	Less Than	0.44	mg/L	2.0	1		EPA 300.0	11/30/23	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	11/15/23	020
Bicarbonate Ion	233	5.0	mg/L	10.0	1		HCO3	11/15/23	020
Dissolved Chloride	4.5	0.59	mg/L	2.0	1	B	EPA 300.0	11/27/23	020
Dissolved Sulfate	0.69	0.44	mg/L	2.0	1	J	EPA 300.0	11/27/23	020
Total Boron	375	3.0	ug/L	10.0	1		EPA 200.8	11/15/23	020
Total Sodium	48400	42.0	ug/L	250	1		EPA 200.8	11/15/23	020
Total Potassium	1490	237	ug/L	789	1		EPA 200.8	11/15/23	020
Total Magnesium	18100	31.2	ug/L	250	1		EPA 200.8	11/15/23	020
Total Calcium	25300	76.2	ug/L	254	1		EPA 200.8	11/15/23	020
Dissolved Calcium	29100	76.2	ug/L	254	1		EPA 200.8	11/16/23	020
Dissolved Magnesium	16000	31.2	ug/L	250	1		EPA 200.8	11/16/23	020
Dissolved Potassium	1990	237	ug/L	789	1		EPA 200.8	11/16/23	020
Dissolved Sodium	43100	42.0	ug/L	250	1		EPA 200.8	11/16/23	020

Sample Comments:

Sample Description: **W49 Caledonia Landfill Semi Annual Sample**  
 Sample ID: AE69878 Sample Collection Date/Time: 11/07/2023 13:40  
 Sample Received: 11/08/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	64.18	0.05	feet		1		H2OD	11/7/23	RAMBOLL
Field Temperature	11	0.1	Degrees C		1		TEMP	11/7/23	RAMBOLL
Field Conductivity	380	0	umhos		1		FCOND25	11/7/23	RAMBOLL
Field pH	7.4	0.1	Units	0.1	1		FIELDPH	11/7/23	RAMBOLL
Total Alkalinity as CaCO3	132	5.0	mg/L	10.0	1		SM 2320 B-1997	11/15/23	020
Total Hardness as CaCO3	72.5	0.32	mg/L	1.7	1		StdMtd 2340B	11/15/23	020
Total Dissolved Solids	200	8.7	mg/L	20.0	1		Std Mtd 2540 C	11/13/23	020
Total Fluoride	1.6	0.48	mg/L	1.6	5	J	EPA 300.0	11/29/23	020
Total Chloride	5.6	3.0	mg/L	10.0	5	J	EPA 300.0	11/29/23	020
Total Sulfate	48.2	2.2	mg/L	10.0	5		EPA 300.0	11/29/23	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	11/15/23	020
Bicarbonate Ion	132	5.0	mg/L	10.0	1		HCO3	11/15/23	020
Dissolved Chloride	4.6	0.59	mg/L	2.0	1	B	EPA 300.0	11/27/23	020

Report Date: Tuesday, December 26, 2023

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

Sample Description: **W49 Caledonia Landfill Semi Annual Sample**  
 Sample ID: AE69878 Sample Collection Date/Time: 11/07/2023 13:40  
 Sample Received: 11/08/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Dissolved Sulfate	50.9	0.44	mg/L	2.0	1		EPA 300.0	11/27/23	020
Total Boron	429	3.0	ug/L	10.0	1		EPA 200.8	11/15/23	020
Total Sodium	53500	42.0	ug/L	250	1		EPA 200.8	11/15/23	020
Total Potassium	849	237	ug/L	789	1		EPA 200.8	11/15/23	020
Total Magnesium	7730	31.2	ug/L	250	1		EPA 200.8	11/15/23	020
Total Calcium	16300	76.2	ug/L	254	1		EPA 200.8	11/15/23	020
Dissolved Calcium	19500	76.2	ug/L	254	1		EPA 200.8	11/16/23	020
Dissolved Magnesium	7880	31.2	ug/L	250	1		EPA 200.8	11/16/23	020
Dissolved Potassium	838	237	ug/L	789	1		EPA 200.8	11/16/23	020
Dissolved Sodium	45900	42.0	ug/L	250	1		EPA 200.8	11/16/23	020
Total Lithium	2.6	0.22	ug/L	1.0	1		EPA 200.8	11/15/23	020
Dissolved Lithium	2.7	0.22	ug/L	1.0	1		EPA 200.8	11/16/23	020

Sample Comments:

