LOG NU: .NOV 1 7 1994	кD.	
ACTON.	, , , , , ,) ,
COMINCO LIPLE NO:		

EXPLORATION

WESTERN CANADA

NTS: 93E-14

ASSESSMENT REPORT

RECEVED NOV - 9 1994 Gold Commissioner's Office VANCOUVER, B.C.

I.P./RESISTIVITY SURVEY

ON THE

THIRA PROPERTY

LATITUDE: 53° 55' N

LONGITUDE: 127° 05' W

OMINECA MINING DISTRICT, B.C.

TIME PERIOD: JULY 24, 1994

CLAIMS COVERED : THIRA 4

GEOLOGICAL BRANCH ASSESSMENT REPORT

INGO JACKISCH

OCT. 1994

TABLE OF CONTENTS

1

.

ł

•

÷

ł

I	INTRODUCTION	1
	Claims and Ownership	1
	Property History	1
	Geology	2
	Location and Access	2
II	GEOPHYSICAL SURVEYS	2
	Equipment and Procedures	2
	Presentation of Results	3
III	INTERPRETATION	3
IV	CONCLUSIONS	4
	APPENDIX I STATEMENT	5
	APPENDIX II STATEMENT OF EXPENDITURES	6
	APPENDIX III CERTIFICATION OF QUALIFICATIONS	7

LIST OF PLATES

PLATE NO.

LOCATION MAP	811-51-10
GRID MAP 1:50,000	811-51-11
CLAIM, GRID, AND CHARGEABILITY MAP [N=1 , a=100m]	811-51-12
INDUCED POLARIZATION/RESISTIVITY PSEUDOSECTION LINE 2000W	811-51-13

PAGE

EXPLORATION

COMINCO LTD.

WESTERN CANADA

ASSESSMENT REPORT ON

AN I.P./RESISTIVITY SURVEY

ON THE THIRA PROPERTY

I INTRODUCTION

On July 24, 1994, a single Induced Polarization/Resistivity [I.P./Res.] survey line was carried out by an in-house Cominco Ltd. geophysical crew on the Thira Property. Geophysicist I. Jackisch and 4 summer students conducted the survey, which totalled 2.6 km.

The purpose of the geophysical survey was to test the southern extent of a known sulfide system which is associated with a large porphyry Cu-Au alteration zone.

This report discusses the geophysical equipment and procedures, then presents and interprets the results.

CLAIMS AND OWNERSHIP

The THIRA PROPERTY is owned by B. Hofsink and Neil Paquette. Work on the claims is carried out by COMINCO LTD. under an agreement with these owners.

The one I.P. survey line was predominately on the Thira 4 claim. Tenure requirements for the Thira 4 claim and adjacent claims are:

Mineral Claims	Tenure Nos.	Units	Recording Date	Due Date
Thira 2	329765	8	Aug. 13, 1994	Aug. 13, 1995
Thira 3	326089	20	June 8, 1994	June 8, 1995
Thira 4	326449	20	June 18, 1994	June 18, 1995

PROPERTY HISTORY

In the early 1970's Jorex drilled 2240 metres on the THIRA 3 and 4 claims for Placer Dome Mines, under the supervision of J.R. Woodcock Consultants. Results outlined large areas of 0.1 to 0.2 % copper.

In 1982 UTAH MINES conducted a 68 km I.P. survey and geological mapping of a large area which included all of Placer Domes Thira claims and ground to the east. A high chargeability

sulphide system 9 km long and 4 km wide was outlined.

GEOLOGY

The geology on the Thira Property was established from 1:50,000 scale mapping conducted by L. Diakow, 1988. The Lower Jurassic Telkwa formation of the Hazelton Group is the oldest volcanic succession exposed on the property. Stocks of diorite, granodiorite, and monzonite cut and locally alter rocks of the Lower Jurassic Telkwa formation. Younger volcanic rocks, tentatively assigned to the Cretaceous Skeena and Kasalka groups, appear to rest unconformably on the Telkwa formation.

