

**BEAVER CREEK Coal Company**

Post Office Box 1378  
Price, Utah 84501  
Telephone 801 637-5050

February 15, 1988

Pamela Grubaugh - Littig  
Reclamation Engineer  
Utah Division of Oil, Gas & Mining  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203

**RECEIVED**  
FEB 22 1988

DIVISION OF  
OIL, GAS & MINING

RE: Amendment on Second Mining  
Trail Mountain No.9 Mine  
ACT/015/009  
Emery County, Utah

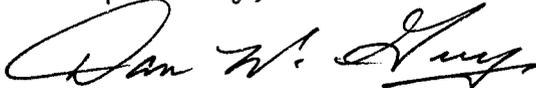
Dear Pam,

Pursuant to our conversation on 2/11/88, I am enclosing 8 copies each of the following information:

- (1) Plate 3-6, showing area of proposed limited extraction; (This should replace the previously submitted Plate 3-6 in Tract I);
- (2) A proposed pillar extraction sequence (This should be added to Appendix 12-1 of the Tract I Permit);
- (3) A corrected page 12-3 for Tract II Permit; (This sheet was inadvertently noted for Chapter 3 in my previous letter; Please replace page 3 of Chapter 12 in the Tract II Permit with this new page marked 12-3).

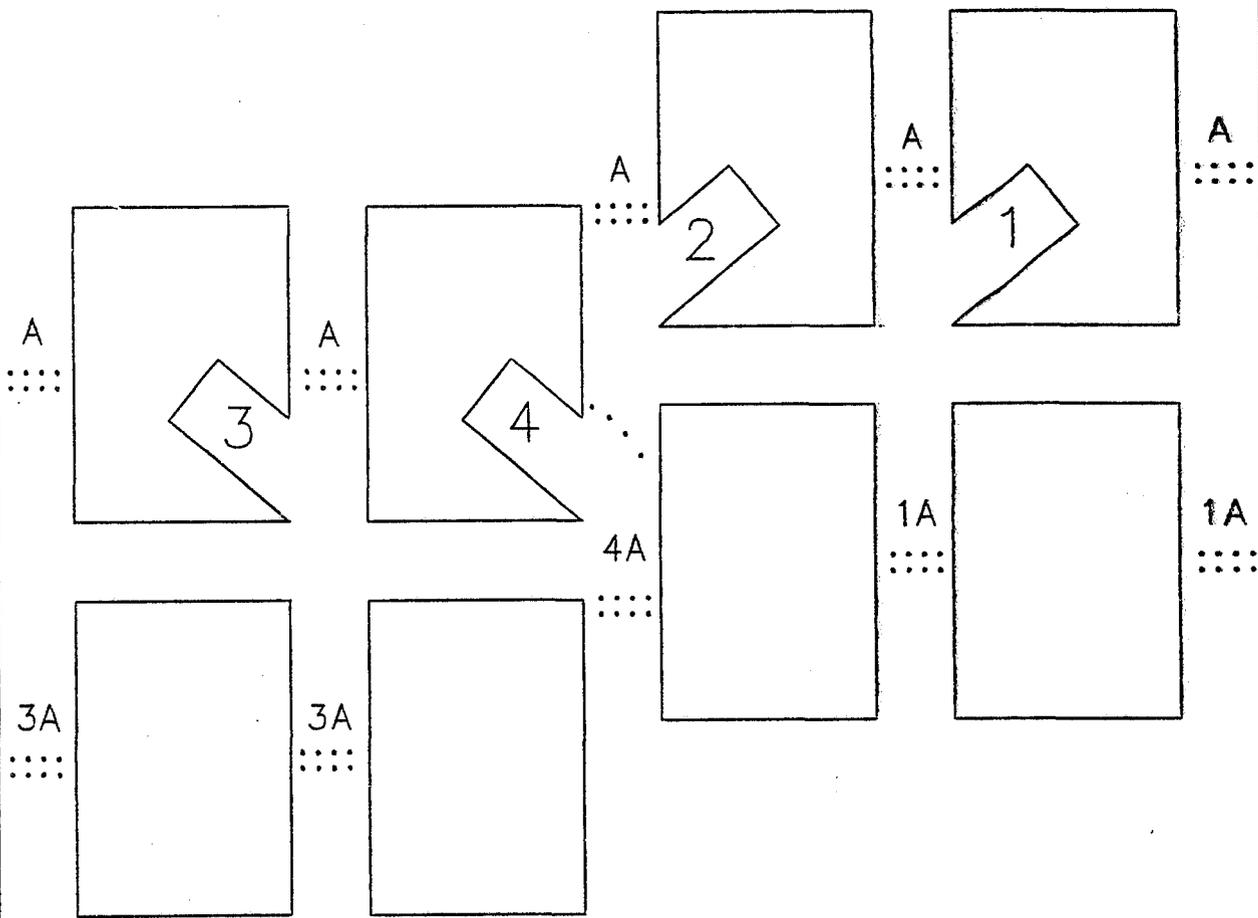
I appreciate the opportunity to discuss these deficiencies with you by phone, in the interest of time. I hope this information will be adequate for your review and approval. If you have any questions, please let me know.

