Coal Mine Safety and Health
District 9

Gary Peacock
General Manager
Genwal Resources, Inc.
P.O. Box 1077
Price, UT 84501

RB: Crandall Canyon Mine
ID No. 42-01715
Preliminary Pillaring Plan

Dear Mr. Peacock:

A preliminary analysis for projected pillaring of the Main West section was submitted to this office for a cursory review. The plan, as is currently written, would not be approved. The Roof Control Group conducted the cursory review.

The technical review noted certain inconsistencies in the plan. These are as follows:

1. In situ coal strength was estimated at 1640 psi. An explanation of how this strength was determined should be included. Typical coal strength values are much lower.

2. The elastic modulus of coal was estimated at 500 ksi. An explanation of how this modulus was determined should be included. If experimental analysis of test samples was conducted, an explanation of the number of samples, the size of samples, and the testing method employed should be included in the submittal.

3. The mine geometry employed in the computer model differs from the physical mine map geometry. This observation applies to the ARMP8 model geometry employed in the analysis of the historical section and the projected sections.

4. The LAMODEL analysis shows, that during pillaring, surrounding pillars exhibit yielding zones. This could indicate a violent outburst since the in-situ coal strength is stated as 1640 psi.
5. A stability factor of 0.37 was determined by analyzing the pillaring of 1st North 9th Left Panel. The analysis of this area was employed to determine the minimum stability factor for favorable retreat mining. This stability factor appears to be determined from where mining ceased due to poor ground control conditions. Therefore, a higher stability factor should be employed that ensures an adequate factor of safety.

If you have any questions or if you would like to meet and discuss the above items, please contact Billy D. Owens at 303-231-5590 or Pete Del Duca at 303-231-5660.

Sincerely,

Allyn C. Davis
District Manager

bcc: Price #1 FO (FYI - NOT for UMF) (Copy surname letter)

Laine Adair
Genwal Resources, Inc.
P.O. Box 1077
Price, UT 84501 (Copy letterhead letter)

RC MHF (Original surname letter - plan - Backup Material)
RC Reading (Copy surname letter)
Pete Del Duca (Copy surname letter)
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