2025 Annual Groundwater Monitoring and Corrective Action Report

Blue Pit

Coyote Station
Beulah, North Dakota

Prepared for
Otter Tail Power Company

Prepared by
Barr Engineering Co.

January 2026

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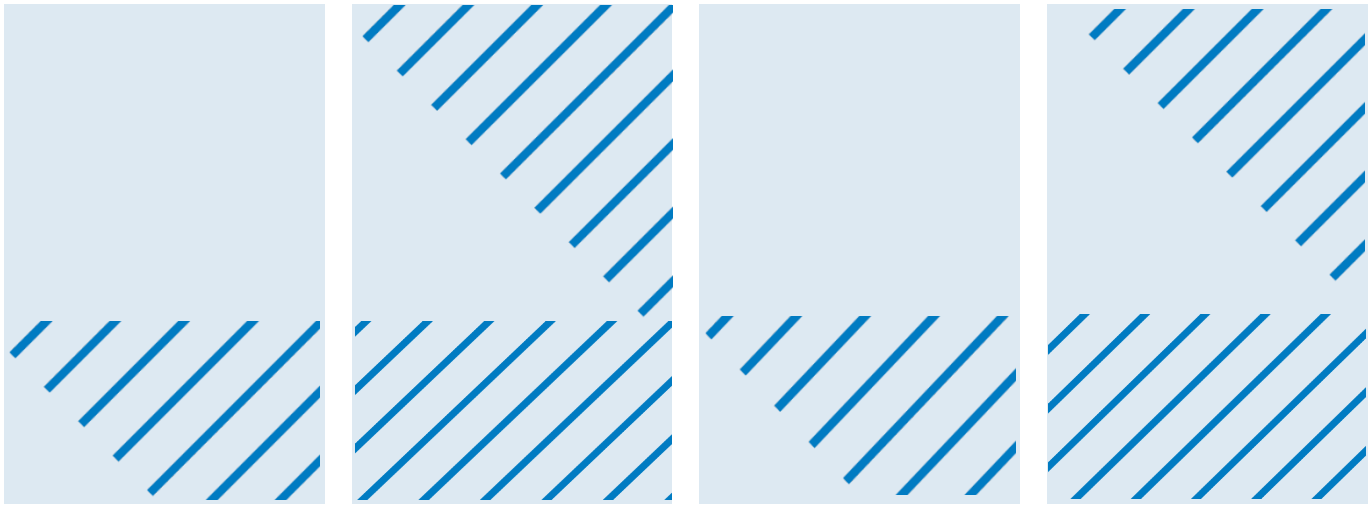

2025 Annual Groundwater Monitoring and Corrective Action Report
Blue Pit
Coyote Station
Beulah, North Dakota

January 2026

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Acronyms

CCR	coal combustion residuals
CFR	Code of Federal Regulations
CSM	conceptual site model
EPA	U.S. 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 Code of Federal Regulations (CFR) §257.94(e)(6). The coal combustion residuals (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 2025 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 U.S. Environmental Protection Agency (EPA) CCR Rule and Appendix I to the North Dakota Department of Environmental Quality (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 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 2025 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 2025.

In 2025, 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 1-1.

Table 1-1 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; Attached Table 1, Figure 2, Figure 3, 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

NDAC North Dakota Administrative Code

2 Groundwater Monitoring and Corrective Action Program

This section documents the status of the groundwater monitoring and corrective action program for the Blue Pit for 2025. 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 2026 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

Four new monitoring wells, BLUE17, BLUE18, BLUE19, and BLUE20 were installed between July 15 and July 23, 2025, at the request of NDDEQ to better understand groundwater flow surrounding the Blue Pit. All wells were developed between July 25 and July 26, 2025, with additional well development for BLUE18 occurring on September 3 and 17, October 8, and November 3, 2025. Detailed boring and well logs are included in Appendix A. Monitoring locations around the Blue Pit were resurveyed after the new monitoring wells were installed. Ground surface and top of riser elevations are included in Appendix A. Baseline monitoring will begin with all new monitoring wells in 2026.

2.2 Monitoring and Analytical Results

Groundwater samples were collected during two semiannual sampling events. A total of 12 groundwater samples (six monitoring wells and two sampling events) were collected and analyzed for the detection monitoring constituents in 2025 under the detection monitoring program, consistent with the requirements of 40 CFR 257.94(c) and NDAC 33.1-20-08-06-04(c).

Dates of sampling are reported on the field data sheets, and analytical laboratory reports are presented in Appendix B. Results are summarized in Attached Table 1. 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, and Appendix C.

Groundwater table contours developed from measurements collected during the spring and fall 2025 sampling events are shown on Figure 2 and Figure 3, respectively.

2.3 Key Actions Completed/Problems Encountered

The following key actions were completed for the groundwater monitoring program during 2025:

- Added monitoring wells BLUE17, BLUE18, BLUE19, and BLUE20 to the monitoring system at the request of NDDEQ to better understand groundwater flow surrounding the Blue Pit.

- Completed semiannual detection monitoring sampling for each background and downgradient well. The new wells cited above were not sampled.
- Statistical analysis was conducted according to the Statistical Analysis Plan, Appendix B of the CCR Groundwater Sampling and Analysis Plan (Carlson McCain, 2017). The statistical plan and graphs associated with the statistical evaluation for the spring and fall 2025 monitoring events are included in Appendix D.
- 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 2025.
- 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 E.

2.4 Key Activities for Upcoming Year

The following key groundwater monitoring program activities are planned for 2026:

- Conduct two groundwater sampling events, one in the spring and one in the fall.
- Evaluate analytical results from both 2026 semiannual detection monitoring events for SSIs according to the Statistical Analysis Plan (Carlson McCain, 2017).
- Continue the detection monitoring program in accordance with the CCR Rules.
- Begin baseline sampling of the new monitoring wells for Appendix III and Appendix IV parameters.

3 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.

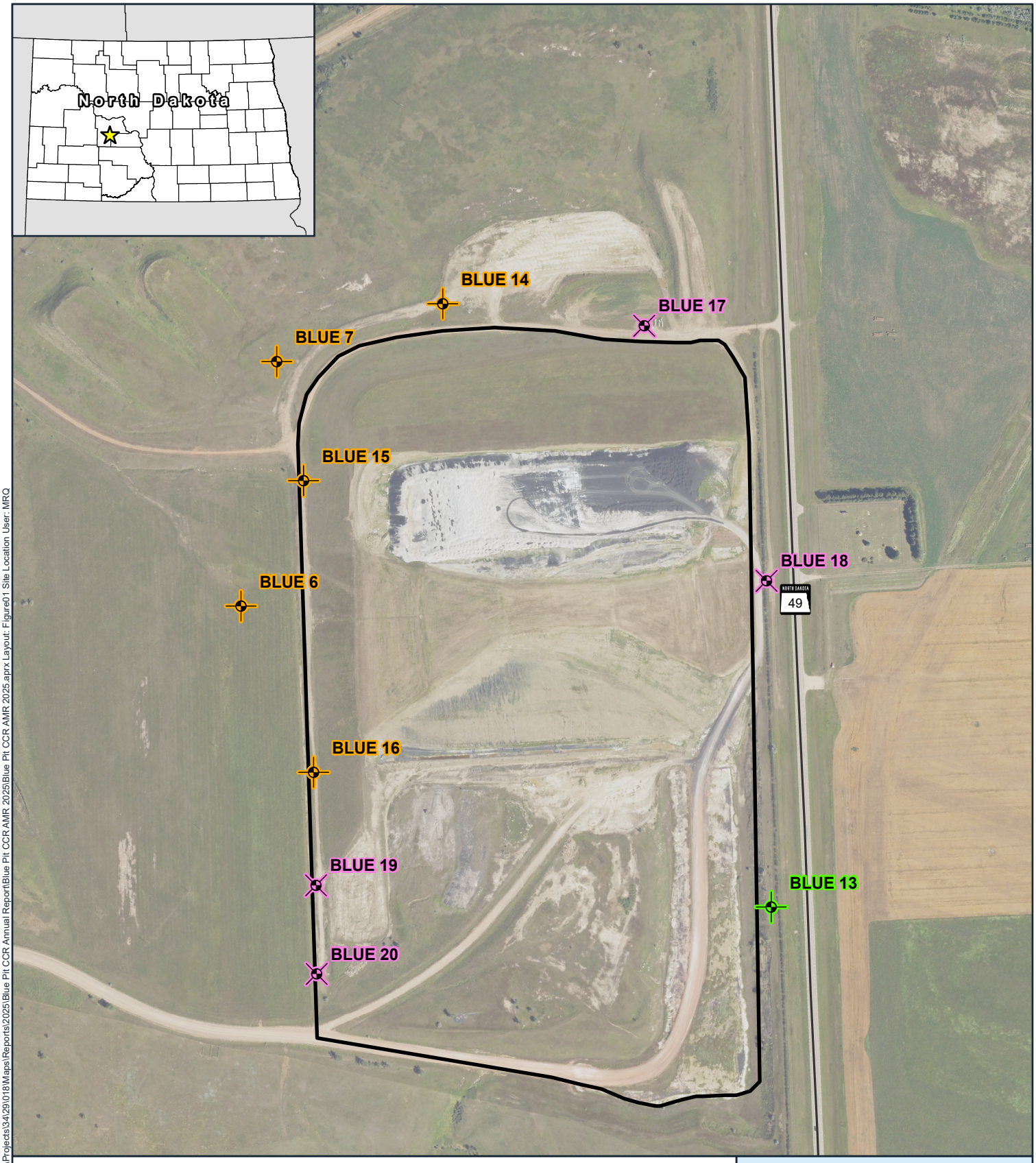
Attached Table

Attached Table 1
Groundwater Analytical Data Summary
Coyote Station
Otter Tail Power Company

		Location	Blue 6	Blue 6	Blue 7	Blue 7	Blue 13	Blue 13	Blue 14	Blue 14	Blue 15	Blue 15	Blue 16	Blue 16	QC	QC
		Date	5/6/25	10/8/25	5/5/25	10/7/25	5/6/25	10/8/25	5/5/25	10/7/25	5/5/25	10/7/25	5/5/25	10/7/25	5/5/25	10/8/25
		Sample Type	N	N	N	N	N	N	N	N	N	N	N	N	FB	FB
Parameter	Analysis Location	Units														
Appendix III																
Boron, total	Lab	mg/l	**0.40**	**0.35**	**0.40**	**0.34**	**0.71**	**0.56**	**0.63**	**0.51**	**0.53**	**0.45**	**0.40**	**0.35**	< 0.1 U	< 0.1 U
Calcium, total	Lab	mg/l	**206**	**202**	**197**	**194**	**110**	**118**	**338**	**368**	**182**	**149**	**178**	**153**	< 1 U	< 1 U
Chloride	Lab	mg/l	**8.2**	**7.4**	**8.7**	**7.1**	**53.4**	**56.0**	**9.8**	**9.3**	**10.8**	**9.4**	**11.4**	**8.2**	< 2.0 U	< 2.0 U
Fluoride	Lab	mg/l	**0.16**	**0.18**	**0.18**	**0.19**	**0.23**	**0.24**	**0.11**	**0.13**	**0.17**	**0.19**	**0.19**	**0.20**	< 0.1 U	< 0.1 U
pH	Field	pH units	**6.89**	**6.62**	**6.68**	**6.65**	**7.01**	**7.01**	**6.74**	**6.76**	**6.58**	**6.62**	**6.67**	**6.68**	**6.2**	**6.2**
Solids, total dissolved	Lab	mg/l	**2010**	**1990**	**2210**	**1970**	**5100**	**5230**	**5120**	**4930**	**3060**	**2670**	**2230**	**1920**	< 10 U	< 10 U
Sulfate, as SO4	Lab	mg/l	**952**	**855**	**1010**	**922**	**2460**	**2500**	**2600**	**2310**	**1130**	**1210**	**948**	**744**	< 5 U	< 5 U
Groundwater Elevation	Field	ft amsl	**1915.01**	**1913.28**	**1913.53**	**1916.11**	**1940.05**	**1940.36**	**1919.37**	**1919.83**	**1914.92**	**1917.23**	**1915.59**	**1917.52**	--	--

--	Not analyzed/Not available.
N	Sample Type: Normal Detection Monitoring
FB	Sample Type: Field Blank
U	The analyte was analyzed for, but was not detected.

Figures



Downgradient Monitoring Well

Upgradient Monitoring Well

Monitoring Well Installed in 2025

Blue Pit

Imagery: USDA NAIP (2025)

N

0 300 600

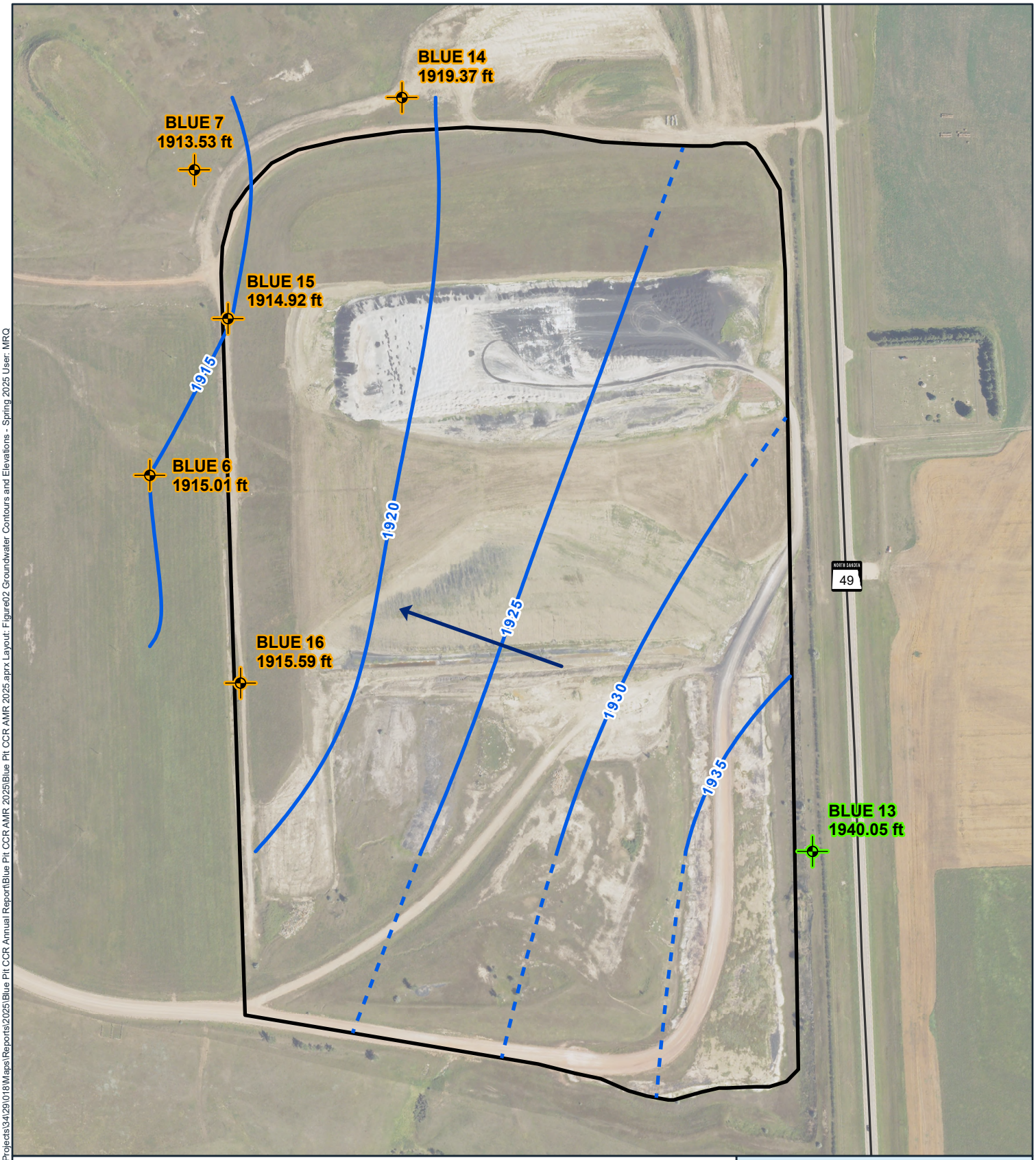
Feet

Blue Pit Location
Coyote Station
Otter Tail Power Company
Beulah, North Dakota

FIGURE 1

BARR

Bar Footer: ArcGISPro 3.5.3, 2026-01-20 08:26 File: I:\Projects\34\29\018\Maps\Reports\2025\Blue Pit CCR Annual Report\Blue Pit CCR AMR 2025\Blue Pit CCR AMR 2025.aprx Layout: Figure01 Site Location User: MRQ



Upgradient Monitoring Well

Downgradient Monitoring Well

Groundwater Contour (ft MSL)
(dashed where inferred)

Groundwater Flow Direction

Blue Pit

Imagery: USDA NAIP (2025)

N

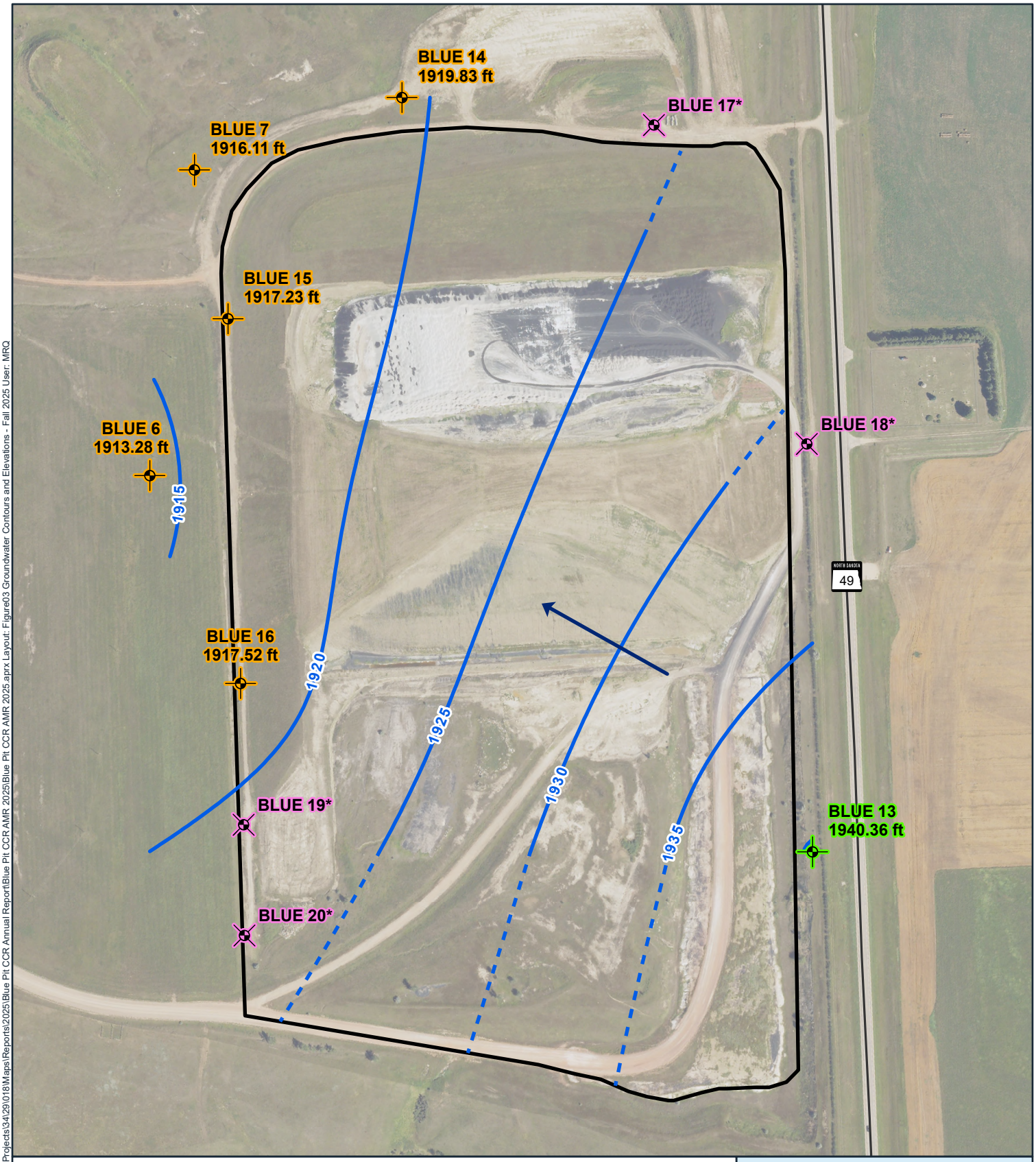
0 300 600
Feet

Spring 2025
Groundwater Contours
Coyote Station
Otter Tail Power Company
Beulah, North Dakota

FIGURE 2

BARR

Bar Footer: ArcGISPro 3.5.3, 2026-01-20 08:26 File: I:\Projects\34\29\018\Maps\Reports\2025\Blue Pit CCR Annual Report\Blue Pit CCR AMR 2025\Blue Pit CCR AMR 2025 aprx Layout: Figure02 Groundwater Contours and Elevations - Spring 2025 User: MRQ



Upgradient Monitoring Well

Downgradient Monitoring Well

Monitoring Well Installed in 2025

Groundwater Contour (ft MSL)
(dashed where inferred)

Groundwater Flow Direction

Blue Pit

Imagery: USDA NAIP (2025)

N

0 300 600
Feet

Note:
* Monitoring location not used for groundwater contour.

Fall 2025
Groundwater Contours
Coyote Station
Otter Tail Power Company
Beulah, North Dakota

FIGURE 3

BARR

Bar Footer: ArcGISPro 3.5.3, 2026-01-20 08:26 File: I:\Projects\34\29\018\Maps\Reports\2025\Blue Pit CCR Annual Report\Blue Pit CCR AMR 2025\Blue Pit CCR AMR 2025 aprx Layout: Figure03 Groundwater Contours and Elevations - Fall 2025 User: MRQ

Appendices

Appendix A

New Monitoring Well Boring Logs

SOIL BORING BLUE 17

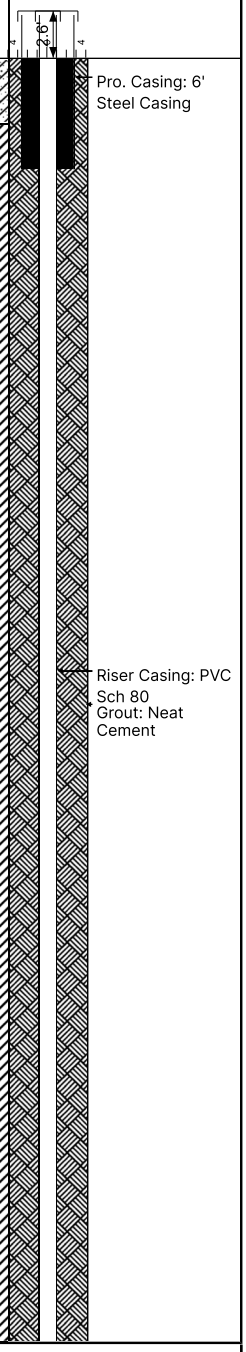
Barr Engineering Minneapolis Co.
4300 MarketPointe Drive Suite 200
Minneapolis, MN

Project: OTP C yote Blue Pit MW
Project No.: 34291075.15
Location: Coyote Station - Blue Pit
Co rdinates: North: 567371.145 East: 1648467.048
H r z nta Datum: NAD 83, ND State Plane South (3302)

Surface Elevation: 2008.91 ft
Drilling Method: Rotasonic
Sample Method: Continuous
Completion Depth: 90.00 ft

Depth (feet)	Sample Interval (ft)	Sample Number	Recovery Length (ft)	USCS	Materials Description
0	0-5	1	4	SC	CLAYEY SAND (SC): brown; moist; fine sand mix w/ lean clay; [topsoil].
2					SANDY FAT CLAY (CH): gray/dark gray w/ some browns; moist; no reaction with HCl; fine sand when present; few fragments of lignite coal; [reworked mine spoils].
5	5-10	2	4.75		
10	10-15	3	4.5		12-20': Clayey sand (SC), fine grained; dark bluish gray/dark gray (5BG 4/1)
15	15-20	4	5		
20	20-25	5	3.6	CH	
25	25-30	6	2.8		
30	30-35	7	2.2		32': Trace small gravel; loose
35	35-37	8	1.9		35-60': Mix of black, carbonaceous fat clay and blue-gray clayey sand; no HCl reaction.
	37-40	9	3		37': Hard drilling.
40					

Graphic Log / Well



Date Boring Started: 07/15/2025
Date Boring Completed: 07/15/2025
Logged By: DJZ, NMK
Drilling Contractor: Cascade
Drill Rig: Mini Sonic 150

Remarks: -

SOIL BORING BLUE 17

Barr Engineering Minneapolis Co.
4300 MarketPointe Drive Suite 200
Minneapolis, MN

Project: OTP Coyote Blue Pit MW
Project No.: 34291075.15
Location: Coyote Station - Blue Pit
Coordinates: North: 567371.145 East: 1648467.048
Horizontal Datum: NAD 83, ND State Plane South (3302)

Surface Elevation: 2008.91 ft
Drilling Method: Rotasonic
Sample Method: Continuous
Completion Depth: 90.00 ft

Depth (feet)	Sample Interval (ft)	Sample Number	Recovery Length (ft)	USCS	Materials Description
	40-45	10	3.3		... continued from previous page
45	45-50	11	3.4		40': Fragments of sandstone; small/large; fine grained; gray with fine black specks; strong HCl reaction. 40-50': Occasional lenses of sandstone fragments; small/large; strong HCl reaction on outer fragment surface and no HCl reaction on fresh surface
50	50-55	12	4.9	CH	
55	55-60	13	4		
60	60-65	14	5		
					64
65	65-70	15	3.1	CL	LEAN CLAY WITH SAND (CL): olive brown (2.5Y 4/4); moist; trace to few fine/medium grained sand; trace to few gravel; few lignite fragments; weak reaction with HCl; trace roots/organics; rusty oxidation spots; fragments of claystone; gray mottling
70	70-75	16	5		71
				SC	71.5 CLAYEY SAND (SC): fine grained; gray; moist.
					72 LIGNITE COAL: black; moist to wet; no reaction with HCl.
75	75-80	17	5	CH	FAT CLAY (CH): dark olive gray (5Y 3/2); slightly moist; hard/dense; few silt pockets and laminae; no reaction with HCl; carbonaceous; few lignite coal fragments.

Well: Grout: Neat Cement; Riser Casing: PVC Sch 80; Seal: 3/8" Bentonite Chips; Sandpack: Red Flint Filter Sand, No. 10 (226-24); Screen: PVC Sch 80, Slot Size 8; Interval: 71-81' bgs

Date Boring Started: 07/15/2025
Date Boring Completed: 07/15/2025
Logged By: DJZ, NMK
Drilling Contractor: Cascade
Drill Rig: Mini Sonic 150

Remarks: -

SOIL BORING BLUE 17

Barr Engineering Minneapolis Co.
4300 MarketPointe Drive Suite 200
Minneapolis, MN

Project: OTP Coyote Blue Pit MW
Project No.: 34291075.15
Location: Coyote Station - Blue Pit
Coordinates: North: 567371.145 East: 1648467.048
Horizontal Datum: NAD 83, ND State Plane South (3302)

Surface Elevation: 2008.91 ft
Drilling Method: Rotasonic
Sample Method: Continuous
Completion Depth: 90.00 ft

Depth (feet)	Sample Interval (ft)	Sample Number	Recovery Length (ft)	USCS	Materials Description	Graphic Log	Well
85	80-85	18	5	CH	... continued from previous page ~80-80.5': Brown/black lignite seam; dry		Screen: PVC Sch 80, Slot Size 8; Interval: 71-81' bgs Sandpack: Red Flint Filter Sand, No. 10 (226-24)
	85-90	19	4.75	SC	85 84-85': Few claystone fragments. CLAYEY SAND (SC): fine grained; blue-gray; moist; no reaction with HCl; silt laminae; black organic laminae. 89-89.5': Fat clay lens; brownish-gray color.		3/8" Bentonite Chips
90					90 89.5-90': Poorly graded sand with clay; fine grained; wet; fat clay at 90'.		
95							
100							
105							
110							
115							

Date Boring Started: 07/15/2025
Date Boring Completed: 07/15/2025
Logged By: DJZ, NMK
Drilling Contractor: Cascade
Drill Rig: Mini Sonic 150

Remarks: -

SOIL BORING BLUE 18

Barr Engineering Minneapolis Co.
4300 MarketPointe Drive Suite 200
Minneapolis, MN

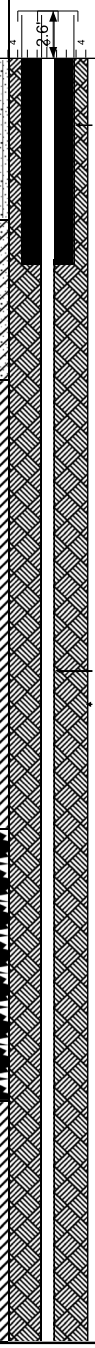
Project: OTP Coyote Blue Pit MW
Project No.: 34291075.15
Location: Coyote Station - Blue Pit
Coordinates: North: 566377.76 East: 1648875.019
Horizontal Datum: NAD 83, ND State Plane South (3302)

Surface Elevation: 2044.31 ft
Drilling Method: Rotasonic
Sample Method: Continuous
Completion Depth: 115.00 ft

Depth (feet)	Sample Interval (ft)	Sample Number	Recovery Length (ft)	USCS	Materials Description
0	0-5	1	5	SM	SILTY SAND (SM): light brown; dry; organics (grass/roots); no reaction with HCl; [topsoil].
5	5-10	2	5	SC	CLAYEY SAND (SC): fine to medium grained; light brown; moist; trace to few 0.5" gravel; no reaction with HCl; mottling and oxidation; [mine spoils]. 6-8': Few 1 cm wide calcium precipitate between pore spaces. 6-10': Trace lignite fragments.
10	10-15	3	5	CH	FAT CLAY (CH): moist; fine grained sand; no reaction with HCl; mottling and oxidation; [mine spoils]. 10-14': Brown; few 0.5" gravel; trace lignite fragments.
15	15-20	4	5	CH	14-20': Brown, gray, reddish-orange mix; silt present; blocky to platy texture. 17-20': Trace silt laminae; often oxidized.
20	20-25	5	5	CH	20': Salts present; translucent; no HCl reaction. FAT CLAY (CH): brown and gray mix; moist; no reaction with HCl; blocky; weak cementation; variable orange oxidation; [mine spoils]. 24': Native sulfur visible in matrix.
25	25-30	6	5		LIGNITE COAL: black; dry; no reaction with HCl; occasional large fragments of carbonaceous fat clay.
30	30-32	7	2		30': Native sulfur visible.
32.5	32-35	8	3	CH	FAT CLAY (CH): moist; sand; no reaction with HCl. 32.5-35': Dark greenish-gray (Gley 1 4/10GY); trace silt; trace lignite; weak cementation; blocky.
35	35-40	9	5	CH	35-41.5': Very dark gray (2.5Y 3/1); few silt laminae; oxidized laminae; occasionally blocky. 35-35.5': Trace lignite fragments.
40					

Graphic Log

Well



Date Boring Started:	07/22/2025
Date Boring Completed:	07/23/2025
Logged By:	NMK
Drilling Contractor:	Cascade
Drill Rig:	Mini Sonic 150

Remarks: -

SOIL BORING BLUE 18

Barr Engineering Minneapolis Co.
4300 MarketPointe Drive Suite 200
Minneapolis, MN

Project: OTP Coyote Blue Pit MW
Project No.: 34291075.15
Location: Coyote Station - Blue Pit
Coordinates: North: 566377.76 East: 1648875.019
Horizontal Datum: NAD 83, ND State Plane South (3302)

Surface Elevation: 2044.31 ft
Drilling Method: Rotasonic
Sample Method: Continuous
Completion Depth: 115.00 ft

Depth (feet)	Sample Interval (ft)	Sample Number	Recovery Length (ft)	USCS	Materials Description
	40-42	10	2		... continued from previous page
41.5					
	42-44	11	2		FAT CLAY (CH): black (2.5Y 2.5/1); moist; very dense; silt laminae; no reaction with HCl; blocky to platy.
42.5	44-48	12	4		42': Limestone boulder; very light gray; dry; strong reaction with HCl.
45					FAT CLAY WITH SILT (CH): moist; very dense; no reaction with HCl.
					42.5-49': Very dark gray (5Y 3/1); little silt laminae; blocky.
					45': 1 cm lignite seam.
					47.5': ~9 0.25-0.5" botryoidal pyrite inclusions.
	48-50	13	2		
50					49-53': Dark gray (5Y 4/1); some silt; trace sand; blocky to platy.
	50-55	14	5		50-53': Dense, some silt laminae.
					53-53.5': Very dark gray (5Y 3/1); few silt.
55					53.5-66.5': Dark gray (2.5Y 4/1); dense; mostly silt and oxidized laminae.
	55-60	15	5	CH	
60					
	60-64	16	4		60-61': Some silt.
65	64-70	17	6		
					65.5-66.5': No silt laminae.
					66.5'-70': Very dark gray (5Y 3/1); dense; trace to few silt; no to weak reaction with HCl; blocky.
70					69.5-70': Silt laminae.
	70-75	18	5	SP	POORLY GRADED SAND WITH CLAY (SP): blue-gray; moist; some clay; trace silt; no reaction with HCl.
71					71-75': Dark gray (5Y 4/1); few silt; trace sand; blocky to semi-blocky.
					FAT CLAY WITH SILT (CH): moist; no reaction with HCl.
75	75-80	19	5	CH	75-83': Very dark gray (2.5Y 3/1); weak cementation; trace silt; blocky.
80					

Graphic Log

Well

Grout: Neat Cement
Riser Casing: PVC Sch 80

Date Boring Started: 07/22/2025
Date Boring Completed: 07/23/2025
Logged By: NMK
Drilling Contractor: Cascade
Drill Rig: Mini Sonic 150

Remarks: -

SOIL BORING BLUE 18

Barr Engineering Minneapolis Co.
4300 MarketPointe Drive Suite 200
Minneapolis, MN

Project: OTP Coyote Blue Pit MW
Project No.: 34291075.15
Location: Coyote Station - Blue Pit
Coordinates: North: 566377.76 East: 1648875.019
Horizontal Datum: NAD 83, ND State Plane South (3302)

Surface Elevation: 2044.31 ft
Drilling Method: Rotasonic
Sample Method: Continuous
Completion Depth: 115.00 ft

Depth (feet)	Sample Interval (ft)	Sample Number	Recovery Length (ft)	USCS	Materials Description
	80-85	20	5		... continued from previous page
				CH	83
					FAT CLAY (CH): black (2.5Y 2.5/1); moist; no reaction with HCl; blocky; weak cementation.
85					85
	85-90	21	5		LIGNITE COAL: black to very dark brown; dry to slightly moist; no reaction with HCl; heavily fractured.
90	90-95	22	5		
95	95 -100	23	5		99
100	100 -105	24	5	CH	FAT CLAY (CH): dark gray (5Y 4/1) to very dark gray (5Y 3/1); moist; trace silt; trace sand; no reaction with HCl; blocky; trace lignite. 104.5': Few silt laminae.
					104.5
105	105 -110	25	5		LIGNITE COAL: very dark brown; dry; no reaction with HCl; mainly powdered, some heavily fractured.
110	110 -115	26	5	CH	110 FAT CLAY (CH): dark gray (2.5Y 4/1); moist; trace silt laminae; trace sand; no reaction with HCl; occasionally blocky.
115					115

Well:
- Grout: Neat Cement
- Riser Casing: PVC Sch 80
- Seal: 3/8" Bentonite Chips
- Sandpack: Red Flint Filter Sand, No. 10 (226-24)
- Screen: PVC Sch 80, Slot Size 8; Interval: 103.5-113.5' bgs

Date Boring Started:	07/22/2025
Date Boring Completed:	07/23/2025
Logged By:	NMK
Drilling Contractor:	Cascade
Drill Rig:	Mini Sonic 150

Remarks: -

SOIL BORING BLUE 19

Barr Engineering Minneapolis Co.
4300 MarketPointe Drive Suite 200
Minneapolis, MN

Project: OTP Coyote Blue Pit MW
Project No.: 34291075.15
Location: Coyote Station - Blue Pit
Coordinates: North: 565321.964 East: 1647100.679
Horizontal Datum: NAD 83, ND State Plane South (3302)

Surface Elevation: 1992.20 ft
Drilling Method: Rotasonic
Sample Method: Continuous
Completion Depth: 90.00 ft

Depth (feet)	Sample Interval (ft)	Sample Number	Recovery Length (ft)	USCS	Materials Description
0	0-5	1	5	CH	FAT CLAY (CH): moist; ~1" lenses of blue gray sand; few silt; no reaction with HCl; often blocky; occasional trace scoria (clinker) and claystone fragments; [mine spoils]. 0-10': Organics.
5	5-10	2	5		
10	10-15	3	5		
15	15-20	4	5		
20	20-25	5	5		
25	25-30	6	5		
30	30-35	7	5		
35	35-40	8	5		34': 3" Claystone lens. 36': 2.5" Claystone lens.
37.5					

Graphic Log

Well

Pro. Casing: 9' Steel Casing

Riser Casing: PVC Sch 80

Grout: Neat Cement

Date Boring Started:	07/19/2025
Date Boring Completed:	07/19/2025
Logged By:	NMK
Drilling Contractor:	Cascade
Drill Rig:	Mini Sonic 150

Remarks: -

SOIL BORING BLUE 19

Barr Engineering Minneapolis Co.
4300 MarketPointe Drive Suite 200
Minneapolis, MN

Project: OTP Coyote Blue Pit MW
Project No.: 34291075.15
Location: Coyote Station - Blue Pit
Coordinates: North: 565321.964 East: 1647100.679
Horizontal Datum: NAD 83, ND State Plane South (3302)

Surface Elevation: 1992.20 ft
Drilling Method: Rotasonic
Sample Method: Continuous
Completion Depth: 90.00 ft

Depth (feet)	Sample Interval (ft)	Sample Number	Recovery Length (ft)	USCS	Materials Description	Well
	35-40	8	5	CH	... continued from previous page	
40	40-45	9	5	CH		
45	45-50	10	5	CH		
50	50-55	11	5	CH	54': Limestone boulder; very light gray; strong reaction with HCl.	
55	55-60	12	5	CH	FAT CLAY WITH SILT (CH): dark gray to black; moist; few fine to coarse grained gravel; no to weak reaction with HCl; blocky; [mine spoils].	Grout: Neat Cement; Riser Casing: PVC Sch 80
60	60-65	13	5	CH	60-65': Occasional trace 0.25" gravel.	
64					LIGNITE COAL: black to very dark brown; dry; no reaction with HCl; highly fractured to powder.	
65	65-68	14	1.5			
66				CH	FAT CLAY WITH SILT (CH): black; moist; no reaction with HCl; little lignite fragments.	
68	68-70	15	2		LIGNITE COAL: transitions from black to very dark brown to brown; dry; no reaction with HCl; heavily fractured to powder.	
70	70-75	16	5			Seal: 3/8" Bentonite Chips; Sandpack: Red
75						

Date Boring Started: 07/19/2025
Date Boring Completed: 07/19/2025
Logged By: NMK
Drilling Contractor: Cascade
Drill Rig: Mini Sonic 150

Remarks: -

SOIL BORING BLUE 19

Barr Engineering Minneapolis Co.
4300 MarketPointe Drive Suite 200
Minneapolis, MN

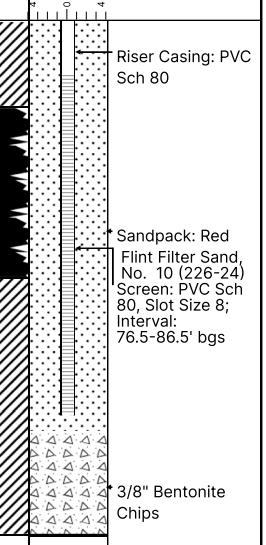
Project: OTP Coyote Blue Pit MW
Project No.: 34291075.15
Location: Coyote Station - Blue Pit
Coordinates: North: 565321.964 East: 1647100.679
Horizontal Datum: NAD 83, ND State Plane South (3302)

Surface Elevation: 1992.20 ft
Drilling Method: Rotasonic
Sample Method: Continuous
Completion Depth: 90.00 ft

Depth (feet)	Sample Interval (ft)	Sample Number	Recovery Length (ft)	USCS	Materials Description
	75-78	17	3	CH	FAT CLAY (CH): black (2.5Y 2.5/1); moist; very dense; trace lignite fragments; no reaction with HCl; blocky to platy; trace silt laminae.
77.5					
	78-80	18	2		LIGNITE COAL: black to very dark brown; dry; no reaction with HCl; heavily fractured to powder; trace pyrite.
80	80-85	19	5		
82.5					
					FAT CLAY (CH): dark gray (2.5Y 4/1); moist; very dense/stiff; no reaction with HCl; few 0.25" silt lenses.
85	85-90	20	5		84.5': Limestone boulder; very light gray; strong reaction with HCl; highly fractured to powder.
86				CH	FAT CLAY (CH): very dark gray (2.5Y 3/1); moist; very dense/stiff; few silt laminae; oxidized laminae; no reaction with HCl.
90					
95					
100					
105					
110					

Graphic Log

Well



Date Boring Started: 07/19/2025
Date Boring Completed: 07/19/2025
Logged By: NMK
Drilling Contractor: Cascade
Drill Rig: Mini Sonic 150

Remarks: -

SOIL BORING BLUE 20

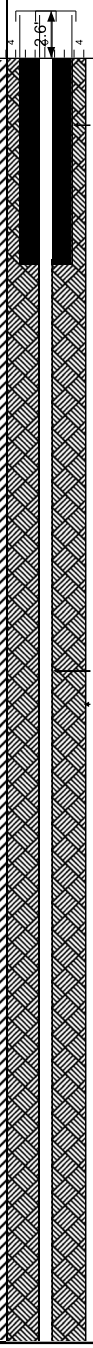
Barr Engineering Minneapolis Co.
4300 MarketPointe Drive Suite 200
Minneapolis, MN

Project: OTP Coyote Blue Pit MW
Project No.: 34291075.15
Location: Coyote Station - Blue Pit
Coordinates: North: 564986.264 East: 1647083.788
Horizontal Datum: NAD 83, ND State Plane South (3302)

Surface Elevation: 1993.60 ft
Drilling Method: Rotasonic
Sample Method: Continuous
Completion Depth: 93.00 ft

Depth (feet)	Sample Interval (ft)	Sample Number	Recovery Length (ft)	USCS	Materials Description
0	0-5	1	4.9	CH	FAT CLAY WITH SAND (CH): moist; no reaction with HCl; occasional fragments of lignite coal, scoria (clinker), and claystone throughout; occasional silt laminae; [mine spoils]. 0-25': Olive and brown.
5	5-10	2	5		
10	10-15	3	5		
15	15-20	4	5		
20	20-25	5	5		
25	25-30	6	5		25-55': Color transition to gray to dark gray.
30	30-35	7	5		
35	35-40	8	5		
40					

Graphic Log / Well



Date Boring Started: 07/17/2025
Date Boring Completed: 07/18/2025
Logged By: DJZ, NMK
Drilling Contractor: Cascade
Drill Rig: Mini Sonic 150

Remarks: -

SOIL BORING BLUE 20

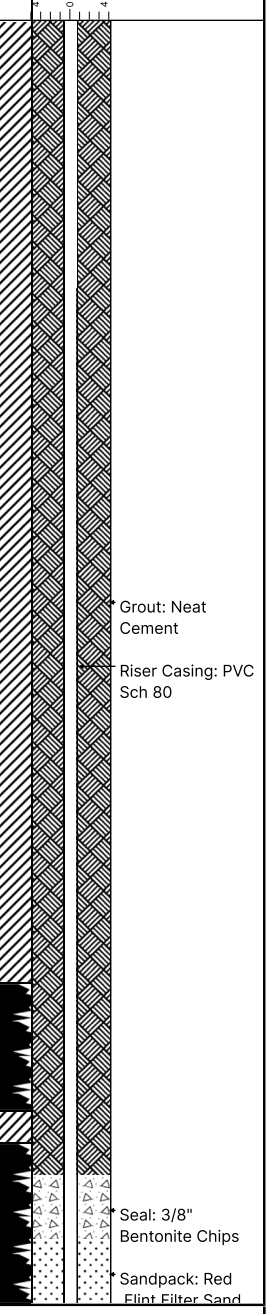
Barr Engineering Minneapolis Co.
4300 MarketPointe Drive Suite 200
Minneapolis, MN

Project: OTP Coyote Blue Pit MW
Project No.: 34291075.15
Location: Coyote Station - Blue Pit
Coordinates: North: 564986.264 East: 1647083.788
Horizontal Datum: NAD 83, ND State Plane South (3302)

Surface Elevation: 1993.60 ft
Drilling Method: Rotasonic
Sample Method: Continuous
Completion Depth: 93.00 ft

Depth (feet)	Sample Interval (ft)	Sample Number	Recovery Length (ft)	USCS	Materials Description
	40-45	9	5		... continued from previous page
45	45-50	10	5		
50	50-55	11	5		51': 3" wide gravel lens (0.5-1" pieces).
					53': 1" sand lens; blue-gray
55	55-60	12	5	CH	55-70': Color transition to dark gray to black.
60	60-65	13	5		60-70': Abundant lignite and claystone fragments.
65	65-70	14	5		
70	70-75	15	4.5		70 LIGNITE COAL: dark brown to black; dry; no reaction with HCl; highly fractured to powdered.
					74
75	75-80	16	5	CH	FAT CLAY (CH): light gray to black; dry to moist; no reaction with HCl; carbonaceous; little lignite fragments. 75 LIGNITE COAL: dark brown to black; dry; no reaction with HCl; heavily fractured to powdered; pieces of remnant organic matter; trace pyrite in lignite.
					80

Graphic Log / Well



Date Boring Started: 07/17/2025
Date Boring Completed: 07/18/2025
Logged By: DJZ, NMK
Drilling Contractor: Cascade
Drill Rig: Mini Sonic 150

Remarks: -

SOIL BORING BLUE 20

Barr Engineering Minneapolis Co.
4300 MarketPointe Drive Suite 200
Minneapolis, MN

Project: OTP Coyote Blue Pit MW
Project No.: 34291075.15
Location: Coyote Station - Blue Pit
Coordinates: North: 564986.264 East: 1647083.788
Horizontal Datum: NAD 83, ND State Plane South (3302)

Surface Elevation: 1993.60 ft
Drilling Method: Rotasonic
Sample Method: Continuous
Completion Depth: 93.00 ft

Depth (feet)	Sample Interval (ft)	Sample Number	Recovery Length (ft)	USCS	Materials Description	Graphic Log	Well
	80-83	17	3	CH	FAT CLAY (CH): black (2.5Y 2.5/1); moist; very stiff/dense; few silt lenses; no reaction with HCl; platy.		Riser Casing: PVC Sch 80
82.5							
85	83-87	18	4		LIGNITE COAL: dark brown to black; dry; no reaction with HCl; heavily fractured to powered.		Sandpack: Red Flint Filter Sand, No. 10 (226-24)
87.5							
	87-90	19	3		FAT CLAY (CH): very dark gray (2.5Y 3/1); moist; very stiff/dense; few silt laminae; trace silt lenses; no reaction with HCl.		Screen: PVC Sch 80, Slot Size 8; Interval: 81.5-91.5' bgs
90	90-93	20	3	CH			
93							
95							
100							
105							
110							
115							

Date Boring Started: 07/17/2025
Date Boring Completed: 07/18/2025
Logged By: DJZ, NMK
Drilling Contractor: Cascade
Drill Rig: Mini Sonic 150

Remarks: -

Appendix B

Laboratory Reports and Field Sheets

MINNESOTA VALLEY TESTING LABORATORIES, INC.
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 ~ 515-382-5486 ~ Fax 515-382-3885
www.MVTL.com

Account #: 6106 **Client:** Otter Tail Power Company
Workorder: OTP Coyote - Blue Spring 2025 (85689) **PO:** 108237

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. Carroll

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.

