

1930 0012

(36)  
NW-40-3

W, Au, Cu, Sb,  
Ag, Silica

Item 12

Mining District: GARDNERVILLE DISTRICT  
(Tungsten, Gold, Copper, Antimony, Silver, Silica)

T. 11-12 N., R. 21 E.  
Douglas County, Nevada  
USGS Mt. Siegel 15-min. quadrangle (1957)

#### GENERAL BACKGROUND

The Gardnerville area is located in Douglas County on the west slope of the Pine Nut Mountains, about 12 miles southwest of Gardnerville. The district was first organized in the 1860's. Initial mining activities centered around gold, silver, and copper ores. In the 1930-40's tungsten was discovered and most of the recorded production of \$54,000 has come from the extraction of this commodity.

The most important tungsten mines in terms of production are: (1) Last Laugh and Divide mines, section 23, T. 12 N., R. 21 E., (2) Tungsten Hills (Cherokee) mine, section 25, T. 12 N., R. 21 E., and (3) Gardnerville mine, section 25, T. 12 N., R. 21 E.

The Ruby Hill mine in section 1, T. 11 N., R. 21 E. was originally discovered in 1908. A small amount of copper has been produced from this property.

The Veta Grande mine is located in sections 9 and 10, T. 11 N., R. 21 E., on a massive quartz vein that contains some silver and minor gold values. The present owners are attempting to develop the mine as a source of silica.

The Danite mine is located in section 10, T. 11 N., R. 21 E., southwest of the Veta Grande mine. Although past production from this property consists of several tons of antimony, some silver ore was shipped as recently as 1964 (2).

Several other small gold and silver mines are present in the Gardnerville area. Of these mines, none has had any appreciable production and the work done at these properties was largely exploratory in nature.

#### GEOLOGICAL AND TECHNICAL DATA

All of the tungsten deposits occur in tactite that has partly replaced Triassic-Jurassic metasedimentary rocks. The ore mineral is scheelite which occurs as disseminations and as small lenses in the tactite.

At the Ruby Hills mine copper mineralization is confined to two north-trending fracture zones that cut metavolcanic rock. The country rock is highly altered and brecciated in the vicinity of the fracture zones. Both primary and secondary copper minerals are present on the dumps of this mine.

Bennett, June 1973

Silver, occurring as stephanite and argentite, and minor gold is present at the Veta Grande mine. The property is located on a very large, massive quartz vein that cuts Tertiary rocks of andesitic composition.

At the Danite mine a quartz latite dike has intruded Tertiary andesite. The dike strikes N 65° E, dips 65° N and is locally brecciated. Quartz veins typically fill the fractures in the dike. Stibnite occurs as small pods, streaks, and as single crystals in the quartz veinlets. A geologic map of the Danite mine is included as an attachment (1).

#### POTENTIAL FOR DEVELOPMENT

Tungsten prices have been stabilized by government sales policies to prevent price fluctuations. However, the future outlook for tungsten is good, and although the mineralized areas in the Gardnerville area appear to be of limited extent, they could be of interest to a small operator in the future should the price of tungsten increase.

The mineralized zone at the Ruby Hills mine appears to be of favorable width and exploration could delineate adequate ore reserves to be of interest to a moderate sized mining company. However, competition from established copper mines in the state and the presence of proven, but as yet unexploited, reserves from other properties suggests that there will be little interest in the Ruby Hills mines in the near future.

The Veta Grande mine is in the process of being developed as a source of silica. To this effect, a crushing plant and classifiers are being installed on the property. Unit values for silica are relatively low and transportation costs typically constitute a major portion of the final costs. The future success of the silica operation at the Veta Grande mine will depend upon several factors. The most important of these factors are: (1) the ability of the material to meet the rigid specification of the glass and/or foundry industry, and (2) the problems associated with a new company entering a marketplace in which several other producers are already firmly established.

