



January 2022 Grassy Valley Data

Norma Townley <Norma.Townley2@newmont.com>

Wed, Feb 2, 2022 at 8:26 AM

To: "Russell - DNR, Elliott" <elliott.russell@state.co.us>

Cc: Justin Raglin <Justin.Raglin@newmont.com>, Katie Blake <Katie.Blake@newmont.com>, Ronald Parratt <Ronald.Parratt@newmont.com>, Norma Townley <Norma.Townley2@newmont.com>

Dear Mr. Russell,

Please see the attached file containing the requested monthly data for Grassy Valley (graphs and analytical reports).

Best Regards,



Norma Townley

Business Assistant | Newmont | T 719-689-4255

Newmont

Cripple Creek & Victor Gold Mine

PO Box 191

100 N.3rd Street

Victor CO 80860

www.newmont.com

T-719-689-4255

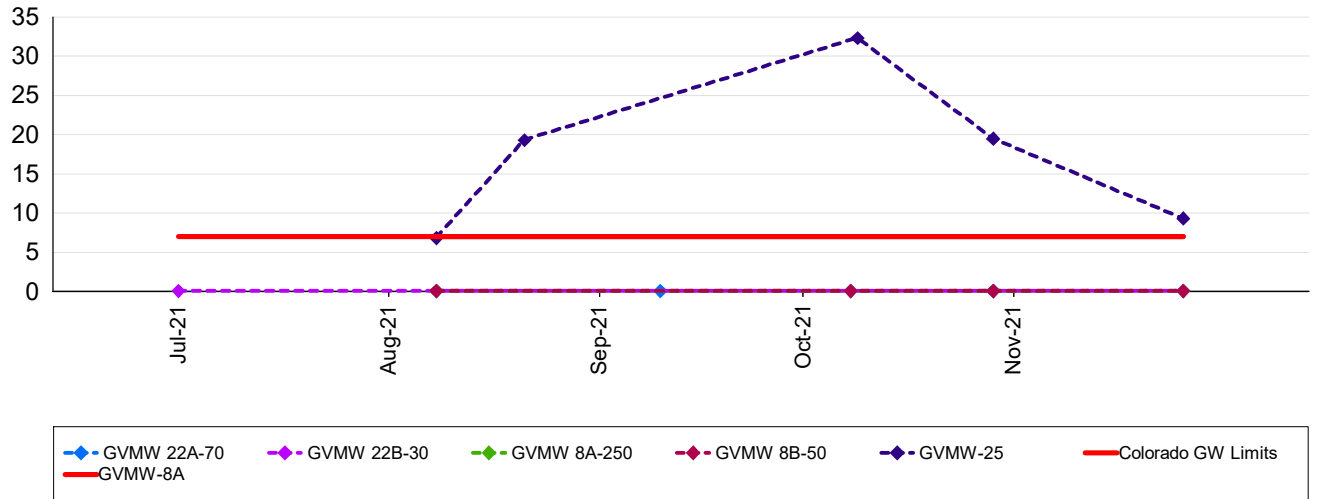
Email: Norma.Townley2@Newmont.com

Please consider the environment before printing this e-mail

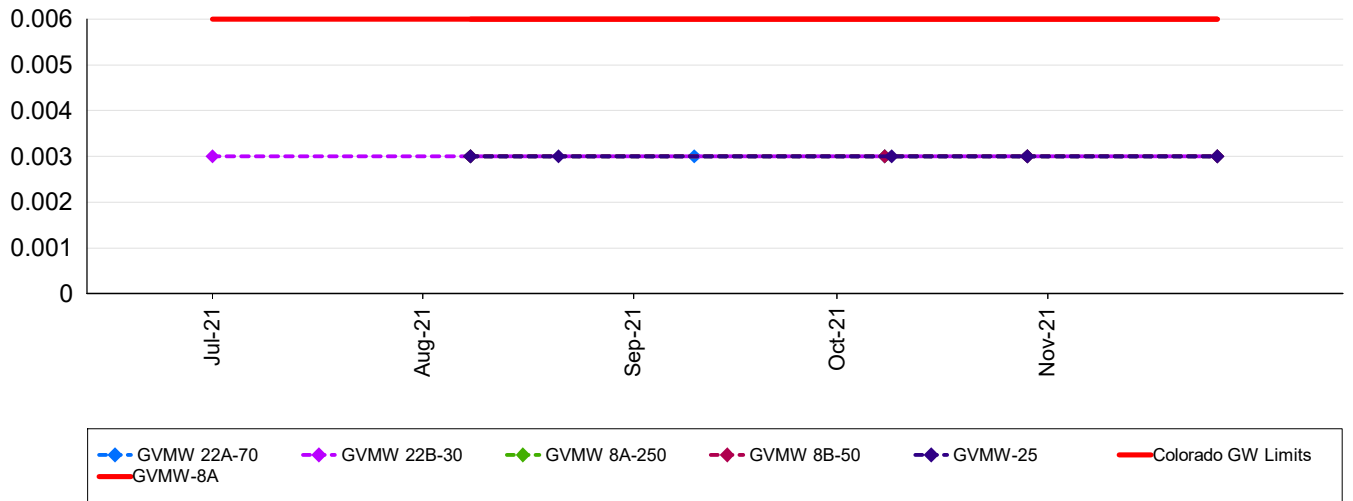


Monthly_Grassy_January_2022.pdf
360K

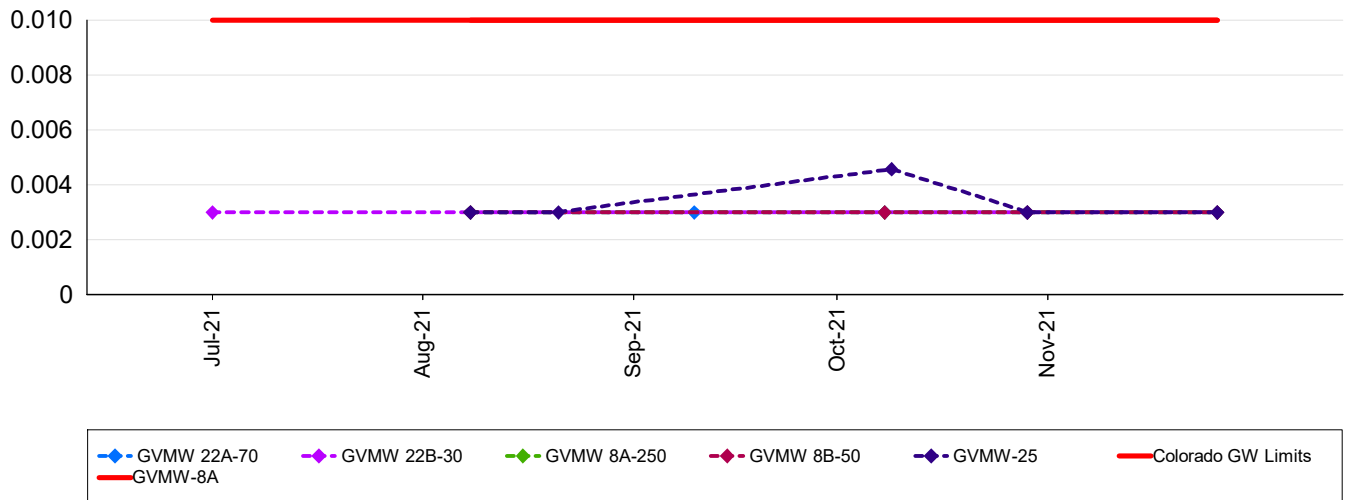
: Aluminium - Dissolved (mg/L)



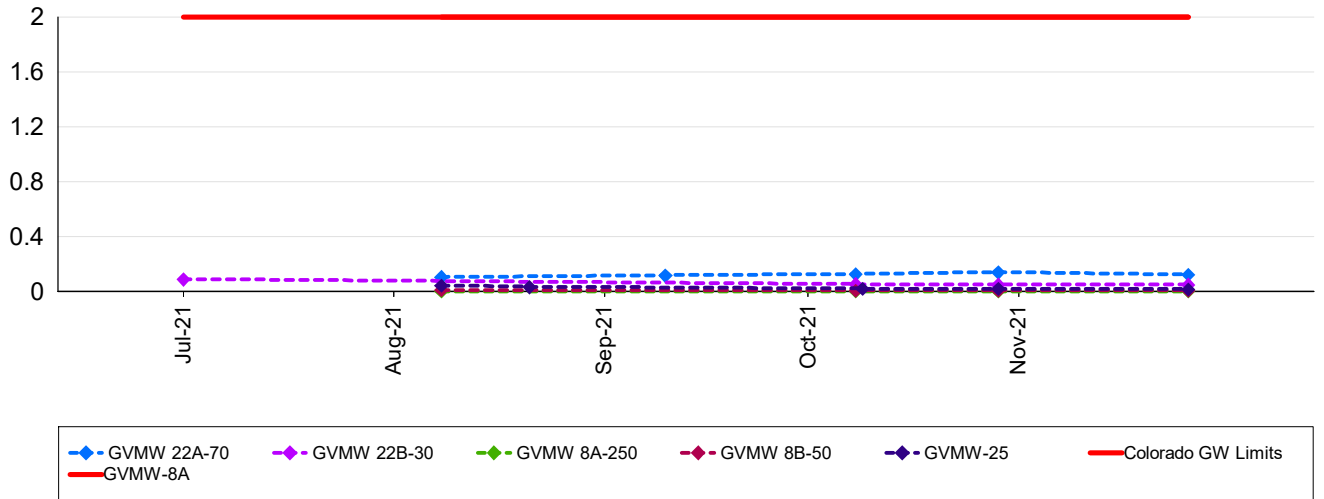
: Antimony - Dissolved (mg/L)



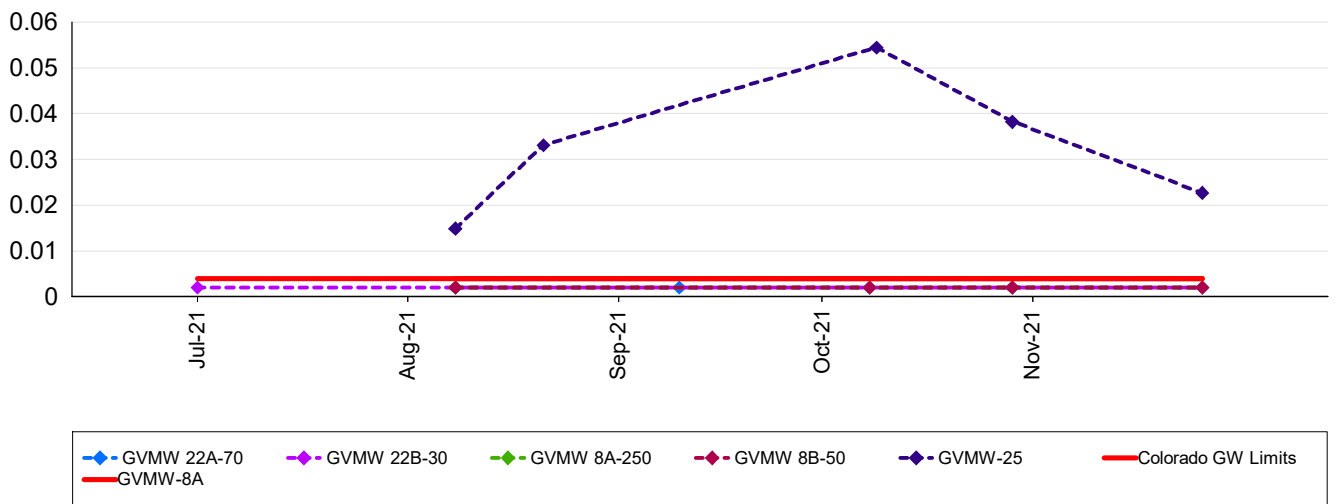
: Arsenic - Dissolved (mg/L)



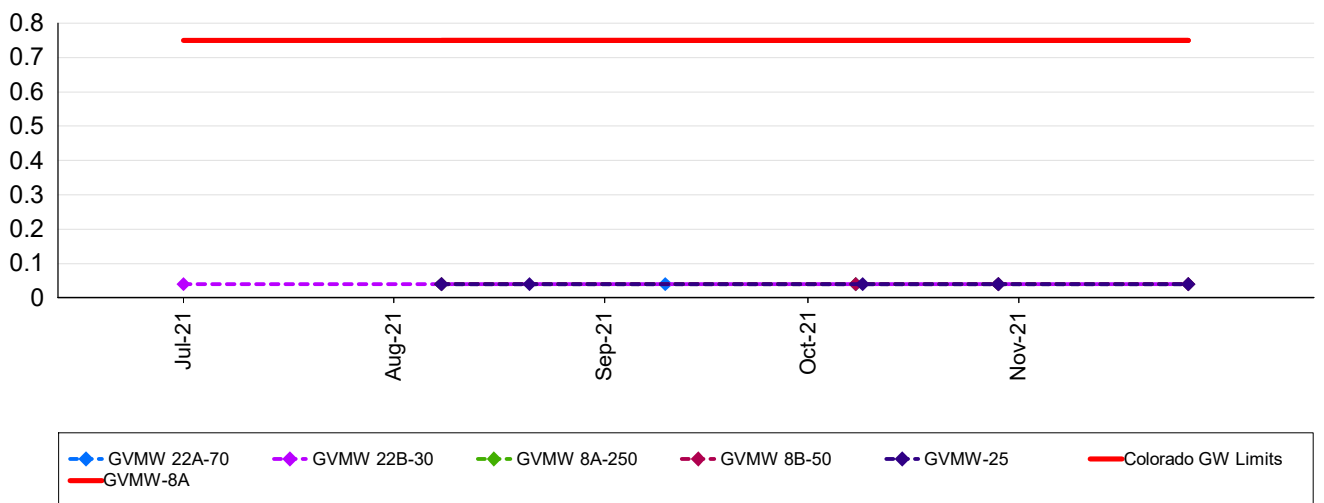
: Barium - Dissolved (mg/L)



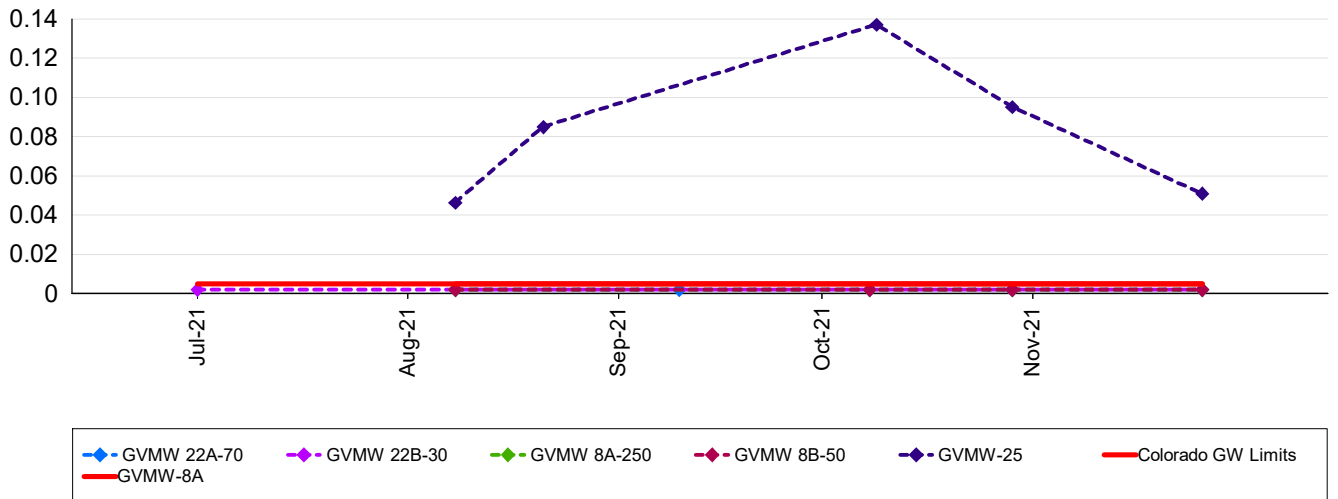
: Beryllium - Dissolved (mg/L)



