

2023 Annual Groundwater Monitoring and Corrective Action Report

Blue Pit

Coyote Station Beulah, North Dakota

Prepared for Otter Tail Power Company

January 2024

2023 Annual Groundwater Monitoring and Corrective Action Report

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Acronyms

Acronym	Description
CCR	Coal Combustion Residuals
CFR	Code of Federal Regulations
EPA	Environmental Protection Agency
NDAC	North Dakota Administrative Code
NDDEQ	North Dakota Department of Environmental Quality
OTP	Otter Tail Power Company
SSI	Statistically Significant Increase

Executive Summary

This summary provides an overview of the Groundwater Monitoring & Corrective Action Program status as required by 40 CFR §257.94(e)(6). The CCR unit operated under the detection monitoring program described in 40 CFR §257.94 and NDAC 33.1-20-08-06-04 at the start and at the end of the 2023 annual reporting period. The current status is detection monitoring.

The monitoring program did not identify any statistically significant increases over background for any of the detection monitoring constituents listed in Appendix III to the EPA CCR Rule and Appendix I to the NDDEQ CCR Rule; therefore, constituents listed in Appendix IV to the EPA CCR Rule and Appendix II to the NDDEQ CCR Rule were not monitored. Corrective action provisions of the CCR Rules were not required.

1.0 Introduction

Otter Tail Power Company (OTP) operates the Coyote Station (Coyote), located near Beulah, North Dakota. Coyote is a coal-fired electrical generating plant, operation of which results in coal combustion residuals (CCR) as a by-product. The Blue Pit is an existing CCR landfill at Coyote that is required to comply with the provisions of the US Environmental Protection Agency (EPA) CCR Rule (40 CFR Parts 257 and 261, Disposal of Coal Combustion Residuals from Electric Utilities), and the North Dakota Department of Environmental Quality (NDDEQ) CCR Rule (North Dakota Administrative Code [NDAC] Title 33.1, Article 20, Chapter 8). The Blue Pit is shown on Figure 1.

This 2023 Annual Groundwater Monitoring and Corrective Action Report (Annual Report) describes the monitoring program and results for the Blue Pit at Coyote. The Blue Pit is currently in detection monitoring as described by 40 CFR 257.94 of the EPA CCR Rule and NDAC 33.1-20-08-06-04 of the NDDEQ CCR Rule.

1.1 Purpose

As stated in 40 CFR 257.90(e) and NDAC 33.1-20-08-06-01(e), the purpose of the Annual Report is to:

- Document the status of monitoring and corrective action program for the CCR unit
- Summarize key actions completed
- Describe any problems encountered
- Discuss actions to resolve the problems
- · Project key activities for the upcoming year

1.2 Status of the Groundwater Monitoring and Corrective Action Program

Baseline monitoring was completed in 2017, as documented in the 2017 Annual Groundwater Monitoring and Corrective Action Report, Blue Pit Area (Barr, 2018). Statistical evaluation of monitoring results under detection monitoring program, which is the evaluation of groundwater monitoring data for statistically significant increases (SSIs) over background began on October 17, 2017, and continued through 2023.

In 2023, the monitoring program did not identify any statistically significant increases over background for any of the detection monitoring constituents listed in the CCR Rules; therefore, assessment monitoring constituents listed in Appendix IV to the EPA CCR Rule and Appendix II to the NDDEQ CCR Rule were not monitored. Corrective action provisions of the CCR Rules were not required.

1.3 CCR Rule Requirements

This Annual Report has been prepared in accordance with the requirements of 40 CFR 257.90(e) of the EPA CCR Rule and NDAC 33.1-20-08-06-01(e) of the NDDEQ CCR Rule, as outlined in the following Table 1.

Table 1 CCR Rule Requirements

EPA CCR Rule Reference (40 CFR)	NDDEQ CCR Rule Reference (NDAC)	Content Required in Report	Location
§257.90(e)(1)	§33.1-20-08- 06-01(e)(1)	Map showing the CCR unit and all monitoring wells that are part of the groundwater monitoring system	Section 2.1.1 Documentation; see Figure 1
§257.90(e)(2)	§33.1-20-08- 06-01(e)(2)	Discuss any new or decommissioned monitoring wells	Section 2.1.2 Changes to Monitoring System
§257.90(e)(3)	\$33.1-20-08- 06-01(e)(3)	All monitoring data obtained under §257.90 through §257.98 and §33.1-20-08-06; provide the number and date groundwater samples were collected, and the monitoring (i.e., detection or assessment)	Section 2.2 Monitoring and Analytical Results; Table 2, Figure 2, Figure 3, Figure 4, Appendices
§257.90(e)(4)	§33.1-20-08- 06-01(e)(4)	Discuss any transition between monitoring programs	Not applicable – no transition between monitoring programs occurred
§257.90(e)(5)	§33.1-20-08- 06-01(e)(5)	Other information specified in §257.90 through §257.98	Throughout report
§257.90(e)(6)	n/a	Overview at beginning of annual report	Executive Summary

2.0 Groundwater Monitoring and Corrective Action Program

This section documents the status of the groundwater monitoring and corrective action program for the Blue Pit for 2023. The groundwater monitoring system is described in Section 2.1, the monitoring and analytical results are described in Section 2.2, key actions completed and problems encountered are described in Section 2.3, and key activities planned for 2024 are described in Section 2.4.

2.1 Groundwater Monitoring System

2.1.1 Documentation

Figure 1 shows an aerial image of the Blue Pit and all upgradient (background) and downgradient monitoring wells, including the well identification numbers, that are part of the groundwater monitoring system, as required by 40 CFR 257.90(e)(1) and NDAC 33.1-20-08-06-01(e)(1). The conceptual site model (CSM) used to develop the network along with details on the monitoring system and the Blue Pit monitoring wells are included in the Groundwater Monitoring System Report, Coyote Station Blue Pit Area (Barr, 2016).

2.1.2 Changes to Monitoring System

The groundwater monitoring system was unchanged in 2023.

2.2 Monitoring and Analytical Results

Groundwater samples were collected during two semiannual sampling events and one verification resampling event. A total of 12 groundwater samples (six monitoring wells and two sampling events) were collected and analyzed for the detection monitoring constituents in 2023 under the detection monitoring program, consistent with the requirements of 40 CFR 257.94(c) and NDAC 33.1-20-08-06-04(c).

Elevated levels of calcium were measured in monitoring well BLUE14 during the spring 2023 detection monitoring event. Monitoring well BLUE14 was resampled for calcium within the 90-day timeframe allowed by the CCR Rule for determination of an SSI. The results of the resampling indicated that calcium concentrations were not statistically significantly higher than background. Dates of sampling are reported on the field data sheets, and analytical laboratory reports are presented in Appendix A. Results are summarized in Table 2. Groundwater flow data, as required by 40 CFR 257.93(c) and NDAC 33.1-20-08-06-03(c), are presented in Figure 2, Figure 3, Figure 4, and Appendix B.

2.3 Key Actions Completed/Problems Encountered

The following key actions were completed for the groundwater monitoring program during 2023:

• Completed semiannual detection monitoring sampling for each background and downgradient well.

- Statistical analysis was conducted according to the Statistical Analysis Plan, Appendix B of the CCR Groundwater Sampling and Analysis Plan (Carlson McCain, 2017).
- Evaluated monitoring results pursuant to 40 CFR 257.93(h) and NDAC 33.1-20-08-06-03(h).
- Determined that no statistically significant increase over background levels occurred at any downgradient monitoring well during 2023.
- Completed the closure of 10.10 acres and the reopening of 11.84 acres in the footprint of the Blue Pit in 2023.
- Problems were not encountered during the reporting period.

The Annual Fugitive Dust Control Report (40 CFR 257.80(c) and NDAC 33.1-20-08-05-01(c)) is included as Appendix C.

2.4 Key Activities for Upcoming Year

The following key groundwater monitoring program activities are planned for 2024:

- Evaluate analytical results from both 2024 semiannual detection monitoring events for statistically significant increases (SSIs) according to the Statistical Analysis Plan (Carlson McCain, 2017).
- Continue the detection monitoring program in accordance with the CCR Rules.

3.0 References

- Barr, 2018. 2017 Annual Groundwater Monitoring and Corrective Action Report, Coyote Station Blue Pit Area. Prepared for Otter Tail Power Company. January 2018.
- Barr, 2016. Groundwater Monitoring System Report, Coyote Station Blue Pit Area. Prepared for Otter Tail Power Company. November 2016.
- Carlson McCain, 2017. CCR Groundwater Sampling and Analysis Plan (Including Statistical Method Selection and Certification), Coyote Station Blue Pit. Prepared for Otter Tail Power Company. October 2017.

Tables

Table 2 Groundwater Analytical Data Summary Coyote Station Otter Tail Power Company

		0.0.0	1313:07 1322:11 1311:07 1327:32 1310:07	1017.04	1322.11	1010101	1920,00	1020.00	1323:13 1311:33 1321:33 1311:21 1311:12 1310:01 1323:33	174.146	21121	1361.00	1911:33	1020.10	It allia	-	Elevation
		1018 8/	102/ 02	1017 8/	1022 77	1010 81	1005 65	1022 05	10/0 07	10/1 /3	1017 21	1021 20	1017 00	1022 10		Π Σ	Groundwater
< 5 U	< 5 U	749	688	1010	1440	2310	1	2690	2650	2600	858 J-	838	834	818	mg/l	Lab	Sulfate, as SO4
< 10 U	< 10 U	1670	1610	2450	2900	4180	ŀ	4920	5060	5090	1750	1860	1880	1750	mg/l	Lab	Solids, total dissolved
ŀ	ŀ	6.67	6.67	6.71	6.58	6.7	6.69	6.72	6.96	6.93	6.65	6.61	6.93	6.59	pH units	Field	ΡĦ
<01U <01U	< 0.1 U	0.20	0.19	0.20	0.17	0.13	1	0.11	0.25	0.25	0.18	0.18	0.17	0_18	mg/l	Lab	Fluoride
<20U <20U	< 2.0 U	7.6	8.5	8.7	10.0	10.5	1	11.5	51.9	42.2	7.0	8.4	7.4	8.7	mg/l	Lab	Chloride
<1U <1U	^1_	136	122	131	181	285	314	369	119	122	171	175	177	173	mg/l	Lab	Calcium, total
< 0.1 U	<0.1U <0.1U	0.30	0.38	0.33	0.44	< 0.5 U	1	0.67	< 0.5 U	0.60	0.28	0.37	0.26	0.37	mg/l	Lab	Boron, total
																	Appendix III
															Units	Analysis Location	Parameter
FB	FB	z	z	z	z	z	Resample	z	z	z	z	z	z	z	Sample Type	ູ້	
10/16/23	5/2/23	10/16/23 5/2/23 10/16/23	5/1/23	10/16/23 5/1/23	5/1/23	10/16/23	6/8/23	5/1/23	10/16/23	5/2/23	10/16/23	5/1/23	10/16/23	5/2/23	Date		
၁၀	ရင	Blue 16	Blue 14 Blue 15 Blue 16 Blue 16 QC	Blue 15	Blue 15	Blue 14	Blue 14	Blue 14	Blue 13 Blue 13 Blue 14	Blue 13	Blue 7	Blue 7	Blue 6	Blue 6	Location		

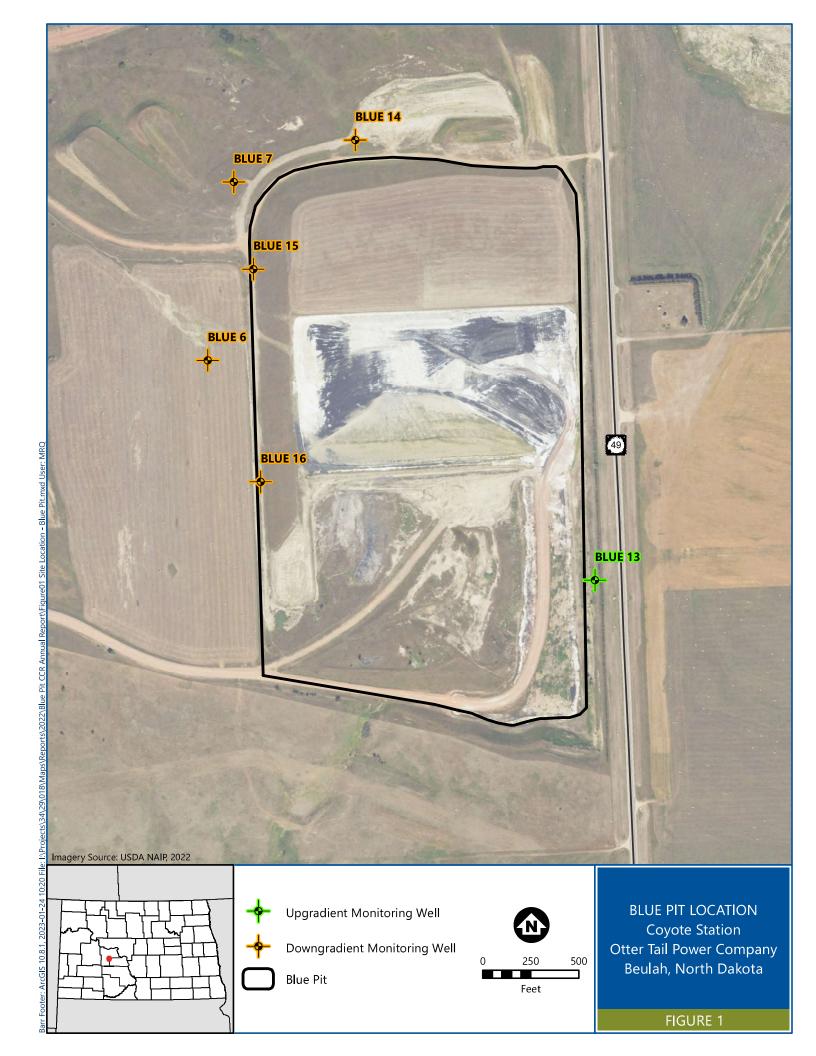
Not analyzed/Not available.

