



State of Utah
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 DIVISION OF OIL, GAS AND MINING

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DIVISION OF OIL GAS & MINING
TECHNICAL FIELD VISIT FORM

Date: April 27, 2000

Time: Departed office at 7:00 am, arrived at mine 10:30 am, left mine at 5:20 pm, arrived at office 8:40pm.

DOGM Staff: David Darby

Other Attendees: Mike Davis

Re: Evaluate background information for CHIA, Canyon Fuel Company, LLC, SUFCO Mine, ACT/041/002, Internal File

Purpose:

Observe the geologic, hydrologic, riparian and other natural features of the east fork of the east fork of Box Canyon in the Pines Tract Lease. This surface visit was needed to evaluate background information for the Cumulative Hydrologic Impact Analysis (CHIA).

Observations:

Mike and I drove to the head of the east fork of Box Canyon. We descended down the west fork of the east fork of Box Canyon, in the fork opposite from the Mill cabins. We first encountered a road that dropped into the channel and led us to two ponds containing water, Joe's Mill Ponds. The canyon is somewhat different than the west fork of Box Canyon. The canyon floor is wider and has more of a U shape. There is also a lot more soil, which is really sand eroded from the surrounding rock. In some places the sand is several feet deep. The rock surface is not exposed like it is in the west fork of Box Canyon. If fractures should develop and widen as a result of mining, it is more likely to be filled with the surrounding sand, unlike the west fork of Box Canyon where surface soils in the upper reaches of the canyon are almost non-existent.

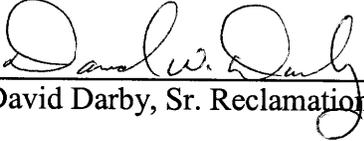
There was a small amount of flow in the channel (not more than 5 gallons per minute) of the west fork of the east fork of Box Canyon. The flow supports sedges in the bottom of the channel a few feet wide. As we approached the fork with the saw mill the width of the sedges increased. However, as we walked down the stream the channel narrowed and the embankment consisting of several feet of sand lined the channel.

When we reached the confluence with the east fork of the east fork of Box Canyon there was flow in both channels. As we looked up the channel we could see that the east for of the east fork of Box Canyon still had snow covering the channel and meadow areas where they were shaded. The snow seemed to contribute most of the flow which was estimated to be between 10 to 20 gallons per minute in the channel. As we walked up the channel, we observed that most of the channel contained sedges which formed a wet meadow riparian area about 20 to 50 feet wide. The sides of the canyon contained sagebrush and other shrubs supported by the sandy soils.

We hiked up to Spring Monitoring Site 105, which was also being monitored by the a water users group. It is monitored with telemetric monitoring and transmitting equipment, the same as the site in Link Canyon. We could see the flow from the spring which emanates from the base of the valley wall. We hiked up a few hundred yards to see if we could see more springs. Mike had two more marked on his map. We did not find where they emanated. From there the canyon turned dry revealing only an ephemeral channel.

Recommendations/Conclusions:

The information garnered during the field visit will be useful in writing the CHIA. Noteworthy of the field visit is the fact that sediments do exist in the channel. In the event that some fracturing of the surface does occur from subsidence, there is material available that can wash into the cracks to heal the fractures. It is also estimated that mid-summer flows in these channels are very low, however the proposed monitoring plan and requirements of monitoring by the Forest Service should establish the types of flow that exist in the channel and its importance to the regional habitat.

Signature:  on May 12, 2000
David Darby, Sr. Reclamation Specialist