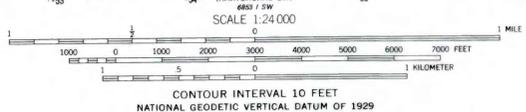


- EXPLANATION**
- 800 —
  - 1000 —
- OVERBURDEN ISOPACHS—Showing thickness of overburden, in feet, from the surface to top of the Upper Hartshorne coal bed. Isopach interval 200 feet (61.0 m).
- 50 —
  - 40 —
- INTERBURDEN ISOPACHS—Showing thickness of interburden, in feet, between the Upper and Lower Hartshorne coal beds. Isopach interval 10 feet (3.05 m).
- 4.1 (4.1)
- 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. Mining Ratio number in brackets.
- 2686
- OIL AND GAS TEST HOLE—Showing thickness of overburden and thickness of interburden as outlined above.
- UH —
- INFERRED TRACE OF COAL BED OUTCROP—Showing symbol of name of coal bed. Arrow points toward coal-bearing area.
- ▲
- THRUST FAULT—Sawtooth on upthrown or overthrust side. Dashed where approximately located.
- 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: Mining Ratios have not been drawn in mined-out areas below Reserve Base thickness.

NOTE: Mining Ratios and 150' SL omitted here due to crowding of steep structure dip.

NOTE: 10 Mining Ratio omitted due to crowding.



UTM GRID AND 1978 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

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.

## FEDERAL COAL RESOURCE OCCURRENCE MAP OF THE KREBS 7.5-MINUTE QUADRANGLE, PITTSBURG COUNTY, OKLAHOMA

BY GEOLOGICAL SERVICES OF TULSA, INC., B. T. BRADY, USGS, AND J. L. QUERRY, BLM

**PLATE 10**  
INTERBURDEN ISOPACH AND MINING RATIO MAP OF THE UPPER AND LOWER HARTSHORNE COAL BEDS OVERBURDEN ISOPACH AND MINING RATIO MAP OF THE UPPER HARTSHORNE COAL BED

COMPILED IN 1980  
This map intended for land-use planning purposes only