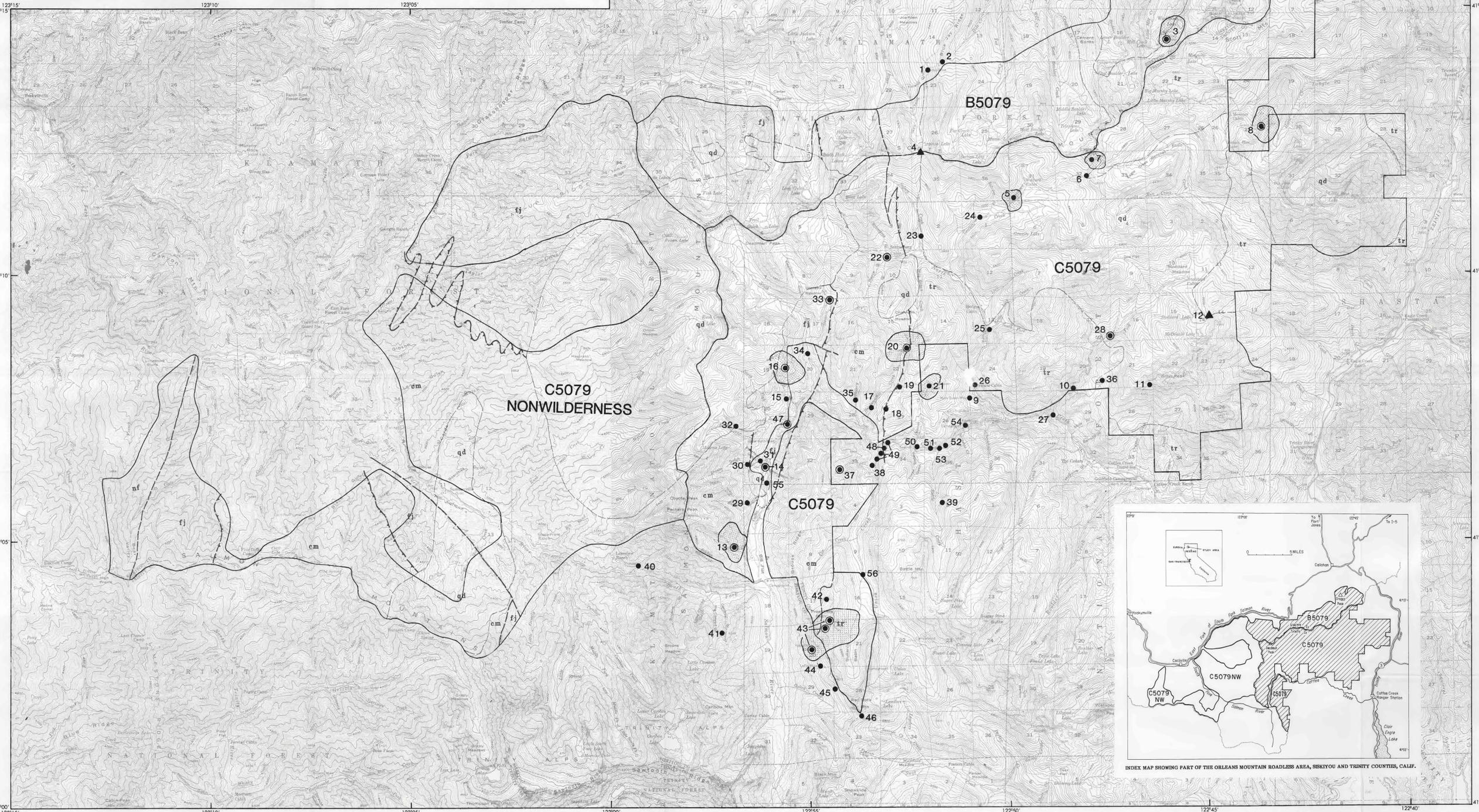


List of mines and prospects in and near the study area, summarized from files and others (1977).