Sample Description: **W50 Caledonia Landfill Semi Annual Sample**  
 Sample ID: AE69879 Sample Collection Date/Time: 11/07/2023 14:36  
 Sample Received: 11/08/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Water Level	40.98	0.05	feet		1		H2OD	11/7/23	RAMBOLL
Field Temperature	11	0.1	Degrees t		1		TEMP	11/7/23	RAMBOLL
Field Conductivity	500	0	umhos		1		FCOND25	11/7/23	RAMBOLL
Field pH	7.4	0.1	Units	0.1	1		FIELDPH	11/7/23	RAMBOLL
Total Alkalinity as CaCO3	154	5.0	mg/L	10.0	1		SM 2320 B-1997	11/15/23	020
Total Hardness as CaCO3	110	0.32	mg/L	1.7	1		StdMtd 2340B	11/15/23	020
Total Dissolved Solids	266	8.7	mg/L	20.0	1		Std Mtd 2540 C	11/13/23	020
Total Fluoride	2.2	1.9	mg/L	6.3	20	J	EPA 300.0	11/29/23	020
Total Chloride	13.1	11.8	mg/L	40.0	20	J	EPA 300.0	11/29/23	020
Total Sulfate	86.1	8.9	mg/L	40.0	20		EPA 300.0	11/29/23	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	11/15/23	020
Bicarbonate Ion	154	5.0	mg/L	10.0	1		HCO3	11/15/23	020
Dissolved Chloride	5.6	0.59	mg/L	2.0	1		EPA 300.0	11/27/23	020
Dissolved Sulfate	79.1	8.9	mg/L	40.0	20		EPA 300.0	11/29/23	020
Total Boron	479	3.0	ug/L	10.0	1		EPA 200.8	11/15/23	020
Total Sodium	59300	42.0	ug/L	250	1		EPA 200.8	11/15/23	020
Total Potassium	1480	237	ug/L	789	1		EPA 200.8	11/15/23	020
Total Magnesium	10600	31.2	ug/L	250	1		EPA 200.8	11/15/23	020
Total Calcium	26500	76.2	ug/L	254	1		EPA 200.8	11/15/23	020
Dissolved Calcium	27500	76.2	ug/L	254	1		EPA 200.8	11/16/23	020
Dissolved Magnesium	9320	31.2	ug/L	250	1		EPA 200.8	11/16/23	020
Dissolved Potassium	1470	237	ug/L	789	1		EPA 200.8	11/16/23	020
Dissolved Sodium	52800	42.0	ug/L	250	1		EPA 200.8	11/16/23	020
Total Lithium	4.4	0.22	ug/L	1.0	1		EPA 200.8	11/15/23	020

Report Date: Tuesday, December 26, 2023

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

Sample Description: **W50 Caledonia Landfill Semi Annual Sample**  
 Sample ID: AE69879 Sample Collection Date/Time: 11/07/2023 14:36  
 Sample Received: 11/08/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Dissolved Lithium	3.9	0.22	ug/L	1.0	1		EPA 200.8	11/16/23	020

Sample Comments:

Sample Description: **QAQC Caledonia Landfill Semi Annual Sample**  
 Sample ID: AE69880 Sample Collection Date/Time: 11/07/2023 14:41  
 Sample Received: 11/08/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Total Alkalinity as CaCO3	156	5.0	mg/L	10.0	1		SM 2320 B-1997	11/15/23	020
Total Hardness as CaCO3	112	0.32	mg/L	1.7	1		StdMtd 2340B	11/15/23	020
Total Dissolved Solids	258	8.7	mg/L	20.0	1		Std Mtd 2540 C	11/13/23	020
Total Fluoride	2.0	1.9	mg/L	6.3	20	J	EPA 300.0	11/29/23	020
Total Chloride	12.8	11.8	mg/L	40.0	20	J	EPA 300.0	11/29/23	020
Total Sulfate	85.3	8.9	mg/L	40.0	20		EPA 300.0	11/29/23	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	11/15/23	020
Bicarbonate Ion	156	5.0	mg/L	10.0	1		HCO3	11/15/23	020
Dissolved Chloride	5.5	0.59	mg/L	2.0	1		EPA 300.0	11/27/23	020
Dissolved Sulfate	75.9	8.9	mg/L	40.0	20		EPA 300.0	11/29/23	020
Field pH	7.4	0.1	Units	0.1	1		FIELDPH	11/7/23	RAMBOLL
Field Temperature	11	0.1	Degrees t		1		TEMP	11/7/23	RAMBOLL
Field Water Level	40.98	0.05	feet		1		H2OD	11/7/23	RAMBOLL
Field Conductivity	500	0	umhos		1		FCOND25	11/7/23	RAMBOLL
Total Boron	495	3.0	ug/L	10.0	1		EPA 200.8	11/15/23	020
Total Sodium	61500	42.0	ug/L	250	1		EPA 200.8	11/15/23	020
Total Potassium	1560	237	ug/L	789	1		EPA 200.8	11/15/23	020
Total Magnesium	10900	31.2	ug/L	250	1		EPA 200.8	11/15/23	020
Total Calcium	27100	76.2	ug/L	254	1		EPA 200.8	11/15/23	020
Dissolved Calcium	28900	76.2	ug/L	254	1		EPA 200.8	11/16/23	020
Dissolved Magnesium	10200	31.2	ug/L	250	1		EPA 200.8	11/16/23	020
Dissolved Potassium	1590	237	ug/L	789	1		EPA 200.8	11/16/23	020
Dissolved Sodium	57700	42.0	ug/L	250	1		EPA 200.8	11/16/23	020

