OKLAHOMA GEOLOGICAL SURVEY
Charles J. Mankin, *Director*

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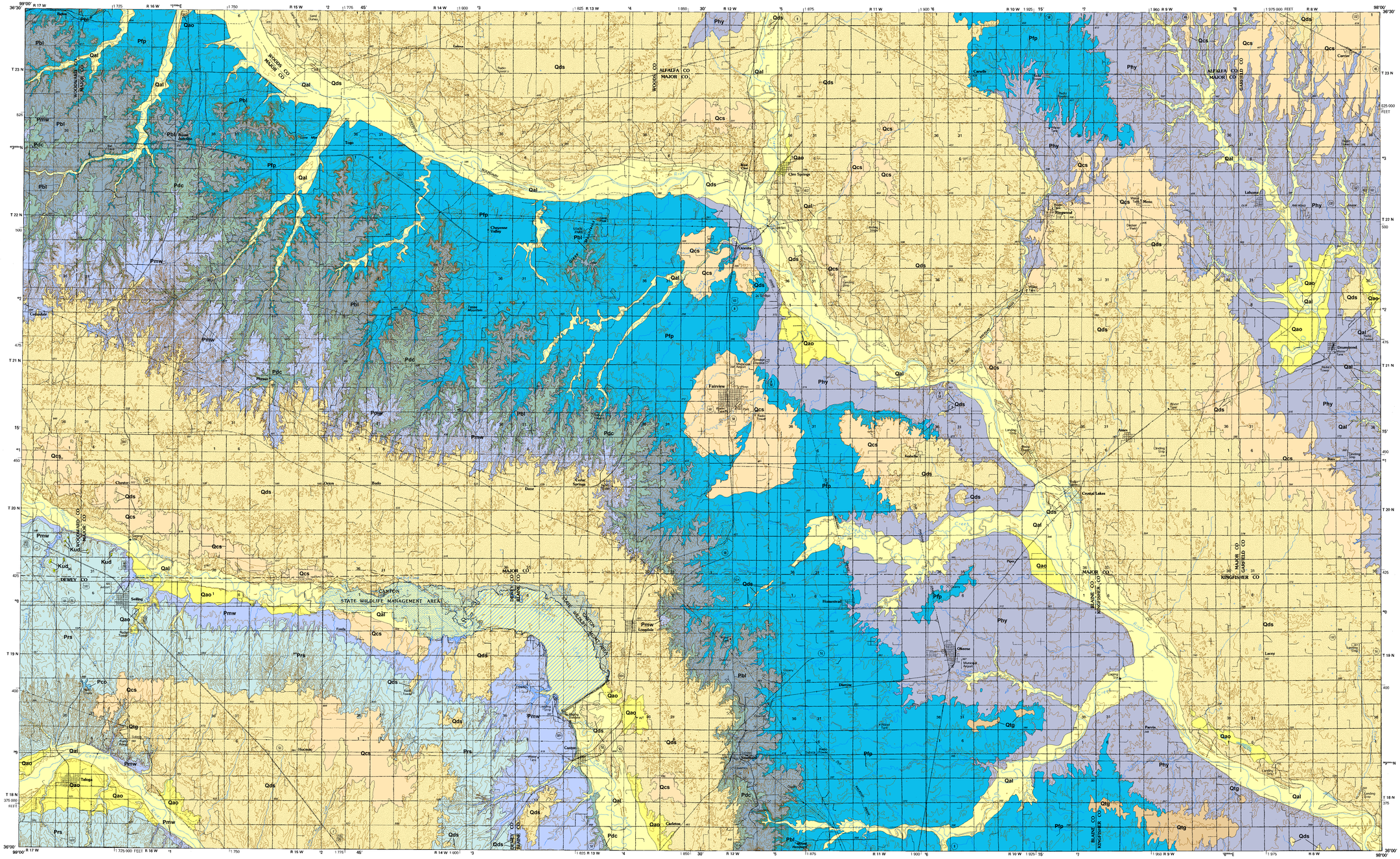
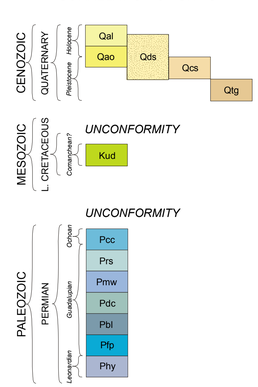
Oklahoma Geologic Quadrangle **OGQ-41**
Geologic Map of the Fairview
30′ X 60′ Quadrangle
(previously Open-File Report OF14-2003)



CORRELATION OF UNITS



DESCRIPTION OF UNITS

Qal — ALLUVIUM—Unconsolidated sand, silt, clay, and gravel in stream and river channels on modern flood plains

Qao — OLDER ALLUVIUM—Unconsolidated sand, silt, clay, and gravel in stream and river channels above modern flood plains

