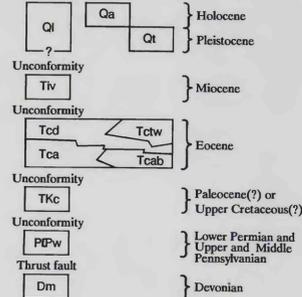


EXPLANATION OF MINERAL RESOURCE POTENTIAL

CORRELATION OF MAP UNITS

DESCRIPTION OF MAP UNITS

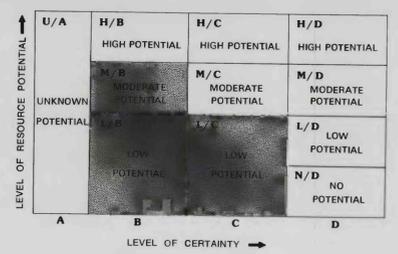
- M/B** Geologic terrane having moderate mineral resource potential for silver, barite, copper, lead, zinc, gold, and tungsten, with a certainty level of B
- L/C** Geologic terrane having low mineral resource potential for oil and gas, uranium, sand and gravel, and building materials, with a certainty level of C—Applies to entire study area
- 1 L/B** Geologic terrane having low mineral resource potential for silver, barium, copper, lead, zinc, gold, and tungsten, with a certainty level of B
- 2 L/B** Geologic terrane having low mineral resource potential for other metals and geothermal energy, with a certainty level of B—Applies to entire study area
- B** Levels of certainty
Data indicate geologic environment and suggest level of resource potential
- C** Data indicate geologic environment and resource potential, but do not establish activity of resource-forming processes



- Qa** Alluvium (Holocene and Pleistocene, Pinedale?)—Unconsolidated alluvial deposits of silt, sand, and gravel; form flat valley bottoms
- Q1** Landslide deposits (Quaternary)—Slump deposits mainly on steep slopes underlain by bleached tuff and tuff breccia
- Qt** Terrace deposits (Pleistocene, Bull Lake?)—Unconsolidated deposits of cobbles, gravel, and sand in terraces on valley sides 80-200 feet above valley bottoms
- T1v** Idavada Volcanics (Miocene)—High-potassium rhyolite ash-flow tuff; phenocrysts of plagioclase, iron-titanium oxides, and pyroxene; lithic fragments and pumice common but not abundant; buff weathering, locally highly vesicular, relatively unaltered
- Tcd** Challis Volcanics high-potassium dacite (Eocene)—Gray, pinkish-gray, and bluish-gray porphyritic thick flows and monolithologic flow breccia with prominent phenocrysts of plagioclase, biotite, hornblende (as much as 6 millimeters long), and in some cases minor quartz or augite in an aphanitic or glassy groundmass; tops of flows commonly amygdaloidal and silicified or filled with chalcedony; bases and margins of flows commonly brecciated; locally partly altered to celadonite
- Tctw** Challis Volcanics densely welded ash-flow tuff (Eocene)—Abundant biotite and plagioclase and minor hornblende and quartz; abundant lithic and pumice fragments in black vitrophyric matrix; commonly altered to celadonite
- Tca** Challis Volcanics high-potassium pyroxene-hornblende andesite flows (Eocene)—Dark-gray to black with aphanitic groundmass; phenocrysts of plagioclase, pyroxene, and hornblende 1-2 millimeters long in a microcrystalline groundmass with a pilotaxitic texture; locally highly altered to celadonite

- Tcab** Challis Volcanics high-potassium andesitic breccia (Eocene)—Volcaniclastic heterolithologic breccia with prominent stratification, local interbeds of poorly sorted sand-sized volcaniclastic sediments, massive unstratified heterolithologic mudflow breccia and monolithologic flow breccia
- TKc** Pre-Challis conglomerate (Eocene? or Upper Cretaceous?)—Gray quartzite pebbles 1-10 centimeters in diameter in white fine-grained matrix; average thickness 100 feet
- PIPw** Wood River Formation (Lower Permian and Upper and Middle Pennsylvanian)—Gray calcareous sandstone, brown-weathering sandy limestone, gray siltite, gray quartzite, bluish-gray limestone, and dark-gray chert; limestone weathers dark brown; crossbedding, convolute structures, and load casts are common in limy sandstone; base of unit characterized by quartz-pebble conglomerate
- Dm** Milligen Formation (Devonian)—Black thinly bedded (1-4 inch) chert, phyllitic fissile quartzite, and thick (15-20 feet) light-gray sandy limestone; interbedded with subordinate, brown-weathering, finely laminated, dark-gray dolomite and slightly calcareous, gray-, brown-, and maroon-weathering siltstone, and black argillite

- Geologic contact—Dashed where approximately located
- Thrust fault—Sawtooth on upper plate
- Strike and dip of beds
- Strike and dip of overturned beds
- Strike of vertically dipping beds
- Strike and dip of lava flows and tuff breccia
- Adit
- Caved adit
- Altered areas—Quartz and quartz-calcite veins in Paleozoic sedimentary rocks and opalescent quartz-chalcedony-calcite-impregnated breccia in altered andesitic tuff breccia
- Analyzed rock-chip (R) sample
- Analyzed stream-sediments (S) and (or) heavy-mineral-concentrate (C) sample
- Anomalous elements denoted for:
 - () Stream sediments
 - [] Heavy-mineral concentrates
 - { } Rock chips



- 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

MAP SHOWING MINERAL RESOURCE POTENTIAL, GEOLOGY, GEOCHEMICAL SAMPLING SITES, AND MINE AND PROSPECT LOCATIONS OF THE LITTLE WOOD RIVER WILDERNESS STUDY AREA AND VICINITY, IDAHO