

COMINCO LTD.

EXPLORATION
NTS: 93N/2

WESTERN DISTRICT

ASSESSMENT REPORT

GEOCHEMICAL SURVEY

ON THE

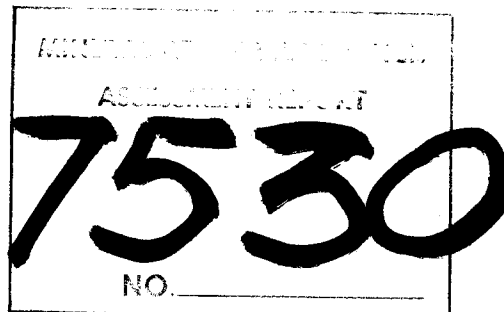
JEAN PROPERTY

OMINECA MINING DISTRICT, B.C.

Claims : JEAN 2, 4, 6, 23-28 and 45 Fraction

Latitude : 55°04'N Longitude: 124°45'W

Period of Work: July 27 to August 3, 1979



September 1979

D. Brabec
Geochemist

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Statement of Expenditures (Breakdown of costs)

Statement of Qualifications

Table 1 - Data Distribution Parameters

Plate 1 - Location of JEAN Property and the
Survey Area

Plate 2 - Cu, Mo and W in Soil

Plate 3 - Pb, Zn and Mn in Soil

SUMMARY

The geochemical soil survey described in this report was conducted on the eastern part of the Jean property situated 88 km NNW of Fort St. James, B.C. The samples were taken from the "B" soil horizon at 60m (200 ft) intervals along lines spaced at 240m (800 ft). A total of 121 samples were analyzed for Cu, Pb, Zn, Mn, Mo and W. The highest values for Cu and Mo outline the extension of an anomalous zone established by previous surveys on the property.

INTRODUCTION

The Jean property is in the Omineca Mining Division some 88 air km NNW of Fort St. James, B.C. It is connected by a dirt road to Chuchi Lake which is accessible by float plane. The location of the claims is shown on Plate 1.

The property covers a broad easterly valley at an elevation of 1000-1200m above sea level. The gentle slopes of this valley, covered with dense spruce and pine forest, have a relatively poor bedrock exposure.

The purpose of the present geochemical survey was to outline the easterly extent of geochemical anomalies found by the previous work on the property. The relative position of geochemical lines and claims is shown on Plates 2 and 3.

GEOLOGY

The survey area is close to the contact of a differentiated granitic stock intruded into the Upper Triassic Takla Group (andesite, basalt and pyroclastics).

The presence of Cu-Mo mineralization on the western part of the property has been established by the previous work, including percussion and diamond drilling.

GEOCHEMICAL SURVEY

A. Field and Analytical Techniques

The field work consisted of soil sampling on the Jean

claims

...2/

claims No. 2, 4, 6, 23, 24, 25, 26, 27, 28 and 45 (fraction). The samples were taken from the B soil horizon found at a depth of 20-30 cm. The interval between stations was 60m along 5 northeasterly lines. The latter are 240m apart of the NE end of the grid.

The samples were dried and sieved to minus 80 mesh and the fines retained for analysis. Copper, lead, zinc and manganese contents were determined by atomic absorption spectrophotometry of solutions obtained by 20% nitric acid digestion of this material. Molybdenum and tungsten were released from samples by nitric-perchloric acid digestion and pyrosulphate fusion, respectively. The contents of both elements were estimated colorimetrically with dithiol.

B. Results

The concentration ranges, geometric means and anomaly thresholds for the elements analyzed are listed in Table 1. The thresholds were estimated on the basis of probability plots and histograms.

The areal distribution of Cu values (Plate 1) indicates a discontinuous anomalous zone over the west central portion of the area surveyed. Along the line 8W this apparently southeasterly zone has a maximum continuous width of 250m. This part of the anomaly is flanked by additional anomalous sites which, if the "background islands" are ignored, increase the overall width of the zone to over 500m.

Most Mo-anomalous sites occur within the Cu anomaly, but it appears that the Mo anomaly extends a little farther southeast. The W highs are mostly isolated and relatively few in number.

The high values for Pb, Zn and Mn tend to occur within the Cu-Mo-anomalous zone, but they do not seem to show any definite pattern (Plate 2).

CONCLUSIONS

...3/

CONCLUSIONS

The Cu-Mo anomaly in the survey area represents an extension of a known anomalous zone on the western part of the property. The present work suggests that the main part of this zone terminates, at least for Cu, between lines 0 and 8W.

