

Montana Bureau of Mines and Geology
Open File No. 437

Geologic Map of the
Winifred 30' x 60' Quadrangle,
Central Montana

Edith M. Wilde and Karen W. Porter

2001

To view a full scale version of this map, [click here](#).

For the text files with the map information, [click here](#).

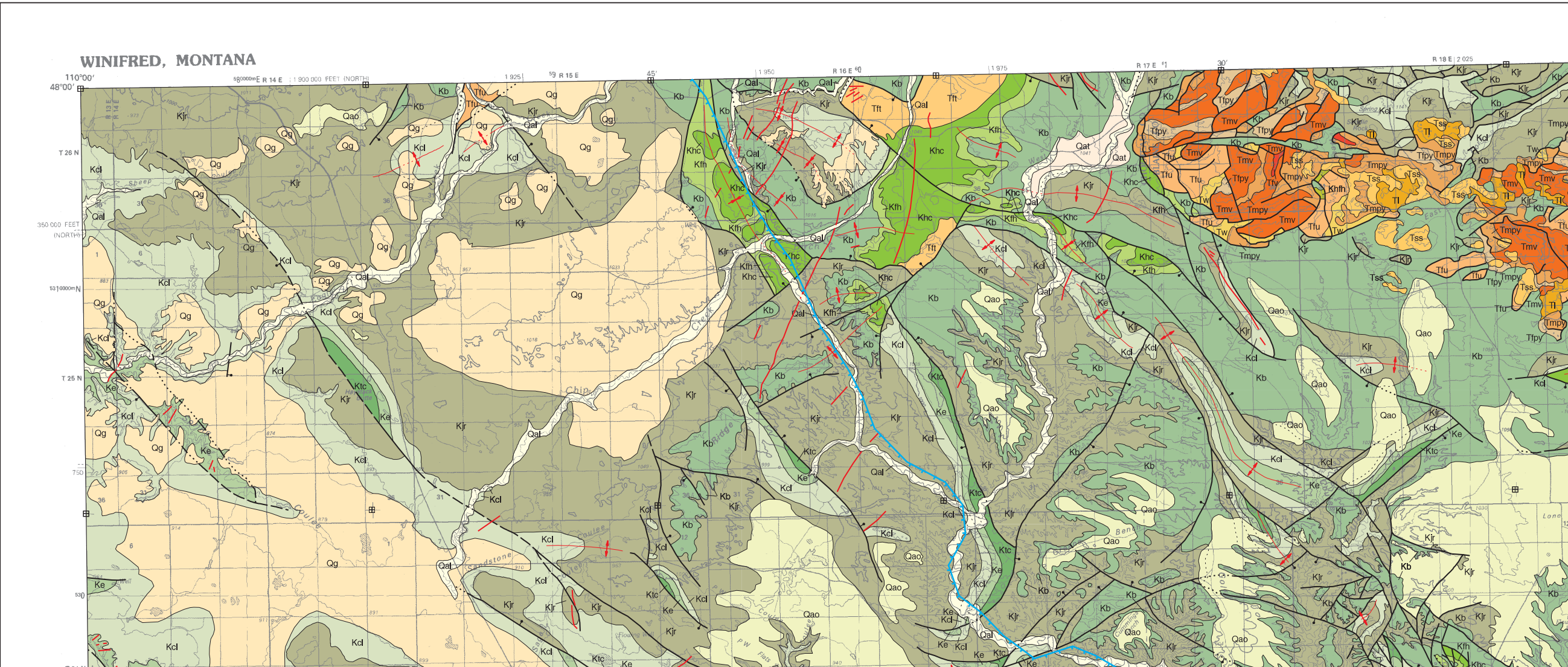
[Digital data link](#)