The antimony occurrence at the Danite mine is in quartz veins that necessitate high-cost underground mining and hand sorting. Little if any antimony production will occur unless there is a period of very high prices or a national emergency. Should the property be further developed for silver ore it is possible that antimony could be a profitable byproduct. However, under current price structures it is unlikely that any further development will take place at this property in the near future.

Past mining activities in the area consist of numerous shafts, adits, and prospect pits. Future production, if any, would probably come from a combination of underground workings and small open pits. Silica will probably be mined from the Veta Grande mine by small open pits.

Bennett, June 1973

COMPANIES AND CLAIMANTS ACTIVE IN AREA

- |                    |                              |                      |
|--------------------|------------------------------|----------------------|
| 1. BILL Group      | 2. BUD Group                 | 3. SKY Group         |
| Bill Thompson      | Climax Moly. Co. of Michigan | Skyline Oil Co.      |
| Box 26             | Mines Park                   | 418 Atlas Bldg.      |
| Gardnerville, Nev. | Golden, Colorado             | Salt Lake City, Utah |
| Jun-Jul 1969       | 1964, 1966                   | (37 lode claims)     |
| (10 lode claims)   | (40+ lode claims)            |                      |

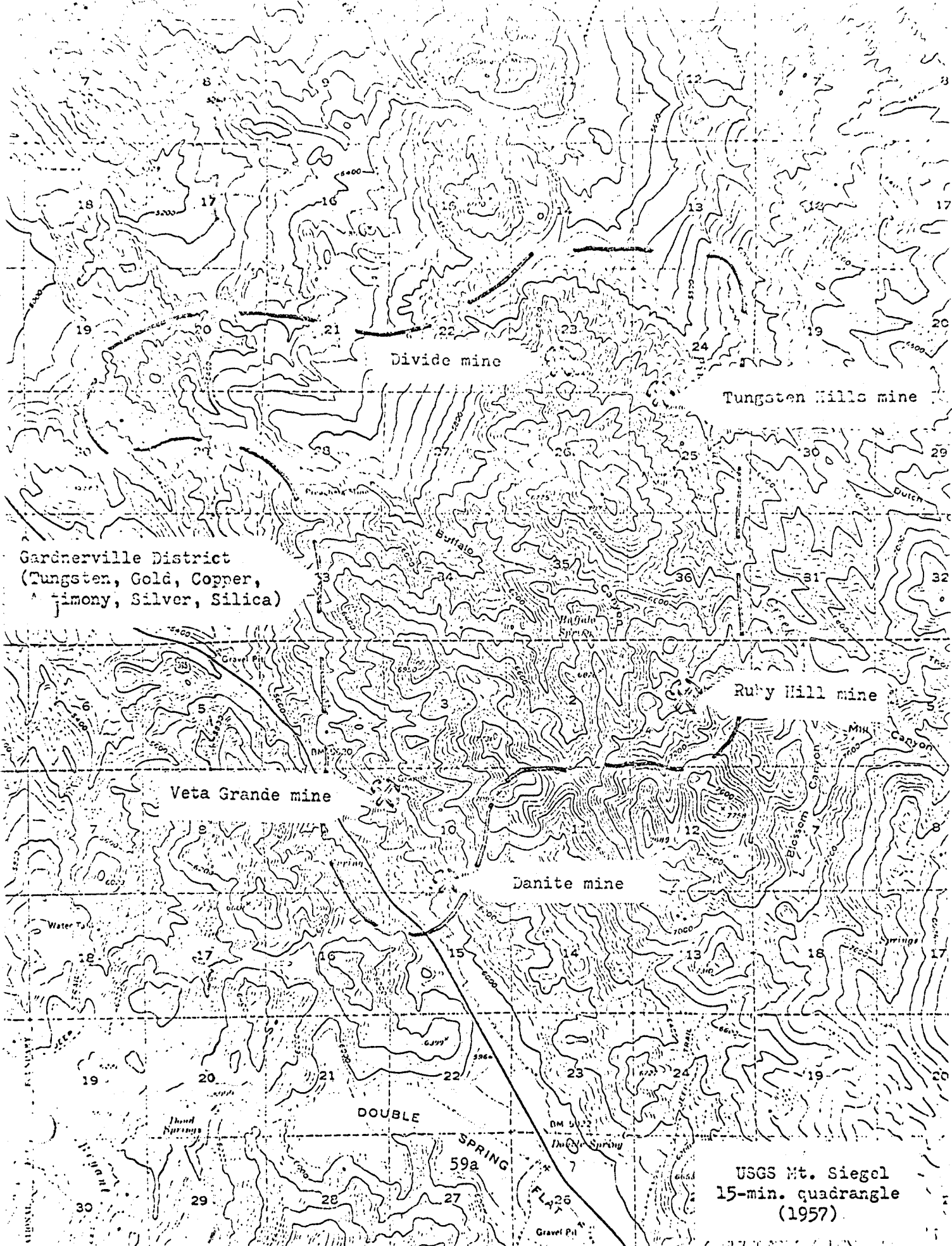
SELECTED REFERENCES

1. Lawrence: Antimony Deposits of Nevada; Nev. Bur. Mines Bull. 61, 1963.
2. Moore: Geology and Mineral Deposits of Lyon, Douglas, and Ormsby Counties, Nevada; Nev. Bur. Mines Bull. 75, 1969.  
(Includes geologic map of area)

FIELD EXAMINATION

Bennett, May 1973

Bennett, June 1973



Gardnerville District  
(Tungsten, Gold, Copper,  
Limony, Silver, Silica)

Divide mine

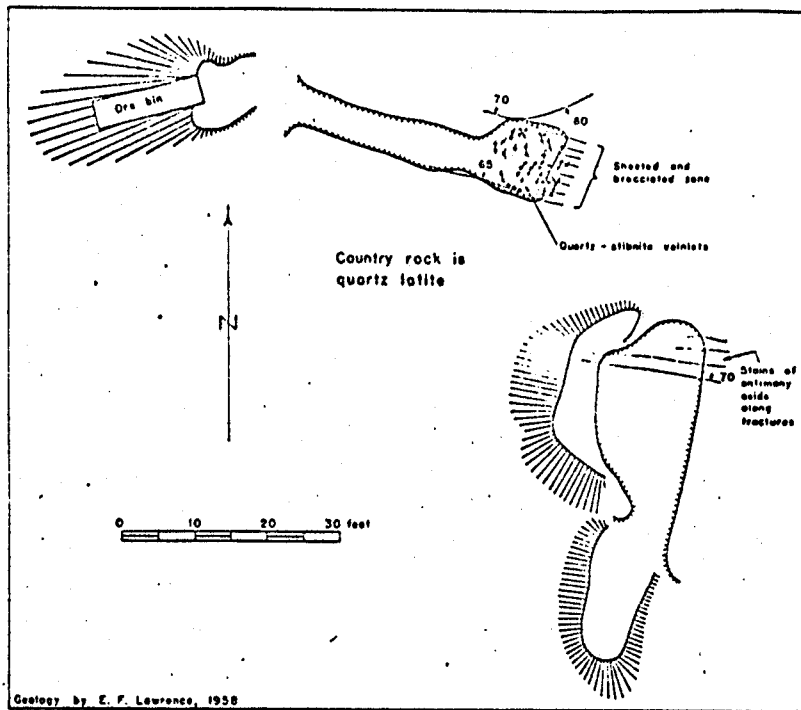
Tungsten Hills mine

Ruby Hill mine

Veta Grande mine

Danite mine

USGS Mt. Siegel  
15-min. quadrangle  
(1957)



Geology by E. F. Lawrence, 1958

Geologic map of the Danite mine, Douglas County, Nevada.

*Taken from:*

Mineral Resources Inventory and Analysis

of the

Pine Nut Planning Unit

Carson City District  
Nevada and California

By

R. E. Bennett

1973

~~see~~ *Douglas County - general*

*Item 15*

*for preface & general  
background information*

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