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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1201 Lincoln Hwy. ~ Nevada, IA 50201 ~ 515-382-5486 ~ Fax 515-382-3885
www.MVTL.com

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

Analytical Results

Lab ID: 85689001 **Date Collected:** 05/05/2025 12:45 **Matrix:** Groundwater
Sample ID: FB Blue **Date Received:** 05/06/2025 14:10 **Collector:** MVTL Field Service

Temp @ Receipt (C): 1.6 **Received on Ice:** Yes

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
Method: ASTM D516-16							
Sulfate	<5	mg/L	5	1		05/14/2025 08:57	
Method: EPA 6010D							
Boron	<0.1	mg/L	0.1	1	05/06/2025 17:18	05/07/2025 15:47	
Calcium	<1	mg/L	1	1	05/06/2025 17:18	05/12/2025 15:01	
Method: SM4500 H+ B-2021							
pH	**6.2**	units	0.1	1		05/07/2025 20:33	*
Method: SM4500-Cl-E 2021							
Chloride	<2.0	mg/L	2.0	1		05/13/2025 09:15	
Method: SM4500-F-C-2021							
Fluoride	<0.1	mg/L	0.1	1		05/07/2025 20:33	
Method: USGS I-1750-85							
Total Dissolved Solids	<10	mg/L	10	1		05/07/2025 14:44	

Analysis Results Comments

pH

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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1201 Lincoln Hwy. ~ Nevada, IA 50201 ~ 515-382-5486 ~ Fax 515-382-3885
www.MVTL.com

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

Analytical Results

Lab ID: 85689002 **Date Collected:** 05/06/2025 09:32 **Matrix:** Groundwater
Sample ID: Blue 6 **Date Received:** 05/06/2025 14:10 **Collector:** MVTL Field Service

Temp @ Receipt (C): 1.6 **Received on Ice:** Yes

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
Method: 120.1							
Specific Conductance - Field	**2481**	umhos/cm	1	1		05/06/2025 09:32	
Method: 150.2							
pH - Field	**6.89**	units	0.01	1		05/06/2025 09:32	
Method: 170.1							
Temperature - Field C	**11.51**	degrees C		1		05/06/2025 09:32	
Method: ASTM D516-16							
Sulfate	**952**	mg/L	50	10		05/14/2025 08:58	
Method: EPA 6010D							
Boron	**0.40**	mg/L	0.1	1	05/06/2025 17:18	05/07/2025 15:48	
Calcium	**206**	mg/L	1	1	05/06/2025 17:18	05/12/2025 15:04	
Method: SM2110							
Appearance - Field	Clear			1		05/06/2025 09:32	
Method: SM4500 H+ B-2021							
pH	**7.1**	units	0.1	1		05/07/2025 20:39	*
Method: SM4500-Cl-E 2021							
Chloride	**8.2**	mg/L	2.0	1		05/13/2025 09:21	
Method: SM4500-F-C-2021							
Fluoride	**0.16**	mg/L	0.1	1		05/07/2025 20:39	
Method: USGS I-1750-85							
Total Dissolved Solids	**2010**	mg/L	10	1		05/07/2025 14:44	

Analysis Results Comments

pH

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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1201 Lincoln Hwy. ~ Nevada, IA 50201 ~ 515-382-5486 ~ Fax 515-382-3885
www.MVTL.com

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

Analytical Results

Lab ID: 85689003 **Date Collected:** 05/05/2025 10:38 **Matrix:** Groundwater
Sample ID: Blue 7 **Date Received:** 05/06/2025 14:10 **Collector:** MVTL Field Service

Temp @ Receipt (C): 1.6 **Received on Ice:** Yes

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
Method: 120.1							
Specific Conductance - Field	**2795**	umhos/cm	1	1		05/05/2025 10:38	
Method: 150.2							
pH - Field	**6.68**	units	0.01	1		05/05/2025 10:38	
Method: 170.1							
Temperature - Field C	**15.08**	degrees C		1		05/05/2025 10:38	
Method: ASTM D516-16							
Sulfate	**1010**	mg/L	50	10		05/14/2025 08:59	
Method: EPA 6010D							
Boron	**0.40**	mg/L	0.1	1	05/06/2025 17:18	05/07/2025 15:50	
Calcium	**197**	mg/L	1	1	05/06/2025 17:18	05/12/2025 15:05	
Method: SM2110							
Appearance - Field	Clear			1		05/05/2025 10:38	
Method: SM4500 H+ B-2021							
pH	**7.1**	units	0.1	1		05/07/2025 20:44	*
Method: SM4500-Cl-E 2021							
Chloride	**8.7**	mg/L	2.0	1		05/13/2025 09:22	
Method: SM4500-F-C-2021							
Fluoride	**0.18**	mg/L	0.1	1		05/07/2025 20:44	
Method: USGS I-1750-85							
Total Dissolved Solids	**2210**	mg/L	10	1		05/07/2025 14:44	

Analysis Results Comments

pH

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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www.MVTL.com

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

Analytical Results

Lab ID: 85689004 **Date Collected:** 05/06/2025 10:05 **Matrix:** Groundwater
Sample ID: Blue 13 **Date Received:** 05/06/2025 14:10 **Collector:** MVTL Field Service

Temp @ Receipt (C): 1.6 **Received on Ice:** Yes

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
Method: 120.1							
Specific Conductance - Field	**6798**	umhos/cm	1	1		05/06/2025 10:05	
Method: 150.2							
pH - Field	**7.01**	units	0.01	1		05/06/2025 10:05	
Method: 170.1							
Temperature - Field C	**11.15**	degrees C		1		05/06/2025 10:05	
Method: ASTM D516-16							
Sulfate	**2460**	mg/L	100	20		05/14/2025 09:00	
Method: EPA 6010D							
Boron	**0.71**	mg/L	0.5	5	05/06/2025 17:18	05/07/2025 15:54	
Calcium	**110**	mg/L	5	5	05/06/2025 17:18	05/12/2025 15:08	
Method: SM2110							
Appearance - Field	Clear			1		05/06/2025 10:05	
Method: SM4500 H+ B-2021							
pH	**7.4**	units	0.1	1		05/07/2025 20:50	*
Method: SM4500-Cl-E 2021							
Chloride	**53.4**	mg/L	2.0	1		05/13/2025 09:23	
Method: SM4500-F-C-2021							
Fluoride	**0.23**	mg/L	0.1	1		05/07/2025 20:50	
Method: USGS I-1750-85							
Total Dissolved Solids	**5100**	mg/L	10	1		05/07/2025 14:44	

Analysis Results Comments

pH

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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1201 Lincoln Hwy. ~ Nevada, IA 50201 ~ 515-382-5486 ~ Fax 515-382-3885
www.MVTL.com

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

Analytical Results

Lab ID: 85689005 **Date Collected:** 05/05/2025 12:17 **Matrix:** Groundwater
Sample ID: Blue 14 **Date Received:** 05/06/2025 14:10 **Collector:** MVTL Field Service

Temp @ Receipt (C): 1.6 **Received on Ice:** Yes

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
Method: 120.1							
Specific Conductance - Field	**5819**	umhos/cm	1	1		05/05/2025 12:17	
Method: 150.2							
pH - Field	**6.74**	units	0.01	1		05/05/2025 12:17	
Method: 170.1							
Temperature - Field C	**16.21**	degrees C		1		05/05/2025 12:17	
Method: ASTM D516-16							
Sulfate	**2600**	mg/L	100	20		05/14/2025 09:08	
Method: EPA 6010D							
Boron	**0.63**	mg/L	0.5	5	05/06/2025 17:18	05/07/2025 15:56	
Calcium	**338**	mg/L	5	5	05/06/2025 17:18	05/12/2025 15:09	
Method: SM2110							
Appearance - Field	Clear			1		05/05/2025 12:17	
Method: SM4500 H+ B-2021							
pH	**7.2**	units	0.1	1		05/07/2025 20:56	*
Method: SM4500-Cl-E 2021							
Chloride	**9.8**	mg/L	2.0	1		05/13/2025 09:25	
Method: SM4500-F-C-2021							
Fluoride	**0.11**	mg/L	0.1	1		05/07/2025 20:56	
Method: USGS I-1750-85							
Total Dissolved Solids	**5120**	mg/L	10	1		05/07/2025 14:44	

Analysis Results Comments

pH

Sample analyzed beyond holding time.

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1201 Lincoln Hwy. ~ Nevada, IA 50201 ~ 515-382-5486 ~ Fax 515-382-3885
www.MVTL.com

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

Analytical Results

Lab ID: 85689006 **Date Collected:** 05/05/2025 13:33 **Matrix:** Groundwater
Sample ID: Blue 15 **Date Received:** 05/06/2025 14:10 **Collector:** MVTL Field Service

Temp @ Receipt (C): 1.6 **Received on Ice:** Yes

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
Method: 120.1							
Specific Conductance - Field	**4031**	umhos/cm	1	1		05/05/2025 13:33	
Method: 150.2							
pH - Field	**6.58**	units	0.01	1		05/05/2025 13:33	
Method: 170.1							
Temperature - Field C	**14.72**	degrees C		1		05/05/2025 13:33	
Method: ASTM D516-16							
Sulfate	**1130**	mg/L	50	10		05/14/2025 09:09	
Method: EPA 6010D							
Boron	**0.53**	mg/L	0.1	1	05/06/2025 17:18	05/07/2025 15:58	
Calcium	**182**	mg/L	5	5	05/06/2025 17:18	05/12/2025 15:10	
Method: SM2110							
Appearance - Field	Clear			1		05/05/2025 13:33	
Method: SM4500 H+ B-2021							
pH	**7.0**	units	0.1	1		05/07/2025 21:01	*
Method: SM4500-Cl-E 2021							
Chloride	**10.8**	mg/L	2.0	1		05/13/2025 09:26	
Method: SM4500-F-C-2021							
Fluoride	**0.17**	mg/L	0.1	1		05/07/2025 21:01	
Method: USGS I-1750-85							
Total Dissolved Solids	**3060**	mg/L	10	1		05/07/2025 14:44	

Analysis Results Comments

pH

Sample analyzed beyond holding time.

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

Analytical Results

Lab ID: 85689007 **Date Collected:** 05/05/2025 14:44 **Matrix:** Groundwater
Sample ID: Blue 16 **Date Received:** 05/06/2025 14:10 **Collector:** MVTL Field Service

Temp @ Receipt (C): 1.6 **Received on Ice:** Yes

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
Method: 120.1							
Specific Conductance - Field	**2914**	umhos/cm	1	1		05/05/2025 14:44	
Method: 150.2							
pH - Field	**6.67**	units	0.01	1		05/05/2025 14:44	
Method: 170.1							
Temperature - Field C	**16.13**	degrees C		1		05/05/2025 14:44	
Method: ASTM D516-16							
Sulfate	**948**	mg/L	25	5		05/14/2025 09:10	
Method: EPA 6010D							
Boron	**0.40**	mg/L	0.1	1	05/06/2025 17:18	05/07/2025 15:59	
Calcium	**178**	mg/L	1	1	05/06/2025 17:18	05/12/2025 15:13	
Method: SM2110							
Appearance - Field	Clear			1		05/05/2025 14:44	
Method: SM4500 H+ B-2021							
pH	**7.0**	units	0.1	1		05/07/2025 21:07	*
Method: SM4500-Cl-E 2021							
Chloride	**11.4**	mg/L	2.0	1		05/13/2025 09:27	
Method: SM4500-F-C-2021							
Fluoride	**0.19**	mg/L	0.1	1		05/07/2025 21:07	
Method: USGS I-1750-85							
Total Dissolved Solids	**2230**	mg/L	10	1		05/07/2025 14:44	

Analysis Results Comments

pH

Sample analyzed beyond holding time.

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

QC Results Summary — WO #: 85689

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 (%)
LFB			100	103.0		85	115		
LFB			100	103.0		85	115		
LFB			100	101.0		85	115		
LFB			100	100.0		85	115		
LFB			100	100.0		85	115		
LFB			100	94.6		85	115		
LFB			100	94.5		85	115		
LFB			100	89.1		85	115		
LFB			100	90.1		85	115		
MB		<5							
MB		<5							
MB		<5							
MB		<5							
MB		<5							
MB		<5							
MB		<5							
MB		<5							
MB		<5							
MS/MSD	85689003		1000	88.2	88.6	85	115	0.0	20
MS/MSD	85726001		100	81.0	77.3	85	115	1.8	20
MS/MSD	85786003		1000	63.5	62.3	85	115	0.8	20
MS/MSD	85786013		1000	64.4	64.6	85	115	0.0	20
MS/MSD	85896001		500	89.2	89.4	85	115	0.1	20
MS/MSD	85896010		500	79.5	79.1	85	115	0.3	20
MS/MSD	86092003		100	84.4	84.4	85	115	0.0	20
MS/MSD	86100003		100	61.5	62.0	85	115	0.0	20
MS/MSD	86100004		100	70.0	70.6	85	115	0.8	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 (%)
LFB			30	100.0		90	110		
LFB			30	99.9		90	110		
LFB			30	101.0		90	110		
LFB			30	101.0		90	110		
LFB			30	102.0		90	110		
LFB			30	102.0		90	110		
LFB			30	103.0		90	110		
LFB			30	104.0		90	110		
LFB			30	104.0		90	110		
MB		<2.0							
MB		<2.0							
MB		<2.0							
MB		<2.0							
MB		<2.0							
MB		<2.0							
MB		<2.0							
MB		<2.0							
MB		<2.0							
MS/MSD	85689003		30	99.4	99.2	80	120	0.3	20
MS/MSD	85896002		30	101.2	101.4	80	120	0.2	20
MS/MSD	86092001		30	103.7	103.7	80	120	0.0	20
MS/MSD	86100004		30	109.0	108.0	80	120	0.3	20

Boron — 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-OE			0.4	105.0		85	115		
MB		<0.1							
MS/MSD	85644001		0.4	102.0	96.4	75	125	3.2	20
MS/MSD	85689003		0.4	98.4	97.7	70	130	0.4	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		85	115		

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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 (%)
MB		<1							
PDS/PDSD	85355005		500	102.0	101.0	75	125	0.4	20
PDS/PDSD	85355015		500	108.0	106.0	75	125	1.7	20
PDS/PDSD	85452002		100	107.0	106.0	75	125	1.0	20
PDS/PDSD	85496012		100	105.0	105.0	75	125	0.2	20
PDS/PDSD	85496017		100	106.0	107.0	75	125	0.8	20
PDS/PDSD	85501003		100	106.0	106.0	75	125	0.2	20
PDS/PDSD	85541001		100	103.0	104.0	75	125	0.8	20
DUP	85542001							2.6	20
DUP	85689003							0.2	20
PDS/PDSD	85689006		500	105.0	104.0	75	125	0.5	20
PDS/PDSD	85715012		500	105.0	105.0	75	125	0.4	20
PDS/PDSD	85805002		100	98.1	97.3	75	125	0.4	20
PDS/PDSD	85908001		100	106.0	108.0	75	125	0.9	20

pH — 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	100.3					
CRM-PH			6	100.2					
CRM-PH			6	100.0					
CRM-PH			6	99.8					
DUP	85496031							0.8	20
DUP	85688003							0.6	20
DUP	85689003							3.2	20
DUP	85715010							0.8	20

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			0.6	102.0		83.99	111.11		
LFB-F			0.5	96.0		90	110		
LFB-F			0.5	98.0		90	110		
LFB-F			0.5	106.0		90	110		
LFB-F			0.5	102.0		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	85541001		0.5	110.0	114.0	80	120	2.3	20
MS/MSD	85689003		0.5	110.0	112.0	80	120	1.4	20
MS/MSD	85715002		0.5	100.0	76.0	80	120	6.8	20

Total Dissolved 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	85689003							1.4	20
DUP	85740009							9.7	20
DUP	85764001							0.9	20

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

Minnesota Valley Testing Laboratories
2616 E. Broadway Ave
Bismarck, ND 58501
(701) 258-9720

Otter Tail Power Company
WO: 85689

Chain of Custody Record

Report To:	Otter Tail Power	CC:	Project Name: OTP Coyote - Blue
Attn:	Josh Hollen		Event: Spring 2025
Address:	PO Box 496 Fergus Falls, MN 56538-0496		Sampled By:
Phone:			
Email:	jhollen@otpco.com		

Lab Number	Sample ID	Date	Time	Sample Type	1 Liter Raw	500 mL HNO3	500 mL HNO3 (filtered)	250 mL H2SO4	Temp (°C)	Spec. Cond.	pH	Appearance (Clear-C, Partly Cloudy-PC, Cloudy-CL)	Analysis Required
001	FB Blue	5 May 25	1245	GW	X	X			NA	NA	NA	NA	OTP CCR App 3
002	Blue 6	6 May 25	0932	GW	X	X			11.51	2481	6.89	C	
003	Blue 7/MS7/MSD7	5 May 25	1038	GW	3	3			15.08	2795	6.68	C	
004	Blue 13	6 May 25	1005	GW	X	X			~~16.21~~	~~5819~~	~~6.74~~	C	
005	Blue 14	5 May 25	1217	GW	X	X			16.21	5819	6.74	C	
006	Blue 15	5 May 25	1333	GW	X	X			14.72	4031	6.58	C	
007	Blue 16	5 May 25	1444	GW	X	X			16.13	2914	6.67	C	
									11.15	6798	7.01		

Comments:

Relinquished By		Sample Condition		Received By	
Name	Date/Time	Location	Temp	Name	Date/Time
1	6 May 25 1410	~~Log In~~ Walk In #2	1.6 °C/TM BOS ROI(Y)N		6 May 25 1410
2					

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

CCR - Appendix III Detection Monitoring

Field Parameters	
pH*	
* Field and Laboratory Measurements	
Total Concentration Parameters	**Method**
Boron	6010
Calcium	6010
Chloride	SM4500 CL E
Fluoride	EPA 300
pH	SM 4500 H+B-96
Sulfate	ASTM D516
Dissolved Solids, Total	SM 2540 C-97

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

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

Coyote Blue Pit Sampling - 2025 CCR

Site	Parameter List	Well Depth	Diameter (Inches)	Well Elevation	Sample Equipment	Dedicated?	Pump Rate (ml/minute)	Goes Dry?	Sample Frequency**
BLUE13	CCR 3	116.46	2	2045.27	Bladder	No	LOW FLOW	Yes	2,4
BLUE6-93	CCR 3	78.85	2	1982.22	Bladder	No	LOW FLOW	YES	2,4
BLUE14	CCR 3	86.97	2	1999.55	Bladder	No	LOW FLOW	No	2,4
BLUE15	CCR 3	87.74	2	1995.88	Bladder	No	LOW FLOW	No	2,4
BLUE16	CCR 3	97.63	2	1995.94	Bladder	No	LOW FLOW	No	2,4
BLUE7-93	CCR 3	97.26	2	1998.38	Bladder	No	LOW FLOW	No	2,4

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

2 = April 16 - June 1
4 = Oct 1 - Nov 15

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

Calibration Report

Instrument Aqua TROLL 600
Serial Number 1025047
Created 5/5/2025

Sensor **Conductivity**
Serial Number 1022539
Last Calibrated 5/5/2025

Calibration Details
TDS Conversion Factor (ppm) 0.65
Cell Constant 0.963
Offset 0.00 µS/cm
Reference Temperature 25.00 °C

Calibration Point 1

Pre Measurement
Actual Conductivity 1,259.7 µS/cm
Specific Conductivity 1,404.4 µS/cm

Post Measurement
Actual Conductivity 1,267.4 µS/cm
Specific Conductivity 1,413.0 µS/cm

Sensor **RDO**
Serial Number 1120735
Last Calibrated 5/5/2025

Calibration Details
Slope 1.3089796
Offset -0.00 mg/L

Calibration point 100%
Concentration 6.53 mg/L
Pre Measurement 95.14 %Sat
Post Measurement 100.00 %Sat
Temperature 19.69 °C
Barometric Pressure 947.84 mbar

Sensor **pH/ORP**
Serial Number 1112098
Last Calibrated 5/5/2025

Calibration Details

Calibration Point 1
pH of Buffer 4.00 pH
pH mV 174.1 mV
Temperature 19.80 °C

Pre Measurement
pH 4.15 pH
pH mV 174.1 mV

Post Measurement
pH 4.00 pH
pH mV 171.1 mV

Calibration Point 2
pH of Buffer 7.02 pH
pH mV -2.4 mV
Temperature 19.59 °C

Pre Measurement
pH 7.21 pH
pH mV -2.4 mV

Post Measurement
pH 7.02 pH
pH mV -2.4 mV

Calibration Point 3
pH of Buffer 10.05 pH
pH mV -176.6 mV
Temperature 19.39 °C

Pre Measurement
pH 10.30 pH
pH mV -176.5 mV

Post Measurement
pH 10.05 pH
pH mV -173.3 mV

Slope and Offset 1
Slope -58.44 mV/pH
Offset -1.2 mV

Slope and Offset 2
Slope -57.51 mV/pH
Offset -1.2 mV

ORP
ORP Solution Zobell's
Offset 22.1 mV
Temperature 18.71 °C
Pre Measurement 232.0 mV
Post Measurement 237.3 mV

Sensor **Turbidity**
Serial Number 1133469
Last Calibrated 5/5/2025

Calibration Details
Slope 0.94146913
Offset 0.81 NTU

Calibration Point 1
Pre Measurement 0.34 NTU
Post Measurement 0.10 NTU

Calibration Point 2
Pre Measurement 97.49 NTU
Post Measurement 100.00 NTU

Sensor **Barometric Pressure**
Serial Number 1025047
Last Calibrated Factory Defaults

Sensor **Pressure**
Serial Number 1023082
Last Calibrated Factory Defaults

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

Calibration Report

Instrument Aqua TROLL 600
Serial Number 1025047
Created 5/6/2025

Sensor **Conductivity**
Serial Number 1022539
Last Calibrated 5/6/2025

Calibration Details
TDS Conversion Factor (ppm) 0.65
Cell Constant 1.013
Offset 0.00 µS/cm
Reference Temperature 25.00 °C

Calibration Point 1

Pre Measurement
Actual Conductivity 1,105.3 µS/cm
Specific Conductivity 1,343.4 µS/cm

Post Measurement
Actual Conductivity 1,162.6 µS/cm
Specific Conductivity 1,413.0 µS/cm

Sensor **RDO**
Serial Number 1120735
Last Calibrated 5/6/2025

Calibration Details
Slope 1.3420213
Offset -0.00 mg/L

Calibration point 100%
Concentration 7.11 mg/L
Pre Measurement 97.23 %Sat
Post Measurement 100.00 %Sat
Temperature 14.69 °C
Barometric Pressure 952.81 mbar

Sensor **pH/ORP**
Serial Number 1112098
Last Calibrated 5/6/2025

Calibration Details

Calibration Point 1
pH of Buffer 4.00 pH
pH mV 169.3 mV
Temperature 15.83 °C

Pre Measurement
pH 4.04 pH
pH mV 169.2 mV

Post Measurement
pH 4.00 pH
pH mV 164.1 mV

Calibration Point 2
pH of Buffer 7.04 pH
pH mV -5.2 mV
Temperature 15.81 °C

Pre Measurement
pH 7.07 pH
pH mV -5.1 mV

Post Measurement
pH 7.04 pH
pH mV -5.0 mV

Calibration Point 3
pH of Buffer 10.11 pH
pH mV -179.3 mV
Temperature 15.66 °C

Pre Measurement
pH 10.13 pH
pH mV -179.1 mV

Post Measurement
pH 10.11 pH
pH mV -173.6 mV

Slope and Offset 1
Slope -57.39 mV/pH
Offset -2.9 mV

Slope and Offset 2
Slope -56.71 mV/pH
Offset -2.9 mV

ORP
ORP Solution Zobell's
Offset 21.9 mV
Temperature 14.73 °C
Pre Measurement 242.7 mV
Post Measurement 242.5 mV

Sensor **Turbidity**
Serial Number 1133469
Last Calibrated 5/6/2025

Calibration Details
Slope 0.93504316
Offset 1.13 NTU

Calibration Point 1
Pre Measurement 0.00 NTU
Post Measurement 0.10 NTU

Calibration Point 2
Pre Measurement 100.32 NTU
Post Measurement 100.00 NTU

Sensor **Barometric Pressure**
Serial Number 1025047
Last Calibrated Factory Defaults

Sensor **Pressure**
Serial Number 1023082
Last Calibrated Factory Defaults

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1201 Lincoln Hwy. ~ Nevada, IA 50201 ~ 515-382-5486 ~ Fax 515-382-3885
www.MVTL.com

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

2616 E. Broadway Ave, Bismarck, ND
Phone: (701) 258-9720

Field Datasheet

Groundwater Assessment

Company:	OTP Coyote
Event:	Spring 2025
Sample ID:	Blue 6
Sampling Personal:	

Weather Conditions: Temp: 50 °F Wind: N @ 5-10 Precip: Sunny / Partly Cloudy / Cloudy

WELL INFORMATION

Well Locked?	YES (NO)	Lock hanging on well
Well Labeled?	(YES) NO	
Repairs Necessary?		
Casing Diameter:	2"	
Water Level Before Purge:	67.22	ft
Total Depth of Well:	79.10	ft
Well Volume:	7.3	liters
Water Level After Sample:		ft
Measurement Method:	Electric Water Level Indicator	

SAMPLING INFORMATION

Purging Method:	Bladder	
Sampling Method:	Bladder	
Dedicated Equipment?	(YES) NO	

Tubing

Control Settings:		
Purge:	8 / 8	Sec.
Recover:	12 / 52	Sec.
PSI:	—	

Bottle List:
1 Liter Raw
500mL Nitric

Duplicate Sample?
YES / (NO)
Duplicate Sample ID:
—

FIELD READINGS

Stabilization Parameters (3 Consecutive)		Temp. (°C)	Spec. Cond.	pH	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Water Level	Pumping Rate	mL Removed	Appearance or Comment
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		clear, slightly turbid, turbid
5 May 25	1503	Start of Well Purge									
	1523	14.64	2460	7.05	8.15	13.3	4.54	Below Pump	300.0	6000.0	Clear
		Purged Dry									
6 May 25	0917	Start of Stabilization Purge						67.25	~~1000~~		
	0922	11.34	2545	6.96	5.28	86.7	9.08	68.45	100.0	500.0	Clear
	0927	11.42	2508	6.92	5.17	85.6	6.32	69.25	100.0	500.0	Clear
	0932	11.51	2481	6.89	5.06	81.7	5.67	69.90	100.0	500.0	Clear

Well Stabilized? (YES) NO Total Volume Purged: 7500.0 Liters

Sample Date	Time	Temp. (°C)	Spec. Cond.	pH			Turbidity (NTU)				Appearance or Comment Clarity, Color, Odor, Ect.
6 May 25	0932	11.51	2481	6.89	5.06		81.7	5.67			Clear

Comments:

NA or - = not applicable

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1201 Lincoln Hwy. ~ Nevada, IA 50201 ~ 515-382-5486 ~ Fax 515-382-3885
www.MVTL.com

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

2616 E. Broadway Ave, Bismarck, ND
Phone: (701) 258-9720

Field Datasheet

Groundwater Assessment

Company:	OTP Coyote
Event:	Spring 2025
Sample ID:	Blue 7
Sampling Personal:	

Weather Conditions: Temp: 70 °F Wind: S @ 10-15 Precip: Sunny / Partly Cloudy / Cloudy

WELL INFORMATION

Well Locked?	YES	(NO) Lock hanging on well
Well Labeled?	(YES)	NO
Repairs Necessary?		
Casing Diameter:	2"	
Water Level Before Purge:	84.80	ft
Total Depth of Well:	97.70	ft
Well Volume:	7.9	liters
Water Level After Sample:	84.82	ft
Measurement Method:	Electric Water Level Indicator	

SAMPLING INFORMATION

Purging Method:	Bladder	
Sampling Method:	Bladder	
Dedicated Equipment?	(YES)	NO

Tubing

Control Settings:	
Purge: 8	Sec.
Recover: 52	Sec.
PSI: —	

Bottle List:	
1 Liter Raw	X3
500mL Nitric	

Duplicate Sample?
(YES) / NO
Duplicate Sample ID:
MS/MSD

FIELD READINGS

Stabilization Parameters (3 Consecutive)		Temp. (°C)	Spec. Cond.	pH	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Water Level	Pumping Rate	mL Removed	Appearance or Comment
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		Clarity, Color, Odor, Ect. clear, slightly turbid, turbid
5 May 25	0948	Start of Well Purge									
	1008	14.72	2710	6.70	0.30	35.7	13.55	84.82	100.0	2000.0	Clear
	1018	14.87	2764	6.71	0.22	-44.5	10.56	84.80	100.0	1000.0	Clear
	1023	14.92	2766	6.70	0.19	-74.4	9.46	84.82	100.0	500.0	Clear
	1028	14.96	2772	6.70	0.19	-97.5	7.81	84.81	100.0	500.0	Clear
	1033	15.13	2787	6.69	0.16	-102.6	8.84	84.80	100.0	500.0	Clear
	1038	15.08	2795	6.68	0.18	-106.6	8.71	84.80	100.0	500.0	Clear

Well Stabilized? (YES) NO Total Volume Purged: 5000.0 Liters

Sample Date	Time	Temp. (°C)	Spec. Cond.	pH			Turbidity (NTU)				Appearance or Comment Clarity, Color, Odor, Ect.
5 May 25	1038	15.08	2795	6.68			8.71				Clear

Comments:	

NA or - = not applicable

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

2616 E. Broadway Ave, Bismarck, ND
Phone: (701) 258-9720

Field Datasheet

Groundwater Assessment

Company:	OTP Coyote
Event:	Spring 2025
Sample ID:	Blue 13
Sampling Personal:	

Weather Conditions: Temp: 50 °F Wind: N @ 5-10 Precip: Sunny / Partly Cloudy / Cloudy

WELL INFORMATION

Well Locked?	YES	(NO) Hinge Broken
Well Labeled?	(YES)	NO
Repairs Necessary?		
Casing Diameter:	2"	
Water Level Before Purge:	105.22	ft
Total Depth of Well:	116.75	ft
Well Volume:	7.1	liters
Water Level After Sample:		ft
Measurement Method:	Electric Water Level Indicator	

SAMPLING INFORMATION

Purging Method:	Bladder	
Sampling Method:	Bladder	
Dedicated Equipment?	(YES) Tubing	NO

Control Settings:	
Purge: 10	Sec.
Recover: 10	Sec.
PSI: 80	

Bottle List:
1 Liter Raw
500mL Nitric

Duplicate Sample?
YES / (NO)
Duplicate Sample ID:
—

FIELD READINGS

Stabilization Parameters (3 Consecutive)		Temp. (°C)	Spec. Cond.	pH	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Water Level	Pumping Rate	mL Removed	Appearance or Comment
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		Clarity, Color, Odor, Ect.
											clear, slightly turbid, turbid
5 May 25	1545	Start of Well Purge									
	1405	12.47	6214	6.92	0.28	-26.3	14.61	Below Pump	300.0	~~5700~~ 6000.0	Clear
		Purged Dry									
6 May 25	0950	Start up	Stabilization from Purge					105.60			
	0955	11.06	6853	6.93	2.29	65.0	91.46	107.08	100.0	500.0	Clear
	1000	11.27	6841	7.01	1.39	39.1	15.26	107.95	100.0	500.0	Clear
	1005	11.15	6798	7.01	0.37	27.1	3.78	108.75	100.0	500.0	Clear

Well Stabilized? YES (NO) Total Volume Purged: 7500.0 Liters

Sample Date	Time	Temp. (°C)	Spec. Cond.	pH			Turbidity (NTU)				Appearance or Comment
											Clarity, Color, Odor, Ect.
6 May 25	1005	11.15	6798	7.01			3.78				Clear

Comments:	

NA or - = not appliciable

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

2616 E. Broadway Ave, Bismarck, ND
Phone: (701) 258-9720

Field Datasheet

Groundwater Assessment

Company:	OTP Coyote
Event:	Spring 2025
Sample ID:	Blue 14
Sampling Personal:	JM CB

Weather Conditions: Temp: 70 °F Wind: S @ 10-15 Precip: Sunny / Partly Cloudy / Cloudy

WELL INFORMATION

Well Locked?	YES	NO Lock hanging on well
Well Labeled?	YES	NO
Repairs Necessary?		
Casing Diameter:	2"	
Water Level Before Purge:	80.18	ft
Total Depth of Well:	86.95	ft
Well Volume:	4.2	liters
Water Level After Sample:	81.37	ft
Measurement Method:	Electric Water Level Indicator	

SAMPLING INFORMATION

Purging Method:	Bladder	
Sampling Method:	Bladder	
Dedicated Equipment?	YES	NO

Tubing

Control Settings:		
Purge:	8	Sec.
Recover:	52	Sec.
PSI:	—	

Bottle List:
1 Liter Raw
500mL Nitric

Duplicate Sample?
YES / NO
Duplicate Sample ID:
—

FIELD READINGS

Stabilization Parameters (3 Consecutive)		Temp. (°C)	Spec. Cond.	pH	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Water Level	Pumping Rate	mL Removed	Appearance or Comment
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		Clarity, Color, Odor, Ect. clear, slightly turbid, turbid
5 May 25	1127	Start of Well Purge									
	1147	15.95	6023	6.71	0.19	110.5	16.27	81.15	100.0	2000.0	Clear
	1157	16.40	6010	6.72	0.18	115.7	20.31	81.35	100.0	1000.0	Clear
	1202	16.52	5964	6.73	0.18	121.4	14.08	81.35	100.0	500.0	Clear
	1207	16.33	5933	6.73	0.17	106.8	10.89	81.36	100.0	500.0	Clear
	1212	16.03	5919	6.74	0.16	99.2	6.66	81.36	100.0	500.0	Clear
	1217	16.21	5891	6.74	0.13	97.8	6.09	81.36	100.0	500.0	Clear

Well Stabilized? YES NO Total Volume Purged: 5000.0 Liters

Sample Date	Time	Temp. (°C)	Spec. Cond.	pH			Turbidity (NTU)				Appearance or Comment Clarity, Color, Odor, Ect.
5 May 25	1217	16.21	5891	6.74			6.09				Clear

Comments:

NA or - = not applicable

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Member ACIL

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

Field Datasheet

Groundwater Assessment

2616 E. Broadway Ave, Bismarck, ND
Phone: (701) 258-9720

Company:	OTP Coyote
Event:	Spring 2025
Sample ID:	Blue 15
Sampling Personal:	[signature]

Weather Conditions: Temp: 70 °F Wind: S @ 10-15 Precip: Sunny / (Partly Cloudy) / Cloudy

WELL INFORMATION

Well Locked?	YES (NO) Lock hanging on well
Well Labeled?	(YES) NO
Repairs Necessary?	
Casing Diameter:	2"
Water Level Before Purge:	80.96 ft
Total Depth of Well:	88.72 ft
Well Volume:	4.8 liters
Water Level After Sample:	81.43 ft
Measurement Method:	Electric Water Level Indicator

SAMPLING INFORMATION

Purging Method:	Bladder
Sampling Method:	Bladder
Dedicated Equipment?	(YES) NO — Tubing

Control Settings:	
Purge:	8 Sec.
Recover:	52 Sec.
PSI:	—

Bottle List:
1 Liter Raw
500mL Nitric

Duplicate Sample? YES / (NO)
Duplicate Sample ID: —

FIELD READINGS

Stabilization Parameters (3 Consecutive)		Temp. (°C)	Spec. Cond.	pH	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Water Level	Pumping Rate	mL Removed	Appearance or Comment Clarity, Color, Odor, Ect.
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		clear, slightly turbid, turbid
5 May 25	1248	Start of Well Purge									
	1308	14.84	4044	6.55	0.37	105.1	27.59	81.42	100.0	2000.0	Clear
	1318	14.96	4045	6.56	0.18	99.1	9.48	81.42	100.0	1000.0	Clear
	1323	14.88	4022	6.57	0.19	98.7	12.24	81.42	100.0	500.0	Clear
	1328	14.62	4041	6.57	0.20	95.6	9.06	81.42	100.0	500.0	Clear
	1333	14.72	4031	6.58	0.17	93.2	7.65	81.42	100.0	500.0	Clear

Well Stabilized? (YES) NO Total Volume Purged: 4500.0 Liters

Sample Date	Time	Temp. (°C)	Spec. Cond.	pH			Turbidity (NTU)				Appearance or Comment Clarity, Color, Odor, Ect.
5 May 25	1333	14.72	4031	6.58			7.65				Clear

Comments: Collected Field Blank @ 1245

NA or - = not appliciable

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Report Date: Monday, May 19, 2025 9:31:09 AM

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1201 Lincoln Hwy. ~ Nevada, IA 50201 ~ 515-382-5486 ~ Fax 515-382-3885
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Member ACIL

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

2616 E. Broadway Ave, Bismarck, ND
Phone: (701) 258-9720

Field Datasheet

Groundwater Assessment

Company:	OTP Coyote
Event:	Spring 2025
Sample ID:	Blue 16
Sampling Personal:	

Weather Conditions: Temp: 75 °F Wind: S @ 10-15 Precip: Sunny / Partly Cloudy / Cloudy

WELL INFORMATION

Well Locked?	(YES)	NO
Well Labeled?	(YES)	NO
Repairs Necessary?		
Casing Diameter:	2"	
Water Level Before Purge:	80.35	ft
Total Depth of Well:	97.50	ft
Well Volume:	10.1	liters
Water Level After Sample:	80.43	ft
Measurement Method:	Electric Water Level Indicator	

SAMPLING INFORMATION

Purging Method:	Bladder	
Sampling Method:	Bladder	
Dedicated Equipment?	(YES)	NO

Tubing

Control Settings:	
Purge: 8	Sec.
Recover: 52	Sec.
PSI: —	

Bottle List:
1 Liter Raw
500mL Nitric

Duplicate Sample?
YES / (NO)
Duplicate Sample ID:
—

FIELD READINGS

Stabilization Parameters (3 Consecutive)		Temp. (°C)	Spec. Cond.	pH	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Water Level	Pumping Rate	mL Removed	Appearance or Comment
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		clear, slightly turbid, turbid
5 May 25	1359	Start of Well Purge									
	1419	16.16	2906	6.66	0.23	89.5	40.41	80.40	100.0	2000.0	Clear
	1429	16.04	2908	6.67	0.19	92.1	24.80	80.42	100.0	1000.0	Clear
	1434	15.91	2910	6.67	0.17	92.5	21.62	80.42	100.0	500.0	Clear
	1439	15.81	2899	6.67	0.16	92.5	20.38	80.42	100.0	500.0	Clear
	1444	16.13	2914	6.67	0.15	91.0	25.13	80.43	100.0	500.0	Clear

Well Stabilized? (YES) NO Total Volume Purged: 4500.0 Liters

Sample Date	Time	Temp. (°C)	Spec. Cond.	pH			Turbidity (NTU)				Appearance or Comment Clarity, Color, Odor, Ect.
5 May 25	1444	16.13	2914	6.67			25.13				Clear

Comments:

NA or - = not applicable

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Member ACIL

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

Sample Condition Checklist

Date: 6 May 25 Time: 1538 Analyst: JPW

Work Order #: 85689

Containers Supplied by MVTL: [X] Yes [ ] No (Designate customer supplied containers as "Other" in container size column)

Comments:

Number of Bottles	Container Size (mL) F-(500) = Filtered	Container Type CG = Clear Glass, P = Plastic, AG = Amber Glass	Preservation	pH	Sample IDs Preservation reagent added Date/Time Analyst	Unique ID of preservation reagent added	Sample pH after preservation	Required for HNO_3 samples only (24 hours later) Sample ID pH Recheck Result Date/Time/Analyst
9	(125) (250) (500) F-(500) (1000) Other [1000 circled]	(CG) (P) (AG) Other [P circled]	NONE HNO_3 H_2SO_4 NaOH NaOH/ZnAcet HCl [NONE circled]	<2 >12				
9	(125) (250) (500) F-(500) (1000) Other [500 circled]	(CG) (P) (AG) Other [P circled]	NONE HNO_3 H_2SO_4 NaOH NaOH/ZnAcet HCl [HNO_3 circled]	<2 >12 [<2 circled]				
	(125) (250) (500) F-(500) (1000) Other	(CG) (P) (AG) Other	NONE HNO_3 H_2SO_4 NaOH NaOH/ZnAcet HCl	<2 >12				
	(125) (250) (500) F-(500) (1000) Other	(CG) (P) (AG) Other	NONE HNO_3 H_2SO_4 NaOH NaOH/ZnAcet HCl	<2 >12				
	(125) (250) (500) F-(500) (1000) Other	(CG) (P) (AG) Other	NONE HNO_3 H_2SO_4 NaOH NaOH/ZnAcet HCl	<2 >12				
	(125) (250) (500) F-(500) (1000) Other	(CG) (P) (AG) Other	NONE HNO_3 H_2SO_4 NaOH NaOH/ZnAcet HCl	<2 >12				
	(125) (250) (500) F-(500) (1000) Other	(CG) (P) (AG) Other	NONE HNO_3 H_2SO_4 NaOH NaOH/ZnAcet HCl	<2 >12				
	(125) (250) (500) F-(500) (1000) Other	(CG) (P) (AG) Other	NONE HNO_3 H_2SO_4 NaOH NaOH/ZnAcet HCl	<2 >12				
	Oil and grease	(CG) (P) (AG) Other	HCl	n/a				
	TOC Vials	(G) (AG)	H_3PO_4	n/a				
	DOC Vials	(G) (AG)	None H_3PO_4	n/a				

*All samples requiring analyses performed outside of the Bismarck laboratory (New Ulm and Sub-Contract) are not documented on this form.
*All samples requiring microbiological tests are not documented on this form.

