

**EarthFax**

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June 17, 1994

Mr. Daron Haddock  
Division of Oil, Gas, and Mining  
State of Utah Natural Resources  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

Subject: Analytical Results of Roof and Floor Samples Collected from Genwal Coal Company's Crandall Canyon Mine - ACT/015/032. #2

Dear Jay:

As requested by Genwal, EarthFax Engineering Inc. has reviewed the acid and toxic forming materials analytical results for the roof and floor samples collected from the Crandall Canyon Mine on May 4, 1994. These samples were collected to satisfy the commitment made in Chapter 7 (hydrology), Section 7.31.3 of Genwal Coal Company's Crandall Canyon Mining and Reclamation Plan. Roof and floor samples were collected from the following locations in the mine; 1<sup>st</sup> Right Cross Cut 38, 1<sup>st</sup> North Cross Cut 35, and Main West Cross Cut 83. Chemical analyses were conducted for acid- and toxic-forming materials in samples by Commercial Testing and Engineering Co. (CTE). The analytical results are summarized in Table 1 and the locations shown on the attached Plate 1.

Using Table 2 in the Guidelines for Management of Topsoil and Overburden for Underground and Surface Coal Mining (Leatherwood and Duce, 1988), all of the samples can be classified non-acid and non toxic.

Therefore, based on the analytical results, no possibility exists for adverse impacts to groundwater and surface waters by any acid or toxic forming materials from the Crandall Canyon Mine.

If we can be of any further assistance please feel free to call.

Sincerely,

Kris H. Blauer  
Hydrogeologist

cc: Jay Marshall, Genwal

2419