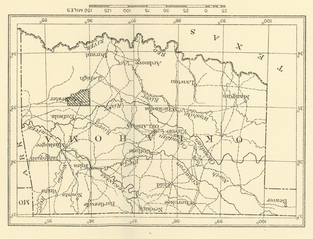

R.13 E.
R.14 E.
R.15 E.
R.16 E.
R.17 E.
T. 6 N.
T. 5 N.
T. 4 N.
T. 3 N.
Mc Alester
Krebs
Alderson
Bache
Dow
Haileyville
Hartshorne
Gowen
Haywood
Savanna
Kiowa
Pittsburg
Blanco
Craig
LAKE TALAWANDA
PITTSBURG COUNTY
LATIMER COUNTY
Wildhorse Creek
Coal Creek
Mud Creek
Buffalo Creek
Gaines Creek
Ash Creek
Brushy Creek
Peaceable Creek
Bugg Creek
Beaver
Cherokee
Newkirk
Bartlesville
Nowata
Vinita
Enid
Tulsa
Tahlequah
MO

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

COAL MAP
OF THE
McALESTER DISTRICT, PITTSBURG AND LATIMER COUNTIES, OKLAHOMA

Surveyed in 1930 and 1931 by T. A. Hendricks assisted by
C. B. Read, C. W. Wilson, Jr., C. R. Williams, T. L. Metcalf,
T. D. Mundorf, and B. M. Choate.

Scale: 2 inches = 1 mile

1933

PRELIMINARY EDITION

EXPLANATION

Outcrop of minable coal bed.
Approximate outcrop of minable coal bed.
Outcrop of thin coal bed.
Abandoned slope mine.
Abandoned shaft mine.
Operating slope mine.
Operating shaft mine.
Abandoned strip pit.
Limit of mine workings.
● *No.1* Diamond drill hole.
(Number corresponds to numbers of logs given in Senate Document 390.)
Brick plant.
Shear fault.
Arrow indicates direction of horizontal movement.
U D Normal fault.
D, *Downthrow.*
U, *Upthrow.*
Thrust fault.
T, *Thrust side*
Axis of anticline.
Axis of syncline.
40° Dip of beds.
⊕ Horizontal beds.
Boundary of segregated Indian coal lands.

System	Series	Formation	Section	Thickness (feet)	Coal beds	Character of rocks	Topographic expression
Carboniferous	Pennsylvanian	Thurman sandstone		200+		Sandstone with some shale and some beds of grit and conglomerate.	Caps prominent escarpments.
		Boggy shale		2,850	Secor Lower Witteville (?)	Alternating shale and sandstone with local beds of red clay in western part of area. Dark-blue shale is predominant.	Sandstone generally forms ridges but in central portions of large synclines forms high irregular hills.
		Savanna sandstone		1,120–2,500	Unnamed bed Cavanal (?)	Alternating sandstone and shale. Sandstones are highly variable in thickness and character but in general fall into three or four groups.	Sandstone forms prominent ridges separated by valleys that occupy areas of shale. Natural prairie common.
		UNCONFORMITY					
		McAlester shale		1,904–2,420	McAlester Thin local coal Upper Hartshorne	Mostly blue shale. Two to five sandstones are present near the middle.	Forms wide valleys between the Hartshorne and Savanna ridges. Sandstones near the middle of the shale form low ridges except in the southwestern part of the area, where the sandstone outcrops are worn down to the level of the surrounding country.
		Hartshorne sandstone		200–500	Lower Hartshorne	Sandstone, massive to thin-bedded. Near middle is a persistent shale unit containing the Lower Hartshorne coal. Upper part of the sandstone is shaly at many places.	Forms a prominent ridge except in the southwestern part of the area, where the ridge is low.
		Atoka formation		2,000+		Mostly shale, sandy to clayey. Occasional beds of sandstone and sandstone members up to 300 feet thick. Only about upper 1,000 feet well exposed.	Generally crops out in broad valleys broken by ridges formed by the thicker sandstone members.

GENERALIZED SECTION OF THE EXPOSED ROCKS IN THE McALESTER DISTRICT, OKLAHOMA
Showing the names and positions of the coal beds in the rock formations

Scale: 1 inch = 1,000 feet.