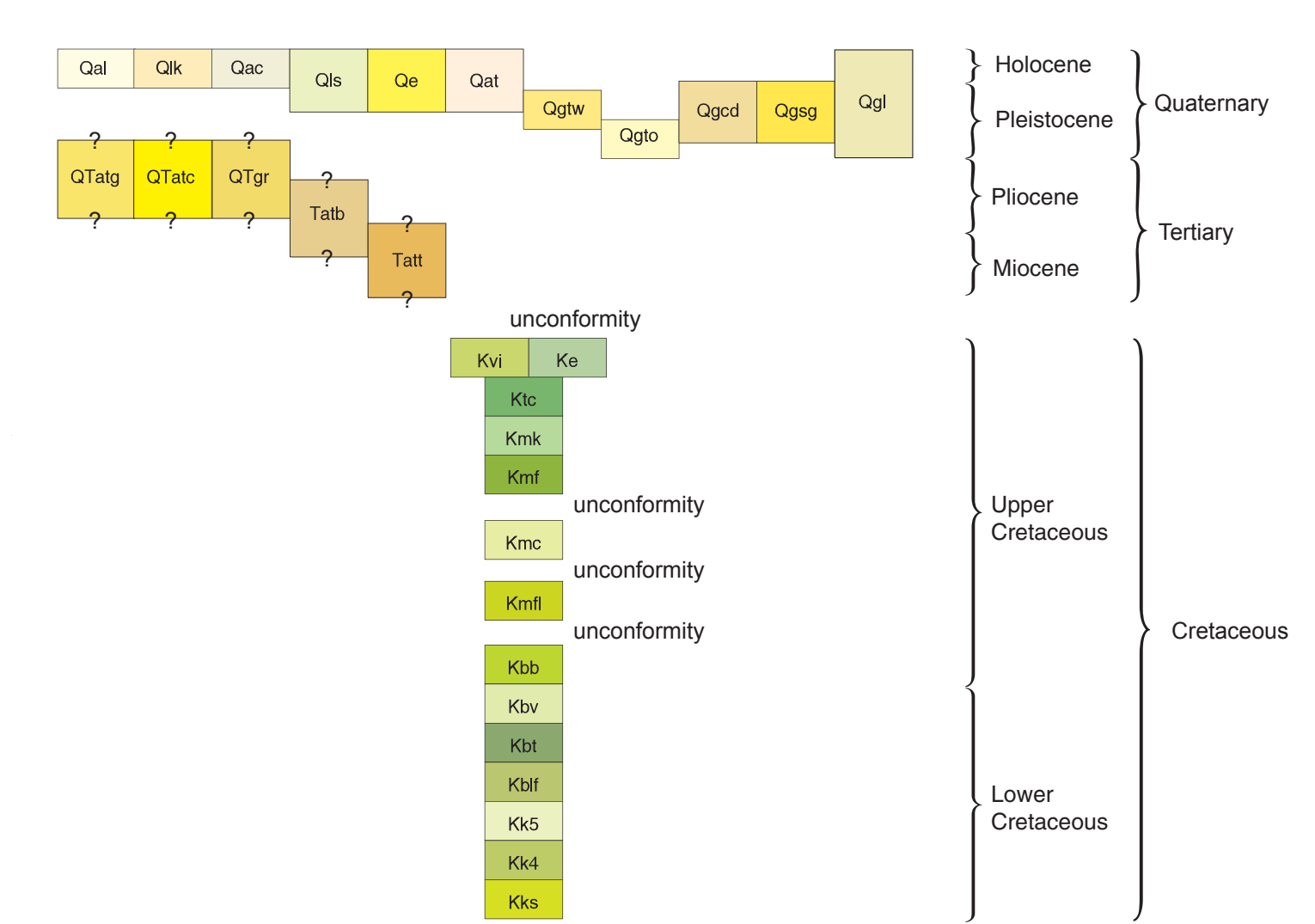


- Map Units**
- Qal Flood plain and channel alluvium
 - Qk Lake deposit
 - Qac Alluvium and colluvium
 - Qls Landslide deposit
 - Qe Eolian deposit
 - Qat Alluvium of alluvial terrace deposit
 - Qgwl Glacial till, late Wisconsinan
 - Qglo Glacial till, Illinoian and pre-Illinoian
 - Qgod Glacial meltwater deposit
 - Qgsw Glacial sand and gravel deposit
 - Qgl Glacial lake deposit and reworked glacial lake deposit
 - QTatg Alluvial terrace deposit of Greenfield Bench
 - QTatc Alluvial terrace deposit of Corvova area
 - DTgr Gravel
 - Tatg Alluvial terrace deposit of Bole Bench
 - Tatf Alluvial broad plain deposit of Teton Ridge
 - Ke Eagle Formation
 - Kvi Virgelle Formation
 - Ktc Telegraph Creek Formation
 - Kmr Marais River Formation, undivided
 - Kmr1 Ferdyg Member of Marais River Formation
 - Kmr2 Cone Member of Marais River Formation
 - Kmr3 Howense Member of Marais River Formation
 - Kmr4 Booklegger Member of Blackleaf Formation
 - Kmr5 Vaughn Member of Blackleaf Formation
 - Kmr6 Tatt Hill Member of Blackleaf Formation
 - Kmr7 Flood Member of Blackleaf Formation
 - Kmr8 Kootenai Formation, Fifth member
 - Kmr9 Kootenai Formation, Fourth member
 - Kmr10 Kootenai Formation, Sunburst Sandstone Member

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

Correlation Diagram



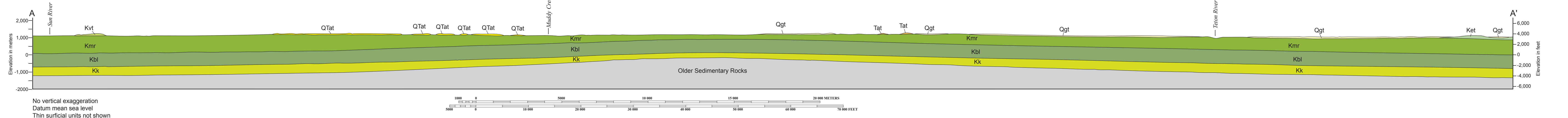
Map Symbols

- Contact** - Dashed where approximately located, dotted where concealed. (Dotted contacts shown for formations, but not members.)