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Report by:

D. Brabec

D. BRABEC
Geochemist

G. Harden

G. HARDEN
Manager, Exploration
Western District

18 September 1979
/tlp

Distribution:

Mining Recorder (2)
Western District (1)
D. Brabec (1)
File

IN THE MATTER OF THE

B.C. MINERAL ACT

AND

IN THE MATTER OF A GEOCHEMICAL PROGRAM CARRIED
OUT ON THE JEAN 2, 4, 6, 23-28 AND 45 FRACTION MINERAL CLAIMS
LOCATED IN THE OMINECA MINING DIVISION
OF THE PROVINCE OF BRITISH COLUMBIA
More particularly N.T.S. 93N/2

STATEMENT OF EXPENDITURES

I, Dragan Brabec, of the City of Vancouver, in the Province of British Columbia, make oath and say:

1. That I am employed as a Geochemist by COMINCO LTD., and as such have a personal knowledge to the facts to which I hereinafter depose;
2. That annexed hereto and marked as "Exhibit A" to this statement is a true copy of expenditures of a geochemical program carried out on the Jean 2, 4, 5, 23-28 and 45 Fraction Mineral Claims;
3. That the said expenditures were incurred between the 27th day of July 1979 and the 3rd day of September 1979 for the purpose of mineral exploration on the above noted claims.



DRAGAN BRABEC
Geochemist

/tlp
18/09/79

EXHIBIT "A"

STATEMENT OF EXPENDITURES FOR A GEOCHEMICAL SURVEY
ON THE JEAN MINERAL CLAIMS, 1979

Chemical analyses			\$ 990.00
Transportation - Helicopter	\$ 993.00		
Truck	\$ 840.00	Total	1,833.00
Domicile			400.00
Salaries -	R.U. Bruaset		1,350.00
	R.A. Ryziuk		483.00
	D. O'Rourke		420.00
Communication -	Radio rental and overhead		
	\$568.88 + \$8.40 = \$ 577.28		
	Radio License, Service Charges		
	\$ 158.24	Total	735.52
Drafting			100.00
Reporting			525.00
			<hr/>
	TOTAL EXPENDITURES		\$6,836.52
			<hr/>

RUB:hmr
16 January 1980

RUB



REGISTERED MAIL

Exploration

Mr. Talis E. Kalnins, P. Eng
Mineral Resources Branch
Parliament Buildings
Victoria, BC
V8V 1X4

17 January 1980

Dear Mr. Kalnins:

Re: COST STATEMENT - ASSESSMENT WORK REPORT FOR
JEAN GROUP - OMINECA MINING DIVISION

Further to our telephone conversations regarding the Statement of Expenditures for the geochemical survey conducted on the Jean Group during 27 July - 3 August 1979, we now enclose the requested information (in duplicate) for your approval. Please note that unfortunately we were unable to reply to your request sooner since the person who supervised this program has only recently returned from his vacation. We regret this delay and would like to apologize for any inconvenience we may have caused.

The more detailed breakdown of costs reads as follows -

Transportation	TOTAL	\$ 1,833.00
Helicopter - 2 items \$532, \$461	=	\$ 993.00
Surface - mobilization & demobilization of crews via truck .		
For Crew #1 rental \$244.17, milage \$137.60, Fuel \$112.35	=	\$ 494.12
For Crew #2 rental \$162.16, milage \$ 93.80, Fuel \$ 89.92	=	\$ 345.88
	TOTAL	\$ 1,833.00
Communications	TOTAL	\$ 735.52
Camp radio rental -		
4 month minimum charge \$568.88,		
Overhead \$8.40	=	\$ 577.28
Service charges on 2 portable radios and license	=	\$ 158.24
		\$ 735.52

.../2

2/17 January 1980

In the matter of transportation, the total includes the cost of mobilization and demobilization of crews from two different projects in the southern part of B.C. Even so the vehicles were not in continuous use during the entire duration of our survey, the fact still remaining that we had to pay rental on them for that full time period. In addition, I would like to point out it was not practical in this case to use only one vehicle because of the difference of embarkation points for the crew members. (Enclosed please find copies of two invoices for helicopter charges.)

Communication includes the cost of leasing of camp radio, licence fees, overhead, toll charges and maintenance. Unfortunately companies leasing radios for exploration work do so on a seasonal basis only and we therefore had to pay for a longer time period than we had these radios in use. In this particular case we had ordered the camp radio well in advance so it would be available whenever a suitable field crew became free to conduct the geochemical survey. The availability of a camp radio actually saved us, in this instance, several man days of salaries since we were able to reschedule the pick up date for two days earlier than originally planned. (We attach one copy of an invoice showing radio charges.)