A porphyry alteration system containing intermittent low grade Cu-Au mineralization is exposed in some of the outcrops on the Thira Property.

LOCATION AND ACCESS

The Thira Property is located 55 km SW of Houston, B.C., 30 km NE of New Canamin's Huckleberry deposit, or at latitude 53°55'N, longitude 127°05'W on N.T.S. 93E14.

Access is by logging road from Houston, B.C., a distance of approximately 90 km.

II GEOPHYSICAL SURVEYS

EQUIPMENT AND PROCEDURES

Two Huntec Mark 4 time domain receivers and a Huntec 7.5 KW Mark 4 constant current transmitter were used for the I.P.\Res. survey. A pole/dipole electrode array was used, with the current electrode to the north of the potential electrodes as indicated on the pseudosection. The standard 2 second ON/OFF alternating square wave was transmitted.

The Mark 4 receivers were set to a delay time of 120 msecs. and an integration time of 900 msecs. Data was recorded both in notepad form and on a Solid State Memory [SSM] unit, manufactured by Lloyd Geophysics Ltd., which is installed inside the receivers. The SSM dumps directly onto a personal computer running on Geosoft software.

The Huntec receiver measures the chargeability in 10 windows, each 90 msecs. in duration, for a total of 900 msecs. The instrument displays and records each of the 10 windows as well as the total chargeability, which is the value plotted on the pseudosections. This chargeability value is equivalent to the eighth slice [M7, measuring from 690 to 1050 msecs. after transmitter shutoff] of the Scintrex IPR-11 receiver. The resistivity values [R] are in units of ohmmetres [ohmm] and are calculated from the formula:

$R = \underline{V K}$	where K =	$2\pi an[n+1]$	a=100m , n=1,2,3,4
I	V =	voltage at	receiver [volts]
	I =	transmitter	r current [amperes]

The survey procedure was to reel out the wire [leading from the transmitter] to the end of the survey line, leaving a stainless steel rod at each 100 metre station. The survey line is then read back to the beginning of the line by the following procedure. The current electrode man cuts the wire at each 100 metre picket and attaches the end leading to the transmitter to the steel electrode. The wire and rods discarded by the current man are used as potential electrodes by the receiver operators [one receiver taking n=2,1 readings, the other taking n=4,3 readings]. The current electrode man moves up in 100 metre intervals and hammers the rod into the ground while the readings are in progress. When both receiver operators are finished with their readings, the current is shut off, and the current man cuts the wire for the new current station and connects the wire to the rod, then asks for the power to be turned on at the new station. This procedure is repeated in 100 metre increments until the entire line is read.

PRESENTATION OF RESULTS

The I.P./Resistivity data is presented in pseudosection form on Plate 811-51-13 with chargeability and apparent resistivity plotted at a scale of 1:5000. A plan map at a scale of 1:1000 showing the claim boundaries and the location of the line with corresponding chargeability values is presented on Plate 811-51-12. Apparent Resistivity is in units of ohm-metres, chargeability values are in units of milliseconds [msecs.].

Chargeability anomaly bars are categorized as strong [>40 msecs.], moderate [30-40 msecs.], and weak [20-30 msecs.]. These bars are plotted on the pseudosections to highlight anomalous chargeability zones.

III INTERPRETATION

The chargeability values are generally above 30 from 2000S to the north end of Line 2000W [see Plate 811-51-13]. Values are generally in the 15 to 30 msec. range south of 2000S.

Three separate chargeability anomalies are outlined. The first has an inverted "V" or pantleg shape centred at 1800S to 1900S, with the leg toward the current electrode [i.e. north] showing a higher chargeability [of 50 msecs.] than the other leg. The second anomaly is a deep n=4 response of greater than 40 msecs., located from 800S to 1100S. The third and strongest chargeability anomaly occurs from 200S to 600S. It appears to be a wide zone with higher chargeability values towards the centre [showing a peak value of 57 msecs.]

