

4419

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

NTS 92 H-9
120° 50° SW

MAGNETOMETER SURVEY

D.C. PROPERTY

PRINCETON AREA

SIMILKAMEEN M.D., B.C.

SUPERVISED BY J.M. HAMILTON P. ENG.

92 H / 9W

Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 4419 MAP _____

MAY 31, 1973

R.U. Bruaset

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Statement of Qualifications	

(1)

SUMMARY

Ground magnetic data were acquired on about 10 miles of traverse on the D.C. Property in early May. These data are relatively featureless in the north-west portion of the property, but show several responses in the 500 to 1000 gamma amplitude range in the southeast portion. It could be that sedimentary rocks predominate in the magnetically undisturbed portion of the survey area, while more magnetic rocks, such as volcanics, underlie the magnetic responses.

INTRODUCTION

The D.C. Property, consisting of 13 mineral claims, is located in Similkameen Mining Division. Access is by the Jura road from Princeton a distance of about 9 miles. The property was acquired by Cominco in 1969, by staking. Other work to date on the property by Cominco consists of soil sampling and geological mapping.

The main objective of the ground magnetic survey on the property was to provide data of use in inferring regional geological features. This report presents these data.

GEOLOGY

The D.C. Property is situated in the southern part of the "porphyry copper belt" of British Columbia. This part of the belt is underlain by late Upper Triassic volcanic and sedimentary rocks of the Nicola Group intruded by complex igneous bodies ranging in age from Late Upper Triassic to Jurassic or later. Regionally, the Nicola group consists of varicoloured lavas, breccias, argillite, tuffs, limestone, chlorite and sericite schist.

Basic to intermediate flows and pyroclastic rocks together with minor interbedded impure limestone comprise the Nicola assemblage outcropping on the D.C. claims. In the western part of the property, Miocene or earlier sedimentary rocks of the Princeton Group overlie the Upper Triassic Nicola Group.

Plutonic rocks of the Osprey Batholith outcrop along the east side of Hayes Creek just east of the D.C. Property.

Traces of copper mineralization have been noted along narrow shears and in fractures developed in the Nicola rocks on the property. Epidote bearing veinlets are commonly developed in the Nicola here.

MAGNETOMETER SURVEY

(a) Method:

Field work was performed by Ron Sheldrake of Scintrex Ltd., Vancouver, in association with the writer, between May 2 and May 11, 1973. Field procedure consisted of establishing base stations at 400 foot intervals on a chain-and-compass baseline, and subsequently returning to them at periodic intervals to monitor the effects of instrument drift and diurnal variation. Traverse lines were surveyed with a line interval of 400 feet and a reading interval of 200 feet, using a sharp MF-1 fluxgate magnetometer. This instrument measures variations in the vertical component of the earth's magnetic field, with a maximum sensitivity of 20 gammas per scale division and a maximum readability of 5 gammas.

(b) Data Presentation:

The following plates are appended to the report:

Plate 1, Magnetometer Plan, Scale 1" = 400' and location map.

...2...

(2)

(Magnetometer Survey con't)

(c) Results:

Magnetic data appear on Plate 2. The surveyed area is typified by two relatively distinct and separate types of magnetic responses. In the northwestern portion of the survey, the (arbitrary) magnetic datum is about 450 gammas, and there is little magnetic relief. This area could reasonably be assumed to be underlain by sediments. In the southeastern portion of the survey, the magnetic datum is a few hundred gammas higher, and several local anomalies of several hundred gammas amplitude are also present. This portion of the surveyed area is obviously underlain by more magnetic rocks, such as perhaps volcanics. The transition from the area of small magnetic response to the area of noticeable magnetic response is located about at a fairly straight line joining 15W on Line 16N with the intersection of Line 72N and Baseline No. 1.

