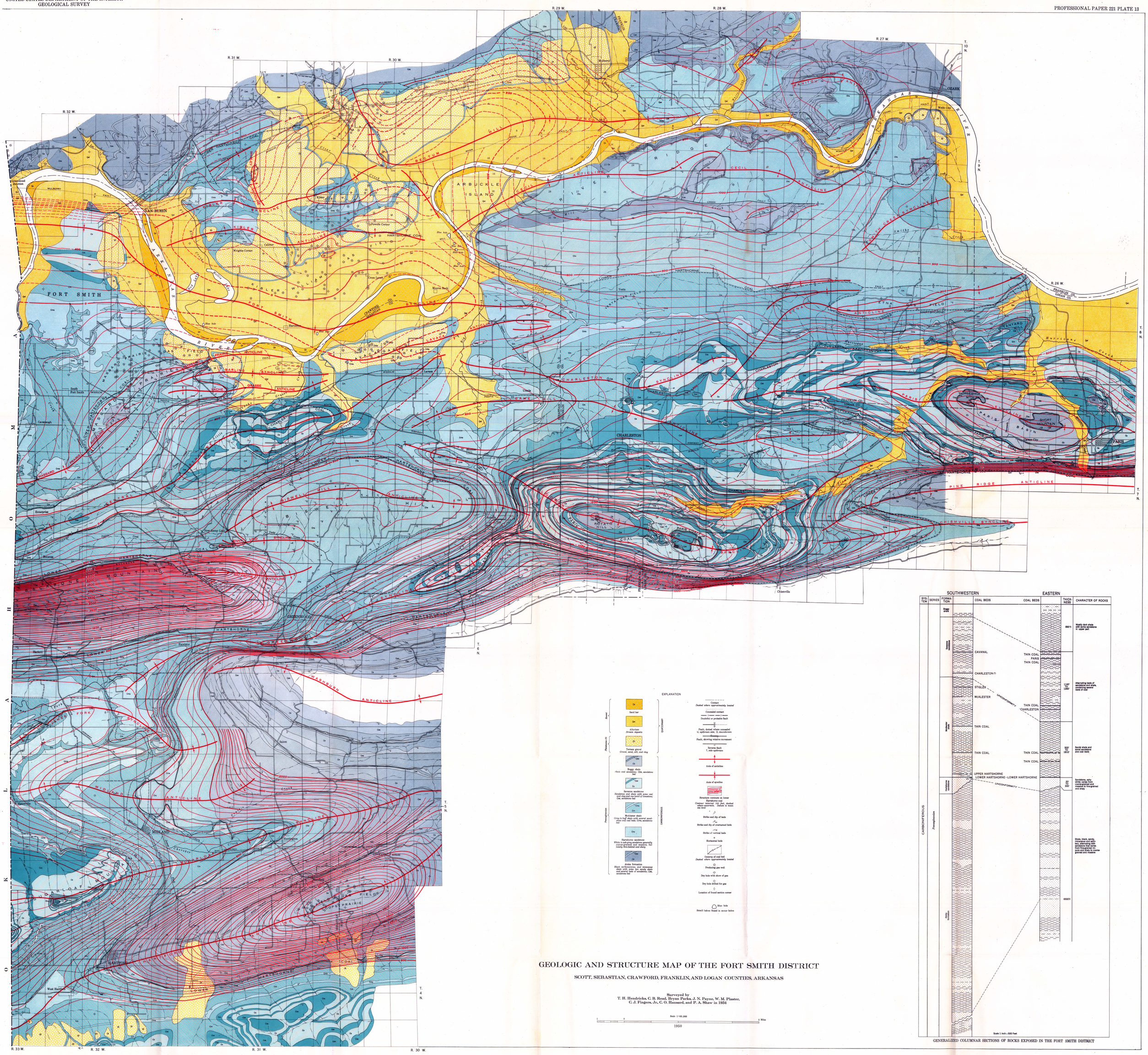

EXPLANATION

Quaternary

Recent

Sand bar

Alluvium
Stream deposits

Pleistocene (?)

Terrace gravel
Gravel, sand, silt, and clay

Carboniferous

Pennsylvanian

Boggy shale
Shale and sandstone; Cbs, *sandstone bed*

Savanna sandstone
Sandstone and shale with some coal and clay and one (only) of limestone; Csa, *sandstone bed*

McAlester shale
Gray to buff shale with several sandstone and coal beds; Cms, *sandstone bed*

Hartshorne sandstone
White to oak-gray sandstone generally coarse-grained and massive, but locally fine-bedded and shaly

Atoka formation
Black carbonaceous, and micaceous shale, with some fine-grained, dark, and several beds of sandstone; Caa, *sandstone bed*

Contact
Dashed where approximately located

Concealed contact

Doubtful or probable fault

Fault, dotted where concealed
U, upthrown side; D, downthrown

Fault, showing relative movement

Reverse fault
T, side upthrown

Axis of anticline

Axis of syncline

Structure contours on lower Hartshorne coal
Contour interval: 100 feet, dashed where uncertain. Datum is mean sea level

Strike and dip of beds

Strike and dip of overturned beds

Strike of vertical beds

Horizontal beds

Outcrop of coal bed
Dashed where approximately located

Producing gas well

Dry hole with show of gas

Dry hole drilled for gas

Location of found section corner

Blue hole
Small lakes found in scour holes

GEOLOGIC AND STRUCTURE MAP OF THE FORT SMITH DISTRICT

SCOTT, SEBASTIAN, CRAWFORD, FRANKLIN, AND LOGAN COUNTIES, ARKANSAS

Surveyed by
T. H. Hendricks, C. B. Read, Bryan Parks, J. N. Payne, W. M. Plaster,
C. J. Fingers, Jr., C. O. Hansard, and P. A. Shaw in 1934

Scale 1:62,500
1 0 1 Mile

1950

GENERALIZED COLUMNAR SECTIONS OF ROCKS EXPOSED IN THE FORT SMITH DISTRICT