

ATTACHMENT 4.0

STATISTICAL CHARTS

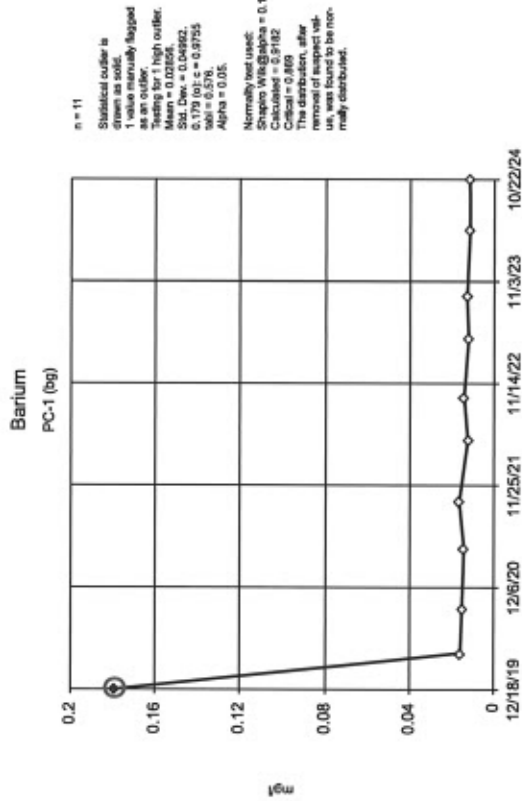
ATTACHMENT 4.1

INTERWELL BACKGROUND OUTLIER CHARTS

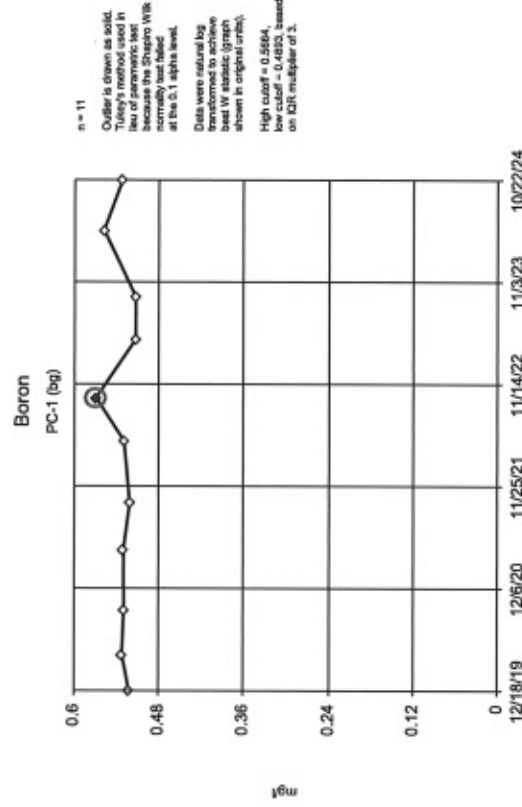
Outlier Analysis

Coors Energy Company Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2 Printed 2/12/2025, 3:00 PM

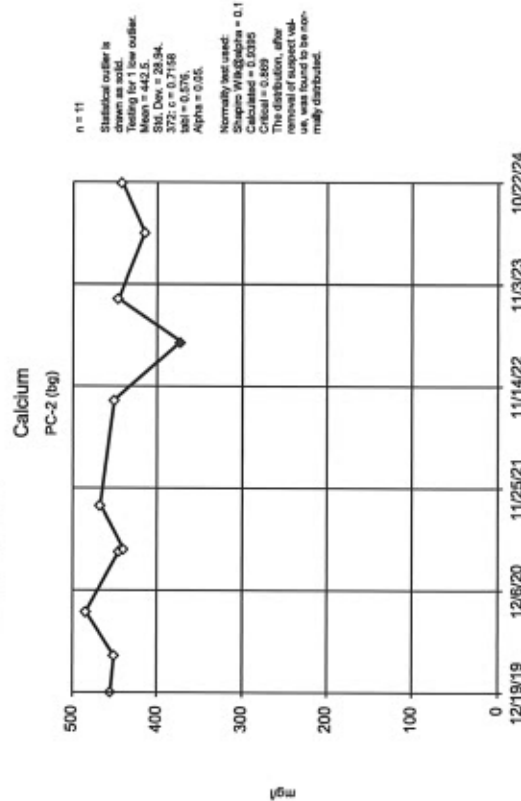
Constituent	Well	Value(s)	Date(s)	Method	N	Mean	Std. Dev.	Distribution
Alkalinity, Bicar...	PC-1 (bg)	n/a	n/a	EPA 1989	11	291.1	8.882	normal
Alkalinity, Bicar...	PC-2 (bg)	n/a	n/a	EPA 1989	11	909.6	29.93	normal
Alkalinity, Carbo...	PC-1 (bg)	n/a	n/a	NP (nm)	11	20	0	unknown
Alkalinity, Carbo...	PC-2 (bg)	n/a	n/a	NP (nm)	11	20	0	unknown
Arsenic (mg/l)	PC-1 (bg)	n/a	n/a	NP (nm)	11	0.01	0	unknown
Arsenic (mg/l)	PC-2 (bg)	n/a	n/a	NP (nm)	11	0.01	0	unknown
Barium (mg/l)	PC-1 (bg)	0.179	12/18/2019	Dixon's	11	0.02856	0.04992	normal
Barium (mg/l)	PC-2 (bg)	n/a	n/a	EPA 1989	11	0.01435	0.002208	normal
Boron (mg/l)	PC-1 (bg)	0.569	9/28/2022	NP (nm)	11	0.5316	0.01735	unknown
Boron (mg/l)	PC-2 (bg)	n/a	n/a	EPA 1989	11	0.2844	0.01103	normal
Cadmium (mg/l)	PC-1 (bg)	n/a	n/a	NP (nm)	11	0.002	0	unknown
Cadmium (mg/l)	PC-2 (bg)	n/a	n/a	NP (nm)	11	0.002017	0.00005729	unknown
Calcium (mg/l)	PC-1 (bg)	n/a	n/a	EPA 1989	11	491.1	21.83	normal
Calcium (mg/l)	PC-2 (bg)	372	4/18/2023	Dixon's	11	442.5	28.94	normal
Chloride (mg/l)	PC-1 (bg)	n/a	n/a	EPA 1989	11	18.13	1.034	normal
Chloride (mg/l)	PC-2 (bg)	n/a	n/a	EPA 1989	11	881.3	35.23	normal
Flouride (mg/l)	PC-1 (bg)	n/a	n/a	EPA 1989	11	1.675	0.1586	normal
Flouride (mg/l)	PC-2 (bg)	n/a	n/a	EPA 1989	11	0.9399	0.8688	ln(x)
Iron (mg/l)	PC-1 (bg)	n/a	n/a	NP (nm)	11	0.1	0	unknown
Iron (mg/l)	PC-2 (bg)	n/a	n/a	NP (nm)	11	0.1	0	unknown
Lead (mg/l)	PC-1 (bg)	n/a	n/a	NP (nm)	11	0.005909	0.0003015	unknown
Lead (mg/l)	PC-2 (bg)	n/a	n/a	NP (nm)	11	0.005909	0.0003015	unknown
Magnesium (mg/l)	PC-1 (bg)	n/a	n/a	EPA 1989	11	93.16	3.386	normal
Magnesium (mg/l)	PC-2 (bg)	n/a	n/a	EPA 1989	11	343	19.5	normal
Manganese (mg/l)	PC-1 (bg)	n/a	n/a	NP (nm)	11	0.01304	0.008357	unknown
Manganese (mg/l)	PC-2 (bg)	1.61	4/18/2023	Dixon's	11	2.102	0.2004	normal
Molybdenum (mg/l)	PC-1 (bg)	n/a	n/a	NP (nm)	10	0.005099	0.0003131	unknown
Molybdenum (mg/l)	PC-2 (bg)	0.0058	9/13/2023	NP (nm)	10	0.005092	0.0002516	unknown
Potassium (mg/l)	PC-1 (bg)	n/a	n/a	EPA 1989	11	11.16	0.6975	normal
Potassium (mg/l)	PC-2 (bg)	n/a	n/a	NP (nm)	11	22.46	2.323	unknown
Selenium (mg/l)	PC-1 (bg)	0.818	9/30/2021	NP (nm)	11	0.1484	0.2222	unknown
Selenium (mg/l)	PC-2 (bg)	n/a	n/a	NP (nm)	11	0.01141	0.00276	unknown
Sodium (mg/l)	PC-1 (bg)	n/a	n/a	EPA 1989	11	393.8	17.23	normal
Sodium (mg/l)	PC-2 (bg)	2010	4/18/2023	Dixon's	11	2474	189.8	normal
Sulfate (mg/l)	PC-1 (bg)	n/a	n/a	EPA 1989	11	1988	118.6	normal
Sulfate (mg/l)	PC-2 (bg)	n/a	n/a	Dixon's	11	5785	416.9	normal



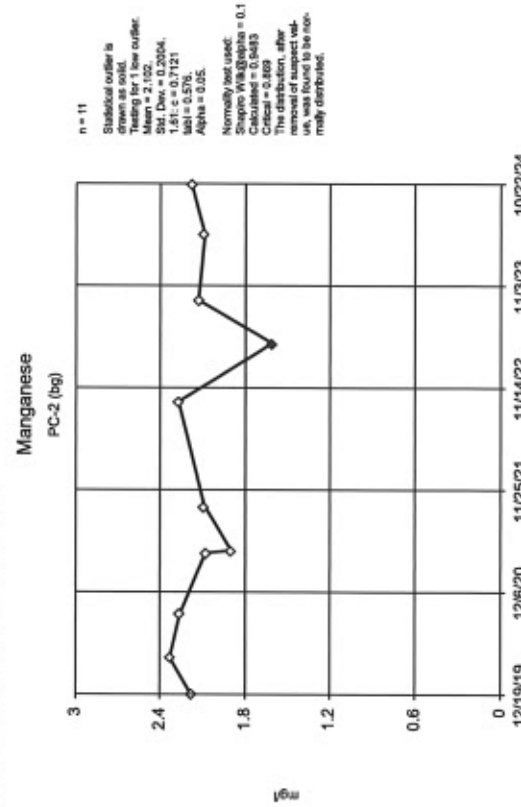
Dixon's Outlier Test Analysis Run 2/12/2025 2:59 PM
Coors Energy Company Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2



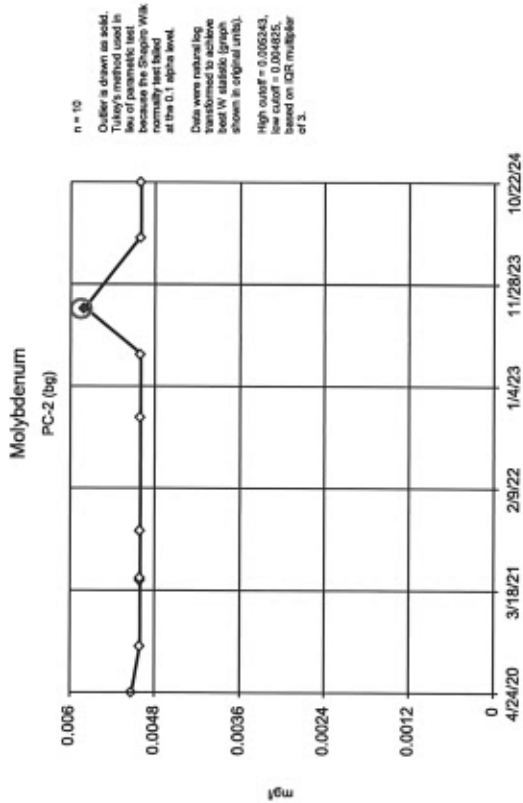
Tukey's Outlier Screening Analysis Run 2/12/2025 2:59 PM
Coors Energy Company Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2



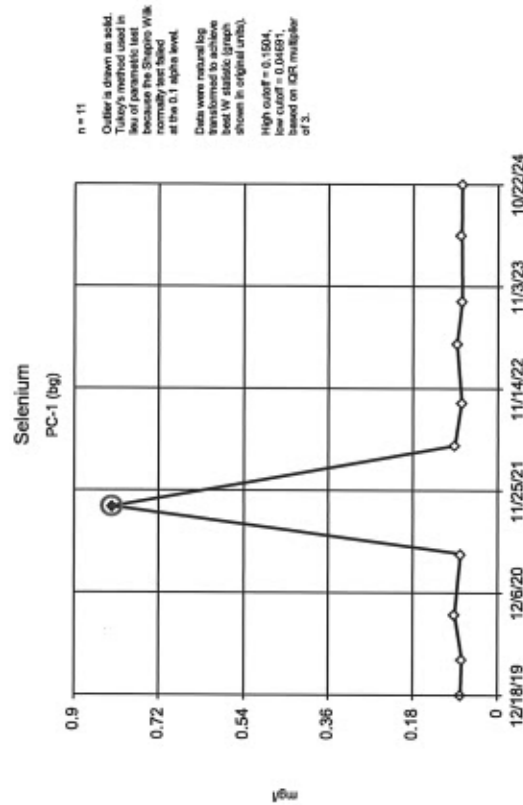
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Coors Energy Company Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2



