

ON THE CO 1 - 22 CLAIMS

Located on Lawless Creek 49° , 120° N.E.



Similkameen M.D.

by

J.H. Montgomery, Ph.D., P. Eng.

Work done between June 30, 1969 and August 30, 1969

July 15, 1970.

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INTRODUCTION

The following report is a record of the work done on the CO claims during the months of July and August 1969.

LOCATION AND ACCESS

The property is located on both sides of Lawless Creek at Long. 120° 53' and Lat. 49° 37'. Access is excellent from Tulameen (4 mile drive).



STATEMENT OF COST

Name	No. of Da	<u>ys</u>			
Victor Mukans	40	6/30 - 8/1 8/20 - 8/30	\$25/day	Party Chief Mag. Operator	\$ 1,000
Gregory Bowes	40	6/30 - 8/1, 8/20 - 8/30	20/day	Geochem Sampler	800
Curt Hallwood	40	6/30 - 8/1, 8/20 - 8/30	20/day	Geochem	800
J. H. Montgomery	4	7/4,5; 8/2,3	50/day	Geological Engineer	200

Food 120 man days @ \$7.00 840 Geochemical Analyses 500 soil samples @ \$2.00 1,000 Biogeochemical Analyses 500 tree samples @ \$4.00 2,000 Declared before me at the \$ 6,640 of Arreace, U , in the atzonen Province of Brillsh Columbia, this day of detoter 70 , A.D. A Commission o'umbia or A Noiges - Comment uiuia, 77

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PROPERTY AND OWNERSHIP

Claim Name	Record No.	Record Date
CO 1 - 8	25153 - 60	June 30, 1969
CO 9 - 22	25379 - 92	July 18, 1970

All claims are owned by J. H. Montgomery

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QUALIFICATIONS OF OPERATORS

Party Chief Victor Mukans has over 15 years experience in various aspects of mining exploration. He has worked for the author since 1967 and is thoroughly experienced in conducting magnetometer and geochemical surveys.

Gregory Bowes and Curt Hallwood, both students, were trained to take soil and tree samples prior to their employment on the CO claims and worked under the supervision of Mukans or the author.

MAGNETIC SURVEY

Instrument: Jalander Fluxgate.

Field Procedure:

Readings were taken on all grid lines, at a spacing of 200 feet. Traverses were closed each day to allow for adjustment of diurnal variation.

Interpretation of Results:

Four distinct anomalies are indicated. (See Figure 2.) <u>Anomaly A</u> at 40 N/52-62 W. It has an amplitude of about 2000 gammas and an areal extent of about 1000 feet by 1000 feet. No outcrop was present in Anomaly A but the amplitude is similar to that observed over rock type changes in the general area.

<u>Anomaly B</u> is located at 30 N/30-36 W. It has an amplitude of about 4500 gammas. It is believed to be caused by magnetite bearing gneiss.

Anomaly C, which is located at 50 N/16-20 W and Anomaly D, 90 N/70-74 W are similar in nature to Anomaly B.

Anomaly E, located at 10 N/84 E was checked in more detail (see figure 2) but no significant patterns emerged.

In general, none of the anomalies is believed to be associated with economic mineralization.

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<u>Copper</u>: Most values fall in the regional background range, i.e., less than 100 ppm. A few scattered samples show a little more than 100 ppm, but these erratic results are considered insignificant.

Zinc: All values fall in the extremely low background range (mostly less than 100 ppm).

Molybdenum: The majority of the values are less than 8 ppm. Some erratic samples, i.e., at 30 N, 44 W (66 ppm); 20 N, 60 W (45 ppm) and 30 N, 104 W (16 ppm) are believed to be caused by glacial float.

No anomalies are indicated.

BIOGEOCHEMICAL SURVEY

a) Field Procedure

Second year growth Douglas Fir was collected on all lines every 400 feet where possible. The sample was put in a brown paper bag and notes were kept regarding location and size of tree.

b) Analytical Procedures

The samples are air dried for about 2 weeks and subsequently ashed in an oven at a low temperature to prevent any metal loss through evaporation. After ashing, analysis proceeds as in soil samples.

Biogeochemical Survey (cont'd.)

c) Interpretation of Results

<u>Copper:</u> Most values fall in normal background. A slightly higher (330 ppm) sample at 10 N, 60 E conforms to a similar erratic result in the soil at the same station.

Zinc: Fluctuations in zinc content are normal, i.e., between 500 - 3000 ppm.

Molybdenum: Background is extremely low, i.e., not detected in most samples. Some higher results in the 3 - 6 ppm range occur at 30 N, 60 E; 40 N, 52 E; 50 N, 42 E; 60 N, 22 W. No correlation exists in the soil at those stations.

No anomalies are indicated.

GEOLOGY

The area is underlain mainly by volcanic and metamorphic rocks of the Nicola Group. These are andesites, basalt, schist and gneiss. On the eastern part of the map area, a large number of dykes and other small bodies of pink granite and rhyolite have intruded the Nicola rocks.

A little copper mineralization was found at 30 N, 52 E. Here chalcopyrite occurs in small quartz stringers in greenstone. Similar float was also found at 10 N, 60 W.

CONCLUSIONS AND RECOMMENDATIONS

The magnetic survey produced four anomalies, believed to be caused by changes in rock type. The geochemical and biogeochemical surveys did not indicate any anomalies, even though some copper mineralization was found on the ground in two locations.

No further work recommended.

espectfully submitted, MONTGOMER ou on

J.H. Montgomery, P. Eng.

July 15, 1970.



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2160 SCALE IN FEET

July 15, 1970 FIG: 4 V Mukans

