

Montana Bureau of Mines and Geology
Open File No. 469

Preliminary Geologic Map of the
Bozeman 30' x 60' Quadrangle,
Southwestern Montana

Compiled and mapped by Susan M. Vuke, Jeffrey D. Lonn,
Richard B. Berg, and Karl S. Kellogg

2002

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

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

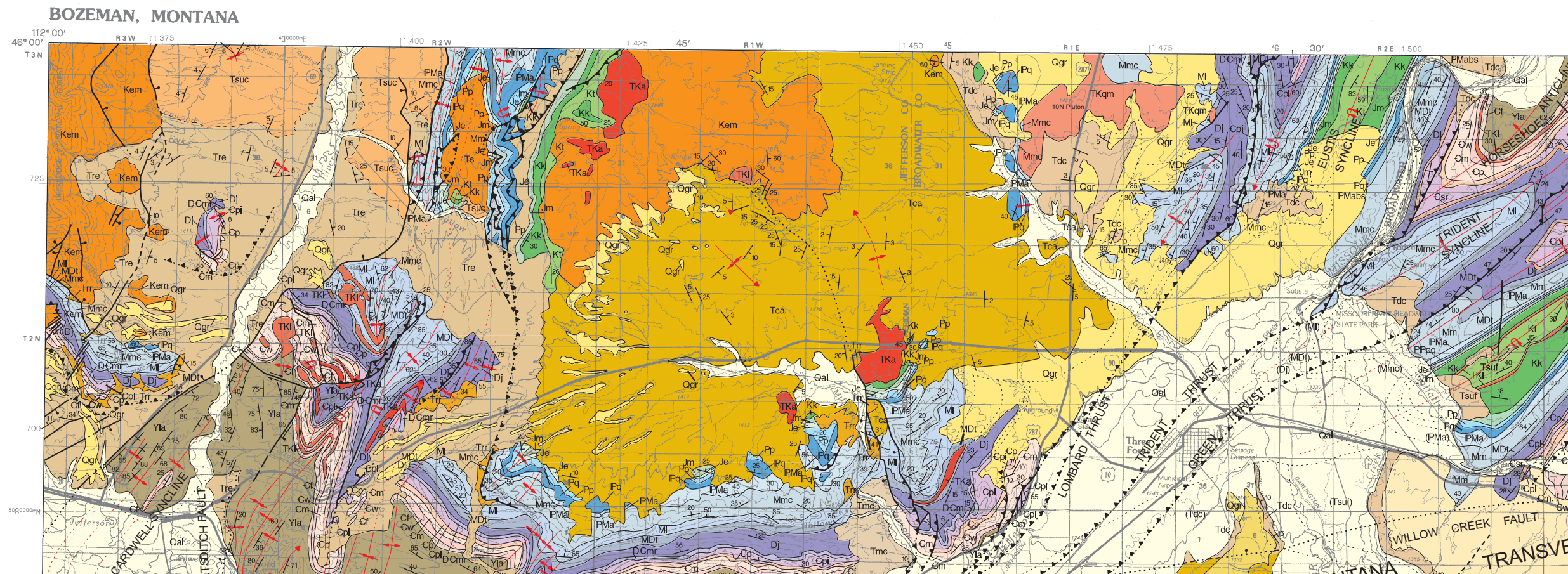
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Note— This map was originally published at a scale of 1:100,000 but the page sizes have been modified to fit average printer capabilities (8½ x 14; legal size paper). There is a an eighth inch overlap on these pages. A full sized colored print of this map can be ordered from the **MBMG Publication Sales Office, 1300 West Park Street, Butte, MT, 59701-8997.**

