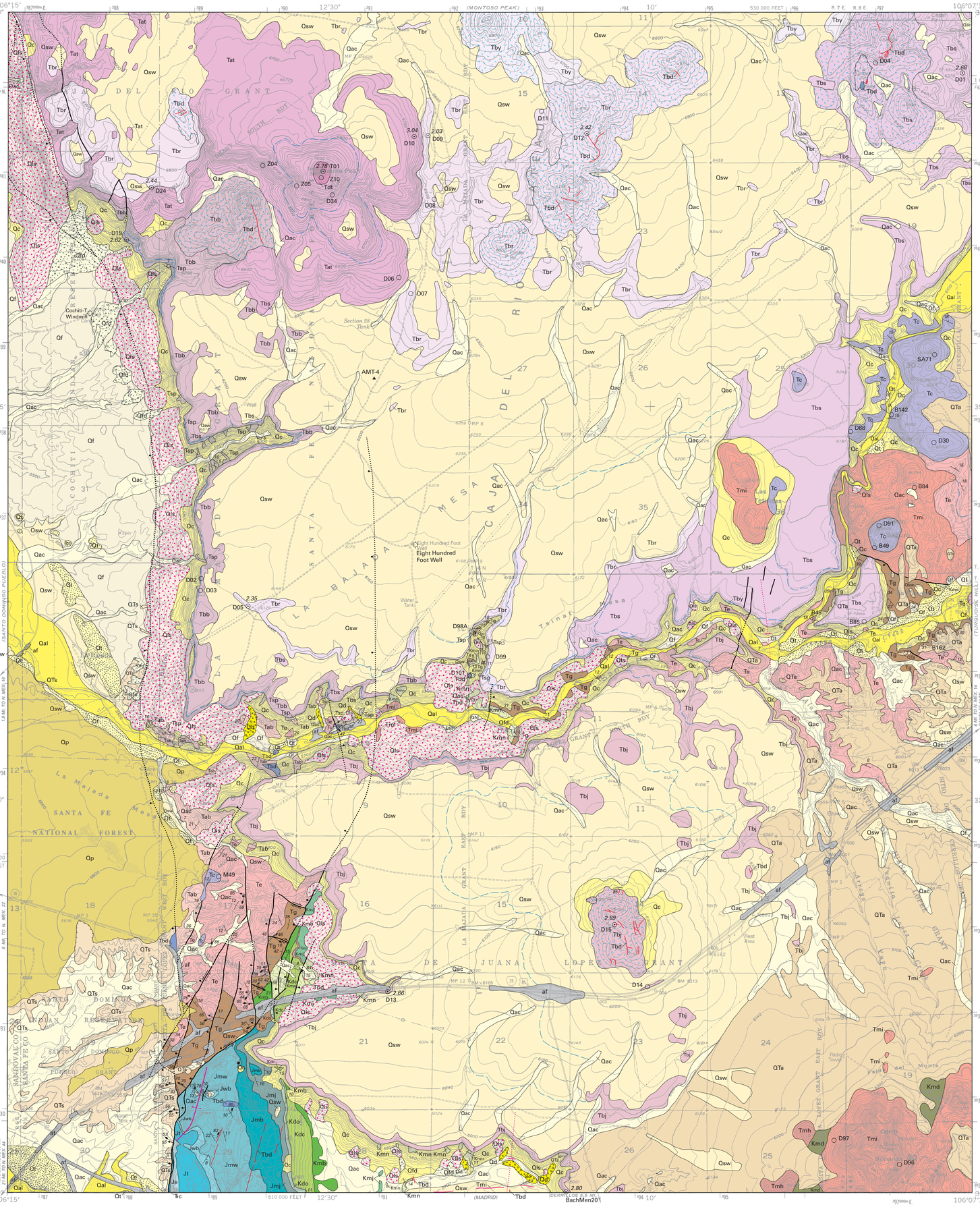
U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

MISCELLANEOUS FIELD STUDIES MAP MF–2352
Version 1.0
Pamphlet accompanies map



Base from U.S. Geological Survey, 1953; photorevised 1993.
North American Datum of 1927 (NAD 27). Projection and 10,000-foot grid ticks: New Mexico coordinate system, central zone (Transverse Mercator). 1,000-meter Universal Transverse Mercator grid ticks, zone 13.

