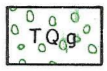


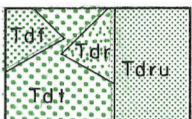
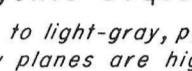
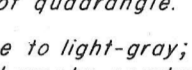
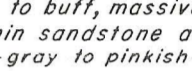
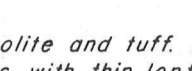




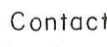
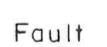
EXPLANATION

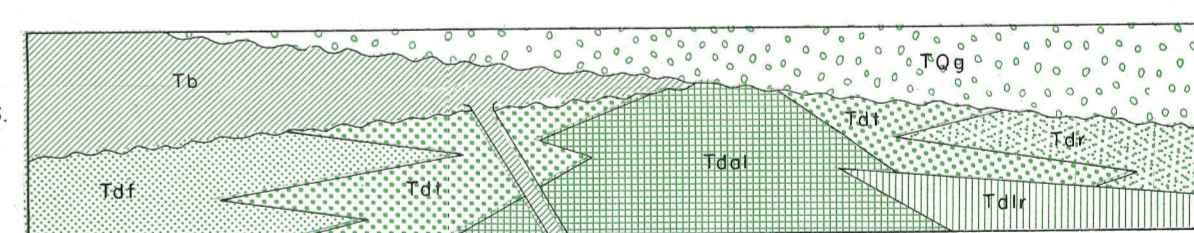
-  Gila conglomerate  
*Locally derived, massive, prevailing buff-colored volcanic sandstone and conglomerate; contains local interbedded thin rhyolite tuffs; upper surface in many areas mantled by a thin cover of pediment veneer gravels, high-level alluvium, and alluvial fan gravels.*
-  UNCONFORMITY
-  Basalt and basaltic andesite  
*Black to medium-gray, purplish-gray, and locally reddish-brown, massive to vesicular, fine-grained to porphyritic flows and flow breccias; contains local thin beds of rhyolite tuff; locally highly amygdaloidal with zeolites, calcite, clay, and silica minerals.*
-  UNCONFORMITY  
Rhyolite sequence
-  Tdf—Rhyolite flows. Pink to light-gray, porphyritic, flow-banded lithoidal rhyolite. Flow planes are highly contorted; spherulites and irregular cavities lined with quartz are common. Locally contains marekanites. Mapped separately only in northwestern quarter of quadrangle.
-  Tdr—Rhyolite flows. White to light-gray; well-developed phenocrysts of sanidine and smoky quartz; locally tin-bearing. Recognized only in northeastern quarter of quadrangle.
-  Tdt—Rhyolite tuffs. White to buff, massive, pumiceous and crystal tuffs and ash; local thin sandstone and conglomeratic sandstone interbeds. Light-gray to pinkish-gray, and brown welded tuff, commonly with pronounced planar structure, abundant coarse grains of quartz and sanidine, and locally pronounced columnar jointing.
-  Tdru—Undifferentiated rhyolite and tuff. Flows, domes, plugs, tuffs, and welded tuffs, with thin lenticular interbeds of purple, red, green, and buff sandstone and conglomeratic sandstone. May locally include quartz latites and latites, and possible equivalents of the upper rhyolite (Tur) of the Mogollon quadrangle.
-  Latite and rhyolite  
*Interlaid dark to light-gray, flow-banded, porphyritic latite, and flow-banded porphyritic rhyolite. Includes local thin rhyolite tuff and welded tuff beds.*
-  Andesite and latite  
*Red to brown, purple, and light-gray to black, vesicular to massive, fine-grained to porphyritic andesite and basaltic andesite flow breccias, flows, pyroclastics, and intrusives. Overlain by light-gray, bluish-gray, and greenish-gray to black calcic latite, latite, and quartz latite flow breccias, flows, pyroclastics and intrusives; fine-grained to porphyritic, locally vitrophyric. Highly altered and bleached in the vicinity of Alum Mountain and Copperas Peak.*

Datil formation

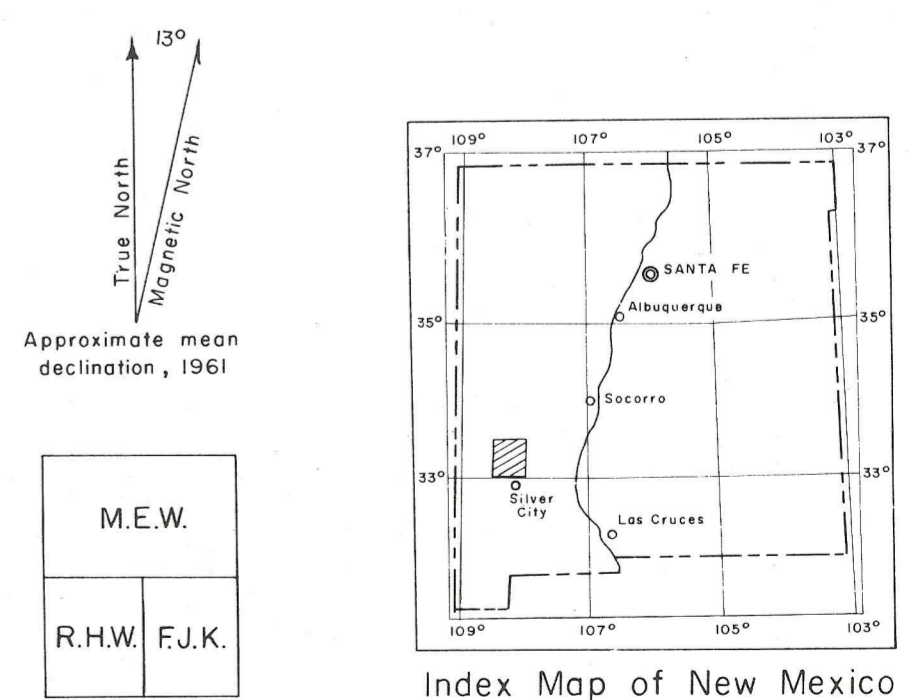
QUATERNARY (?)

TERTIARY

-  Contact  
*Approximately located. Dashed where approximately located in southern half of map.*
-  Fault  
*Dashed where approximately located or inferred. D down-thrown side; U upthrown side.*



Diagrammatic Relationships of Mapped Lithologic Units



Base from Beaverhead quadrangle of New Mexico State Highway Department.

Geology mapped in 1956-1958. Geologic cartography by Bob Price.

# RECONNAISSANCE GEOLOGIC MAP OF ALUM MOUNTAIN THIRTY-MINUTE QUADRANGLE

By Max E. Willard, Robert H. Weber, and Frederick J. Kuellmer

