

0001



State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt  
Governor

Ted Stewart  
Executive Director

James W. Carter  
Division Director

355 West North Temple  
3 Triad Center, Suite 350  
Salt Lake City, Utah 84180-1203  
801-538-5340  
801-359-3940 (Fax)  
801-538-5319 (TDD)

TO: FILE  
FROM: DAVID DARBY  
DATE: DECEMBER 22, 1995  
SUBJECT: NOTICE OF CONCERN BY STEVE AND PETE STAMATAKIS,  
CONCERNING DEWATERING OF WATER SOURCES ON THEIR  
PROPERTY BY BEAVER CREEK COAL COMPANY

On November 14, 1995 Ken Wyatt and I visited the Gordon Creek #2, #7 and #8 mines. Afterwards, we drove up to Beaver Creek in hopes of running into one of the Stamatakas brothers. Earlier, last spring, I had a meeting with Steve and Pete Stamatakas. They indicated that several springs have either dried up or have been reduced in flow in the vicinity of Beaver Creek. We had tried to get together throughout the summer to plan a site visit so they could show us which springs he was concerned about. They also stated that subsidence has occurred in some locations and thought that it may have some effect on the low water levels.

We ran into Steve Stamatakas on his property and asked if he could show us around. We drove down Beaver Creek where he showed us areas along the creek that had supported willows and beaver ponds. Ponds no longer existed in many areas where sign indicated they had been there. We traveled down the road paralleling Beaver Creek and stopped at the sites where Horizon had drilled monitoring wells. At the lower well we stopped to observe the method used by GeoHunt to monitor deep wells.

From there we traveled down to the confluence of Jump and Beaver Creeks next to the lower end of the Stamatakas' property. We observed the flow in Jump Creek which appeared to be between a half to one cfs. We walked over to an artisan well and spring, both flowing. I had previously monitored both of these sources when I worked for the U.S. Geological Survey (USGS). Beaver Creek was flowing, but I can not estimate the flow.

On the drive back up the creek Steve Stamatakas pointed out areas on the south side of the creek that appeared as cracks or small escarpments on the southeast hillside which paralleled the creek.

The scarps ranged between 6 inches to about 14 inches. Their origin is hard to determine, they resembled the types of scarps related to slumping, but no downward movement of the earth could be discerned. Their association to subsidence was considered and may have merit, but a definite conclusion could not be made. One scarp appeared to be related to a tree toppling.

Steve showed us the spring area in the north east corner of Section 18, where a diversion was developed to transport water over the hillside into the Gordon Creek drainage. The sight was a major spring source that supplied water to the creek. The source originated from a canyon on the north. There are willows and a large beaver pond associated with this source.

Next, we traveled down to the Gordon Creek drainage where Steve pointed out a spring source at the horseshoe bend in the road. The area on the surface was saturated and some trees were leaning over. Water was flowing from this site down the creek that paralleled the road.

For the last part of the tour Steve showed us a spring source along the side of the road below the entrance of of Coal Canyon the Gordon Creek #3 & #6 mines were located. He stated that the flow was a new source. He also pointed out a quaking aspen grove that had died out. He believed the trees died because of water flows coming down the canyon from the Gordon Creek #3 & #6 mines.

#### Findings

First and foremost, definite conclusion of water resource interception can not be concluded because baseline data does not exist and a complete evaluation of the site has not been conducted. Several factors come into play in evaluating this site. The issues related to reduced flows at this site involve several years of drought, overgrazing the site and the extent of mining under and adjacent to the site which could intercept or influence these water sources.

It is a fact that several years of drought preceded the 1995 water year. The drought could have reduced baseflows substantially in some areas to the point that it could take several years of normal to above normal precipitation to restore the aquifers. Therefore, even though 1995 was well above normal in precipitation, the groundwater recharge may not have completely occurred to sustain normal flow to the springs and creek. An evaluation should be made between current precipitation and discharge rates with the relationships calculated in previous studies conducted by the USGS.

In evaluating the site, I noticed that no beaver ponds existed along a large section of the stream, where I saw several at the same site while conducting surveys for the USGS in the early 80's. Most remarkable was the total lack of willows along the stream. This could have resulted from overgrazing or spraying of the willows. The removal of willows would cause the beaver to abandon the site, and eventually their dams, which hold back the water and maintain a higher water table along the riparian zone, would fall apart and the stream would begin to

channelize. This appears to be the situation along this stretch of the stream. The stream is now channelized with erodible steep banks. Bank storage has been eliminated and all the flow moves down the channel.

The fractures along the Beaver Creek and the claims by the Stamatakas' of new spring sources in the canyons below the property and reduced flows have merit if mining activities can be linked to their water sources. An intensive evaluation of the site as related to mining activities should be conducted.