

ATTACHMENT 3
Reference Materials

THE UNIVERSITY OF TEXAS AT ARLINGTON
BUREAU OF ECONOMIC GEOLOGY
W. L. PANDE, DIRECTOR

PLATE 3
THE WILCOX GROUP AND CROSS SECTIONS
DIAPYCNAL SYSTEM AND DEEP-THEM LEINITE

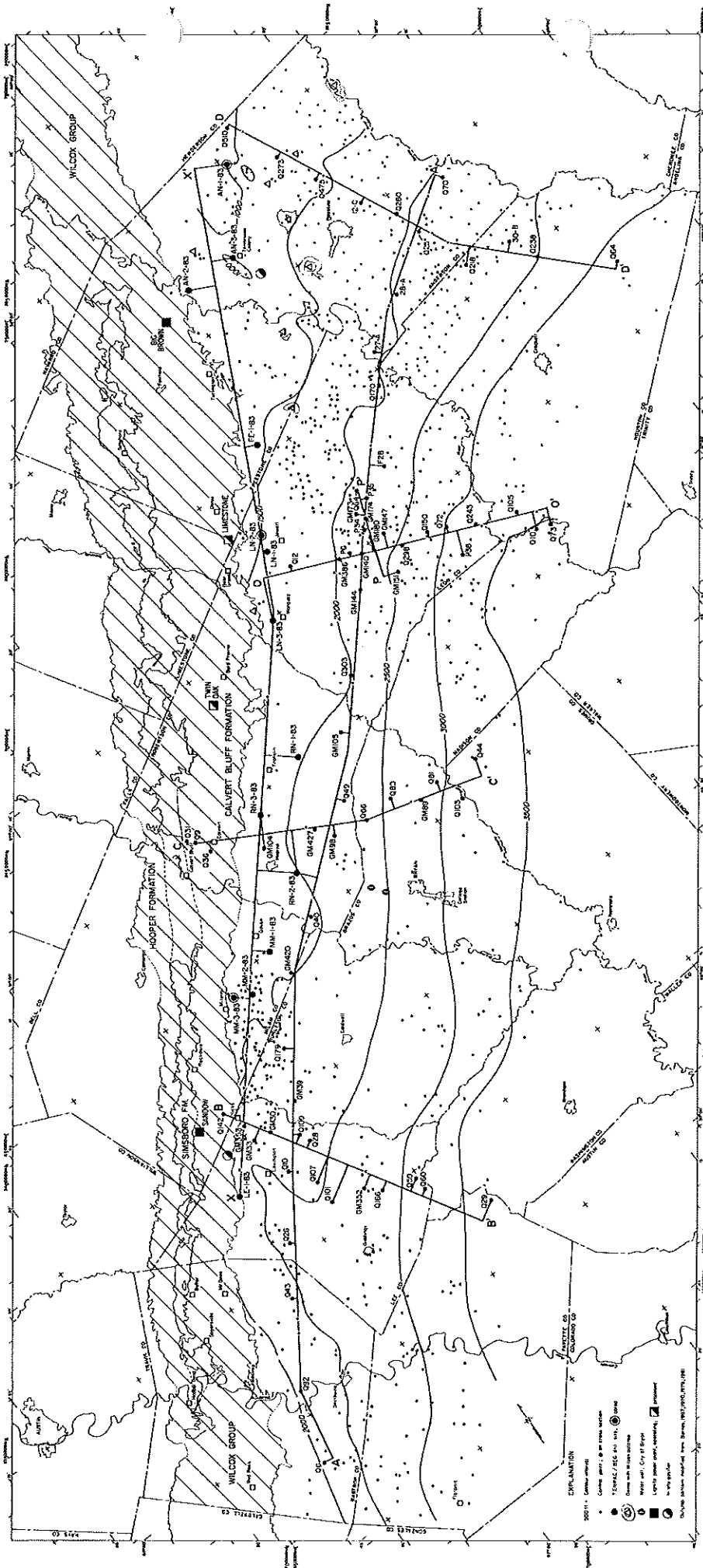


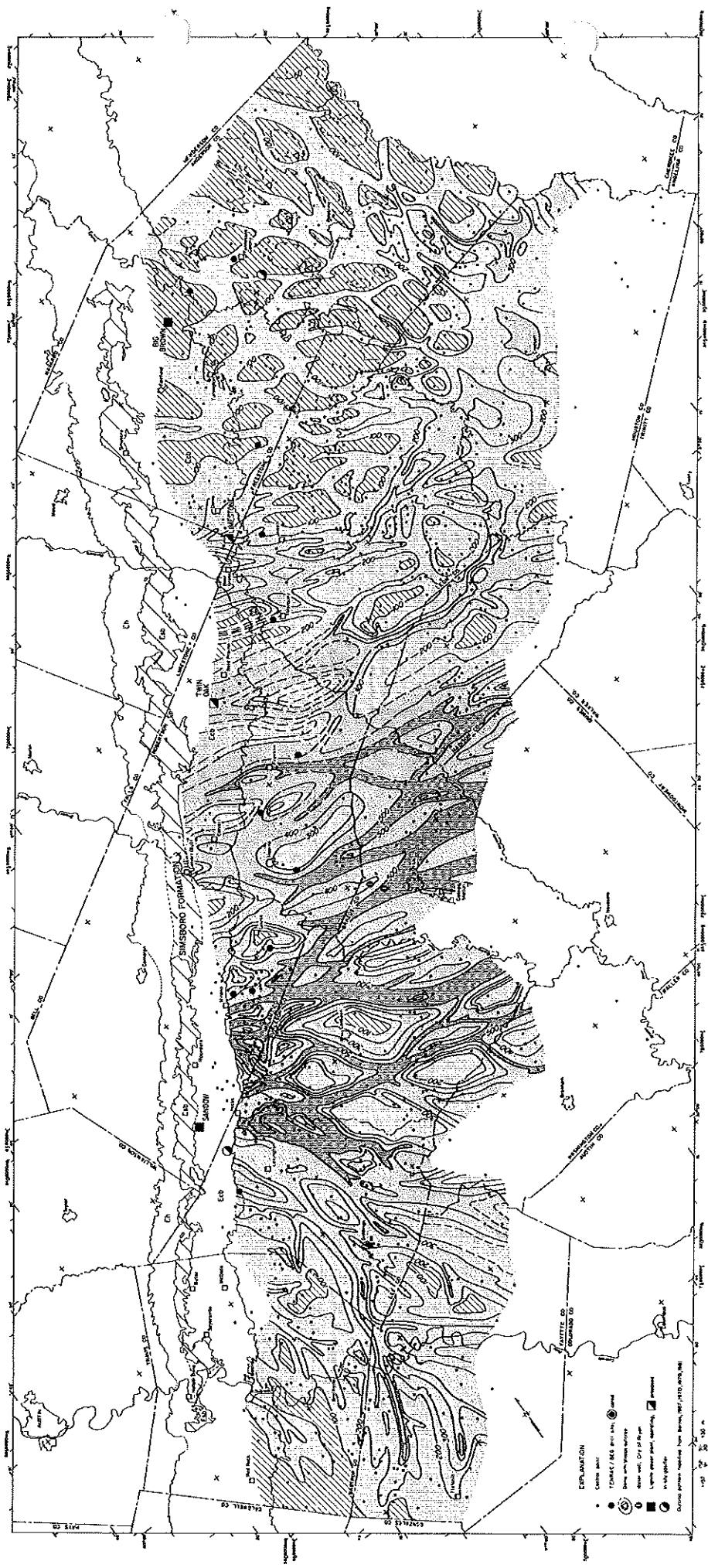
PLATE 3. WILCOX ISOPACH MAP AND LOCATIONS OF CROSS SECTIONS
1985

The Wilcox Group thickness from Lee (1985) is used as the basis for isopach maps. The thickness in several well areas is illustrated by dashed lines. See Appendix C for a list of well locations. See also Plate 2 for a list of well locations.

Map was published from the McGraw-Hill book, "Wilcox Group and Cross Sections" (1985). The map was prepared by the staff of the Bureau of Economic Geology, The University