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1758 WESTERN PARKWAY
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B. C. - YUKON EXPLORATION LTD.
LIME CREEK MOLYBDENITE
PROGRESS REPORT

INTRODUCTION

Since my report of 8th February 1967 a systematic geochemical survey has been made for molybdenum and copper over the Lime Creek claims and a number of rock cuts have been blasted out.

I have been asked to review the data presented in the report on the geochemical survey by Mr. T. M. Smith B. Sc. of Whitehorse dated 2nd December 1968.

GEOCHEMICAL RESULTS

Several anomalies were found but zone A is by far the most important. It consists of a roughly circular area averaging 2000 feet across but with a central zone of low values that is 600 by 900 feet so that the anomalous values form a rough ring-shape with an area of 2.5 million square feet. As pointed out by Mr. Smith such occurrences are known elsewhere. A good example is the deposit of B. C. Molybdenum near Alice Arm, B. C. where the average outer diameter is also about 2000 feet and the actual economic mineralization has a ring-shape area of 1.6 million square feet.

At Lime Creek a copper anomaly roughly conforms with the molybdenum although the values suggest only a low content in the bedrock.

An unsigned map showing the rock outcrops accompanies the report on the geochemical survey but is not described. The legend shows six varieties of coast intrusives but the only one shown on the map is the light coloured biotite granite. Presumably no significant rock alteration was noted in the outcrops within the

anomalous area.

The actual amount of the molybdenum present in the soil anomaly is quite low compared with other areas and may represent too low a grade in the bedrock to be economic. However a diagrammatic map showing the location of 23 rock cuts and an accompanying set of assays shows that high grade areas are present. Thus trenching from north to south across the site of the highest soil sample of 98 ppm Mo is recorded as 25 feet of 1.14% MoS₂, 15 feet of 2.67% MoS₂, 20 feet of 0.94% MoS₂ and 5 feet of 2.67% MoS₂. I strongly suspect that these samples were taken along a vein that may only be a few inches wide.

At 1300 feet east of here near the boundary of the anomaly an E - W trench gave 15 feet of 0.28% MoS₂ plus 30 feet of 2.60% MoS₂ which again could represent only a narrow vein. At another 400 feet to the east trenching gave 10 feet of 0.84% MoS₂ plus 35 feet of 1.11% MoS₂ where the soil gave only 6 and 4 ppm.

The geological map shows that there could be as much again of the favourable granite on the west side of Lime Creek that has not been explored.

DISCUSSION

The geochemical survey has demonstrated that a much larger area of molybdenum mineralization is present than was known previously. There is no indication on the maps but apparently the original showings are along the north edge of the anomaly.

Cuts should now be made across many of the rock outcrops within the anomalous zone so that a competent geologist can map the main directions of mineralization and set out a diamond drilling programme accordingly. Thus if the main direction is easterly and the dip steeply to the south then a series of holes at 400 feet apart and at -45° to the north could be drilled with BQ wire line equipment. I would suggest that five such holes would provide a good test of the potential of the anomaly.

RECOMMENDATIONS

1. Extend the geochemical survey to cover the west half of the granite stock.
This could amount to about 7 miles of lines.
2. Blast cuts into fresh rock in at least ten areas around the ring-shaped zone A.
3. Map the geology of Zone A in detail including the directions of mineralization.
4. Drill five holes with BQ wire line equipment each 400 feet long to explore the mineralization on a 400 ft grid.

COSTS

To carry out the above recommendations the sum of \$50,000 should be available as follows :

Geochemical surveying	1000
Rock cuts	2000
Diamond drilling 2000 feet BQ	40000
Overhead	7000
	\$50,000

A. C. Skerl