

APR 9 1965

RECEIVED
APR 12 1965

DOUGLAS D. CAMPBELL
CONSULTING GEOLOGIST
1119 MARINE BUILDING
VANCOUVER I. B. C.

VERR ADDISON GOLD MINES LTD.

007716

| |
|--------|
| W.S.R. |
| K.C.G. |
| J.H.S. |
| E.F. |
| R.D.S. |
| B.S.E. |
| P.M.K. |
| G.W.M. |
| R.G.M. |
| C.K.W. |
| J.B.S. |
| G.P.R. |
| K.F.L. |
| J.B. |
| S.C.J. |

SUMMARY
OF PESO SILVER MINES LIMITED INTERESTS
IN THE YUKON

Peso Silver Mines Limited owns or controls about 2000 claims or approximately 150 square miles in two entirely different areas of the Yukon, the Mount Nansen district and the Mayo district. The program of exploration and development which was undertaken after Charter Oil Company Limited acquired control of Peso in December, 1963, had a two-fold purpose: (1) to acquire and develop properties that will be profitable to mine under existing economic conditions and metal prices, and (2) to acquire and explore silver bearing properties which may not be presently economic but which will appreciate in value with an increase in the price of silver and thus become economic.

Work to date on various properties in the Yukon has resulted in fulfillment of both of these purposes. Ore marketable under existing conditions is presently being developed on the Webber Zone at Mount Nansen. Current underground developments on the Webber Zone have been most encouraging. Marginal ore, which will be profitable on a modest rise in the price of silver, has been developed on the Rex and No. 1 zones on the Peso property in the Mayo area. Present development on the Shanghai property in the Mayo district indicates the likely existence of high grade silver ore of the Keno Hill type in very appreciable amounts. The objective of development by Peso in the Mayo district and in the Mount Nansen area is now to continue proving ore on enough properties to warrant the construction of one mill in each district.

Mount Nansen Area

The properties in this area encompass two major known parallel vein zones, the Webber and the Brown-McDade Zones, which trend northward about 4000 feet apart. Cross veins and faults have been exposed between these two structures and some appear to be economic gold-silver lodes of which the Huestis Vein is the principal. The major structures have lengths of 4-5000 feet on the properties and all of these lengths warrant exploration since they comprise potential ore zones.

The Webber Zone has been stripped and sampled on the surface for a vein length, with branches, of 2200 feet. Of this length 750 feet, in five sections, has proven to be of ore grade across average widths of 3-6 feet. The probable tonnage in these shoots to a depth of 200 feet is about 75,000 tons at an average gross grade of approximately \$30-\$50 per ton in gold and silver.

The drift on the Webber Zone has proceeded 780 feet and, with surface work, and a raise through the ore, has essentially proven the first high grade surface ore shoot to a depth of at least 200 feet. Surface exposures indicate that approximately 2000 feet of additional drifting could prove up between the surface and the level about 75,000 tons at 0.30-0.50 oz. Au and 20-30 Oz. Ag. Depth exploration will need to be done by drilling but it is reasonable to project the ore structure to 1000 feet depth, in which case the tonnage potential would be 700,000 tons containing approximately 14-20 million ounces of silver in the Webber Zone alone. Recent underground development at the Discovery Mines property on similar structures 5 miles north of the Webber has proven ore to a depth of 1000 feet. Extrapolation of the Webber ore to 1000 feet indicates a potential of 14-20 million ounces of silver and over 100,000 ounces of gold.

The cost of the Webber development to March 31, 1965 has been \$268,000. The cost of the completion of the present development will be approximately \$200,000.

The Huestis Zone has not been extensively explored but the present development is expected to prove up a minimum of 30,000 tons between the drift and the surface grading 0.5-0.7 oz. Au and 20-30 oz. Ag for about 1500 feet of underground work. The overall potential of this vein system is not established but it would appear that at least 60,000 tons is likely to a depth of 500 feet. The vein is narrower than the Webber but appears to be higher in grade. For an average mining width of 3 feet it will return a gross dollar value of about \$60 per ton, judging from surface samples. Underground development has just intersected a 15 foot vein zone 169 feet from the collar. To 1000 ft. depth it would add a potential of 3-4 million ounces of silver to the Webber.

The cost of the Huestis development to March 31, 1965 has been \$20,000. The cost to complete the present program will be approximately \$100,000.

The Brown-McDade Zone is the easternmost zone on the properties in the Mt. Nansen area. Previous owners have exposed a length of 1300 feet of vein zone at the Brown-McDade property underground at a depth of approximately

150 feet. At least 30,000 tons grading about 0.5 oz. Au and 4 oz. Ag has been proven by this work. Recent investigation has suggested that the grade and tonnage could be as high as 200,000 tons between the level and the surface at 0.6 oz. Au and 10 oz. Ag. Further investigation, sampling and drilling to prove this figure will be done this summer and will cost about \$20,000. The possible potential of this one orebody on the Brown-McDade zone to 1000 feet would be about 1,000,000 tons. A length of over 3000 ft. of the Brown-McDade zone remains to be explored, thus the ultimate potential of the zone could be over twice as great as the above figures.