of Texas at Arlington. The map was prepared by the staff of the Bureau of Economic Geology, The University of Texas at Arlington.

THE UNIVERSITY OF TENNESSEE
 DEPARTMENT OF GEOLOGICAL ENGINEERING
 W. L. FISHER, DIRECTOR

PLATE 5
 THE WILCOX OF MISSISSIPPI AND
 ITS RELATIONSHIP TO THE SIMSBOURNE AND
 THE SIMSBOURNE AND SIMSBOURNE LIMBITE



- EXPLANATION**
- Contour mark
 - Trench/ALS and/or
 - Area with known structure
 - Unconformity, City of Memphis
 - Unconformity (sand, sandstone, shale)
 - in the upper
- Source: original, Nashville, Tenn. Survey, 1907-1910, 1915, 1920, 1925, 1930

Scale: 1:50,000
 1" = 1 mile

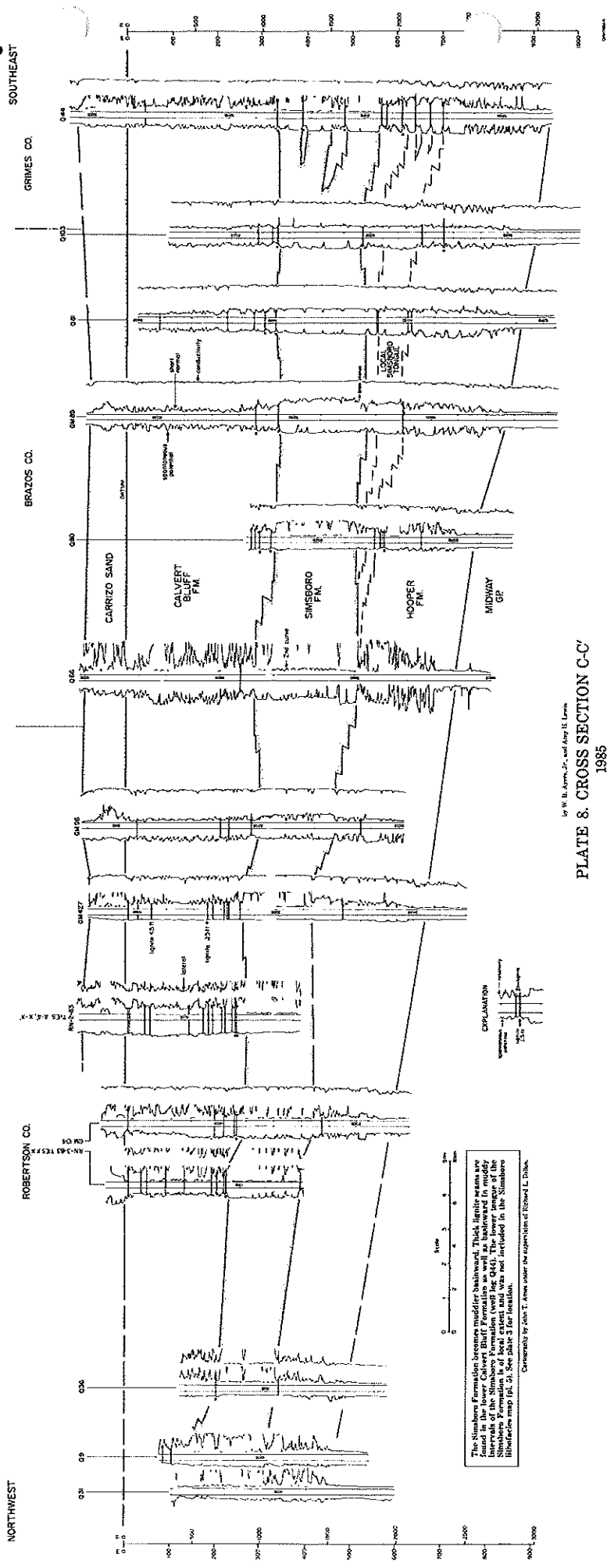
Geological units:
 ESB - Group 1907 Formation
 ESB - Simsborne Formation
 C - Higher formation