Submitted by: R. Bruaset
Ragnar U. Bruaset
Geologist, Western District

Endorsed by: J. M. Hamilton
J. M. Hamilton, P. Eng.
Geophysicist, Western District

Endorsed for
release by: W. T. Irvine
W. T. Irvine, P. Eng.
Manager, Western District

Distribution:

Exploration Admin., Vancouver (1)
Mining Recorder (2)
Western District (1)

RUB/bb

DOMINION OF CANADA:
PROVINCE OF BRITISH COLUMBIA.

In the Matter of

To Wit:

I, Ragnar U. Bruaset

of The city of Vancouver

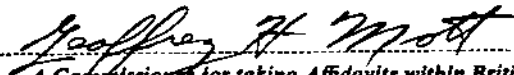
in the Province of British Columbia, do solemnly declare that

- (1) I did personally prepare the accompanying report and did supervise the geophysical survey carried out on the D.C. claim group situated in the Similkameen Mining Division B.C.
- (2) Two copies of the said report are being filed with the Mining Recorder at Princeton by registered mail.
- (3) Attached here to and marked with the letter "A" upon which I have signed my name at the time of declaring hereof, is a statement of expenditure incurred in connection with the geochemical survey of the said claims.

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the "Canada Evidence Act."

Declared before me at the city
of Vancouver, in the
Province of British Columbia, this 4th
day of June, 1973, A.D.


R.U. Bruaset


A Commissioner for taking Affidavits within British Columbia or
A Notary Public in and for the Province of British Columbia.
GEOFFREY H. MOTT
Barrister & Solicitor

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

June 1, 1973

STATEMENT OF QUALIFICATIONS

R.U. Bruaset was responsible for conducting the geophysical survey herein described. Mr. Bruaset received his B. Sc. from the University of British Columbia in 1967. Except for an absence of seven months from October 1967 to May 1968, he has been engaged full time by Cominco Ltd. on various projects in Greenland, Northwest Territories and British Columbia. Since November 1968 Mr. Bruaset has been engaged in all stages of porphyry copper exploration in southern and north central B.C. This work range from reconnaissance surveys to preproduction development.

Signed by: _____

D.W. Heddle
D.W. Heddle P. Eng.
Chief Geologist,
Western District, Exploration

DWH/bb

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT
June 1, 1973

GEOPHYSICAL SURVEY COSTS, D.C. PROPERTY

SIMILKAMEEN M.D., B.C. N.T.S. 92 H-9, 50° 120° SW.

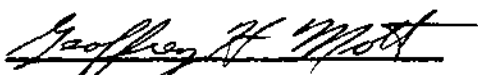
1. Ron Sheldrake, Scintrex Ltd., 5 days at \$50 per day	\$250
2. R.U. Bruaset, Cominco Ltd., 6 days at \$51 per day	\$306
3. J.P. Snyder, Drafting, Cominco Ltd., 4 days at \$30 per day	\$120
4. Instrument Rental, Sharpe MF-1 Magnetometer, Minimum charge	\$140
5. Mobilization and Demobilization	\$142
6. Living Expenses, ten man days at \$14.50 per day	\$145
	<u>\$1103</u>

The above work was performed during the period May 2 to May 20, 1973

Signed


Ragnar U. Bruaset

This is Exhibit "A" to the Statutory Declaration of Ragnar U. Bruaset
declared before me this day of June, 1973