We feel these costs are legitimate charges against the project in question as they were incurred directly as a result of the project. We trust these comments answer your questions fully. If not, please do not hesitate to contact us.

Yours very truly,



S.S. Selke
Senior Technician
Western District

SSS/pcl

Encls.

17-49

MOUNTAIN HELICOPTERS INC.

CHARTER AND CONTRACT TICKET

Cominco				Date	July 28		
Pilot Luck				Base	Cash	Cheque	Charge
A/C Type 206				CF NME	Area		

From Ft. St James To (1) Jean Marieck
 To (2) Old Camp SnaGea To (3) To New Camp
 To (4) 2 Trips To (5) Ft. St. James
 To (6) To (7)
 To (8) To (9)
 To (10) To (11)

Charter Rate	1.5	Hours at S	330.00	\$	495.00
Contract Rate		Hours at S			
Fuel Charge	35 gal @ 66.50 COMINCO LTD. fuel				37.00
Pilot Expenses	AUG 21 1979 RUB				
Other					

I personally guarantee payment of this charter.
 Authorized by: _____ CHEQUE NO. 53200
 TOTAL CHGE. 532.00

This ticket is expressly subject to the conditions printed on the reverse side of ticket and which are hereby accepted: (Passengers Signature)
 1. Ragnar U. Buaset 01-110-932-WB2A
 2. _____
 3. _____
 4. _____
 5. _____
 6. _____
 8. _____
 9. _____
 10. _____
 11. _____
 12. _____

MAIN BASE
 P.O. Box 368
 Prince George, B.C.
 Phone 963-9622
 Telex 047-9027
 2 BASE
 P.O. Box 280
 Fort St. James, B.C.
 Phone 996-7208

No. of Departures	No. of Passengers	No. of hours flown	Base of designated Pt.
		1.5	
	Lbs. cargo	Miles flown	Class of flying

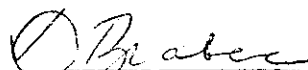
Service Charge of 1% per Month on Overdue Accounts
 LAST AMOUNT ABOVE

STATEMENT OF QUALIFICATIONS

I, Dragan Brabec, of the City of Vancouver, in the Province of British Columbia, hereby certify:

1. That I am a geochemist residing at 923 Clements Ave., North Vancouver, British Columbia with business address at 700-409 Granville Street, Vancouver, British Columbia.
2. That I graduated with B.Sc. equivalent degree in geology from the University of Belgrade, Yugoslavia in 1961, D.I.C. degree in applied geochemistry from the University of London, England in 1964 and a Ph.D. degree in geology from the University of British Columbia in 1971.
3. That I have been practising geochemistry with COMINCO LTD. from 1974 to the present.

DATED THIS 18th DAY OF SEPTEMBER 1979, AT VANCOUVER, BRITISH COLUMBIA.



DRAGAN BRABEC
Geochemist

MOUNTAIN HELICOPTERS INC. CHARTER AND CONTRACT TICKET

Date July 31

Cash Charge
 A/C Type Area

From Ft. St. James To (1) Jean Marie
 To (2) Move camp Gear To (3) 10 Old camp
 To (4) Ft. St. James To (5)
 To (6) To (7)
 To (8) To (9)
 To (10) To (11)

Charter Rate	Hours at \$	1.3 @ 33000	\$ 429.00
Contract Rate	Hours at \$		
Fuel Charge		30 GAL @ DOMINCO LTD.	32.00
Pilot Expenses			
Other		AUG 21 1979	

I personally guarantee payment of this charter. TOTAL CHGE. 461.00

Authorized by: RICHMAGNEQUE NO. 3331

This ticket is expressly subject to the conditions printed on the reverse side of ticket and which are hereby accepted. (Passengers' Signature)
 1. Ragnar Bruaseth. 001-40-032-WB2A
 2. 8. 14.
 3. 9.
 4. 10.
 5. 11.
 6. 12.

MAIN BASE
 P.O. Box 368
 Prince George, B.C.
 Phone 963-9622
 Telex 047-8027
 2/BASE
 P.O. Box 280
 Fort St. James, B.C.
 Phone 996-7208

No. of Departures	No. of Passengers	No. of hours flown	Base or designated Pt.
	Lbs. cargo	Miles flown	Class of flying

MOUNTAIN HELICOPTERS INC. TERMS - NET 30 DAYS
 B.C. Service Charge of 1% per Month on Overdue Accounts
 PLEASE PAY LAST AMOUNT ABOVE

TC092

Originating Office
TADANAC

MONTH
M 1979

Station
T181

PAGE

KUB

DUPLICATE

VANCOUVER OFFICE

Description

Work Order No.

