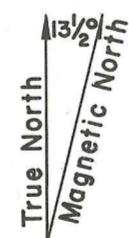


Base from Datil quadrangle
of New Mexico State
Highway Department.



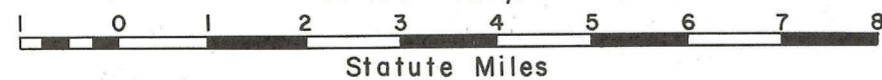
Approximate mean
declination, 1952

Compiled from unpublished geologic reconnais-
sance maps and Bulletin 58 of the New Mexico
Bureau of Mines and Mineral Resources.
Geologic cartography by E. S. Holman.

RECONNAISSANCE GEOLOGIC MAP OF DATIL THIRTY-MINUTE QUADRANGLE

By Max E. Willard and David B. Givens

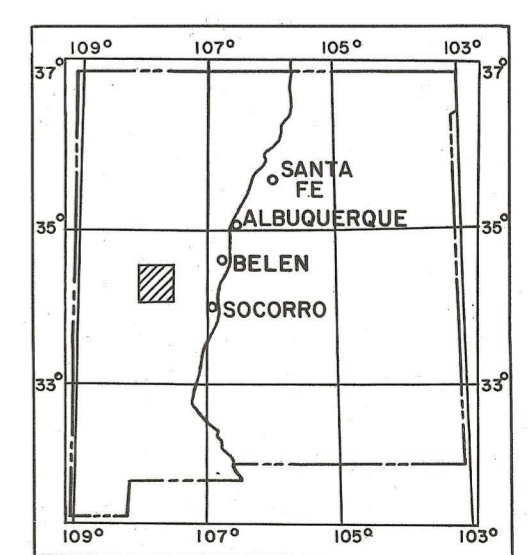
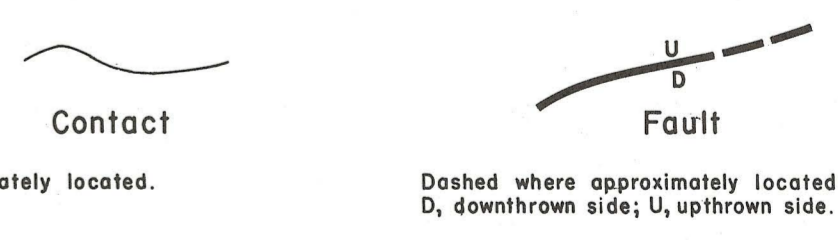
Scale: 1:126,720



1958

EXPLANATION

- | | |
|---|---|
| <p>Qal
Alluvium
Includes lake sediments of San Agustin Plain; small amounts of landslide debris and pediment gravel.</p> <p>TQg
Santa Fe group
Made up largely of locally derived conglomerate and sandstone.</p> <p>TQb
Basalt flows
Black, brecciated, and scoriaceous; typically contains phenocrysts of augite and olivine. At places overlies members of the Santa Fe group.</p> <p>UNCONFORMITY</p> <p>Tb
Basalt and basaltic andesite
Black to medium-gray, aphanitic, commonly vesicular; locally a flow breccia; characteristically contains scattered reddish-brown crystals of iddingsite. In part equivalent to the La Jara Peak basalt of the adjacent Puerfocito quadrangle.</p> <p>Tbi
Basalt intrusions
Black to dark-gray dikes and volcanic necks. May be genetically related to basalt and basaltic andesite flows (Tb).</p> <p>UNCONFORMITY (?)</p> <p>Tdt
Rhyolite tuff facies
Light-colored massive pumiceous and crystal tuffs, and welded tuff. Locally interlayered with other facies of the Datil formation. Locally contains conglomerate of volcanic and nonvolcanic detrital material. Equivalent, in part, to the Hells Mesa member of Dog Springs and Puerfocito quadrangles.</p> <p>Tda
Andesite-basaltic andesite facies
Gray to black coarsely porphyritic flow; contains lathlike feldspar phenocrysts as much as half an inch long. Similar flows in adjacent quadrangles to the south and west are interlayered with rhyolite tuff (Tdt).</p> <p>Tdl
Latite facies
Light-gray latite, welded tuff, and coarse latitic pyroclastics; equivalent to the Spears Ranch member of Puerfocito and Dog Springs quadrangles. Includes beds of sandstone and conglomerate, largely of latite, green to purple altered andesite, and smaller amounts of nonvolcanic detrital material.</p> <p>Tdvs
Volcanic sedimentary facies
Gray to light-gray siltstone, sandstone, and conglomerate; largely of latite fragments, but includes some beds of nonvolcanic detritus. Thin rhyolite tuff beds are present at places.</p> <p>Ti
Diorite porphyry intrusive
Light-gray, coarsely porphyritic; contains phenocrysts of plagioclase, hornblende, and biotite. Exposed in isolated outcrops near Rock Candy, south of Datil. Relative age not determined; may be hypabyssal equivalent of andesite facies (Tda).</p> <p>Ts
Nonvolcanic sedimentary rocks
Largely reddish-brown friable arkosic sandstone, shale, and siltstone; north of Madre Mountain includes beds of coarse conglomerate. At places grades laterally and vertically into the volcanic sedimentary facies (Tdvs) and is interbedded in its lower parts with Mesaverde-like sandstone. In part equivalent to sediments that elsewhere have been designated as the Boca formation.</p> <p>UNCONFORMITY (?)</p> <p>Kmv
Mesaverde group
Yellow and reddish-brown sandstone and conglomerate, and gray shale. May be in part equivalent to the Gallup and Crevasse Canyon formations.</p> <p>Km
Mancos shale
Light-gray slightly sandy carbonaceous shale and thin interlayered beds of yellow quartzose sandstone. Includes the Tres Hermanos sandstone.</p> <p>Kd
Dakota(?) sandstone
Consists of one 20-foot bed of yellow silica-cemented quartzose sandstone.</p> <p>UNCONFORMITY</p> <p>Rc
Chinle formation
Red to purple shales and mudstone; includes in its upper parts thin beds of gray sandstone.</p> | <p>QUATERNARY</p> <p>TERTIARY</p> <p>CRETACEOUS</p> <p>TRIASSIC</p> |
|---|---|



INDEX MAP
OF
NEW MEXICO