# 2631

COMINCO LTD.

GEOCHEMICAL SURVEY ON THE NORTH ED GROUP (MINERAL CLAIMS ED 13-16, 25-28, 42-48, 55-78 and 80) HIGHLAND VALLEY AREA KAMLOOPS MINING DISTRICT BRITISH COLUMBIA LAT. 50° 35' N. LONG.121° 08'W 92 I-11E

REPORT BY

S.J. PEDLEY, P. ENG.

ENDORSED BY

W.T. IRVINE, P. ENG.

Department of Mines and Petroleum Resources ASCECSMEET REPORT NO. 2631 MAP

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EXPLORATION \*

# WESTERN DISTRICT

# GEOCHEMICAL SURVEY ON THE NORTH ED GROUP (MINERAL CLAIMS ED 13-16, 25-28, 42-48, 55-78 and 80) HIGHLAND VALLEY AREA KAMLOOPS MINING DISTRICT BRITISH COLUMBIA LAT. 50° 35' N. LONG.121° 08'W 92 I-11E

Work was done

May 28 to September 15, 1970.

September 15, 1970

S. J. Pedley, P.Eng.

## EXPLORATION

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September 15, 1970 Vancouver, B.C.

#### EXPLORATION

#### WESTERN DISTRICT

GEOCHEMICAL SURVEY ON THE NORTH ED GROUP (MINERAL CLAIMS ED 13-16, 25-28, 42-48, 55-78 and 81) HIGHLAND VALLEY AREA KAMLOOPS MINING DISTRICT BRITISH COLUMBIA LAT. 50° 35' N. LONG.121° 08' W 92 I-11 E

# SUMMARY

The claim group is covered by portions of three independent grid systems. Soil samples were collected along these lines and where coverage was not adequate along claim location lines and pace and compass lines. Eight hundred and thirty samples were collected and analysed for copper. Background values were taken as being 15 ppm copper, the arithmetic mean of the samples, and the standard deviation was calculated as 15 ppm. Threshold was taken as mean plus twice the standard deviation or 45 ppm. The 25 samples that were greater than threshold had a random erratic distribution. In all there was insufficient contrast and grouping of high values to warrant contouring the results.

#### INTRODUCTION

The largest part of the North Ed Group lies west of Woods Creek and mile 1.5 to mile 3 of the Woods Creek Forest access road. The mileage is measured from the Highland Valley highway five miles west of Big Divide Lake.

## GEOLOGY

The claim group is entirely within the Guichon Batholith and south of the Tertiary volcanic rocks that trend eastward from Glossy Mountain. Rock exposures are scarce and are limited to low relief outcrops on the northernmost claims and along parts of Woods Creek. Overburden is shallow to the north and about 40' in the southeast corner as measured in a percussion drill hole drilled south of the group. Creek cuts further west suggest the cover could be appreciably deeper.

Meta volcanics, probably Nicola group and representing a pendant, outcrop on Ed 80. To the south these grade into a dark, siliceous, highly contaminated variation of the Hybrid phase of the Batholith. In the same area quartz porphyry outcrops and probably represents dykes that cut this section of the Hybrid although no contact relationships could be seen. On Ed 70 and 69 more typical Hybrid outcrops and this is intruded by pegmatites. Guichon variety granodiorite outcrops along Woods Creek. These are hydrothermally altered and heavily sheared with the principal faulting paralleling the creek. The faults are in part invaded by fine grained dykes and have influenced the location of the Woods Creek drainage. Xenoliths are common in the Guichon phase. A contact between the Guichon phase and the Hybrid phase lies somewhere west of Woods Creek and this is thought to trend northeasterly paralleling the creek.

#### GEOCHEMICAL SURVEY

The sampling was done by the writer with the help of one assistant. Holes were dug with a grub hoe and samples were taken from the B horizon which was developed six to 12 inches below the surface. Samples were placed in water resistant Kraft paper bags which were marked with the station number. Notes were taken as to soil peculiarities and drainage. A total of 830 samples were taken, of these about 750 were along previously cut lines from portions of three geophysical grids that overlay parts of the property. A bulk of these required rechaining. Where the grids did not give adequate coverage pace and compass lines were run and on these sample locations were marked with flagging. Samples were taken at 100' intervals on lines that were generally 600 to 800' apart.

All samples were dried and sieved and ions were taken into solution with a bot nitric acid attack. Samples were then analysed for copper using a Unicam SP90 atomic absorption unit. The results were then analysed. The arithmatic mean of 15 ppm. was taken as the background value and the standard deviation was calculated using the formula =

#### This equalled 15 ppm.

Threshold was taken as the mean plus twice the standard deviation and equalled 45 ppm.

## DATA PRESENTATION

Values of copper in parts per million are plotted at the sample location points as shown on the attached plan No.2. Only 29 samples exceeded the threshold value and these appear in random distribution over the survey area. There is insufficient contrast and grouping of values to warrant contouring the values.

# ATTACHMENTS

SJP:ma

Plan 1 - Location map
Plan 2 - Sample data (1" = 400')
Exhibit "A"
Statutory Declaration

Report by: \_ Pedley, P.Eng.

 $\frac{(\leq x)^2}{(N)}$ 

 $\frac{(\underline{x}\underline{x}2)}{(N)}$  -

Distribution: Expl'n. Administration (1) Mining Recorder (2)W11. (1) Endorsed by: o West. Dist. W. T. Irvine, P. Eng. (1)SJP Manager, Western District

# EXHIBIT "A"

# COST OF GEOCHEMICAL PROGRAM NORTH ED GROUP KAMLOOPS MINING DIVISION

# Personnel

Field - S.J. Pedley - May 28,29, July 23-26, Aug. 1-7, 1970.	31,	
Office- Report preparation Sept. 9,10	16 days @ \$85	\$ 1,360
Field - L.J. Pedley - July 23-26,31, Aug. 1-7, 1970.	12 days @ \$21	252
Drafting - T. Bjorgan, Drafting	2 days @ \$24	48
Assaying - 830 samples @ \$1.35		1,120
Vehicle rental		250
Lodgings in field - 26 man days @ \$15.00		390
	TOTAL:	\$ 3,420

Sampling and sample analyses were done between May 28 and September 15, 1970.

Signed: Éng. Pedley

This Exhibit "A" to the Statutory Declaration of S.J. Pedley declared before me the **30 \*\*** day of September, 1970, A.D.

for for taking Affidavits for British Columbia A Commiss:

DOMINION OF CANADA: PROVINCE OF BRITISH COLUMBIA. To WIT:

STATUTORY DECLARATION RELATING TO EXPENDITURES ON A GEOCHEMICAL SURVEY ON THE NORTH ED GROUP, KAMLOOPS MINING DIVISION

I, S. J. PEDLEY

of City of Vancouver

in the Province of British Columbia, do solemnly declare that

1. Copies of a report regarding a geochemical survey on certain mineral claims situated in the Kamloops Mining Division are being filed with the Mining Recorder in Vancouver.

2. Attached hereto, and marked with the letter "A" upon which I have signed my name at the time of declaring hereof, is a Statement of Expenditures incurred in connection with the geochemical survey of the said claims showing in addition the period during which those making the said survey performed their work.

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 , in the Vancouver J. Tedley of Province of British Columbia, this day of September

nissioner for taking Affidavits within British Columbia or





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