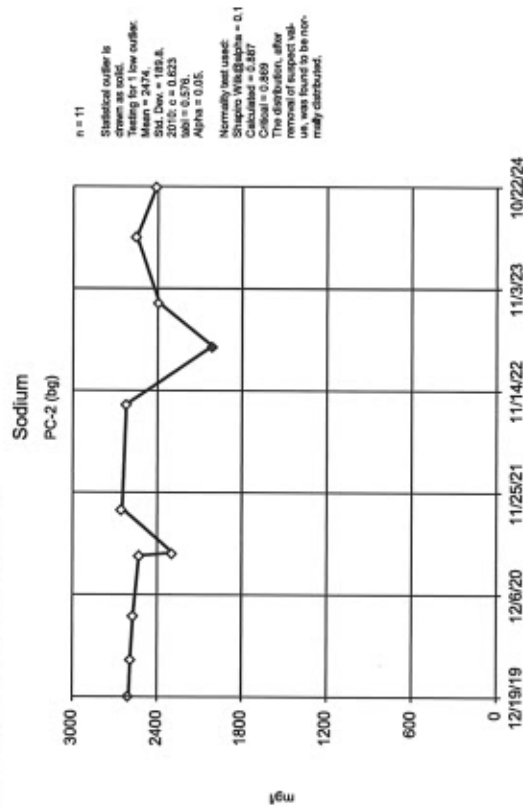
Dixon's Outlier Test Analysis Run 2/12/2025 2:59 PM
Coors Energy Company Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2



Tukey's Outlier Screening Analysis Run 2/12/2025 2:59 PM
Coors Energy Company Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2



Tukey's Outlier Screening Analysis Run 2/12/2025 2:59 PM
Coors Energy Company Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2



Dixon's Outlier Test Analysis Run 2/12/2025 2:59 PM
Coors Energy Company Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

ATTACHMENT 4.2

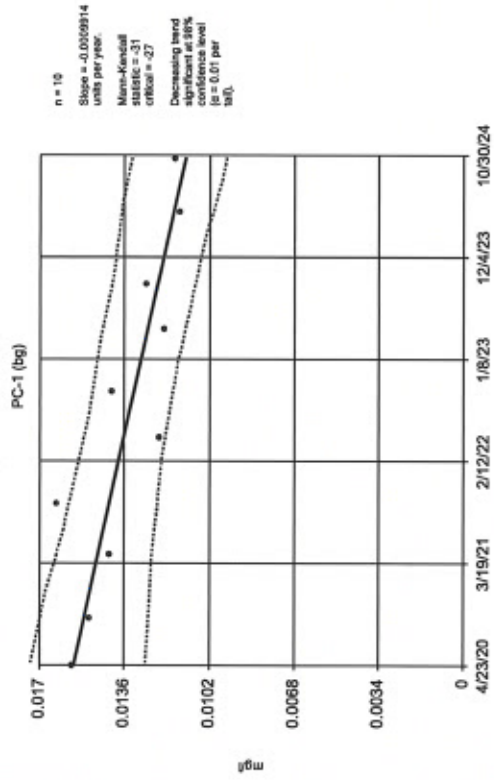
BACKGROUND TREND CHARTS

Trend Test

Coors Energy Company Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2 Printed 2/12/2025, 3:29 PM

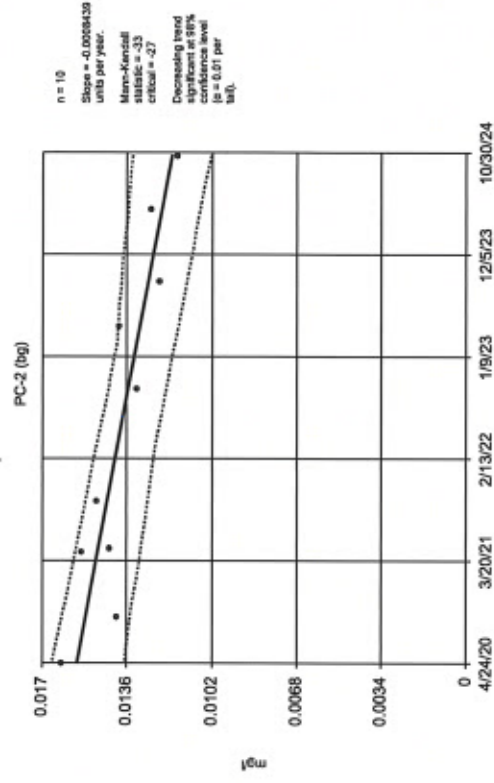
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Alkalinity, Bicarbonate (mg/l)	PC-1 (bg)	1.632	4	31	No	11	0	n/a	n/a	0.02	NP
Alkalinity, Bicarbonate (mg/l)	PC-2 (bg)	4.022	7	31	No	11	0	n/a	n/a	0.02	NP
Alkalinity, Carbonate (mg/l)	PC-1 (bg)	0	0	31	No	11	100	n/a	n/a	0.02	NP
Alkalinity, Carbonate (mg/l)	PC-2 (bg)	0	0	31	No	11	100	n/a	n/a	0.02	NP
Arsenic (mg/l)	PC-1 (bg)	0	0	31	No	11	100	n/a	n/a	0.02	NP
Arsenic (mg/l)	PC-2 (bg)	0	0	31	No	11	100	n/a	n/a	0.02	NP
Barium (mg/l)	PC-1 (bg)	-0.0009914	-31	-27	Yes	10	0	n/a	n/a	0.02	NP
Barium (mg/l)	PC-2 (bg)	-0.0008439	-33	-27	Yes	10	0	n/a	n/a	0.02	NP
Boron (mg/l)	PC-1 (bg)	0	0	27	No	10	0	n/a	n/a	0.02	NP
Boron (mg/l)	PC-2 (bg)	0.001493	5	31	No	11	0	n/a	n/a	0.02	NP
Cadmium (mg/l)	PC-1 (bg)	0	0	31	No	11	100	n/a	n/a	0.02	NP
Cadmium (mg/l)	PC-2 (bg)	0	-10	-31	No	11	90.91	n/a	n/a	0.02	NP
Calcium (mg/l)	PC-1 (bg)	-2.941	-11	-31	No	11	0	n/a	n/a	0.02	NP
Calcium (mg/l)	PC-2 (bg)	-8.162	-24	-31	No	11	0	n/a	n/a	0.02	NP
Chloride (mg/l)	PC-1 (bg)	-0.07192	-6	-31	No	11	0	n/a	n/a	0.02	NP
Chloride (mg/l)	PC-2 (bg)	3.147	13	31	No	11	0	n/a	n/a	0.02	NP
Fluoride (mg/l)	PC-1 (bg)	0	0	31	No	11	0	n/a	n/a	0.02	NP
Fluoride (mg/l)	PC-2 (bg)	0.3397	29	31	No	11	63.64	n/a	n/a	0.02	NP
Iron (mg/l)	PC-1 (bg)	0	0	31	No	11	100	n/a	n/a	0.02	NP
Iron (mg/l)	PC-2 (bg)	0	0	31	No	11	100	n/a	n/a	0.02	NP
Lead (mg/l)	PC-1 (bg)	0	10	31	No	11	100	n/a	n/a	0.02	NP
Lead (mg/l)	PC-2 (bg)	0	10	31	No	11	100	n/a	n/a	0.02	NP
Magnesium (mg/l)	PC-1 (bg)	-0.9177	-17	-31	No	11	0	n/a	n/a	0.02	NP
Magnesium (mg/l)	PC-2 (bg)	-1.943	-12	-31	No	11	0	n/a	n/a	0.02	NP
Manganese (mg/l)	PC-1 (bg)	0	-9	-27	No	10	90	n/a	n/a	0.02	NP
Manganese (mg/l)	PC-2 (bg)	-0.02469	-9	-31	No	11	0	n/a	n/a	0.02	NP
Molybdenum (mg/l)	PC-1 (bg)	0	7	27	No	10	90	n/a	n/a	0.02	NP
Molybdenum (mg/l)	PC-2 (bg)	0	-8	-23	No	9	88.89	n/a	n/a	0.02	NP
Potassium (mg/l)	PC-1 (bg)	0.1373	12	31	No	11	0	n/a	n/a	0.02	NP
Potassium (mg/l)	PC-2 (bg)	0	3	31	No	11	0	n/a	n/a	0.02	NP
Selenium (mg/l)	PC-1 (bg)	-0.0005615	-10	-27	No	10	0	n/a	n/a	0.02	NP
Selenium (mg/l)	PC-2 (bg)	0	3	31	No	11	72.73	n/a	n/a	0.02	NP
Sodium (mg/l)	PC-1 (bg)	2.653	5	31	No	11	0	n/a	n/a	0.02	NP
Sodium (mg/l)	PC-2 (bg)	-39.2	-17	-31	No	11	0	n/a	n/a	0.02	NP
Sulfate (mg/l)	PC-1 (bg)	0	-1	-31	No	11	0	n/a	n/a	0.02	NP
Sulfate (mg/l)	PC-2 (bg)	-81.91	-15	-31	No	11	0	n/a	n/a	0.02	NP

Sen's Slope and 95% Confidence Band



Constituent: Barium Analysis Run 2/12/2025 3:29 PM
Coors Energy Company Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

Sen's Slope and 95% Confidence Band



Constituent: Barium Analysis Run 2/12/2025 3:29 PM
Coors Energy Company Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

ATTACHMENT 4.3

APRIL INTERWELL PREDICTION LIMITS

Prediction Limit

Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2 Printed 2/12/2025, 3:36 PM