Map prepared from data furnished by the Tennessee Geological Survey, University of Tennessee, Knoxville, Tennessee, and the U.S. Geological Survey, Washington, D.C.
 by W. L. Fisher, Jr., and J. H. Lane

PLATE 5. SIMSBOURNE FORMATION, MAJOR-SAND ISOLITH MAP
 1985

This map is a modification of Plate 5, U.S. Geological Survey, 1907, and is based on the work of the Tennessee Geological Survey, University of Tennessee, Knoxville, Tennessee, and the U.S. Geological Survey, Washington, D.C. The map is a modification of Plate 5, U.S. Geological Survey, 1907, and is based on the work of the Tennessee Geological Survey, University of Tennessee, Knoxville, Tennessee, and the U.S. Geological Survey, Washington, D.C. The map is a modification of Plate 5, U.S. Geological Survey, 1907, and is based on the work of the Tennessee Geological Survey, University of Tennessee, Knoxville, Tennessee, and the U.S. Geological Survey, Washington, D.C.

C
NORTHWEST



The Simsboro Formation becomes muddier basinward. Thick lignite seams are found in the lower Calvert Bluff Formation as well as basinward in muddy sandstone of the Simsboro Formation. The lower part of the Simsboro Formation is of local extent and was not included in the Simsboro lithostratigraphic map (pl. 5). See plate 3 for location.
Courtesy of John T. Aron under the supervision of Richard L. Dilks.

PLATE 8. CROSS SECTION C-C'
1985

by W. B. Aron, Jr., and Amy S. Lewis

X

SOUTHWEST

LEE CO.

MILAM CO.

ROBERTSON CO.

LE-1-83

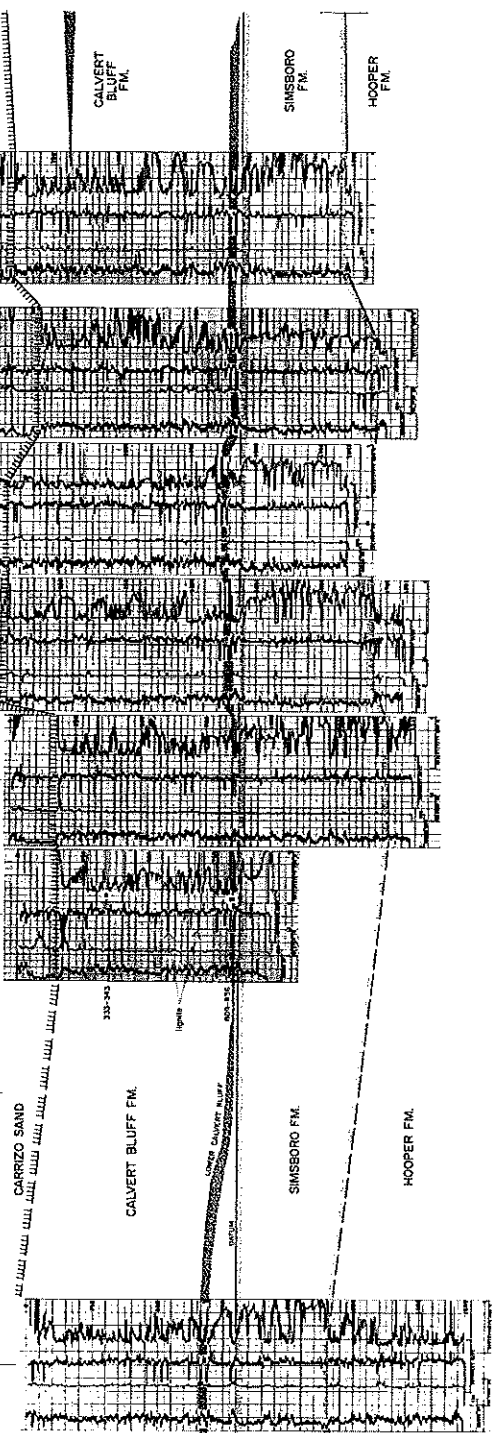
MR-4-83

TR-2-83

RN-3-83

RN-4-83

0 200 400 600 800 1000 1200 1400



X' X

ROBERTSON CO.

LEON CO.

FREESTONE CO.

ANDERSON CO.

