

TECHNICAL FIELD VISIT

Utah Coal Regulatory Program

January 16, 2004

TO: Internal File

THRU: Daron R. Haddock, Permit Supervisor

FROM: Steve M. Fluke, Reclamation Hydrogeologist
Jerriann Ernstsens, Ph.D., Environmental Scientist, Biology

RE: Technical Field Visit, East Fork Box Canyon, Canyon Fuel Company, LLC.,
SUFCO, C/041/002

Other Attendees: Chris Hansen and Mike Davis (SUFCO); Eric Petersen (Petersen Hydrology); Tom Lloyd and Justin Bingham (U.S.F.S.); Craig Walker (Utah DWR); and Neil Frandsen and Garth Frandsen (Nelco)

Date & Time: January 14, 2004; 9:30 am to 5:00 pm

PURPOSE:

To assess the accessibility during winter conditions of the East Fork of Box Canyon (EFB) for the subsidence and water monitoring program. The mine has moved beyond the 15⁰ angle-of-draw from the stream and, although it is mid-winter, we wanted to see if there was any additional damage to the stream channel before postponing the monitoring until ice and snow melt. No monitoring has taken place since December 22, 2003 due to snow cover. Snowmobiles were obtained for this trip and the mine hired Neil and Garth of Nelco for recon the day prior to our trip and as guides for our group. During the field visit, the weather was clear and calm with temperatures in the 40s ⁰F. Snow cover typically ranged from 6" to 14" with drifts in the canyon bottom up to 3'. At the time of the site visit, the longwall face had progressed approximately 250' east and 20' south of EFB-07.

TECHNICAL FIELD VISIT

OBSERVATIONS:

We first rode to the south end of the EFB upstream of Joe's Mill Pond. However, we decided the snow depth was too great to hike in to the canyon from there. We rode on to the Elusive Peacock Shelter. On the way, we disturbed a herd of approximately 25 elk. They ran parallel to our direction of travel, and then dashed in to a ravine. As observed on the December 3, 2003 site visit, tension cracks ranging in width from 2 inches to 2 feet were observed on the canyon rim above the Elusive Peacock Shelter. These cracks are obscured by the snow cover and appear to be hazardous since Tom Lloyd and Chris Hansen have fallen into them. Erik Petersen, Steve Fluke, and Craig Walker hiked to the stream channel to assess conditions while the rest of the party stayed behind. Spring 214 was frozen and the stream at EFB-11 was flowing at approximately 20 gpm as measured with a bucket and stopwatch. A new 20' section of the stream channel at EFB-11 was dry apparently due to buckling. Approximately 50 feet downstream of EFB-11 the stream appeared to be mostly frozen and the channel was choked with over 3' of snow.

The group then headed around the EFB to access the stream at the confluence with the east fork of the EFB. We hiked to EFB-8 and observed Spring 217 to be frozen. With snow cover at approximately 2', we headed further downstream to EFB-9. On the way we observed no signs of subsidence or fractures and decided to turn around because it was getting late and because we could observe very little due to snow cover.

While most of the group was hiking down the channel, Mike Davis and Garth Frandsen snowmobiled on the rim near Quitchupah Creek to inspect ponds. They mentioned that they spotted a second herd of elk as well as three bull elks. The herd was on top, while the bulls were in the Quitchupah drainage.

RECOMMENDATIONS/CONCLUSIONS:

During the site visit, agency and mine representatives agreed that little could be accomplished by continuing the monitoring program until some of the snow melts away. We will watch the weather and conditions in the area to decide when it would be appropriate to continue monitoring.

Concerns raised regarding the tension crack hazard at the canyon rim above the Elusive Peacock Shelter prompted a phone conversation between Jerriann Ernstsens, Steve Fluke, and Tom Lloyd the morning of January 15, 2004. We decided that it would be prudent to instruct the mine to post two signs at the fracture area warning the public of the hazard until some mitigation action could take place in the spring. We left messages with Mike Davis and Chris Hansen expressing our concerns and desire to take action (1/15/2004).