A Commission for taking Affidavits
within British Columbia

GEOFFREY H. MOTT

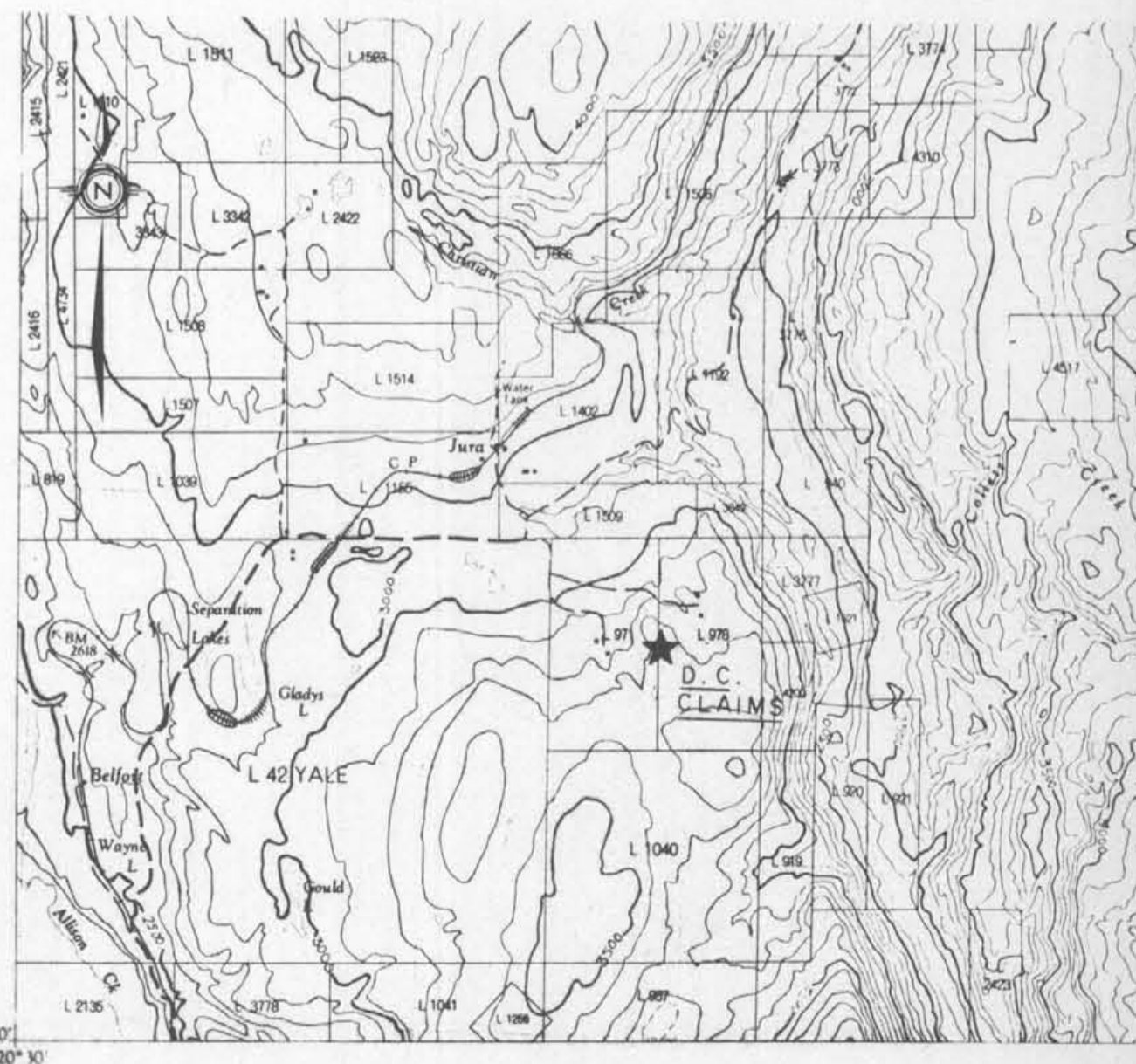
Barrister & Solicitor



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO 4419 MAP #1



HAYES
CREEK
OSPREY GRANODIORITE
NICOLA VOLCANICS AND SEDIMENTS



LOCATION MAP
SCALE 1:50,000
N.T.S. 92 H 9 W

LEGEND
CONTOUR INTERVALS 100Y
INSTRUMENT : SHARPE MF-1
MAX. SENSITIVITY 20Y/SCALE DIVISION

4419 M-1

Rubment

TO ACCOMPANY A REPORT BY R.U. BRUASET

Drawn by: RUB	Traced by: J.P.S.
Revised by: _____	Revised by: _____
_____	_____
_____	_____

MAGNETOMETER SURVEY
D. C. PROPERTY
SIMILKAMEEN MINING DIVISION NTS 92 H 9
Scale: 1:400 Date: MAY, 1973 Plate: 1