



Cripple Creek & Victor - M-1980-244 Grassy Valley Monthly Monitoring June 2023

1 message

Antonio Matarrese <Antonio.Matarrese@newmont.com> Thu, Jul 27, 2023 at 1:22 PM
To: "Russell - DNR, Elliott" <elliott.russell@state.co.us>
Cc: Patrick Lennberg - DNR <patrick.lennberg@state.co.us>, Michael Cunningham <michaela.cunningham@state.co.us>, Katie Blake <Katie.Blake@newmont.com>, Johnna Gonzalez <Johnna.Gonzalez@newmont.com>, Norma Townley <Norma.Townley2@newmont.com>

Elliott -

Please see the attached graphs and analytical report for Grassy Valley monitoring for the month of June 2023.

Best Regards,
Tony



Antonio Matarrese

ENVIRONMENTAL COORDINATOR

100 North 3rd Street
Victor, Colorado 80860
 (719) 851-4185
 (719) 250-3452

[NEWMONT.COM](http://newmont.com)

Monthly Grassy Valley Report - June 2023.pdf
4397K



Cripple Creek & Victor
Gold Mining Company
P.O. Box 191
100 North 3rd Street
Victor, Colorado 80860

P 719.689.2977
F 719.689.3254
newmont.com

July 27, 2023

SENT VIA EMAIL

Mr. Elliott Russell
Environmental Protection Specialist
Colorado Department of Natural Resources
Division of Reclamation, Mining, and Safety
Office of Mined Land Reclamation
1313 Sherman Street, Room 215
Denver, Colorado 80203

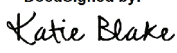
Re: Monthly Grassy Valley June 2023 Report Submission, July 27, 2023

Dear Mr. Russell,

Please see the attached Grassy Valley data (included within Attachment A) for monitoring well GVMW-25, surface water monitoring location GV-06, and Seep 1 & Seep 2, for the month of June, 2023.

Should you require further information please do not hesitate to contact Antonio Matarrese at 719.851.4185 or antonio.matarrese@newmont.com or myself at 719.851.4048 or katie.blake@newmont.com

Sincerely,

DocuSigned by:

5A3D013B629844B...

Katie Blake

Sustainability & External Relations Manager
Cripple Creek and Victor Gold Mining Company

EC: P. Lennberg
M. Cunningham
K. Blake
J. Gonzalez
A. Matarrese
N. Townley

File: "C:\Users\19012214\Newmont USA Limited\CC&V - S&ER Environmental - Environmental Compliance\Water\DRMS\Grassy Monthly\6 - June 2023\Final"

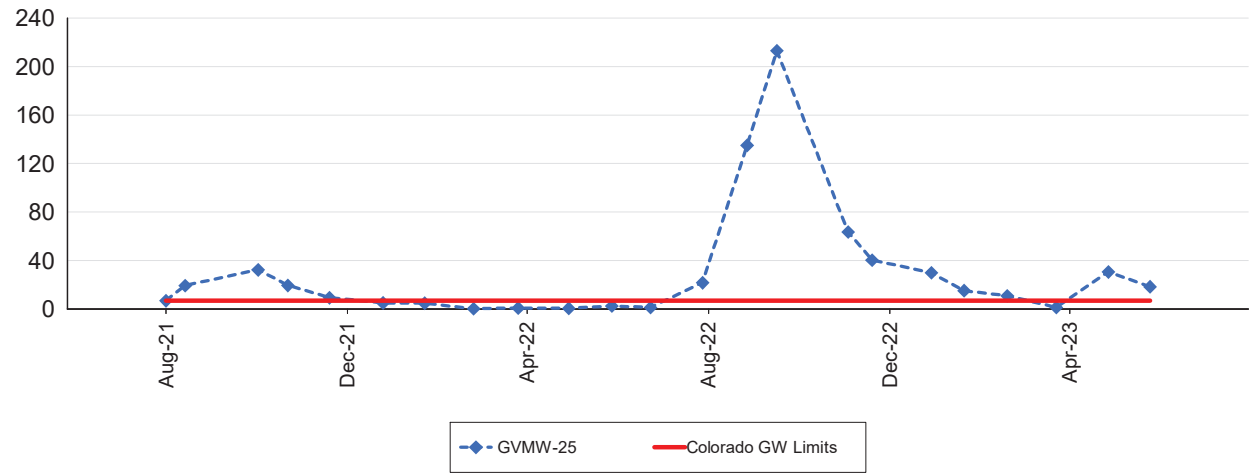


Cripple Creek & Victor
Gold Mining Company
P.O. Box 191
100 North 3rd Street
Victor, Colorado 80860

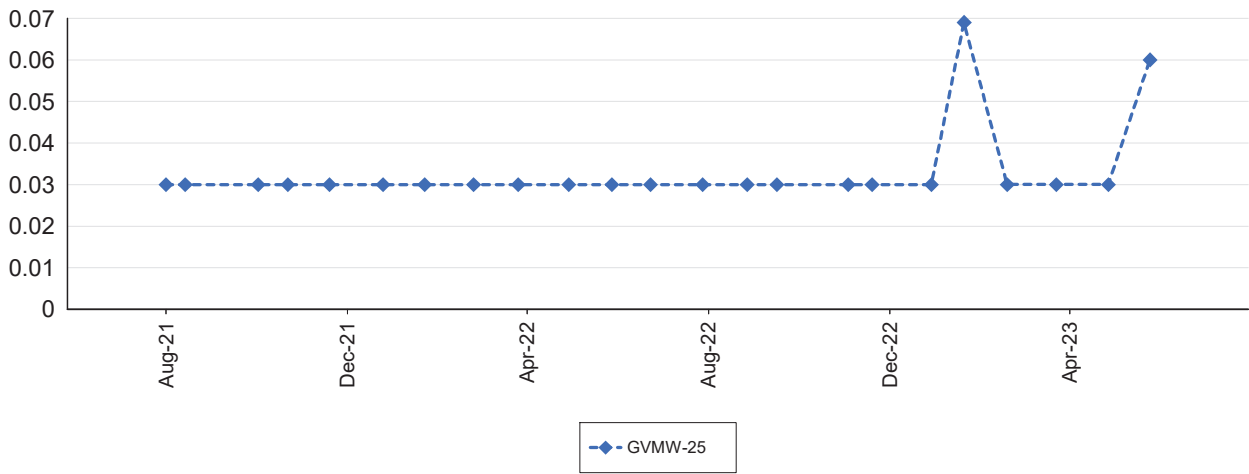
P 719.689.2977
F 719.689.3254
newmont.com

Attachment A

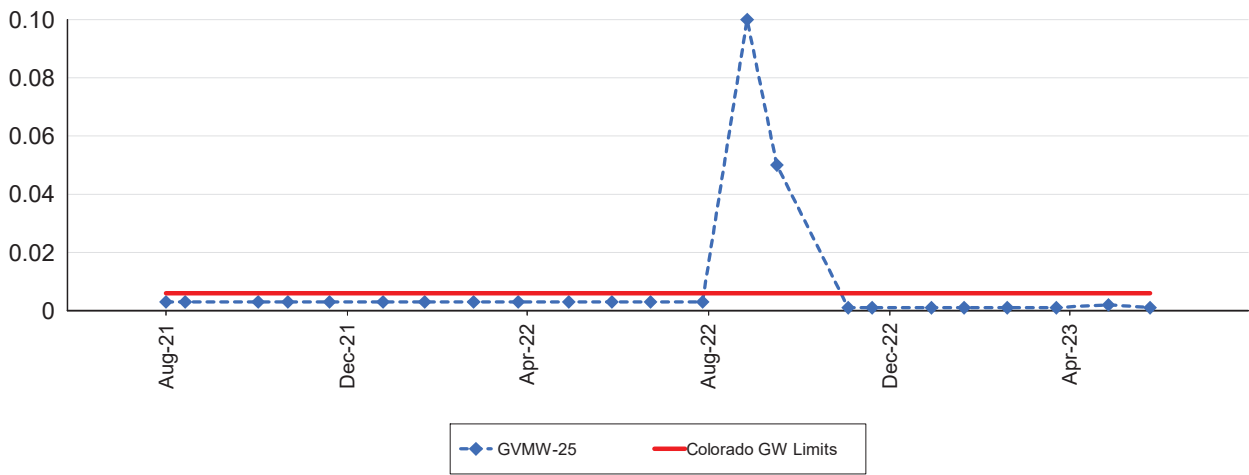
: Aluminium - Dissolved (mg/L)



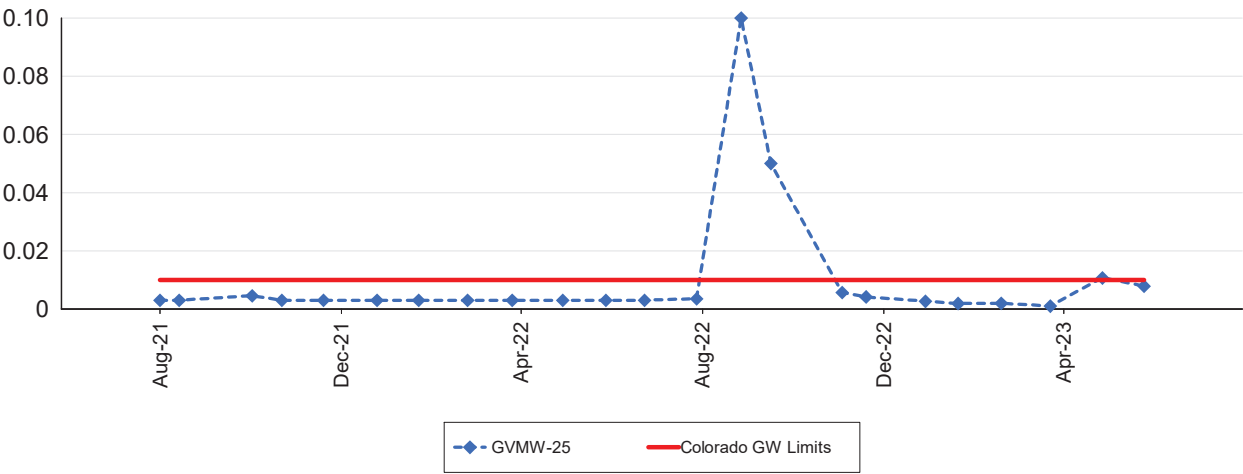
: Ammonia (mg/L)



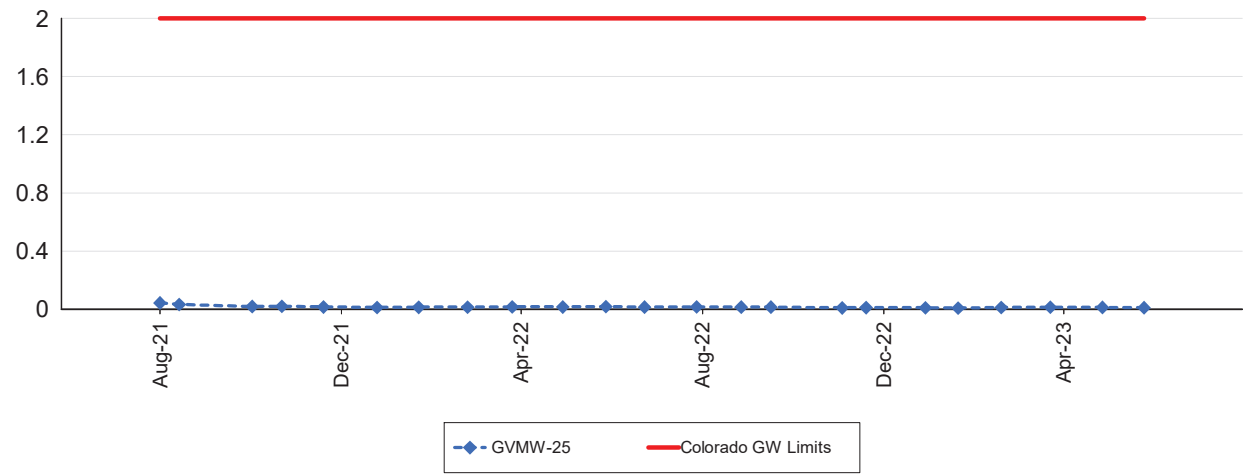
: Antimony - Dissolved (mg/L)



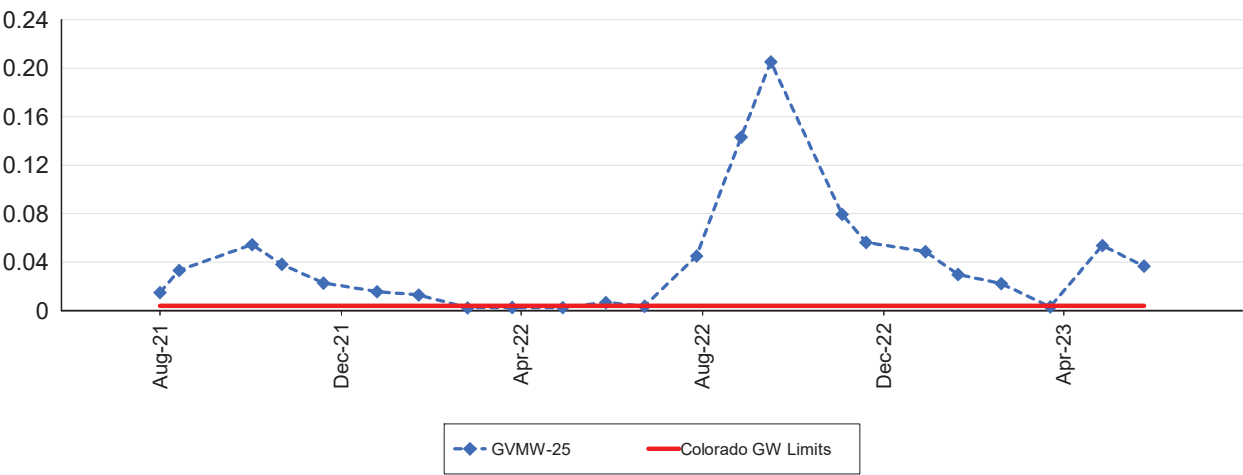
: Arsenic - Dissolved (mg/L)



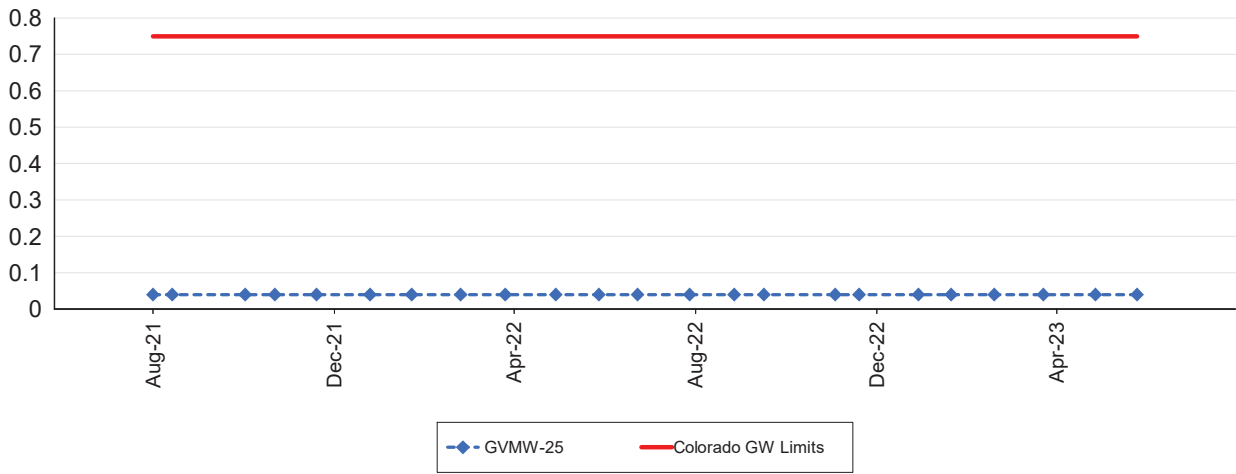
: Barium - Dissolved (mg/L)



