

**Montana Bureau of Mines and Geology  
EDMAP 1- Plate 1 of 2**

This report was prepared by a geology student under the direction of his advisor as a product of the EDMAP Component of the U.S. Geological Survey National Cooperative Geologic Mapping Program, Contract Number 00HQAG092. It has not been reviewed by the Montana Bureau of Mines and Geology and does not necessarily conform to the usual style and standards for Bureau publications.

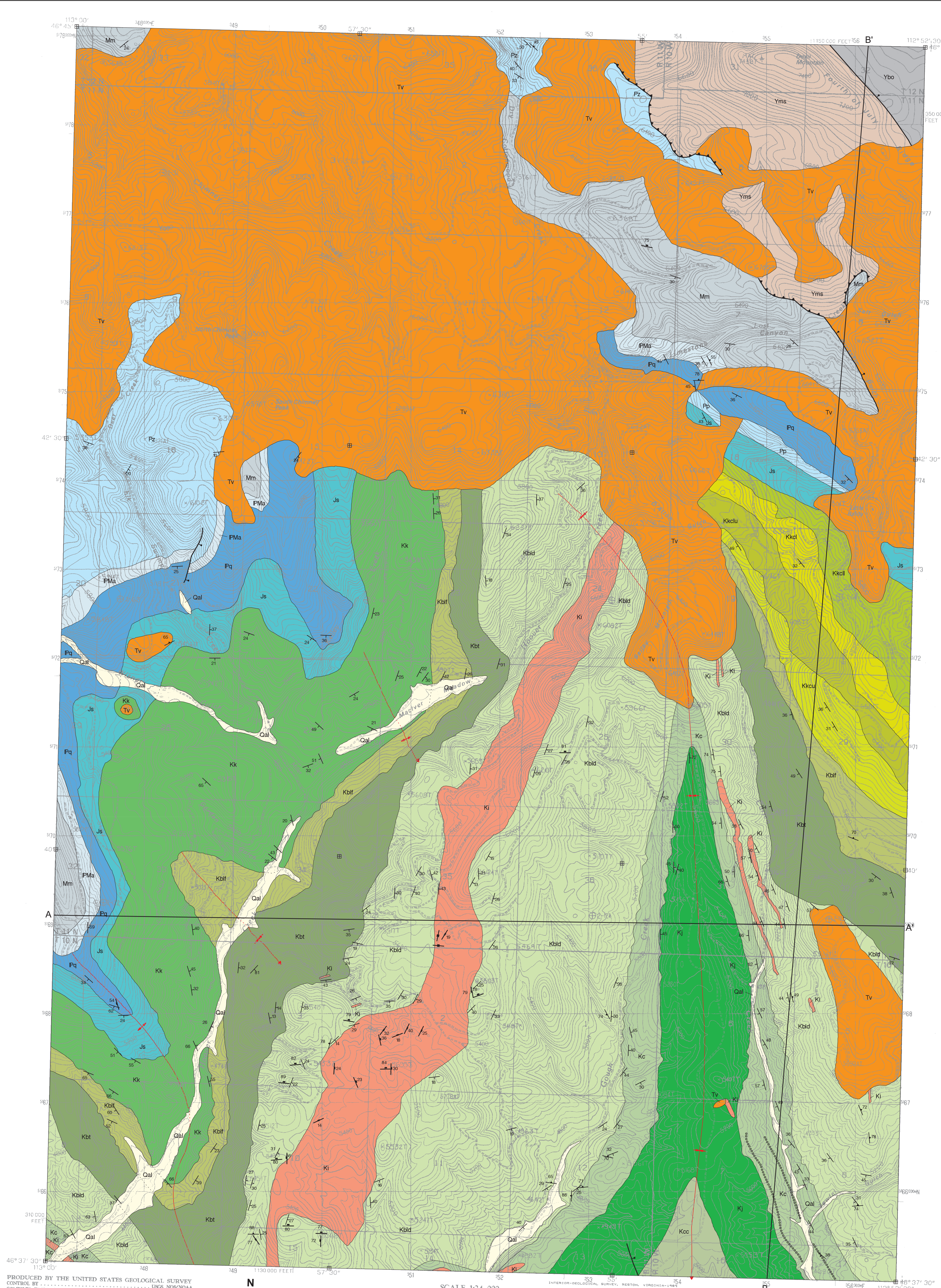
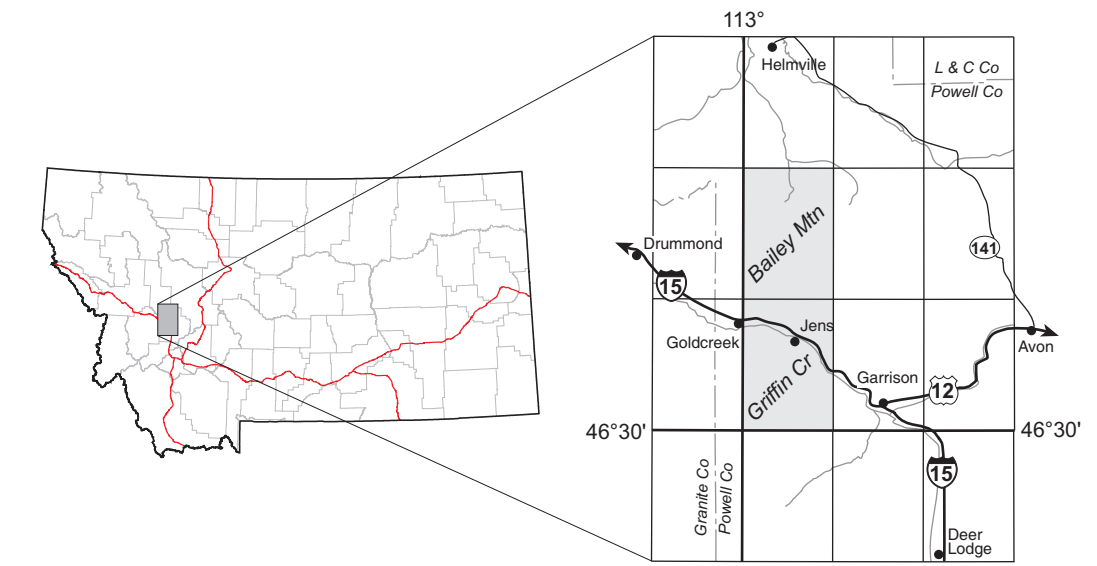
For more detailed information please refer to:  
Brooks, J.A., 2002. Bedrock geologic maps of the Griffin Creek and Bailey Mountain 7.5 minute quadrangles, Powell County, Montana. Missoula, University of Montana M.S. thesis, 84 p., four plates.

