Newmont
NORTH AMERICA

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

SENT VIA ELECTRONIC COMMUNICATION

February 29, 2024

Mr. Patrick Lennberg
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: Additional Information Required, Grassy Valley Groundwater and Surface Water Monitoring Report December 2023; Permit No. M-1980-244

Dear Mr. Lennberg:

Cripple Creek and Victor Gold Mining Company (CC&V) received the Division of Reclamation, Mining, and Safety's (DRMS) *Additional Information Required and Issuance of Corrective Action, Grassy Valley Groundwater and Surface Water Monitoring Report December 2023*; Permit No. M-1980-244. CC&V has reviewed the additional information required in the letter dated February 2, 2023 from DRMS and has prepared the following responses for each comment. The DRMS comment (**in bold**) and CC&V's corresponding response (*in italics*) is presented below.

1. **A review of Table 1 and the associated field sheets for monitoring wells GVMW-4A, 15A and 15C indicates the wells could not be sampled.**

   For GVMW-4A the field sheet states the depth is beyond pumping capabilities. Does the Operator know how productive 4A is? The field sheet indicates a shallow water level of 42 feet. If the well were determined to be productive couldn't the well be sampled using volumetric methods, assuming the water level stabilized at a depth suitable for the pump?

   The field sheets for all wells mentioned above indicate the casing is broken or there is a blockage. Please describe what the Operator's plans are to verify the

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integrity of the wells and what the next steps are to ensure the wells are not cross contaminating water bearing zones or providing preferential pathways for contamination into the subsurface.

According to well construction records, GVMW-4A's mid-screen depth is 455 feet below ground surface (bgs). The existence of water at the shallow depth (42' bgs) in this well indicates the potential for a plugged or broken well casing. To evaluate the productivity and quality of water within GVMW-4A, CC&V is proposing the below investigation activities.

Historical notes on well sampling indicate well casing in GVMW-4A and GVMW-15A may be potentially broken/blocked, neither of which conditions have been confirmed. CC&V is in the process of purchasing additional equipment to increase monitoring depth capabilities. Plans for the additional investigation for each well are as follows:

1. *GVMW-4A & GVMW-15A – Presence of water at 42 feet and 96 feet bgs (respectively) in these wells indicates the wells are not performing as intended. CC&V plans to use a deployable pump to sample the wells using a low-flow procedure. If possible, samples will be collected with the pump depth around 50' below the static water level. It is anticipated that the water level within these wells will not stabilize, but a sample will be collected to evaluate the quality of water in the upper sections of the wells and should be considered a grab sample.*

   After initial samples are collected, the pump will be used to evacuate a substantial amount of water to draw down the water column. CC&V will then observe the recovery of water. If water returns to the well, a grab sample will be collected to evaluate water quality for waters that are recharging the well. If little to no water returns to the well over, CC&V will again use the deployable pump the draw down the water column to our maximum pump capabilities (approximately 250-280' bgs) and collect an additional sample of water within the deeper potions of the well.

   Water quality results and recharge rates/level will dictate the next steps for monitoring these well.

2. *GVMW-15C – CC&V is in the process of acquiring additional equipment to confirm the depth of water in this well. Previous notes indicate the well has been dry since construction and no samples have ever been taken from this well. The most recent attempt to gauge the well indicated that it was dry to at least 500' bgs.*

2. Provide an explanation why some completed groundwater field forms have recorded Dissolved Oxygen (DO) and others do not?

CC&V updated the Water Monitoring QAPP and sampling SOP to include additional stabilization parameters (including DO) for groundwater sampling in the TR-139 Preliminary Adequacy Review received on November 16, 2023. CC&V's instrument for monitoring DO

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required calibration. The DO measurements were incorporated into the field sheet immediately after our instrument returned from calibration in mid-December 2023; therefore, field sheets for samples collected in the first week of December 2023 do not contain DO measurements. All field sheets completed during groundwater sample collection will include DO measurements moving forward. And, if parameters are missed, they will be described within the body of the report.