Map No.	Name	Map No.	Name	Map No.	Name
1	Pat (partial) prospect	18	Gold Creek prospect	38	Niada prospect
2	Laney mine prospect	19	M.P. mine prospect	39	Hershel prospect
3	Klart mine prospect	20	Henderson (Henderson) mine	40	Clelio prospect
4	Silver Star prospect	21	Opus prospect	41	Great Dike prospect
5	Chlor prospect	22	Schlimberg placer mine	42	D.V. prospect
6	Chlor prospect	23	Schlimberg and Yellow Rose mines	43	Decker and Yellow Rose mines
7	Opus prospect	24	Gracie prospect	44	Labby prospect
8	Opus prospect	25	North Fork Creek Oxide placer	45	Island prospect
9	Opus prospect	26	Francis Oxide placer	46	Red Rock Hill prospect (includes 4 patented claims)
10	Opus prospect	27	T & C placer	47	North Placer mine (4 patented claims)
11	Opus prospect	28	Island placer mine	48	Union Creek placer
12	Opus prospect	29	Handy Oxide placer	49	Unnamed placer
13	Opus prospect	30	Chavis placer	50	Chavis placer
14	Opus prospect	31	Chavis and Kitty placer	51	James Hill's placer
15	Opus prospect	32	Adams Creek	52	Keystone placer
16	Opus prospect	33	Reveal (Eliason) placer mine	53	Unnamed gravel bar on Coffee Creek
17	Opus prospect	34	South Fork Coffee Creek placer	54	Prince Albert placer
18	Opus prospect	35	Unnamed placer	55	Upper Union placers
19	Opus prospect	36	Unnamed placer		
20	Opus prospect	37	Unnamed placer		
21	Opus prospect	38	Unnamed placer		
22	Opus prospect	39	Unnamed placer		
23	Opus prospect	40	Unnamed placer		
24	Opus prospect	41	Unnamed placer		
25	Opus prospect	42	Unnamed placer		
26	Opus prospect	43	Unnamed placer		
27	Opus prospect	44	Unnamed placer		
28	Opus prospect	45	Unnamed placer		
29	Opus prospect	46	Unnamed placer		
30	Opus prospect	47	Unnamed placer		
31	Opus prospect	48	Unnamed placer		
32	Opus prospect	49	Unnamed placer		
33	Opus prospect	50	Unnamed placer		
34	Opus prospect	51	Unnamed placer		
35	Opus prospect	52	Unnamed placer		
36	Opus prospect	53	Unnamed placer		
37	Opus prospect	54	Unnamed placer		
38	Opus prospect	55	Unnamed placer		
39	Opus prospect	56	Unnamed placer		
40	Opus prospect				
41	Opus prospect				
42	Opus prospect				
43	Opus prospect				
44	Opus prospect				
45	Opus prospect				
46	Opus prospect				
47	Opus prospect				
48	Opus prospect				
49	Opus prospect				
50	Opus prospect				
51	Opus prospect				
52	Opus prospect				
53	Opus prospect				
54	Opus prospect				
55	Opus prospect				
56	Opus prospect				



**EXPLANATION**

AREA OF LOW TO MODERATE POTENTIAL FOR GOLD (AND POSSIBLY SILVER)

AREA OF LOW POTENTIAL FOR CHROMIUM

MINES OR PROSPECTS—Number refers to list of mines and prospects, and tables 1 and 2 of accompanying pamphlet

HISTORICALLY PRODUCTIVE MINE—Number refers to list of mines and prospects, and table 1 of accompanying pamphlet

**GEOLOGIC MAP UNITS**

QUARTZ DIORITE

CENTRAL METAMORPHIC TERRANE

FORT JONES TERRANE

NORTH FORK TERRANE

TRINITY TERRANE

CONTACT—Dashed where approximately located

HIGH-ANGLE FAULT—Dashed where approximately located

THURST FAULT—Solid with teeth on upper plate

APPROXIMATE BOUNDARY OF ROADLESS AREA

**STUDIES RELATED TO WILDERNESS**

The Wilderness Act (Public Law 85-624, September 3, 1968) and related areas 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. This report presents the results of a mineral resource potential survey of part of the Orleans Mountain Roadless Area, which includes B5079 and C5079 in the Kings and Shasta-Trinity National Forests, Siskiyou and Trinity Counties, California. The areas were established as roadless areas by the U.S. Forest Service, January 1976. Also included in this report is area C5079 NW which was designated as a roadless area in January, 1979.