**MAP UNITS**

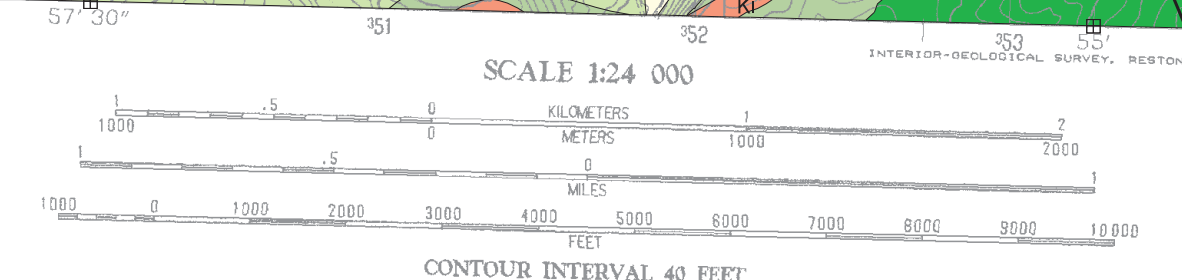
Qal	Alluvium of modern channels and flood plains
Tv	Volcanic rocks, undivided
Ki	Intrusive rocks, undivided
Kcc	Carter Creek Formation
Kj	Jens Formation
Kc	Coberly Formation
Kbid	Dunkleberg Member of Blackleaf Formation
Kbt	Taft Hill Member of Blackleaf Formation
Kblf	Flood Member of Blackleaf Formation
Kkcu	Upper calcareous member "gastropod limestone", Kootenai Formation
Kkcu	Upper clastic member, Kootenai Formation
Kkcl	Lower calcareous member, Kootenai Formation
Kkcl	Lower clastic member, Kootenai Formation
Kk	Kootenai Formation, undivided
Js	Sedimentary rocks, undivided
Pp	Phosphoria Formation
Pq	Quadrant Formation
FMa	Amesden Formation
Mm	Madison Group, undivided
Pz	Sedimentary rocks, undivided
Ybo	Bonner Formation
Yms	Mount Shields Formation

