1230 0004

(4)

NW-18-2
Fe, Cu

Item 4

Mining District: MINERAL BASIN
COPPER KETTLE
(Iron, Copper)

T. 24-25 N., R. 34 E.
Churchill County, Nevada
Reno AMS Map Sheet 1971

GENERAL BACKGROUND

The Buena Vista mine is the only mine of the Mineral Basin District in Churchill County with significant past production. This mine was discovered in 1898 and patent was granted in 1901. Between 1951-1953, 283,000 long tons, exceeding 57 percent iron, were shipped to Japan. Other smaller shipments were made to consumers in California in 1953. Some ore was also shipped from other properties in the area during WW II. Mining was done by open pit methods.

The Copper Kettle district was discovered in 1908. A small amount of copper ore was shipped in 1917 and 11 tons were shipped in 1929. A small deposit of iron occurs in the district but has not been exploited.

GEOLOGIC AND TECHNICAL DATA

At the Buena Vista mine the principal ore is magnetite that locally has been replaced by hematite. The ore occurs as replacement deposits in breccia zones in scapolitized intrusive and metavolcanic rock. Iron ore reserves in the area are large; however, the lower grade material would have to be upgraded. Significant amounts of vanadium (0.31 percent V_2O_5) occur in the Buena Vista ores (2).

Copper mineralization in the Copper Kettle district occurs at the contact between diorite and limestone. Ore minerals include chalcocite, cuprite, copper carbonates, and some silver. Magnetite mineralization is found in breccias and shears in the intrusive and altered volcanic rocks.

POTENTIAL FOR DEVELOPMENT

The Mineral Basin district will be an important source of iron ore in the future. Large-scale development will depend upon premium overseas prices (from Japan most likely) or a favorable long-term domestic contract. Steel mill construction on the west coast would probably mean immediate development. Production would consist of direct shipping ore and concentrates. Mining would be by open pit methods.

Bennett, 1975

The sediment covered area of the northern Carson Sink lies between known iron deposits. Geophysical prospecting could disclose the presence of iron deposits beneath the fluvial sediments.

None of the known mineralization in the Copper Kettle district would appear to be economic at this time. Further exploration could, however, disclose more significant mineralization.

COMPANIES AND CLAIMANTS ACTIVE IN AREA

Unknown.

SELECTED REFERENCES

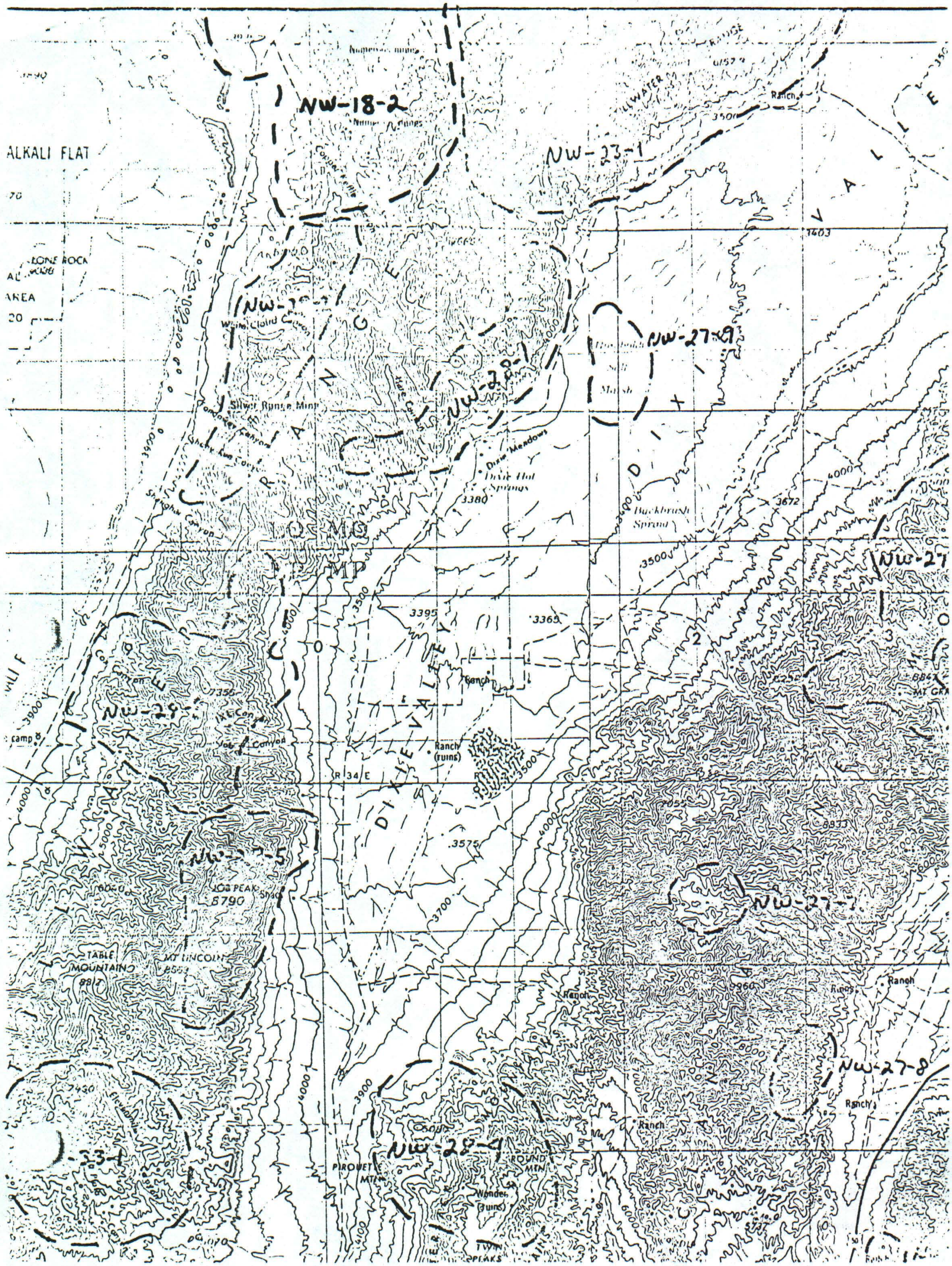
1. Willden and Speed, 1974, Geology and mineral deposits of Churchill County, Nevada.

2. Reeves and Kral, 1955, Geology and iron ore deposits of the Buena Vista Hills, Churchill and Pershing Counties, Nevada.

FIELD EXAMINATION

Bennett 1975

Bennett, 1975


NW-18-2
NW-23-1
ALKALI FLAT
NW-27-9
NW-28-1
NW-29
NW-27-5
NW-27-7
NW-27-8
NW-28-4
NW-27
Dixie Meadows
Dixie Hot Springs
Buckbrush Spring
3380
3672
3395
3365
3575
4000
3500
Ranch
Ranch (ruins)
R 34 E
7355
Shack
8790
TABLE MOUNTAIN
8817
MT LINCOLN
7430
9960
Ranch
ROUND MTN
Wonder (ruins)
TWIN PEAKS

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 Co.-general files Item 17