

GL02773-7

Quarterly Report

January 1 to March 31, 1979

Contract Number DE-AS07-76ID12029

Monthly Report

February 15 to March 31, 1979

Agreement Number DE-FC07-79ID12033

Geothermal Studies in Montana

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April 2, 1979

State Wide Program

A reservoir-temperature table containing calculated temperatures based on various geothermometers is in progress and will be completed by the time of the next quarterly report.

Approximately half of the data points from the Petroleum Information data file have been plotted on 1⁰ x 2⁰ maps with color coding to indicate the age of the zone(s) tested.

The Carter Bridge warm springs have been inventoried. The springs discharge along the east side of the Yellowstone River over a distance of roughly one third of a mile with an effective yield of 1,500 to 1,800 gpm of 27⁰C water. A data has been set for inventorying warm wells in the vicinity of Ashland, Montana.

The annotated bibliography is approximately two-thirds complete and is progressing on schedule.

Local assistance work has been limited to the Warm Springs Hospital area and around Livingston during this quarter. Discussions with oil-field drillers in Cut Bank and Havre indicate that MERDI may be able to get an oil-field rig to do the drilling within their budget limitations.

Marvin Miller represented the Bureau and presented research results at the D.O.E. meeting held in Salt Lake City.

A review draft of the Environmental Statement of the Island Park Geothermal Area has been received by Sonderegger and Schmidt, who attended the earlier workshop. A portion of the South Fork of the Madison River drainage would be deferred for leasing under one alternative and would be restricted to no surface occupancy under two other alternatives. Only the "no leasing" alternative would preclude further work in the West Yellowstone area.

Areal Studies

A final report on the geophysical studies at Ennis, Montana, is being prepared by Charles Wideman. Results from his work were used in siting the locations of thermal-gradient holes that are currently being drilled. Drilling results will be included in the next quarterly report.

Individual compilations of the mapping in the Centennial Valley area are in progress. The final compilation will await the completion of Matthew Mannick's work (Sept. 1). Abstracts by Mannick and by Sonderegger and Schofield were submitted and accepted for presentation at the Rocky Mountain Sectional G.S.A. meeting.

We have not received a response from the Flathead Planning Project concerning the possibility of working on Tribal Lands; however, the work has been outlined for fee land (privately held) within the Little Bitterroot drainage near Camas. Plans have been made for work in the Radersburg basin, and personnel have been selected for this study. Personnel for the West Yellowstone work have not yet been selected.