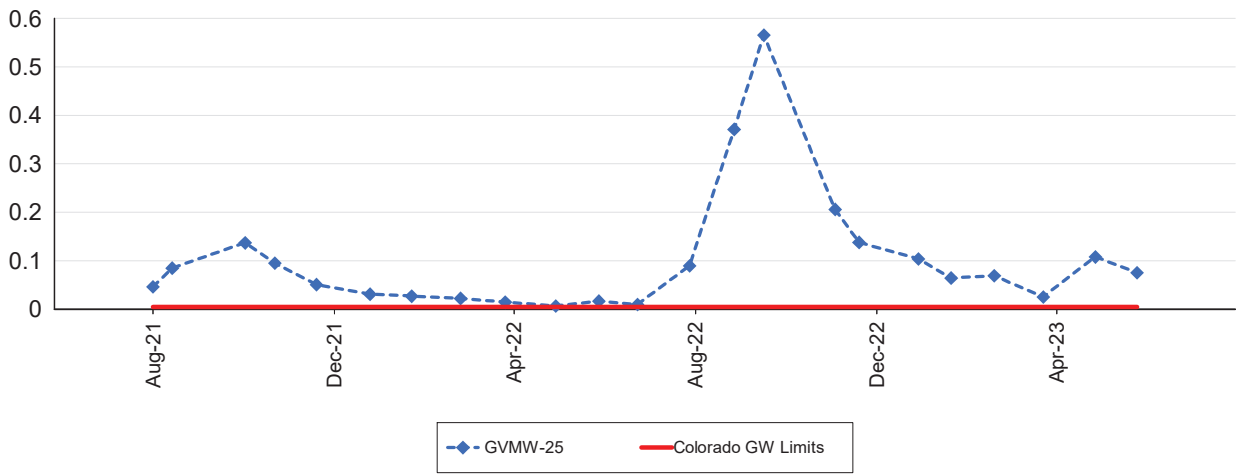
: Beryllium - Dissolved (mg/L)



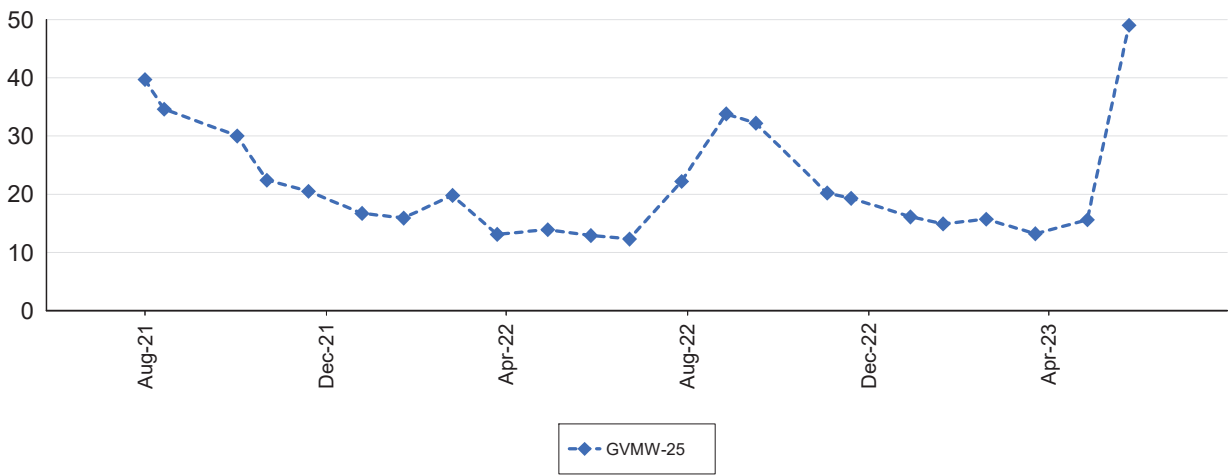
: Boron - Dissolved (mg/L)



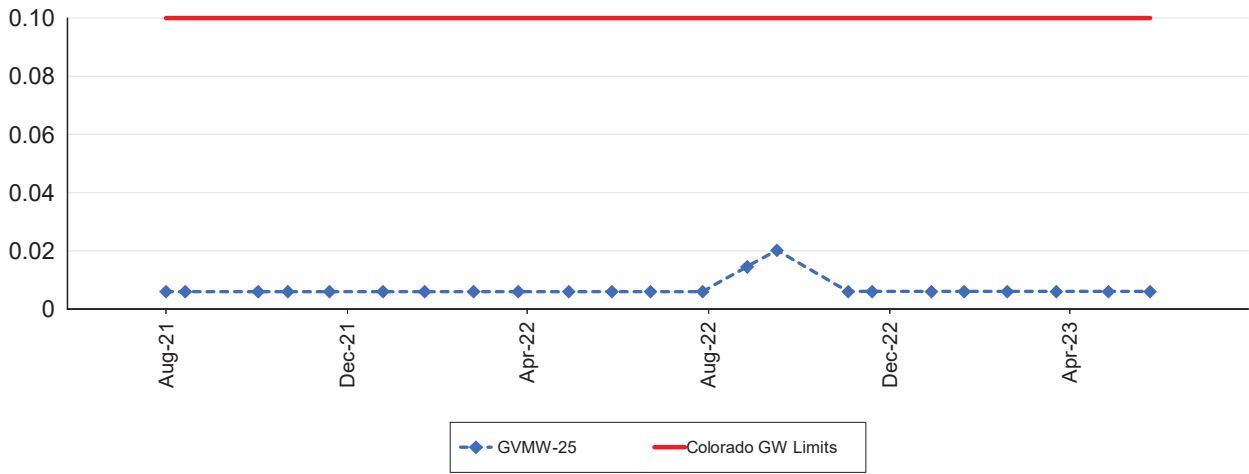
: Cadmium - Dissolved (mg/L)



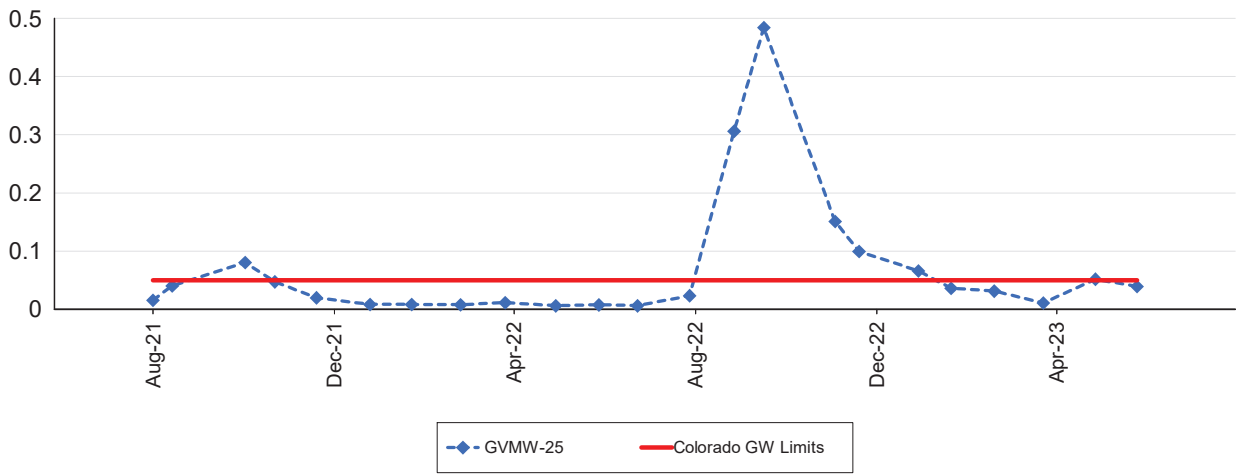
: Chloride - Total (mg/L)



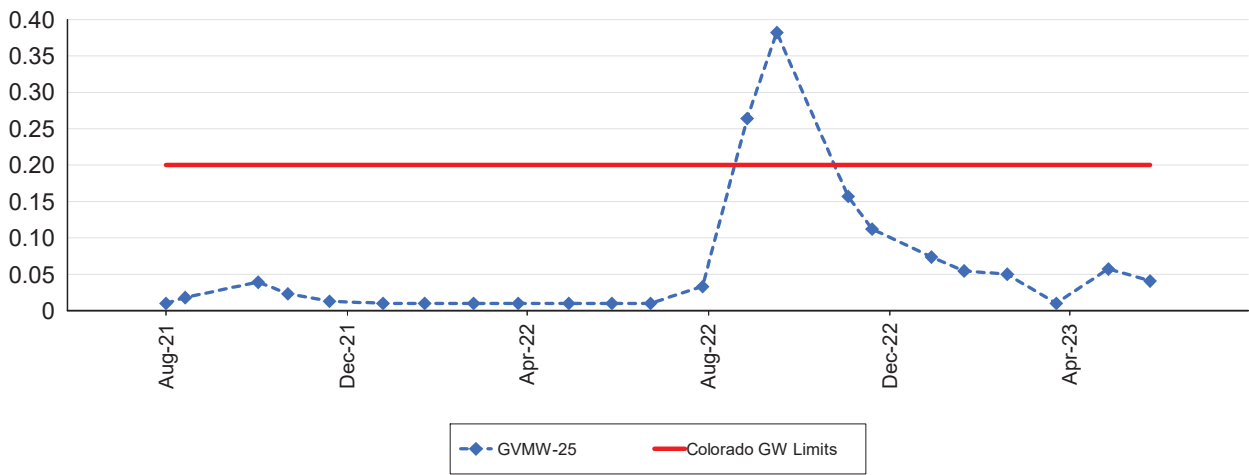
: Chromium - Dissolved (mg/L)



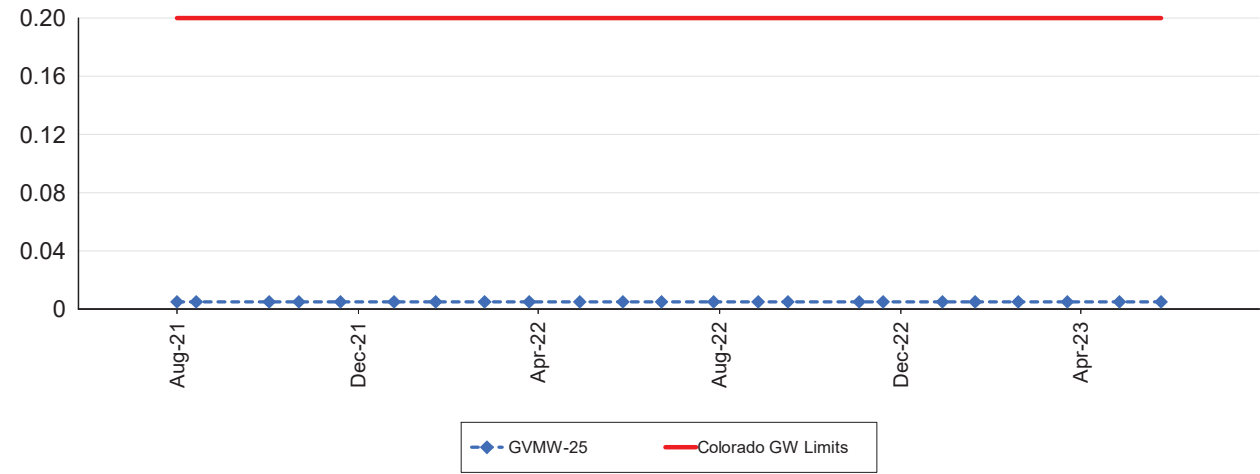
: Cobalt - Dissolved (mg/L)



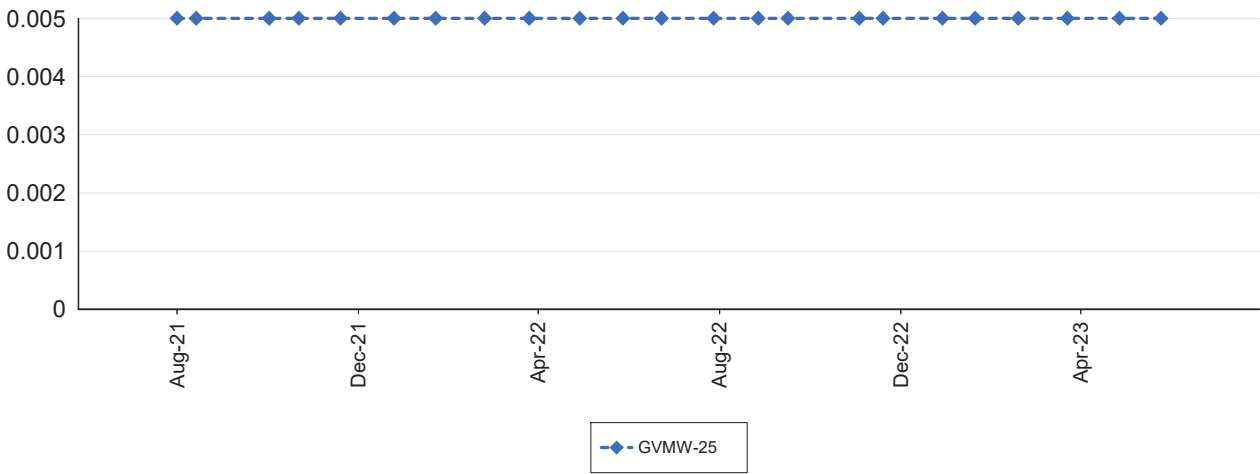
: Copper - Dissolved (mg/L)



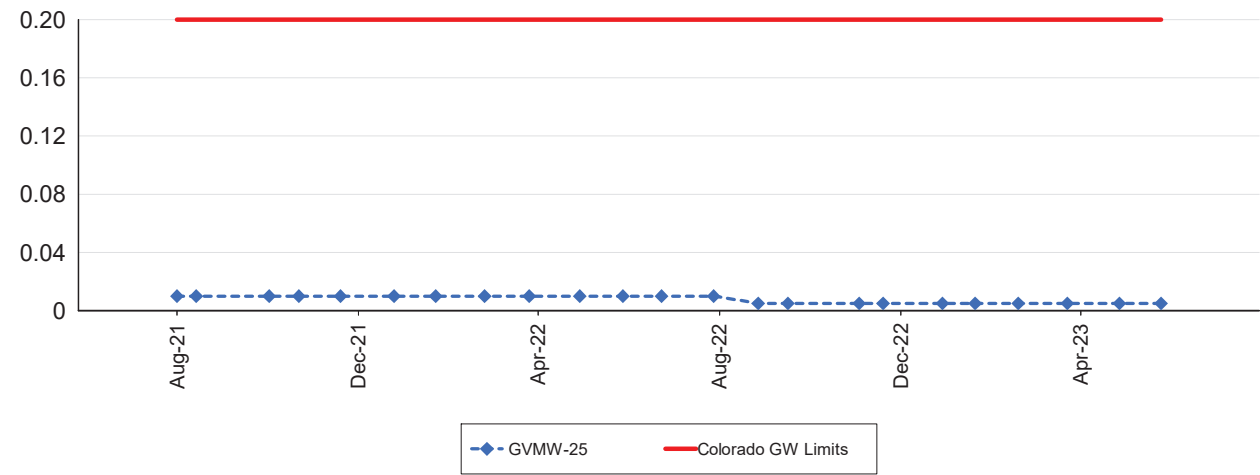
: Cyanide - Free (mg/L)



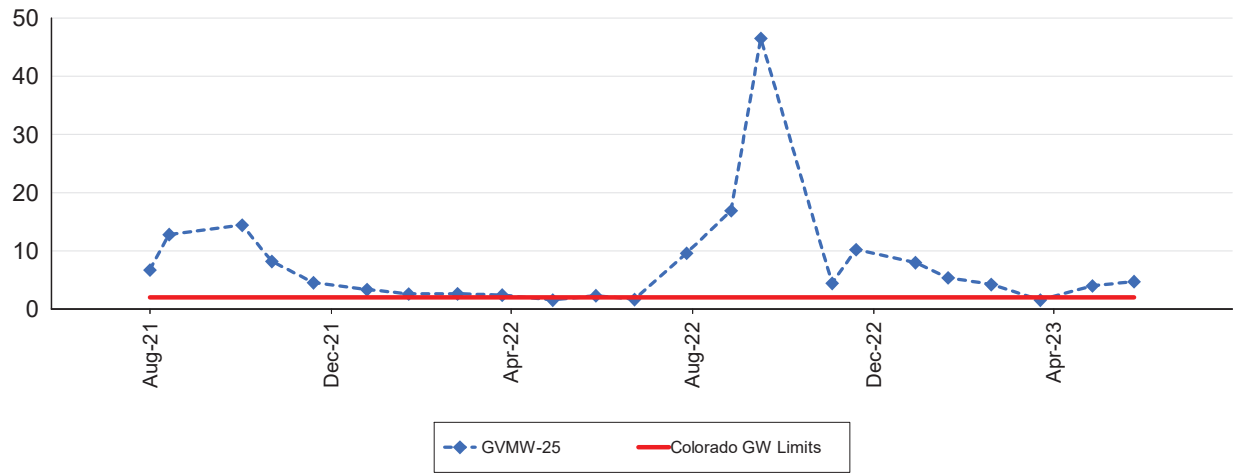
: Cyanide - Total (mg/L)



