

Good Hope Group

The Good Hope group of five patented claims and a patented mill site is owned by A. H. Berning and associates of Carlin, Nev. This property was first located in the '70s and several shipments of ore were made at that time. Development consists of an inclined shaft reported to be 250 feet deep and about 100 feet of lateral workings. Only equipment on the property is a 9-horsepower, Fairbanks-Morse geared hoist.

The prevailing formations are limestone intruded by rhyolite. Values are chiefly in lead and silver with a small amount of gold. The ore occurs in bunches in a vein striking northwest-southeast, dipping 50° northeast, and varying from 3 to 6 feet in width. On the south end of this property, on the Good Hope No. 7 claim, is a vein of barite. This part of the property is under lease to the Industrial Minerals & Chemical Co., which company, in 1935 and 1936, shipped about 300 tons of barite paying a royalty of 50 cents per ton.

Barite

Barite occurs on the E. 1/2 of the E. 1/2 of the NE. 1/4 of Sec. 27, T. 34 N., R. 51 E., M. D. B. and M. This section is one of those included in the original railroad land grant and is owned by the Southern Pacific Land Co. For the past 5 years the barite deposits have been worked under lease by the Industrial Minerals & Chemical Co. of Berkeley, Calif. Development consists of three adits, the longest 700 feet. Equipment for mining comprises an Ingersoll Rand Imperial, type 14, portable compressor and several jackhammers. The barite is mined by open-stope method and it is hauled to Carlin in trucks for rail shipment to the Pacific coast.

The barite occurs in a vein striking S. 30° E. and dipping about 70° easterly. The width of the vein averages about 10 feet. Country rock is shale. The barite is massive, and relatively free from impurities but in places is stained with iron oxide. The deposit has been explored to a depth of about 75 feet.

UNION DISTRICT

The Union district is in Union Canyon in the Sulphur Range, 45 miles by automobile north of Eureka. It can also be reached by automobile from Palisade, about 35 miles north. It is sometimes considered a part of the Mineral Hill district, which is about 7 miles northwest. The first mineral discovery was made by James Lindsay in 1836. In 1837, a small smelting furnace was erected, and, from the size of the slag pile, it is estimated several hundred tons of ore were reduced. After lying idle for many years, the principal claims were acquired by the Union Mines Co. organized by William P. Fairman of Philadelphia, Pa. From 1915 to 1918, this company rehabilitated the mines, did considerable development work, and shipped 7,088 dry tons of ore having a gross value of \$175,802, or an average of \$24.80 per ton. This ore was hauled to the Union siding on the Eureka-Nevada Railroad by wagon team and shipped to the U. S. Smelting, Refining &



Mining Co. at Midvale, Utah. After the company suspended operations, occasional shipments of ore were made by lessees. The total production from the district has probably been a little more than \$200,000.

#### Union Mines Co.

The Union Mines Co., owned by W. P. Fairman, 225 South 15th St., Philadelphia, Pa., and associates, comprises a group of 12 patented claims. Development consists of four vertical shafts, the depths of which are 200, 250, 300, and 550 feet, respectively. Other workings, consisting of drifts, crosscuts, winzes, and raises, comprise an additional 4,000 feet. The two main shafts, Union and Armstrong, are caved and inaccessible. No water has been encountered in the mine workings. According to W. P. Fairman,<sup>33/</sup> approximately \$242,000 has been expended by the company for equipment and the development of the property. Equipment includes two Fairbanks-Morse geared gasoline hoists, two Ingersoll-Rand compressors (9 by 8 inches), and camp accommodations for a crew of 12 men.

Prevailing rocks are limestone and quartzite. Ore occurs in irregular replacement deposits in the limestone. Values are in lead and silver. Virtually all the ore shipped was from the zone of oxidation and averaged 25 percent lead, 10 to 12 ounces silver, 10 percent lime, 15 percent iron, and the balance chiefly silica.

#### WILLIAMS SALT MARSH

Williams Salt Marsh is 40 miles north of Eureka in the north end of Diamond Valley, which parallels the Diamond Range on the west. In the early days, the Marsh was exploited for salt to supply the chlorination mills at Mineral Hill, Hamilton, and other districts in eastern Nevada; with the decline of the chlorination process, salt production became unimportant.

Information on the production of salt from this playa in 1871 is given by Whitehill:<sup>34/</sup>

The marsh contains about 1,000 acres of salt land, from which salt is obtained in incrustations on the surface and from the solution in the waters, which come within 4 feet of the top of the ground. The flat, however, which this marsh drains is 15 miles long and 6 miles wide. Salt was obtained here for a long time by gathering the incrustations, without refining, but it was not very pure. It contained only 60 percent salt. It is obtained now by evaporating the water in shallow iron pans by means of artificial heat. The pans are 10 feet long, 4 feet wide, and 10 inches deep - 22 of which are in use, producing daily 5,000 pounds, working 16 hours. The salt obtained in this manner is 95 percent pure. The waters contain about 12 percent of salt,

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<sup>33/</sup> Private communication.

<sup>34/</sup> Whitehill, Henry R., Biennial Report of the State Mineralogist: State of Nevada, 1871-1872, p. 80.