APPROXIMATE MEAN DECLINATION, 1993

SCALE 1:24 000

CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

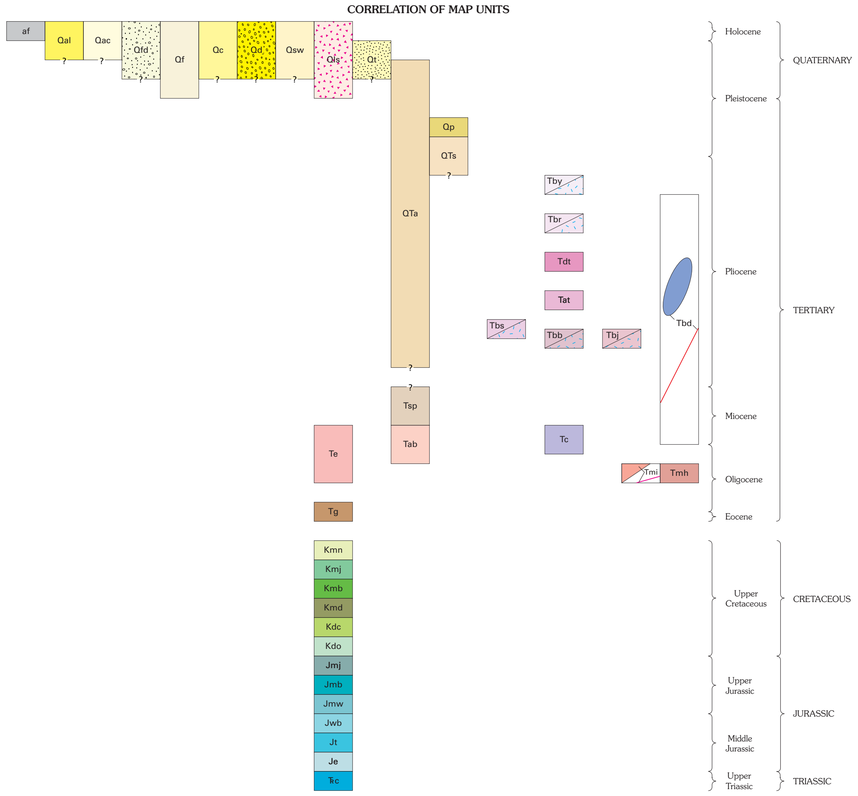
MAP LOCATION

Bedrock geology by David Sawyer, Scott Minor, and Ren Thompson, 1996–1999; surficial geology by Ralph Shroba, 1996–1998, assisted by Aaron Pecos, 1996.
Editing and digital cartography by Alessandro J. Donatich
Manuscript approved for publication December 13, 2000

GEOLOGIC MAP OF THE TETILLA PEAK QUADRANGLE, SANTA FE AND SANDOVAL COUNTIES, NEW MEXICO

By
David A. Sawyer, Ralph R. Shroba, Scott A. Minor, and Ren A. Thompson
Digital compilation by Jeffrey C. Blossom, Thomas R. Fisher, Ronald R. Wahl, and D. Paco Van Sistine
2002

CORRELATION OF MAP UNITS



LIST OF MAP UNITS

SURFICIAL DEPOSITS

- af — Artificial fill deposits (latest Holocene)
- Qal — Flood plain and stream channel deposits (Holocene and late(?) Pleistocene)
- Qac — Alluvium and colluvium, undivided (Holocene and late Pleistocene)
- Qfd — Fan alluvium and debris-flow deposits (Holocene to middle(?) Pleistocene)
- Qf — Fan alluvium (Holocene to middle Pleistocene)
- Qc — Colluvium, undivided (Holocene to middle(?) Pleistocene)
- Qd — Debris-flow deposits (Holocene to middle(?) Pleistocene)
- Qsw — Sheetwash deposits (Holocene to middle (?) Pleistocene)
- Qls — Landslide deposits (Holocene to early Pleistocene)
- Qt — Terrace alluvium (late and middle(?) Pleistocene)
- QTa — Ancha Formation (late or middle Pleistocene to Pliocene)
- Qp — Pediment deposits (middle Pleistocene)
- QTs — Upper Santa Fe Group sediments (middle or early Pleistocene to late(?) Pliocene)

