

**EXPLANATION OF RESOURCE POTENTIAL**  
Area having resource potential for Tertiary molybdenum stockworks—  
See table 25 for scoring of recognition criteria

**1** High potential—Areas 1, 11, 12  
**2** Moderate potential—Areas 2, 6, 10  
**3** Low potential—Areas 3-5, 7-9

**13** Area having no potential for Tertiary molybdenum stockworks  
(diagnostic criteria absent)—Area 13

**x 2** Mine or prospect—Named mines and prospects listed below  
1 Little Falls  
2 CUMO  
3 Red Mountain

**LIST OF GEOLOGIC TERRANES**

al Alluvial terrane  
pl Eocene Plutonic terrane  
vo Challis volcanic terrane  
ba Idaho batholith terrane  
bs Black shale terrane  
ca Carbonate terrane  
ms Proterozoic terrane

— Trans-Challis fault system terrane

Regions of overlap between carbonate terrane and black shale terrane

Mostly rock glaciers; alluvial fans; landslide debris; talus; and terminal, end, and lateral moraines. Also includes Miocene volcanic and sedimentary rocks and noncarbonate roof pendants in the Idaho batholith of undivided (Paleozoic? or Proterozoic?) age

— Terrane boundary

— Boundaries of calderas and other volcano-tectonic structures—Dashed where approximately located

**DEFINITIONS OF RESOURCE POTENTIAL**

High mineral resource potential exists in areas where geologic, geochemical, and geophysical characteristics favorable for resource accumulation are known to be present, or where enough of these characteristics are present to give strong support to genetic models favorable for resource accumulation and where evidence shows that mineral concentration—mineralization in the broad sense—has taken place (Taylor and Steven, 1983, p. 1269).

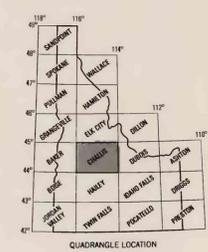
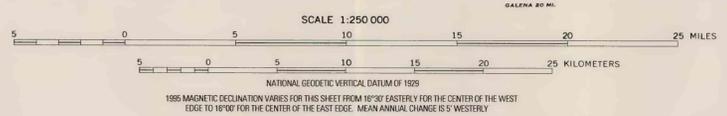
Moderate mineral resource potential exists in areas where geologic, geochemical, and geophysical characteristics favorable for resource accumulation are known or can reasonably be inferred to be present but where evidence for mineralization is less clear or has not yet been found (Taylor and Steven, 1983, p. 1269).

Low mineral resource potential exists in areas where geologic, geochemical, and geophysical characteristics are unfavorable, where evidence indicates that mineral concentrations are unlikely, or where requirements for genetic models cannot be supported (Taylor and Steven, 1983, p. 1269).

Unknown mineral resource potential exists where the level of knowledge, at an appropriate scale, is so inadequate that to classify potential as high, moderate, or low would be misleading (Taylor and Steven, 1983, p. 1269).

In some instances an assignment of no mineral resource potential for a particular ore deposit type or types has been given to specific areas within the Challis quadrangle. In these cases the occurrence of the particular ore deposit type is dependent on the presence of a specific lithology. Known absence of the required rock type precludes the occurrence of the ore deposit.

Base modified from U.S. Geological Survey, 1957  
Limited revision 1983  
100,000-foot grids based on Idaho coordinate system,  
central and west zones



**RESOURCE POTENTIAL FOR TERTIARY MOLYBDENUM STOCKWORKS IN THE  
CHALLIS 1° x 2° QUADRANGLE, IDAHO**

By  
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