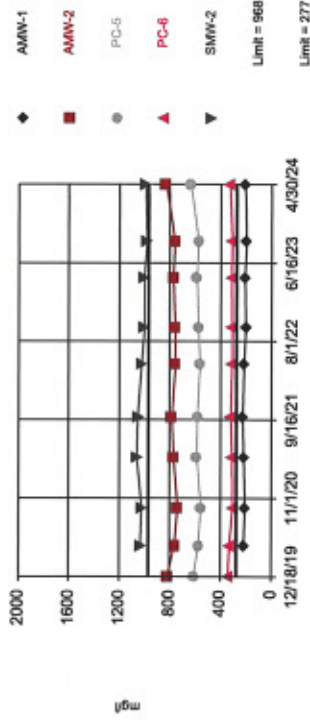
Constituent	Well	Upper...	Lower Lim.	Date	Observ.	Sig.	Bq N	Bq Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Alkalinity, Bicarbonate (mg/l)	AMW-1	968	277	4/30/2024	208	Yes	20	n/a	n/a	0	n/a	n/a	0.008048	NP Inter (normality) ...
Alkalinity, Bicarbonate (mg/l)	AMW-2	968	277	4/30/2024	829	No	20	n/a	n/a	0	n/a	n/a	0.008048	NP Inter (normality) ...
Alkalinity, Bicarbonate (mg/l)	PC-5	968	277	4/30/2024	636	No	20	n/a	n/a	0	n/a	n/a	0.008048	NP Inter (normality) ...
Alkalinity, Bicarbonate (mg/l)	PC-6	968	277	4/30/2024	327	No	20	n/a	n/a	0	n/a	n/a	0.008048	NP Inter (normality) ...
Alkalinity, Bicarbonate (mg/l)	SMW-2	968	277	4/30/2024	989	Yes	20	n/a	n/a	0	n/a	n/a	0.008048	NP Inter (normality) ...
Alkalinity, Carbonate (mg/l)	AMW-1	20	20	4/30/2024	20ND	No	20	n/a	n/a	100	n/a	n/a	0.008048	NP Inter (NDs) 1 of 2
Alkalinity, Carbonate (mg/l)	AMW-2	20	20	4/30/2024	20ND	No	20	n/a	n/a	100	n/a	n/a	0.008048	NP Inter (NDs) 1 of 2
Alkalinity, Carbonate (mg/l)	PC-5	20	20	4/30/2024	20ND	No	20	n/a	n/a	100	n/a	n/a	0.008048	NP Inter (NDs) 1 of 2
Alkalinity, Carbonate (mg/l)	PC-6	20	20	4/30/2024	20ND	No	20	n/a	n/a	100	n/a	n/a	0.008048	NP Inter (NDs) 1 of 2
Alkalinity, Carbonate (mg/l)	SMW-2	20	20	4/30/2024	20ND	No	20	n/a	n/a	100	n/a	n/a	0.008048	NP Inter (NDs) 1 of 2
Arsenic (mg/l)	AMW-1	0.01	n/a	4/30/2024	0.01ND	No	20	n/a	n/a	100	n/a	n/a	0.004024	NP Inter (NDs) 1 of 2
Arsenic (mg/l)	AMW-2	0.01	n/a	4/30/2024	0.01ND	No	20	n/a	n/a	100	n/a	n/a	0.004024	NP Inter (NDs) 1 of 2
Arsenic (mg/l)	PC-5	0.01	n/a	4/30/2024	0.01ND	No	20	n/a	n/a	100	n/a	n/a	0.004024	NP Inter (NDs) 1 of 2
Arsenic (mg/l)	PC-6	0.01	n/a	4/30/2024	0.01ND	No	20	n/a	n/a	100	n/a	n/a	0.004024	NP Inter (NDs) 1 of 2
Arsenic (mg/l)	SMW-2	0.01	n/a	4/30/2024	0.01ND	No	20	n/a	n/a	100	n/a	n/a	0.004024	NP Inter (NDs) 1 of 2
Barium (mg/l)	AMW-1	0.0175	n/a	4/30/2024	0.026	Yes	18	0.01391	0.001491	0	None	No	0.0005852	Param Inter 1 of 2
Barium (mg/l)	AMW-2	0.0175	n/a	4/30/2024	0.0185	Yes	18	0.01391	0.001491	0	None	No	0.0005852	Param Inter 1 of 2
Barium (mg/l)	PC-5	0.0175	n/a	4/30/2024	0.0342	Yes	18	0.01391	0.001491	0	None	No	0.0005852	Param Inter 1 of 2
Barium (mg/l)	PC-6	0.0175	n/a	4/30/2024	0.0085	No	18	0.01391	0.001491	0	None	No	0.0005852	Param Inter 1 of 2
Barium (mg/l)	SMW-2	0.0175	n/a	4/30/2024	0.011	No	18	0.01391	0.001491	0	None	No	0.0005852	Param Inter 1 of 2
Boron (mg/l)	AMW-1	0.558	n/a	4/30/2024	0.1ND	No	19	n/a	n/a	0	n/a	n/a	0.00449	NP Inter (normality) ...
Boron (mg/l)	AMW-2	0.558	n/a	4/30/2024	0.247	No	19	n/a	n/a	0	n/a	n/a	0.00449	NP Inter (normality) ...
Boron (mg/l)	PC-5	0.558	n/a	4/30/2024	0.1ND	No	19	n/a	n/a	0	n/a	n/a	0.00449	NP Inter (normality) ...
Boron (mg/l)	PC-6	0.558	n/a	4/30/2024	0.59	Yes	19	n/a	n/a	0	n/a	n/a	0.00449	NP Inter (normality) ...
Boron (mg/l)	SMW-2	0.558	n/a	4/30/2024	0.341	No	19	n/a	n/a	0	n/a	n/a	0.00449	NP Inter (normality) ...
Cadmium (mg/l)	AMW-1	0.00219	n/a	4/30/2024	0.002ND	No	20	n/a	n/a	95	n/a	n/a	0.004024	NP Inter (NDs) 1 of 2
Cadmium (mg/l)	AMW-2	0.00219	n/a	4/30/2024	0.002ND	No	20	n/a	n/a	95	n/a	n/a	0.004024	NP Inter (NDs) 1 of 2
Cadmium (mg/l)	PC-5	0.00219	n/a	4/30/2024	0.002ND	No	20	n/a	n/a	95	n/a	n/a	0.004024	NP Inter (NDs) 1 of 2
Cadmium (mg/l)	PC-6	0.00219	n/a	4/30/2024	0.002ND	No	20	n/a	n/a	95	n/a	n/a	0.004024	NP Inter (NDs) 1 of 2
Cadmium (mg/l)	SMW-2	0.00219	n/a	4/30/2024	0.002ND	No	20	n/a	n/a	95	n/a	n/a	0.004024	NP Inter (NDs) 1 of 2
Calcium (mg/l)	AMW-1	552.8	n/a	4/30/2024	260	No	20	467.1	36.36	0	None	No	0.0005852	Param Inter 1 of 2
Calcium (mg/l)	AMW-2	552.8	n/a	4/30/2024	472	No	20	467.1	36.36	0	None	No	0.0005852	Param Inter 1 of 2
Calcium (mg/l)	PC-5	552.8	n/a	4/30/2024	595	Yes	20	467.1	36.36	0	None	No	0.0005852	Param Inter 1 of 2
Calcium (mg/l)	PC-6	552.8	n/a	4/30/2024	179	No	20	467.1	36.36	0	None	No	0.0005852	Param Inter 1 of 2
Calcium (mg/l)	SMW-2	552.8	n/a	4/30/2024	474	No	20	467.1	36.36	0	None	No	0.0005852	Param Inter 1 of 2
Chloride (mg/l)	AMW-1	943	n/a	4/30/2024	26.6	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...
Chloride (mg/l)	AMW-2	943	n/a	4/30/2024	357	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...
Chloride (mg/l)	PC-5	943	n/a	4/30/2024	132	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...
Chloride (mg/l)	PC-6	943	n/a	4/30/2024	51	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...
Chloride (mg/l)	SMW-2	943	n/a	4/30/2024	753	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...
Flouride (mg/l)	AMW-1	3	n/a	4/30/2024	1.03	No	20	n/a	n/a	30	n/a	n/a	0.004024	NP Inter (normality) ...
Flouride (mg/l)	AMW-2	3	n/a	4/30/2024	1.5ND	No	20	n/a	n/a	30	n/a	n/a	0.004024	NP Inter (normality) ...
Flouride (mg/l)	PC-5	3	n/a	4/30/2024	1.5ND	No	20	n/a	n/a	30	n/a	n/a	0.004024	NP Inter (normality) ...
Flouride (mg/l)	PC-6	3	n/a	4/30/2024	2.59	No	20	n/a	n/a	30	n/a	n/a	0.004024	NP Inter (normality) ...
Flouride (mg/l)	SMW-2	3	n/a	4/30/2024	1.5ND	No	20	n/a	n/a	30	n/a	n/a	0.004024	NP Inter (normality) ...
Iron (mg/l)	AMW-1	0.1	n/a	4/30/2024	0.1ND	No	20	n/a	n/a	100	n/a	n/a	0.004024	NP Inter (NDs) 1 of 2
Iron (mg/l)	AMW-2	0.1	n/a	4/30/2024	0.1ND	No	20	n/a	n/a	100	n/a	n/a	0.004024	NP Inter (NDs) 1 of 2
Iron (mg/l)	PC-5	0.1	n/a	4/30/2024	0.1ND	No	20	n/a	n/a	100	n/a	n/a	0.004024	NP Inter (NDs) 1 of 2
Iron (mg/l)	PC-6	0.1	n/a	4/30/2024	0.1ND	No	20	n/a	n/a	100	n/a	n/a	0.004024	NP Inter (NDs) 1 of 2
Iron (mg/l)	SMW-2	0.1	n/a	4/30/2024	0.1ND	No	20	n/a	n/a	100	n/a	n/a	0.004024	NP Inter (NDs) 1 of 2

Prediction Limit

Logan County Colorado LF														Client: AEC		Data: Inorganics Coors 3rd Qtr 2024 v2		Printed 2/12/2025, 3:36 PM	
Constituent	Well	Upper...	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method					
Lead (mg/l)	AMW-1	0.006	n/a	4/30/2024	0.006ND	No	20	n/a	n/a	100	n/a	n/a	0.004024	NP Inter (NDs) 1 of 2					
Lead (mg/l)	AMW-2	0.006	n/a	4/30/2024	0.006ND	No	20	n/a	n/a	100	n/a	n/a	0.004024	NP Inter (NDs) 1 of 2					
Lead (mg/l)	PC-5	0.006	n/a	4/30/2024	0.006ND	No	20	n/a	n/a	100	n/a	n/a	0.004024	NP Inter (NDs) 1 of 2					
Lead (mg/l)	PC-6	0.006	n/a	4/30/2024	0.006ND	No	20	n/a	n/a	100	n/a	n/a	0.004024	NP Inter (NDs) 1 of 2					
Lead (mg/l)	SMW-2	0.006	n/a	4/30/2024	0.006ND	No	20	n/a	n/a	100	n/a	n/a	0.004024	NP Inter (NDs) 1 of 2					
Magnesium (mg/l)	AMW-1	377	n/a	4/30/2024	69.2	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...					
Magnesium (mg/l)	AMW-2	377	n/a	4/30/2024	170	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...					
Magnesium (mg/l)	PC-5	377	n/a	4/30/2024	149	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...					
Magnesium (mg/l)	PC-6	377	n/a	4/30/2024	75.7	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...					
Magnesium (mg/l)	SMW-2	377	n/a	4/30/2024	163	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...					
Manganese (mg/l)	AMW-1	2.33	n/a	4/30/2024	0.01ND	No	19	n/a	n/a	42.11	n/a	n/a	0.00449	NP Inter (normality) ...					
Manganese (mg/l)	AMW-2	2.33	n/a	4/30/2024	3.49	Yes	19	n/a	n/a	42.11	n/a	n/a	0.00449	NP Inter (normality) ...					
Manganese (mg/l)	PC-5	2.33	n/a	4/30/2024	17.8	Yes	19	n/a	n/a	42.11	n/a	n/a	0.00449	NP Inter (normality) ...					
Manganese (mg/l)	PC-6	2.33	n/a	4/30/2024	0.0106	No	19	n/a	n/a	42.11	n/a	n/a	0.00449	NP Inter (normality) ...					
Manganese (mg/l)	SMW-2	2.33	n/a	4/30/2024	0.479	No	19	n/a	n/a	42.11	n/a	n/a	0.00449	NP Inter (normality) ...					
Molybdenum (mg/l)	AMW-1	0.00599	n/a	4/30/2024	0.005ND	No	17	n/a	n/a	88.24	n/a	n/a	0.005427	NP Inter (NDs) 1 of 2					
Molybdenum (mg/l)	AMW-2	0.00599	n/a	4/30/2024	0.005ND	No	17	n/a	n/a	88.24	n/a	n/a	0.005427	NP Inter (NDs) 1 of 2					
Molybdenum (mg/l)	PC-5	0.00599	n/a	4/30/2024	0.005ND	No	17	n/a	n/a	88.24	n/a	n/a	0.005427	NP Inter (NDs) 1 of 2					
Molybdenum (mg/l)	PC-6	0.00599	n/a	4/30/2024	0.00721	Yes	17	n/a	n/a	88.24	n/a	n/a	0.005427	NP Inter (NDs) 1 of 2					
Molybdenum (mg/l)	SMW-2	0.00599	n/a	4/30/2024	0.005ND	No	17	n/a	n/a	88.24	n/a	n/a	0.005427	NP Inter (NDs) 1 of 2					
Potassium (mg/l)	AMW-1	28.1	n/a	4/30/2024	3.27	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...					
Potassium (mg/l)	AMW-2	28.1	n/a	4/30/2024	29.5	Yes	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...					
Potassium (mg/l)	PC-5	28.1	n/a	4/30/2024	19	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...					
Potassium (mg/l)	PC-6	28.1	n/a	4/30/2024	7.36	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...					
Potassium (mg/l)	SMW-2	28.1	n/a	4/30/2024	16.9	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...					
Selenium (mg/l)	AMW-1	0.0913	n/a	4/30/2024	0.0135	No	19	n/a	n/a	42.11	n/a	n/a	0.00449	NP Inter (normality) ...					
Selenium (mg/l)	AMW-2	0.0913	n/a	4/30/2024	0.01ND	No	19	n/a	n/a	42.11	n/a	n/a	0.00449	NP Inter (normality) ...					
Selenium (mg/l)	PC-5	0.0913	n/a	4/30/2024	0.01ND	No	19	n/a	n/a	42.11	n/a	n/a	0.00449	NP Inter (normality) ...					
Selenium (mg/l)	PC-6	0.0913	n/a	4/30/2024	0.0666	No	19	n/a	n/a	42.11	n/a	n/a	0.00449	NP Inter (normality) ...					
Selenium (mg/l)	SMW-2	0.0913	n/a	4/30/2024	0.01ND	No	19	n/a	n/a	42.11	n/a	n/a	0.00449	NP Inter (normality) ...					
Sodium (mg/l)	AMW-1	2650	n/a	4/30/2024	142	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...					
Sodium (mg/l)	AMW-2	2650	n/a	4/30/2024	1530	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...					
Sodium (mg/l)	PC-5	2650	n/a	4/30/2024	270	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...					
Sodium (mg/l)	PC-6	2650	n/a	4/30/2024	448	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...					
Sodium (mg/l)	SMW-2	2650	n/a	4/30/2024	1610	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...					
Sulfate (mg/l)	AMW-1	6510	n/a	4/30/2024	795	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...					
Sulfate (mg/l)	AMW-2	6510	n/a	4/30/2024	3380	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...					
Sulfate (mg/l)	PC-5	6510	n/a	4/30/2024	1860	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...					
Sulfate (mg/l)	PC-6	6510	n/a	4/30/2024	1250	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...					
Sulfate (mg/l)	SMW-2	6510	n/a	4/30/2024	2910	No	20	n/a	n/a	0	n/a	n/a	0.004024	NP Inter (normality) ...					

