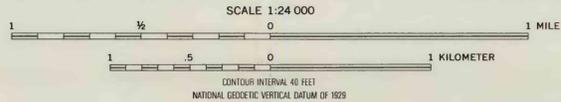


Based on U.S. Geological Survey, Beaverhead Rock NE, 1962; Beaverhead Rock SE, 1961; Laurin Canyon, Shelden, 1963.

Geology generalized from Tisdall (1976a), Karaszewich (1981), and James and Wier (1972).



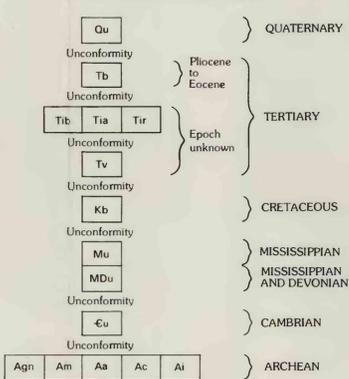
EXPLANATION OF MINERAL RESOURCE POTENTIAL

[Archean metamorphic rocks, concealed beneath Mesozoic and Paleozoic strata, have a low potential for iron, at certainty level B, and an unknown potential for talc, at certainty level A.]

- Area of identified iron resources
- H/C Geologic terrane having high resource potential—For talc with certainty level C
- M/B,C Geologic terrane having moderate resource potential—For talc with certainty levels B and C, as indicated
- L/B,C Geologic terrane having low resource potential for gold, silver, copper, lead, zinc, uranium, oil, and gas—For entire study area, and for iron in metamorphic rocks except as shown above
- Resource ratings for Archean metamorphic rocks concealed beneath Mesozoic and Paleozoic strata—Not labeled on map
- L/B Iron
- U/A Talc

APPROXIMATE MEAN DECLINATION, 1983

CORRELATION OF MAP UNITS



LIST OF MAP UNITS

- Qu Sediments undivided (Quaternary)
- Tb Bozeman Group (Tertiary)
- Tib, Tia, Tir Intrusive rocks (Tertiary)
- Tv Volcanic rocks (Tertiary)
- Kb Beaverhead Group (Cretaceous)
- Mu Sedimentary rocks undivided (Mississippian)—Includes Kibbey(?) Formation, Mission Canyon Limestone, and Lodgepole Limestone
- MDu Sedimentary rocks undivided (Mississippian and Devonian)—Includes Three Forks Formation and Jefferson Dolomite
- Eu Sedimentary rocks undivided (Cambrian)—Includes Red Lion Formation, Pilgrim Dolomite, Park Shale, Meagher Limestone, Wolsley Shale, and Flathead Sandstone
- Agn Quartzofeldspathic gneiss (Archean)
- Am Marble (Archean)
- Aa Amphibole (Archean)
- Ac Ultramafic rock (Archean)
- Ai Iron-formation (Archean)
- Contact
- Contact or gravity-slide block—Bar on slide block; bars on opposite sides of contact line indicate mutual contact of two slide-blocks
- U Fault—U, upthrown side; D, downthrown side
- Low-angle fault—Sawtooth on upper plate
- Anticline—Showing trace of axial plane and direction of plunge of axis
- Syncline—Showing trace of axial plane and direction of plunge of axis
- Overturned anticline—Showing trace of axial plane, direction of dip of limbs, and plunge of axis
- Overturned syncline—Showing trace of axial plane, direction of dip of limbs, and plunge of axis
- Strike and dip of beds
- Inclined
- Overturned
- Vertical
- Strike and dip of foliation
- Inclined
- Vertical
- Prospect
- Sample locality—Stream-sediment and (or) heavy-mineral concentrate
- Sample locality—Rock
- Locality of talc occurrence in outcrop or talc chip in float
- Occurrence of talc referred to in text

LEVEL OF RESOURCE POTENTIAL	U/A	H/B	H/C	H/D
	UNKNOWN POTENTIAL	MODERATE POTENTIAL	MODERATE POTENTIAL	MODERATE POTENTIAL
	L/B	L/C	L/D	N/D
	LOW POTENTIAL	LOW POTENTIAL	LOW POTENTIAL	NO POTENTIAL
LEVEL OF CERTAINTY				
A				B
C				D

LEVELS OF RESOURCE POTENTIAL

LEVELS OF CERTAINTY

H High mineral resource potential

M Moderate mineral resource potential

L Low mineral resource potential

U Unknown mineral resource potential

N No known mineral resource potential

A Available data not adequate

B Data indicate geologic environment and suggest level of resource potential

C Data indicate geologic environment, give good indication of level of resource potential, but do not establish activity of resource-forming processes

D Data clearly define geologic environment and level of resource potential and indicate activity of resource-forming processes in all or part of the area

Diagram showing relationships between levels of mineral resource potential and levels of certainty. Shading shows levels that apply to this study area

MINERAL RESOURCE POTENTIAL AND GEOLOGIC MAP OF THE RUBY MOUNTAINS WILDERNESS STUDY AREA, MADISON COUNTY, MONTANA