

The test work showed that the minerals present in the ore are pyrite, sphalerite, chalcopyrite, freibergite, galena, pyrochite, barite, calcite, quartz, dolomite and clay. Pyrite is the most abundant metallic mineral.

The test work was done to determine floatation test on the recovery of silver in a silver-lead concentrate and producing a separate zinc concentrate. Most of the grinding was done to 62% - 200 mesh and did not give satisfactory results. More attention was given to sulphite bulk floatation than to finer grinding of the whole ore for selective separation to separate concentrates.

More metallurgical testing would need to be done before proceeding on this project. Ore

ORE RESERVES

Dolly Varden	50,000 tons	Grade	20 ozs.
Wolfe	600,000 tons		8.2 ozs.
Torbrite	360,000 tons		7.5 ozs.
North Star	240,000 tons		7.9 ozs.

The Sunshine Mining Company estimated the ore reserves at the Dolly Varden Mine as 7,146,656 tons aggregate, grading 3.9 ozs. of silver, of which 100,000 tons were expected to be extracted by open pit.

POTENTIAL AREA

In the Dolly Varden Mine area the zone below the 1500 foot elevation to the 1000 foot elevation is potential at the intersection between the Northsouth and the Eastwest fault fractures. The same is true in the Torbrite Mines where there are excellent chances of developing further substantial amounts of silver ore.

SUMMARY

An ore reserve of 1,250,000 tons of ore grading about 8 ozs. of silver in mineable widths up to 20 ft. are calculated. No estimate has been made of the lead, zinc and cadmium which is considered to be a credit in ~~the~~ this ore.

The value of the ore is calculated on the basis of \$2 per oz. silver, 14¢ per lb. of lead, 13¢ per lb. of zinc and \$2.85 per lb. of cadmium.

The percentage of the content of the various metals in the ore would paid for by this method are assumed to be silver 90%, lead 80%, zinc 60% cadmium 60%.

On the basis of the above figures a grade of \$20 per ton is estimated.

Mining costs are estimated at \$14.50 per ton based on a rate of 500 tons per day milled. The cost of a mill and plant plus working capital to produce at the rate of 500 tons per day is estimated at 2,750,000 dollars.

It is concluded that the profit potential from this ore body would be about ~~\$400,000 x 4~~ four hundred thousand dollars annually on a pre-tax and pre-rate of basis and is hence unattractive to Cyprus.