

**ROCKY MOUNTAIN
ENERGY COMPANY**

July 31, 1980

UNITED STATES NUCLEAR REGULATORY COMMISSION
Fuel Processing & Fabrication Branch
Division of Fuel Cycle & Material Safety
Washington, D. C. 20555

ATTN: William Crow

Dear Sir:

RE: Quarterly Report, License No. SUA-1338,
Docket No. 40-8697

Pursuant to License Condition No. 29, the Rocky Mountain Energy Company's Reno Creek In-Situ Test Facility is submitting the Quarterly Report covering the period of April through June, 1980.

Restoration continued on Pattern I during the quarter. Results obtained from the production well during the restoration period beginning in January, 1980, are shown in Table I.

As mentioned in the previous Quarterly Report, a water treatment circuit was installed to neutralize excess acid and produce a near neutral pH water for reinjection. The water treatment circuit removes most of the heavy metals and radionuclides, producing a relatively clean solution with a pH of 7.5 to 8.5. The underflow containing the majority of the contaminants was discharged into the lined evaporation reservoir for eventual disposition.

Results during the groundwater sweep, prior to the installation of the treatment circuit, show that groundwater quality underwent dramatic improvement during this early stage of water removal. Free acid levels dropped to 331 mg/l, while pH levels rose to 3.17. Sulfates, conductivity, uranium (as uranium oxide), iron, calcium, and vanadium dropped to 1701 mg/l, 3300 micromhos/cm, 4.1 mg/l, 63 mg/l, 150 mg/l, and 0.3 mg/l, respectively.

Data obtained during the chemical injection phase of restoration indicate a less dramatic improvement in water quality; however a recent significant decrease in the concentration of free acid in the groundwater suggests that chemical breakthrough may be imminent. We expect to see additional significant improvement in groundwater quality when this occurs.

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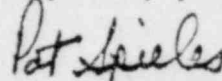
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To summarize, significant restoration progress has been accomplished in Pattern I at the Reno Creek site (see Table 2). The most recent values of 140 mg/l, 100 mg/l, and 85 mg/l indicate a downward trend in free acid concentrations, and a continued improvement in groundwater conditions as a result of the current restoration activities.

Work continues on modification of the plant for the Pattern II carbonate leach test. Expected startup date for the new test pattern is mid-August. Verbal approval of the Carbonate License Amendment Request was received July 30, 1980.

Air quality data and groundwater surveillance for the second quarter demonstrate that operations have not caused an environmental impact to the area. The attached tables summarize second quarter operations.

Very truly yours,



Patrick Spieles
Environmental Supervisor
ISL Operations

PS/ph/J

cc: USNRC, C/O Document Management Branch
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