NORTHEAST

1250 1300 1350

LN-3-83

LN-2-83

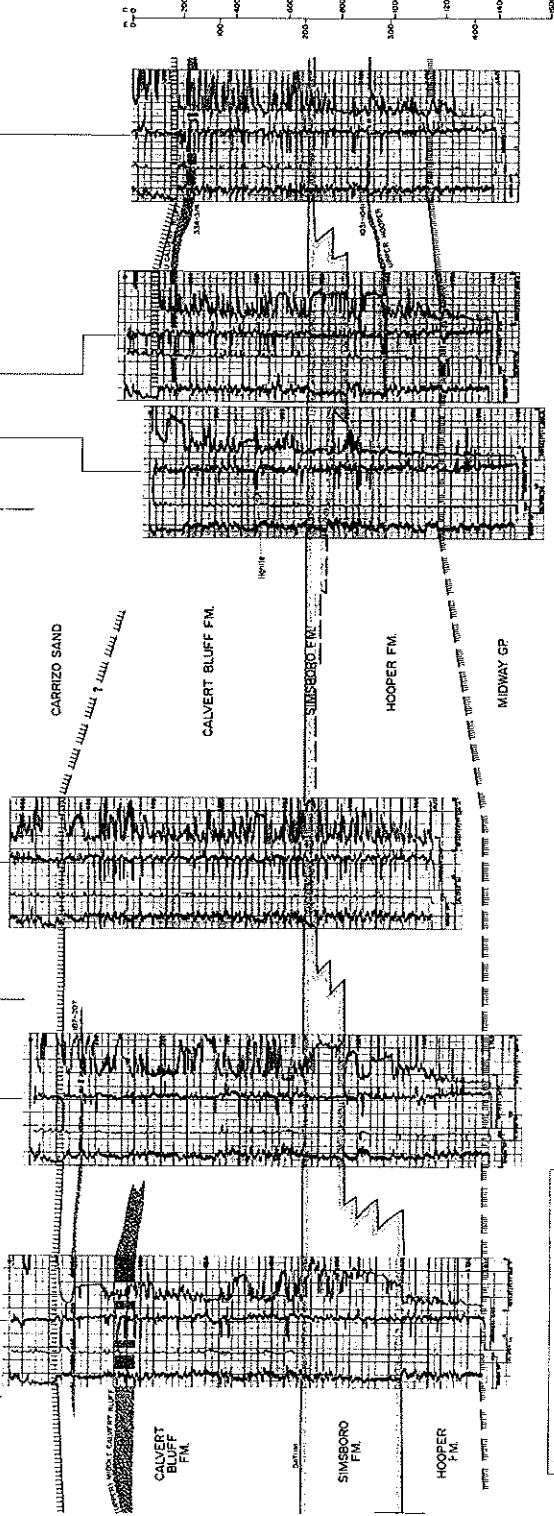
FE-4-83

AN-2-83

AN-3-83

AN-4-83

0 200 400 600 800 1000 1200 1400



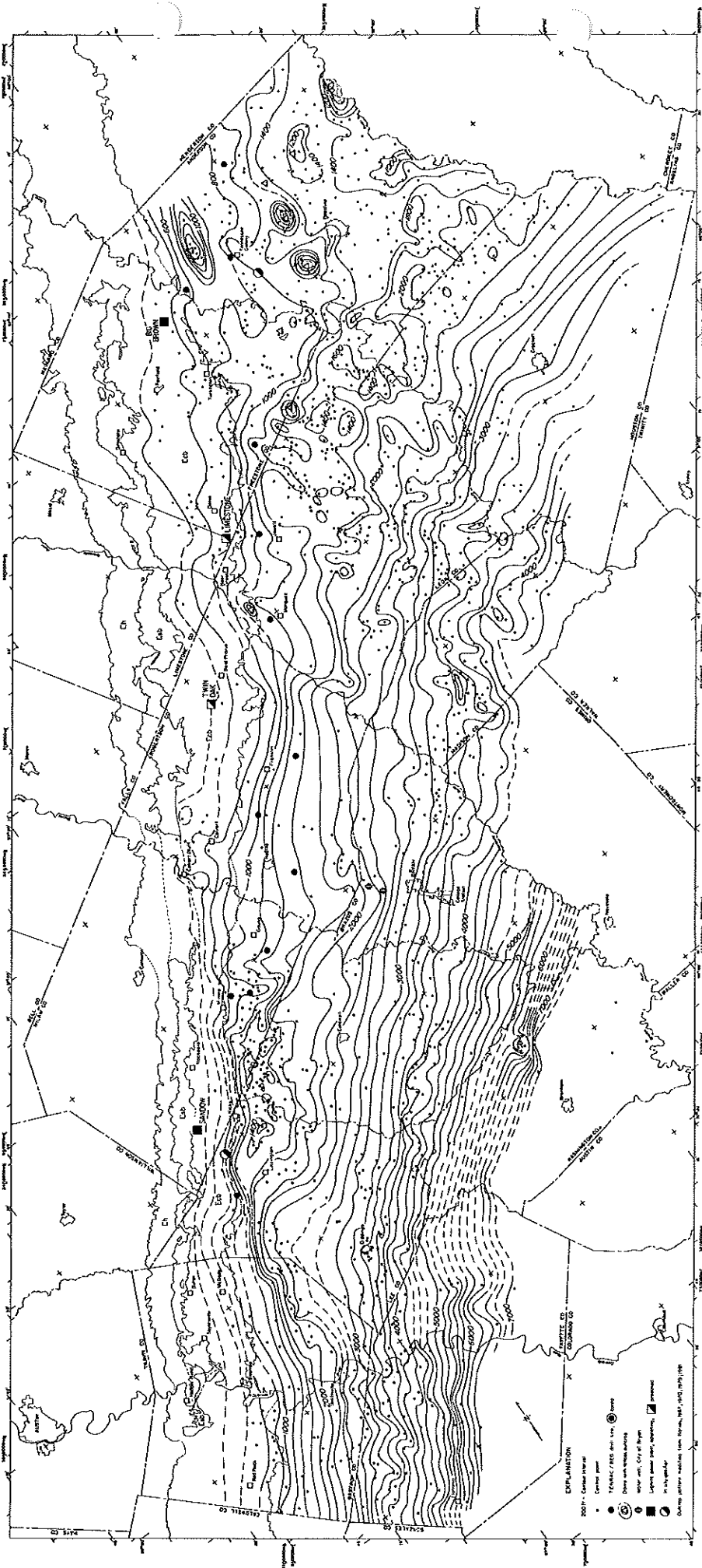
Unconformities: Lee, Leon, Freestone and Anderson Basins, Adams' Canyon, Hooper and Simsboro Basins, and the Permian-Triassic unconformity. The Carrizo Sandstone is a local facies of the Carrizo Sandstone, which is a local facies of the Carrizo Sandstone. The Carrizo Sandstone is a local facies of the Carrizo Sandstone, which is a local facies of the Carrizo Sandstone. The Carrizo Sandstone is a local facies of the Carrizo Sandstone, which is a local facies of the Carrizo Sandstone. The Carrizo Sandstone is a local facies of the Carrizo Sandstone, which is a local facies of the Carrizo Sandstone.

