



0024

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

file

Norman H. Bangerter, Governor
Dee C. Hansen, Executive Director
Dianne R. Nielson, Ph.D., Division Director

355 W. North Temple • 3 Triad Center • Suite 350 • Salt Lake City, UT 84180-1203 • 801-538-5340

April 29, 1988

TO: John Whitehead, Permit Supervisor
FROM: James R. Fricke, Reclamation Hydrologist *JRF*
RE: Culvert Outlet Protection Amendment (TDN#8), Beaver Creek
Coal Company, C. V. Spur, ACT/007/022-87E, Folder #2,
Carbon County, Utah

Synopsis

The operator's response (April 12, 1988) to the Division's request (February 4, 1988) is adequate. The operator has submitted Figure 7-6 depicting length, width, and depth of riprap for the culvert outlet protection plan.

Analysis

Figure 7-6 and Table 7-25 (previously submitted) are adequate for culvert outlet erosion protection. The operator did not submit riprap sizing calculations as requested in the January 15, 1988 technical memo. However, the Division has determined that nine-inch meridian diameter riprap depicted on Figure 7-6 will remain stable at velocities up to nine feet per second. Review of the C. V. Spur MRP indicates that culvert outlet velocities are less than nine feet per second.

Recommendations

The Division should approve the amendment. Figure 7-6 and Table 7-25 should be incorporated into the MRP.

djh
0798R/65