

Bullion Lead-Silver-Zinc Mine, Ivanpah Mountains

15N 14E Sec. 15 SBM 35.39112000050 -115.47306000000 (western workings)
15N 14E Sec. 11 SBM 35.39141000030 -115.46164000000 (eastern workings)

History

The history of Bullion mine, namesake of the Bullion Mining District, has been a puzzle to researchers. Wright and others (1953, p. 73) in their compendium of San Bernardino County mines state, "Shipped high grade silver-lead carbonate ore to Wales in 1860's and 1870's via Colorado River." Patchick (1961, 1959) cites the same source: California Mining Bureau geologist, Ireland (1888, p. 499). However, Ireland makes no mention of shipments to Swansea; he reports in part: "Bullion. This mine is situated eight miles south of Seedlow Station on the Atlantic and Pacific Railroad. The vein on the surface showed gray copper, with 62 percent copper, a little silver, and traces of gold..." It is evident that Seedlow is a typographical error for Ludlow - and today the mine located eight miles south of Ludlow is the Bagdad Chase. Located on the northeast flank of the Bullion Mountains, the Bagdad Chase is the largest source of copper in the county, but is also a significant gold producer. The Bullion mine located south of Mountain Pass, while containing copper, was primarily known as a silver mine in the 1870s. It was not until 1953 that the Bullion mine in the Mescal Range is mentioned to have been worked in the 1860s, at least that this author has found. (From Vredenburg, 1996d).

As Paul Harvey would say, "Now for the rest of the story..." The Bullion mine is insignificant, but it does seem to have been the first mine worked in the district. It is located less than one-half mile east of the New Trail Mine on the east side of the Ivanpah Mountains. In March, 1879, James H. Boyd, owner of the mine, located a ledge here, that when assayed at Bidwell's mill at Ivanpah, ran \$350 per ton in silver. Also in March 1879, Boyd, in an open letter to William Griffin, esq., president of the Workingmen's Club in San Bernardino, advertised for a boy between 15 and 18 years old, to work at the Bullion Mine, driving a burro or jackass, packing water for his mine camp. He offered to pay \$30 per month and board, and explained that he now employs an Indian at 75 cents per day. The hyperbole regarding this mine is remarkable. On May 10, 1879 the San Bernardino Weekly Times offered: "The Bullion mine, the Bonanza of the camp, is one of the most promising mines in Southern California. At a depth of 85 feet, two feet of splendid grade milling ore, going up in the hundreds per ton, has been struck. Jesse Taylor's team makes a trip every three days hauling five tons per load." And on October 18, 1879, "Our sister district, Copowee, where the Bullion mine is located, is an undeveloped district with the exception of the famous Bullion mine, which is one of the foremost mines in the southern country. It is down several hundred feet, with very high grade ore." (From Vredenburg, 1996d).

In contrast, in 1890, James Crossman, who accompanied the Piute Company to Ivanpah in 1869, simply states, "Bullion District. Lies seven miles southeast of Nantan. It contains a number of promising veins carrying ores of both silver and gold. But little work has as yet been done here." (From Vredenburg, 1996d).

About 1905 Jim Connolle and a Salt Lake City company mined several carloads of ore. After lying idle for 4 years, in May 1909, George Bergman, an Eldorado Canyon mine owner, leased the mine and posted a \$50,000 bond. At that time the mine was owned by the Jim and Pat Monaghan of Victorville and Heber Robinson. At the mine were "fair mine buildings and a whim." It was developed by a half dozen shafts, the deepest being 250 feet with levels every 50 feet that were driven 100 feet through the rock. The Monaghan's continued their interest at least until 1913. There were about 250 tons of lead-copper-silver

ore produced from the mine in 1916-1917 but it apparently has not produced any since. (From Vredenburg, 1996d).

Geology

The Bullion Mine has workings to the west and east of the Clark Mountain Fault. The eastern mine is hosted by PreCambrian gneiss, and the western mine is hosted by Goodsprings dolomite (Hewett, 1957, Plate 1).

