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A REVIEW OF MINING IN NEVADA THROUGH 1947

by

A. E. BERNARD
State Inspector of Mines

Hampered by the continued high cost of mining, the scarcity of experienced men and the veto of the subsidy bill, mining in Nevada has, to use "Burro Bill's" expression, taken a bad beating in 1947. Nevada has always been a great mining state. Since the discovery of the immense and fabulously wealthy Comstock Lode at Gold Canyon in the late 1850's, the Virginia City, Silver City and Gold Hill mines have produced fortune after fortune. They have been given credit for the expansion of the Bay District, and it has even been claimed that the gold and silver from Storey County saved the Union during the Civil War.

After the Comstock came strike after strike, boom after boom, until Nevada was producing precious ores from every section of the state. Located in the central part were the rich silver district of Austin, the rich Treasure Hill at Hamilton, the great and romantic Tonopah and Goldfield, and from this central area also came the lead production of Eureka, which at one time was credited with controlling the price of lead on the world market. The Pioche district, Delamar, Searchlight, Goodsprings, Rhyolite, Bullfrog and Beatty, to name a few, produced in the south. The camps of Jarbidge, Gold Creek, Tuscarora, Midas, Jumbo, Winnemucca, Lovelock, Aurora, Candelaria and Hawthorne and surrounding areas were active in the north and west. These camps produced multi-millions until cessation of hostilities after World War I, and mining activities practically came to a standstill during the depression of the early thirties.

Though strategic metals had been mined to some extent during most of these years, in a majority of instances they had been merely a by-product of the precious metals. Exceptions were the large copper mines of the Ely district, the tungsten properties of the Rare Metals Corporation at Mill City, and the various other smaller copper, lead, tungsten, mercury and other strategic metals producers throughout the state, whose production was bolstered for a few years during the first World War.

During the middle 1930's mining activities began to revive. The raise in the price of gold and silver was a much-needed shot in the arm to the industry. Old mines were reopened and new ones were prospected and developed, most important among these being the Rio Tinto Copper discovery at Mountain City and the Getchell Gold Mine in Humboldt County. The Rio Tinto deposit was discovered in the early 1930's by the veteran prospector and geologist, S. Frank Hunt, after a twelve-year prospecting program and later was acquired by the Anaconda Copper Mining Company, which operated the property as the Mountain City Copper Company from 1932 to 1947. A 500-ton-daily-capacity mill was installed and was worked at full capacity for the fifteen years of the mine's operation, with the exception of the later years of World War II, when the shortage of labor and materials slowed down production to about 350 tons daily.

The Getchell Mine, a large, low-grade gold deposit, was developed and began operations in 1937. The milling plant had a capacity of approximately 1000 tons daily and was operated on a 24-hour basis until Government Closing Order L-208 went into effect in 1942. At that time the company began to develop and mine tungsten ore from their Chase, Granite Creek, Kirby and Tonopah Mines. These operations

were carried on until after the war, when excessively high operating costs forced them to discontinue the mining of these low-grade and marginal ores. At this time the company is milling between 400 and 500 tons of tungsten ore daily from the Riley Mine, a neighboring operation conducted by the U. S. Vanadium Corporation. At the same time the company operates a 100-ton pilot plant on its gold-arsenic ore to simplify and make a more efficient flowsheet to be used when they increase their tonnage to 1500 daily. The present plans are to attain this goal by 1948.

Between World Wars I and II, very little was known about the large deposits of lead-zinc ores which were lying at greater depths than had previously been worked. These beddings were first encountered in the Pioche district, and most of the credit for the exploration of these ore bodies is due E. H. Snyder, whose patience and perseverance resulted in the development of what are now known as the C.M. beds. Through his efforts there came into existence the Caselton Mine, Forlorn Hope Mine, Pan American and others which will produce strategic metals. The complexity of concentrating these ores necessitated the shipping of the crudes to Bauer, Utah, and since the freight charges from mine to mill took a terrific toll of the profits, the Combined Metals Reduction Company constructed a 750-ton concentrating unit at the Caselton Mine, which was completed in 1941. This also made possible the mining of much lower grade ore, which, until then, was not commercial. Since that time the plant has been greatly enlarged and now serves the Ely Valley Mines and the Prince Mine as well.

