

MEMORANDUM

TO: John Brock

FROM: G.H. Rayner DATE: May 20, 1979.

SUBJECT: The LOU Property
Omineca Mining Division, N.T.S. 93L-13
An Evaluation of Available Data

INTRODUCTION

The LOU (Louise Lake) Property lies about 20 miles west of Smithers, B.C. It is accessible by a 4-wheel drive road built in 1969. The present condition of the road is not known.

The property has been tested by a soils geochem grid, I.P. surveys, limited bulldozer trenching and by diamond drill holes totalling 6632 feet.

SUMMARY AND CONCLUSIONS

The mineral deposit is related to a small feldspar porphyry intrusion cutting Hazelton and possibly Bowser age rocks. Economic mineralization is mainly tennantite and occurs in both the intrusive and the older rocks. A major shear appears to exercise some control. Pyrite is widespread.

The mineral system seems to be fairly well defined by work done to date. The size of the copper-bearing central portion would be about 500 feet by 1200 feet.

The soil geochemistry does not indicate any other comparable centers in the immediate area.

Trenching and drilling results showed sections with fairly uniform grades in the range of 0.25% Cu, 0.01 oz. Au, 0.1 oz. Ag and 0.01 Mo across intercepts of 300 to 400 feet. There appears to be potential for more of the same with depth.

Unfortunately, these grades do not represent ore at present prices and there is little evidence to suggest that better grade material could be found with more work.

The possibility of metallurgical problems in recovering values from the tennantite should also be borne in mind.

Low, but interesting precious metal values (\$3 - \$4 at May, 1979) were found in the surface trench sampling. The drill core was assayed only for Cu, Mo, and in some cases Ag. In view of the unusual mineralogy of the deposit all samples should have been run for gold and silver since the distribution of these metals may not parallel that of copper.

If the rejects from the core samples are available it would be useful to complete the assaying of mineralized intercepts for silver and gold.

Apart from this additional assaying no further suggestions for further work arise from the data.

GEOLOGICAL CONSIDERATIONS

Interest on the property is focused on a mineral center related to a feldspar porphyry intrusion which cuts pyroclastics and sediments of presumed Hazelton age. A zone of shearing may have been a local control.

The mineral center shows a concentric pattern of zoning in metal content and several alteration types including quartz-sericite, stockwork quartz and potassic alteration. The potash mineral was not stated.

Sufficient drilling has been carried out to define laterally the above pattern and to test the copper-bearing core to a depth of about 350 feet. Grades were not encouraging except for one 20-foot intercept in DDH5 which ran 1.99% Cu and 0.13% Mo.

The potential appears to be for additional tonnages of sub-ore material with depth.

GEOCHEMISTRY

A soil geochemistry grid of six lines was run over an area about 3 miles by 1.5 miles in size. This did not give good coverage particularly since the lines were sub-parallel to the general trend of mineralization. In spite of this, the known mineral center was strongly detected on two lines and weakly on a third. Since no other areas of strong interest showed up it seems reasonable to conclude that there are no other significant mineral centers within the area surveyed.

Soil geochemistry should give reasonably valid results in this area since overburden does not appear to be excessive and much of the cover consists of residual material.

INDUCED POLARIZATION SURVEYS

Extensive I.P. surveys have been run over the permissive areas of the property. This work has outlined a large anomalous area about 10,000 feet

long centered to the west of Louise Lake in the area of copper mineralization. Pyrite varied from 2% to 6% in the drilling in this area and is presumably responsible for this major anomaly.

Smaller anomalies were noted to the east of Louise Lake but these were not supported by significant geochemical response.

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