

MAP UNITS

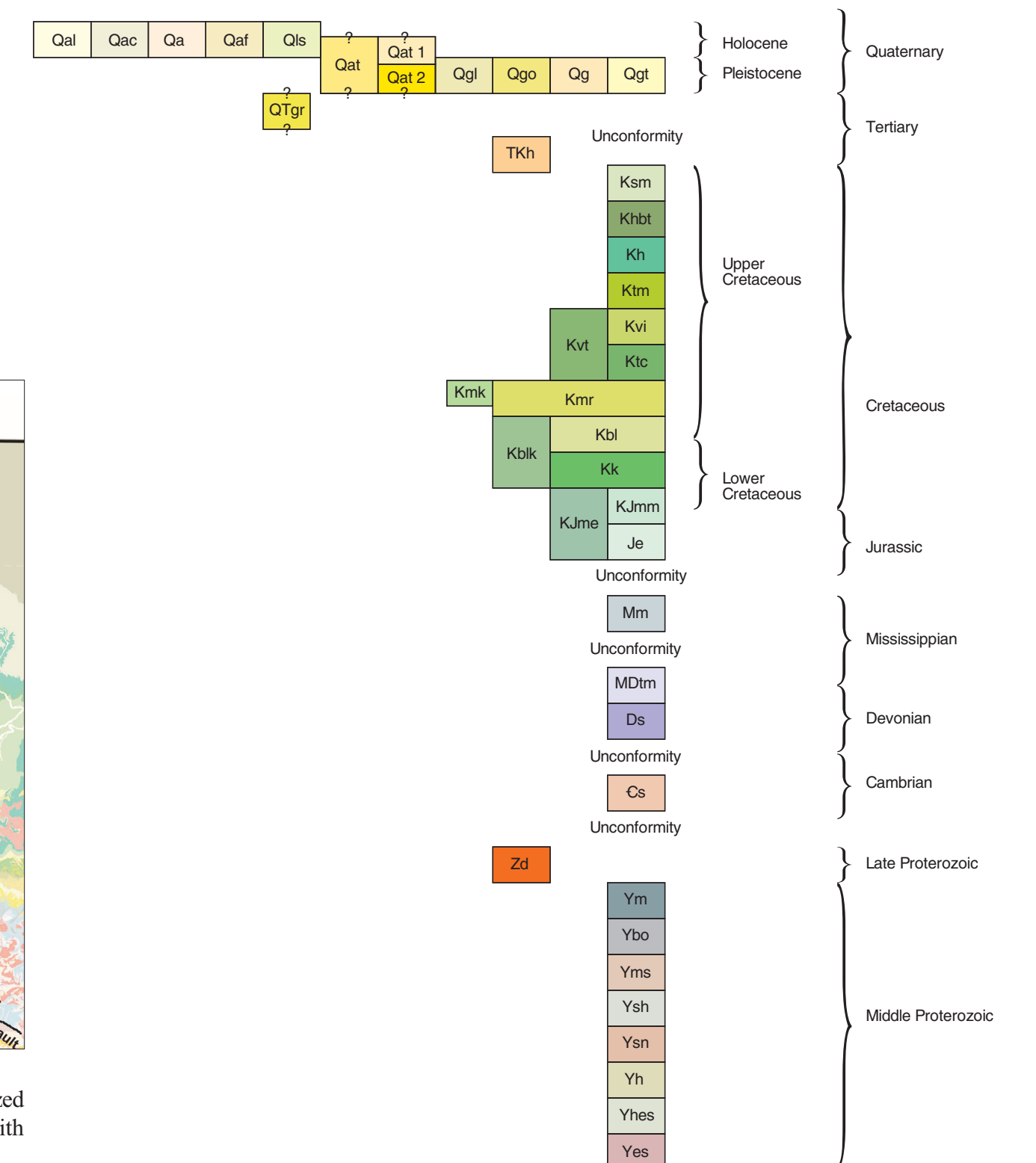
- Qal Alluvium of modern channels and flood plains
- Qac Alluvium and colluvium, undivided
- Qa Alluvial deposit
- Qaf Alluvial fan deposit
- Qls Landslide deposit
- Qat Alluvium of alluvial terrace
- Qat1 Alluvium of youngest alluvial terrace
- Qat2 Alluvium of second youngest alluvial terrace
- Qgl Glacial lake deposit
- Qgp Glacial outwash deposit
- Qg Glacial deposit, undivided
- Qgt Glacial till
- QTgr Gravel
- Thb Hypabyssal intrusive or flows
- Km St. Mary River Formation
- Km1 Horseshel Formation and Bearpaw-Horseshel transition unit
- Km2 Horseshel Formation
- Km3 Two Medicine Formation
- Kv1 Virgelle Formation
- Kv2 Virgelle and Telegraph Creek Formations, undivided
- Kv3 Telegraph Creek Formation
- Kvr Marais River Formation
- Kk1 Kevin Member of Marais River Formation
- Kk2 Blackfoot Formation
- Kk3 Blackfoot and Kootenai Formations, undivided
- Kk4 Kootenai Formation
- Kme Mount Pablo Formation, Morrison Formation, and Ellis Group, undivided
- Kme1 Mount Pablo Formation and Morrison Formation, undivided
- Je Ellis Group, undivided
- Mm Madison Group, undivided
- MDm Three Forks Formation, Jefferson Dolomite and Maywood Formation
- Ds Sedimentary rocks, undivided
- Cs Sedimentary rocks, undivided
- Zd Diabase sills and dikes, undivided
- Ym McNamara Formation
- Ybo Bonner Formation
- Yms Mount Shields Formation
- Ysh Sheppard Formation
- Ysn Snowpelt Formation
- Yh Helena Formation
- Yhes Helena, Empire, and Spokane Formations, undivided
- Yes Empire and Spokane Formations, undivided
- W Water
- Choteau Choteau