Exceeds Limit: AMW-1, SMW-2

Prediction Limit
Interwell Non-parametric

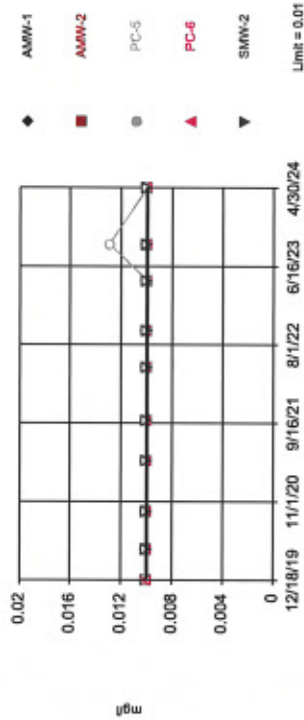


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 20 background values. Annual per-constituent alpha = 0.07904. Individual comparison alpha = 0.008048 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Alkalinity, Bicarbonate Analysis Run 2/12/2025 3:35 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

Within Limit

Prediction Limit
Interwell Non-parametric

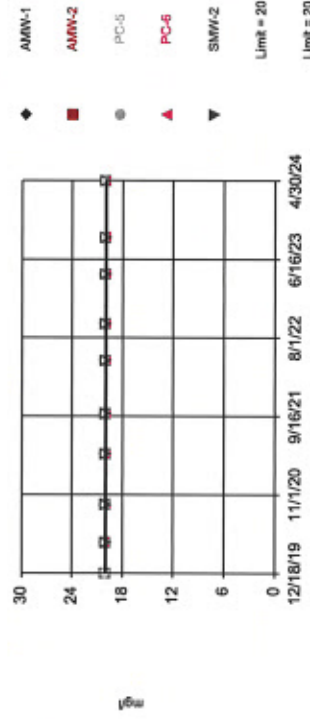


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Annual per-constituent alpha = 0.03952. Individual comparison alpha = 0.004024 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Arsenic Analysis Run 2/12/2025 3:35 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

Within Limits

Prediction Limit
Interwell Non-parametric

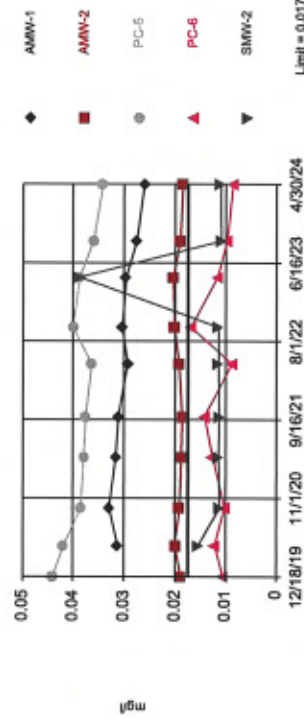


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Annual per-constituent alpha = 0.07904. Individual comparison alpha = 0.008048 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Alkalinity, Carbonate Analysis Run 2/12/2025 3:35 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

Exceeds Limit: AMW-1, AMW-2, PC-5

Prediction Limit
Interwell Parametric



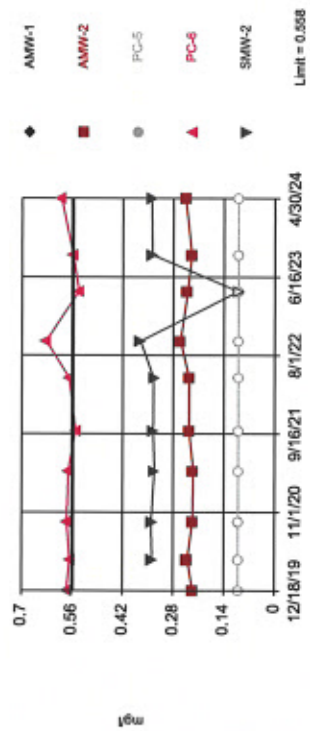
Background Data Summary: Mean=0.01391, Std. Dev.=0.001491, n=18. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk (alpha = 0.01, calculated = 0.96, critical = 0.858, Kappa = 2.414 (c=18, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.002922. Individual comparison alpha = 0.0005852. Comparing 5 points to limit.

Constituent: Barium Analysis Run 2/12/2025 3:35 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

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Yellow symbols indicate censored values.

Exceeds Limit: PC-6

Prediction Limit
Interwell 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 0.01 alpha level. Limit is highest of 19 background values. Annual per-constituent alpha = 0.044. Individual comparison alpha = 0.00449 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Limit = 0.558

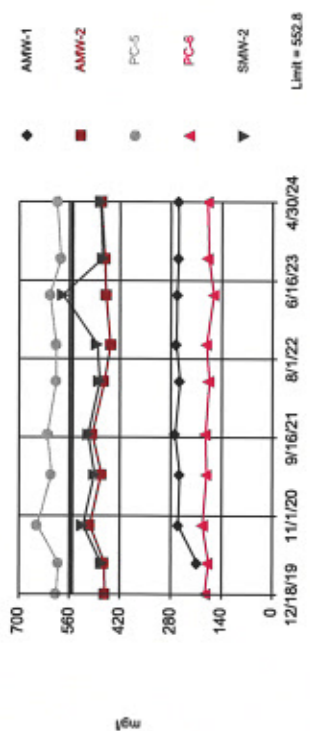
Constituent: Boron Analysis Run 2/12/2025 3:35 PM

Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

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Exceeds Limit: PC-5

Prediction Limit
Interwell Parametric



Background Data Summary: Mean=467.1, Std. Dev.=36.38, n=20. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk (alpha = 0.01, calculated = 0.957, critical = 0.968). Kappa = 2.356 (c=18, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.002922. Individual comparison alpha = 0.0005852. Comparing 5 points to limit.

Limit = 552.8

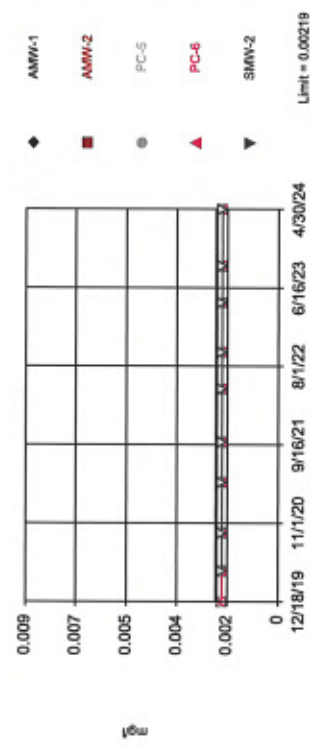
Constituent: Calcium Analysis Run 2/12/2025 3:35 PM

Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

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Yellow symbols indicate censored values.

Within Limit

Prediction Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 20 background values. 95% NDS. Annual per-constituent alpha = 0.03952. Individual comparison alpha = 0.004024 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Limit = 0.00219

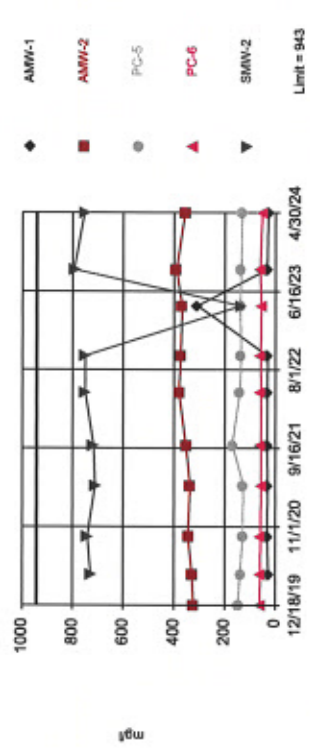
Constituent: Cadmium Analysis Run 2/12/2025 3:35 PM

Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

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Within Limit

Prediction Limit
Interwell 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 0.01 alpha level. Limit is highest of 20 background values. Annual per-constituent alpha = 0.03952. Individual comparison alpha = 0.004024 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Limit = 943

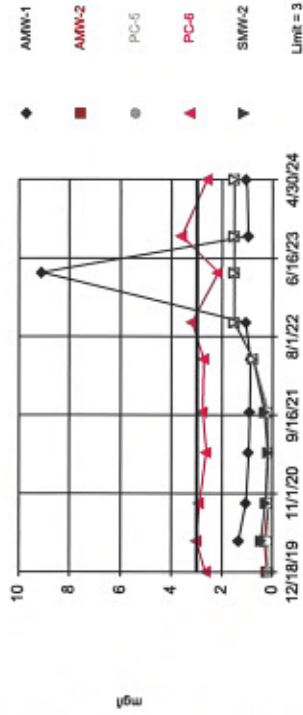
Constituent: Chloride Analysis Run 2/12/2025 3:35 PM

Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Interwell 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 0.01 alpha level. Limit is highest of 20 background values. 30% NDs. Annual per-constituent alpha = 0.03952. Individual comparison alpha = 0.004024 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

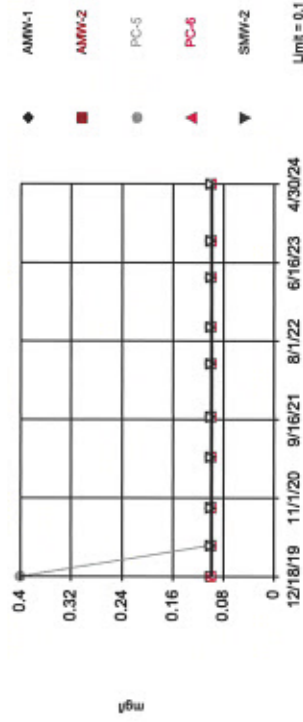
Limit = 3

Constituent: Fluoride Analysis Run 2/12/2025 3:35 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Annual per-constituent alpha = 0.03952. Individual comparison alpha = 0.004024 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

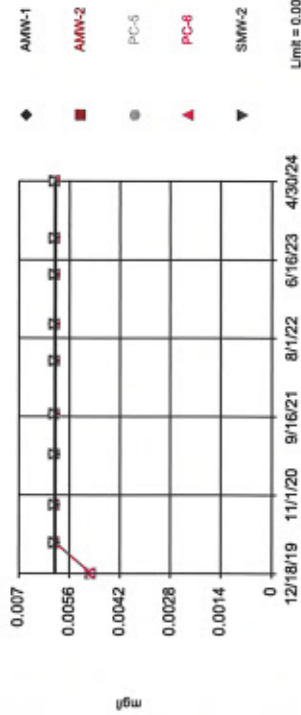
Limit = 0.1

Constituent: Iron Analysis Run 2/12/2025 3:35 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 20) were censored; limit is most recent reporting limit. Annual per-constituent alpha = 0.03952. Individual comparison alpha = 0.004024 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

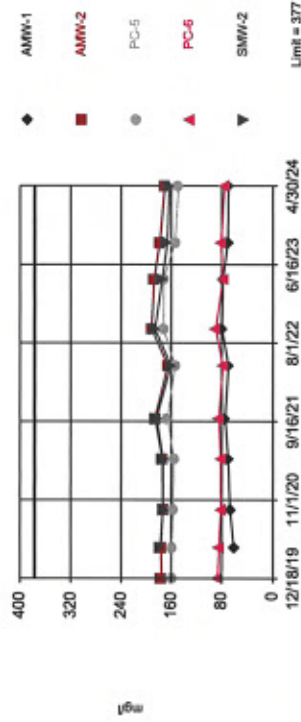
Limit = 0.006

Constituent: Lead Analysis Run 2/12/2025 3:35 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Interwell 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 0.01 alpha level. Limit is highest of 20 background values. Annual per-constituent alpha = 0.03952. Individual comparison alpha = 0.004024 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

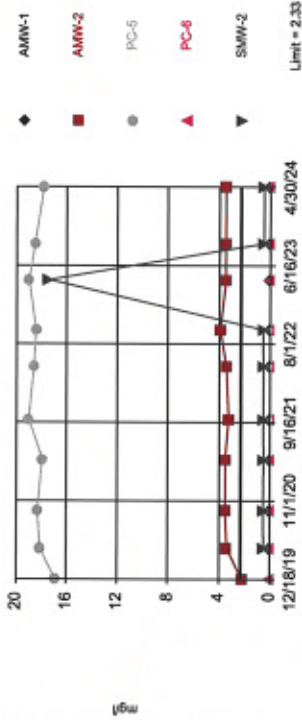
Limit = 377

Constituent: Magnesium Analysis Run 2/12/2025 3:35 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

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Yellow symbols indicate censored values.

Exceeds Limit: AMW-2, PC-5

Prediction Limit
Interwell Non-parametric



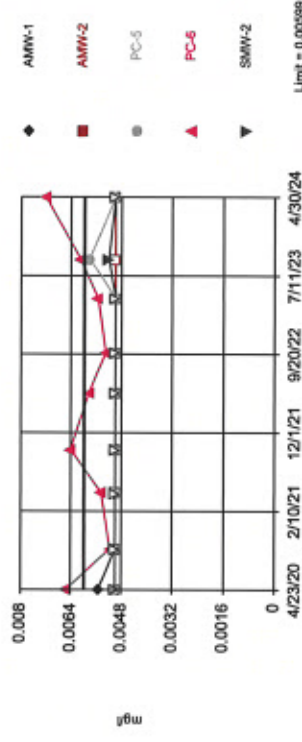
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 19 background values. 42.11% NDs. Annual per-constituent alpha = 0.044. Individual comparison alpha = 0.00449 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Manganese Analysis Run 2/12/2025 3:35 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

Statistik™ v.10.0.24 Software licensed to American Environmental Consultants, LLC
Yellow symbols indicate censored values.

Exceeds Limit: PC-6

Prediction Limit
Interwell Non-parametric



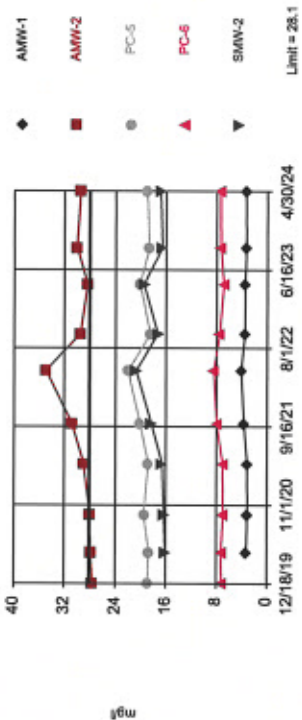
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 17 background values. 88.24% NDs. Annual per-constituent alpha = 0.05296. Individual comparison alpha = 0.005427 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Molybdenum Analysis Run 2/12/2025 3:35 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

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Yellow symbols indicate censored values.

Exceeds Limit: AMW-2

Prediction Limit
Interwell Non-parametric



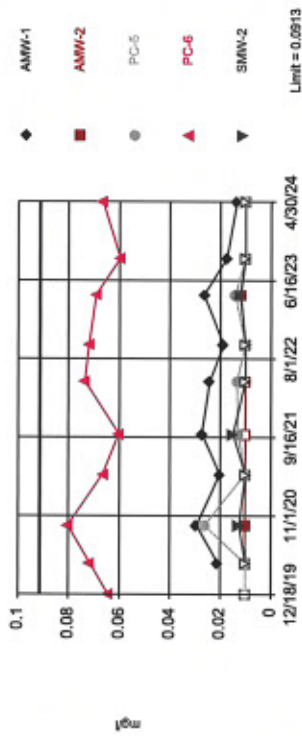
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. 42.11% NDs. Annual per-constituent alpha = 0.03952. Individual comparison alpha = 0.004024 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Potassium Analysis Run 2/12/2025 3:35 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

Statistik™ v.10.0.24 Software licensed to American Environmental Consultants, LLC
Yellow symbols indicate censored values.

