

Base from U.S. Geological Survey, 1:500,000 1974, Roads modified 1975

Preliminary Map GEOTHERMAL ENERGY RESOURCES OF ARIZONA

Geothermal Map No. 1

Compiled by

W. R. Hahman, Sr., C. Stone, & J. C. Witcher
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Produced by

Bureau of Geology and Mineral Technology
Geological Survey Branch, University of Arizona
Tucson, Arizona 85719

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Drafted by

D. B. Dwyer

NOTE: The configuration and areal extent of the potential geothermal energy resource areas shown on this map are conjectural. This map was prepared to furnish background information for investigative projects. The leasing of land and drilling for geothermal energy should only be undertaken after a thorough geological investigation.

EXPLANATION

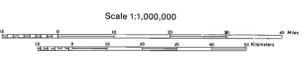
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|--|--|------|--|--|----|
| | Hot Spring >30°C | 4. | | Regions of High Chemical Geothermometers | 6. |
| | Area containing one or more water wells with temperature gradient >164°C/KM | 4. | | Regions of High Heat Flow (>2.5 HFU) | 6. |
| | Area containing one or more water wells with temperature gradient 55°-164°C/KM | 4. | | Regions of High Geothermal Gradients (>150°C/KM) | 6. |
| | Area with potential for hot dry rock | 4. | | Regions of High Geothermal Gradients (>36°C/KM) | 6. |
| | Oil/gas borehole—Celsius temperature and depth recorded | 4. | | Area containing KGRA determined by Arizona State Land Department | 4. |
| | Tested geothermal prospect | 4. | | Area containing KGRA determined by Federal Government | 4. |
| | Extrusive igneous rocks 3,000,000 years and younger | 1-3. | | Lineaments | 5. |
| | | | | Cinder cone | 2. |

SOURCES OF DATA

- Reference No.
1. Arizona Bureau of Mines, Outcrop of Quaternary igneous rocks, from Map of Outcrops of Tertiary and Quaternary rocks in Arizona, 1962
 2. Arizona Bureau of Mines, Correlation of Cinder Cones, from Geologic Map of Arizona, 1969
 3. Damon, P. E., Shafiqullah, M., and Lynch, D. J., Ages of volcanic fields determined by K-Ar dating at Laboratory of Isotope Geochemistry with support from N.S.F. Grant EAR 76-02590, U.S.G.S. Grant 14-08-0001-G-170 and the State of Arizona, January 1978
 4. Druit, C. E. and Conley, J. N., Geothermal Areas, Arizona Oil & Gas Conservation Commission, August 1977
 5. Lepley, L. K., Landsat Lineament Map of Arizona, October 1977
 6. Swanberg, C. A., Morgan, Paul, Stoyer, C. H. and Witcher, J. C., Regions of High Geothermal Potential, An Appraisal Study of the Geothermal Resources of Arizona and Adjacent Areas in New Mexico and Utah and Their Value for Desalination and other Uses, July 1977

Known Geothermal Resource Areas

- State**
1. Gila River
 2. W-C Maricopa
 3. Buckhorn-Higley
 4. SW Superstition Mtns.
 5. Roskrige Mtns.
 6. San Pedro Valley
 7. Wilcox
 8. Graham
 9. Clifton
- Federal**
- F1. Gillard Hot Springs
 - F2. Clifton Hot Springs



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