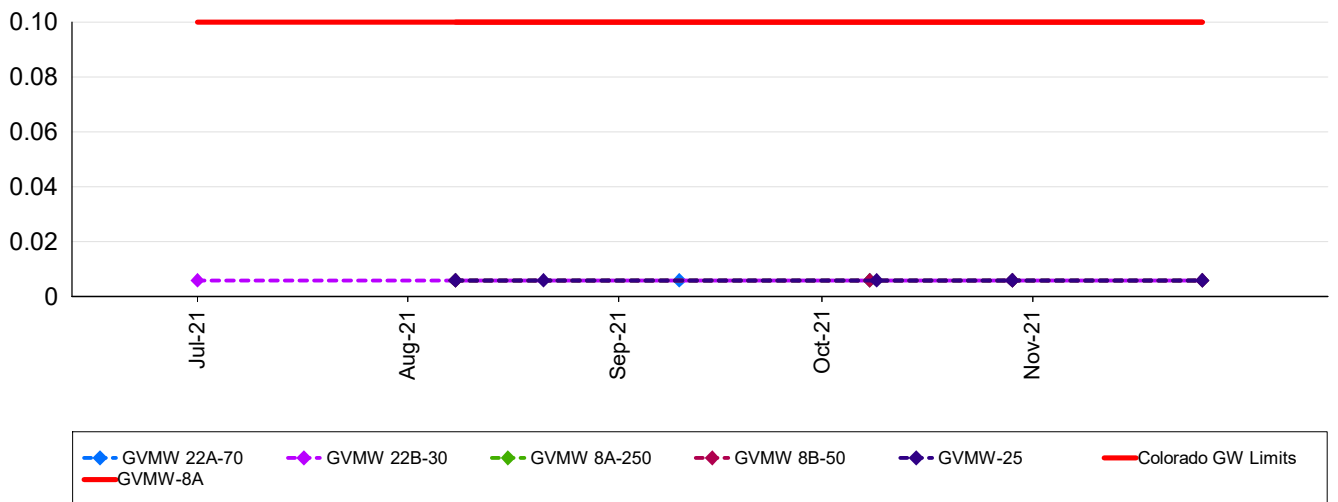
: Boron - Dissolved (mg/L)



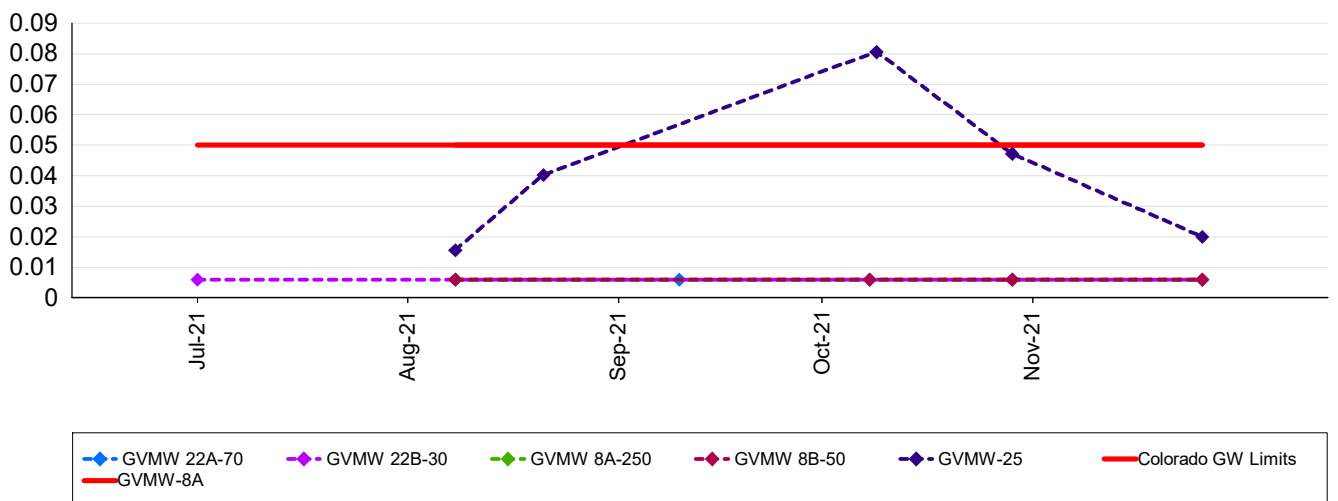
: Cadmium - Dissolved (mg/L)



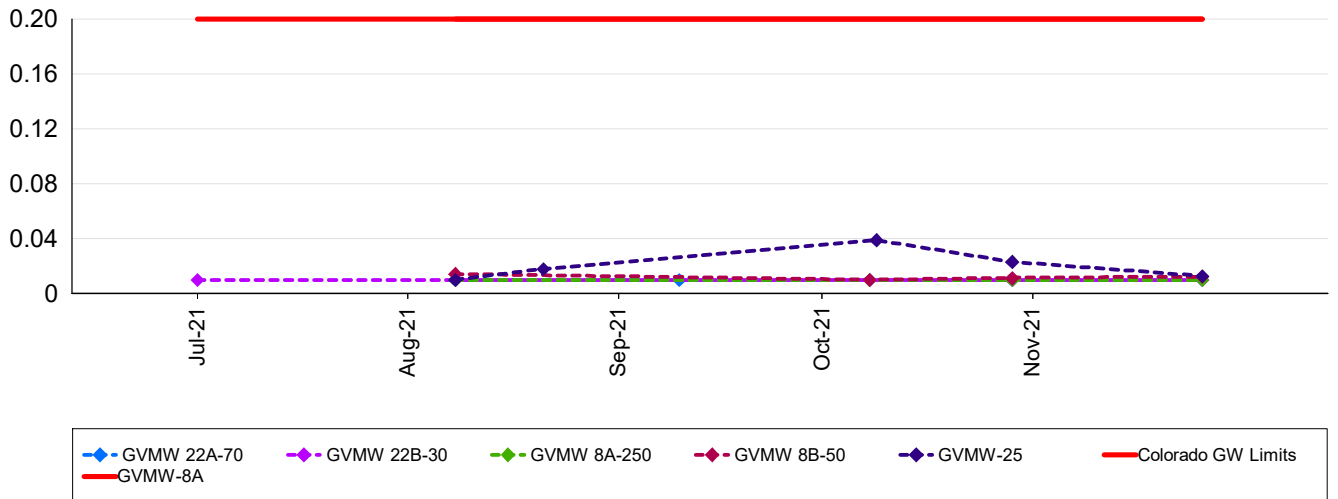
: Chromium - Dissolved (mg/L)



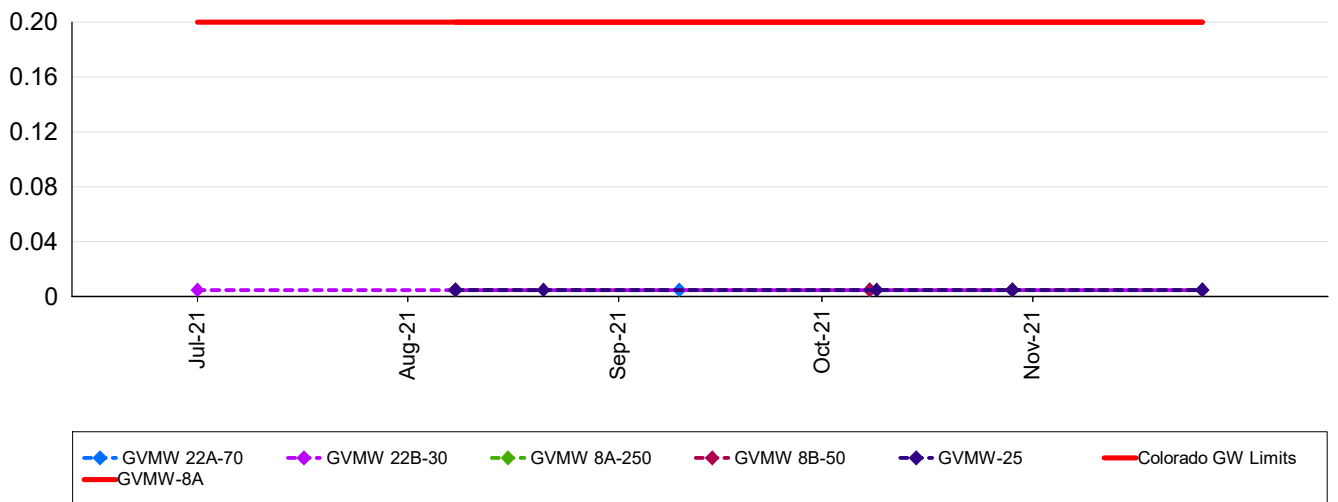
: Cobalt - Dissolved (mg/L)



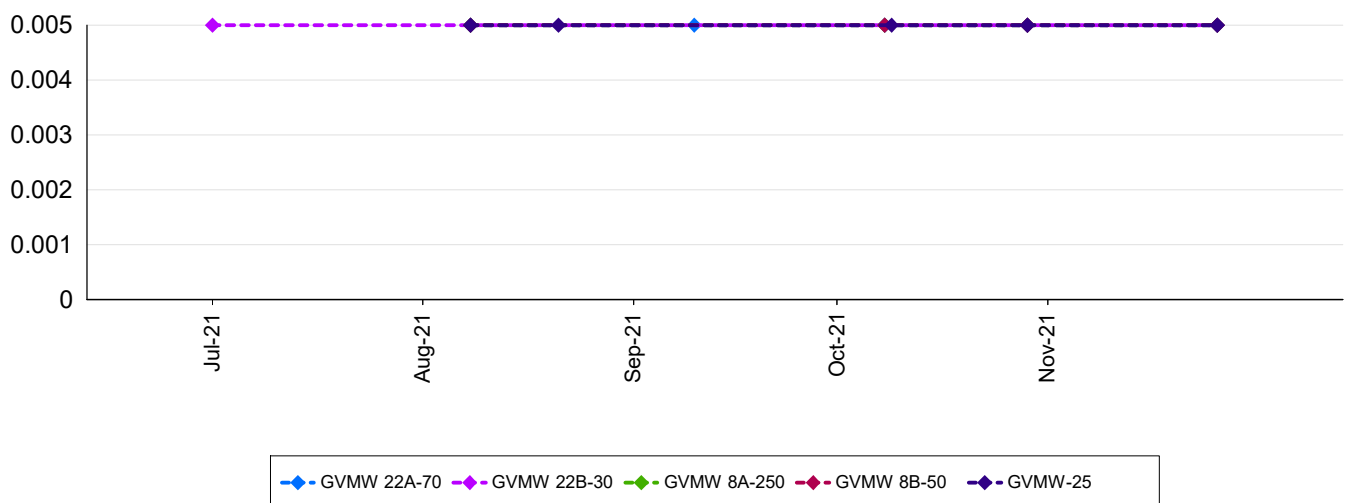
: Copper - Dissolved (mg/L)



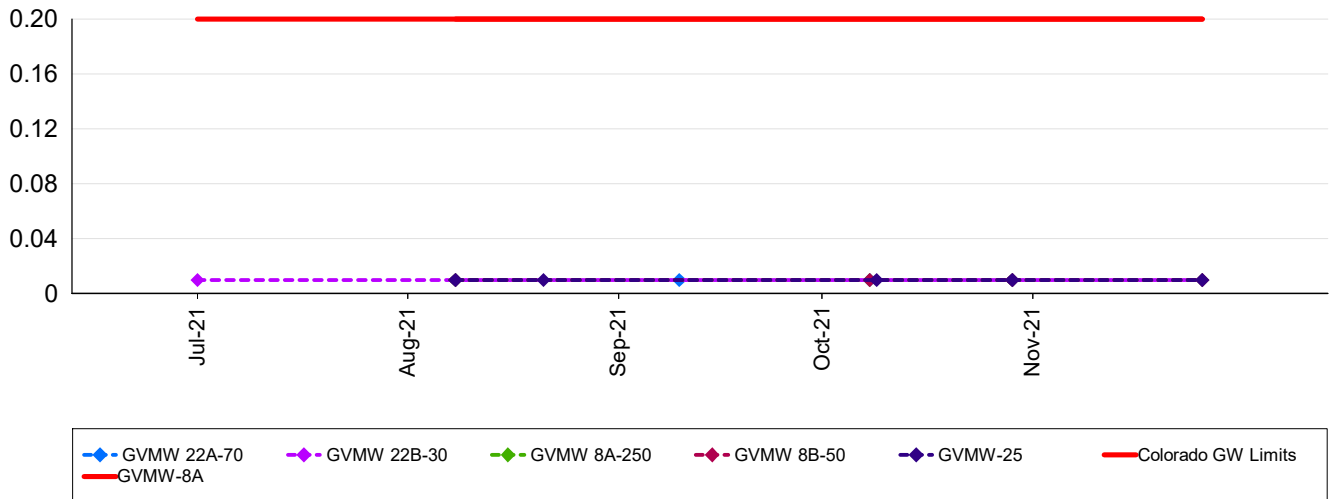
: Cyanide - Free (mg/L)



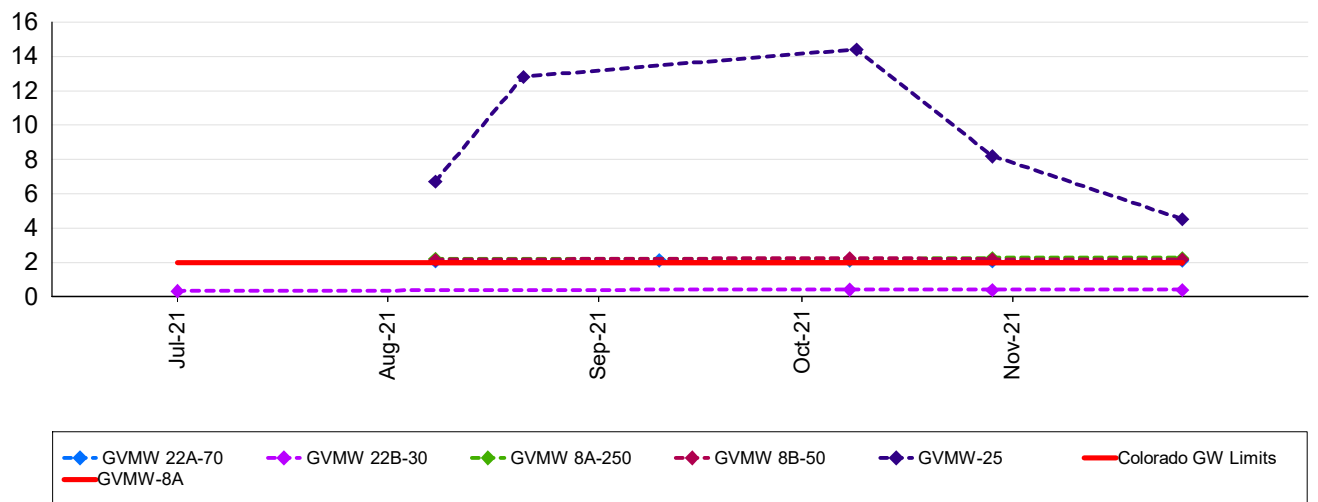
: Cyanide - Total (mg/L)