3. **Table 1 indicates GVMW-7B was not sampled because there was insufficient water to collect a sample. A review of the field sheet shows there was ~4.4 feet of water in the well. Why was the water in the well not purged to dryness and revisited and sampled, or an attempt to collect a sample, in accordance with QAPP's low yielding well methodology?**

In the United States Geologic Survey's (USGS) National Field Manual for the Collection of Water Quality Data Book 9 Chapter A4 section 4.2.2,it is recommended to "Avoid sampling…wells at which purging will stir up bottom detritus that can bias analytical results. This is often the case in wells that have 5 feet or less of water". Purging the well to dryness would likely further disturb the sediment at the bottom of the well and ultimately reduce the height of the water column. Additionally, sampling this well would require the use of a bailer which would further disturb the water column. CC&V opted not to sample the well to avoid producing biased results. CC&V plans to sample the well when the water column returns to a favorable height.

4. **The field sheet for GVMW-8A indicates 7.5 gallons were removed during purging. The flows indicated on the field sheet along with the time spent purging only 5.7 gallons were removed, a clarification is required.**

The volume of 7.5 gallons shown on the field sheet is the total volume of water removed during the sampling process and includes the volume of water purged prior to achieving stabilization of the groundwater level. In accordance with the EPA Low-Flow SOP Appendix B #6, as pumping is first initiated the flow rate is slowly increased until the water level starts to drop. The flow rate is then reduced so the water level stabilizes. At this point the flow rate is recorded using a graduated container and a stopwatch. The volume of water purged when pumping at the stabilized flow rate is recorded on the field sheets. The total purged volume is also recorded on the field sheets and measured using a graduated bucket.

5. **Provide an explanation why the water level in GVMW-8B dropped one foot by adjusting the pump when it appears the water level was already stable. The well was purged for 40 minutes at 1.7 gpm which would have removed 68 gallons from the well, yet the actual volume pumped portion reads ~3.5 gallons, a clarification is needed.**

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Initially the water level stabilized at ~37.7 feet bgs but flow from the pump ceased, likely due to head pressure overcoming the low pumping rate. The pumping rate was increased slightly and the water level restabilized at ~38.6 feet bgs. The entire time elapsed to complete the sampling and adjustments to maintain sample integrity took approximately 40 minutes, but the pump was not evacuating water the entire time. The total volume of water removed is measured continuously throughout the sampling process via a graduated bucket. CC&V asserts the sample is valid and the amount of water removed would satisfy the purging requirement for both volumetric and low flow methods. CC&V is reviewing sampling protocols and field notes to better present the data to DRMS to avoid confusion.

6. **Clarification is needed for the following items related to the field sheet for GVMW-10. The last two time intervals read "1:49" yet the parameters measured are different. The well appears to have been purged for 38 minutes at 2.09 gpm which would indicate ~79 gallons were removed from the well but the actual volume pumped is 30 gallons.**

There is a typographical error on the field sheet and the last time interval should be 1:54. Like the above response, the pumping rate had to be adjusted after the initial readings. From 1:39 to 1:54 at 2.09 gpm the purge volume would be around ~31 gallons which is more consistent with the total amount of water removed recorded on the field sheets. CC&V asserts that the sample is valid, and the amount of water removed would satisfy the purging requirement for both volumetric and low flow methods. CC&V is reviewing sampling protocols and field notes to better present the data to DRMS to avoid confusion.

7. **On the field sheet for GVMW-24A it's indicated the well was purged for 52 minutes at 1.4 gpm which would result in 72.8 gallons being removed from the well. While the volumetric purge portion of the field sheet has not been completed, if GVMW-24A is a 2-inch diameter well then 3 casing volumes for a volumetric purge totals ~63 gallons. Additionally, when the sampler returned to the well after purging dry at 230.3 feet the water level was 221.4 feet, 28.6 feet of water in the well, a sample was not collected as there was insufficient volume to pump. Why was it determined there was insufficient volume to pump when the water level was higher than when pumping ceased the day before? Also, clarify why a sample was not collected when it appears sufficient volume was removed for sampling a 2-inch well using a volumetric purge method.**

This well has been historically sampled using the purge and return method. It was originally measured to have a depth to water of 121.4' bgs before purging dry at 230.3' bgs. When the

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sampler returned to collect the sample the next day, sediment build up inhibited pumping and prevented sample collection. In the February monitoring event, CC&V will confirm the present total depth of the well and move to a high yield, low-flow, or volumetric sampling procedure in lieu of the previously utilized purge and return method.

8. **A summary table needs to be provided that shows each parameter exceedance of a limit, the location of the exceedance, and the corresponding concentration limit, e.g. GVMW-10, Uranium, 0.0875 mg/L, 0.03 mg/L.**

Please see Attachment 1. This table will be included in the monthly reports moving forward.

