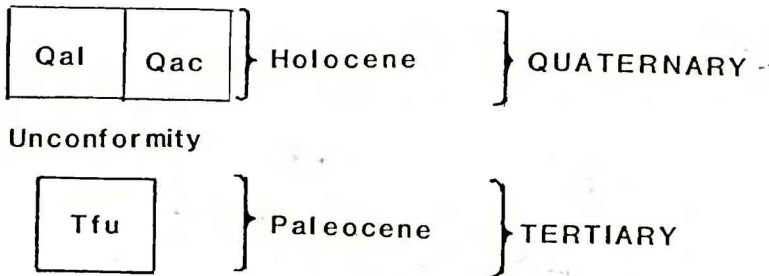




CORRELATION OF MAP UNITS



DESCRIPTION OF MAP UNITS

- Qal Alluvium (Holocene)**--Light-brown and gray, well-sorted and well-stratified clay, silt, sand, and gravel. Thickness ranges from as much as 4 m (13 ft) under the flood plain of Nelson Creek to less than 2 m (6 ft) under flood plains of tributary streams. 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 and gray, poorly sorted and well-stratified clay, silt, sand, and gravel deposited by gravity processes and slope wash. Color and texture of colluvium reflect the parent material upslope. May interfinger with alluvium; includes alluvial fans and thin veneer of windblown clay, silt, and sand. As much as 10 m (33 ft) thick, but generally less than 5 m (16 ft). Soil profiles range from well-developed to poorly developed.
- Tfu Tongue River Member (Collier and Knechtel, 1939) of Fort Union Formation (Paleocene)**--Yellowish- to light-brown shale and sandstone containing numerous lignite beds. Base not exposed; maximum exposed thickness is estimated to be more than 100 m (330 ft).

- w Water**  
**Contact**--Dashed where approximately located  
**Abandoned coal mine**  
**Scarp**--Hachures on down side

REFERENCE

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

JOHNSON COULEE EAST 88-610	BROCKWAY NE 88-631	YOUNGQUIST MINE 88-627	CIRCLE HILL 88-630	WOODWORTH HILL 88-626	OLSON COULEE NORTH 88-620	JOHNSON RESERVOIR NW 88-613	JOHNSON RESERVOIR NE 88-611
BEAUTY CREEK 88-636	BROCKWAY SW 88-623	CIRCLE RESERVOIR 88-629	QUICK ANTELOPE 88-618	MOUNT ANTELOPE 88-616	OLSON COULEE SOUTH 88-621	DEER CREEK CHURCH 88-628	JOHNSON RESERVOIR 88-609
BERRY SCHOOL 88-632	WATKINS SE 93-521	RIO SHEEP MOUNTAIN NW 88-622	BEARSHACK CREEK 88-634	DIAMOND O BUTTE NW 88-607	UNION SCHOOL 88-617	LINDSAY 88-614	WOODROW 88-625
HEITZ SCHOOL 88-608	WATKINS SE 88-624	RIO SHEEP MTN 93-629	BECKER DAM 88-633	NORTH COULEE 88-610	DIAMOND O BUTTE 88-635	LINDSAY SW 88-615	UPPER CRACKER BOX SCHOOL 88-612

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

GEOLOGIC MAP OF THE JOHNSON COULEE EAST  
QUADRANGLE, MCCONE COUNTY, MONTANA

By

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

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