

## STATE OF NEVADA

JOHN A. FULTON, DIRECTOR



BOX C, UNIVERSITY STATION

## MACKAY SCHOOL OF MINES

August 15, 1935

MINING LOG OF NORTHERN NEVADA TRIP,

OF

Jay A. Carpenter, Mining Engineer, and Wm. I. Smyth, Metallurgist,
Aug. 2-12 Incl., 1935

By

Jay A. Carpenter, E.M.

ore similar to the camp of National which can be plainly seen from this mountain top property.

agust 6. Spring City Mine.

This is an old silver mine about 9 miles from Paradise Valley (See Lincoln, p. 101). This old mine long held by W.J. Bell, was relocated in recent years by Gus Rogers, who is now reopening it, along with a "few partners from Oregon in a close organization." Mr. C.' A. McGee, who handles the office work, is one of these partners, as is also a Mr. Rowland, who does the trucking.

Mr. Rogers, an energetic practical miner, has built a 60-ton/milkx plant through which he is now running waste dumps and at the same time opening up the mine and searching for ore. He plans to complete the milling of the dumps by October and then close the mill until spring when he expects to treat old fills, pillars, and any newly discovered ore.

In our driving the two miles of rough road up the caryon to the mines, we crossed the tailings stream 20 times! Away out on the flat we could see the bold outcrop of a large quartz vein that led us to the mine as it did the prospectors in the '70's.

The old timers mined two strong quartz fissure veins in slate, having a N. 10° strike and a steep dip to the west, that are a few hundred feet apart. The east vein is now called the "Paradise" Vein, and the west is the Wild Goose Vein. As in the case of most veins in shale, the walls are quite irregular with much swelling and pinching, and with quartz extending back onto the walls on cross fractures and bedding.

The quartz is a blocky white quartz, and carrying pyrite as well as iron oxides close to the surface. (See museum sample). The ore carries silver in the ratio of 100 to 1 of gold, with practically no base metals.

Both veins were opened by tunnels, with deep winzes below the lowest tunnels. Large ore shoots were mined mostly as open stopes, that today are still open though many stulls have rotted away in the fifty years gone by. Mr. Rogers is drilling in the walls and on cross fractures in search of ore with some success. He is pumping water for his mill from the deepest winze to open the lowest levels. I was very favorably impressed with his operations and his possibilities of finding new ore. A striking point is that the ore bearing veins practically pinch out at the surface or are covered, while the barrent veins outcrop boldly!

For drilling, an old Buick engine in low gear directly drives a Schram vertical compressor, with an air regulator on the gas engine feed.

The dump ores on a steep hillside, are scraped down to a loading bin by a scraper hoist powered thru a d. c. motor thru an old auto gear transmission.

It is trammed 800 feet to a chute, and trammed 400 feet again to the mill.

Two men at \$5.00 and one at \$4.00 deliver 60 tons a day to the mill, at a labor cost of under  $25\phi$  a ton.

The main power plant at the mill is a 75 kW. 200 d. c. electric generator driven both (a) directly by an 80 HP. 300 r.p.m. style vertical F. M. 4 cylinder deisel, and (b) by V belt from the new style F. M. 40 HP. 1200 r.pm. deisel. The space in the mill occupied by the old 80 HP vertical is about 540 cu. ft. while for the new 40 HP it is but 72 cu. ft. The marine mechanic prasted the new model very highly for its superior operation.

The mill is a great assortment of second hand units kept running steadily by energetic men, even to having a gyrat Top gear sent by airplane from Milwaukee!

## August 7. Auld Lange Syne Mine.

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This mine about 22 miles southeast of Winnemucca on the highway, and then 8 miles easterly, is owned by Mr. Rheinhart of Winnemucca. For detailed geology read Bull. 414, U. S. G. S. The main quartz gold vein was mined in 1888, by narrow stopes to the surface from a drift tunnel. Mr. R. asserts that in 1920 a cyanide leaching plant recovered \$60,000 from the amalgamation tailings, thus indicating an excellent early production. In late years the Nevada Mexico Mng. Co., under H. M. Gilbert, took a lease and bond, put in good surface equipment including a Huntington mill and drove the adit tunnel 800 ft. farther in the mountain without financial success. However, Mr. Gilbert is now attempting to raise money to obtain another working lease and bond, as he is now sure his work failed to follow the main vein.

We were unable to explore the main tunnel as it is now used as a water reservoir. The open stopes only show on the surface for a short distance and and are very narrow. No reports were furnished us. We naturally were unable to draw any conclusions or make any recommendations.