Within Limit

Prediction Limit
Interwell Non-parametric

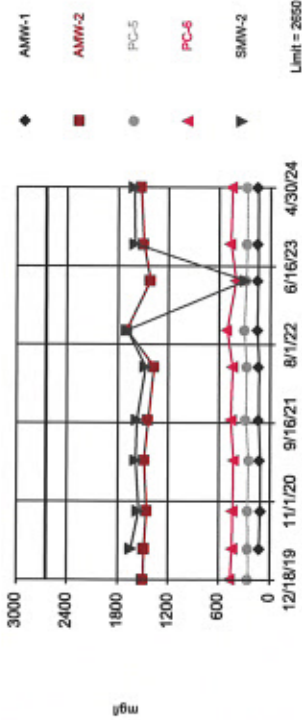


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 19 background values. 42.11% NDs. Annual per-constituent alpha = 0.044. Individual comparison alpha = 0.00449 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Selenium Analysis Run 2/12/2025 3:35 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

Within Limit

Prediction Limit
Interwell Non-parametric

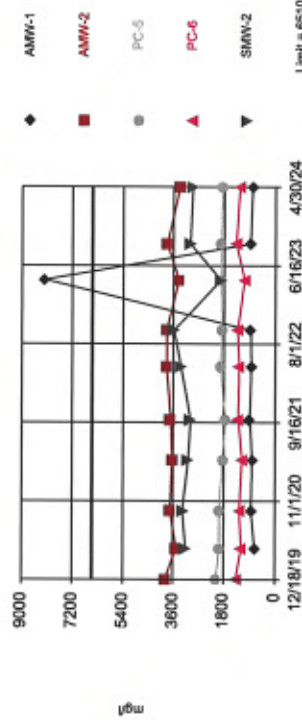


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 20 background values. Annual per-constituent alpha = 0.03952. Individual comparison alpha = 0.004024 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Sodium Analysis Run 2/12/2025 3:35 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

Within Limit

Prediction Limit
Interwell 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 0.01 alpha level. Limit is highest of 20 background values. Annual per-constituent alpha = 0.03952. Individual comparison alpha = 0.004024 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Sulfate Analysis Run 2/12/2025 3:35 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

ATTACHMENT 4.4

OCTOBER INTERWELL PREDICTION LIMITS

Prediction Limit

Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2 Printed 2/12/2025, 3:36 PM

Constituent	Well	Upper...	Lower Lim.	Date	Observ.	Sig.	Bq N	Bq Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Alkalinity, Bicarbonate (mg/l)	AMW-1	968	277	10/21/2024	191	Yes	22	n/a	n/a	0	n/a	n/a	0.006991	NP Inter (normality) ...
Alkalinity, Bicarbonate (mg/l)	AMW-2	968	277	10/22/2024	794	No	22	n/a	n/a	0	n/a	n/a	0.006991	NP Inter (normality) ...
Alkalinity, Bicarbonate (mg/l)	PC-5	968	277	10/21/2024	610	No	22	n/a	n/a	0	n/a	n/a	0.006991	NP Inter (normality) ...
Alkalinity, Bicarbonate (mg/l)	PC-6	968	277	10/21/2024	319	No	22	n/a	n/a	0	n/a	n/a	0.006991	NP Inter (normality) ...
Alkalinity, Bicarbonate (mg/l)	SMW-2	968	277	10/22/2024	1020	Yes	22	n/a	n/a	0	n/a	n/a	0.006991	NP Inter (normality) ...
Alkalinity, Carbonate (mg/l)	AMW-1	20	20	10/21/2024	20ND	No	22	n/a	n/a	100	n/a	n/a	0.006991	NP Inter (NDs) 1 of 2
Alkalinity, Carbonate (mg/l)	AMW-2	20	20	10/22/2024	20ND	No	22	n/a	n/a	100	n/a	n/a	0.006991	NP Inter (NDs) 1 of 2
Alkalinity, Carbonate (mg/l)	PC-5	20	20	10/21/2024	20ND	No	22	n/a	n/a	100	n/a	n/a	0.006991	NP Inter (NDs) 1 of 2
Alkalinity, Carbonate (mg/l)	PC-6	20	20	10/21/2024	20ND	No	22	n/a	n/a	100	n/a	n/a	0.006991	NP Inter (NDs) 1 of 2
Alkalinity, Carbonate (mg/l)	SMW-2	20	20	10/22/2024	20ND	No	22	n/a	n/a	100	n/a	n/a	0.006991	NP Inter (NDs) 1 of 2
Arsenic (mg/l)	AMW-1	0.01	n/a	10/21/2024	0.01ND	No	22	n/a	n/a	100	n/a	n/a	0.003495	NP Inter (NDs) 1 of 2
Arsenic (mg/l)	AMW-2	0.01	n/a	10/22/2024	0.01ND	No	22	n/a	n/a	100	n/a	n/a	0.003495	NP Inter (NDs) 1 of 2
Arsenic (mg/l)	PC-5	0.01	n/a	10/21/2024	0.01ND	No	22	n/a	n/a	100	n/a	n/a	0.003495	NP Inter (NDs) 1 of 2
Arsenic (mg/l)	PC-6	0.01	n/a	10/21/2024	0.01ND	No	22	n/a	n/a	100	n/a	n/a	0.003495	NP Inter (NDs) 1 of 2
Arsenic (mg/l)	SMW-2	0.01	n/a	10/22/2024	0.01ND	No	22	n/a	n/a	100	n/a	n/a	0.003495	NP Inter (NDs) 1 of 2
Barium (mg/l)	AMW-1	0.01739	n/a	10/21/2024	0.0249	Yes	20	0.01368	0.001579	0	None	No	0.0005852	Param Inter 1 of 2
Barium (mg/l)	AMW-2	0.01739	n/a	10/22/2024	0.0183	Yes	20	0.01368	0.001579	0	None	No	0.0005852	Param Inter 1 of 2
Barium (mg/l)	PC-5	0.01739	n/a	10/21/2024	0.0344	Yes	20	0.01368	0.001579	0	None	No	0.0005852	Param Inter 1 of 2
Barium (mg/l)	PC-6	0.01739	n/a	10/21/2024	0.00827	No	20	0.01368	0.001579	0	None	No	0.0005852	Param Inter 1 of 2
Barium (mg/l)	SMW-2	0.01739	n/a	10/22/2024	0.0108	No	20	0.01368	0.001579	0	None	No	0.0005852	Param Inter 1 of 2
Boron (mg/l)	AMW-1	0.558	n/a	10/21/2024	0.1ND	No	21	n/a	n/a	0	n/a	n/a	0.003759	NP Inter (normality) ...
Boron (mg/l)	AMW-2	0.558	n/a	10/22/2024	0.224	No	21	n/a	n/a	0	n/a	n/a	0.003759	NP Inter (normality) ...
Boron (mg/l)	PC-5	0.558	n/a	10/21/2024	0.1ND	No	21	n/a	n/a	0	n/a	n/a	0.003759	NP Inter (normality) ...
Boron (mg/l)	PC-6	0.558	n/a	10/21/2024	0.577	Yes	21	n/a	n/a	0	n/a	n/a	0.003759	NP Inter (normality) ...
Boron (mg/l)	SMW-2	0.558	n/a	10/22/2024	0.329	No	21	n/a	n/a	0	n/a	n/a	0.003759	NP Inter (normality) ...
Cadmium (mg/l)	AMW-1	0.00219	n/a	10/21/2024	0.002ND	No	22	n/a	n/a	95.45	n/a	n/a	0.003495	NP Inter (NDs) 1 of 2
Cadmium (mg/l)	AMW-2	0.00219	n/a	10/22/2024	0.002ND	No	22	n/a	n/a	95.45	n/a	n/a	0.003495	NP Inter (NDs) 1 of 2
Cadmium (mg/l)	PC-5	0.00219	n/a	10/21/2024	0.002ND	No	22	n/a	n/a	95.45	n/a	n/a	0.003495	NP Inter (NDs) 1 of 2
Cadmium (mg/l)	PC-6	0.00219	n/a	10/21/2024	0.002ND	No	22	n/a	n/a	95.45	n/a	n/a	0.003495	NP Inter (NDs) 1 of 2
Cadmium (mg/l)	SMW-2	0.00219	n/a	10/22/2024	0.002ND	No	22	n/a	n/a	95.45	n/a	n/a	0.003495	NP Inter (NDs) 1 of 2
Calcium (mg/l)	AMW-1	548.7	n/a	10/21/2024	244	No	22	466.8	35.26	0	None	No	0.0005852	Param Inter 1 of 2
Calcium (mg/l)	AMW-2	548.7	n/a	10/22/2024	502	No	22	466.8	35.26	0	None	No	0.0005852	Param Inter 1 of 2
Calcium (mg/l)	PC-5	548.7	n/a	10/21/2024	590	Yes	22	466.8	35.26	0	None	No	0.0005852	Param Inter 1 of 2
Calcium (mg/l)	PC-6	548.7	n/a	10/21/2024	173	No	22	466.8	35.26	0	None	No	0.0005852	Param Inter 1 of 2
Calcium (mg/l)	SMW-2	548.7	n/a	10/22/2024	492	No	22	466.8	35.26	0	None	No	0.0005852	Param Inter 1 of 2
Chloride (mg/l)	AMW-1	943	n/a	10/21/2024	26.2	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Chloride (mg/l)	AMW-2	943	n/a	10/22/2024	369	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Chloride (mg/l)	PC-5	943	n/a	10/21/2024	140	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Chloride (mg/l)	PC-6	943	n/a	10/21/2024	54.8	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Chloride (mg/l)	SMW-2	943	n/a	10/22/2024	750	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Flouride (mg/l)	AMW-1	2.613	n/a	10/21/2024	0.785	No	22	0.9781	0.704	31.82	Kapla...	No	0.0005852	Param Inter 1 of 2
Flouride (mg/l)	AMW-2	2.613	n/a	10/22/2024	0.75ND	No	22	0.9781	0.704	31.82	Kapla...	No	0.0005852	Param Inter 1 of 2
Flouride (mg/l)	PC-5	2.613	n/a	10/21/2024	1.5ND	No	22	0.9781	0.704	31.82	Kapla...	No	0.0005852	Param Inter 1 of 2
Flouride (mg/l)	PC-6	2.613	n/a	10/21/2024	2.46	No	22	0.9781	0.704	31.82	Kapla...	No	0.0005852	Param Inter 1 of 2
Flouride (mg/l)	SMW-2	2.613	n/a	10/22/2024	0.186	No	22	0.9781	0.704	31.82	Kapla...	No	0.0005852	Param Inter 1 of 2
Iron (mg/l)	AMW-1	0.1	n/a	10/21/2024	0.1ND	No	22	n/a	n/a	100	n/a	n/a	0.003495	NP Inter (NDs) 1 of 2
Iron (mg/l)	AMW-2	0.1	n/a	10/22/2024	0.1ND	No	22	n/a	n/a	100	n/a	n/a	0.003495	NP Inter (NDs) 1 of 2
Iron (mg/l)	PC-5	0.1	n/a	10/21/2024	0.1ND	No	22	n/a	n/a	100	n/a	n/a	0.003495	NP Inter (NDs) 1 of 2
Iron (mg/l)	PC-6	0.1	n/a	10/21/2024	0.1ND	No	22	n/a	n/a	100	n/a	n/a	0.003495	NP Inter (NDs) 1 of 2
Iron (mg/l)	SMW-2	0.1	n/a	10/22/2024	0.1ND	No	22	n/a	n/a	100	n/a	n/a	0.003495	NP Inter (NDs) 1 of 2

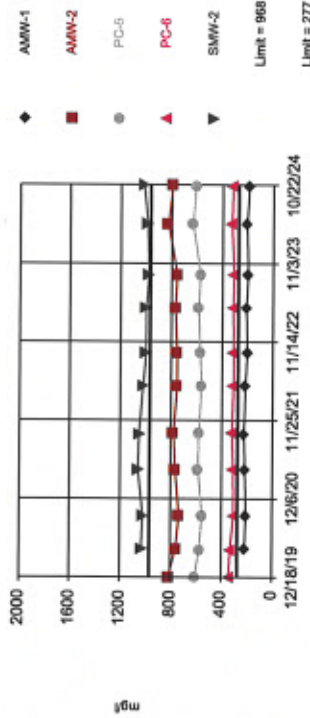
Prediction Limit

Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2 Printed 2/12/2025, 3:36 PM

