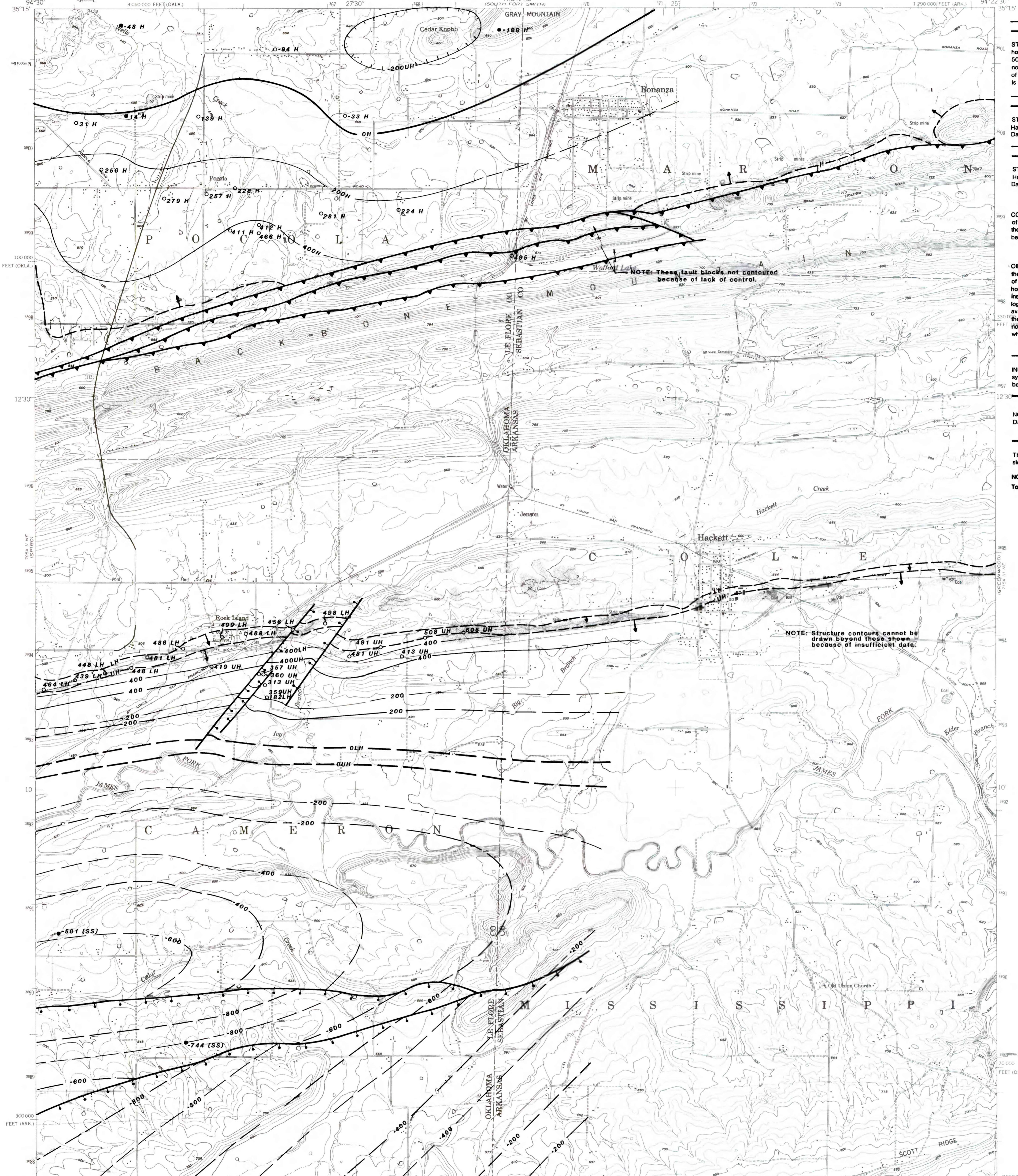


UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

HACKETT QUADRANGLE  
ARKANSAS-OKLAHOMA  
7.5 MINUTE SERIES (TOPOGRAPHIC)



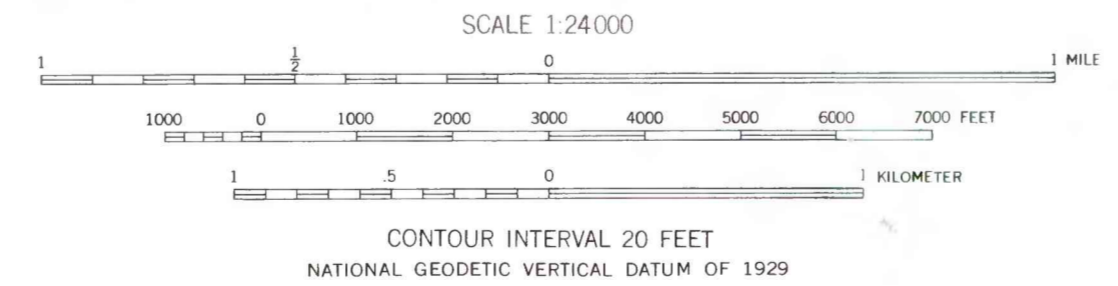
- EXPLANATION**
- 800 —
  - 1000H —
- STRUCTURE CONTOURS—Drawn on top of the Hartshorne coal bed. Solid where vertical accuracy within 50 feet; long dashed where vertical accuracy possibly not within 50 feet; Hachures indicate closed contours of basin. Contour interval is 200 feet (61.0m). Datum is mean sea level.
- 800 —
  - 1000UH —
- STRUCTURE CONTOURS—Drawn on top of the Upper Hartshorne coal bed. Contour interval 200 feet (61.0m). Datum is mean sea level.
- 800 —
  - 1000LH —
- STRUCTURE CONTOURS—Drawn on top of the Lower Hartshorne coal bed. Contour interval 200 feet (61.0m). Datum is mean sea level.
- 932 UH
  - 947 LH
- COAL TEST MEASUREMENT—Showing altitude of top of coal beds, in feet. Drill holes which did not intersect the coal bed, or mine measured sections from which bed altitude could not be determined, are not shown.
- 922 (SS)
- OIL AND GAS TEST HOLE—Showing altitude of top of the Hartshorne Sandstone Formation selected because of its close proximity to the Upper Hartshorne - Hartshorne coal zone in wells where the suite of logs was insufficient to verify coal occurrence. Wells for which logs of the first 3,000 feet (914.4m) interval were not available or wells whose logged interval began below the base of the Hartshorne Sandstone Formation are not shown. Appendix II structural top information which could not be verified is similarly not shown.
- H —
- INFERRED TRACE OF COAL BED OUTCROP—Showing symbol of name of coal bed. Arrow points toward coal-bearing area.
- NORMAL FAULT—Bar and ball on downthrown side. Dashed where approximately located.
- THRUST FAULT—Sawtooth on upthrown or overthrown side. Dashed where approximately located.
- NOTE: Altitudes rounded to the nearest foot.  
To convert feet to meters, multiply feet by 0.3048.

NOTE: These fault blocks not contoured because of lack of control.

NOTE: Structure contours cannot be drawn beyond those shown because of insufficient data.

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 HACKETT 7.5-MINUTE QUADRANGLE,  
LEFLORE COUNTY, OKLAHOMA AND SEBASTIAN COUNTY, ARKANSAS  
BY GEOLOGICAL SERVICES OF TULSA, INC., B. T. BRADY, USGS, AND J. L. QUERRY, BLM

PLATE 5  
STRUCTURE CONTOUR MAP OF  
THE HARTSHORNE COAL BED AND  
UPPER AND LOWER SPLITS