

Geology from Bergquist and Nitkiewicz (1982)

DEPARTMENT OF THE INTERIOR

Base from U.S. Geological Survey, 1:62,500, Hockett Peak, Kernville Lamont Peak, Monache Mtn., 1956; 1:24,000, Onyx, Welden, 1972

MISCELLANEOUS FIELD STUDIES

Woodpecker Meadow anomaly

The anomaly occurs south of Woodpecker Meadow in the northern part of the study area and includes sample sites 46 and 56, which have anomalous concentrations of Ag, Sn, and Mo. The area is underlain by Cretaceous Isabella Granodiorite. The geochemical suite of elements is probably associated with contact-type mineralization.

Rockhouse Meadow anomaly The anomaly occurs west of Rockhouse Meadow in the east-central part of the study area and includes sample sites 97, 106, 107, and 234, which have anomalous concentrations of Pb, Sn, Cu, Mo, Ba, and Zn. The area is underlain by Cretaceous Isabella Granodiorite, mixed Isabella Granodiorite and Sacatar Quartz Diorite, and Kernville Series. The anomalous values of Cu, F, Mo, SO_A , U, and Zn in stream waters from this area (Miller and

> McHugh, 1985) also support the existence of the anomaly. These geochemical suites of elements are probably associated

with contact-type and(or) hydrothermal vein-type Black Mountain anomaly The anomaly occurs in the area that includes Black Mountain and the area north of Black Mountain in the center part of the study area and includes sample site 51, which has anomalous concentrations of Ag, Cu, Mo, and Zn. The area is underlain by Cretaceous Isabella Granodiorite. The anomalous values of Bi, Cu, Pb, and Sn in the nonmagnetic fraction of heavy-mineral concentrates (Miller and others, 1985) also support the existence of the anomaly. These

geochemical suites of elements are probably associated with

contact-type and(or) hydrothermal vein-type mineralization.

Pilot Knob anomaly This large anomaly occurs in the area that includes Pilot Knob and the area west of Pilot Knob and consists of many low-grade anomalies. The anomaly includes sample sites 7, 31, 32, 35, 36, 39, 207, 210, 211, 213, 214, 223, 224, 225, and 226 and consists mainly of anomalous concentrations of Pb and Th. Ag, Ba, Mo, and Sn are also anomalous at some of the sites. The area is underlain mainly by Cretaceous Isabella Granodiorite which is mostly quartz monzonite. The anomalous values of Ag, Mo, Pb, and Sn, in the nonmagnetic fraction of heavy-mineral concentrates (Miller and others, 1985) and F, Mo, SO_4 , and U in waters from springs (Miller and McHugh, 1985) also support the existence of the anomaly. Although the anomaly is low-grade, the geochemical suites of elements are probably associated with highly differentiated silica-rich rocks with possible

methods for the semiquantitative analyses of geologic

materials: U.S. Geological Survey Circular 591, 6 p.

Miller, W. J., 1931, Geologic sections across the southern Sierra Nevada of California: California University

Miller, W. J., and Webb, R. W., 1940, Descriptive geology of

the Kernville quadrangle, California: California

Miller, W. R., and McHugh, J. B., 1985, Distribution of

Miller, W. R., McHugh, J. B., and Motooka, J. M., 1985,

Motooka, J. M., McHugh, J. B. and Miller, W. R., 1980,

Analyses of the heavy-mineral fraction of drainage

sediments, Domeland Wilderness and adjacent RARE II

study areas, Kern and Tulare Counties, California:

U.S. Geological Survey Open-File Report 80-918.

Distribution of anomalous trace elements in the nonmagnetic fraction of heavy-mineral concentrates and

Studies Map MF-1395-E, scale 1:48,000.

MF-1395-C, scale 1:48,000.

Journal of Mines and Geology, v. 36, no. 4, October

anomalous elements in water, Domeland Wilderness and

California: U.S. Geological Survey Miscellaneous Field

uranium in the less than 0.180-mm fraction of selected

stream sediments, Domeland Wilderness and contiguous

roadless areas, Kern and Tulare Counties, California:

U.S. Geological Survey Miscellaneous Field Studies Map

contiguous roadless areas, Kern and Tulare Counties

Department of Geology Bulletin, v. 20, no. 9,

porphyry-molybdenum mineralization.

REFERENCES CITED Bergquist, J. R., and Nitkiewicz, A. M., 1982, Geologic map of the Domeland Wilderness and contiguous roadless areas, Kern and Tulare Counties, California: U.S. Geological Survey Miscellaneous Field Studies Map MF-1395-A, scale 1:48,000. Grimes, D. J., and Marranzino, A. P., 1968, Direct-current arc and alternating spark emission spectrographic field

05207 Domeland Addition Roadless Area; 3100 acres INDEX MAP SHOWING 7.5' AND 15' QUADRANGLES