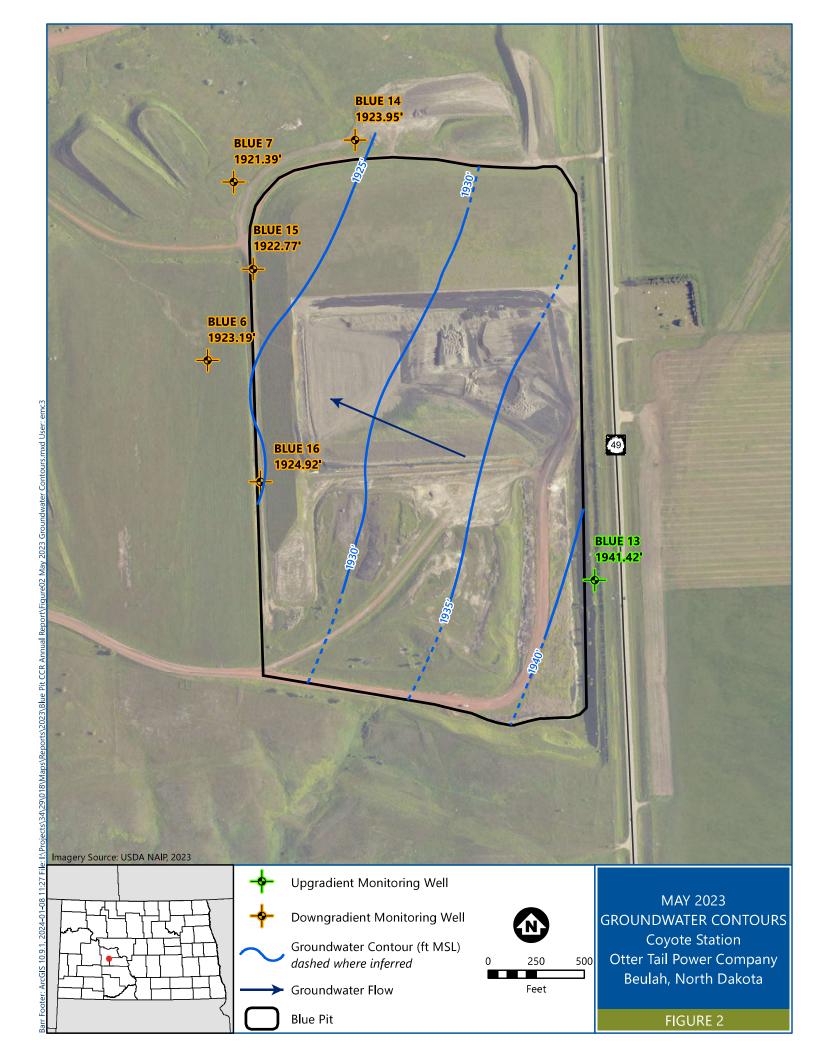
ㅠz:

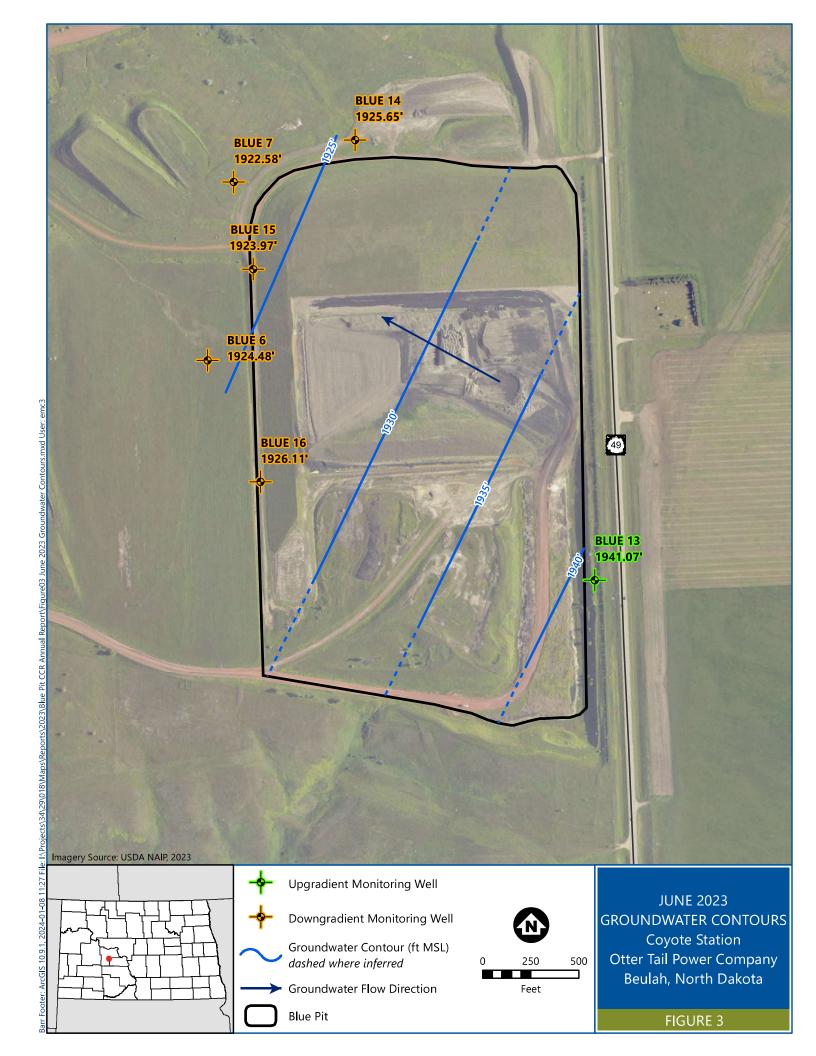
Resample U J- Sample Type: Normal Detection Monitoring
Sample Type: Field Blank
Sample Type: Normal Detection Monitoring Resample The analyte was analyzed for, but was not detected.

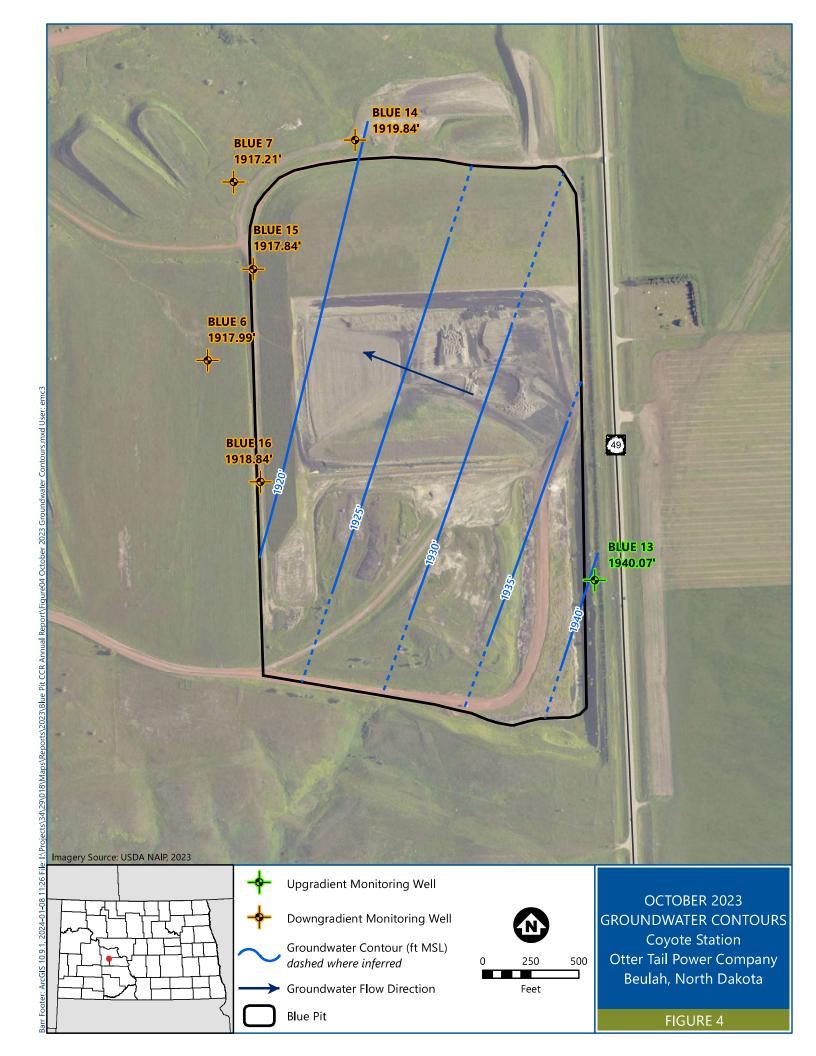
The result is an estimated quantity and may be biased low.

Figures









Appendices

Appendix A

Laboratory Reports and Field Sheets



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Account #: 6106 **Client:** Otter Tail Power Company **Workorder:** OTP Coyote Blue Spring 2023 (14232) **PO:** 59625

Josh Hollen Otter Tail Power Company PO Box 496 Fergus Falls, MN 56538

Certificate of Analysis

Approval

All data reported has been reviewed and approved by:

C. Carriell

Claudette Carroll, Lab Manager Bismarck, ND

Analyses performed under Minnesota Department of Health Accreditation conforms to the current TNI standards.

NEW ULM LAB CERTIFICATIONS: MN LAB # 027-015-125 ND WW/DW # R-040

BISMARCK LAB CERTIFICATIONS: MN LAB # 038-999-267 ND W/DW # ND-016

MVTL guarantees the accuracy of the analysis done on the sample submitted for testing. It is not possible for MVTL to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by MVTL. As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.



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Account #: 6106 Client: Otter Tail Power Company

Workorder Summary

Workorder Comments

All analytes with dilution factors greater than 1 (displayed in DF column) required dilution due to matrix or high concentration of target analyte unless otherwise noted and reporting limits (RDL column) have been adjusted accordingly.

Analysis Results Comments

14232001 (FB Blue)

Sample analyzed beyond holding time.(pH)

14232002 (Blue 6)

Sample analyzed beyond holding time.(pH)

14232003 (Blue 7)

Sample analyzed beyond holding time.(pH)

14232004 (Blue 13)

Sample analyzed beyond holding time.(pH)

14232005 (Blue 14)

Sample analyzed beyond holding time.(pH)

14232006 (Blue 15)

Sample analyzed beyond holding time.(pH)

14232007 (Blue 16)

Sample analyzed beyond holding time.(pH)

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Account #: 6106 Client: Otter Tail Power Company

Analytical Results

Lab ID:14232001Date Collected:05/02/2023 08:48Matrix:GroundwaterSample ID:FB BlueDate Received:05/02/2023 15:12Collector:MVTL Field Service

Temp @ Receipt (C): 0.8 Received on Ice: Yes

Method: ASTM D516-16

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Sulfate	<5	mg/L	5	1	05/03/2023 11:38	05/03/2023 11:38	AMC	

Method: EPA 6010D

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Boron	<0.1	mg/L	0.1	1	05/02/2023 17:35	05/05/2023 09:38	SLZ	
Calcium	<1	mg/L	1	1	05/02/2023 17:35	05/03/2023 11:38	SLZ	

Method: SM4500 H+ B-2011

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
pH	5.6	units	0.1	1	05/03/2023	05/03/2023	RAA	*

Method: SM4500-CI-E 2011

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Chloride	<2.0	mg/L	2.0	1	05/09/2023 11:02	05/09/2023 11:02	AMC	

Method: SM4500-F-C-2011

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Fluoride	<0.1	mg/L	0.1	1	05/03/2023	05/03/2023 17:41	RAA	

Method: USGS I-1750-85

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Total Dissolved Solids	<10	mg/L	10	1	05/05/2023 08:13	05/05/2023 08:13	RAA	

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Account #: 6106 Client: Otter Tail Power Company

Analytical Results

 Lab ID:
 14232002
 Date Collected:
 05/02/2023 08:20
 Matrix:
 Groundwater

 Sample ID:
 Blue 6
 Date Received:
 05/02/2023 15:12
 Collector:
 MVTL Field Service

Temp @ Receipt (C): 0.8 Received on Ice: Yes

Method: 120.1

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Specific Conductance - Field	2101	umhos/cm	1	1	05/02/2023 08:20	05/02/2023 08:20	DJN	

Method: 150.2

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
pH - Field	6.59	units	0.01	1	05/02/2023 08:20	05/02/2023 08·20	DJN	

Method: 170.1

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Temperature - Field C	7.89	degrees (1	05/02/2023 08:20	05/02/2023 08:20	DJN	

Method: ASTM D516-16

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Sulfate	818	mg/L	25	5	05/03/2023 11:39	05/03/2023 11:39	AMC	

Method: EPA 6010D

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Boron	0.37	mg/L	0.1	1	05/02/2023 17:35	05/05/2023 09:39	SLZ	
Calcium	173	mg/L	1	1	05/02/2023 17:35	05/03/2023 11:39	SLZ	

Method: SM4500 H+ B-2011

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
pН	6.9	units	0.1	1	05/03/2023 17·46	05/03/2023 17·46	RAA	*

Method: SM4500-CI-E 2011

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Chloride	8.1	mg/L	2.0	1	05/09/2023 11:03	05/09/2023 11:03	AMC	

Method: SM4500-F-C-2011

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Fluoride	0.18	mg/L	0.1	1	05/03/2023 17:46	05/03/2023 17:46	RAA	

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Account #: 6106 Client: Otter Tail Power Company

Analytical Results

Lab ID:14232002Date Collected:05/02/2023 08:20Matrix:GroundwaterSample ID:Blue 6Date Received:05/02/2023 15:12Collector:MVTL Field Service

Temp @ Receipt (C): 0.8 Received on Ice: Yes

Method: USGS I-1750-85

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Total Dissolved Solids	1750	mg/L	10	1	05/05/2023 08:13	05/05/2023 08:13	RAA	



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Account #: 6106 Client: Otter Tail Power Company

Analytical Results

Lab ID:14232003Date Collected:05/01/2023 11:46Matrix:GroundwaterSample ID:Blue 7Date Received:05/02/2023 15:12Collector:MVTL Field Service

Method: 120.1 Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Specific Conductance - Field	2470	umhos/cm		1	05/01/2023 11:46	05/01/2023 11:46	DJN	
Method: 150.2								
Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
pH - Field	6.61	units	0.01	1	05/01/2023 11:46	05/01/2023 11:46	DJN	,
Method: 170.1								
Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Temperature - Field C	11.8	degrees C		1	05/01/2023 11:46	05/01/2023 11:46	DJN	
Method: ASTM D516-16								
Parameter	Results	Units	RDL	DF	Prepared	Analyzed	By	Qual
Sulfate	838	mg/L	25	5	05/03/2023 11:40	05/03/2023 11:40	AMC	
Method: EPA 6010D								
Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Boron	0.37	mg/L	0.1	1	05/02/2023 17:35	05/05/2023 09:40	SLZ	,
Calcium	175	mg/L	1	1	05/02/2023 17:35	05/03/2023 11:40	SLZ	
Method: SM4500 H+ B-2011								
Parameter	Results	Units	RDI	DF	Prepared	Analyzed	Bv	Qual

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
рН	7.0	units	0.1	1	05/03/2023 17:54	05/03/2023 17:54	RAA	*

Method: SM4500-CI-E 2011

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Chloride	8.4	mg/L	2.0	1	05/09/2023 11:05	05/09/2023 11:05	AMC	-

Method: SM4500-F-C-2011

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Fluoride	0.18	mg/L	0.1	1	05/03/2023 17:54	05/03/2023 17:54	RAA	

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Account #: 6106 Client: Otter Tail Power Company

Analytical Results

Lab ID:14232003Date Collected:05/01/2023 11:46Matrix:GroundwaterSample ID:Blue 7Date Received:05/02/2023 15:12Collector:MVTL Field Service

Temp @ Receipt (C): 0.8

Method: USGS I-1750-85

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Total Dissolved Solids	1860	mg/L	10	1	05/05/2023 08:13	05/05/2023 08:13	RAA	



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Account #: 6106 Client: Otter Tail Power Company

Analytical Results

 Lab ID:
 14232004
 Date Collected:
 05/02/2023 08:45
 Matrix:
 Groundwater

 Sample ID:
 Blue 13
 Date Received:
 05/02/2023 15:12
 Collector:
 MVTL Field Service

Temp @ Receipt (C): 0.8 Received on Ice: Yes

Method: 120.1

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Specific Conductance - Field	5415	umhos/cm	1	1	05/02/2023 08:45	05/02/2023 08:45	DJN	

Method: 150.2

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
pH - Field	6.93	units	0.01	1	05/02/2023 08:45	05/02/2023 08·45	DJN	

Method: 170.1

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Temperature - Field C	7.87	degrees C		1	05/02/2023	05/02/2023	DJN	

Method: ASTM D516-16

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Sulfate	2600	mg/L	100	20	05/03/2023 11:41	05/03/2023 11:41	AMC	

Method: EPA 6010D

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Boron	0.60	mg/L	0.5	5	05/02/2023 17:35	05/05/2023 09:42	SLZ	
Calcium	122	mg/L	5	5	05/02/2023 17:35	05/03/2023 11:50	SLZ	

Method: SM4500 H+ B-2011

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
pН	7.4	units	0.1	1	05/03/2023 19·49	05/03/2023 19·49	RAA	*

Method: SM4500-CI-E 2011

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Chloride	42.2	mg/L	2.0	1	05/09/2023 11:06	05/09/2023 11:06	AMC	

Method: SM4500-F-C-2011

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Fluoride	0.25	mg/L	0.1	1	05/03/2023 19:49	05/03/2023 19:49	RAA	

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Account #: 6106 Client: Otter Tail Power Company

Analytical Results

Lab ID:14232004Date Collected:05/02/2023 08:45Matrix:GroundwaterSample ID:Blue 13Date Received:05/02/2023 15:12Collector:MVTL Field Service