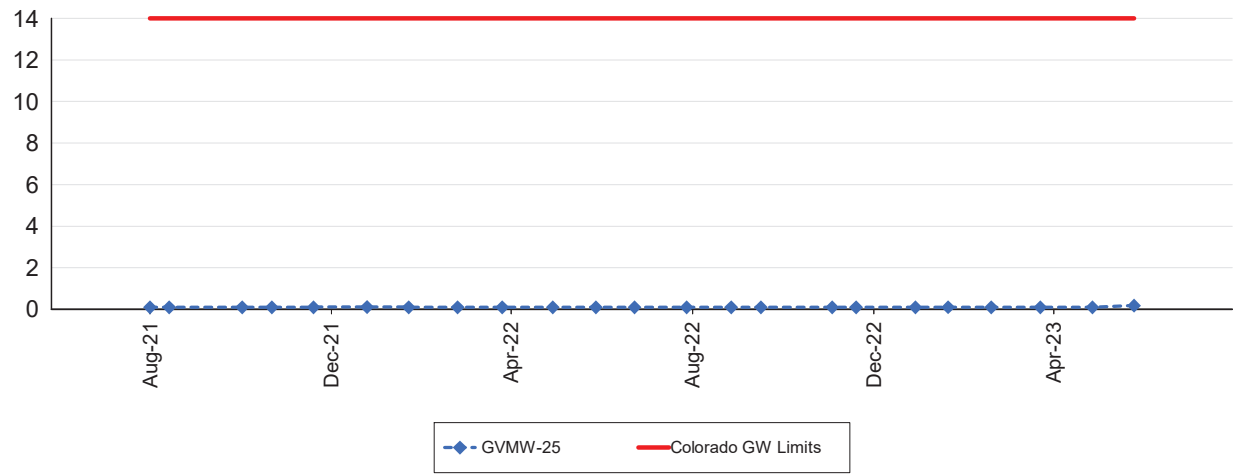
: Cyanide - WAD (mg/L)



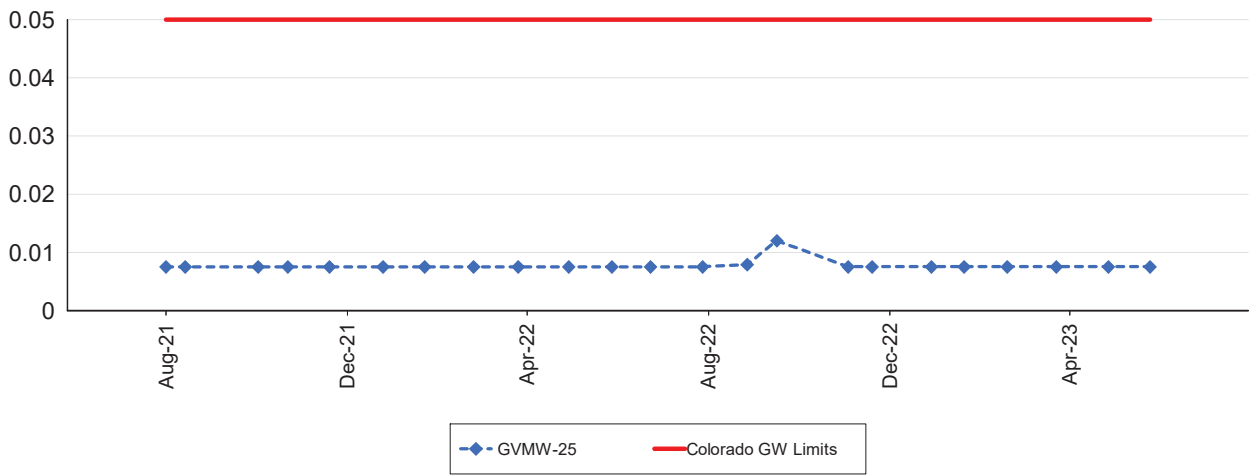
: Fluoride - Total F (mg/L)



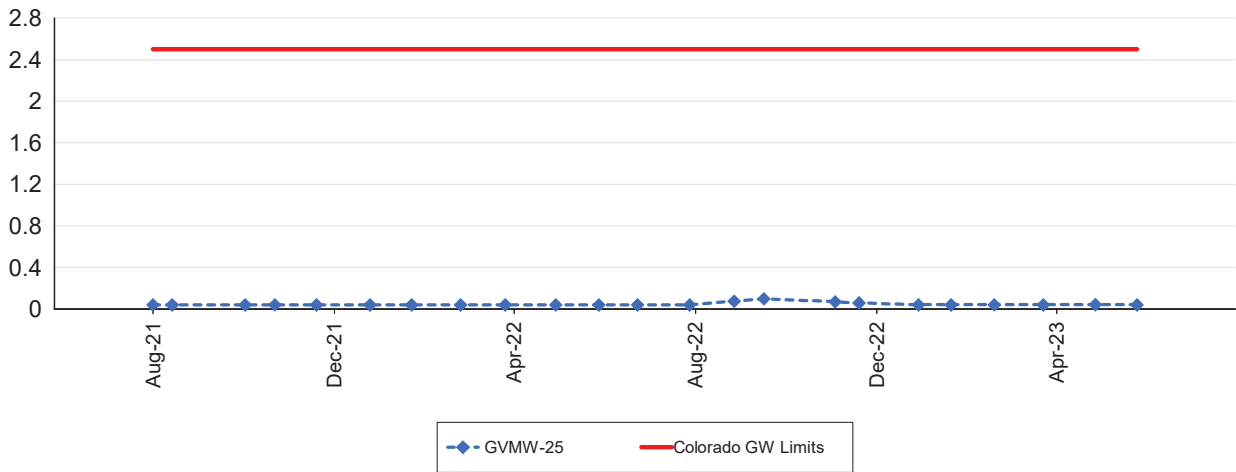
: Iron - Dissolved (mg/L)



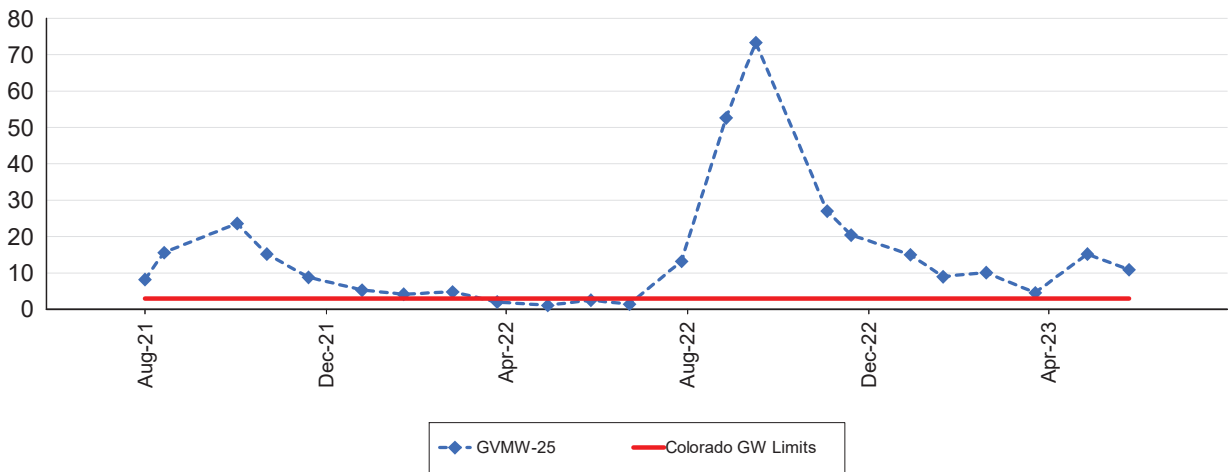
: Lead - Dissolved (mg/L)



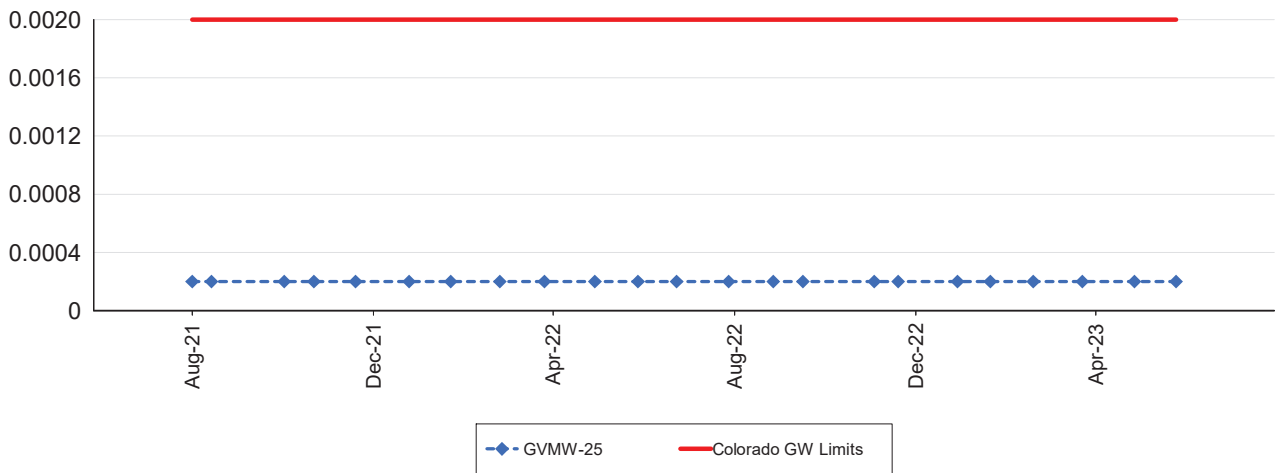
: Lithium - Dissolved (mg/L)



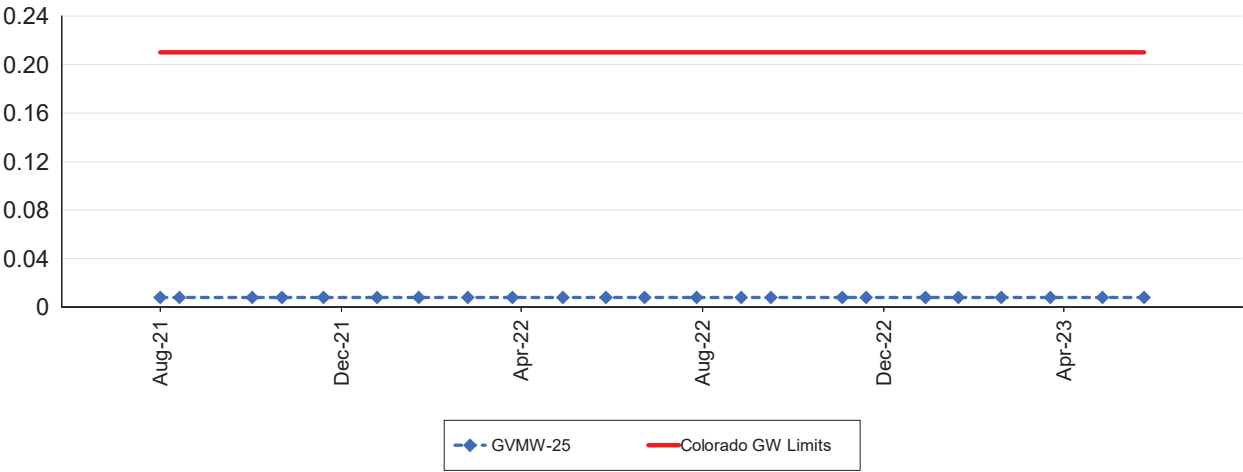
: Manganese - Dissolved (mg/L)



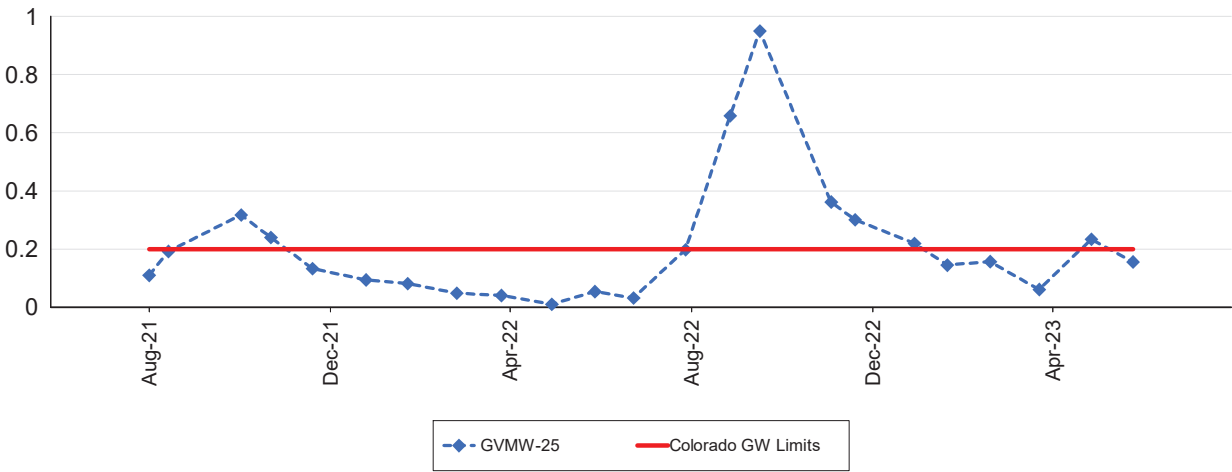
: Mercury - Dissolved (mg/L)



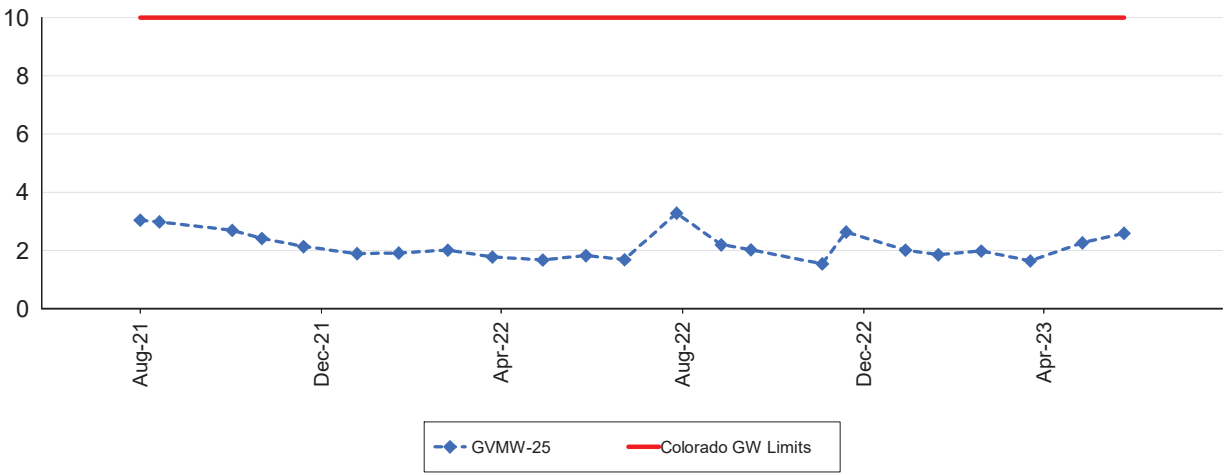
: Molybdenum - Dissolved (mg/L)



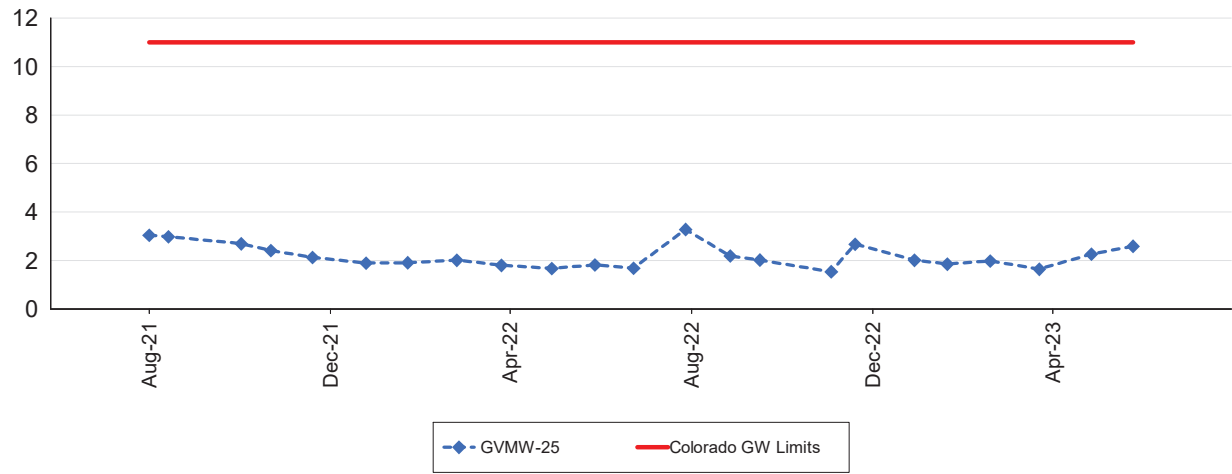
: Nickel - Dissolved (mg/L)



