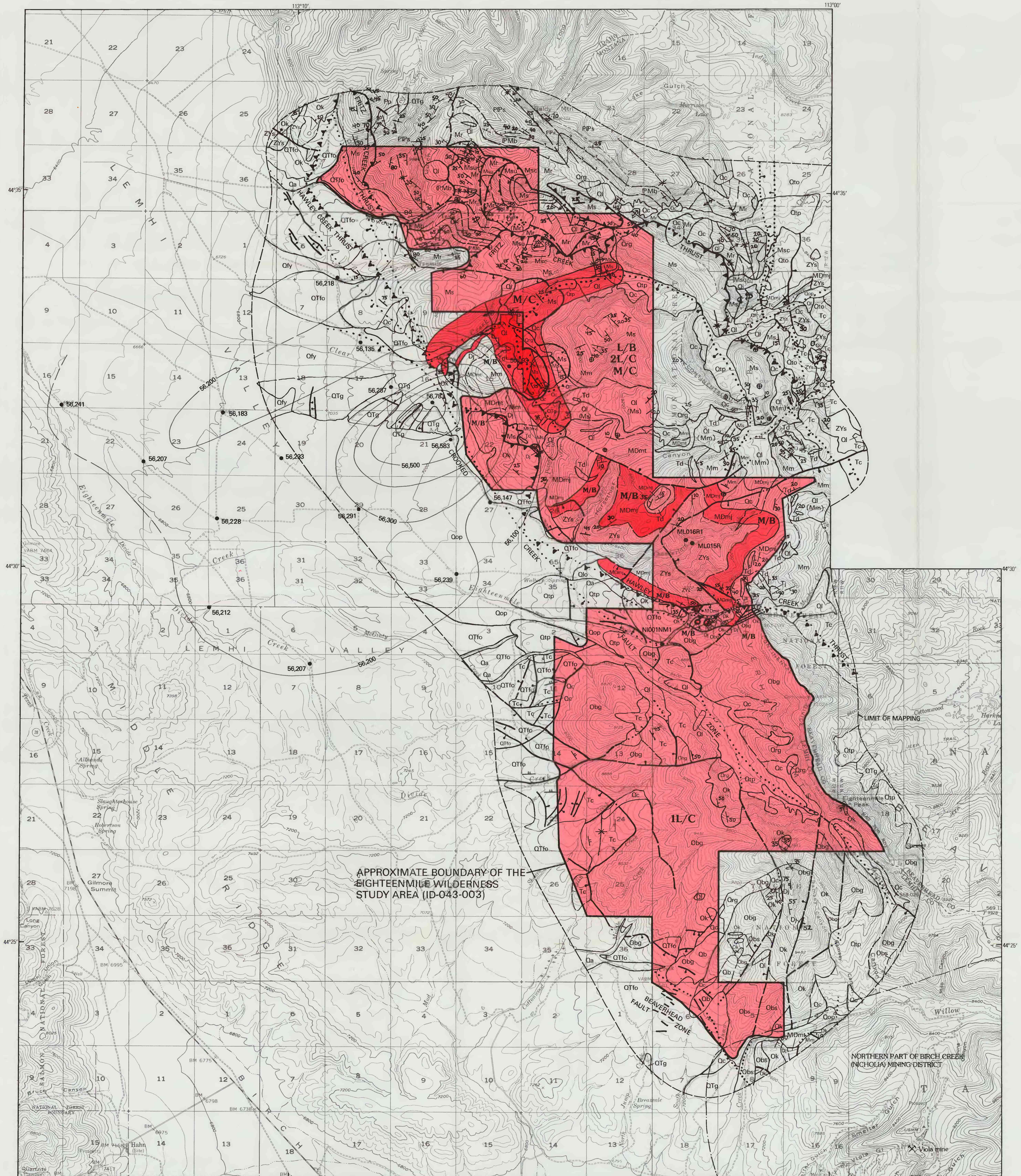
DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

