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DRILLING DATA FROM EXPLORATION WELL 2-2A, NW 1/4, SEC. 15, T. 3 N., R. 31 E.,
IDAHO NATIONAL ENGINEERING LABORATORY, BUTTE COUNTY, IDAHO

By
David J. Doherty
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DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

EXPLANATION

DISCUSSION

The U.S. Department of Energy, in cooperation with the U.S. Geological Survey, drilled three exploration wells on the eastern Snake River Plain, Idaho, during the summer and fall of 1978. The wells were continuously cored, and range in depth from 2,000 ft (610 m) to 3,000 ft (914 m). The wells were drilled to obtain subsurface geologic information pertaining to geothermal exploration in three areas of the eastern Snake River Plain which have distinctly different types of geology.

Two of the wells are located on property of the Idaho National Engineering Laboratory (INEL), Idaho with the third well being located in Sugar City, Idaho (Andrew and others, 1979).

The preliminary report describes the lithology and shows the temperature distribution and geophysical logs of well 2-2A, located on the INEL site in the NW 1/4, sec. 15, T. 3 N., R. 31 E., Butte County, Idaho. The well was located by the U.S. Geological Survey to obtain subsurface information on the character and distribution of basaltic lava flows and interbedded sediments; 2) the age of the rocks and 3) the nature and extent of alteration of the rocks, and 4) an estimate of the heat flow in the area.

Drilling on well 2-2A began June 17, 1978, to a depth of 412 ft (125 m). Drilling was suspended on September 21, 1978, after reaching a total depth of 3,000 ft (914 m) on September 21, 1978. The geology of the area near the well has been briefly described by Anderson and others (1979). The subsurface geology is generalized by Anderson and others (1979). The subsurface geology is generalized by Anderson and others (1979). The subsurface geology is generalized by Anderson and others (1979).

Table 1.--Geophysical log information concerning drill hole 2-2A, located in the NW 1/4, sec. 15, T. 3 N., R. 31 E., Butte County, Idaho.

Log No.	Type	Date Logged	Feet	Meters
1	Temperature	9-22-78	0-2640	0-805
2	Temperature	9-24-78	2640-2990	805-911
3	Temperature	10-01-78	221-264	67.3-79.7
4	Gamma	9-22-78	0-2640	0-805

1. Logged by N. L. McCullough, Co. Box 5185 W. Yellowstone Hwy., Casper, Wyoming 82601.

2. Logged by Charles A. Brott and David D. Blackwell, Institute for the Study of Earth and Man, Geothermal Laboratory, 253 Leroy Building, Southern Methodist University, Dallas, Texas 75275.

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