**SUMMARY**

Gold was mined from both lode and placer deposits in parts of the Orleans Mountain Roadless Area between 1873 and 1914. Area B5079 has one area with a low to moderate potential for additional small pockets of low-grade resources. Area C5079 has several areas with a moderate potential for additional small pockets of low-grade resources. A survey of mines, prospects, and mineral areas was not conducted for Area C5079 NW and no mineral resources were found during the geologic mapping of the area. Both areas B5079 and C5079 have one prospect each (Union Ridge, map nos. 4 and 5, map no. 1), respectively, with a low potential for chromium.

**INTRODUCTION**

The study area is part of the Orleans Mountain Roadless Area encompassing approximately 192 mi<sup>2</sup> in Siskiyou and Trinity Counties, Calif. The study area lies within the Kings and Shasta-Trinity National Forests. The study area lies within the Kings and Shasta-Trinity National Forests, which are located on rugged terrain with elevations ranging from 1,000 to 8,000 ft.

**DESCRIPTION**

This mineral resource potential study is based on an earlier study of the Kings and Shasta-Trinity National Forests and adjacent areas, 1973 by the U.S. Geological Survey and the U.S. Bureau of Mines. The study area was mapped by the U.S. Geological Survey and the U.S. Bureau of Mines in 1973. However, mineral resources and occurrences were not mapped in the area since 1973 has consisted of geologic reconnaissance and professional mapping during the 1981 and 1982 summer field seasons.

**GEOLOGY, GEOCHEMISTRY, AND GEOPHYSICS PERTAINING TO MINERAL RESOURCE ASSESSMENT**

The Orleans Mountain area consists of five generally north-south trending terrane units separated by thrust faults (Drew, 1977; Davis, 1981; Jayko and Blake, 1983). From east to west these terranes are Trinity, Central Metamorphic, Fort Jones, and North Fork (Blake and others, 1981). These terranes form the country rock surrounding the Kings and Shasta-Trinity National Forests, and the study area.

**GEOLOGY**

The Trinity terrane consists of metamorphosed basaltic and andesite with lesser amounts of gabbro and diorite. Small orthoquartzite pods several feet in size are interbedded with the basaltic rocks. Geochronological studies of zircon samples from several orthoquartzite pods indicated between 1.63 and 2.1 percent orthoquartzite.

**GEOCHEMISTRY**

The Central Metamorphic terrane consists of two formations, the Salmon Mountain and the Kings Mountain. The Salmon Mountain formation is a quartzite and contains small amounts of gabbro and diorite. The Kings Mountain formation is a quartzite and contains small amounts of gabbro and diorite. The Kings Mountain formation is a quartzite and contains small amounts of gabbro and diorite.

**GEOPHYSICS**

Magnetic anomalies in the study area are associated with the Jurassic plutons and ultramylonite of the Kings Mountain terrane (Drew and others, 1973). These anomalies are responsible for the types of rocks involved, and therefore, provide no indication of mineral deposits.

**MINING DISTRICTS AND MINERALIZATION**

Fifty-six mines and prospects are located within or immediately adjacent to the study area. The Kings Mountain and North Fork terranes contain the most mineral resources on the only patented claims in or immediately adjacent to the roadless area.