The declaration of war by the United States on the Axis Powers in December of 1941 after this country had been attacked caught our government without sufficient supplies of strategic metals to carry on with the rapidly expanding war effort so necessary for a complete and speedy victory. Order L-208 was put into effect by the War Production Board. This order closed all gold mines, the motive being that men working therein could be better utilized in the production of strategic metals, and an appeal was made to the mine operators and the miners themselves to produce to the best of their ability. The response was most gratifying.

The copper mines of Ely kept up sufficient production of crude ore to operate the concentrating plant at McGill to its full capacity of 22,000 tons daily, this in spite of the fact that their manpower in the mines was at times only 50% of normal. The Mountain City Copper Company fought losing odds and did their best. The Copper Canyon Mine at Battle Mountain completed a 350-ton mill which operated at full capacity during the war years. The lead-zinc mines of Pioche, in spite of heartbreaking manpower and material shortages, increased their production. The Mt. Hope Mine of the Callahan Zinc-Lead Company shipped ore to the railroad in Elko County until their concentrator was completed. The Nevada-Massachusetts Company mines at Mill City, facing the same obstacles, also increased their tonnage of tungsten ore. They also constructed a new mill at Golconda to treat complex tungsten from their Golconda property. Latest available statistics show this company has produced a greater number of units of WO_3 than any other property in the United States. The Cordero Mining Company during these war years did extensive exploration and development and became the second largest producer of quicksilver in the United States. Other mines contributing greatly to the war effort were the Tungsten Metals Corporation, the Cherry Creek Tungsten Mining Company, the Grand Deposit Mining Company, the Ely Manganese Company, all in the Ely vicinity; the Rip Van Winkle, Cleveland, Marshall and Delno Mines in Elko County; the Riley Mine; the various mercury mines of Humboldt and Pershing Counties; the Bristol Silver, Lincoln and Salt Lake-Pioche Mines of Lincoln County, and many others, not to mention the large-scale operations of Basic Magnesium at Gabbs and Henderson and the talc mines southwest of Goldfield, whose quality of material is among the best in the world.

In 1945, after our victory in the greatest conflict of all time, mining in Nevada began to lag. The subsidies which had been given the marginal mines to stimulate and increase production were suddenly cut off, in many instances before the operators had recovered their original investment. Market prices on some metals dropped, in some cases drastically. Lack of development work, which could not be done during the war years of labor and material shortages, began to hurt. Most mines had depleted, while some of them had actually exhausted, their ore reserves. Operating costs not only remained at the peak but were actually going higher; scarce material not only remained scarce, but was getting scarcer. The mines were no longer being encouraged to produce more, they now were back on their own, the large majority had left only headaches, filled stopes and a future full of taxes.

Starting in 1946 through 1947 the dark side of Nevada's mining picture began to show; of all the gold mines that were closed by L-208, only a few have resumed operations, and that only on a small scale. Among those reopening are the Donovan operations, Consolidated Chollar Gould and Savage Mining Company and Central Comstock Mines Corporation in Storey County, Kinney-Keystone and a few other small operations in Clark County, Ohio Mines, Grand Central, Goldpoint Company and Goldpoint Syndicate in Esmeralda County. There are numerous companies with just a few men doing repair work and marking time. The following producers have either ceased or greatly curtailed operations: Mountain City Copper Company, Victoria Lease, Richards Mine, Marshall Mining Company, Grand Deposit, Tungsten Metals Corporation, Manganese Mining Company and others. Not all these mines have exhausted their ore bodies, but they just could not mine at a profit. Numerous other mines have ceased the mining of ores and are doing extensive development work.

The bright side of the picture is the Deep Mines Operation of the Newmont Company at Goldfield, where ores reportedly running as high as 60 ounces gold per ton have been discovered. At this time the development program is still in the early stages, but all indications point to a prosperous future for Goldfield. The completion of the Fad Shaft at Eureka is also one of the highlights. This four-compartment shaft was commenced by the Eureka Corporation Limited in 1941 to develop large bodies of sulphide ores previously explored by diamond drills. After a period of seven years, in which time practically every known obstacle was encountered and overcome, a depth of 2350 feet has been attained and from this level drifting and developing will begin. The most modern methods were employed in this undertaking; the greater part of the mucking was done with a clam shell, steel sets were used instead of the conventional timber and a great part of the first 1000 feet was concreted. The area which will be explored through these operations is all virgin ground and great hopes are held by all mining men in Nevada for the future of Eureka.

