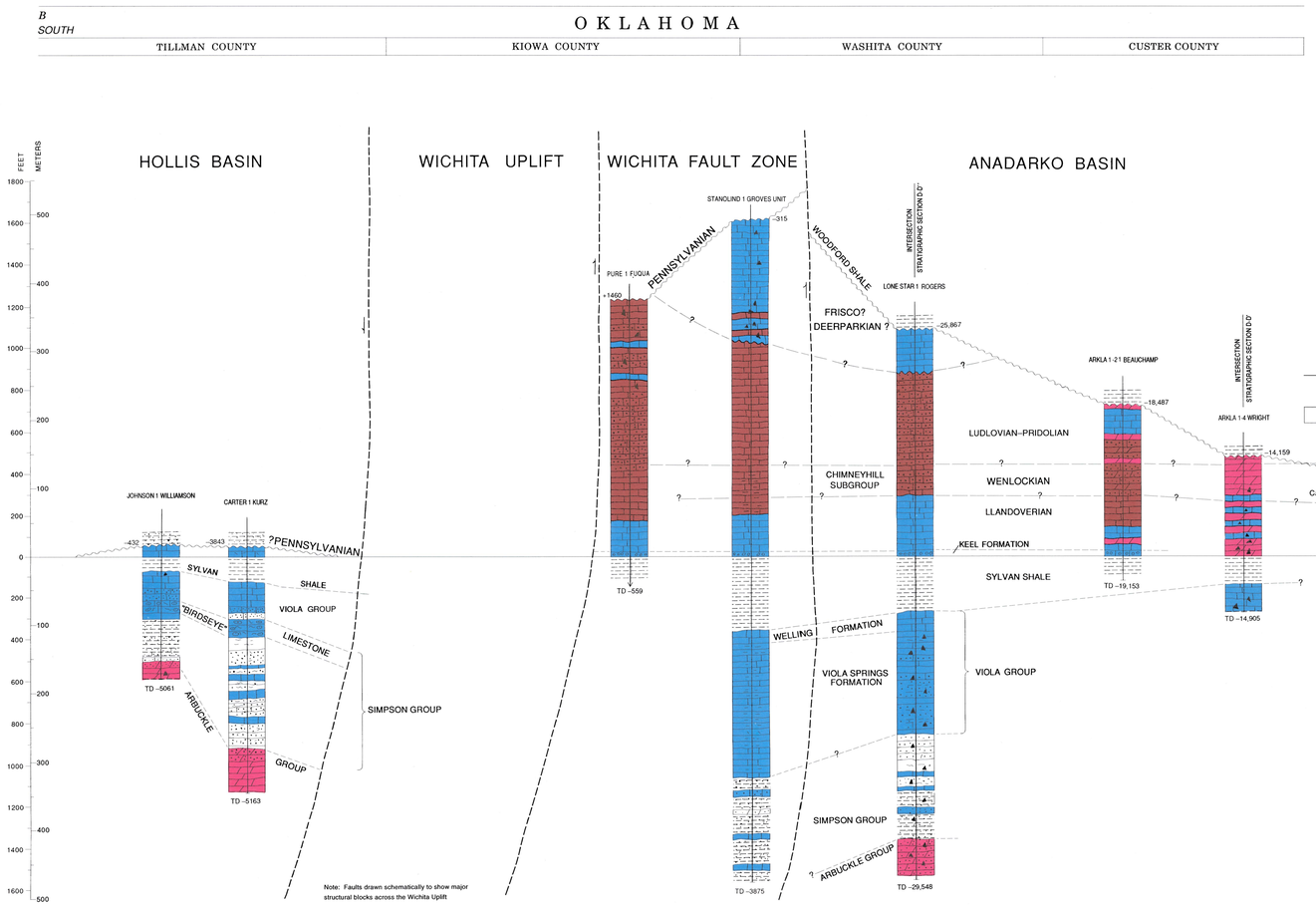
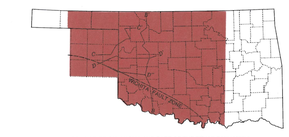
OKLAHOMA GEOLOGICAL SURVEY
Charles J. Mankin, *Director*





Coral data supplied by W. A. Oliver, Jr., U.S. Geological Survey, Washington, D.C.; P. K. Sutherland, University of Oklahoma, Norman, Oklahoma

Stromatoporoid data supplied by J. A. Faggerstrom, Jamestown, Colorado

For additional surface and subsurface information on these strata in the Anadarko basin see Amsden, Oklahoma Geological Survey, Bulletins 84, 121, 129; Amsden and Barrick, Oklahoma Geological Survey Bulletin 143

EXPLANATION

The $CaCO_3$, $MgCO_3$, and HCl-insoluble-residue data for cores are based on analyses prepared in the Oklahoma Geological Survey, Analytical Chemistry Laboratory; for samples, the data are based on estimates derived from examination of thin sections (see well summary accompanying this report). The lithostratigraphic data shown on the STRATIGRAPHIC SECTIONS represent a summary of chemical analyses and thin-section information synthesized to accommodate this small scale