Temp @ Receipt (C): 0.8 Received on Ice: Yes

Method: USGS I-1750-85

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Total Dissolved Solids	5090	mg/L	10	1	05/05/2023 08:13	05/05/2023 08:13	RAA	



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Account #: 6106 Client: Otter Tail Power Company

Analytical Results

Lab ID: 14232005 **Date Collected:** 05/01/2023 13:38 Matrix: Groundwater 05/02/2023 15:12 **Date Received:** MVTL Field Service Sample ID: Blue 14 Collector:

Method: 120.1								
Parameter	Results	Units	RDL	DF	Prepared	Analyzed	By	Qual
Specific Conductance - Field	5543	umhos/cm	1	1	05/01/2023 13:38	05/01/2023 13:38	DJN	
Method: 150.2								
Parameter	Results	Units	RDL	DF	Prepared	Analyzed	By	Qual
pH - Field	6.72	units	0.01	1	05/01/2023 13:38	05/01/2023 13:38	DJN	,
Method: 170.1								
Parameter	Results	Units	RDL	DF	Prepared	Analyzed	By	Qual
Temperature - Field C	13.64	degrees C		1	05/01/2023 13:38	05/01/2023 13:38	DJN	,
Method: ASTM D516-16								
Parameter	Results	Units	RDL	DF	Prepared	Analyzed	By	Qual
Sulfate	2690	mg/L	100	20	05/03/2023 11:49	05/03/2023 11:49	AMC	,
Method: EPA 6010D								
Parameter	Results	Units	RDL	DF	Prepared	Analyzed	By	Qual

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Boron	0.67	mg/L	0.5	5	05/02/2023 17:35	05/05/2023 09:42	SLZ	·
Calcium	369	mg/L	5	5	05/02/2023 17:35	05/03/2023 11:46	SLZ	

Method: SM4500 H+ B-2011

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
pH	7.1	units	0.1	1	05/03/2023 19:55	05/03/2023 19:55	RAA	*

Method: SM4500-CI-E 2011

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Chloride	11.5	mg/L	2.0	1	05/09/2023 11:14	05/09/2023 11:14	AMC	

Method: SM4500-F-C-2011

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Fluoride	0.11	mg/L	0.1	1	05/03/2023 19:55	05/03/2023 19:55	RAA	

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Account #: 6106 Client: Otter Tail Power Company

Analytical Results

Lab ID:14232005Date Collected:05/01/2023 13:38Matrix:GroundwaterSample ID:Blue 14Date Received:05/02/2023 15:12Collector:MVTL Field Service

Temp @ Receipt (C): 0.8

Method: USGS I-1750-85

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Total Dissolved Solids	4920	mg/L	10	1	05/05/2023 08:13	05/05/2023 08:13	RAA	



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Account #: 6106 Client: Otter Tail Power Company

Analytical Results

Lab ID: 14232006 **Date Collected:** 05/01/2023 16:30 Matrix: Groundwater 05/02/2023 15:12 Sample ID: Blue 15 **Date Received:** Collector: MVTL Field Service

Method: 120.1								
Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Specific Conductance - Field	3788	umhos/cm	1	1	05/01/2023 16:30	05/01/2023 16:30	DJN	
Method: 150.2								
Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
pH - Field	6.58	units	0.01	1	05/01/2023 16:30	05/01/2023 16:30	DJN	
Method: 170.1								
Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Temperature - Field C	13.11	degrees C		1	05/01/2023 16:30	05/01/2023 16:30	DJN	
Method: ASTM D516-16								
Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Sulfate	1440	mg/L	50	10	05/03/2023 11:50	05/03/2023 11:50	AMC	
Method: EPA 6010D								
Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Boron	0.44	mg/L	0.1	1	05/02/2023 17:35	05/05/2023 09:43	SLZ	
Calcium	181	mg/L	1	1	05/02/2023 17:35	05/03/2023 11:47	SLZ	
Method: SM4500 H+ B-2011								
Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
рН	7.0	units	0.1	1	05/03/2023 20:01	05/03/2023 20:01	RAA	*
Method: SM4500-CI-E 2011								
Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Chloride	10.0	mg/L	2.0	1	05/09/2023 11:08	05/09/2023 11:08	AMC	
Method: SM4500-F-C-2011								
Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Fluoride	0.17	mg/L	0.1	1	05/03/2023 20:01	05/03/2023 20:01	RAA	

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Account #: 6106 Client: Otter Tail Power Company

Analytical Results

Lab ID:14232006Date Collected:05/01/2023 16:30Matrix:GroundwaterSample ID:Blue 15Date Received:05/02/2023 15:12Collector:MVTL Field Service

Temp @ Receipt (C): 0.8

Method: USGS I-1750-85

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Total Dissolved Solids	2900	mg/L	10	1	05/05/2023 08:13	05/05/2023 08:13	RAA	



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Account #: 6106 Otter Tail Power Company Client:

Analytical Results

Lab ID: 14232007 **Date Collected:** 05/01/2023 15:35 Matrix: Groundwater 05/02/2023 15:12 Sample ID: Blue 16 **Date Received:** MVTL Field Service Collector:

Temp @ Receipt (C):

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Specific Conductance - Field	2301	umhos/cm	1	1	05/01/2023 15:35	05/01/2023 15:35	DJN	
Method: 150.2								
Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
pH - Field	6.67	units	0.01	1	05/01/2023 15:35	05/01/2023 15:35	DJN	
Method: 170.1								
Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Temperature - Field C	13.15	degrees C		1	05/01/2023 15:35	05/01/2023 15:35	DJN	

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Sulfate	688	mg/L	25	5	05/03/2023 11:51	05/03/2023 11:51	AMC	

Method: EPA 6010D

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Boron	0.38	mg/L	0.1	1	05/02/2023 17:35	05/05/2023 09:43	SLZ	·
Calcium	122	mg/L	1	1	05/02/2023 17:35	05/03/2023 11:54	SLZ	

Method: SM4500 H+ B-2011

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
pH	7.0	units	0.1	1	05/03/2023 20:09	05/03/2023 20:09	RAA	*

Method: SM4500-CI-E 2011

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Chloride	8.5	mg/L	2.0	1	05/09/2023 11:09	05/09/2023 11:09	AMC	-

Method: SM4500-F-C-2011

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Fluoride	0.19	mg/L	0.1	1	05/03/2023 20:09	05/03/2023 20:09	RAA	

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Account #: 6106 Client: Otter Tail Power Company

Analytical Results

Lab ID:14232007Date Collected:05/01/2023 15:35Matrix:GroundwaterSample ID:Blue 16Date Received:05/02/2023 15:12Collector:MVTL Field Service

Temp @ Receipt (C): 0.8

Method: USGS I-1750-85

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Total Dissolved Solids	1610	mg/L	10	1	05/05/2023 08:13	05/05/2023 08:13	RAA	



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Account #: 6106 Client: Otter Tail Power Company

MVTL Field Services

Sampling Report

Otter Tail Power - Coyote Station

Blue

Sample Event: Spring 2023 Work Order #: 14232

Sampling Dates: May 1-2, 2023

Well Condition: All wells were found to be in fair condition.

Lock Condition: None

Sample Method: Low Flow with Bladder Pump

Samples collected Duplicate Sample Location
Blue 6 Blue 7 MS/MSD

Blue 7 Blue 13 Blue 14 Blue 15

Blue 16 Field Blank Blue

Samples collected were placed on ice and transported back to the MVTL Laboratory in Bismarck, ND for analysis.

Jeremy Meyer MVTL Field Services

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Account #: 6106 Client: Otter Tail Power Company

C Results Summary						WO #:	142	32	
Sulfate				Units: mg/	L				
QC Type	Original Sample ID	Blank Result	Spike Amount	Spike % Recovery	Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)
FB			100	107.0		85	115		
FB			100	105.0		85	115		
FB			100	109.0		85	115		
FB			100	112.0		85	115		
			100	112.0		63	115		
ИВ		<5							
ИВ		<5							
ИВ		<5							
ИВ		<5							
NS/MSD	13843003		500	80.5	79.9	85	115	0.0	20
1S/MSD	14232003		500	107.4	107.9	85	115	0.0	20
1S/MSD	14238003		1000	86.7	88.7	85	115	1.0	20
Chloride				Units: mg/	L				
2С Туре	Original Sample ID	Blank Result	Spike Amount	Spike % Recovery	Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)
FB			30	93.0	% Kecovery	90	110		
FB			30	93.2		90	110		
FB			30	93.3		90	110		
FB			30	93.3		90	110		
FB			30	94.7		90	110		
FB			30	94.5		90	110		
FB			30	93.9		90	110		
ИВ		<2.0							
ИВ		<2.0							
ИВ		<2.0							
ИВ		<2.0							
ИВ		<2.0							
4B		<2.0							
nu.		~2.0							
ИВ		<2.0							
ИВ ИS/MSD	14232003	<2.0	30	89.5	90.0	80	120	0.3	20

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Account #: 6106 Client: Otter Tail Power Company

Chloride				Units:	mg/L					
QC Type	Original Sample ID	Blank Result	Spike Amount	Spike % Recovery		Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)
MS/MSD	14750004		30	131.0		130.2	80	120	0.2	20
Boron				Units:	mg/L					
QC Type	Original Sample ID	Blank Result	Spike Amount	Spike %	1116/ -	Spike Duplicate	Lower Control	Upper Control	RPD (%)	RPD Limit (%)
LFB-OE			0.4	Recovery 95.7		% Recovery	Limit (%) 85	Limit (%) 115		
MB		<0.1								
MS/MSD	14232003		0.4	90.1		94.2	70	130	2.2	20
WIS/WISO	14232003		0.4	50.1		34.2	70	150	2.2	20
Calcium				Units:	mg/L					
QC Type	Original Sample ID	Blank Result	Spike Amount	Spike % Recovery		Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)
LFB-MI			100	110.0		A RECOVERY	85	115		
LFB-MI			100	108.0			85	115		
МВ		<1								
MB		<1								
DUP	14216001								0.0	20
DUP	14232003								5.7	20
DUP	14238002								0.9	20
Calcium				Units:	mg/L					
QC Type	Original Sample ID	Blank Result	Spike Amount	Spike % Recovery		Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)
PDS/PDSD	13738001		100	106.0		104.0	75	125	1.4	20
PDS/PDSD	13759001		100	101.0		103.0	75	125	0.9	20
PDS/PDSD	14216001		100	105.0		105.0	75	125	0.1	20
PDS/PDSD	14232003		100	97.3		97.0	75	125	0.1	20
PDS/PDSD	14232004		500	102.0		101.0	75	125	1.3	20
рН				Units:	units					
QC Type	Original Sample ID	Blank Result	Spike Amount	Spike %	willed	Spike Duplicate	Lower Control	Upper Control	RPD (%)	RPD Limit (%)
DUP	14216011			Recovery		% Recovery	Limit (%)	Limit (%)	6.4	20
DUP	14232003								1.2	20
DUP	14241001								1.0	20
DUP	14408001								1.9	20
рН				Units:	units					
QC Type	Original Sample ID	Blank Result	Spike Amount	Spike %		Spike Duplicate	Lower Control	Upper Control	RPD (%)	RPD Limit (%)
CRM-PH			6	Recovery 99.7		% Recovery	Limit (%) 98.33	Limit (%) 101.67		
CRM-PH			6	99.0			98.33	101.67		



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Account #: 6106 Client: Otter Tail Power Company

рН				Units:	units					
QC Type	Original Sample ID	Blank Result	Spike Amount	Spike % Recovery		Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)
CRM-PH			6	99.0		×	98.33	101.67		
Fluoride				Units:	mg/L					
QC Type	Original Sample ID	Blank Result	Spike Amount	Spike % Recovery		Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)
CRM-F			3.39	103.0			83.8	111		
.FB-F			0.5	98.0			90	110		
.FB-F			0.5	102.0			90	110		
LFB-F			0.5	100.0			90	110		
MB-F		<0.1								
MB-F		<0.1								
MB-F		<0.1								
MS/MSD-F	14232003		0.5	102.0		104.0	80	120	1.4	20
MS/MSD-F	14232007		0.5	104.0		106.0	80	120	1.4	20
Total Dissolve	ed Solids			Units:	mg/L					
QC Type	Original Sample ID	Blank Result	Spike Amount	Spike % Recovery		Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)
CRM			736	98.0			90.35	110.33		
ИB		<10								
DUP	14238003								11.2	20
DUP	14607008								5.3	20



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Account #: 6106 **Client:** Otter Tail Power Company

MV			esting La	borato	orie	S			<i>N</i> 0:	142			ompany		Cha	in of Custody Record
Report To: Attn:	Otter Tail Power Josh Hollen			CC:									Project Na	ame:	01	P Coyote - Blue
Address:	PO Box 496												Event:			
Phone: Email:	Fergus Falls, MN 56538-0	0496											Sampled I	By)		Spring 2023
Email:	monen@otpco.com							*******						NI	nN	issuay
	Samp	le Informatior		200			Sampl	le Con	taine	rs			Field Re	adings		
Lab Number	Sample ID	Date	Time	Sample Type	1 Liter Raw	500 mL HN03	500 mL HNO3 (filtered) 250 mL H2SO4					Temp (°C)	Spec. Cond.	Hď	Appearance (Clear-C, Partly Cloudy-PC, Cloudy-CL)	Analysis Required
001	FB Blue	2/May 23	0848	GW	Х	Х	_		Н			NA	NA	NA	NA	
002	Blue 6	2 May 83	0820	GW	Х	Х		\perp	Н		_	89	2101	6.59	8.16 C	
003	Blue 7/MS7/MSD7 Blue 13	May 23	1146	GW GW	3 X	3	+	-	\vdash	+			2470	6,61	4,97	
004	Blue 14	2 May 23	1338	GW	X	X	+	\vdash	\vdash	+		287	5415	6,93	26.19 C	OTP CCR App 3
0006	Blue 15	May 23	1630	GW		x	+	\vdash	H	+		3.64	5543 3788	6.58	3.51 C	(see attachment)
007	Blue 16	1 May 23	1535	GW		х	#			#			2301	6,67		
Comments:																

Sample Condition

Temp (°C)

C/ 8 TM562/JM805

Location Log In Walk In #2

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Received By

Date/Time

/ /Name

Relinquished By

Date/Time

2 May 23

Name



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Account #: 6106 Client: Otter Tail Power Company

CCR - Appendix III Detection Monitoring

OTP Cayote Blue Pit

Field Parameters

pH*

* Field and Laboratory Measurements

Total Concentration Parameters

> Boron

Calcium

Chloride

> Fluoride

- pH Sulfate

Dissolved Solids, Total

Method

6010

6010

SM4500 CL E **EPA 300**

SM 4500 H+B-96

ASTM D516

SM 2540 C-97

NOTE: Total Recoverable Metals! Groundwater samples shall not be field filtered prior to analysis.