Form #80-910025-2 M:\Documents\FORMS\Approved Templates\Bismarck\Waters\80-910025-2 Sample Condition Checklist Page 1 of 1 Effective Date : 1 July 2024

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1201 Lincoln Hwy. ~ Nevada, IA 50201 ~ 515-382-5486 ~ Fax 515-382-3885
www.MVTL.com

Account #: 6106 **Client:** Otter Tail Power Company
Workorder: OTP Coyote-Blue Fall 2025 (103212) **PO:** 108237

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. Carroll

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.

Amended data package to update the project name. CC 24Oct25

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

Analytical Results

Lab ID: 103212001 **Date Collected:** 10/08/2025 08:24 **Matrix:** Groundwater
Sample ID: FB Blue **Date Received:** 10/08/2025 12:09 **Collector:** MVTL Field Service

Temp @ Receipt (C): 2.8 **Received on Ice:** Yes

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
Method: ASTM D516-16							
Sulfate	<5	mg/L	5	1		10/15/2025 09:16	
Method: EPA 6010D							
Boron	<0.1	mg/L	0.1	1	10/08/2025 15:52	10/16/2025 16:11	
Calcium	<1	mg/L	1	1	10/08/2025 15:52	10/17/2025 16:33	
Method: SM4500 H+ B-2021							
pH	**6.2**	units	0.1	1		10/08/2025 23:16	*
Method: SM4500-Cl-E 2021							
Chloride	<2.0	mg/L	2.0	1		10/14/2025 10:14	
Method: SM4500-F-C-2021							
Fluoride	<0.1	mg/L	0.1	1		10/08/2025 23:16	
Method: USGS I-1750-85							
Total Dissolved Solids	<10	mg/L	10	1		10/08/2025 15:00	

Analysis Results Comments

pH

Sample analyzed beyond holding time.

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

Analytical Results

Lab ID: 103212002 **Date Collected:** 10/08/2025 08:41 **Matrix:** Groundwater
Sample ID: Blue 6 **Date Received:** 10/08/2025 12:09 **Collector:** MVTL Field Service

Temp @ Receipt (C): 2.8 **Received on Ice:** Yes

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
Method: 120.1							
Specific Conductance - Field	**2549**	umhos/cm	1	1		10/08/2025 08:41	
Method: 150.2							
pH - Field	**6.62**	units	0.01	1		10/08/2025 08:41	
Method: 170.1							
Temperature - Field C	**10.37**	degrees C		1		10/08/2025 08:41	
Method: ASTM D516-16							
Sulfate	**855**	mg/L	25	5		10/15/2025 09:17	
Method: EPA 6010D							
Boron	**0.35**	mg/L	0.1	1	10/08/2025 15:52	10/13/2025 15:25	
Calcium	**202**	mg/L	1	1	10/08/2025 15:52	10/17/2025 16:38	
Method: SM2110							
Appearance - Field	Clear			1		10/08/2025 08:41	
Method: SM4500 H+ B-2021							
pH	**7.0**	units	0.1	1		10/08/2025 23:22	*
Method: SM4500-Cl-E 2021							
Chloride	**7.4**	mg/L	2.0	1		10/14/2025 10:15	
Method: SM4500-F-C-2021							
Fluoride	**0.18**	mg/L	0.1	1		10/08/2025 23:22	
Method: USGS I-1750-85							
Total Dissolved Solids	**1990**	mg/L	10	1		10/08/2025 15:00	

Analysis Results Comments

pH

Sample analyzed beyond holding time.

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

Analytical Results

Lab ID: 103212003 **Date Collected:** 10/07/2025 11:07 **Matrix:** Groundwater
Sample ID: Blue 7 **Date Received:** 10/08/2025 12:09 **Collector:** MVTL Field Service
Sample Desc: MS7/MSD7
Temp @ Receipt (C): 2.8 **Received on Ice:** Yes

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
Method: 120.1							
Specific Conductance - Field	**2566**	umhos/cm	1	1		10/07/2025 11:07	
Method: 150.2							
pH - Field	**6.65**	units	0.01	1		10/07/2025 11:07	
Method: 170.1							
Temperature - Field C	**11.82**	degrees C		1		10/07/2025 11:07	
Method: ASTM D516-16							
Sulfate	**922**	mg/L	50	10		10/15/2025 09:19	*
Method: EPA 6010D							
Boron	**0.34**	mg/L	0.1	1	10/08/2025 15:52	10/13/2025 15:26	
Calcium	**194**	mg/L	1	1	10/08/2025 15:52	10/17/2025 16:39	
Method: SM2110							
Appearance - Field	Clear			1		10/07/2025 11:07	
Method: SM4500 H+ B-2021							
pH	**7.1**	units	0.1	1		10/08/2025 23:28	*
Method: SM4500-Cl-E 2021							
Chloride	**7.1**	mg/L	2.0	1		10/14/2025 10:16	
Method: SM4500-F-C-2021							
Fluoride	**0.19**	mg/L	0.1	1		10/08/2025 23:28	
Method: USGS I-1750-85							
Total Dissolved Solids	**1970**	mg/L	10	1		10/08/2025 15:00	

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

Analytical Results

Analysis Results Comments

Sulfate

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

pH

Sample analyzed beyond holding time.

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

Analytical Results

Lab ID: 103212004 **Date Collected:** 10/08/2025 09:37 **Matrix:** Groundwater
Sample ID: Blue 13 **Date Received:** 10/08/2025 12:09 **Collector:** MVTL Field Service

Temp @ Receipt (C): 2.8 **Received on Ice:** Yes

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
Method: 120.1							
Specific Conductance - Field	**6518**	umhos/cm	1	1		10/08/2025 09:37	
Method: 150.2							
pH - Field	**7.01**	units	0.01	1		10/08/2025 09:37	
Method: 170.1							
Temperature - Field C	**11.65**	degrees C		1		10/08/2025 09:37	
Method: ASTM D516-16							
Sulfate	**2500**	mg/L	100	20		10/15/2025 09:20	
Method: EPA 6010D							
Boron	**0.56**	mg/L	0.5	5	10/08/2025 15:52	10/13/2025 15:28	
Calcium	**118**	mg/L	5	5	10/08/2025 15:52	10/17/2025 16:45	
Method: SM2110							
Appearance - Field	Clear			1		10/08/2025 09:37	
Method: SM4500 H+ B-2021							
pH	**7.4**	units	0.1	1		10/08/2025 23:33	*
Method: SM4500-Cl-E 2021							
Chloride	**56.0**	mg/L	2.0	1		10/14/2025 10:17	
Method: SM4500-F-C-2021							
Fluoride	**0.24**	mg/L	0.1	1		10/08/2025 23:33	
Method: USGS I-1750-85							
Total Dissolved Solids	**5230**	mg/L	10	1		10/08/2025 15:00	

Analysis Results Comments

pH

Sample analyzed beyond holding time.

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

Analytical Results

Lab ID: 103212005 **Date Collected:** 10/07/2025 14:03 **Matrix:** Groundwater
Sample ID: Blue 14 **Date Received:** 10/08/2025 12:09 **Collector:** MVTL Field Service

Temp @ Receipt (C): 2.8 **Received on Ice:** Yes

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
Method: 120.1							
Specific Conductance - Field	**5801**	umhos/cm	1	1		10/07/2025 14:03	
Method: 150.2							
pH - Field	**6.76**	units	0.01	1		10/07/2025 14:03	
Method: 170.1							
Temperature - Field C	**13.84**	degrees C		1		10/07/2025 14:03	
Method: ASTM D516-16							
Sulfate	**2310**	mg/L	50	10		10/15/2025 09:28	
Method: EPA 6010D							
Boron	**0.51**	mg/L	0.5	5	10/08/2025 15:52	10/13/2025 15:29	
Calcium	**368**	mg/L	5	5	10/08/2025 15:52	10/17/2025 16:46	
Method: SM2110							
Appearance - Field	Clear			1		10/07/2025 14:03	
Method: SM4500 H+ B-2021							
pH	**7.2**	units	0.1	1		10/08/2025 23:39	*
Method: SM4500-Cl-E 2021							
Chloride	**9.3**	mg/L	2.0	1		10/14/2025 10:18	
Method: SM4500-F-C-2021							
Fluoride	**0.13**	mg/L	0.1	1		10/08/2025 23:39	
Method: USGS I-1750-85							
Total Dissolved Solids	**4930**	mg/L	10	1		10/08/2025 15:00	

Analysis Results Comments

pH

Sample analyzed beyond holding time.

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

Analytical Results

Lab ID: 103212006 **Date Collected:** 10/07/2025 12:07 **Matrix:** Groundwater
Sample ID: Blue 15 **Date Received:** 10/08/2025 12:09 **Collector:** MVTL Field Service

Temp @ Receipt (C): 2.8 **Received on Ice:** Yes

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
Method: 120.1							
Specific Conductance - Field	**3661**	umhos/cm	1	1		10/07/2025 12:07	
Method: 150.2							
pH - Field	**6.62**	units	0.01	1		10/07/2025 12:07	
Method: 170.1							
Temperature - Field C	**11.98**	degrees C		1		10/07/2025 12:07	
Method: ASTM D516-16							
Sulfate	**1210**	mg/L	50	10		10/15/2025 09:30	
Method: EPA 6010D							
Boron	**0.45**	mg/L	0.1	1	10/08/2025 15:52	10/13/2025 15:31	
Calcium	**149**	mg/L	1	1	10/08/2025 15:52	10/17/2025 16:49	
Method: SM2110							
Appearance - Field	Clear			1		10/07/2025 12:07	
Method: SM4500 H+ B-2021							
pH	**7.1**	units	0.1	1		10/08/2025 23:45	*
Method: SM4500-Cl-E 2021							
Chloride	**9.4**	mg/L	2.0	1		10/14/2025 10:20	
Method: SM4500-F-C-2021							
Fluoride	**0.19**	mg/L	0.1	1		10/08/2025 23:45	
Method: USGS I-1750-85							
Total Dissolved Solids	**2670**	mg/L	10	1		10/08/2025 15:00	

Analysis Results Comments

pH

Sample analyzed beyond holding time.

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

Analytical Results

Lab ID: 103212007 **Date Collected:** 10/07/2025 12:50 **Matrix:** Groundwater
Sample ID: Blue 16 **Date Received:** 10/08/2025 12:09 **Collector:** MVTL Field Service

Temp @ Receipt (C): 2.8 **Received on Ice:** Yes

Parameter	Results	Units	RDL	DF	Prepared	Analyzed	Qual
Method: 120.1							
Specific Conductance - Field	**2521**	umhos/cm	1	1		10/07/2025 12:50	
Method: 150.2							
pH - Field	**6.68**	units	0.01	1		10/07/2025 12:50	
Method: 170.1							
Temperature - Field C	**12.93**	degrees C		1		10/07/2025 12:50	
Method: ASTM D516-16							
Sulfate	**744**	mg/L	25	5		10/15/2025 09:31	
Method: EPA 6010D							
Boron	**0.35**	mg/L	0.1	1	10/08/2025 15:52	10/13/2025 15:32	
Calcium	**153**	mg/L	1	1	10/08/2025 15:52	10/17/2025 16:51	
Method: SM2110							
Appearance - Field	Clear			1		10/07/2025 12:50	
Method: SM4500 H+ B-2021							
pH	**7.1**	units	0.1	1		10/08/2025 23:50	*
Method: SM4500-Cl-E 2021							
Chloride	**8.2**	mg/L	2.0	1		10/14/2025 10:21	
Method: SM4500-F-C-2021							
Fluoride	**0.20**	mg/L	0.1	1		10/08/2025 23:50	
Method: USGS I-1750-85							
Total Dissolved Solids	**1920**	mg/L	10	1		10/08/2025 15:00	

Analysis Results Comments

pH

Sample analyzed beyond holding time.

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

QC Results Summary — WO #: 103212

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 (%)
LFB			100	100.0		85	115		
LFB			100	96.9		85	115		
LFB			100	93.7		85	115		
LFB			100	96.4		85	115		
LFB			100	94.3		85	115		
LFB			100	99.3		85	115		
LFB			100	104.0		85	115		
LFB			100	110.0		85	115		
LFB			100	107.0		85	115		
MB		<5							
MB		<5							
MB		<5							
MB		<5							
MB		<5							
MB		<5							
MB		<5							
MB		<5							
MB		<5							
MS/MSD	103146005		500	80.4	83.0	85	115	1.8	20
MS/MSD	103212003		1000	75.9	77.6	85	115	1.2	20
MS/MSD	103374004		2000	66.9	72.8	85	115	3.6	20
MS/MSD	103380005		500	93.4	93.9	85	115	0.4	20
MS/MSD	103380013		4000	72.7	69.5	85	115	1.5	20
MS/MSD	103395008		1000	99.5	103.9	85	115	2.2	20
MS/MSD	103535005		500	99.5	100.2	85	115	0.5	20
MS/MSD	103708001		1000	90.3	94.5	85	115	2.3	20
MS/MSD	103813002		100	110.0	110.2	85	115	0.0	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 (%)
LFB			30	97.3		90	110		
LFB			30	97.5		90	110		
LFB			30	97.8		90	110		
LFB			30	97.9		90	110		
LFB			30	97.3		90	110		
LFB			30	97.2		90	110		
LFB			30	97.0		90	110		
LFB			30	97.1		90	110		
LFB			30	97.3		90	110		
LFB			30	96.5		90	110		
LFB			30	97.3		90	110		
LFB			30	97.0		90	110		
MB		<2.0							
MB		<2.0							
MB		<2.0							
MB		<2.0							
MB		<2.0							
MB		<2.0							
MB		<2.0							
MB		<2.0							
MB		<2.0							
MB		<2.0							
MB		<2.0							
MB		<2.0							
MS/MSD	103185005		30	98.8	100.6	80	120	0.9	20
MS/MSD	103212003		30	99.7	99.0	80	120	0.5	20
MS/MSD	103380005		600	110.9	115.2	80	120	0.8	20
MS/MSD	103431001		30	88.1	95.3	80	120	1.6	20
MS/MSD	103646004		30	79.6	77.6	80	120	0.4	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	103708001		30	100.3	98.2	80	120	0.8	20

Boron — 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-OE			0.4	97.7		85	115		
LFB-OE			0.4	101.0		85	115		
MB		<0.1							
MB		<0.1							
PDS/PDSD	102682017		8	87.5	86.8	75	125	0.3	20
MS/MSD	103212003		0.4	89.6	92.2	70	130	1.5	20
PDS/PDSD	103496001		4	87.4	88.9	75	125	1.0	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	108.0		85	115		
LFB-MI			100	109.0		85	115		
MB		<1							
MB		<1							
PDS/PDSD	103142003		100	95.5	95.1	75	125	0.2	20
PDS/PDSD	103185009		500	100.0	98.8	75	125	0.6	20
DUP	103185010							1.2	20
DUP	103212003							1.0	20
PDS/PDSD	103212003		100	89.8	91.0	75	125	0.4	20
PDS/PDSD	103212003		500	104.0	104.0	75	125	0.1	20
PDS/PDSD	103212005		500	98.4	99.4	75	125	0.6	20

pH — 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	99.5					
CRM-PH			6	99.5					
CRM-PH			6	99.2					
CRM-PH			6	99.2					
DUP	103185004							1.1	20
DUP	103185005							0.1	20

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1201 Lincoln Hwy. ~ Nevada, IA 50201 ~ 515-382-5486 ~ Fax 515-382-3885
www.MVTL.com

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

pH — 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 (%)
DUP	103212003							2.9	20

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			3.34	98.8		83.83	111.07		
LFB-F			0.5	106.0		90	110		
LFB-F			0.5	106.0		90	110		
LFB-F			0.5	108.0		90	110		
LFB-F			0.5	106.0		90	110		
MB-F		<0.1							
MB-F		<0.1							
MB-F		<0.1							
MB-F		<0.1							
MS/MSD	103144001		0.5	98.0	106.0	80	120	7.8	20
MS/MSD	103185011		0.5	102.0	104.0	80	120	1.0	20
MS/MSD	103212003		0.5	106.0	108.0	80	120	1.4	20

Total Dissolved 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	103147009							4.8	20
DUP	103212003							0.0	20
DUP	103212007							0.5	20

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Minnesota Valley Testing Laboratories
2616 E. Broadway Ave
Bismarck, ND 58501
(701) 258-9720

Otter Tail Power Company
WO: 103212

Chain of Custody Record

Report To:	Otter Tail Power	Project Name:	OTP Coyote - Blue
Attn:	Josh Hollen	Event:	~~Fall 202~~ FALL ~~Spring~~ 2025
Address:	PO Box 496 Fergus Falls, MN 56538-0496	Sampled By:	Jeremy Meyer CC 24OCT25
Phone:		CC:	
Email:	jhollen@otpco.com		

	Sample Information				Sample Containers										Field Readings				
Lab Number	Sample ID	Date	Time	Sample Type	1 Liter Raw	500 mL HNO3	500 mL HNO3 (filtered)	250 mL H2SO4							Temp (°C)	Spec. Cond.	pH	Appearance (Clear-C, Partly Cloudy-PC, Cloudy-CL)	Analysis Required
001	FB Blue	8Oct25	~~[illegible]~~ *	GW	X	X		*0824							NA	NA	NA	NA	OTP CCR App 3
002	Blue 6	8Oct25	0841	GW	X	X									10.37	2549	6.62	C	
003	Blue 7/MS7/MSD7	7Oct25	1107	GW	3	3									11.82	2566	6.65	C	
004	Blue 13	8Oct25	0937	GW	X	X									11.65	6518	7.01	C	
005	Blue 14	7Oct25	1403	GW	X	X									13.84	5801	6.76	C	
006	Blue 15	7Oct25	1207	GW	X	X									11.98	3661	6.62	C	
007	Blue 16	7Oct25	1250	GW	X	X									12.93	2521	6.68	C	
0																			

Comments: *8Oct25 J

Relinquished By		Sample Condition		Received By	
Name	Date/Time	Location	Temp	Name	Date/Time
1 [signature]	8Oct25 1209	~~Log In~~ Walk In #2	2.8 °C/TM605 ROI Y/N	[signature]	8Oct25 1209
2					

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

CCR - Appendix III Detection Monitoring

Field Parameters
pH*

* Field and Laboratory Measurements

Total Concentration Parameters	**Method**
Boron	6010
Calcium	6010
Chloride	SM4500 CL E
Fluoride	EPA 300
pH	SM 4500 H+B-96
Sulfate	ASTM D516
Dissolved Solids, Total	SM 2540 C-97

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

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

Calibration Report

Instrument Aqua TROLL 600
Serial Number 1025047
Created 10/6/2025

Sensor **Conductivity**
Serial Number 1022539
Last Calibrated 10/6/2025

Calibration Details
TDS Conversion Factor (ppm) 0.65
Cell Constant 1.005
Offset 0.000 µS/cm
Reference Temperature 25.00 °C

Calibration Point 1

Pre Measurement
Actual Conductivity 992.8 µS/cm
Specific Conductivity 1,433 µS/cm

Post Measurement
Actual Conductivity 978.8 µS/cm
Specific Conductivity 1,413 µS/cm

Sensor **RDO**
Serial Number 1120735
Last Calibrated 10/6/2025

Calibration Details
Slope 1.3781485
Offset -0.000 mg/L

Calibration point 100%
Concentration 8.896 mg/L
Pre Measurement 98.49 %Sat
Post Measurement 100.0 %Sat
Temperature 4.243 °C
Barometric Pressure 954.3 mbar

Sensor **pH/ORP**
Serial Number 1112098
Last Calibrated 10/6/2025

Calibration Details

Calibration Point 1
pH of Buffer 4.000 pH
pH mV 146.6 mV
Temperature 9.123 °C

Pre Measurement
pH 3.952 pH
pH mV 146.4 mV

Post Measurement
pH 4.000 pH
pH mV 138.8 mV

Calibration Point 2
pH of Buffer 7.060 pH
pH mV -22.5 mV
Temperature 8.960 °C

Pre Measurement
pH 7.011 pH
pH mV -22.4 mV

Post Measurement
pH 7.060 pH
pH mV -21.3 mV

Calibration Point 3
pH of Buffer 10.14 pH
pH mV -195.1 mV
Temperature 8.940 °C

Pre Measurement
pH 10.08 pH
pH mV -195.0 mV

Post Measurement
pH 10.14 pH
pH mV -184.6 mV

Slope and Offset 1
Slope -55.24 mV/pH
Offset -19.2 mV

Slope and Offset 2
Slope -56.05 mV/pH
Offset -19.1 mV

ORP
ORP Solution Zobell's
Offset 33.7 mV
Temperature 9.152 °C
Pre Measurement 257.2 mV
Post Measurement 249.8 mV

Sensor **Turbidity**
Serial Number 1133469
Last Calibrated 10/6/2025

Calibration Details
Slope 0.6935186
Offset 1.067 NTU

Calibration Point 1
Pre Measurement 0.000 NTU
Post Measurement 0.100 NTU

Calibration Point 2
Pre Measurement 127.3 NTU
Post Measurement 100.0 NTU

Sensor **Barometric Pressure**
Serial Number 1025047
Last Calibrated Factory Defaults

Sensor **Pressure**
Serial Number 1023082
Last Calibrated Factory Defaults

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Member ACIL

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

MVTL
2616 E. Broadway Ave, Bismarck, ND
Phone: (701) 258-9720

Field Datasheet
Groundwater Assessment

Company:	OTP Coyote
Event:	Fall 2025
Sample ID:	Blue 6
Sampling Personal:	JT

Weather Conditions: Temp: 35 °F Wind: S @ 5-10 Precip: Sunny / Partly Cloudy / Cloudy

WELL INFORMATION

Well Locked?	(YES)	NO
Well Labeled?	(YES)	NO
Repairs Necessary?		
Casing Diameter:	2"	
Water Level Before Purge:	65.40	ft
Total Depth of Well:	99.10	ft
Well Volume:	8.4	liters
Top of pump:	71.55	ft
Water Level After Sample:	69.73	ft
Measurement Method:	Electric Water Level Indicator	

SAMPLING INFORMATION

Purging Method:	Bladder	
Sampling Method:	Bladder	
Dedicated Equipment?	(YES)	NO

Tubing

Control Settings:		
Purge:	8 / 8	Sec.
Recover:	12 / 52	Sec.
PSI:		

Bottle List:
1 Liter Raw
500mL Nitric

Duplicate Sample?
YES / (NO)
Duplicate Sample ID:

FIELD READINGS

Stabilization Parameters (3 Consecutive)		Temp. (°C)	Spec. Cond.	pH	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Water Level	Pumping Rate	mL Removed	Appearance or Comment Clarity, Color, Odor, Ect.
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		clear, slightly turbid, turbid
7Oct25	1308	Start of Well Purge									
	1328	14.50	2546	6.86	2.14	60.5	2.95	Blowing	300.0	6000.0	Clear
		Purged	Dry								
8Oct25	0821	Start of Stabilization purge						65.40			
	0826	10.40	2523	6.78	5.16	101.0	7.93	66.55	100.0	500.0	Clear
	0831	10.40	2552	6.63	0.77	63.6	1.82	—	100.0	500.0	Clear
	0836	10.36	2550	6.62	0.71	55.7	1.73	—	100.0	500.0	Clear
	0841	10.37	2549	6.62	0.69	54.5	1.65	69.00	100.0	500.0	Clear

Well Stabilized? (YES) NO Total Volume Purged: 8000.0 Liters

Sample Date	Time	Temp. (°C)	Spec. Cond.	pH			Turbidity (NTU)				Appearance or Comment Clarity, Color, Odor, Ect.
8Oct25	0841	10.37	2549	6.62			1.65				Clear

Comments: Collected Blue Field Blank @ 0824

NA or - = not applicable

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

MVTL
2616 E. Broadway Ave, Bismarck, ND
Phone: (701) 258-9720

Field Datasheet

Groundwater Assessment

Company:	OTP Coyote
Event:	Fall 2025
Sample ID:	Blue 7
Sampling Personal:	J Hoy

Weather Conditions: Temp: 45 °F Wind: N @5-10 Precip: Sunny / Partly Cloudy / Cloudy

WELL INFORMATION

Well Locked?	(YES)	NO
Well Labeled?	(YES)	NO
Repairs Necessary?		
Casing Diameter:	2"	
Water Level Before Purge:	82.21	ft
Total Depth of Well:	—	ft
Well Volume:	—	liters
Water Level After Sample:	82.30	ft
Measurement Method:	Electric Water Level Indicator	

SAMPLING INFORMATION

Purging Method:	Bladder	
Sampling Method:	Bladder	
Dedicated Equipment?	(YES)	NO

Tubing

Control Settings:	
Purge: 7	Sec.
Recover: ~~37~~ 23	Sec.
PSI: —	

Bottle List:
1 Liter Raw
500mL Nitric ×3

Duplicate Sample?
(YES) / NO
Duplicate Sample ID:
MS/MSD

FIELD READINGS

Stabilization Parameters (3 Consecutive)		Temp. (°C)	Spec. Cond.	pH	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Water Level	Pumping Rate	mL Removed	Appearance or Comment Clarity, Color, Odor, Ect.
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		clear, slightly turbid, turbid
7 Oct 25	1032	Start of Well Purge									
	1042	12.18	2570	6.67	0.63	60.4	8.15	82.30	100.0	1000.0	Clear
	1047	12.37	2560	6.67	0.48	55.2	9.72	82.29	100.0	500.0	Clear
	1052	12.33	2511	6.66	0.41	51.3	9.07	82.28	100.0	500.0	Clear
	1057	11.75	2555	6.66	0.31	38.4	17.49	82.30	100.0	500.0	Clear
	1102	11.78	2552	6.66	0.27	35.6	13.41	82.30	100.0	500.0	Clear
	1107	11.82	2566	6.65	0.21	34.2	12.79	82.30	100.0	500.0	Clear

Well Stabilized? (YES) NO Total Volume Purged: 3500.0 Liters

Sample Date	Time	Temp. (°C)	Spec. Cond.	pH			Turbidity (NTU)				Appearance or Comment Clarity, Color, Odor, Ect.
7 Oct 25	1107	11.82	2566	6.65			12.79				Clear

Comments:

NA or - = not appliciable

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

2616 E. Broadway Ave, Bismarck, ND
Phone: (701) 258-9720

Field Datasheet

Groundwater Assessment

Company:	OTP Coyote
Event:	Fall 2025
Sample ID:	Blue 13
Sampling Personal:	JH

Weather Conditions: Temp: 40 °F Wind: S @ 5-10 Precip: Sunny / Partly Cloudy / Cloudy

WELL INFORMATION

Well Locked?	(YES)	NO
Well Labeled?	(YES)	NO
Repairs Necessary?		
Casing Diameter:	2"	
Water Level Before Purge:	104.92	ft
Total Depth of Well:	116.65	ft
Well Volume:	7.2	liters
†		
Water Level After Sample:	108.26	ft
Measurement Method:	Electric Water Level Indicator	

SAMPLING INFORMATION

Purging Method:	Bladder	
Sampling Method:	Bladder	
Dedicated Equipment?	(YES)	NO

Tubing

Control Settings:	
Purge:	10 Sec.
Recover:	10 Sec.
PSI:	—

Bottle List:
1 Liter Raw
500mL Nitric

Duplicate Sample?
YES / (NO)
Duplicate Sample ID:

FIELD READINGS

Stabilization Parameters (3 Consecutive)		Temp. (°C)	Spec. Cond.	pH	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Water Level	Pumping Rate	mL Removed	Appearance or Comment
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		Clarity, Color, Odor, Ect. clear, slightly turbid, turbid
7 Oct 25	1435	Start of Well Purge									
	1455	12.36	6078	6.86	0.42	-72.3	5.91	Below Pump	300.0	6000.0	Clear
		Purged Dry									
8 Oct 25	0907	Start of stabilization purge						105.25			
	0912	11.29	5978	6.86	1.97	66.0	48.86	—	100.0	500.0	Clear
	0917	11.27	6187	6.95	2.38	56.8	56.64	—	100.0	500.0	Clear
	0922	11.33	6409	7.00	1.49	39.2	12.00	—	100.0	500.0	Clear
	0927	11.53	6522	7.02	0.35	29.2	2.93	—	100.0	500.0	Clear
	0932	11.62	6520	7.01	0.29	17.1	2.91	—	100.0	500.0	Clear
	0937	11.65	6518	7.01	0.28	15.2	3.56	108.10	100.0	500.0	Clear

Well Stabilized? (YES) NO Total Volume Purged: 9000.0 Liters

Sample Date	Time	Temp. (°C)	Spec. Cond.	pH			Turbidity (NTU)				Appearance or Comment Clarity, Color, Odor, Ect.
8 Oct 25	0937	11.65	6518	7.01			3.56				Clear

Comments:

NA or - = not applicable

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

MVTL
2616 E. Broadway Ave, Bismarck, ND
Phone: (701) 258-9720

Field Datasheet

Groundwater Assessment

Company:	OTP Coyote
Event:	Fall 2025
Sample ID:	Blue 14
Sampling Personal:	

Weather Conditions: Temp: 45 °F Wind: S @ 5-10 Precip: Sunny / Partly Cloudy / Cloudy

WELL INFORMATION

Well Locked?	~~YES~~	NO
Well Labeled?	(YES)	NO
Repairs Necessary?		
Casing Diameter:	2"	
Water Level Before Purge:	80.06	ft
Total Depth of Well:	—	ft
Well Volume:	—	liters
Water Level After Sample:	81.05	ft
Measurement Method:	Electric Water Level Indicator	

SAMPLING INFORMATION

Purging Method:	Bladder	
Sampling Method:	Bladder	
Dedicated Equipment?	(YES)	NO
Tubing		

Control Settings:	
Purge: 8	Sec.
Recover: 52	Sec.
PSI: —	

Bottle List:
1 Liter Raw
500mL Nitric

Duplicate Sample?
YES (NO)
Duplicate Sample ID:
—

FIELD READINGS

Stabilization Parameters (3 Consecutive)		Temp. (°C)	Spec. Cond.	pH	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Water Level	Pumping Rate	mL Removed	Appearance or Comment Clarity, Color, Odor, Ect.
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		clear, slightly turbid, turbid
7 Oct 25	1338	Start of Well Purge									
	1348	13.91	5851	6.76	0.34	110.2	6.15	80.65	100.0	1000.0	Clear
	1353	13.66	5842	6.76	0.34	113.3	15.67	80.73	100.0	500.0	Clear
	1358	13.99	5828	6.76	0.42	116.4	14.25	80.89	100.0	500.0	Clear
	1403	13.84	5801	6.76	0.44	115.8	14.12	81.02	100.0	500.0	Clear

Well Stabilized? (YES) NO Total Volume Purged: 2500.0 Liters

Sample Date	Time	Temp. (°C)	Spec. Cond.	pH			Turbidity (NTU)				Appearance or Comment Clarity, Color, Odor, Ect.
7 Oct 25	1403	13.84	5801	6.76			14.12				Clear

Comments:

NA or - = not appliciable

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

2616 E. Broadway Ave, Bismarck, ND
Phone: (701) 258-9720

Field Datasheet

Groundwater Assessment

Company:	OTP Coyote
Event:	Fall 2025
Sample ID:	Blue 15
Sampling Personal:	JyK

Weather Conditions: Temp: 50 °F Wind: N @ 5-10 Precip: Sunny / Partly Cloudy / Cloudy

WELL INFORMATION

Well Locked?	(YES)	NO
Well Labeled?	(YES)	NO
Repairs Necessary?		
Casing Diameter:	2"	
Water Level Before Purge:	79.25	ft
Total Depth of Well:	—	ft
Well Volume:	—	liters
Water Level After Sample:	79.60	ft
Measurement Method:	Electric Water Level Indicator	

SAMPLING INFORMATION

Purging Method:	Bladder	
Sampling Method:	Bladder	
Dedicated Equipment?	(YES)	NO

Tubing

Control Settings:	
Purge: 8	Sec.
Recover: 52	Sec.
PSI: —	

Bottle List:
1 Liter Raw
500mL Nitric

Duplicate Sample?
YES / (NO)
Duplicate Sample ID:
—

FIELD READINGS

Stabilization Parameters (3 Consecutive)		Temp. (°C)	Spec. Cond.	pH	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Water Level	Pumping Rate	mL Removed	Appearance or Comment Clarity, Color, Odor, Ect.
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		clear, slightly turbid, turbid
7Oct25	1142	Start of Well Purge									
	1152	12.18	3716	6.63	0.47	45.4	22.05	79.60	100.0	1000.0	Clear
	1157	12.08	3693	6.62	0.66	45.5	24.55	79.60	100.0	500.0	Clear
	1202	11.93	3682	6.62	0.63	46.3	15.74	79.60	100.0	500.0	Clear
	1207	11.98	3661	6.62	0.66	46.5	8.13	79.60	100.0	500.0	Clear

Well Stabilized? (YES) NO Total Volume Purged: 2500.0 Liters

Sample Date	Time	Temp. (°C)	Spec. Cond.	pH			Turbidity (NTU)				Appearance or Comment Clarity, Color, Odor, Ect.
7Oct25	1207	11.98	3661	6.62			8.13				Clear

Comments:	

NA or - = not appliciable

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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1126 North Front St. ~ New Ulm, MN 56073 ~ 800-782-3557 ~ Fax 507-359-2890
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Member ACIL

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

2616 E. Broadway Ave, Bismarck, ND
Phone: (701) 258-9720

Field Datasheet

Groundwater Assessment

Company:	OTP Coyote
Event:	Fall 2025
Sample ID:	Blue 16
Sampling Personal:	

Weather Conditions: Temp: 55 °F Wind: NW @ 5-10 Precip: Sunny / Partly Cloudy / Cloudy

WELL INFORMATION

Well Locked?	YES	NO
Well Labeled?	YES	NO
Repairs Necessary?		
Casing Diameter:	2"	
Water Level Before Purge:	78.42	ft
Total Depth of Well:	—	ft
Well Volume:	—	liters
Water Level After Sample:	78.62	ft
Measurement Method:	Electric Water Level Indicator	

SAMPLING INFORMATION

Purging Method:	Bladder	
Sampling Method:	Bladder	
Dedicated Equipment?	YES	NO

Tubing

Control Settings:	
Purge: 8	Sec.
Recover: 52	Sec.
PSI: —	

Bottle List:
1 Liter Raw
500mL Nitric

Duplicate Sample?
YES NO
Duplicate Sample ID:
C

FIELD READINGS

Stabilization Parameters (3 Consecutive)		Temp. (°C)	Spec. Cond.	pH	DO (mg/L)	ORP (mV)	Turbidity (NTU)	Water Level	Pumping Rate	mL Removed	Appearance or Comment Clarity, Color, Odor, Ect.
Purge Date	Time		±5%	±0.1	±10%	±10	<5.0	(ft)	mL/Min		clear, slightly turbid, turbid
7 Oct 25	1225	Start of Well Purge									
	1235	13.13	2523	6.67	0.48	91.9	32.83	78.44	100.0	1000.0	Clear
	1240	12.98	2519	6.67	0.30	87.8	32.53	78.51	100.0	500.0	Clear
	1245	13.03	2522	6.67	0.25	86.0	34.70	78.58	100.0	500.0	Clear
	1250	12.93	2521	6.68	0.22	85.1	26.57	78.60	100.0	500.0	Clear

Well Stabilized? YES NO Total Volume Purged: 2500.0 Liters

Sample Date	Time	Temp. (°C)	Spec. Cond.	pH			Turbidity (NTU)				Appearance or Comment Clarity, Color, Odor, Ect.
7 Oct 25	1250	12.93	2521	6.68			26.57				Clear

Comments:

NA or - = not appliciable

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.

Sample Condition Checklist

Date: 8 Oct 25 Time: 1357 Analyst: PN

Work Order #: 8 163212

Containers Supplied by MVTL: ☒ Yes ☐ No (Designate customer supplied containers as "Other" in container size column) @8Oct25PN

Comments:

Number of Bottles	Container Size (mL) F-(500) = Filtered	Container Type CG = Clear Glass, P = Plastic, AG = Amber Glass	Preservation	pH	Sample IDs Preservation reagent added Date/Time Analyst	Unique ID of preservation reagent added	Sample pH after preservation	Required for HNO_3 samples only (24 hours later) Sample ID pH Recheck Result Date/Time/Analyst
9	(125) (250) (500) F-(500) (1000) Other [1000 circled]	(CG) (P) (AG) Other [P circled]	NONE HNO_3 H_2SO_4 NaOH NaOH/ZnAcet HCl [NONE circled]	<2 >12				
9	(125) (250) (500) F-(500) (1000) Other [500 circled]	(CG) (P) (AG) Other [P circled]	NONE HNO_3 H_2SO_4 NaOH NaOH/ZnAcet HCl [HNO_3 circled]	<2 >12 [<2 circled]				
	(125) (250) (500) F-(500) (1000) Other	(CG) (P) (AG) Other	NONE HNO_3 H_2SO_4 NaOH NaOH/ZnAcet HCl	<2 >12				
	(125) (250) (500) F-(500) (1000) Other	(CG) (P) (AG) Other	NONE HNO_3 H_2SO_4 NaOH NaOH/ZnAcet HCl	<2 >12				
	(125) (250) (500) F-(500) (1000) Other	(CG) (P) (AG) Other	NONE HNO_3 H_2SO_4 NaOH NaOH/ZnAcet HCl	<2 >12				
	(125) (250) (500) F-(500) (1000) Other	(CG) (P) (AG) Other	NONE HNO_3 H_2SO_4 NaOH NaOH/ZnAcet HCl	<2 >12				
	(125) (250) (500) F-(500) (1000) Other	(CG) (P) (AG) Other	NONE HNO_3 H_2SO_4 NaOH NaOH/ZnAcet HCl	<2 >12				
	(125) (250) (500) F-(500) (1000) Other	(CG) (P) (AG) Other	NONE HNO_3 H_2SO_4 NaOH NaOH/ZnAcet HCl	<2 >12				
	Oil and grease	(CG) (P) (AG) Other	HCl	n/a				
	TOC Vials	(G) (AG)	H_3PO_4	n/a				
	DOC Vials	(G) (AG)	None H_3PO_4	n/a				

*All samples requiring analyses performed outside of the Bismarck laboratory (New Ulm and Sub-Contract) are not documented on this form.
*All samples requiring microbiological tests are not documented on this form.

Form #80-910025-2 M:\Documents\FORMS\Approved Templates\Bismarck\Waters\80-910025-2 Sample Condition Checklist.xlsx Page 1 of 1 Effective Date : 1 July 2024

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.

