



March 2, 2023

Daniel Takami
Grand Island Resources LLC
12567 West Cedar Dr.
Lakewood, CO 80228

**Re: Additional Information Required, 4th Quarter 2022 Groundwater and Surface Water
Monitoring Report; Cross Gold Mine, Permit No. M-1977-410**

Dear Mr. Takami:

On February 28, 2023, the Division of Reclamation, Mining and Safety (Division/DRMS) received the 4th Quarter 2022 groundwater and surface water monitoring report for the Cross Gold Mine. After review of the submission the Division has additional items that need to be addressed or clarified.

General

1. It appears the Operator is using the laboratory duplicate (laboratory replicate) analysis in place of collecting a field duplicate samples for groundwater and effluent media. An analytical laboratory replicate is a subsample of a routine sample that is homogenized, divided into separate containers, and analyzed using the same analytical method. It is used to determine method precision, but because it is a non-blind sample, or known to the analyst, it can only be used by the analyst as an internal control tool and not as an unbiased estimate of analytical precision.

Field duplicate samples are samples obtained side-by-side with the primary sample and treated as separate samples throughout the remaining sample handling and analytical processes. These samples are used to assess error associated with sample heterogeneity, sample methodology and analytical procedures. An assessment of field duplicate samples is completed by using the Relative Percent Difference.

Finally, the SAP approved under TR10 states field duplicate samples will be collected side-by-side with the primary sample. The Operator shall collect one field duplicate sample for each media sampled (groundwater, effluent, and surface water), for a total of 3 duplicate samples to be collected per sampling event as committed to in TR10.

2. In future reports, please provide a footnote for the tables that defines what “ND” means.
3. In future reports, please provide the analytical results of the duplicate sample next to the primary sample results.



Groundwater

4. In Table 2.1.1 the exceedance of Copper in the Caribou well is not highlighted. A review of the lab report indicates this is a true exceedance. Please revise and resubmit the table.

Effluent

5. In Tables 3.2 and 3.3 the exceedance of the pH standard from the Caribou Portal is not highlighted. Please revise and resubmit the table.

Surface Water

6. In reviewing the primary and duplicate surface water sample tables, Tables 4.1.1 and 5.3.1 respectively, it appears there is a discrepancy between the table values for Specific Conductance and Specific Conductance, Total. Please provide an explanation for the difference between the two tables.

Please respond to these issues within 30 days of the date on this letter. The due date is **April 1, 2023**. The Division reserves the right to further supplement this document with additional items and details as necessary.

If you need additional information or have any questions, please contact me by telephone at **303-866-3567 x8114**, or by email at patrick.lennberg@state.co.us.

Sincerely,



Patrick Lennberg
Environmental Protection Specialist

cc: Jared Ebert; DRMS

ec: Daniel Takami, danieltakami@gmail.com, Grand Island Resources LLC
Sergio Rivera, sergio.rivera@novametallix.com, Grand Island Resources LLC