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U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

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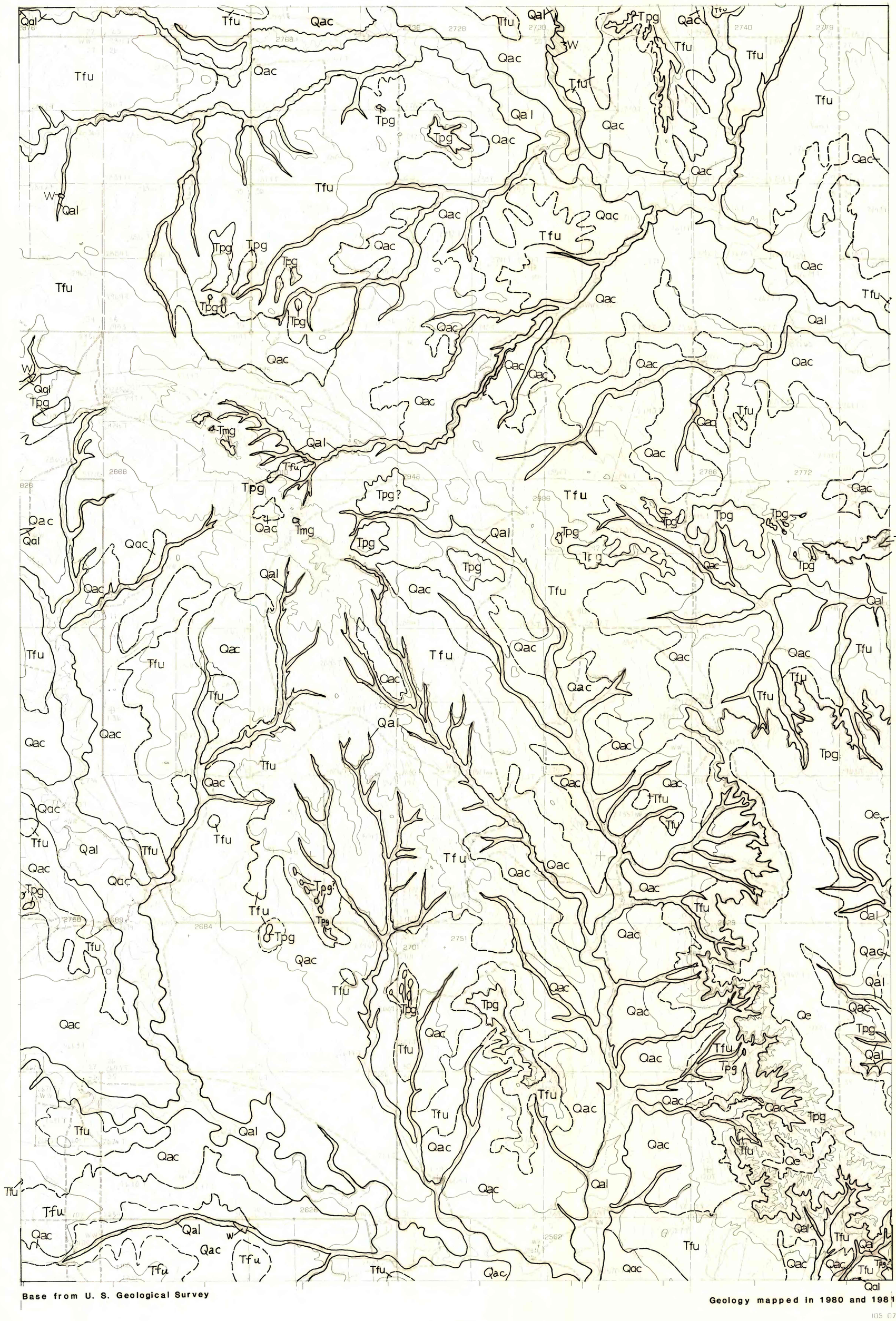
Prepared in cooperation with the
MONTANA BUREAU OF MINES AND GEOLOGY

