

I. C. 6902

Arabia District

The Arabia district is in the east foothills of the Trinity Range about 5 miles west of Oreana, a station on the Southern Pacific Railroad. It was discovered by George Lovelock in 1859 and became active in the sixties. A Stetefeldt furnace was built on the Humboldt River at old Oreana to treat the ores of the Montezuma mine in 1867. This smelter has the distinction of being one of the first lead smelters in the United States. It was erected after unsuccessful attempts had been made to reduce the ore in stamp mills.

The Montezuma mine has been the principal producer of the district. Statistics on production are fragmentary. In 1868 Raymond^{5/} estimated that the Montezuma mine had produced 1,500 tons of ore and that ore reserves were 1,200 tons. The ore contained 40 to 50 percent lead and antimony and 60 to 80 ounces of silver per ton. From 1916 to 1918 the slag dumped from former smelting operations was shipped to the Midvale smelter to recover the lead, antimony, and silver contained in it.

From 1919 to 1930 a small quantity of ore was produced annually by lessees and owners. The tonnages produced and average values per ton for some typical years, according to Mineral Resources, are as follows:

| Year | Tons | Value | Value per ton |
|------------|------|----------|---------------|
| 1921 | 164 | \$10,312 | \$62.88 |
| 1923 | 110 | 5,425 | 49.32 |
| 1925 | 213 | 11,064 | 51.94 |
| 1926 | 323 | 14,194 | 43.94 |
| 1927 | 200 | 8,607 | 43.04 |

The ore contained lead, silver, gold, copper, and antimony. In March 1936 the district was deserted and all mining equipment had been removed.

The geology of the district has been described by Knopf^{6/}. The principal rock is granodiorite which contains contact-metamorphosed sedimentary rocks of the hornfels type. The granodiorite and hornfels are cut by numerous veins carrying silver-bearing bindheimite, the so-called hydrous antimonate of lead. Some veins can be traced on the surface for more than 1,000 feet.

The main working of the Montezuma mine consists of a large open-cut about 100 feet long, 20 feet wide, and about 25 feet deep. In the early days an inclined shaft was sunk 120 feet on the vein beginning at the open-cut, but it is reported to have passed out of ore at a depth of 60 feet.

About 1/4 mile north of the Montezuma mine considerable work has been done on the Electric vein. The vein ranges in width from 1 to 3 feet. A group of 10 patented claims is owned by Electrical Mining & Reduction Co., Newton, Mass.

Total workings in the area are 3,500 feet, and deepest shaft reaches a vertical depth of 210 feet.

5/ Raymond, R. W., Mineral Resources of the States and Territories West of the Rocky Mountains for 1868: 1869, pp. 130-131.

6/ Knopf, A., The Antimonial Silver-Lead Veins of the Arabia District, Nevada: U. S. Geol. Survey Bull. 660, 1918, pp. 240-255.