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CONSULTANTS / ENGINEERS

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June 22, 1976

Mr. Max A. Robb, President
Swisher Coal Company
90 West First North - Suite 15
Price, Utah 84501

Dear Mr. Robb:

You have asked for our opinion regarding potential impact to ground water by mining activity in your proposed Huntington Canyon No. 4 mine, Section 16 Township 16 South Range 7 East SLB&M, Emery County, Utah.

The following opinion is preliminary in nature and subject to varification or possible modification by field studies.

Pending Mining Plan

The drainage area for the pending mining plan for Huntington Canyon No. 4 mine is to Mill Fork Creek and Huntington Creek. The Blind Canyon Seam is to be mined. This Seam is underlain by interbedded sandstones and shales approximately 40 to 110 feet thick, the Hiawatha Seam, and the Star Point sandstone perched aquifers occur in the strata insized by Mill Fork Canyon and Huntington Canyon. The regional water table is near the surface of the stream beds of Huntington and Mill Fork Creeks and at a depth of over 1,500 feet at the northwest corner of the area to be mined. Recharge of the ground water is from precipitation falling in the area. Shale strata of the Black Hawk formation most likely limits local recharge to the perched aquifers with little or none reaching the main zone of saturation. The main zone is most likely recharged from precipitation to the west and northwest of the area to be mined.

Mining activity could intercept perched aquifers in the coal bed and affect perched aquifers in the strata above the bed. However, mine water should not be a problem because of the limited recharge of the perched aquifers. Subsidence and associated rock fracturing would tend to increase the local recharge.

Mr. Max A. Robb

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Little Bear Spring in Little Bear Canyon discharges from the Star Point sandstone at a point approximately 200 feet below the base of the coal seam to be mined. Since recharge in this area is probably minimal, it is unlikely that there will be an impact due to mining on the base flow and water quality of Little Bear Spring.

Furthermore, it is highly improbable that mining activity would have an impact on Rilda Spring or Four Springs. These springs are separated from the mining activity by deeply indented canyons that would isolate potential impacts of mining.

It is recommended that a hydrologic study of the area be done to better define the ground water system and that strategic springs be monitored routinely for water quality and quantity to establish base line information.

Sincerely,

VAUGHN HANSEN ASSOCIATES

O. Lew Wood *ack.*

O. Lew Wood, Ph.D.

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