



CRIPPLE CREEK & VICTOR
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June 29, 2023

ELECTRONIC DELIVERY

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: Permit No. M-1980-244; Cripple Creek & Victor Gold Mining Company; Cresson Project;
Technical Revision 138 – ECOSA Long Term Management Plan**

Dear Mr. Russell:

Newmont Corporation's Cripple Creek and Victor Gold Mining Company (CC&V) hereby provides this Technical Revision (TR) 138 to Permit M-1980-244, as required by the Colorado Division of Reclamation Mining and Safety (DRMS) in TR-132 – ECOSA Monitoring Plan Update. The contents of this TR include a long-term plan for investigating and mitigating seepage from the East Cresson Overburden Storage Area (ECOSA).

The technical revision payment fee in the amount of \$1,006 will be made electronically via the DRMS webpage and confirmation will be submitted to your office via email.

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 Katie.Blake@Newmont.com.

Sincerely,

DocuSigned by:

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Katie Blake
Sustainability & External Relations Manager
Cripple Creek & Victor Gold Mining Co

Ec: M. Cunningham – DRMS
E. Russell - DRMS
P. Lennberg - DRMS
M. Crepeau – Teller County
J. Gonzalez – CC&V
K. Blake – CC&V
N. Townley – CC&V
A. Matarrese – CC&V

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Background

The ECOSA facility was approved for construction by DRMS within Amendment 10 (Mine Life Extension #2) to mining Permit M-1980-244. In August 2021, as part of the quarterly DRMS water monitoring program, CC&V collected a water sample from monitoring well GVMW-25. Upon receipt of the analytical results, CC&V provided an exceedance report to DRMS specifying parameter exceedances for Beryllium, Cadmium, Fluoride, Manganese, pH, Sulfate, and Zinc in the sample collected. Subsequent to this notification, DRMS requested CC&V collect monthly water quality samples from five monitoring wells in Grassy Valley: GVMW-25, GVMW-8A, GVMW-8B, GVMW-22A, and GVMW-22B. These monitoring results were submitted to DRMS from October 2021 to January 2022, when DRMS informed CC&V that starting in February 2022, only monitoring location GVMW-25 would require monthly reporting. No exceedances were observed at the other monitoring locations.

CC&V continued monthly sampling and reporting of water quality data for monitoring well GVMW-25, and observed increases in parameter concentrations in August 2022, similar to increases observed in August 2021. Shortly after the receipt of monitoring well GVMW-25 monthly water quality information from August 2022, DRMS notified CC&V on September 30, 2022 of the requirement for the ECOSA Monitoring Plan Update, to be submitted as Technical Revision 132. TR-132 was submitted to DRMS on October 27, 2022 and was approved on March 10, 2023. In TR-132, CC&V committed to submitting this subsequent TR containing a long-term plan for investigating and mitigating seepage from ECOSA. The following sections of this letter contain the plan for the establishment of monitoring and extraction of groundwater from wells within Grassy Valley, such that impacted water from ECOSA can be intercepted and collected.

CC&V continues to provide DRMS with Monthly Reports in accordance with the approved *Quality Assurance Project Plan and Field Sampling Guidance for Grassy Valley Monthly Monitoring* dated February 27, 2023. The Grassy Valley Monthly Monitoring currently includes monitoring from surface water location GV-06 and groundwater locations GVMW-25, Seep 1, and Seep 2. Monthly monitoring will also include groundwater location GVMW-26 upon installation.

Workplan

CC&V hypothesizes that the seasonally influenced concentrations of constituents observed at monitoring well GVMW-25 are caused by stored porewater within the ECOSA facility being flushed into shallow groundwater in Grassy Valley during the monsoon rain events.

In Q4 2021, Golder Associates was contracted to assist CC&V with the evaluation of ECOSA toe seepage and shallow groundwater impacted by potential seepage from the ECOSA facility into groundwater within Grassy Valley. Golder submitted a gap assessment of available data for the system in December 2021. This assessment identified the following gaps:

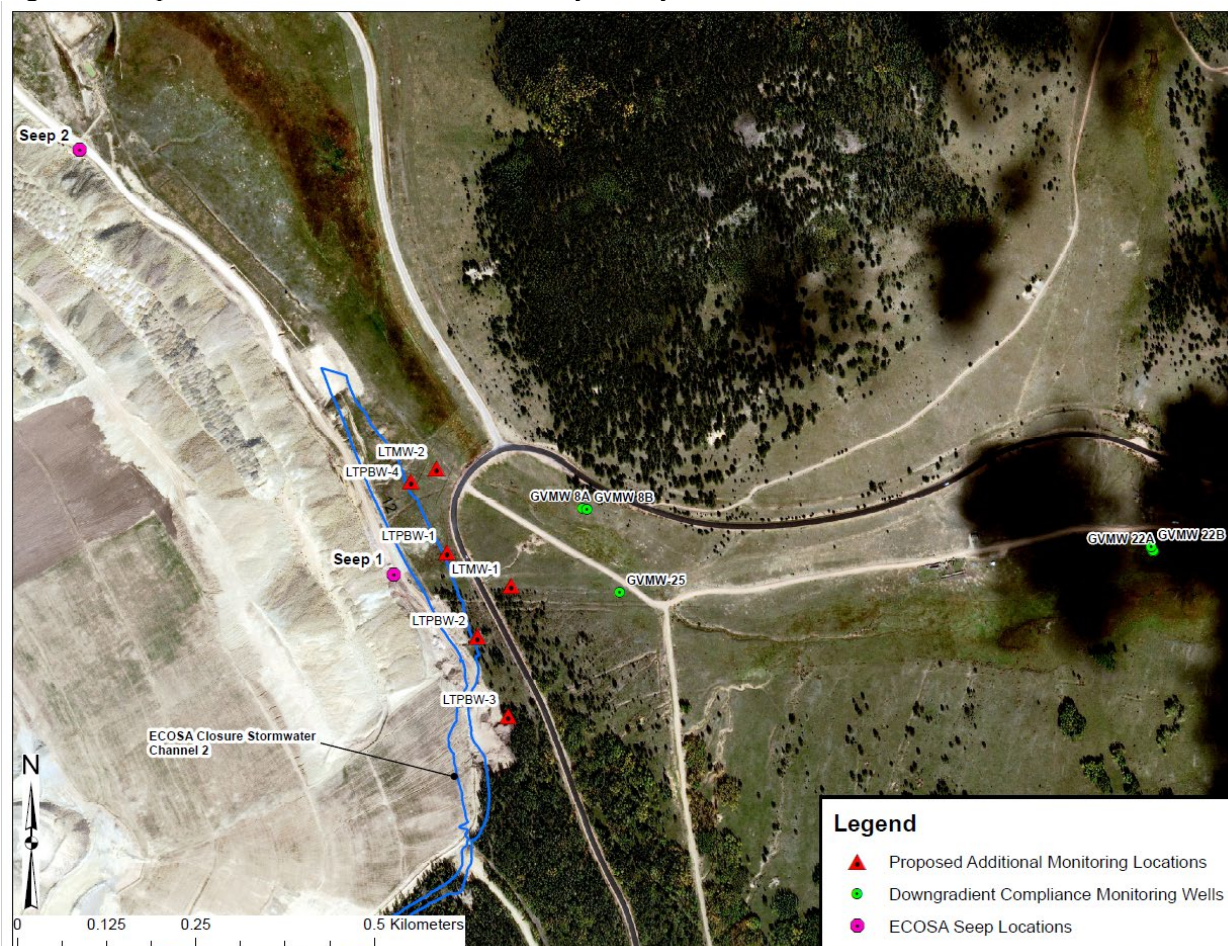
- ECOSA toe seepage quantity and quality
- ECOSA water balance
- Shallow groundwater quality
- Grassy Valley hydrogeology
- Disposal of seepage at VLFs
- Availability and properties of fine-grained waste rock material

These identified gaps facilitated follow up actions which CC&V has completed and is still in the process of evaluating.

Unfortunately, this geophysical work by Golder did not provide the necessary information to determine the potential subsurface flow paths for water infiltrating through the ECOSA facility and entering Grassy Valley. CC&V is currently planning additional geophysical surveys that will be completed prior to the installation of the proposed wells to identify potential seepage pathways from the ECOSA. The total number of wells and the locations may be modified based on the findings of these surveys.

To increase CC&V's ability to monitor, intercept, and collect impacted groundwater as necessary, CC&V proposes the installation of 6 additional wells within Grassy Valley that can be used to monitor groundwater quality and intercept and collect impacted groundwater, such that it is prevented from migrating into lower Grassy Valley. The proposed well locations are presented within Figure 1, below, as are the existing DRMS compliance monitoring wells and the ECOSA seep locations, which represent surface expressions of seepage that are currently being captured.

