5420 0029

(21) Item 29

NW-28-4
Ag, Au, Cu, Pb,
CaF_2, U

Mining District: WONDER
(Silver, Gold, Copper, Lead, Fluorite, Uranium)

T. 18-19 N., R. 39-35 E.
Churchill County Nevada
AMS Reno Map Sheet 1971

GENERAL BACKGROUND

Indicated mineral area NW-28-9 encompasses an area on the western slope of a southern spur of the Clan Alpine Range about 55 road miles east of Fallon, Nevada. The mining district lies about 15 road miles north of U. S. Highway 50 from the Dixie Valley Road turnoff. Wonder lies at the 5500 foot elevation.

The first mining discoveries were made in the spring of 1906 on the Jackpot claim group by a miner from Fairview. The Nevada Wonder Mining Company was incorporated in September, 1906, and later acquired most of the productive claims within the district, totaling 401 acres, 328 of which were patented claims. A 200 ton cyanide mill was constructed at the Nevada Wonder Mine in 1913. The company ceased production in 1919, after 13 profit making years. The mine equipment was dismantled and much of it sold in 1924. Mining operations in recent years have been mostly by lessees.

The total ore production from the district between 1907 and 1955, amounted to $6,350,186. Production figures indicate 73,892 ounces of gold 6,867,744 ounces of silver, 7,000 pounds of copper and 9320 pounds of lead were produced. The greatest production occurred from 1911 through 1919.

The Nevada Wonder Mine was the only mine of great importance within the district. The mine has been developed by means of two vertical shafts and numerous subshafts and winzes extending to a depth of 2,000 feet. The underground workings are greater than 12 miles in length, according to F. C. Schrader in a 1947 U.S.G.S. open-file report. The workings explore the Nevada Wonder vein, visible at the surface. The ore was mined by the shrinkage method near the surface where the vein walls were firm. Mining was accomplished by the cut-and-fill method below the 400-foot level where the vein walls were not so firm.

Uranium and fluorite are reported in the area, but there has been no production.

Hoke, 1975

GEOLOGICAL AND TECHNICAL DATA

The Wonder district is underlain primarily by Tertiary quartz latite and rhyolite welded tuffs and flows. These rocks were intruded by Tertiary dacite stocks and plugs, then by rhyolite dikes and plugs, followed by andesite dikes and plugs, and basalt dikes. Most of the veins occur in the quartz latite and rhyolite extrusives.

The richest vein, the Nevada Wonder, lies partly along the contact of the extrusives and the largest dacite stock. Toward the north, the vein leaves the contact and lies within the rhyolite extrusive. The strike of the vein is N. 25°W., the dip is 75°NE, and cropsout for a distance of 1¼ miles on the surface. The oreshoot widths averaged 5 to 6 feet and ranged up to 30 feet. The ore material occurs in quartz, banded with feldspar. Oxidation extends to a depth of 1,300 feet. The gangue consists of feldspar and its weathering products, quartz, and small amounts of fluorite. Some of the ore material is white, although much of it is stained yellowish-brown with limonite. The silver occurs as halogen salts and argentite. Gold occurs free and in association with argentite.

The ore deposits in the district occur in shear zones and fissures within the rhyolite and quartz latite extrusives as tabular siliceous veins. The veins and the adjacent silicified rock usually form prominent outcrops since the silicified material is more resistant to weathering. The veins range from less than a foot wide to 30 or 40 feet, and are separated from the silicified wall rock by a sheet of gouge an inch to several feet in width. Some of the veins are quite deep: the Nevada Wonder is over 2,000 feet deep, the Jack Pot vein has been worked to a depth of 1,000 feet, and others have been worked to depths of several hundred feet. The primary gangue mineral is quartz, which is associated with orthoclase and crushed wall rock. Minor fluorite mineralization occurs locally. Feldspar and rock alteration products, such as soft clay materials, kaolin, sericite, limonite, and occasionally minor amounts of manganese, occur in the oxidized zone. The veins are often well-banded. The silver and gold occur primarily in the quartz-Feldspar gangue of the veins, and as replacements in the gouge and the silicified wall rock.

POTENTIAL FOR DEVELOPMENT

Potential for production of high-grade gold and silver ore from the district is unlikely, since the most productive vein, the Nevada

Wonder, has been worked rather extensively for the high-grade ore during the days of the Nevada Wonder Mining Company. However, there is potential for development of the lower grade deposits which remain in the location of the Nevada Wonder Mine, according to recent analyses (2). Some samples taken from the vein material and the adjacent silicified wall rock yield 200-300 ppm silver and 2.1 to 2.7 ppm gold (2).

Petro-Mineral Projects, Inc. (Reno, Nevada) has been doing exploratory work in the autumn of 1974, on the Frank Lewis property to get back into the old mine at greater depths to take samples.

The uranium and fluoride deposits are not economic.

COMPANIES AND CLAIMANTS ACTIVE IN AREA

1. FIRST AND LAST DEAL
   LODE CLAIM
   Leon Gilder et.al.
   2200 Indian Lakes Rd.
   Fallon, Nevada 89406
   (lode claim)

2. WONDER Group
   Frank Lewis
   120 Greenridge Dr.
   Reno, Nevada
   (1 placer claim, 10 lode claims)

3. RED BEE Group
   Original Klondyke Divide
   Mining Company
   (3 lode claims)

4. DICKY V
   Roy Garate et.al.
   2050 Lovelock Hwy.
   Fallon, Nevada
   (lode claim)

SELECTED REFERENCES

1. Vanderburg, 1940, Reconnaissance of mining districts in Churchill County, Nevada.

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

FIELD EXAMINATION

Hoke, November 1974

Hoke, 1975

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