Appendix C

Groundwater Flow Calculations

Coyote Blue Pit Groundwater Velocity Calculation

Sampling Date	5/5/2025

Upgradient (BLUE 13)

Top of Casing Elevation	2045.27	ft amsl	*Groundwater Monitoring System Report (Barr, 2016)*
Depth to Water	105.22	ft below TOC	
Water Level Elevation	1940.05	ft amsl	

Downgradient (BLUE 15)

Top of Casing Elevation	1995.88	ft amsl	*Groundwater Monitoring System Report (Barr, 2016)*
Depth to Water	80.96	ft below TOC	
Water Level Elevation	1914.92	ft amsl	

horizontal hydraulic	5.20E-05	cm/s	*Groundwater Monitoring System Report (Barr, 2016)*
conductivity (Kh)	1.47E-01	ft/day	
porosity (n)	0.2		*Groundwater Monitoring System Report (Barr, 2016)*
horizontal distance	2403.4	ft	
WL elevation difference	25.13	ft	
gradient (i)	0.010	ft/ft	
linear velocity (V)	0.0077	ft/day	
V	**2.8**	ft/yr	

Coyote Blue Pit Groundwater Velocity Calculation

Sampling Date	10/7/25

Upgradient (BLUE 13)

Top of Casing Elevation	2045.28	ft amsl	*Groundwater Monitoring System Report (Barr, 2016)*
Depth to Water	104.92	ft below TOC	
Water Level Elevation	1940.36	ft amsl	

Downgradient (BLUE 15)

Top of Casing Elevation	1996.48	ft amsl	*Groundwater Monitoring System Report (Barr, 2016)*
Depth to Water	79.25	ft below TOC	
Water Level Elevation	1917.23	ft amsl	

horizontal hydraulic	5.20E-05	cm/s	*Groundwater Monitoring System Report (Barr, 2016)*
conductivity (Kh)	1.47E-01	ft/day	
porosity (n)	0.2		*Groundwater Monitoring System Report (Barr, 2016)*
horizontal distance	2403.4	ft	
WL elevation difference	23.13	ft	
gradient (i)	0.010	ft/ft	
linear velocity (V)	0.0071	ft/day	
V	**2.6**	ft/yr	

Appendix D

Statistical Analysis Plan and Evaluation

Statistical Analysis Plan

Blue Pit

Coyote Station
Beulah, North Dakota

Prepared for:

Otter Tail Power Company
6240 13th Street SW
Beulah, ND 58523

October, 2017

15650 36th Ave N. Suite 110
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TABLE OF CONTENTS

1.0 INTRODUCTION

This Statistical Analysis Plan describes the method(s) to be used in identifying statistically significant increases (SSIs) over the upgradient or background groundwater quality at the Blue Pit at Otter Tail Power Company's Coyote Station generating plant (Plant), in accordance with the requirements of the U.S. Code of Federal Regulations, Title 40, Parts 257 and 261 (CFR, 2015) regarding the disposal of coal combustion residuals (CCR) in landfills and surface impoundments. In particular, this Plan satisfies applicable portions of §257.93, §257.94, and §257.95 pertaining to selection of a statistical method, detection monitoring, and assessment monitoring.

This Plan is included as Appendix B within the CCR Groundwater Sampling and Analysis Plan (SAP) for the Blue Pit (Carlson McCain, 2017) and the reader is referred to the SAP for additional information on the site-specific hydrogeologic setting, existing groundwater monitoring network, sampling and analysis procedures, and reporting requirements. The Plan specifically applies to the groundwater monitoring network for the Blue Pit, as described in the *Groundwater Monitoring System Report* (Barr, 2016).

2.0 STATISTICAL APPROACH

The statistical approach will generally follow applicable portions of the U.S. Environmental Protection Agency (EPA) Unified Guidance for Statistical Analysis of Groundwater Data at RCRA Facilities (Unified Guidance) (EPA, 2009). The Unified Guidance provides recommendations for statistical techniques used in detection and assessment monitoring, and is specifically referenced in the preamble for 40 CFR §257 as a guide for selecting a statistical method.

Statistical analysis will be completed using a commercially-available computer software program, such as Sanitas, developed by Sanitas Technologies. This program automatically incorporates many of the recommendations in the EPA Unified Guidance relating to statistical considerations such as background data, non-detects, and verification resampling.

2.1 Interwell vs. Intrawell Testing

The Unified Guidance describes two main strategies for comparison of background data to compliance data in monitoring wells. One strategy is known as "interwell" testing, which involves comparison of results in downgradient wells to the pooled upgradient well data for each parameter. The other strategy is known as "intrawell" testing, which involves comparison of recent observations to historical results within a single well. Interwell testing is the classical upgradient versus downgradient comparison, which is intuitive to many users, and can be a statistically powerful method in situations where the hydrogeologic conditions are relatively consistent and uniform, and the monitoring network is constructed such that wells are completed in the same aquifer and in the same relative stratigraphic position. Conversely, with intrawell testing, compliance data are compared to background samples collected from within the compliance well itself, as opposed to samples from upgradient wells, so it is not necessary to identify upgradient wells to use for background. Also, because the background and compliance data come from the same well, and therefore the same location, intrawell tests are not affected by spatial variability within the aquifer. This allows application of intrawell techniques at virtually any site, including sites with more complex hydrogeologic conditions.

Based on descriptions of the hydrogeologic setting and existing monitoring well network for the Blue Pit presented in Sections 2 and 3 of the SAP, intrawell testing will be the primary statistical method used for groundwater data evaluation, eliminating the influence of spatial variability. While intrawell analysis does not involve direct upgradient-to-downgradient comparisons, sampling and analysis of upgradient wells can provide valuable information and should be included in the intrawell testing program. Although upgradient wells do not provide the background data that compliance measurements are tested against for intrawell analysis, it is appropriate to discuss results of intrawell testing at compliance wells in the context of the overall site, including upgradient wells. For example, if SSIs in downgradient wells are associated with corresponding elevated concentrations or increasing trends in upgradient wells it may be an indication of natural changes in groundwater quality that are unrelated to the CCR unit. In this scenario, it may be appropriate to augment the primary intrawell method with additional analyses (e.g. trend testing and/or interwell analyses) in order to confirm or disconfirm an SSI.

An important assumption for intrawell comparisons is that the monitoring locations are not currently impacted by the CCR unit. With intrawell analysis the background data set is comprised of analytical results from within the compliance wells themselves, so if the groundwater is already contaminated it will not be identified as an SSI unless concentrations continue to increase. Based on a review of the

2016 Annual Monitoring Report for Coyote Station (Barr, 2017), none of the wells in the CCR monitoring network currently exhibit impacts due to the Blue Pit.

3.0 DETECTION MONITORING

3.1 Statistical Method

The use of the selected statistical method, and the selected general statistical approach (interwell vs. intrawell), is subject to ongoing review and assessment to ensure its continued suitability for groundwater monitoring at the site. As the background data set changes over time, modifications to the statistical methods are expected. Otter Tail Power Company reserves the right to employ different statistical methods in place of, or in addition to, the initially selected methods if future analysis of the dataset indicates that alternate methods are more appropriate. Any changes to the statistical method will be documented in the annual monitoring report, and if changes will carry forward into future events a revised Statistical Analysis Plan will be prepared and placed into the Plant's operating record.

Each detection monitoring constituent listed in Table 2 of the SAP will be analyzed to determine whether any of the compliance well data exhibit an SSI over background data. The primary statistical method used for detection monitoring for the Blue Pit will be intrawell control charts. A control chart is one of the specified methods listed in §257.93 (f)(4) and compares future observations to a control limit calculated using the mean and standard deviation of the background measurements. Control charts have the benefit of allowing visual identification of potential trends in the data because the compliance data are displayed graphically over time. The Shewart-CUSUM control chart is an example of a type of control chart that may be utilized, and governing equations for this type of control chart are presented in Chapter 20 of the Unified Guidance (EPA, 2009). Control chart parameters will be chosen such that testing achieves appropriate false positive rates and statistical power as recommended by the Unified Guidance.

If the control chart utilized is a parametric procedure, the original or transformed data must fit a normal distribution. Normality testing is discussed further in Section 3.3, below. If the data cannot be normalized, then a non-parametric procedure will be substituted. Non-parametric prediction limits will be the primary alternative method used is such cases. Non-parametric prediction limits are constructed by setting the limit as a large "order statistic" from the background data set, for example the highest detected value.

3.2 Background Data

The Unified Guidance recommends a minimum of eight background samples for intrawell analysis. To date, Otter Tail Power Company has conducted eight sampling events at each well in the Blue Pit monitoring network. Each background sample has been analyzed for each of the parameters in Appendix III and Appendix IV of 40 CFR 257. These eight samples will be used to construct the initial detection monitoring background data sets for the Blue Pit.

An important assumption of intrawell control chart analysis is that the background data are statistically independent. To check independence between consecutive sampling events, the background measurements were tested for first-order autocorrelation using the autocorrelation function presented in Chapter 14 of the Unified Guidance. No pattern of significant autocorrelation was identified, indicating the background sampling frequency was adequate to ensure independence between consecutive samples.

As monitoring progresses and additional samples are collected and analyzed, the background data set should be updated periodically (in the absence of SSIs) to allow long-term, natural changes in groundwater quality to be incorporated into the monitoring program. Background data will be updated every two years, unless an SSI is noted at a particular well or statistical testing indicates that the proposed new background data exhibit significant differences from the existing background data set. This is consistent with the recommendations in the Unified Guidance for semi-annual sampling.

3.3 Normality Testing and Non-detects

In parametric tests a key assumption is that the background data are normally distributed. The data set will be tested for normality using the Shapiro-Wilk, Shapiro-Francia, or another appropriate test. If the data do not follow a normal distribution or cannot be normalized, for example if the data set contains a high percentage of non-detects, then a non-parametric prediction limit will be generated in lieu of a control chart. For data sets with up to 15% non-detects, the non-detect values will be substituted with the value of the laboratory reporting limit. For data sets with greater than 50% non-detects, a non-parametric prediction limit will be generated in lieu of a control chart. If all results are non-detect the double-quantification rule should be used, meaning that two consecutive detections above the highest laboratory reporting limit constitute an SSI. If reported, estimated results less than the reporting limit (i.e. "J-flagged") data will be used in place of non-detect values.

3.4 Outlier Testing

Outliers are extreme high or low values within a data set which can disproportionally affect the background statistics, e.g. mean and standard deviation, used in generating applicable limits and determining SSIs. These anomalous values must be identified, evaluated, and removed from the data set if found to be not representative of natural conditions. The background data set will be screened for outliers using Dixon's test if background data set is less than 25 samples, and Rosner's test if greater than 25 samples. Time series graphs and box and whisker plots may also be generated to help visually identify outliers.

3.5 Duplicate Data

As discussed in Section 4 of the SAP, duplicate samples will be collected for QA/QC purposes. For statistical analysis of parameters with duplicate samples, only the original sample will be used for statistical comparisons, assuming that review of all QA/QC data indicates that the original sample is valid.

3.6 Determination of Statistically Significant Increases (SSIs)

For parameters statistically monitored using control charts, observations exceeding the control limit will be flagged as an initial exceedance and the well will be subject to verification resampling, as recommended in the Unified Guidance. Similarly, with prediction limits, if the original observation exceeds the prediction limit it will signal an initial exceedance subject to resampling. The resampling strategy used will be pass 1-of-2, meaning one resample will be collected and if either the initial sample or the resample are below the control limit (i.e. they "pass" the test) then the SSI is not verified. In practice, resampling is only conducted when there is an exceedance in the initial sample, so pass 1-of-2 can be thought of simpler terms: if the resample exceeds the limit, then there is a verified SSI; otherwise

there is not an SSI. The resample will be collected at least 30 days after the initial sample and at least 30 days prior to the next scheduled sampling event.

If the initial exceedance is not verified, and is subsequently not flagged as erroneous or unrepresentative, the sample result will remain in the database, but will not be used for additional analysis or added to the background data set before being evaluated to determine whether it is a statistical outlier.

3.7 Response to a Verified SSI

If an SSI is determined to have occurred for one of the detection monitoring parameters, Otter Tail Power Company will take the following actions in accordance with §257.94 (e):

1. Except as provided for in (2), below, within 90 days of identifying a verified SSI establish an assessment monitoring program in accordance with §257.95
2. Within 90 days, demonstrate that a source other than the CCR Unit caused the SSI
    - If it is determined within 90 days of detecting the SSI that a source other than the CCR Unit caused the SSI, the groundwater monitoring system will return back to detection monitoring.
    - If, within 90 days of detecting the SSI, it cannot be determined that a source other than the CCR Unit is causing the SSI, assessment monitoring will be initiated at the groundwater monitoring system with SSI.
    - Any report indicating that the CCR Unit is not the source of the SSI, regardless of whether the groundwater monitoring system is in assessment monitoring or not, will be included in the annual groundwater monitoring and corrective action report in accordance with §257.90 (e).
3. Prepare a notification of assessment monitoring and place in Plant's operating record.

3.8 Demonstrations

If an SSI is observed, Otter Tail Power Company may complete a demonstration identifying that a source other than the CCR Unit caused the SSI, or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Otter Tail Power Company must complete the written demonstration within 90 days of detecting an SSI and obtain a certification from a qualified professional engineer verifying the accuracy of the information in the report.

4.0 ASSESSMENT MONITORING

If an SSI is detected for one or more detection monitoring constituents and Otter Tail Power Company is unable to demonstrate that a source other than the CCR Unit is the source of the SSI within 90 days of detecting the SSI, Otter Tail Power Company will begin assessment monitoring in accordance with §257.95.

The steps to be followed for assessment monitoring are as follows:

1. Within 90 days of beginning assessment monitoring, the groundwater monitoring system with the detected SSI will be sampled for the parameters listed as "assessment monitoring" as found on Table 2.
2. 90 days after receiving results of the initial assessment monitoring parameters analysis, all wells will be resampled for detection monitoring parameters plus detected (i.e. concentration above the reporting limit) assessment monitoring parameters. Groundwater sampling thereafter will be semi-annual and consist of sampling for the entire suite of assessment monitoring parameters during one event and detection monitoring parameters plus detected assessment monitoring parameters during the other event.
3. If the concentration of an assessment or detection monitoring parameter continues to be above background concentrations but below the applicable groundwater protection standard (see Section 5.4.1), assessment monitoring will continue.
4. If one or more assessment monitoring parameters are detected at significant levels above the groundwater protection standard, the following actions will be taken:
    - Place a notification of the exceedance in the Plant's operating record;
    - The nature and extent of the release will be determined;
    - Notify the owners or residents of land beneath which the plume is migrating offsite, and place notification in operating record;
    - Within 90 days:
        - Initiate an assessment of corrective measures as required by §257.96, or
        - Demonstrate that a source other than the CCR Unit caused the SSI

Once the concentrations of all parameters listed in Table 2 are shown through statistical analysis to be below background concentrations through for two consecutive monitoring events, detection monitoring may resume. A notice of resuming detection monitoring will be placed in the Plant's operating record.

4.1 Groundwater Protection Standards

Groundwater protection standards (GWPS) must be established for each detected assessment monitoring constituent. The GWPS shall be either the MCL, or the background concentration for the constituent, whichever is higher.

Comparing assessment monitoring data to the GWPS will be done using confidence intervals. In assessment monitoring, the comparison is made to determine whether constituent concentrations have increased above the GWPS. Therefore, the lower confidence limit (LCL) is of primary interest. If the LCL exceeds the GWPS at the 95% confidence level then the constituent has been detected at a statistically significant level above the GWPS and an assessment of corrective measures must begin pursuant to §257.96.

Development of statistical methods for corrective action measures is beyond the scope of this Plan. Such methods should be developed as part of a corrective action monitoring program, if necessary.

5.0 CERTIFICATION

I hereby certify under penalty of law that this report was prepared under my direction or supervision under a system designed to assure that qualified personnel gather and evaluate the information submitted. Based upon my inquiry of the persons or person who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. Furthermore, I certify that I am a duly Licensed Professional Engineer under the Laws of the State of North Dakota.

In addition, I certify that the selected statistical methods identified in this Plan are appropriate for evaluating the groundwater monitoring data at Otter Tail Power Company's Coyote Station Blue Pit, and meet the requirements of §257.93, Groundwater sampling and analysis requirements, as included in 40 CFR Part 257, Subpart D, Disposal of Coal Combustion Residuals from Electric Utilities.

Nicholas Bonow, PE
License No. PE-7064

October 16, 2017
Date

6.0 REFERENCES

ASTM, 2012. American Society for Testing and Materials, D6312-98 (2012) Standard Guide for Developing Appropriate Statistical Approaches for Ground-Water Detecting Monitoring Programs; ASTM Book of Standards, Vol. 4.09. www.astm.org/

Barr, 2016. Groundwater Monitoring System Report – Blue Pit Area; Coyote Station, Beulah, North Dakota. Prepared for Otter Tail Power Company. November, 2016.

Barr, 2017. 2016 Annual Water Monitoring Report – Coyote Station – Beulah, North Dakota. Solid Waste Permits: SP-182 (Blue Pit), SP-090 (Black Pit), SP-032 (Green Pit), SP-170 (Slag Pond), and Inert Waste Disposal Permit IT 131 (Purple Pit). Prepared for Otter Tail Power Company. February 2017.

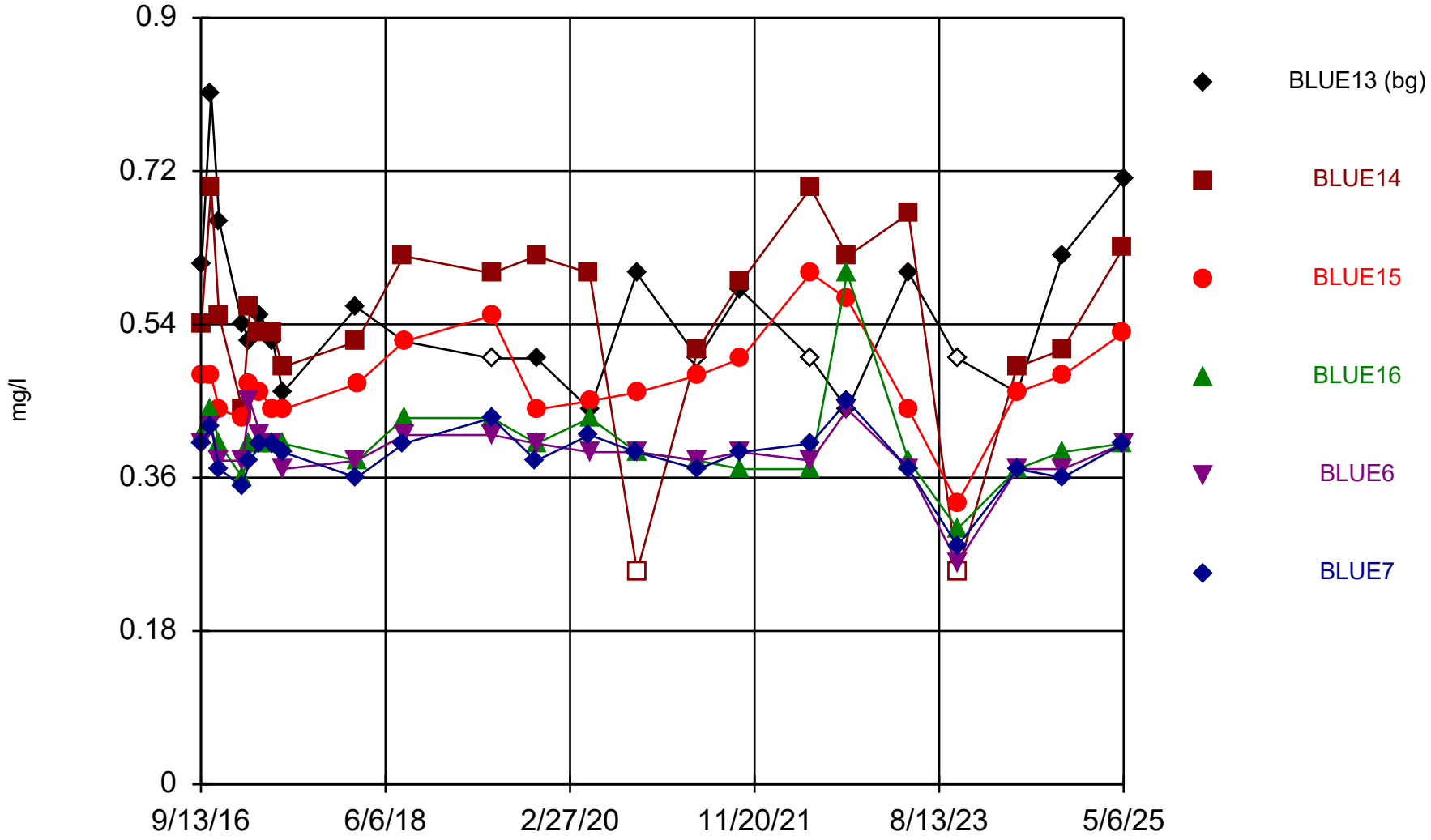
Carlson McCain, 2017. CCR Groundwater Sampling and Analysis Plan. Blue Pit; Coyote Station, Beulah, North Dakota. October, 2017.

CFR, 2015. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities; Final Rule, 40 CFR, Parts 257 and 261.

EPA, 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities – Unified Guidance. Environmental Protection Agency Office of Resource Conservation and Recovery. March, 2009.

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG
Hollow symbols indicate censored values.

Boron, total

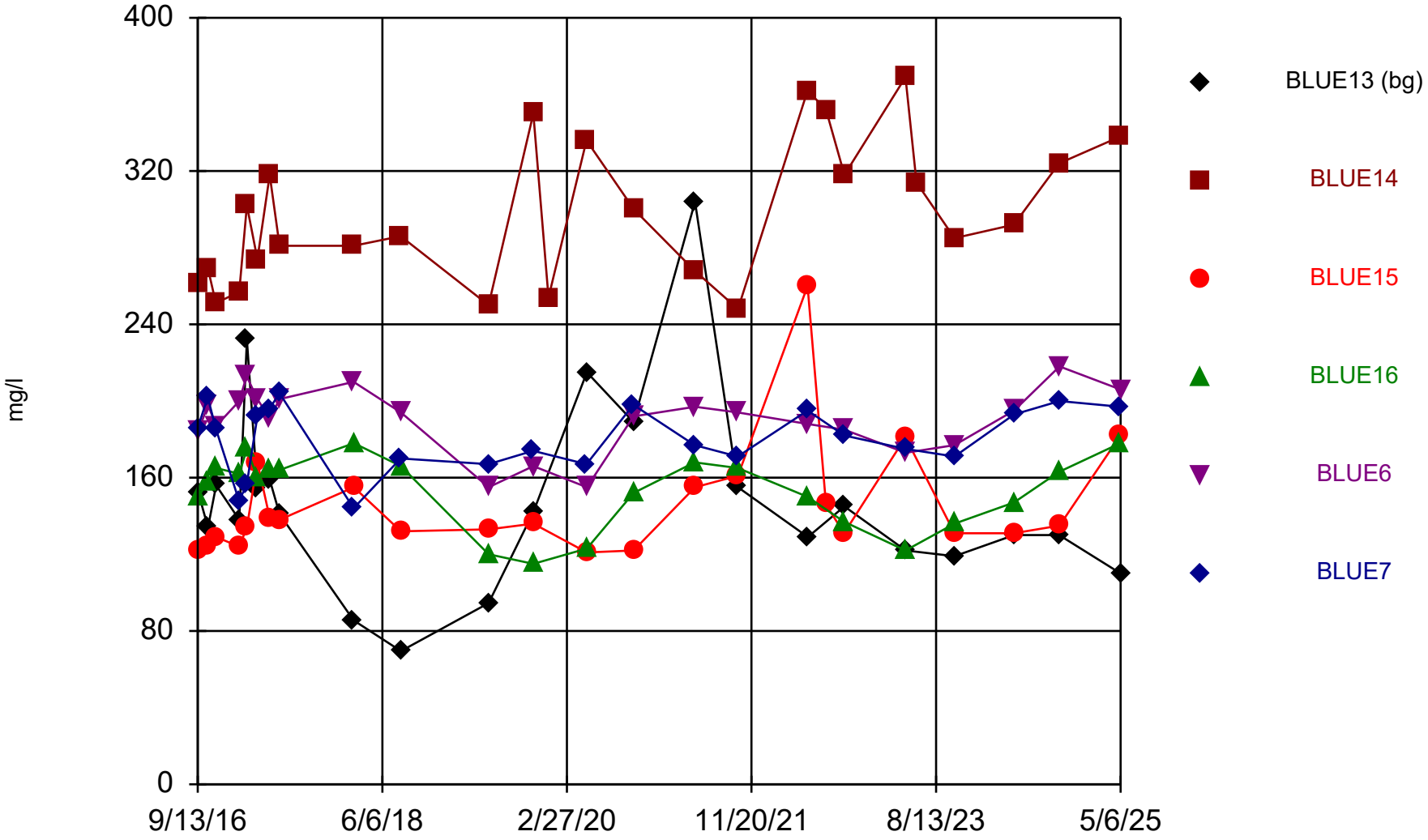


Time Series Analysis Run 7/3/2025 4:16 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG

Calcium, total



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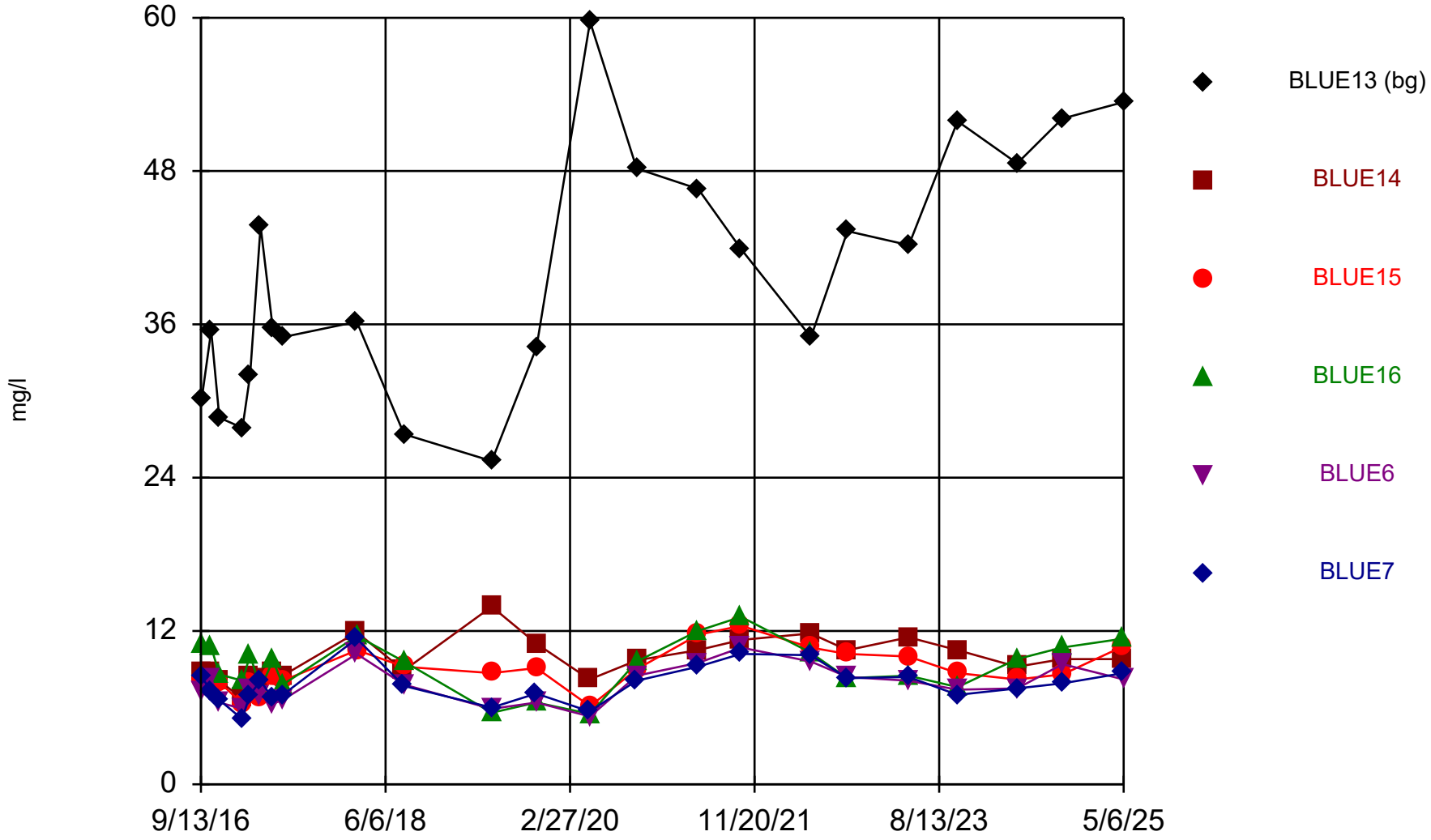
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG

Chloride

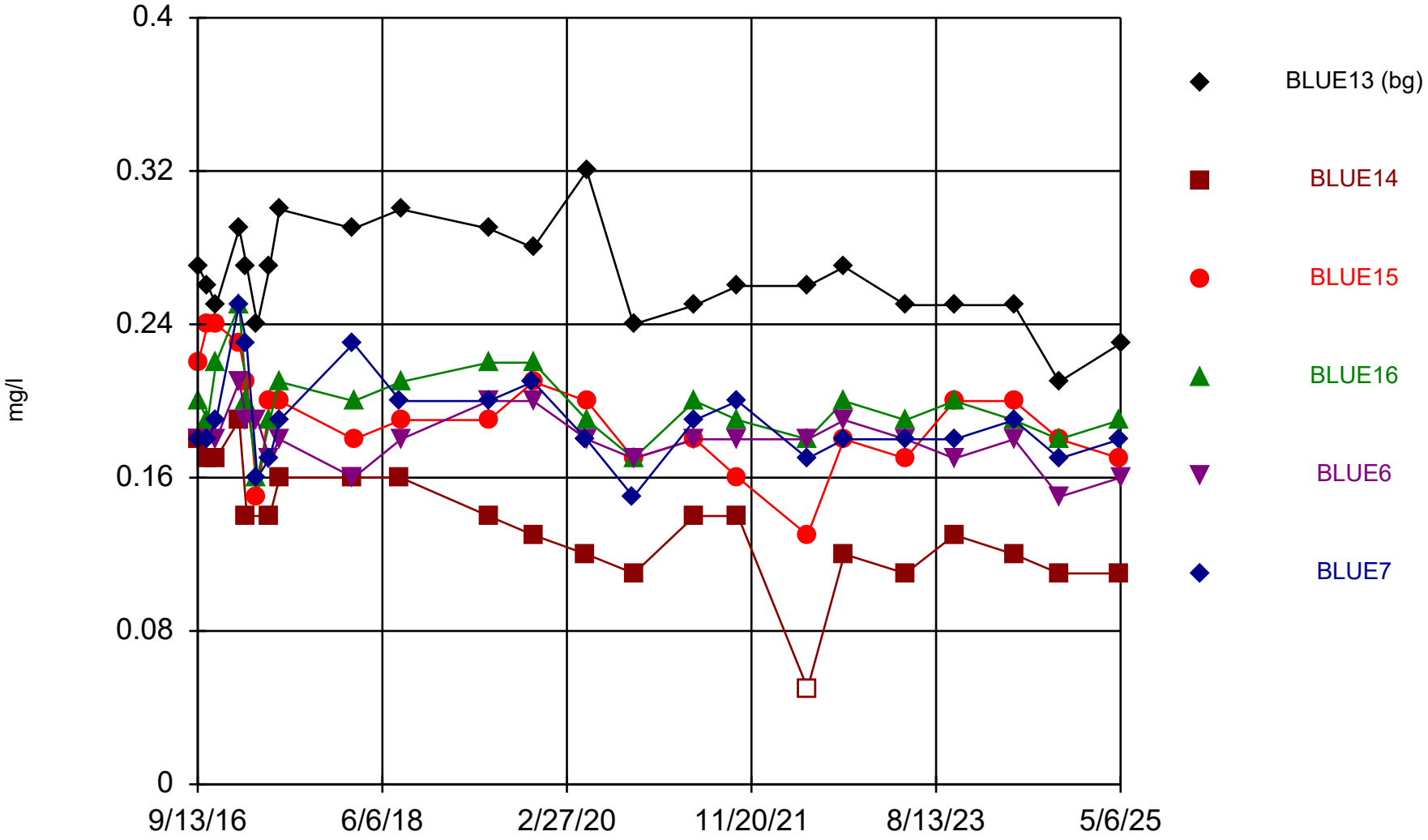


Time Series Analysis Run 7/3/2025 4:16 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG
Hollow symbols indicate censored values.

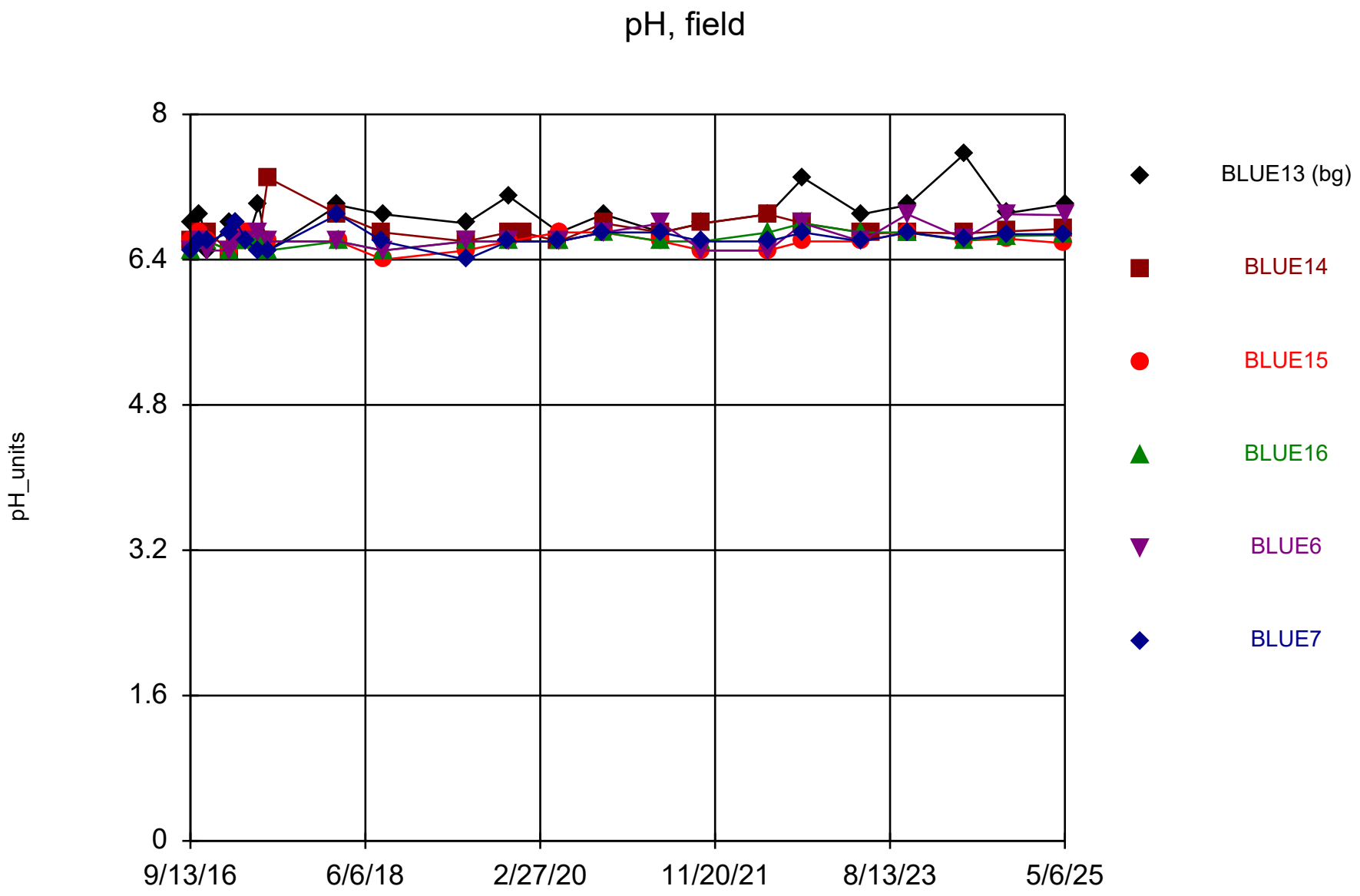
Fluoride



Time Series Analysis Run 7/3/2025 4:16 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG

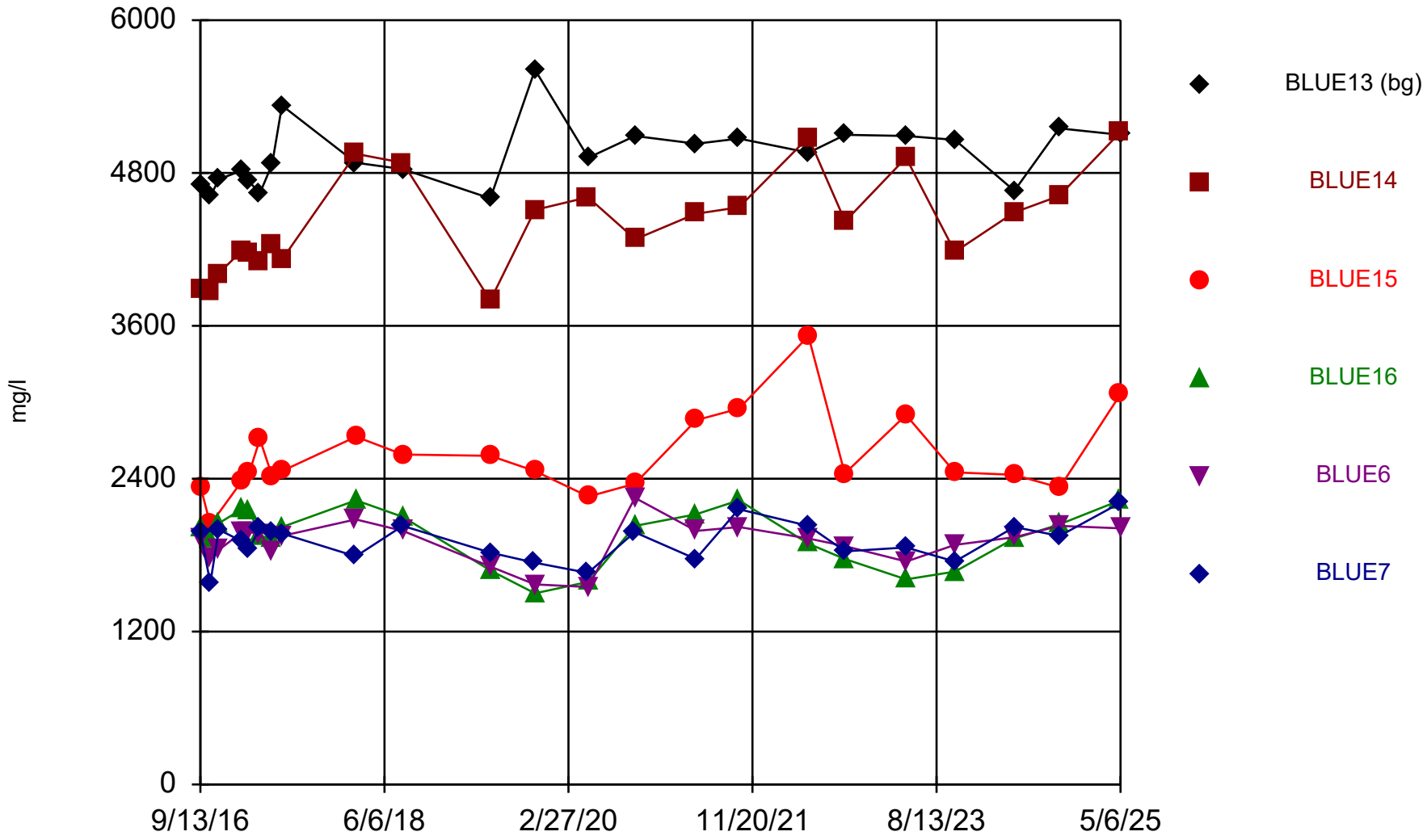


Time Series Analysis Run 7/3/2025 4:16 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG

Solids, total dissolved

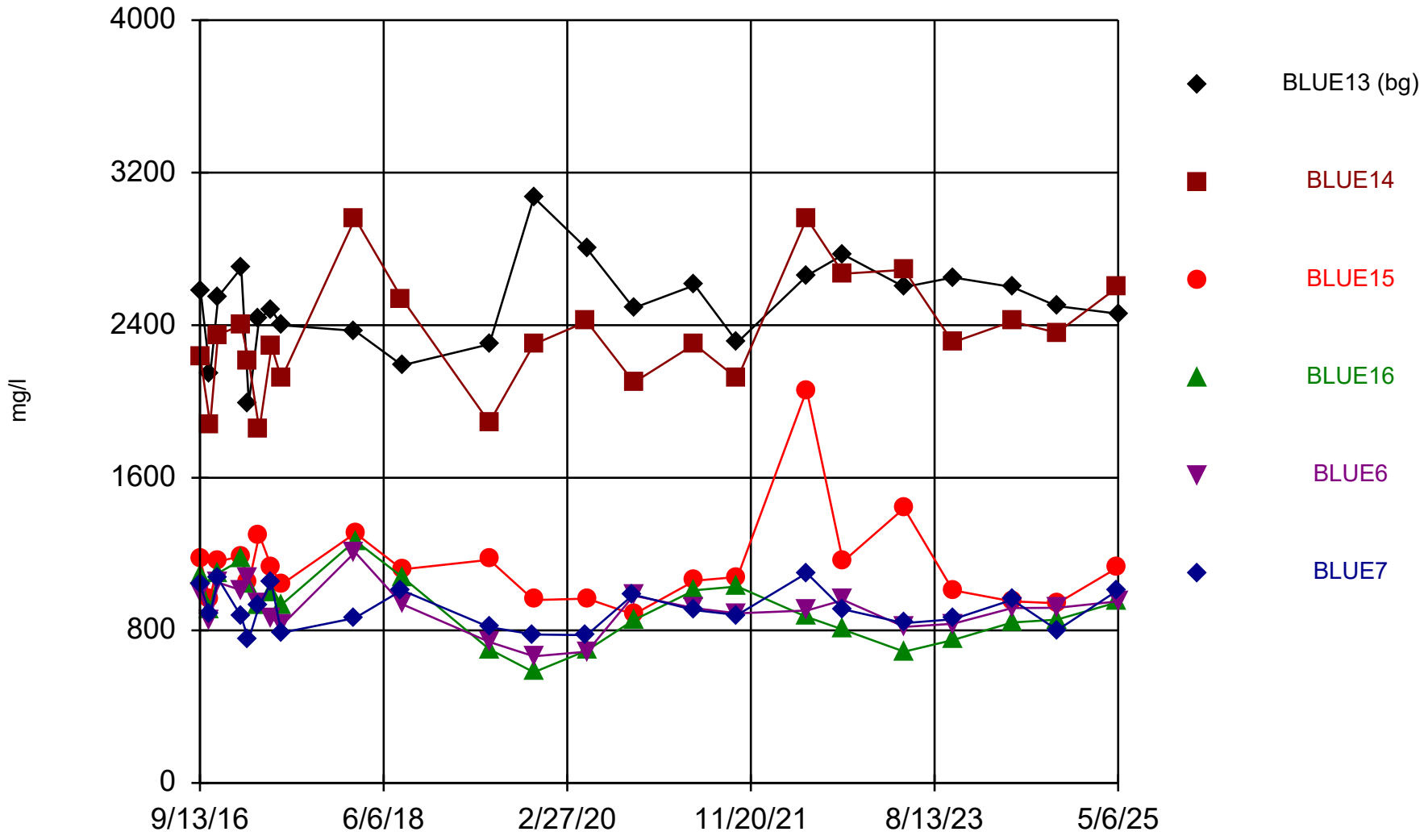


Time Series Analysis Run 7/3/2025 4:16 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG

Sulfate, as SO4



Time Series Analysis Run 7/3/2025 4:16 PM View: A_3

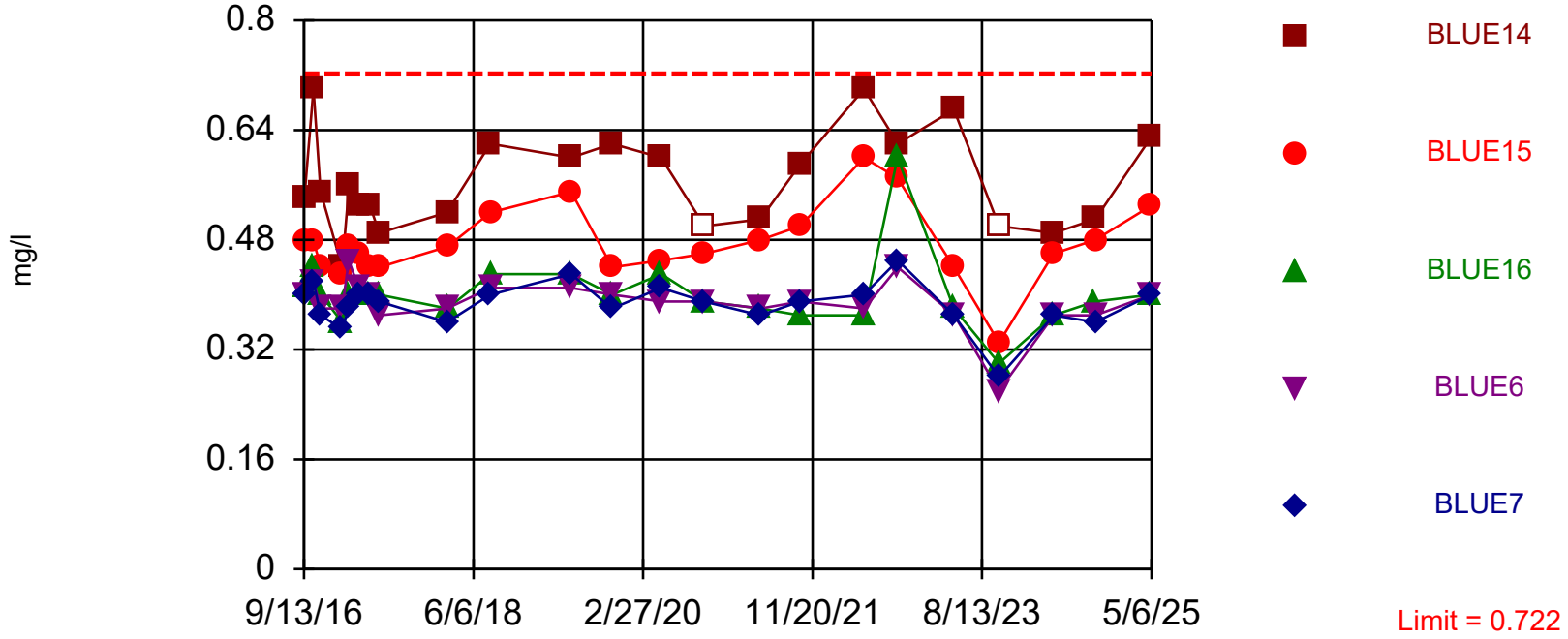
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG
Hollow symbols indicate censored values.