The largest operations in the State today are conducted by the Kennecott Copper Corporation and the Consolidated Coppermines Corporation of Ely; between these two companies, upwards of 20,000 tons of crude copper ore are being produced daily. The Robinson mining district covering these properties still has huge reserves of low-grade copper, silver and gold. The Pioche district is one of the known great mineral deposits; the area contains one of the largest low-grade lead-zinc-manganese reserves in the United States. Though the term inexhaustable would be an overstatement, the mines of Lincoln County will supply the nation for a good many years to come. The Nevada-Massachusetts Company at Tungsten, Nevada, has the largest known deposit of WO_3 in the State. This property now has more ore in sight than at any time for a number of years past and future production is assured, provided the demand warrants the price needed to operate profitably. The company is keeping its development well ahead of its mining program. The Cordero Quicksilver Mine at McDermitt is operating its 100-ton-daily plant with success and has a nice body of ore, but is plagued with high operating costs and a decline in the price of quicksilver.

Other mines which show future promise are the Reorganized Silver King Divide at New Pass and Nevada Equity at Austin; the gold dredge of the Natomas Company at Copper Canyon, and the Consolidated Goldacres Pit and Mill at Beowawe are producing steadily. Much interest is being shown in the old gold camp of Jarbidge, which enjoyed its boom years in the early 1900's and produced until L-208 affected all gold operations in 1942. Also of interest is the fact that mine operators of Nye County have taken over the Tybo Mines and plan development there. These operations had a large production record in past years. The large, low-grade copper deposit in Yerington, explored by diamond drill during the war years, also has possibilities.

Less spectacular but none the less important in our mining picture of 1947 are the nonmetallic mines. These consist of the Pacific Portland Cement Company property at Gerlach, Washoe County, with an output of 600 tons daily; the Celatom Mine and Plant of The Eagle Picher Company, a new operation at Clark Station, Storey County, which will swing into full production in the near future; the Baxter Fluorspar in Mineral County; Sierra Magnesite and Basic Refractories, Inc. in Nye County; the Apex and Sloan plants of the U.S. Lime Products Corporation with 1100 tons daily; the Blue Diamond Corporation with 900 tons daily; the Nevada Silica Sands, Inc., 400 tons; and The Nunn Company, 800 tons. These latter, along with other smaller companies, are in Clark County.

At the end of the fiscal year 1942 there were 7,885 men employed in the Nevada mines as compared with 4,067 in 1947.

Due to limited space, it has been necessary to omit mentioning many of our smaller operations, which also play an important part in the economy of Nevada.

In closing I would like to say that the mine safety record for 1947 is very gratifying. At the time this is written we have had three mine fatalities for the year. One man was crushed between the mucking machine he was operating and the hanging wall of the drift, and two men were killed in falls down shafts. No men were lost by falling ground, cave-ins, blasting accidents, or others of the more hazardous types. Most of the credit for this fine record is due to the mine operators and to the miners themselves, whose cooperation with the office of Inspector of Mines has been splendid.

The mining industry now needs a stimulant, and in the writer's opinion, one of the greatest it could receive would be the modification of regulations governing sale of mining securities by the S.E.C. No one familiar with the early-day development and promotion of new mining ventures doubts that there were a number of duds and wildcats and that some people lost money through dishonest promoters. However, the contention of many of the advocates of the S.E.C., that it was the widows and orphans who were the victims of these coups, would seem erroneous, as it is not probable that the widows and orphans would have that amount of money. The majority of those losing in mining stock were people who had the money to buy a few or a large amount of stocks on the chance of hitting pay dirt and making a fortune. Admitting that most new mining ventures are a gamble, what in this world is not? Certainly horse racing and numerous other types of legalized lotteries are not cinches, and if the mining industry had but a small part of the money that is lost through these channels, it would benefit immeasurably. At the same time, it would be a boon to industries other than mining and would pay more than its share of honest dividends. The history of our greatest mines will prove that it was the large number of stockholders that made them possible and until such a time as the general public can again have a hand in the discovery and exploration of hidden ore bodies, very few of them will be found.