1126 North Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890 2616 East Broadway Ave. ~ Bismarck, ND 58501 ~ 800-279-6885 ~ Fax 701-258-9724 1201 Lincoln Hwy. ~ Nevada, IA 50201 ~ 800-362-0855 ~ Fax 515-382-3885 www.MVTL.com



Account #: 6106 Client: Otter Tail Power Company

111/20			Fiel	d Da	tack	100+		Company:		OTP Coyo	te
MVTI			LICI	uDo	ıcası	iccr		Event:		Spring	2023
			G	roundwate	r Assessm	ent		Sample ID:			Blue 15
2616 E. Broadway Ave, Bi	smarck, ND							Sampling F	ersonal:	Dalle	n NPiswas
Phone: (701) 258-	9720					,					1 /· · · · ×
Neather Conditions	S:	Temp:	55	°F	Wind:	N	@ 10		Precip: /	Sunny / P	artly Cloudy / Cloudy
	WELL INFO	ORMATIO	N			, , , , , , ,	,	SAM	PLING IN	FORMATI	ON
Well Locked?	YES	NO		-	1	Purging Me	ethod:	Bladder	r Liivo iiv	1	Control Settings:
Well Labeled?	CYES.	NO			1	Sampling N		Bladder			Purge: Se
Casing Strait?	YES	NO			1		Equipment		NO	i	Recover: Se
Grout Seal Intact?	YES	NO	Not \	/isible	1				pin	•	PSI:
Repairs Necessary?			3.5	//////////////////////////////////////	1	Duplicate S	ample?	YES	NO	1	
Casing	g Diameter:	2	2"		1	Duplicate S	ample ID:			1	
Water Level Be	fore Purge:	73	11	ft	1			<u> </u>		•	
Total De	pth of Well:	8=	7.80	ft			Bott	le List:		1	
	ell Volume:	(701	liters		1 Liter Raw				I	
Depth to To		-	-	ft		500mL Nitrie	C				
Water Level Af			175	ft						İ	
Measureme	nt Method:	Electric \	Nater Level	Indicator]]	
		·	~			LD READIN		-			· · · · · · · · · · · · · · · · · · ·
Stabilization Parar		Temp.	Spec.	рН	DO	ORP	Turbidity	Water Level	Pumping	mL	Appearance or Comment
(3 Consecutiv		(°C)	Cond.		(mg/L)	(mV)	(NTU)		Rate	Removed	Clarity, Color, Odor, Ect.
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		clear, slightly turbid, turbid
	1555	Start of Wel		1/ -7	1000	1.2	1 / 6//	1			<u> </u>
0	16 15	13,17	3788	6,58	0.34	48.	15.81	73,31	100	2000	Cla
11/5	1620	13,44	3803	6.58	0,24	4806	3016	-73.25	100	500	Chi
MM)	1625	13,55	3764	6.58	0,23	49.1	2,46	73,28	100	500	
May 23	1630	63.11	3188	6.58	0,24	49.3	3.36	73.28	100	500	Cu
\	77.55					 				-	
(ļ					
								-			
			-			-		-			
	Well Sta	abilized?	YES)	NO				Total Vol	ıme Purged:	3500	Liters
		Temp.	Spec.				Turbidity				Appearance or Comment
Sample Date	Time	(°C)	Cond.	pH			(NTU)				Clarity, Color, Odor, Ect.
							3,36				



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Account #: 6106 Client: Otter Tail Power Company

AAVIT			Fiel	d Da	itash	taar		Company:		OTP Coyot	
MVII	>							Event:		Spring	2023
			Gı	roundwate	r Assessme	ent		Sample ID:			Blue 7
2616 E. Broadway Ave, B	Bismarck, ND							Sampling P	ersonal:) alrei	n Nieswy
Phone: (701) 258-	-9720				,	11				~	
Neather Condition	s:	Temp:	59	°F	Wind: C	1981	@		Precip: '	Sunny / Pa	artly Cloudy / Cloudy
	WELL INFO	ORMATIO	N					SAM	PLINGIN	FORMATI	ON
Well Locked?	YES	NO			1	Purging Me	ethod:	Bladder	· Liivo iiv	1	Control Settings:
Well Labeled?	XES	NO				Sampling N		Bladder		1	Purge: 4 Se
Casing Strait?	YES	NO		>	i		Equipment?		NO		Recover: Se
Grout Seal Intact?	YES	NO	Not	/isible				Ti	615		PSI:
Repairs Necessary?					1	Duplicate S	ample?	YES)	NO	T '	
Casin	g Diameter:	2	2"		1	Duplicate S		754/	nco	1	
Water Level Be		71		ft	1			411/1	-30		
	pth of Well:	9-	1.75	ft			Botti	e List:		1	
	/ell Volume:		2.9	liters	1	1 Liter Raw		2		1	
Depth to To	op of Pump:		~	ft	1	500mL Nitrie	· X '	1			
Water Level A		71	97	ft	1		/)			1	
	ent Method:	Electric V	Nater Level	Indicator			-			l	
	-			***************************************	CICI	D READIN	ıcs	***************************************			
Stabilization Para	meters	Temp.	Spec.	Γ	DO	ORP	Turbidity		Pumping	mL	Appearance or Comment
Stabilization Para (3 Consecutiv		Temp.	Spec. Cond.	pН	DO		Turbidity	Water Level	Pumping Rate	mL Removed	Appearance or Comment Clarity, Color, Odor, Ect.
				pH ±0.1		ORP		Water Level		100000	Appearance or Comment Clarity, Color, Odor, Ect. clear, slightly turbid, turbid
(3 Consecutiv	ve)		Cond. ±5%		DO (mg/L)	ORP (mV)	Turbidity (NTU)		Rate	100000	Clarity, Color, Odor, Ect.
(3 Consecutiv	ve)	(°C)	Cond. ±5%	±0.1	DO (mg/L)	ORP (mV)	Turbidity (NTU)		Rate	100000	Clarity, Color, Odor, Ect. clear, slightly turbid, turbid
(3 Consecutive Purge Date	Time	(°C) Start of Wel	Cond. ±5% Purge		DO (mg/L) ±10%	ORP (mV) ±10	Turbidity (NTU)		Rate mL/Min	Removed	Clarity, Color, Odor, Ect.
(3 Consecutive Purge Date	Time	(°C) Start of Wel	Cond. ±5% Purge	±0.1	DO (mg/L) ±10%	ORP (mV) ±10	Turbidity (NTU) <5.0	(ft) 76.9 7	Rate mL/Min	2000	Clarity, Color, Odor, Ect. clear, slightly turbid, turbid
(3 Consecutive Purge Date	Time	Start of Wel	Cond. ±5% Purge 2495 2482	±0.1	DO (mg/L) ±10% 0,44	ORP (mV) ±10	Turbidity (NTU) <5.0	(ft) 76.9 7 76.97	Rate mL/Min	2000	Clarity, Color, Odor, Ect. clear, slightly turbid, turbid
(3 Consecutive Purge Date	Time	(°C) Start of Wel . 60 . 7 11 70	Cond. ±5% I Purge 2495 2487 2487	±0.1	DO (mg/L) ±10% 0,44 0,42	ORP (mV) ±10	Turbidity (NTU) <5.0	(ft) 76.9 7 76.97 76.97	Rate mL/Min / O O / O O / O O	2000 300	Clarity, Color, Odor, Ect. clear, slightly turbid, turbid
(3 Consecutiv	Time	(°C) Start of Wel . 60 . 7 11 70	Cond. ±5% I Purge 2495 2487 2487	±0.1	DO (mg/L) ±10% 0,44 0,42	ORP (mV) ±10	Turbidity (NTU) <5.0	(ft) 76.9 7 76.97 76.97	Rate mL/Min / O O / O O / O O	2000 300	Clarity, Color, Odor, Ect. clear, slightly turbid, turbid
(3 Consecutive Purge Date	Time	(°C) Start of Wel . 60 . 7 11 70	Cond. ±5% I Purge 2495 2487 2487	±0.1	DO (mg/L) ±10% 0,44 0,42	ORP (mV) ±10	Turbidity (NTU) <5.0	(ft) 76.9 7 76.97 76.97	Rate mL/Min / O O / O O / O O	2000 300	Clarity, Color, Odor, Ect. clear, slightly turbid, turbid
(3 Consecutive Purge Date	Time	(°C) Start of Wel . 60 . 7 11 70	Cond. ±5% I Purge 2495 2487 2487	±0.1	DO (mg/L) ±10% 0,44 0,42	ORP (mV) ±10	Turbidity (NTU) <5.0	(ft) 76.9 7 76.97 76.97	Rate mL/Min / O O / O O / O O	2000 300	Clarity, Color, Odor, Ect. clear, slightly turbid, turbid
(3 Consecutive Purge Date	Time	(°C) Start of Wel . 60 . 7 11 70	Cond. ±5% I Purge 2495 2487 2487	±0.1	DO (mg/L) ±10% 0,44 0,42	ORP (mV) ±10	Turbidity (NTU) <5.0	(ft) 76.9 7 76.97 76.97	Rate mL/Min / O O / O O / O O	2000 300	Clarity, Color, Odor, Ect. clear, slightly turbid, turbid
(3 Consecutive Purge Date	Time	(*C) Start of Wel 11.60 11.71 11.70	Cond. ±5% I Purge 2495 2487 2487	±0.1	DO (mg/L) ±10% 0,44 0,42	ORP (mV) ±10	Turbidity (NTU) <5.0	(ft) 76.97 76.97 76.97	Rate mL/Min / O O / O O / O O	2000 (500 (500 (500) (500)	Clarity, Color, Odor, Ect. clear, slightly turbid, turbid
(3 Consecutive Purge Date	Time	(°C) Start of Wel . 60 . 7 11 70	Cond. ±5% I Purge 2495 2487 2487	±0.1	DO (mg/L) ±10% 0,44 0,42	ORP (mV) ±10	Turbidity (NTU) <5.0	(ft) 76.97 76.97 76.97	Rate mL/Min / O O / O O / O O	2000 300	Clarity, Color, Odor, Ect. clear, slightly turbid, turbid
(3 Consecutive Purge Date	Well Sta	Start of Wel	Cond. ±5% 1 Purge 2 4 8 7 2 4 8 7 2 4 8 7	±0.1	DO (mg/L) ±10% 0,44 0,42	ORP (mV) ±10	Turbidity (NTU) <5.0	(ft) 76.97 76.97 76.97	Rate mL/Min / O O / O O / O O	2000 (500 (500 (500) (500)	Clarity, Color, Odor, Ect. clear, slightly turbid, turbid
(3 Consecutive Purge Date	well Sta	start of Wel II. 60 II. 70 abilized? Temp. ('C)	Cond. ±5% Purge 2 1/9 5/9 2 1/8 7	±0.1	DO (mg/L) ±10% 0,44 0,42	ORP (mV) ±10	Turbidity (NTU) <5.0 6, 72 7, 91 4,83 L+, 97	(ft) 76.97 76.97 76.97	Rate mL/Min / O O / O O / O O	2000 (500 (500 (500) (500)	Clarity, Color, Odor, Ect. clear, slightly turbid, turbid
(3 Consecutive Purge Date	Well Sta	Start of Wel	Cond. ±5% Purge 2.4.9.5 2.4.8.1 2.4.8.	±0.1	DO (mg/L) ±10% 0,44 0,42	ORP (mV) ±10	Turbidity (NTU) <5.0 6, 72 7, 91 9,83 1,97 Turbidity	(ft) 76.97 76.97 76.97	Rate mL/Min / O O / O O / O O	2000 (500 (500 (500) (500)	Clarity, Color, Odor, Ect. clear, slightly turbid, turbid



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Account #: 6106 Client: Otter Tail Power Company

			Eial	4 D-	tack	neet		Company:		OTP Coyo	te
MVTI			riei	u Da	icasi	ieet		Event:		Spring	2023
	4		Gr	oundwate	r Assessm	ent		Sample ID:			Blue 14
2616 E. Broadway Ave, B	ismarck, ND							Sampling F	ersonal:	9/11.1	Vicaria 1
Phone: (701) 258-	9720		10								1000
Weather Condition		Temp:	50	°F	Wind:	NW	@		Precip: (Sunny / P	artly Cloudy / Cloudy
	WELL INFO	DRMATIO	N			/ * * * * * * * * * * * * * * * * * * *		SAM	DI ING IN	FORMATI	ON
Well Locked?	YES	NO			1	Purging Me	thod:	Bladder]	Control Settings:
Well Labeled?	NES)	NO				Sampling N		Bladder		1	Purge: Se
Casing Strait?	YES	NO			j	Dedicated			NO	1	Recover: Se
Grout Seal Intact?	YES	NO	- Not V	/isible	1			Tu	Sho 1	•	PSI:
Repairs Necessary?					1	Duplicate S	ample?	YES	NO)		<u> </u>
Casin	g Diameter:	2	2"		1	Duplicate S				1	
Water Level Be	efore Purge:	7		ft	1		-			•	
	pth of Well:	8	6,98	ft]		Bottl	e List:		1	
W	ell Volume:	7	1	liters		1 Liter Raw					
Depth to To	op of Pump:	_		ft		500mL Nitrie	:				
Water Level At	ter Sample:	70	2107	ft		i				l	
Measureme	nt Method:	Electric V	Nater Level	Indicator]]	
					FIE	LD READIN					
Stabilization Para		Temp.	Spec.	pН	DO	ORP	Turbidity	Water Level	Pumping	mL	Appearance or Comment
(3 Consecutiv		(°C)	Cond.		(mg/L)	(mV)	(NTU)		Rate	Removed	Clarity, Color, Odor, Ect.
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		clear, slightly turbid, turbid
	1238	Start of Wel		1 111	10	17//-	110 ==	-27 (0)	10	10400	
	1258	13,76	5556	6177	0,44	74,2	10.95	16.62	100	2000	Cla
	1318	13,54	5743	6,73	0,41	62.0	6,73	76.65	100	2000	acc
1 ~ 23	1328	13,77	5714	6.13	0138	54.9	4.91	16.65	100	1000	
(May 2)	1753	13. 74	5688	672	0.32	54,2		76.65	(00	500	
\/ ' '	1778	17.64	7547	6,50	0.40	54.7	3,51	76165	100	200	
1.						 					
								-			
						—					
					 						
	Well Sta	abilized?	YES	NO				Total Vol	ume Purged:	6880	Liters
Sample Date	Time	Temp.	Spec.	рН	T		Turbidity				Appearance or Comment
Sample Date	rime	(°C)	Cond.	рн			(NTU)				Clarity, Color, Odor, Ect.
Mayer	1338	13,64	5543	6,72	+		3,51				Cles
Comments:	I										



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Account #: 6106 Client: Otter Tail Power Company

AUVT			Fial	d Da	ıtash	toor		Company:	-	OTP Coyo	
MVT			1161	uDo	Lasi	icci		Event:		Spring	2023
			Gi	roundwate	r Assessme	ent		Sample ID:		^	Blue 6
2616 E. Broadway Ave, B	Bismarck, ND							Sampling F	Personal:	Darre	n Newan
Phone: (701) 258-									t		
Weather Condition	s:	Temp:	50	°F	Wind:	N	@5		Precip:	Sunny / P	artly Cloudy / Cloudy
	WELL INFO	ORMATIO	N					SAM	IPLING IN	FORMATI	ON
Well Locked?	YES	NO				Purging Me	ethod:	Bladder		1	Control Settings:
Well Labeled?	YES	NO				Sampling N	Nethod:	Bladder		1	Purge: 4 / Se
Casing Strait?	NE8	NO				Dedicated	Equipment?	YES	NO	i	Recover: 56/ Se
Grout Seal Intact?	YES	NO	Not \	/isible				146	rius	•	PSI:
Repairs Necessary?			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			Duplicate S	Sample?	YES	NO	1	
Casin	ng Diameter:	2	2"			Duplicate S	Sample ID:		-	1	
Water Level Be			1,0	_ft				*****		•	
Total De	epth of Well:	9	7,55	ft			Bottl	e List:		1	
W	Vell Volume:	16.	4	liters		1 Liter Raw				1	
	op of Pump:			ft		500mL Nitri	С			l	-
Water Level At	fter Sample:		,05	ft		l					
Measureme	ent Method:	Electric V	Water Level	Indicator]	
				,		LD READIN	7				***************************************
Stabilization Para		Temp.	Spec.	На	DO	ORP	Turbidity	Water Level	Pumping	mL	Appearance or Comment
(3 Consecutiv		(°C)	Cond.		(mg/L)	(mV)	(NTU)		Rate	Removed	Clarity, Color, Odor, Ect.
Purge Date	Time	Start of Wel	±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		clear, slightly turbid, turbid
	1405	Start of Wel	Purge	1/17	M -0	1010	Taaiia	1 - 1	100	1 - 4 -	1 2 2 2 2 2
	1475			LA.AX							
7		1000	0.7	449	0,5	100	29.47	+1.05	100	2000	Cita
· Mun 23		12,77	2155	7.68	087	93,7	16,42	76.02	100	2000	de
May 23		12,77	2290	6.67	9.87	96.1	16,42	7/03	100	2000	cle-
May 3	1505			6.67	1.16	96.1	3.96	7/103	100	2000 2000 2000	de de
Morr3	1505		2290	6.67		96.1	5.15	71,03	100 100 100	2000 2000 2000 500	de de
Moy 23	1505		2290	6.67		96.1	3.96	7/103	100	2000 2000 2000	Gen de
Morr3	1505		2290	6.67		96.1	5.15	71,03	100 100 100	2000 2000 2000 500	Ge.
Morn 3	1505		2290	6.67		96.1	5.15	71,03	100 100 100	2000 2000 2000 500	de.
Morn3	1505 1505 1525 1538 1535	13.12 13.12 13.35 13.15	22qq 2311 2278 2301	6.67		96.1	5.15	71.03 71.03 71.03 71.03		2000 2000 2000 500 500	
Morn3	1505 1505 1525 1538 1535	12,72 13,12 13,35 13,15	27q0 2311 2278 230	6.67		96.1	7.96 5.15 5.03 4.76	71.03 71.03 71.03 71.03	100 100 100	2000 2000 2000 500 500	Liters
Mown 3 Sample Date	1505 1505 1525 1538 1535	17,72 13,12 13,35 13,15 abilized?	22qq 2311 2278 230 230	6.67		96.1	7, 96 515 515 5103 4, 76	71.03 71.03 71.03 71.03		2000 2000 2000 500 500	Liters Appearance or Comment
Sample Date	Sos	12,72 13,12 13,35 13,15	2290 2311 2278 230 230 XES Spec. Cond.	NO pH		96.1	7, 96 515 515 515 517 4, 76	71.03 71.03 71.03 71.03		2000 2000 2000 500 500	Liters
	1505 1505 1525 1536 1535 Well Sta	17,72 13,12 13,35 13,15 abilized?	22qq 2311 2278 230 230	NO		96.1	7, 96 515 515 5103 4, 76	71.03 71.03 71.03 71.03		2000 2000 2000 500 500	Liters Appearance or Comment