9. **A review of the graphs for GVMW-25 indicates there were detections of both Cyanide (Free) and Cyanide (WAD). However, a review of the laboratory reports it does not appear the parameters were actual detections. Provide an explanation of the laboratory qualifies from the laboratory report and an explanation of how it relates to whether or not the parameters were actually detected in the sample. Additionally, the Operator should provide a section in the cover letter that addresses similar items to preclude having to address them through adequacy.**

Analytical data for GVMW-25 do not indicate detections of either Cyanide (Free) or Cyanide (WAD). However, because of a dilution at the laboratory, the graph shows an increase in concentration due to the increased reporting limit. Dilutions are indicated in the 7th column from the left on the lab reports as well as a "D" qualifier in the notes section. Dilutions are a common laboratory practice and mainly occur to lower the concentration of analyte that is being tested and help eliminate interference from other substances that may be present in the sample that can artificially alter the analysis. The laboratory used for analysis is a accredited and third-party certified laboratory. Concentrations of free and WAD cyanide for GVMW-25 sample were below the reporting limit of 0.0500 mg/L and have a method detection limit (MDL) of 0.0480 mg/L and 0.0100 mg/L, respectively. Both reporting limits and MDL are below the regulatory limits of 0.2 mg/L. Notes and definitions for this analytical report are included as Attachment 2. Laboratory analytical reports may contain numerous different qualifiers and definitions. Providing a textual explanation for each qualifier in the cover letter of the monthly reports would be cumbersome. In lieu of this, CC&V will include the qualifier definition sheet from SVL in analytical reports in the monthly reports moving forward.

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10. **The graphs need to be updated to clearly indicate where parameter concentrations are detected in sample (a concentration above the laboratory reporting limit) versus concentrations that are less than the laboratory reporting limit.**

Graphs provided are intended to be a depiction of trends in concentrations over time. Analytes may vary between detected and non-detect concentrations throughout the sampling history displayed on the graphs. To help review these values, CC&V will provide Attachment 1 with the monthly reports moving forward. The graphs should be reviewed in conjunction with the provided table.

Should the Division required further information regarding the above responses, please do not hesitate to contact Josh Adams at 719-323-0438 or Joshua.Adams@Newmont.com or me at 719-851-4048 or Katie.Blake@Newmont.com.

Sincerely,

DocuSigned by:
Katie Blake
5A3D013B629844B...

Katie Blake
Sustainability & External Relations Manager
Cripple Creek & Victor Mine

EC: M. Cunningham – DRMS
E. Russell - DRMS
K. Blake - CC&V
J. Gonzalez – CC&V
J. Adams – CC&V

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Attachment 1

Table 2
Grassy Valley Monthly Groundwater Analytical Results
Cripple Creek and Victor Gold Mining Company