Respectfully,



Dan W. Guy,  
Manager Permitting/Compliance

cc: Dan Meadors  
Joe Fielder  
Johnny Coffey  
Allen Childs  
Jay Marshall  
File



PROPOSED  
 TRAIL MOUNTAIN  
 SOUTH MAIN PILLAR EXTRACTION SEQUENCE

(RIGHT TO LEFT)

WITH REMOTE CONTROL

NOTE: See Page 50 For Outline

	BEAVER CREEK COAL		
	<i>Main West Pillar Plan</i>		
DWN	R.J.M.	Date	15/Feb./88
SCALE: 1' = 50'		REV. Date	
ACAD DRAWING #		Roof A: Page 49	

the barrier pillars protecting the main entries, the development panels will be allowed to cave following retreat mining. Each new panel will be developed adjacent to the last panel and tied to the old works. The end result will be a uniform supercritical subsidence profile spread over a large area of the mine plan which will minimize stress concentrations and limit them only to the unmined boundaries and those barrier and permanent chain pillars which are not likely to crush. The overburden depth for most of the Tract 2 area varies, as Figure 6-5 shows, from approximately 1,400 feet to 2,000 feet. Referring to the ACT/015/009 PAP subsidence predictions (Appendix 1, herein) the maximum subsidence factors for this range of depths are 0.35 to 0.247. Utilizing an average extracted thickness of 6.5 feet the maximum subsidence values for the range should be 2.3 ( $0.35 \times 6.5 = 2.28'$ ) to 1.6 ( $0.247 \times 6.5 = 1.61'$ ) feet. An angle of draw of 15 degrees can be assumed for this type and thickness of cover which when combined with the seam dip of 4 degrees west and the maximum overburden thickness of 2,200 feet would place the western limit of subsidence at a point some 760 feet west of the caved area ( $2,200' \times \tan(15^\circ + 4^\circ \text{dip}) = 757.5'$ ). The present mine plan includes a north-south set of entries along the west boundary of Tract 2 which are not expected to cave. Because this protected zone is 750 feet wide, the limit of subsidence should remain within the boundaries of Tract 2 on the west. On the north and south sides of the tract the subsidence could extend out a maximum of about 565 feet ( $2,100' \times \tan 15^\circ = 562.7'$ ). Along the eastern boundary under the cliffs facing Cottonwood Canyon, subsidence will be controlled by limiting second mining to percentages as shown in Appendix 12-1, page 4. Subsidence will gradually increase toward the west (up the canyon walls) with the result that the cliffs will be tilted toward the west slightly. This should reduce any effects of subsidence on the canyon walls to minor rockfalls. The impact of the subsidence on the majority of the mine area should be a gradual and uniform lowering of the ground elevation. No faults have been mapped in the mine

2/1/88