Qds — DUNE SAND—Unconsolidated windblown sand formed into definite dune structures and ridges

Qcs — COVER SHEET SAND—Featureless sheet of windblown silt and sand

Qtg — TERRACE GRAVEL—Unconsolidated gravel, sand, silt, and clay laid down at several levels along former courses of present-day streams

UNCONFORMITY

Kud — CRETACEOUS UNDIVIDED—Chaotic mixture of large blocks of Dakota and Cheyenne Sandstones intercalated with Kiowa Shale. Formed from subsurface salt dissolution and collapse into older formations

UNCONFORMITY

Pcc — CLOUD CHIEF FORMATION—Reddish-brown to orange-brown shale, locally interbedded with thin, reddish-brown fine-grained sandstone and siltstone

Prs — RUSH SPRINGS FORMATION—Reddish-brown, fine-grained sandstone, commonly cross-bedded, with local interbeds of reddish-brown shale. Contact with underlying Marlow Formation obscure to gradational

Pmw — MARLOW FORMATION—Usually a soft-weathering, orange-brown, fine-grained sandstone, with local interbeds of very sandy shale and siltstone

Pdc — DOG CREEK SHALE—Poorly exposed sequence of alternating reddish-brown shale, silty shale, and siltstone, with thin gypsum beds and stringers occurring throughout. Base mapped at the top of the highest massive Blaine gypsum bed

Pbl — BLAINE FORMATION—Alternating sequence of two to four massive gypsum beds with reddish-brown shale. Base mapped at lowest massive gypsum bed, which usually forms a prominent escarpment on top of underlying Flowerpot Shale

Pfp — FLOWERPOT SHALE—Reddish-brown silty shale; upper part with alternating thin gypsum beds that give unit a characteristic striped pattern at a distance. Basal contact with Hennessey Formation obscure to gradational

Phy — HENNESSEY FORMATION—Orangish-brown to reddish-brown silty shale and siltstone

SYMBOLS

Unit contact; approximately located

INDEX MAP

MAP REFERENCES

1. Alexander, W.B., 1965, Areal geology of southern Dewey County, Oklahoma: University of Oklahoma unpublished M.S. thesis, 42p.
2. Birchum, J.M., 1963, Areal geology of northwestern Dewey County, Oklahoma: University of Oklahoma unpublished M.S. thesis, 33p.
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4. Cederstrand, J.R., 1996, Digital geologic map of the Woodward quadrangle, southwestern Oklahoma: U.S. Geological Survey Open-File Report OR-96-381, scale 1:250,000.
5. Fay, R.O., 1961, Geology and mineral resources of Blaine County, Oklahoma: Oklahoma Geological Survey Bulletin 89, 258p.
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7. Hamilton, William, Jr., 1961, Areal geology of the Fairview area, Major County, Oklahoma: University of Oklahoma unpublished M.S. thesis, 73p.
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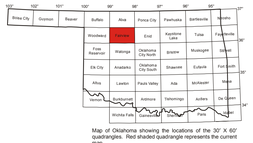
TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN DECLINATION

SCALE 1:100 000
0 1 2 3 4 5 6 7 8 MILES
0 1 2 3 4 5 6 7 8 9 10 KILOMETERS
CONTOUR INTERVAL 10 METERS



Map of Oklahoma showing the locations of the 30′ X 60′ quadrangles. Red shaded quadrangle represents the current map

Base Map Credits

The base map was compiled by the U.S. Geological Survey from 1:24000-scale topographic maps dated 1969-1980. Orthophotography was derived from aerial photographs taken 1981. Map edited 1986. Universal Transverse Mercator (UTM) projection. 1927 North American Datum. 25,000-foot grid ticks based on Oklahoma coordinate system, north zone. 10,000-meter UTM grid, zone 14.

Geologic Map Credits

Geology compiled and field checked by Thomas M. Stanley, Galen W. Miller, and Neil H. Suneson, 2001-2002. Research supported by the U.S. Geological Survey National Cooperative Geologic Mapping Program, under Assistance Award Number 01HQAG0107. The views and conclusions contained in this document are those of the authors and should not be interpreted as necessarily representing the official policies, either expressed or implied, of the U.S. Government. Original publication as Open-File Report OF14-2003. Map revised and published as OGQ-41. Cartography and layout prepared by G. Russell Standridge, 2002.

GEOLOGIC MAP OF THE FAIRVIEW 30′ X 60′ QUADRANGLE, ALFALFA, BLAINE, DEWEY, GARFIELD, KINGFISHER, MAJOR, WOODS, AND WOODWARD COUNTIES, OKLAHOMA

Compiled by Thomas M. Stanley, Galen W. Miller, and Neil H. Suneson
Cartography by G. Russell Standridge

2002