

MAP UNITS

- Alk Alluvium of modern channels and flood plains
- Alk Alluvial fan deposit
- Alk Lake deposit
- Alk Landslide deposit
- Alk Colluvium
- Alk Gravel
- Alk Talus deposit
- Alk Avalanche deposit
- Alk Lake deposit and overlying eolian deposit
- Alk Alluvium, older, undivided
- Alk Alluvial fan deposit, older
- Alk Glacial lake deposit
- Alk Glacial moraine deposit
- Alk Glacial outwash deposit
- Alk Sediment, undivided
- Alk Gravel
- Alk Ledford Pass Soil
- Alk Basaltic rocks, undivided
- Alk Limestone and calcareous tuffs
- Alk Jasperoid
- Alk Intrusive rocks, undivided
- Alk Rhyolite or rhyolitic sediment
- Alk Andesite
- Alk Basalt
- Alk Travertine, lake or hot-spring deposits
- Alk Stenslie Creek Formation
- Alk Anderson Ranch member, informal, Stenslie Creek Formation
- Alk Timber Hill Basalt member, informal, Stenslie Creek Formation
- Alk Sedimentary rocks of Medicine Lodge beds, undivided
- Alk Sediment or sedimentary rocks, undivided
- Alk Conglomerate
- Alk Conglomerate and sandstone
- Alk Organic-rich shale
- Alk Tuffaceous shale
- Alk Chalks Volcanics Group
- Alk Tuffs and sandstone of Chalks Volcanics Group
- Alk Conglomerate and sandstone of Chalks Volcanics Group
- Alk Conglomerate and sandstone of the Chalks volcanic group
- Alk Tuffs
- Alk Bottle-bearing sandstone of Chalks Volcanics Group
- Alk Bottle-bearing tuff of Chalks Volcanics Group
- Alk Rhyolite of Chalks Volcanics Group
- Alk Andesite of Chalks Volcanics Group
- Alk Basalt of Chalks Volcanics Group
- Alk Breccia (Landslide deposit)
- Alk Quartzite-bearing tuff of Chalks Volcanics Group
- Alk Renova Formation
- Alk Basaltic member, informal, Renova Formation
- Alk White Hills member, informal, Renova Formation
- Alk Cook Ranch member, informal, Renova Formation
- Alk Basalt cap of Dillon volcanics member, informal, Renova Formation
- Alk Quartz
- Alk Rhyolitic pyroclastic rocks of Dillon volcanics member, informal, Renova Formation
- Alk Rhyolitic lava flows of Dillon volcanics member, informal, Renova Formation
- Alk Sage Creek and Del members, informal, Renova Formation
- Alk Hill Spring Basalt of Dillon volcanics member, informal, Renova Formation
- Alk Gravel and conglomerate of uncertain affinities
- Alk Beaverhead Group
- Alk Red Butte conglomerate, Beaverhead Group
- Alk Collium
- Alk Limestone conglomerate of the Beaverhead Group
- Alk Quartzite conglomerate, Beaverhead Group
- Alk Little Sheep Quartzite of Beaverhead Group
- Alk Upper limestone conglomerate of Beaverhead Group
- Alk Onond limestone of Beaverhead Group
- Alk Lima Conglomerate of the Beaverhead Group
- Alk Snowline Sandstone of Beaverhead Group
- Alk Lower limestone conglomerate of Beaverhead Group
- Alk Morinda Sandstone of Beaverhead Group
- Alk Divide Creek Conglomerate of Beaverhead Group
- Alk Frontier Formation
- Alk Frontier and Blackfoot Formations, undivided
- Alk Blackfoot Formation
- Alk Kootenai Formation
- Alk Kootenai Formation and Ellis Group, undivided
- Alk Morrison Formation, Ellis Group, and Twin Creek Formation, undivided
- Alk Sedimentary rocks, undivided
- Alk Thynnes, Woodside, and Dimwoody Formations, undivided
- Alk Phosphoria Formation
- Alk Phosphoria and Park City Formations, undivided
- Alk Quadrant Formation
- Alk Gravel
- Alk Snowcrest Range Group or Formation
- Alk Sedimentary rocks, undivided
- Alk Scott Peak through McGowan Creek Formations, undivided
- Alk Lombard Formation, Kibbey Formation, and Madison Group
- Alk Scott Peak Formation
- Alk Tendoy Group
- Alk Madison Group, undivided
- Alk Middle Canyon Formation
- Alk Mission Canyon Limestone
- Alk McGowan Creek Formation
- Alk Lodgepole Limestone
- Alk McGowan Creek and Three Forks Formations, undivided
- Alk Three Forks and Jefferson Formations, undivided
- Alk Three Forks, Jefferson, Maywood? Formations, undivided
- Alk Sedimentary rocks, undivided
- Alk Kinkikins and Summerhouse Formations, undivided
- Alk Bighorn Dolomite
- Alk Sedimentary rocks, undivided
- Alk Snowy Range Formation
- Alk Pilgrim, Park, and Meagher Formations, undivided
- Alk Park through Flathead Formations, undivided
- Alk Wolsley and Flathead Formations, undivided
- Alk Sedimentary rocks, undivided
- Alk Granite gneiss
- Alk Gneissic rocks
- Alk Quartzite and marble
- Alk Ultramafic rock
- Alk Water
- Alk ID

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

Base from U.S. Geological Survey
Lima 30' x 60' topographic quadrangle
Map date: 1987
Projection: UTM zone 12, 1927 NAD

