

Mining District: Bernice (Bernice Canyon Area) (Silver, Antimony)

> T. 21-22 N., R. 37-38 E. Churchill County, Nevada AMS Millett Map Sheet 1955

GENERAL BACKGROUND

Indicated mineral area NW-27-2 encompasses an area on the western slope of the Clan Alpine Range in the area of Bernice Canyon. Dixie Valley lies immediately to the west. Access to the area is through Dixie Valley.

The principal mining locations are situated in the northern part of the area in Bernice and Hoyt Canyons, northeast of the Dixie Valley settlement.

Deposits of silver ore were discovered in the late 1870's, and accounted for much of the \$156,000 recorded production of the 1880's. Antimony deposits were discovered in the 1880's, but production values over the years have not been recorded. Some antimony was produced in the 1890's, the early 1900's, during World War I, World War II, and the mid-1960's. Antimony production prior to 1963 equaled several hundred tons of metal.

The Bernice mine, located on the south side of the ridge between Bernice and Hoyt Canyons, has several adits exploring different levels. This mine has produced silver ore.

The Antimony King Mine, located 2% road miles up Bernice Canyon, is developed by several adits. Numerous open cuts and trenches explore veins at the surface. The Antimony King has been the principal producer of antimony and was being worked in 1967.

GEOLOGICAL AND TECHNICAL DATA

The oldest rocks in the area are Triassic sedimentary rock--shale and siltstone, with interbedded limestone and sandstone. These rocks are cut by several felsite dikes in Bernice Canyon. The dikes trend north and locally parallel the bedding of the Triassic rocks. Some of the antimony ore occurs in these dikes or in close proximity to them. Tertiary volcanics unconformably overlie the Triassic sedimentary rocks and are locally faulted against them.

The adits of the Bernice mine explore a quartz vein trending north in slate. The vein dips steeply to the west. Pyrite, arsenopyrite, and stibnite are present on the dumps of this property. Samples taken in the mid-1960's contained up to several hundred ppm silver. More silver ore is believed to occur at greater depths within the property.

The Antimony King mine has adits which explore a quartz vein varying in width up to 4 feet. Stibnite occurs as pods and veinlets within the quartz vein. Some stibnite pods are 2 feet in diameter. Sphalerite, pyrite, and arsenopyrite are associated with the stibnite.

POTENTIAL FOR DEVELOPMENT

The known antimony occurrences in the area are in narrow veins that necessitate high cost underground mining. Selective mining and some hand-cobbing is required to produce shipping ore. Little antimony production will occur unless there is a period of very high prices or a national emergency. Should economic deposits of silver in the area be developed it is possible that antimony could be a profitable by-product.

COMPANIES AND CLAIMANTS ACTIVE IN AREA

- 1. BIACKHAWK #1
 J. Halonen
 P. O. Box 431
 Yerington, Nevada 89447
 August 1972
 (lode claim)
- JACKSON HOME Group
 K. Jackson
 P. 0. Box 292
 Battle Mountain, Nevada
 September 1972
 (7 lode claims)
- 3. GOTCHA Group
 J. Howard Sims (estate of)
 Salmon, Idaho
 August 1972
 (lode claims)

- 4. KING SOLOMON Group
 (includes Antimony King)
 Howard Turley
 Dixie Valley, Nevada
 August 1972
 (lode claims)
- 5. NEW HOPE MINE
 Charles and Betty Martin
 6375 Brickyard Rd.
 Tillamook, Oregon 97141
 July 1974
 (lode claim)
- 6. STIBNITE #1 & #2
 S. V. and Bob Trease
 225 Drumm Lane
 Fallon, Nevada 89406
 May 1974
 (lode claims)

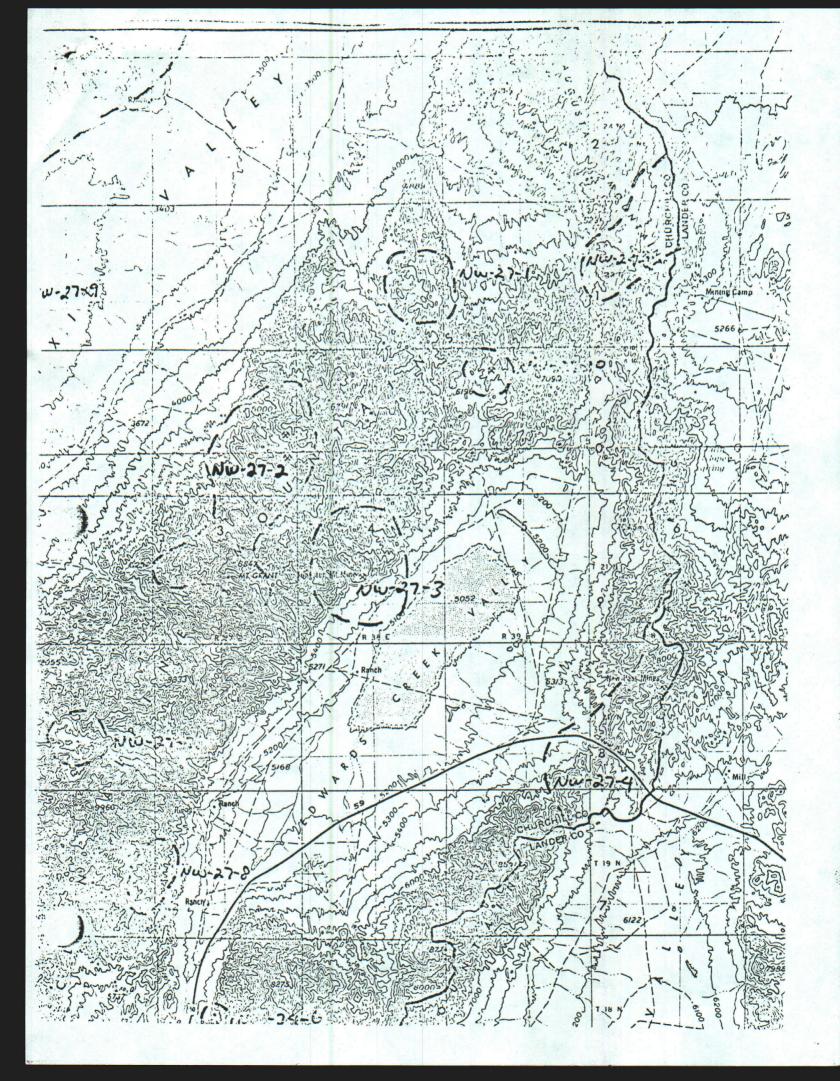
SELECTED REFERENCES

- 1. Lawrence, 1963, Antimony deposits of Nevada.
- 2. Vanderburg, 1940, Reconnaissance of mining districts in Churchill County, Nevada.
- 3. Willden and Speed, 1974, Geology and mineral deposits of Churchill County, Nevada.

FIELD EXAMINATION

Hoke, December 1974

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Taken from:

Mineral Resources Inventory and Analysis

of the

Clan Alpine Planning Unit

Carson City District

by

R. E. Bennett and C. L. Hoke

1975

for complete introduction
see Churchill (o-general)
files
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