Figure 1: Proposed additional wells within Grassy Valley

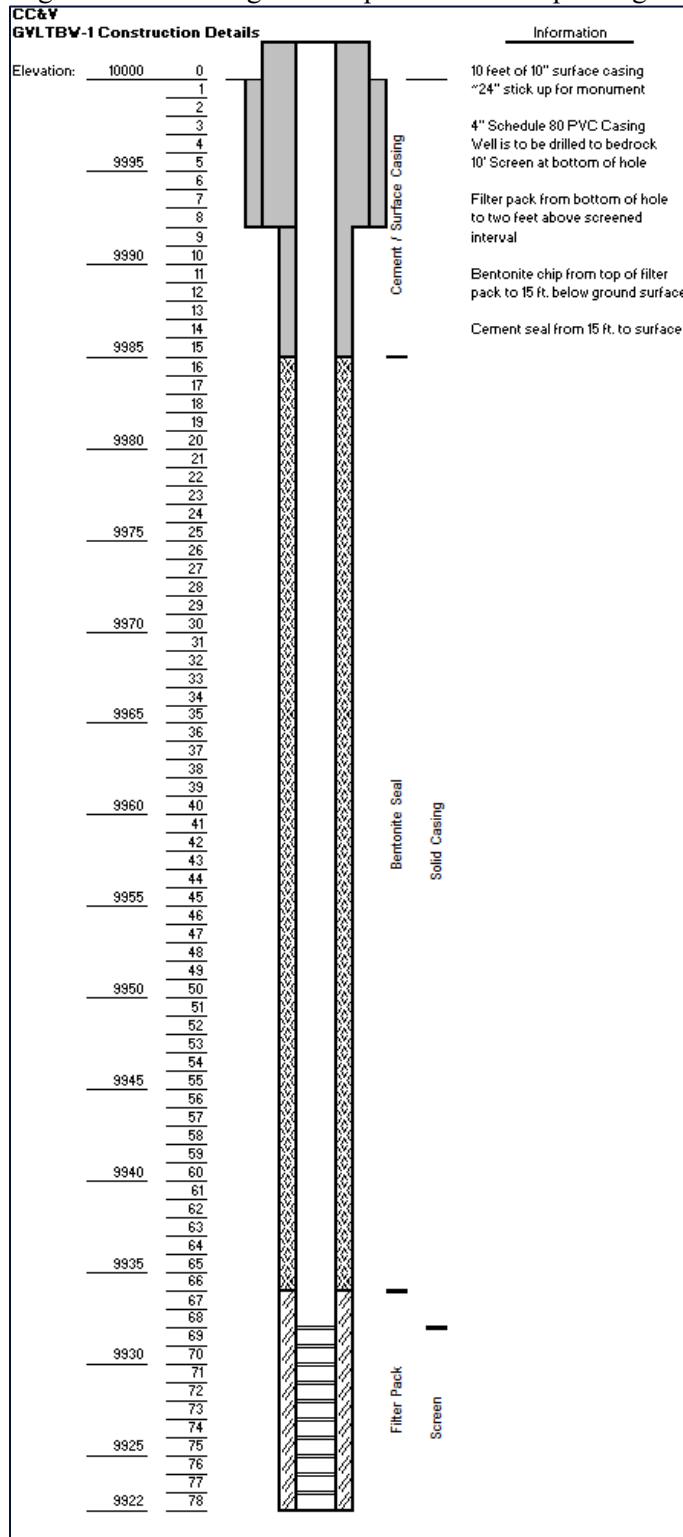


The proposed monitoring/interception wells are to be constructed and installed through the alluvium stopping at the top of observable bedrock, as completed for monitoring well GVMW-25. Locations adjacent to ECOSA (LTPBW-1, LTPBW-2, LTPBW-3, LTPBW-4) are anticipated to be shallower in construction compared to wells installed closer to the thalweg of Grassy Valley (LTMW-1 & LTMW-2) due to the hypothesis that alluvial material will be thicker in the thalweg of Grassy Valley than on the slopes of the valley. Figure 2, below, presents a view of the proposed monitoring/interception well locations. It is currently anticipated that these wells will be constructed using 4" PVC schedule 80 well casing, and appropriate gravel pack for fluid capture if necessary. Following the completion of the geophysical survey and determination of optimal well locations, an analysis will be performed to ensure that the radius of influence of each well overlaps to the extent that the wells can intercept all seepage. An example well diagram is presented in Figure 3 below.