For a more detailed description of the map units and symbols, please refer to the text accompanying this map.

MAP SYMBOLS

- Contact - Approximately located. Dotted where concealed beneath glacial deposits or alluvium.
- Normal Fault - Bar and ball on downthrown side.
- Thrust Fault - Sawtooth on upper plate. Dotted where concealed.
- Anticline - Trace of axial plane. Dotted where trace is concealed.
- Syncline - Trace of axial plane. Dotted where trace is concealed.
- Strike and dip of inclined beds
- Horizontal beds
- Drumlin and linear features on bedrock attributed to glacial movement
- Melt-water channel

Correlation Chart for Choteau 30' x 60' quadrangle

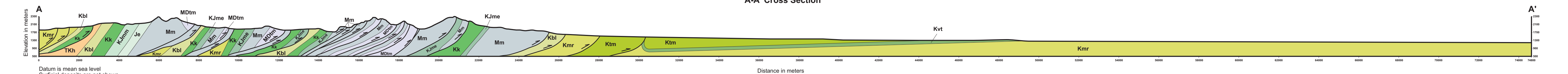


Base from U.S. Geological Survey  
Choteau 30' x 60' topographic quadrangle  
Map date: 1984  
Projection: UTM zone 12, 1927 NAD  
UTM Grid Declination 11°07' West  
1980 Magnetic North Declination 17.5° East

SCALE 1:100 000  
1 CENTIMETER ON THE MAP REPRESENTS 1 KILOMETER ON THE GROUND  
CONTOUR INTERVAL 50 METERS

CHOTEAU, MONTANA  
47112-E1-TM-100  
1984

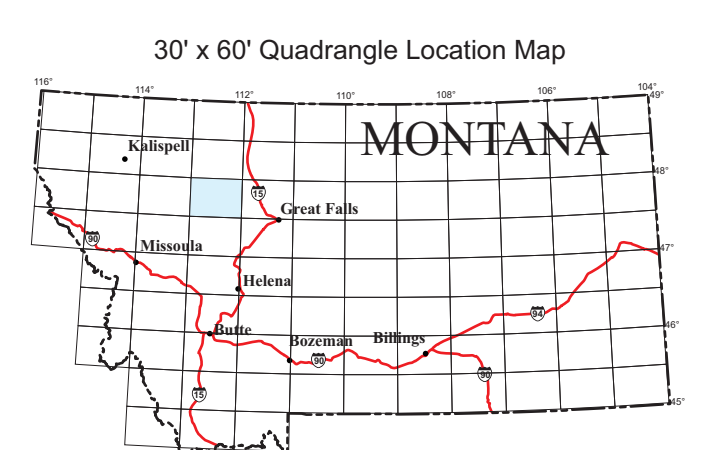
A-A' Cross Section



- Cross Section Units
- Thb Hypabyssal intrusion or flow
  - Km3 Two Medicine Formation
  - Kv1 Virgelle and Telegraph Creek Formations, undivided
  - Kvr Marais River Formation
  - Kk2 Blackfoot Formation
  - Kk4 Kootenai Formation
  - Kme1 Mount Pablo Formation, Morrison Formation, and Ellis Group, undivided
  - Kme2 Mount Pablo Formation, Morrison Formation, and Ellis Group, undivided
  - Je Ellis Group, undivided
  - Mm Madison Group, undivided
  - MDm Three Forks Formation, Jefferson Dolomite and Maywood Formation

