

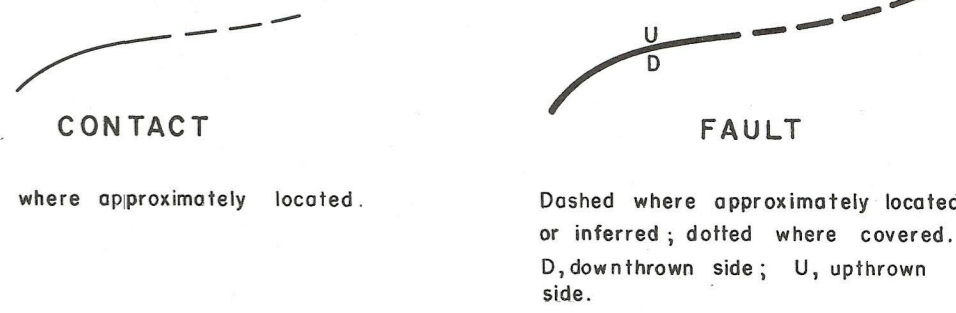
EXPLANATION

- Qal**
Valley alluvium
- UNCONFORMITY
- TQg**
Gila Conglomerate
Largely locally derived volcanic conglomerate and sandstone. Includes local lacustrine clays, silts, and diatomite; thin rhyolite tuff beds; and in some areas a thin cover of pediment veneer gravels, high-level alluvium, and alluvial fan gravels.
- UNCONFORMITY
- Tur** **Tb**
Upper rhyolite Basalt and basaltic andesite
Tur:— Rhyolite flows, volcanic domes, plugs, tuffs, and ash. Vitric and spherulitic varieties common in flows and minor intrusive bodies. Tuffs include welded vitric and micaceous varieties. Possible equivalents locally undifferentiated from rhyolite sequence of Datil formation (Tdr) in Mogollon Mountains and north and northeast of Mule Creek. Interlaid with upper flows of basaltic sequence (Tb) and with Gila conglomerate (TQg) west of Mule Creek.
Tb:— Black to medium-gray, locally reddish-brown, fine-grained flows, flow breccias, and minor tuffs and ash. Prominently vesicular at many places; locally contains amygdules of calcite, zeolites, clay, and silica minerals. Small reddish-brown grains of iddingsite are characteristic. Upper portion in some areas interlaid with Gila conglomerate (TQg) and with upper rhyolite (Tur).
- UNCONFORMITY
- Tdr** **Tdru** **Tdc**
Rhyolite sequence Volcanic conglomerate
Tdr:— Rhyolite flows. Pink to light-gray, porphyritic, flow-banded lithoidal rhyolite. Flow planes are highly contorted; spherulites and irregular cavities lined with quartz crystals are common. Locally contains marekanites. Mapped separately only in extreme northeastern corner of quadrangle.
Tdr:— Rhyolite tuffs. White to buff, massive pumiceous and crystal tuffs and ash; local thin sandstone and conglomeratic sandstone interbeds. Light-gray to pinkish-gray welded tuff, commonly with pronounced planar structure and abundant coarse grains of quartz and sanidine.
Tdru:— Undifferentiated rhyolite. Flows, volcanic domes, plugs, tuffs, and welded tuffs, with thin lenticular interbeds of purple, red, green, and buff sandstone and conglomeratic sandstone. Several flows and tuffs of light-colored to red quartz latite are included with rhyolite sequence in Mogollon mining district, where flows and breccias of underlying andesitic sequence (Tda) also are interlaid with rhyolite.
Tdc:— Red to brown lenticular conglomerate and sandstone containing pebbles, cobbles, and boulders largely of andesite and basaltic andesite. Probably correlative with Dog Gulch formation of Ferguson in Mogollon mining district.
- Tdl** **Tdal**
Quartz latite and latite Undifferentiated andesite and latite
Tdl:— Light to dark-gray, and bluish-gray to greenish-gray, less commonly pink to red quartz latite and latite flow breccias, pyroclastics, flows, and intrusive bodies. Highly porphyritic at many places. Locally bleached and altered. Includes thin rhyolite flows and tuffs along Mogollon Creek. Quartz latites in Mogollon mining district included within undifferentiated rhyolite sequence (Tdru).
Tda:— Red to purple, and light-gray to black andesite and basaltic andesite flow breccias, flows, pyroclastics, and intrusive bodies. In part vesicular to scoriaceous and amygdaloidal. Locally bleached and altered. In some areas difficult to distinguish from more calcic phases of overlying latites (Tdl); also difficult to distinguish from basalts and basaltic andesites of later sequence (Tb) where directly overlain by them.
Tdal:— Undifferentiated andesites and latites described above.
Correlation of these units with the Datil formation is tenuous; they may conceivably be a part of the earlier group of pre-Datil andesites and latites.

Datil Formation

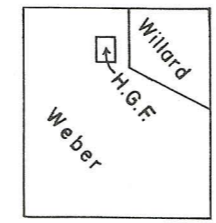
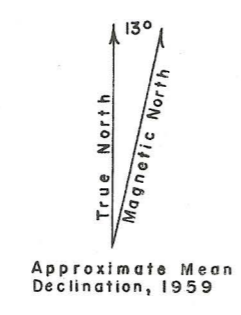
TERTIARY

QUATERNARY

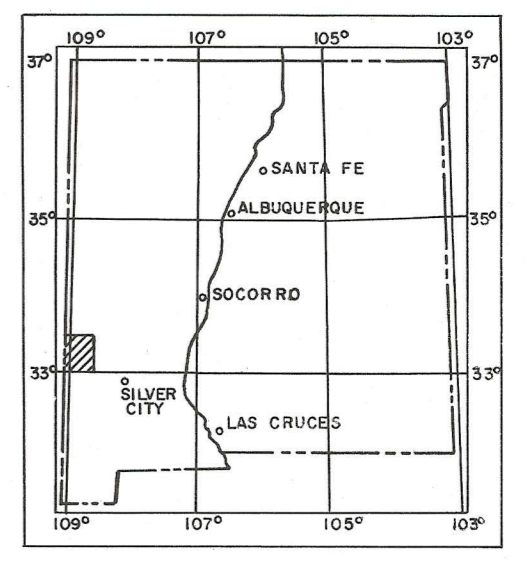


Diagrammatic Relationships of Mapped Lithologic Units

Base from Glenwood quadrangle of New Mexico State Highway Department.



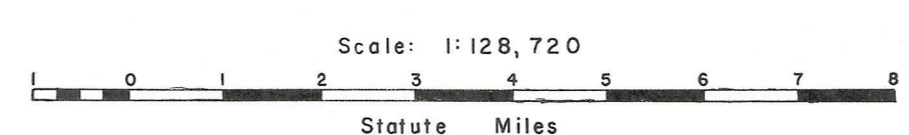
Geology mapped in 1956-57. Mogollon mining district generalized from H.G. Ferguson, U.S. Geol. Survey Bull. 787, 1927. Geologic cartography by E.S. Holman



INDEX MAP OF NEW MEXICO

RECONNAISSANCE GEOLOGIC MAP
OF
MOGOLLON THIRTY-MINUTE QUADRANGLE

By Robert H. Weber and Max E. Willard



Scale: 1:128,720

1959