Preliminary Geologic Map of the Scobey 30' x 60' Quadrangle

Robert N. Bergantino

and

Edith M. Wilde

1998

Map: revised 2011

SCOBEY 30' x 60' QUADRANGLE

DESCRIPTION AND AGE OF MAP UNITS

Symbo	l Age	Description
Qal Qgb Qgl Qgi Qac	Holocene Pleistocene Pleistocene Pleistocene Quaternary	Alluvium; deposits of gravel, sand, silt or clay on flood plains Glacial lake bar deposits Glacial lake deposits Glacial ice-contact deposits; kames, kame terraces, eskers Alluvium-colluvium; includes deposits in alluvial fans, on alluvial terraces and glacial outwash
Tf	Miocene-Pliocene	Flaxville Formation; maximum thickness 30 meters (100 feet), generally less than 10 meters (30 feet); may include extensive gravels of Pleistocene age
Tftr	Paleocene	Fort Union Formation, Tongue River Member The Tongue River Member has been extensively evaluated for coal resources especially on the Fort Peck Indian Reservation, consequently its contact with the Lebo Member is better known than that between the Lebo and Tullock members. Nevertheless, the Tongue River-Lebo contact is shown here as approximate. The Tongue River Member is about 250 meters (800 feet) thick.
Tfle	Paleocene	Fort Union Formation, Lebo Member In 1939, Collier and Knechtel mapped the Tullock and Lebo members in the McCone County portion of the Wolf Point 30' x 60' quadrangle, about 35 miles (55 km) southwest of the southwest corner of the Plentywood 30' x 60' quadrangle. These members have not been mapped in this quadrangle. Their contact on this map was derived from a few measurements of their thickness and from structure contours on the top of the Bearpaw Shale and base of the Tongue River Member. The contact between these members is shown as approximate. The Lebo Member is about 100 meters (300 feet) thick.
Tft	Paleocene	Fort Union Formation, Tullock Member For contact with the Lebo Member, see Lebo. The Tullock Member is about 60 meters (200 feet) thick.
Khc	Upper Cretaceous	Hell Creek Formation Note: the contact between the Hell Creek Formation and the Tullock Member of the Fort Union Formation is approximate, only. The Hell Creek Formation ranges from 70 to 85 meters (230-280 feet) thick.
Kfh	Upper Cretaceous	Fox Hills Sandstone; the upper part of the Fox Hills Sandstone has been eroded in places during deposition of the Hell Creek Formation, maximum thickness about 45 meters (150 feet).
Kb	Upper Cretaceous	Bearpaw Shale; 330 meters (1100 feet) thick; only the very top of the Bearpaw Shale is present in this quadrangle
W		Water body; includes reservoirs and rivers

SCOBEY 30' x 60' QUADRANGLE

MAP SYMBOLS

٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠٠	Contact; dashed where approximate, dotted where concealed
	Fault; dashed where approximate
MATTIMA	Significant break between two levels of alluvium-colluvium
1	Inferred maximum extent of glacial ice: ticks on ice side

SCOBEY 30' x 60' QUADRANGLE

SOURCES OF GEOLOGIC MAP DATA

- 1. Colton, R.B. 1964. Geologic map of the south half of the Baylor, Larslan, West Fork, Police Creek, Kahle and Lundeville quadrangles, Valley, Roosevelt and Daniels counties, Montana. U.S. Geological Survey Miscellaneous Geologic Investigations Map I-361. Scale 1:62,500.
- 2. Colton, R.B., Whitaker, S. T., Ehler, W. C. and Fuller, H. K. 1978. Preliminary photogeologic map of the Four Buttes, Scobey and Flaxville quadrangles, Daniels County, Montana. U.S. Geological Survey Open-File Report 78-898. Scale 1:50,000.

SCOBEY 30' X 60' QUADRANGLE INDEX MAP OF SOURCES OF GEOLOGIC MAP DATA

