

American Association of Petroleum Geologists Bulletin, v. 60, no. 8, p. 1389. 1976

APPLEGATE, JAMES K., PAUL R. DONALDSON,
and LELAND L. MINK, Boise State Univ., Boise,
Ida.

Geologic and Seismic Studies of Boise Front, Idaho, for
Geothermal Resource Evaluation

Hot water has been used for space heating since 1890. Consequently, a project to investigate the possibilities of expanding the resource utilization was begun in January 1975.

It is postulated that the best productive zones would be in the areas of increased fracture porosity at the intersection of two or more faults. Thus, an integrated study utilizing remote sensing, field geology, resistivity, ground magnetics, microseismic and active seismic techniques was undertaken. Numerous fault trends have been defined by the investigation. The faults do not appear to be currently active, on the basis of approximately 9 months of microseismic monitoring.

Currently, exploratory holes are being drilled to understand better the geologic relations. However, further investigations need to be undertaken to study a larger area and also to detail the relations among various fault systems. Dipole-bipole resistivity mapping, electromagnetic soundings, and active seismic studies would be particularly beneficial.

The studies have been funded by ERDA.