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**Age and Location of
Volcanic Centers $\leq$ 3.0 M. Y. Old
in Arizona, New Mexico and the
Trans-Pecos Area of West Texas**

(Modified from R. G. Luedke and R. L. Smith, 1978)

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MASTER

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EXPLANATION

- Volcanic Rocks ≤ 3.0 M. Y. Old
- Volcanic Center ≤ 3.0 M. Y. Old

DISCUSSION

This map is one of a series of maps designed for hot dry rock geothermal assessment in Arizona, New Mexico, and the Trans-Pecos area of west Texas. The 3.0 m.y. cutoff age was selected because original heat has probably largely dissipated in older rocks.

The location of volcanic centers is more important to geothermal resources assessment than the location of their associated volcanic rocks; however, ages have been determined for numerous flows far from their source. Therefore, the distribution of all volcanic rocks ≤ 3.0 m.y. old, for which there is at least one determined age, are shown. Location of the volcanic vents and rocks were taken from Luedke and Smith (1978).

Ages were obtained from the original literature in all cases except for McKee and others (1974), Silberman and others (1976), Ulrich and McKee (1976), and Wolfe and McKee (1976). The abstract by McKee and others (1974) lists only the ages of various rocks they dated, so locations were taken from Luedke and Smith (1978). The dates of Silberman and others (1976), Ulrich and McKee (1976), and Wolfe and McKee (1976) are taken from written communications cited by Luedke and Smith (1978); therefore, both references are shown on the map for those ages.

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