EXPLANATION
 10000 Feet
 133-3248 Sandstone

PLATE 23. LIGNITE CROSS SECTION X-X'
 1985

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PLATE 28
 THE SIMSBORO OVERBURDEN AND
 UNDERLYING STRATA IN EAST-CENTRAL TEXAS
 IN HORIZONTAL PROJECTION AND GRID-MESH LIGHTS

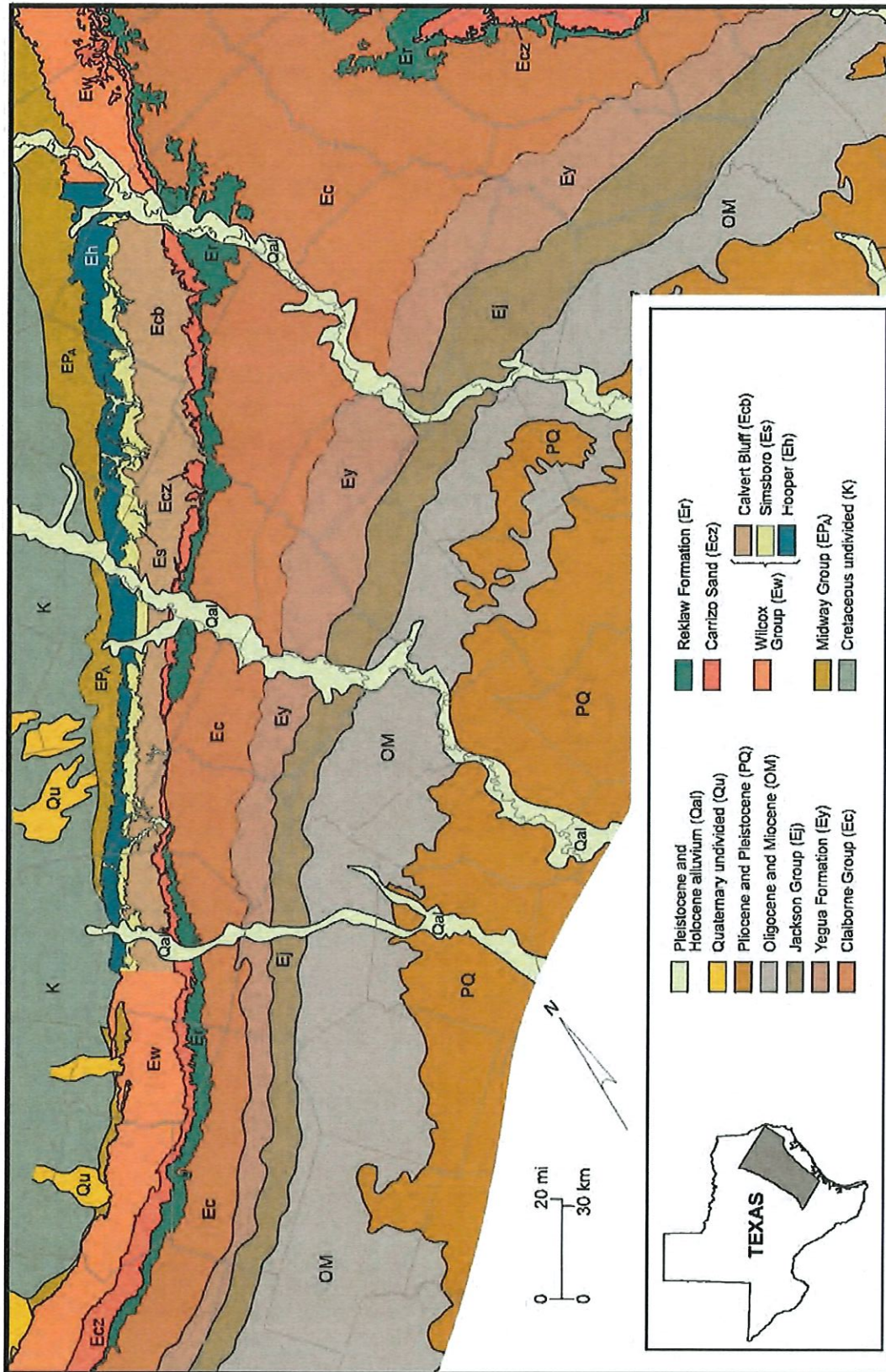


- EXPLANATION**
- 200' Contour Interval
 - Center point
 - T-6466 / B-50 (see 1:50,000)
 - Data with 100' contour interval
 - City of origin
 - Lighter (see 1:50,000)
 - in 1:50,000
 - Contour interval reduction from 100' to 200' (see 1:50,000)

