

EXPLANATION

- GEOLOGIC TERRANE HAVING HIGH MINERAL RESOURCE POTENTIAL
- GEOLOGIC TERRANE HAVING MODERATE MINERAL RESOURCE POTENTIAL
- GEOLOGIC TERRANE HAVING LOW MINERAL RESOURCE POTENTIAL OR LOW POTENTIAL FOR GEOTHERMAL ENERGY RESOURCES

LEVELS OF RESOURCE POTENTIAL

H High mineral resource potential
M Moderate mineral resource potential
L Low mineral resource potential
U Unknown 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, indicate resource potential, but do not establish activity of resource-forming processes
D Data define geologic environment and level of resource potential, and indicate activity of resource-forming processes in all or part of area

LEVEL OF RESOURCE POTENTIAL	U/A	H/B	H/C	H/D
	M/B	M/C	M/D	M/D
	L/B	L/C	L/D	L/D
	A	B	C	D

Relationships between levels of resource potential and levels of certainty

COMMODITIES

Ag Silver
Au Gold
Na Sodium
Pb Lead
W Tungsten
Zn Zinc
Geothermal

TYPES OF DEPOSITS AND OCCURRENCES

- 1 Silicified zones and fractures
- 2 Propylitized zone
- 3 Argillically altered zone
- 4 Hot spring

CORRELATION OF MAP UNITS

Qu Qv QUATERNARY
Tv Tbs TERTIARY
Ka Tpe Tertiary

DESCRIPTION OF MAP UNITS

Qs SURFACE DEPOSITS (QUATERNARY)—Modern and older alluvium composed of locally derived, arkosic sandstone and older (pediment) gravels limited to outer extent in the northeastern part of the study area which is underlain by Pliocene(?) tan to dark-brown, volcanic boulder conglomerate containing smaller igneous and metamorphic clasts. Includes Christmas Canyon Formation of Smith (1964)

Qv VOLCANIC ROCKS (QUATERNARY)—Flows, sills, dikes and plugs of olive to very dark-greenish-gray andesite composed of plagioclase, biotite, hornblende, pyroxene, and minor quartz phenocrysts in a microcrystalline and glassy groundmass

Tv VOLCANIC AND SEDIMENTARY ROCKS (TERTIARY)—Intrusive and extrusive volcanic rocks and interbedded sedimentary rocks: rubble, volcanic and tuff breccias, and lapilli tuff locally capped by dark-gray, porphyritic andesite; minor andesite dikes and felsite plugs interbedded with tuffaceous arkosic sandstone and conglomeratic sandstone; propylitically altered, heavily brecciated porphyritic andesite, thinly bedded lapilli tuff, and less-brecciated andesite dikes; alteration intensity greatest in center of altered area and increases with depth. Includes Lava Mountain Andesite and late Pliocene Almond Mountain Volcanics of Smith (1964). Stippled pattern shows area of propylitic alteration described by Smith (1964)

Tbs BEDROCK SPRING FORMATION (TERTIARY)—Interbedded argillaceous and pyroclastic rocks including tan arkosic sandstone and conglomerate with minor amounts of siltstone, claystone, limestone, and evaporites; laterally extensive lenses of tuff, lapilli tuff, and volcanic breccia

Ka ATOLJA QUARTZ MONZONITE (CRETACEOUS)—Plutonic rocks approximating quartz monzonite in overall composition; includes apatite and leucocratic rocks in the northwestern part of the study area and some hornblende granodiorite in the southeastern part

CONTACT

— FAULT—Dashed where approximately located; dotted where concealed

--- FAULT LOCATED FROM AERIAL PHOTOGRAPHS

* USGS SAMPLING SITE WITH DETECTABLE GOLD

● USGS SAMPLING SITE WITH NO DETECTABLE GOLD

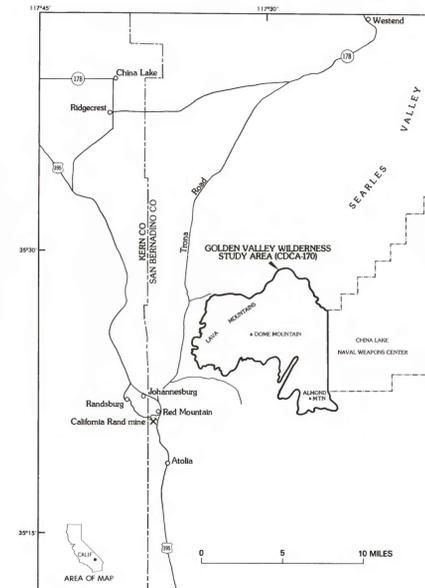
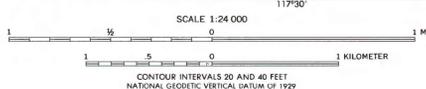
▲ USGS STREAM-SEDIMENT SAMPLING SITE AND NUMBER

X PROSPECT

PROSPECTS AND CLAIMS

Map No.	Name
1	Lava Mountain claims
2	RAK claims
3	SKG claims
4	prospect, name unknown
5	prospect, name unknown
6	prospect, name unknown
7	prospect, name unknown

Base from U.S. Geological Survey
Cuddeback Lake, 1954, 1:62,500;
Klinker Mountain, Red Mountain, 1967



MINERAL RESOURCE POTENTIAL MAP OF THE GOLDEN VALLEY WILDERNESS STUDY AREA, SAN BERNARDINO COUNTY, CALIFORNIA

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