4730 0024

NW-23-1 Cu, Ni, Au, Co, Fe, Ag, Hg, Ti, oil shale

Mining District: T.

TABLE MOUNTAIN
CORRAL CANYON

(Copper, Nickel, Gold, Cobalt,

Iron, Silver, Mercury, Titanium, Oil Shale)

T. 24-25 N., R. 35-36-37 E. Churchill County, Nevada AMS Reno Map Sheet 1971

## GENERAL BACKGROUND

Each area will be treated separately in the following discussion. Refer to the attached location map for area boundary and identification of specific properties covered herein.

## I. Table Mountain District

This district is located in the vicinity of Cottonwood Canyon in the northeast portion of the Stillwater Range where it crosses the Churchill-Pershing County line.

Copper deposits were first discovered in the area in the early 1860's. Subsequently a small amount of ore was shipped from the district.

Nickel-Cobalt deposits were discovered in Cottonwood Canyon in 1882 and worked for eight years. Around 250 tons of ore was shipped for a value of \$19,000.

Some mercury has been produced from a mine on the east slope of the Stillwaters, north of Cottonwood Canyon.

Small iron deposits occur in the area. There has been no production from any of these prospects.

# GEOLOGICAL AND TECHNICAL DATA

The oldest rocks in the area are Triassic siltstones. Thrust over the Triassic rocks is a sequence of Jurassic units consisting of quartzite, greenstone and gabbro. Unconformably overlying the Mesozoic rocks are rhyolitic tuffs, lacustrine sediments and basalt.

At the Nickel and Lovelock mines, nickel and cobalt mineralization occurs along a sheared contact zone between gabbro and greenstone or quartzite. The ores occur as small, discontinuous stringers up to several inches wide in the quartzite or greenstone. None of the workings are much more than 100 feet deep.

Magnetite/hematite deposits occur within the greenstones. These deposits occur as small bodies which are less than a few feet thick and are laterally discontinuous.

#### POTENTIAL FOR DEVELOPMENT

Intermittent activity has occurred at the Boyer Copper deposit for some fifty years since its discovery in the 1860's. The last significant work occurred in 1910 when some diamond drilling was done. Activity in recent years has been confined to assessment work. It is unlikely that any viable mining operation will develop in the near future.

The potential for Nickel-Cobalt production from existing properties is doubtful. However, exploration probably has not been sufficiently intensive to eliminate the possibility of more promising discoveries.

## II. Corral Canyon District

The Corral Canyon district is located on the eastern flank of the Stillwater Range in the vicinity of the mouth of Corral Canyon.

A limited amount of gold was produced from the area in the late 1920's and early 1930's. No production figures are available.

Titanium occurrences were discovered following the period of gold mining. No production has occurred.

#### GEOLOGICAL AND TECHNICAL DATA

The geology of the area is similar to that in the Table Mountain District. Rocks in the area include gabbro, greenstone, albitite and silicified limestone.

Gold-bearing quartz occurs within and along the contacts of albitite dikes and masses. The quartz occurs as elongate lenticular bodies several feet long. Pyrite and minor sphalerite are assoicated with the freegold mineralization. Assays reportedly ran about an ounce of gold per ton (3).

Anatase, ilmenite, leucoxene and rutile are locally abundant in the albitite bodies. The titanium content of these bodies varies, from less than 1 percent to almost 40 percent. The titanium content of all the albitic bodies in the Corral Canyon area averages about 0.75 percent (3).

# POTENTIAL FOR DEVELOPMENT

The discontinuity of the quartz bodies suggests that any future gold production will be on a small scale. Future exploration could disclose undiscovered ore bodies.

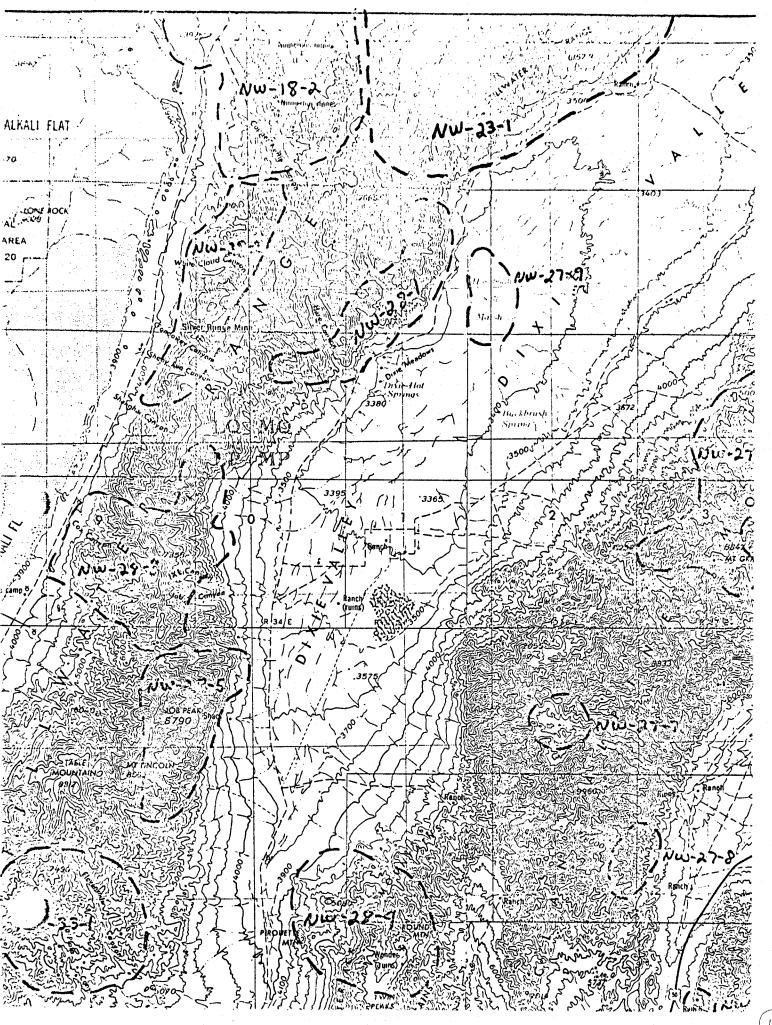
The generally low metal content of the Corral Canyon titanium deposits and economic aspects of titanium mining (2) provide little encouragement for production of titanium in significant amounts.

# SELECTED REFERENCES

- 1. Fergunson, H. G., 1939, Nickel Deposits in Cottonwood Canyon, Churchill County, Nevada
- 2. Beal, L. H., 1963, Investigation of Titanium Occurrences in Nevada
- 3. Willden, R. and Speed, R. C., 1974, Geology and mineral deposits of Churchill County, Nevada

#### FIELD EXAMINATION

Bennett, 1975



Taken from:

Mineral Resources Inventory and Analysis

of the

Clan Alpine Planning Unit

Carson City District

bу

R. E. Bennett and C. L. Hoke

1975

for complete introduction see Churchill (o-general) files