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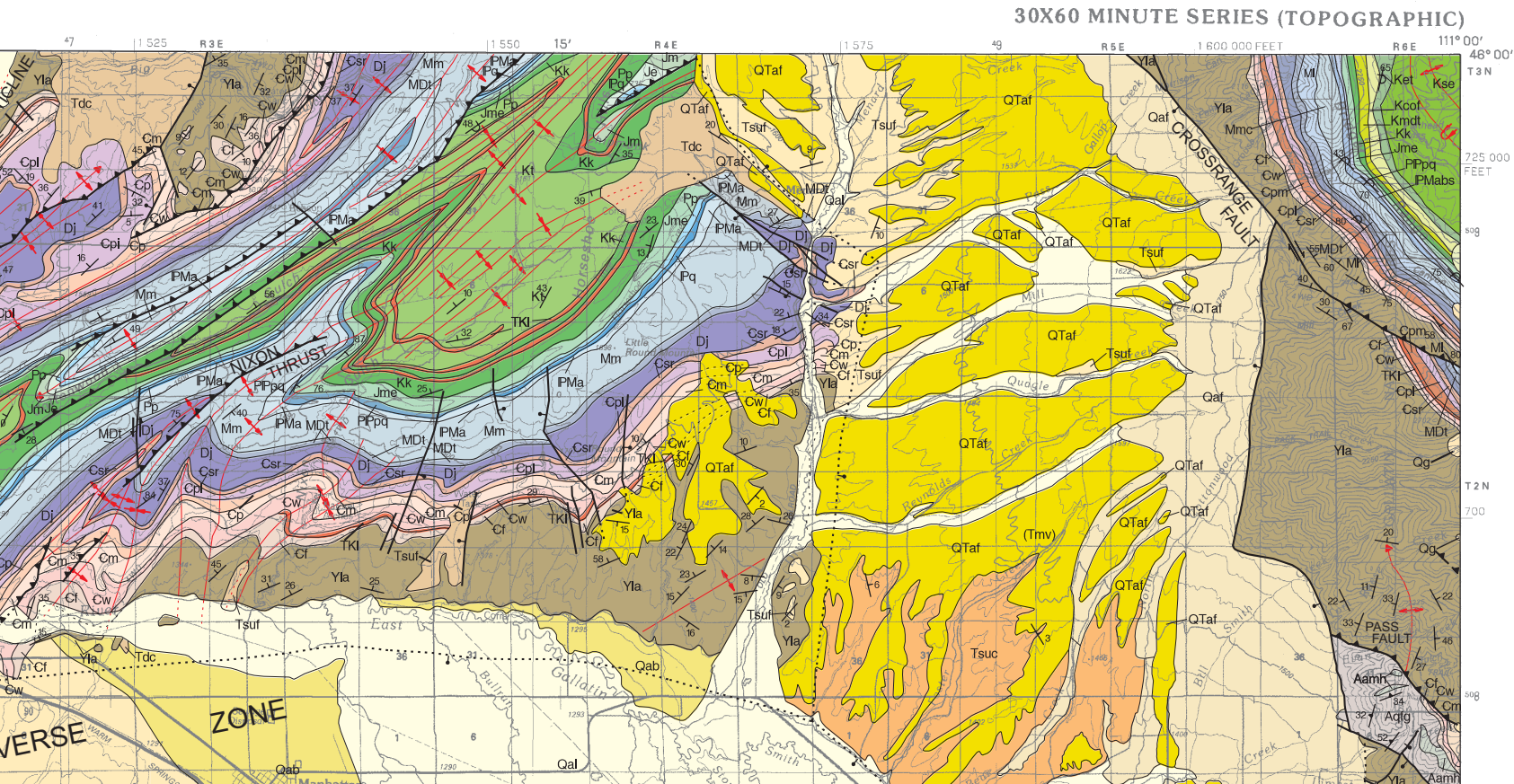
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