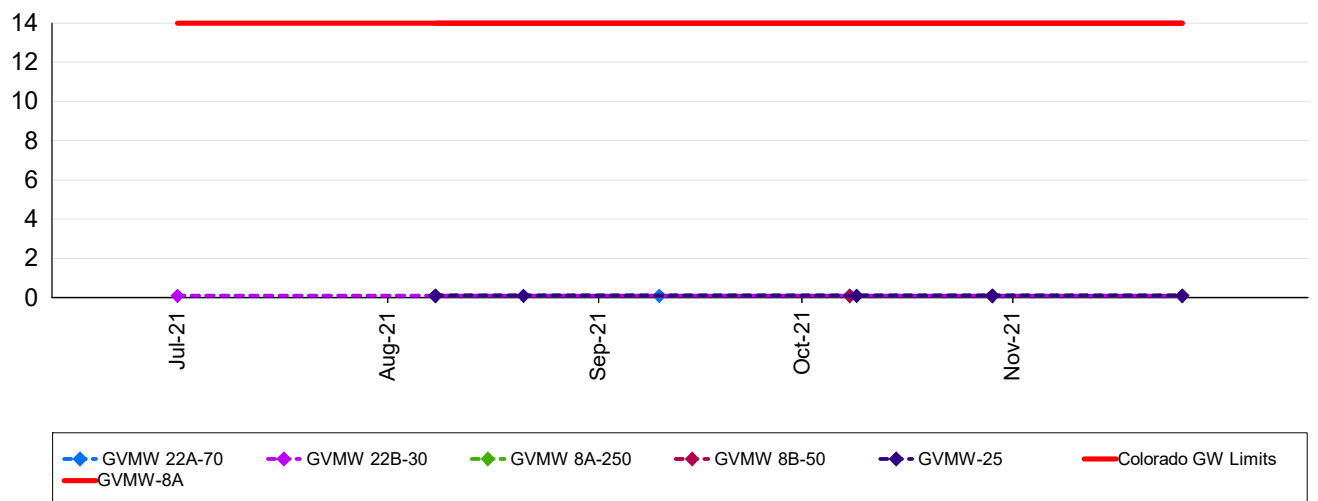
: Cyanide - WAD (mg/L)



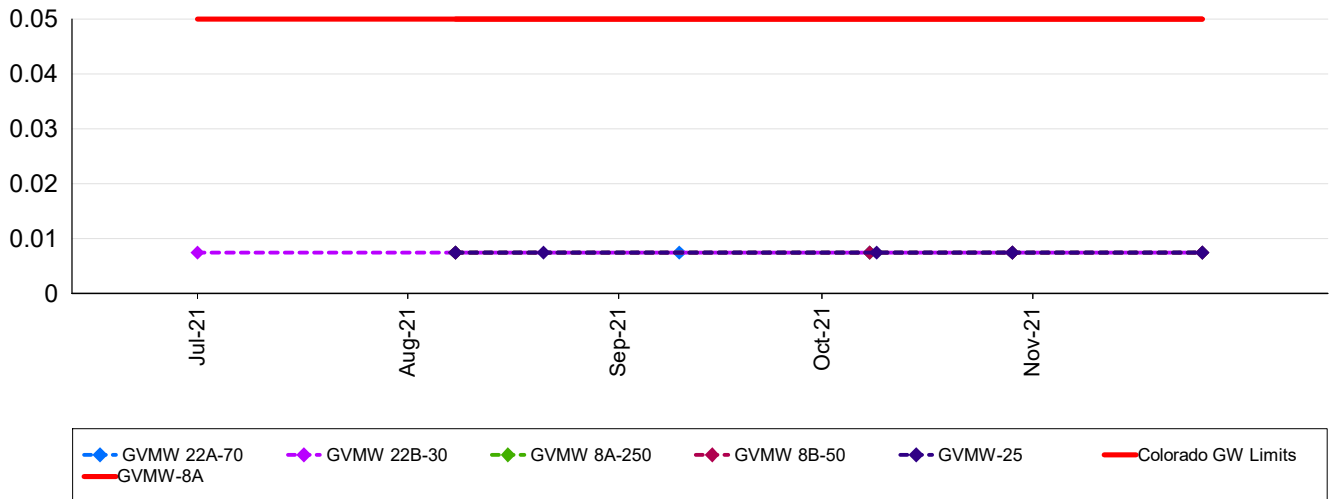
: Fluoride - Total F (mg/L)



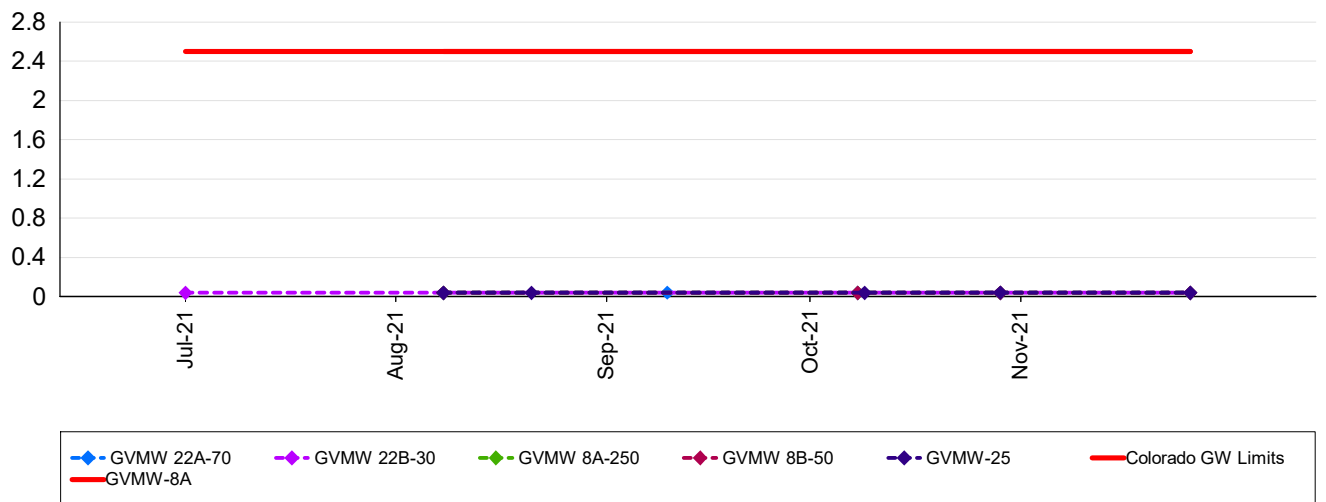
: Iron - Dissolved (mg/L)



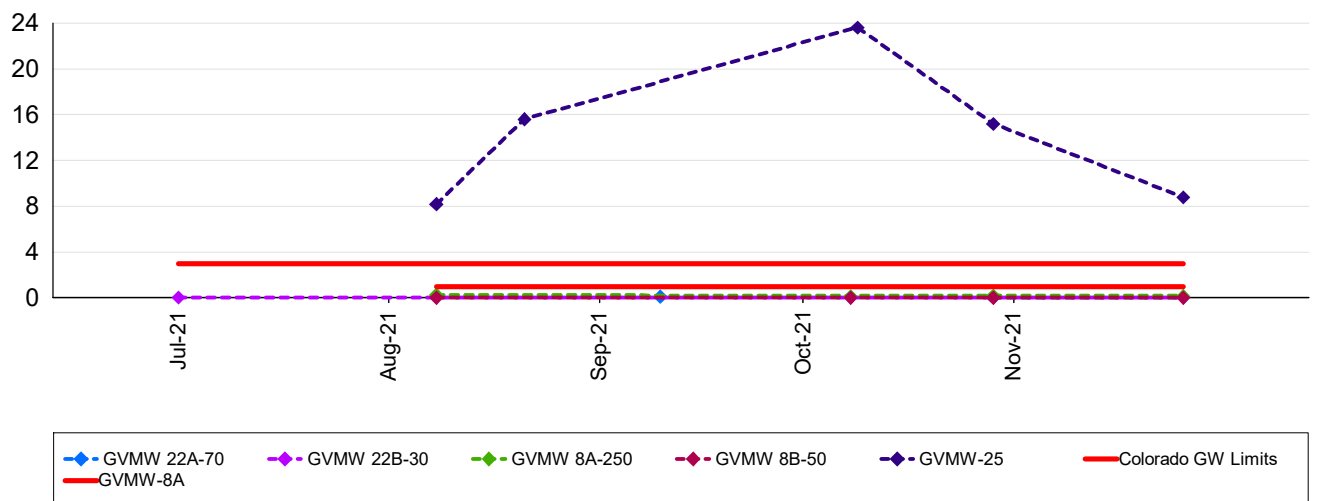
: Lead - Dissolved (mg/L)



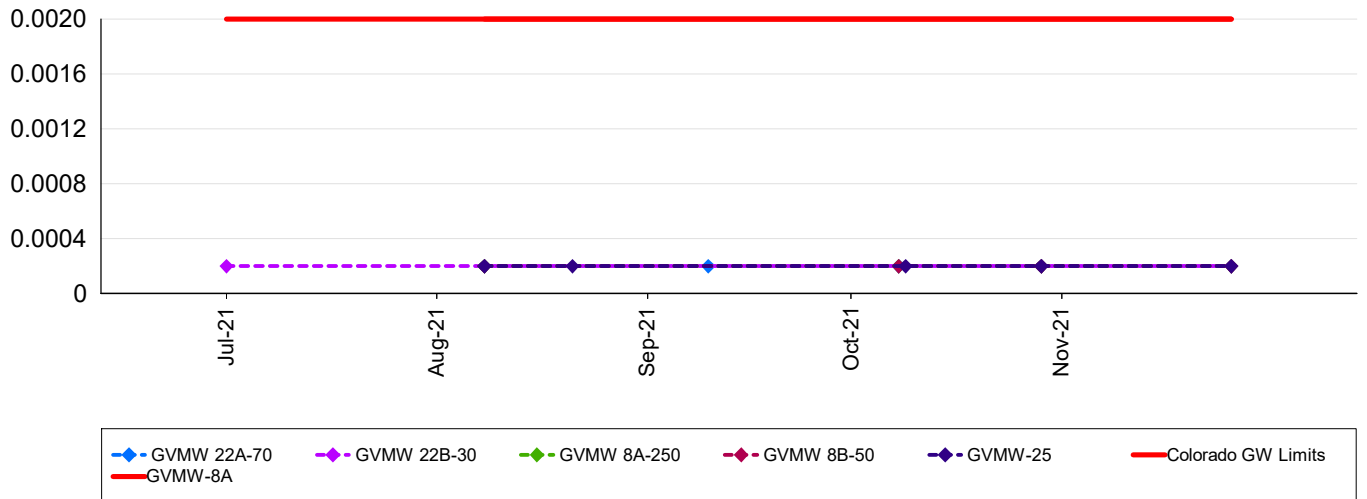
: Lithium - Dissolved (mg/L)



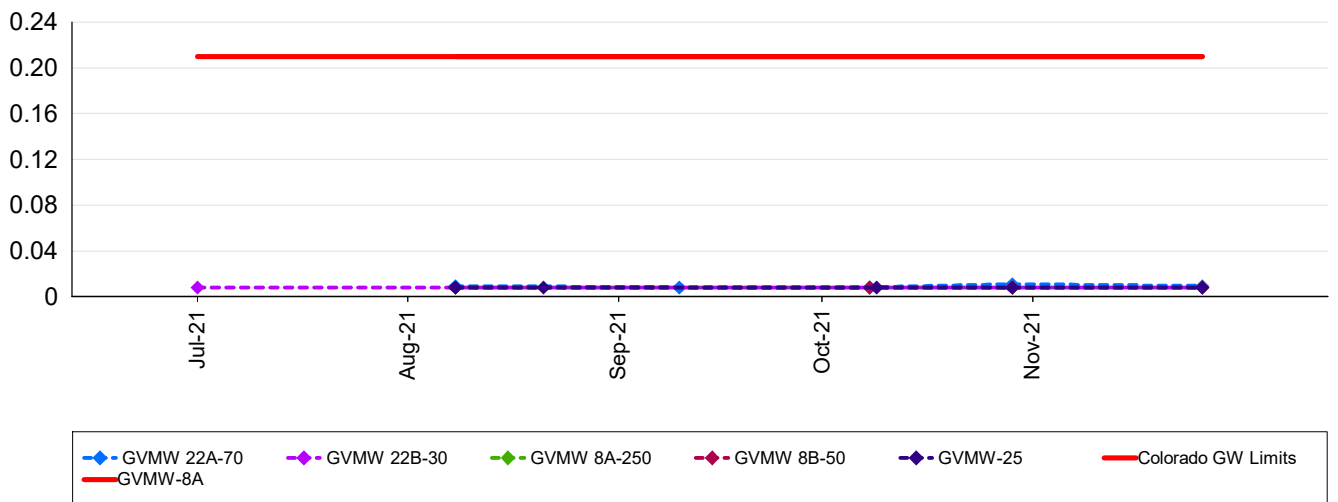
: Manganese - Dissolved (mg/L)



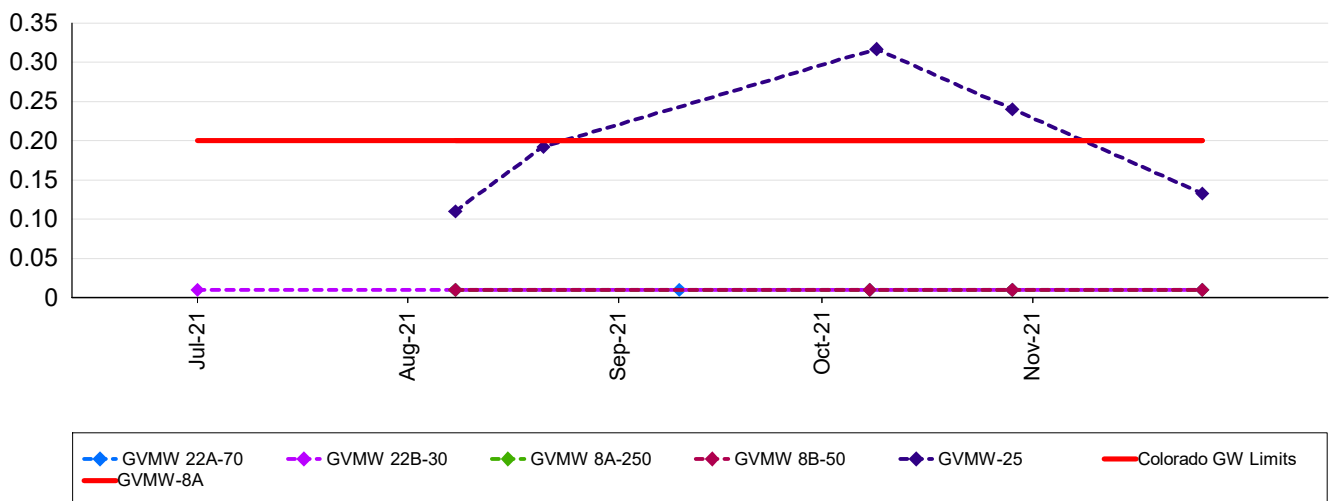
: Mercury - Dissolved (mg/L)



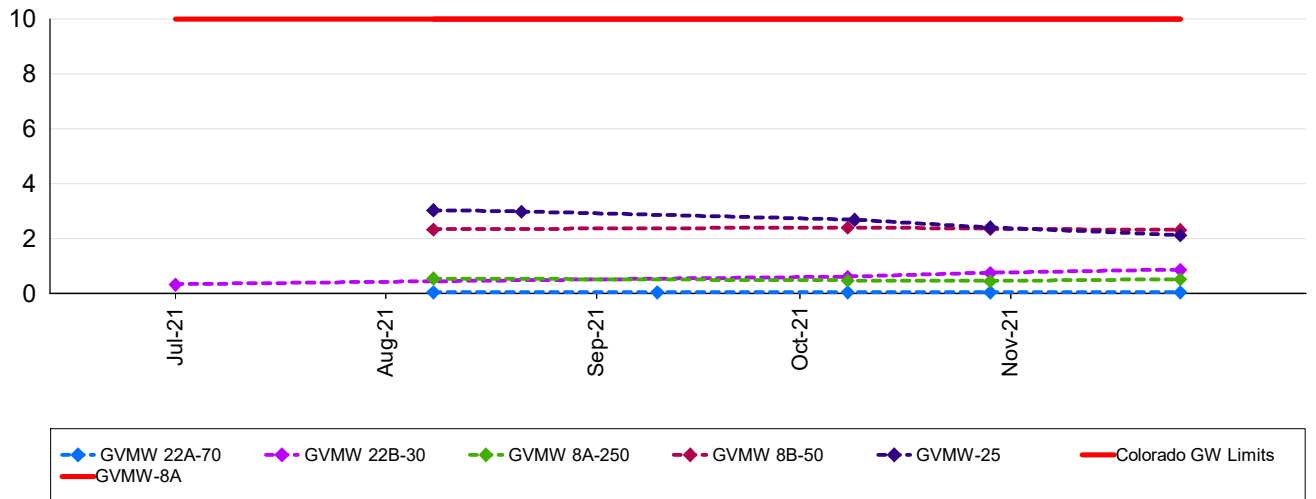
: Molybdenum - Dissolved (mg/L)