The resistivity values are 30 to 90 ohm-metres north of 1200S. South of 1200S resistivity values range from 50 to 500 ohm-metres.

IV CONCLUSIONS

One line consisting of 2.6 kms of I.P./Resistivity was surveyed by Cominco Ltd. on July 24, 1994, on the Thira Property.

The results show above background chargeability and comparatively low resistivity values for virtually the entire line.

Report by : _____ Ingo Jackisch

Geophysicist, P.Geo

Approved for Release by : J.M. Hamilton, P.Eng/P.Geo

Manager, Exploration Cominco Ltd. Western Canada

Distribution:

[2] Mining Recorder[1] Western District, Central Files[1] Geophysics File, Vancouver, B.C.

APPENDIX I

IN THE MATTER OF THE B.C. MINERAL ACT

AND IN THE MATTER OF A GEOPHYSICAL PROGRAMME

CARRIED OUT ON THE THIRA PROPERTY

LOCATED 100 KMS SW OF HOUSTON, B.C.

IN THE OMENICA MINING DIVISION OF THE

PROVINCE OF BRITISH COLUMBIA,

MORE PARTICULARLY

N.T.S. 93E/14

<u>STATEMENT</u>

I, Ingo Jackisch, of 424 Somerset Street, in the City of North Vancouver, in the Province of British Columbia, make oath and say:

- That I am employed as a geophysicist by Cominco Ltd. and, as such have a personal knowledge of 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 incurred on a geophysical survey on the THIRA Property;
- 3. That the said expenditures were incurred on July 24, 1994, for the purpose of mineral exploration on the above noted property.

Ing# Jackisch Geophysicist Cominco Ltd.

Dated this	<u>2</u> day	of	November	,	1994
at Vancouv	rer, B.C.				

APPENDIX II - EXHIBIT "A"

STATEMENT OF EXPENDITURES

THIRA PROPERTY - JULY 24, 1994

1. SALARIES

1

. . .

I.	JACKISCH	\$360
Α.	ROBULACK	125
J.	ALLARDYCE	107
т.	DIXON	109
J.\$	S. ARMSTRONG	100
0	o: indibilitorio	100

\$801.00

2.	REPORT WRITING, D	RAFTING, CONSULTING	3	\$1885.00
3.	EQUIPMENT RENTAL	I.P. RECEIVER I.P. TRANSMITTER MISC.	\$100 125 100	
				\$325.00
4.	TRUCK RENTAL			\$60.00
5.	EXPENSE ACCOUNTS	I. JACKISCH A. ROBULACK J. ALLARDYCE T. DIXON J.S. ARMSTRONG	\$90.00 30.00 30.00 30.00 30.00 30.00	

6. MOTEL

\$210.00

\$160.00

TOTAL \$3441.00

APPENDIX III

CERTIFICATION OF QUALIFICATIONS

I, INGO JACKISCH, of 424 Somerset Street, in the City of North Vancouver, in the Province of British Columbia, do hereby certify:

- i. THAT I graduated with a B.Sc. in Geophysics from the University of British Columbia in 1975.
- ii. THAT I am a member in good standing of the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
- iii. THAT I have been actively practising Geophysics from 1975 to 1994, and have been an employee of Cominco Ltd. from 1980 to 1994.

isch. B.Sc. P.Geo. Ingo Jad

o Jackisch, B.Sc. P.Geo Geophysicist

Oct., 1994



		N.T.S. 93E/14
	THIRA PROPERTY	
300 Km.	Drawn by: Treesd by:	
	Bertand by: Buber AnnA Slor KEVBD	LOCATION MAP
	├ ── ├ ── ┤	SCALE: 12,000,000 DATE NOV 94 PLATE NO: 811-51-10
		SCALE 1:2000,000 DATE NOV 94 PLATE NO: 811-51-10