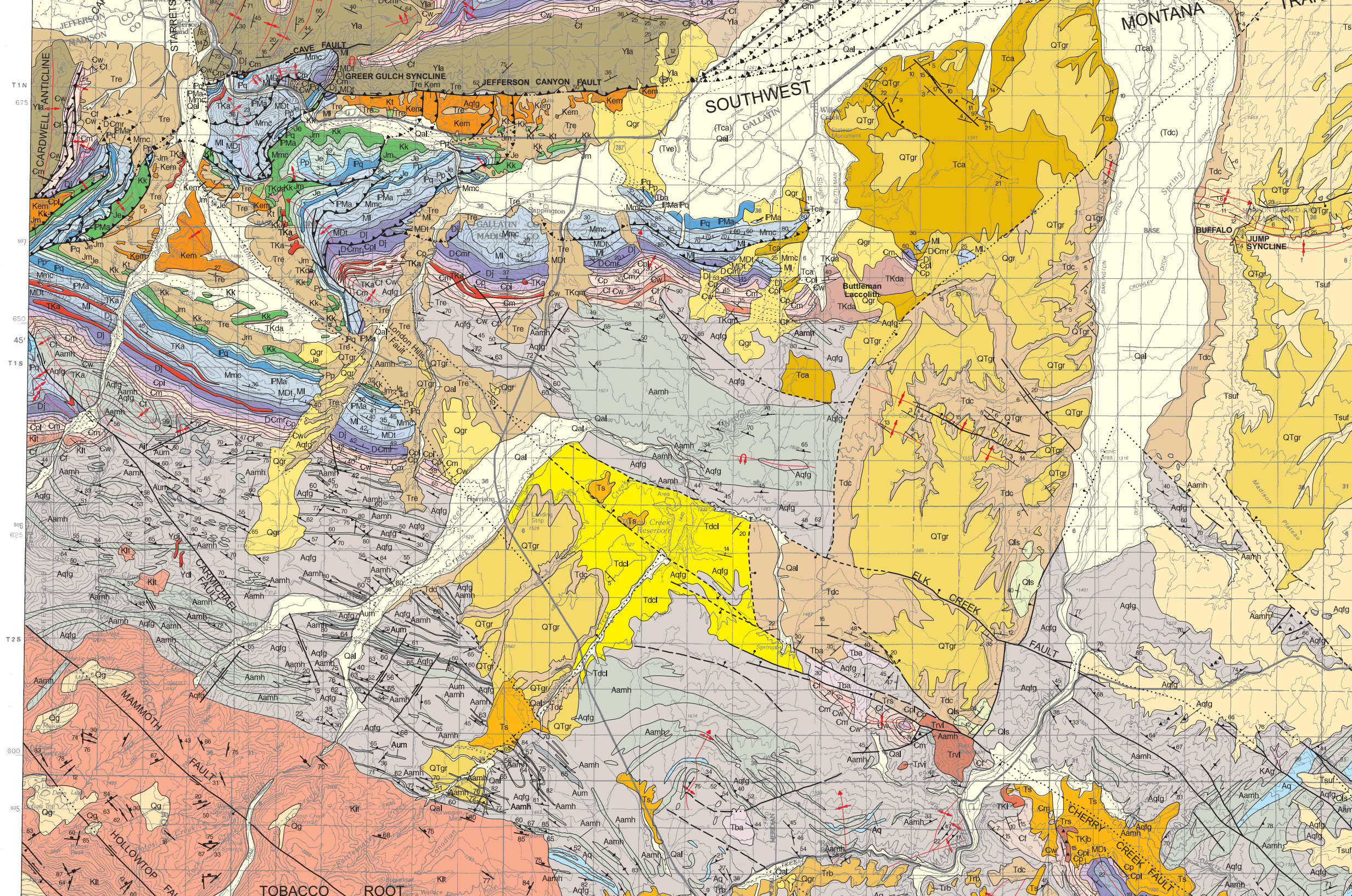
Open File MBMG 469, Plate 1 of 1
Geologic Map, Bozeman 30'x60' Quadrangle