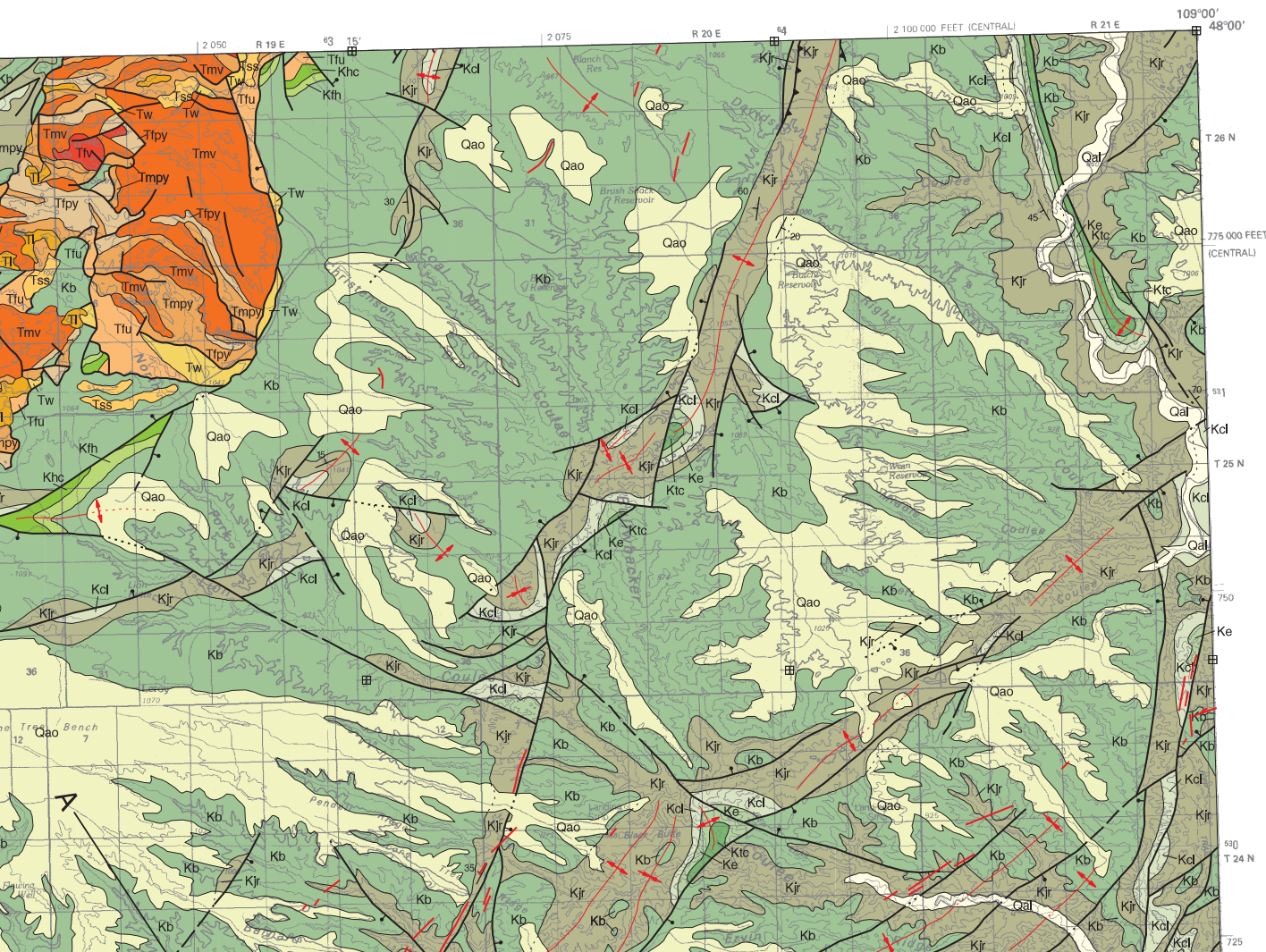
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