

EXPLANATION

SEDIMENTARY ROCKS

Quaternary and Tertiary deposits
QTu is undifferentiated alluvium, glaciolacustrine deposits, and colluvial terraces of gravel and sand. It is found in the area of Cedar Creek and Thompson Creek, and on divide between Flat and Sigel creeks. Probably many more higher-level gravels in areas not traversed. Age of QTu ranges from Miocene (?) to Recent. QTu is a limited deposit of conglomerate with some interbedded sandstone, shale, and unconsolidated material near the level of the Clark Fork River. Probably Pleistocene.

Cambrian rocks undifferentiated
Includes sequence from bottom to top of quartzite, shale, limestone, fissile dolomitic sandstone, and dolomite. The quartzite, shale, and limestone are correlated with the Flathead sandstone, Gordon shale, and Damulite limestone of northwestern Montana. Some of upper dolomite may be younger than Cambrian.

UNCONFORMITY

Rock Rabbit quartzite
pCr
Medium- to coarse-grained, pink, white, or reddish-purple, vitreous quartzite. Medium- to massive-bedded. Slightly feldspathic. Crossbedding common.

Bouchard formation
pCb
Olive-gray, olive-brown, thin- to medium-bedded, sericitic quartzite with interbedded dark olive-gray to olive-brown argillite more abundant near bottom and top of section. Occasional beds of vitreous white quartzite and dark-gray fissile shale. Weathers to a rusty-brown to olive-drab. Mud cracks numerous.

Slowsay formation
pSl
Heterogeneous sequence of thin- to medium-bedded argillaceous quartzite, vitreous quartzite, quartzose argillite, and argillite, in general is more argillaceous toward top of section. Colors are usually tints of red, purple, and green ranging from pale to bright. Bright red and green, dense, fine-grained argillites in upper half of section are outstanding. Crossbedding, ripple marks, mud cracks, mud flake conglomerate, and coarse and fine common. Salt casts rare.

Lubine quartzite
pL
Thin- to massive-bedded, light pinkish-brown, vitreous to subvitreous, fine-grained quartzite with many thin, dusky-red to purple argillite interbeds, becomes more vitreous and massive bedded higher in section. Brown weathering, grayish-pink, dolomitic quartzite lenses 1 to 3 inches thick and several inches to several feet long are common and diagnostic. Some beds are feldspathic. Ripple marks and mud cracks are common. Some crossbedding.

Spruce formation
pSp
Thin-bedded, fine-grained, greenish-gray, impure quartzite with many thick zones of thinly interbedded greenish-gray quartzite argillite and impure quartzite and occasional horizons of pale purplish-gray quartzite. Lower 300 feet and upper 700-800 feet partly dolomitic. Much fine-grained subequal magnetite throughout. Weathers buff to brown. Many mud cracks and ripple marks.

Wallace formation
pW
Interbedded dark-gray argillite and light-gray, fine-grained quartzite, all more or less dolomitic. Phyllite predominates in some areas near Casum Fault zone. Some impure dolomitic limestone. Argillaceous beds predominate lower half of section but contain many thin- to medium-bedded dolomitic quartzite beds. Upper part composed of thin- to medium-bedded dolomitic quartzites with interbedded non-dolomitic argillite and impure limestone beds. Mud cracks common.

St. Regis formation
pSr
Predominantly thin-bedded, greenish-gray, laminated argillite and quartzose argillite with occasional beds of light-gray sericitic quartzite. Locally purplish-gray color may predominate. Phyllite in areas of intense shearing or folding. Uppermost beds usually slightly dolomitic.

Burke-Revetz formation
pBr
Undifferentiated equivalent of the Burke and Revett formations in the Coeur d'Alene district, Idaho. Mostly thin- to medium-bedded, light-gray, impure quartzite with some vitreous white to pale-purple quartzite beds near top. Locally highly sericitic and schistose as a result of dynamic metamorphism.

Pritchard formation
pPr
Thin- to medium-bedded, light- to dark-gray, impure quartzite and quartzose argillite. Well-defined graded bedding is common. Limonitic staining usually present on weathered surfaces.

IGNEOUS ROCKS

Diabase dikes and sills
Indicating areas in which contact identification is questionable because of thin cover of siltstone silt and gravel, and other surficial materials.

Venue obscuring bedrock
Contact
Dashed where approximately located.

Indefinite contact
Gradational contacts and contacts projected into areas between traverses.

Fault showing dip
Long dash indicates approximately located; short dash where inferred or projected into areas between traverses; dotted where concealed. Arrows indicate relative movement. U - upthrown block, D - downthrown block.

Probable fault
Line observed on aerial photographs believed to represent fault.

Zone of brecciated rock
Anticline
Showing trace of axial plane and bearing and plunge of axis. Dashed where approximately located; dotted where concealed.

Syncline
Showing trace of axial plane and bearing and plunge of axis. Dashed where approximately located; dotted where concealed.

Overturned anticline
Overturned syncline

Strike and dip of beds
Strike and direction of dip of beds estimated from a distance

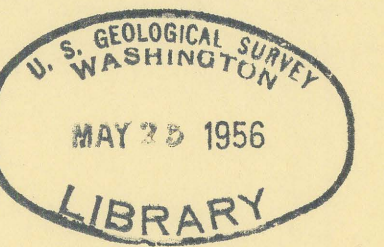
Strike and dip of overturned beds
Strike and dip of questionably overturned beds

Strike of vertical beds
Lineaments

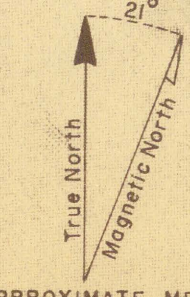
Lines observed on aerial photographs believed to represent bedding, showing estimated attitude of beds.
Horizontal beds
Strike and dip of cleavage
Strike of vertical cleavage
Horizontal cleavage
Vertical shaft
Portal of adit
Portal of caved adit
Trench
Prospects and mine workings whose exact position and trend are not known

List of mines and prospects

1. Iron Mountain mine, 1600 level
2. Iron Mountain mine, 700 level
3. Velvet mine
4. Deadwood Gulch prospect
5. Upper Keesey prospect
6. Nancy Lee mine, Nancy Lee tunnel
7. Nancy Lee mine, Lower tunnel
8. Little Pittsburg mine
9. Line Gulch prospect
10. Bear Gulch prospect
11. Wilson Creek prospect
12. Amador mine



RECONNAISSANCE GEOLOGIC MAP OF THE
ST. REGIS-SUPERIOR AREA,
MINERAL COUNTY, MONTANA
BY ARTHUR B. CAMPBELL



This map is preliminary and has not been reviewed or edited for conformity with U.S. Geological Survey standards and nomenclature.

Montana (St. Regis-Superior area). Geol. 1:31,620. 1956.

Scale 1:31,620