Within Limit

Boron, total

Interwell Parametric



Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-0.6711, Std. Dev.=0.1686, n=20, 20% NDs. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9181, critical = 0.905. Kappa = 2.048 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001504. Comparing 5 points to limit.

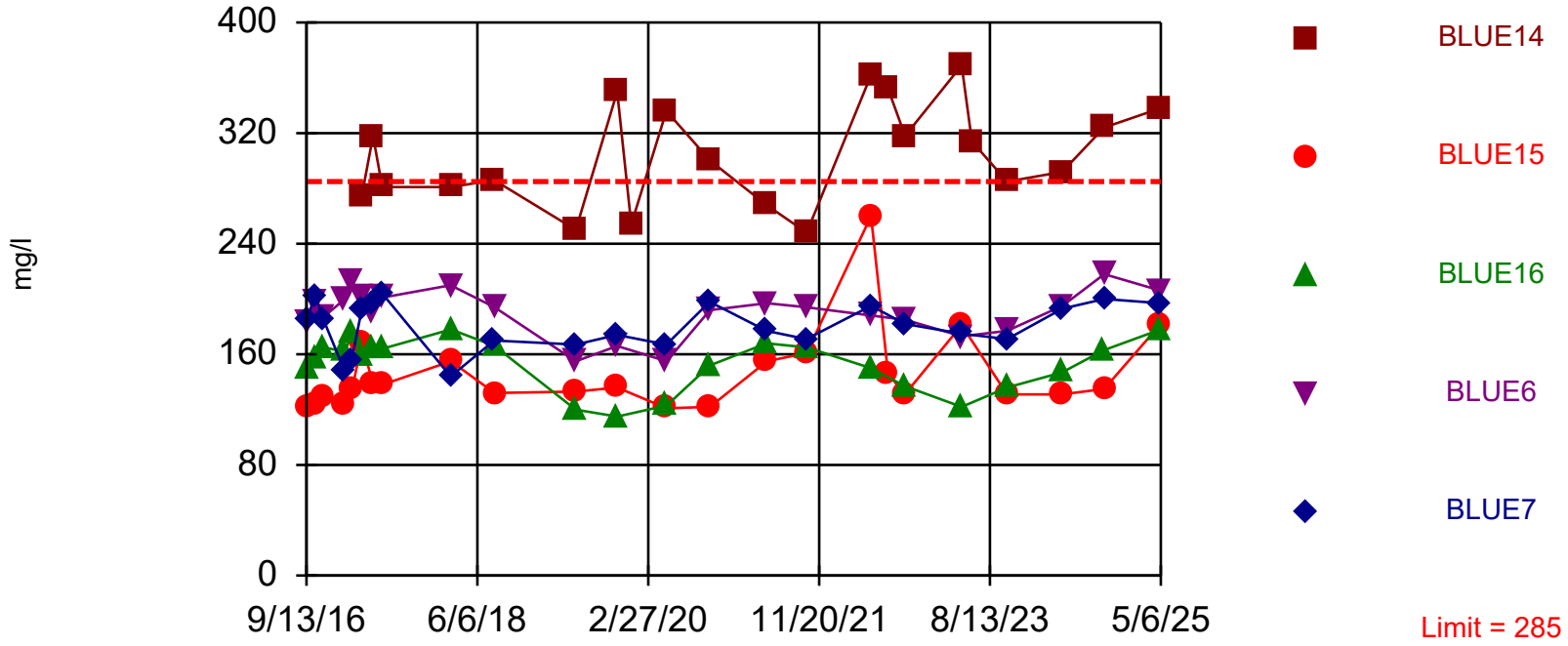
Prediction Limit Analysis Run 7/3/2025 3:44 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Exceeds Limit: BLUE14

Calcium, total

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=4.969, Std. Dev.=0.3335, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9576, critical = 0.905. Kappa = 2.048 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001504. Comparing 5 points to limit.

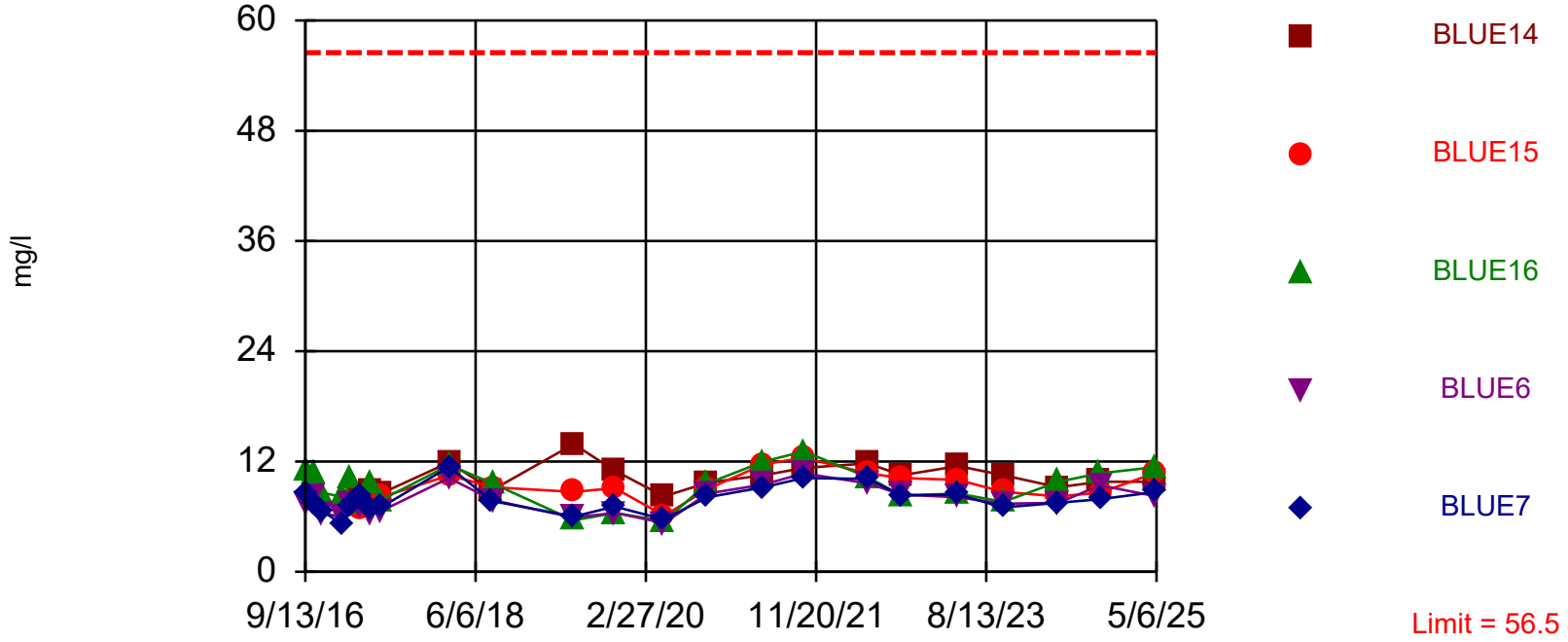
Prediction Limit Analysis Run 7/3/2025 3:44 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Within Limit

Chloride

Interwell Parametric



Background Data Summary: Mean=38.02, Std. Dev.=9.014, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9474, critical = 0.905. Kappa = 2.048 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001504. Comparing 5 points to limit.

Prediction Limit Analysis Run 7/3/2025 3:44 PM View: A_3

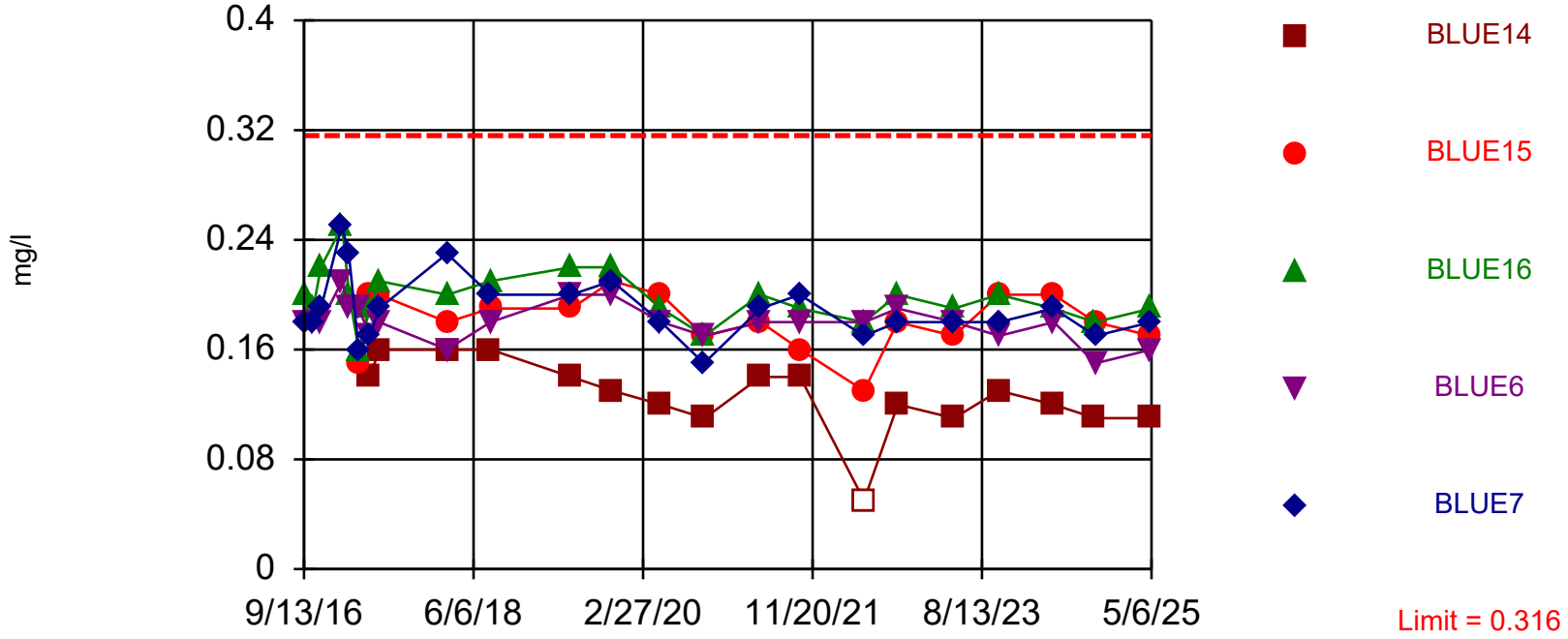
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG
Hollow symbols indicate censored values.

Within Limit

Fluoride

Interwell Parametric



Background Data Summary: Mean=0.2705, Std. Dev.=0.02212, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9414, critical = 0.905. Kappa = 2.048 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001504. Comparing 5 points to limit.

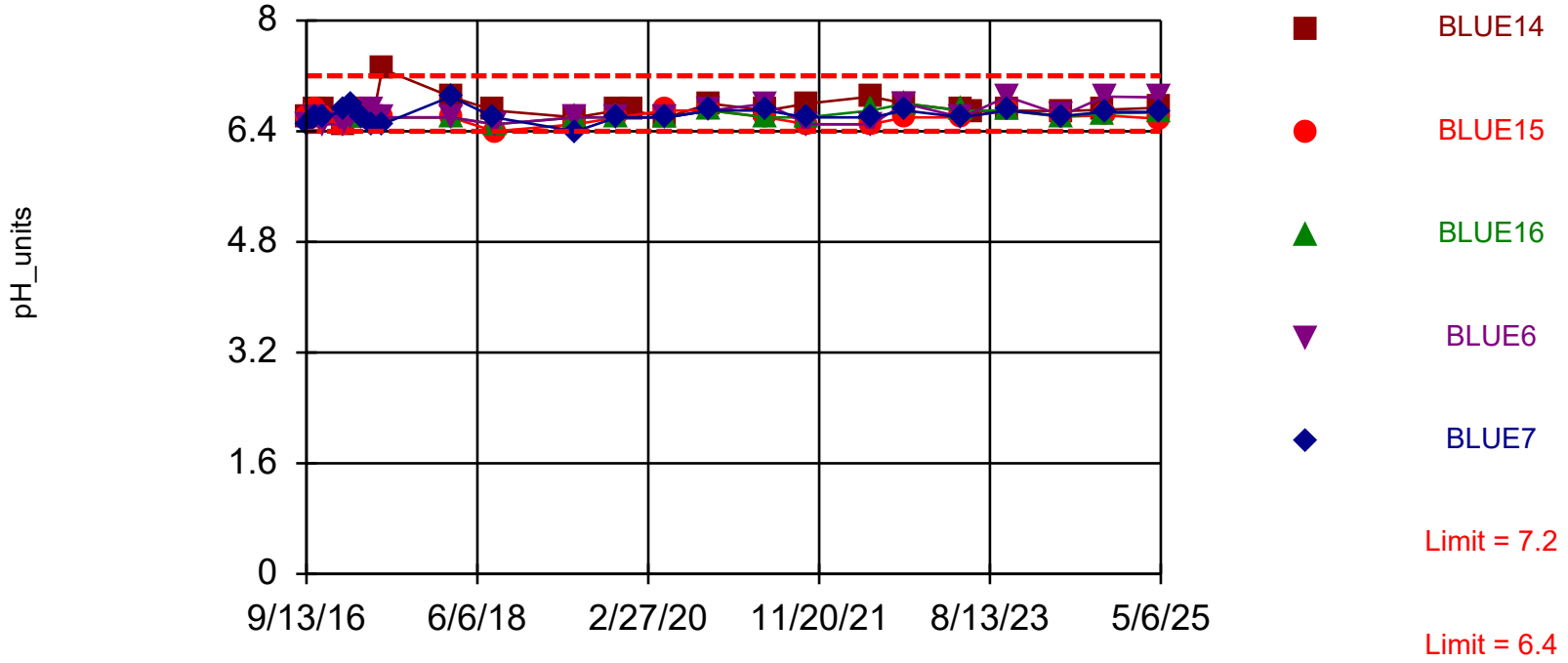
Prediction Limit Analysis Run 7/3/2025 3:44 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Within Limits

pH, field

Interwell Parametric

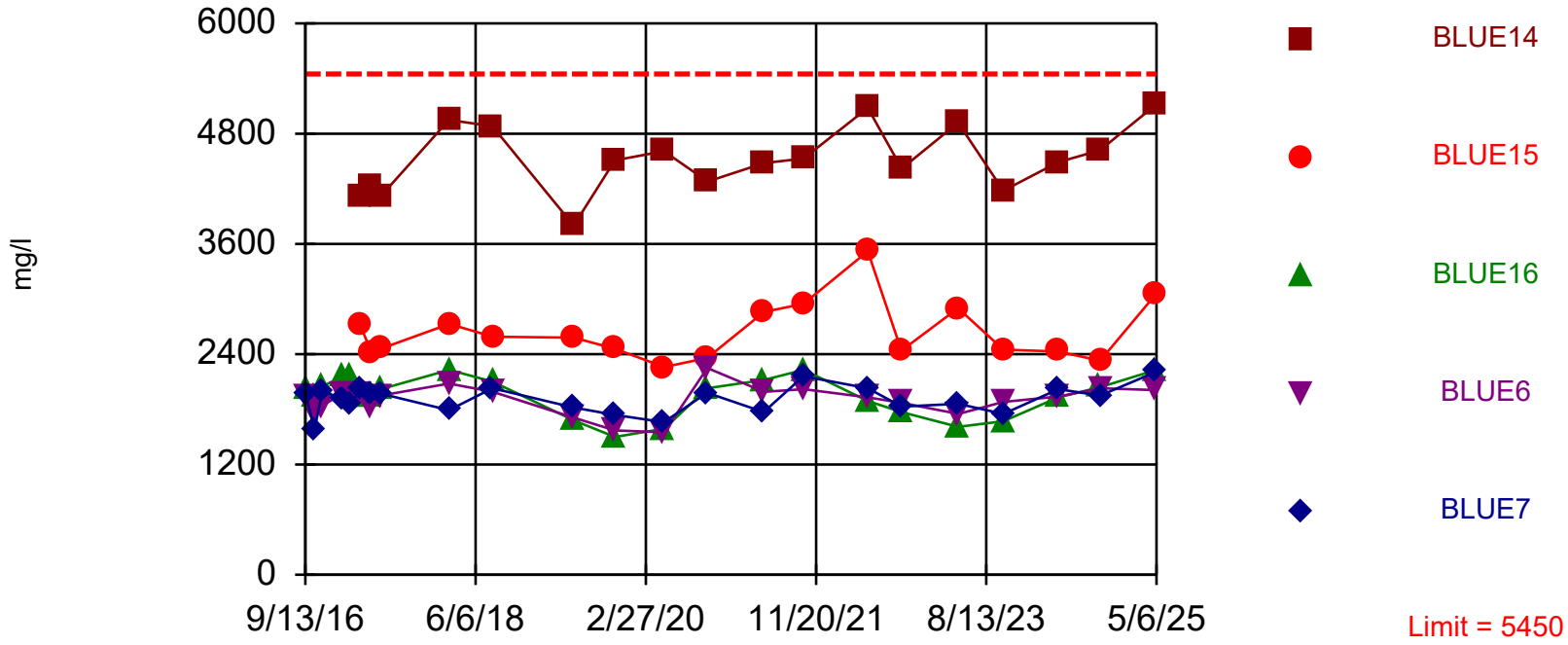


Background Data Summary: Mean=6.845, Std. Dev.=0.1932, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9554, critical = 0.905. Kappa = 2.048 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.000752. Comparing 5 points to limit.

Within Limit

Solids, total dissolved

Interwell Parametric



Background Data Summary: Mean=4935, Std. Dev.=250.5, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9278, critical = 0.905. Kappa = 2.048 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001504. Comparing 5 points to limit.

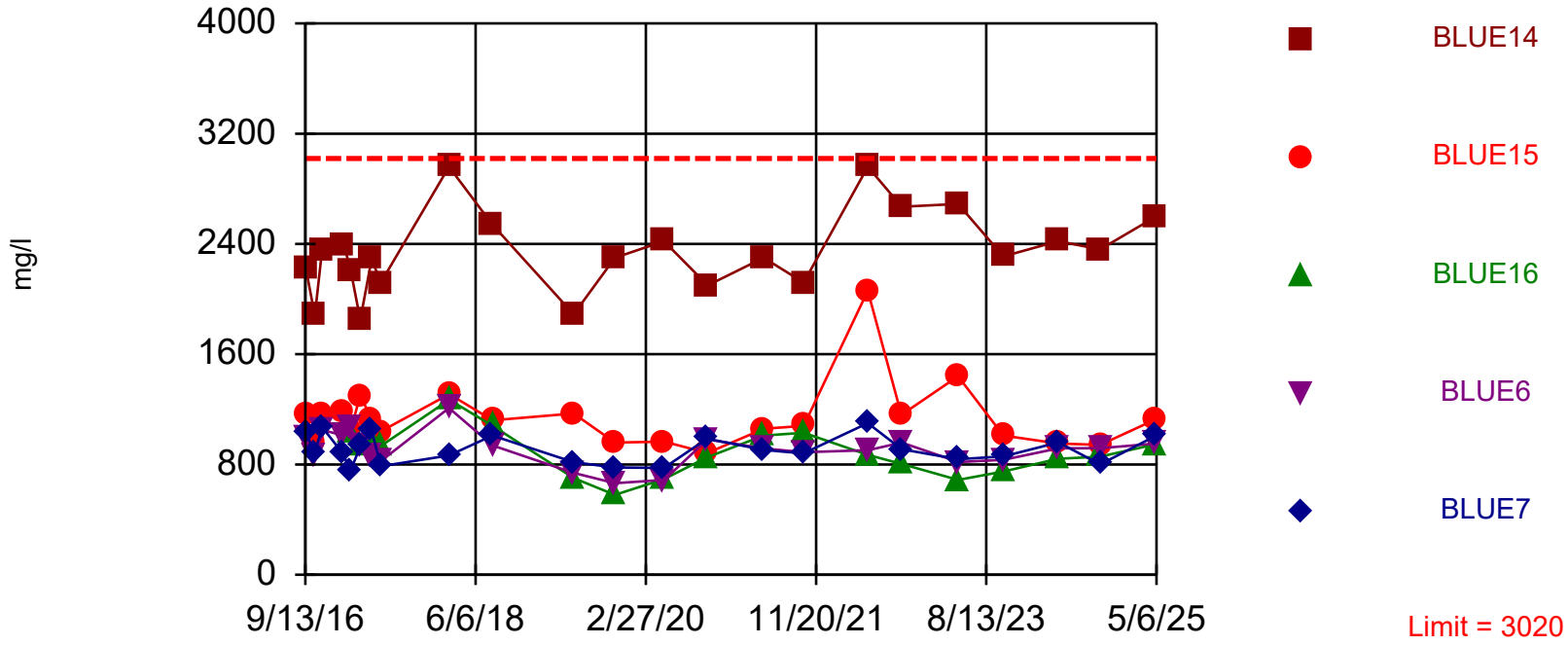
Prediction Limit Analysis Run 7/3/2025 3:44 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Within Limit

Sulfate, as SO4

Interwell Parametric



Background Data Summary: Mean=2505, Std. Dev.=251.2, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9896, critical = 0.905. Kappa = 2.048 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001504. Comparing 5 points to limit.

Prediction Limit Analysis Run 7/3/2025 3:44 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Prediction Limit

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat Printed 7/3/2025, 3:45 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron, total (mg/l)	BLUE14	0.722	n/a	5/5/2025	0.63	No	20	20	ln(x)	0.001504	Param Inter 1 of 2
Boron, total (mg/l)	BLUE15	0.722	n/a	5/5/2025	0.53	No	20	20	ln(x)	0.001504	Param Inter 1 of 2
Boron, total (mg/l)	BLUE16	0.722	n/a	5/5/2025	0.4	No	20	20	ln(x)	0.001504	Param Inter 1 of 2
Boron, total (mg/l)	BLUE6	0.722	n/a	5/6/2025	0.4	No	20	20	ln(x)	0.001504	Param Inter 1 of 2
Boron, total (mg/l)	BLUE7	0.722	n/a	5/5/2025	0.4	No	20	20	ln(x)	0.001504	Param Inter 1 of 2
Calcium, total (mg/l)	**BLUE14**	**285**	**n/a**	**5/5/2025**	**338**	**Yes**	**20**	**0**	**ln(x)**	**0.001504**	**Param Inter 1 of 2**
Calcium, total (mg/l)	BLUE15	285	n/a	5/5/2025	182	No	20	0	ln(x)	0.001504	Param Inter 1 of 2
Calcium, total (mg/l)	BLUE16	285	n/a	5/5/2025	178	No	20	0	ln(x)	0.001504	Param Inter 1 of 2
Calcium, total (mg/l)	BLUE6	285	n/a	5/6/2025	206	No	20	0	ln(x)	0.001504	Param Inter 1 of 2
Calcium, total (mg/l)	BLUE7	285	n/a	5/5/2025	197	No	20	0	ln(x)	0.001504	Param Inter 1 of 2
Chloride (mg/l)	BLUE14	56.5	n/a	5/5/2025	9.8	No	20	0	No	0.001504	Param Inter 1 of 2
Chloride (mg/l)	BLUE15	56.5	n/a	5/5/2025	10.8	No	20	0	No	0.001504	Param Inter 1 of 2
Chloride (mg/l)	BLUE16	56.5	n/a	5/5/2025	11.4	No	20	0	No	0.001504	Param Inter 1 of 2
Chloride (mg/l)	BLUE6	56.5	n/a	5/6/2025	8.2	No	20	0	No	0.001504	Param Inter 1 of 2
Chloride (mg/l)	BLUE7	56.5	n/a	5/5/2025	8.7	No	20	0	No	0.001504	Param Inter 1 of 2
Fluoride (mg/l)	BLUE14	0.316	n/a	5/5/2025	0.11	No	20	0	No	0.001504	Param Inter 1 of 2
Fluoride (mg/l)	BLUE15	0.316	n/a	5/5/2025	0.17	No	20	0	No	0.001504	Param Inter 1 of 2
Fluoride (mg/l)	BLUE16	0.316	n/a	5/5/2025	0.19	No	20	0	No	0.001504	Param Inter 1 of 2
Fluoride (mg/l)	BLUE6	0.316	n/a	5/6/2025	0.16	No	20	0	No	0.001504	Param Inter 1 of 2
Fluoride (mg/l)	BLUE7	0.316	n/a	5/5/2025	0.18	No	20	0	No	0.001504	Param Inter 1 of 2
pH, field (pH_units)	BLUE14	7.2	6.4	5/5/2025	6.74	No	20	0	No	0.000752	Param Inter 1 of 2
pH, field (pH_units)	BLUE15	7.2	6.4	5/5/2025	6.58	No	20	0	No	0.000752	Param Inter 1 of 2
pH, field (pH_units)	BLUE16	7.2	6.4	5/5/2025	6.67	No	20	0	No	0.000752	Param Inter 1 of 2
pH, field (pH_units)	BLUE6	7.2	6.4	5/6/2025	6.89	No	20	0	No	0.000752	Param Inter 1 of 2
pH, field (pH_units)	BLUE7	7.2	6.4	5/5/2025	6.68	No	20	0	No	0.000752	Param Inter 1 of 2
Solids, total dissolved (mg/l)	BLUE14	5450	n/a	5/5/2025	5120	No	20	0	No	0.001504	Param Inter 1 of 2
Solids, total dissolved (mg/l)	BLUE15	5450	n/a	5/5/2025	3060	No	20	0	No	0.001504	Param Inter 1 of 2
Solids, total dissolved (mg/l)	BLUE16	5450	n/a	5/5/2025	2230	No	20	0	No	0.001504	Param Inter 1 of 2
Solids, total dissolved (mg/l)	BLUE6	5450	n/a	5/6/2025	2010	No	20	0	No	0.001504	Param Inter 1 of 2
Solids, total dissolved (mg/l)	BLUE7	5450	n/a	5/5/2025	2210	No	20	0	No	0.001504	Param Inter 1 of 2
Sulfate, as SO4 (mg/l)	BLUE14	3020	n/a	5/5/2025	2600	No	20	0	No	0.001504	Param Inter 1 of 2
Sulfate, as SO4 (mg/l)	BLUE15	3020	n/a	5/5/2025	1130	No	20	0	No	0.001504	Param Inter 1 of 2
Sulfate, as SO4 (mg/l)	BLUE16	3020	n/a	5/5/2025	948	No	20	0	No	0.001504	Param Inter 1 of 2
Sulfate, as SO4 (mg/l)	BLUE6	3020	n/a	5/6/2025	952	No	20	0	No	0.001504	Param Inter 1 of 2
Sulfate, as SO4 (mg/l)	BLUE7	3020	n/a	5/5/2025	1010	No	20	0	No	0.001504	Param Inter 1 of 2

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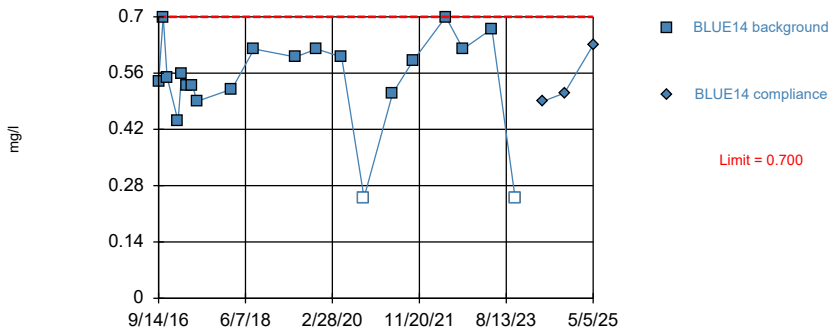
Hollow symbols indicate censored values.

Within Limit

Boron, total

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 20 background values. 10% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Seasonality was not detected with 95% confidence.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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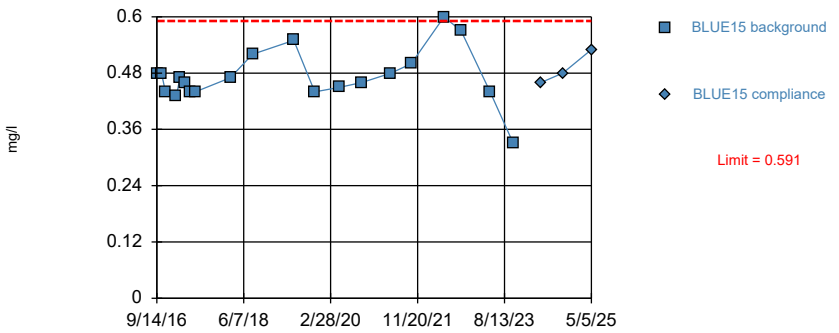
Within Limit

Boron, total

Intrawell Parametric



Background Data Summary: Mean=0.4725, Std. Dev.=0.05766, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9107, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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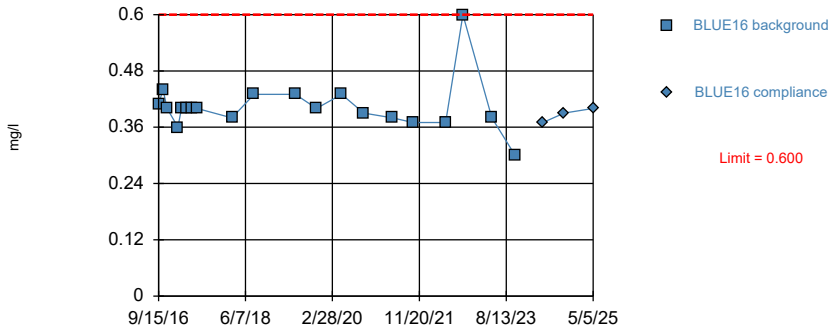
Within Limit

Boron, total

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 20 background values. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Seasonality was not detected with 95% confidence.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

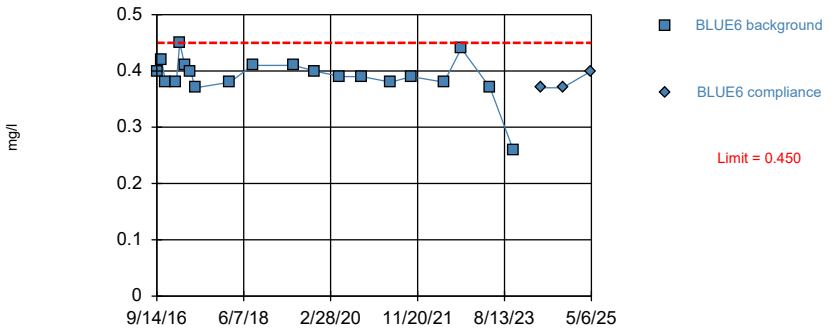
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG

Within Limit

Boron, total

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 20 background values. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Seasonality was not detected with 95% confidence.

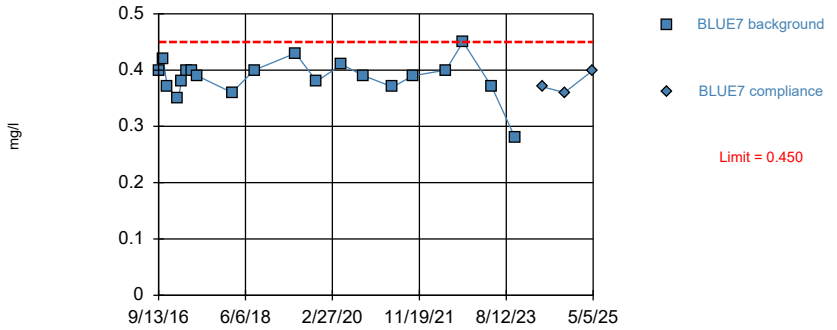
Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Within Limit

Boron, total

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 20 background values. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Seasonality was not detected with 95% confidence.

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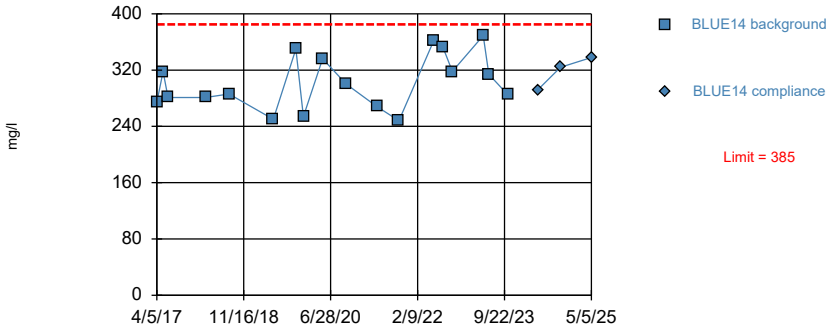
Within Limit

Calcium, total

Intrawell Parametric



Background Data Summary: Mean=302.6, Std. Dev.=39.1, n=18. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9389, critical = 0.897. Kappa = 2.104 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

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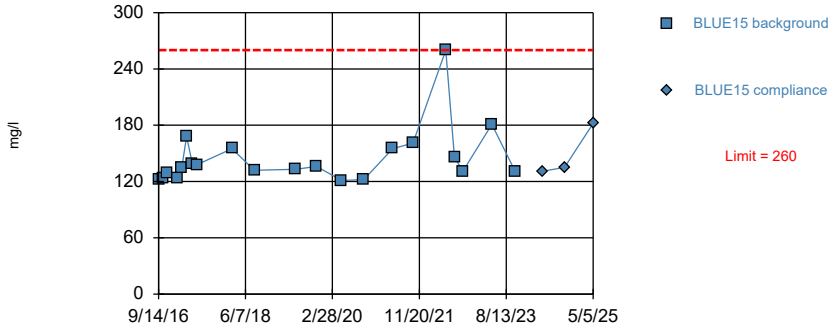
Within Limit

Calcium, total

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 21 background values. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2). Seasonality was not detected with 95% confidence.

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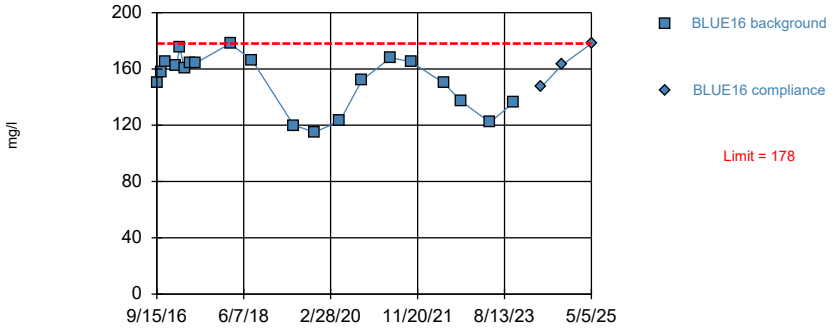
Within Limit

Calcium, total

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 20 background values. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Seasonality was not detected with 95% confidence.

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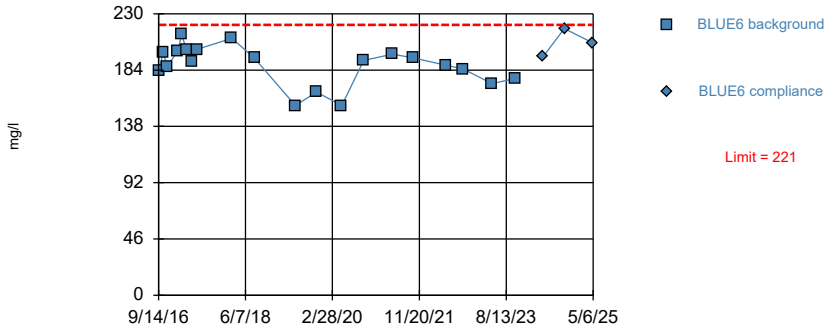
Within Limit

Calcium, total

Intrawell Parametric



Background Data Summary: Mean=188.1, Std. Dev.=16.06, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9337, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

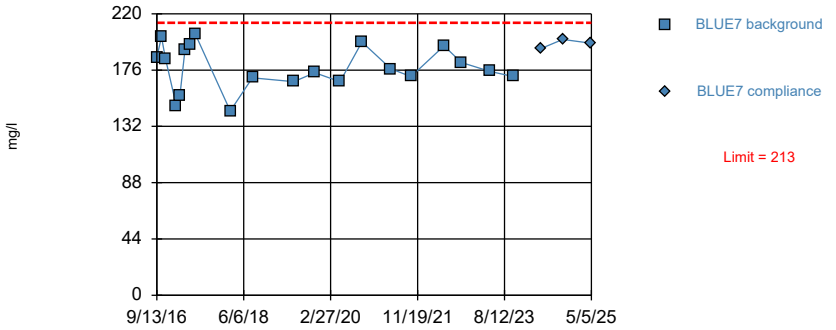
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG

Within Limit

Calcium, total

Intrawell Parametric



Background Data Summary: Mean=178, Std. Dev.=17.11, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9611, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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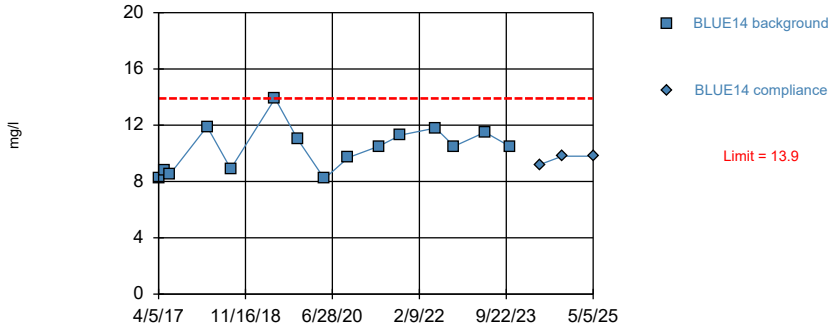
Within Limit

Chloride

Intrawell Parametric



Background Data Summary: Mean=10.35, Std. Dev.=1.635, n=15. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9392, critical = 0.881. Kappa = 2.193 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

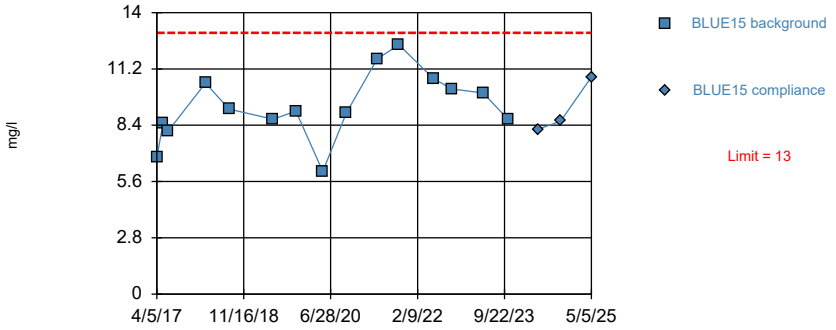
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG

Within Limit

Chloride

Intrawell Parametric



Background Data Summary: Mean=9.313, Std. Dev.=1.68, n=15. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9779, critical = 0.881. Kappa = 2.193 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

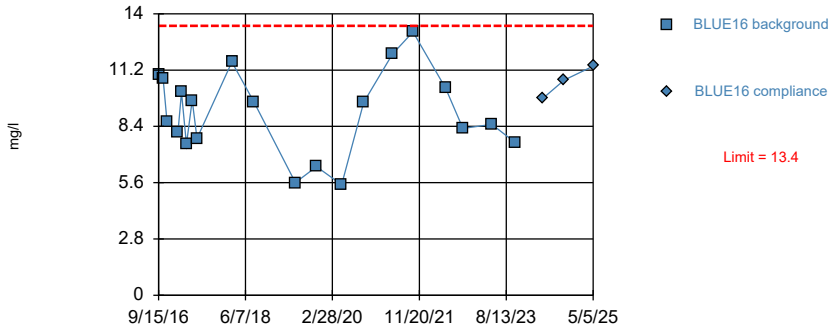
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG

Within Limit

Chloride

Intrawell Parametric



Background Data Summary: Mean=9.085, Std. Dev.=2.074, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9808, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

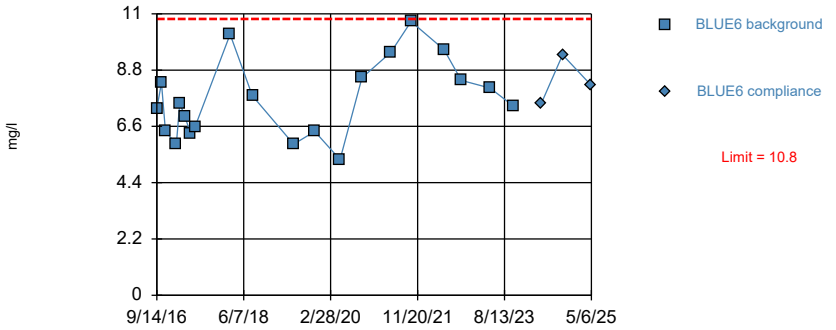
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG

Within Limit

Chloride

Intrawell Parametric



Background Data Summary: Mean=7.655, Std. Dev.=1.509, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9602, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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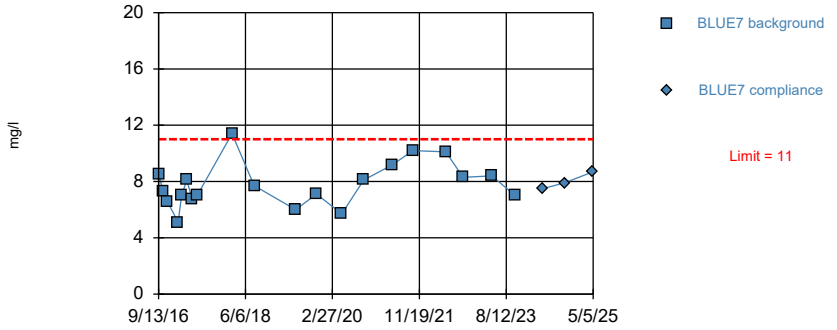
Within Limit

Chloride

Intrawell Parametric



Background Data Summary: Mean=7.775, Std. Dev.=1.581, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9647, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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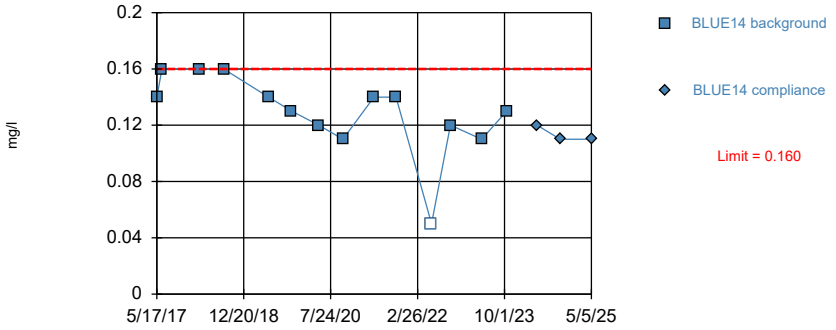
Hollow symbols indicate censored values.

