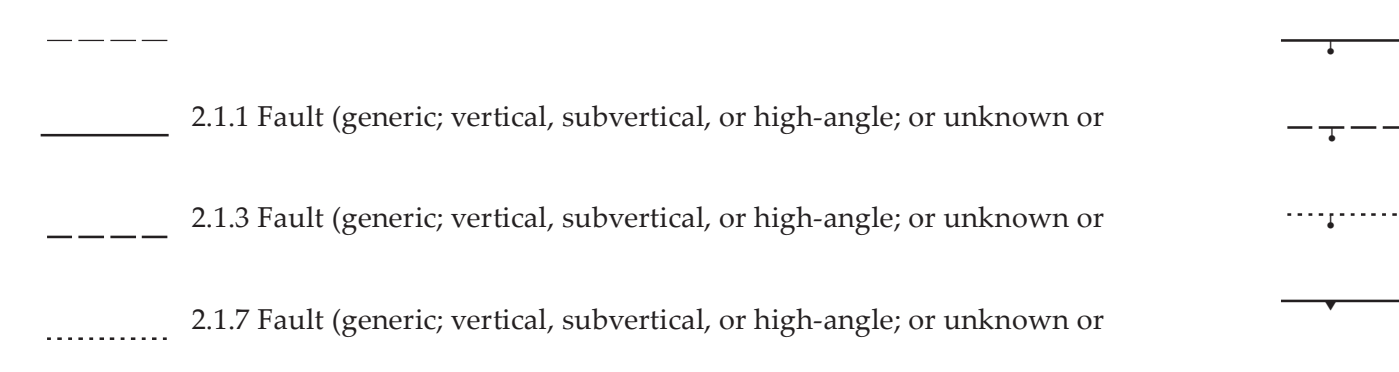
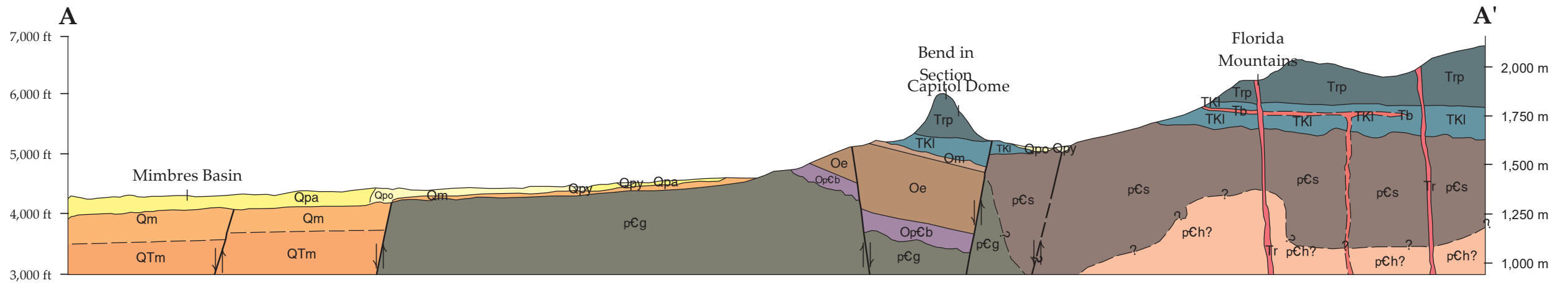
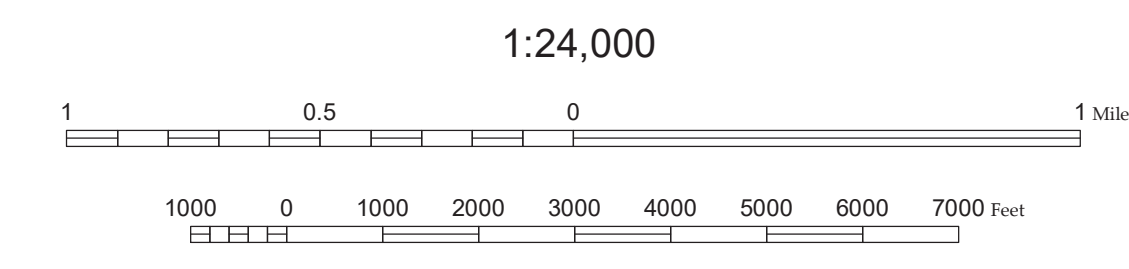
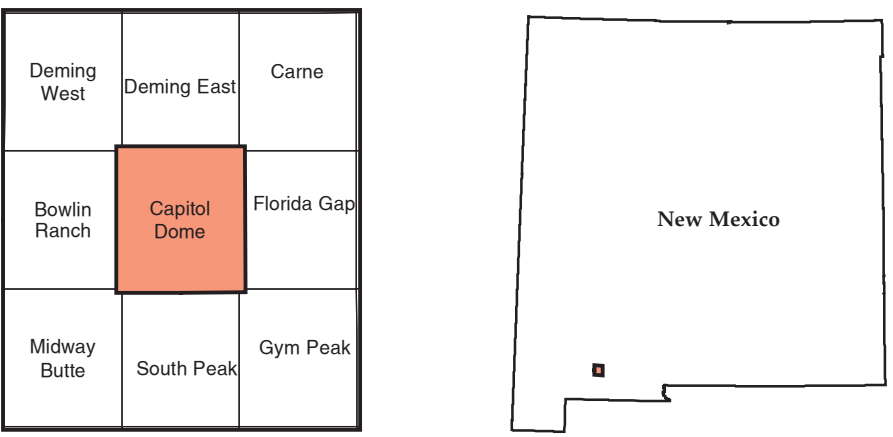