**MAP SYMBOLS**

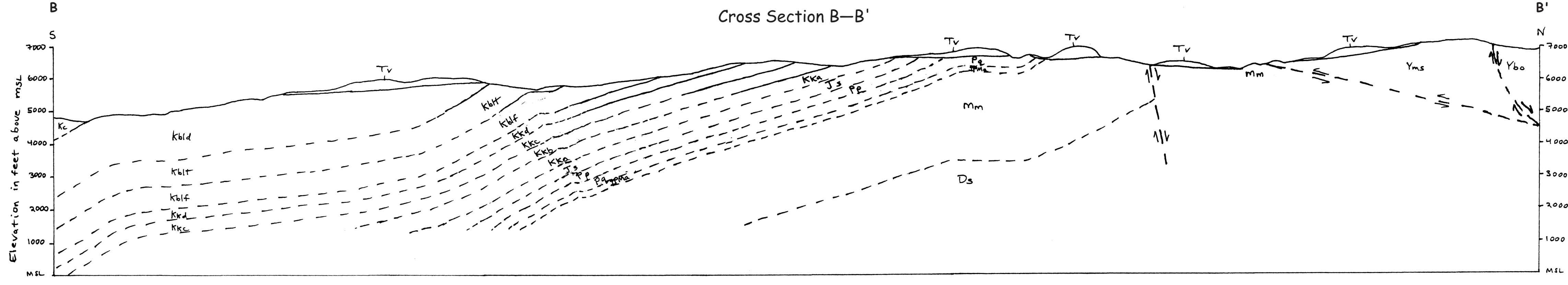
	Contact: dotted where concealed
	Normal fault: dotted where concealed; bar and ball on downthrown side
	Reverse or thrust fault: teeth on upthrown block
	Syncline: showing trace of axial plane and plunge direction where known; dotted where concealed
	Anticline: showing trace of axial plane and plunge direction where known; dotted where concealed
	Strike and dip of inclined beds
	Strike and dip of joints
	Strike of vertical joints
	Foliation
	Fossil oyster beds



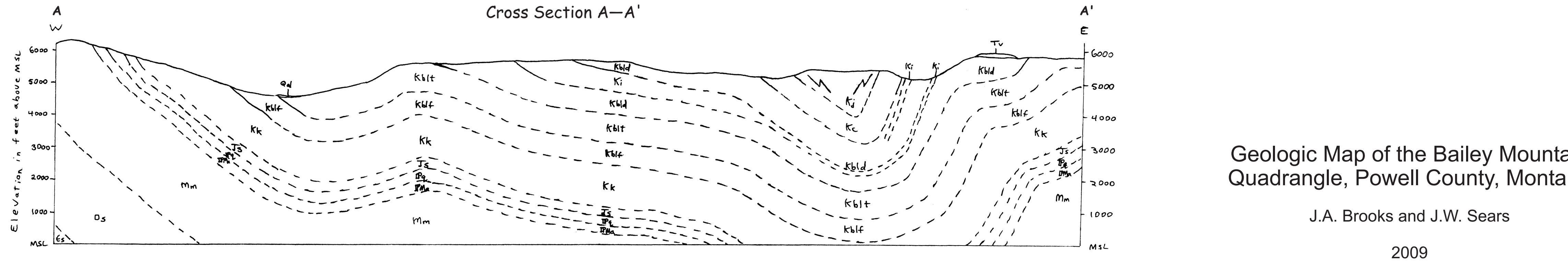
PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY  
CONTROL BY ..... USGS, NAD83/NOAA  
CORRECTED FROM AERIAL PHOTOGRAPHS TAKEN ..... 1994  
FIELD CHECKED ..... 1998 MAP EDITED ..... 1999  
PROJECTION ..... LAMBERT CONFORMAL CONIC  
GRID 800-METER UNIVERSAL TRANSVERSE MERCATOR ..... ZONE 12  
800-METER STATE GRID TICS ..... MONTANA, CENTRAL ZONE  
UTM GRID DECLINATION ..... 1.22° WEST  
1983 MAGNETIC NORTH DECLINATION ..... 17° EAST  
VERTICAL DATUM ..... NATIONAL GEODETIC VERTICAL DATUM OF 1988  
HORIZONTAL DATUM ..... 1983 NORTH AMERICAN DATUM