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Account #: 6106 **Client:** Otter Tail Power Company

4417			Fiel	d Da	tack	taar		Company:		OTP Coyo	
MVT	•							Event:		Spring	2023
			Gr	roundwate	r Assessm	ent		Sample ID:			Blue 6
2616 E. Broadway Ave, E	Bismarck, ND							Sampling P	ersonal:	Darre	en Niesway
Phone: (701) 258			00				1				
Weather Condition	is:	Temp:	1>	°F	Wind:	Ligh	@		Precip:	Sunny P	artly Cloudy / Cloudy
	WELL INFO	ORMATIO	N /			J		SAM	PLING IN	FORMATI	ON
Well Locked?	YES	40			1	Purging Me	thod:	Bladder		1	Control Settings:
Well Labeled?	YES	NO			1	Sampling N	lethod:	Bladder		7	Purge: 4 Sec
Casing Strait?	YE8	NO]	Dedicated	Equipment	YES	NO].	Recover: 56 / Sec
Grout Seal Intact?	YES	NO	Not V	/isible	,			-fu	6:00		PSI:
Repairs Necessary?				grouts.	ia /	Duplicate S	ample?	YES	(NO)]	,
	ng Diameter:	2	?" ′			Duplicate S	ample ID:				
Water Level B		50		ft]					_	
Total De	epth of Well:	7	11.1	ft			Bott	e List:			
	Vell Volume:		12.4	liters		1 Liter Raw					
	op of Pump:			ft		500mL Nitrio	3			1	
Water Level A		6	2.33	ft		1				1	
Measureme	ent Method:	Electric V	Nater Level	Indicator						_	
					FIE	LD READIN	IGS				
Stabilization Para	meters	Temp.	Spec.	рН	DO	ORP	Turbidity	Water Level	Pumping	mL	Appearance or Comment
(3 Consecuti		(°C)	Cond.	рп	(mg/L)	(mV)	(NTU)	water Level	Rate	Removed	Clarity, Color, Odor, Ect.
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		clear, slightly turbid, turbid
	0900	Start of Wel	l Purge			i i i i i i i i i i i i i i i i i i i		1			,
	0405	9,47	2553	673	0,72	229	3,12	60,52		500	Clean
	0925	9.30	2423	6.90	6,25	71.3	13 91	71,94	600	12,000	clean
7		Ω	10	-			* * *	TOP of			
2 May 23	-	1 Wg	ed V.	14				punp			
1/110/											
	0815		- star	FED lu	GC -)	59.03	100	500	Clea
2 100123						<u> </u>					
201010							A THE R. P. L. P.				
	Well Sta	abilized?	YES	NO				Total Volu	ume Purged	: 000	Liters
Sample Date	Time	Temp.	Spec.	рН	00	ORP	Turbidity			T	Appearance or Comment
		(°C)	Cond.	/	10	UNI	(NTU)				Clarity, Color, Odor, Ect.
2MM23	0820	7.89	2101	6,59	1,74	74,0	8.16				clear
Comments:											



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Account #: 6106 Client: Otter Tail Power Company

			Eial	d Da	tack	200+		Company:		OTP Coyot	e	
MVT			LIGI	u Da	ıtası	iger		Event:		Spring	2023	
	4		G	roundwate	r Assessm	ent		Sample ID:		4	Blue 3	
2616 E. Broadway Ave,	Bismarck, ND							Sampling I	Personal:	Dane	a Niesma	
Phone: (701) 258							Mar and an			9977 67		
Weather Condition	is:	Temp:	33	°F	Wind:	Light	@		Precip:	Sunny / Pa	irtly Cloudy / Cloudy	
	WELL INFO	ORMATIO	N ′			/		SAIV	IPLING IN	FORMATIC	ON	
Well Locked?	YES	NO	cap is	broken]	Purging M	ethod:	Bladder			Control Settings:	
Well Labeled?	XES	NO	1 /			Sampling I		Bladder			Purge: 4	Sec.
Casing Strait?	YES	NO				Dedicated	Equipment:		NO] [Recover: 67	Sec.
Grout Seal Intact?	YES	NO C	racler d	Visible				Tub	ng		PSI:	
Repairs Necessary?				Concrete	_	Duplicate:	Sample?	YES	MO			
	ng Diameter:	2	2"			Duplicate :	Sample ID:		(
Water Level B		/6	13.85	ft						_		
	epth of Well:	11	6,65	ft			Bott	le List:		1		
V	Vell Volume:	,	719	liters	1	1 Liter Raw				1		
Depth to T	op of Pump:		-	ft	1	500mL Nitri	c			l		
Water Level A	fter Sample:	10	4.81	ft	1							
Measurem	ent Method:	Electric V	Nater Level	Indicator	1							
		Lana and a contract of the con			FIE	LD READII	NGS			•		
Stabilization Para	ameters	Temp.	Spec.	На	DO	ORP	Turbidity	Water Level	Pumping	mL	Appearance or Comme	ent
(3 Consecuti	ive)	(°C)	Cond.	рн	(mg/L)	(mV)	(NTU)	water Level	Rate	Removed	Clarity, Color, Odor, Ec	t.
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		clear, slightly turbid, tur	bid
	0940	Start of Wel	Purge				***************************************				(CT)	
	1000	9.69	5943	6,90	1,27	13,9	1/13,11	113.87	600	12,000	57	
11117	, , , , , , , , , , , , , , , , , , , ,	()))	~ , _			1	1	TOP of		150		
11/10/107		Pu	racd	014				pump				
11/11/			9	1			1	1				
12.												
2May23	1840	- 5+a	rted +	o Purge	weil			103.11		500		
a muy 23	000		,	101190				100.71				
12/10/10						 				-		
				 		 	 	1				
				+		 	 					
La company of the com	Well Sta	abilized?	YES	(NO)				Total Vol	ume Purged:	12,500	Liters	
Comple Date	Time	Temp.	Spec.		.0.0	1 1	Turbidity				Appearance or Comme	ent
Sample Date		(°C)	Cond.	pH	10	ORP	(NTU)				Clarity, Color, Odor, Ec	t.
2 May 23	0845	7.87	5415	6.93	3,59	51,5	26.19				de	
Comments:	F	BB	lue !	colle	ctel	at v	ve 1/1,					



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Client: Account #: 6106 Otter Tail Power Company



Phone: (701) 258-9720

Measurement Method:

Field Datasheet

Groundwater Assessment

Company: **OTP Coyote** Spring 2023 Event: Sample ID: Blue Sampling Personal:

Sunny / Partly Cloudy / Cloudy

Purge:

PSI:

Recover:

Control Settings:

Sec.

Precip:

Weather Conditions: Wind: Temp: WELL INFORMATION Well Locked? YES NO NO Well Labeled? Casing Strait? Not Visible **Grout Seal Intact?** YES NO Repairs Necessary? Casing Diameter: Water Level Before Purge: Total Depth of Well: Well Volume liters Depth to Top of Pump: ft Water Level After Sample:

Electric Water Level Indicator

SAMPLING INFORMATION Purging Method: Bladder Sampling Method: Dedicated Equipment Bladder YES

Duplicate Sample? YES NO Duplicate Sample ID:

	Bottle List:	
1 Liter Raw		
500mL Nitric		

FIELD READINGS

Stabilization Par	ameters	Temp.	Spec.	рН	DO	ORP	Turbidity	146-4	Pumping	mL	Appearance or Comment
(3 Consecut	ive)	(°C)	Cond.	рн	(mg/L)	(mV)	(NTU)	Water Level	Rate	Removed	Clarity, Color, Odor, Ect.
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		clear, slightly turbid, turbi
		Start of Wel	l Purge								
							ļ				
	-				-		-				CO TOTAL CONTRACTOR CO
		+					-	1			
		+									
		 									
	***************************************						-				***************************************
	Wells	tabilized?	YES	NO				Total Volu	ime Purged		iters

Sample Date	Time	Temp.	Spec.	рН	Turbidity	Appearance or Comment
		(°C)	Cond.		(NTU)	Clarity, Color, Odor, Ect.
Comments:						

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Report Date: Friday, May 19, 2023 5:15:22 PM



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Josh Hollen Otter Tail Power Company PO Box 496 Fergus Falls, MN 56538

Certificate of Analysis

Approval

All data reported has been reviewed and approved by:

C. Carrell

Claudette Carroll, Lab Manager Bismarck, ND

Analyses performed under Minnesota Department of Health Accreditation conforms to the current TNI standards.

NEW ULM LAB CERTIFICATIONS: MN LAB # 027-015-125 ND WW/DW # R-040

BISMARCK LAB CERTIFICATIONS: MN LAB # 038-999-267 ND W/DW # ND-016

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Report Date: Tuesday, June 13, 2023 10:56:20 AM



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Account #: 6106 Client: Otter Tail Power Company

Workorder Summary

Workorder Comments

All analytes with dilution factors greater than 1 (displayed in DF column) required dilution due to matrix or high concentration of target analyte unless otherwise noted and reporting limits (RDL column) have been adjusted accordingly.



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Account #: 6106 Client: Otter Tail Power Company

Analytical Results

 Lab ID:
 17852001
 Date Collected:
 06/08/2023 13:10
 Matrix:
 Groundwater

 Sample ID:
 Blue 14
 Date Received:
 06/08/2023 14:50
 Collector:
 MVTL Field Service

Temp @ Receipt (C): 5.8 Received on Ice: Yes

Method: 120.1

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Specific Conductance - Field	5225	umhos/cm	1	1	06/08/2023 13:10	06/08/2023 13:10	JSM	

Method: 150.2

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
pH - Field	6.69	units	0.01	1	06/08/2023 13:10	06/08/2023 13:10	JSM	

Method: 170.1

Parameter	Results	Units F	RDL	DF	Prepared	Analyzed	Ву	Qual
Temperature - Field C	15.7	degrees C		1	06/08/2023 13:10	06/08/2023 13:10	JSM	

Method: EPA 6010D

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Ву	Qual
Calcium	314	mg/L	5	5	06/08/2023 17:48	06/12/2023 14:07	SLZ	

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Page 3 of 8



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Account #: 6106 Client: Otter Tail Power Company

MVTL Field Services

Sampling Report

Otter Tail Power - Coyote Station

Blue

Sample Event: Resample 14 Work Order #: 17852

Sampling Dates: 8-Jun-23

Well Condition: All wells were found to be in fair condition.

Lock Condition: None

Sample Method: Low Flow with Bladder Pump

Blue 14 None

Resample for Calcium

Samples collected were placed on ice and transported back to the MVTL Laboratory in Bismarck, ND for analysis.

Jeremy Meyer MVTL Field Services

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Account #: 6106 Client: Otter Tail Power Company

C Nesun	ts Summary							WO #:	17852	4
Calcium				Units:	mg/L					
QC Type	Original Sample ID	Blank Result	Spike Amount	Spike % Recovery		Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)
FB-MI			100	105.0			85	115		
FB-MI			100	112.0			85	115		
FB-MI			100	108.0			85	115		
ИΒ		<1								
ИВ		<1								
ИВ		<1								
UP	17714002								6.3	20
UP	17719001								1.8	20
UP	17846029								0.8	20
UP	17852001								1.0	20
UP	17868002								0.9	20
Calcium				Units:	mg/L					
Э С Туре	Original Sample ID	Rlank Result	Spike Amount	Spike % Recovery	,	Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)
DS/PDSD	17268002		100	103.0		106.0	75	125	2.1	20
DS/PDSD	17268007		100	103.0		103.0	75	125	0.3	20
DS/PDSD	17448005		500	97.3		103.0	75	125	3.1	20
DS/PDSD	17714005		100	98.1		106.0	75	125	5.4	20
DS/PDSD	17714006		100	107.0		106.0	75	125	0.5	20
PDS/PDSD	17846032		500	105.0		108.0	75	125	1.5	20



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Date/Time

8 Jun 23

Account #: 6106 **Client:** Otter Tail Power Company

MV	(701) 258-9720 Otter Tail Power CC:				WO: 17852								Compan 	У	Chain of Custody Record		
Report To: Attn:	Josh Hollen			CC:									Project Name: OTP Coyote - Blue			TP Coyote - Blue	
Address:	PO Box 496 Fergus Falls, MN 56538	8-0496											Event:				
Phone: Email:	jhollen@otpco.com Sample Information				<u> </u>								Sampled By:				
	Sample Information					9	Sampl	e Cor	ntain	ers			Field Readings				
Lab Number	Sample ID	Date	Time	Sample Type			500 mL HNO3 (filtered) 250 mL H2SO4					Temp (°C)	Spec. Cond.	Hd	Appearance (Clear-C, Partly Cloudy-PC, Cloudy-CL)	Analysis Required	
001	Blue 14	8Jne 23	1310	GW	Х	Х	+	+	+	+	+	15.70	2225	6.69	C		
						-					F						
						+			+		ŧ					Calcium	
	<u> </u>				H	+			+		F						
Comments:																	

Sample Condition

Temp (°C)
RO1 5.8
TM562 / FM805

Location

Walk In #2

MVTL guarantees the accuracy of the analysis done on the sample submitted for testing. It is not possible for MVTL to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by MVTL. As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.