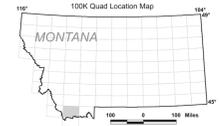
Montana Bureau of Mines and Geology
Open File 408, Plate 1
**Geologic Map of the
Lima 30' x 60' Quadrangle
Southwest Montana**

Jeffrey D. Lonn, Betty Skipp, Edward T. Ruppel,
Susanne U. Janecke, William J. Perry Jr., James W. Sears,
Mervin J. Bartholomew, Michael C. Stickney,
William J. Fritz, Hugh A. Hurlow, and Robert C. Thomas

Revised	Date
Map and text, added Plate 2	2/06

2000

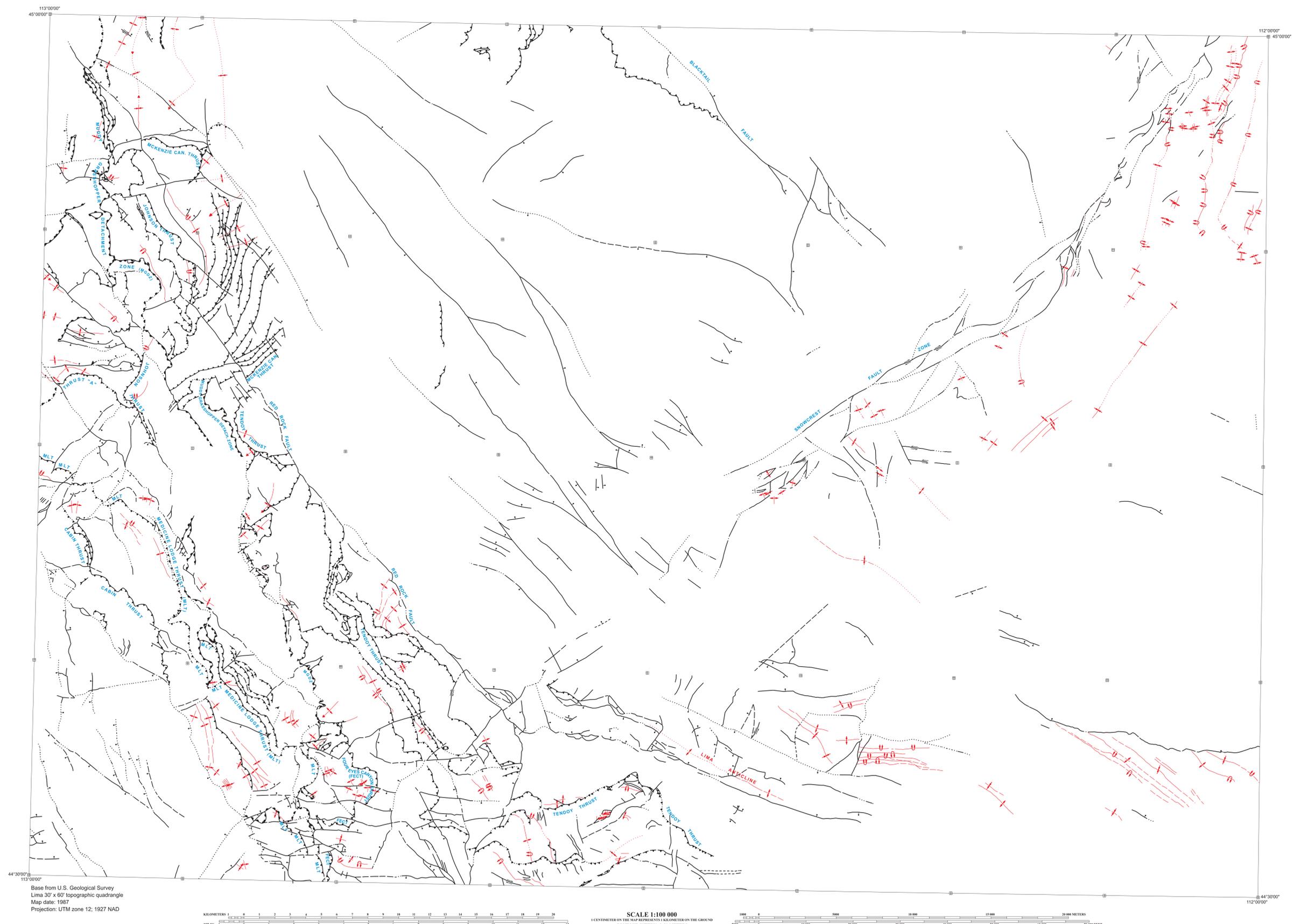
Partial support has been provided by the STATEMAP component of the National Cooperative Geologic Mapping Program of the U.S. Geological Survey under Contract Number 99-HQ-AG-0130.
GIS production: Ken Sandus and Paul Thale, MBMG



Quad index

SALMON	DILLON	ENNIS
LEADORE	LIMA	HEGEN LAKE
BORAN PEAK	DUBOIS	ASHFORD

Maps may be obtained from
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Base from U.S. Geological Survey
 Lima 30' x 60' topographic quadrangle
 Map date: 1987
 Projection: UTM zone 12; 1927 NAD



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Plate 2: Faults and Folds of the Lima 30' x 60' Quadrangle Southwest Montana

Jeffrey D. Lonn, Betty Skipp, Edward T. Ruppel,
 Susanne U. Janecke, William J. Perry Jr., James W. Sears,
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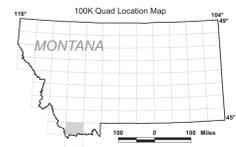
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