ESB General Soil Formations
 E44 Sandstone Formations
 Ch. Major Formations

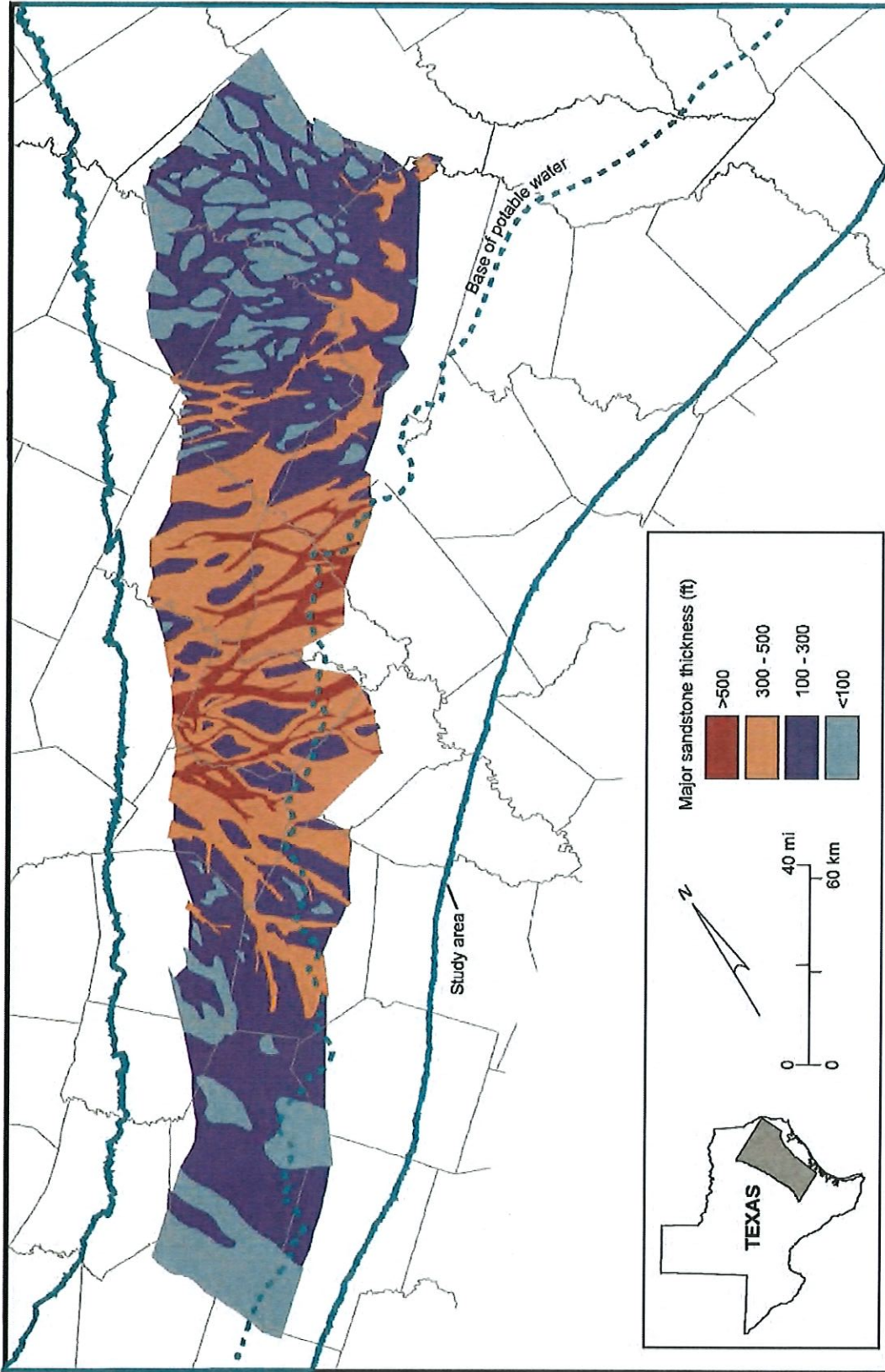
PLATE 28. SIMSBORO OVERBURDEN MAP
 1985

This map is the result of the Simsboro Overburden and Underlying Strata in East-Central Texas, U.S.G.S. Professional Paper 1000, 1985.



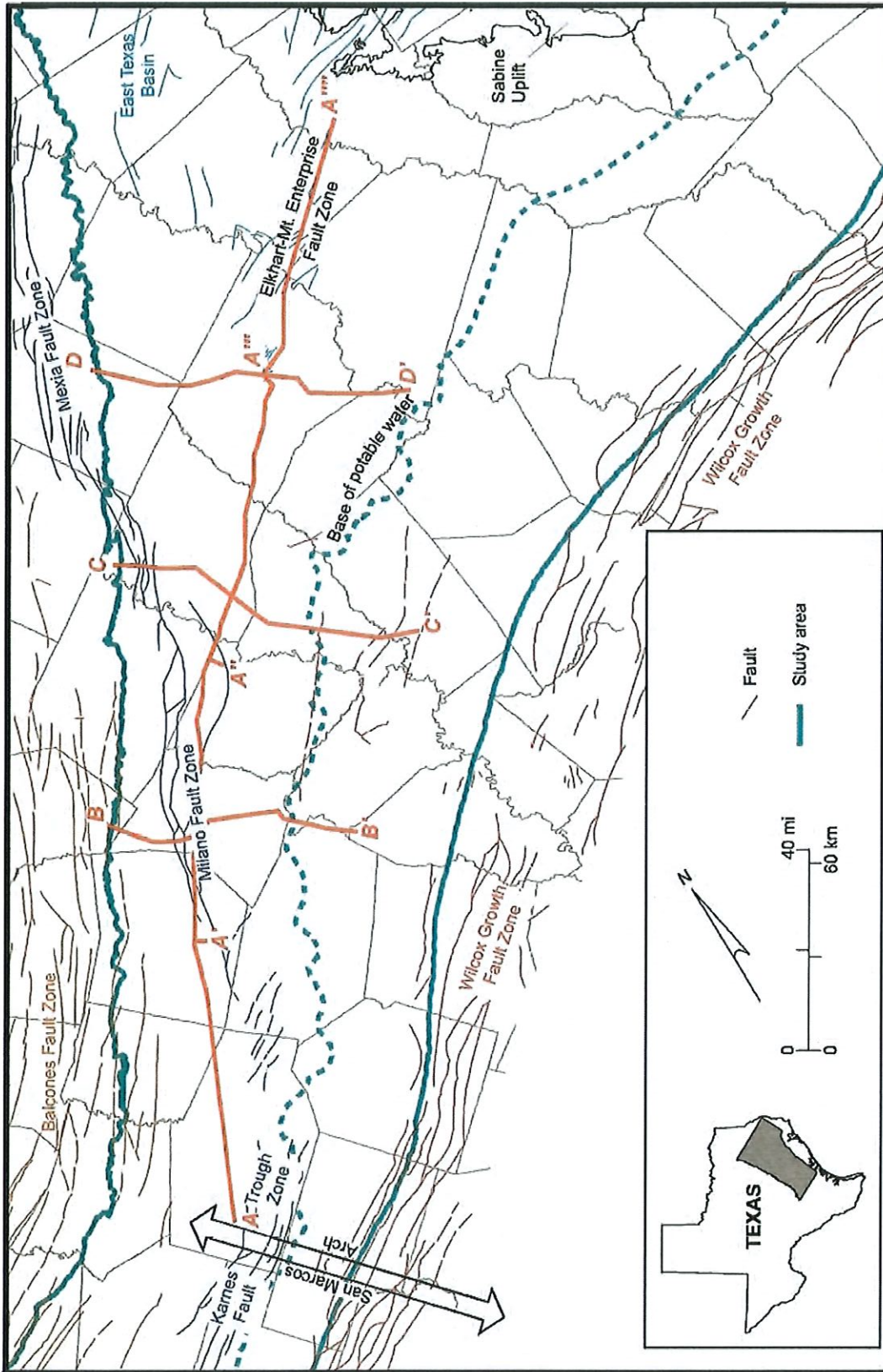
DA1815c

Figure 11. Generalized map of surface geology in the study area. The Wilcox Group is not subdivided into formations south of the Colorado River or north of the Trinity River. Claiborne Group shown on map does not include Yegua Formation, Reklaw Formation, and Carrizo Sand. Modified from Bureau of Economic Geology (1992).