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Relinquished By

Date/Time

8 June 23



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Account #: 6106 Client: Otter Tail Power Company

A 44 / T			Eigl	AD.	atasl	agat		Company:		OTP Coyo	te
MVT	4		1101	uD	atasi	ICCL		Event:		Spring	2023
	45		G	roundwat	er Assessm	ent		Sample ID:	:		Blue 14
2616 E. Broadway Ave,	Bismarck, ND							Sampling F	Personal:		Inchi-
Phone: (701) 25											
Weather Condition	ns:	Temp:	90)°F	Wind:	ς'	@ 5-10	2	Precip:	/Sunny)/P	artly Cloudy / Cloudy
	WELL INF	ORMATIO	N					SAM	IPLING IN	FORMATI	ON
Well Locked?	YES	NO			7	Purging M	ethod:	Bladder		1	Control Settings:
Well Labeled?	(YES)	NO			1	Sampling N	/lethod:	Bladder		1	Purge: S
Casing Strait?	VES)	NO]	Dedicated	Equipment'	YES	NO	1	Recover: S
Grout Seal Intact?	YES	NO	(Not	/isible		10.000000000000000000000000000000000000	2.00 700 (00000)	Tub	inag	-	PSI:
Repairs Necessary?					1	Duplicate 5	Sample?	YES	NO	1	
	ng Diameter		2"	ALL STATES		Duplicate 5	Sample ID:	_		1	
Water Level B			3.90	ft		2		***************************************	**************************************	-	
	epth of Well		_	ft			Bott	le List:			
	Well Volume		_	liters		1 Liter Raw				1	
	Top of Pump		<u> </u>	ft		500mL Nitri	С				
Water Level A			1.60	ft	1					1	
Measurem	ent Method	: Electric V	Nater Level	Indicator]				***************************************		
eesa kanania s					FIE	LD READI	NGS			The .	
Stabilization Par		Temp.	Spec.	рН	DO	ORP	Turbidity	Water Level	Pumping	mL	Appearance or Comment
(3 Consecut		(°C)	Cond.		(mg/L)	(mV)	(NTU)		Rate	Removed	Clarity, Color, Odor, Ect.
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		clear, slightly turbid, turbid
0 00	1150	Start of Wel	Purge								
65 1 68				-							
B June 23	1200	24,21	5529	6.67	0.94	162.8	28,81	74.63	100.0	1000.0	Clear
& June 19	1220	24.21	5529	6,63	0.33	61.9	22.40	74.60	100.0	1000.0	Clear
B June 29	1200 1220 1240	24,21 24,51 15.08	5529 5454 5288	6.63	0.33	61.9	13,75	74.63 74.60 74.65			Clear Clear Clear
& June 19	1200 1220 1240	24,21 24,51 15.08 15.34	5529 5454 5288 5255	6,63	0.33	61.9 45.7 46.1	13.75	74.65	100.0	2000.0 2000.0 2000,0	Cler
B Jue 18	1200 1220 1240	24,21 24,51 15,08 15,34 15,65	5529 5454 5288 5255 5225	6,63	0.33	61.9 45.7 46.1 42.1	22.40 13.75 4.91 3.11	74.60 74.65 74.71 74.71	100.0	2000.0	Clear
B Jue 18	1200 1220 1240	24,21 24,51 15.08 15.34	5529 5454 5288 5255	6,63	0.33	61.9 45.7 46.1	13.75	74.65	100.0	2000.0 2000.0 2000,0	Clear
B Jue 29	1200 1220 1240 1300 1305	24,21 24,51 15,08 15,34 15,65	5529 5454 5288 5255 5225	6,63	0.33	61.9 45.7 46.1 42.1	22.40 13.75 4.91 3.11	74.60 74.65 74.71 74.71	100.0 100.0 100.0	2000.0 2000.0 2000.0 500.0	Clear Clear Clear Clear
B Jue 29	1200 1220 1240 1300 1305	24,21 24,51 15,08 15,34 15,65	5529 5454 5288 5255 5225	6,63	0.33	61.9 45.7 46.1 42.1	22.40 13.75 4.91 3.11	74.60 74.65 74.71 74.71	100.0 100.0 100.0	2000.0 2000.0 2000.0 500.0	Clear Clear Clear Clear
B Jue 29	1200 1220 1240 1300 1305	24,21 24,51 15,08 15,34 15,65	5529 5454 5288 5255 5225	6,63	0.33	61.9 45.7 46.1 42.1	22.40 13.75 4.91 3.11	74.60 74.65 74.71 74.71	100.0 100.0 100.0	2000.0 2000.0 2000.0 500.0	Clear Clear Clear Clear
B Jucis	1200 1220 1240 1300 1305 1310	24,21 24,51 15,08 15,34 15,65	5529 5454 5288 5255 5225	6,63	0.33	61.9 45.7 46.1 42.1	22.40 13.75 4.91 3.11	74.60 74.65 74.71 74.74 74.76	100.0 100.0 100.0	2000.0 2000.0 2000.0 500.0 500.0	Clear Clear Clear Clear
Sample Date	1200 1220 1240 1300 1305 1310	24,21 24,51 15.08 15.34 15.65 15.70 abilized?	\$529 \$454 5286 5255 5225 5225 \$225	6,69 6,70 6,69 6,69	0.33	61.9 45.7 46.1 42.1	72.40 13.75 4.91 3.41 3.37	74.60 74.65 74.71 74.74 74.76	100.0 100.0 100.0 100.0	2000.0 2000.0 2000.0 500.0 500.0	Clex Clex Clex Clex Clex Clex Clex Clex
	200 220 220 220 305 305 305	24,21 24,51 15.08 15.34 15,65 15,70	5529 5454 5286 5255 5225 5225	6,69 6,70 6,69 6,69	0.33	61.9 45.7 46.1 42.1	13.75 4.91 3.41 3.37	74.60 74.65 74.71 74.74 74.76	100.0 100.0 100.0 100.0	2000.0 2000.0 2000.0 500.0 500.0	Clear Clear Clear Clear Clear Clear Clear Liters



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Account #: 6106

Client:

Field Datasheet

Otter Tail Power Company

OTP Coyote

Company:

2616 E. Broadway Ave, Bismarc Phone: (701) 258-9720	ck, ND		Surface wat	ter Assessme		Samp	ing Personal:	John	
Weather Conditions:	Temp:	90	ı°F	Wind:	5	@ 5-10	Precip: (Su	nny / Partly Cloudy	/ Cloudy
Well ID	Date	Time	Casing Diameter	Water Level (ft)	Total Depth (ft)		Comme	ents	
Blue 6		1134	2"	57.75					
Blue 7		1138	2"	75.75					
Blue 13		1336	2"	104.20					
Blue 14		1143	2"	73,90					
Blue 15		1127	2"	71.91	_				
Blue 16		1131	2"	69.83	_				
							3 3334 10		
New York Committee Committ									
9.									

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Josh Hollen Otter Tail Power Company PO Box 496 Fergus Falls, MN 56538

Certificate of Analysis

Approval

All data reported has been reviewed and approved by:

C. Carrell

Claudette Carroll, Lab Manager Bismarck, ND

Analyses performed under Minnesota Department of Health Accreditation conforms to the current TNI standards.

NEW ULM LAB CERTIFICATIONS: MN LAB # 027-015-125 ND WW/DW # R-040

BISMARCK LAB CERTIFICATIONS: MN LAB # 038-999-267 ND W/DW # ND-016

Workorder Comments

All analytes with dilution factors greater than 1 (displayed in DF column) required dilution due to matrix or high concentration of target analyte unless otherwise noted and reporting limits (RDL column) have been adjusted accordingly.

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Account #: 6106 Client: Otter Tail Power Company

Analytical Results

Lab ID:31257001Date Collected:10/16/2023Matrix:GroundwaterSample ID:FB BlueDate Received:10/16/2023 18:15Collector:MVTL Field Service

Temp @ Receipt (C): 4.8 Received on Ice: Yes

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
							_
Method: ASTM D516-16							
Sulfate	<5	mg/L	5	1	10/25/2023 11:27	10/25/2023 11:27	
Method: EPA 6010D							
Boron	<0.1	mg/L	0.1	1	10/17/2023 16:50	10/26/2023 09:55	
Calcium	<1	mg/L	1	1	10/17/2023 16:50	10/23/2023 10:50	
Method: SM4500 H+ B-2011							
рН	6.3	units	0.1	1	10/17/2023 16:20	10/17/2023 16:20	*
Method: SM4500-CI-E 2011							
Chloride	<2.0	mg/L	2.0	1	10/24/2023 11:39	10/24/2023 11:39	
		3-					
Method: SM4500-F-C-2011		_					
Fluoride	<0.1	mg/L	0.1	1	10/17/2023 16:20	10/17/2023 16:20	
Method: USGS I-1750-85							
Total Dissolved Solids	<10	mg/L	10	1	10/19/2023 16:52	10/19/2023 16:52	

Sample Comments

Time sampled was not supplied by the client.

Analysis Results Comments

рΗ

Sample analyzed beyond holding time.

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Report Date: Monday, November 27, 2023 3:38:34 PM

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Account #: 6106 Client: Otter Tail Power Company

Analytical Results

 Lab ID:
 31257002
 Date Collected:
 10/16/2023 16:16
 Matrix:
 Groundwater

 Sample ID:
 Blue 6
 Date Received:
 10/16/2023 18:15
 Collector:
 MVTL Field Service

Temp @ Receipt (C): 4.8 Received on Ice: Yes

Temp & Redelpt (0).	received on	100.					
Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
Method: 120.1							
Specific Conductance - Field	2193	umhos/cm	1	1	10/16/2023 16:16	10/16/2023 16:16	
Method: 150.2							
		.,	0.04		10/10/0000 10 10	10/10/0000 10 10	
pH - Field	6.93	units	0.01	1	10/16/2023 16:16	10/16/2023 16:16	
Method: 170.1							
Temperature - Field C	16.28	degrees C		1	10/16/2023 16:16	10/16/2023 16:16	
Made a de ACTM DE4C 4C							
Method: ASTM D516-16							
Sulfate	834	mg/L	25	5	10/25/2023 11:28	10/25/2023 11:28	
Method: EPA 6010D							
Boron	0.26	mg/L	0.1	1	10/17/2023 16:50	10/26/2023 09:57	
Calcium	177	mg/L	1	1	10/17/2023 16:50	10/23/2023 10:53	
Method: SM4500 H+ B-2011							
		.,	0.4	4	40/47/0000 40 00	10/17/0000 10 00	*
ΡΗ	6.7	units	0.1	1	10/17/2023 16:26	10/17/2023 16:26	•
Method: SM4500-CI-E 2011							
Chloride	7.4	mg/L	2.0	1	10/24/2023 11:40	10/24/2023 11:40	
Method: SM4500-F-C-2011							
Fluoride	0.17	mg/L	0.1	1	10/17/2023 16:26	10/17/2023 16:26	
Method: USGS I-1750-85							
Total Dissolved Solids	1880	mg/L	10	1	10/19/2023 16:52	10/19/2023 16:52	
. Sta. B.SSOIVGG GOIIGG		g/ =	10	•	. 5, . 6, 2020 10.02	. 3, . 3, 2020 10.02	

Analysis Results Comments

рΗ

Sample analyzed beyond holding time.

MVTL guarantees the accuracy of the analysis done on the sample submitted for testing. It is not possible for MVTL to guarantee that a test result obtained on a particular sample will be the same on any other sample unless all conditions affecting the sample are the same, including sampling by MVTL. As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of clients, and authorization for publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval.



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Account #: 6106 Client: Otter Tail Power Company

Analytical Results

Lab ID:31257003Date Collected:10/16/2023 13:40Matrix:GroundwaterSample ID:Blue 7Date Received:10/16/2023 18:15Collector:MVTL Field Service

Temp @ Receipt (C): 4.8 Received on Ice: Yes

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
	· toodito	30	1102				Q uui
Method: 120.1							
Specific Conductance - Field	2238	umhos/cm	1	1	10/16/2023 13:40	10/16/2023 13:40	
Method: 150.2							
pH - Field	6.65	units	0.01	1	10/16/2023 13:40	10/16/2023 13:40	
Method: 170.1							
Temperature - Field C	12.17	degrees C		1	10/16/2023 13:40	10/16/2023 13:40	
Method: ASTM D516-16							
Sulfate	858	mg/L	50	10	10/25/2023 11:33	10/25/2023 11:33	*
Method: EPA 6010D							
Boron	0.28	mg/L	0.1	1	10/17/2023 16:50	10/26/2023 09:59	
Calcium	171	mg/L	1	1	10/17/2023 16:50	10/23/2023 10:54	
Method: SM4500 H+ B-2011							
рН	6.8	units	0.1	1	10/17/2023 16:32	10/17/2023 16:32	*
Method: SM4500-CI-E 2011							
Chloride	7.0	mg/L	2.0	1	10/24/2023 11:41	10/24/2023 11:41	
Method: SM4500-F-C-2011							
Fluoride	0.18	mg/L	0.1	1	10/17/2023 16:32	10/17/2023 16:32	
Method: USGS I-1750-85							
Total Dissolved Solids	1750	mg/L	10	1	10/19/2023 16:52	10/19/2023 16:52	

Analysis Results Comments

Sulfate

Matrix spike and/or matrix spike duplicate recovery was low; the associated laboratory control sample recovery was acceptable.

pН

Sample analyzed beyond holding time.

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Report Date: Monday, November 27, 2023 3:38:34 PM

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Account #: 6106 Client: Otter Tail Power Company

Analytical Results

Lab ID:31257004Date Collected:10/16/2023 16:50Matrix:GroundwaterSample ID:Blue 13Date Received:10/16/2023 18:15Collector:MVTL Field Service

Temp @ Receipt (C): 4.8 Received on Ice: Yes

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Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
Method: 120.1							
Specific Conductance - Field	6084	umhos/cm	1	1	10/16/2023 16:50	10/16/2023 16:50	
Method: 150,2							
pH - Field	6.96	units	0.01	1	10/16/2023 16:50	10/16/2023 16:50	
Method: 170.1		_					
Temperature - Field C	13.91	degrees C		1	10/16/2023 16:50	10/16/2023 16:50	
Method: ASTM D516-16							
Sulfate	2650	mg/L	200	40	10/25/2023 13:38	10/25/2023 13:38	
Method: EPA 6010D							
Boron	<0.5	mg/L	0.5	5	10/17/2023 16:50	10/26/2023 10:21	
Calcium	119	mg/L	5	5	10/17/2023 16:50	10/23/2023 10:55	
Method: SM4500 H+ B-2011							
рН	7.1	units	0.1	1	10/17/2023 16:38	10/17/2023 16:38	*
Method: SM4500-CI-E 2011		_					
Chloride	51.9	mg/L	2.0	1	10/24/2023 11:42	10/24/2023 11:42	
Method: SM4500-F-C-2011							
Fluoride	0.25	mg/L	0.1	1	10/17/2023 16:38	10/17/2023 16:38	
Method: USGS I-1750-85							
Total Dissolved Solids	5060	mg/L	10	1	10/19/2023 16:52	10/19/2023 16:52	
		5					

Analysis Results Comments

рΗ

Sample analyzed beyond holding time.

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Account #: 6106 Client: Otter Tail Power Company

Analytical Results

Lab ID:31257005Date Collected:10/16/2023 12:40Matrix:GroundwaterSample ID:Blue 14Date Received:10/16/2023 18:15Collector:MVTL Field Service

Temp @ Receipt (C): 4.8 Received on Ice: Yes

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
Method: 120.1							
Specific Conductance - Field	5044	umhos/cm	1	1	10/16/2023 12:40	10/16/2023 12:40	
Method: 150.2							
pH - Field	6.7	units	0.01	1	10/16/2023 12:40	10/16/2023 12:40	
Method: 170.1							
Temperature - Field C	12.18	degrees C		1	10/16/2023 12:40	10/16/2023 12:40	
Method: ASTM D516-16							
Sulfate	2310	mg/L	100	20	10/25/2023 13:39	10/25/2023 13:39	
Made at EDA COADD		-					
Method: EPA 6010D	-0 F		0.5	_	40/47/2022 40:50	40/00/0000 40:00	
Boron	<0.5	mg/L	0.5	5	10/17/2023 16:50	10/26/2023 10:23	
Calcium	285	mg/L	5	5	10/17/2023 16:50	10/23/2023 10:56	
Method: SM4500 H+ B-2011							
рН	6.8	units	0.1	1	10/17/2023 17:38	10/17/2023 17:38	*
Method: SM4500-CI-E 2011							
Chloride	10.5	mg/L	2.0	1	10/24/2023 11:43	10/24/2023 11:43	
Method: SM4500-F-C-2011							
Fluoride	0.13	mg/L	0.1	1	10/17/2023 17:38	10/17/2023 17:38	
Method: USGS I-1750-85							
Total Dissolved Solids	4180	mg/L	10	1	10/19/2023 16:52	10/19/2023 16:52	
TOTAL DISSUIVED SUIDS	4100	mg/L	10	'	10/18/2023 10.32	10/18/2023 10.32	

Analysis Results Comments

рΗ

Sample analyzed beyond holding time.

