MOREAU, WOODARD & COMPANY LTD. MINERAL EXPLORATION SERVICES

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ABEM MINIGUN ELECTROMAGNETIC SURVEY

for

ROYAL CANADIAN VENTURES LTD.

on the

93 N-1 CHUCHI GROUP

PRINCE GEORGE AREA, B. C.

(To Accompany Map #67-103)

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INTRODUCTION

An electromagnetic survey was carried out for Royal Canadian Ventures Ltd., in October 1967, on a portion of the 93N-1 Chuchi Group. The property is located 110 miles northwest of Prince George, B.C., at 55° 14' N and 124° 28' W. It is accessible from Chuchi Lake which is accessible by road from Prince George.

The purpose of this survey was to locate sub-surface conductors which might prove to be sulphide deposits of economic importance. No conductors were located. The accompanying map shows the area surveyed and the results obtained.

METHOD AND INTERPRETATION OF RESULTS

The ABEM Minigun was used for this survey. It employs a receiving coil and a transmitting coil, both wound on staffs with ferrite cores. The receiving coil is connected to a compensator which measures the in-phase and out-of-phase components of the vertical secondary field. The readings are expressed in percentage change from a normal field. The oscillator is built into the transmitting coil and operates at a frequency of 3520 c.p.s.

Readings were taken at 100 foot intervals along previously cut and chained lines 400 feet apart. A Soil interval of 200 feet was used.

A typical curve over a steeply dipping conductor shows a rise (positive) when approaching the conductor, followed by a low (negative - greater than 5%) when the conductor is between the coils. A second rise occurs when the coils are beyond the conductor. Both the in-phase and the out-ofphase components usually

produce the same general shape of curve. The ratio of the two components indicates the relative conductivity of the conductor.

RESULTS

The area surveyed was essentially geo-electrically neutral. The minor out-of-phase negative readings were caused by slight differences in conductivity of the overburden. The anomalous positive in-phase readings were caused by readings taken at coil intervals less than 200 feet, necessitated by the topography.

No recommendations for further work on the property can be made from the results of this survey.

Respectfully submitted,

MOREAU, WOODARD & CO. LTD.

J. A. Woodard, P. Eng., ... Consulting Geophysicist.

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ASSESSMENT WORK DETAILS

Field Work: October 23, 1967 to October 27, 1967.

J.	A. Proudfoot, 144 Sunnyslope, Pickering, Ontario	5	days
L.	Boule, 530 Mackenzie Ave., North Kamloops, B. C.	5	days

Draughtin, and Consulting - November 8th, 1967.