0021

March 29, 1985

TO: Coal File

FROM: Pamela Grubaugh-Littig, Reclamation Engineer pgl

RE: Safety Factor Calculations, Second Mining Under Beaver Creek, Beaver Creek Coal Company, Gordon Creek #2 and #7, ACT/007/016, #3, Carbon County, Utah

The factor of safety calculations for the pillars for second mining under Beaver Creek and the associated rate of pillar collapse were discussed with Dr. William G. Pariseau, Professor of Mining Engineering at the University of Utah in a telephone conversation on March 29, 1985. He commented that a pillar safety factor of 2.4 is conservative. He suspected that at an extraction rate of 64 percent with 550 feet of overburden that if there was movement, it would move down gradually and uniformly.

Additional questions that could be asked:

1. What is 1 standard deviation on strength and find the probability?

2. Generate more informtion--if 1 pillar fails and increases the load on others, then what will happen?

3. Will there be a domino effect? Will there be increased deterioration over time?

4. Data from each particular mine should determine the angle of draw?

btb
cc: John Whitehead
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