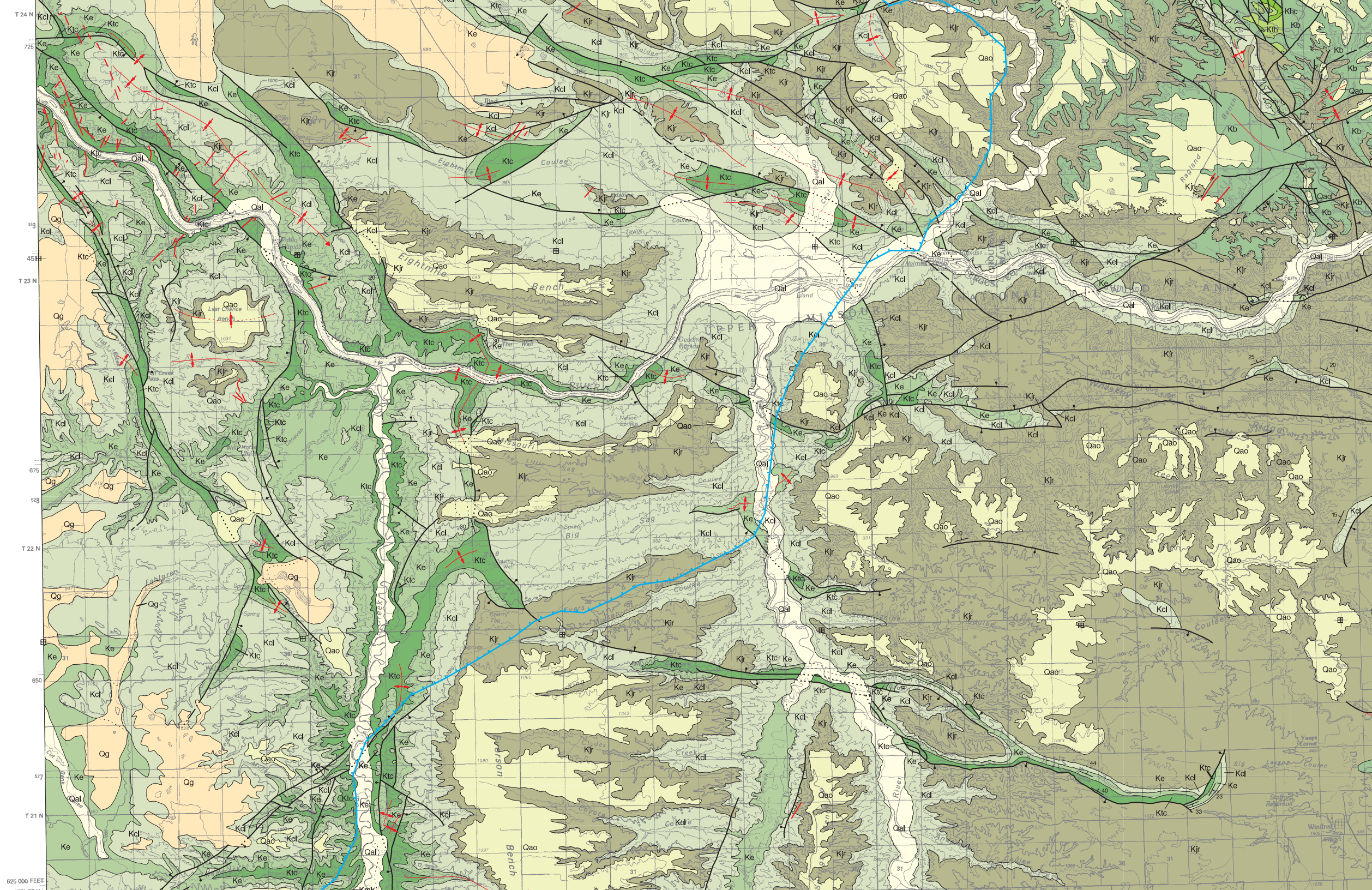
Open File MBMG 437, Plate 1 of 1
Geologic Map, Winifred 30'x60' Quadrangle