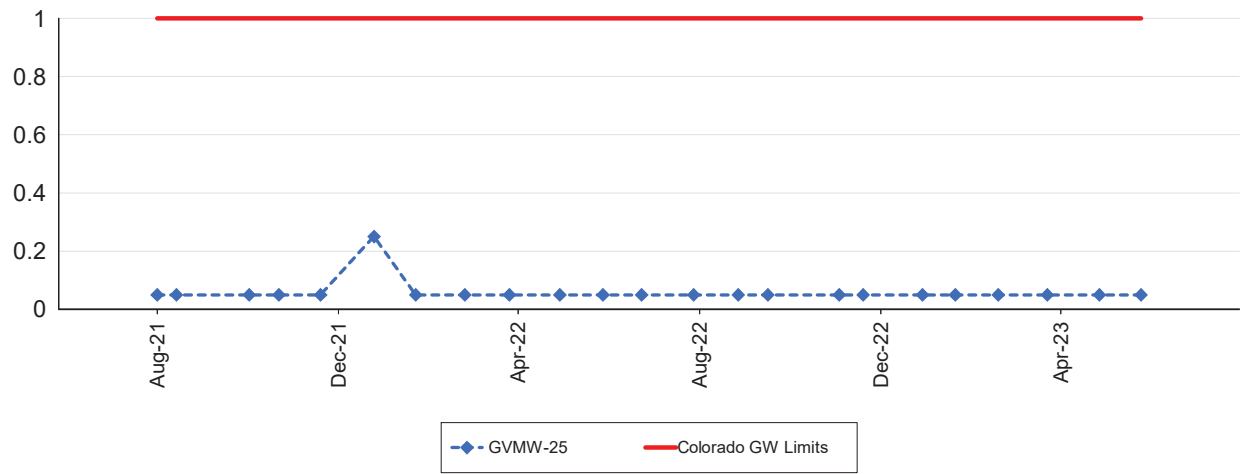
: Nitrate as Nitrogen (mg/L)



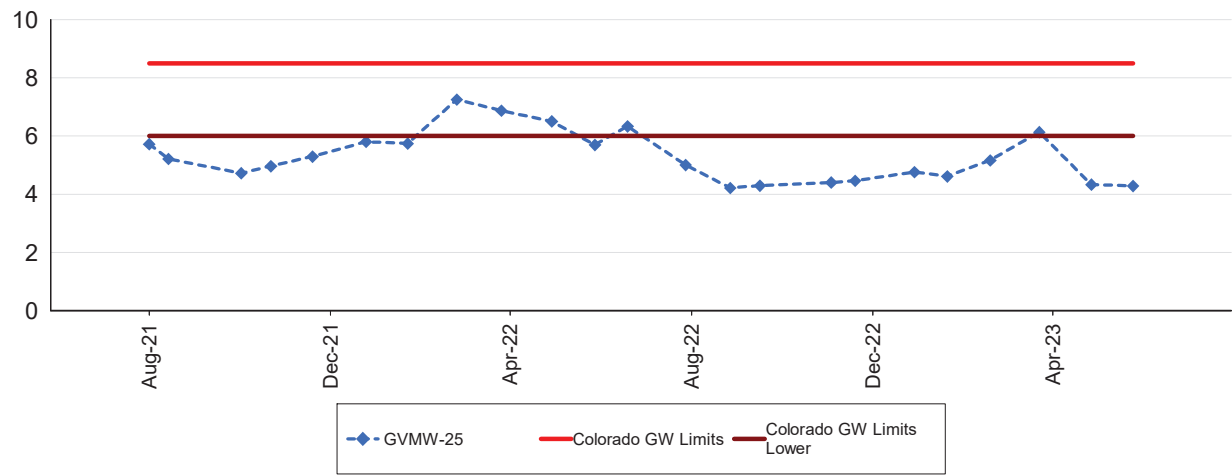
: Nitrite + Nitrate as Nitrogen (mg/L)



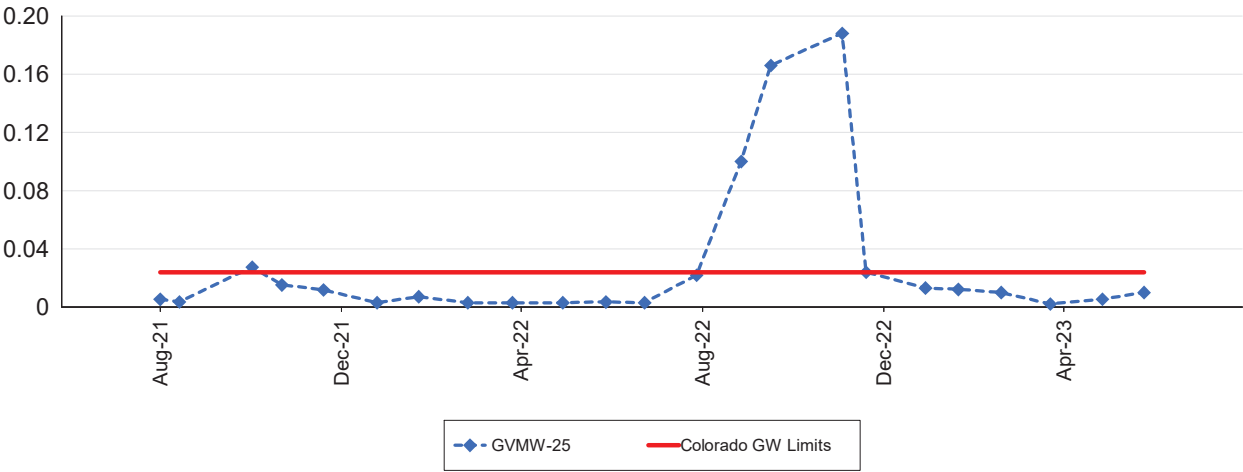
: Nitrite as Nitrogen (mg/L)



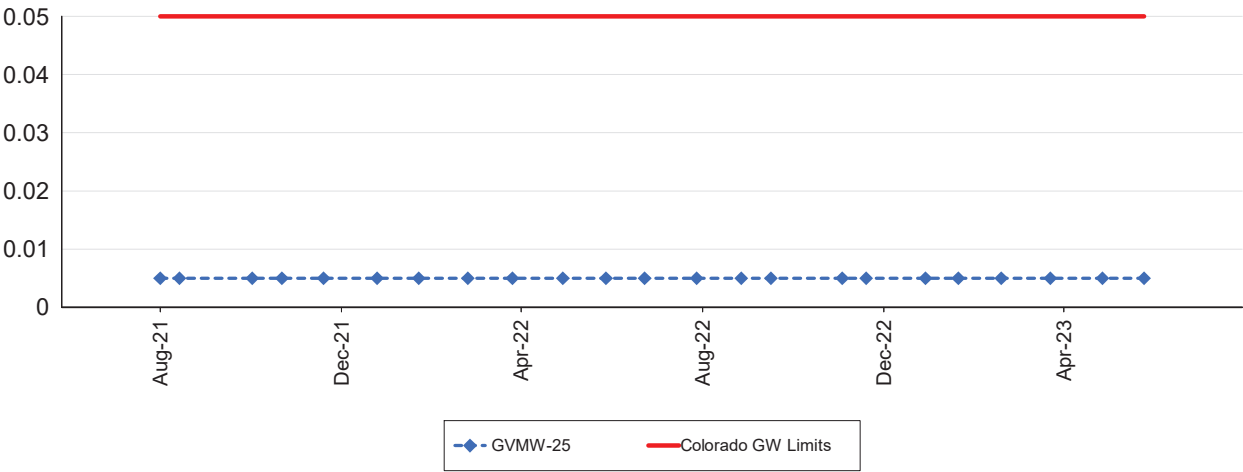
: pH Field (pH unit)



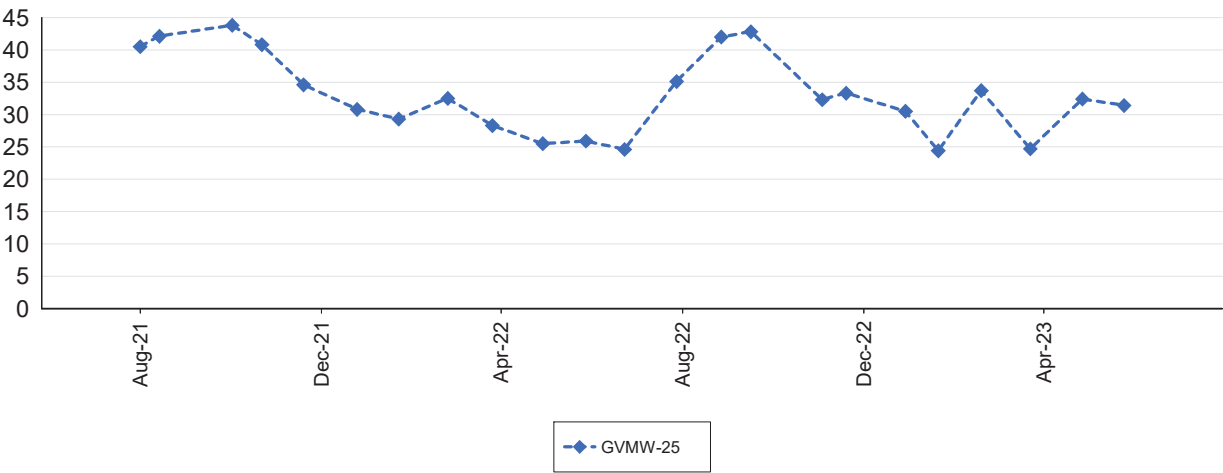
: Selenium - Dissolved (mg/L)

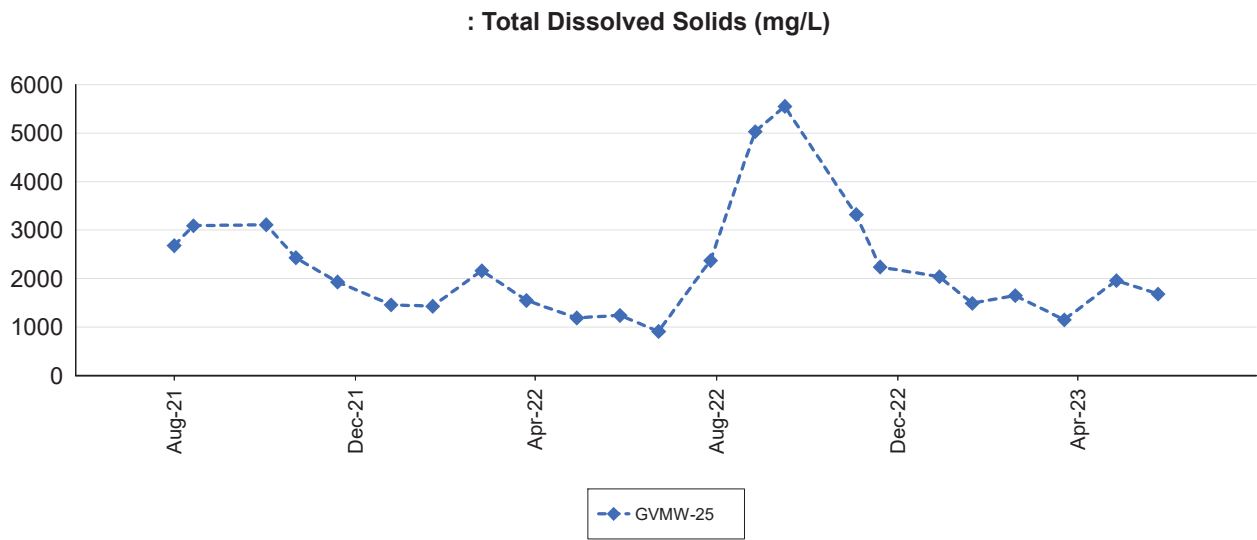
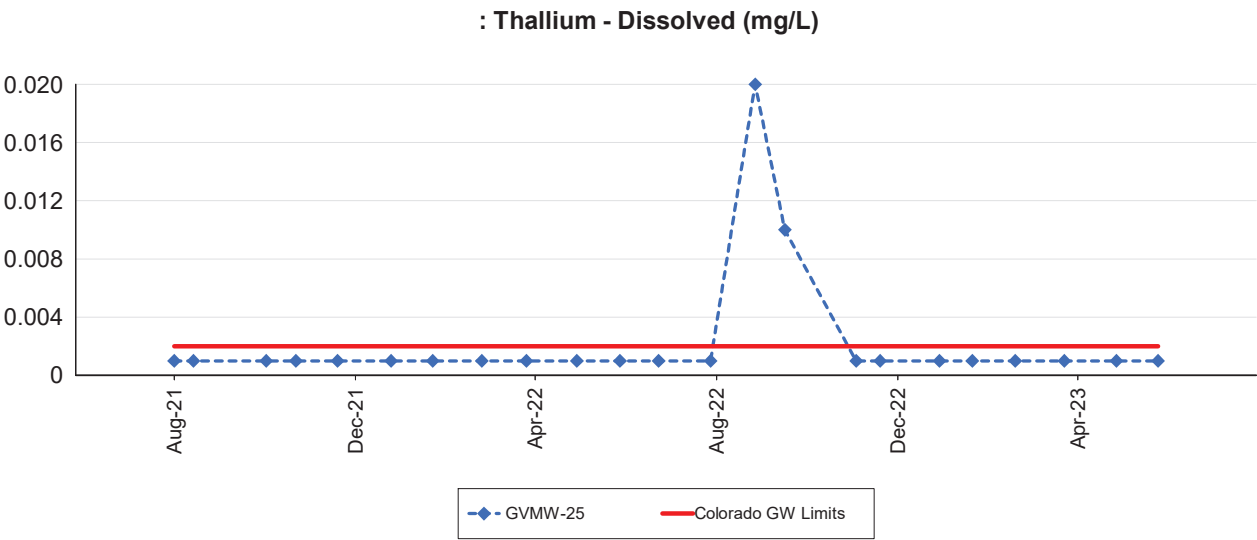
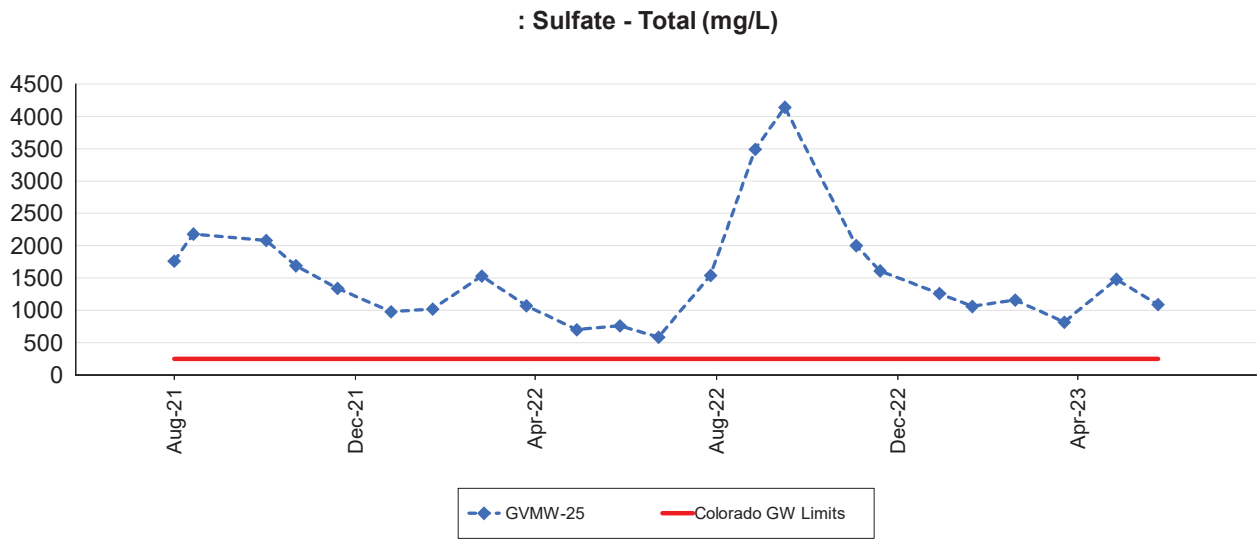


: Silver - Dissolved (mg/L)

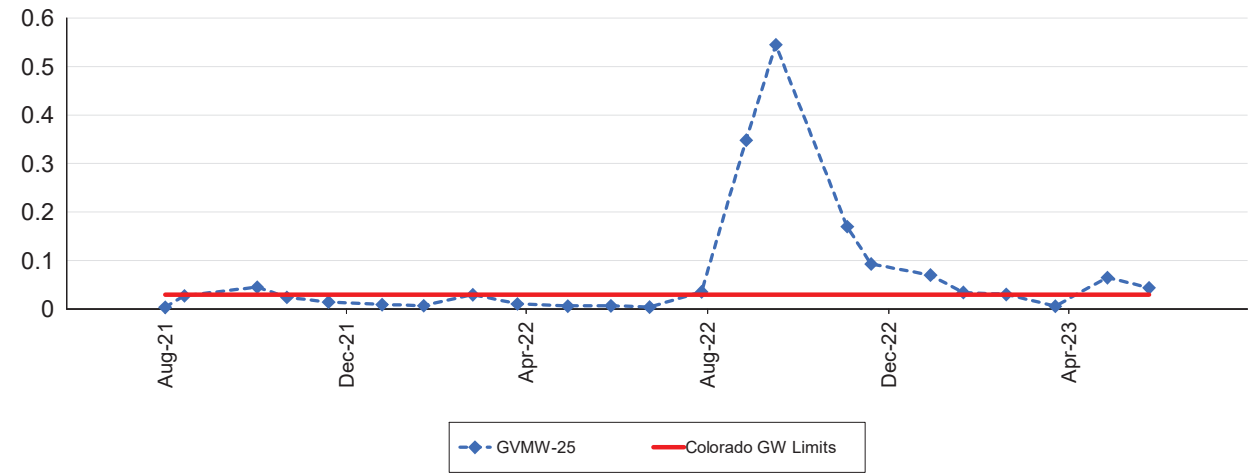


: Sodium - Dissolved (mg/L)

