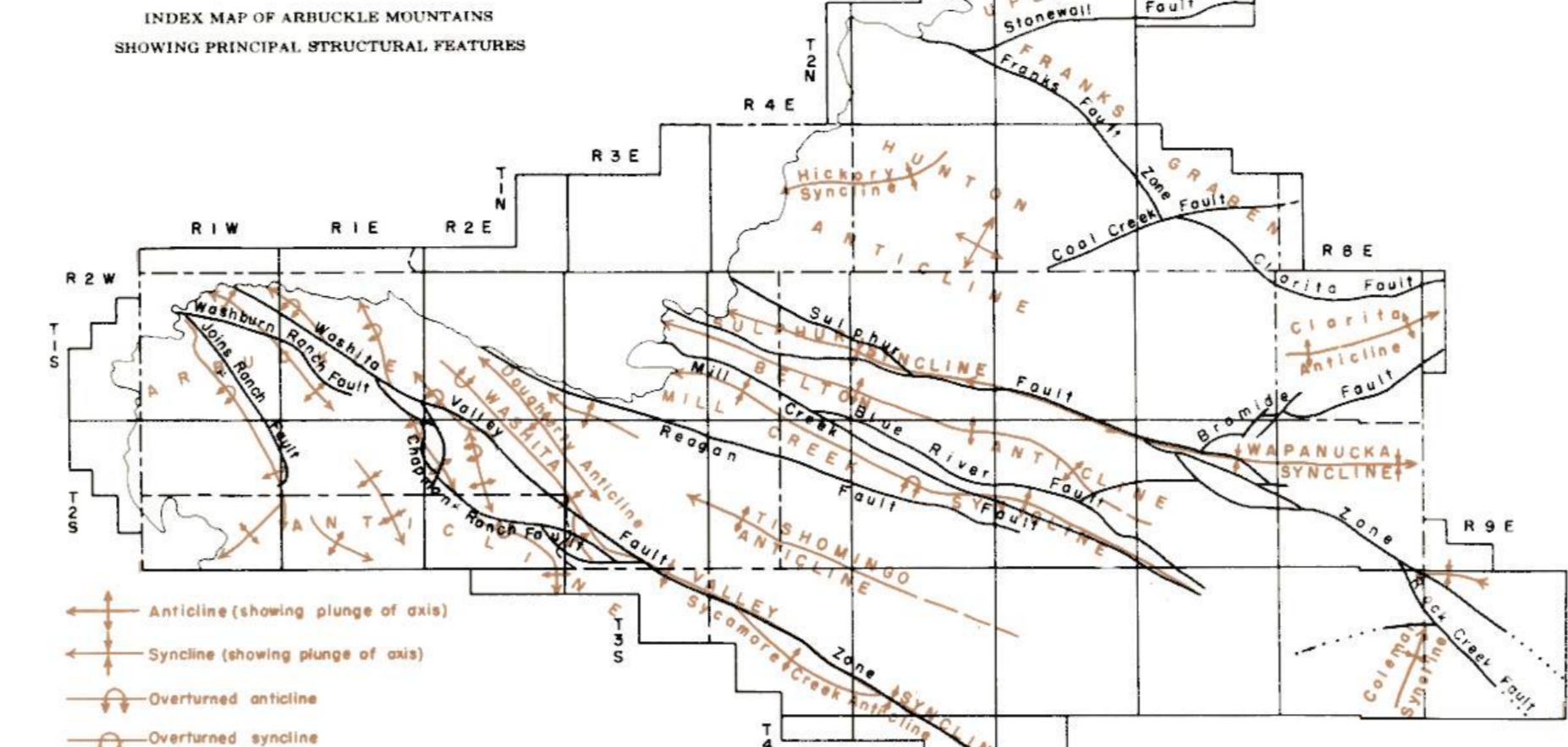
