

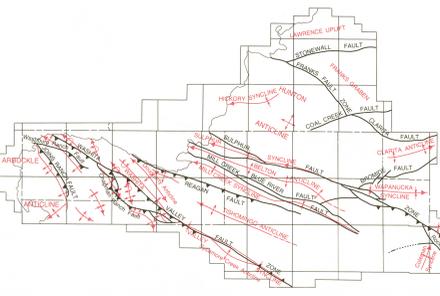
This map is a redraft, at reduced scale and with minor revisions, from an earlier published map (W. E. Ham, M. E. McKinley, and others, 1954, Geologic map and sections of the Arbuckle Mountains, Oklahoma, Oklahoma Geological Survey, scale 1:250,000). Stratigraphic nomenclature has been updated from the earlier map and is largely consistent with terminology adopted in the CORONA project (C. J. Mankin, coordinator, 1967). Correlation of stratigraphic units of north America-Texas-Oklahoma tectonic region correlation chart, American Association of Petroleum Geologists, May, 1961, and quarry data have been updated through 1967. Map reduction, adjustments, revisions, stratigraphic nomenclature and new map of quarry data have been done by R. S. Johnson, P. K. Schuchert, and others. Information on Late Mississippian through Pennsylvanian nomenclature, E. E. Dutton, geologic map, and subsection of Pennsylvanian units, R. O. Fay, provided data on stratigraphic nomenclature and on faulting along major faults.

On the earlier map, virtually all faults were shown as vertical faults in the cross sections, because there were no sufficient horizontal data to verify the dip of the fault planes. Subsequent drilling in the Arbuckle anticline, and in a few places in the Tishomingo anticline, shows that some faults are thrust faults. In the Arbuckle anticline, and in the Tishomingo anticline, the faults are thrust faults with southern Oklahoma and Texas. Geological Society of America, Map and Chart Series MC-298, W. C. Brown, 1964. Washita Valley fault (shown as a new fault) in an old fault, in J. G. Berger, ed., Technical proceedings of the 1961 AAPG Midcontinent regional meeting, Oklahoma City Geological Society, p. 80-89; these faults are now shown as thrusts on the map and cross sections, but other faults are as shown on the original map.

Base from U.S. Geological Survey 30' x 60-minute quadrangle maps: Ada, 1975; Ardmore, 1986; Pauls Valley, 1986; and Tishomingo, 1985.

- 1 Myron E. McKinley
- 2 William E. Ham, Ph.D. dissertation, Yale University, Feb. 1951
- 3 Robert J. Dunham, M.S. thesis, University of Oklahoma, 1951
- 4 William E. Ham, Okla. Geol. Survey Circular 26, 1949
- 5 Charles E. Decker and William E. Ham, Okla. Geol. Survey Bull. 65, 1945
- 6 William E. Ham, Okla. Geol. Survey Bull. 65, 1945
- 7 William E. Ham
- 8 George D. Morgan, Bur. Geol. Bull. 2, 1924
- 9 James C. Barker, M.S. thesis, University of Oklahoma, 1950
- 10 Martin P. Gilbert, M.S. thesis, University of Oklahoma, 1952
- 11 Myron E. McKinley, M.S. thesis, University of Oklahoma, 1954
- 12 William E. Ham and Myron E. McKinley

INDEX TO GEOLOGIC MAPPING



INDEX MAP OF ARBUCKLE MOUNTAINS SHOWING PRINCIPAL STRUCTURAL FEATURES

Geologic Map and Sections of the Arbuckle Mountains, Oklahoma
by
William E. Ham and Myron E. McKinley and others, 1954
Revised by Kenneth S. Johnson, 1990