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Account #: 6106 Client: Otter Tail Power Company

Analytical Results

 Lab ID:
 31257006
 Date Collected:
 10/16/2023 15:05
 Matrix:
 Groundwater

 Sample ID:
 Blue 15
 Date Received:
 10/16/2023 18:15
 Collector:
 MVTL Field Service

Temp @ Receipt (C): 4.8 Received on Ice: Yes

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
Method: 120.1							
Specific Conductance - Field	3108	umhos/cm	1	1	10/16/2023 15:05	10/16/2023 15:05	
Method: 150.2							
pH - Field	6.71	units	0.01	1	10/16/2023 15:05	10/16/2023 15:05	
Method: 170.1							
Temperature - Field C	12,92	degrees C		1	10/16/2023 15:05	10/16/2023 15:05	
remperature - Field C	12.32	degrees o		'	10/10/2023 10:00	10/10/2023 13:03	
Method: ASTM D516-16							
Sulfate	1010	mg/L	50	10	10/25/2023 13:41	10/25/2023 13:41	
Method: EPA 6010D							
Boron	0.33	mg/L	0.1	1	10/17/2023 16:50	10/26/2023 10:24	
Calcium	131	mg/L	1	1	10/17/2023 16:50	10/23/2023 10:57	
Method: SM4500 H+ B-2011							
pH	6.8	units	0.1	1	10/17/2023 17:44	10/17/2023 17:44	*
Method: SM4500-CI-E 2011							
Chloride	8.7	mg/L	2.0	1	10/24/2023 11:44	10/24/2023 11:44	
Method: SM4500-F-C-2011							
Fluoride	0.20	mg/L	0.1	1	10/17/2023 17:44	10/17/2023 17:44	
Method: USGS I-1750-85							
Total Dissolved Solids	2450	mg/L	10	1	10/19/2023 16:52	10/19/2023 16:52	

Analysis Results Comments

рΗ

Sample analyzed beyond holding time.

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Account #: 6106 Client: Otter Tail Power Company

Analytical Results

Lab ID:31257007Date Collected:10/16/2023 16:00Matrix:GroundwaterSample ID:Blue 16Date Received:10/16/2023 18:15Collector:MVTL Field Service

Temp @ Receipt (C): 4.8 Received on Ice: Yes

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
Method: 120.1							
Specific Conductance - Field	2220	umhos/cm	1	1	10/16/2023 16:00	10/16/2023 16:00	
Method: 150.2							
pH - Field	6.67	units	0.01	1	10/16/2023 16:00	10/16/2023 16:00	
Method: 170.1							
Temperature - Field C	13.14	degrees C		1	10/16/2023 16:00	10/16/2023 16:00	
		J					
Method: ASTM D516-16							
Sulfate	749	mg/L	25	5	10/25/2023 13:42	10/25/2023 13:42	
Method: EPA 6010D							
Boron	0.30	mg/L	0.1	1	10/17/2023 16:50	10/26/2023 10:26	
Calcium	136	mg/L	1	1	10/17/2023 16:50	10/23/2023 10:58	
Method: SM4500 H+ B-2011							
рН	6.8	units	0.1	1	10/17/2023 17:51	10/17/2023 17:51	*
Method: SM4500-CI-E 2011							
	7.0		2.0	4	10/24/2023 11:46	10/24/2023 11:46	
Chloride	7.6	mg/L	2.0	1	10/24/2023 11:46	10/24/2023 11:46	
Method: SM4500-F-C-2011							
Fluoride	0.20	mg/L	0.1	1	10/17/2023 17:51	10/17/2023 17:51	
Method: USGS I-1750-85							
Total Dissolved Solids	1670	mg/L	10	1	10/19/2023 16:52	10/19/2023 16:52	

Analysis Results Comments

рΗ

Sample analyzed beyond holding time.

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Account #: 6106 Client: Otter Tail Power Company

c nesun	ts Summary						WO #:	3125	07
Sulfate				Units: mg/L					
QC Type	Original Sample ID	Blank Result	Spike Amount	Spike % Recovery	Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)
FB			100	102.0		85	115		
FB			100	96.5		85	115		
FB			100	95.3		85	115		
FB			100	100.0		85	115		
ro			100	100.0		0.5	113		
FB			100	96.7		85	115		
FB			100	98.2		85	115		
FB			100	102.0		85	115		
FB			100	102.0		85	115		
FB			100	102.0		85	115		
				**************************************		-			
ИB		<5							
ИВ		<5							
ИВ		<5							
ИВ		<5							
ИВ		<5							
ИB		<5							
ИВ		<5							
ИВ		<5							
ИВ		<5							
MS/MSD	31043001		1000	93.2	93.1	85	115	0.0	20
WIS/ WISD	31043001		1000	93.2	93.1	65	115	0.0	20
NS/MSD	31257003		1000	81.7	83.1	85	115	0.6	20
NS/MSD	31258006		100	99.5	100.6	85	115	0.8	20
/IS/MSD	31449001		500	86.8	86.6	85	115	0.1	20
MS/MSD	31724004		2000	88.7	90.5	85	115	0.8	20
MS/MSD	31740009		2000	88.5	86.4	85	115	0.8	20
MS/MSD	31817001		2000	93.0	94.5	85	115	1.2	20
/IS/MSD	31825010		10000	65.7	59.9	85	115	6.1	20
Chloride				Units: mg/L					
QC Туре	Original Sample ID	Blank Result	Spike Amount	Spike % Recovery	Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)



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Account #: 6106 Client: Otter Tail Power Company

Chloride	0.4-1/ 1 :	011-0	5-9	Units: mg/		V	W	PDD /0''	DDD 11- 11 (21)
QC Type LFB	Original Sample ID	Blank Result	Spike Amount	Spike % Recovery	Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)
LFB			30	92.9		90	110		
LFB			30	93.2		90	110		
LFB			30	93.7		90	110		
LFB			30	93.9		90	110		
LFB			30	94.5		90	110		
LFB			30	94.7		90	110		
LFB			30	94.5		90	110		
LFB			30	94.4		90	110		
LFB			30	94.7		90	110		
LFB			30	94.0		90	110		
MB		<2.0							
MB		<2.0							
MB		<2.0							
MB		<2.0							
MB		<2.0							
MB		<2.0							
МВ		<2.0							
MB		<2.0							
MB		<2.0							
MB		<2.0							
MB		<2.0							
MS/MSD	31257003		30	83.8	80.6	80	120	2.8	20
M2/M2D	31/24002		30	97.8	97.1	80	120	U.4	20
MS/MSD	31743001		30	122.4	122.5	80	120	0.0	20
MS/MSD	31825014		30	95.3	94.4	80	120	0.0	20
MS/MSD	31877011		30	121.3	123.9	80	120	1.0	20
Calcium QC Type	Original Sample ID	Blank Result	Spike Amount	Units: mg/	Spike Duplicate	Lower Control	Upper Control	RPD (%)	RPD Limit (%)
PDS/PDSD	31257001		100	Recovery 100.0	% Recovery 99.9	Limit (%) 75	Limit (%) 125	0.1	20
PDS/PDSD	31419001		100	87.7	86.5	75	125	0.4	20



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Account #: 6106 Client: Otter Tail Power Company

Calcium				Units:	mg/L					
QC Type	Original Sample ID	Blank Result	Spike Amount	Spike % Recovery		Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)
PDS/PDSD	31612001		500	96.8		95.6	75	125	1.1	20
PDS/PDSD	31740003		1000	93.4		95.6	75	125	1.6	20
DS/PDSD	31740013		100	94.8		94.6	75	125	0.2	20
PDS/PDSD	31761002		100	88.6		92.9	75	125	2.0	20
Boron				Units:	mg/L					
QC Туре	Original Sample ID	Blank Result	Spike Amount	Spike % Recovery		Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)
FB-OE			0.4	93.0			85	115		
ИВ		<0.1								
/IS/MSD	31257003		0.4	93.2		88.8	75	125	2.7	20
Calcium				Units:	mg/L					
QС Туре	Original Sample ID	Blank Result	Spike Amount	Spike % Recovery	3, -	Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)
FB-MI			100	112.0			85	115		
ИΒ		<1								
UP	31257007								3,8	20
UP	31419004								1.1	20
Н				Units:	units					
QC Type	Original Sample ID	Blank Result	Spike Amount	Spike % Recovery		Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)
OUP	31258001								0.3	20
UP	31288001								0.7	20
UP	31314001								0.3	20
оН				Units:	units					
ДС Туре	Original Sample ID	Blank Result	Spike Amount	Spike % Recovery		Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)
RM-PH			6	99.2			98.33	101.67		
RM-PH			6	98.3			98.33	101.67		
RM-PH			6	98.7			98.33	101.67		
RM-PH			6	98.7			98.33	101.67		
luoride				Units:	mg/L					
QC Type	Original Sample ID	Blank Result	Spike Amount	Spike % Recovery		Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)
RM-F			3.06	93.1			83.99	111.11		
FB-F			0.5	100.0			90	110		
FB-F			0.5	92.0			90	110		
FB-F			0.5	104.0			90	110		



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Account #: 6106 Client: Otter Tail Power Company

Fluoride				Units:	mg/L					
QC Type	Original Sample ID	Blank Result	Spike Amount	Spike % Recovery		Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)
MB-F		<0.1								
MB-F		<0.1								
MB-F		<0.1								
MB-F		<0.1								
MS/MSD-F	31257003		0.5	96.0		102.0	80	120	4.4	20
MS/MSD-F	31257003		0.5	94.0		88.0	80	120	4.7	20
MS/MSD-F	31258004		0.5	100.0		102.0	80	120	0.8	20
Total Dissolve	ed Solids			Units:	mg/L					
QC Type	Original Sample ID	Blank Result	Spike Amount	Spike % Recovery		Spike Duplicate % Recovery	Lower Control Limit (%)	Upper Control Limit (%)	RPD (%)	RPD Limit (%)
CRM			736	99.0			90.35	110.33		
MB		<10								
DUP	31465002								2.5	20



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10 miles (10 miles)
ITI
/TL
4

Minnesota Valley Testing Laboratories 2616 E. Broadway Ave Bismarck, ND 58501

CC:

(701) 258-9720

(701) 238-37

Otter Tail Power Josh Hollen

PO Box 496 Fergus Falls, MN 56538-0496

Phone: Email:

Report To: Attn: Address:

jhollen@otpco.com

Otter Tail Power Company

WO: 31257



Chain of Custody Record

Event: Fall 2023
Sampled By:

	Samp	le Informatior					Sample Con	tainers		Field Re	adings		
Lab Number	Sample ID	Date	Тіме	Sample Type	1 Liter Raw	HN03	500 mL HNO3 (filterad) 250 mL H2SO4		Temp (°C)	Spec. Cond.	Hd	Appearance (Clear-C, Partly Cloudy-PC, Cloudy- CL)	Analysis Required
001	FB Blue	16 Oct 23	16	GW	Х	Х			NA	NA	NA	NA	
008	Blue 6	16 Oct 23	1616	GW	X	Х			16.20	2193	6,93	C	
003	Blue 7/MS7/MSD7	16 Oct 23	1340	GW	3	3			12.17	2238	6.65	L	
004	Blue 13	16 Oct 23	1650	GW	Х	Х			13.91	6084	6.96	C	
005	Blue 14	16 Oct 23	1240	GW	Х	Х			12.18	5044	6.70	C	OTD CCD A 2
006	Blue 15	16 Oct 23	1505	GW	Х	Х			12.92	3108	6,71	C	OTP CCR App 3
007	Blue 16	16 Oct 23	1600	GW	х	х			13.14	2220	6.67	C	

Comments:

Relinguished By		Sample	e Condition	Received By		
Name n	Date/Time	Location	Temp (°C)	Name	Date/Time	
7/1	16.0ct 23	Log In Wa lk In #2 >	150 4.6 TM562 / TM805	Heather Horse	170G 23 6800	
, ,				<u></u>		



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Account #: 6106 Client: Otter Tail Power Company



Sample Date

16 Oct 23

Comments:

Field Datasheet

Groundwater Assessment

Spec.

2193

6.93

(°C)

16.28

1616

Company: OTP Coyote

Event: Fall 2023

Sample ID: Blue G

Sampling Personal: Agreement State Company: Sampling Personal: Agreement State Company: Sampling Personal: Agreement State Company: Sampling Personal: Agreement State Company: Sampling Personal: Agreement State Company: Sampling Personal: Agreement State Company: Sampling Personal: Agreement State Company: Sampling Personal: Sampling

Appearance or Comment

Clarity, Color, Odor, Ect

Cless

Sunny / Partly Cloudy / Cloudy Wind: **Weather Conditions:** Precip: Temp: 65°F @ 5-10 SAMPLING INFORMATION WELL INFORMATION Well Locked? NO Purging Method: Bladder **Control Settings:** Purge: 10 Recover: 10 Sec. Bladder Well Labeled? NO Sampling Method: NO Casing Strait? YES NO Dedicated Equipment Not Visible 80 NO **Grout Seal Intact?** YES YES NO Duplicate Sample? Repairs Necessary? Casing Diameter: Duplicate Sample ID: Water Level Before Purge: ft **Bottle List:** Total Depth of Well: Well Volume: liters 1 Liter Raw Depth to Top of Pump: ft 500mL Nitric Water Level After Sample Electric Water Level Indicator Measurement Method: FIELD READINGS DO Turbidity Pumping mi **Appearance or Comment** Water Leve рН (NTU) <5.0 Clarity, Color, Odor, Ect. (3 Consecutive) (°C) Cond. (mg/L) Rate Removed mL/Min ±0.1 clear, slightly turbid, turbid **Purge Date** Time ±5% ±10% ±10 tart of Well Purge 16 Oct 23 1116 70,03 10,46 2213 6,79 20,40 300,0 Ckey 1138 1.24 2209 0,58 60.0 30.0 300.0 Che 7.51 Pursed 16,28 2193 10 Smin to clean line 1611 100.0 6.93 96.8 66.12 500.0 Class 12,51 1616 Total Volume Purged: 6000 (NO Liters YES

Turbidity

(NTU)

22,03

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Account #: 6106 Client: Otter Tail Power Company



Field Datasheet

Groundwater Assessment

Company: OTP Coyote

Event: Fall 2023

Sample ID: Blue 7

Sampling Personal:

Phone: (701) 258-9720 Sunny Partly Cloudy / Cloudy Wind: Precip: Weather Conditions: Temp: 60°F 5 @ 5-10 SAMPLING INFORMATION WELL INFORMATION **Control Settings:** Purging Method: Bladde Well Locked NO Purge: /0 Bladder Well Labeled? CVES NO Sampling Method: Recover: 50 YES NO Dedicated Equipment? YES Casing Strait? Not Visible 69 Tubby **Grout Seal Intact?** YES NO CES Duplicate Sample? NO Repairs Necessary? Casing Diameter: Duplicate Sample ID: MSMSD Water Level Before Purge: Bottle List: Total Depth of Well: liters 1 Liter Raw Well Volume: Depth to Top of Pump: ft 500mL Nitric Water Level After Sample Electric Water Level Indicator Measurement Method: D DEADINGS

Stabilization Pa	rameters	Temp.	Spec.		DO	ORP	Turbidity	Water Level	Pumping	mL	Appearance or Comment	
(3 Consecu	tive)	(°C)	Cond.	pН	(mg/L)	(mV)	(NTU)	water Level	Rate	Removed	Clarity, Color, Odor, Ect.	
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		clear, slightly turbid, turbid	
60ct23	1305	Start of Wel	l Purge									
600	1315	12,89	2241	6.60	0.34	-29.1	20.13	81.28	100.0	10000	Clery	
	1325	12,50	2238	6,62	0,19	-37.4	5,32	81.30	100.0	1000.0	Cless	
	1330	12.41	2203	6163	0,19	-40.0	4,69	81.32	100.0	500.0	Clear	
	1335	12.33	7239	6.64	0.17	-45.7	3,80	B1.34	C.001	500.0	Cleer	
	1340	12.17	2238	6,65	0,14	-49.2	3,11	B1.35	100.0	500.0	Cher	
						-		+				
		300 mg										
	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Stabilized?	(YES)	NO	L		L	Total Vol	ume Purged	3500,0	Liters	

	T	Temp. Spec.			Turbidity	Appearance or Comment
Sample Date Time	(°C)	(°C) Cond pH	рН	(NTU)	Clarity, Color, Odor, Ect.	
1600123	1340	12.17	2238	6.65	3.11	Clery

Comments:



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Account #: 6106 Client: Otter Tail Power Company



Field Datasheet

Groundwater Assessment

Phone: (701) 258-9720 Precip: Sunny / Partly Cloudy / Cloudy 5 @ 5-10 **Weather Conditions:** Wind: Temp: SAMPLING INFORMATION WELL INFORMATION Control Settings: Purge: 10 Purging Method: NO Well Locked? YES Hinge bolun Sampling Method: Bladde YES Well Labeled? Recover: 10 NO Sec **Dedicated Equipment?** MES Casing Strait? Not Visible 80 **Grout Seal Intact?** (NO) **Duplicate Sample?** Repairs Necessary?