Labour 2 Material 3 Misc

Current Amount

To Date Amount

Estimated \$ Only

WESTERN EXP RADIO RQNTS-GEN PROJ F A 2597380
TCU RADIO LICENSE FEE 599370
TCU RADIO LICENSE FEES 248987

T1811616
T1811616
T1811616

648 44 ** TFC

Col- 110-052-WB3A

WESTERN EXP RADIO RQNTS-GEN PROJ K
013231 JACK ROSS RADIO E483900

T1811611

568 88
568 88 *

APR OVERHEADS TC05241

T1811611

8 40
8 40 *

577 28 **

JEAN AS

Col- 110-052-WB2

WESTERN EXP RADIO RQNTS-GEN PROJ K
INDUSTRIAL COMMUN'S
CO RADIO LICENSE 0474068

T1811611
T1811611
T1811611

102 24
56 00
158 24 *
158 24 **

Col-110-052-WB2A

APR OVERHEADS TC05241

T1811616

2 37
628 89 *

APR OVERHEADS TC05241

T1811616

7 80
7 80 *

634 69 **

WUXON CRYSTALINE COL- 850-052-NFLA

WESTERN EXP RADIO RQNTS-GEN PROJ Q
13239 JACK ROSS RADIO E483907

T1811617
T1811617

654 16
3 39

APR OVERHEADS TC05241

T1811617

657 55 *

APR OVERHEADS TC05241

T1811617

4 80
4 80 *

662 38 **

FIN Col- 110-052-NFLA

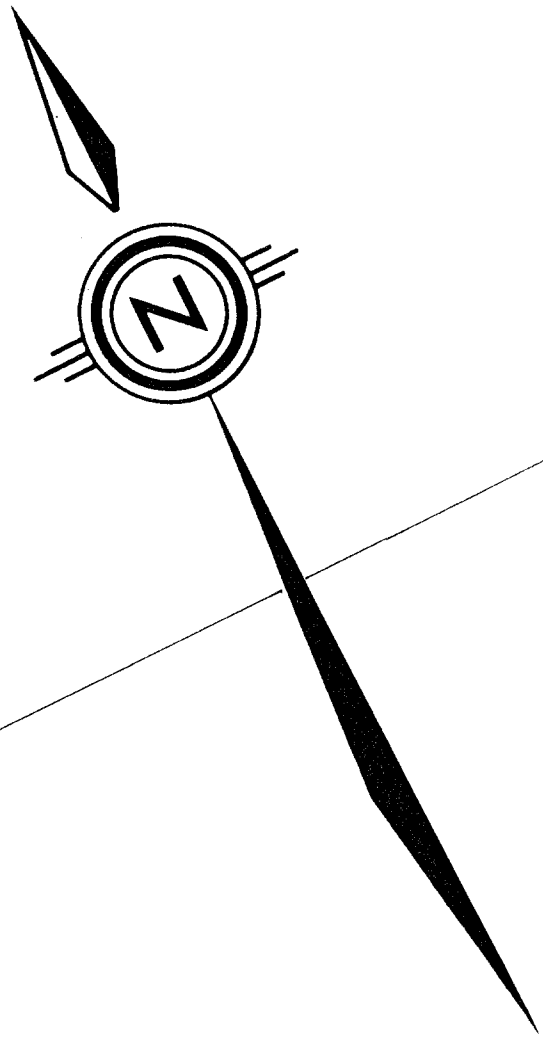
TABLE 1

DATA DISTRIBUTION PARAMETERS
JEAN SOIL SURVEY

(values in ppm)

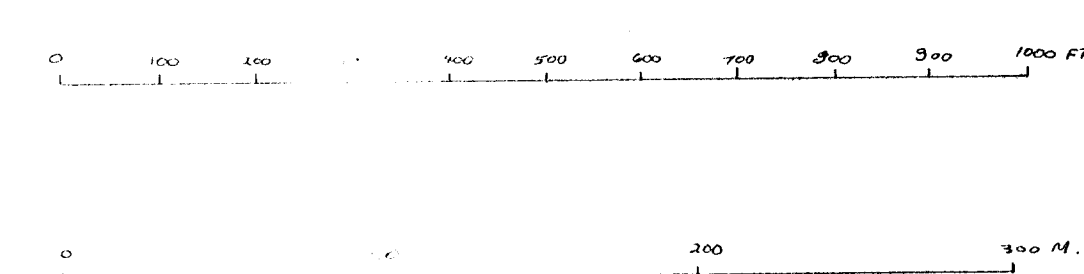
<u>Element</u>	<u>Range</u>	<u>Geometric Mean</u>	<u>Estimated Anomaly Threshold</u>
Cu	8 - 619	44	130
Pb	<4 - 46	5	15
Zn	2 - 195	50	115
Mn	11 - 2340	270	1000
Mo	2 - 45	5	10
W	2 - 20	6	12