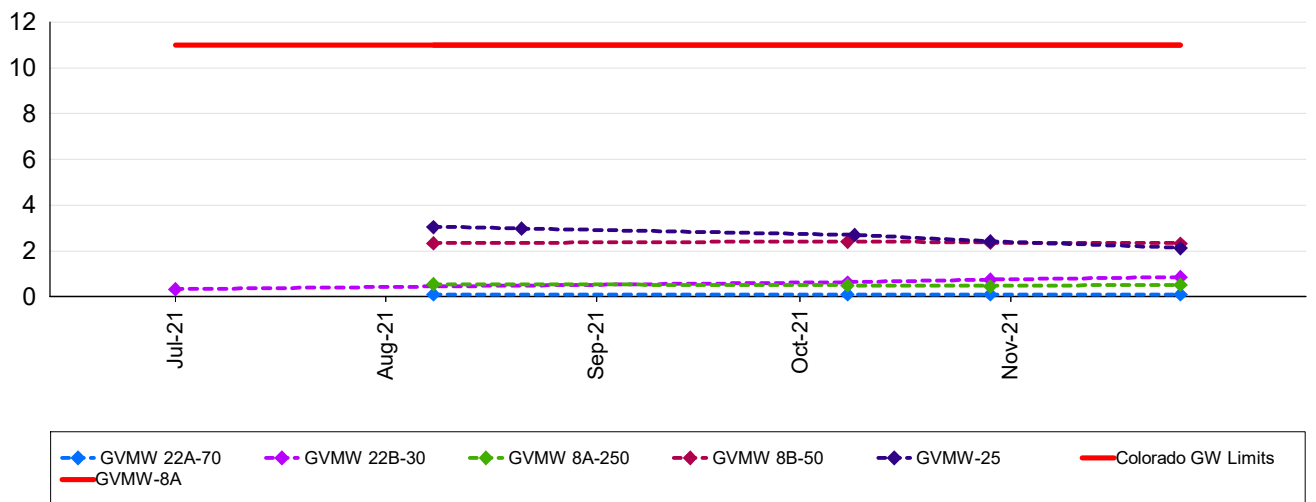
: Nickel - Dissolved (mg/L)



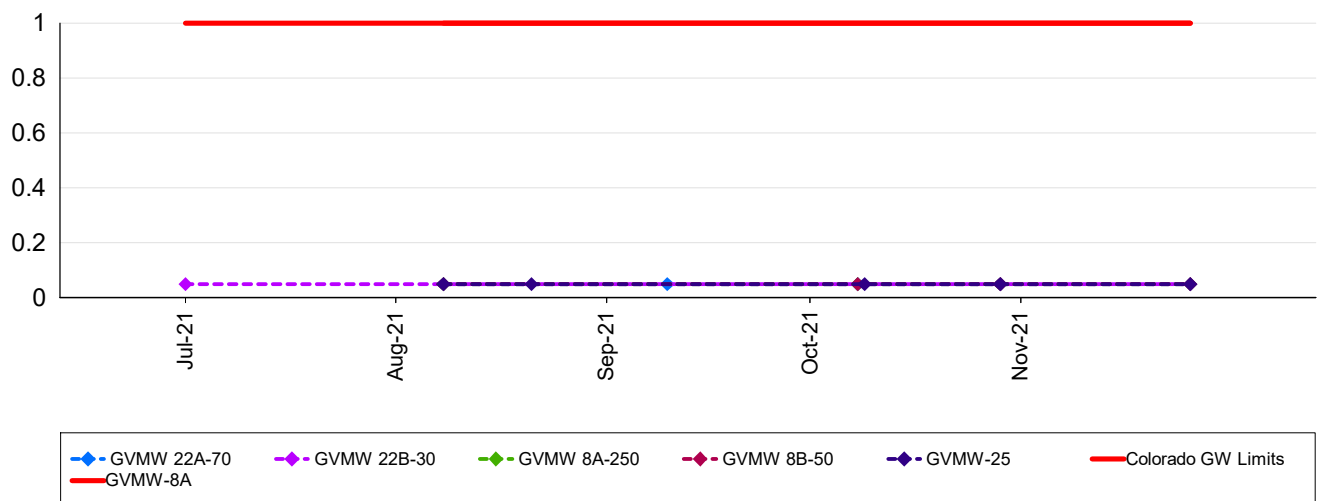
: Nitrate as Nitrogen (mg/L)



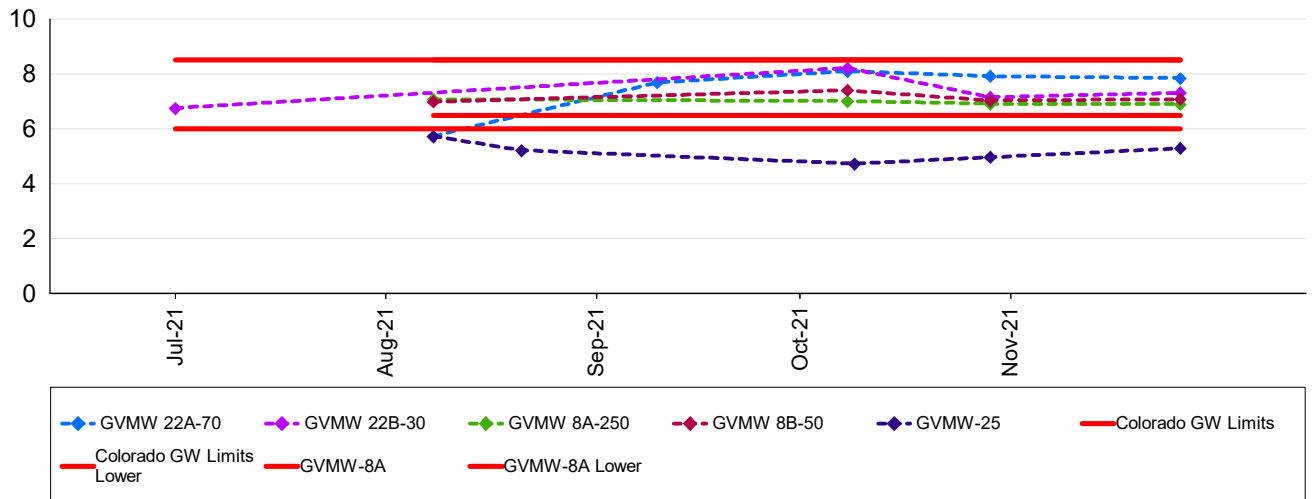
: Nitrite + Nitrate as Nitrogen (mg/L)



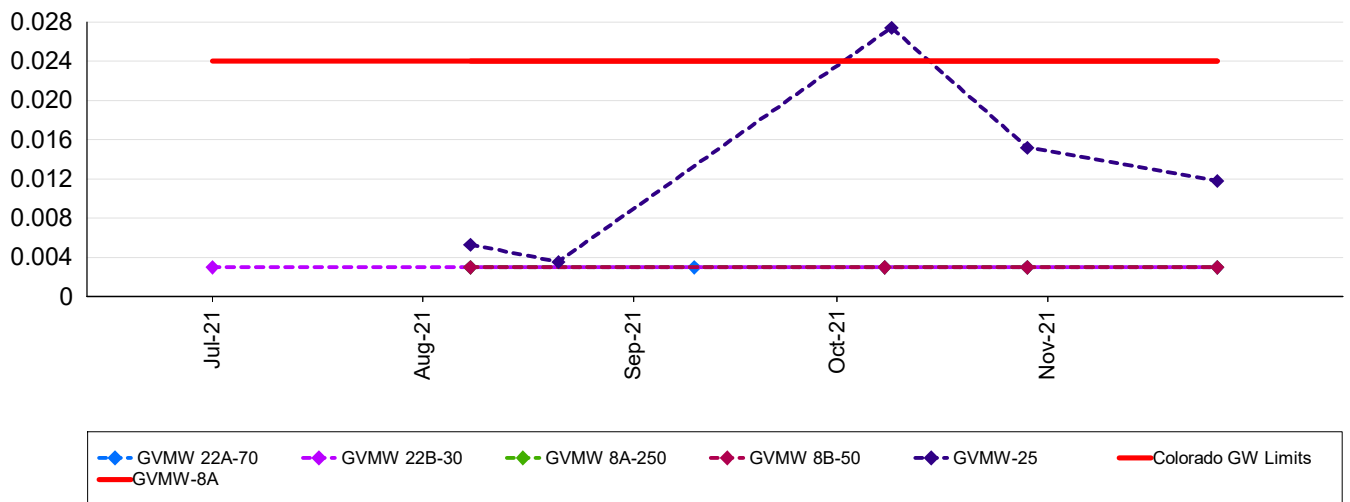
: Nitrite as Nitrogen (mg/L)



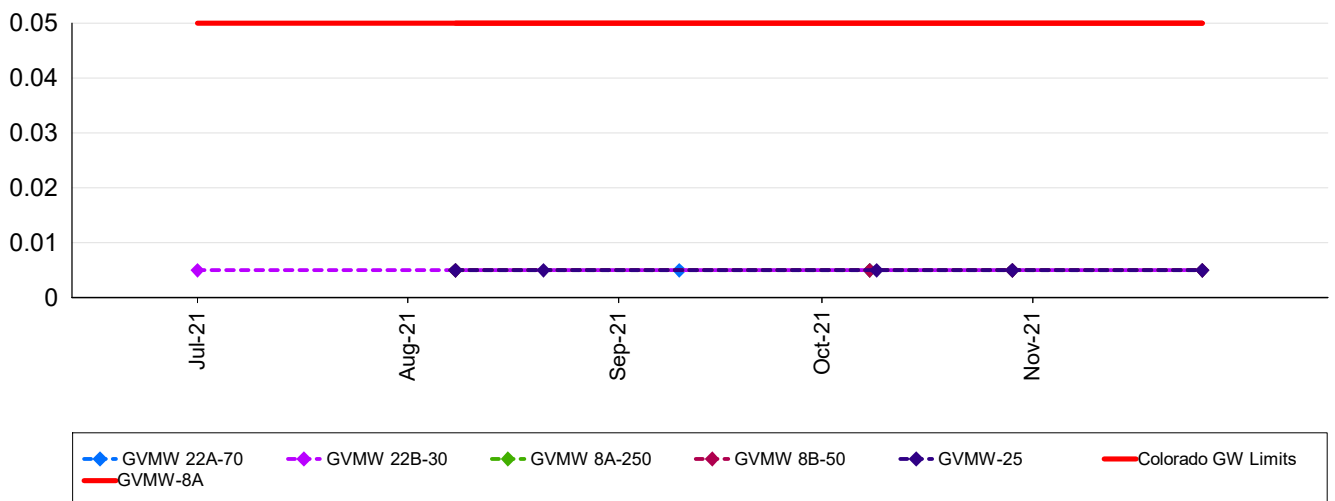
: pH Field (pH unit)



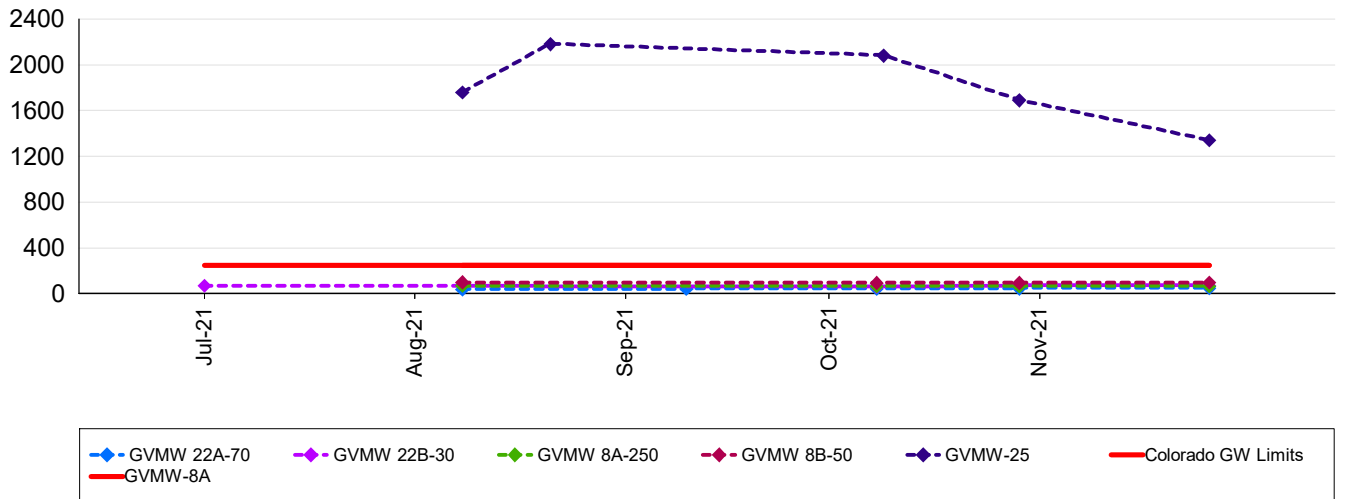
: Selenium - Dissolved (mg/L)



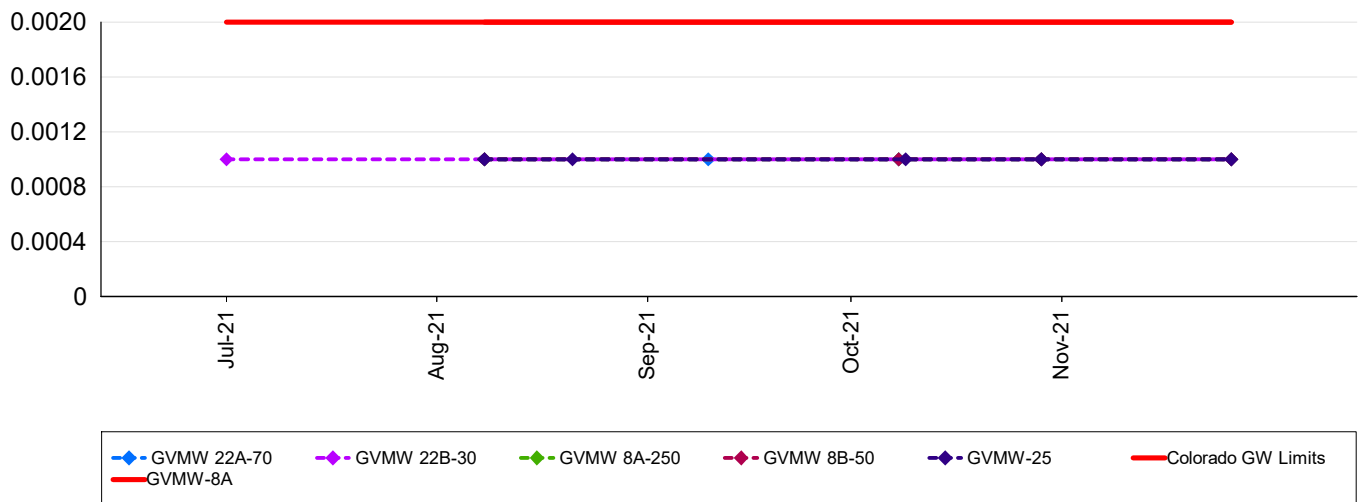
: Silver - Dissolved (mg/L)