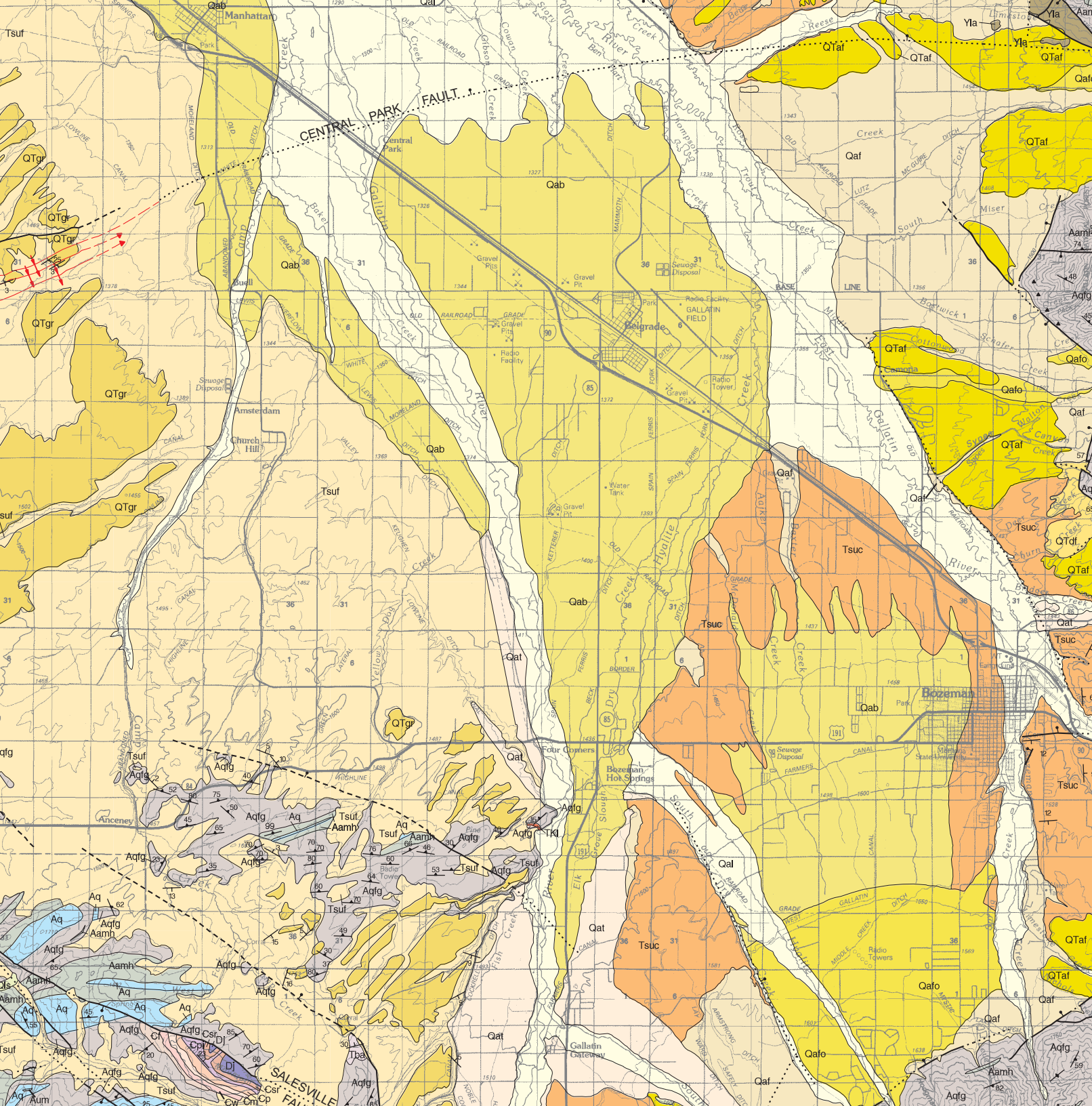


MAP UNITS

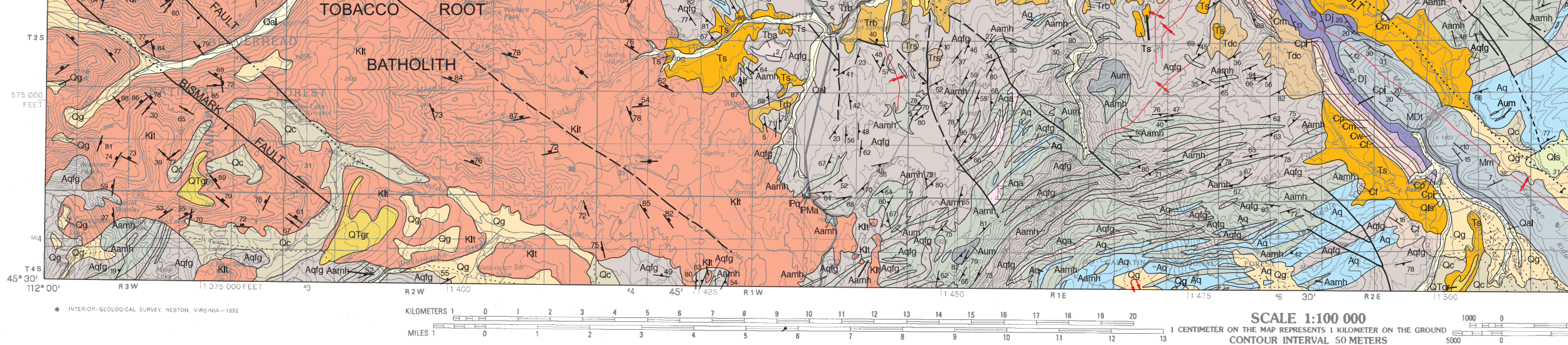
Qal	Alluvium of modern channels and flood plains
Qc	Colluvium
Qls	Landslide deposit
Qaf	Alluvial fan deposit
Qat	Alluvium of alluvial terrace deposit
Qafo	Alluvial fan deposit, older
Qgr	Gravel
Qab	Alluvium of braid plains
Qg	Glacial deposits, undivided
QTgr	Gravel
QTaf	Alluvial fan deposit
QTdf	Debris flow deposit
Tsuf	Sediment or sedimentary rock, upper Ter. finer-grained
Tsuc	Sediment or sedimentary rock, upper Ter. coarser-grained
Tdc	Dunbar Creek Formation
Tdcl	Dunbar Creek Formation, lower
Tca	Climbing Arrow Formation
Tmc	Milligan Creek Formation
Trb	Red Bluff Formation
Tre	Renova Formation
Trr	Red Hill member, informal, of Renova Formation
Ts	Sediment or sedimentary rocks, undivided
Tav	Absaroka Volcanics
Trvl	Rhyolite, vitrophyre
Trs	Rhyolite sediment







- | | |
|--------|--|
| Trs | Rhyolite sediment |
| Tba | Basalt |
| TKjb | Jasperoid breccia |
| TKl | Latite |
| TKqm | Quartz monzonite |
| TKa | Andesite |
| TKda | Dacite |
| Klt | Intrusive rock of Tobacco Root Batholith, undivided |
| Kem | Elkhorn Mountains Volcanics |
| Kag | Granite |
