



GEOLOGIC MAP

OF THE

NORTHERN HALF OF THE MULLAN AND VICINITY QUADRANGLE, IDAHO

AREAL GEOLOGY

By A. B. Griggs

Scale 1:12,000

1000 500 0 1000 2000 3000 4000 5000 Feet

1/2 Miles

Contour interval 25 feet
Datum is mean sea level

1952

Geology mapped in 1948-51

Topography by C. P. McKinley,
C. N. Mortenson and F. H. Purdy
Culture and drainage in part
compiled from aerial photographs
Surveyed in 1938-39

TRUE NORTH
MAGNETIC NORTH
APPROXIMATE MEAN
DECLINATION 1952

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

EXPLANATION

- Qal** Alluvial Deposits
- Qg** Glacial and Glaciolacustrine Deposits
- og** Older Gravels
- Undifferentiated gravels older than Qal, commonly forming terraces.
- ld** Lamprophyre Dikes
- Solid lines where exposed; dashed where approximately located.
- ad** Other Dikes
- Solid lines where exposed; dashed where approximately located. Includes varieties of diabase, diorite, and monzonite.
- m** Monzonite and Associated Rocks Vary From Syenite to Diorite
- pssp** Striped Peak Formation
- Interbedded impure quartzite and argillite, usually thin-bedded. Colors vary from purple and pink to gray and green, many beds limy. Shallow water features are characteristic.
- pewu** Upper Wallace Formation
- Predominantly thinly laminated, dark gray argillite, some interbedded light gray quartzite and impure to fairly pure limestone; more or less limy material throughout.
- pewl** Lower Wallace Formation
- Interbedded, fine-grained, light-gray, more or less limy quartzite and dark gray argillite. Beds range from 1 to 12 inches thick. Some impure dolomitic beds near top. Shallow water features are characteristic.
- pss** St. Regis Formation
- Typified by purplish color of rocks. Grades from light purple quartzite at base to thin-bedded dark purple and gray argillite. Uppermost part is usually a thinly laminated, light greenish argillite.
- pgr** Revett Formation
- Thick-bedded, vitreous, white quartzite. Cross-bedded and laminated in part. Grades into less pure quartzite at bottom and top.
- pcb** Burke Formation
- Thin-bedded, light to greenish-gray, fine-grained argillaceous quartzite with more or less white or light purple, thick-bedded quartzite. Shallow water features are common.
- pssp** Upper Prichard Formation
- Thin-to-thick-bedded, light gray to white, pure to argillaceous quartzite interbedded with thinly-laminated, dark gray argillite. Shallow water features are common.
- pssp** Lower Prichard Formation
- Banded dark gray argillite, laminated in part; partings usually contain numerous pyrite crystals. Weathers rusty red. The pssp is a zone of interbedded white to light gray quartzite.
- Veins at the Surface**
- Solid line where exposed; broken where approximately located.
- Veins Projected From Underground Workings**
- Approximate position shown as if vein were continuous to surface, though not necessarily known to crop out.
- Types of Veins**

 - A = veins known to contain base metals
 - B = veins not known to contain base metals

- Contact**
- Dashed where approximately located.
- Indefinite Contact**
- Includes gradational and obscured contacts, and boundaries of surficial deposits.
- Fault Showing Dip**
- Dashed where approximately located; dotted where concealed.
- U** = upthrown side, **D** = downthrown side
- Doubtful or Probable Fault**
- Dotted where concealed.
- Faults Showing Dip, Projected on Dip to Surface From Underground Observation**
- U** = upthrown side, **D** = downthrown side
- Anticline**
- Showing trace of axial plane; dashed where approximately located, dotted where concealed.
- Syncline**
- Showing trace of axial plane; dashed where approximately located, dotted where concealed.
- Strike and Dip of Beds**
- Strike and Dip of Beds Projected Vertically From Underground Observation
- Strike and Dip of Overturned Beds**
- Strike and Dip of Vertical Beds**
- Horizontal Beds**
- Strike and Dip of Cleavage**
- Strike of Vertical Cleavage**
- Prospect Pit or Obscure Working**
- Portal of Adit**
- Shaft**