

View northeast across Mono Lake. Geothermal Resources International, Inc. well "State PRC 4397.1" 1 in foreground. Tufa towers line the lake shore and extend into the water.

GL03514
**MONO LAKE
 GEOTHERMAL
 WELLS
 ABANDONED**

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Lawrence H. Axtell

California Division of
 Oil and Gas, Sacramento

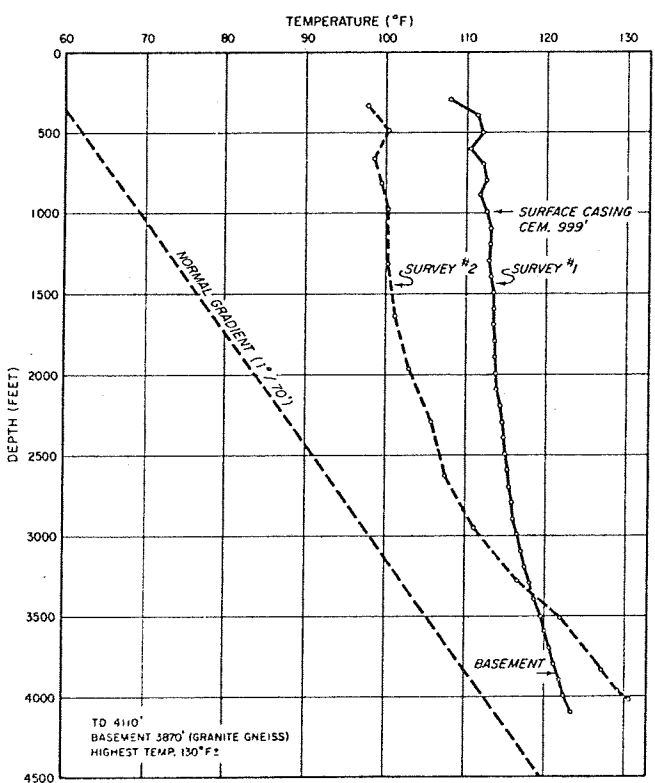
Prospects for the development of geothermal resources in the Mono Lake area were somewhat diminished with the drilling and abandonment of two wildcat wells late in 1971.

On September 13, 1971, the first well, Geothermal Resources International, Inc. "State PRC 4397.1" 1 (see *California Geology*, September 1971) was spudded on the south shore of Mono Lake. During drilling operations, the unconsolidated sediments encountered in the first 1000 feet washed out badly. This resulted in an unusually large

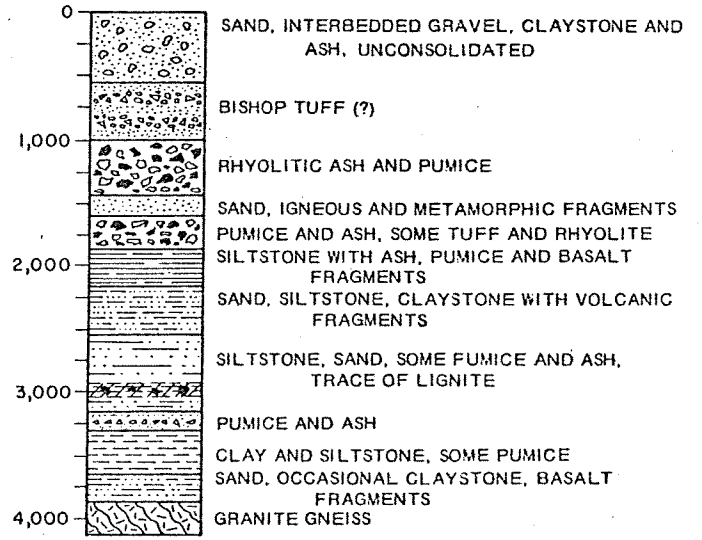
volume of cement being required to fill the annulus when the 13 3/8-inch surface casing was cemented in place at 999 feet.

The well was then drilled directionally from the shore to a point 4110 feet under the lake. Location of the bottom of the hole was 561 feet north 32° east of the surface location; total vertical depth was 4056 feet. The drilling rate, as well as the temperature, weight, and hydrogen sulfide content of the drilling mud were continuously monitored and recorded. The average temperature of the returning mud was 85°F (29.5°C) while drilling near the surface and increased gradually to a maximum of 115°F (46°C) at the bottom of the well.

The encountering of granite gneiss basement at 3870 feet and the low temperature and thermal gradient were discouraging. On September 26 the decision was made to cease drilling and to run temperature, dual-induction, sonic, and density logs. A lithologic column of the formations encountered is shown in an accompanying figure.



Temperature surveys of the Mono Lake exploratory geothermal well "State PRC 4397.1" 1 drilled by Geothermal Resources International, Inc. Data courtesy GRI, Inc.



Lithologic column of the Mono Lake exploratory well "State PRC 4397.1" 1.