Figure 2: Additional wells close up view



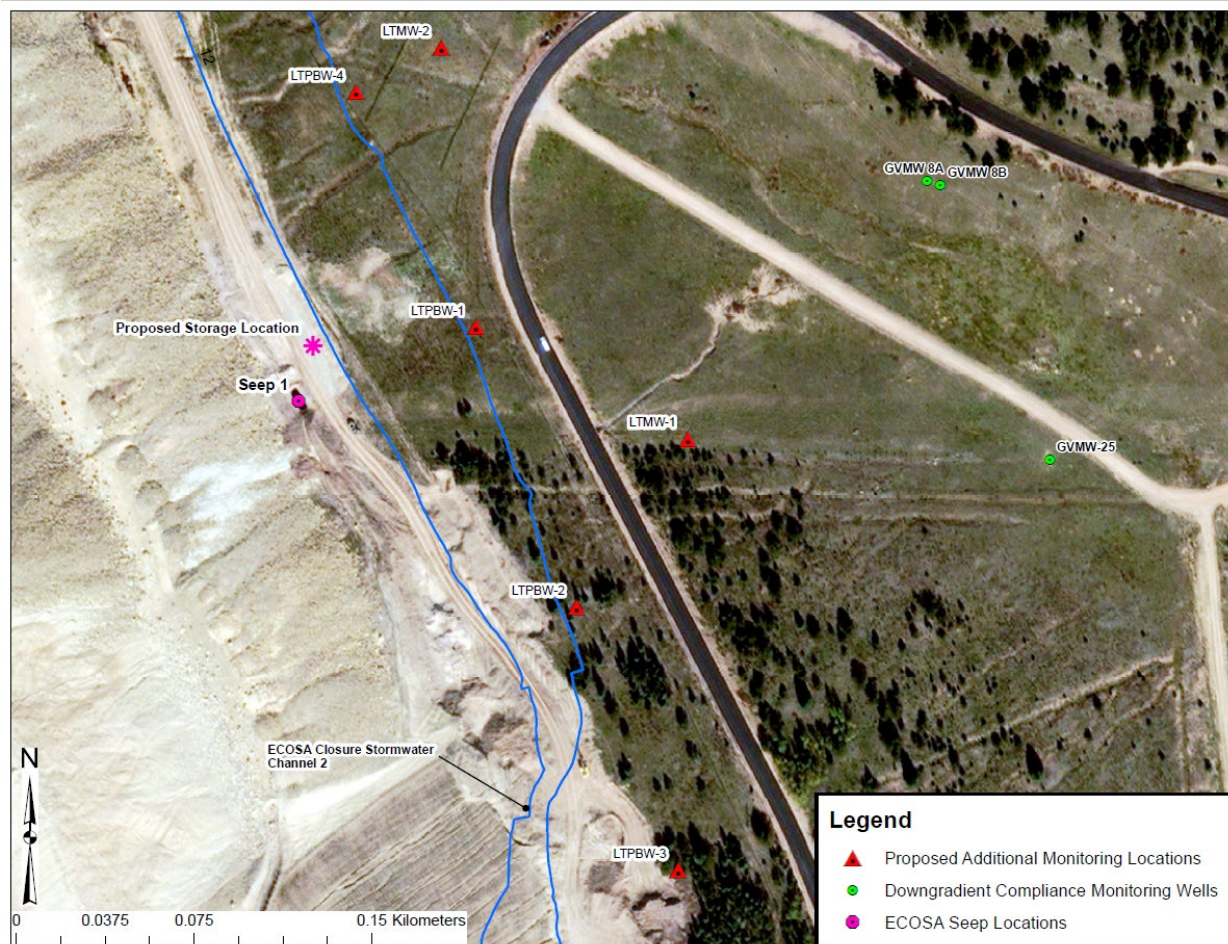
Figure 3: Monitoring / interception well example diagram



Additional Infrastructure

In conjunction with the wells to be installed for groundwater monitoring and interception, there will need to be power as well as a tank or pond to contain solution until it is transferred to a water truck for conveyance to the Valley Leach Facilities for disposal during operations. Further analysis of anticipated flow rates from the interception wells is needed to develop design details for the storage facility. It is anticipated that the four monitoring / interception wells will have dedicated pumps and transducers installed for automatic operation (LTPBW-1, LTPBW-2, LTPBW-3, LTPBW-4). Flow meters will be installed at each of the pumpback wells to understand yield and flow distribution. Figure 4, below, proposes a location at the toe of ECOSA for water storage during mining operations.

Figure 4: Proposed water storage location



Monitoring

During mining operations, monitoring wells LTMW-1 and LTMW-2 will be monitored on a monthly basis in accordance with the approved *Quality Assurance Project Plan and Field Sampling Guidance for Grassy Valley Monthly Monitoring* dated February 27, 2023. Pump back wells (LTPBW-1, LTPBW-2, LTPBW-3, LTPBW-4) will be monitored monthly until the chemistry in each well is understood. The wells will also be monitored/analyzed to assess the effectiveness of the system and ensure that operating conditions are optimized based on the effect.

Closure

Following the end of mining and processing operations, the VLFs will be closed in accordance with the approved mine closure plan. At this time, the collected solution will no longer be able to be conveyed to the VLF facilities for disposal. It is anticipated that following reclamation of the ECOSA, infiltration into the waste rock will be reduced, but will still occur to some extent. CC&V is currently performing Stage 1 Closure Studies to investigate the potential impacts to the ECOSA water balance post reclamation. Subsequent studies are anticipated to occur following Stage 1 to further our understanding and inform how these impacts will be mitigated during and post closure.