

LEADVILLE DISTRICT

LOCATION

The Leadville district is located along what used to be State Highway 34, approximately 38 miles north of Gerlach. The town site is located approximately one mile to the west of the road. For purposes of this report the Hog Ranch Gold Area will be included here. This area lies about 3-4 miles to the north-northwest of Leadville and if it were back in the days when mining districts were a recognized entity it more than likely would have been part of the Leadville district.

HISTORY

Bonham has as good a write-up on the history of Leadville as anyone, although historical write-ups can also be found in Lincoln and Overton: "The Leadville district is the largest producer of lead and silver in Washoe County There is very little published information concerning the early history of the district. Presumably the district was discovered in the early 1900's. According to the 1909 edition of Mineral Resources of the United States, development work was proceeding in the district during that year. The year 1910 saw the first production from the Leadville district."

"The only important producer in the district to date [still applicable in 1985] has been the Leadville mine. John Harmon acquired the Leadville mine, apparently before 1909, and organized the Tohoqua Mining Co., which developed the mine, built a 60-ton-per-day mill utilizing gravity concentration and operated the Leadville mine from 1910 to 1918"

"The Tohoqua Mining Co. experienced financial difficulties and went into receivership in 1918. The Leadville mine was then acquired by A.A. Codd, who organized the Leadville Mining Co. in 1920. From 1920 until 1925, the Leadville mine produced in excess of 1,000,000 ounces of silver, 3,500,000 pounds of lead, and minor amounts of gold and copper with a gross value in excess of \$1,150,000. The mill erected by the Leadville Mining Co. was destroyed by fire in 1925 and was not rebuilt. After the fire the company ceased operation of the mine for their own account and turned the mine over to leasers, who mined high-grade, direct shipping ore from 1926 through 1928 when the Leadville mine was ordered closed by the State Inspector of Mines after a fire within the mine. The main Leadville mine has not been worked since 1928."

"There was essentially no production from the Leadville district between 1928 and 1938. A few tons of ore were produced from the Swingle vein in 1939 and 1940. The district has been idle since 1941"

The visit made to the Leadville district during this contract showed that no work has been done in the district for many, many years. Most of the workings are caved and there are no buildings around. There was a new claim block which covered the area. They were staked in June 1984 by Transwestern Mining Co. of Reno, Nevada. They are called the Prong claims.

Northwest of Leadville, approximately 3-4 miles, and north of the summit of Hog Ranch Mountain is found a new gold discovery which goes by the name Hog Ranch Gold Prospect. There has never been any production from this area, nor even any old prospect pits or sites. It is thought that the discovery was made by Noranda Exploration. They had control of the property for 2-3 years, about 3-4 years ago, and did extensive exploration - dozer cuts/roads, sampling, mapping and drilling. Noranda drilled out a very low-grade deposit but then dropped the property. It is currently under the control of Ferret Exploration, who headquarters in the Denver, Colorado area. They are in the process of putting the property into production.

GEOLOGIC SETTING

According to Bonham, The area around Leadville proper is composed of the South Willow Formation. This formation is Oligocene in age (Early Tertiary) and is made up of basalt, andesite, and dacite flows, conglomerate, mud flow breccia, and associated intrussive phases. This unit, in the Leadville area, is bounded on the north and west by faults. The Hog Ranch Gold Prospect lies northwest of the juncture of the two above faults and is found in the Canyon Rhyolite Sequence. This unit is Miocene in age and unconformably overlies the South Willow Formation. It is composed of flows, protrusive domes and subordinate welded ash flows of soda rhyolite. It is locally interfingered with the High Rock Sequence, but usually the High Rock sequence lies with marked unconformity upon the Canyon Rhyolite.

ORE DEPOSITS

According to Bonham: "The host rocks for the ore deposits of the Leadville district are andesite flows and associated dacite porphyry intrusives of the Oligocene age South Willow Formation" Several dacite porphyry dikes, up to 50 feet thick, cut the andesite flows of the South Willow Formation in the Leadville district. The dikes are cogenetic with the andesite flows."

"To date, the known economic mineralization in the Leadville district occurs in two veins, the Leadville vein, from which practically all the production has come, and the Swingle or south vein. The Leadville vein strikes about east-west and dips steeply north. The Swingle vein is a parallel structure south of the Leadville vein."

Bonham's description of the workings is taken from two reports which are on file at the Nevada Bureau of Mines. One of the reports was written by H.W. Stotesbury in 1917; the other was written by J.A. Burgess in 1926.

Quoting Bonham: "The main workings on the Leadville vein consist of a 2,000-foot haulage tunnel and a two compartment 800-foot winze at a 75° inclination. The head of the winze is 250 feet vertically below the vein outcrop. In 1926 the 700 level was being mined and the 800 level was being opened up"

During Bonham's visit in 1968, "The main haulage tunnel is caved at the portal, and the Harmon shaft is also partially caved, consequently the mine workings are inaccessible." From all appearances no work has been done since Bonham's visit and consequently the workings are in worse shape.

"The workings on the Swingle vein consist of a 400-foot cross-cut tunnel, and drifts east and west along the vein."

"The Leadville vein occurs in a fault zone which cuts andesite flows and dacite porphyry dikes of the South Willow Formation. The ore mineralization consists of irregular lenses, stringers, and disseminations of galena, sphalerite, pyrite, and minor chalcopryite, with quartz and calcite, replacing gougey, brecciated andesite and dacite porphyry. Disseminated pyrite and minor amounts of lead and zinc occur in the wallrock adjacent to the vein"

"The width of the main orebody averaged 3 to 4 feet and occasionally reached 6 feet. The main ore shoot extended 900 feet along strike and pitched steeply west. In places, the vein consists of up to 8 inches of solid sulphide ore. The ore shoot extends below the deepest workings, the 800 level."

"The ore shoot reportedly was terminated to the west by a fault or dike." Burges thought that the ore shoot was cut off by a dike and that one of the lower levels should be driven west, a sufficient distance to check out the possibility of continuation of ore to the west. Burgess' recommendations were never carried out.

Even today the area remains unexplored even though two different claim blocks have covered the area. Pictures #5 and 6 were taken here and sample #2405 collected.

The Hog Ranch Gold Prospect is in heavily iron-stained, in places, rhyolite rocks of the Canyon Rhyolite Sequence. In places these rocks are veined with opalitic material. For 1985 additional drilling and metallurgical work is planned with the final decision to be an operating, open-pit mine. Announced reserves are 2.5 million tons averaging 0.085 ounces of gold per ton.

SELECTED REFERENCES

Bonham, H.F., and Papke, K.G. (1969) Geology and mineral deposits of Washoe and Storey Counties, Nevada: Nev. Bur. Mines Bull. 70, 140 p.

Lincoln, F.C. (1923) Mining districts and mineral resources of Nevada: Reprint Ed. 1970, Douglas McDonald, Verdi, Nev., pp. 236, 237.

Overton, T.D. (1947) Mineral resources of Douglas, Ormsby, and Washoe Counties, Nevada: Nev. Bur. Min. Bull. 46, pp. 67-69.

The Northern Miner Newspaper, July 26, 1984.