

CORRELATION OF MAP UNITS

Qg	QUATERNARY
Tv	TERTIARY
KJdg	CRETACEOUS AND JURASSIC
DOs	DEVONIAN(?) TO ORDOVICIAN(?)

DESCRIPTION OF MAP UNITS

Qg	GLACIAL DEPOSITS (QUATERNARY)
Tv	VOLCANIC ROCKS (TERTIARY)
KJdg	DIORITE, GRANODIORITE, AND RELATED IGNEOUS ROCKS (CRETACEOUS AND JURASSIC)
DOs	SHOO FLY COMPLEX (DEVONIAN? TO ORDOVICIAN?) --Quartzite, slate, calc-silicate rocks, and marble

EXPLANATION

—	CONTACT
●	GEOCHEMICAL ANOMALY--Stream-sediment sample containing anomalous concentrations of lead (Pb), copper (Cu), and gold (Au). Values in parts per million. Au?, gold detected, but amount present was below level of measurement.
---	BOUNDARY OF ROADLESS AREA--Approximately located

Rubicon Roadless Area
STUDIES RELATED TO WILDERNESS

The Wilderness Act (Public Law 98-577, September 3, 1984) and related Acts require the U.S. Geological Survey and the U.S. Bureau of Mines to survey certain areas on Federal lands to determine their mineral resource potential. Results must be made available to the public and be submitted to the Administration and the Congress. This report presents the results of a mineral resource potential survey of the Rubicon Roadless Area in the Tahoe and El Dorado National Forests, Placer and El Dorado Counties, Calif. The Rubicon Roadless Area (5-026) was classified as a further planning area during the Second Roadless Area Review and Evaluation (RAE II) by the U.S. Forest Service, January 1979.

SUMMARY

A search of mining records, coupled with geologic and geochemical field investigations, indicates that the Rubicon Roadless Area has not yielded any significant amounts of economic minerals in the past and that it has a low mineral resource potential. Gold was found in panned concentrates of samples taken from the walls of the abandoned Pigeon Roost mine adjacent to the area and in a stream-sediment sample collected downstream from the mine. The deposits are small and low grade, but they may be of interest to weekend prospectors.

No potential for oil, gas, coal, or geothermal resources was identified.

GEOLOGY

The Rubicon Roadless Area is located on the lower reaches of the Rubicon River, a major tributary of the Middle Fork of the American River that drains the west slope of the Sierra Nevada. The Rubicon River exposes a wide variety of metamorphic rocks that are intruded by three small plutons of the Sierra Nevada batholith. Tertiary volcanic rocks rest unconformably above the metamorphic and igneous rocks on the ridges north and south of the river. Unconsolidated boundary gravel deposits, representing outwash from Pleistocene glaciers that capped the range to the east, are plastered on the canyon walls in the eastern part of the study area.

The area lies 8 to 15 mi (13 to 24 km) east of significant lode and placer mining areas that are part of the Mother Lode district. Despite the proximity to this classic mining district and a general comparability of rock types, no record of mineral production in the Rubicon Roadless Area was found.

GEOCHEMISTRY

The results of a geochemical study of panned concentrates from stream-sediment samples taken within the study area is given by Harwood (1983). Trace amounts of gold were located in the creek of Pigeon Roost Canyon below the abandoned Pigeon Roost mine, but the gold values were too low and the alluvial deposits too small to constitute a resource. Anomalous amounts of lead and copper were identified in panned concentrates of stream-sediment samples collected over a quartz diorite body in the eastern part of the study area. No sulfide-bearing veins or mineralized areas were found in the intrusive rocks and it is concluded that minor amounts of lead and copper are disseminated in the quartz diorite.

PROSPECTS AND MINERALIZED AREAS

No mining activity is currently being conducted in the study area and no record of mineral production could be found for the Pigeon Roost mine, the only mine or prospect in the immediate vicinity of the study area.

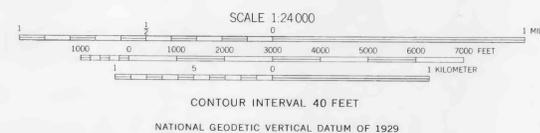
The Pigeon Roost mine contains an open, slumped trench about 500 ft (152 m) long, 100 ft (30 m) wide, and 15 ft (4.6 m) deep which appears to represent most of the original tertiary gravel deposit. Samples taken from the walls of the trench contained gold values of \$1.98 and \$137.60 per yd³ (\$2.59 and \$180 per m³) assuming \$800 per troy oz for gold.

REFERENCE

Harwood, D. S., 1983, Geologic and geochemical maps of the Rubicon Roadless Area, Placer and El Dorado counties, California: U.S. Geological Survey Miscellaneous Field Studies Map MF-1501-A, scale 1:24,000.

Base from U.S. Geological Survey,
1:24 000, Devil Peak, Robbs Peak, 1973

Geology from
Harwood (1983)



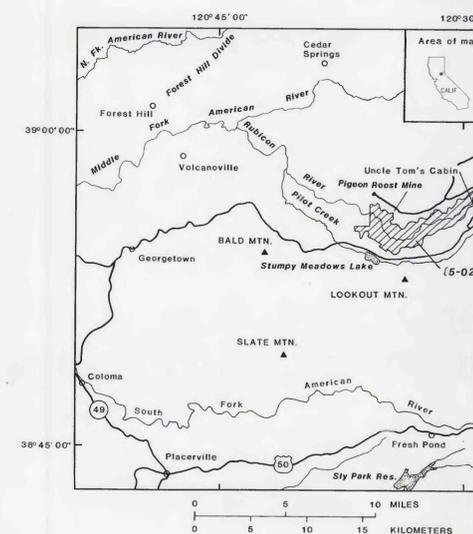
MINERAL RESOURCE POTENTIAL MAP OF THE RUBICON ROADLESS AREA, PLACER AND EL DORADO COUNTIES, CALIFORNIA

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1983



Index map showing location of Rubicon Roadless Area, California

EXPLANATORY TEXT ACCOMPANIES MAP