



## COLORADO

Division of Reclamation,  
Mining and Safety

Department of Natural Resources

Date: June 29, 2020

To: Eric Scott

From: Tim Cazier, P.E.

RE: Ragsdale Reservoirs, DRMS File No. M-2020-007;  
Second Adequacy Review - June 26, Response to DRMS Comments on  
Cannon Lands Slope Stability Memorandum by Deere & Ault

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The Division of Reclamation, Mining and Safety (DRMS) engineering staff has reviewed the June 26, 2020 adequacy responses Memorandum by Deere & Ault.

1. Factor of Safety Selection. The response was not adequate. The response made a case based on correlation and assumed conservatism. The "Strength Measurements Resulting from Multiple Tests" in the Mined Land Reclamation Board Policy (MLRB) No. 30 - Factors of Safety for Slope Stability/Geotechnical Analyses are intended to be based on site specific data as is clearly stated for the alternative engineering analyses and seismic data portions of this policy. Specifically, the less conservative Factors of Safety are for multiple tests on site specific data. The correlation and assumed conservative values provided are not site specific. The Applicant must implement either Option A or B from our June 19, 2020 review:
  - a. Perform a site specific geotechnical investigation of the Cannon Lands materials to include multiple tests for the material in the various proposed pits to demonstrate appropriate strength parameters, or
  - b. Perform a more limited site specific geotechnical investigation of the Cannon Lands materials to include verification tests for samples of the various proposed pits to demonstrate appropriate strength parameters are consistent with the Fort Lupton data and provide the strength test results from the Fort Lupton site for DRMS review.
2. Seismic Evaluation. The response was adequate.