Constituent	Well	Upper...	Lower Lim.	Date	Obsrv.	Sig.	Bq.N	Bq.Mean	Std.Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Lead (mg/l)	AMW-1	0.006	n/a	10/21/2024	0.006ND	No	22	n/a	n/a	100	n/a	n/a	0.003495	NP Inter (NDs) 1 of 2
Lead (mg/l)	AMW-2	0.006	n/a	10/22/2024	0.006ND	No	22	n/a	n/a	100	n/a	n/a	0.003495	NP Inter (NDs) 1 of 2
Lead (mg/l)	PC-5	0.006	n/a	10/21/2024	0.006ND	No	22	n/a	n/a	100	n/a	n/a	0.003495	NP Inter (NDs) 1 of 2
Lead (mg/l)	PC-6	0.006	n/a	10/21/2024	0.006ND	No	22	n/a	n/a	100	n/a	n/a	0.003495	NP Inter (NDs) 1 of 2
Lead (mg/l)	SMW-2	0.006	n/a	10/22/2024	0.006ND	No	22	n/a	n/a	100	n/a	n/a	0.003495	NP Inter (NDs) 1 of 2
Magnesium (mg/l)	AMW-1	377	n/a	10/21/2024	64.1	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Magnesium (mg/l)	AMW-2	377	n/a	10/22/2024	181	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Magnesium (mg/l)	PC-5	377	n/a	10/21/2024	157	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Magnesium (mg/l)	PC-6	377	n/a	10/21/2024	79.2	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Magnesium (mg/l)	SMW-2	377	n/a	10/22/2024	169	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Manganese (mg/l)	AMW-1	2.33	n/a	10/21/2024	0.01ND	No	21	n/a	n/a	42.86	n/a	n/a	0.003759	NP Inter (normality) ...
Manganese (mg/l)	AMW-2	2.33	n/a	10/22/2024	3.71	Yes	21	n/a	n/a	42.86	n/a	n/a	0.003759	NP Inter (normality) ...
Manganese (mg/l)	PC-5	2.33	n/a	10/21/2024	19.6	Yes	21	n/a	n/a	42.86	n/a	n/a	0.003759	NP Inter (normality) ...
Manganese (mg/l)	PC-6	2.33	n/a	10/21/2024	0.0199	No	21	n/a	n/a	42.86	n/a	n/a	0.003759	NP Inter (normality) ...
Manganese (mg/l)	SMW-2	2.33	n/a	10/22/2024	0.501	No	21	n/a	n/a	42.86	n/a	n/a	0.003759	NP Inter (normality) ...
Molybdenum (mg/l)	AMW-1	0.00599	n/a	10/21/2024	0.005ND	No	19	n/a	n/a	89.47	n/a	n/a	0.00449	NP Inter (NDs) 1 of 2
Molybdenum (mg/l)	AMW-2	0.00599	n/a	10/22/2024	0.005ND	No	19	n/a	n/a	89.47	n/a	n/a	0.00449	NP Inter (NDs) 1 of 2
Molybdenum (mg/l)	PC-5	0.00599	n/a	10/21/2024	0.005ND	No	19	n/a	n/a	89.47	n/a	n/a	0.00449	NP Inter (NDs) 1 of 2
Molybdenum (mg/l)	PC-6	0.00599	n/a	10/21/2024	0.005ND	No	19	n/a	n/a	89.47	n/a	n/a	0.00449	NP Inter (NDs) 1 of 2
Molybdenum (mg/l)	SMW-2	0.00599	n/a	10/22/2024	0.005ND	No	19	n/a	n/a	89.47	n/a	n/a	0.00449	NP Inter (NDs) 1 of 2
Potassium (mg/l)	AMW-1	28.1	n/a	10/21/2024	3.45	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Potassium (mg/l)	AMW-2	28.1	n/a	10/22/2024	30.7	Yes	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Potassium (mg/l)	PC-5	28.1	n/a	10/21/2024	19.7	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Potassium (mg/l)	PC-6	28.1	n/a	10/21/2024	7.56	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Potassium (mg/l)	SMW-2	28.1	n/a	10/22/2024	17.7	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Selenium (mg/l)	AMW-1	0.0913	n/a	10/21/2024	0.0223	No	21	n/a	n/a	38.1	n/a	n/a	0.003759	NP Inter (normality) ...
Selenium (mg/l)	AMW-2	0.0913	n/a	10/22/2024	0.0125	No	21	n/a	n/a	38.1	n/a	n/a	0.003759	NP Inter (normality) ...
Selenium (mg/l)	PC-5	0.0913	n/a	10/21/2024	0.0206	No	21	n/a	n/a	38.1	n/a	n/a	0.003759	NP Inter (normality) ...
Selenium (mg/l)	PC-6	0.0913	n/a	10/21/2024	0.0753	No	21	n/a	n/a	38.1	n/a	n/a	0.003759	NP Inter (normality) ...
Selenium (mg/l)	SMW-2	0.0913	n/a	10/22/2024	0.0127	No	21	n/a	n/a	38.1	n/a	n/a	0.003759	NP Inter (normality) ...
Sodium (mg/l)	AMW-1	2650	n/a	10/21/2024	140	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Sodium (mg/l)	AMW-2	2650	n/a	10/22/2024	1560	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Sodium (mg/l)	PC-5	2650	n/a	10/21/2024	268	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Sodium (mg/l)	PC-6	2650	n/a	10/21/2024	443	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Sodium (mg/l)	SMW-2	2650	n/a	10/22/2024	1670	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Sulfate (mg/l)	AMW-1	6510	n/a	10/21/2024	863	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Sulfate (mg/l)	AMW-2	6510	n/a	10/22/2024	3160	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Sulfate (mg/l)	PC-5	6510	n/a	10/21/2024	1970	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Sulfate (mg/l)	PC-6	6510	n/a	10/21/2024	1320	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...
Sulfate (mg/l)	SMW-2	6510	n/a	10/22/2024	3320	No	22	n/a	n/a	0	n/a	n/a	0.003495	NP Inter (normality) ...

Exceeds Limit: AMW-1, SMW-2

Prediction Limit
Interwell Non-parametric

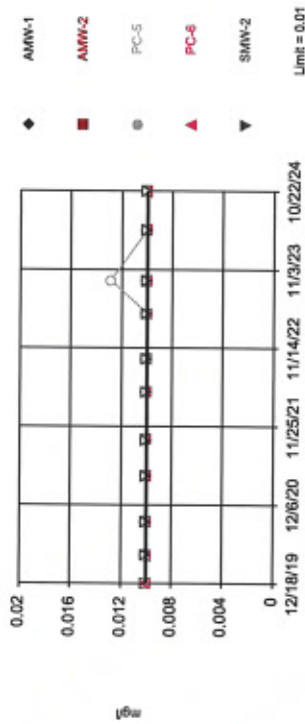


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 22 background values. Annual per-constituent alpha = 0.06882. Individual comparison alpha = 0.006991 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Alkalinity, Bicarbonate Analysis Run 2/12/2025 3:36 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

Within Limit

Prediction Limit
Interwell Non-parametric

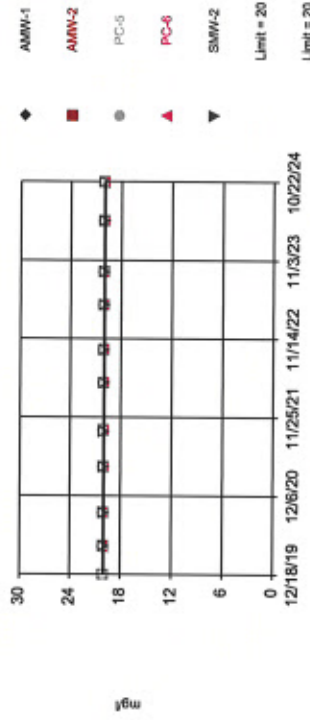


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 22) were censored; limit is most recent reporting limit. Annual per-constituent alpha = 0.03441. Individual comparison alpha = 0.003495 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Arsenic Analysis Run 2/12/2025 3:36 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

Within Limits

Prediction Limit
Interwell Non-parametric

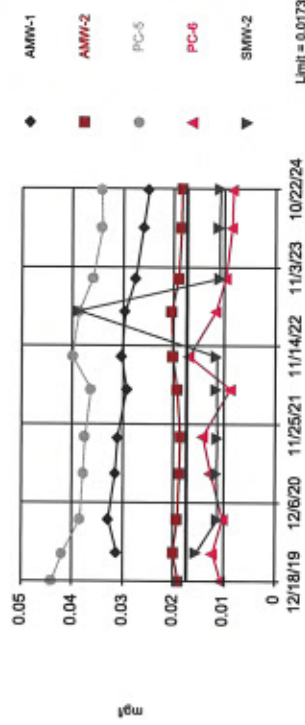


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 22) were censored; limit is most recent reporting limit. Annual per-constituent alpha = 0.06882. Individual comparison alpha = 0.006991 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Alkalinity, Carbonate Analysis Run 2/12/2025 3:36 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

Exceeds Limit: AMW-1, AMW-2, PC-5

Prediction Limit
Interwell Parametric



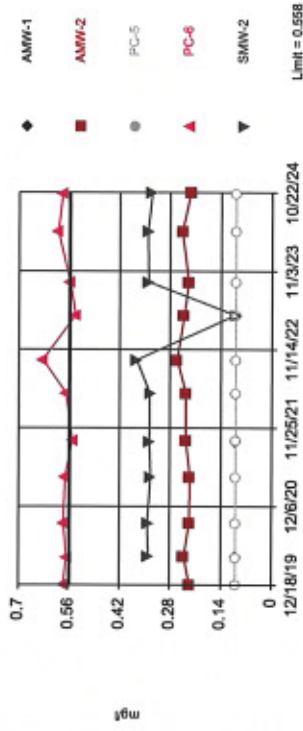
Background Data Summary: Mean=0.01368, Std. Dev.=0.001579, n=20. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk (p=alpha = 0.01, calculated = 0.9426, critical = 0.868. Kappa = 2.356 (c=18, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.002922. Individual comparison alpha = 0.0005852. Comparing 5 points to limit.

Constituent: Barium Analysis Run 2/12/2025 3:36 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

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Hollow symbols indicate censored values.

Exceeds Limit: PC-6

Prediction Limit
Interval Non-parametric



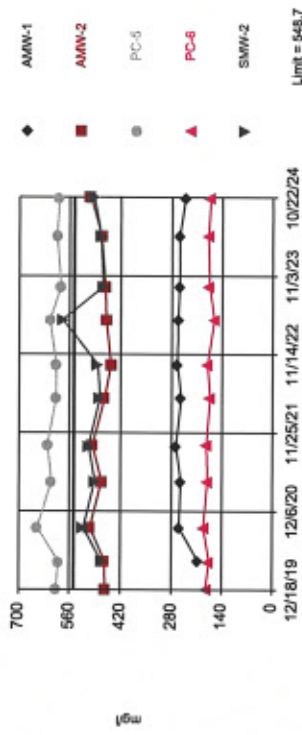
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 21 background values. Annual per-constituent alpha = 0.03696. Individual comparison alpha = 0.003759 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Boron Analysis Run 2/12/2025 3:36 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

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Exceeds Limit: PC-5

Prediction Limit
Interval Parametric



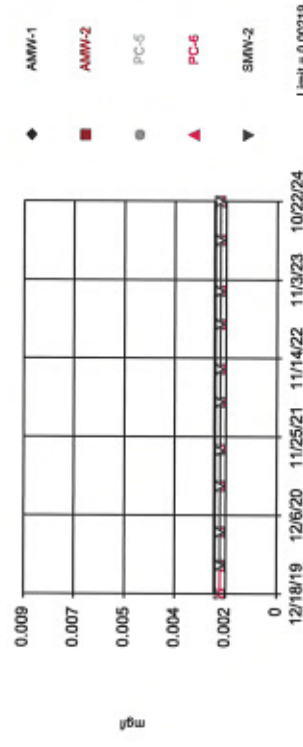
Background Data Summary: Mean=466.8, Std. Dev.=35.26, n=22. Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk (alpha = 0.01, calculated = 0.9538, critical = 0.878). Kappa = 2.322 (c=18, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.002922. Individual comparison alpha = 0.0005852. Comparing 5 points to limit.

Constituent: Calcium Analysis Run 2/12/2025 3:36 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

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Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Interval Non-parametric



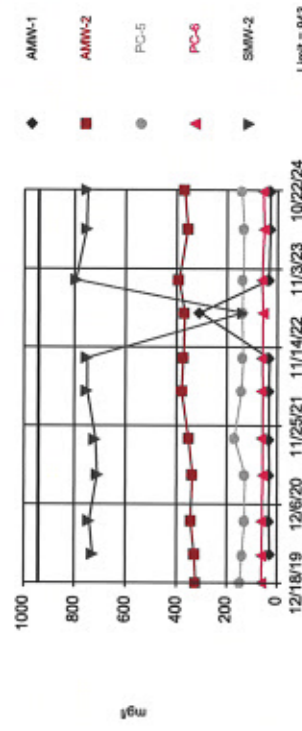
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 22 background values. 95.45% NDI. Annual per-constituent alpha = 0.03441. Individual comparison alpha = 0.003495 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Cadmium Analysis Run 2/12/2025 3:36 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

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Within Limit

Prediction Limit
Interval Non-parametric



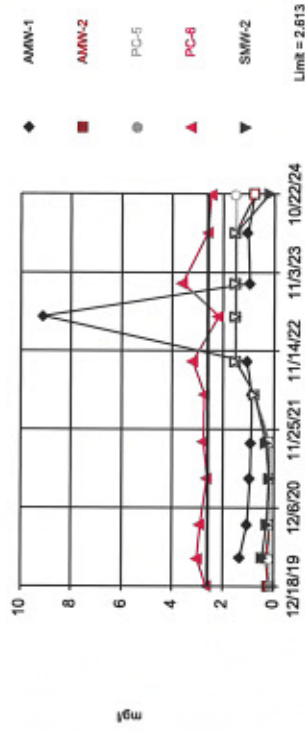
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 22 background values. Annual per-constituent alpha = 0.03441. Individual comparison alpha = 0.003495 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Chloride Analysis Run 2/12/2025 3:36 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

Surstat™ v. 10.0.24 Software licensed to American Environmental Consultants, LLC
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Interval Parametric



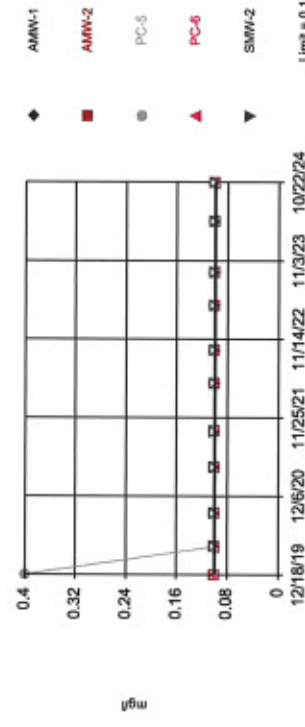
Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.9781, Std. Dev.=0.704, n=22, 31.82% NDs.
Insufficient data to test for seasonality; not deseasonalized. Normality test: Shapiro Wilk @alpha = 0.01, calculated =
0.8847, critical = 0.878, Kappa = 2.322 (n=18, w=5, 1 of 2, event alpha = 0.05132). Report alpha = 0.002922.
Individual comparison alpha = 0.0005852. Comparing 5 points to limit.

