

Barber Canyon is 2 miles long and averages 300 feet in width. The average ~~Item~~ depth to bedrock is 30 feet. The best values are on bedrock and on benches at the sides of the canyon. The gold is coarse and averages 875 fine. The average value of the ground, including the low-grade surface material, is reported to be 28 cents per cubic yard.

In recent years several groups of men were placering on a small scale for 2 miles along Spaulding Canyon. These groups are reported to have made wages.

Spring Valley District

The Spring Valley district is on the east slope of the Humboldt Range 14 miles east of Oreana via the Limerick Canyon road, which crosses the Humboldt Range. It can also be reached by automobile road from Mill City, 28 miles north.

The Eagle mine, better known as the Bonanza King, is the only important lode mine in the district. It was located in 1868. A 15-stamp mill erected on the property in 1873 treated about 7,000 tons of ore, judging from the old tailings dump. These tailings are reported to average \$4 per ton in gold and silver at current metal prices. The property was operated by the Bonanza King Mining Co. several years prior to 1910. It is owned by M. M. McKeever of Boston. The property consists of one patented claim and five unpatented claims.

In 1934 the property was under bond and lease to F. R. McDonald who had charge of the property in 1910. When it was visited McDonald was employed in rehabilitating the mine. A 500-cubic foot compressor, driven by a four-cylinder Hercules engine, and a 15-hp. Fairbanks-Morse geared hoist had been installed. The mine is opened by a vertical shaft with levels at 100-, 225-, and 300-foot elevations. According to McDonald 4,600 tons of ore are blocked out in the mine.

The Bonanza King vein is in a rhyolite formation. The vein filling is quartz stained in places by copper carbonates. The vein ranges in width from $2\frac{1}{2}$ to 5 feet and dips nearly vertically. The ore minerals are gold, galena, pyrite, sphalerite, and tetrahedrite. A carload of ore shipped to the American Smelting & Refining Co. of Salt Lake City in 1908 contained 2.65 ounces of gold and 8.32 ounces of silver per ton, 2 percent iron, 9 percent insoluble, considerable lead, a little zinc and sulphur, and a trace of copper.

Spring Valley Gulch 2 miles southeast of the Bonanza King mine contains a cinnabar deposit owned by the Cinnabar King Mining Co. A Newhall furnace, 20 feet long and $2\frac{1}{2}$ feet in diameter, and a metal-pipe condensing system were built in 1931, but the plant closed down the same year owing to the low price of mercury. An aerial gravity tram several hundred feet long connects the workings with the mill. The cinnabar occurs in limestone.

Placer mining began in Spring Valley in 1881. The output of the Spring Valley, American Canyon, and Dry Gulch placer areas was large. Ransome^{16/} states:

The placers were first worked by Americans, who are reported to have taken out gold to the value of \$1,000,000. The ground, however, soon passed into the possession of the Chinese, who formed a considerable settlement in

16/ Ransome, F.L., Notes on Some Mining Districts in Humboldt County, Nev.: U.S. Geol. Survey Bull. 414, 1909, p. 12.

American Canyon and mined the gravels with skill and assiduity by drifting from countless narrow shafts ranging from 40 to 85 feet deep. How much gold they obtained is unknown, but some estimates, doubtless much exaggerated, place the total at about \$10,000,000.

The hundreds of shallow shafts and piles of gravel and tailings are ample proof of former activity. The Americans leased the ground to Chinese placer operators on a royalty basis, and the ground was subleased to individual Chinese in blocks 20 feet square. Locke states:^{17/}

Each block of 400 square feet produced an average of \$1,500 to \$3,000 in gold dust and nuggets.

In 1910 the Federal Mines Co. installed a dredge to work the lower part of Spring Valley Canyon. According to the old records of the company the output of the dredge from October 15, 1912, to January 17, 1914, was 58,494 cubic yards of gravel valued at \$10,902.43 or \$0.186 per cubic yard.

Dredging was hampered by the scarcity of water, which was piped and flumed from Indian Creek 5 miles north. It was difficult to keep the dredge afloat because of the old underground workings which threatened to drain the dredge pond.

The gold occurs from the surface down in a series of gravel layers underlain by seams of clay. The alluvium contains many boulders. The gold is coarse, and it averages 700 fine.

Twelve hundred acres of placer ground in Spring Valley Canyon are owned by J. B. O'Marr, A. E. Evans, and H. T. Brink. In March 1936 Los Angeles interests were negotiating for an option to sample the property. Placer ground in Dry Gulch owned by W. A. Wilson and others was also being investigated by the same interests.

In recent years there has been some small-scale placer mining in Spring Valley, American Canyon, and Dry Gulch. At the head of Limerick Canyon, west of the divide separating this canyon and Spring Valley, placer deposits were worked in former years by small-scale methods. In 1931 the Limerick Canyon Mining Co. erected a small placer plant on the Puett property. It is reported that operations were unsuccessful because water was scarce, and the plant operated only a short time.

Here the depth of the placer gravel is 2 to 38 feet and averages 11 feet. The alluvium contains chiefly schist and no large boulders. The best values are concentrated on the schist bedrock. Most of the gold is the size of mustard seeds, and it averages 850 fine.

In March 1936 the Puett and Walker placer properties in Limerick Basin were under option to San Francisco interests, and the ground was being sampled by six men. A 5-cubic yard concrete mixer was used for this work. A little water is available at McCarthy Springs, $1\frac{1}{2}$ miles below the placer ground.

^{17/} Locke, Ernest G., Reawakening of an Old Placer Camp; Min. and Sci. Press, vol. 107, 1913, p. 373.