

1940 0005

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Item 5

I. C. 6941

Hawaiian Group

The Hawaiian group of four unpatented claims owned by B. H. Donnelly, of Hawthorne, is in Ryan Canyon 5 1/2 miles northeast of Thorne, a station on the Hazen Mina branch of the Southern Pacific R.R. This property was discovered in 1906 by a man named Ryan, after whom the canyon was named.

No production has ever been made from the property. Prospecting work consists of a shaft 50 feet deep and some surface cuts, evidently made in search for shipping ore which was not found in commercial quantities. Property has been idle for many years.

The nearest water for milling is on the flat near Thorne, approximately 1,500 feet lower than the deposit.

The interesting feature of the property is a prominent outcrop ranging from 150 to 600 feet in width and traceable on the surface for nearly a thousand feet. This outcrop shows considerable silicification, and, according to Donnelly, samples taken at various places along the outcrop assayed \$2.50 to \$14 per ton. Values are in gold and silver associated with small amounts of copper, manganese, and iron oxides. Sampling done has been insufficient to determine the average value of the material.

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GARFIELD DISTRICT

The Garfield district is at the northern end of an unnamed mountain range situated south and west of Soda Spring Valley. Acme, a siding on the Southern Pacific R. R., is 6 miles north. The district is accessible by automobile road either from Mina, 20 miles southeast, or Hawthorne, 24 miles northwest.

Silver-gold ore was first discovered in this area by Joshua Mass and Amos Everson in 1882. From 1882 to 1887, the Garfield mine (formerly known as the Blue Light) is said to have produced several million dollars in shipping ore. About 1890 an English company called the Hampton Plain Exploration Co. acquired the Garfield mine and erected a 10-stamp mill at Garfield Springs 9 miles south of the mine. To judge from the tailings at Garfield Springs, roughly 5,000 tons of ore were treated. In 1935, an unsuccessful attempt was made to treat these tailings by cyanidation.

About 1922 the Mabel mine, adjoining the Garfield, was acquired by the West End Consolidated Mining Co. Since 1922 this mine has been a small but consistent producer of high-grade shipping ore. From 1922 to 1929 the Mabel mine is reported to have yielded 4,310 tons of ore having a gross value of \$421,627, an average of \$97.83 per ton.

In recent years mining activity in the Garfield district has been confined to small leasing operations.

Eldorado Mining Co.

The Eldorado Mining Co. (Garfield mine), organized in 1928, is controlled by W. J. Harris of Reno and J. H. Miller of Hawthorne, Nev. The property comprises 13 claims, some of which are patented.

Entry to the Garfield Mine is by a tunnel 2,500 feet long. Total workings comprise about 2 miles. The deepest working is 350 feet from the surface. Most of the equipment has been removed, and mining is done by hand methods.

In recent years the only mining at this property has been done by lessees. Leases are given for 6-month periods. Royalty payments, based on net smelter returns are as follows:

<u>Value of ore</u>	<u>Royalty, percent</u>
\$50 or less	10
\$50 to \$75	15
\$75 to \$100	20
\$100 or more	25

In 1936, eight claims of the Garfield group were under lease to F. P. Merry and associates. The lessees were screening the dumps and hauling the fines to the W. & M. mill at Sodaville for treatment. The fines are said to average better than \$8 per ton. The cost of screening is 64 cents per ton, and the cost of hauling to Sodaville, 22 miles distant, is \$2.25 per ton. It is said that about 100,000 tons of dump material contain commercial values. Up to October 1936 about 10,000 tons of dump ore had been treated.

The W. & M. mill at Sodaville, operated by F. P. Merry and associates, has a capacity of 40 tons per day. Electric power may be purchased for milling. Water for milling is obtained from a well near the millsite. The ore is concentrated by the flotation process. Milling cost is \$1.62 per ton. Cost of shipping and smelting concentrates is 33 cents per ton of ore treated. The flow sheet of the mill is shown in figure 2.

At the Garfield mine the formation is limestone and volcanics. According to Miller, three interlacing veins have been exposed in the underground workings. These veins range in width from 3 inches to 9 feet. Values are in silver, gold, and lead.

Mabel Mine

The Mabel mine, adjoining the Garfield mine, consists of two patented and four unpatented claims.

Development consists of a vertical shaft 650 feet deep with levels at 100-foot intervals. A winze 130 feet deep has been sunk from the 600-foot level.

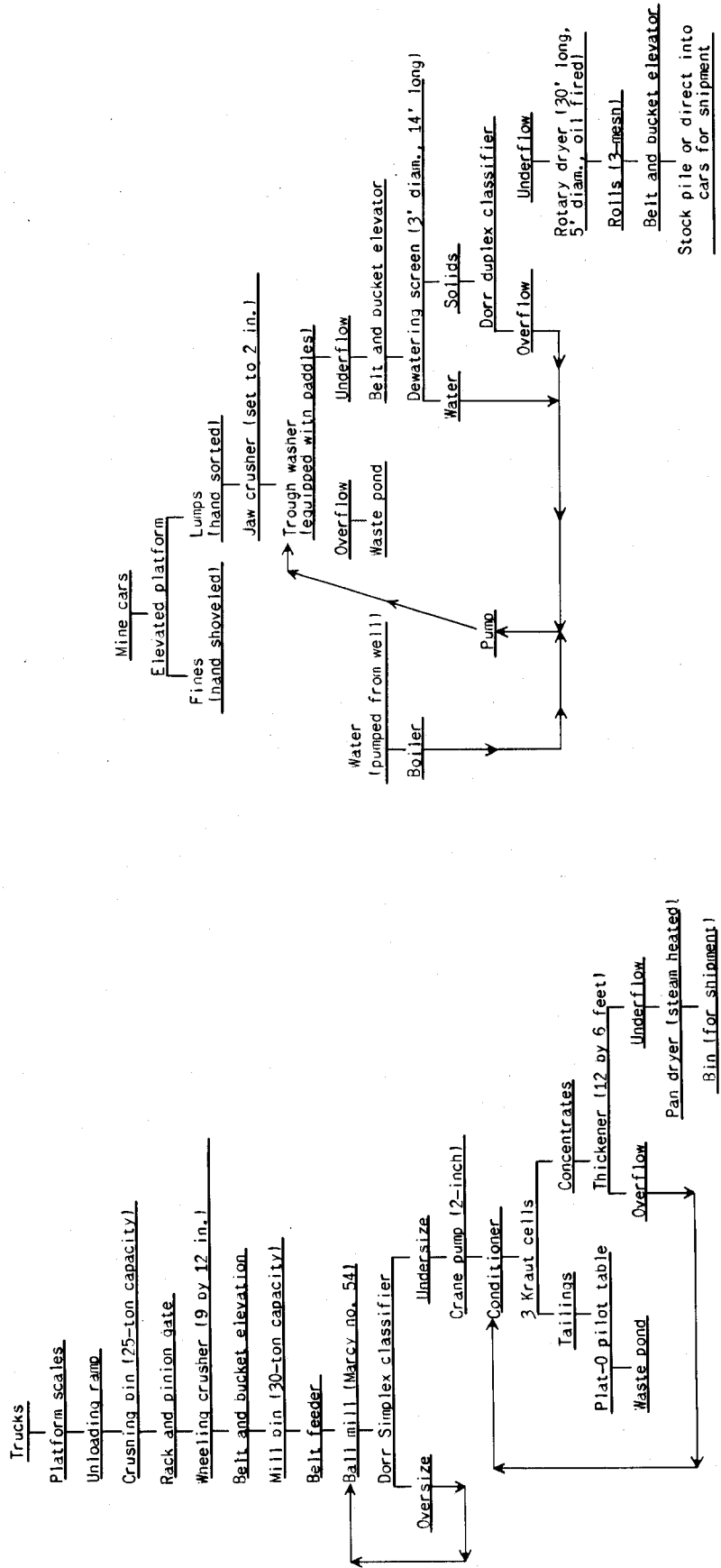


Figure 2.— Flow sheet of W. & M. mill at Sodaville, Mineral County, Nev.

