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

Prepared in cooperation with the
NEW MEXICO STATE ENGINEER OFFICE,
NEW MEXICO ENVIRONMENT DEPARTMENT,
and
NEW MEXICO BUREAU OF MINES AND MINERAL RESOURCES

Base from U.S. Geological Survey, Taos, New Mexico, 1:100,000, 1983; Wheeler Peak, New Mexico-Colorado, 1:100,000, 1982; Abiquiu, New Mexico, 1:100,000, 1978; and Chama, New Mexico-Colorado, 1:100,000, 1981

GEOLOGIC MAP OF TAOS COUNTY, NEW MEXICO

By
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1993

INDEX TO GEOLOGIC MAPPING

1. P.W. Bauer and C.M. Maxwell, New Mexico Bureau of Mines and Mineral Resources, written commun. (1992)
2. Lipman and Reed (1989)
3. J.M. Robertson, New Mexico Bureau of Mines and Mineral Resources, written commun. (1992)
4. Dane and Bachman (1965)
5. Dane and Bachman (1965) and New Mexico Bureau of Mines and Mineral Resources, written commun. (1992)
6. Clark and Read (1972)
7. Kelley (1978)
8. Lipman and Mehnert (1979)
9. Petersen (1969)
10. O'Neill and Mehnert (1988)
11. Chapin (1981)
12. Miller and others (1963)

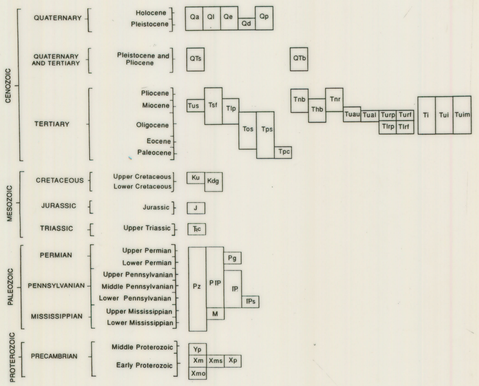
0 1 2 3 4 5 MILES
0 1 2 3 4 5 KILOMETERS

EXPLANATION

DESCRIPTION OF MAP UNITS

- **Qa** — Alluvium; upper and middle Quaternary (Holocene and upper Pleistocene)
- **Ql** — Landslide deposits and colluvium (Holocene and Pleistocene)
- **Qe** — Eolian deposits; fine quartz sand; used in "stacked unit" symbols where it veneers a unit of greater significance (Holocene and upper Pleistocene)
- **Qd** — Glacial deposits; till and outwash (upper and middle Pleistocene)
- **Qp** — Piedmont alluvial deposits; includes alluvial fans, deposits of higher gradient tributaries bordering major streams, and alluvial veneers of the piedmont slope (Holocene and Pleistocene)
- **QTs** — Upper Santa Fe Group (lower Pleistocene and Pliocene)
- **QTb** — Basaltic and andesitic volcanic rocks interbedded with Pleistocene and Pliocene sedimentary units
- **Tus** — Upper Tertiary sedimentary units; includes Picuris Formation and Las Feveras Formation (lower Miocene)
- **Tsf** — Lower and middle Santa Fe Group; Pliocene to uppermost Oligocene
- **Tlp** — Los Pinos Formation (equivalent to lower Santa Fe Group) (Miocene and upper Oligocene)
- **Tos** — Sedimentary and volcaniclastic sedimentary rocks with intermediate composition volcanic rocks locally (Oligocene and upper Eocene)
- **Tps** — Sedimentary rocks (Oligocene, Eocene, and Paleocene); includes El Rito and interfingering Blanco Basin Formations
- **Tpc** — Poison Canyon Formation, Raton Basin (Paleocene)
- **Tnb** — Basalt and andesite flows including the Servilleta Basalt (Pliocene); includes flows interbedded with the Santa Fe Group (Pliocene and Miocene)
- **Thb** — Hinsdale Basalt; alkalic basalts interbedded with Los Pinos Formation (Miocene and upper Oligocene)
- **Tnr** — Silicic volcanic rocks (Pliocene and Miocene)
- **Tuau** — Lower Miocene and uppermost Oligocene basaltic andesite and andesite
- **Tual** — Upper Oligocene andesite and basaltic andesite
- **Turp** — Upper Oligocene rhyolitic pyroclastic rocks (ash flow tuffs), primarily the Amalia Tuff
- **Turf** — Upper Oligocene silicic (or felsic) flows and masses
- **Tlrp** — Lower Oligocene silicic pyroclastic rocks (ash flow tuffs); includes the Treasure Mountain Tuff
- **Tlrf** — Lower Oligocene silicic (or felsic) flows and masses
- **Tl** — Tertiary Intrusive rocks, undifferentiated (Miocene and Oligocene)
- **Tui** — Miocene to Oligocene, silicic to intermediate intrusive rocks; dikes, stocks, sills, and plugs
- **Tulm** — Upper and middle Tertiary mafic-instrusive rocks (Miocene and Oligocene)
- **Ku** — Upper Cretaceous rocks, undivided
- **Kdg** — Dakota Group, Upper and Lower Cretaceous
- **J** — Jurassic rocks, undivided
- **Tc** — Chinle Group, Upper Triassic
- **Pz** — Upper Paleozoic rocks, undivided
- **Pg** — Glorieta Sandstone; texturally and mineralogically mature high-silica quartz sand
- **PIP** — Permian and Pennsylvanian rocks
- **IP** — Pennsylvanian rocks, undivided; includes the Sandia, Madera, La Pasada, Alamitos, and Flechado Formations
- **IPs** — Sandia Formation; predominantly a clastic unit (commonly arkosic) with minor black shale and limestone in lower part
- **M** — Arroyo Peñasco Group (Upper Mississippian)
- **Yp** — Middle Proterozoic plutonic rocks
- **Xp** — Early Proterozoic plutonic rocks
- **Xm** — Early Proterozoic metamorphic rocks, dominantly felsic volcanic, volcaniclastic, and plutonic rocks; includes Vadito Group and locally high-grade felsic gneisses of unknown age
- **Xms** — Early Proterozoic metasedimentary rocks; essentially equivalent to Hondo Group, but locally includes high-grade quartzite-pelitic schist of unknown age
- **Xmo** — Early Proterozoic metamorphic rocks, dominantly mafic
- **ds** — MINE DUMPS INDICATED AS DISTURBED GROUND
- GEOLOGIC CONTACT--Dashed where approximate or projected
- FAULT--Dashed where approximately located; dotted where concealed by younger units
- PRECAMBRIAN SHEAR ZONE
- MIOCENE AND OLIGOCENE SILICIC TO INTERMEDIATE DIKES
- UPPER AND MIDDLE TERTIARY MAFIC DIKES
- LATE PROTEROZOIC (?) DIABASE DIKES
- VOLCANIC VENTS AND CINDER CONES

CORRELATION OF MAP UNITS



Garrabrant, L. A., 1993, Water resources of Taos County, New Mexico: U.S. Geological Survey Water-Resources Investigations Report 93-4107

Geology from Paul Bauer and others, New Mexico Bureau of Mines and Mineral Resources, written commun. (1992)