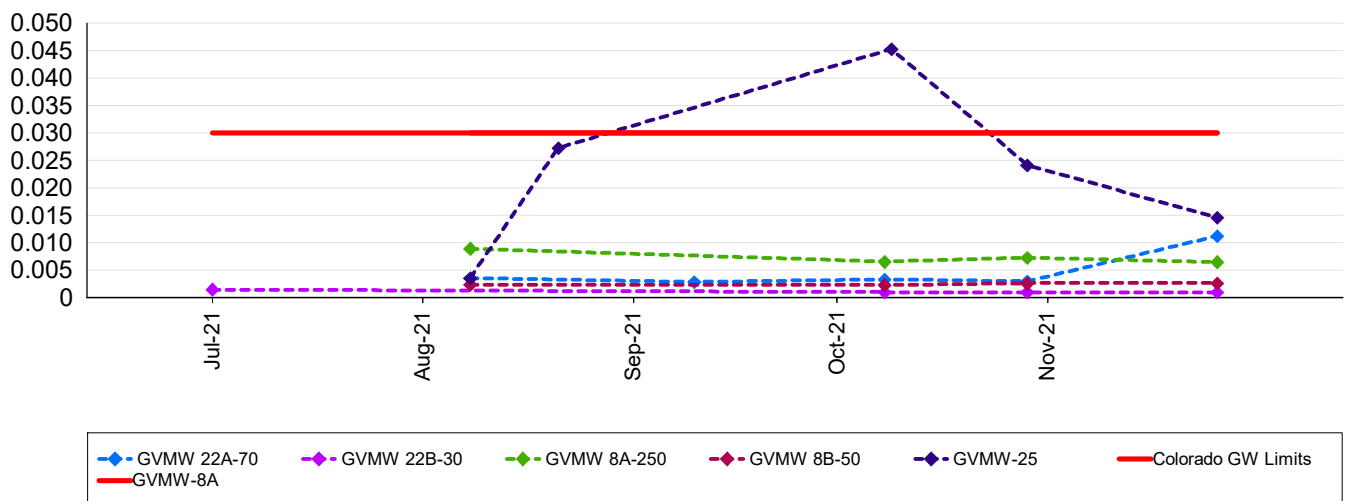
: Sulfate - Total (mg/L)



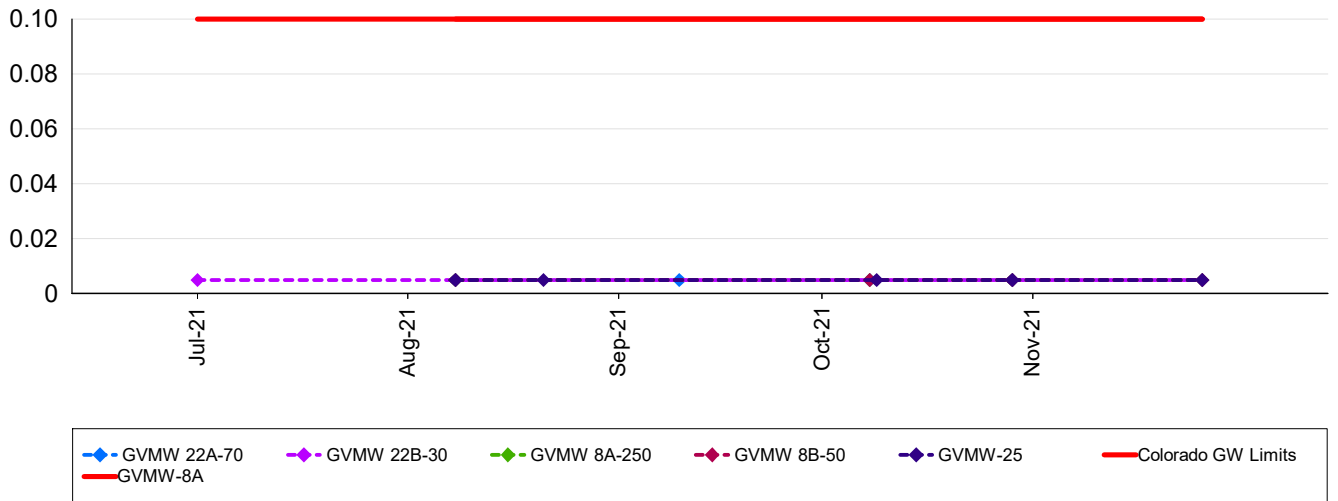
: Thallium - Dissolved (mg/L)



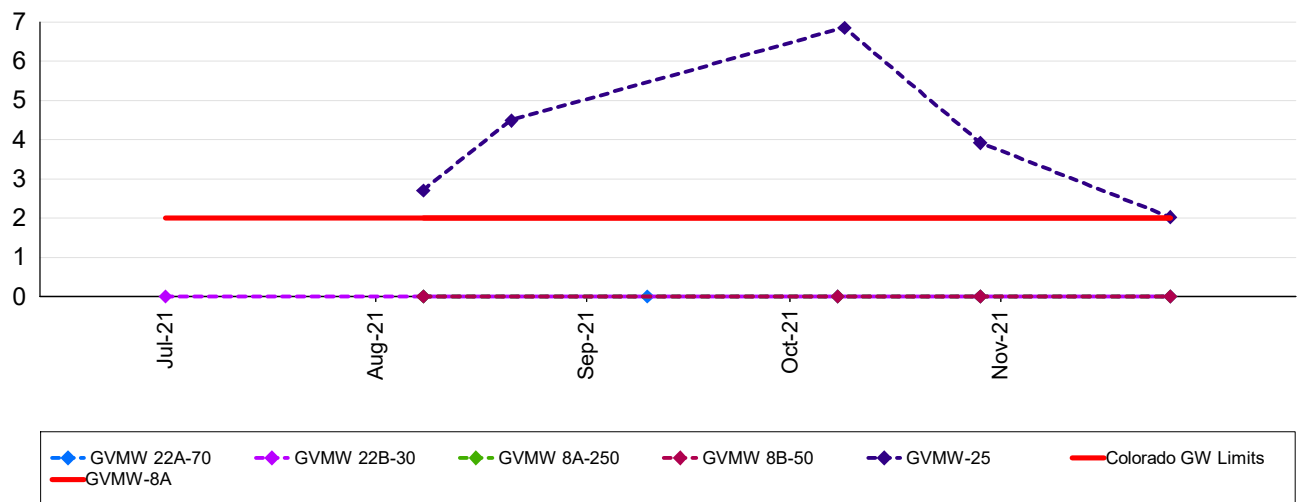
: Uranium - Dissolved (mg/L)



: Vanadium - Dissolved (mg/L)



: Zinc - Dissolved (mg/L)





Newmont - Cripple Creek & Victor
Post Office Box 191
Victor, CO 80860

Project Name: Cripple Creek/Victor Water and Soil 2022Work Order: **X2A0190**

Reported: 31-Jan-22 18:00

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Sampled By	Date Received	Notes
GVMW-25	X2A0190-01	Ground Water	12-Jan-22 13:15	BOD	13-Jan-2022	
GVMW-8A	X2A0190-02	Ground Water	12-Jan-22 08:10	BOD	13-Jan-2022	
GVMW-22A	X2A0190-03	Ground Water	12-Jan-22 10:35	BOD	13-Jan-2022	
GVMW-22B	X2A0190-04	Ground Water	12-Jan-22 11:50	BOD	13-Jan-2022	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested.

Sample preparation is defined by the client as per their Data Quality Objectives.

This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.

Analyses were performed in accordance with SVL standard operating procedures and calibrations were performed and met SVL internal QC criteria.

The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

This report shall not be reproduced except in full, without the written approval of SVL Analytical, Inc.

Case Narrative: X2A0190

The state of origin only accredits for drinking water analyses.

Samples treated with CdCO₃ before CN analysis for sulfide interference at client request.



Newmont - Cripple Creek & Victor
Post Office Box 191
Victor, CO 80860

Project Name: Cripple Creek/Victor Water and Soil 2022Work Order: **X2A0190**

Reported: 31-Jan-22 18:00

Client Sample ID: **GVMW-25**

Sampled: 12-Jan-22 13:15

Received: 13-Jan-22

Sampled By: BOD

SVL Sample ID: **X2A0190-01 (Ground Water)****Sample Report Page 1 of 2**

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable--reportable as Total per 40 CFR 136)										
EPA 200.7	Calcium	278	mg/L	0.100	0.035		X204005	ATM	01/26/22 13:28	M3
EPA 200.7	Magnesium	68.7	mg/L	0.500	0.045		X204005	ATM	01/26/22 13:28	
EPA 200.7	Potassium	4.25	mg/L	0.50	0.09		X204005	ATM	01/26/22 13:28	
SM 2340 B	Hardness (as CaCO3)	977	mg/L	2.31	0.271		N/A		01/26/22 13:28	

Metals (Dissolved)

EPA 200.7	Aluminum	5.07	mg/L	0.080	0.054		X204009	ATM	01/27/22 14:55	
EPA 200.7	Barium	0.0131	mg/L	0.0020	0.0019		X204009	ATM	01/27/22 14:55	
EPA 200.7	Beryllium	0.0156	mg/L	0.00200	0.00080		X204009	ATM	01/28/22 12:11	
EPA 200.7	Boron	< 0.0400	mg/L	0.0400	0.0078		X204009	ATM	01/27/22 14:55	
EPA 200.7	Cadmium	0.0313	mg/L	0.0020	0.0016		X204009	ATM	01/27/22 14:55	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X204009	ATM	01/27/22 14:55	
EPA 200.7	Cobalt	0.0082	mg/L	0.0060	0.0046		X204009	ATM	01/27/22 14:55	
EPA 200.7	Copper	< 0.0100	mg/L	0.0100	0.0027		X204009	ATM	01/27/22 14:55	
EPA 200.7	Iron	0.113	mg/L	0.100	0.056		X204009	ATM	01/27/22 14:55	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X204009	ATM	01/28/22 12:11	
EPA 200.7	Lithium	< 0.040	mg/L	0.040	0.025		X204009	ATM	01/28/22 12:11	
EPA 200.7	Manganese	5.25	mg/L	0.0080	0.0034		X204009	ATM	01/27/22 14:55	
EPA 200.7	Molybdenum	< 0.0080	mg/L	0.0080	0.0034		X204009	ATM	01/27/22 14:55	
EPA 200.7	Nickel	0.0942	mg/L	0.0100	0.0048		X204009	ATM	01/27/22 14:55	
EPA 200.7	Silver	< 0.0050	mg/L	0.0050	0.0019		X204009	ATM	01/27/22 14:55	
EPA 200.7	Sodium	30.8	mg/L	0.50	0.12		X204009	ATM	01/27/22 14:55	
EPA 200.7	Vanadium	< 0.0050	mg/L	0.0050	0.0019		X204009	ATM	01/27/22 14:55	
EPA 200.7	Zinc	1.10	mg/L	0.0100	0.0054		X204009	ATM	01/27/22 14:55	
EPA 200.8	Antimony	< 0.00300	mg/L	0.00300	0.00072		X203180	AS	01/27/22 14:10	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021		X203180	AS	01/27/22 14:10	
EPA 200.8	Selenium	< 0.00300	mg/L	0.00300	0.00024		X203180	AS	01/27/22 14:10	
EPA 200.8	Thallium	< 0.00100	mg/L	0.00100	0.00008		X203180	AS	01/27/22 14:10	
EPA 200.8	Uranium	0.00907	mg/L	0.00100	0.000052		X203180	AS	01/27/22 14:10	

Metals (Filtered)

EPA 245.1	Mercury	< 0.000200	mg/L	0.000200	0.000093		X205016	ATM	01/27/22 08:53	
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Classical Chemistry Parameters

ASTM D7237	Cyanide (free) @ pH 6 @21.0°C	< 0.0050	mg/L	0.0050	0.0048		X203085	HJL	01/18/22 13:53	
EPA 335.4	Cyanide (total)	< 0.0050	mg/L	0.0050	0.0038		X203191	KJR	01/17/22 14:11	
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X205147	KJR	01/27/22 14:34	
OIA 1677	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0010		X203086	HJL	01/18/22 10:38	
SM 2310 B	Acidity to pH 8.3	< 10.0	mg/L as CaCO3	10.0			X204069	MWD	01/21/22 09:45	
SM 2320 B	Total Alkalinity	3.7	mg/L as CaCO3	1.0			X204040	MWD	01/18/22 13:19	
SM 2320 B	Bicarbonate	3.7	mg/L as CaCO3	1.0			X204040	MWD	01/18/22 13:19	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X204040	MWD	01/18/22 13:19	
SM 2320 B	Hydroxide	< 1.0	mg/L as CaCO3	1.0			X204040	MWD	01/18/22 13:19	
SM 2540 C	Total Diss. Solids	1460	mg/L	10			X204049	TJL	01/18/22 17:05	
SM 2540 D	Total Susp. Solids	7.0	mg/L	5.0			X204050	TJL	01/18/22 17:05	
SM 4500 H B	pH @19.0°C	5.2	pH Units				X204040	MWD	01/18/22 13:19	H5



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Kellogg, ID 83837-0929

(208) 784-1258

www.svl.net

Newmont - Cripple Creek & Victor
Post Office Box 191
Victor, CO 80860

Project Name: Cripple Creek/Victor Water and Soil 2022

Work Order: **X2A0190**

Reported: 31-Jan-22 18:00

Client Sample ID: **GVMW-25**

Sampled: 12-Jan-22 13:15

SVL Sample ID: **X2A0190-01 (Ground Water)**

Received: 13-Jan-22

Sample Report Page 2 of 2

Sampled By: BOD

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	Chloride	16.7	mg/L	1.00	0.70	5	X203167	EBR	01/13/22 15:57	D2
EPA 300.0	Fluoride	3.33	mg/L	0.500	0.310	5	X203167	EBR	01/13/22 15:57	D1
EPA 300.0	Nitrate as N	1.89	mg/L	0.250	0.215	5	X203167	EBR	01/13/22 15:57	D1
EPA 300.0	Nitrate+Nitrite as N	1.89	mg/L	0.100	0.074		X203167	EBR	01/13/22 15:57	D1
EPA 300.0	Nitrite as N	< 0.250	mg/L	0.250	0.155	5	X203167	EBR	01/13/22 15:57	D1
EPA 300.0	Sulfate as SO4	978	mg/L	30.0	18.0	100	X203167	EBR	01/13/22 16:12	D2

Cation/Anion Balance and TDS Ratios

Cation Sum: 21.8 meq/L Anion Sum: 21.2 meq/L C/A Balance: 1.29 % Calculated TDS: 1390 TDS/cTDS: 1.05

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

Herman J. Haring
Project Manager



Newmont - Cripple Creek & Victor
Post Office Box 191
Victor, CO 80860

Project Name: Cripple Creek/Victor Water and Soil 2022

Work Order: **X2A0190**

Reported: 31-Jan-22 18:00

Client Sample ID: **GVMW-8A**

Sampled: 12-Jan-22 08:10

Received: 13-Jan-22

Sampled By: BOD

SVL Sample ID: **X2A0190-02 (Ground Water)**

Sample Report Page 1 of 2

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable--reportable as Total per 40 CFR 136)										
EPA 200.7	Calcium	47.6	mg/L	0.100	0.035		X204005	ATM	01/26/22 13:38	
EPA 200.7	Magnesium	6.18	mg/L	0.500	0.045		X204005	ATM	01/26/22 13:38	
EPA 200.7	Potassium	0.75	mg/L	0.50	0.09		X204005	ATM	01/26/22 13:38	
SM 2340 B	Hardness (as CaCO3)	144	mg/L	2.31	0.271		N/A		01/26/22 13:38	

Metals (Dissolved)

