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SILVER CANYON

POLARIS
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September 22, 1966

PRELIMINARY ENGINEERING
REPORT
SIEGEL SILVER & LEAD MINE

We have examined the Siegel Silver and Lead Mine located in White Pine County, Nevada. The property consists of fourteen (14) patented mining claims. A Preliminary Engineering and Evaluation Study of our observations, computations and core drilling plats and results are herewith enclosed.

SUMMARY AND CONCLUSIONS:

Our examinations to date indicate that the fourteen (14) claims does contain (58,490,000) ozs of blocked out silver ore. Some gold and lead was found in most of the samples, however, no values or considerations were given for these minerals.

The present net worth based on todays silver market is

---\$59,941,284.00---

I believe this to be an excellent proven property.

Respectfully submitted,

Charles L. Milligan
CHARLES L. MILLIGAN

INTRODUCTION & LOCATION

The purpose of this geological report is to establish a present value on a silver deposit consisting of fourteen (14) patented mining claims. The property is located approximately one mile south of Siegel Canyon in the north $\frac{1}{2}$ Section 2, Township 21 North, Range 65 East, six (6) miles southeast of Schellbourne, Nevada, White Pine County. The deposit is commonly called the "Siegel Silver Mine", in the Silver Canyon Mining District of Nevada.

The main workings of the mine are located on the Black Eagle and Cumberland claims.

The names of the fourteen (14) claims are as follows; Black Eagle, Black Eagle #2, Black Eagle #3, Black Eagle #4, Cumberland, Umpire, Dorothy, Percy, Climax, General Spencer and Ontario, St Anthony Mine #1, St Anthony Mine #2, and Delta. The claims are all contiguous and shown on the enclosed core drill plat.

The mine has a good access road that can be maintained the year around. The property can be operated and opened pitted the year around.

GENERAL GEOLOGY

Most of the rocks exposed on the Siegel Mining area makeup a metamorphosed pre-Cambrian complex of volcanic rocks, tuffaceous rocks and sedimentary rocks and associated intruded

igneous rocks of diverse composition. After considerable erosion, this pre-Cambrian complex was covered by rhyolite tuff and intruded by associated dikes of late Cretaceous or early Tertiary Age. Later, stocks of quartz monzonite and associated dikes were emplaced. After erosion carved a surface of considerable relief these rocks, lava flows and volcanic cones dammed the principal streams, causing deposition of gravels and sands in the main and tributary canyons. This stage in the geological history culminated in the outpouring of widespread basalt flows, carved into lava mountains by the latest interval of erosion.

The structure of the pre-Cambrian sedimentary and volcanic rocks appears to be, in part, an overturned syncline modified by faults. Some of the rhyolite, gabbro, and granite intrusions were guided along high angle faults.

The blackness of the ore is caused by manganese oxides, with some iron oxide and a carbonate that appears to be mangiferous siderite with the silver being carried as a chloride.

Massive beds of limestone that dip approximately 50 degrees Northwest are quite predominate across the claims. One of the lower tunnels starts in thin bedded dark colored lime shales, which overlies the massive dark colored quartzite that forms all of the ridge east of the mine.

One of the main characteristics that should be noted that in all areas of Nevada which has had many large producing silver mines, such deposits have generally been associated with extensive limestone.

RECOVERABLE BLOCKED OUT VALUES

The subject area as outlined and discussed in this report covers eleven claims. This core drill program has defined the ore body in order to establish the values as set forth in this study. The core drilling program provides useful data for geological analysis and gives a realistic method for making an evaluation of the ore body.

Many of the veins were as wide as 28 feet and thickness that were well over 100 feet. Several of the old records indicate some ore that averaged well over 100 ounces per ton in silver, 12% lead (galena) and .006 in gold. Some 200-carloads of ore had been shipped to the smelter in Murry from this mine.

From the correlating study of the drill plat (enclosed with this report), it appears that approximately 150 feet of productive silver bearing zones were penetrated and the area around holes 1, 8 & 9 were in the center of the main workings. The deposit seems to be quite contiguous and the overburden averages approximately 18 to 20 feet. Most of the sample studies indicated that a conglomerate of various unnamed rock does exist between some of the mineralized zones. The upper workings consists of a crosscut tunnel which trends south 10 degrees east, for 100 feet to a fault that strikes south 61 degrees east and 100 feet west. An incline winze apparently connecting the lower tunnel. The lower tunnel starts 350 feet below and 900 feet north of the upper workings and runs south 10 degrees west.

The average assay for the silver deposit was 28.47 ounces per ton. The total deposit is well represented by a good sample study.

RESERVES WERE CALCULATED ON THE FOLLOWING BASIS:

Volume of ore per claim
Volume X eleven (11) claims
Eleven (11) claims X 28.47 ounces per ton = 58,490,000 ozs
58,490,000 ozs @ \$1.22 per oz = \$71,357,800. Gross income,
Recoverable net values are calculated as follows;
10% royalty
4% mining cost
2% hauling cost
10% contingency factor
5% metallurgical loss factor
31% operating costs and processing cost

THE PRESENT NET WORTH BASED ON TODAY'S SILVER PRICES

-----\$59,941,284.00-----

GENERAL DISCUSSION

The Siegel Mine is in an accessible area which can be operated the year around.

The property has been completely core drilled and blocked out. The reserves are figured on a very conservative basis. In fact we have used about 25% discount factors in arriving at the present net worth of the deposit.

Sample and geological studies indicate a very high grade

Silver ore thru-out the entire ore body

The property can be mined by means of the present workings that exist at the mine . The overburden can be stripped and the ore shipped to a smelter.

In order to put the mine into operation with very little capital it would be feasible to hire a contractor to mine the ore on a turn-key contract.

Indications are that silver will increase in price in the very near future.

All geological information contained in this study indicates that this is much richer ore deposit then shown in this study.