| Kse | Sedan Formation |
| Ket | Eagle and Telegraph Creek Formations, undivided |
| Kcof | Cody Shale and Frontier Formation, undivided |
| Kmdt | Mowry Shale and Thermopolis Formation, undivided |
| Kt | Thermopolis Formation |
| Kk | Kootenai Formation |
| Jme | Morrison Formation and Ellis Group, undivided |
| Jm | Morrison Formation |
| Je | Ellis Group, undivided |
| Td | Dinwoody Formation |
| Pp | Phosphoria Formation |
| IPq | Quadrant Formation |
| PPpq | Phosphoria and Quadrant Formation, undivided |
| IPMa | Amsden Formation |
| IPMabs | Amsden and Big Snowy Formations |
| PMpa | Phosphoria, Quadrant Formations, Amsden Formations |
| Mm | Madison Group, undivided |
| Mmc | Mission Canyon Limestone |
| MI | Lodgepole Limestone |
| Msr | Snowcrest Range Group |
| MDt | Three Forks Formation |
| DJ | Jefferson Formation |
| DJm | Jefferson Formation and Maywood Formation, undivided |
| DCmr | Maywood Formation and Red Lion Formation, undivided |
| Cgs | Grove Creek and Snowy Range Formations |
| Csr | Snowy Range Formation |
| Cpl | Pilgrim Limestone |
| Cpm | Park and Meagher Formation, undivided |
| Cp | Park Shale |
| Cm | Meagher Limestone |



