EXPLANATION

-800

-1000 SS

OVERBURDEN ISOPACHS-Showing thickness of overburden, in feet, from the surface to the Hartshorne Sandstone Formation. Isopach interval 200 feet (61.0m.).

-1000 UH

-800

OVERBURDEN ISOPACHS-Showing thickness of overburden, in feet, from the surface to top of the Upper Hartshorne coal bed. Isopach interval 200 feet(61.0 m.).

50

60

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

○ 599 (53)

COAL TEST MEASUREMENT-Showing thickness of overburden, in feet, (upper number) from the surface to top of the Hartshorne coal bed (or Upper Hartshorne where split) and thickness of interburden, in feet, (lower number in parentheses) between the Upper Hartshorne and Lower Hartshorne splits of the Hartshorne coal bed.

● 1711 (SS) (44)

OIL AND GAS TEST HOLE-Showing thickness of overburden, in feet, from the surface to top of the Hartshorne Sandstone Formation (upper number) and interburden, in feet, (lower number in parentheses) between the Hartshorne Sandstone Formation and Lower Hartshorne coal bed.

UH

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

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

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: Overburden isopach adjusted to correspond with topography of Wilburton 7.5 minute quadrangle.

NOTE: Mining ratios have not been drawn through mined-out areas or areas below Reserve Base thickness.

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 boundries from 15' quadrangles.

Both factors result in overburden anomalies.

LIMIT OF UH 1' THICK COAL

Base from U.S. Geological Survey, 1940

This map intended for land-use planning purposes only.

This report was prepared under contract to the U.S. Geological Survey, and has not been edited for conformity with Geological Survey editorial standards or stratigraphic nomenclature. Opinions expressed herein do not necessarily represent those of the Geological Survey.

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

OKLAHOMA
QUADRANGLE LOCATION

Compiled 1980/1981

INTERIOR-GEOLOGICAL SURVEY, RESTON, VIRGINIA-1980

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 14

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