EPA 200.7	Aluminum	< 0.080	mg/L	0.080	0.054		X204009	ATM	01/27/22 14:58	
EPA 200.7	Barium	< 0.0020	mg/L	0.0020	0.0019		X204009	ATM	01/27/22 14:58	
EPA 200.7	Beryllium	< 0.00200	mg/L	0.00200	0.00080		X204009	ATM	01/28/22 12:15	
EPA 200.7	Boron	< 0.0400	mg/L	0.0400	0.0078		X204009	ATM	01/27/22 14:58	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X204009	ATM	01/27/22 14:58	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X204009	ATM	01/27/22 14:58	
EPA 200.7	Cobalt	< 0.0060	mg/L	0.0060	0.0046		X204009	ATM	01/27/22 14:58	
EPA 200.7	Copper	< 0.0100	mg/L	0.0100	0.0027		X204009	ATM	01/27/22 14:58	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X204009	ATM	01/27/22 14:58	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X204009	ATM	01/28/22 12:15	
EPA 200.7	Lithium	< 0.040	mg/L	0.040	0.025		X204009	ATM	01/28/22 12:15	
EPA 200.7	Manganese	0.0971	mg/L	0.0080	0.0034		X204009	ATM	01/27/22 14:58	
EPA 200.7	Molybdenum	< 0.0080	mg/L	0.0080	0.0034		X204009	ATM	01/27/22 14:58	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0048		X204009	ATM	01/27/22 14:58	
EPA 200.7	Silver	< 0.0050	mg/L	0.0050	0.0019		X204009	ATM	01/27/22 14:58	
EPA 200.7	Sodium	24.0	mg/L	0.50	0.12		X204009	ATM	01/27/22 14:58	
EPA 200.7	Vanadium	< 0.0050	mg/L	0.0050	0.0019		X204009	ATM	01/27/22 14:58	
EPA 200.7	Zinc	< 0.0100	mg/L	0.0100	0.0054		X204009	ATM	01/27/22 14:58	
EPA 200.8	Antimony	< 0.00300	mg/L	0.00300	0.00072		X203180	AS	01/27/22 14:17	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021		X203180	AS	01/27/22 14:17	
EPA 200.8	Selenium	< 0.00300	mg/L	0.00300	0.00024		X203180	AS	01/27/22 14:17	
EPA 200.8	Thallium	< 0.00100	mg/L	0.00100	0.00008		X203180	AS	01/27/22 14:17	
EPA 200.8	Uranium	0.00708	mg/L	0.00100	0.000052		X203180	AS	01/27/22 14:17	

Metals (Filtered)

EPA 245.1	Mercury	< 0.000200	mg/L	0.000200	0.000093		X205016	ATM	01/27/22 08:55	
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Classical Chemistry Parameters

ASTM D7237	Cyanide (free) @ pH 6 @21.0°C	< 0.0050	mg/L	0.0050	0.0048		X203085	HJL	01/18/22 13:55	
EPA 335.4	Cyanide (total)	< 0.0050	mg/L	0.0050	0.0038		X203191	KJR	01/17/22 14:14	
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X205147	KJR	01/27/22 14:36	
OIA 1677	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0010		X203086	HJL	01/18/22 10:40	
SM 2310 B	Acidity to pH 8.3	< 10.0	mg/L as CaCO3	10.0			X204069	MWD	01/21/22 09:45	
SM 2320 B	Total Alkalinity	48.2	mg/L as CaCO3	1.0			X204040	MWD	01/18/22 13:25	
SM 2320 B	Bicarbonate	48.2	mg/L as CaCO3	1.0			X204040	MWD	01/18/22 13:25	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X204040	MWD	01/18/22 13:25	
SM 2320 B	Hydroxide	< 1.0	mg/L as CaCO3	1.0			X204040	MWD	01/18/22 13:25	
SM 2540 C	Total Diss. Solids	244	mg/L	10			X204049	TJL	01/18/22 17:05	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X204050	TJL	01/18/22 17:05	
SM 4500 H B	pH @18.0°C	6.9	pH Units				X204040	MWD	01/18/22 13:25	H5



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Kellogg, ID 83837-0929

(208) 784-1258

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Newmont - Cripple Creek & Victor
Post Office Box 191
Victor, CO 80860

Project Name: Cripple Creek/Victor Water and Soil 2022

Work Order: **X2A0190**

Reported: 31-Jan-22 18:00

Client Sample ID: **GVMW-8A**

Sampled: 12-Jan-22 08:10

SVL Sample ID: **X2A0190-02 (Ground Water)**

Received: 13-Jan-22

Sample Report Page 2 of 2

Sampled By: BOD

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	Chloride	57.6	mg/L	2.00	1.40	10	X203167	EBR	01/13/22 17:14	D2
EPA 300.0	Fluoride	2.05	mg/L	0.100	0.062		X203167	EBR	01/13/22 16:58	
EPA 300.0	Nitrate as N	0.450	mg/L	0.050	0.043		X203167	EBR	01/13/22 16:58	
EPA 300.0	Nitrate+Nitrite as N	0.450	mg/L	0.100	0.074		X203167	EBR	01/13/22 16:58	
EPA 300.0	Nitrite as N	< 0.050	mg/L	0.050	0.031		X203167	EBR	01/13/22 16:58	
EPA 300.0	Sulfate as SO4	63.5	mg/L	3.00	1.80	10	X203167	EBR	01/13/22 17:14	D2

Cation/Anion Balance and TDS Ratios

Cation Sum: 3.96 meq/L Anion Sum: 4.05 meq/L C/A Balance: -1.08 % Calculated TDS: 233 TDS/cTDS: 1.05

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

Herman J. Haring
Project Manager



Newmont - Cripple Creek & Victor
Post Office Box 191
Victor, CO 80860

Project Name: Cripple Creek/Victor Water and Soil 2022Work Order: **X2A0190**

Reported: 31-Jan-22 18:00

Client Sample ID: **GVMW-22A**

Sampled: 12-Jan-22 10:35

Received: 13-Jan-22

Sampled By: BOD

SVL Sample ID: **X2A0190-03 (Ground Water)****Sample Report Page 1 of 2**

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Metals (Total Recoverable--reportable as Total per 40 CFR 136)										
EPA 200.7	Calcium	31.6	mg/L	0.100	0.035		X204005	ATM	01/26/22 13:42	
EPA 200.7	Magnesium	13.1	mg/L	0.500	0.045		X204005	ATM	01/26/22 13:42	
EPA 200.7	Potassium	1.13	mg/L	0.50	0.09		X204005	ATM	01/26/22 13:42	
SM 2340 B	Hardness (as CaCO3)	133	mg/L	2.31	0.271		N/A		01/26/22 13:42	

Metals (Dissolved)

EPA 200.7	Aluminum	< 0.080	mg/L	0.080	0.054		X204009	ATM	01/27/22 15:02	
EPA 200.7	Barium	0.116	mg/L	0.0020	0.0019		X204009	ATM	01/27/22 15:02	
EPA 200.7	Beryllium	< 0.00200	mg/L	0.00200	0.00080		X204009	ATM	01/28/22 12:19	
EPA 200.7	Boron	< 0.0400	mg/L	0.0400	0.0078		X204009	ATM	01/27/22 15:02	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X204009	ATM	01/27/22 15:02	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X204009	ATM	01/27/22 15:02	
EPA 200.7	Cobalt	< 0.0060	mg/L	0.0060	0.0046		X204009	ATM	01/27/22 15:02	
EPA 200.7	Copper	< 0.0100	mg/L	0.0100	0.0027		X204009	ATM	01/27/22 15:02	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X204009	ATM	01/27/22 15:02	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X204009	ATM	01/28/22 12:19	
EPA 200.7	Lithium	< 0.040	mg/L	0.040	0.025		X204009	ATM	01/28/22 12:19	
EPA 200.7	Manganese	0.0310	mg/L	0.0080	0.0034		X204009	ATM	01/27/22 15:02	
EPA 200.7	Molybdenum	< 0.0080	mg/L	0.0080	0.0034		X204009	ATM	01/27/22 15:02	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0048		X204009	ATM	01/27/22 15:02	
EPA 200.7	Silver	< 0.0050	mg/L	0.0050	0.0019		X204009	ATM	01/27/22 15:02	
EPA 200.7	Sodium	35.3	mg/L	0.50	0.12		X204009	ATM	01/27/22 15:02	
EPA 200.7	Vanadium	< 0.0050	mg/L	0.0050	0.0019		X204009	ATM	01/27/22 15:02	
EPA 200.7	Zinc	< 0.0100	mg/L	0.0100	0.0054		X204009	ATM	01/27/22 15:02	
EPA 200.8	Antimony	< 0.00300	mg/L	0.00300	0.00072		X203180	AS	01/27/22 14:19	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021		X203180	AS	01/27/22 14:19	
EPA 200.8	Selenium	< 0.00300	mg/L	0.00300	0.00024		X203180	AS	01/27/22 14:19	
EPA 200.8	Thallium	< 0.00100	mg/L	0.00100	0.00008		X203180	AS	01/27/22 14:19	
EPA 200.8	Uranium	0.00311	mg/L	0.00100	0.000052		X203180	AS	01/27/22 14:19	

Metals (Filtered)

EPA 245.1	Mercury	< 0.000200	mg/L	0.000200	0.000093		X205016	ATM	01/27/22 09:04	
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Classical Chemistry Parameters

ASTM D7237	Cyanide (free) @ pH 6 @21.0°C	< 0.0050	mg/L	0.0050	0.0048		X203085	HJL	01/18/22 13:56	
EPA 335.4	Cyanide (total)	< 0.0050	mg/L	0.0050	0.0038		X203191	KJR	01/17/22 14:16	
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X205147	KJR	01/27/22 14:39	
OIA 1677	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0010		X203086	HJL	01/18/22 10:41	
SM 2310 B	Acidity to pH 8.3	< 10.0	mg/L as CaCO3	10.0			X204069	MWD	01/21/22 09:45	
SM 2320 B	Total Alkalinity	159	mg/L as CaCO3	1.0			X204040	MWD	01/18/22 13:31	
SM 2320 B	Bicarbonate	159	mg/L as CaCO3	1.0			X204040	MWD	01/18/22 13:31	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X204040	MWD	01/18/22 13:31	
SM 2320 B	Hydroxide	< 1.0	mg/L as CaCO3	1.0			X204040	MWD	01/18/22 13:31	
SM 2540 C	Total Diss. Solids	201	mg/L	10			X204049	TJL	01/18/22 17:05	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X204050	TJL	01/18/22 17:05	
SM 4500 H B	pH @18.0°C	7.9	pH Units				X204040	MWD	01/18/22 13:31	H5



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Newmont - Cripple Creek & Victor
Post Office Box 191
Victor, CO 80860

Project Name: Cripple Creek/Victor Water and Soil 2022

Work Order: **X2A0190**

Reported: 31-Jan-22 18:00

Client Sample ID: **GVMW-22A**

Sampled: 12-Jan-22 10:35

SVL Sample ID: **X2A0190-03 (Ground Water)**

Received: 13-Jan-22

Sample Report Page 2 of 2

Sampled By: BOD

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
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Anions by Ion Chromatography

EPA 300.0	Chloride	4.58	mg/L	0.20	0.14		X203167	EBR	01/13/22 17:29	
EPA 300.0	Fluoride	1.96	mg/L	0.100	0.062		X203167	EBR	01/13/22 17:29	
EPA 300.0	Nitrate as N	< 0.050	mg/L	0.050	0.043		X203167	EBR	01/13/22 17:29	
EPA 300.0	Nitrate+Nitrite as N	< 0.100	mg/L	0.100	0.074		X203167	EBR	01/13/22 17:29	
EPA 300.0	Nitrite as N	< 0.050	mg/L	0.050	0.031		X203167	EBR	01/13/22 17:29	
EPA 300.0	Sulfate as SO4	42.0	mg/L	0.30	0.18		X203167	EBR	01/13/22 17:29	

Cation/Anion Balance and TDS Ratios

Cation Sum: 4.24 meq/L Anion Sum: 4.29 meq/L C/A Balance: -0.63 % Calculated TDS: 225 TDS/cTDS: 0.89

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

Herman J. Haring
Project Manager



Newmont - Cripple Creek & Victor
Post Office Box 191
Victor, CO 80860

Project Name: Cripple Creek/Victor Water and Soil 2022Work Order: **X2A0190**

Reported: 31-Jan-22 18:00

Client Sample ID: **GVMW-22B**

Sampled: 12-Jan-22 11:50

Received: 13-Jan-22

Sampled By: BOD

SVL Sample ID: **X2A0190-04 (Ground Water)****Sample Report Page 1 of 2**

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
EPA 200.7	Calcium	33.4	mg/L	0.100	0.035		X204005	ATM	01/26/22 13:45	
EPA 200.7	Magnesium	9.82	mg/L	0.500	0.045		X204005	ATM	01/26/22 13:45	
EPA 200.7	Potassium	1.53	mg/L	0.50	0.09		X204005	ATM	01/26/22 13:45	
SM 2340 B	Hardness (as CaCO3)	124	mg/L	2.31	0.271		N/A		01/26/22 13:45	

Metals (Total Recoverable--reportable as Total per 40 CFR 136)**Metals (Dissolved)**

EPA 200.7	Aluminum	< 0.080	mg/L	0.080	0.054		X204009	ATM	01/27/22 15:05	
EPA 200.7	Barium	0.0413	mg/L	0.0020	0.0019		X204009	ATM	01/27/22 15:05	
EPA 200.7	Beryllium	< 0.00200	mg/L	0.00200	0.00080		X204009	ATM	01/28/22 12:23	
EPA 200.7	Boron	< 0.0400	mg/L	0.0400	0.0078		X204009	ATM	01/27/22 15:05	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X204009	ATM	01/27/22 15:05	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X204009	ATM	01/27/22 15:05	
EPA 200.7	Cobalt	< 0.0060	mg/L	0.0060	0.0046		X204009	ATM	01/27/22 15:05	
EPA 200.7	Copper	< 0.0100	mg/L	0.0100	0.0027		X204009	ATM	01/27/22 15:05	
EPA 200.7	Iron	0.226	mg/L	0.100	0.056		X204009	ATM	01/27/22 15:05	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X204009	ATM	01/28/22 12:23	
EPA 200.7	Lithium	< 0.040	mg/L	0.040	0.025		X204009	ATM	01/28/22 12:23	
EPA 200.7	Manganese	0.0284	mg/L	0.0080	0.0034		X204009	ATM	01/27/22 15:05	
EPA 200.7	Molybdenum	< 0.0080	mg/L	0.0080	0.0034		X204009	ATM	01/27/22 15:05	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0048		X204009	ATM	01/27/22 15:05	
EPA 200.7	Silver	< 0.0050	mg/L	0.0050	0.0019		X204009	ATM	01/27/22 15:05	
EPA 200.7	Sodium	20.6	mg/L	0.50	0.12		X204009	ATM	01/27/22 15:05	
EPA 200.7	Vanadium	< 0.0050	mg/L	0.0050	0.0019		X204009	ATM	01/27/22 15:05	
EPA 200.7	Zinc	< 0.0100	mg/L	0.0100	0.0054		X204009	ATM	01/27/22 15:05	
EPA 200.8	Antimony	< 0.00300	mg/L	0.00300	0.00072		X203180	AS	01/27/22 14:21	
EPA 200.8	Arsenic	< 0.00300	mg/L	0.00300	0.00021		X203180	AS	01/27/22 14:21	
EPA 200.8	Selenium	< 0.00300	mg/L	0.00300	0.00024		X203180	AS	01/27/22 14:21	
EPA 200.8	Thallium	< 0.00100	mg/L	0.00100	0.00008		X203180	AS	01/27/22 14:21	
EPA 200.8	Uranium	< 0.00100	mg/L	0.00100	0.000052		X203180	AS	01/27/22 14:21	

Metals (Filtered)

EPA 245.1	Mercury	< 0.000200	mg/L	0.000200	0.000093		X205016	ATM	01/27/22 09:10	
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Classical Chemistry Parameters

ASTM D7237	Cyanide (free) @ pH 6 @21.0°C	< 0.0050	mg/L	0.0050	0.0048		X203085	HJL	01/18/22 14:02	
EPA 335.4	Cyanide (total)	< 0.0050	mg/L	0.0050	0.0038		X203191	KJR	01/17/22 14:19	
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X205147	KJR	01/27/22 14:52	
OIA 1677	Cyanide (WAD)	< 0.0100	mg/L	0.0100	0.0010		X203086	HJL	01/18/22 10:43	
SM 2310 B	Acidity to pH 8.3	< 10.0	mg/L as CaCO3	10.0			X204069	MWD	01/21/22 09:45	
SM 2320 B	Total Alkalinity	74.5	mg/L as CaCO3	1.0			X204040	MWD	01/18/22 13:39	
SM 2320 B	Bicarbonate	74.5	mg/L as CaCO3	1.0			X204040	MWD	01/18/22 13:39	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X204040	MWD	01/18/22 13:39	
SM 2320 B	Hydroxide	< 1.0	mg/L as CaCO3	1.0			X204040	MWD	01/18/22 13:39	
SM 2540 C	Total Diss. Solids	185	mg/L	10			X204049	TJL	01/18/22 17:05	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X204050	TJL	01/18/22 17:05	
SM 4500 H B	pH @19.0°C	6.9	pH Units				X204040	MWD	01/18/22 13:39	H5