OPEN-FILE REPORT 88-615



Base from U. S. Geological Survey

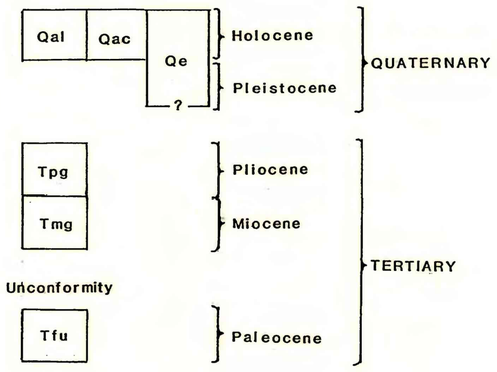
Geology mapped in 1980 and 1981

SCALE 1:24 000

1 ½ 0 1 MILE

1 .5 0 1 KILOMETER

CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

Qal **Alluvium (Holocene)**--Light-brown and gray, well-stratified and well-sorted clay, silt, sand, and gravel. As much as 6 m (20 ft) thick under the flood plain of Bad Route Creek to less than 3 m (10 ft) under flood plains of tributaries. Unit limited to areas characterized by meander or braided patterns on aerial photographs. Surface of unit may be subject to occasional flooding

Qac **Alluvium and colluvium (Holocene)**--Light-brown to gray, poorly sorted and well-stratified clay, silt, sand, and gravel deposited by slope wash and gravity processes. As much as 10 m (33 ft) thick, but generally less than 5 m (16 ft). The color and texture of the colluvium reflect the parent material upslope. May interfinger with alluvium; includes alluvial fans and much windblown clay, silt, and sand. Soil profiles range from well-developed to poorly developed

Qe **Eolium (Holocene to Pleistocene)**--Light-brown to light-gray clay, silt, sand, granules, and pebbles. Pebbles were carried up into eolium by bioturbation. Present mainly as a thin veneer as much as 2 m (6 ft) thick on terraces and fans. May be present as a veneer less than 2 m (6 ft) thick

Tpg **Sand and gravel undivided (Pliocene)**--Light-brown to light-gray, well-stratified and well-sorted to poorly sorted sand and gravel. Thickness as much as 20 m (66 ft), but generally less than 16 m (52 ft). Unit generally limited to altitudes between 902 m (2,960 ft) and 823 m (2,700 ft). May contain some Pleistocene sand and gravel

Tmg **Sand and gravel undivided (Miocene)**--Light-brown to light-gray, well-stratified to poorly stratified, and well-sorted to poorly sorted sand and gravel. Thickness as much as 24 m (80 ft), but generally less than 10 m (33 ft). Unit generally limited to altitudes 936 m (3,070 ft). Cemented locally by calcium carbonate

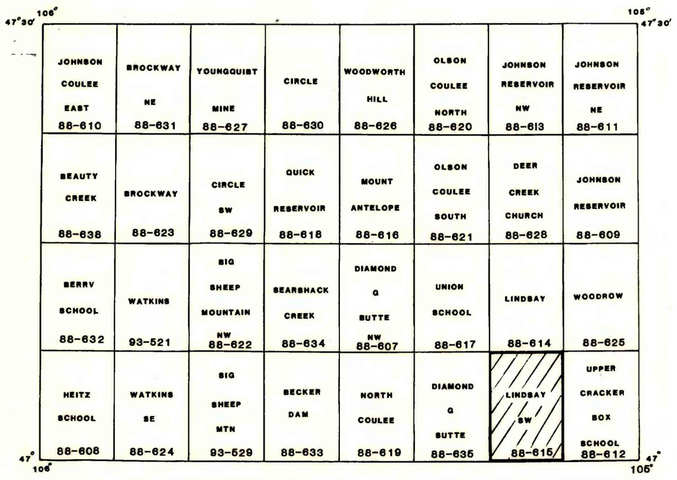
Tfu **Tongue River Member (Collier and Knechtel, 1939) of Fort Union Formation (Paleocene)**--Yellowish- and light-brown shale and sandstone containing numerous lignite beds. Remaining thickness of formation is estimated to be 123 m (400 ft)

w **Water**

—— **Contact**--Dashed where approximately located

REFERENCE

Collier, A.J., and Knechtel, M.N., 1939, The coal resources of McCone County, Montana: U.S. Geological Survey Bulletin 905, 80 p.



INDEX TO QUADRANGLES IN THE CIRCLE 30' x 60' QUADRANGLE. MAPPED QUADRANGLE SHOWN BY STRIPES; NUMBERS ARE OPEN-FILE NUMBERS

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GEOLOGIC MAP OF THE LINDSAY SW QUADRANGLE, DAWSON COUNTY, MONTANA

By

R.B. Colton, J.P. McGraw, and D.K. Bozeman

1994