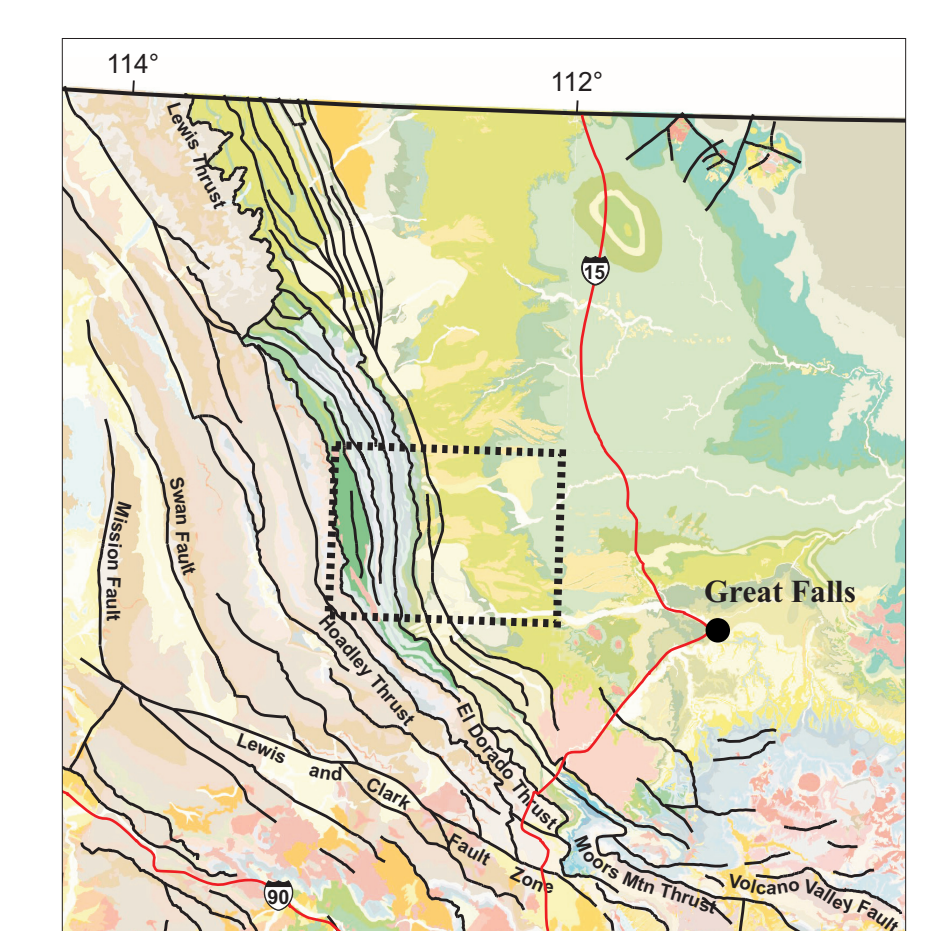
7.5' quadrangle index

|               |                 |             |              |                 |                 |               |              |
|---------------|-----------------|-------------|--------------|-----------------|-----------------|---------------|--------------|
| Phogary River | Mount Angelo    | Crow Butte  | Two Lakes    | Burns Reservoir | Burns           | Agassiz South | East Lake    |
| Green Park    | Our Lakes       | Ear Win     | Lost Thicket | Woods Park      | Three Buttes    | Choteau       | Choteau SE   |
| Green Creek   | American Indian | Crook River | Spill Rock   | Phobos          | Harvesters Hill | Sawtooth      | Presidential |
| Phogary       | Parsons         | Stanton     | Spill Rock   | Spill Rock      | Gilman          | Golden Ridge  | Lowry        |



30' x 60' quadrangle index

|                        |                 |                   |
|------------------------|-----------------|-------------------|
| HUNGRY HORSE RESERVOIR | VALER           | CONRAD            |
| SWAN PEAK              | CHOTEAU         | GREAT FALLS NORTH |
| BEELLY LAKE            | DEANSPORN RIVER | GREAT FALLS SOUTH |



Regional faults  
Dashed outline is Choteau 30' x 60' quadrangle. Colors on generalized geologic map base (Vukobratovic and others, 2007) are not consistent with those on the 1:100,000-scale map of the Choteau quadrangle.

Montana Bureau of Mines and Geology  
Open File 571  
  
Geologic Map of the  
Choteau 30' x 60' Quadrangle  
North Central Montana

Compiled and mapped by Richard B. Berg

2008

Maps may be obtained from  
Publications Office  
Montana Bureau of Mines and Geology  
1300 West Park Street, Butte, Montana 59710-8397  
Phone: (406) 496-4167 Fax: (406) 496-4451  
http://www.mbmng.mtech.edu

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GIS production: Ken Sandaa and Paul Thale, MBMG. Map layout: Susan Smith, MBMG