**ASSESSMENT OF MINERAL RESOURCE POTENTIAL**

Gold which has the highest mineral resource potential in the study area, is generally associated with the Kings Mountain and North Fork terranes. Small amounts of copper and lead are by-products of gold mining. At least 19,498 oz of gold and 4,815 oz of silver were produced from the study area between 1873 and 1914. Of this total, 13,388 oz of gold and 4,417 oz of silver were from placer deposits. Most of the mineral production in the study area is from placer deposits. The potential for gold resources in this area is greater than the current (1983) gold price of more than \$400 per ounce than at the \$33 per ounce price which prevailed when Hutz and others (1977) made the earlier mineral resource study.

Both areas, B5079 and C5079, have known occurrences of ultramylonite rock with 19 percent to more than 20 percent. Known ultramylonite pods are small and scattered, and there is a low potential for larger and more closely spaced occurrences.

There is no evidence of a potential for chromite. Some, lead, and gravel are identified, but these high-grade, low-volume mineral resources are far from local markets.

**REFERENCES CITED**

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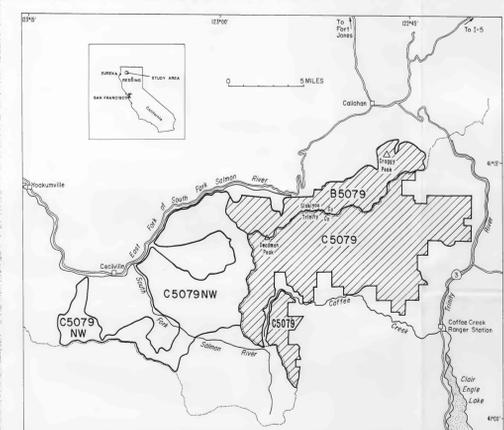
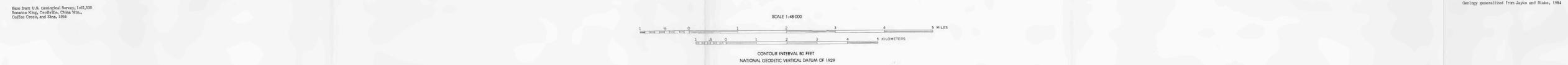


Table 1.—Recorded production from lode and placer mines in and near the study area: Summary from files and others (1977).

Map No.	Mine	Years active	Gold (oz)	Silver (lb)	Copper (lb)	Lead (lb)
3	Klart L	1905 - 1920	1,198	552	--	--
4	Grand National L	1901 - 1927	1,198	400	2,100	1,000
13	Patner L	1909 - 1920	400	240	--	--
14	Nerring Star L	1909	63	--	--	--
16	Geneva L	1931 - 1939	147	335	--	240
20	Henderson L	1899 - 1909	120	7	--	--
22	Schlimberg P	1914 - 1937	460	40	--	--
37	Andy Lease L	1937's	100	--	--	--
43	Derinda L	1911 - 1938	10,000	700	--	--
47	Yellow Rose L	1883 - 1901	3,400	400	--	--
51	Haven P	1913 - 1935	320	27	--	--
42	Nash P	1884 - 1911	10,000	1,400	--	--
38	Holland P	1873 - 1923	1,800	--	--	--
Total			29,488 or 4,815 on 1,000 lb	248 lb	--	--

\* Located outside the study area within 1/2 mi of the boundary.  
L, Lode; P, Placer.  
--, No record.



MINERAL RESOURCE POTENTIAL MAP OF PARTS OF THE ORLEANS MOUNTAIN ROADLESS AREA, SISKIYOU AND TRINITY COUNTIES, CALIFORNIA

By  
A. S. Jayko and M. C. Blake, Jr. and L. Y. Marks, H. K. Thurber, and R. K. Evans  
U.S. Geological Survey U.S. Bureau of Mines  
1983

Explaining pamphlet accompanies map  
Source—Geological Survey, Room 36-1983  
For sale by Branch of Distribution, U.S. Geological Survey,  
Box 218, Federal Center, Denver, CO 80225