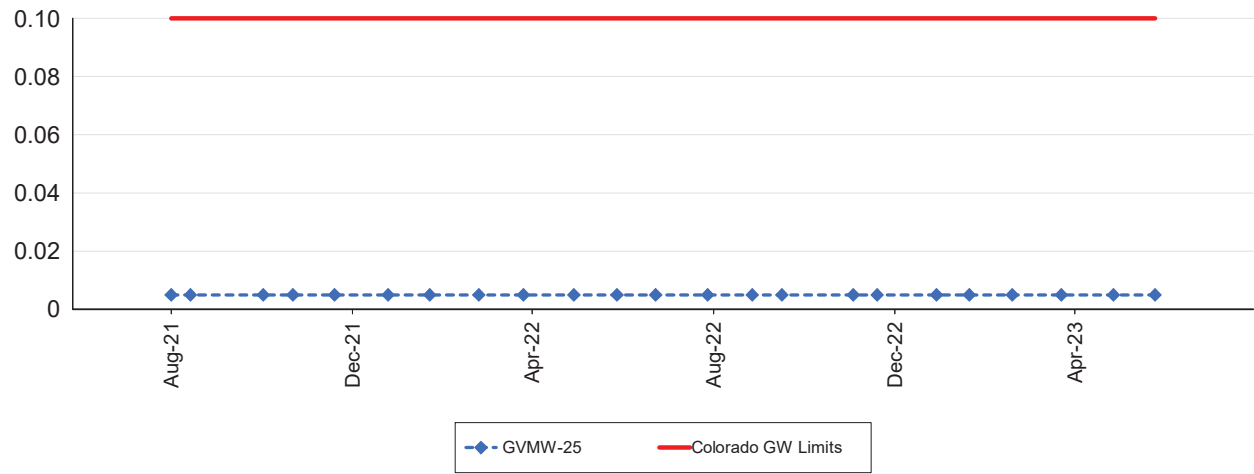




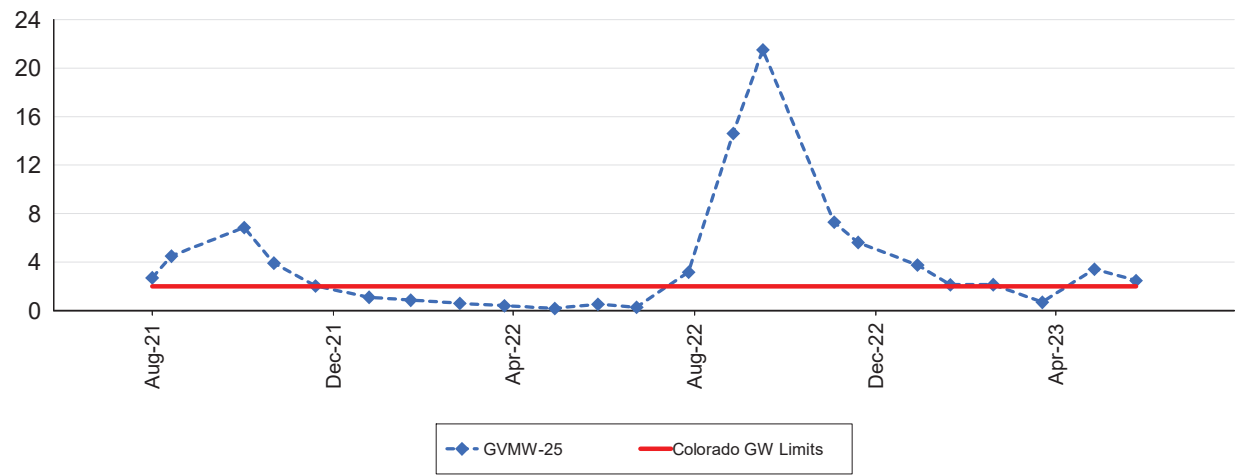
: Uranium - Dissolved (mg/L)



: Vanadium - Dissolved (mg/L)



: Zinc - Dissolved (mg/L)



Analytical Reports

**Newmont - Cripple Creek & Victor**

Post Office Box 191

Victor, CO 80860

Work Order: **X3F0212**

Reported: 19-Jul-23 14:42

Client Sample ID: **GVMW-25**

Sampled: 12-Jun-23 09:42

SVL Sample ID: **X3F0212-04 (Ground Water)**

Received: 14-Jun-23

Sampled By: PB

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	283	mg/L	0.100	0.035		X325062	SMU	06/27/23 17:38	
EPA 200.7	Magnesium	75.3	mg/L	0.500	0.045		X325062	SMU	06/27/23 17:38	
EPA 200.7	Potassium	3.78	mg/L	0.50	0.09		X325062	AS	07/03/23 11:27	
SM 2340 B	Hardness (as CaCO3)	1020	mg/L	2.31	0.271		N/A		06/29/23 17:46	

Metals (Dissolved)

EPA 200.7	Aluminum	18.4	mg/L	0.080	0.054		X324274	SMU	06/29/23 17:46	
EPA 200.7	Barium	0.0114	mg/L	0.0020	0.0019		X324274	SMU	06/29/23 17:46	
EPA 200.7	Beryllium	0.0367	mg/L	0.00200	0.00080		X324274	SMU	06/29/23 17:46	
EPA 200.7	Boron	< 0.0400	mg/L	0.0400	0.0078		X324274	AS	07/03/23 08:59	
EPA 200.7	Cadmium	0.0755	mg/L	0.0020	0.0016		X324274	SMU	06/29/23 17:46	
EPA 200.7	Calcium	267	mg/L	0.100	0.069		X324274	SMU	06/29/23 17:46	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X324274	SMU	06/29/23 17:46	
EPA 200.7	Cobalt	0.0393	mg/L	0.0060	0.0046		X324274	SMU	06/29/23 17:46	
EPA 200.7	Copper	0.0407	mg/L	0.0100	0.0027		X324274	SMU	06/29/23 17:46	
EPA 200.7	Iron	0.180	mg/L	0.100	0.056		X324274	SMU	06/29/23 17:46	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X324274	SMU	06/29/23 17:46	
EPA 200.7	Lithium	< 0.040	mg/L	0.040	0.025		X324274	SMU	06/29/23 17:46	
EPA 200.7	Magnesium	73.8	mg/L	0.500	0.090		X324274	SMU	06/29/23 17:46	
EPA 200.7	Manganese	10.9	mg/L	0.0080	0.0034		X324274	SMU	06/29/23 17:46	
EPA 200.7	Molybdenum	< 0.0080	mg/L	0.0080	0.0034		X324274	SMU	06/29/23 17:46	
EPA 200.7	Nickel	0.156	mg/L	0.0100	0.0048		X324274	SMU	06/29/23 17:46	
EPA 200.7	Potassium	3.78	mg/L	0.50	0.18		X324274	SMU	06/29/23 17:46	
EPA 200.7	Silver	< 0.0050	mg/L	0.0050	0.0019		X324274	SMU	06/29/23 17:46	
EPA 200.7	Sodium	31.4	mg/L	0.50	0.12		X324274	SMU	06/29/23 17:46	
EPA 200.7	Vanadium	< 0.0050	mg/L	0.0050	0.0019		X324274	SMU	06/29/23 17:46	
EPA 200.7	Zinc	2.47	mg/L	0.0100	0.0054		X324274	SMU	06/29/23 17:46	
EPA 200.8	Antimony	< 0.00100	mg/L	0.00100	0.00072		X325099	SMU	06/28/23 12:58	
EPA 200.8	Arsenic	0.00787	mg/L	0.00100	0.00021		X325099	SMU	06/28/23 12:58	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.00240	10	X325099	SMU	07/07/23 12:47	D1
EPA 200.8	Thallium	< 0.00100	mg/L	0.00100	0.00008		X325099	SMU	06/28/23 12:58	
EPA 200.8	Uranium	0.0438	mg/L	0.000100	0.000052		X325099	SMU	06/28/23 12:58	

Metals (Filtered)

EPA 245.1	Mercury	< 0.000200	mg/L	0.000200	0.000093		X324242	NMS	06/19/23 13:01	
-----------	----------------	------------	------	----------	----------	--	---------	-----	----------------	--

Classical Chemistry Parameters

ASTM D7237	Cyanide (free) @ pH 6 @20.0°C	< 0.0050	mg/L	0.0050	0.0048		X326056	DD	06/29/23 19:54	H1
EPA 335.4	Cyanide (total)	< 0.0050	mg/L	0.0050	0.0038		X324264	JRR	06/20/23 11:24	
EPA 350.1	Ammonia as N	< 0.060	mg/L	0.060	0.025	2	X324218	ESL	06/20/23 19:01	D1
OIA 1677	Cyanide (WAD)	< 0.0050	mg/L	0.0050	0.0010		X324018	HJL	06/22/23 12:31	
SM 2310 B	Acidity to pH 8.3	115	mg/L as CaCO3	10.0			X325252	MWD	06/23/23 09:23	
SM 2320 B	Total Alkalinity	< 1.0	mg/L as CaCO3	1.0			X325026	MWD	06/19/23 14:11	
SM 2320 B	Bicarbonate	< 1.0	mg/L as CaCO3	1.0			X325026	MWD	06/19/23 14:11	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X325026	MWD	06/19/23 14:11	
SM 2320 B	Hydroxide	< 1.0	mg/L as CaCO3	1.0			X325026	MWD	06/19/23 14:11	
SM 2540 C	Total Diss. Solids	1680	mg/L	10			X324237	TJL	06/19/23 14:50	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X324238	TJL	06/19/23 16:00	
SM 4500 H B	pH @18.7°C	4.5	pH Units				X325026	MWD	06/19/23 14:11	H5

SVL holds the following certifications:

AZ:0538, ID:ID00019, NV:ID000192007A, UT(TNI):ID000192015-1, WA:C573

Work order Report Page 8 of 23



One Government Gulch - PO Box 929
Kellogg, ID 83837-0929
(208) 784-1258
www.svl.net

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

Work Order: **X3F0212**
Reported: 19-Jul-23 14:42

Client Sample ID: **GVMW-25**
SVL Sample ID: **X3F0212-04 (Ground Water)**

Sampled: 12-Jun-23 09:42
Received: 14-Jun-23
Sampled By: PB

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	49.0	mg/L	10.0	1.10	50	X324143	RS	06/14/23 23:07	D2
EPA 300.0	Fluoride	4.71	mg/L	0.100	0.017		X324143	RS	06/14/23 22:50	
EPA 300.0	Nitrate as N	2.59	mg/L	0.050	0.013		X324143	RS	06/14/23 22:50	H3
EPA 300.0	Nitrate+Nitrite as N	2.59	mg/L	0.100	0.044		X324143	RS	06/14/23 22:50	H3
EPA 300.0	Nitrite as N	< 0.050	mg/L	0.050	0.031		X324143	RS	06/14/23 22:50	H3
EPA 300.0	Sulfate as SO4	1090	mg/L	15.0	9.00	50	X324143	RS	06/14/23 23:07	D2

Cation/Anion Balance and TDS Ratios

Cation Sum: 23.4 meq/L	Anion Sum: 24.5 meq/L	C/A Balance: -2.37 %	Calculated TDS: 1540	TDS/cTDS: 1.09
------------------------	-----------------------	----------------------	----------------------	----------------

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

Katie Yoder



One Government Gulch - PO Box 929
Kellogg, ID 83837-0929
(208) 784-1258
www.svl.net

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

Work Order: X3F0212
Reported: 19-Jul-23 14:42

Client Sample ID: **Ecosa Seep-1**
SVL Sample ID: **X3F0212-02 (Surface Water)**

Sampled: 12-Jun-23 11:04
Received: 14-Jun-23
Sampled By: PB

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
--------	---------	--------	-------	----	-----	----------	-------	---------	----------	-------

Metals (Total)

EPA 245.1	Mercury	< 0.000093	mg/L	0.000200	0.000093		X325195	NMS	06/23/23 12:50	U
-----------	---------	------------	------	----------	----------	--	---------	-----	----------------	---

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

EPA 200.7	Barium	0.0401	mg/L	0.0020	0.0010		X326016	JRR	07/13/23 09:53	
EPA 200.7	Beryllium	0.0730	mg/L	0.00200	0.00040		X326016	JRR	07/13/23 09:53	
EPA 200.7	Boron	< 0.0400	mg/L	0.0400	0.0039		X325062	SMU	06/27/23 17:28	
EPA 200.7	Calcium	286	mg/L	0.100	0.035		X325062	SMU	06/27/23 17:28	M3
EPA 200.7	Chromium	0.0610	mg/L	0.0060	0.0010		X326016	JRR	07/13/23 09:53	
EPA 200.7	Iron	243	mg/L	0.100	0.028		X325062	SMU	06/27/23 17:28	M3
EPA 200.7	Magnesium	221	mg/L	0.500	0.045		X325062	SMU	06/27/23 17:28	
EPA 200.7	Manganese	307	mg/L	0.0400	0.0170	10	X326016	JRR	07/13/23 13:33	D2
EPA 200.7	Molybdenum	< 0.0080	mg/L	0.0080	0.0017		X326016	JRR	07/13/23 09:53	
EPA 200.7	Nickel	1.13	mg/L	0.0100	0.0024		X326016	JRR	07/13/23 09:53	
EPA 200.7	Phosphorus	2.17	mg/L	0.050	0.007		X325062	SMU	06/27/23 17:28	
EPA 200.7	Potassium	0.77	mg/L	0.50	0.09		X325062	SMU	06/27/23 18:54	
EPA 200.7	Sodium	13.2	mg/L	0.50	0.06		X325062	SMU	06/27/23 17:28	
EPA 200.7	Zinc	141	mg/L	0.0500	0.0270	10	X326016	JRR	07/13/23 13:33	D2
EPA 200.8	Antimony	< 0.00300	mg/L	0.00300	0.00072	2	X326019	SMU	06/29/23 11:11	
EPA 200.8	Arsenic	0.112	mg/L	0.0100	0.00210	20	X325067	SMU	06/25/23 13:56	D1
EPA 200.8	Cadmium	3.22	mg/L	0.0100	0.00630	200	X326019	SMU	07/07/23 10:36	D2
EPA 200.8	Chromium	0.0664	mg/L	0.0100	0.00170	20	X325067	SMU	06/25/23 13:56	D1
EPA 200.8	Copper	6.97	mg/L	0.0400	0.0360	200	X326019	SMU	07/07/23 10:36	D2
EPA 200.8	Lead	0.00946	mg/L	0.00020	0.00014	2	X326019	SMU	06/29/23 11:11	
EPA 200.8	Selenium	< 0.100	mg/L	0.100	0.0240	200	X326019	SMU	07/07/23 10:36	D1
SM 2340 B	Hardness (as CaCO3)	1640	mg/L	2.31	0.457		N/A		06/27/23 17:28	

Metals (Dissolved)