Constituent: Fluoride Analysis Run 2/12/2025 3:36 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

Surstat™ v. 10.0.24 Software licensed to American Environmental Consultants, LLC
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Interval Non-parametric



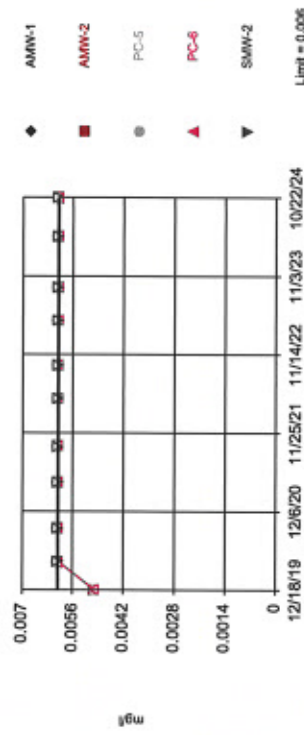
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background
values (n = 22) were censored; limit is most recent reporting limit. Annual per-constituent alpha = 0.03441. Individual
comparison alpha = 0.003495 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will
not be deseasonalized.

Constituent: Iron Analysis Run 2/12/2025 3:36 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

Surstat™ v. 10.0.24 Software licensed to American Environmental Consultants, LLC
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Interval Non-parametric



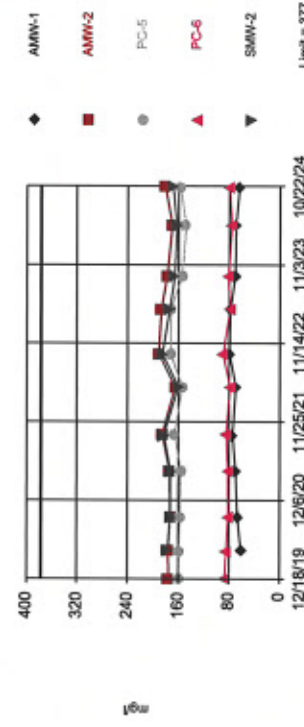
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background
values (n = 22) were censored; limit is most recent reporting limit. Annual per-constituent alpha = 0.03441. Individual
comparison alpha = 0.003495 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will
not be deseasonalized.

Constituent: Lead Analysis Run 2/12/2025 3:36 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

Surstat™ v. 10.0.24 Software licensed to American Environmental Consultants, LLC
Hollow symbols indicate censored values.

Within Limit

Prediction Limit
Interval Non-parametric

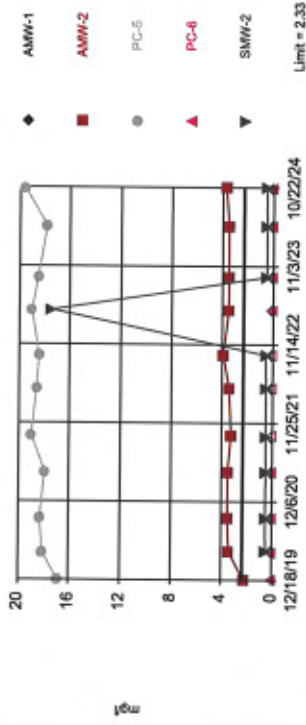


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data
to be non-normal at the 0.01 alpha level. Limit is highest of 22 background values. Annual per-constituent alpha =
0.03441. Individual comparison alpha = 0.003495 (1 of 2). Comparing 5 points to limit. Insufficient data to test for
seasonality; data will not be deseasonalized.

Constituent: Magnesium Analysis Run 2/12/2025 3:36 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

SeniStar™ v.10.0.24 Software licensed to American Environmental Consultants, LLC
Yellow symbols indicate censored values.
Exceeds Limit: AMW-2, PC-5

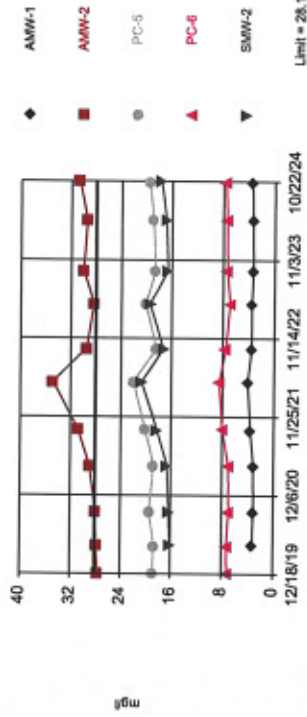
Prediction Limit
Interval Non-parametric



Constituent: Manganese Analysis Run 2/12/2025 3:36 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

SeniStar™ v.10.0.24 Software licensed to American Environmental Consultants, LLC
Yellow symbols indicate censored values.
Exceeds Limit: AMW-2

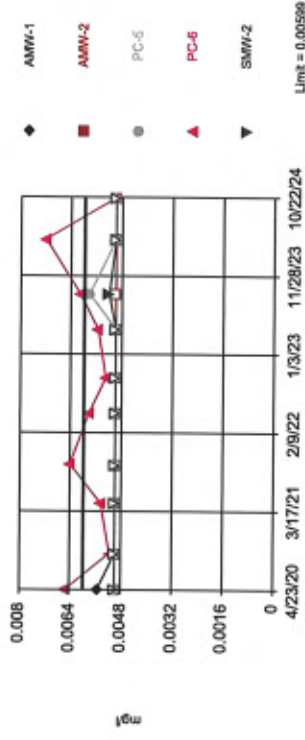
Prediction Limit
Interval Non-parametric



Constituent: Potassium Analysis Run 2/12/2025 3:36 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

SeniStar™ v.10.0.24 Software licensed to American Environmental Consultants, LLC
Yellow symbols indicate censored values.
Within Limit

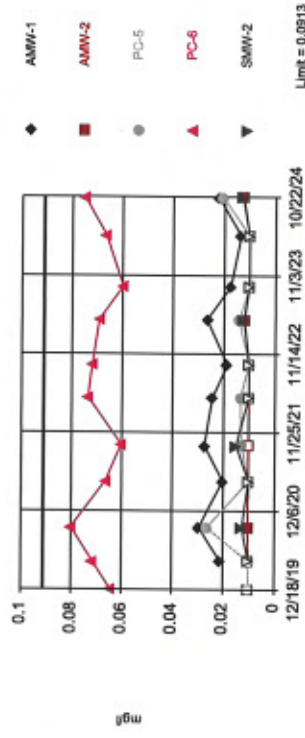
Prediction Limit
Interval Non-parametric



Constituent: Molybdenum Analysis Run 2/12/2025 3:36 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

SeniStar™ v.10.0.24 Software licensed to American Environmental Consultants, LLC
Yellow symbols indicate censored values.
Within Limit

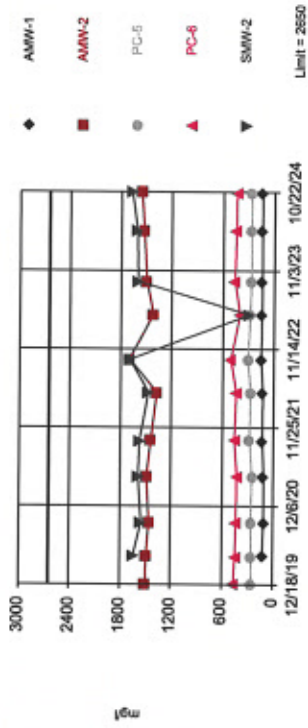
Prediction Limit
Interval Non-parametric



Constituent: Selenium Analysis Run 2/12/2025 3:36 PM
Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

Within Limit

Prediction Limit
Interval Non-parametric



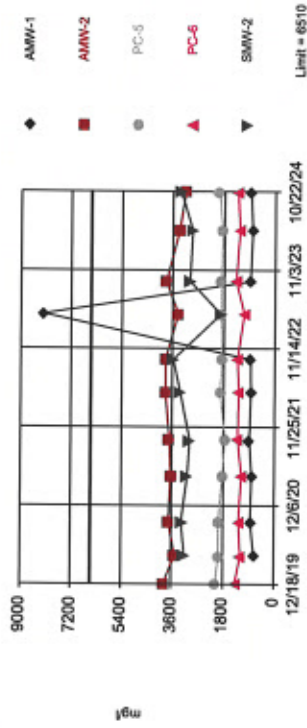
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 22 background values. Annual per-constituent alpha = 0.03441. Individual comparison alpha = 0.003495 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Sodium Analysis Run 2/12/2025 3:36 PM

Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

Within Limit

Prediction Limit
Interval 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 0.01 alpha level. Limit is highest of 22 background values. Annual per-constituent alpha = 0.03441. Individual comparison alpha = 0.003495 (1 of 2). Comparing 5 points to limit. Insufficient data to test for seasonality; data will not be deseasonalized.

Constituent: Sulfate Analysis Run 2/12/2025 3:36 PM

Logan County Colorado LF Client: AEC Data: Inorganics Coors 3rd Qtr 2024 v2

SURFACE WATER HYDROLOGY

2024

SURFACE WATER HYDROLOGY

The site drainage plan and descriptions of associated structures for the CEC Keenesburg Mine site are found in Appendix K of the Permit. Historically, as part of the reclamation process, CEC continues to maintain the diversion ditches, drainage ditches and drainage swales along the roads and around the north and east sides of the Permit Area. These features serve to convey all surface water runoff to Sediment Pond 2. The present drainage facilities, as well as existing site topographic features, are identified on the Existing Surface Features and Utilities Map. Certain surface water control features have been designated permanent facilities (by Permit revision, and at the direction of CDMG and others). These features will remain following the completion of all site reclamation activities. The permanent features include:

- Sediment Pond #2,
- The East and the West Perimeter Ditches
- The Dugout Pond

These permanent drainage features are identified on the existing Reclamation Contour and Drainage Plan Map.

With the exception of Sediment Pond 2 and the Dugout Pond, all previously existing man-made temporary pond sites have been closed and deleted from the drainage control mapping and monitoring requirement. This action was deemed appropriate because: 1) the sedimentation infill of Sediment Pond 2 has been virtually non-existent after more than fifteen years of continuous use; 2) Sediment Pond 2 has not had significant amounts of water stored in it for more than brief periods (except during the unusual and prolonged periods of excess precipitation in 1995, 1999, 2013, and 2018), and 3) even considering those unusual events of 1995, 1999, 2013, and 2018, to date there has not been an observed discharge from Sediment Pond 2. The rain event of 2018 took right up to the spillway, but significant outflow was not observed based on natural debris at the spillway.

Further, CEC implemented a dewatering scheme for Sediment Pond 2 in 1997, in conjunction with the preparation of a, "Spill Prevention, Control and Countermeasures Plan" for the site. This plan was last updated in 2003, but has been the subject of annual review. According to the plan, and when conditions warrant, CEC personnel will pump excess runoff water accumulated in Sediment Pond 2 back to the Dugout Pond, located about 700 feet slightly upgradient and to the south-southeast on the CEC property. The Dugout Pond has an available storage capacity exceeding the total contributing runoff volume associated with a 100-year,

24-hour design storm event (Technical Revision, “Drainage Control Plan II”, January 1995). Pumps can be employed, as needed, to move the accumulated runoff water in Sediment Pond 2 back to the Dugout Pond within a maximum time frame of 72 hours, thus meeting a reasonable evacuation time period for Sediment Pond 2 dewatering. In this manner, CEC can maintain a continued lowered pond level in Sediment Pond 2 during prolonged periods of excess rainfall and runoff at the site (similar to that which was experienced during the spring of 1995). CEC did have occasion to employ this plan during rainfall events in April and May, 1999. This plan was also deployed in May and June of 2018 successfully. The system functioned in accordance with the design.

Except for the surface water accumulation from “recent” rainfall events, the practice of encouraging standing water to “pond” in the former mining pits (now confined to ash disposal B-Pit) has been eliminated. Deep eolian sand deposits (in some places as much as thirty feet in thickness) exist across much of the mine site. The sand’s high infiltration characteristic contributes to a significant loss of surface moisture due to the “deep percolation” of rainfall during most storm events. The result is that normally only a minimal runoff is experienced. As additional segments of the Permit site are reclaimed (topsanded and seeded), less and less runoff has been observed.