ANALYTE	Reg 41 TVS	NPL	UNIT	Well I.D.	GVMW-4A	GVMW-4B	GVMW-7A	GVMW-7B	GVMW-8A*	GVMW-8B	GVMW-10	GVMW-15A	GVMW-15B	GVMW-15C	GVMW-22A	GVMW-22B	GVMW-24A	GVMW-24B	GVMW-25	GMVW-26A
				Sample Date	NS	NS	12/6/2024	NS	12/12/2024	12/12/2024	12/20/2024	NS	12/12/2024	NS	12/6/2024	12/6/2024	NS	NS	12/6/2024	12/7/2024
Aluminium - Dissolved	5	**7**	mg/L		NS	NS	<0.080	NS	<0.080	<0.080	<0.080	NS	0.607	NS	<0.080	<0.080	NS	NS	**820**	<0.080
Ammonia	NA	NA	mg/L		NS	NS	<0.030	NS	0.037	<0.030	<0.030	NS	0.074	NS	<0.030	<0.030	NS	NS	<0.030	<0.030
Antimony - Dissolved	**0.006**	NA	mg/L		NS	NS	<0.00200	NS	<0.00100	<0.00100	<0.00100	NS	<0.00100	NS	<0.00100	<0.00200	NS	NS	<0.0100	<0.00100
Arsenic - Dissolved	**0.01**	NA	mg/L		NS	NS	<0.00200	NS	<0.00100	<0.00100	<0.00100	NS	<0.00100	NS	<0.00100	<0.00200	NS	NS	**0.32**	<0.00100
Barium - Dissolved	**2**	NA	mg/L		NS	NS	0.148	NS	<0.0020	0.0105	0.0279	NS	0.0157	NS	0.1090	0.0564	NS	NS	0.0186	0.198
Beryllium - Dissolved	**0.004**	NA	mg/L		NS	NS	<0.00200	NS	<0.00200	<0.00200	<0.00200	NS	**0.0459**	NS	<0.00200	<0.00200	NS	NS	**0.4920**	<0.00200
Boron - Total	**0.75**	NA	mg/L		NS	NS	<0.0400	NS	<0.0400	<0.0400	<0.0400	NS	<0.0400	NS	<0.0400	<0.0400	NS	NS	<0.0400	<0.0400
Cadmium - Dissolved	**0.005**	**0.005**	mg/L		NS	NS	<0.0020	NS	<0.0020	<0.0020	<0.0020	NS	0.0046	NS	<0.0020	<0.0020	NS	NS	1.56	<0.0020
Chloride - Total	**250**	NA	mg/L		NS	NS	4.95	NS	67.90	41.00	4.83	NS	0.62	NS	4.11	6.53	NS	NS	22.70	1.26
Chromium - Dissolved	**0.1**	NA	mg/L		NS	NS	<0.0060	NS	<0.0060	<0.0060	<0.0060	NS	<0.0060	NS	<0.0060	<0.0060	NS	NS	0.0884	<0.0060
Cobalt - Dissolved	**0.05**	NA	mg/L		NS	NS	<0.0060	NS	<0.0060	<0.0060	<0.0060	NS	**0.0909**	NS	<0.0060	<0.0060	NS	NS	**2.0400**	<0.0060
Copper - Dissolved	**0.2**	**0.2**	mg/L		NS	NS	<0.0100	NS	<0.0100	0.0244	<0.0100	NS	<0.0100	NS	<0.0100	<0.0100	NS	NS	**3.20**	<0.0100
Cyanide - Free	**0.2**	NA	mg/L		NS	NS	<0.0050	NS	<0.0050	<0.0050	<0.0050	NS	<0.0050	NS	<0.0050	<0.0050	NS	NS	<0.0500	<0.0050
Cyanide - Total	NA	NA	mg/L		NS	NS	<0.0050	NS	<0.0050	<0.0050	<0.0050	NS	<0.0050	NS	<0.0050	<0.0050	NS	NS	<0.0050	<0.0050
Cyanide - WAD	NA	**0.2**	mg/L		NS	NS	<0.0050	NS	<0.0050	<0.0050	<0.0050	NS	<0.0050	NS	<0.0050	<0.0050	NS	NS	<0.0500	<0.0050
Fluoride - Total F	**2**	**2**	mg/L		NS	NS	0.926	NS	1.86	**2.21**	0.26	NS	0.47	NS	**2.07**	0.38	NS	NS	**70.00**	1.91
Iron - Dissolved	0.3	**14**	mg/L		NS	NS	0.926	NS	<0.100	<0.100	<0.100	NS	**25.20**	NS	<0.100	<0.100	NS	NS	1.37	<0.100
Lead - Dissolved	**0.05**	NA	mg/L		NS	NS	<0.0075	NS	<0.0075	<0.0075	<0.0075	NS	0.046	NS	<0.0075	<0.0075	NS	NS	**<0.0075**	<0.0075
Lithium - Dissolved	**2.5**	NA	mg/L		NS	NS	<0.040	NS	<0.040	<0.040	0.058	NS	<0.040	NS	0.042	**<0.040**	NS	NS	0.28	<0.040
Manganese - Dissolved	0.05	**3**	mg/L		NS	NS	0.178	NS	<0.0080	<0.0080	0.171	NS	1.68	NS	<0.0080	<0.0080	NS	NS	**230**	0.0086
Mercury - Dissolved	**0.002**	**0.002**	mg/L		NS	NS	<0.000200	NS	<0.000200	<0.000200	<0.000200	NS	<0.000200	NS	<0.000200	<0.000200	NS	NS	<0.000200	<0.000200
Molybdenum - Dissolved	**0.21**	NA	mg/L		NS	NS	<0.0080	NS	<0.0080	<0.0080	0.0198	NS	<0.0080	NS	<0.0080	<0.0080	NS	NS	<0.0080	<0.0080