- 01-01-Unit-Qs-Windblown sand-Unconsolidated dunes up to 10 ft (3 m) high; mostly underlain by caliche horizon; forms cover over map units shown by
- 01-02-Unit-Qpy-Younger piedmont-slope arroyo alluvium-Fills (silty to gravelly) of shallow drainageways cut below older fan and erosion surfaces
- 01-03-Unit-Qpo-Older piedmont-slope alluvium-Unconsolidated fan deposits, piedmont-valley fills, and erosion-surface veneers; associated with surfaces
- 01-04-Unit-Qpa-Undifferentiated piedmont-slope alluvium-Complexly intermixed, older piedmont-slope alluvium and younger piedmont-slope
- 01-05-Unit-Qca-Undifferentiated colluvium-alluvium-Thin talus-slope veneers and colluvial and alluvial fills on arroyo-valley-side slopes; found in mountain
- 01-06-Unit-Qby-Younger Basin-floor sediments-Similar to Qbo except
- 01-07-Unit-Qbo-Older basin-floor sediments-Predominately nongravelly to slightly gravelly alluvium in the Mimbres Basin unaffected by arroyo incision;
- 01-08-Unit-Qm-Mimbres formation-Fan gravel and interbedded sandy lenses representing piedmont-slope facies; includes thin erosion-surface veneers near mountain fronts; upper layers contain carbonate accumulations (caliche) to
- 01-09-Unit-QTm-Mimbres formation-Similar to Qm but found on higher terrace remnants; igneous rock clasts are much more intensely weathered; thickness to
- 02-01-Unit-Tr-Rhyolite of Little Florida Mountains-Irregular, domal to dike-like intrusions and small flows of pale-red to dark-grayish-red flow-banded rhyolite; phenocrysts are very rare; includes two small outcrops along eastern margin of
- 02-02-Unit-Ta-Hornblende-andesite dikes-Intensely altered and deeply weathered dikes ranging from 1 to 6 ft (3 to 1.8 m) thick; exposed only in arroyos
- 02-03-Unit-Tb-Basalt or basaltic-andesite dikes and sills-Dark-gray to black, dense, aphanitic rock; a few dikes are diabasic; some of the rocks are slightly
- 02-04-Unit-Tr-Rhyolite dikes-Very light gray dikes ranging from 6 to 10 ft (1.8-5.5 m) thick; holocrystalline, generally nonporphyritic; fractures commonly
- 02-05-Unit-Trp-Rubio Peak Formation-Grayish-purple and reddish breccias of polyolithic volcanic clasts grading upward into greenish-gray breccias and conglomeratic sandstones; basal beds contain abundant granite and limestone
- 02-06-Unit-TK-Lobo Formation-interbedded reddish shale and nodular shaly limestone, gray siltstone, sandstone, and pebble-to-cobble conglomerate; this unit
- 03-01-Unit-Qm-Montoya Formation-Basal, coarse sandy dolomite (Cable Canyon) overlain by dark-brown, coarse-crystalline dolomite (Upbam); upper part of section consists of thin-bedded, medium-gray limestone and cherty
- 03-02-Unit-Qe-El Paso Formation-Basal unit of dark-gray medium-crystalline dolomite overlain by thin- to medium-bedded, light- to medium-gray limestone
- 03-03-Unit-Qb-Bliss Sandstone-Basal, brown arkose and coarse sandstone overlain by white, medium- to coarse-grained sandstone and a few fine-
- 04-01-Unit-Qc-Conglomerate-Cobble-to-boulder conglomerate with dark-red and green shale matrix; described as diamictite by Corbitt and Woodward (1973a); only exposure is 0.5 mi (0.8 km) north of Capitol Dome; thickness to
- 04-02-Unit-Qg-Granite-Coarse-crystalline, red granite; contains approximately 69% perthite and microcline, 24% quartz, 5% chlorite (altered biotite), and 2% magnetite, zircon, apatite, and apatite; cut by few felsite and basalt dikes,
- 04-03-Unit-Qs-Syenite and quartz syenite-Predominately coarse crystalline with many aplitic zones; fresh unaltered rock is bluish gray but prevailing outcrops are a yellowish-brown; composition ranges from syenite with only a trace of quartz
- 04-04-Unit-Qh-Hornfelses-Dark-gray, fine to medium-crystalline rock intruded by quartz syenite; composed of 52% calcic andesite, 23% urtinite, 19% augite, 2%
- 04-05-Unit-Qm-Metamorphic sequence-Biotite schist, biotite-hornblende gneiss,