DISPOSAL ACTIVITIES DATA 2024

DISPOSAL ACTIVITIES

Ash Disposal

For the calendar year 2024, no mixed fly and bottom ash were transported to, and disposed of at the Coors Energy Company, Keenesburg Mine site. Thus, the total ash disposal activity for the B-Pit ash volume remains at 816,024 tons. The total amount of ash disposed of at the Keenesburg Mine between 1987 and the end of ash disposal was 1,066,044 tons. The last load of ash was disposed of in March 2016. No further ash will be accepted.

In accordance with the conditions of the Permit, the Keenesburg site continued to accept only ash that is the by-product of the coal combustion process, and which is generated at the power plant located in Golden, Colorado, the MillerCoors, LLC (formerly Coors Brewing Company) plant location. Since September, 1995 this power plant has been owned and operated by Colorado-Golden Energy Corporation (CGEC). (formerly Trigen-Colorado Energy Corporation). According to the agreements between CGEC and CEC, ash from this power plant will continue to be transported to, and used for reclamation at the Keenesburg site until the reclamation requirement has been satisfied. As of March 2016, coal is no longer used at the power plant, as such no more ash will be deposited into the Keenesburg mine.

Mine Waste Rock Disposal

CEC obtained approvals from CDRMS (Minor Revision #34), from CDPHE, and from Weld County, to dispose of mine waste rock at the Keenesburg Mine site. During 1998 and 1999 a total of 12,467 tons of mine waste rock, the residual material from “hard rock” mine reclamation sites in the Clear Creek drainage, near Idaho Springs, Colorado, was transported to the Keenesburg site for disposal. This material was placed, in a layer approximately four feet thick, between layers of ash in the existing disposal pit (B-Pit). The specific intent of this method of mine waste rock disposal, as described in MR #34, was to isolate the material and thus minimize the possibility for future contamination.

No additional mine waste rock was received for disposal after calendar year 1999. The total quantity of this material placed at the Keenesburg site is still

12,467 tons. The placement location and horizontal extent of the mine waste rock has been identified on the Existing Surface Features and Utilities Map.

The site has been fully reclaimed, no further ash or rocks will be accepted or placed at the mine. All areas have been graded to final elevations and seeded.

RECLAMATION REPORT 2024

RECLAMATION REPORT

Coors Energy Company (CEC) continues to contract for the consultant engineering services of American Environmental Consulting, LLC, Littleton, Colorado (includes preparation of computer-generated drawings of the mine site, and compilation of volume and area estimates). In 2012, AzTec Consultants, Inc. provided surveying services for the new control points located for subsequent mapping work. No topo was taken in 2024 as the site remains unchanged.

Note: To facilitate easier reference to, and discussion of the various acreage parcels shown on the Vegetation/Revegetation Map (see page 218) a numeric designation has been assigned to each revegetated parcel. This system, initiated for the 2002 AHR Report, has been carried forward with new designations assigned as parcels were first seeded with the reclamation seed mix. Reclamation sitework is now complete.

No additional acreage was "disturbed" during 2023. In fact, the mine closure activities were completed in 2020 and the mine is in post-closure monitoring. As such, no aerial photo was taken in 2024.

There was no reseeding completed in 2024. More details are included in the vegetation report.

Because of the national debate over classification of ash (hazardous vs nonhazardous), a management decision was made in 2010 to fill in as much of the bottom layer of B-Pit as soon as possible. The ash is normally placed in the pit in two layers, or lifts, before it is covered with spoils (6 feet) and topsand (2 feet). Additionally, management determined that a change from coal fuel to natural gas is economically sound and April 22, 2016 saw the last load of ash disposed of in the facility. The remaining fill into the B-Pit was completed using overburden materials from the onsite soils excavated during previous mining operations.

CEC will also use this opportunity to note that control efforts are being employed, specifically with respect to *Bromus tectorum* (cheatgrass). This particular noxious weed (Classification list "C" species on the State's noxious weed listing), has been the subject of discussions following more recent AHR Report submittals, and most recently the Application for Phase

III bond release (SL-06). In response to concerns over this issue, CEC has followed the recommendation of CDRMS and others in pursuing a test application of a control herbicide [Panoramic 2SL, manufactured by Alligare]. The test application was first made during the fall of 2010, specifically to Area 25. Then, following evidence of a successful control effort, the herbicide was applied to areas with noxious weeds.

In 2016, a technical revision to the permit was submitted and included removing approximately 212.45 acres from the mine permit. The reclamation summary for the end of 2021 is unchanged from 2016 and is as follows:

RECLAMATION ACREAGE SUMMARY

Total area remaining to be reclaimed 0 acres

Total area reclaimed and revegetated 225.10 ± acres

Grand Total 225.10 ± acres

[Note: It is still important to recognize that these acreage values vary significantly from the 2005 and earlier AHR Reports. These variances result from the improved accuracy of the photo mapping tools, and a redetermination of total site acreage following the assignment of acreage values to all parcels within the Permit area boundary. The results of this effort were submitted and approved as part of the Permit Renewal Application process in 2006. The most significant change was in the number of acres left "undisturbed" by mining activities, yet still within the Permit Area (a total of 173± acres before TR #42). Additionally, while the Permit Area boundary was changed (adjusted inward) in 2011 by TR #42, this Reclamation Acreage Summary accounts for all acreage reclaimed, whether now inside or outside of the boundary line.]

Additional Reclamation Information:

The total 435± acres "originally disturbed" by the Keenesburg Mine coal extraction operation can presently be assigned to one or more of the following categories:

- Acreage in previously active mining areas that has been reclaimed (includes the Long Term Spoil Area)
- Acreage backfilled and graded that has been previously seeded and growing
- Acreage designated as long-term mining or reclamation facilities (includes Access Road and SAE's)
- Acreage removed from Permit Area through approval of TR #42

The ARR form for 2024 has the following modifications:

- Phase II release of 9.68 acres for Area 30
- Phase III release of 30.55 acres for Areas 23, 29, 30, 31

Colorado Division of Reclamation, Mining and Safety

Annual Reclamation Report for Calendar Year – 2024

Kennesburg Mine	C-1981-028	Coors Energy Company
Mine Name	Permit Number	Permittee
PO Box 4030 Golden, CO 80402		
Address		

This report, required by Rule 2.04.13, is due by February 15 of each year, or other date, as agreed upon by the Division. It should include text, discussion, and maps, at a minimum, in addition to any other reclamation monitoring data as required by the approved permit. The location of the acreage reported under each land status category and year of seeding (if applicable) should be clearly identified on a map included with the report.

Land Category	Last Year's Cumulative Total (from last year's ARR)	This Calendar Year			Cumulative Total
		Acres Added (+)	Acres Subtracted (-)		
Acreage in Active Mining Areas ¹	0	0	0	=	0.00

Land Category	Last Year's Cumulative Total (from last year's ARR)	This Calendar Year			Cumulative Total
		Acres Added (+)	Acres Subtracted (-)		
Acres Disturbed ²	443.53	0	0	=	443.53
Acres Backfilled and Graded	373.16	0	0	=	373.16
Acres Topsoiled	373.16	0	0	=	373.16

Acreage in Long-term Facilities ³	Last Year's Cumulative Total (from last year's ARR)	This Calendar Year			Cumulative Total
		Acres Added (+)	Acres Subtracted (-)		
Non-Permanent Facilities	0	0	0	=	0
Permanent Facilities (permitted)	70.37	0	0	=	70.37
Totals	70.37			=	70.37

Acres Seeded (permanent)	Last Year's Cumulative Total (from last year's ARR)	This Calendar Year			Cumulative Total
		Acres Added (+)	Acres Subtracted (-)		
9 Years and Less	129.68	0	0	=	129.68
10 Years and Greater	233.59	0	0	=	233.59
Totals	363.27			=	363.27

Bond Release	Last Year's Cumulative Total (from last year's ARR)	This Calendar Year			Cumulative Total
		Acres Added (+)	Acres Subtracted (-)		
Phase I Released	434.64	0	0	=	434.64
Phase II Released	301.91	9.68	0	=	311.59
Phase III Released	263.70	30.55	0	=	294.25

¹Includes pits, topsoil stripped areas in advance of pits, and spoil not backfilled and graded

²Surface Mine Acres Disturbed = B&G + Long-Term Facilities + Active Mining Areas; Underground Mine Acres Disturbed = B&G + Long-Term Facilities; Separately-permitted Loadouts = B&G + Long-Term Facilities

³Includes haul, access and light-use roads, temporary dams and impoundments; permanent dams and impoundments; diversion and collector ditches, water and air monitoring sites; topsoil stockpiles; overburden stockpiles; repair, storage and construction areas; office area, repair shops, and parking; coal stockpiles, loading, and processing areas; railroads; coal conveyors; refuse piles and coal mine waste impoundments; head-of-hollow fills; valley fills; ventilation shafts and entryways; and non-coal waste disposal area (garbage dumps and coal combustion by-products disposal areas).

February 8, 2019

MASS BALANCE

CEC stopped accepting fly and bottom ash for disposal following 2016 and no ash was disposed of in 2024. Reclamation work has been completed. All overburden material from the Long-Term Spoil Area was previously used as fill for the remaining portion of the B-Pit, and as the 6-foot final cover over the top layer of ash in the filled area of the B Pit. No additional overburden was placed after 2022. The 2019 to 2020 topo shows that there is no remaining topsand to be removed and placed for reclamation. No mine waste rock was delivered to the Keenesburg site for disposal during the year. In 2020, the reclamation activities included the final placement of topsand material, seeding approximately 55.55 acres (Areas 43, 38, 35, and 36), and continuing to maintain the quality of the revegetation. Some minor site work was completed in 2023, including tilling the old road alignments and adding in some organic material to aid in vegetation growth.

Remaining B-Pit Airspace Volume 0 BCY (final reclamation contours achieved)

Remaining A-Pit Airspace Volume 0 BCY (final reclamation contours achieved)

[A-PIT AND B-PIT ARE CLOSED]

Long-Term Spoil Remaining on Site 0 BCY

Topsand Stockpiled on Site 0 BCY

Review of 2003 versus 2008 Topographic Surfaces

Since reliability of the topographic map work is essential to most activities relative to reclamation, it is important to build reliability into this database. In 2003 through 2005, CEC had the site flown and contoured at 2-foot intervals in the disturbed “active reclamation” areas, as opposed to the 5-foot interval used prior to 2003. For 2006 and after, the entire site has been flown and contoured at the 2-foot interval. This more detailed topographic mapping has resulted in consecutive years of more accurate elevation mapping and better estimates of the volumes of materials used and their placement. CEC has concluded that the expanded 2-foot contour interval mapping for the entire site is a long-term benefit worth the additional investment.

Review of 2011, 2012, and 2013 Topographic Surfaces

In 2012, CEC had the site resurveyed and new control points added for future mapping and volume calculations. The new survey also moved the coordinate system to State Plane coordinates from the previously used local coordinates, however the volumes for 2012 were still calculated based on the local grid system. In 2013, and in subsequent mapping events, the state plane coordinate system alone was used to prepare the surfaces and calculate

volumes to ensure mapping activities into the future more accurately estimate the volumes of materials used and their placement and more accurate comparisons for future activities. This change from local to state plane coordinate system resulted in a change in elevation across the site which also results in a recalculated volume of materials. The following note has been added to each drawing to explain the change:

The October 2012 Aerial survey of Keenesburg Mine was compiled and triangulated on Colorado State Plane North (surface) and reprojected to Local Mine datum using follow report:

Horizontal Reprojection to Local Mine Datum:

Translation north: -1282156.5640 ft

Translation east: -3240307.3930 ft

Rotation: 0°01'39.45"

Origin north: 1318616.5640 ft

Origin east: 3280875.3930 ft

Scale factor: 1.00148829949

Vertical Reprojection to Local Mine Datum:

Note: there is a vertical plane between the New Vertical Datum and Local Mine Datum.

The following points were best fit to match Local Mine Datum.

X 36620.749 Y 28971.406 -3.834 ft at power pole

X 36498.977 Y 36412.435 -0.25 ft at control point 1101

X 40568.000 Y 36460.000 1.273 at control point 1103

X 41733.435 Y 28217.937 -1.834 ft at power pole

In 2013, and in subsequent mapping events, the flyover was mapped in state plane coordinates to match the 2012 change. Additionally, the volume calculations were conducted using Carlson software, arguably more accurate software than the previously used AutoCAD Land Development software (see note below). The two changes together result in a more accurate assessment of the remaining airspace for filling and soils available for use as cover during reclamation.

Computer-Aided Drafting System Software Explanation

As noted above, the volumes for the 2020 AHR Report were computed using the Triangulation by Two Surface Volumes method provided in the Carlson Software programs rather than the previously used AutoCAD Land Development Desktop software. Carlson software, arguably, results in more accurate volume calculations. These methods calculate faster in most cases than other methods and are the most accurate because it uses true TIN to TIN prismatic volumes. The Triangulation method re-triangulates a new surface based on the points from both surfaces (TIN). It uses the points from both surfaces (TIN), as well as any location where the triangle edges between the two surfaces cross. The Triangulation method then calculates the new surface elevations based on the difference between the elevations of the two surfaces.

PERMIT ACTIVITY SUMMARY FOR 2024

<u>Minor Revisions</u>	<u>Approved</u>	<u>Description of Revision</u>
MR-48	9/16/2024	Modification to Vegetation cover equation

<u>Technical Revisions</u>	<u>Approved</u>	<u>Description</u>
NA		

<u>"Other"</u>	<u>Approved</u>	<u>Description</u>
Permit Revision 3	11/05/2024	Normal Renewal
SL-12	09/16/2024	Phase Release