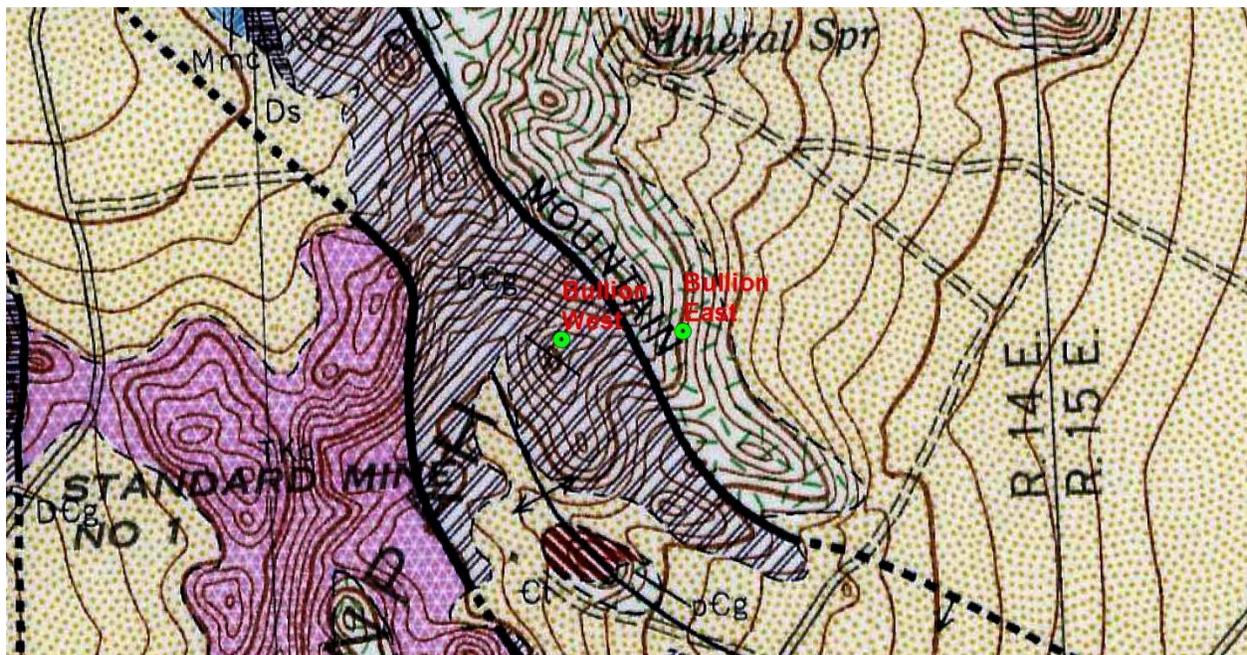


Figure 1. Geologic map of the Bullion Mines and surrounding area. From Hewett, 1957, Plate 1.

Mineralogy and Workings

At the Bullion mine, argentiferous cerussite is found in limestone in the oxidized zone. Primary ore contains galena and chalcopyrite. The mine was developed by a 200-foot, 45 degree inclined shaft in 1917. Produced 1916-1917; average smelter recovery was 15% lead, 7.87% copper, 0.51 ounce of silver, and 0.157 ounce of gold per ton. Reported to have produced around 1860; ore shipped to Wales. (From Goodwin, 1957, p. 618-619; (Eric 1948:300; Irelan 1888 :499; Tucker 1930:270-271; 343; 43b:475, pl. 7; Wright 1953:ap. 73).

Note: This mine is not to be confused with the Bullion mine described by Hewett, 1956, p. 152 (no. 46, plate 2) that is in Nevada.

Recorded production of the Bullion mine since 1930 (no. 46, pl. 2)

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Year	Crude ore (tons)	Recoverable metals				
		Gold (ounces)	Silver (ounces)	Copper (pounds)	Lead (pounds)	Zinc (pounds)
1931	176				25,315	96,224
1932	36					29,684
1935	40		229			15,380
1937	51	1	433	100	35,900	
1938	86	4	325	100	32,000	

Figure 2. Bullion Mine Production. From Hewett, 1956, p. 153.

References from Larry Vredenburgh

Barstow Printer: Dec 23, 1910, Jan 3, 1913.

Ireland, William, 1888, San Bernardino County: California Mining Bureau Report 8.

Patchick, P. F., 1959, Economic geology of the Bullion Mining District, San Bernardino County, California: University of Southern California, unpublished M.S. thesis, p. 172;

Patchick, P., 1961, "A Geologist's Notes on the Ivanpah Mountains," Desert Vol. 24, No. 5, p. 8-11.

San Bernardino Weekly Times: March 8, Oct. 18, 1879; March 20, 1880,

Searchlight Bulletin: Apr. 30, May 7, 1909

The Mining World: Jun. 1, 1907, p. 701;