



EXPLANATION

800
1000

OVERBURDEN ISOPACHS—Showing thickness of overburden, in feet, from the surface to top of the Upper McAlester coal bed. Isopach interval 200 feet (61.0m). Hachures indicate thinning.

60

INTERBURDEN ISOPACH—Showing thickness of interburden, in feet, between the Upper McAlester and Lower McAlester (Stigler) coal beds. Isopach interval 10 feet (3.05m).

312 (61)

COAL TEST MEASUREMENT—Showing thickness of overburden, in feet, (upper number) from the surface to top of the Upper McAlester coal bed and thickness of interburden, in feet, (lower number in parentheses) between the Upper McAlester and Lower McAlester coal beds.

727 (53)

OIL AND GAS TEST HOLE—Showing thickness of overburden and thickness of interburden as outlined above.

UM

INFERRED TRACE OF COAL BED OUTCROP—Showing symbol of trace of coal bed. Arrow points toward coal-bearing area.

15MR

MINING-RATIO CONTOUR—Number indicates cubic yards of overburden per ton of recoverable coal by surface mining methods. Contours shown only in areas underlain by coal of Reserve Base thickness within the stripping limit (in this quadrangle, the 150-foot-overburden isopach). To convert mining ratio to cubic meters of overburden per metric ton of recoverable coal, multiply mining ratio by 0.8428.

150 SL

150 SL STRIPPING-LIMIT LINE—Boundary for surface mining (in this quadrangle, the 150-foot-overburden isopach). Arrow points toward the area suitable for surface mining where the recovery factor is 80 percent, and away from the area suitable for subsurface mining (down dip to the 3,000-foot-overburden isopach) where the recovery factor is 50 percent.

NOTE: Thickness rounded to nearest foot.
To convert feet to meters, multiply feet by 0.3048.

NOTE: Surveyed elevations on oil and gas wells may not agree with well spots on topographic maps.

Topographic elevations on 7-1/2' quadrangles may not match with adjoining boundaries from 15' quadrangles.

Both factors result in overburden anomalies.

Base from U.S. Geological Survey, 1940
This map intended for land-use planning purposes only.

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UTM GRID AND 1979 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

SCALE 1:24,000

CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

QUADRANGLE LOCATION

Compiled 1980/1981

FEDERAL COAL RESOURCE OCCURRENCE MAP OF THE NORTHWEST QUARTER OF THE RED OAK 15-MINUTE QUADRANGLE, LATIMER COUNTY, OKLAHOMA

BY GEOLOGICAL SERVICES OF TULSA, INC., AND B. T. BRADY, USGS

PLATE 7

INTERBURDEN ISOPACH MAP OF THE UPPER AND LOWER McALESTER COAL BEDS AND OVERBURDEN ISOPACH AND MINING RATIO MAP OF THE UPPER McALESTER COAL BED