Within Limit

Fluoride

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 14 background values. 7.143% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2). Seasonality was not detected with 95% confidence.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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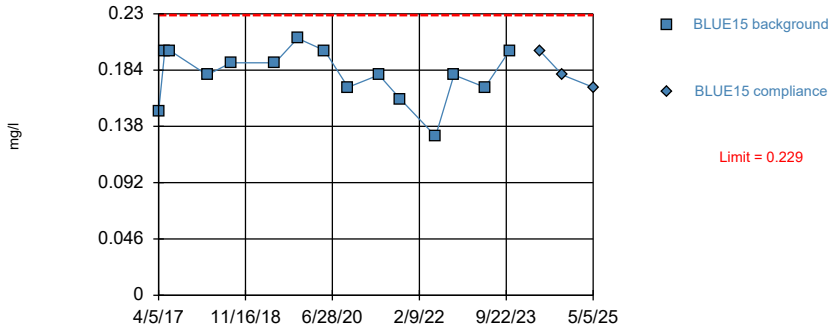
Within Limit

Fluoride

Intrawell Parametric



Background Data Summary: Mean=0.1807, Std. Dev.=0.02187, n=15. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9257, critical = 0.881. Kappa = 2.193 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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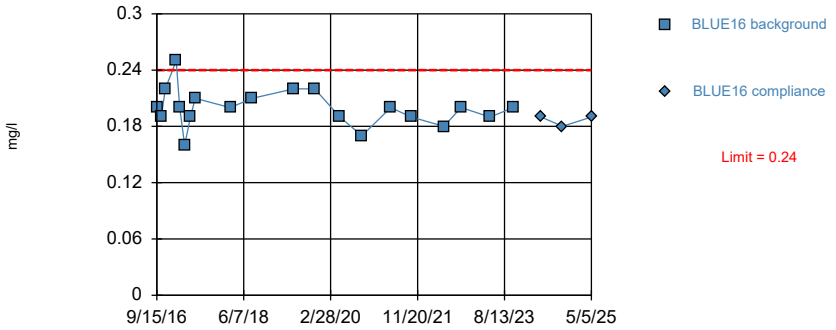
Within Limit

Fluoride

Intrawell Parametric



Background Data Summary: Mean=0.1995, Std. Dev.=0.01959, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.943, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

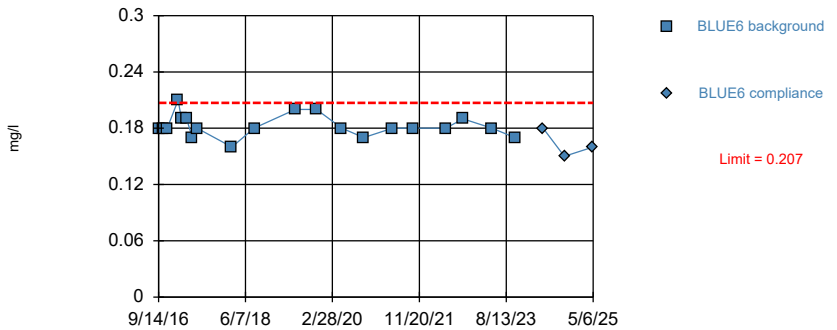
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG

Within Limit

Fluoride

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=-1.703, Std. Dev.=0.06307, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9091, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

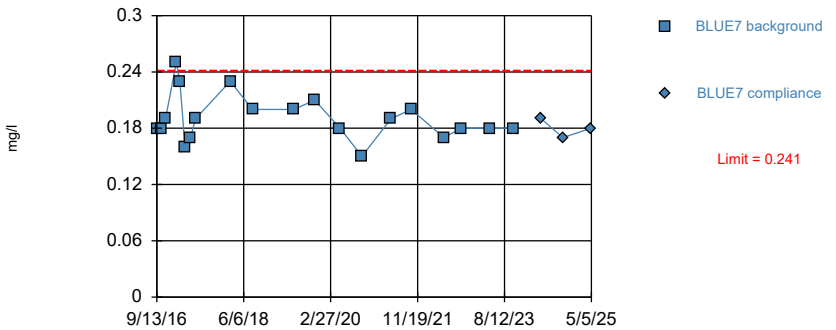
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG

Within Limit

Fluoride

Intrawell Parametric



Background Data Summary: Mean=0.191, Std. Dev.=0.02447, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9302, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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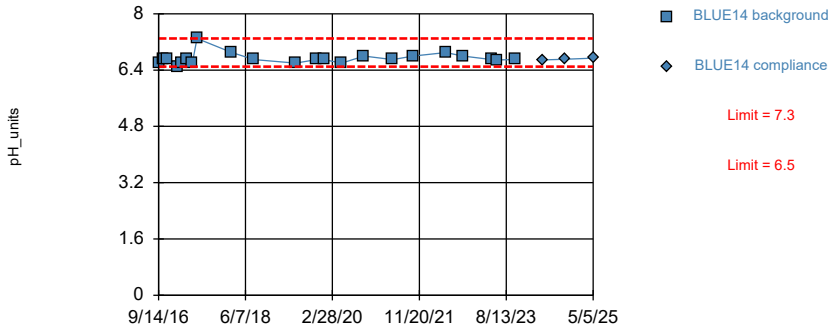
Within Limits

pH, field

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 22 background values. Well-constituent pair annual alpha = 0.0148. Individual comparison alpha = 0.007415 (1 of 2). Seasonality was not detected with 95% confidence.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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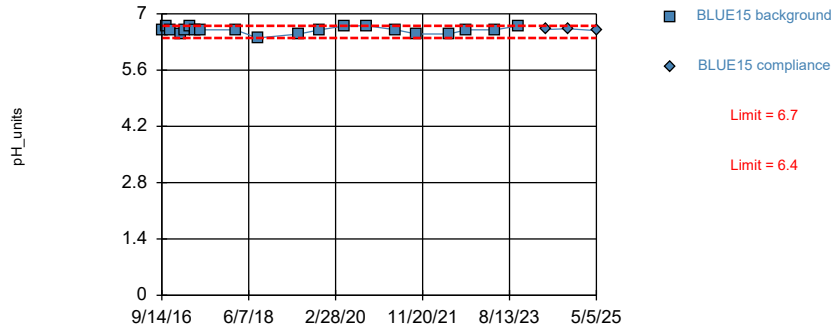
Within Limits

pH, field

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 20 background values. Well-constituent pair annual alpha = 0.01713. Individual comparison alpha = 0.008582 (1 of 2). Seasonality was not detected with 95% confidence.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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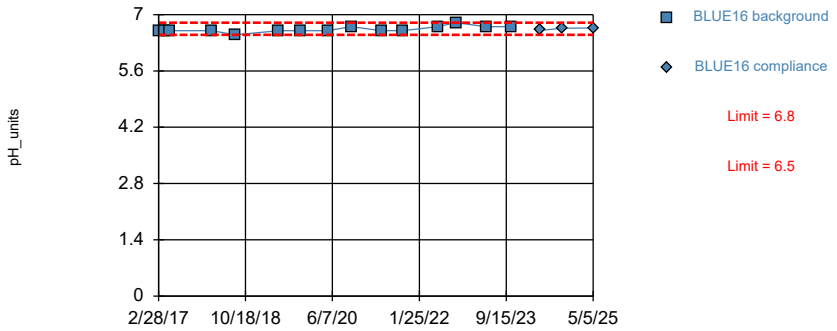
Within Limits

pH, field

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 15 background values. Well-constituent pair annual alpha = 0.03002. Individual comparison alpha = 0.01507 (1 of 2). Seasonality was not detected with 95% confidence.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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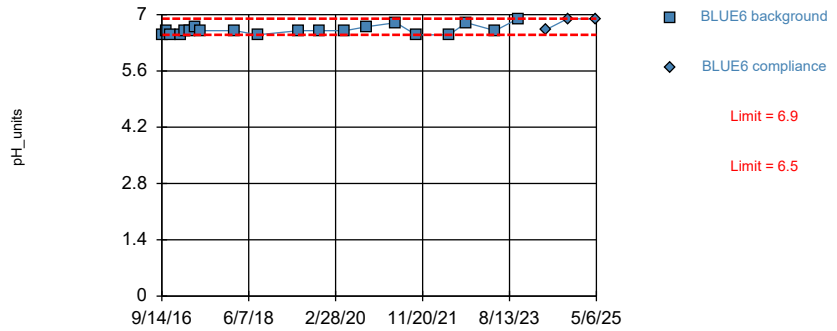
Within Limits

pH, field

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 20 background values. Well-constituent pair annual alpha = 0.01713. Individual comparison alpha = 0.008582 (1 of 2). Seasonality was not detected with 95% confidence.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

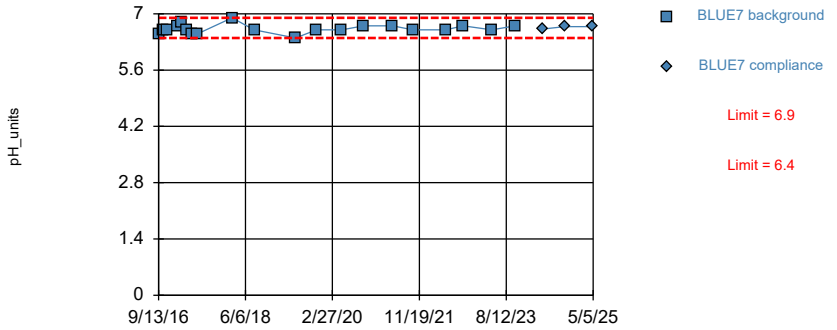
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG

Within Limits

pH, field

Intrawell Parametric



Background Data Summary: Mean=6.625, Std. Dev.=0.1118, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9158, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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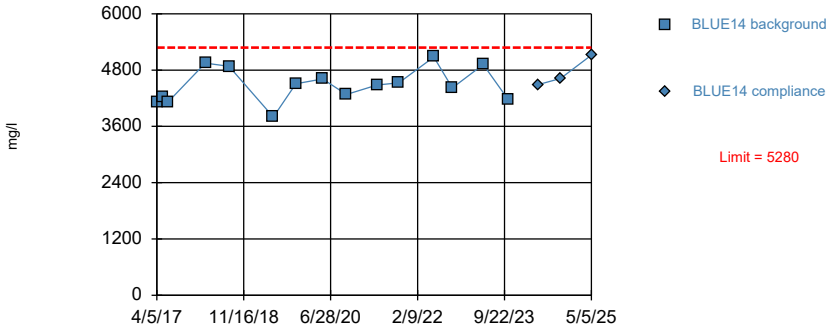
Within Limit

Solids, total dissolved

Intrawell Parametric



Background Data Summary: Mean=4474, Std. Dev.=365.9, n=15. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9636, critical = 0.881. Kappa = 2.193 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

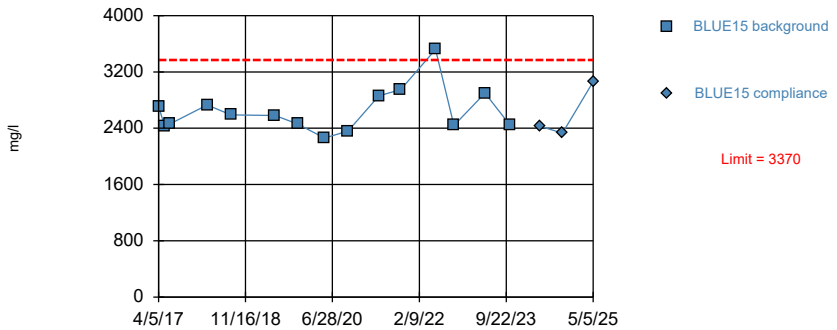
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG

Within Limit

Solids, total dissolved

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=7.875, Std. Dev.=0.113, n=15. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9051, critical = 0.881. Kappa = 2.193 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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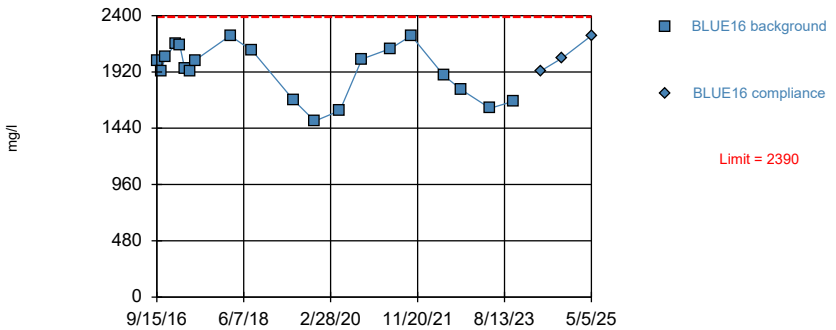
Within Limit

Solids, total dissolved

Intrawell Parametric



Background Data Summary: Mean=1931, Std. Dev.=223.1, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9311, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

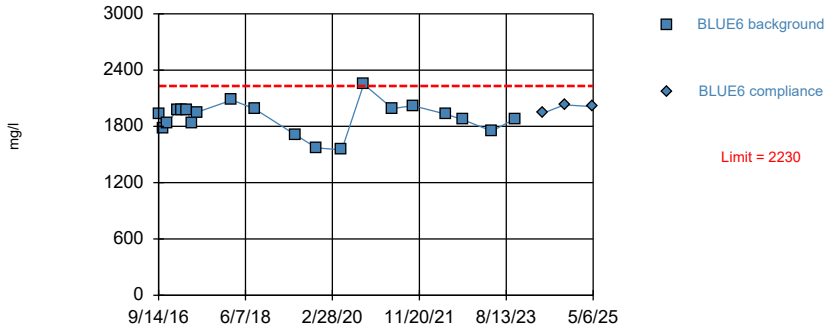
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG

Within Limit

Solids, total dissolved

Intrawell Parametric



Background Data Summary: Mean=1893, Std. Dev.=165.5, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.953, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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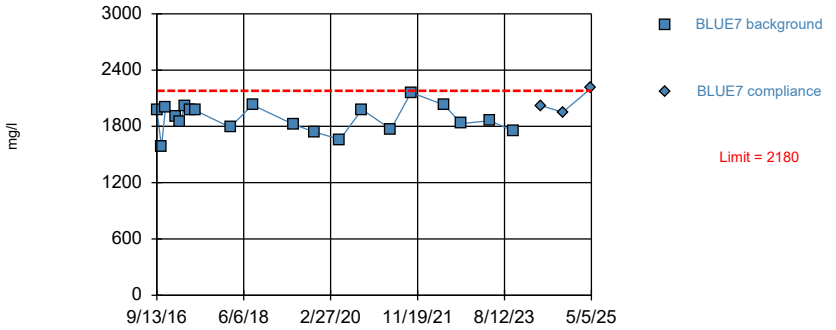
Exceeds Limit

Solids, total dissolved

Intrawell Parametric



Background Data Summary: Mean=1885, Std. Dev.=144.3, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9675, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:03 PM View: A_3

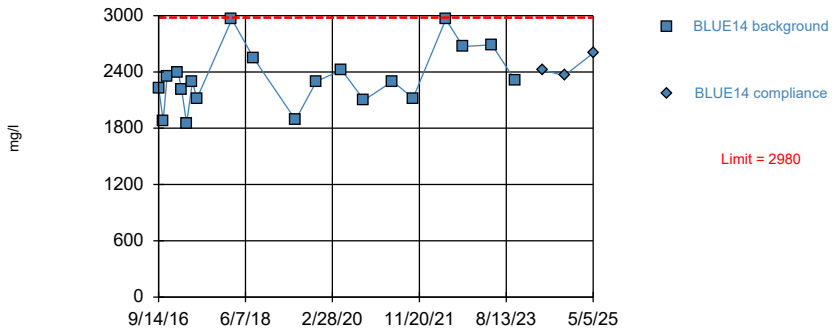
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG

Within Limit

Sulfate, as SO4

Intrawell Parametric



Background Data Summary: Mean=2330, Std. Dev.=315.6, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9429, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:04 PM View: A_3

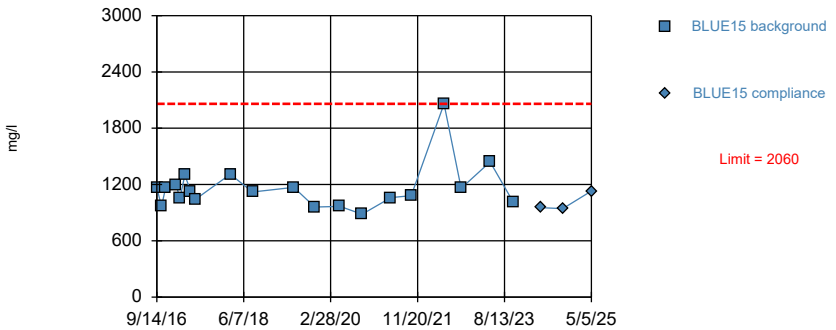
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG

Within Limit

Sulfate, as SO4

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 20 background values. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Seasonality was not detected with 95% confidence.

Prediction Limit Analysis Run 7/3/2025 4:04 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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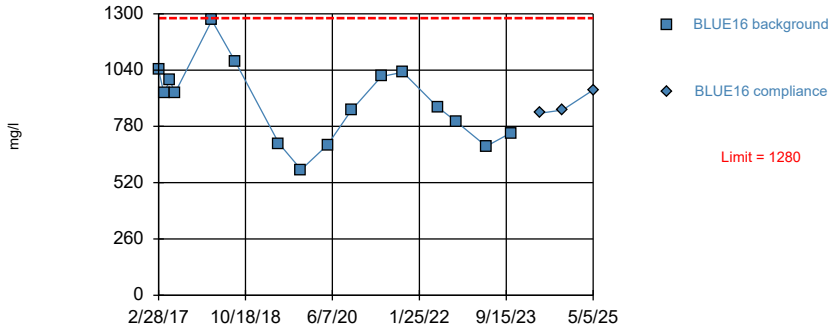
Within Limit

Sulfate, as SO4

Intrawell Parametric



Background Data Summary: Mean=889.5, Std. Dev.=181, n=16. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9733, critical = 0.887. Kappa = 2.15 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:04 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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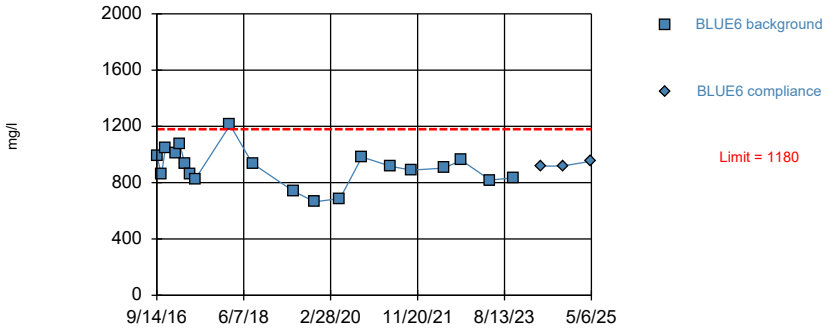
Within Limit

Sulfate, as SO4

Intrawell Parametric



Background Data Summary: Mean=907.3, Std. Dev.=131.2, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9824, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:04 PM View: A_3

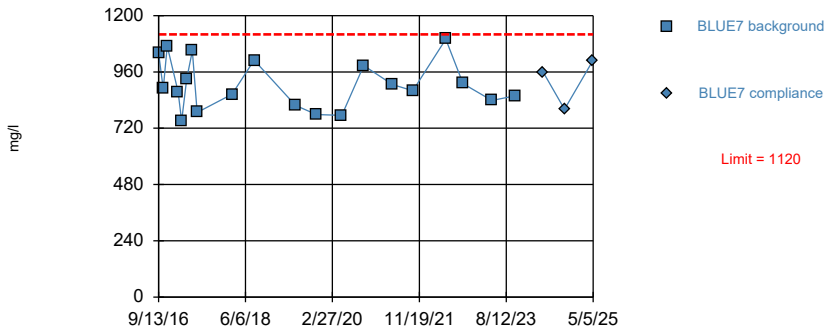
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.0.27 Software licensed to Barr Engineering Company. UG

Within Limit

Sulfate, as SO4

Intrawell Parametric



Background Data Summary: Mean=905.8, Std. Dev.=105.6, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9452, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 7/3/2025 4:04 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Prediction Limit

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat Printed 7/3/2025, 4:07 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron, total (mg/l)	BLUE14	0.700	n/a	5/5/2025	0.63	No	20	10	n/a	0.004291	NP Intra (normality) ...
Boron, total (mg/l)	BLUE15	0.591	n/a	5/5/2025	0.53	No	20	0	No	0.001504	Param Intra 1 of 2
Boron, total (mg/l)	BLUE16	0.600	n/a	5/5/2025	0.4	No	20	0	n/a	0.004291	NP Intra (normality) ...
Boron, total (mg/l)	BLUE6	0.450	n/a	5/6/2025	0.4	No	20	0	n/a	0.004291	NP Intra (normality) ...
Boron, total (mg/l)	BLUE7	0.450	n/a	5/5/2025	0.4	No	20	0	n/a	0.004291	NP Intra (normality) ...
Calcium, total (mg/l)	BLUE14	385	n/a	5/5/2025	338	No	18	0	No	0.001504	Param Intra 1 of 2
Calcium, total (mg/l)	BLUE15	260	n/a	5/5/2025	182	No	21	0	n/a	0.003999	NP Intra (normality) ...
Calcium, total (mg/l)	BLUE16	178	n/a	5/5/2025	178	No	20	0	n/a	0.004291	NP Intra (normality) ...
Calcium, total (mg/l)	BLUE6	221	n/a	5/6/2025	206	No	20	0	No	0.001504	Param Intra 1 of 2
Calcium, total (mg/l)	BLUE7	213	n/a	5/5/2025	197	No	20	0	No	0.001504	Param Intra 1 of 2
Chloride (mg/l)	BLUE14	13.9	n/a	5/5/2025	9.8	No	15	0	No	0.001504	Param Intra 1 of 2
Chloride (mg/l)	BLUE15	13	n/a	5/5/2025	10.8	No	15	0	No	0.001504	Param Intra 1 of 2
Chloride (mg/l)	BLUE16	13.4	n/a	5/5/2025	11.4	No	20	0	No	0.001504	Param Intra 1 of 2
Chloride (mg/l)	BLUE6	10.8	n/a	5/6/2025	8.2	No	20	0	No	0.001504	Param Intra 1 of 2
Chloride (mg/l)	BLUE7	11	n/a	5/5/2025	8.7	No	20	0	No	0.001504	Param Intra 1 of 2
Fluoride (mg/l)	BLUE14	0.160	n/a	5/5/2025	0.11	No	14	7.143	n/a	0.008612	NP Intra (normality) ...
Fluoride (mg/l)	BLUE15	0.229	n/a	5/5/2025	0.17	No	15	0	No	0.001504	Param Intra 1 of 2
Fluoride (mg/l)	BLUE16	0.24	n/a	5/5/2025	0.19	No	20	0	No	0.001504	Param Intra 1 of 2
Fluoride (mg/l)	BLUE6	0.207	n/a	5/6/2025	0.16	No	20	0	ln(x)	0.001504	Param Intra 1 of 2
Fluoride (mg/l)	BLUE7	0.241	n/a	5/5/2025	0.18	No	20	0	No	0.001504	Param Intra 1 of 2
pH, field (pH_units)	BLUE14	7.3	6.5	5/5/2025	6.74	No	22	0	n/a	0.007415	NP Intra (normality) ...
pH, field (pH_units)	BLUE15	6.7	6.4	5/5/2025	6.58	No	20	0	n/a	0.008582	NP Intra (normality) ...
pH, field (pH_units)	BLUE16	6.8	6.5	5/5/2025	6.67	No	15	0	n/a	0.01507	NP Intra (normality) ...
pH, field (pH_units)	BLUE6	6.9	6.5	5/6/2025	6.89	No	20	0	n/a	0.008582	NP Intra (normality) ...
pH, field (pH_units)	BLUE7	6.9	6.4	5/5/2025	6.68	No	20	0	No	0.000752	Param Intra 1 of 2
Solids, total dissolved (mg/l)	BLUE14	5280	n/a	5/5/2025	5120	No	15	0	No	0.001504	Param Intra 1 of 2
Solids, total dissolved (mg/l)	BLUE15	3370	n/a	5/5/2025	3060	No	15	0	ln(x)	0.001504	Param Intra 1 of 2
Solids, total dissolved (mg/l)	BLUE16	2390	n/a	5/5/2025	2230	No	20	0	No	0.001504	Param Intra 1 of 2
Solids, total dissolved (mg/l)	BLUE6	2230	n/a	5/6/2025	2010	No	20	0	No	0.001504	Param Intra 1 of 2
Solids, total dissolved (mg/l)	**BLUE7**	**2180**	**n/a**	**5/5/2025**	**2210**	**Yes**	**20**	**0**	**No**	**0.001504**	**Param Intra 1 of 2**
Sulfate, as SO4 (mg/l)	BLUE14	2980	n/a	5/5/2025	2600	No	20	0	No	0.001504	Param Intra 1 of 2
Sulfate, as SO4 (mg/l)	BLUE15	2060	n/a	5/5/2025	1130	No	20	0	n/a	0.004291	NP Intra (normality) ...
Sulfate, as SO4 (mg/l)	BLUE16	1280	n/a	5/5/2025	948	No	16	0	No	0.001504	Param Intra 1 of 2
Sulfate, as SO4 (mg/l)	BLUE6	1180	n/a	5/6/2025	952	No	20	0	No	0.001504	Param Intra 1 of 2
Sulfate, as SO4 (mg/l)	BLUE7	1120	n/a	5/5/2025	1010	No	20	0	No	0.001504	Param Intra 1 of 2

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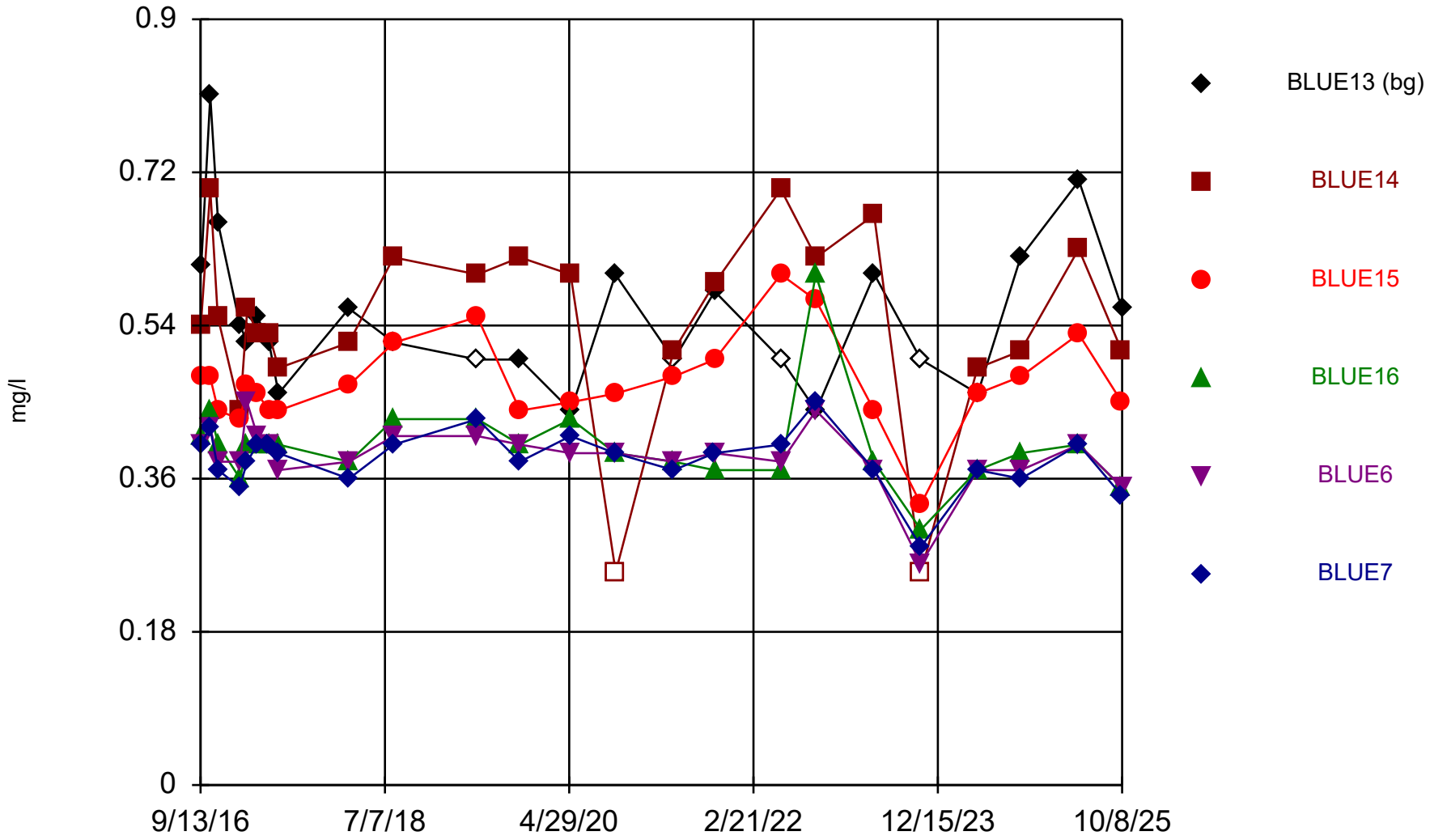
Hollow symbols indicate censored values.

Boron, total



Time Series Analysis Run 11/14/2025 3:49 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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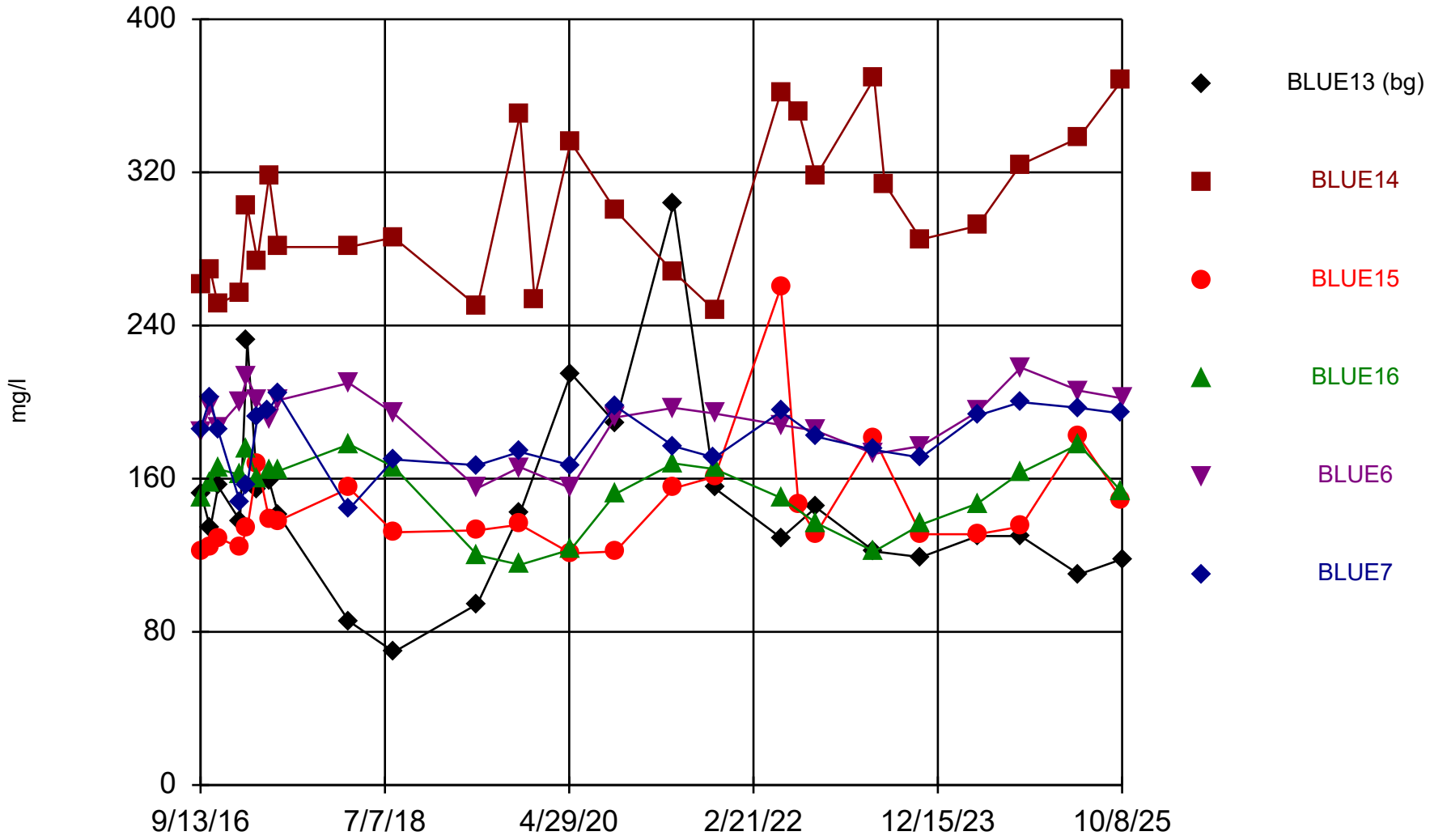
Calcium, total

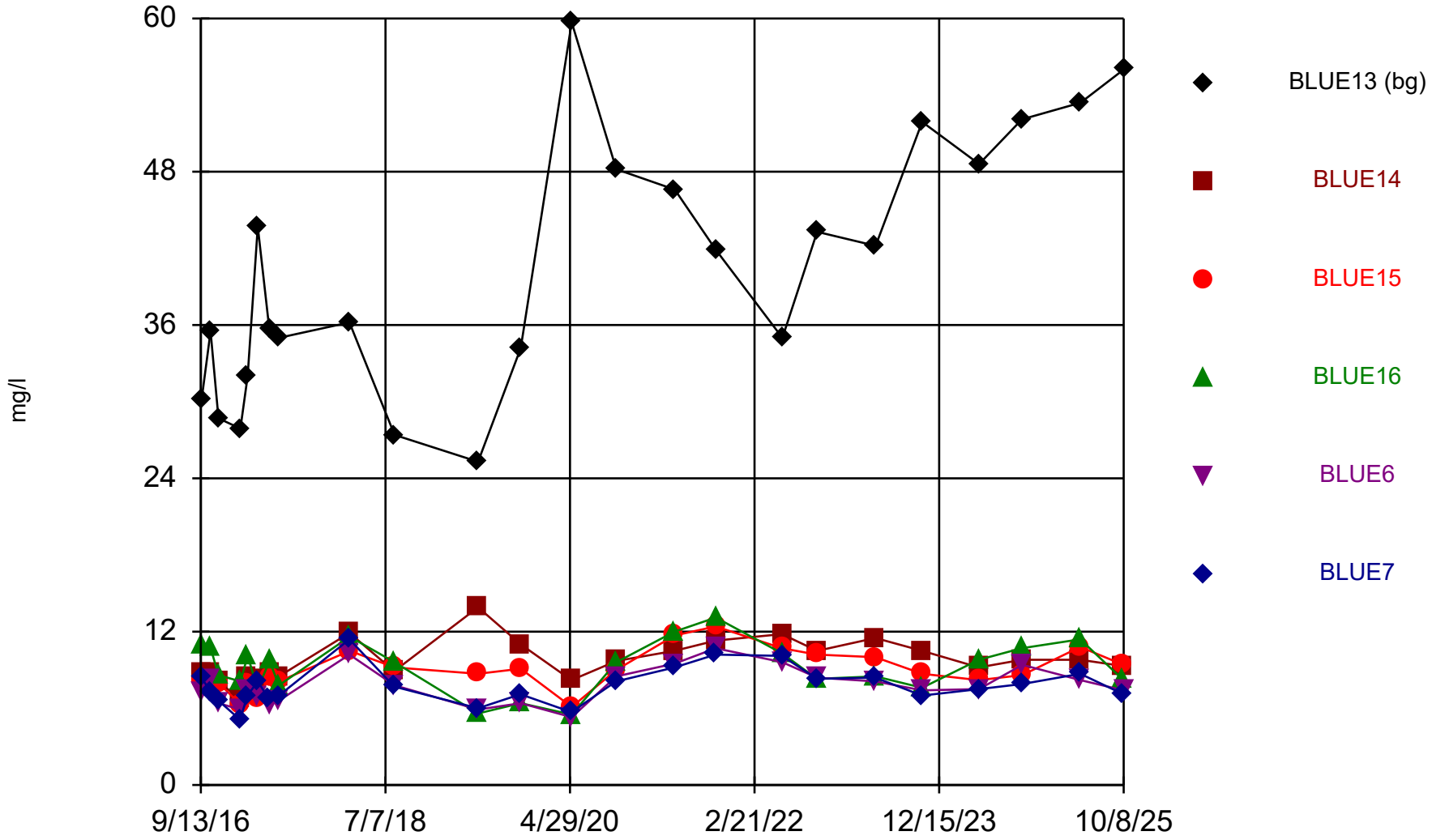


Time Series Analysis Run 11/14/2025 3:49 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.1.02 Software licensed to Barr Engineering Company. UG

Chloride

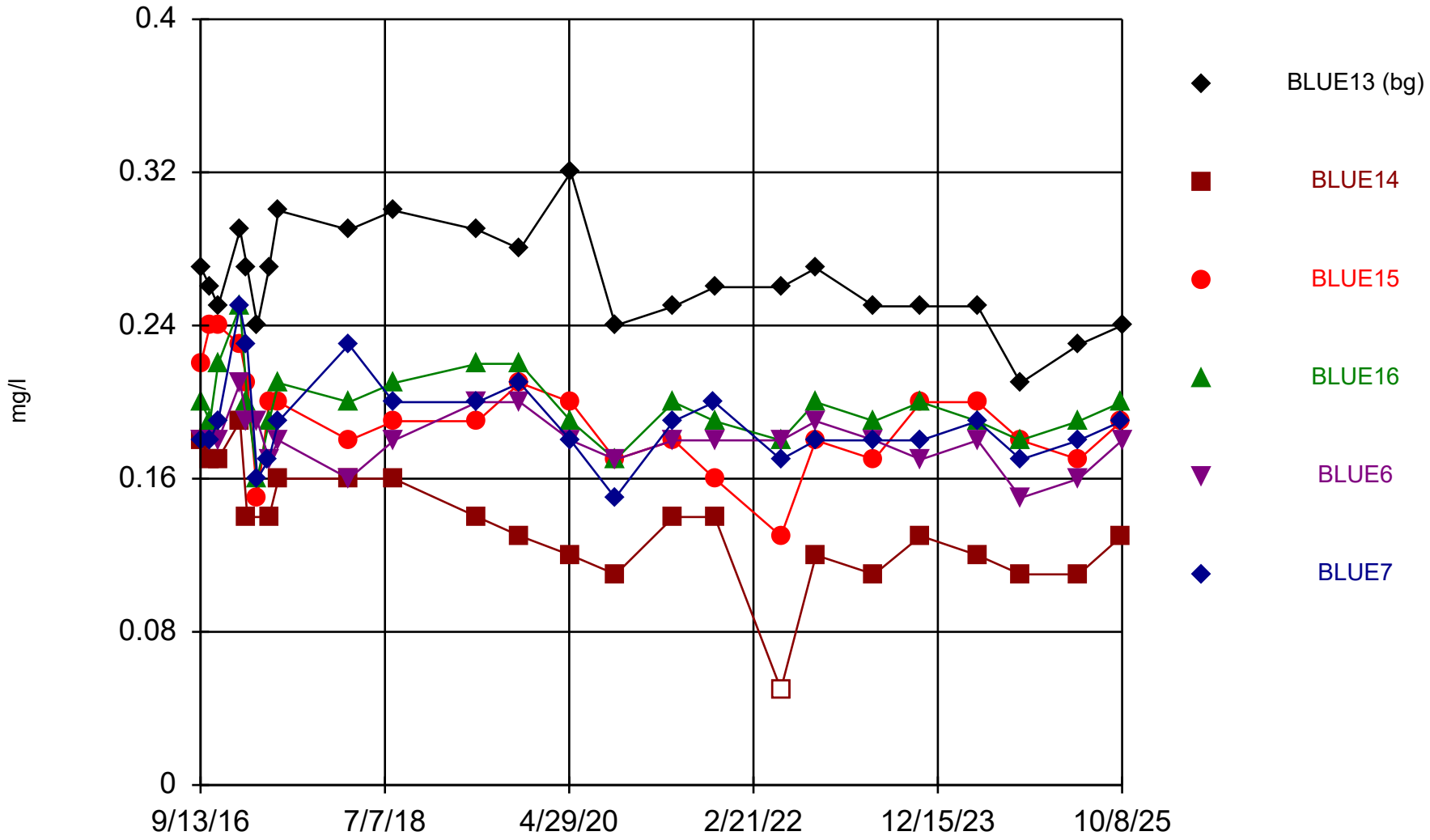


Time Series Analysis Run 11/14/2025 3:49 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.1.02 Software licensed to Barr Engineering Company. UG
Hollow symbols indicate censored values.

