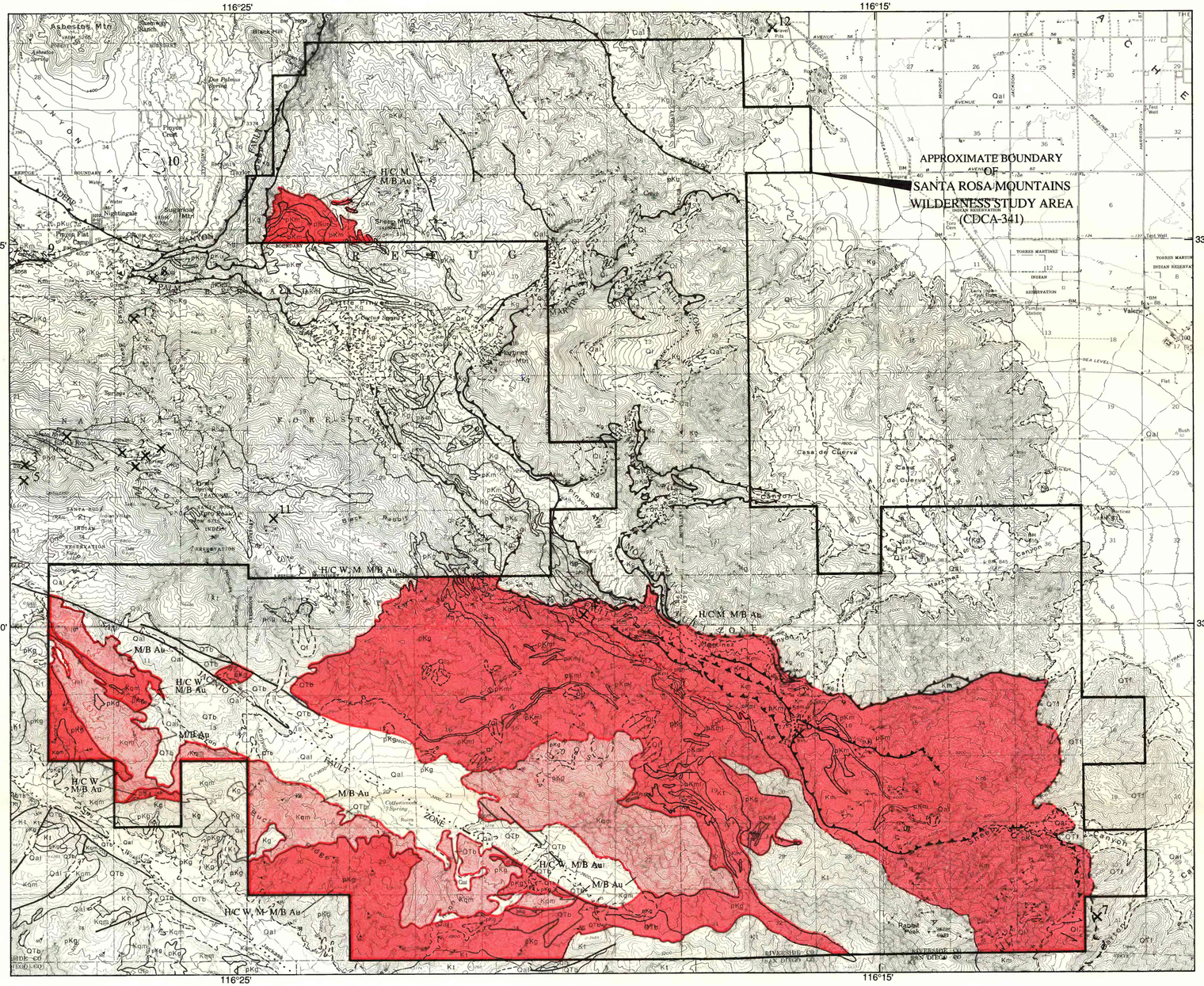


Base from U.S. Geological Survey, Coachella, 1956; Palm Desert and Rabbit Peak, 1959; Clark Lake, 1960.

TRUE NORTH
MAGNETIC NORTH
13°
APPROXIMATE MEAN DECLINATION, 1988

SCALE 1:62 500
1 ½ 0 1 2 3 4 5 MILES
1 .5 0 1 2 3 4 5 KILOMETERS
CONTOUR INTERVAL 80 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

CALIF
AREA OF MAP

Geology compiled from Wright (1946), Sharp (1967), Matti and others (1983), Calzia (1988), and from unpublished geologic mapping by J.C. Matti, B.F. Fox, R.V. Sharp, and B.G. Erskine, 1982.