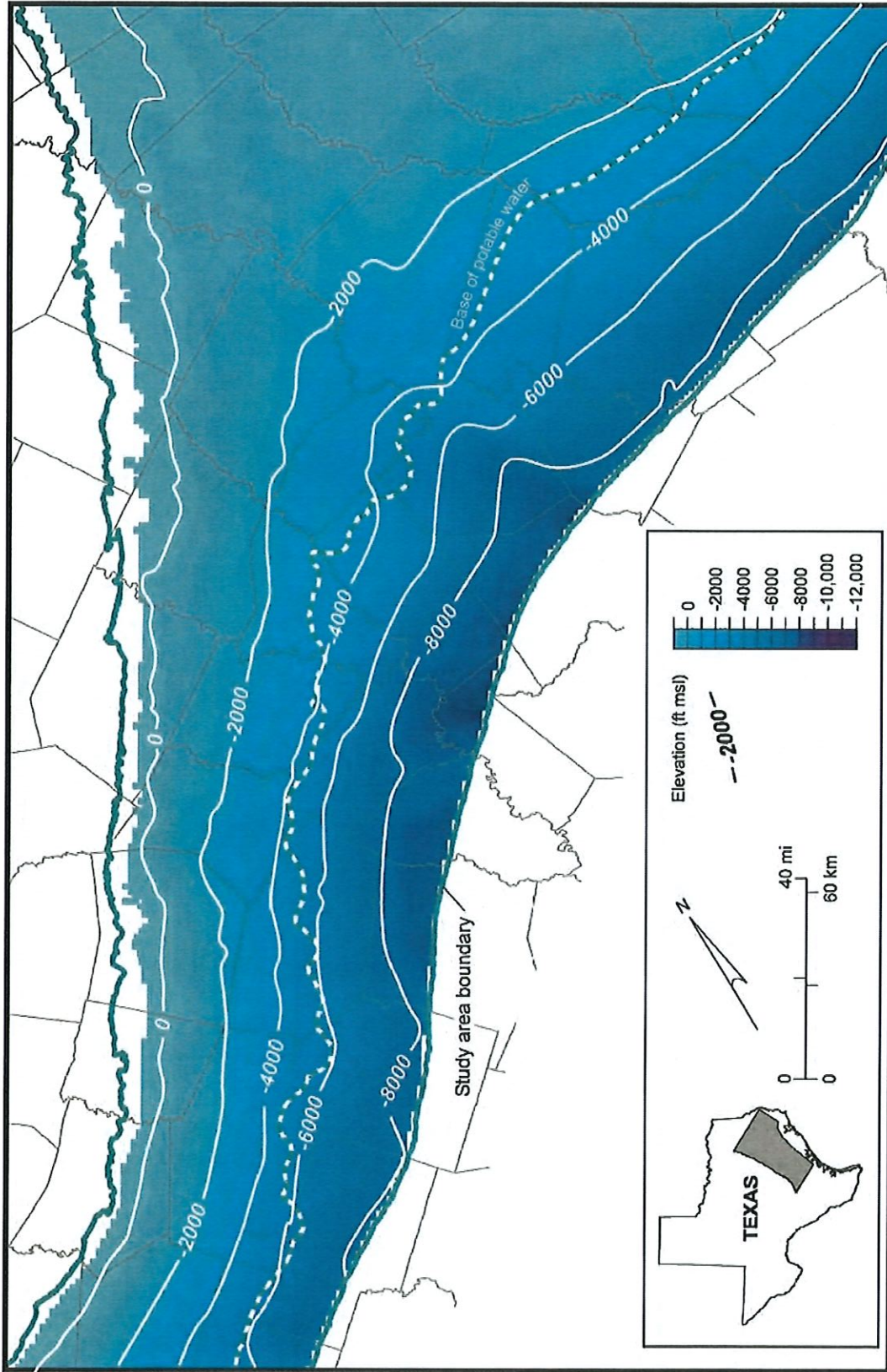
QAd1795c

Figure 12. Thickness of major sandstones in the Simsboro Formation in the study area. Modified from Ayers and Lewis (1985).