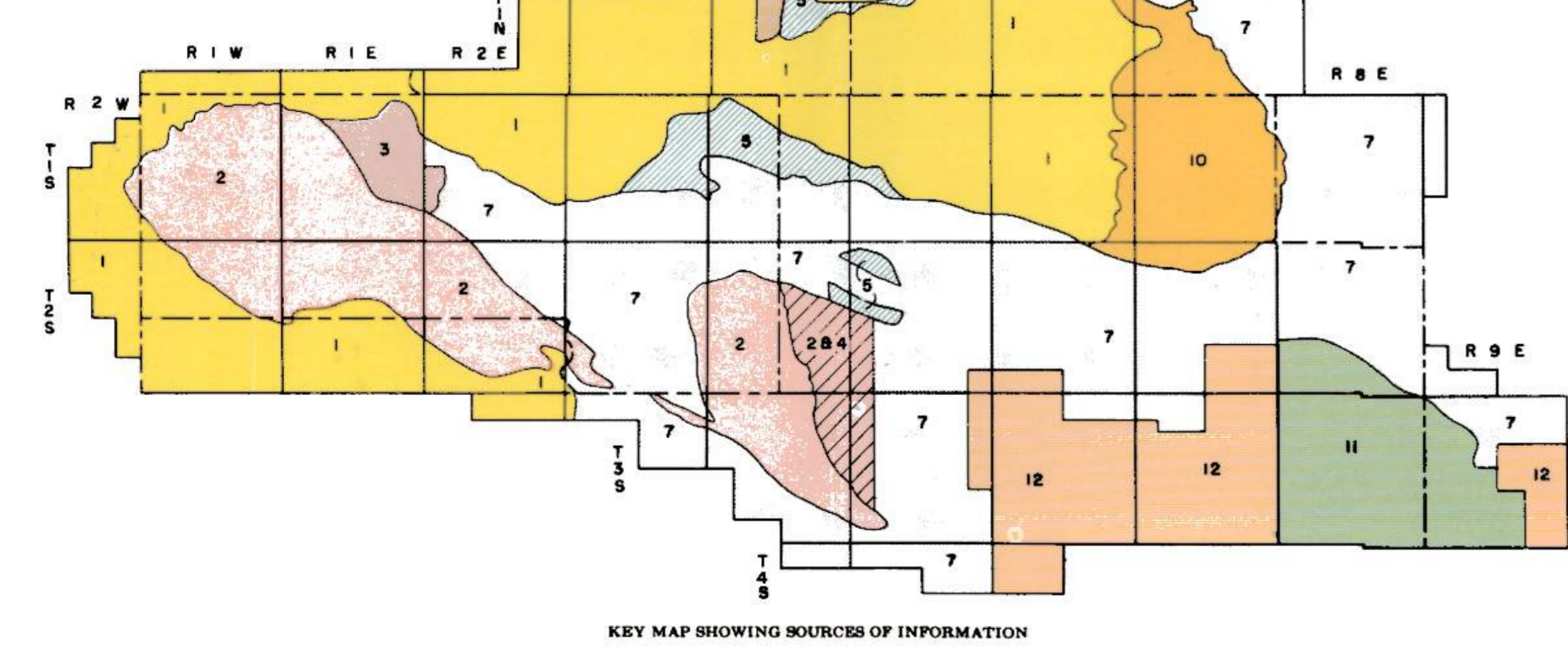