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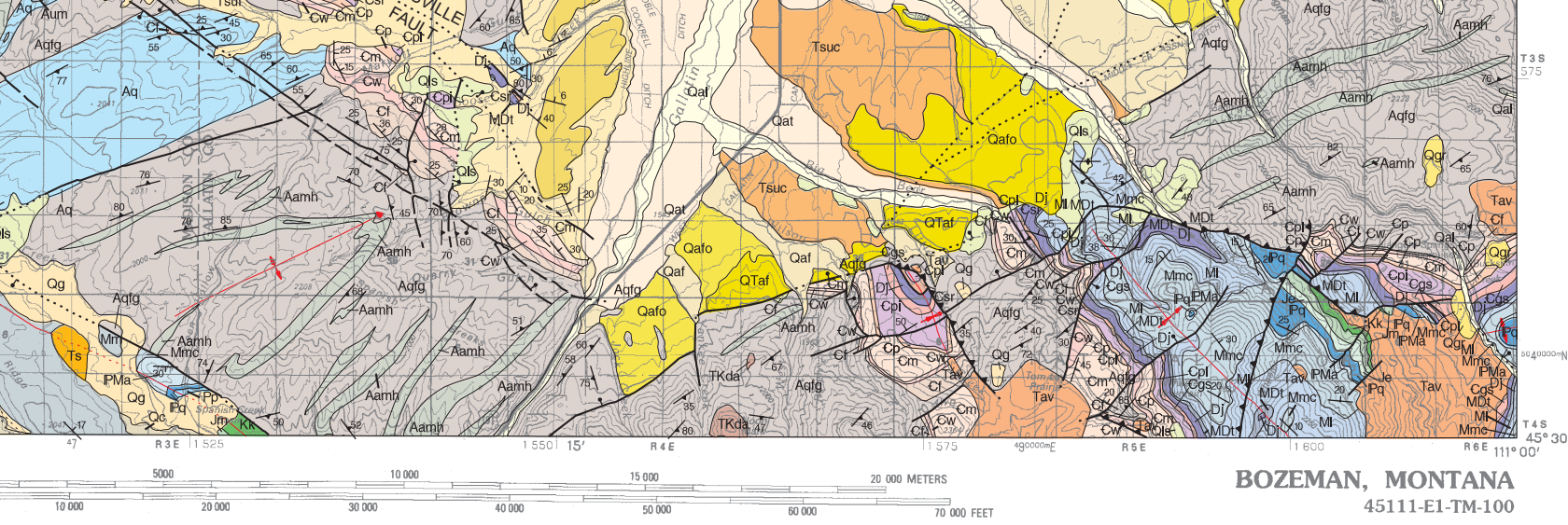
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Revised	Date
Map and text (minor)	1/03

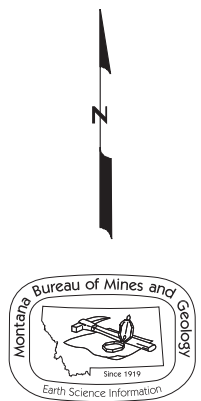
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|------|---|
| Cm | Meagher Limestone |
| Cpf | Park, Meagher, Wolsey and Flathead Formations |
| Cw | Wolsey Shale |
| Cf | Flathead Formation |
| Yla | Lahood Formation |
| Aqfg | Quartzofeldspathic gneiss |
| Aqf | Quartzofeldspathic gneiss |
| Aamh | Amphibolite and hornblende gneiss |
| Aum | Ultramafic rock |
| Aqa | Quartzite and amphibolite |
| Aq | Quartzite |
| Alt | Banded iron formation |

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3MG. Map layout: Susan Smith, MBMG.



Maps may be obtained from
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