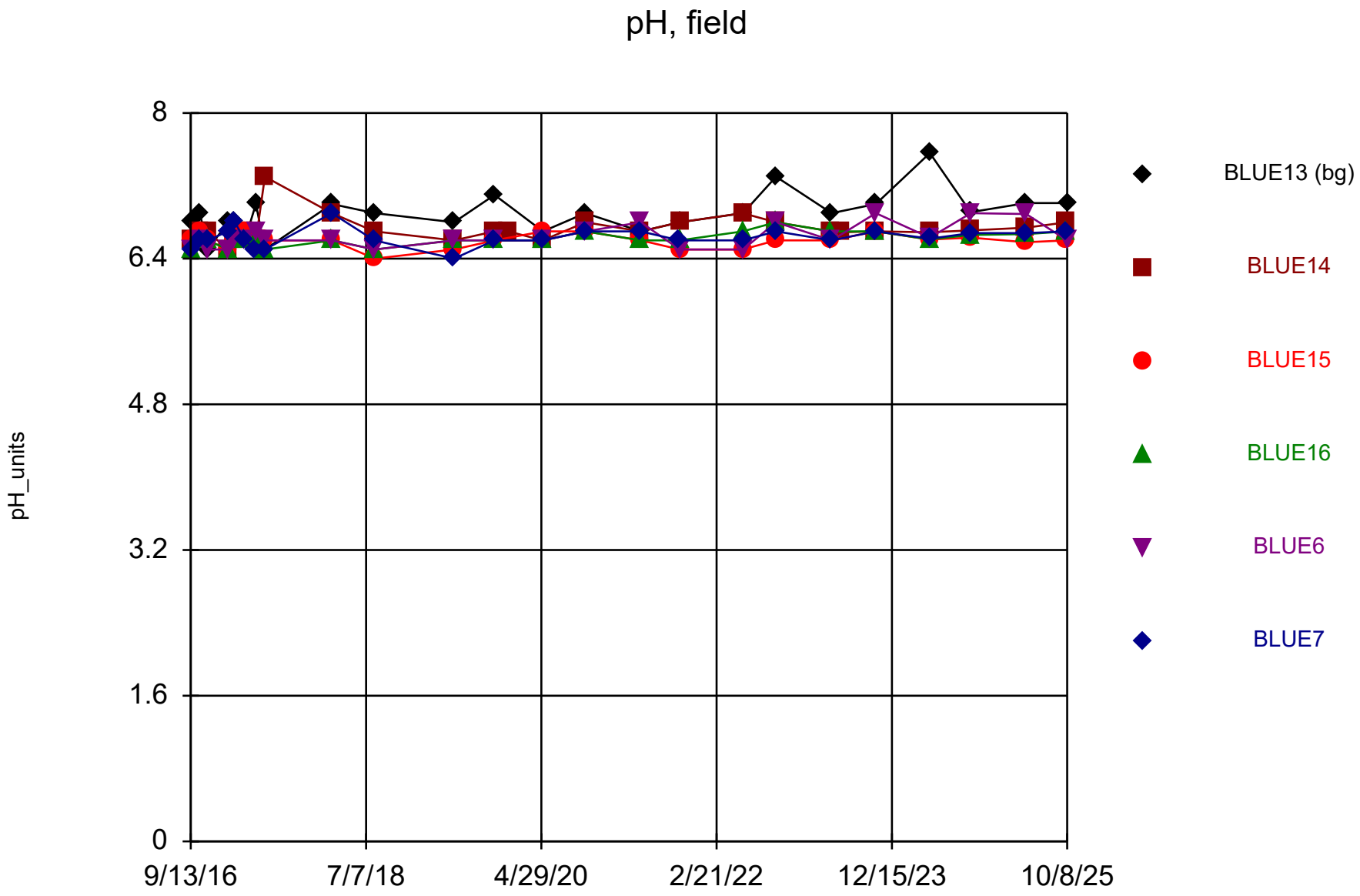
Fluoride



Time Series Analysis Run 11/14/2025 3:49 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.1.02 Software licensed to Barr Engineering Company. UG

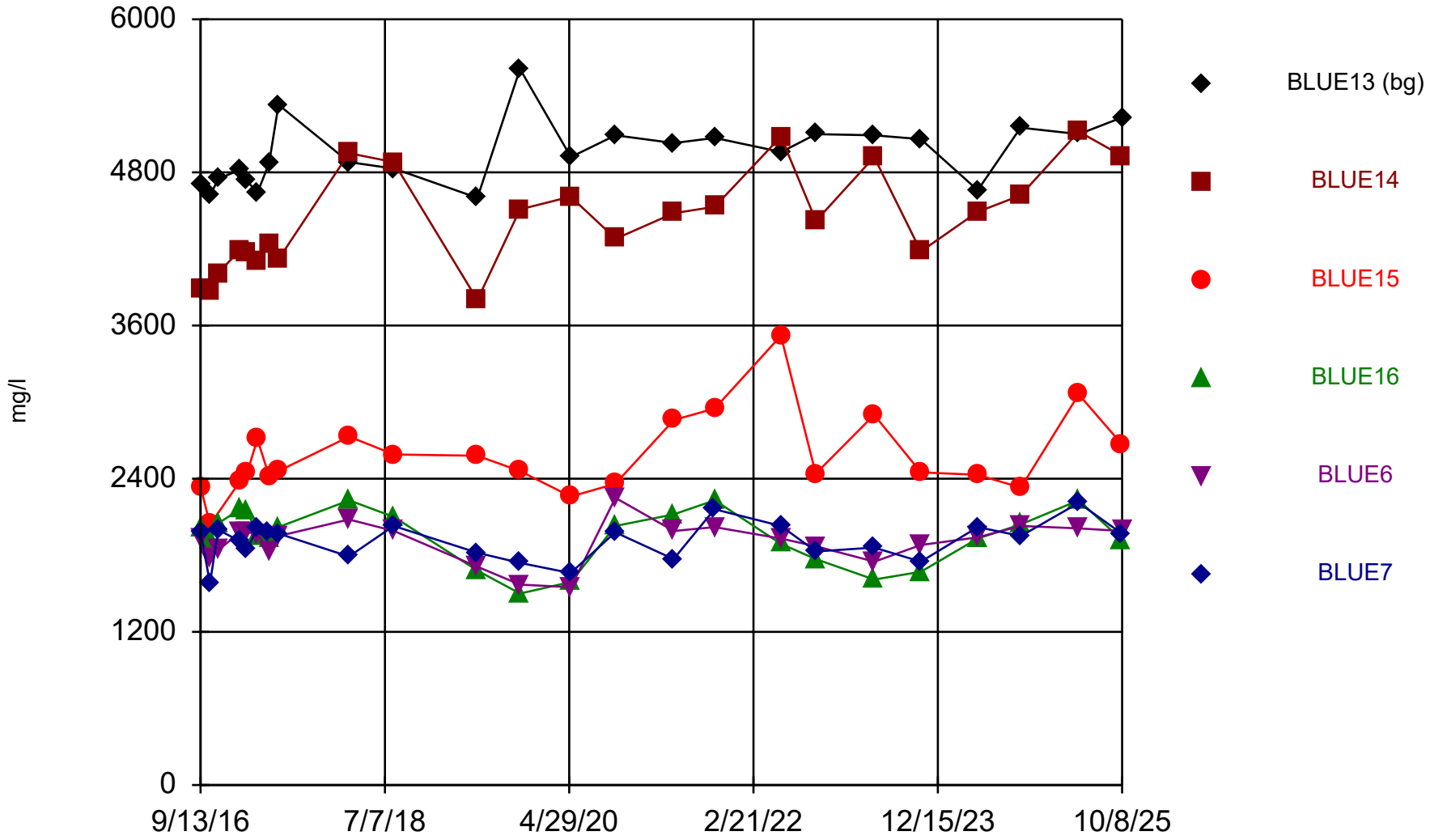


Time Series Analysis Run 11/14/2025 3:49 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.1.02 Software licensed to Barr Engineering Company. UG

Solids, total dissolved



Time Series Analysis Run 11/14/2025 3:49 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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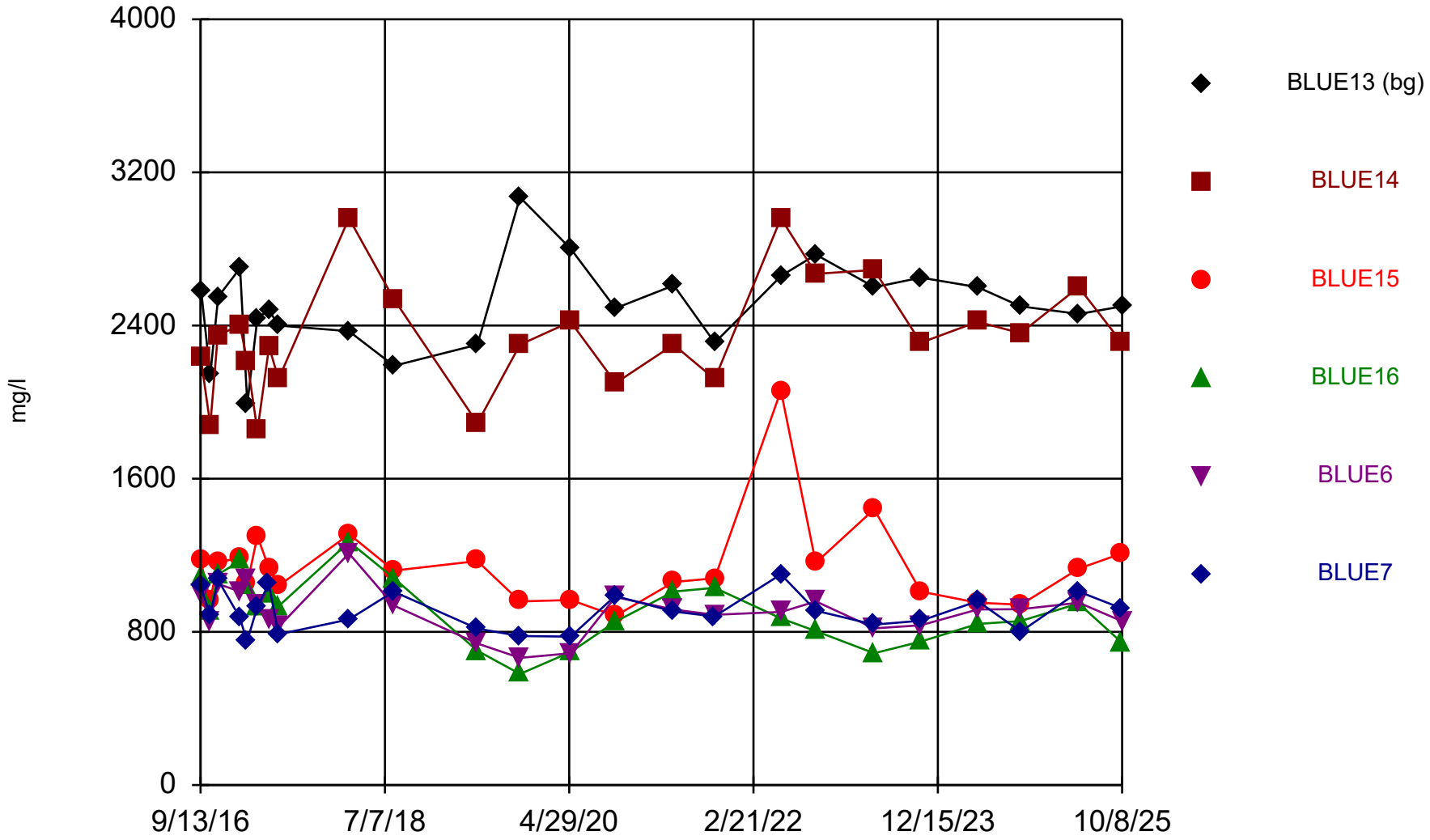
Sulfate, as SO4



Time Series Analysis Run 11/14/2025 3:49 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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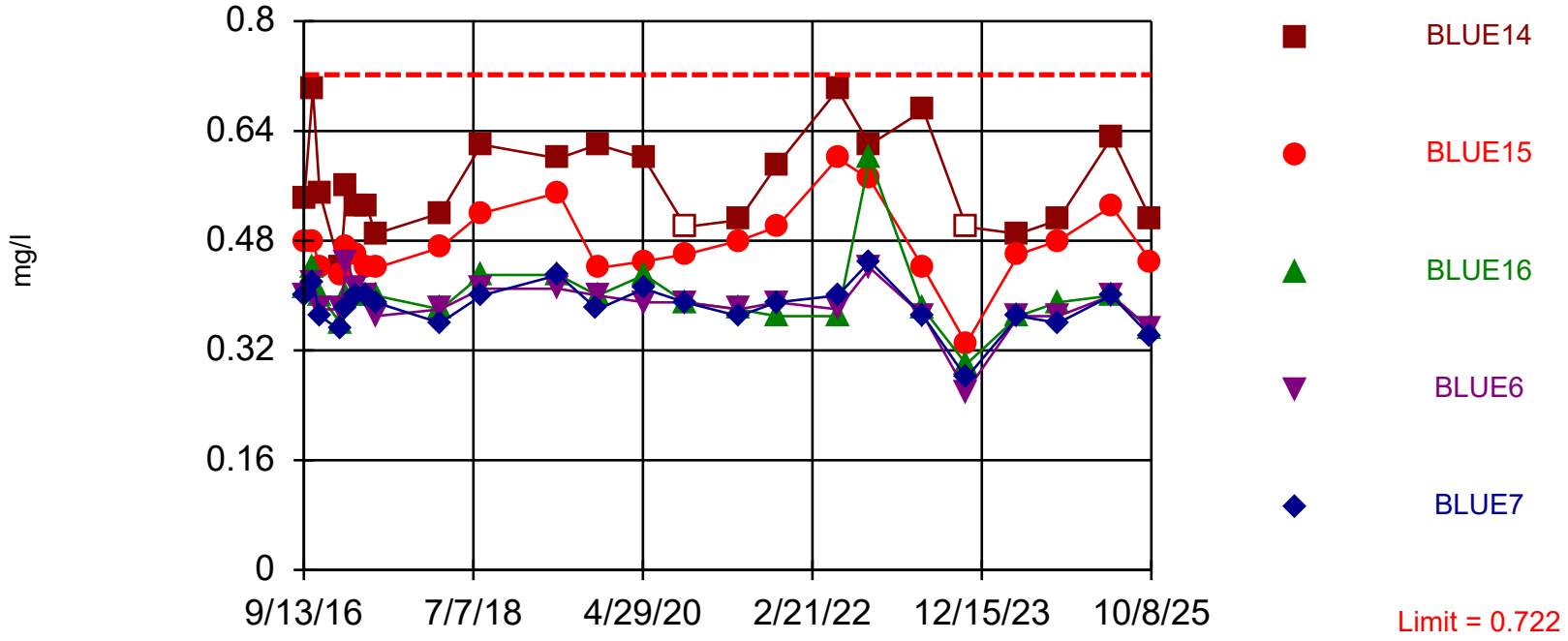
Hollow symbols indicate censored values.

Within Limit

Boron, total

Interwell Parametric

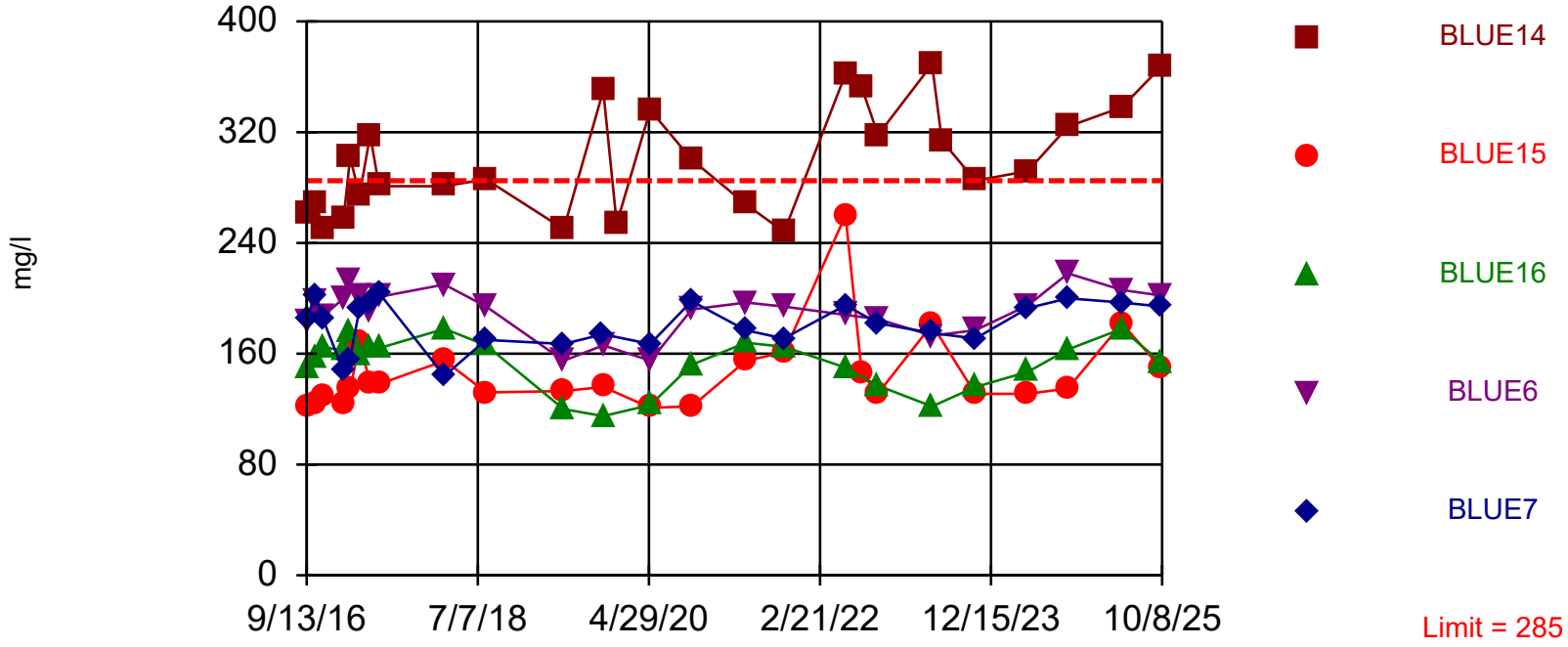


Background Data Summary (based on natural log transformation) (after Kaplan-Meier Adjustment): Mean=-0.6711, Std. Dev.=0.1686, n=20, 20% NDs. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9181, critical = 0.905. Kappa = 2.048 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001504. Comparing 5 points to limit.

Exceeds Limit: BLUE14

Calcium, total

Interwell Parametric

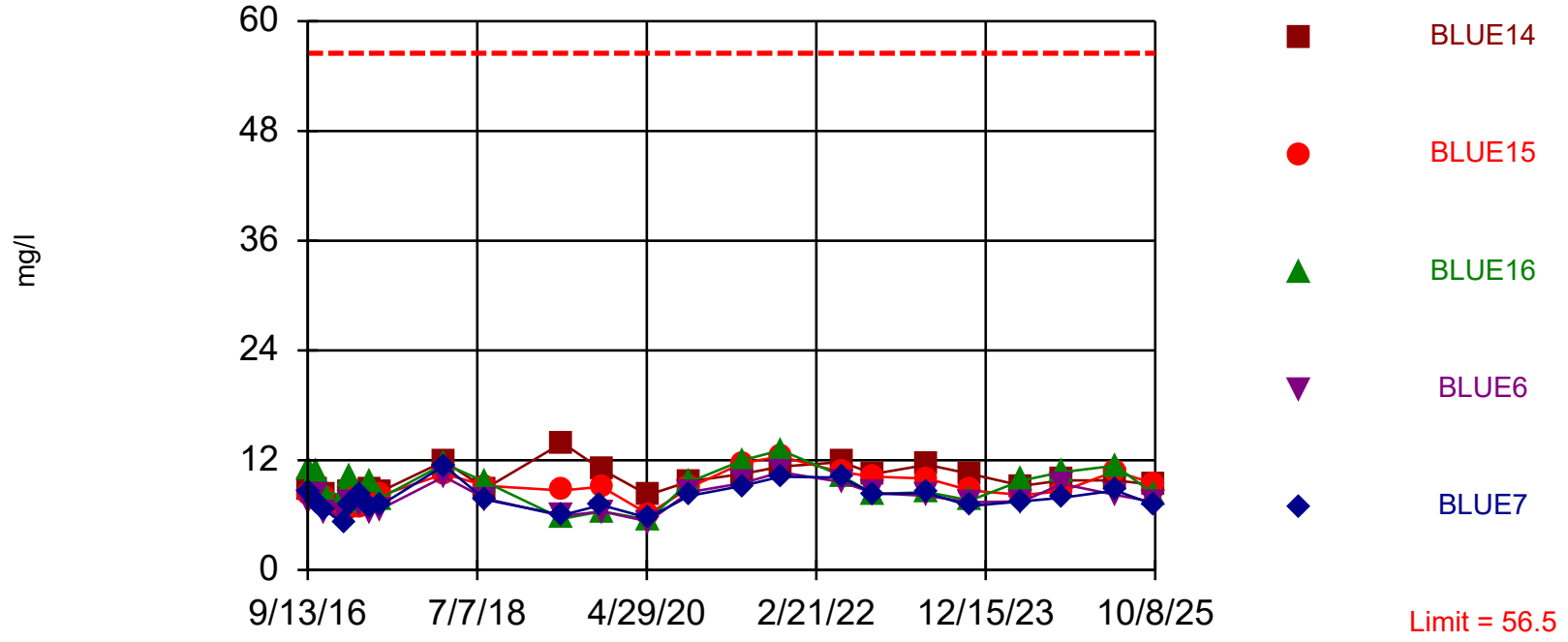


Background Data Summary (based on natural log transformation): Mean=4.969, Std. Dev.=0.3335, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9576, critical = 0.905. Kappa = 2.048 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001504. Comparing 5 points to limit.

Within Limit

Chloride

Interwell Parametric



Background Data Summary: Mean=38.02, Std. Dev.=9.014, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9474, critical = 0.905. Kappa = 2.048 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001504. Comparing 5 points to limit.

Prediction Limit Analysis Run 11/14/2025 3:51 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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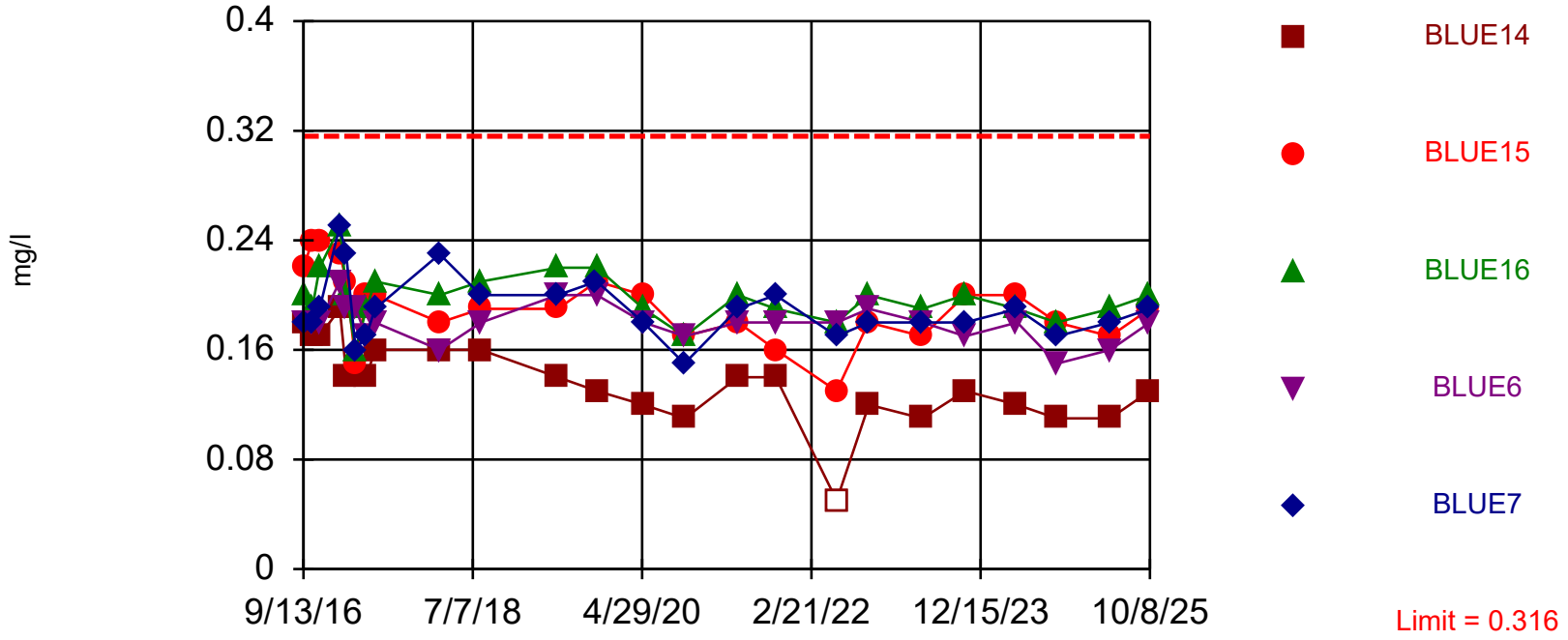
Hollow symbols indicate censored values.

Within Limit

Fluoride

Interwell Parametric



Background Data Summary: Mean=0.2705, Std. Dev.=0.02212, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9414, critical = 0.905. Kappa = 2.048 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001504. Comparing 5 points to limit.

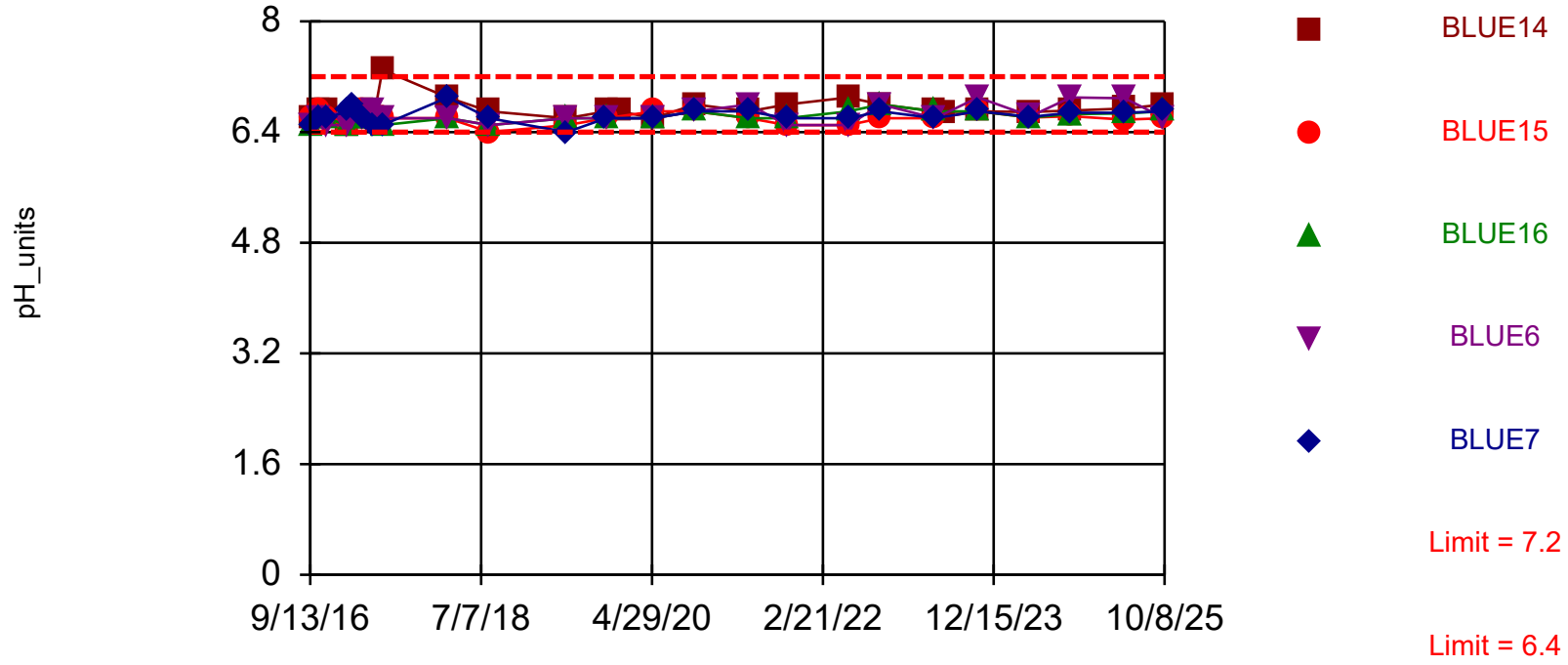
Prediction Limit Analysis Run 11/14/2025 3:51 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Within Limits

pH, field

Interwell Parametric

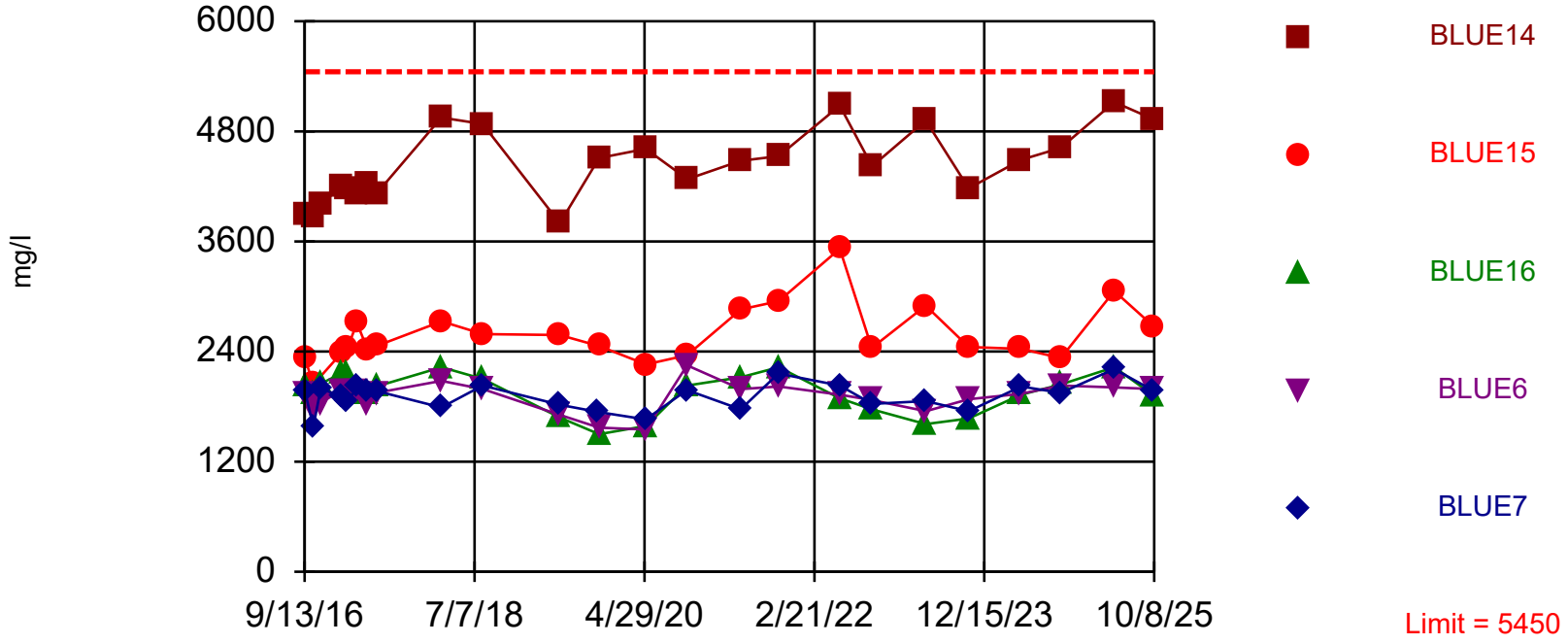


Background Data Summary: Mean=6.845, Std. Dev.=0.1932, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9554, critical = 0.905. Kappa = 2.048 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.000752. Comparing 5 points to limit.

Within Limit

Solids, total dissolved

Interwell Parametric



Background Data Summary: Mean=4935, Std. Dev.=250.5, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9278, critical = 0.905. Kappa = 2.048 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001504. Comparing 5 points to limit.

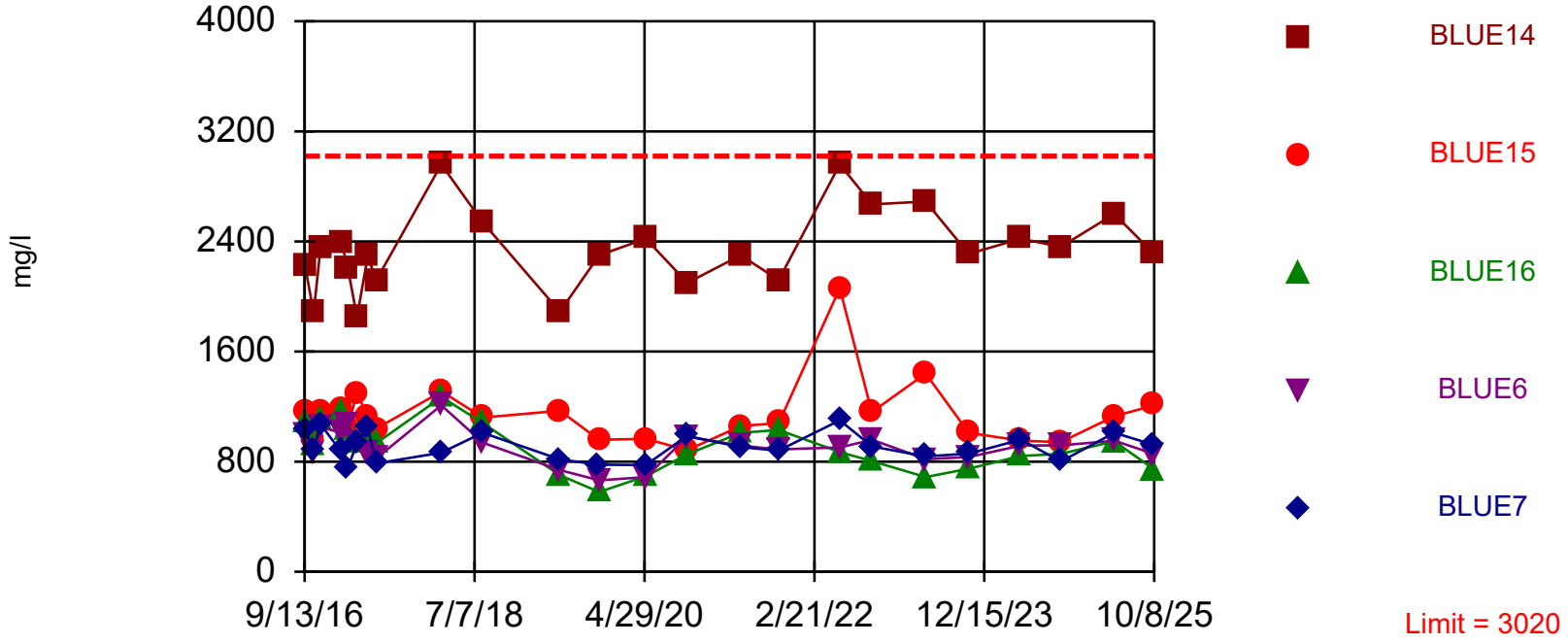
Prediction Limit Analysis Run 11/14/2025 3:51 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Within Limit

Sulfate, as SO4

Interwell Parametric



Background Data Summary: Mean=2505, Std. Dev.=251.2, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9896, critical = 0.905. Kappa = 2.048 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.001504. Comparing 5 points to limit.

Prediction Limit Analysis Run 11/14/2025 3:52 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Prediction Limit

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat Printed 11/14/2025, 3:53 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron, total (mg/l)	BLUE14	0.722	n/a	10/7/2025	0.51	No	20	20	ln(x)	0.001504	Param Inter 1 of 2
Boron, total (mg/l)	BLUE15	0.722	n/a	10/7/2025	0.45	No	20	20	ln(x)	0.001504	Param Inter 1 of 2
Boron, total (mg/l)	BLUE16	0.722	n/a	10/7/2025	0.35	No	20	20	ln(x)	0.001504	Param Inter 1 of 2
Boron, total (mg/l)	BLUE6	0.722	n/a	10/8/2025	0.35	No	20	20	ln(x)	0.001504	Param Inter 1 of 2
Boron, total (mg/l)	BLUE7	0.722	n/a	10/7/2025	0.34	No	20	20	ln(x)	0.001504	Param Inter 1 of 2
Calcium, total (mg/l)	**BLUE14**	**285**	**n/a**	**10/7/2025**	**368**	**Yes**	**20**	**0**	**ln(x)**	**0.001504**	**Param Inter 1 of 2**
Calcium, total (mg/l)	BLUE15	285	n/a	10/7/2025	149	No	20	0	ln(x)	0.001504	Param Inter 1 of 2
Calcium, total (mg/l)	BLUE16	285	n/a	10/7/2025	153	No	20	0	ln(x)	0.001504	Param Inter 1 of 2
Calcium, total (mg/l)	BLUE6	285	n/a	10/8/2025	202	No	20	0	ln(x)	0.001504	Param Inter 1 of 2
Calcium, total (mg/l)	BLUE7	285	n/a	10/7/2025	194	No	20	0	ln(x)	0.001504	Param Inter 1 of 2
Chloride (mg/l)	BLUE14	56.5	n/a	10/7/2025	9.3	No	20	0	No	0.001504	Param Inter 1 of 2
Chloride (mg/l)	BLUE15	56.5	n/a	10/7/2025	9.4	No	20	0	No	0.001504	Param Inter 1 of 2
Chloride (mg/l)	BLUE16	56.5	n/a	10/7/2025	8.2	No	20	0	No	0.001504	Param Inter 1 of 2
Chloride (mg/l)	BLUE6	56.5	n/a	10/8/2025	7.4	No	20	0	No	0.001504	Param Inter 1 of 2
Chloride (mg/l)	BLUE7	56.5	n/a	10/7/2025	7.1	No	20	0	No	0.001504	Param Inter 1 of 2
Fluoride (mg/l)	BLUE14	0.316	n/a	10/7/2025	0.13	No	20	0	No	0.001504	Param Inter 1 of 2
Fluoride (mg/l)	BLUE15	0.316	n/a	10/7/2025	0.19	No	20	0	No	0.001504	Param Inter 1 of 2
Fluoride (mg/l)	BLUE16	0.316	n/a	10/7/2025	0.2	No	20	0	No	0.001504	Param Inter 1 of 2
Fluoride (mg/l)	BLUE6	0.316	n/a	10/8/2025	0.18	No	20	0	No	0.001504	Param Inter 1 of 2
Fluoride (mg/l)	BLUE7	0.316	n/a	10/7/2025	0.19	No	20	0	No	0.001504	Param Inter 1 of 2
pH, field (pH_units)	BLUE14	7.2	6.4	10/7/2025	6.8	No	20	0	No	0.000752	Param Inter 1 of 2
pH, field (pH_units)	BLUE15	7.2	6.4	10/7/2025	6.6	No	20	0	No	0.000752	Param Inter 1 of 2
pH, field (pH_units)	BLUE16	7.2	6.4	10/7/2025	6.7	No	20	0	No	0.000752	Param Inter 1 of 2
pH, field (pH_units)	BLUE6	7.2	6.4	10/8/2025	6.6	No	20	0	No	0.000752	Param Inter 1 of 2
pH, field (pH_units)	BLUE7	7.2	6.4	10/7/2025	6.7	No	20	0	No	0.000752	Param Inter 1 of 2
Solids, total dissolved (mg/l)	BLUE14	5450	n/a	10/7/2025	4930	No	20	0	No	0.001504	Param Inter 1 of 2
Solids, total dissolved (mg/l)	BLUE15	5450	n/a	10/7/2025	2670	No	20	0	No	0.001504	Param Inter 1 of 2
Solids, total dissolved (mg/l)	BLUE16	5450	n/a	10/7/2025	1920	No	20	0	No	0.001504	Param Inter 1 of 2
Solids, total dissolved (mg/l)	BLUE6	5450	n/a	10/8/2025	1990	No	20	0	No	0.001504	Param Inter 1 of 2
Solids, total dissolved (mg/l)	BLUE7	5450	n/a	10/7/2025	1970	No	20	0	No	0.001504	Param Inter 1 of 2
Sulfate, as SO4 (mg/l)	BLUE14	3020	n/a	10/7/2025	2310	No	20	0	No	0.001504	Param Inter 1 of 2
Sulfate, as SO4 (mg/l)	BLUE15	3020	n/a	10/7/2025	1210	No	20	0	No	0.001504	Param Inter 1 of 2
Sulfate, as SO4 (mg/l)	BLUE16	3020	n/a	10/7/2025	744	No	20	0	No	0.001504	Param Inter 1 of 2
Sulfate, as SO4 (mg/l)	BLUE6	3020	n/a	10/8/2025	855	No	20	0	No	0.001504	Param Inter 1 of 2
Sulfate, as SO4 (mg/l)	BLUE7	3020	n/a	10/7/2025	922	No	20	0	No	0.001504	Param Inter 1 of 2

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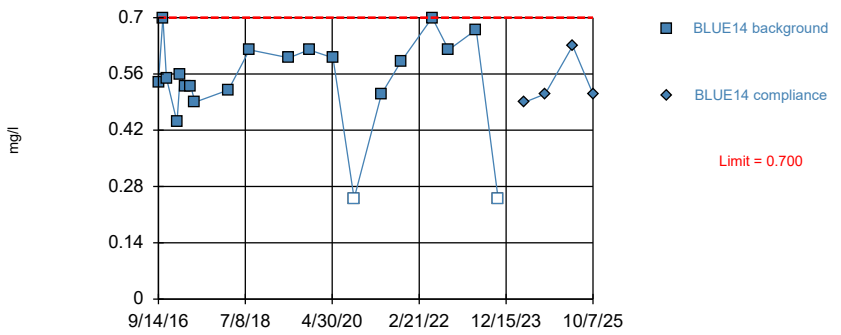
Hollow symbols indicate censored values.