EPA 200.7	Aluminum	605	mg/L	0.080	0.054		X324274	SMU	06/29/23 17:38	
EPA 200.7	Barium	0.0106	mg/L	0.0020	0.0019		X324274	SMU	06/29/23 17:38	
EPA 200.7	Beryllium	0.0818	mg/L	0.00200	0.00080		X324274	SMU	06/29/23 17:38	
EPA 200.7	Calcium	287	mg/L	0.100	0.069		X324274	SMU	06/29/23 17:38	
EPA 200.7	Iron	239	mg/L	0.100	0.056		X324274	SMU	06/29/23 17:38	
EPA 200.7	Magnesium	225	mg/L	0.500	0.090		X324274	SMU	06/29/23 17:38	
EPA 200.7	Manganese	301	mg/L	0.0800	0.0340	10	X324274	SMU	06/29/23 18:42	D2
EPA 200.7	Molybdenum	< 0.0080	mg/L	0.0080	0.0034		X324274	SMU	06/29/23 17:38	
EPA 200.7	Nickel	1.20	mg/L	0.0100	0.0048		X324274	SMU	06/29/23 17:38	
EPA 200.7	Potassium	< 0.50	mg/L	0.50	0.18		X324274	SMU	06/29/23 17:38	
EPA 200.7	Sodium	12.7	mg/L	0.50	0.12		X324274	SMU	06/29/23 17:38	
EPA 200.7	Zinc	150	mg/L	0.100	0.0540	10	X324274	SMU	06/29/23 18:42	D2
EPA 200.8	Antimony	< 0.200	mg/L	0.200	0.144	200	X325099	SMU	06/28/23 14:55	D1
EPA 200.8	Arsenic	0.215	mg/L	0.200	0.0420	200	X325099	SMU	06/28/23 14:55	D1
EPA 200.8	Cadmium	3.44	mg/L	0.0200	0.0126	200	X325099	SMU	06/28/23 14:55	D2
EPA 200.8	Chromium	< 0.200	mg/L	0.200	0.0340	200	X325099	SMU	06/28/23 14:55	D1
EPA 200.8	Copper	7.18	mg/L	0.0800	0.0720	200	X325099	SMU	06/28/23 14:55	D2
EPA 200.8	Lead	< 0.0400	mg/L	0.0400	0.0280	200	X325099	SMU	06/28/23 14:55	D1
EPA 200.8	Selenium	< 0.100	mg/L	0.100	0.0240	100	X325099	SMU	07/07/23 12:40	D1
EPA 200.8	Silver	< 0.0160	mg/L	0.0160	0.0122	200	X325099	SMU	06/28/23 14:55	D1
EPA 200.8	Thallium	< 0.0400	mg/L	0.0400	0.0160	200	X325099	SMU	06/28/23 14:55	D1
EPA 200.8	Uranium	5.27	mg/L	0.0200	0.0104	200	X325099	SMU	06/28/23 14:55	D2



One Government Gulch - PO Box 929
Kellogg, ID 83837-0929
(208) 784-1258
www.svl.net

Newmont - Cripple Creek & Victor	Work Order: X3F0212
Post Office Box 191	Reported: 19-Jul-23 14:42
Victor, CO 80860	

Client Sample ID: **Ecosa Seep-1**

SVL Sample ID: **X3F0212-02 (Surface Water)**

Sample Report Page 2 of 2

Sampled: 12-Jun-23 11:04
Received: 14-Jun-23
Sampled By: PB

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
--------	---------	--------	-------	----	-----	----------	-------	---------	----------	-------

Metals (Filtered)

EPA 245.1	Mercury	< 0.000200	mg/L	0.000200	0.000093		X324242	NMS	06/19/23 12:57	
-----------	---------	------------	------	----------	----------	--	---------	-----	----------------	--

Classical Chemistry Parameters

ASTM D7237	Cyanide (free) @ pH 6 @19.0°C	< 0.0050	mg/L	0.0050	0.0048		X324215	HJL	06/21/23 13:40	
Calculation	Chromium(III)	0.0610	mg/L	0.0110	0.00290		N/A		07/13/23 09:53	
EPA 335.4	Cyanide (total)	< 0.0050	mg/L	0.0050	0.0038		X324264	JRR	06/20/23 11:18	
EPA 350.1	Ammonia as N	< 0.060	mg/L	0.060	0.025	2	X324218	ESL	06/20/23 18:56	D1
EPA 351.2	TKN	< 0.50	mg/L	0.50	0.31		X324151	HJL	06/21/23 19:54	
Hach 8167	Total Chlorine	0.15	mg/L	0.020			X325158	NMS	06/21/23 16:59	H4
OIA 1677	Cyanide (WAD)	< 0.0050	mg/L	0.0050	0.0010		X324018	HJL	06/22/23 12:28	
SM 2310 B	Acidity to pH 8.3	4850	mg/L as CaCO3	10.0			X325252	MWD	06/23/23 09:23	
SM 2320 B	Total Alkalinity	< 1.0	mg/L as CaCO3	1.0			X325026	MWD	06/19/23 14:01	
SM 2320 B	Bicarbonate	< 1.0	mg/L as CaCO3	1.0			X325026	MWD	06/19/23 14:01	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X325026	MWD	06/19/23 14:01	
SM 2320 B	Hydroxide	< 1.0	mg/L as CaCO3	1.0			X325026	MWD	06/19/23 14:01	
SM 2540 C	Total Diss. Solids	9060	mg/L	100			X324237	TJL	06/19/23 14:50	D2
SM 2540 D	Total Susp. Solids	15.0	mg/L	5.0			X324238	TJL	06/19/23 16:00	
SM 4500 H B	pH @18.2°C	2.8	pH Units				X325026	MWD	06/19/23 14:01	H5
SM 4500 S D	Sulfide	< 0.050	mg/L	0.050	0.020		X324203	DD	06/19/23 17:12	
SM 4500-O-G	Dissolved Oxygen	6.6	mg/L	0.1			X324259	TJL	06/26/23 13:45	H3,H5

Dissolved Classical Chemistry Parameters

SM 3500 Cr B	Hexavalent Chromium	< 0.0050	mg/L	0.0050	0.0019		X325197	RS	06/22/23 16:00	
--------------	---------------------	----------	------	--------	--------	--	---------	----	----------------	--

Filtered Classical Chemistry Parameters

Calculation	Chromium (III)	< 0.205	mg/L	0.205	0.0359		N/A		06/28/23 14:55	
-------------	----------------	---------	------	-------	--------	--	-----	--	----------------	--

Anions by Ion Chromatography

EPA 300.0	Chloride	2.70	mg/L	2.00	0.22	10	X324143	RS	06/14/23 21:42	D1
EPA 300.0	Fluoride	34.1	mg/L	1.00	0.170	10	X324143	RS	06/14/23 21:42	D2
EPA 300.0	Nitrate as N	< 0.500	mg/L	0.500	0.130	10	X324143	RS	06/14/23 21:42	D1,H3
EPA 300.0	Nitrate+Nitrite as N	< 1.00	mg/L	1.00	0.440	10	X324143	RS	06/14/23 21:42	D1,H3
EPA 300.0	Nitrite as N	< 0.500	mg/L	0.500	0.310	10	X324143	RS	06/14/23 21:42	D1,H3
EPA 300.0	Sulfate as SO4	6630	mg/L	75.0	45.0	250	X324143	RS	06/14/23 21:59	D2

Cation/Anion Balance and TDS Ratios

Cation Sum: 130 meq/L	Anion Sum: 140 meq/L	C/A Balance: -3.68 %	Calculated TDS: 7190	TDS/cTDS: 1.26
-----------------------	----------------------	----------------------	----------------------	----------------

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

Katie Yoder

**Newmont - Cripple Creek & Victor**

Post Office Box 191

Victor, CO 80860

Work Order: **X3F0212**

Reported: 19-Jul-23 14:42

Client Sample ID: **Ecosa Seep-2**

Sampled: 12-Jun-23 10:35

Received: 14-Jun-23

Sampled By: PB

SVL Sample ID: **X3F0212-03 (Surface Water)****Sample Report Page 1 of 2**

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
--------	---------	--------	-------	----	-----	----------	-------	---------	----------	-------

Metals (Total)

EPA 245.1	Mercury	< 0.000093	mg/L	0.000200	0.000093		X325195	NMS	06/23/23 12:52	U
-----------	---------	------------	------	----------	----------	--	---------	-----	----------------	---

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

EPA 200.7	Barium	0.0678	mg/L	0.0500	0.0475	50	X326016	JRR	07/13/23 09:57	D1
EPA 200.7	Beryllium	0.575	mg/L	0.0500	0.0200	50	X326016	JRR	07/13/23 09:57	D1
EPA 200.7	Boron	< 0.200	mg/L	0.200	0.0390	10	X325062	SMU	06/27/23 17:35	
EPA 200.7	Calcium	402	mg/L	0.500	0.345	10	X325062	SMU	06/27/23 17:35	
EPA 200.7	Chromium	2.12	mg/L	0.150	0.0500	50	X326016	JRR	07/13/23 09:57	D1
EPA 200.7	Iron	2180	mg/L	0.500	0.280	10	X325062	SMU	06/27/23 18:58	D2
EPA 200.7	Magnesium	1260	mg/L	2.50	0.450	10	X325062	SMU	06/27/23 17:35	
EPA 200.7	Manganese	1370	mg/L	0.200	0.0850	50	X326016	JRR	07/13/23 09:57	D2
EPA 200.7	Molybdenum	< 0.200	mg/L	0.200	0.0850	50	X326016	JRR	07/13/23 09:57	D1
EPA 200.7	Nickel	15.6	mg/L	0.250	0.120	50	X326016	JRR	07/13/23 09:57	D1
EPA 200.7	Phosphorus	47.5	mg/L	0.250	0.065	10	X325062	SMU	06/27/23 17:35	
EPA 200.7	Potassium	204	mg/L	2.50	0.90	10	X325062	SMU	06/27/23 18:58	D2
EPA 200.7	Sodium	51.1	mg/L	2.50	0.60	10	X325062	SMU	06/27/23 17:35	
EPA 200.7	Zinc	252	mg/L	0.250	0.135	50	X326016	JRR	07/13/23 09:57	D2
EPA 200.8	Antimony	< 0.00300	mg/L	0.00300	0.00072	2	X326019	SMU	06/29/23 11:13	
EPA 200.8	Arsenic	1.70	mg/L	0.500	0.105	1000	X325067	SMU	06/25/23 13:58	D2
EPA 200.8	Cadmium	0.0394	mg/L	0.000100	0.000063	2	X326019	SMU	06/29/23 11:13	
EPA 200.8	Chromium	2.02	mg/L	0.500	0.0850	1000	X325067	SMU	06/25/23 13:58	D2
EPA 200.8	Copper	0.0812	mg/L	0.00100	0.00036	2	X326019	SMU	06/29/23 11:13	
EPA 200.8	Lead	< 0.00020	mg/L	0.00020	0.00014	2	X326019	SMU	06/29/23 11:13	
EPA 200.8	Selenium	0.0936	mg/L	0.0100	0.00240	20	X326019	SMU	07/07/23 10:39	D1
SM 2340 B	Hardness (as CaCO3)	6360	mg/L	22.8	10.5		N/A		06/29/23 17:42	

Metals (Dissolved)

EPA 200.7	Aluminum	6090	mg/L	4.00	2.70	50	X324274	SMU	06/29/23 17:42	D2
EPA 200.7	Barium	< 0.100	mg/L	0.100	0.0950	50	X324274	SMU	06/29/23 17:42	D1
EPA 200.7	Beryllium	0.695	mg/L	0.100	0.0400	50	X324274	SMU	06/29/23 17:42	D1
EPA 200.7	Calcium	474	mg/L	5.00	3.45	50	X324274	SMU	06/29/23 17:42	D1
EPA 200.7	Iron	5530	mg/L	5.00	2.80	50	X324274	SMU	06/29/23 17:42	D2
EPA 200.7	Magnesium	1520	mg/L	25.0	4.50	50	X324274	SMU	06/29/23 17:42	D2
EPA 200.7	Manganese	1700	mg/L	0.400	0.170	50	X324274	SMU	06/29/23 17:42	D2
EPA 200.7	Molybdenum	< 0.400	mg/L	0.400	0.170	50	X324274	SMU	06/29/23 17:42	D1
EPA 200.7	Nickel	17.3	mg/L	0.500	0.240	50	X324274	SMU	06/29/23 17:42	D1
EPA 200.7	Potassium	< 25.0	mg/L	25.0	9.00	50	X324274	SMU	06/29/23 17:42	D1
EPA 200.7	Sodium	59.0	mg/L	25.0	6.00	50	X324274	SMU	06/29/23 17:42	D1
EPA 200.7	Zinc	285	mg/L	0.500	0.270	50	X324274	SMU	06/29/23 17:42	D2
EPA 200.8	Antimony	< 0.200	mg/L	0.200	0.144	200	X325099	SMU	06/28/23 14:58	D1
EPA 200.8	Arsenic	2.30	mg/L	0.200	0.0420	200	X325099	SMU	06/28/23 14:58	D2
EPA 200.8	Cadmium	12.2	mg/L	0.0200	0.0126	200	X325099	SMU	06/28/23 14:58	D2
EPA 200.8	Chromium	2.30	mg/L	0.200	0.0340	200	X325099	SMU	06/28/23 14:58	D2
EPA 200.8	Copper	28.3	mg/L	0.0800	0.0720	200	X325099	SMU	06/28/23 14:58	D2
EPA 200.8	Lead	< 0.0400	mg/L	0.0400	0.0280	200	X325099	SMU	06/28/23 14:58	D1
EPA 200.8	Selenium	0.479	mg/L	0.100	0.0240	100	X325099	SMU	07/07/23 12:42	D1
EPA 200.8	Silver	< 0.0160	mg/L	0.0160	0.0122	200	X325099	SMU	06/28/23 14:58	D1
EPA 200.8	Thallium	< 0.0400	mg/L	0.0400	0.0160	200	X325099	SMU	06/28/23 14:58	D1
EPA 200.8	Uranium	15.5	mg/L	0.0200	0.0104	200	X325099	SMU	06/28/23 14:58	D2

**Newmont - Cripple Creek & Victor**

Post Office Box 191

Victor, CO 80860

Work Order: **X3F0212**

Reported: 19-Jul-23 14:42

Client Sample ID: **Ecosa Seep-2**SVL Sample ID: **X3F0212-03 (Surface Water)**

Sampled: 12-Jun-23 10:35

Received: 14-Jun-23

Sampled By: PB

Sample Report Page 2 of 2

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
--------	---------	--------	-------	----	-----	----------	-------	---------	----------	-------

Metals (Filtered)

EPA 245.1	Mercury	< 0.000200	mg/L	0.000200	0.000093		X324242	NMS	06/19/23 12:59	
-----------	---------	------------	------	----------	----------	--	---------	-----	----------------	--

Classical Chemistry Parameters

ASTM D7237	Cyanide (free) @ pH 6 @19.0°C	< 0.0050	mg/L	0.0050	0.0048		X324215	HJL	06/21/23 13:41	
Calculation	Chromium(III)	2.08	mg/L	0.155	0.0519		N/A		07/13/23 09:57	
EPA 335.4	Cyanide (total)	0.0607	mg/L	0.0050	0.0038		X324264	JRR	06/20/23 11:21	
EPA 350.1	Ammonia as N	< 0.300	mg/L	0.300	0.127	10	X324218	ESL	06/20/23 18:58	D1
EPA 351.2	TKN	5.92	mg/L	2.50	1.54	5	X323177	HJL	06/21/23 17:51	D
Hach 8167	Total Chlorine	< 0.20	mg/L	0.20		10	X325158	NMS	06/21/23 16:59	D1,E12,H4
OIA 1677	Cyanide (WAD)	< 0.0050	mg/L	0.0050	0.0010		X324018	HJL	06/22/23 12:30	
SM 2310 B	Acidity to pH 8.3	43600	mg/L as CaCO3	10.0			X325252	MWD	06/23/23 09:23	
SM 2320 B	Total Alkalinity	< 1.0	mg/L as CaCO3	1.0			X325026	MWD	06/19/23 14:06	
SM 2320 B	Bicarbonate	< 1.0	mg/L as CaCO3	1.0			X325026	MWD	06/19/23 14:06	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X325026	MWD	06/19/23 14:06	
SM 2320 B	Hydroxide	< 1.0	mg/L as CaCO3	1.0			X325026	MWD	06/19/23 14:06	
SM 2540 C	Total Diss. Solids	75100	mg/L	100			X324237	TJL	06/19/23 14:50	D2,E11
SM 2540 D	Total Susp. Solids	103	mg/L	5.0			X324238	TJL	06/19/23 16:00	
SM 4500 H B	pH @18.5°C	2.4	pH Units				X325026	MWD	06/19/23 14:06	H5
SM 4500 S D	Sulfide	< 0.050	mg/L	0.050	0.020		X324203	DD	06/19/23 17:14	
SM 4500-O-G	Dissolved Oxygen	6.0	mg/L	0.1			X324259	TJL	06/26/23 13:45	H3,H5

Dissolved Classical Chemistry Parameters

SM 3500 Cr B	Hexavalent Chromium	0.0378	mg/L	0.0050	0.0019		X325197	RS	06/22/23 16:00	
--------------	----------------------------	--------	------	--------	--------	--	---------	----	----------------	--

Filtered Classical Chemistry Parameters

Calculation	Chromium (III)	2.27	mg/L	0.205	0.0359		N/A		06/28/23 14:58	
-------------	-----------------------	------	------	-------	--------	--	-----	--	----------------	--

Anions by Ion Chromatography

EPA 300.0	Chloride	< 50.0	mg/L	50.0	5.50	250	X324143	RS	06/14/23 22:16	D2
EPA 300.0	Fluoride	304	mg/L	25.0	4.25	250	X324143	RS	06/14/23 22:16	D2
EPA 300.0	Nitrate as N	12.7	mg/L	12.5	3.25	250	X324143	RS	06/14/23 22:16	D2,H3
EPA 300.0	Nitrate+Nitrite as N	< 25.0	mg/L	25.0	11.0	250	X324143	RS	06/14/23 22:16	D2,H3
EPA 300.0	Nitrite as N	< 12.5	mg/L	12.5	7.75	250	X324143	RS	06/14/23 22:16	D1,H3
EPA 300.0	Sulfate as SO4	55100	mg/L	1500	900	5000	X324143	RS	06/14/23 22:33	D2