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Kellogg, ID 83837-0929

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Newmont - Cripple Creek & Victor
Post Office Box 191
Victor, CO 80860

Project Name: Cripple Creek/Victor Water and Soil 2022

Work Order: **X2A0190**

Reported: 31-Jan-22 18:00

Client Sample ID: **GVMW-22B**

Sampled: 12-Jan-22 11:50

Received: 13-Jan-22

Sampled By: BOD

SVL Sample ID: **X2A0190-04 (Ground Water)**

Sample Report Page 2 of 2

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Anions by Ion Chromatography										
EPA 300.0	Chloride	12.3	mg/L	2.00	1.40	10	X203167	EBR	01/13/22 18:15	D2
EPA 300.0	Fluoride	0.341	mg/L	0.100	0.062		X203167	EBR	01/13/22 18:00	
EPA 300.0	Nitrate as N	0.816	mg/L	0.050	0.043		X203167	EBR	01/13/22 18:00	
EPA 300.0	Nitrate+Nitrite as N	0.816	mg/L	0.100	0.074		X203167	EBR	01/13/22 18:00	
EPA 300.0	Nitrite as N	< 0.050	mg/L	0.050	0.031		X203167	EBR	01/13/22 18:00	
EPA 300.0	Sulfate as SO4	75.4	mg/L	3.00	1.80	10	X203167	EBR	01/13/22 18:15	D2

Cation/Anion Balance and TDS Ratios

Cation Sum: 3.43 meq/L Anion Sum: 3.48 meq/L C/A Balance: -0.74 % Calculated TDS: 202 TDS/cTDS: 0.92

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

 **Herman J. Haring**
Project Manager



Newmont - Cripple Creek & Victor
Post Office Box 191
Victor, CO 80860

Project Name: Cripple Creek/Victor Water and Soil 2022Work Order: **X2A0190**

Reported: 31-Jan-22 18:00

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
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Metals (Total Recoverable--reportable as Total per 40 CFR 136)

EPA 200.7	Calcium	mg/L	<0.100	0.035	0.100	X204005	26-Jan-22	
EPA 200.7	Magnesium	mg/L	<0.500	0.045	0.500	X204005	26-Jan-22	
EPA 200.7	Potassium	mg/L	<0.50	0.09	0.50	X204005	26-Jan-22	

Metals (Dissolved)

EPA 200.7	Aluminum	mg/L	<0.080	0.054	0.080	X204009	27-Jan-22	
EPA 200.7	Barium	mg/L	<0.0020	0.0019	0.0020	X204009	27-Jan-22	
EPA 200.7	Beryllium	mg/L	<0.00200	0.00080	0.00200	X204009	28-Jan-22	
EPA 200.7	Boron	mg/L	<0.0400	0.0078	0.0400	X204009	27-Jan-22	
EPA 200.7	Cadmium	mg/L	<0.0020	0.0016	0.0020	X204009	27-Jan-22	
EPA 200.7	Chromium	mg/L	<0.0060	0.0020	0.0060	X204009	27-Jan-22	
EPA 200.7	Cobalt	mg/L	<0.0060	0.0046	0.0060	X204009	27-Jan-22	
EPA 200.7	Copper	mg/L	<0.0100	0.0027	0.0100	X204009	27-Jan-22	
EPA 200.7	Iron	mg/L	<0.100	0.056	0.100	X204009	27-Jan-22	
EPA 200.7	Lead	mg/L	<0.0075	0.0049	0.0075	X204009	28-Jan-22	
EPA 200.7	Lithium	mg/L	<0.040	0.025	0.040	X204009	28-Jan-22	
EPA 200.7	Manganese	mg/L	<0.0080	0.0034	0.0080	X204009	27-Jan-22	
EPA 200.7	Molybdenum	mg/L	<0.0080	0.0034	0.0080	X204009	27-Jan-22	
EPA 200.7	Nickel	mg/L	<0.0100	0.0048	0.0100	X204009	27-Jan-22	
EPA 200.7	Silver	mg/L	<0.0050	0.0019	0.0050	X204009	27-Jan-22	
EPA 200.7	Sodium	mg/L	<0.50	0.12	0.50	X204009	27-Jan-22	
EPA 200.7	Vanadium	mg/L	<0.0050	0.0019	0.0050	X204009	27-Jan-22	
EPA 200.7	Zinc	mg/L	<0.0100	0.0054	0.0100	X204009	27-Jan-22	
EPA 200.8	Antimony	mg/L	<0.00300	0.00072	0.00300	X203180	27-Jan-22	
EPA 200.8	Arsenic	mg/L	<0.00300	0.00021	0.00300	X203180	27-Jan-22	
EPA 200.8	Selenium	mg/L	<0.00300	0.00024	0.00300	X203180	27-Jan-22	
EPA 200.8	Thallium	mg/L	<0.00100	0.00008	0.00100	X203180	27-Jan-22	
EPA 200.8	Uranium	mg/L	<0.00100	0.000052	0.00100	X203180	27-Jan-22	

Metals (Filtered)

EPA 245.1	Mercury	mg/L	<0.000200	0.000093	0.000200	X205016	27-Jan-22	
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Classical Chemistry Parameters

ASTM D7237	Cyanide (free) @ pH 6	mg/L	<0.0050	0.0048	0.0050	X203085	18-Jan-22	
EPA 335.4	Cyanide (total)	mg/L	<0.0050	0.0038	0.0050	X203191	17-Jan-22	
EPA 350.1	Ammonia as N	mg/L	<0.030	0.013	0.030	X205147	27-Jan-22	
OIA 1677	Cyanide (WAD)	mg/L	<0.0100	0.0010	0.0100	X203086	18-Jan-22	
SM 2310 B	Acidity to pH 8.3	mg/L as CaCO3	<10.0		10.0	X204069	21-Jan-22	
SM 2320 B	Total Alkalinity	mg/L as CaCO3	<1.0		1.0	X204040	18-Jan-22	
SM 2320 B	Bicarbonate	mg/L as CaCO3	<1.0		1.0	X204040	18-Jan-22	
SM 2320 B	Carbonate	mg/L as CaCO3	<1.0		1.0	X204040	18-Jan-22	
SM 2320 B	Hydroxide	mg/L as CaCO3	<1.0		1.0	X204040	18-Jan-22	
SM 2540 C	Total Diss. Solids	mg/L	<10		10	X204049	18-Jan-22	
SM 2540 D	Total Susp. Solids	mg/L	<5.0		5.0	X204050	18-Jan-22	
SM 4500 H B	pH @20.0°C	pH Units	5.7			X204040	18-Jan-22	

Anions by Ion Chromatography

EPA 300.0	Chloride	mg/L	<0.20	0.14	0.20	X203167	13-Jan-22	
EPA 300.0	Fluoride	mg/L	<0.100	0.062	0.100	X203167	13-Jan-22	
EPA 300.0	Nitrate as N	mg/L	<0.050	0.043	0.050	X203167	13-Jan-22	
EPA 300.0	Nitrate+Nitrite as N	mg/L	<0.100	0.074	0.100	X203167	13-Jan-22	
EPA 300.0	Nitrite as N	mg/L	<0.050	0.031	0.050	X203167	13-Jan-22	
EPA 300.0	Sulfate as SO4	mg/L	<0.30	0.18	0.30	X203167	13-Jan-22	



Newmont - Cripple Creek & Victor
Post Office Box 191
Victor, CO 80860

Project Name: Cripple Creek/Victor Water and Soil 2022

Work Order: **X2A0190**

Reported: 31-Jan-22 18:00

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
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Metals (Total Recoverable--reportable as Total per 40 CFR 136)

EPA 200.7	Calcium	mg/L	19.9	20.0	99.4	85 - 115	X204005	26-Jan-22	
EPA 200.7	Magnesium	mg/L	19.9	20.0	99.6	85 - 115	X204005	26-Jan-22	
EPA 200.7	Potassium	mg/L	20.2	20.0	101	85 - 115	X204005	26-Jan-22	

Metals (Dissolved)

EPA 200.7	Aluminum	mg/L	0.945	1.00	94.5	85 - 115	X204009	27-Jan-22	
EPA 200.7	Barium	mg/L	0.916	1.00	91.6	85 - 115	X204009	27-Jan-22	
EPA 200.7	Beryllium	mg/L	1.00	1.00	100	85 - 115	X204009	28-Jan-22	
EPA 200.7	Boron	mg/L	1.00	1.00	100	85 - 115	X204009	27-Jan-22	
EPA 200.7	Cadmium	mg/L	1.01	1.00	101	85 - 115	X204009	27-Jan-22	
EPA 200.7	Chromium	mg/L	1.00	1.00	100	85 - 115	X204009	27-Jan-22	
EPA 200.7	Cobalt	mg/L	0.966	1.00	96.6	85 - 115	X204009	27-Jan-22	
EPA 200.7	Copper	mg/L	0.962	1.00	96.2	85 - 115	X204009	27-Jan-22	
EPA 200.7	Iron	mg/L	10.1	10.0	101	85 - 115	X204009	27-Jan-22	
EPA 200.7	Lead	mg/L	0.963	1.00	96.3	85 - 115	X204009	28-Jan-22	
EPA 200.7	Lithium	mg/L	1.10	1.00	110	85 - 115	X204009	28-Jan-22	
EPA 200.7	Manganese	mg/L	0.977	1.00	97.7	85 - 115	X204009	27-Jan-22	
EPA 200.7	Molybdenum	mg/L	1.02	1.00	102	85 - 115	X204009	27-Jan-22	
EPA 200.7	Nickel	mg/L	0.970	1.00	97.0	85 - 115	X204009	27-Jan-22	
EPA 200.7	Silver	mg/L	0.0467	0.0500	93.5	85 - 115	X204009	27-Jan-22	
EPA 200.7	Sodium	mg/L	19.0	19.0	100	85 - 115	X204009	27-Jan-22	
EPA 200.7	Vanadium	mg/L	1.01	1.00	101	85 - 115	X204009	27-Jan-22	
EPA 200.7	Zinc	mg/L	0.993	1.00	99.3	85 - 115	X204009	27-Jan-22	
EPA 200.8	Antimony	mg/L	0.0270	0.0250	108	85 - 115	X203180	27-Jan-22	
EPA 200.8	Arsenic	mg/L	0.0267	0.0250	107	85 - 115	X203180	27-Jan-22	
EPA 200.8	Selenium	mg/L	0.0262	0.0250	105	85 - 115	X203180	27-Jan-22	
EPA 200.8	Thallium	mg/L	0.0287	0.0250	115	85 - 115	X203180	27-Jan-22	
EPA 200.8	Uranium	mg/L	0.0270	0.0250	108	85 - 115	X203180	27-Jan-22	

Metals (Filtered)

EPA 245.1	Mercury	mg/L	0.00483	0.00500	96.5	85 - 115	X205016	27-Jan-22	
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Classical Chemistry Parameters

ASTM D7237	Cyanide (free) @ pH 6	mg/L	0.103	0.100	103	90 - 110	X203085	18-Jan-22	
EPA 335.4	Cyanide (total)	mg/L	0.103	0.100	103	90 - 110	X203191	17-Jan-22	
EPA 350.1	Ammonia as N	mg/L	1.01	1.00	101	90 - 110	X205147	27-Jan-22	
OIA 1677	Cyanide (WAD)	mg/L	0.0990	0.100	99.0	82 - 118	X203086	18-Jan-22	
SM 2310 B	Acidity to pH 8.3	mg/L as CaCO3	709	739	95.9	95.4 - 104	X204069	21-Jan-22	
SM 2310 B	Acidity to pH 8.3	mg/L as CaCO3	719	739	97.3	95.4 - 104	X204069	21-Jan-22	
SM 2310 B	Acidity to pH 8.3	mg/L as CaCO3	729	739	98.7	95.4 - 104	X204069	21-Jan-22	
SM 2320 B	Total Alkalinity	mg/L as CaCO3	10.2	9.93	103	94.3 - 106	X204040	18-Jan-22	
SM 2320 B	Total Alkalinity	mg/L as CaCO3	100	99.3	101	94.3 - 106	X204040	18-Jan-22	
SM 2320 B	Bicarbonate	mg/L as CaCO3	10.2	9.93	103	95.1 - 106	X204040	18-Jan-22	
SM 2320 B	Bicarbonate	mg/L as CaCO3	100	99.3	101	95.1 - 106	X204040	18-Jan-22	
SM 2540 D	Total Susp. Solids	mg/L	9.0	10.0	90.0	85 - 115	X204050	18-Jan-22	

Anions by Ion Chromatography

EPA 300.0	Chloride	mg/L	2.81	3.00	93.8	90 - 110	X203167	13-Jan-22	
EPA 300.0	Fluoride	mg/L	1.87	2.00	93.6	90 - 110	X203167	13-Jan-22	
EPA 300.0	Nitrate as N	mg/L	1.89	2.00	94.4	90 - 110	X203167	13-Jan-22	
EPA 300.0	Nitrate+Nitrite as N	mg/L	4.43	4.50	98.4	90 - 110	X203167	13-Jan-22	
EPA 300.0	Nitrite as N	mg/L	2.54	2.50	102	90 - 110	X203167	13-Jan-22	
EPA 300.0	Sulfate as SO4	mg/L	9.70	10.0	97.0	90 - 110	X203167	13-Jan-22	



Newmont - Cripple Creek & Victor
Post Office Box 191
Victor, CO 80860

Project Name: Cripple Creek/Victor Water and Soil 2022

Work Order: X2A0190

Reported: 31-Jan-22 18:00

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch and Source ID	Analyzed	Notes
Classical Chemistry Parameters									
SM 2310 B	Acidity to pH 8.3	mg/L as CaCO ₃	<10.0	<10.0	UDL	20	X204069 - X2A0133-01	21-Jan-22	
SM 2320 B	Total Alkalinity	mg/L as CaCO ₃	157	159	1.5	20	X204040 - X2A0190-03	18-Jan-22	
SM 2320 B	Bicarbonate	mg/L as CaCO ₃	157	159	1.5	20	X204040 - X2A0190-03	18-Jan-22	
SM 2320 B	Carbonate	mg/L as CaCO ₃	<1.0	<1.0	UDL	20	X204040 - X2A0190-03	18-Jan-22	
SM 2320 B	Hydroxide	mg/L as CaCO ₃	<1.0	<1.0	UDL	20	X204040 - X2A0190-03	18-Jan-22	
SM 2540 C	Total Diss. Solids	mg/L	241	244	1.2	10	X204049 - X2A0190-02	18-Jan-22	
SM 2540 D	Total Susp. Solids	mg/L	<5.0	<5.0	<RL	10	X204050 - X2A0192-01	18-Jan-22	
SM 2540 D	Total Susp. Solids	mg/L	<5.0	<5.0	UDL	10	X204050 - X2A0190-02	18-Jan-22	
SM 4500 H B	pH @18.0°C	pH Units	7.9	7.9	0.1	20	X204040 - X2A0190-03	18-Jan-22	