- Grain-supported, skeletal limestone; up to 25% $MgCO_3$; <10% HCl-insoluble residues
- Mud-supported marlstone* ; up to 25% $MgCO_3$; <10% HCl-insoluble residues
- Marlstone with >10% HCl-insoluble residues
- Marlstone with red beds
- Dominantly crystalline dolomite (>25% $MgCO_3$); may include some heavily dolomitized beds (>25% $MgCO_3$)
- "Birdseye" limestone; dense micrite with irregular areas spar; micrite pellets common; fossils mainly ostracodes; mullusks moderately common; brachiopods, corals locally present, generally fragmented; dolomite content generally low but with dolomite beds locally grading into crystalline dolomite
- Oolite; ooids with radial and concentric structure; marine shelly fauna; <10% $MgCO_3$; <10% HCl-insoluble residues
- Oolite and matrix replaced with crystalline dolomite; gross outline of ooids preserved; >25% $MgCO_3$
- Chert; may be associated with any of the above lithologies
- Glauconite; may be associated with any of the above lithologies
- Shale

* Almost all of the marlstones are at least sparingly fossiliferous; as the fossil content increases the rock grades into a grain-supported skeletal limestone

- CORED INTERVAL
- WOODFORD SHALE
- –6845 Top HUNTON GROUP (ft) subsea level
- *Kirkidium* sp.
- Brachiopods
- Trilobites
- *Halysites*
- Tetracorals
- Tabulate corals
- Stromatoporoids
- Algae

FAUNAL DATA

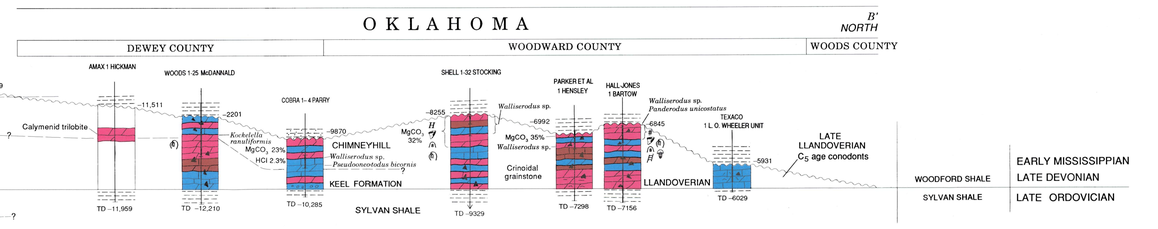
$MgCO_3$ 23%, HCl-insoluble residue 2.3% — CHEMICAL ANALYSIS (average, in percent)

32.3% MATRIX, 76.5% FOSSILS — POINT COUNT

P18.A Porosity Permeability Test (See Oklahoma Geological Survey Bulletin 121, p. 165)

TD –7156 Total Depth (ft) subsea level

Note: Subsea elevations have been calculated either from ground level, derrick floor, or kelly bushing, resulting in minor differences in footage

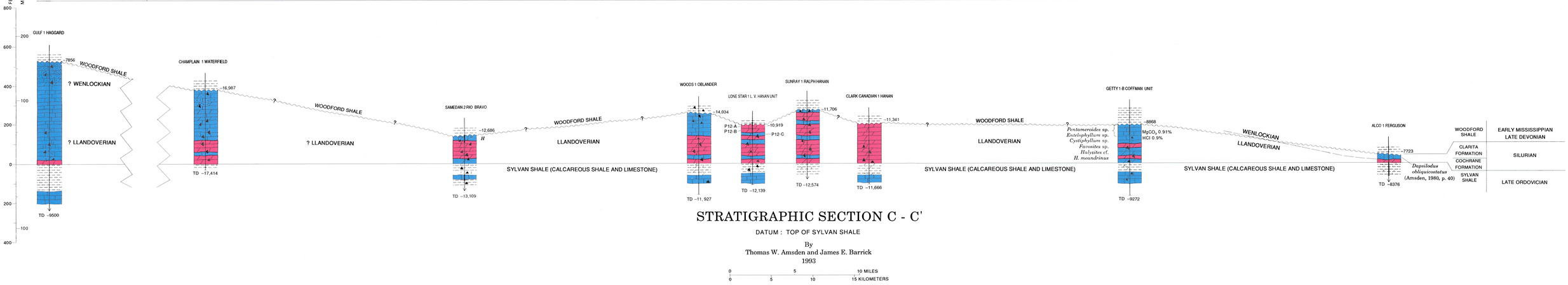


STRATIGRAPHIC SECTION B - B'

DATUM : TOP OF SYLVAN SHALE

By
Thomas W. Amsden and James E. Barrick
1993

0 5 10 15 20 25 MILES
0 5 10 15 20 25 30 35 40 KILOMETERS



STRATIGRAPHIC SECTION C - C'