/tlp
18/09/79



- L.P.C.
 - L.A.M.E. (SPT)
 - L.A.M.E. (SPT)

SCALES :

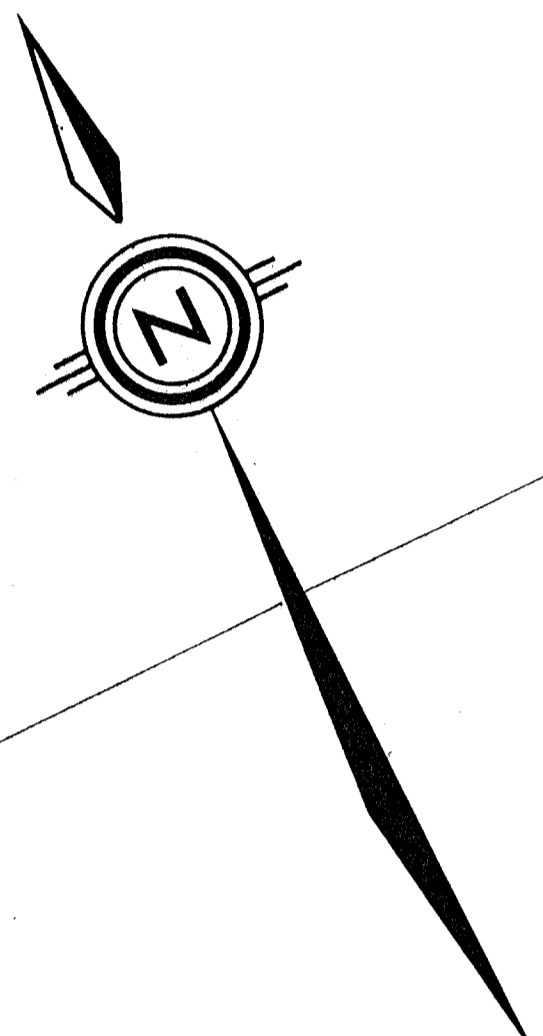


LEGEND

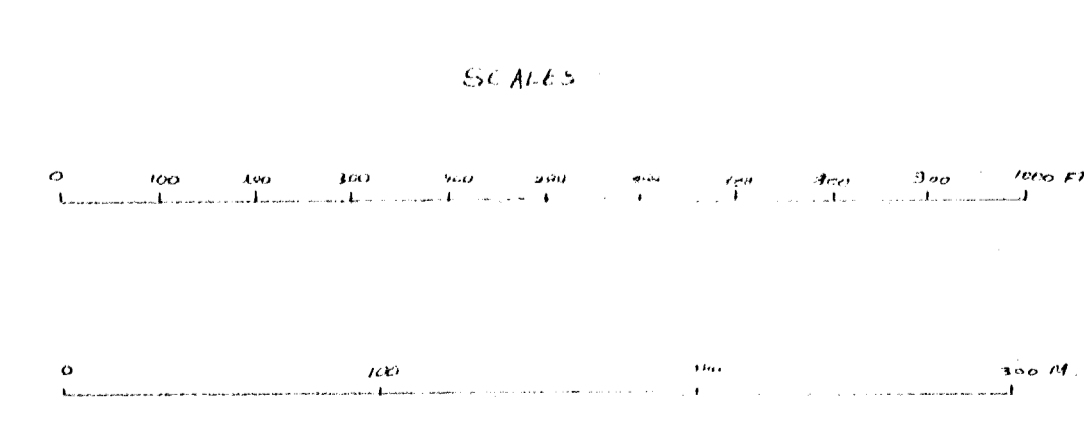
20- 2/4	Cu - Mo / W
-----	130 ppm Cu contour
●	> Mo 10 ppm
∠	> W 12 ppm

7530

JEAN PROPERTY		93 N/2	
Drawn by: <i>Red</i>	Traced by:	Cu, Mo & W in Soil	
Revised by: []	Revised by: []	Scale: 1" = 2400'	
		Date: SEPT., 1979	Plate: 2



- CREEK
- CLAIM POST
- LEGAL CORNER POST



LEGEND
 5/40/142 Pb / Zn / Mn

MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
7530

JEAN PROPERTY <i>RB</i>		93 N/2	
Drawn by: <i>elw</i>	Traced by:		
Revised by:	Date:	Revised by:	Date:
Pb, Zn & Mn in Soil			
Scale: 1:2400	Date: SEPT, 1979	Plate: 3	