



**EXPLANATION**

**2000**  
**OVERBURDEN ISOPACHS**--Showing thickness of overburden, in feet, from the surface to top of the Lower Split of the Hartshorne coal bed. Isopach interval 1000 feet (305m).

**30**  
**0(7.8)**  
**COAL TEST MEASUREMENT**--Showing thickness of overburden, in feet, (upper number) from the surface to top of the Lower Split of the Hartshorne coal bed. Mining ratio in brackets.

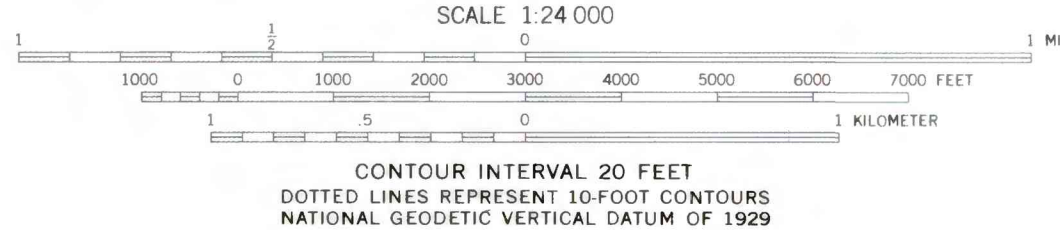
**LH**  
**INFERRED TRACE OF COAL BED OUTCROP**--Showing symbol of name of coal bed. Arrow points toward coal-bearing area.

**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 0.8426.

**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.**

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.



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

**FEDERAL COAL RESOURCE OCCURRENCE MAP OF THE SOUTHEAST QUARTER OF THE HEAVENER 15-MINUTE QUADRANGLE, LE FLORE COUNTY, OKLAHOMA**  
 BY GEOLOGICAL SERVICES OF TULSA, INC., B. T. BRADY, USGS, AND J. L. QUERRY, BLM