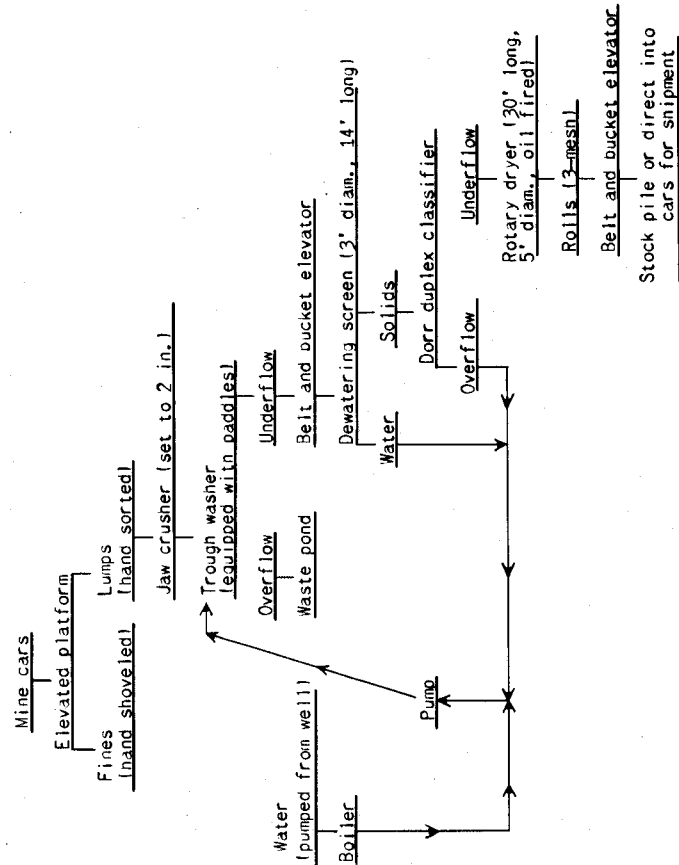


Figure 3.— Flow sheet of plant for treating thenardite, Rhodes Alkali Chemical Corporation, Rhodes Marsh, Mineral County, Nev.

Mining equipment includes a Chicago Pneumatic two-drill compressor and a Fairbanks-Morse gear hoist, both powered by gasoline engines. Hoisting is done with bucket and crosshead.

In 1936 that portion of the mine above the 600-foot level was under lease to Lloyd Wilson, of Hawthorne, and associates. The lessees had produced about \$18,000 of shipping ore in about one year. The royalty payments based on the gross value of the ore are 20 percent on ore having a value of less than \$100 per ton and 25 percent over \$100 per ton. The haul to Mina, a distance of 23 miles, costs \$2.75 per ton on contract.

Veins range in width from 3 inches to 3 feet and contain silver, gold, and lead.

HAWTHORNE DISTRICT

The Hawthorne district includes a large area tributary to the town of Hawthorne, which is at the south end of Walker Lane 7 miles southwest of Thorne, a station on the Mina-Hazen branch of the Southern Pacific R.R. It is sometimes divided into the Lucky Boy section and the Pamlico section, 6 and 10 miles, respectively, southeast of Hawthorne.

The Pamlico and La Panta mines in the Pamlico Range were the most important early-day producers. Other early-day mines of less importance in the Pamlico section were the Good Hope, War Eagle, New York Central, and Gold Bug. In later years, the Lucky Boy has been the principal property in the Hawthorne area. In recent years there has been little mining activity.

Production of the Hawthorne District from 1910 to 1934 is shown in table 4.

Lucky Boy Consolidated Mines Co:

The Lucky Boy Consolidated Mines Co., J. H. Miller, of Hawthorne, president and principal owner, owns 14 patented claims on the east slope of the Wassuk Range. The Lucky Boy mine was discovered in 1906 by Guy E. Pritchard while working on the road over the Lucky Boy Pass.

In 1936 the property was under option to eastern interests, and several men were employed in cleaning out the Miller tunnel. This work was done primarily to hold the option.

The Lucky Boy mine is developed by the Hubbard two-compartment shaft 950 feet deep, inclined 70°, the Miller tunnel 6,400 feet long, and approximately 2 miles of subsidiary workings.

Mining equipment includes a Sullivan compressor, 50-horsepower electric hoist, electric haulage locomotive, and other mining machinery.

A 125-ton flotation mill was erected in 1926 near the portal of the Miller tunnel. Milling equipment includes a 10- by 12-inch Blake crusher, 2 1/2- by 8-foot Hardinge ball mill, Dorr Duplex classifier, three K & K flotation units, a Deister table, and an Oliver filter.