

COLORADO Division of Reclamation, Mining and Safety Department of Natural Resources

November 8, 2022

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

Re: Additional Information Required, 3rd Quarter 2022 Groundwater and Surface Water Monitoring Report; Cross Gold Mine, Permit No. M-1977-410

Dear Mr. Takami:

On October 31, 2022, the Division of Reclamation, Mining and Safety (Division/DRMS) received the 3rd 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. The Operator in TR-10 committed to collecting duplicate samples at the rate of one duplicate sample for each media sampled. Therefore for each sampling event the Operator shall collect a one duplicate sample for surface water, one duplicate for groundwater and one duplicate for effluent. Please provide an explanation why no duplicate samples were collected.
- **2.** Additionally, other QA/QC samples such as rinsates, field blanks and matrix spike samples were not collected, please provide an explanation?
- **3.** Please clearly state which samples were filtered in the field.

Surface Water

- **4.** In the analytical result tables temperature is listed twice with one entry indicating field and the other not referencing where/when it was taken. Please describe the difference between these two entries.
- 5. In the analytical result tables pH is listed twice. One entry indicates it was collected in the field the other entry is adjusted to 25 degrees C, but the values for each entry are identical. Please describe the difference between the two.
- **6.** The pH measurements values in the tables do not match what is recorded on the field sheets, please provide an explanation for the difference. Please update and resubmit the tables with the field measured pH values clearly indicated.
- 7. The field water quality data collected at the time of sampling should be included on the data tables in the report. Please update the tables to reflect the field water quality data collected at the time of sampling.



Groundwater

- 8. None of the groundwater sample results, including effluent, exceeding Table Value Standards (TVS) were clearly indicated (bold font or highlighted). The Division understands that some of the samples were not filtered in the field but the results should be highlighted for reference with later reports. Additionally, pH measurement exceedances occurred regardless of filtered status. Please update and resubmit the tables with the sample results exceeding TVS clearly indicated.
- **9.** The pH measurements values in the tables do not match what is recorded on the field sheets, please provide an explanation for the difference. Please update and resubmit the tables with the field measured pH values clearly indicated.
- **10.** There is a shift in the groundwater flow direction in the September Potentiometric Surface Map figure is this due to a change in pumping at the Cross Winze, please clarify.
- **11.** Please update the effluent tables to include the TVS each analyte is being compared to.
- **12.** The effluent sample result tables do not have results for Coliform(s), please provide an explanation for the missing values.

Please respond to these issues within 30 days of the date on this letter. The due date is **December 8, 2022**. 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 <u>patrick.lennberg@state.co.us</u>.

Sincerely,

Patrick Lennberg Environmental Protection Specialist

- cc: Jared Ebert; DRMS
- ec: Daniel Takami, Grand Island Resources LLC Richard Mittasch, Grand Island Resources LLC