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F.L. CROTEAU LTD.
GEOLOGICAL ENGINEERING

GEOPHYSICAL AND GEOCHEMICAL SURVEY
"ROY" CLAIM GROUP
KELOWNA AREA, B.C.

by

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Vancouver, B.C.
November 26, 1970

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INTRODUCTION

A magnetometer survey was conducted over the "Roy" claim group located in the Kelowna Area, British Columbia during portions of August and September 1970. The survey was carried out by Mr. W.A. McClelland of Merritt, B.C. and was later examined by Mr. Sherwin F. Kelly, P.Eng., a geophysicist, working out of Merritt.

During the course of the survey and later the writer had occasion to examine the field work and to consult on necessary detail work to further define anomalous conditions that were found.

Selective geochemical sampling was done to see what reaction might be obtained in various portions of the claims and more specifically in the anomalous areas. Only those samples associated with the anomalous areas were assayed while the balance were retained for further study if considered advisable.

RESULTS

Three anomalous areas were established by the geophysical survey. These areas were not markedly above the average background reading that appeared to be common to the area but were considered significant enough to warrant further investigation. Soil sampling in the anomalous areas also showed a considerably higher copper count than average background.

The anomalies were essentially located in claims Roy 86, 89, 91, 93 and 95 and comprised 3 areas contoured above the 600 gamma level. The general impression had to be found that a northwesterly trend occurs to the conductor materials and this was borne out by the trend established by the anomalous geo-chemical assays.

At a later date a diamond drill hole was located and drilled on the centre anomaly to a depth of 528 feet. Heavy magnetite mineralization was encountered in an intermediate composition altered lava from 370 feet to the bottom of the hole, where mineral was still quite prominent. The assays taken revealed the deposit to be of potential economic interest as an iron deposit. Titanium was also present in the assays.

Petrographic and metallurgical studies are being carried out at present and further diamond drilling is contemplated for the 1971 field season.

A gravity survey has been conducted over the anomalous area by Kenting Explorations Ltd. and a report on this survey is being awaited.

CONCLUSIONS

1. The anomalous areas are the result of deep seated magnetite occurrences and for this reason readings taken cannot be truly used to outline the full extent of the deposit.

Gravity surveys may help in this regard.

2. Metallurgical work is necessary to define the extent to which titanium may be an interfering element in the iron concentration.
3. The magnetite occurs as a prolific, finely disseminated mineral in a very uniform re-crystallized, dense andesite.
4. The copper values returned by the geo-chemical survey, while generally following the anomalous trend of the iron could not be related to results obtained in the diamond drilling.

Resepctfully submitted,



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Vancouver, B.C.
November 22, 1970