



- MINES AND PROSPECTS**
1. Iron Mountain mine, 1600 level
  2. Iron Mountain mine, 700 level
  3. Little Anaconda group (Velvet adit)
  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

**EXPLANATION**

**SEDIMENTARY ROCKS**

**QT** Alluvium, glaciolacustrine deposits, and coalescing terrace gravels and gravel-covered slopes adjacent to the Clark Fork  
*Includes higher level gravel deposits covering ridges in area of Cedar Creek and Thompson Creek, and on divide between Flat and Siegel Creeks. Probably many more high-level gravels in areas not traversed*

**QTc** Dissected deposits of conglomerate with some interbedded sandstone, shale, and unconsolidated material near the level of the Clark Fork

**P<sub>1</sub>** Paleozoic 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 Damnation limestone of northwestern Montana*

**UNCONFORMITY**

**pCq** Feldspathic quartzite of Rock Rabbit Ridge  
*Medium- to coarse-grained, pink, white or reddish-purple, vitreous quartzite. Medium- to massive-bedded. Slightly feldspathic. Crossbedding common*

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

**pCs1** Slowy formation  
*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 argillite beds in upper half of section are outstanding. Crossbedding, ripple marks, mud cracks, mud flake conglomerate, and scour and fill common. Salt casts rare*

**pCl** Lupine quartzite  
*Thin- to massive-bedded light-pinkish-brown to subvitreous fine-grained quartzite with many thin dusky-red purple argillite interbeds; becomes more vitreous and massive bedded higher in section. Brown-weathering grayish-pink dolomitic quartzite lenses 1-3 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*

**pCsp** Spruce formation  
*Thin-bedded fine-grained greenish-gray impure quartzite containing many thick zones of thinly interbedded greenish-gray quartzose argillite and impure quartzite and a few zones of pale purplish-gray quartzite. Lower 300 feet and upper 700-800 feet partly dolomitic. Much fine-grained euhedral magnetite throughout. Weathers buff to brown. Many mud cracks and ripple marks*

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

**pCsr** St. Regis formation  
*Predominantly thin-bedded greenish-gray laminated argillite and quartzose argillite and a few beds of light-gray sericitic quartzite. Locally purplish-gray may predominate. Phyllite in areas of intense shearing or folding. Uppermost beds generally slightly dolomitic*

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

**pCp** Prichard formation  
*Thin- to medium-bedded light- to dark-gray impure quartzite and quartzose argillite. Well-defined graded bedding is common. Limonitic staining generally present on weathered surfaces*

**IGNEOUS ROCKS**

**dd** Diabase dikes and sills

**dd** Veneer obscuring bedrock  
*Indicating areas in which bedrock identification is questionable because of thin cover of lacustrine silt and gravel and other surficial materials*

**Contact**  
Dashed where approximately located

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

**Fault, showing dip and relative movement**  
Dashed where approximately located; short dashed where inferred or projected into areas between traverses; dotted where concealed; queried where doubtful; U, upthrown side; D, downthrown side

**Zone of brecciated rock**

**Lineament**  
Line observed on aerial photographs believed to represent fault

**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

**Overtured anticline**

**Overtured 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 inferred 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**

**Vein**

**Vertical shaft**

**Portal of adit**

**Portal of caved adit**

**Trench**

**Prospects and mine workings whose exact position and trend are not known**

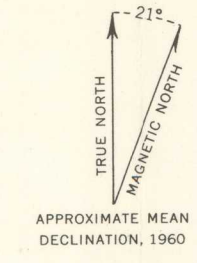
**Line of traverse**  
Shown by shaded areas

**INDEX FOR MAPPED AREA**

Geology from R. E. Wallace and J. W. Hosterman, 1956

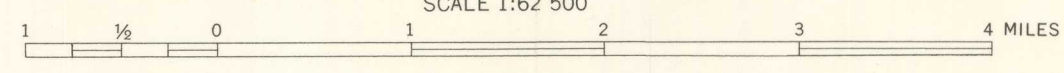
Area mapped by A. B. Campbell, 1953-54

Base map west of 115° after U.S. Forest Service prepared from aerial photographs made in 1947-48. Base map east of 115° by Special Maps Branch, U.S. Geological Survey, 1953



**RECONNAISSANCE GEOLOGIC MAP OF THE ST. REGIS-SUPERIOR AREA, MINERAL COUNTY, MONTANA**

SCALE 1:62 500



INTERIOR—GEOLOGICAL SURVEY, WASHINGTON, D. C. H-3124