BULLETIN 1718-B
PLATE 1



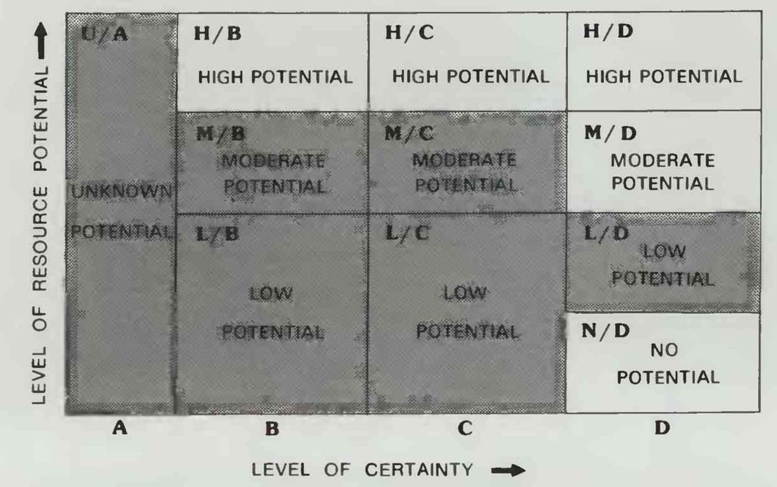
Base from U.S. Geological Survey 1:62,500 Morrison Lake, Nicholia, 1956; Scott Peak, 1957

Geology by Betty Skipp assisted by Jean M. LaDue, 1982-1984; geology in vicinity of Dry Canyon modified from B.K. Lucchitta (1966); geology in vicinity of Eighteenmile Peak from Skipp (1984). Outline of Clear Creek claim area from files of U.S. Bureau of Land Management (George F. Babits, Jr., written commun., 1986)

EXPLANATION OF IDENTIFIED RESOURCES AND MINERAL RESOURCE POTENTIAL

[Down to a depth of 10,000 ft, the entire study area has low resource potential for oil, at certainty level D. Below a depth of 10,000 ft, the entire study area has an unknown resource potential for oil and gas, at certainty level A]

- Area of identified resources of gypsum
- **M/B** — Geologic terrane having moderate mineral resource potential for silver, lead, and zinc, at certainty level B
- **M/C** — Geologic terrane having moderate mineral resource potential for gypsum, at certainty level C
- **M/C** — Geologic terrane having moderate resource potential for dry gas (methane), and possibly wet gas, at certainty level C, down to a depth of 10,000 ft—Applies to entire study area
- **L/B** — Geologic terrane having low mineral resource potential for lead, silver, copper, molybdenum, and zinc, at certainty level B—Applies to Clear Creek area and vicinity in northern part of study area
- **1L/C** — Geologic terrane having low mineral resource potential for silver, copper, lead, molybdenum, and zinc in fractures, and for tin, niobium, uranium, thorium, and rare-earth elements in granite, both groups at certainty level C—Applies to Beaverhead Mountains pluton and sediments derived from the pluton in south half of study area
- **2L/C** — Geologic terrane having low mineral resource potential for phosphate, at certainty level C—Applies to north half of study area, north of Pass Creek