**Cross Section B-B'**



**Cross Section A-A'**



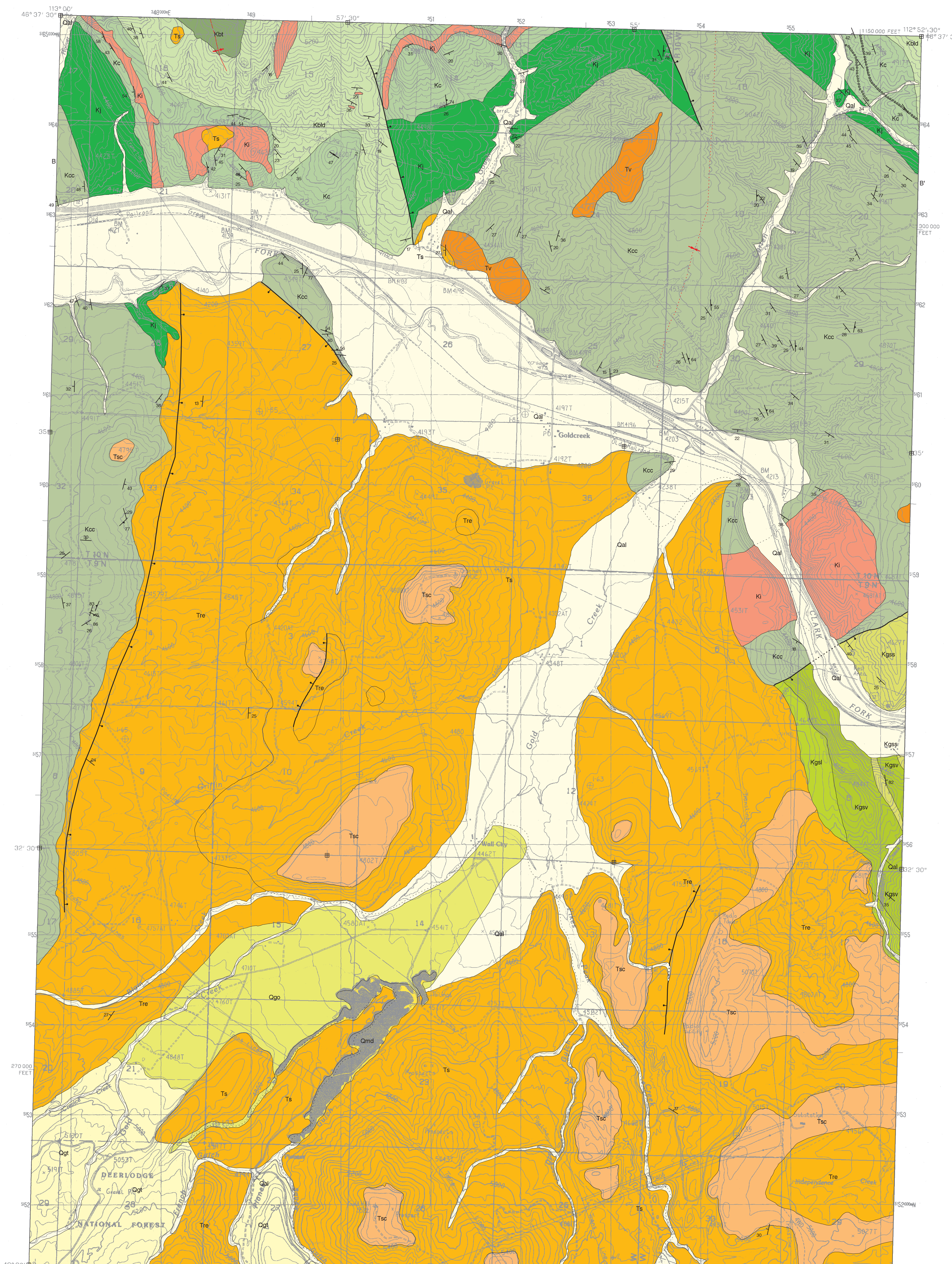
**Geologic Map of the Bailey Mountain  
Quadrangle, Powell County, Montana**