Cation/Anion Balance and TDS Ratios

Cation Sum: 998 meq/L Anion Sum: 1,164 meq/L C/A Balance: -7.67 % Calculated TDS: 57389 TDS/cTDS: 1.31

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

Katie Yoder



One Government Gulch - PO Box 929

Kellogg, ID 83837-0929

(208) 784-1258

www.svl.net**Newmont - Cripple Creek & Victor**

Post Office Box 191

Victor, CO 80860

Work Order: **X3F0212**

Reported: 19-Jul-23 14:42

Client Sample ID: **GV-06**

Sampled: 12-Jun-23 07:34

Received: 14-Jun-23

Sampled By: PB

SVL Sample ID: **X3F0212-01 (Surface Water)****Sample Report Page 1 of 2**

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
--------	---------	--------	-------	----	-----	----------	-------	---------	----------	-------

Metals (Total)

EPA 245.1	Mercury	< 0.000093	mg/L	0.000200	0.000093		X325195	NMS	06/23/23 12:48	U
-----------	---------	------------	------	----------	----------	--	---------	-----	----------------	---

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

EPA 200.7	Barium	0.111	mg/L	0.0020	0.0010		X326016	JRR	07/13/23 09:50	
EPA 200.7	Beryllium	< 0.00200	mg/L	0.00200	0.00040		X326016	JRR	07/13/23 09:50	
EPA 200.7	Boron	< 0.0400	mg/L	0.0400	0.0039		X325062	SMU	06/27/23 17:25	
EPA 200.7	Calcium	45.7	mg/L	0.100	0.035		X325062	SMU	06/27/23 17:25	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0010		X326016	JRR	07/13/23 09:50	
EPA 200.7	Iron	0.676	mg/L	0.100	0.028		X325062	SMU	06/27/23 17:25	
EPA 200.7	Magnesium	10.6	mg/L	0.500	0.045		X325062	SMU	06/27/23 17:25	
EPA 200.7	Manganese	0.829	mg/L	0.0080	0.0017		X326016	JRR	07/13/23 09:50	
EPA 200.7	Molybdenum	< 0.0080	mg/L	0.0080	0.0017		X326016	JRR	07/13/23 09:50	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0024		X326016	JRR	07/13/23 09:50	
EPA 200.7	Phosphorus	< 0.050	mg/L	0.050	0.007		X325062	SMU	06/27/23 17:25	
EPA 200.7	Potassium	1.60	mg/L	0.50	0.09		X325062	SMU	06/27/23 18:50	
EPA 200.7	Sodium	13.9	mg/L	0.50	0.06		X325062	SMU	06/27/23 17:25	
EPA 200.7	Zinc	< 0.0100	mg/L	0.0100	0.0027		X326016	JRR	07/13/23 09:50	
EPA 200.8	Antimony	< 0.00300	mg/L	0.00300	0.00072	2	X326019	SMU	06/29/23 11:08	
EPA 200.8	Arsenic	< 0.00100	mg/L	0.00100	0.00021	2	X325067	SMU	06/25/23 13:40	
EPA 200.8	Cadmium	< 0.000100	mg/L	0.000100	0.000063	2	X326019	SMU	06/29/23 11:08	
EPA 200.8	Chromium	< 0.00100	mg/L	0.00100	0.00017	2	X325067	SMU	06/25/23 13:40	
EPA 200.8	Copper	< 0.00100	mg/L	0.00100	0.00036	2	X326019	SMU	06/29/23 11:08	
EPA 200.8	Lead	< 0.00020	mg/L	0.00020	0.00014	2	X326019	SMU	06/29/23 11:08	
EPA 200.8	Selenium	< 0.00300	mg/L	0.00300	0.00024	2	X326019	SMU	07/07/23 10:33	
SM 2340 B	Hardness (as CaCO3)	158	mg/L	2.31	0.271		N/A		06/29/23 17:28	

Metals (Dissolved)

EPA 200.7	Aluminum	< 0.080	mg/L	0.080	0.054		X324274	SMU	06/29/23 17:28	
EPA 200.7	Barium	0.104	mg/L	0.0020	0.0019		X324274	SMU	06/29/23 17:28	
EPA 200.7	Beryllium	< 0.00200	mg/L	0.00200	0.00080		X324274	SMU	06/29/23 17:28	
EPA 200.7	Calcium	44.3	mg/L	0.100	0.069		X324274	SMU	06/29/23 17:28	
EPA 200.7	Iron	0.462	mg/L	0.100	0.056		X324274	SMU	06/29/23 17:28	
EPA 200.7	Magnesium	10.5	mg/L	0.500	0.090		X324274	SMU	06/29/23 17:28	
EPA 200.7	Manganese	0.815	mg/L	0.0080	0.0034		X324274	SMU	06/29/23 17:28	
EPA 200.7	Molybdenum	< 0.0080	mg/L	0.0080	0.0034		X324274	SMU	06/29/23 17:28	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0048		X324274	SMU	06/29/23 17:28	
EPA 200.7	Potassium	1.73	mg/L	0.50	0.18		X324274	SMU	06/29/23 17:28	
EPA 200.7	Sodium	13.3	mg/L	0.50	0.12		X324274	SMU	06/29/23 17:28	
EPA 200.7	Zinc	< 0.0100	mg/L	0.0100	0.0054		X324274	SMU	06/29/23 17:28	
EPA 200.8	Antimony	< 0.00100	mg/L	0.00100	0.00072		X325099	SMU	06/28/23 12:45	
EPA 200.8	Arsenic	< 0.00100	mg/L	0.00100	0.00021		X325099	SMU	06/28/23 12:45	M1
EPA 200.8	Cadmium	< 0.000100	mg/L	0.000100	0.000063		X325099	SMU	06/28/23 12:45	
EPA 200.8	Chromium	< 0.00100	mg/L	0.00100	0.00017		X325099	SMU	06/28/23 12:45	
EPA 200.8	Copper	< 0.00040	mg/L	0.00040	0.00036		X325099	SMU	06/28/23 12:45	
EPA 200.8	Lead	< 0.00020	mg/L	0.00020	0.00014		X325099	SMU	06/28/23 12:45	
EPA 200.8	Selenium	< 0.00100	mg/L	0.00100	0.00024		X325099	SMU	07/07/23 12:32	
EPA 200.8	Silver	0.000082	mg/L	0.00008	0.000061		X325099	SMU	06/28/23 12:45	
EPA 200.8	Thallium	< 0.00100	mg/L	0.00100	0.00008		X325099	SMU	06/28/23 12:45	
EPA 200.8	Uranium	0.000742	mg/L	0.000100	0.000052		X325099	SMU	06/28/23 12:45	

SVL holds the following certifications:

AZ:0538, ID:ID00019, NV:ID000192007A, UT(TNI):ID000192015-1, WA:C573

Work order Report Page 2 of 23

**Newmont - Cripple Creek & Victor**

Post Office Box 191

Victor, CO 80860

Work Order: **X3F0212**

Reported: 19-Jul-23 14:42

Client Sample ID: **GV-06**

Sampled: 12-Jun-23 07:34

Received: 14-Jun-23

Sampled By: PB

SVL Sample ID: **X3F0212-01 (Surface Water)****Sample Report Page 2 of 2**

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
--------	---------	--------	-------	----	-----	----------	-------	---------	----------	-------

Metals (Filtered)

EPA 245.1	Mercury	< 0.000200	mg/L	0.000200	0.000093		X324242	NMS	06/19/23 12:55	
-----------	---------	------------	------	----------	----------	--	---------	-----	----------------	--

Classical Chemistry Parameters

ASTM D7237	Cyanide (free) @ pH 6 @19.0°C	< 0.0050	mg/L	0.0050	0.0048		X324215	HJL	06/21/23 13:38	
Calculation	Chromium(III)	< 0.0110	mg/L	0.0110	0.00290		N/A		07/13/23 09:50	
EPA 335.4	Cyanide (total)	< 0.0050	mg/L	0.0050	0.0038		X324264	JRR	06/20/23 11:16	
EPA 350.1	Ammonia as N	< 0.030	mg/L	0.030	0.013		X324218	ESL	06/20/23 12:57	
EPA 351.2	TKN	< 0.50	mg/L	0.50	0.31		X324151	HJL	06/21/23 20:26	
Hach 8167	Total Chlorine	< 0.020	mg/L	0.020			X325158	NMS	06/21/23 16:59	H4
OIA 1677	Cyanide (WAD)	< 0.0050	mg/L	0.0050	0.0010		X324018	HJL	06/22/23 12:27	
SM 2310 B	Acidity to pH 8.3	-59.6	mg/L as CaCO3	10.0			X325252	MWD	06/23/23 09:23	
SM 2320 B	Total Alkalinity	82.5	mg/L as CaCO3	1.0			X325026	MWD	06/19/23 13:55	
SM 2320 B	Bicarbonate	82.5	mg/L as CaCO3	1.0			X325026	MWD	06/19/23 13:55	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X325026	MWD	06/19/23 13:55	
SM 2320 B	Hydroxide	< 1.0	mg/L as CaCO3	1.0			X325026	MWD	06/19/23 13:55	
SM 2540 C	Total Diss. Solids	244	mg/L	10			X324237	TJL	06/19/23 14:50	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X324238	TJL	06/19/23 16:00	
SM 4500 H B	pH @18.1°C	7.5	pH Units				X325026	MWD	06/19/23 13:55	H5
SM 4500 S D	Sulfide	< 0.050	mg/L	0.050	0.020		X324203	DD	06/19/23 17:07	
SM 4500-O-G	Dissolved Oxygen	6.8	mg/L	0.1			X324259	TJL	06/26/23 13:45	H5

Dissolved Classical Chemistry Parameters

SM 3500 Cr B	Hexavalent Chromium	< 0.0050	mg/L	0.0050	0.0019		X325197	RS	06/22/23 16:00	
--------------	---------------------	----------	------	--------	--------	--	---------	----	----------------	--

Filtered Classical Chemistry Parameters

Calculation	Chromium (III)	< 0.00600	mg/L	0.00600	0.00207		N/A		06/28/23 12:45	
-------------	----------------	-----------	------	---------	---------	--	-----	--	----------------	--

Anions by Ion Chromatography

EPA 300.0	Chloride	8.30	mg/L	0.20	0.02		X324143	RS	06/14/23 21:08	
EPA 300.0	Fluoride	0.590	mg/L	0.100	0.017		X324143	RS	06/14/23 21:08	
EPA 300.0	Nitrate as N	< 0.050	mg/L	0.050	0.013		X324143	RS	06/14/23 21:08	H3
EPA 300.0	Nitrate+Nitrite as N	< 0.100	mg/L	0.100	0.044		X324143	RS	06/14/23 21:08	H3
EPA 300.0	Nitrite as N	< 0.050	mg/L	0.050	0.031		X324143	RS	06/14/23 21:08	H3
EPA 300.0	Sulfate as SO4	89.3	mg/L	3.00	1.80	10	X324143	RS	06/14/23 21:25	D2

Cation/Anion Balance and TDS Ratios

Cation Sum: 3.75 meq/L Anion Sum: 3.78 meq/L C/A Balance: -0.36 % Calculated TDS: 219 TDS/cTDS: 1.12

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

Katie Yoder

Field Sheets

Newmont Mining Co

Cripple Creek & Victor Gold Mining Co

Groundwater Sampling Log

Location : Grassy valleyDate: 6/12/23Technician: P. BarelaQuarter: 2Static Water Level (DTW): 35.3Well ID: GVMW-25Is well Dry? NOIf so Dry at: Well Depth: 79

feet

Time	Drawdown (ft)	pH (S.U.)	Cond. (uS/cm)	Temp. (°C)	Notes
8:22 am		4.33	2182	6.0	started pumping 6.87 c/p
38.2 8:32 am	2.9	4.28	1698	5.9	
38.2 8:42	2.9	4.28	1701	6.0	
38.6 8:52	3.3	4.28	1715	6.0	
38.7 9:02	3.4	4.26	1742	6.1	
38.7 9:12	3.4	4.28	1767	6.5	
38.8 9:22	3.5	4.29	1777	6.7	
38.8 9:32	3.5	4.30	1804	6.2	
38.8 9:42	3.5	4.28	1807	6.3	

Sample Method: Low Flow Rate (gpm): ~1.81 Time Start: 8:22 Time End: 9:42

Final Parameters	Stabilization Guidance	Met?	Comments
pH	4.28	0.1	Y/N
Conductivity	1807	3%	Y/N
Temp©	6.3	10%	Y/N
Final H2O level	38.8	feet	

O/G visible: Y/NTurbid? Y/NEquipment Decontaminated: Y/NDecontamination procedure used: Triple rinse w/ liquorox before pumpinguse new tubing & FilterWeather: CloudySignature: [Signature]

Newmont Mining Co**Cripple Creek & Victor Gold Mining Co****Surface Water Sampling Log****Location:** Ecosa seep-1**Date:** 6/12/23**Technician:** P. Borela**Quarter:** 2

Time	pH (S.U.)	Cond. (uS/cm)	Temp. (°C)	Notes
11:04	2.46	6109	12.0	

Sample Method: Grab**Oil/Gas visible** ☒ [Y/N]**Turbid** ☒ [Y/N]**Clear** ☒ [Y/N]**Weather:** Cloudy**Signature:** **Comments:**use new tubing & filter

Newmont Mining Co

Cripple Creek & Victor Gold Mining Co

Surface Water Sampling Log

Location: Ecosa Seep-2Date: 6/12/23Technician: P. BareraQuarter: 2

Time	pH (S.U.)	Cond. (uS/cm)	Temp. (°C)	Notes
10:35	2.07	23.08	12.1	

Sample Method: GravOil/Gas visible [Y/N] ☒Turbid [Y/N] ☒Clear [Y/N] ☒Weather: cloudySignature: 

Comments:

use new tubing & Filter

Newmont Mining Co

Cripple Creek & Victor Gold Mining Co

Surface Water Sampling Log

Location: GV-06Date: 6/12/23Technician: P. BarelaQuarter: 2

Time	pH (S.U.)	Cond. (uS/cm)	Temp. (°C)	Notes
7:34 am	6.72	360.0	7.1	

Sample Method: GranOil/Gas visible ☒ [Y/N]Turbid ☒ [Y/N] slightClear ☒ [Y/N]Weather: CloudySignature: 

Comments:

Foam around collection area. water has a very bad smell
use new tubing & filter

QA/QC

**Newmont - Cripple Creek & Victor**

Post Office Box 191

Victor, CO 80860

Work Order:

X3F0212

Reported:

19-Jul-23 14:42

Client Sample ID: **GVMW-125**

Sampled: 12-Jun-23 09:42

Received: 14-Jun-23

Sampled By: PB

SVL Sample ID: **X3F0212-05 (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	277	mg/L	0.100	0.035		X325062	SMU	06/27/23 17:42	
EPA 200.7	Magnesium	74.7	mg/L	0.500	0.045		X325062	SMU	06/27/23 17:42	
EPA 200.7	Potassium	3.76	mg/L	0.50	0.09		X325062	AS	07/03/23 11:30	
SM 2340 B	Hardness (as CaCO3)	999	mg/L	2.31	0.271		N/A		06/29/23 17:49	

Metals (Dissolved)