- Concealed bedrock unit** - Symbol shown for formations, but not members. (Ke) Eagle Formation, (Ktc) Telegraph Creek Formation, (Kmr) Marais River Formation, (Kbl) Blackleaf Formation, and (Kk) Kootenai Formation
- Dike** - Shonkinite dike segments in southwestern part of map are northernmost exposed igneous rocks associated with Adel Mountain Volcanics to south.

Base from U.S. Geological Survey
 Great Falls North 30' x 60' topographic quadrangle
 Map edited: 1976; photorevised: 1990
 Projection: UTM zone 12, 1927 NAD
 UTM grid declination 0°28' West
 1976 Magnetic North Declination 18.5° East



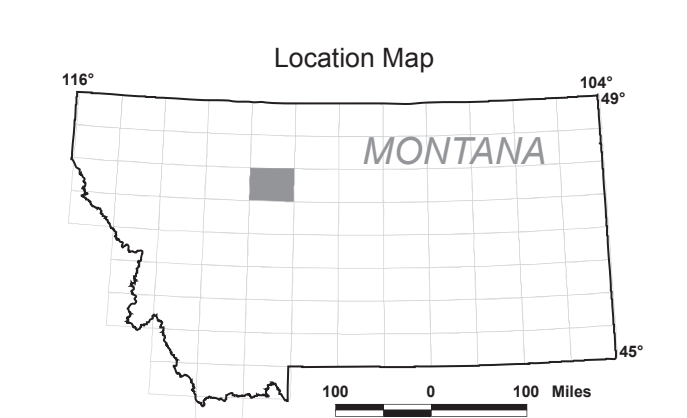
Cross Section A-A'



- Cross Section Explanation**
- Qgt Glacial till, undivided
 - QTat Alluvium, undivided (Pleistocene and/or Pliocene)
 - Tat Alluvium, undivided (Pliocene and/or Miocene)
 - Ket Eagle and Telegraph Creek Fms., undivided
 - Kvt Virgelle and Telegraph Creek Fms., undivided
 - Kmr Marais River Formation, undivided
 - Kbl Blackleaf Formation, undivided
 - Kk Kootenai Formation, undivided

Adjacent 30' x 60' quadrangles

VALER	CONRAD	LONGSOME LAKE
CHOTEAU	GREAT FALLS NORTH	FORT BERTON
DEARBORN RIVER	GREAT FALLS SOUTH	BELT



Montana Bureau of Mines and Geology
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Geologic Map of the Great Falls North 30' x 60' Quadrangle, Central Montana

Compiled and mapped by Susan M. Vuke,
 Roger B. Colton, and David S. Fullerton

Revisions	Date
Text & map	8/02
Text	3/03
Map	9/12

2002

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Maps may be obtained from
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