

1890 0005

Washoe Co. general

NW-30-5

Cu, Au, Mo

Mining District: FRED'S MOUNTAIN AREA, HILL JOHNSON PROSPECT
(Copper, Gold, Molybdenum)

T. 22 N., R. 19 E.

Washoe County, Nevada

USGS Dogskin Mountain 15-min. quadrangle (1957)

I-tem 50

(9 of 18)

GENERAL BACKGROUND

To facilitate discussion the two areas will be treated separately.

I. Fred's Mountain Area

Fred's Mountain is located east of Peterson Mountain and west of Antelope Valley. Several prospect pits and adits explore copper and copper-gold occurrences in the area. There has apparently been no production from any of the properties. The area was examined; however, snow prevented anything more than a cursory inspection.

GEOLOGICAL AND TECHNICAL DATA

The bulk of Fred's Mountain consists of granodiorite. At the northern end of the mountain, the granodiorite has intruded metamorphic rocks of Mesozoic age. Unconformably overlying there older rocks is the Hartford Hills Rhyolite of Tertiary age.

Disseminations of copper sulfides occur in small lenses in the metamorphic rocks. In section 10, T. 22 N., R. 19 E. a quartz vein reportedly contains pyrite, minor copper, and low gold values (1).

POTENTIAL FOR DEVELOPMENT

The minor copper showings reported by Bonham (1) in prospect pits and workings on Fred's Mountain are economically submarginal. Of potentially greater significance, however, is the fact that these showings may represent leakages from a larger deposit at depth. The geology is certainly favorable for the presence of such an ore body.

COMPANIES AND CLAIMANTS ACTIVE IN AREA

1. NASH COPPER MINE Group
R. A., R. H. Nash
3701 Mill, Reno
Jan. 1900, 1951
(24 lode claims)

2. LOBO Group
F. Paul
1603 Marietta, Sparks
Mar. 1966
(2 lode claims)

Bennett, Jan. 1973

II. Hill Johnson Prospect

The Hill Johnson molybdenum prospect is located on the south end of Fred's Mountain in section 27, T. 22 N., R. 19 E. Two adits are on the property, but there has been no apparent production. The prospect was not examined by the writers during this investigation.

GEOLOGICAL AND TECHNICAL DATA

Molybdenum oxide (ilsemanite?) staining reportedly occurs on quartz veins in a small metavolcanic roof pendant in granodiorite (1).

POTENTIAL FOR DEVELOPMENT

Several active mines in the United States produce essentially all of our domestic molybdenum requirements plus most of the free world's also. It has been estimated that these properties will continue to supply virtually the entire domestic market through the year 2000 at the 1968 price level of about \$1.60 per pound of molybdenum concentrate (3).

The low grade and apparent small extent, coupled with the competition of established mines with large reserves, make it unlikely that the Hill Johnson Prospect will be an economic source of molybdenum in the future.

The possibility for other occurrences in the area is not known.

COMPANIES AND CLAIMANTS ACTIVE IN AREA

Unknown, but presumably under lode locations.

SELECTED REFERENCES

1. Bonham and Papke: Geology and Mineral Resources of Washoe and Storey Counties, Nevada; Nev. Bur. Mines Bull. 70, 1969.
(Includes Geologic Map of Resource Area)
2. Schilling: An Inventory of Molybdenum Occurrences in Nevada; Nev. Bur. Mines Rpt. 2, 1962.
3. US Bur Mines: Mineral Facts and Problems, 1970 Ed.; US Bur. Mines Bull. 650, 1970.

FIELD EXAMINATION

Bennett and Mallery (Fred's Mountain Area), Dec. 1972

Bennett, Jan. 1973

USGS Dogskin Mountain
15-min. quadrangle (1957)

USGS Reno
15-min. quadrangle (1950)

Whitney Spr.
Juniper Spr.
Sagebrush
s Mountain area
Copper)

Area of Red Rock Pegmatites
(Feldspar)

Hill Johnson Prospect
(Molybdenum)

45a

Washoe Co. - general

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Mineral Resources Inventory and Analysis

of the

Pyramid Resource Area

Carson City District
Nevada and California

by

R. E. Bennett and H. W. Mallery

1973

*see Washoe County-general,
file for the complete
introduction to this report
(0160 0035)*