LEVELS OF RESOURCE POTENTIAL

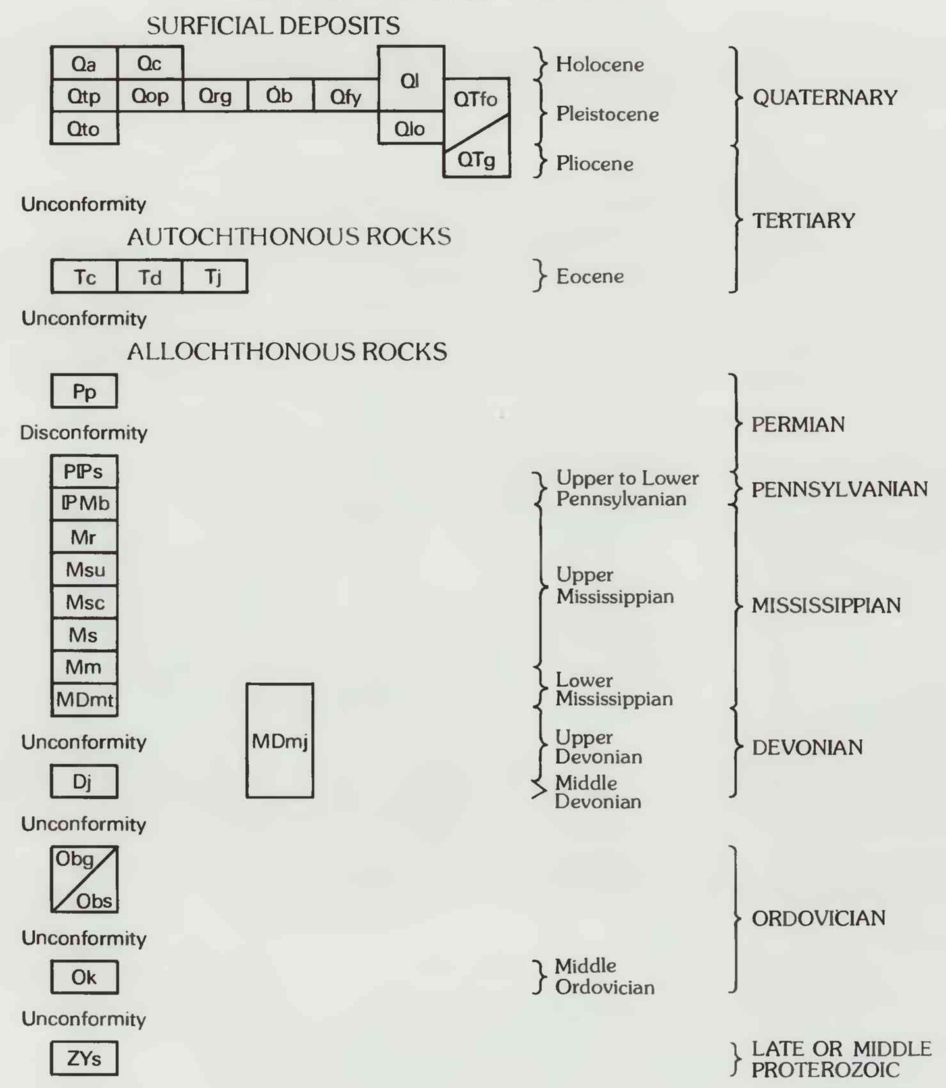
- **H** High mineral resource potential
- **M** Moderate mineral resource potential
- **L** Low mineral resource potential
- **U** Unknown mineral resource potential
- **N** No known mineral resource potential