Preliminary estimates suggest a potential of the Webber, Huestis and Brown-McDade zones of approximately 30 million ounces of silver to a depth of 1000 feet. There is no reason at this time to expect the ore not to extend below this depth.

It is expected that before the end of the current year (1965) the development program in the Mount Nansen area will have proven or indicated at least 200,000 tons of gold-silver ore. Such a figure would justify immediately the construction of a 200-500 ton per day mill to serve all Mount Nansen area properties. If as expected the reserve tonnage indicated is much in excess of 200,000 tons a larger mill would be warranted.

The above discussion on the Mount Nansen properties has been confined to those vein zones on which ore has been proven. Considering that outside of these explored portions of the zones there remains over 20,000 feet of length of vein zones yet to be explored, the possible ore potential of the Mount Nansen properties is excellent. With such scope for exploration on structures of known favourability, plus the fact that to date over 30 percent of the zone lengths exposed have produced ore, the potential of the Mount Nansen area can be considered as major.

Mayo Area

In the Mayo area of the Yukon, Peso Silver Mines Ltd. holds 100% interest in the Peso-Rex property and 60% in the Silver Titan holdings.

On the Peso-Rex property underground development has proven and indicated approximately 60,000 tons of silver-lead ore grading 20-35 oz. Ag and 5-7% Pb. Continued underground and surface exploration of the Rex and the No. 1 veins could reasonably double this figure without exploring deeper than the present level. The cost of such work would

be about \$200,000. The cost of the Peso work to date has been \$1,137,000. (See breakdown sheet attached.)

The Duncan Ladue and the Rio Plata properties have underground workings which prove up some tens of thousands of tons of silver-lead ore of the United Keno Hill type, ranging in grade from 20 to 100 oz. Ag per ton. Further drilling and underground work would properly assess the reserves of these properties at a cost of \$50,000.

*Trace
SUS
99.2 Ag
22.7 Pb
2.0 Zn*

*Ind hole 1100
away
45.9 Ag
1.34 Pb
1.52 Zn*

The Shanghai property of Silver Titan is presently being explored underground. Approximately \$430,000 have been expended on this program and recent drill results have indicated the possible existence of a major silver-lead orebody of the Keno Hill type. Mining widths appear to be 5-10 feet and the grade to be 40-100 oz. Ag per ton, plus appreciable lead and zinc. The potential of this property is being enhanced with each drill intersection and expansion of the program is envisaged. Such underground expansion would consist of further drifting and raising at a cost of \$200,000.

*Closed
down
Feb 15 11*

It should be pointed out that United Keno Hill Mines Ltd., the largest silver producer in Canada, never had more than a year's reserves in sight yet they have continued to operate on a highly profitable basis for the past 20 years.

Generally, exploration in the Mayo area of the Yukon has been undertaken on the theory that this vast unexplored area surrounding the richest silver deposit in Canada is potentially excellent hunting ground if the geological factors are otherwise equal. Thus the concentration of exploration on vein and fault structures within the Keno Hill-type quartzites is calculated to shoot for the most favourable targets. Exploration is slow and costly because of the extensive and deep overburden, the existence of permafrost and the short working season, nonetheless, the value of another Keno Hill-type deposit is such that the payoff can be 100-fold. Thus far this program has found marginal silver deposits at Rex and Mt. Haldane. The potential of these properties has not yet been determined, but further exploration work would be expected to increase the ore reserves considerably.

It is evident that the Peso holdings and interests in the Mayo area will be able to support a common mill of at least 200 tons per day, and possibly 500 tons. The mill feed will be relatively high grade silver ore ranging from 20 to 100 oz. per ton. Approximate cost of such a mill would be \$400,000.

Silver Production

If the development in the Mount Nansen and Mayo districts is pursued by Peso Silver Mines as described above, and if the results are as expected, then the two mills would produce in the neighborhood of 7-10 million ounces of silver per year. This figure could greatly be increased by increased development in 1965 of course. A potential of 15 million ounces per year may be realized depending on results of development of all the properties. The ultimate potential of the districts, and thus the life of the mills, cannot yet be estimated but several years operation appear to be assured at least, on the basis of the very limited development to date.

The potential of the other holdings of Peso in the Mayo and Mount Nansen districts has not been discussed because exploration on them has been very preliminary, but certainly many deserve further work and the possibilities of developing ore on them can be considered as being good.



Douglas D. Campbell,
Ph.D., P. Eng.
Consultant

April 7, 1965

CUMULATIVE EXPLORATION AND DEVELOPMENT
EXPENDITURES TO MARCH 31, 1965 ON PESO PROPERTIES

| | |
|---|----------------------------|
| Peso No. 1, No. 2, and Rex | \$ 1,137,000 |
| Shanghai | 430,000 |
| Mount Nansen | 448,000 |
| Brown-McDade | 450,000 |
| Rio Plata | 500,000 |
| Duncan Ladue and various other properties | 625,000 |
| Total | <u><u>\$ 3,590,000</u></u> |