DEPARTMENT OF THE INTERIOR
UNITED STATES GEOLOGICAL SURVEY

COAL INVESTIGATIONS
MAP C-92-B

DISCUSSION

The base of the Fruitland Formation (top of Pictured Cliffs Sandstone) is used as a datum because it is persistent throughout the area of the map, is relatively easy to identify on commercial logs, and is reported on most well data cards. The top of the Fruitland is not as reliable a datum because the Kirtland-Fruitland contact is arbitrary and difficult to identify on geophysical logs. Coals in the Fruitland are not reported on well data cards; their stratigraphic position is here based on published data and interpretation of available commerical well logs. The base of the lowest Fruitland coal in most well holes in the map area is less than 20 ft above the Fruitland-Pictured Cliffs contact and coincides with the contact in more than 50 percent of the holes; the coal-bearing interval ranges from less than 20 ft to more than 200 ft thick, and averages about 100 ft in thickness.

The base of the Fruitland Formation, therefore, is the most reliable indicator of approximate depths below ground surface of the Fruitland coals and thus is a fairly good indicator of overburden within the map area.

Commerical oil or gas wells on the map represent those for which reliable data was available during map preparation; the accompanying inset map shows total well locations as of January 1982.

MAP EXPLANATION

—5500— STRUCTURE CONTOUR—Drawn on top of Pictured Cliffs Sandstone; contours omitted, because of lack of well data, near outcrop of Pictured Cliffs Sandstone, where the elevation of the formation is greater than 6,100 ft. Contour interval 100 ft. Datum is mean sea level

DEPTHS FROM GROUND SURFACE TO BASE OF FRUITLAND FORMATION

- 0–500 ft
- 500–1,000 ft
- 1,000–2,000 ft
- 2,000–3,000 ft
- 3,000–4,000 ft

OUTCROP OF PICTURED CLIFFS SANDSTONE—Taken from Mytton, 1983

SELECTED OIL OR GAS WELLS—Used for map compilation

EXPLORATORY CORE HOLES

- U.S. Geological Survey—Drilled for coal resource studies
- U.S. Bureau of Land Management, U.S. Bureau of Reclamation, and U.S. Geological Survey—Drilled for resource and potential reclamation evaluation

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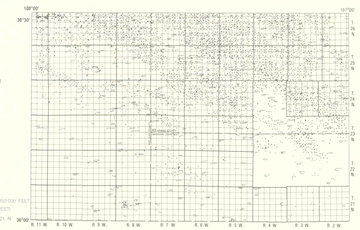
Note: Chaco Canyon National Monument was increased in size and designated Chaco Culture National Historical Park on December 19, 1980.



MAP FROM PETROLEUM INFORMATION CORPORATION SHOWING TOTAL WELL LOCATIONS IN CHACO CANYON 30′ x 60′ QUADRANGLE, AS OF JANUARY 1982

Base from U.S. Geological Survey, 1976
50,000-foot grid ticks based on the New Mexico Coordinate system, central and west zones
Projection and 10,000-meter grid, zone 13: Universal Transverse Mercator

SCALE 1:100 000
1 ½ 0 1 2 3 4 5 MILES
1 ½ 0 1 2 3 4 5 KILOMETERS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Compiled by N. W. Sweatt in 1981

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MAP SHOWING STRUCTURE CONTOURS ON TOP OF THE PICTURED CLIFFS SANDSTONE AND DEPTHS TO THE BASE OF THE FRUITLAND FORMATION, CHACO CANYON 30′ x 60′ QUADRANGLE, SAN JUAN, RIO ARRIBA, AND SANDOVAL COUNTIES, NEW MEXICO

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1983

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