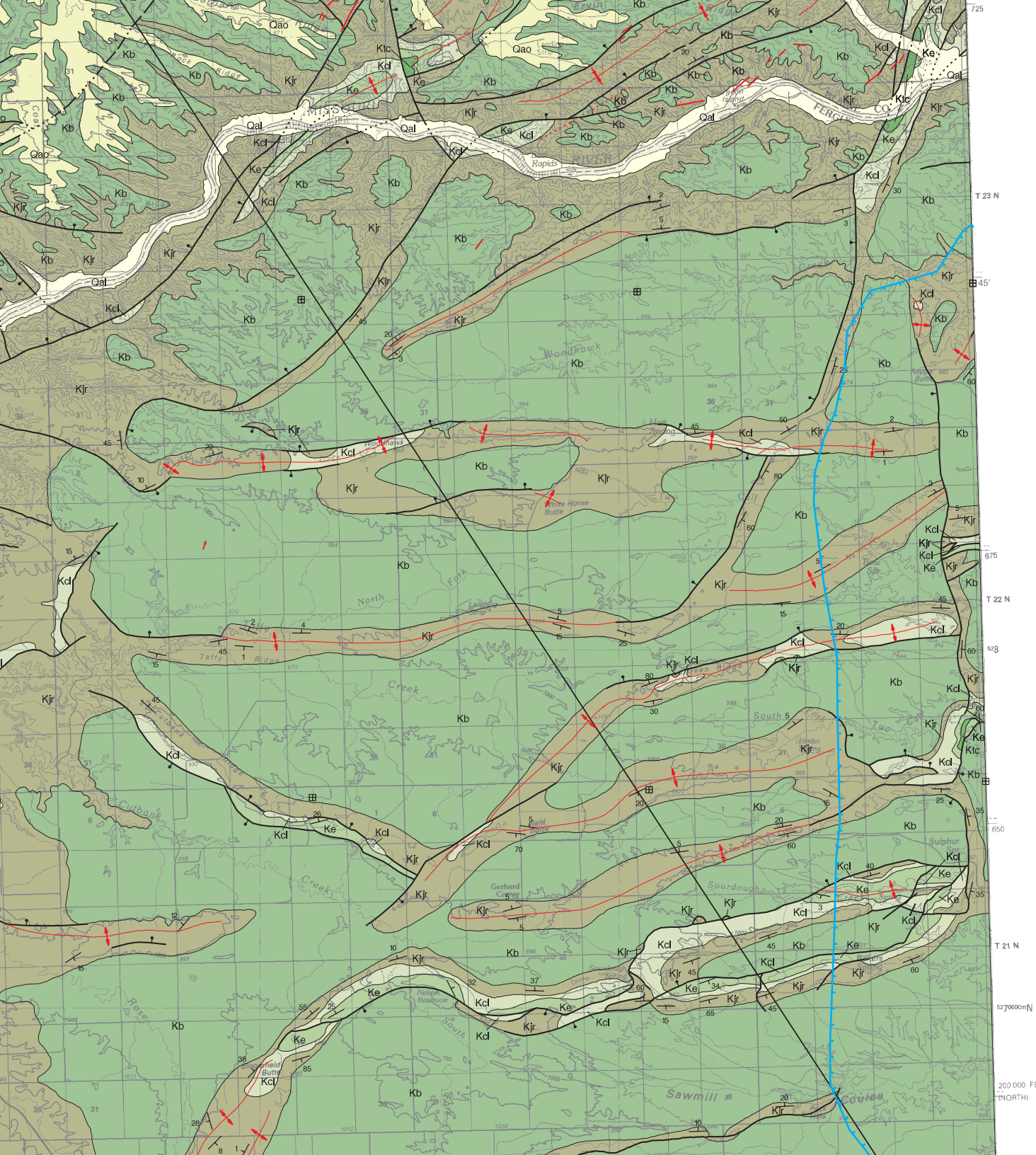




MAP UNITS

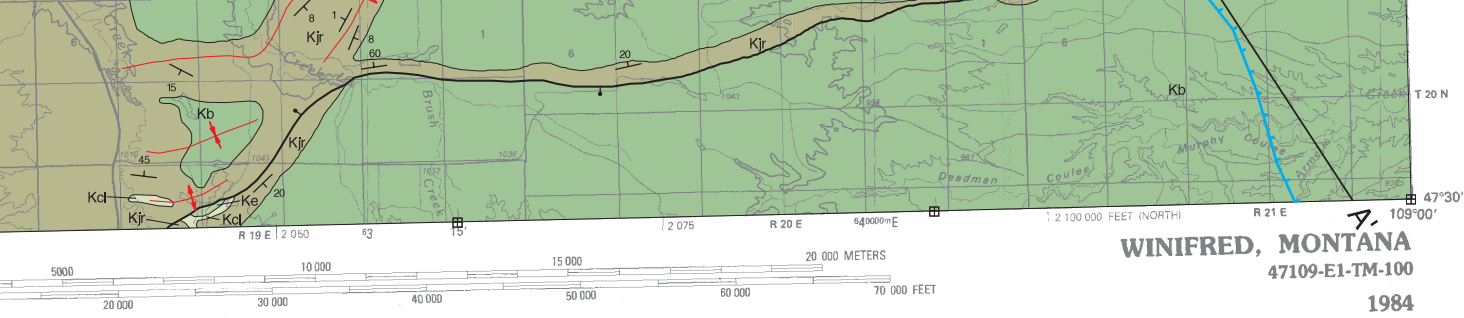
Qal	Alluvium of modern channels and flood plains
Qat	Alluvium of alluvial terrace deposit
Qao	Alluvium, older, undivided
Qg	Glacial deposits, undivided
Qls	Landslide deposit
Tfv	Felsic volcanic rocks
Ttpy	Felsic pyroclastic rocks
Tmv	Mafic volcanic rocks
Tmpy	Mafic pyroclastic rocks
Tl	Latite and porphyritic latite
Tss	Shonkinitic and syenite
Tw	Wasatch Formation
Tfu	Fort Union Formation, undivided
Tfu	Fort Union Formation, undivided



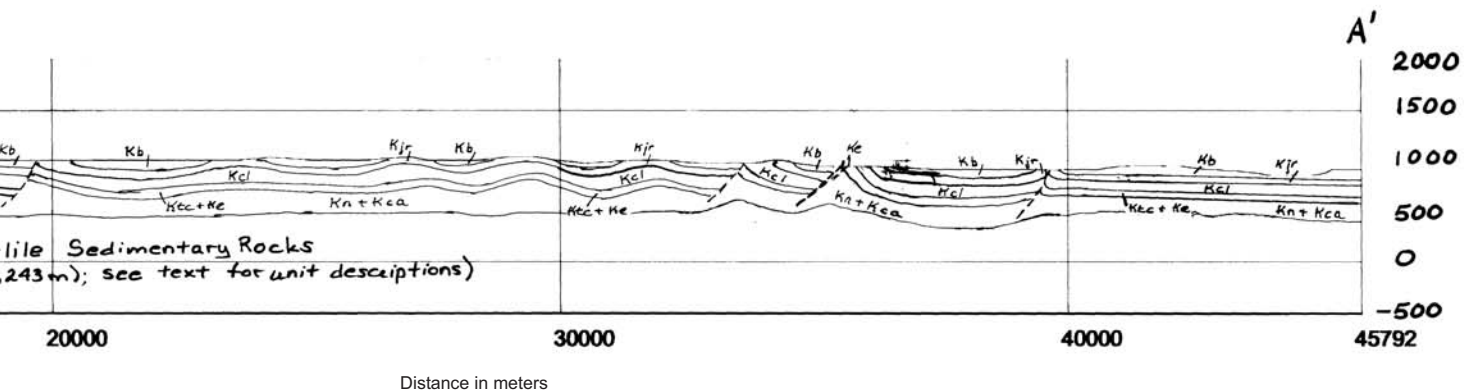


- Tht Tullock Member of Fort Union Formation
- Khc Hell Creek Formation
- Kfh Fox Hills Formation
- Khfh Hell Creek Formation and Fox Hills Formation, undivided
- Kb Bearpaw Shale
- Kjr Judith River Formation
- Kcl Claggett Shale
- Ke Eagle Formation
- Ktc Telegraph Creek Formation
- Kmk Kevin Member of Marias River Formation

 Extent of glaciation



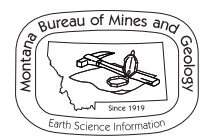
Cross Section A-A'
Vertical exaggeration x2.0



Unit thickness, meters (ft/3.28)

Kb	1,300'	only lower part exposed
Kjr	380'	116 m
Kcl	500'	152 m
Ke+Ktc	450'	137 m
Kn+Kca	630'	192 m

See text for unit names and descriptions
Surficial deposits not shown



Maps may be obtained from
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