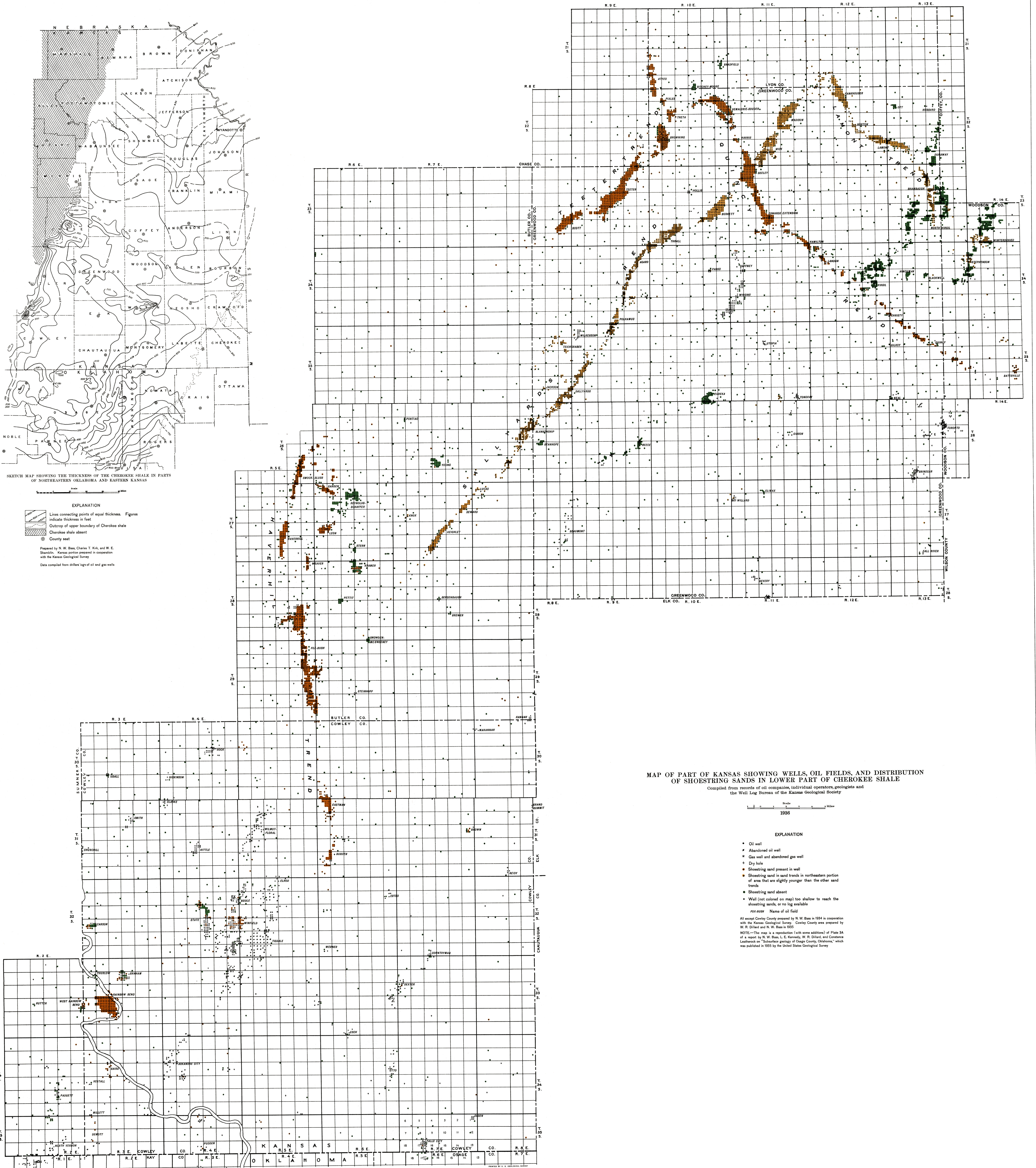


SKETCH MAP SHOWING THE THICKNESS OF THE CHEROKEE SHALE IN PARTS OF NORTHEASTERN OKLAHOMA AND EASTERN KANSAS

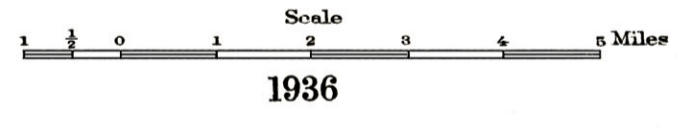
- EXPLANATION**
- Lines connecting points of equal thickness. Figures indicate thickness in feet.
 - - - Outcrop of upper boundary of Cherokee shale.
 - Cherokee shale absent.
 - ⊙ County seat.

Prepared by N. W. Bass, Charles T. Kirk, and W. E. Shamblin. Kansas portion prepared in cooperation with the Kansas Geological Survey.

Data compiled from driller logs of oil and gas wells.



MAP OF PART OF KANSAS SHOWING WELLS, OIL FIELDS, AND DISTRIBUTION OF SHOESTRING SANDS IN LOWER PART OF CHEROKEE SHALE
 Compiled from records of oil companies, individual operators, geologists and the Well Log Bureau of the Kansas Geological Society



- EXPLANATION**
- Oil well
 - ◊ Abandoned oil well
 - ✦ Gas well and abandoned gas well
 - ⊕ Dry hole
 - Shoestring sand present in well
 - Shoestring sand in sand trends in northeastern portion of area that are slightly younger than the other sand trends
 - ◐ Shoestring sand absent
 - Well (not colored on map) too shallow to reach the shoestring sands, or no log available
- For. name* Name of oil field

All except Cowley County prepared by N. W. Bass in 1934 in cooperation with the Kansas Geological Survey. Cowley County area prepared by W. R. Dillett and N. W. Bass in 1935.

NOTE—The map is a reproduction (with some additions) of Plate 3A of a report by N. W. Bass, L. E. Kennedy, W. R. Dillett, and Costanza Leathrock on "Subsurface geology of Osage County, Oklahoma," which was published in 1933 by the United States Geological Survey.