Base map from U.S. Geological Survey 2010.
North American Datum of 1983 (NAD83) World Geodetic System of 1984 (WGS84).
Projectable and 1000-meter grid Universal Transverse Mercator, zone 13B. Shown in blue.
10 000-foot ticks; New Mexico Coordinate System of 1927 (west zone), shown in red.



New Mexico Bureau of Geology and Mineral Resources
Geologic Map 56

This draft geologic map is preliminary and will undergo revision. It was produced from either scans of hand-drafted originals or from digitally drafted original maps and figures using a wide variety of software, and is currently in cartographic production. It is being distributed in this draft form as part of the bureau's Open-file map series (OFGM), due to high demand for current geologic map data in these areas where STATEMAP quadrangles are located and it is the bureau's policy to disseminate geologic data to the public as soon as possible.

After this map has undergone review, editing, and final cartographic production adhering to bureau map standards, it will be released in our Geologic Map (GM) series. This final version will receive a new GM number and will supersede this preliminary open-file geologic map.

DRAFT

Comments to Map Users

A geologic map displays information on the distribution, nature, orientation, and age relationships of rock and deposits and the occurrence of structural features. Geologic and fault contacts are irregular surfaces that form boundaries between different types or ages of units. Data depicted on this geologic quadrangle map may be based on any of the following: reconnaissance field geologic mapping, compilation of published and unpublished work, and photogeologic interpretation. Locations of contacts are not surveyed, but are plotted by interpretation of the position of a given contact onto a topographic base map; therefore, the accuracy of contact locations depends on the scale of mapping and the interpretation of the geologists. Any enlargement of this map could cause misunderstanding in the detail of mapping and may result in erroneous interpretations. Site-specific conditions should be verified by detailed surface mapping or subsurface exploration. Topographic and cultural changes may not be shown due to recent development.

Cross sections are constructed based upon the interpretations of the author made from geologic mapping, and available geophysical, and subsurface (drill/lele) data. Cross sections should be used as an aid to understanding the general geologic framework of the map area, and not be the sole source of information for use in locating or designing wells, buildings, roads, or other man-made structures.

The New Mexico Bureau of Geology and Mineral Resources created the Open-file Geologic Map Series to expedite dissemination of these geologic maps and map data to the public as rapidly as possible while allowing for map revision as geologists continued to work in map areas. Each map sheet carries the original date of publication below the map as well as the latest revision date in the upper right corner. In most cases, the original date of publication coincides with the date of the map product delivered to the National Cooperative Geologic Mapping Program (NCCMP) as part of New Mexico's STATEMAP agreement. While maps are produced, maintained, and updated in an ArcGIS geodatabase, at the time of the STATEMAP deliverable, each map goes through cartographic production and internal review prior to uploading to the Internet. Even if additional updates are carried out on the ArcGIS map data files, citations to these maps should reflect this original publication date and the original authors listed. The views and conclusions contained in these map documents are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the State of New Mexico, or the U.S. Government.

New Mexico Bureau of Geology and Mineral Resources
New Mexico Tech
801 Leroy Place
Socorro, New Mexico
87801-4796
[575] 835-5490

This and other STATEMAP quadrangles are available for free download in both PDF and ArcGIS formats at:



Digital layout and cartography by the NMBGMR Map Production Group