J.A. Brooks and J.W. Sears

Montana Bureau of Mines and Geology  
EDMAP 1 - Plate 2 of 2

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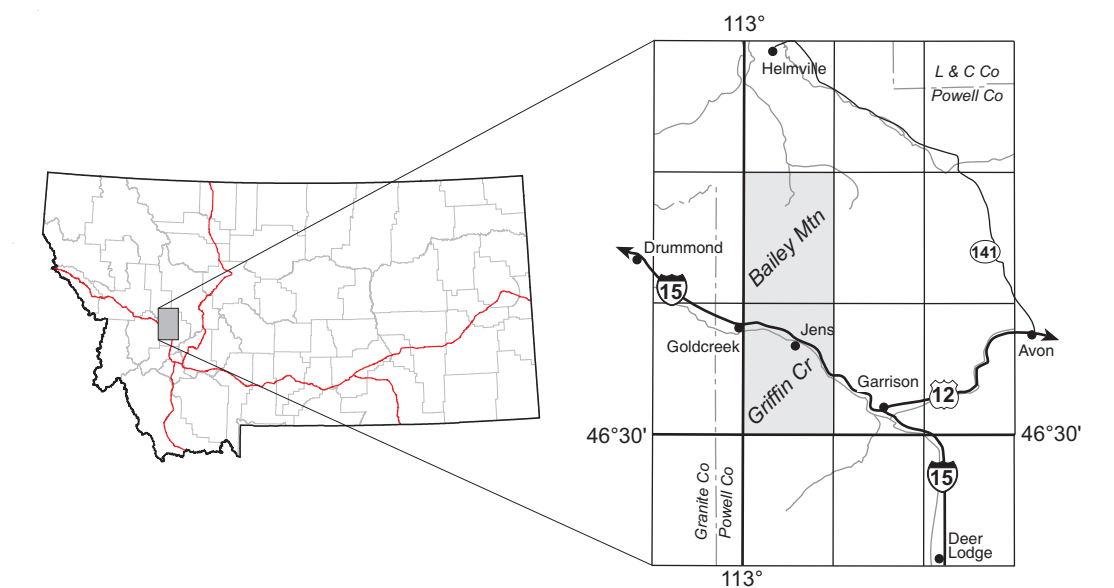


MAP UNITS

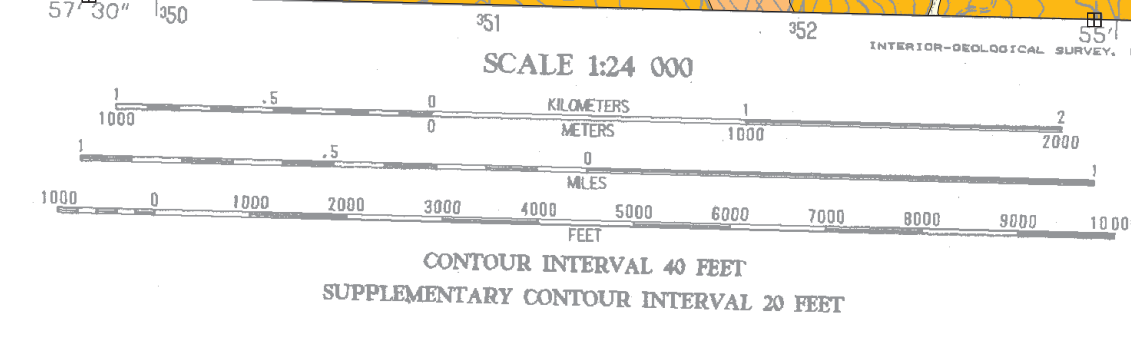
- Qmd Mine dumps and tailings
- Qal Alluvium of modern channels and flood plains
- Qgo Glacial outwash deposit
- Qgt Glacial till
- Tsc Stomile Creek Formation
- Tre Renova Formation
- Ts Sediment or sedimentary rocks, undivided
- Tv Volcanic rocks, undivided
- Ki Intrusive rocks, undivided
- Kgsv Golden Spike Formation, volcanoclastic
- Kgsa Golden Spike Formation, andesite lava
- Kgss Golden Spike Formation, nonvolcanoclastic
- Kcc Carter Creek Formation
- Kj Jens Formation
- Kc Coberly Formation
- Kldl Dunkleberg Member of Blackleaf Formation
- Kldr Tatt Hill Member of Blackleaf Formation

MAP SYMBOLS

- Contact: dotted where concealed
- Normal fault: dotted where concealed; bar and ball on downthrown side
- Syncline: showing trace of axial plane and plunge direction where known; dotted where concealed
- Anticline: showing trace of axial plane and plunge direction where known; dotted where concealed
- 32 Strike and dip of inclined beds
- 79° Strike and dip of joints
- Strike of vertical joints
- 75° Foliation
- ..... Fossil oyster beds



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PROJECTION ..... LAMBERT CONFORMAL CONIC  
GRID 300-METER UNIVERSAL TRANSVERSE MERCATOR  
3000-FOOT STATE GRID TICS ..... MONTANA, CENTRAL ZONE  
UTM GRID DECLINATION ..... 124° WEST  
1983 MAGNETIC NORTH DECLINATION ..... 80° EAST  
VERTICAL DATUM ..... NATIONAL GEODETIC VERTICAL DATUM OF 1929  
HORIZONTAL DATUM ..... 1983 NORTH AMERICAN DATUM



Geologic Map of the Griffin Creek  
Quadrangle, Powell County, Montana

J.A. Brooks and J.W. Sears