LEVELS OF CERTAINTY

- **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

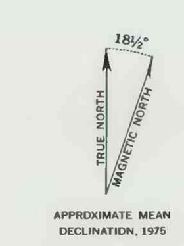
CORRELATION OF MAP UNITS

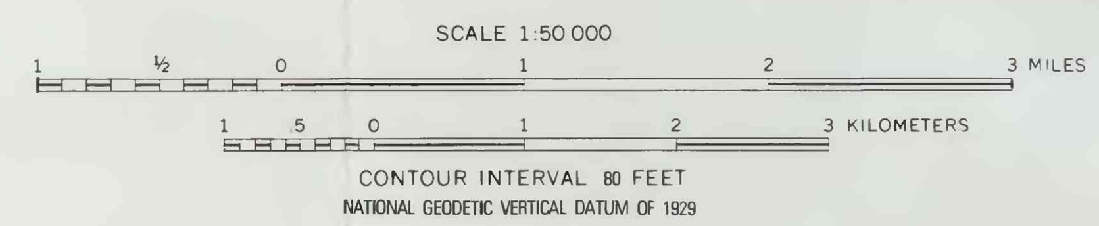


DESCRIPTION OF MAP UNITS

- Qa — **Alluvial deposits (Holocene)**
- Qc — **Colluvial deposits (Holocene)**
- Ql — **Landslide deposits (Quaternary)**—Map unit in parentheses indicates semicoherent debris primarily of that unit
- Qtp — **Till of Pinedale glaciation (upper Pleistocene)**
- Qop — **Outwash of Pinedale glaciation (upper Pleistocene)**
- Qrg — **Rock glacier deposits (upper Pleistocene)**
- Qb — **Boulder train (upper Pleistocene)**
- Qto — **Pre-Pinedale glacial till (Pleistocene)**
- Qfy — **Younger alluvial fan gravel (Pleistocene)**
- Qlo — **Older landslide deposits (Pleistocene)**
- QTfo — **Older alluvial fan gravel (lower Pleistocene to Pliocene)**
- QTg — **Gravel (lower Pleistocene to Pliocene)**
- Tc — **Challis Volcanics (Eocene)**
- Td — **Dike or sill (Eocene?)**
- Tj — **Jasperoid (Eocene?)**
- Pp — **Phosphoria Formation (Permian)**
- PIPs — **Snaky Canyon Formation (Permian and Pennsylvanian)**
- IPMb — **Bluebird Mountain Formation (Lower Pennsylvanian and Upper Mississippian)**
- Mr — **Railroad Canyon Formation (Upper Mississippian)**
- Msu — **Surrett Canyon Formation (Upper Mississippian)**
- Msc — **South Creek Formation (Upper Mississippian)**
- Ms — **Scott Peak Formation (Upper Mississippian)**
- Mm — **Middle Canyon Formation (Upper and Lower Mississippian)**
- MDmt — **McGowan Creek Formation (Lower Mississippian) and Sappington Member (Upper Devonian) of Three Forks Formation**
- MDmj — **McGowan Creek, Three Forks, and Jefferson Formations, undivided (Lower Mississippian to Middle Devonian)**
- Dj — **Jefferson Formation (Upper and Middle Devonian)**
- **Beaverhead Mountains pluton (Ordovician)**
  - Obg — **Granite**
  - Obs — **Syenite**
- Ok — **Kinnikinic Quartzite (Middle Ordovician)**
- ZYs — **Sandstone (Late and Middle Proterozoic)**

- **Contact**—Dashed where approximately located; queried where uncertain
- **Faults**—Dashed where approximately located; dotted where concealed; queried where uncertain
  - **Fault**—Bar and ball on downthrown side where mostly normal slip; arrow indicates mostly strike slip
  - **Thrust fault**—Sawteeth on upper plate
- **Folds**—Showing trace of axial plane; dashed where approximately located
  - **Anticline**
  - **Overturned anticline**—Showing direction of dip of limbs
  - **Syncline**
  - **Overturned syncline**—Showing direction of dip of limbs
- **Strike and dip of bedding**
  - **Approximate attitude from aerial photographs**
  - 20 **Inclined**
  - 80 **Overturned**
  - **Vertical**
  - **Horizontal**
- 20 **Strike and dip of inclined cleavage**
- 45 **Strike and dip of inclined lava flows**
- 56,228 **Ground magnetic station and total-intensity magnetic value**
- —56,300— **Contours of total-intensity magnetic values from ground survey**—Contour interval 100 gammas
- **Mine**
- **Prospect**
- ML015R **Geochemical sample site and number**





MAP SHOWING IDENTIFIED RESOURCES, MINERAL RESOURCE POTENTIAL, GEOLOGY, MAGNETIC CONTOURS, SELECTED GEOCHEMICAL SAMPLE SITES, AND PRINCIPAL MINES AND PROSPECTS OF THE EIGHTEENMILE WILDERNESS STUDY AREA, LEMHI COUNTY, IDAHO