DATUM : TOP OF SYLVAN SHALE

By
Thomas W. Amsden and James E. Barrick
1993

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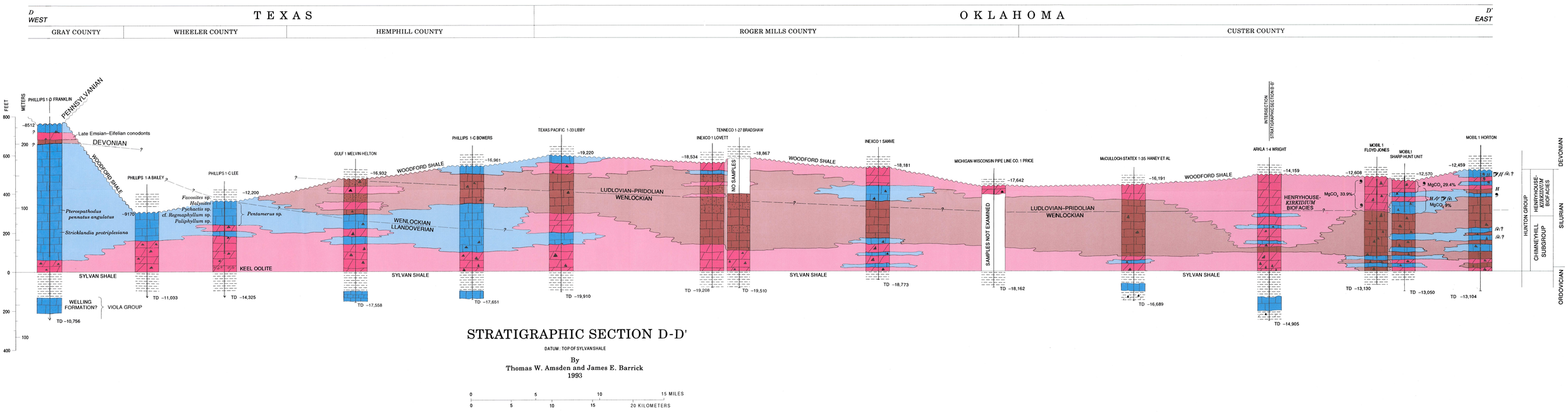
0 5 10 15 KILOMETERS



STRATIGRAPHIC SECTION D-D'

DATUM : TOP OF SYLVANSHALE

By
Thomas W. Amsden and James E. Barrick
1993

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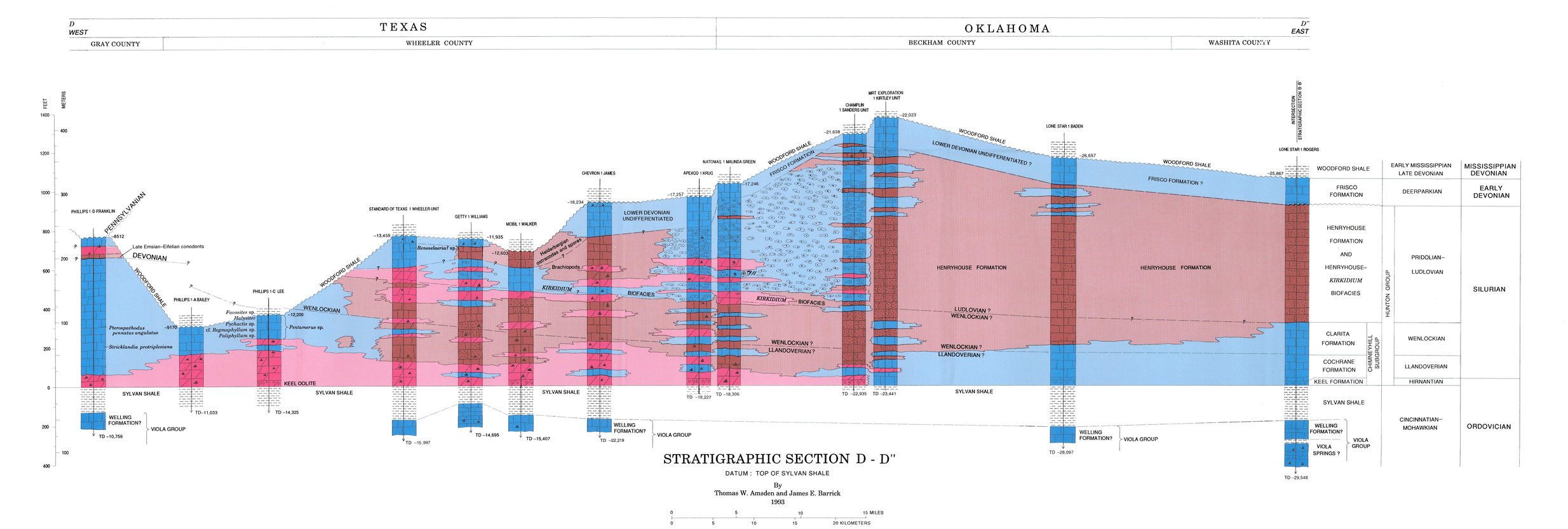
0 5 10 15 20 KILOMETERS



STRATIGRAPHIC SECTION D - D''

DATUM : TOP OF SYLVAN SHALE

By
Thomas W. Amsden and James E. Barrick
1993

0 5 10 15 MILES
0 5 10 15 20 KILOMETERS