Casing Diameter: Duplicate Sample ID: Water Level Before Purge: Bottle List: Total Depth of Well: 113.80 1 Liter Raw Well Volume: Depth to Top of Pump: ft 500mL Nitric 108,52 ft Electric Water Level Indicator Water Level After Sample: Measurement Method: CITI D DEADINGS

Stabilization Par	Stabilization Parameters		Spec.	c. pH	DO (mg/L)	ORP	Turbidity	Water Level	Pumping Rate	mL Removed	Appearance or Comment Clarity, Color, Odor, Ect.	
(3 Consecutive)		(°C)	Cond.	pri		(mV)	(NTU)	200000000000000000000000000000000000000				
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		clear, slightly turbid, turbid	
	1035	035 Start of Well Purge										
6 oct 23	1045	10.51	5962	6.90	1,90	139.2	35.26	110,31	300.0	3000.0	Clear	
	1055	10,59	6000	6.91	1.59	69,5	22.71	Belas Pry	3000	300.0	Clear	
		Pugad	Du	- Annana								
	1645	Purosed	well for	Smin	to Clean	line		105,10	k			
	1650	13.91	6084	6,96	2,35	46.7	90.36	106,52	100.0	5000		
				(NO)						: 65000	Liters	

Sample Date Time Temp. Spec.	Spec.		Turbidity	Appearance or Comment		
	pН	(NTU)	Clarity, Color, Odor, Ect.			
16 Oct 23	1650	13.91	6084	6,96	90.36	

Comments:

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Account #: 6106 Client: Otter Tail Power Company



Field Datasheet

Groundwater Assessment

Spec.

5044

pH

6,70

Company: OTP Coyote

Event: Fall 2023

Sample ID: Blue I-I
Sampling Personal:

Appearance or Comment

Clarity, Color, Odor, Ect

Phone: (701) 258-9720 Sunny / Partly Cloudy / Cloudy Precip: **Weather Conditions:** Temp: Wind: 5 @ 5-10 WELL INFORMATION SAMPLING INFORMATION Purging Method: Bladder Control Settings: Well Locked? MES NO Purge: 10 Well Labeled? NO Sampling Method: Bladder YES Recover: SO NO YES) NO Dedicated Equipment? Casing Strait? Not Visible **Grout Seal Intact?** NO M) YES Duplicate Sample? Repairs Necessary? Casing Diameter: Duplicate Sample ID: Water Level Before Purge 79.7 **Bottle List:** Total Depth of Well liters 1 Liter Raw Well Volume: Depth to Top of Pump ft 500mL Nitric Water Level After Sample Measurement Method: **FIELD READINGS** Pumping mL Appearance or Comment Stabilization Parameters DO Water Leve pH Clarity, Color, Odor, Ect (°C) (mV) (NTU) Rate Removed Cond (3 Consecutive) mL/Min ±0.1 clear, slightly turbid, turbid Purge Date ±5% ±10% ±10 <5.0 Start of Well Purge 1150 16 Oct 23 5295 5190 80,30 100.0 0.00U 1200 12.17 39.0 0.17 80,82 Cles 6.73 12.46 100,0 2000.0 0.11 81.03 10000 6.70 4.07 1230 11.94 5077 0.06 38-5 1000,0 clear 100.0 Clay 500,0 500,0 12.18 35,9 33,3 2.41 81.11 1235 5027 0,05 100.0 81.25 1240 5044 6.70 0.05 3.41 Total Volume Purged: 5000.0 Liters Well Stabilized YES NO

Turbidity

(NTU)

3.41

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Report Date: Monday, November 27, 2023 3:38:34 PM

Time

1240

(°C)

12.18

Sample Date

160473



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Account #: 6106 Client: Otter Tail Power Company



Phone: (701) 258-9720

Field Datasheet

Groundwater Assessment

OTP Coyote Company: Fall 2023 Event: Sample ID: Blue Sampling Personal:

NO

NO

Control Settings:

Purge: 60 Recover: 50

PSI: BO

Precip: Sunny / Partly Cloudy / Cloudy 5@5-10 Weather Conditions: Wind: Temp: SAMPLING INFORMATION WELL INFORMATION Bladder Purging Method: Well Locked? VES NO Sampling Method: Bladder Well Labeled? XES YES NO Dedicated Equipment? YES Casing Strait? Not Visible Grout Seal Intact? NO **Duplicate Sample? Duplicate Sample ID:** Casing Diameter: Water Level Before Purge 78.04 Bottle List: Total Depth of Well: liters 1 Liter Raw Well Volume: Depth to Top of Pump: ft 500mL Nitrio 78110 ft Water Level After Sample: Electric Water Level Indicator Measurement Method:

Stabilization Parameters (3 Consecutive)		Temp.	Spec.	На	DO	ORP	Turbidity	Water Level	Pumping	mL	Appearance or Comment
		(°C)	Cond.	pn	(mg/L)	(mV)	(NTU)		Rate	Removed	Clarity, Color, Odor, Ect.
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		clear, slightly turbid, turbid
12-	1420	Start of Well	Purge								
6 Oct 23	1430	12.63	3311	6.64	0.34	-3016	18,97	78,09	1000	1000.0	Clear
-,	1440	12.8%	3172	b.66	0.26	-34.8	8.16	78.09	100,0	1000.0	Clear
	1450	13,23	3136	6.68	0.17	-30.6	6,22	78,09	100,0	1000.0	Cler
	1455	13,35	3125	6.70	0.15	- 32.2	5,03	78,10	100.0	500.0	Clear
	1500	13.18	3113	6,70	0,13	-35.0	4,52	78,10	1000	500.0	Cles
	1505	12,92	3108	6,71	0 413	- 39,1	1,29	78.10	100,0	500.0	Clesy
						-		1		-	
		 	-	-			†				
									ume Purged		Liters

FIELD DEADINGS

		Town	Snoo		Turbidity	Appearance or Comment
Sample Date	Time	Temp.	Spec. Cond.	pH	(NTU)	Clarity, Color, Odor, Ect.
16 Oct 23	1505	12.92	3108	6,71	1.29	Cleer

Comments:

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Account #: 6106 Client: Otter Tail Power Company

Collected Field Blank (FB) @ 1530

	_							Company:		OTP Coyot	e	
MVTL			Field	d Da	tasr	ieet		Event:		Fall	2023	
VIVIL	4			oundwater				Sample ID:			Blue .16	
			GI	Juliawatei	Assessine			Sampling P	ersonal:		1	
2616 E. Broadway Ave, Bis								oumpining :			100	
Phone: (701) 258-9 Weather Conditions		Taman	65	٥c	Wind:	2	@5-10	>	Precip:	Sunny / Pa	(tly Cloudy / Cloudy	-
Weather Conditions	•	Temp:	65	F	willa.	>	@ J 10					
1	WELL INFO	RMATIO	V						PLING IN	FORMATIC	Control Settings:	
Well Locked?	YES	NO				Purging Mo		Bladder			Purge: 10	Sec.
Well Labeled?	YES	NO				Sampling N		Bladder	NO		Recover: So	Sec.
Casing Strait?	YES	NO				Dedicated	Equipment	TV.D		J	PSI: 80	Jec.
Grout Seal Intact?	YES	NO	Not V	ISIDIE		F			416	1	P31. 00	
Repairs Necessary?						Duplicate S		YES	CHO	-		
	Diameter:			a		Duplicate S	sample ID:			J		
Water Level Be				ft ft			Dott	le List:		1		
	oth of Well:			liters		1 Liter Raw	Вош	ie List.		1		
	ell Volume:			ft		500mL Nitri	in.					
Depth to To		9-		ft		SOUTH WITH	ic			l.		
Water Level Af			Vater Level		1							
Measureme	nt ivietnoa:	Electric	vater Lever	mulcator	J	L				4		
						LD READII		1			A	
Stabilization Parar	meters	Temp.	Spec.	pН	DO	ORP	Turbidity	Water Level	Pumping	mL .	Appearance or Comme Clarity, Color, Odor, Ed	
(3 Consecutiv		(°C)	Cond.		(mg/L)	(mV)	(NTU)	(6)	Rate mL/Min	Removed	clear, slightly turbid, tur	
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/IVIII	1	clear, slightly turbid, tur	Diu
16 Oct 23	1525	Start of We					100 01	1-00	100,0	10000	101	
10 00	1535	13,99	2232	6,62	0.42	10,4	29,74	77.21			Clear	
	1545	13.29	2219	6.63	0,19	11.6	5.46	77.25	100,0	1000.0 500.0	Clear	
	1550	13.11	2218	6,65	0.20	10.7	21.62	77.25	100:0	50.0	Cler	
	1555	13.04	2216	6.66	0.16	12.7	3,33	77.25	100,0	50.0	Clear	
	1600	13,14	2220	6,67	0.14	14.0	2123	14.62	100.0	36010	Cut	
			<u> </u>					+				
					 		4	 				
								-		 		
			-		-	-	-	+		-		
	Well Sta	abilized?	YES	NO	L		1	Total Vo	ume Purgeo	1: 35020	Liters	
		Tama	Spec.	T	T	T	Turbidity			T	Appearance or Comm	ent
Sample Date	Time	Temp.	Cond.	pH			(NTU)				Clarity, Color, Odor, E	ct.
16 Oct 23	1600	13.14	7.220	6.67	1		3,33				(km	
100-1	11000	11211	1000	1000		_						

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Comments:

Appendix B

Groundwater Flow Calculations

Appendix B Annual Groundwater Monitoring and Corrective Action Report

Coyote Blue Pit Groundwater Velocity Calculation

Sampling Date	5/1/2023

Upgradient (BLUE 13)

Top of Casing Elevation	2045.27 ft	t amsl	Groundwater Monitoring System Report (Barr, 2016)
Depth to Water	103.85 ft	t below TOC	
Water Level Elevation	1941.42 ft	t amsl	

Downgradient (BLUE 15)

Top of Casing Elevation	1995.88 f	ft amsl	Groundwater Monitoring System Report (Barr, 2016)
Depth to Water	73.11 f	ft below TOC	
Water Level Elevation	1922.77 f	ft amsl	

horizontal hydraulic	5.20E-05	cm/s
conductivity (Kh)	1.47E-01	ft/day
porosity (n)	0.2	
horizontal distance	2403.4	ft
WL elevation difference	18.65	ft
gradient (i)	0.008	ft/ft
linear velocity (V)	0.0057	ft/day
V	2.1	ft/vr

Groundwater Monitoring System Report (Barr, 2016)

Groundwater Monitoring System Report (Barr, 2016)

Appendix B Annual Groundwater Monitoring and Corrective Action Report

Coyote Blue Pit Groundwater Velocity Calculation

Sampling Date	6/8/2023

Upgradient (BLUE 13)

Top of Casing Elevation	2045.27	ft amsl	Groundwater Monitoring System Report (Barr, 2016)
Depth to Water	104.20	ft below TOC	
Water Level Elevation	1941.07	ft amsl	

Downgradient (BLUE 15)

Top of Casing Elevation	1995.88	ft amsl	Groundwater Monitoring System Report (Barr, 2016)
Depth to Water	71.91	ft below TOC	
Water Level Elevation	1923.97	ft amsl	

horizontal hydraulic	5.20E-05	cm/s
conductivity (Kh)	1.47E-01	ft/day
porosity (n)	0.2	
horizontal distance	2403.4	ft
WL elevation difference	17.10	ft
gradient (i)	0.007	ft/ft
linear velocity (V)	0.0052	ft/day
V	1.9	ft/vr

Groundwater Monitoring System Report (Barr, 2016)

Groundwater Monitoring System Report (Barr, 2016)

Appendix B Annual Groundwater Monitoring and Corrective Action Report

Coyote Blue Pit Groundwater Velocity Calculation

Sampling Date	10/16/2023
---------------	------------

Upgradient (BLUE 13)

Top of Casing Elevation	2045.27 f	ft amsl	Groundwater Monitorir
Depth to Water	105.20 f	ft below TOC	
Water Level Elevation	1940.07 f	ft amsl	

Groundwater Monitoring System Report (Barr, 2016)

Downgradient (BLUE 15)

Top of Casing Elevation	1995.88	ft amsl
Depth to Water	78.04	ft below TOC
Water Level Elevation	1917.84	ft amsl

Groundwater Monitoring System Report (Barr, 2016)

horizontal hydraulic	5.20E-05	cm/s
conductivity (Kh)	1.47E-01	ft/day
porosity (n)	0.2	
horizontal distance	2403.4	ft
WL elevation difference	22.23	ft
gradient (i)	0.009	ft/ft
linear velocity (V)	0.0068	ft/day
V	2.5	ft/yr

Groundwater Monitoring System Report (Barr, 2016)

Groundwater Monitoring System Report (Barr, 2016)

Appendix C

Annual Fugitive Dust Control Report

Coal Combustion Residuals

2023 Annual Fugitive Dust Control Report

Coyote Station Plant - Blue Pit

Date: December 5, 2023

Introduction

This report is the Annual Fugitive Dust Control Report that is required by the Coal Combustion Residual (CCR) rule that went into effect in October of 2015. This report is for the Blue Pit landfill for the Coyote Station Plant located in Mercer County, North Dakota. It is for the time period of December 2022 to December 2023.

Section 257.80(c) of the CCR requires three segments for the completion of this report. The first is actions taken by the owner/operator to control CCR fugitive dust. The second is a record of all citizen complaints (Table 1). The third is a summary of any corrective measures taken.

Actions taken to control CCR fugitive dust

The following Best Management Practices have been identified as CCR fugitive dust control measures at the Coyote Plant.

Water

• Fugitive dust is largely controlled by the use of water. Water is used to condition the ash prior to its transfer from silos to transport vehicles and is also used to wet the in-place ash and haul roads as needed.

Vehicle Speed Control

• Drivers are instructed to travel no faster than 25 miles per hour when traveling to and from ash disposal areas or other CCR units.

Minimize the Open Working Area

• The working face of the landfill or CCR unit will be as small as is practicable to prevent erosion. This is accomplished by installing intermediate and final cover to reduce footprint size.

Vehicle covering

• Occasionally other vehicles may be used to transport CCR. These vehicles will be enclosed or covered during transport if fugitive dust is a concern.

Curtailing operations

• In extreme weather events, transport of CCR will be reduced or delayed until conditions improve.

Table 1 Citizen Complaint Record

Fugitive Dust Citizen Complaint			
Date	Citizen Complaint	Was complaint confirmed (Yes/No)	Corrective Measures Taken
	No citizen complaints occurred over this time period		

Summary of corrective measures taken

There were no emergency corrective measures taken in the Blue Pit landfill due to the lack of fugitive dust present from this CCR unit.