TERTIARY ROCKS

Volcanic rocks of the Cerros de Rio volcanic field

- Tby — Younger basalt of Caja del Rio (Pliocene)
- Tbd — Basaltic dikes (Pliocene and Miocene)
- Tbr — Basalt of Caja del Rio (Pliocene)
- Tdt — Dacite of Tetilla Peak (Pliocene)
- Tat — Andesite of Tetilla Peak (Pliocene)
- Tbs — Basalt of Tsinat Mesa (Pliocene)
- Tbb — Basalt of La Bajada (Pliocene)
- Tbj — Basalt of Mesita de Juana (Pliocene)

Miocene to Eocene igneous and sedimentary rocks

- Tsp — Santa Fe Group–eastern piedmont facies (Miocene?)
- Tab — Abiquiu Formation (Miocene to Oligocene)
- Tc — Cieneguilla Basanite (Miocene to Oligocene)
- Te — Espinaso Formation (Miocene or Oligocene)
- Tmi — Monzonite and monzonite porphyry intrusions (Oligocene)
- Tmh — Hornblende monzonite porphyry (Oligocene)
- Tg — Galisteo Formation (Oligocene and Eocene)

MESOZOIC SEDIMENTARY ROCKS

Mancos Shale (Upper Cretaceous)

- Kmn — Niobrara Member
- Kmj — Juana Lopez Member, and Blue Hill and Fairport Members of the Carlile Shale, undivided
- Kmb — Bridge Creek Limestone and Graneros Members, undivided
- Kmd — Mancos Shale and Dakota Sandstone, undivided (Upper Cretaceous)

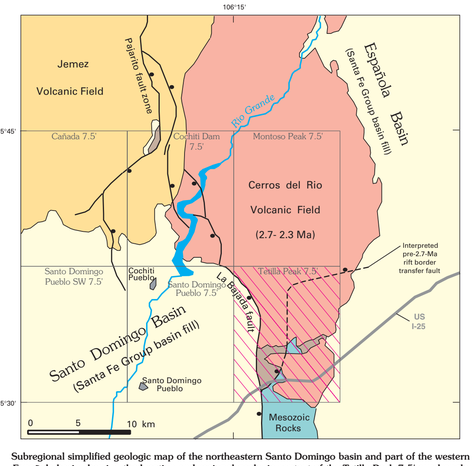
Dakota Sandstone (Upper Cretaceous)

- Kdc — Cubero Tongue
- Kdo — Oak Canyon Member

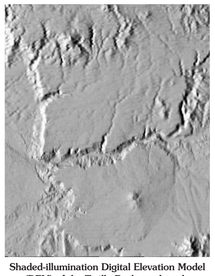
Morrison Formation (Upper Jurassic)

- Jmj — Jackpile Sandstone Member
- Jmb — Brushy Basin Member
- Jmw — Westwater Canyon Member
- Jwb — Wanakah Formation, Beclabito Member (Middle Jurassic)
- Jt — Todilto Formation (Middle Jurassic)
- Je — Entrada Sandstone (Middle Jurassic)
- Ꞧc — Chinle Formation (Upper Triassic)

- Contact
- Lava-flow contact—Concealed or uncertain internal flow contact
- Fault—Showing dip where known. Dotted where concealed. Bar and ball on downthrown side. Opposed arrows show strike-slip movement. Diamond indicates slip lineation bearing and plunge. Arrowhead indicates dip of fault plane at lineation site
- Anticline
- Syncline
- Cinder deposits in units Tby, Tbr, Tbs, Tbj, Tbb
- Strike and dip of bedding
- Joint
  - Inclined
  - Vertical or near vertical—Showing strike
- D13 2.66 — Geochronologic analysis sample locality—Showing isotopic age (in Ma) where available. See table 4
- D14 — Geochemical analysis sample locality—See table 3
- Pit or quarry
- AMT-4 — Audio-magneto-telluric (or high-frequency magnetotelluric) station



Subregional simplified geologic map of the northeastern Santo Domingo basin and part of the western Española basin showing the location and regional geologic context of the Tetilla Peak 7.5′ quadrangle



Shaded-illumination Digital Elevation Model (DEM) of the Tetilla Peak quadrangle

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This map was produced on request, directly from digital files, on an electronic plotter

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http://geology.cr.usgs.gov/pub/mf-maps/mf-2352