



GEOLOGIC MAP OF THE EAST-CENTRAL PART OF THE SAN JUAN BASIN, NEW MEXICO

SCALE 1:63,360

1 2 3 4 5 MILES

1 2 3 4 5 KILOMETERS

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

SECTIONED TOWNSHIP

- EXPLANATION**
- Quaternary**
- Aluvium
Sand, silt, and clay containing some gravel. Present in
most valleys.
- High terrace gravel
Gravel capping terraces; local colluvial deposits on
slopes and walls of valleys; sand, silt, clay, and gravel
in the higher parts of some valleys.
- Tertiary**
- San Jose Formation**
Tst. Tropic Member, red shale and interbedded white,
tan, and red sandstone.
Tst. Lower Member, massive red to buff conglomeratic
sandstone and interbedded sandy shale.
Tst. Basins Member, variegated shale and interbedded
thin to thick white to tan sandstone.
Tst. Cuba Mesa Member, thick buff to tan conglomeratic
sandstone and gray interbedded shale. Where the
Cuba Mesa Member intertongues with the Basins
Member, Tst. Tst. and Tst. are irregularly of the Cuba
Mesa Member.
- Nacimiento Formation**
Gray to olive-gray shale containing interbedded thin to
thick sandstone and conglomeratic sandstone.
- Opal Alamo Sandstone**
Buff to light-brown thick crossbedded sandstone con-
taining lenses of conglomeratic and thin lenses of
olive-gray and gray shale.
- Kirtland Shale and Fruitland Formation undivided**
Dark-gray to olive-gray shale and interbedded buff,
brown, and white sandstone. Contains local lenses of
pale conglomeratic sand.
- Pictured Cliffs Sandstone**
Gray to light-brown sandstone and interbedded gray
shale. Upper part is mostly soft sandstone. Lower
part is mostly sandy shale, containing lower
lenses of red sandstone. Where the Pictured Cliffs
Sandstone is overlain by the Kirtland Shale and
Fruitland Formation, north of sec. 4, T. 25 N.,
R. 1 E., the Pictured Cliffs grades laterally into the
upper part of the Lower Shale.
- Lower Shale**
Gray shale containing a few thin beds of sandstone,
siltstone, and conglomeratic limestone.
- Mesaville Group undivided**
Consists of an upper unit of thick sandstone, the La
Ventana Shale of the Cliff House Sandstone, a
middle unit of sandstone and shale, the
Mesaville Formation, and a lower unit of thick sand-
stone, the Point Lobos Sandstone.
- Sedimentary, igneous, and metamorphic rocks**
- Structural features**
- Anticline
Showing trace of axial plane and direction of plunge.
Dashed where approximately located; dotted where
concealed.
- Syncline
Showing trace of axial plane and direction of plunge.
Dashed where approximately located; dotted where
concealed.
- Anticlinal bend
Showing trace of axial plane and direction of plunge.
Dashed where approximately located; dotted where
concealed.
- Synclinal bend
Showing trace of axial plane and direction of plunge.
Dashed where approximately located; dotted where
concealed.
- Strike and dip of beds
- Strike and dip of overturned beds
- Structure contours
Drawn on basis of Opal Alamo Sandstone. Dashed where
approximately located. Contour interval 100 feet
except eastern margin of area where interval is 200
feet.
- Well drilled for oil or gas
Showing name of company, number, and date, and
altitude at base of Opal Alamo Sandstone.
- Locality of measured stratigraphic section
Shown on plate 2
- Line of correlation diagram
Diagrams shown on plates 4, 5, and 6
- Line of section
Sections shown on plate 6
- List of names of companies and independent drillers
corresponding to abbreviated names shown with
symbols of wells drilled for oil or gas
- Albuquerque, Oscar and Mike
Anadarko Petroleum Corp.
Benson, Martin and Greer
Blackford, Ken
Brickhoff Drilling Co.
Brown, A. N.
Clark and Crowder Production Co.
Cypress Oil Co.
Dell Oil Co.
El Paso Natural Gas Co.
Farrington, R. J.
Garrett and Ryan
Gulf Oil Corp.
Gunsight Butte Uranium Corp.
Harwood, J. B.
Harris, J. J.
Humble Oil and Refining Co.
Lover and others
Magdalena Petroleum Co.
Northwest Production Co.
Ocho Oil Co.
Pan American Petroleum Corp.
Paw Oil Co.
R. and G. Drilling Co.
Reid and Bates, Inc.
Reynolds Mining Corp.
Rogers Development, Inc.
San Juan Gas Corp.
Shell Oil Co.
Shively, Carroll
Shively Oil and Gas Co.
Smith, Lloyd, Inc.
Southern Texas Gas Co.
Spurrier and Hight
Standard Oil and Gas Co.
Sun Oil Co.
Turner, Fred, J.
U.S. Shoshone, Refining and
Mining Co.