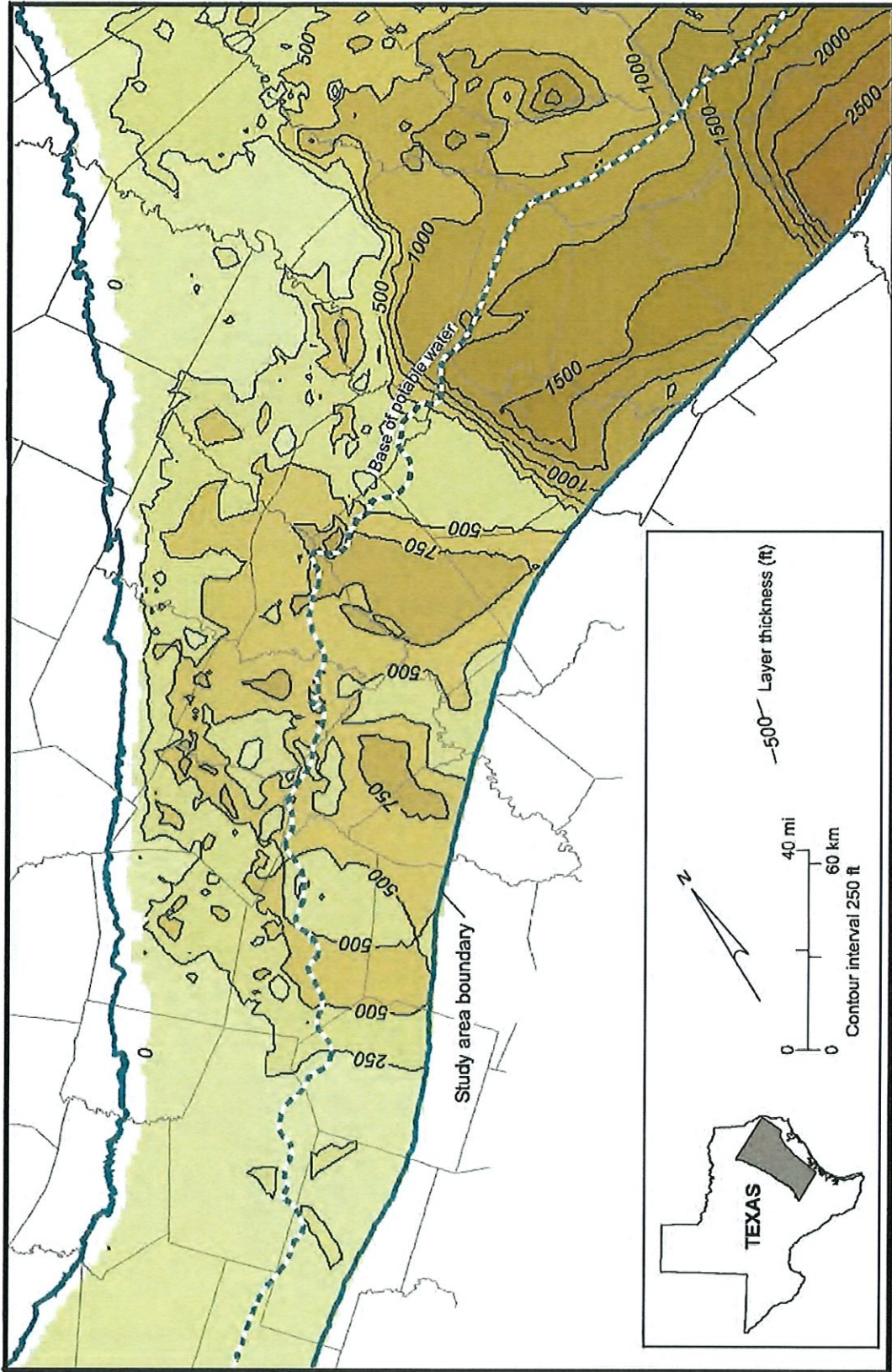
QA41798c

Figure 14. Geologic structure in the study area. Modified from Ewing (1990). Lines of sections shown in figures 15 and 16.



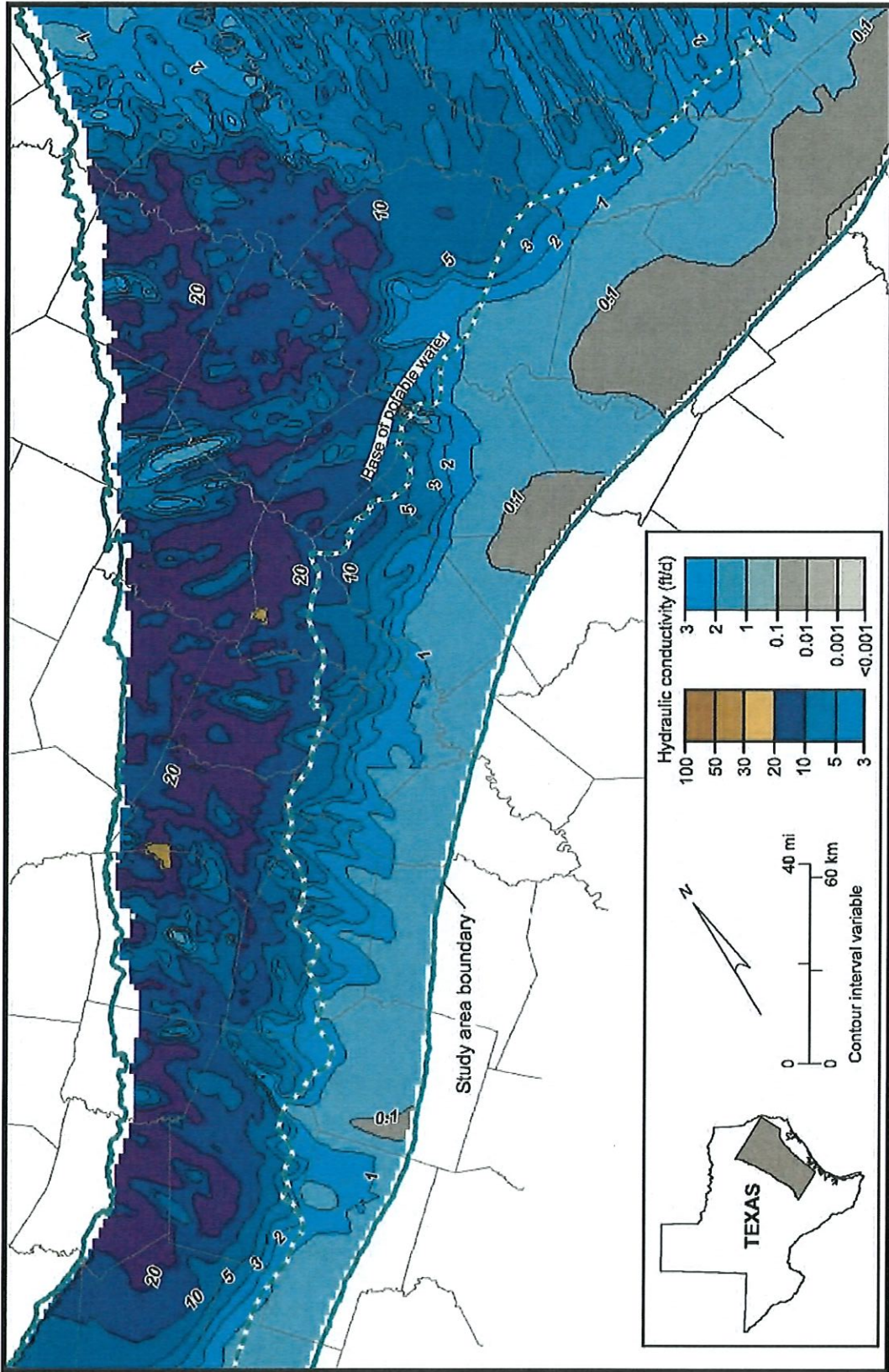
QA41812c

Figure 19. Elevation of the base of the Calvert Bluff Formation (top of Simsboro Formation).



QAd1820c

Figure 24. Total thickness of the Simsboro Formation.



QA1811(e)lc

Figure 49. Map of average hydraulic conductivity in the Simsboro Formation. Method of calculation described in text.