Quality Control - MATRIX SPIKE Data

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch and Source ID	Analyzed	Notes
Metals (Total Recoverable--reportable as Total per 40 CFR 136)										
EPA 200.7	Calcium	mg/L	299	278	20.0	102	70 - 130	X204005 - X2A0190-01	26-Jan-22	
EPA 200.7	Calcium	mg/L	37.0	16.4	20.0	103	70 - 130	X204005 - X2A0217-01	26-Jan-22	
EPA 200.7	Magnesium	mg/L	86.5	68.7	20.0	89.3	70 - 130	X204005 - X2A0190-01	26-Jan-22	
EPA 200.7	Magnesium	mg/L	22.1	1.78	20.0	101	70 - 130	X204005 - X2A0217-01	26-Jan-22	
EPA 200.7	Potassium	mg/L	25.5	4.25	20.0	106	70 - 130	X204005 - X2A0190-01	26-Jan-22	
EPA 200.7	Potassium	mg/L	20.8	<0.50	20.0	103	70 - 130	X204005 - X2A0217-01	26-Jan-22	
Metals (Dissolved)										
EPA 200.7	Aluminum	mg/L	1.50	0.549	1.00	94.9	70 - 130	X204009 - X2A0196-01	27-Jan-22	
EPA 200.7	Aluminum	mg/L	0.939	<0.080	1.00	93.9	70 - 130	X204009 - X2A0202-03	27-Jan-22	
EPA 200.7	Barium	mg/L	0.955	0.0146	1.00	94.0	70 - 130	X204009 - X2A0196-01	27-Jan-22	
EPA 200.7	Barium	mg/L	0.984	0.0210	1.00	96.3	70 - 130	X204009 - X2A0202-03	27-Jan-22	
EPA 200.7	Beryllium	mg/L	1.05	0.0511	1.00	100	70 - 130	X204009 - X2A0196-01	28-Jan-22	
EPA 200.7	Beryllium	mg/L	1.02	<0.00200	1.00	102	70 - 130	X204009 - X2A0202-03	28-Jan-22	
EPA 200.7	Boron	mg/L	1.08	<0.0400	1.00	105	70 - 130	X204009 - X2A0196-01	27-Jan-22	
EPA 200.7	Boron	mg/L	1.07	0.0401	1.00	103	70 - 130	X204009 - X2A0202-03	27-Jan-22	
EPA 200.7	Cadmium	mg/L	0.976	<0.0020	1.00	97.6	70 - 130	X204009 - X2A0196-01	27-Jan-22	
EPA 200.7	Cadmium	mg/L	0.984	<0.0020	1.00	98.4	70 - 130	X204009 - X2A0202-03	27-Jan-22	
EPA 200.7	Chromium	mg/L	0.985	<0.0060	1.00	98.5	70 - 130	X204009 - X2A0196-01	27-Jan-22	
EPA 200.7	Chromium	mg/L	0.984	<0.0060	1.00	98.4	70 - 130	X204009 - X2A0202-03	27-Jan-22	
EPA 200.7	Cobalt	mg/L	0.998	0.0861	1.00	91.2	70 - 130	X204009 - X2A0196-01	27-Jan-22	
EPA 200.7	Cobalt	mg/L	0.905	<0.0060	1.00	90.5	70 - 130	X204009 - X2A0202-03	27-Jan-22	
EPA 200.7	Copper	mg/L	1.03	<0.0100	1.00	103	70 - 130	X204009 - X2A0196-01	27-Jan-22	
EPA 200.7	Copper	mg/L	1.17	0.194	1.00	97.3	70 - 130	X204009 - X2A0202-03	27-Jan-22	
EPA 200.7	Iron	mg/L	33.3	23.0	10.0	102	70 - 130	X204009 - X2A0196-01	27-Jan-22	
EPA 200.7	Iron	mg/L	9.69	<0.100	10.0	96.9	70 - 130	X204009 - X2A0202-03	27-Jan-22	
EPA 200.7	Lead	mg/L	0.934	<0.0075	1.00	93.4	70 - 130	X204009 - X2A0196-01	28-Jan-22	
EPA 200.7	Lead	mg/L	0.979	<0.0075	1.00	97.9	70 - 130	X204009 - X2A0202-03	28-Jan-22	
EPA 200.7	Lithium	mg/L	1.20	0.077	1.00	113	70 - 130	X204009 - X2A0196-01	28-Jan-22	
EPA 200.7	Lithium	mg/L	1.15	<0.040	1.00	115	70 - 130	X204009 - X2A0202-03	28-Jan-22	
EPA 200.7	Manganese	mg/L	10.4	9.57	1.00	85.3	70 - 130	X204009 - X2A0196-01	27-Jan-22	
EPA 200.7	Manganese	mg/L	0.963	<0.0080	1.00	95.9	70 - 130	X204009 - X2A0202-03	27-Jan-22	
EPA 200.7	Molybdenum	mg/L	1.02	0.0142	1.00	101	70 - 130	X204009 - X2A0196-01	27-Jan-22	
EPA 200.7	Molybdenum	mg/L	1.01	<0.0080	1.00	100	70 - 130	X204009 - X2A0202-03	27-Jan-22	
EPA 200.7	Nickel	mg/L	0.958	0.0232	1.00	93.5	70 - 130	X204009 - X2A0196-01	27-Jan-22	
EPA 200.7	Nickel	mg/L	0.921	<0.0100	1.00	91.5	70 - 130	X204009 - X2A0202-03	27-Jan-22	
EPA 200.7	Silver	mg/L	0.0482	<0.0050	0.0500	96.4	70 - 130	X204009 - X2A0196-01	27-Jan-22	
EPA 200.7	Silver	mg/L	0.0468	<0.0050	0.0500	93.6	70 - 130	X204009 - X2A0202-03	27-Jan-22	
EPA 200.7	Sodium	mg/L	87.4	66.3	19.0	111	70 - 130	X204009 - X2A0196-01	27-Jan-22	

SVL holds the following certifications:

AZ:0538, ID:ID00019 & ID00965 (Microbiology), NV:ID000192007A, SC:58004001, UT(TNI):ID000192015-1, WA:C573

Work order Report Page 12 of 15



Newmont - Cripple Creek & Victor
Post Office Box 191
Victor, CO 80860

Project Name: Cripple Creek/Victor Water and Soil 2022Work Order: **X2A0190**

Reported: 31-Jan-22 18:00

Quality Control - MATRIX SPIKE Data (Continued)

Method	Analyte	Units	Spike Result	Sample Result (R)	Spike Level (S)	% Rec.	Acceptance Limits	Batch and Source ID	Analyzed	Notes
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Metals (Dissolved) (Continued)

EPA 200.7	Sodium	mg/L	41.5	23.8	19.0	93.4	70 - 130	X204009 - X2A0202-03	27-Jan-22	
EPA 200.7	Vanadium	mg/L	1.03	<0.0050	1.00	103	70 - 130	X204009 - X2A0196-01	27-Jan-22	
EPA 200.7	Vanadium	mg/L	1.01	<0.0050	1.00	101	70 - 130	X204009 - X2A0202-03	27-Jan-22	
EPA 200.7	Zinc	mg/L	1.85	0.860	1.00	99.4	70 - 130	X204009 - X2A0196-01	27-Jan-22	
EPA 200.7	Zinc	mg/L	1.03	0.0463	1.00	98.1	70 - 130	X204009 - X2A0202-03	27-Jan-22	
EPA 200.8	Antimony	mg/L	0.0270	<0.00300	0.0250	108	70 - 130	X203180 - X2A0190-01	27-Jan-22	
EPA 200.8	Arsenic	mg/L	0.0318	<0.00300	0.0250	123	70 - 130	X203180 - X2A0190-01	27-Jan-22	
EPA 200.8	Selenium	mg/L	0.0321	<0.00300	0.0250	121	70 - 130	X203180 - X2A0190-01	27-Jan-22	
EPA 200.8	Thallium	mg/L	0.0285	<0.00100	0.0250	114	70 - 130	X203180 - X2A0190-01	27-Jan-22	
EPA 200.8	Uranium	mg/L	0.0374	0.00907	0.0250	113	70 - 130	X203180 - X2A0190-01	27-Jan-22	

Metals (Filtered)

EPA 245.1	Mercury	mg/L	0.800	0.819	1.00	-1.91	70 - 130	X205016 - X2A0204-03	27-Jan-22	D2,M4
EPA 245.1	Mercury	mg/L	0.000958	<0.000200	0.00100	95.8	70 - 130	X205016 - X2A0206-02	27-Jan-22	

Classical Chemistry Parameters

ASTM D7237	Cyanide (free) @ pH 6	mg/L	0.107	<0.0050	0.100	107	79 - 121	X203085 - X2A0068-02	18-Jan-22	
EPA 335.4	Cyanide (total)	mg/L	0.101	<0.0050	0.100	101	90 - 110	X203191 - X2A0099-01	17-Jan-22	
EPA 350.1	Ammonia as N	mg/L	1.02	<0.030	1.00	99.8	90 - 110	X205147 - X2A0342-01	27-Jan-22	
EPA 350.1	Ammonia as N	mg/L	1.03	<0.030	1.00	103	90 - 110	X205147 - X2A0190-01	27-Jan-22	
OIA 1677	Cyanide (WAD)	mg/L	0.104	<0.0100	0.100	104	82 - 118	X203086 - X2A0068-02	18-Jan-22	

Anions by Ion Chromatography

EPA 300.0	Chloride	mg/L	3.19	0.20	3.00	99.9	90 - 110	X203167 - X2A0168-01	13-Jan-22	
EPA 300.0	Fluoride	mg/L	2.02	<0.100	2.00	101	90 - 110	X203167 - X2A0168-01	13-Jan-22	
EPA 300.0	Nitrate as N	mg/L	2.03	<0.050	2.00	101	90 - 110	X203167 - X2A0168-01	13-Jan-22	
EPA 300.0	Nitrate+Nitrite as N	mg/L	4.10	<0.100	4.00	103	90 - 110	X203167 - X2A0168-01	13-Jan-22	
EPA 300.0	Nitrite as N	mg/L	2.08	<0.050	2.00	104	90 - 110	X203167 - X2A0168-01	13-Jan-22	
EPA 300.0	Sulfate as SO4	mg/L	16.7	6.27	10.0	104	90 - 110	X203167 - X2A0168-01	13-Jan-22	

Quality Control - MATRIX SPIKE DUPLICATE Data

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	RPD	RPD Limit	% Recovery	Batch and Source ID	Notes
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Metals (Total Recoverable--reportable as Total per 40 CFR 136)

EPA 200.7	Calcium	mg/L	306	299	20.0	2.3	20	0.30R>S	X204005 - X2A0190-01	M3
EPA 200.7	Magnesium	mg/L	89.4	86.5	20.0	3.2	20	104	X204005 - X2A0190-01	
EPA 200.7	Potassium	mg/L	26.0	25.5	20.0	2.1	20	109	X204005 - X2A0190-01	

Metals (Dissolved)

EPA 200.7	Aluminum	mg/L	1.49	1.50	1.00	0.2	20	94.6	X204009 - X2A0196-01	
EPA 200.7	Barium	mg/L	0.920	0.955	1.00	3.7	20	90.5	X204009 - X2A0196-01	
EPA 200.7	Beryllium	mg/L	1.06	1.05	1.00	0.7	20	101	X204009 - X2A0196-01	
EPA 200.7	Boron	mg/L	1.07	1.08	1.00	0.8	20	104	X204009 - X2A0196-01	
EPA 200.7	Cadmium	mg/L	0.970	0.976	1.00	0.6	20	97.0	X204009 - X2A0196-01	
EPA 200.7	Chromium	mg/L	0.981	0.985	1.00	0.4	20	98.1	X204009 - X2A0196-01	
EPA 200.7	Cobalt	mg/L	0.997	0.998	1.00	0.2	20	91.0	X204009 - X2A0196-01	
EPA 200.7	Copper	mg/L	1.02	1.03	1.00	0.5	20	102	X204009 - X2A0196-01	
EPA 200.7	Iron	mg/L	32.6	33.3	10.0	2.0	20	96.0	X204009 - X2A0196-01	
EPA 200.7	Lead	mg/L	0.949	0.934	1.00	1.6	20	94.9	X204009 - X2A0196-01	
EPA 200.7	Lithium	mg/L	1.21	1.20	1.00	0.7	20	114	X204009 - X2A0196-01	
EPA 200.7	Manganese	mg/L	10.3	10.4	1.00	1.1	20	73.7	X204009 - X2A0196-01	
EPA 200.7	Molybdenum	mg/L	1.03	1.02	1.00	0.5	20	101	X204009 - X2A0196-01	



Newmont - Cripple Creek & Victor
Post Office Box 191
Victor, CO 80860

Project Name: Cripple Creek/Victor Water and Soil 2022Work Order: **X2A0190**

Reported: 31-Jan-22 18:00

Quality Control - MATRIX SPIKE DUPLICATE Data (Continued)

Method	Analyte	Units	MSD Result	Spike Result	Spike Level	RPD	RPD Limit	% Recovery	Batch and Source ID	Notes
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Metals (Dissolved) (Continued)

EPA 200.7	Nickel	mg/L	0.955	0.958	1.00	0.3	20	93.2	X204009 - X2A0196-01	
EPA 200.7	Silver	mg/L	0.0475	0.0482	0.0500	1.4	20	95.0	X204009 - X2A0196-01	
EPA 200.7	Sodium	mg/L	85.5	87.4	19.0	2.2	20	101	X204009 - X2A0196-01	
EPA 200.7	Vanadium	mg/L	1.02	1.03	1.00	0.4	20	102	X204009 - X2A0196-01	
EPA 200.7	Zinc	mg/L	1.85	1.85	1.00	0.3	20	98.8	X204009 - X2A0196-01	
EPA 200.8	Antimony	mg/L	0.0286	0.0270	0.0250	5.9	20	114	X203180 - X2A0190-01	
EPA 200.8	Arsenic	mg/L	0.0316	0.0318	0.0250	0.8	20	122	X203180 - X2A0190-01	
EPA 200.8	Selenium	mg/L	0.0307	0.0321	0.0250	4.6	20	116	X203180 - X2A0190-01	
EPA 200.8	Thallium	mg/L	0.0275	0.0285	0.0250	3.6	20	110	X203180 - X2A0190-01	
EPA 200.8	Uranium	mg/L	0.0357	0.0374	0.0250	4.5	20	107	X203180 - X2A0190-01	

Metals (Filtered)

EPA 245.1	Mercury	mg/L	0.798	0.800	1.00	0.3	20	-2.11	X205016 - X2A0204-03	D2,M4
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Classical Chemistry Parameters

ASTM D7237	Cyanide (free) @ pH 6	mg/L	0.108	0.107	0.100	0.9	11	108	X203085 - X2A0068-02	
EPA 335.4	Cyanide (total)	mg/L	0.102	0.101	0.100	1.5	20	102	X203191 - X2A0099-01	
EPA 350.1	Ammonia as N	mg/L	1.02	1.02	1.00	0.3	20	99.4	X205147 - X2A0342-01	
OIA 1677	Cyanide (WAD)	mg/L	0.106	0.104	0.100	1.9	11	106	X203086 - X2A0068-02	

Anions by Ion Chromatography

EPA 300.0	Chloride	mg/L	3.18	3.19	3.00	0.4	20	99.4	X203167 - X2A0168-01	
EPA 300.0	Fluoride	mg/L	1.96	2.02	2.00	2.9	20	98.2	X203167 - X2A0168-01	
EPA 300.0	Nitrate as N	mg/L	1.98	2.03	2.00	2.1	20	99.2	X203167 - X2A0168-01	
EPA 300.0	Nitrate+Nitrite as N	mg/L	4.05	4.10	4.00	1.3	20	101	X203167 - X2A0168-01	
EPA 300.0	Nitrite as N	mg/L	2.07	2.08	2.00	0.5	20	103	X203167 - X2A0168-01	
EPA 300.0	Sulfate as SO4	mg/L	16.5	16.7	10.0	1.0	20	102	X203167 - X2A0168-01	



Newmont - Cripple Creek & Victor
Post Office Box 191
Victor, CO 80860

Project Name: Cripple Creek/Victor Water and Soil 2022

Work Order: **X2A0190**

Reported: 31-Jan-22 18:00

Notes and Definitions

D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of target analyte.
H5	This test is specified to be performed in the field within 15 minutes of sampling; sample was received and analyzed past the regulatory holding time.
M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to spike level. The LCS was acceptable.
M4	The analysis of the spiked sample required a dilution such that the spike recovery calculation does not provide useful information. The LCS recovery was acceptable.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
0.30R>S	% recovery not applicable; spike level is less than 30% of the sample concentration
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable
