

As such potash is not water-soluble, a question arises as to the amount absorbed by the soil, and by plants, but this company claims to demonstrate remarkable results.

With the coming of cheap electrical power from Boulder Dam, deposits such as this derive new importance, or new interest. If the percentage of alunite is large enough, it might be possible to first extract the potash, and then smelt the residue for aluminum by the electrolytic process.

At night, on this date, we drove from Beatty south to Las Vegas, where we spent two days ~~in interviews and arranging immediate and future examination trips.~~

#### SEARCHLIGHT DISTRICT

The afternoon of June 1st found us at Searchlight. The camp is a scene of renewed activity, due to the Searchlight Gold Corporation, which took over the well-known Duplex Mine on July 31, 1930. The officers of the new company, which is incorporated in Delaware, are Albert H. MacCarthy, President, Dr. Wilton McCarthy, Treasurer, W. J. Loring, V. President and General Manager, and Roy A. Lennon, Secretary.

The mine is now producing 600 tons per month which is milled at the company's own plant. The ore is largely brecciated quartz containing gold, silver, lead and copper. It is much oxidized, and 80% of the value is in gold, the remaining value being divided between the other metals.

The mill consists of a ball-mill, operating in closed circuit with a Don classifier & flotation unit. The mine had been worked for many years by former owners and subsequently by leasers. Much "dead" work has been necessary to put it in shape for steady production, yet



Mr. Loring states that it had been left in much better condition than mines usually are when operated by leasers. The ore shoots were worked out cleanly, the waste had been properly disposed of, and the timbering was sufficient to protect the underground openings. Definite mining costs are not yet available, and will necessarily be high at first. Definite mining costs are not yet available, and will necessarily be high at first. Development is being pushed in a proper manner on the 500, 700 and 800 foot levels. Sufficient new ore has been found to keep the mill running steadily at 20 tons per day.

The two great producers of Searchlight--The Quartette with a production of \$3,500,000 and the Duplex, with about \$800,000 to its credit--produced but little below the 600' levels. Below 400' the ore became of lower grade and contained more of the base metals, not economically adapted to amalgamation and the simple milling then used. The introduction of more modern methods, fine grinding and flotation, as at the new plant, should make it possible to mill such ore at a profit. Our inspection of the 800' level in the duplex, particularly the west drift in progress, indicates a favorable outlook there for new bodies of milling grade ore. The actual mining is being carried on by Mr. Frank Wagner, a thorough hard-rock miner of the Mother Lode area of California.

Development has not yet disclosed substantial ore reserves on any of the upper levels. The history of such deeper mining as has been done in the district is not entirely favorable, yet there has been very little exploration at depth. Our presence was welcomed, and after having examined the mine with Mr. Wagner during the afternoon, Mr. Loring urged us to go down to the bottom on the 800' level with him the next morning, which we did. The company is fortunate in having interested Mr. Loring, who has had wide mining experience both here and in Australia.



For a long period he managed the famous "Sons of Gwalla" mine in West Australia, having succeeded to Mr. Herbert Hoover's interest in that property in 1908.

Lease on the Quartette Mine.

The formerly great Quartette Mine is inoperative, although during our visit a lease on some of the property was taken by Mr. E. L. Peters, who is at present in charge of the Duncan Mine in El Dorado Canyon.

EL DORADO CANYON DISTRICT

On June 2 we drove from Searchlight to El Dorado. The first stop was made to see the open stopes of the old Wall Street Mine, a rich producer of the 60's. Large caverns were stoped out to the surface. In places the vein was 12 feet wide or more with fairly good footwall, but a poorly defined hanging wall. The large open stope, 300' long and 85' deep, is supported by a few ore pillars. The vein is very flat, dipping  $35^{\circ}$  SW, with a strike of  $N 60^{\circ} E$ . The ore is a slightly silicified breccia of the country rock which appears to be quartz monzonite, and it was no doubt a difficult matter to differentiate ore from waste. This ore body was taken out completely and no continuation of the veins were found. It was terminated by faults on the bottom and to the north.

El Dorado Empire Mines Co.

C. E. L. Gresh, Manager, was greeted at the mine on the Black Hawk Claim. Mr. Gresh has discovered some new ore at the surface within a few feet of the 200 foot shaft on his property. He is of the opinion that a N & S fault with a westerly dip has cut off the adjacent Wall