MINERAL RESOURCE POTENTIAL MAP OF THE SANTA ROSA MOUNTAINS WILDERNESS STUDY AREA, RIVERSIDE COUNTY, CALIFORNIA

EXPLANATION

Area having high mineral resource potential (H)

Area having moderate mineral resource potential (M)

Commodities

Au Gold
M Marble
W Tungsten

CORRELATION OF MAP UNITS

Surficial deposits and sedimentary rocks

Qal, Ql — QUATERNARY

QTb, QTf — QUATERNARY AND (OR) TERTIARY

Santa Rosa mylonite zone

Lower plate: Km, Kt, Kgb, Kqm — CRETACEOUS

Upper plate: Kg

pKs, pKml, pKg — PRE-CRETACEOUS

pKm, pKu

DESCRIPTION OF MAP UNITS

Surficial deposits and sedimentary rocks

Qal **Alluvium (Quaternary)**

Ql **Landslide deposits (Quaternary)**—Arrows indicate direction of movement

QTb **Bautista Formation of Axelrod (1966) (Quaternary and (or) Tertiary)**

QTf **Fanglomerate deposits (Quaternary and (or) Tertiary)**

Lower plate

Km **Mylonitic gneiss, marble, and tonalite (Cretaceous)**

Kt **Tonalite, monzogranite, and granodiorite (Cretaceous)**

Kgb **Gabbro (Cretaceous)**

Kqm **Quartz monzonite (Cretaceous)**

pKs **Metasedimentary rocks (pre-Cretaceous)**

pKml **Marble (pre-Cretaceous)**

pKg **Gneiss and schist (pre-Cretaceous)**—Includes pods of marble

Upper plate

Kg **Undifferentiated granitic rocks (Cretaceous)**

pKm **Marble (pre-Cretaceous)**—Coarse-grained, locally mylonitic

pKu **Gneiss, schist, and metasedimentary rocks, undivided (pre-Cretaceous)**

MINES, PROSPECTS, AND CLAIMS

1 Pigeon Creek mine
2 Ribbonwood prospect
3 Indian prospect
4 Miller Ranch prospect
5 Oro Vista mine
6 Unnamed prospect
7 Unnamed prospect
8 Dolomite mine
9 Nightingale limestone claims
10 Serpentine Hill asbestos claims
11 Unnamed prospect
12 Sand and gravel pit

Contact—Dashed where approximately located; queried where uncertain

Fault—Dashed where approximately located; dotted where concealed. Arrows show sense of lateral slip; bar and ball on downthrown side. Dips shown where known

Thrust fault—Dashed where approximate; dotted where concealed; queried where uncertain. Sawteeth on upper plate

Slump scarp

Strike and dip of bedding

Horizontal bedding

Vertical foliation

Strike and dip of foliation—Arrow indicates bearing and plunge of lineation

5 Mine

6 Prospect

12 Gravel pit

9 Claim

DEFINITION OF LEVELS OF MINERAL RESOURCE POTENTIAL AND CERTAINTY OF ASSESSMENT

LEVELS OF RESOURCE POTENTIAL

H **HIGH** mineral resource potential is assigned to areas where geologic, geochemical, and geophysical characteristics indicate a geologic environment favorable for resource occurrence, where interpretations of data indicate a high degree of likelihood for resource accumulation, where data support mineral-deposit models indicating presence of resources, and where evidence indicates that mineral concentration has taken place. Assignment of high resource potential to an area requires some positive knowledge that mineral-forming processes have been active in at least part of the area.

M **MODERATE** mineral resource potential is assigned to areas where geologic, geochemical, and geophysical characteristics indicate a geologic environment favorable for resource occurrence, where interpretations of data indicate reasonable likelihood for resource accumulation, and (or) where an application of mineral-deposit models indicates favorable ground for the specified type(s) of deposits.

L **LOW** mineral resource potential is assigned to areas where geologic, geochemical, and geophysical characteristics define a geologic environment in which the existence of resources is permissive. This broad category embraces areas with dispersed but insignificantly mineralized rock, as well as areas with little or no indication of having been mineralized.

N **NO** mineral resource potential is a category reserved for a specific type of resource in a well-defined area.

U **UNKNOWN** mineral resource potential is assigned to areas where information is inadequate to assign a low, moderate, or high level of resource potential.

LEVELS OF CERTAINTY

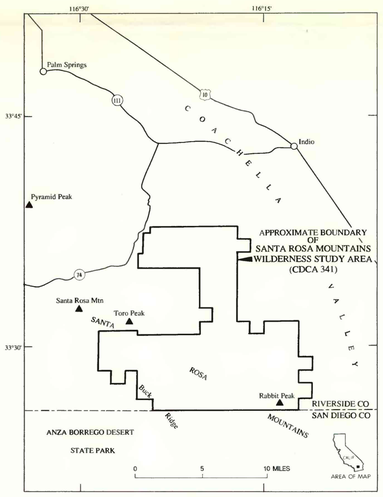
A Available information is not adequate for determination of the level of mineral resource potential.
B Available information only suggests the level of mineral resource potential.
C Available information gives a good indication of the level of mineral resource potential.
D Available information clearly defines the level of mineral resource potential.

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

LEVEL OF CERTAINTY

Abstracted with minor modifications from:

Taylor, R.B., and Steven, T.A., 1983, Definition of mineral resource potential: Economic Geology, v. 78, no. 6, p. 1268-1270.
Taylor, R.B., Stoneman, R.J., and Marsh, S.P., 1984, An assessment of the mineral resource potential of the San Isabel National Forest, south-central Colorado: U.S. Geological Survey Bulletin 1638, p. 40-42.
Goudarzi, G.H., compiler, 1984, Guide to preparation of mineral survey reports on public lands: U.S. Geological Survey Open-File Report 84-0787, p. 7, 8.



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