Sample Comments:

Sample Description: **EB3 Caledonia Landfill Semi Annual Sample**  
 Sample ID: AE69881 Sample Collection Date/Time: 11/07/2023 15:10  
 Sample Received: 11/08/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field Temperature	12	0.1	Degrees t		1		TEMP	11/7/23	RAMBOLL
Field Conductivity	14	0	umhos		1		FCOND25	11/7/23	RAMBOLL

Report Date: Tuesday, December 26, 2023

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

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Sample Description: **EB3 Caledonia Landfill Semi Annual Sample**  
Sample ID: AE69881 Sample Collection Date/Time: 11/07/2023 15:10  
Sample Received: 11/08/2023 Sample Collector: RAMBOLL

<u>Parameter</u>	<u>Result</u>	<u>LOD</u>	<u>Units</u>	<u>LOQ</u>	<u>DIL</u>	<u>Result Flag</u>	<u>Analysis Method</u>	<u>Analysis Date</u>	<u>Analyst</u>
Field pH	8.0	0.1	Units	0.1	1		FIELDPH	11/7/23	RAMBOLL
Total Alkalinity as CaCO3	Less Than	5.0	mg/L	10.0	1		SM 2320 B-1997	11/15/23	020
Total Hardness as CaCO3	1.6	0.32	mg/L	1.7	1	J	StdMtd 2340B	11/15/23	020
Total Dissolved Solids	Less Than	8.7	mg/L	20.0	1		Std Mtd 2540 C	11/13/23	020
Total Fluoride	Less Than	0.095	mg/L	0.32	1		EPA 300.0	11/29/23	020
Total Chloride	Less Than	0.59	mg/L	2.0	1		EPA 300.0	11/29/23	020
Total Sulfate	Less Than	0.44	mg/L	2.0	1		EPA 300.0	11/29/23	020
Carbonate Ion	Less Than	5.0	mg/L	10.0	1		CO3	11/15/23	020
Bicarbonate Ion	Less Than	5.0	mg/L	10.0	1		HCO3	11/15/23	020
Dissolved Chloride	Less Than	0.59	mg/L	2.0	1		EPA 300.0	11/27/23	020
Dissolved Sulfate	Less Than	0.44	mg/L	2.0	1		EPA 300.0	11/27/23	020
Total Boron	Less Than	3.0	ug/L	10.0	1		EPA 200.8	11/15/23	020
Total Sodium	42.7	42.0	ug/L	250	1	J	EPA 200.8	11/15/23	020
Total Potassium	Less Than	237	ug/L	789	1		EPA 200.8	11/15/23	020
Total Magnesium	183	31.2	ug/L	250	1	J	EPA 200.8	11/15/23	020
Total Calcium	327	76.2	ug/L	254	1		EPA 200.8	11/15/23	020
Dissolved Calcium	358	76.2	ug/L	254	1		EPA 200.8	11/16/23	020
Dissolved Magnesium	190	31.2	ug/L	250	1	J	EPA 200.8	11/16/23	020
Dissolved Potassium	Less Than	237	ug/L	789	1		EPA 200.8	11/16/23	020
Dissolved Sodium	Less Than	42.0	ug/L	250	1		EPA 200.8	11/16/23	020

Sample Comments:

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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.