April 8, 2015

George Robinson R Squared, Inc. 3926 North State Hwy 67 Sedalia, CO 80135



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

1313 Sherman Street, Room 215 Denver, CO 80203

RE: Gold Basin Mine, Permit No. M-1992-045 , 112 Conversion Application Adequacy Review

Dear Mr. Robinson:

The Division of Reclamation, Mining and Safety (Division) is in the process of reviewing the above referenced application in order to ensure that it adequately satisfies the requirements of the Colorado Mined Land Reclamation Act (Act) and the associated Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for Hard Rock, Metal, and Designated Mining Operations (Rules). During review of the material submitted, the Division determined that the following issue(s) of concern shall be adequately addressed before the application can be considered for approval.

<u>Exhibit C</u>

1. Please submit a color copy of Figure C-3. The details in the provided black and white copy are difficult to discern.

<u>Exhibit D</u>

- 2. Stated on Page 12, "Gold Basin mining will occur in areas that are at least a 25 foot offset from the active steam or diversion (Chaffee County Use Permit Stipulation-See Exhibit L)." Exhibit L is the Reclamation Cost estimate. The Chaffee County Resolution was located in the application package in Exhibit M, M-8. Please correct the wording in Exhibit D.
- 3. Stated on Page 13, "... (Figure D-2) illustrates the location of the two sets of three processing ponds." Figure D-2 shows only one set of two ponds, and Figure D-3 shows only one set of two ponds. Please show the location of the two sets of <u>three</u> ponds on the maps in Exhibit D. Use larger maps if necessary to show all pertinent details.
- 4. Stated on Page 13, "Discharged water will be managed in accordance with CDPHE industrial discharge water quality permit requirements (Exhibit M-4)." Exhibit M, M-4 states "See the following submitted Industrial Discharge Permit COR0048940." However, Permit COR0048940 is not included in Attachment M-4. In its place is stormwater permit COR040278. Please provide the Division with a copy of the industrial discharge permit that will be associated with the discharged process water.
- 5. Stated on Page 13, "The second processing unit will be located northeast of the storage unit (upper Cache Creek) in an area operated by the previous operators Exhibit D, Figure D-2." The second processing unit is not shown on Figure D-2. Please show the location of the second processing unit on Figure D-2.
- 6. Please provide a larger copy of Figure D-1. The details are difficult to discern on the provided map.



<u>Exhibit E</u>

- 7. Stated on Page 16, "Channels will be constructed in areas identified on Figure F-2..." The Division is unable to locate the proposed channels on Figure F-2. Perhaps larger maps are needed to show these features. Details are difficult to discern on the provided maps. Adding additional confusion is the fact that Figure F-2 is referred to as Post mine Reclamation Cross Section on Page 28. Is there a cross section that should be included with this exhibit?
- 8. Prior to any work being conducted within the Cache Creek channel, such as channel realignment or diversion, installation of culverts, etc., please provide documentation to the Division that the operator has received authorization from the U.S. Army Corp of Engineers (USACE) to conduct such work. Also, please provide approved USACE plans to the Division.
- 9. Stated on Page 17, "Stream gradients will be designed to approximate pre-mine gradients (Exhibit E-Attachment C)..." The Division is unable to locate a map that shows locations that correspond with the stations listed in Attachment C. Is Attachment C representative of the existing gradient or the estimated pre-mining (historic mining) gradient? Also, please clarify the elevation units used in Attachment C.
- 10. Stated on Page 18, "Because topsoil is thin (less than 6 inches), historical and current mining activities will not salvage topsoil." Please note that Rule 3.1.9 requires that topsoil be salvaged for use in reclamation unless existing topsoil is of insufficient quantity or of poor quality. The application proposes to use "alternative native growth materials" instead of salvaging existing topsoil. If these "alternative growth materials" can be shown to be more suitable for vegetation requirements, then the operator shall remove, segregate and preserve the material. Please describe the native growth materials to be used and the operator's plans to salvage this material, in accordance with Rule 3.1.9, for use in reclamation.
- 11. Stated on Page 18, "Mulch will be applied at a rate of 1-2 tons per acre..." Please specify what type of mulch will be used.
- 12. Attachment A: Please submit a color copy of these photos.
- 13. Attachment C: Please provide a plan view map that shows the stations that correspond with the profile. Also, please clarify whether this is representative of the existing gradient or the assumed pre-mining (historic mining) gradient? Also, please clarify the elevation units used in Attachment C.

<u>Exhibit F</u>

- 14. Please provide a larger copy of Figure F-1. The details are difficult to discern on the provided map.
- 15. Figure F-2 is referred to as Post mine Reclamation Cross Section on Page 28. Is there a cross section that should be included with this exhibit?

Exhibit G

- 16. Stated on Page 32, "The sampling results confirm, water quality conforms to Gold Basin's CDPHE water quality discharge criteria." Please provide the water quality discharge criteria to the Division. The Industrial Discharge Permit was not included in your submittal.
- 17. State on Page 32, "...sampling will occur during the month of June through October." Please specify the proposed sampling frequency, proposed analysis method and list of analytes.

18. The source of water to be used for the operation is not explicitly referenced in the application. Please provide additional information regarding the source of water to be used and demonstrate that the water use complies with Colorado water laws.

<u>Exhibit H</u>

19. The provided material appears to describe a Cache Creek drainage located in California. Please provide information relevant to this operation.

Exhibit M

20. The Industrial Discharge Permit COR0048940 was not included in Attachment M-4. In its place is the stormwater permit COR040278.

Please submit your response(s) to the above listed issue(s) by Friday, April 24, 2015 in order to allow the Division sufficient time for review.

The Division will continue to review your application and will contact you if additional information is needed.

If you require additional information, or have questions or concerns, please contact me at the Division's Grand Junction Field Office.

Sincerely, Dustin Czapla

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Cc: Laurens Leffingwell 1700 Wadsworth Road Old Mill Creek, IL 60083