



LIST OF MAP UNITS
[See accompanying pamphlet for detailed descriptions of map units, discussion of mapping methods and stratigraphy of drill-hole data, and references cited.]

- #### SURFICIAL DEPOSITS
- Artificial-Fill Deposits**
- af Artificial fill (latest Holocene)
- Alluvial Deposits**
- Oa Alluvium in stream channels and beneath treads of low terraces (Holocene)
 - Ot Terrace alluvium (Holocene and late Pleistocene)
 - Qsw Sheetwash deposits (Holocene and late? Pleistocene)
 - Qsw/Oby2 Sheetwash deposits over lava flow unit 2
 - Qsw/Oby1 Sheetwash deposits over lava flow unit 1
 - Og Gravelly alluvium (middle Pleistocene)
 - Ota Old alluvium and calcic soils of the Llano de Albuquerque (early? Pleistocene and Pliocene)
- Alluvial and Colluvial Deposits**
- Qay Young alluvial-slope deposits (Holocene and late Pleistocene)
 - Qac Alluvium and colluvium, undivided (Holocene and late? Pleistocene)
 - Qao Old alluvial-slope deposits (late? and middle? Pleistocene)
- Colluvial Deposits**
- Oc Colluvial deposits, undivided (Holocene to middle? Pleistocene)
- Alluvial and Eolian Deposits**
- Qas Sheetwash deposits, eolian sand, calcic soils, and minor stream alluvium associated with fault scarps (late and middle? Pleistocene)
- Eolian Deposits**
- Qea Active eolian sand (Holocene)
- Eolian and Alluvial Deposits**
- Qe Active and inactive eolian sand and sheetwash deposits, undivided (Holocene and late? Pleistocene)
 - Qes Inactive eolian sand and sheetwash deposits, undivided (Holocene and late? Pleistocene)
 - Qes/Ota Inactive eolian sand and sheetwash deposits over old alluvium and calcic soils of the Llano de Albuquerque (Holocene to Pliocene)
- LAVA FLOWS AND RELATED DEPOSITS OF ALBUQUERQUE VOLCANOES**
- Young lava flows and related deposits (middle Pleistocene)**
- Oby5c Cinder deposits on lava flow unit 5
 - Oby5 Lava flow unit 5
 - Oby4 Lava flow unit 4
 - Oby3 Lava flow unit 3
 - Oby2c Cinder deposits on lava flow unit 2
 - Oby2 Lava flow unit 2
 - Oby1 Lava flow unit 1
 - Obo Old lava flows (middle Pleistocene)
- UPPER SANTA FE GROUP SEDIMENTS**
- Tg Gravel unit of the upper Santa Fe Group sediments (Pliocene)
 - Tps Pebble sand unit of the upper Santa Fe Group sediments (upper Miocene)
 - Tms Mud and sand unit of the upper Santa Fe Group sediments (upper Miocene)
 - Ts Upper Santa Fe Group sediments, undivided (Pliocene and upper Miocene)
- CONTACTS AND FAULTS**
- Contact—Located with certainty. Contacts for surficial units Qsw, Qes, Qea, and Qe are approximately located.
 - - - Normal faults—Dashed where approximately located; dotted or dotted-and-dashed where concealed; bar and ball on apparent relative downthrown side, where known. Some concealed faults (dotted) are based chiefly on their topographic and geomorphic expression. Other concealed faults (dotted or dotted-and-dashed) are based in part or chiefly on interpretation of high-resolution aeromagnetic data (Grauch, 1999; U.S. Geological Survey and SIAL, Ltd., 1997). The latter faults are labeled "AM." The sense of motion indicated on some of the faults labeled "AM" is based on their subtle topographic and (or) geomorphic expression. Dip symbol and number indicate dip of fault plane.
- STRIKE AND DIP OF BEDDING**
- Inclined
 - Horizontal
- EXTENT OF ABUNDANT DUNES AND BLOWOUTS**—Delineates the approximate boundary of a 14 km² area within unit Qes, in the southwestern part of the map area, characterized by abundant dunes and blowouts.
- DRY HOLE DRILLED FOR HYDROCARBONS**—Approximately located; showing the lease name, hole number, and total depth (TD) in feet
- HOLE DRILLED FOR WATER RESOURCE EVALUATION**—Approximately located; showing name of well, well number, and total depth (TD) in feet
- APPROXIMATE LOCATION OF TRENCH**—Trench excavated across the westernmost fault near the southwest corner of the map area revealed that the soil K horizon formed in the top of unit Ota is displaced one meter down to the east (John W. Hawley, oral commun., 2003). Along this same fault, about 900 m south of the trench, the top of unit Tps is displaced 7 m down to the east

CONVERSION FACTORS

Multiply	By	To obtain
centimeters (cm)	0.3937	inches (in.)
meters (m)	3.281	feet (ft)
kilometers (km)	0.6214	miles (mi)

Scale from U.S. Geological Survey, 1954
Photorevised 1967 and 1973
Polyconic projection
North American Datum of 1927; 10,000-foot grid based on New Mexico coordinate system, central zone
1,000-meter grid ticks, zone 13

SCALE 1:24,000
CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Geology mapped in 1996-99 (See pamphlet for geologic mapping credit)
Geologic map database by Theodore R. Brandt
Digital map layout by William Sowers
Preparation of GIS files for map layout by Nancy Shock
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MAP SHOWING GEOLOGY ON TOPOGRAPHIC BASE GEOLOGIC MAP OF THE LA MESITA NEGRA SE QUADRANGLE, BERNALILLO COUNTY, NEW MEXICO

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