OGLE PETROLEUM INC.

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May 30, 1981

Mr. Ed Francis
Land Quality Division
Department of Environmental Quality
401 West Nineteenth Street
Cheyenne, Wyoming 82002

and

Mr. Dan Martin
Uranium Recovery Licensing Branch
Division of Waste Management
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

RE: Permit to Mine No. 504

and

Source Material License No.
SUA-1336, Docket No. 40-8693

SUBJECT: Quarterly Report

Gentlemen:

In accordance with the referenced licenses, Ogle Petroleum Inc. (OPI) herewith submits the Quarterly Report for its pilot (R & D) in-situ uranium solution mining operation in the Bison Basin area of Wyoming. The period covered by this report is February 1 through April 30, 1981.

1. OPERATIONAL SUMMARY

During this reporting period, OPI detected an excursion at horizontal excursion monitor wells 303-6-M 2 and 303-6-M 4 (see Figure 1). For more details about the excursion and corrective actions, please refer to the special reports on monitor well analytical results dated March 25 and April 20, 1981. After successfully correcting the excursion, all mining activities were halted on April 3, 1981.

Since halting mining activities in the one-acre R & D wellfield, OPI has been performing plant maintenance and preparing for construction of the commercial facility to begin after the Final Environmental Statement is issued.

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During the period covered by this Report, the wellfield operated at an average flow rate of 49.2 gallons per minute (gpm). The total product recovered between startup on June 26, 1980 and April 31, 1981 based on metallurgical calculations is approximately 10,731 pounds of uranium (as U_3O_8). The average grade of uranium in the pregnant leach solution during this reporting period was 30.2 ppm.

2. AVERAGE FLOW RATES TO THE PROCESSING PLANT

The average flow rates to the processing plant during this reporting period, by month, are as follows:

February, 1981	49.6 gpm
March, 1981	45.9 gpm
April, 1981 (3 days)	79.7 gpm

3. AVERAGE FLOW RATES TO THE POND

The average flow rates to the evaporation pond during this reporting period, by month, are as follows:

February, 1981	10.4 gpm
March, 1981	4.3 gpm
April, 1981 (3 days)	0.0 gpm

The high plant bleed figures for February and March are due to excursion correction measures.

4. TOTAL NUMBER OF GALLONS INJECTED AND RECOVERED

The total number of gallons injected and recovered during this reporting period are as follows:

Injected	3,671,051 gallons
Recovered	4,270,571 gallons

5. WASTE VOLUME GENERATED

The total volume of liquid waste effluent discharged to the evaporation pond during this reporting period was 599,520 gallons. The quality of the effluent is reflected in the analytical results of the monthly plant bleed samples presented in Table 1.

6. MONITOR WELL ANALYTICAL RESULTS

The analytical results of the required monitor well sampling program are presented in tabular form in Tables 2 through 8 and in graphical form on Figures 2 through 49. The locations of the monitor wells are shown on Figure 1. For the analytical results of special monitor well samples collected during the excursion detected at well 303-6-M 2, please refer to the special reports on monitor well analytical results dated March 25 and April 20, 1981.

Monitor well M 1 continued to exceed its upper control limit (UCL) for carbonate plus bicarbonate by a maximum of 21 mg/l during this reporting period. OPI still believes that the elevated level of carbonate plus bicarbonate at well M 1 is due to the normal outside sweep of the mining lixiviant.

Monitor well M 2 detected an apparent horizontal excursion during this reporting period. For a complete description of the problem at well M 2, please refer to the special reports on monitor well analytical results dated March 25 and April 20, 1981.

Upper aquifer monitor well M 3 exceeded its UCL for chloride on April 1 (1 mg/l) and on April 15 (2 mg/l). OPI believes that surpassing the UCL for chloride by 2 mg/l can be attributed to natural groundwater quality variation and/or the analytical precision of the laboratory which, according to the lab, is 3 to 4 mg/l for chloride.

For a discussion on the elevated chloride, conductivity, and carbonate plus bicarbonate levels at well M 4, please refer to the special report on monitor well analytical results dated March 25, 1981.

Monitor wells M 5 and M 6 continue to periodically exceed their UCLs for ammonia. Since OPI does not use any ammonia in its mining operation, the elevated ammonia values can only be attributed to natural groundwater quality variation and/or analytical precision.

7. MONITOR WELL WATER LEVELS

As required by the referenced Licenses, the depth to the water surface in each monitor well was measured each time the well was sampled. These measurements were taken prior to pumping the well for the water quality sample collection. The results of these water surface measurements are presented graphically on Figures 50 through 55.

8. ENVIRONMENTAL MONITORING

During this reporting period, three 48-hour air samples were collected and analyzed for radon 222. The data for these samples are shown in Table 9. Also

collected were three 24-hour air particulate samples for thorium 230, radium 226, and uranium. The data from these samples are shown in Table 10. These samples were collected at TLD Stations 1, 2, and 3 which are shown on the TLD Station Location Map (Figure 56). Quarterly results from the 22 environmental TLDs are shown in Table 11 with the locations shown on Figure 56.

Please contact our Casper office if additional information concerning this Report or the R & D operation is desired.

Sincerely,

OGLE PETROLEUM INC.

Gary A. Saunders
Environmental Engineer

Glenn J. Catchpole, Vice President
and Uranium Project Manager

GAS:jm

Enclosures

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