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Item 57

CARLIN GOLD MINING COMPANY

This new gold mining operation, which is a wholly-owned subsidiary of Newmont Mining Corporation is of special significance to the future of the mining industry in Nevada. It has proven that the aggressive employment of advanced geological techniques and the willingness to invest in large-scale modern treatment plants can develop precious metal mining operations in areas which heretofore had been passed over. Not only is it the first entirely new major gold mining operation in the United States in the past 25 years but in terms of tonnage treated is the second largest that has ever been built or operated in the continental United States, being exceeded only by the latter-year operations of the famous Homestake mine in South Dakota.

The mine and mill are located 20 miles northwest of Carlin in the old Lynn Creek mining district. Since about 1900 there has been sporadic activity in this area consisting of small lode mines and placers, with a total production of about \$500,000. However, the existence of the major deposit now being worked remained entirely unknown.

The discovery of the present deposit was the result of scientifically important mapping of the Roberts Mountain fault system by the U. S. Geological Survey, under a cooperative program with the Nevada Bureau of Mines. Published reports of the study convinced Newmont geologists that it was an important lead toward major mineral deposits.

Initial exploration was begun in the area in late 1961, and in the Fall of 1962, the discovery of the deposit was made. This was followed up by the staking of a large group of claims, the leasing of additional adjoining mineral rights, and a large-scale development program. In a little over a year sufficient ore had been proved to warrant a \$10,000,000 investment in a large open pit mine and a modern milling plant with a capacity of 2,000 tons of ore per day.

In the Spring of 1964, Newmont retained the Bechtel Corporation to work with Newmont on the design of the milling plant and to assume responsibility for the construction of the mill and related installations. At the same time a contract was awarded Isbell Construction Company of Reno for the removal of 3,000,000 tons of overburden to uncover the main ore body for mining. It is noteworthy that from the start of design to initiation of operations there was a lapse of only 11 months. The first gold bar was poured at the Carlin mill on May 27, 1965. By the end of 1966, more than \$13,000,000 had been produced.

The ore is mined by large shovels at the rate of 3,000 tons per day, 5 days per week, crushed, and stored in large bins. The mill proper works 7 days per week, 24 hours per day, at the rate of 2,000 tons per day. The ore is ground to the size of fine sand in a large ball mill and agitated with cyanide solution in a series of agitators. The cyanide solution dissolves the gold in the ore. The solution is then separated from the ore in a series of settling tanks with slowly revolving rakes. The treated ore is then stored behind a large dam with elaborate precautions for its permanent retention. The solution containing

the gold is treated with zinc dust for the recovery of the gold, and is again used in the plant for the recovery of additional gold from new ore. The final product consists of bars of gold weighing about 75 pounds each which are shipped to the U. S. Mints in San Francisco and Denver, Colorado.

The economic impact of the new operation on the local area has been tremendous. The payroll payments during development and construction exceeded \$3,000,000 and were of direct benefit to the communities of Carlin and Elko. The permanent operations maintain an industrial-type payroll of about 135 employees, and this is of great importance to a local economy which in recent years has depended almost solely on ranching, railroading, and tourism. Eureka County, in which the mine is located, has obtained a 47% increase in tax revenues as a result of the operation.

State and County officials have deemed the new development of great significance not only as to the present operation, but to future possibilities of additional mining operations in the Lynn Creek district. So much so, that the State Highway Department has included the route to the district in the State secondary system. High priority is being given this project which will replace existing county roads and will greatly benefit not only future mining operations, but also agricultural and recreational development of the Tuscarora Mountain region.

The Elko Daily Free Press has described the Carlin operation as "...a golden testimonial to present-day mining engineers;...a revelation of modern technique..." concluding that "NOTHING SPURS THE ECONOMY QUICKER THAN MINING. Newmont's activity near this city has added greatly to the prosperity of Carlin and Elko, and to Eureka and Elko Counties. It is a tribute to men of vision, to mining companies with great means to probe the mysteries of the earth and bring forth great values..."