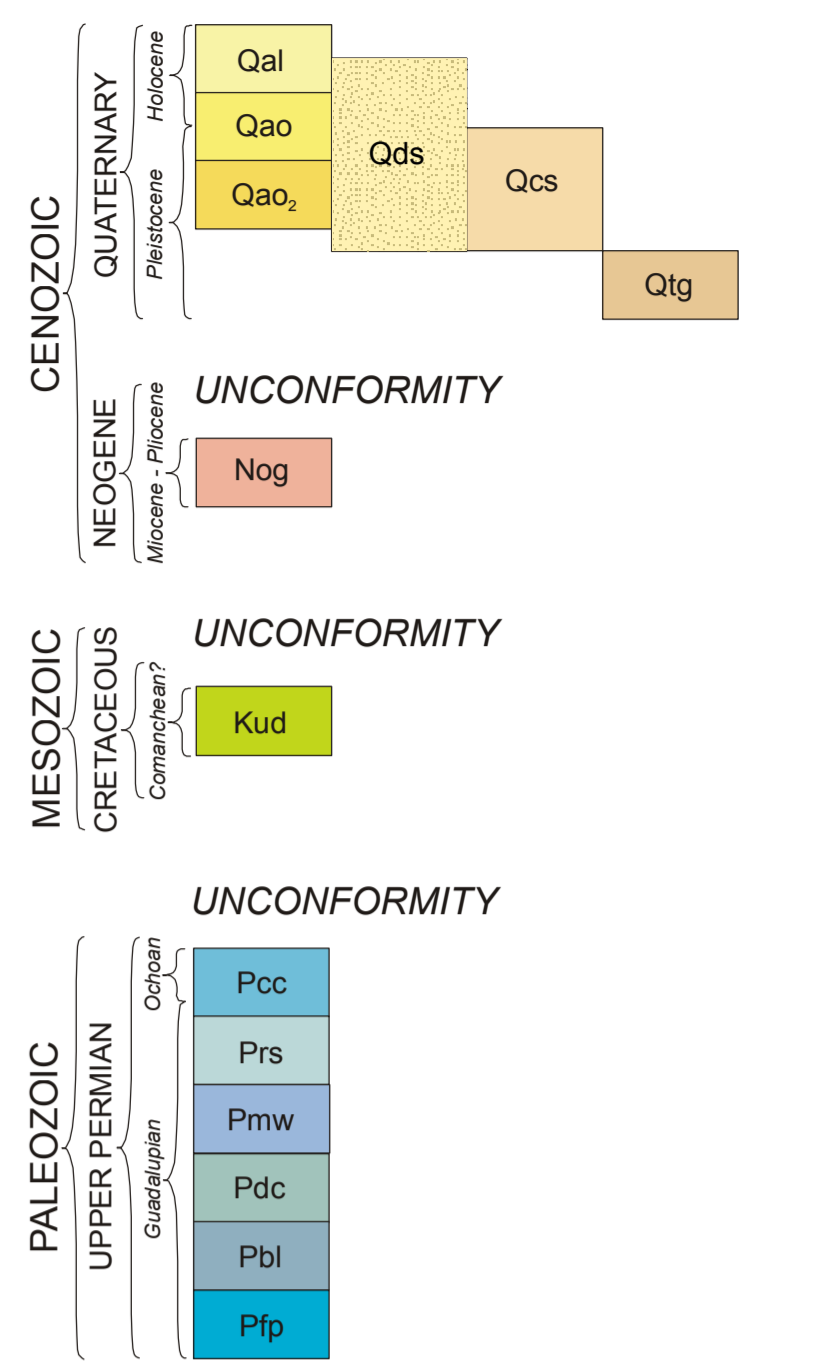


CORRELATION OF UNITS

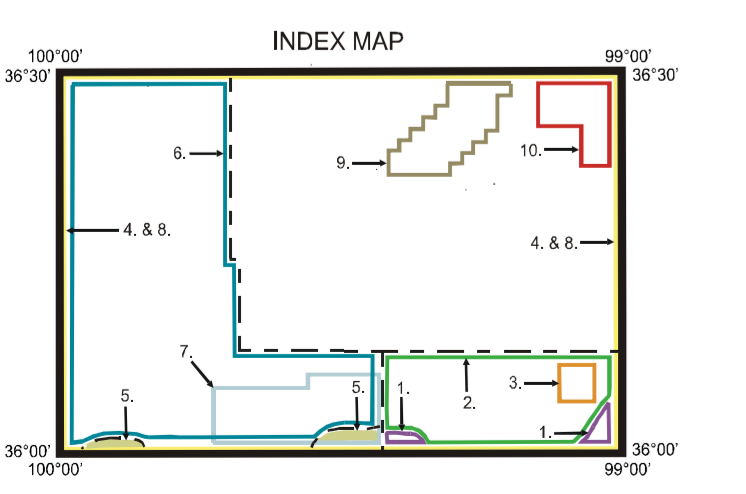


DESCRIPTION OF UNITS

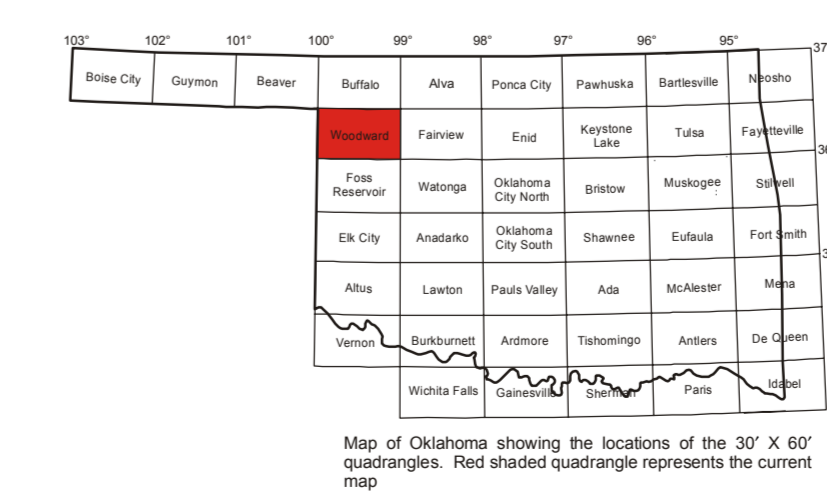
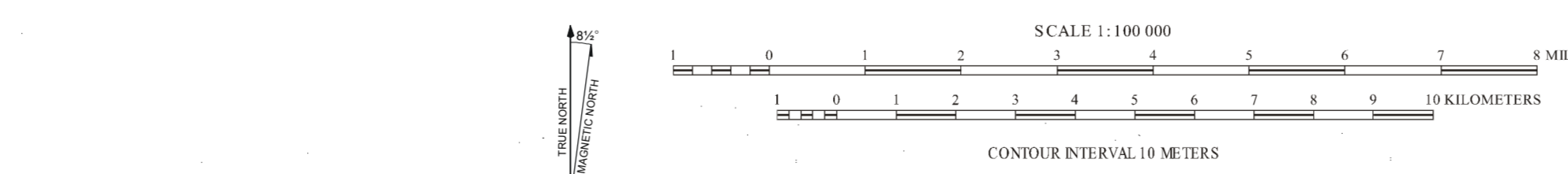
- Qal** ALLUVIUM—Unconsolidated sand, silt, clay, and gravel in stream and river channels on modern flood plains
- Qao** OLDER ALLUVIUM—Unconsolidated sand, silt, clay, and gravel in stream and river channels concentrated between 0 and 12 m above modern flood plains
- Qao_o** OLDER ALLUVIUM—Unconsolidated sand, silt, clay, and gravel in stream and river channels concentrated between 12 and 24 m 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**
- Nog** OGALLALA FORMATION—Mostly unconsolidated to well-cemented, light gray to light brown stream-laid deposits of sand, silt, clay, and gravel together with local caliche and volcanic ash. Where exposed, base usually consists of a well-indurated bed of conglomerate with basalt, limestone, and dolomite clasts
- 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, locally greenish-gray shale locally interbedded with thin, reddish-brown fine-grained sandstone and siltstone. Bedding usually chaotic due to slumping; calcite veining common. Base mapped at the Moccasin Creek gypsum bed
- Prs** RUSH SPRINGS FORMATION—Reddish-brown, fine-grained sandstone, commonly cross-bedded, with local interbeds of reddish-brown shale. Upper third of unit contains several thin gypsum beds
- 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 top of highest massive Blaine gypsum bed
- Pbl** BLAINE FORMATION—Alternating sequence of four massive gypsum beds with reddish-brown shale
- Pfp** FLOWERPOT SHALE—Reddish-brown silty shale; upper part with alternating thin gypsum beds underlying that give unit a characteristic striped pattern at a distance

SYMBOLS

- Unit contact, approximately located



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The base map was compiled by the U.S. Geological Survey from 1:62,500 scale topographic maps dated 1959-1975. Photography revised from aerial photographs taken 1967. Meter scale 1987. UTM grid 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, 2001. 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. Originally published as Open-File Report OF-13-2003. Map revised and published as OGG-40. Cartography and layout prepared by G. Russell Standridge, 2002.

GEOLOGIC MAP OF THE WOODWARD 30' X 60' QUADRANGLE,
ELLIS, DEWEY, ROGER MILLS, AND WOODWARD COUNTIES, OKLAHOMA
Compiled by Thomas M. Stanley
Cartography by G. Russell Standridge
2002