

U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

**GEOLOGIC MAP OF THE TULAROSA MOUNTAINS 30' × 60'
QUADRANGLE, CATRON COUNTY, NEW MEXICO**

Compiled by
James C. Ratté

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ABSTRACT

The “Geologic Map of the Tularosa Mountains 30-minute by 60-minute Quadrangle, Catron County, New Mexico” is intended to provide (1) regional geologic information at a scale intermediate between that of the latest New Mexico State Geologic Map and individual 7½-minute and 15-minute geologic quadrangles that cover part of the western part of the Mogollon-Datil volcanic field; and (2) updated, detailed information on the ages, sources, distribution, and correlation of caldera-related ignimbrites (ash-flow tuffs), and associated extrusive and intrusive volcanic rocks in the northwestern part of the Mogollon-Datil volcanic field. The ignimbrites are mainly outflow from the major Oligocene and Eocene caldera eruptive centers in adjacent areas, but the Tularosa Mountains 30-minute by 60-minute quadrangle also contains numerous eruptive centers of post-caldera age, which are aligned along major structural trends of basin and range age (between about 20 million and 1 million years), and constitute a basaltic to silicic, bimodal volcanic assemblage.

This publication consists of a map sheet and a pamphlet. The map sheet includes the principal map, a diagram showing stratigraphic correlation of map units, a list of map units, and four figures.

FIGURE CAPTIONS

Figure 1. Index map of New Mexico showing location of Tularosa Mountains 30-minute by 60-minute quadrangle, pink shaded; Quemado 30-minute by 60-minute quadrangle, pink diagonal lines (Chamberlin and others, 1994); and Mogollon Mountains 30-minute by 60-minute quadrangle, blue diagonal lines.

Figure 2. Index to 7½-minute topographic quadrangles in the Tularosa Mountains 30-minute by 60-minute quadrangle showing principal highways, settlements, and the Continental Divide. Settlements (shown by black dot): A, Aragon; AC, Apache Creek; C, Cruzville; L, Luna; OHS, Old Horse Springs; R, Reserve (Catron County Seat).

Figure 3. Index to published geologic maps and unpublished data in the Tularosa Mountains 30-minute by 60-minute quadrangle.

Figure 4. Structural features of the Tularosa Mountains 30-minute by 60-minute quadrangle showing fault pattern and major named fault zones, volcanic eruptive centers, and proposed caldera boundaries (red, this study; gray, prior study). Bar and ball on downthrown side of selected faults.

CORRELATION DIAGRAM

This is a diagram that shows the stratigraphic correlation of the units used on this map.

LIST OF MAP UNITS

This is a list of the map units in the form of a key to the map, which shows the color and symbol used on the map to represent each different map unit.