EPA 200.7	Aluminum	18.2	mg/L	0.080	0.054		X324274	SMU	06/29/23 17:49	
EPA 200.7	Barium	0.0110	mg/L	0.0020	0.0019		X324274	SMU	06/29/23 17:49	
EPA 200.7	Beryllium	0.0364	mg/L	0.00200	0.00080		X324274	SMU	06/29/23 17:49	
EPA 200.7	Boron	< 0.0400	mg/L	0.0400	0.0078		X324274	AS	07/03/23 09:03	
EPA 200.7	Cadmium	0.0758	mg/L	0.0020	0.0016		X324274	SMU	06/29/23 17:49	
EPA 200.7	Calcium	266	mg/L	0.100	0.069		X324274	SMU	06/29/23 17:49	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X324274	SMU	06/29/23 17:49	
EPA 200.7	Cobalt	0.0385	mg/L	0.0060	0.0046		X324274	SMU	06/29/23 17:49	
EPA 200.7	Copper	0.0421	mg/L	0.0100	0.0027		X324274	SMU	06/29/23 17:49	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X324274	SMU	06/29/23 17:49	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X324274	SMU	06/29/23 17:49	
EPA 200.7	Lithium	< 0.040	mg/L	0.040	0.025		X324274	SMU	06/29/23 17:49	
EPA 200.7	Magnesium	72.9	mg/L	0.500	0.090		X324274	SMU	06/29/23 17:49	
EPA 200.7	Manganese	10.7	mg/L	0.0080	0.0034		X324274	SMU	06/29/23 17:49	
EPA 200.7	Molybdenum	< 0.0080	mg/L	0.0080	0.0034		X324274	SMU	06/29/23 17:49	
EPA 200.7	Nickel	0.155	mg/L	0.0100	0.0048		X324274	SMU	06/29/23 17:49	
EPA 200.7	Potassium	3.77	mg/L	0.50	0.18		X324274	SMU	06/29/23 17:49	
EPA 200.7	Silver	< 0.0050	mg/L	0.0050	0.0019		X324274	SMU	06/29/23 17:49	
EPA 200.7	Sodium	31.3	mg/L	0.50	0.12		X324274	SMU	06/29/23 17:49	
EPA 200.7	Vanadium	< 0.0050	mg/L	0.0050	0.0019		X324274	SMU	06/29/23 17:49	
EPA 200.7	Zinc	2.46	mg/L	0.0100	0.0054		X324274	SMU	06/29/23 17:49	
EPA 200.8	Antimony	< 0.00100	mg/L	0.00100	0.00072		X325099	SMU	06/28/23 13:29	
EPA 200.8	Arsenic	0.00754	mg/L	0.00100	0.00021		X325099	SMU	06/28/23 13:29	
EPA 200.8	Selenium	< 0.0100	mg/L	0.0100	0.00240	10	X325099	SMU	07/07/23 12:49	D1
EPA 200.8	Thallium	< 0.00100	mg/L	0.00100	0.00008		X325099	SMU	06/28/23 13:29	
EPA 200.8	Uranium	0.0425	mg/L	0.000100	0.000052		X325099	SMU	06/28/23 13:29	

Metals (Filtered)

EPA 245.1	Mercury	< 0.000200	mg/L	0.000200	0.000093		X324242	NMS	06/19/23 13:03	
-----------	----------------	------------	------	----------	----------	--	---------	-----	----------------	--

Classical Chemistry Parameters

ASTM D7237	Cyanide (free) @ pH 6 @19.0°C	< 0.0050	mg/L	0.0050	0.0048		X324215	HJL	06/21/23 15:56	
EPA 335.4	Cyanide (total)	< 0.0050	mg/L	0.0050	0.0038		X324264	JRR	06/20/23 11:26	
EPA 350.1	Ammonia as N	< 0.060	mg/L	0.060	0.025	2	X324218	ESL	06/20/23 19:04	D1
OIA 1677	Cyanide (WAD)	< 0.0050	mg/L	0.0050	0.0010		X324018	HJL	06/22/23 12:37	
SM 2310 B	Acidity to pH 8.3	115	mg/L as CaCO3	10.0			X325252	MWD	06/23/23 09:23	
SM 2320 B	Total Alkalinity	< 1.0	mg/L as CaCO3	1.0			X325026	MWD	06/19/23 14:24	
SM 2320 B	Bicarbonate	< 1.0	mg/L as CaCO3	1.0			X325026	MWD	06/19/23 14:24	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO3	1.0			X325026	MWD	06/19/23 14:24	
SM 2320 B	Hydroxide	< 1.0	mg/L as CaCO3	1.0			X325026	MWD	06/19/23 14:24	
SM 2540 C	Total Diss. Solids	1630	mg/L	10			X324237	TJL	06/19/23 14:50	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X324238	TJL	06/19/23 16:00	
SM 4500 H B	pH @19.2°C	4.7	pH Units				X325026	MWD	06/19/23 14:24	H5

SVL holds the following certifications:

AZ:0538, ID:ID00019, NV:ID000192007A, UT(TNI):ID000192015-1, WA:C573

Work order Report Page 10 of 23



One Government Gulch - PO Box 929

Kellogg, ID 83837-0929

(208) 784-1258

www.svl.net**Newmont - Cripple Creek & Victor**

Post Office Box 191

Victor, CO 80860

Work Order: **X3F0212**

Reported: 19-Jul-23 14:42

Client Sample ID: **GVMW-125**SVL Sample ID: **X3F0212-05 (Ground Water)**

Sampled: 12-Jun-23 09:42

Received: 14-Jun-23

Sampled By: PB

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	49.5	mg/L	10.0	1.10	50	X324143	RS	06/14/23 23:41	D2
EPA 300.0	Fluoride	4.76	mg/L	0.100	0.017		X324143	RS	06/14/23 23:24	
EPA 300.0	Nitrate as N	2.60	mg/L	0.050	0.013		X324143	RS	06/14/23 23:24	H3
EPA 300.0	Nitrate+Nitrite as N	2.60	mg/L	0.100	0.044		X324143	RS	06/14/23 23:24	H3
EPA 300.0	Nitrite as N	< 0.050	mg/L	0.050	0.031		X324143	RS	06/14/23 23:24	H3
EPA 300.0	Sulfate as SO4	1100	mg/L	15.0	9.00	50	X324143	RS	06/14/23 23:41	D2

Cation/Anion Balance and TDS Ratios

Cation Sum: 23.2 meq/L

Anion Sum: 24.8 meq/L

C/A Balance: -3.18 %

Calculated TDS: 1546

TDS/cTDS: 1.05

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

Katie Yoder

**Newmont - Cripple Creek & Victor**

Post Office Box 191

Victor, CO 80860

Work Order: **X3F0212**

Reported: 19-Jul-23 14:42

Client Sample ID: **RB-0612**

Sampled: 12-Jun-23 08:07

Received: 14-Jun-23

Sampled By: PB

SVL Sample ID: **X3F0212-06 (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	< 0.100	mg/L	0.100	0.035		X325062	SMU	06/27/23 18:01	
EPA 200.7	Magnesium	< 0.500	mg/L	0.500	0.045		X325062	SMU	06/27/23 18:01	
EPA 200.7	Potassium	< 0.50	mg/L	0.50	0.09		X325062	AS	07/03/23 11:34	
SM 2340 B	Hardness (as CaCO ₃)	< 2.31	mg/L	2.31	0.543		N/A		06/27/23 18:01	

Metals (Dissolved)

EPA 200.7	Aluminum	< 0.080	mg/L	0.080	0.054		X324274	SMU	06/29/23 17:53	
EPA 200.7	Barium	< 0.0020	mg/L	0.0020	0.0019		X324274	SMU	06/29/23 17:53	
EPA 200.7	Beryllium	< 0.00200	mg/L	0.00200	0.00080		X324274	SMU	06/29/23 17:53	
EPA 200.7	Boron	< 0.0400	mg/L	0.0400	0.0078		X324274	AS	07/03/23 09:07	
EPA 200.7	Cadmium	< 0.0020	mg/L	0.0020	0.0016		X324274	SMU	06/29/23 17:53	
EPA 200.7	Calcium	< 0.100	mg/L	0.100	0.069		X324274	SMU	06/29/23 17:53	
EPA 200.7	Chromium	< 0.0060	mg/L	0.0060	0.0020		X324274	SMU	06/29/23 17:53	
EPA 200.7	Cobalt	< 0.0060	mg/L	0.0060	0.0046		X324274	SMU	06/29/23 17:53	
EPA 200.7	Copper	< 0.0100	mg/L	0.0100	0.0027		X324274	SMU	06/29/23 17:53	
EPA 200.7	Iron	< 0.100	mg/L	0.100	0.056		X324274	SMU	06/29/23 17:53	
EPA 200.7	Lead	< 0.0075	mg/L	0.0075	0.0049		X324274	SMU	06/29/23 17:53	
EPA 200.7	Lithium	< 0.040	mg/L	0.040	0.025		X324274	SMU	06/29/23 17:53	
EPA 200.7	Magnesium	< 0.500	mg/L	0.500	0.090		X324274	SMU	06/29/23 17:53	
EPA 200.7	Manganese	< 0.0080	mg/L	0.0080	0.0034		X324274	SMU	06/29/23 17:53	
EPA 200.7	Molybdenum	< 0.0080	mg/L	0.0080	0.0034		X324274	SMU	06/29/23 17:53	
EPA 200.7	Nickel	< 0.0100	mg/L	0.0100	0.0048		X324274	SMU	06/29/23 17:53	
EPA 200.7	Potassium	< 0.50	mg/L	0.50	0.18		X324274	SMU	06/29/23 17:53	
EPA 200.7	Silver	< 0.0050	mg/L	0.0050	0.0019		X324274	SMU	06/29/23 17:53	
EPA 200.7	Sodium	< 0.50	mg/L	0.50	0.12		X324274	SMU	06/29/23 17:53	
EPA 200.7	Vanadium	< 0.0050	mg/L	0.0050	0.0019		X324274	SMU	06/29/23 17:53	
EPA 200.7	Zinc	0.0126	mg/L	0.0100	0.0054		X324274	SMU	06/29/23 17:53	
EPA 200.8	Antimony	< 0.00100	mg/L	0.00100	0.00072		X325099	SMU	06/28/23 13:32	
EPA 200.8	Arsenic	< 0.00100	mg/L	0.00100	0.00021		X325099	SMU	06/28/23 13:32	
EPA 200.8	Selenium	< 0.00100	mg/L	0.00100	0.00024		X325099	SMU	07/07/23 12:57	
EPA 200.8	Thallium	< 0.00100	mg/L	0.00100	0.00008		X325099	SMU	06/28/23 13:32	
EPA 200.8	Uranium	< 0.000100	mg/L	0.000100	0.000052		X325099	SMU	06/28/23 13:32	

Metals (Filtered)

EPA 245.1	Mercury	< 0.000200	mg/L	0.000200	0.000093		X324242	NMS	06/19/23 13:05	
-----------	---------	------------	------	----------	----------	--	---------	-----	----------------	--

Classical Chemistry Parameters

ASTM D7237	Cyanide (free) @ pH 6 @20.0°C	< 0.0050	mg/L	0.0050	0.0048		X324213	HJL	06/22/23 17:23	
EPA 335.4	Cyanide (total)	< 0.0050	mg/L	0.0050	0.0038		X324264	JRR	06/20/23 11:29	
EPA 350.1	Ammonia as N	< 0.060	mg/L	0.060	0.025	2	X324218	ESL	06/20/23 19:07	D1
OIA 1677	Cyanide (WAD)	< 0.0050	mg/L	0.0050	0.0010		X324018	HJL	06/22/23 12:39	
SM 2310 B	Acidity to pH 8.3	< 10.0	mg/L as CaCO ₃	10.0			X325252	MWD	06/23/23 09:23	
SM 2320 B	Total Alkalinity	1.7	mg/L as CaCO ₃	1.0			X325026	MWD	06/19/23 14:29	
SM 2320 B	Bicarbonate	1.7	mg/L as CaCO ₃	1.0			X325026	MWD	06/19/23 14:29	
SM 2320 B	Carbonate	< 1.0	mg/L as CaCO ₃	1.0			X325026	MWD	06/19/23 14:29	
SM 2320 B	Hydroxide	< 1.0	mg/L as CaCO ₃	1.0			X325026	MWD	06/19/23 14:29	
SM 2540 C	Total Diss. Solids	< 10	mg/L	10			X324237	TJL	06/19/23 14:50	
SM 2540 D	Total Susp. Solids	< 5.0	mg/L	5.0			X324238	TJL	06/19/23 16:00	
SM 4500 H B	pH @19.0°C	6.5	pH Units				X325026	MWD	06/19/23 14:29	H5

SVL holds the following certifications:

AZ:0538, ID:ID00019, NV:ID000192007A, UT(TNI):ID000192015-1, WA:C573

Work order Report Page 12 of 23



One Government Gulch - PO Box 929

Kellogg, ID 83837-0929

(208) 784-1258

www.svl.net**Newmont - Cripple Creek & Victor**

Post Office Box 191

Victor, CO 80860

Work Order: **X3F0212**

Reported: 19-Jul-23 14:42

Client Sample ID: **RB-0612**SVL Sample ID: **X3F0212-06 (Ground Water)**

Sampled: 12-Jun-23 08:07

Received: 14-Jun-23

Sampled By: PB

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	< 0.20	mg/L	0.20	0.02		X324143	RS	06/14/23 20:00	
EPA 300.0	Fluoride	< 0.100	mg/L	0.100	0.017		X324143	RS	06/14/23 20:00	
EPA 300.0	Nitrate as N	< 0.050	mg/L	0.050	0.013		X324143	RS	06/14/23 20:00	H3
EPA 300.0	Nitrate+Nitrite as N	< 0.100	mg/L	0.100	0.044		X324143	RS	06/14/23 20:00	H3
EPA 300.0	Nitrite as N	< 0.050	mg/L	0.050	0.031		X324143	RS	06/14/23 20:00	H3
EPA 300.0	Sulfate as SO4	< 0.30	mg/L	0.30	0.18		X324143	RS	06/14/23 20:00	

Cation/Anion Balance and TDS Ratios

Cation Sum: 0.03 meq/L

Anion Sum: 0.04 meq/L

C/A Balance: -22.08 %

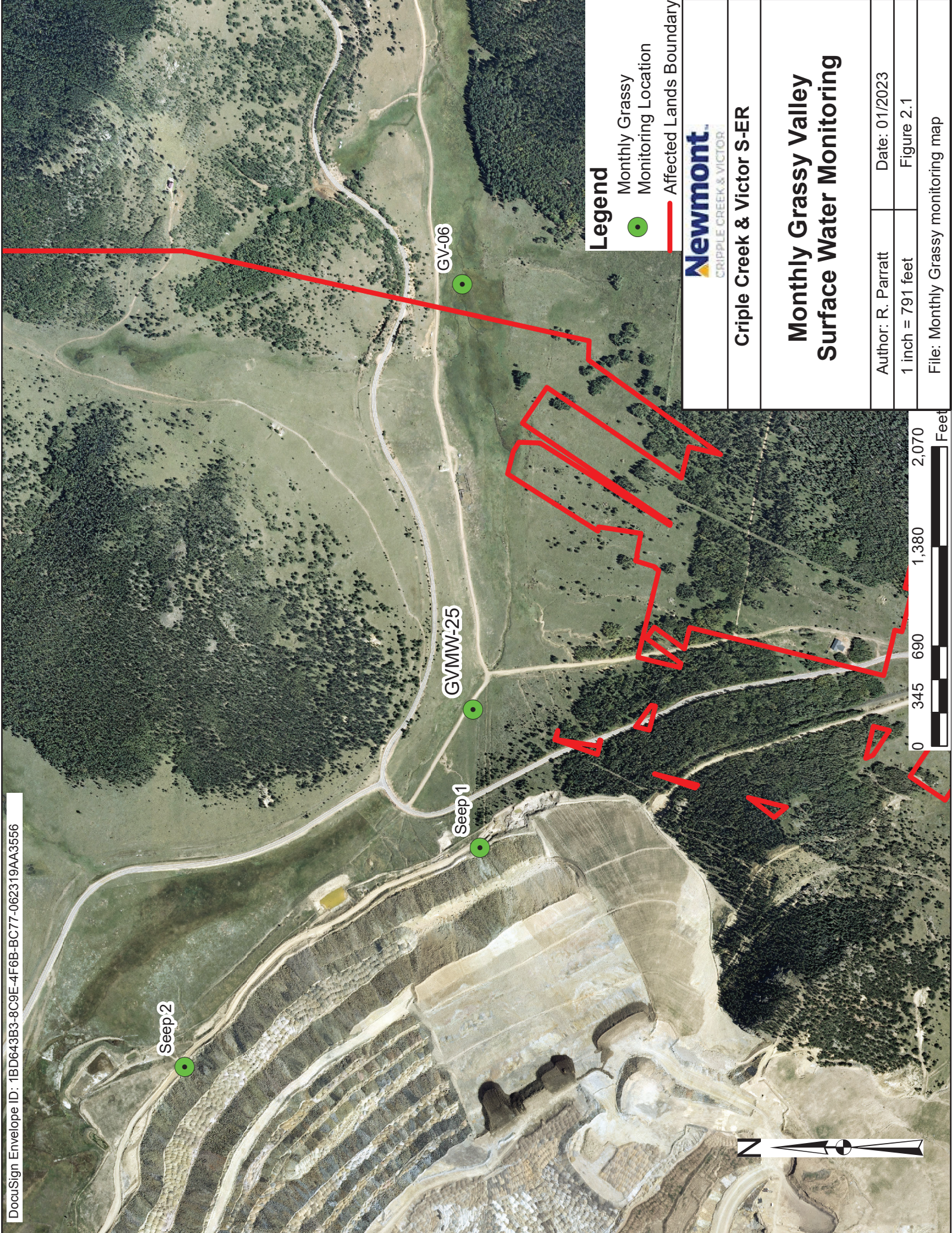
Calculated TDS: 1

TDS/cTDS: 0.00

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

Katie Yoder

Map



Legend

- Monthly Grassy Monitoring Location
- Affected Lands Boundary



CRIPPLE CREEK & VICTOR

Cripple Creek & Victor S-ER

Monthly Grassy Valley
Surface Water Monitoring

Author: R. Parratt	Date: 01/2023
1 inch = 791 feet	Figure 2.1
File: Monthly Grassy monitoring map	