Within Limit

Boron, total

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 20 background values. 10% NDs. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Seasonality was not detected with 95% confidence.

Prediction Limit Analysis Run 11/14/2025 4:00 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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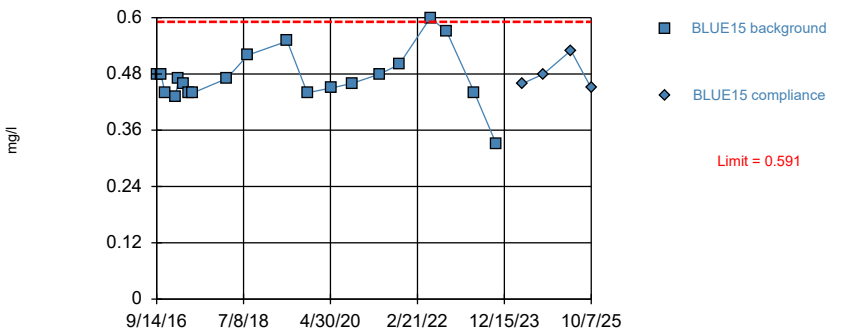
Within Limit

Boron, total

Intrawell Parametric



Background Data Summary: Mean=0.4725, Std. Dev.=0.05766, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9107, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:00 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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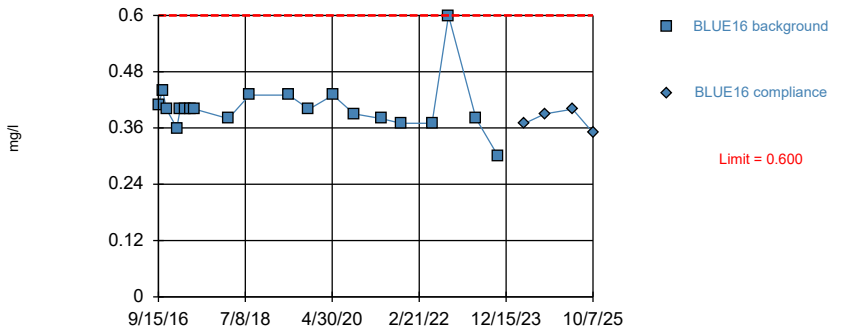
Within Limit

Boron, total

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 20 background values. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Seasonality was not detected with 95% confidence.

Prediction Limit Analysis Run 11/14/2025 4:00 PM View: A_3

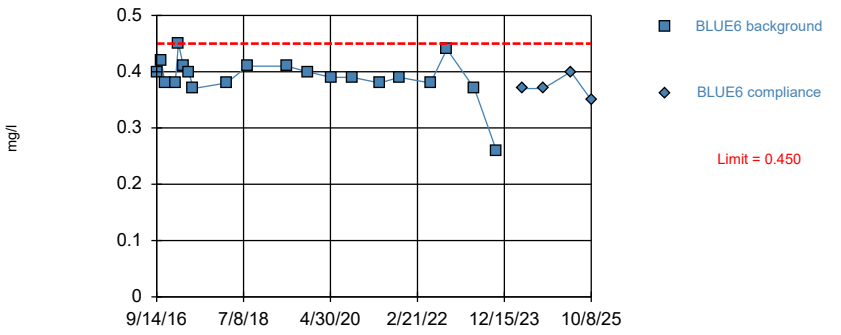
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.1.02 Software licensed to Barr Engineering Company. UG

Within Limit

Boron, total

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 20 background values. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Seasonality was not detected with 95% confidence.

Prediction Limit Analysis Run 11/14/2025 4:00 PM View: A_3

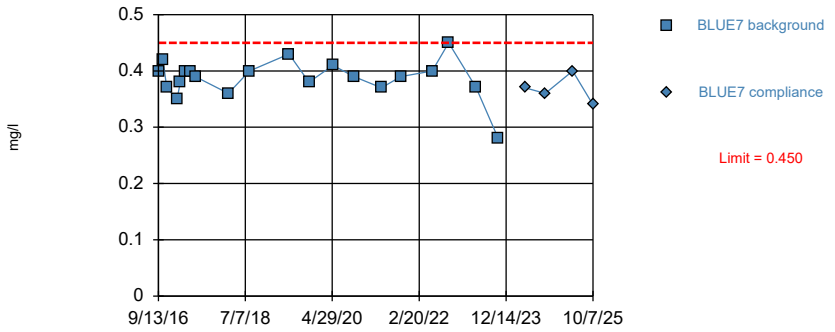
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.1.02 Software licensed to Barr Engineering Company. UG

Within Limit

Boron, total

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 20 background values. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Seasonality was not detected with 95% confidence.

Prediction Limit Analysis Run 11/14/2025 4:00 PM View: A_3

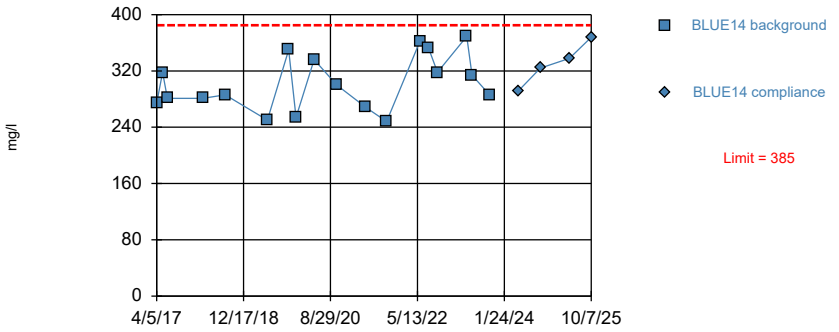
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.1.02 Software licensed to Barr Engineering Company. UG

Within Limit

Calcium, total

Intrawell Parametric



Background Data Summary: Mean=302.6, Std. Dev.=39.1, n=18. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9389, critical = 0.897. Kappa = 2.104 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:00 PM View: A_3

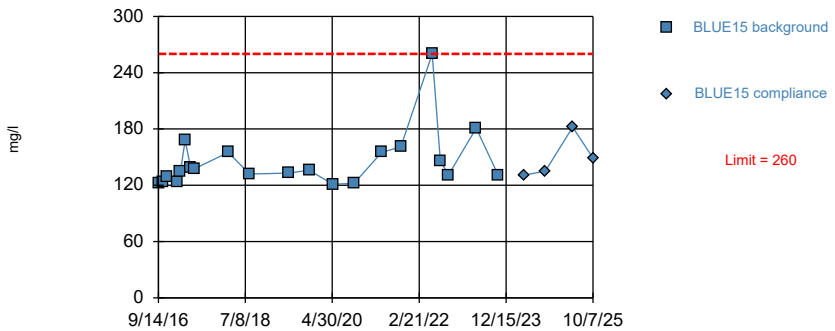
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.1.02 Software licensed to Barr Engineering Company. UG

Within Limit

Calcium, total

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 21 background values. Well-constituent pair annual alpha = 0.007982. Individual comparison alpha = 0.003999 (1 of 2). Seasonality was not detected with 95% confidence.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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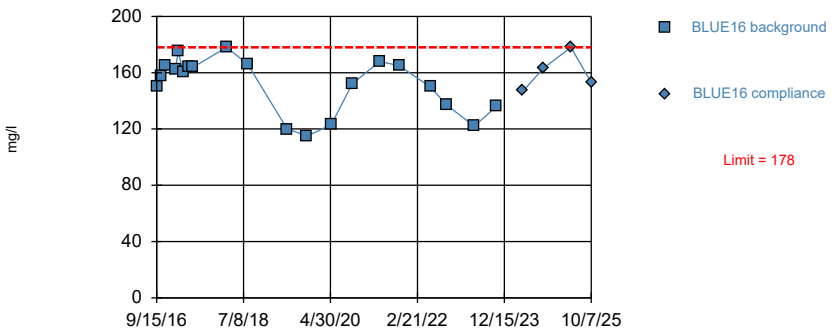
Within Limit

Calcium, total

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 20 background values. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Seasonality was not detected with 95% confidence.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

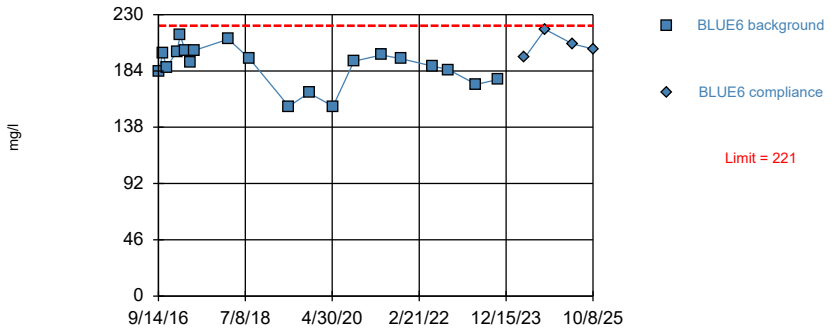
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.1.02 Software licensed to Barr Engineering Company. UG

Within Limit

Calcium, total

Intrawell Parametric



Background Data Summary: Mean=188.1, Std. Dev.=16.06, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9337, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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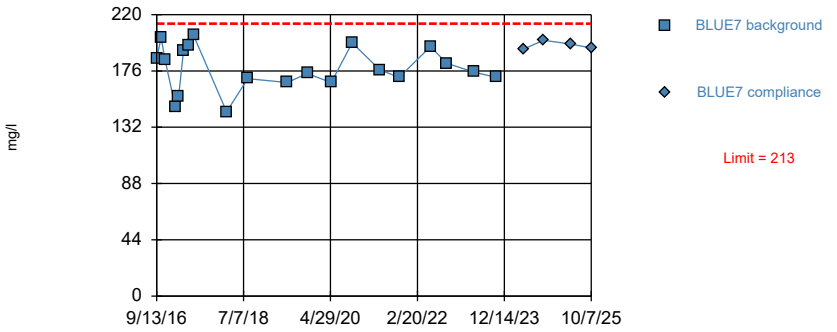
Within Limit

Calcium, total

Intrawell Parametric



Background Data Summary: Mean=178, Std. Dev.=17.11, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9611, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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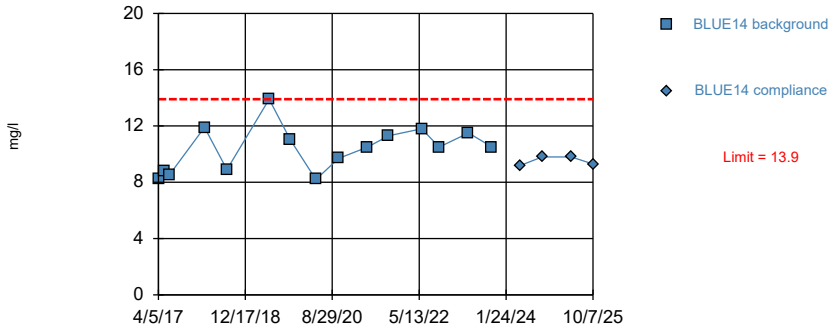
Within Limit

Chloride

Intrawell Parametric



Background Data Summary: Mean=10.35, Std. Dev.=1.635, n=15. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9392, critical = 0.881. Kappa = 2.193 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

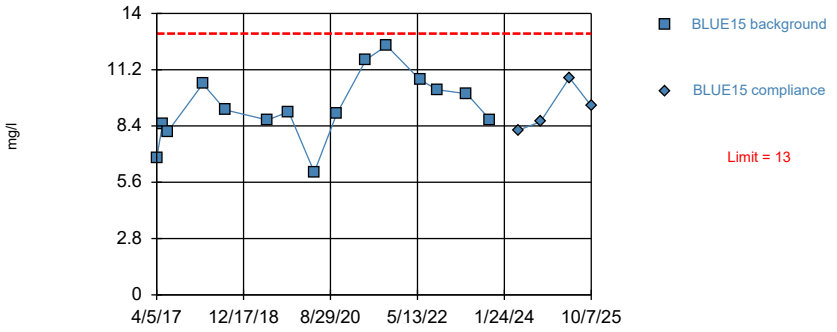
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.1.02 Software licensed to Barr Engineering Company. UG

Within Limit

Chloride

Intrawell Parametric



Background Data Summary: Mean=9.313, Std. Dev.=1.68, n=15. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9779, critical = 0.881. Kappa = 2.193 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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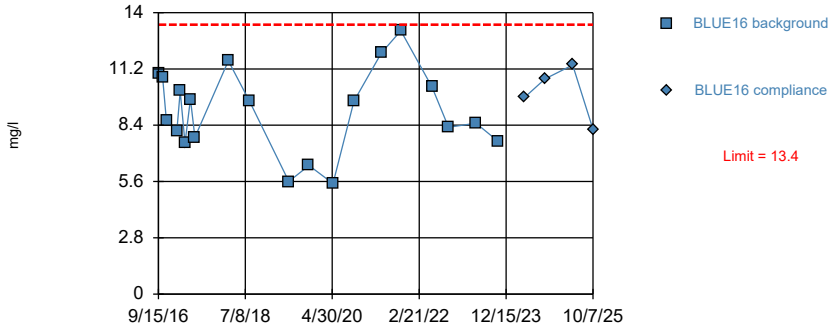
Within Limit

Chloride

Intrawell Parametric



Background Data Summary: Mean=9.085, Std. Dev.=2.074, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9808, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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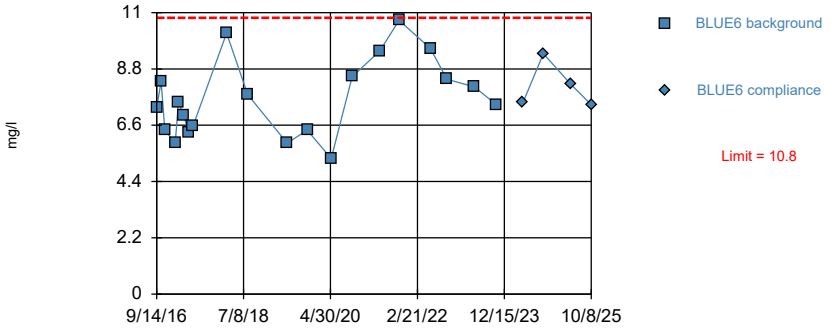
Within Limit

Chloride

Intrawell Parametric



Background Data Summary: Mean=7.655, Std. Dev.=1.509, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9602, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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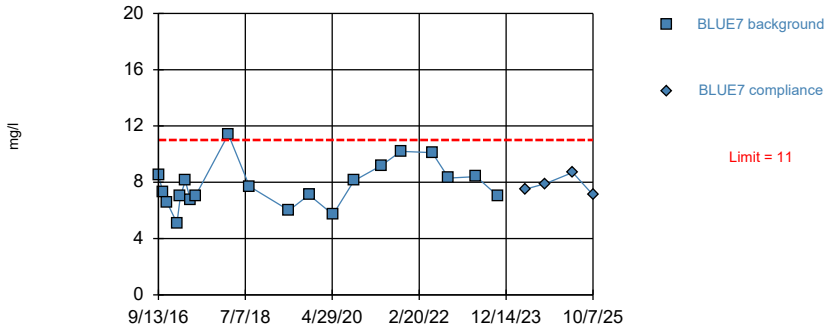
Within Limit

Chloride

Intrawell Parametric



Background Data Summary: Mean=7.775, Std. Dev.=1.581, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9647, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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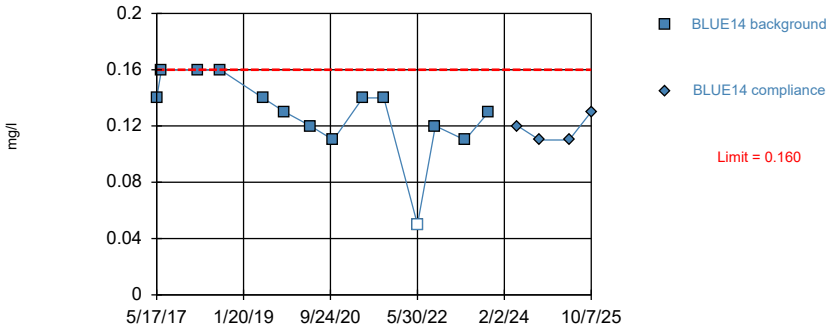
Hollow symbols indicate censored values.

Within Limit

Fluoride

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 14 background values. 7.143% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2). Seasonality was not detected with 95% confidence.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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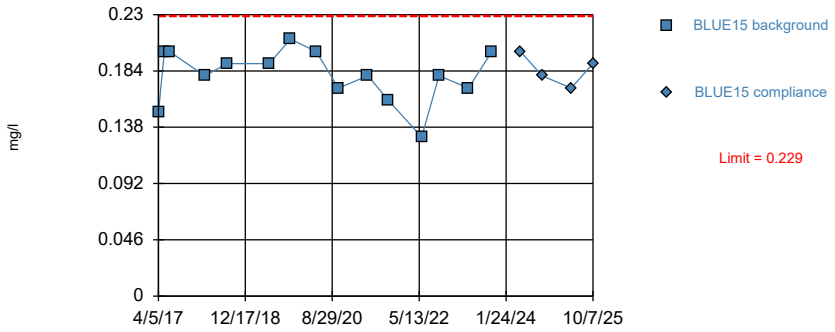
Within Limit

Fluoride

Intrawell Parametric



Background Data Summary: Mean=0.1807, Std. Dev.=0.02187, n=15. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9257, critical = 0.881. Kappa = 2.193 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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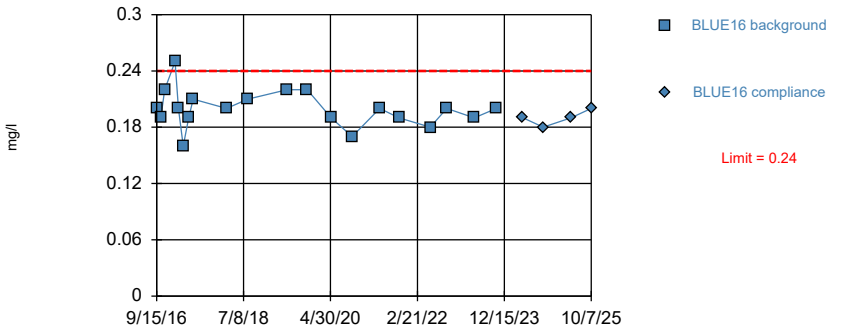
Within Limit

Fluoride

Intrawell Parametric



Background Data Summary: Mean=0.1995, Std. Dev.=0.01959, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.943, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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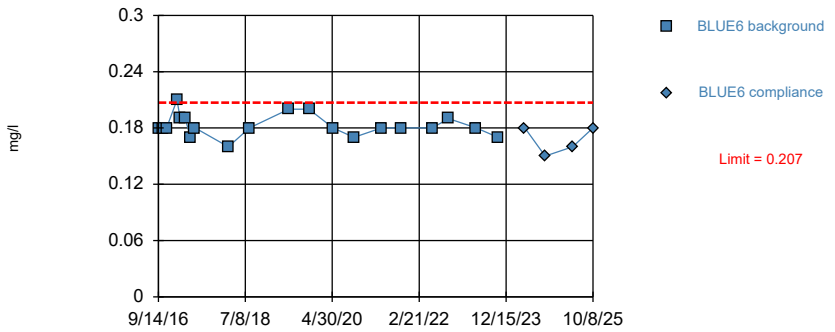
Within Limit

Fluoride

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=-1.703, Std. Dev.=0.06307, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9091, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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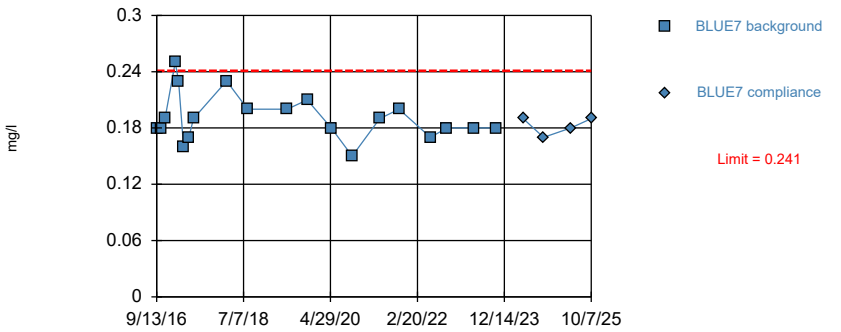
Within Limit

Fluoride

Intrawell Parametric



Background Data Summary: Mean=0.191, Std. Dev.=0.02447, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9302, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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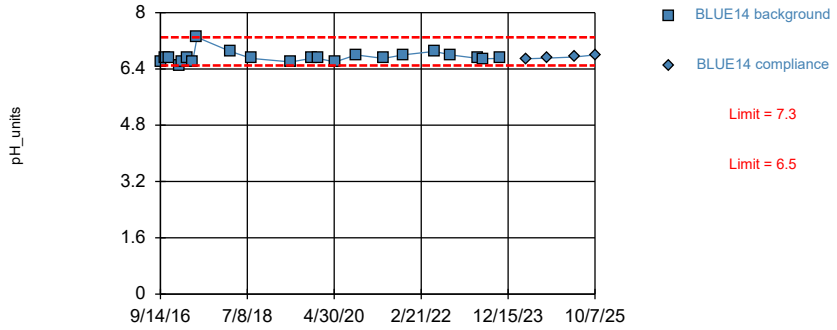
Within Limits

pH, field

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 22 background values. Well-constituent pair annual alpha = 0.0148. Individual comparison alpha = 0.007415 (1 of 2). Seasonality was not detected with 95% confidence.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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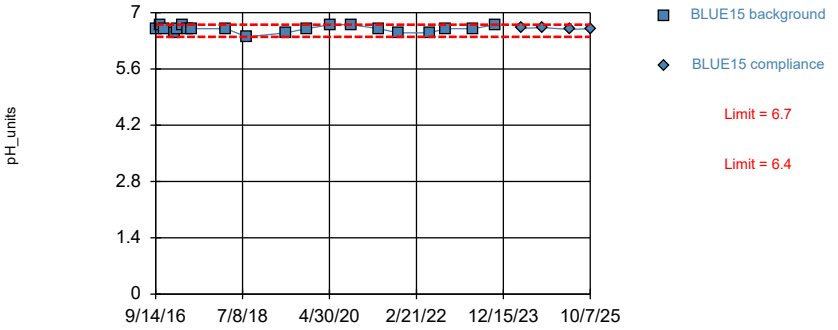
Within Limits

pH, field

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 20 background values. Well-constituent pair annual alpha = 0.01713. Individual comparison alpha = 0.008582 (1 of 2). Seasonality was not detected with 95% confidence.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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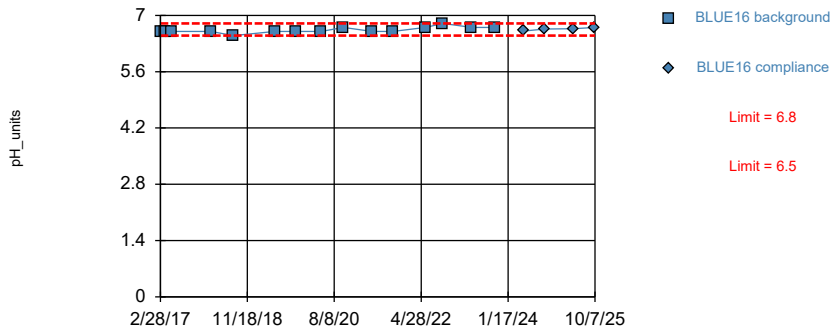
Within Limits

pH, field

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 15 background values. Well-constituent pair annual alpha = 0.03002. Individual comparison alpha = 0.01507 (1 of 2). Seasonality was not detected with 95% confidence.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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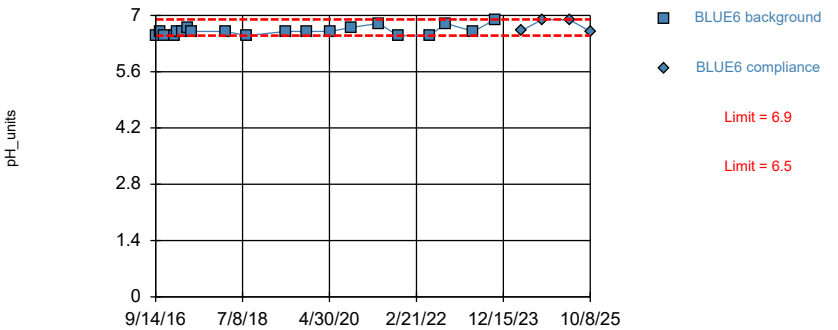
Within Limits

pH, field

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limits are highest and lowest of 20 background values. Well-constituent pair annual alpha = 0.01713. Individual comparison alpha = 0.008582 (1 of 2). Seasonality was not detected with 95% confidence.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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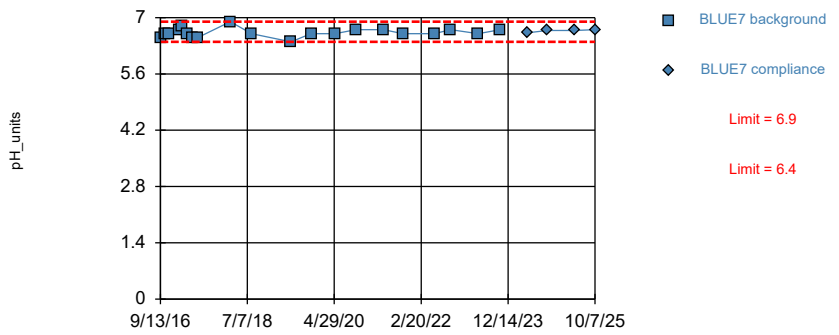
Within Limits

pH, field

Intrawell Parametric



Background Data Summary: Mean=6.625, Std. Dev.=0.1118, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9158, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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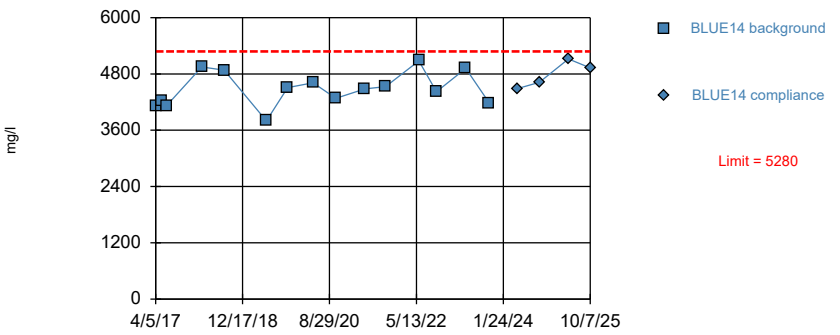
Within Limit

Solids, total dissolved

Intrawell Parametric



Background Data Summary: Mean=4474, Std. Dev.=365.9, n=15. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9636, critical = 0.881. Kappa = 2.193 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

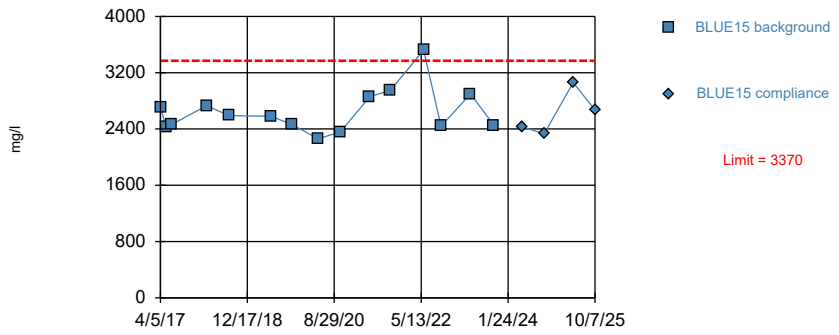
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.1.02 Software licensed to Barr Engineering Company. UG

Within Limit

Solids, total dissolved

Intrawell Parametric



Background Data Summary (based on natural log transformation): Mean=7.875, Std. Dev.=0.113, n=15. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9051, critical = 0.881. Kappa = 2.193 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

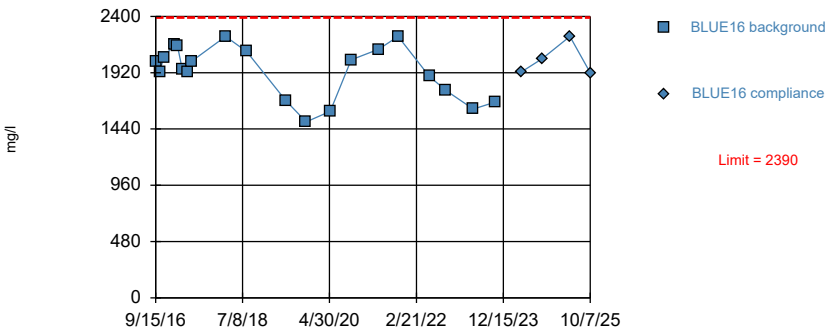
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.1.02 Software licensed to Barr Engineering Company. UG

Within Limit

Solids, total dissolved

Intrawell Parametric



Background Data Summary: Mean=1931, Std. Dev.=223.1, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9311, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

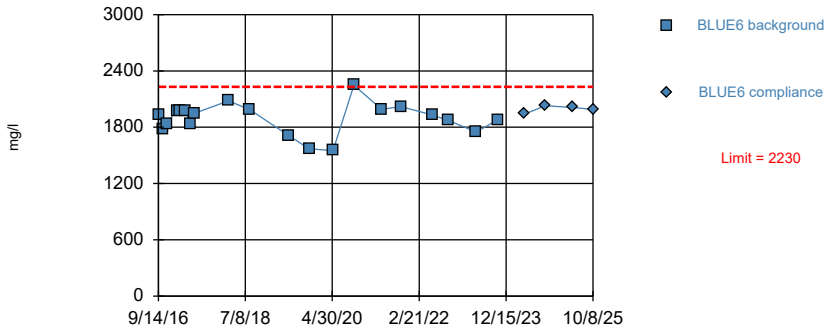
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.1.02 Software licensed to Barr Engineering Company. UG

Within Limit

Solids, total dissolved

Intrawell Parametric



Background Data Summary: Mean=1893, Std. Dev.=165.5, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.953, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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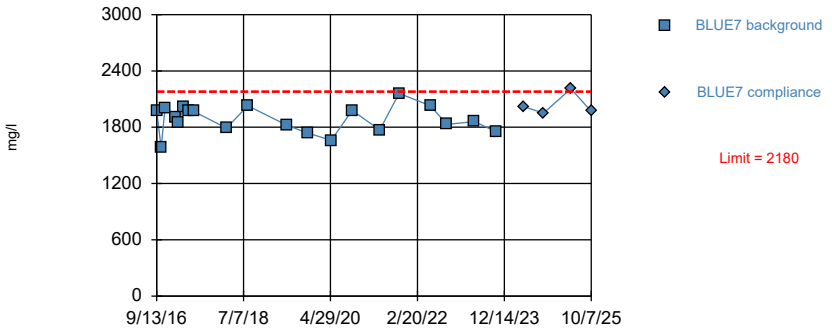
Within Limit

Solids, total dissolved

Intrawell Parametric



Background Data Summary: Mean=1885, Std. Dev.=144.3, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9675, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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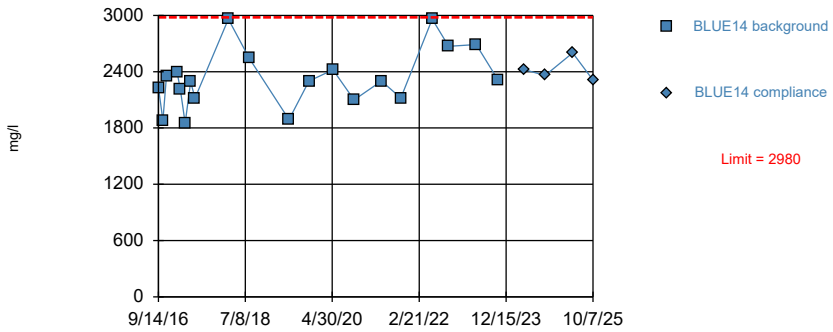
Within Limit

Sulfate, as SO4

Intrawell Parametric



Background Data Summary: Mean=2330, Std. Dev.=315.6, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9429, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

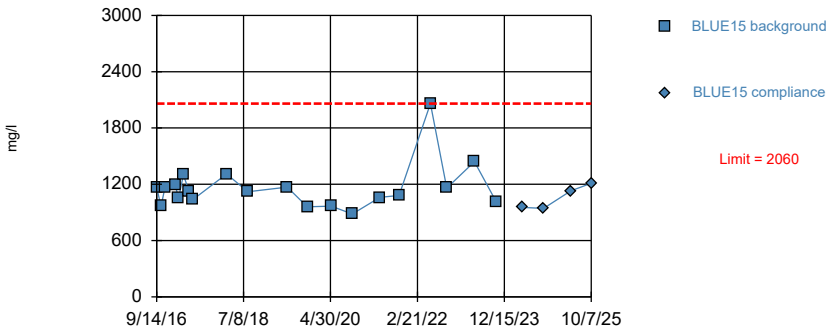
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.1.02 Software licensed to Barr Engineering Company. UG

Within Limit

Sulfate, as SO4

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.05 alpha level. Limit is highest of 20 background values. Well-constituent pair annual alpha = 0.008564. Individual comparison alpha = 0.004291 (1 of 2). Seasonality was not detected with 95% confidence.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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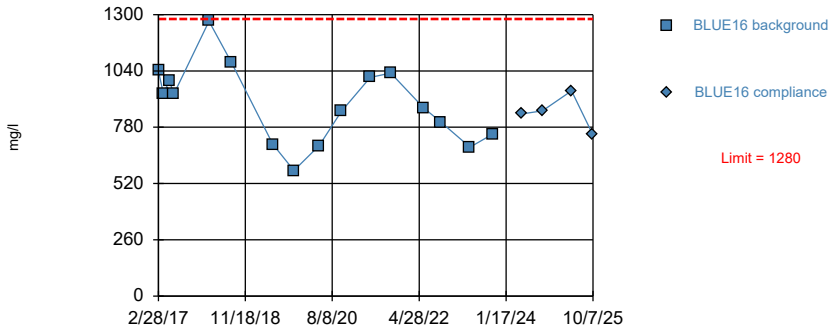
Within Limit

Sulfate, as SO4

Intrawell Parametric



Background Data Summary: Mean=889.5, Std. Dev.=181, n=16. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9733, critical = 0.887. Kappa = 2.15 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

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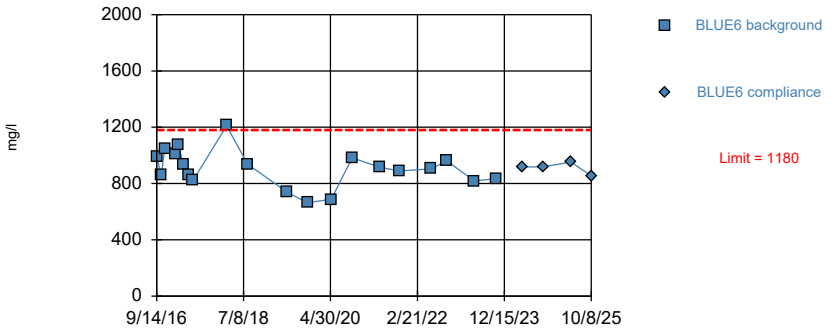
Within Limit

Sulfate, as SO4

Intrawell Parametric



Background Data Summary: Mean=907.3, Std. Dev.=131.2, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9824, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

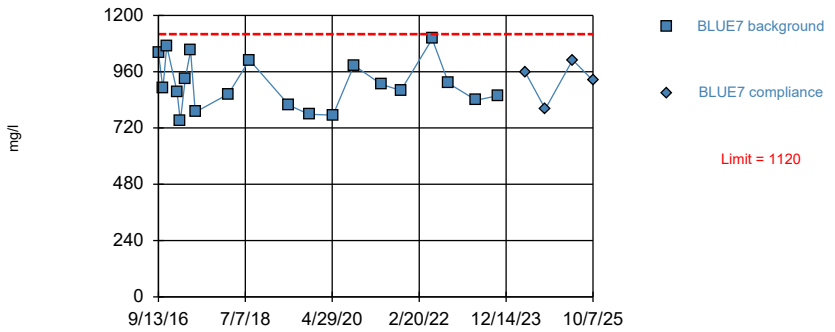
Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Sanitas™ v.10.1.02 Software licensed to Barr Engineering Company. UG

Within Limit

Sulfate, as SO4

Intrawell Parametric



Background Data Summary: Mean=905.8, Std. Dev.=105.6, n=20. Seasonality was not detected with 95% confidence. Normality test: Shapiro Wilk @alpha = 0.05, calculated = 0.9452, critical = 0.905. Kappa = 2.058 (c=7, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.001504.

Prediction Limit Analysis Run 11/14/2025 4:01 PM View: A_3

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat

Prediction Limit

Coyote Station Client: Barr Engineering Company Data: Coyote_Blue-Pit_Sanitas_CCR flat Printed 11/14/2025, 4:03 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Boron, total (mg/l)	BLUE14	0.700	n/a	10/7/2025	0.51	No	20	10	n/a	0.004291	NP Intra (normality) ...
Boron, total (mg/l)	BLUE15	0.591	n/a	10/7/2025	0.45	No	20	0	No	0.001504	Param Intra 1 of 2
Boron, total (mg/l)	BLUE16	0.600	n/a	10/7/2025	0.35	No	20	0	n/a	0.004291	NP Intra (normality) ...
Boron, total (mg/l)	BLUE6	0.450	n/a	10/8/2025	0.35	No	20	0	n/a	0.004291	NP Intra (normality) ...
Boron, total (mg/l)	BLUE7	0.450	n/a	10/7/2025	0.34	No	20	0	n/a	0.004291	NP Intra (normality) ...
Calcium, total (mg/l)	BLUE14	385	n/a	10/7/2025	368	No	18	0	No	0.001504	Param Intra 1 of 2
Calcium, total (mg/l)	BLUE15	260	n/a	10/7/2025	149	No	21	0	n/a	0.003999	NP Intra (normality) ...
Calcium, total (mg/l)	BLUE16	178	n/a	10/7/2025	153	No	20	0	n/a	0.004291	NP Intra (normality) ...
Calcium, total (mg/l)	BLUE6	221	n/a	10/8/2025	202	No	20	0	No	0.001504	Param Intra 1 of 2
Calcium, total (mg/l)	BLUE7	213	n/a	10/7/2025	194	No	20	0	No	0.001504	Param Intra 1 of 2
Chloride (mg/l)	BLUE14	13.9	n/a	10/7/2025	9.3	No	15	0	No	0.001504	Param Intra 1 of 2
Chloride (mg/l)	BLUE15	13	n/a	10/7/2025	9.4	No	15	0	No	0.001504	Param Intra 1 of 2
Chloride (mg/l)	BLUE16	13.4	n/a	10/7/2025	8.2	No	20	0	No	0.001504	Param Intra 1 of 2
Chloride (mg/l)	BLUE6	10.8	n/a	10/8/2025	7.4	No	20	0	No	0.001504	Param Intra 1 of 2
Chloride (mg/l)	BLUE7	11	n/a	10/7/2025	7.1	No	20	0	No	0.001504	Param Intra 1 of 2
Fluoride (mg/l)	BLUE14	0.160	n/a	10/7/2025	0.13	No	14	7.143	n/a	0.008612	NP Intra (normality) ...
Fluoride (mg/l)	BLUE15	0.229	n/a	10/7/2025	0.19	No	15	0	No	0.001504	Param Intra 1 of 2
Fluoride (mg/l)	BLUE16	0.24	n/a	10/7/2025	0.2	No	20	0	No	0.001504	Param Intra 1 of 2
Fluoride (mg/l)	BLUE6	0.207	n/a	10/8/2025	0.18	No	20	0	ln(x)	0.001504	Param Intra 1 of 2
Fluoride (mg/l)	BLUE7	0.241	n/a	10/7/2025	0.19	No	20	0	No	0.001504	Param Intra 1 of 2
pH, field (pH_units)	BLUE14	7.3	6.5	10/7/2025	6.8	No	22	0	n/a	0.007415	NP Intra (normality) ...
pH, field (pH_units)	BLUE15	6.7	6.4	10/7/2025	6.6	No	20	0	n/a	0.008582	NP Intra (normality) ...
pH, field (pH_units)	BLUE16	6.8	6.5	10/7/2025	6.7	No	15	0	n/a	0.01507	NP Intra (normality) ...
pH, field (pH_units)	BLUE6	6.9	6.5	10/8/2025	6.6	No	20	0	n/a	0.008582	NP Intra (normality) ...
pH, field (pH_units)	BLUE7	6.9	6.4	10/7/2025	6.7	No	20	0	No	0.000752	Param Intra 1 of 2
Solids, total dissolved (mg/l)	BLUE14	5280	n/a	10/7/2025	4930	No	15	0	No	0.001504	Param Intra 1 of 2
Solids, total dissolved (mg/l)	BLUE15	3370	n/a	10/7/2025	2670	No	15	0	ln(x)	0.001504	Param Intra 1 of 2
Solids, total dissolved (mg/l)	BLUE16	2390	n/a	10/7/2025	1920	No	20	0	No	0.001504	Param Intra 1 of 2
Solids, total dissolved (mg/l)	BLUE6	2230	n/a	10/8/2025	1990	No	20	0	No	0.001504	Param Intra 1 of 2
Solids, total dissolved (mg/l)	BLUE7	2180	n/a	10/7/2025	1970	No	20	0	No	0.001504	Param Intra 1 of 2
Sulfate, as SO4 (mg/l)	BLUE14	2980	n/a	10/7/2025	2310	No	20	0	No	0.001504	Param Intra 1 of 2
Sulfate, as SO4 (mg/l)	BLUE15	2060	n/a	10/7/2025	1210	No	20	0	n/a	0.004291	NP Intra (normality) ...
Sulfate, as SO4 (mg/l)	BLUE16	1280	n/a	10/7/2025	744	No	16	0	No	0.001504	Param Intra 1 of 2
Sulfate, as SO4 (mg/l)	BLUE6	1180	n/a	10/8/2025	855	No	20	0	No	0.001504	Param Intra 1 of 2
Sulfate, as SO4 (mg/l)	BLUE7	1120	n/a	10/7/2025	922	No	20	0	No	0.001504	Param Intra 1 of 2

Appendix E

Annual Fugitive Dust Control Report

Coal Combustion Residuals
2025 Annual Fugitive Dust Control Report
Coyote Station Plant – Blue Pit
Date: December 4, 2025

Introduction

This report fulfills the requirements of 257.80(c) in 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 is located in Mercer County, North Dakota. This Annual Report covers the time period from December 2024 to December 2025.

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. The third is a summary of any corrective measures taken. See Table 1 for citizen complaints.

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 CCR prior to its transfer from silos to transport vehicles and is also used to wet the in-place CCR 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 CCR disposal areas.

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 in 2025		

Summary of corrective measures taken

There were no emergency corrective measures taken at Coyote Station due to the lack of fugitive dust reported.