GEOLOGIC MAP AND SECTIONS  
OF THE  
ARBUCKLE MOUNTAINS  
OKLAHOMA

by  
William E. Ham and Myron E. McKinley  
and others

1954  
Scale  
72,000

- Myron E. McKinley
- William E. Ham, Ph.D. American, Yale University, 1932
- Robert J. Dickson, M. S. Ohio, University of Oklahoma, 1931
- William E. Ham, O.S.A. Geol. Survey Circular 24, 1948
- Charles E. Dickson and William E. Ham, O.S.A. Geol. Survey Bull. 66, 1946
- William E. Ham, O.S.A. Geol. Survey Bull. 66, 1946
- William E. Ham
- George D. Wagner, Ph.D. Geol. Bull. 5, 1914
- Alvan C. Barker, M. S. Ohio, University of Oklahoma, 1930
- Myron E. Ham, M. S. Ohio, University of Oklahoma, 1932
- Myron E. McKinley, M. S. Ohio, University of Oklahoma
- William E. Ham and Myron E. McKinley



- EXPLANATION**
- Page (Dashed where inferred, Dotted where concealed)
  - Relative movement across
  - Upper plate of thrust fault
  - Relative movement on vertically fault shown in section
  - Horizontal beds
  - Vertical beds
  - Overturned beds
  - Collapsed areas showing chaotic structure
  - U.S. Highway
  - State Highway
- Geologic Formations:**
- ALLEGANY** (Sand, silt, clay, and gravel; includes sand grains of various sizes)
  - FRANKFORD GROUP** (Primarily sand and sandy clay of Paleozoic formation, consisting of lower member of base to base)
  - STRATFORD FORMATION** (Sand and siltstone, including base limestone member at base)
  - HANSBERRY FORMATION** (Siltstone, sandstone, and shale)
  - ADA FORMATION** (Siltstone, sandstone, and limestone)
  - COLLEGE HANCH CONGLOMERATE** (Limestone, sandstone, and shale)
  - MIDDLE SERIES** (In western area only, including Franks formation, but of which no representative)
  - THE BRUNNEN SERIES** (In western area only, including Franks and other formations, consisting of sandstone, siltstone, and shale)
  - DEER FORMATION** (In Mid-Cross section, consisting of sandstone, siltstone, and shale)
  - ATOKA FORMATION** (Sandstone and shale, including thin shaly beds)
  - WAPANUKA LIMESTONE** (Limestone, quartz, and chert, including chert nodules and shaly limestone)
  - DOUGHERTY HILLS FORMATION** (In Mid-Cross section, consisting of sandstone, siltstone, and shale)
  - SPRINGER FORMATION** (In Mid-Cross section, consisting of sandstone, siltstone, and shale)
  - CANEY SHALE** (Dark-colored shaly shale, including separation overburden)
  - WYOMING LIMESTONE, WELSH LIMESTONE, and WYOMING LIMESTONE** (In Mid-Cross section, consisting of limestone, sandstone, and shale)
  - BUNTON GROUP** (From base to top, including: (1) ... (2) ... (3) ... (4) ... (5) ... (6) ... (7) ... (8) ... (9) ... (10) ...)
  - ELGAN SHALE** (In Mid-Cross section, consisting of shale)
  - TRINITY LIMESTONE, and VELLA LIMESTONE** (In Mid-Cross section, consisting of limestone)
  - BROMIDE, TULSA CREEK, and MC LURE** (In Mid-Cross section, consisting of limestone, sandstone, and shale)
  - OIL CREEK FORMATION** (In Mid-Cross section, consisting of limestone and shale)
  - WEST SPRING CREEK, and KNOWLAND FORMATIONS** (In Mid-Cross section, consisting of limestone, sandstone, and shale)
  - COOL CREEK, and MORGAN HILL** (In Mid-Cross section, consisting of limestone, sandstone, and shale)
  - MOUNTAIN LIMESTONE, SIGNAL MOUNTAIN LIMESTONE, and MOUNTAIN LIMESTONE** (In Mid-Cross section, consisting of limestone)
  - TIMBERED HILLS GROUP** (In Mid-Cross section, consisting of limestone, sandstone, and shale)
  - COLLEGE HANDBY** (In Mid-Cross section, consisting of limestone, sandstone, and shale)
  - THUNDERBOLT GRANITE** (Pink, medium- and coarse-grained granite, locally containing dioritic fragments)

PERMIAN CRETACEOUS QUATERNARY  
PENNSYLVANIAN  
MISSISSIPPIAN  
DEVONIAN  
SILURIAN  
ORDOVICIAN  
CARBONIFEROUS  
CAMBRIAN