

BOISE GEOTHERMAL PROJECT: A PROGRESS REPORT

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A project has been funded by ERDA (AEC) to investigate the potential geothermal reserves along the Boise Front for possible utilization for large-scale space heating of government office buildings. The study will include geological, geophysical, and hydrological studies in an integrated program to define the nature of the resource. Engineering feasibility studies will be carried out by Aerojet Nuclear Corporation.

The Boise Front study area is envisioned as an interbedded sequence of lake beds, stream deposits, and lava flows which lap onto the granitic rocks of the Idaho Batholith. The Front represents the northeastern edge of the Snake River Plain and may be bounded by a series of northwest-southeast trending faults which are down towards the center of the plain.

Some hot springs and numerous hot water wells have been documented along the Front. It is postulated that the leakage of hot water is controlled by the northwest-southeast fault trend and a possible perpendicular fault trend.

The geological, geophysical, and hydrological studies are attempting to define the location of the large hot water reservoir which is feeding the shallow system. Geological field mapping will be carried out in the area in addition to hydrological studies in existing hot water wells, and wells to be drilled specifically for the project. Geophysical studies will include dipole-bipole resistivity mapping, magnetometer and gravimeter surveys, microseismicity study, an active seismic program, and borehole geophysical studies of the hydrological drill holes.