

EXPLANATION

- Mine or mining district having an identified resource of gold and silver
- H/C Geologic terrane having high mineral resource potential for small vein deposits of gold, silver, lead, and zinc, at certainty level C
- M/C Geologic terrane having moderate mineral resource potential for stockwork molybdenum deposits in igneous rocks, at certainty level C—Applies only to a small area near the Halfmoon Creek stock, within the area of high potential for vein deposits defined above
- M/B Geologic terrane having moderate mineral resource potential for stockwork molybdenum deposits in igneous rocks, at certainty level B
- L/C Geologic terrane having low mineral resource potential, at certainty level C, for vein deposits of gold, silver, lead, and zinc; placer gold deposits; pegmatite minerals (feldspar, mica, and gem minerals); and stratiform copper and zinc deposits—For vein deposits, applies only outside the area of high potential defined above. For all others, applies to entire study area
- L/D Geologic terrane having low energy resource potential for oil and gas and for geothermal sources, at certainty level D—Applies to entire study area

CORRELATION OF MAP UNITS

Qu	QUATERNARY
TKqp	TERTIARY AND CRETACEOUS
Ys	MIDDLE PROTEROZOIC
Xgn	EARLY PROTEROZOIC

DESCRIPTION OF MAP UNITS

- Qu **Unconsolidated sediments (Quaternary)**—Includes alluvium, colluvium, talus, and glacial debris
- TKqp **Quartz porphyry (Tertiary and Cretaceous)**—Dikes, sills, and small stocks of rhyolite and quartz latite
- Ys **St. Kevin Granite (Middle Proterozoic)**—Heterogeneous pluton of granite, quartz monzonite, and granodiorite; contains many textural facies
- Xgn **Biotope gneiss, schist, and migmatite (Early Proterozoic)**—Mainly strongly foliated metasediments, but includes interlayered mafic rocks, pegmatites, and small bodies of St. Kevin Granite

CONTACT

- Fault—Dotted where concealed. Bar and ball on downthrown side
- Approximate boundary of Mount Massive Wilderness
- Patented mining claim
- Mine
- Prospect

MINES, PROSPECTS, AND AREAS OF MINERALIZATION IN AND NEAR THE MOUNT MASSIVE WILDERNESS

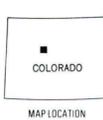
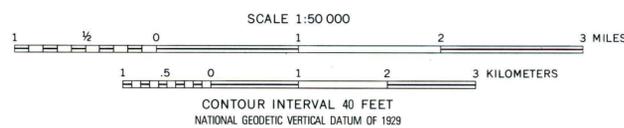
1. Sugarloaf mining district
2. Main Range Trail prospects
3. Halfmoon Creek area
4. Mount Champion area
5. Lackawanna Gulch area
6. Independence Pass (Eureka mine)
- 7-14. Unnamed prospects

LEVEL OF RESOURCE POTENTIAL ↑	U/A	H/B	H/C	H/D
	UNKNOWN	HIGH POTENTIAL	HIGH POTENTIAL	HIGH POTENTIAL
		M/B	M/C	M/D
	POTENTIAL	MODERATE POTENTIAL	MODERATE POTENTIAL	MODERATE POTENTIAL
	L/B	L/C	L/D	
	LOW POTENTIAL	LOW POTENTIAL	LOW POTENTIAL	
			N/D	
			NO POTENTIAL	
	A	B	C	D
	LEVEL OF CERTAINTY →			

H High mineral resource potential	A Available data not adequate
M Moderate mineral resource potential	B Data indicate geologic environment and suggest level of resource potential
L Low mineral resource potential	C Data indicate geologic environment, give good indication of level of resource potential, but do not establish activity of resource-forming processes
U Unknown mineral resource potential	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
N No known mineral resource potential	

Diagram showing relationships between levels of mineral resource potential and levels of certainty. Shading shows levels that apply to this study area

Base from U.S. Geological Survey 1:24,000
Homestake Reservoir, Nast 1970;
Mount Massive, Mount Elbert, 1967;
Independence Pass, Mount Champion, 1960



Geology generalized from Van Loenen (1985)

IDENTIFIED RESOURCES AND MINERAL RESOURCE POTENTIAL OF THE MOUNT MASSIVE WILDERNESS, LAKE COUNTY, COLORADO