Nickel - Dissolved	**0.1**	NA	mg/L		NS	NS	<0.0100	NS	<0.0100	<0.0100	<0.0100	NS	**0.143**	NS	<0.0100	<0.0100	NS	NS	**2.52**	<0.0100
Nitrate as Nitrogen	**10**	**10**	mg/L		NS	NS	<0.050	NS	1.08	2.15	0.39	NS	<0.050	NS	<0.050	0.20	NS	NS	3.55	<0.050
Nitrite + Nitrate as Nitrogen	**1**	**1**	mg/L		NS	NS	<0.100	NS	**1.09**	**2.16**	0.39	NS	<0.100	NS	<0.100	0.22	NS	NS	**3.55**	<0.100
Nitrite as Nitrogen	10	**11**	mg/L		NS	NS	<0.050	NS	<0.050	<0.050	<0.050	NS	<0.050	NS	<0.050	<0.050	NS	NS	<0.500	<0.050
pH Field	**6.0-8.5**	**6.0-8.5**	pH units		NS	NS	7.32	NS	6.72	6.67	7.00	NS	**4.41**	NS	7.76	6.73	NS	NS	**3.88**	7.81
Selenium - Dissolved	0.02	**0.024**	mg/L		NS	NS	<0.00200	NS	<0.00100	<0.00100	0.00549	NS	<0.00100	NS	<0.00100	<0.00200	NS	NS	0.02	<0.00100
Silver - Dissolved	**0.05**	NA	mg/L		NS	NS	<0.0050	NS	<0.0050	<0.0050	<0.0050	NS	<0.0050	NS	<0.0050	<0.0050	NS	NS	<0.0050	<0.0050
Sodium - Dissolved	NA	NA	mg/L		NS	NS	8.36	NS	24.40	25.40	40.40	NS	13.10	NS	36.30	25.40	NS	NS	44.90	31.20
Sulfate - Total	**250**	NA	mg/L		NS	NS	16.80	NS	57.60	88.00	**1580**	NS	**337**	NS	37.10	107	NS	NS	**8,850**	12.40
Thallium - Dissolved	**0.002**	NA	mg/L		NS	NS	<0.000400	NS	<0.000200	<0.000200	<0.000200	NS	<0.000200	NS	<0.000200	<0.000400	NS	NS	<0.00200	<0.000200
Total Dissolved Solids	NA	NA	mg/L		NS	NS	188	NS	285	272	2,440	NS	529	NS	259	239	NS	NS	11,900	199
Uranium - Dissolved	**0.03**	NA	mg/L		NS	NS	0.00418	NS	0.00429	0.00247	**0.0875**	NS	0.0057	NS	0.0035	0.0015	NS	NS	**2.8200**	0.00318
Vanadium - Dissolved	**0.1**	NA	mg/L		NS	NS	<0.0050	NS	<0.0050	<0.0050	<0.0050	NS	<0.0050	NS	<0.0050	<0.0050	NS	NS	<0.0050	<0.0050
Zinc - Dissolved	**2**	**2**	mg/L		NS	NS	<0.0100	NS	<0.0100	<0.0100	0.0473	NS	**2.16**	NS	<0.0100	<0.0100	NS	NS	**71.80**	<0.0100

Notes:
Applicable Standard vs. Non-applicable standard
* NPL of 1.0 mg/L for manganese and 6.5-8.5 for pH applies to GVMW-8A
Result below laboratory detection limit
BOLD - exceeds applicable standard
< - less than
mg/L - miligrams per liter
NPL - Numeric Protection Limit
NS- Not sampled
TVS - table value standard
NS- Not sampled

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F 719.689.3254
newmont.com

Attachment 2

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: **X3L0112**
Reported: 08-Jan-24 10:58

Notes and Definitions

D1	Sample required dilution due to matrix.
D2	Sample required dilution due to high concentration of target analyte.
E12	The reported value is estimated due to the presence of interferents.
H1	Sample analysis performed past holding time.
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.
M1	Matrix spike recovery was high, but the LCS recovery was acceptable.
M2	Matrix spike recovery was low, but the LCS recovery 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.
Q12	Sample was received and analyzed with pH <12.
Q5C	After two pH adjustments, the method-specified pH was not achieved.
R2B	RPD exceeded the laboratory acceptance limit.
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

SVL holds the following certifications:
AZ:0538, **ID**:ID00019, **NV**:ID000192007A, **UT**(**TNI**):ID000192015-1, **WA**:C573