PRELIMINARY GEOLOGIC MAP OF THE WOLF POINT 30 x 60 QUADRANGLE

Robert N. Bergantino

and

Edith M. Wilde

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WOLF POINT 30' x 60' QUADRANGLE

DESCRIPTION AND AGE OF MAP UNITS

Symbol	Age	Description
Qal	Holocene	Alluvium; deposits of gravel, sand, silt or clay on flood plains
Qg	Pleistocene	Glacial drift (generally till and outwash deposits in Weldon-Brockton-Froid structure)
Qgi	Pleistocene	Glacial ice-contact deposits; kames, kame terraces, eskers
Qac	Quaternary	Alluvium-colluvium; includes deposits in alluvial fans, on alluvial terraces and glacial outwash
Tf	Miocene-Pliocene	Flaxville Formation; maximum thickness about 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 delimited than that of the Lebo and Tullock. Nevertheless, the Tongue River-Lebo contact is shown on this map as approximate. Thickness about 250 meters (800 feet).
Tfle	Paleocene	Fort Union Formation, Lebo Member In 1939, Collier and Knechtel mapped the Tullock and Lebo members in the McCone County portion this 30' x 60' quadrangle, but these members have not been mapped elsewhere 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. Thickness of the Lebo Member is about 100 meters (300 feet).
Tft	Paleocene	Fort Union Formation, Tullock Member For contact with overlying Lebo Member, see Lebo. Thickness of the Tullock Member is about 70 meters (230 feet).
Khc	Upper Cretaceous	Hell Creek Formation. Thickness is from 70 to 85 meters (230-280 feet).
Kfh	Upper Cretaceous	Fox Hills Sandstone. The upper portion was eroded in places during deposition of the Hell Creek Formation. Maximum thickness about 45 meters (150 feet).
Kb	Upper Cretaceous	Bearpaw Shale. Thickness about 330 meters (1100 feet). Only the upper part is present in this quadrangle.
W		Water body; includes reservoirs and rivers

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MAP SYMBOLS

Contact; dashed where approximate, dotted where concealed

Fault; approximate location

Approximate axis of latest pre-diversion (pre-glacial) Missouri River

Significant break between two levels of alluvium-colluvium

Inferred maximum extent of glacial ice, ticks on ice side

(Tfle) Geologic symbol of inferred buried unit

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SOURCES OF GEOLOGIC MAP DATA

1. Colton, R.B. 1955. Geology of the Wolf Point quadrangle, Montana. U.S. Geological Survey Geologic Quadrangle Map GQ-67. Scale 1:62,500.

2. Colton, R.B. 1963. Geologic map of the Chelsea quadrangle, Roosevelt and McCone counties, Montana: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-363. Scale 1:62,500.

3. Colton, R.B. 1963. Geologic map of the Cuskers quadrangle, Roosevelt County, Montana: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-364. Scale 1:62,500.

4. Colton, R.B. 1963. Geologic map of the Hay Creek quadrangle, Roosevelt County, Montana: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-365. Scale 1:62,500.

5. Colton, R.B. 1963. Geologic map of the Oswego quadrangle, Valley, Roosevelt and McCone counties, Montana: U.S. Geological Survey Miscellaneous Geologic Investigations Map I-366, 1:62,500.

6. Colton, R.B. 1963. Geologic map of the Poplar quadrangle, Roosevelt, Richland and Daniels counties, Montana. U.S. Geological Survey Miscellaneous Geologic Investigations Map I-367. Scale 1:62,500.

7. Colton, R.B. 1963. Geologic map of the Todd Lakes quadrangle, Valley County, Montana. U.S. Geological Survey Miscellaneous Geologic Investigations Map I-370 Scale 1:62,500.

8. Colton, R.B. 1963. Geologic map of the Tule Valley quadrangle, Roosevelt County, Montana. U.S. Geological Survey Miscellaneous Geologic Investigations Map I-371. Scale 1:62,500.

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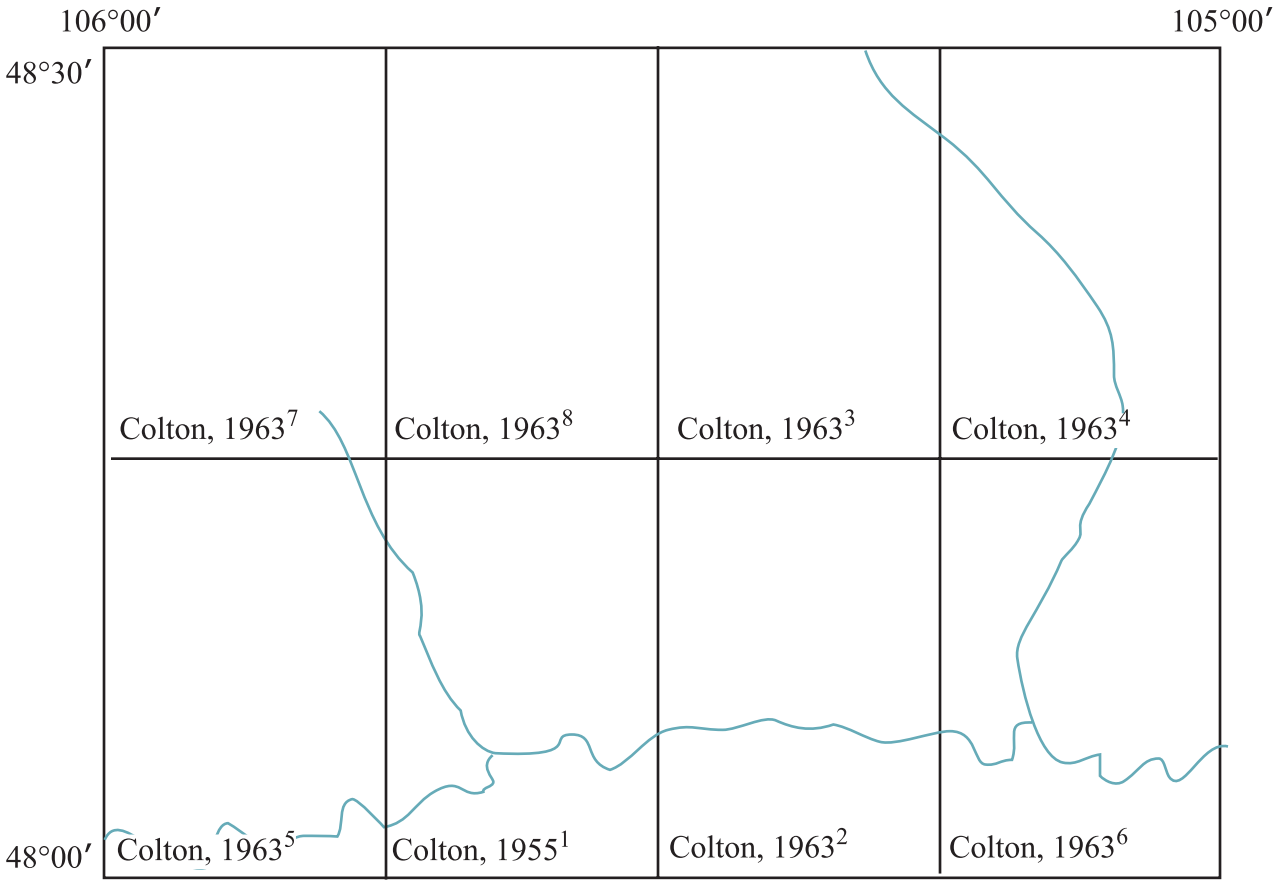
SOURCES OF GEOLOGIC MAP DATA



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