

COMINCO LTD.

EXPLORATION

WESTERN DISTRICT

NTS: 92I/11

GEOPHYSICAL REPORT st

ON

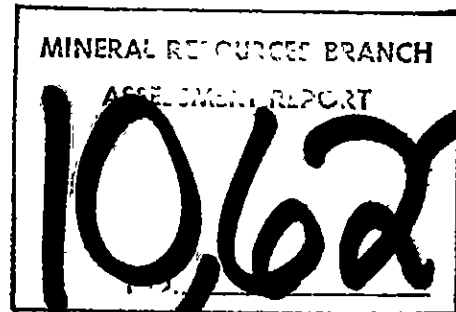
INDUCED POLARIZATION AND RESISTIVITY SURVEYS st

ISLAND PROPERTY

HIGHLAND VALLEY AREA, KAMLOOPS M.D., B.C.

LATITUDE: 50°32'N

LONGITUDE: 121°08'W



FIELD WORK PERFORMED: JULY 13 - 18, 1982

CLAIMS : ISLAND 12A and 13

OWNER AND OPERATOR : COMINCO LTD.

AUGUST 1982

J. KLEIN

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PLATE 229-82-1b LOCATION PLAN, Scale 1:250,000

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APPENDIX I STATEMENT

APPENDIX II STATEMENT OF EXPENDITURES

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REFERENCES: GEOPHYSICAL REPORT ON I.P. AND MAG SURVEYS,
ISLAND PROPERTY, DATED JUNE 2, 1980 by A.R. Scott

 GEOPHYSICAL REPORT ON AN I.P. SURVEY,
ISLAND PROPERTY, DATED DECEMBER 22, 1981 by J. Klein

COMINCO LTD.

EXPLORATION

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WESTERN DISTRICT

20 August 1982

GEOPHYSICAL REPORT

ON

INDUCED POLARIZATION AND RESISTIVITY SURVEYS

I S L A N D P R O P E R T Y

INTRODUCTION

During the period July 13 - 18, 1982, some 7.9 km of reconnaissance scale, multiseperation, induced polarization and resistivity survey work was completed over portions of the ISLAND property. The I.P./res. work was conducted by a COMINCO LTD. crew under the direction of Mr. I. Jackisch.

The ISLAND property is located in the Highland Valley area of B.C., some 6 km west of the Lornex mine. Plate1b shows the general location of the property and Plate2b the location of the two survey lines (4N and 8N) with respect to the claims and previous I.P. coverages on the claim block.

This report describes procedures used for this survey, presents the data and discusses the results.

GEOPHYSICAL SURVEYS

Induced Polarization and Resistivity

Two Hunttec MK IV I.P. receivers and one Scintrex IPR-11 receiver in combination with a Hunttec 7.5 kw motor generator/transmitter were used on the ISLAND survey. Readings were taken in the time domain using a 2 second current ON/2 second current OFF alternating square wave signal. A delay time of 120 milliseconds and total integration time of from 120 msec. to 1020 msec. were used for the Hunttec MK IV receivers to measure the I.P. effect. A delay time of 330 msec. and an integration time of 180 msec. (from 330-510 msec.) were used for the IPR-11 receiver. Chargeability values are given in units of milliseconds for the MK IV receiver data and in mV/V for the IPR-11 results.

The survey was of a regional reconnaissance nature with survey lines 400 meters apart. A pole dipole electrode array was used with an "a" spacing of 100 meters and "n" separations of 1, 2, 3 and 4. The current electrode was kept to the east or the west of the potential dipole, as indicated in the pseudosections.





The apparent resistivity values are given in units of ohm meters and were calculated from the relation:

$$\text{apparent resistivity} = (V/I) \cdot K,$$

where V is the voltage across the measuring dipole during the current on period (I), and K is a geometrical factor dependent on the "a" spacing and "n" separation.

DISCUSSION OF RESULTS

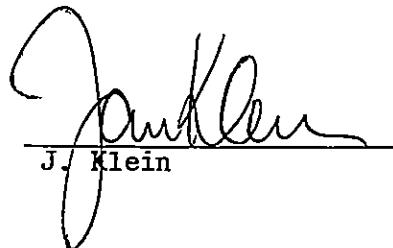
The induced polarization survey results are plotted in pseudosection format on accompanying Plate 229-82-3. The chargeability response has been categorized on the sections in the following manner (which are the same as for the previous surveys on this property):-

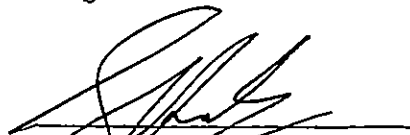
-  strong I.P. high (greater than 10 msec. or mV/V at near separations)
-  moderate I.P. high (greater than 8 msec. or mV/V at near separations)
-  weak I.P. high (greater than 5 msec. or MV/V at near separations)
-  > 5 msec. or mV/V at further separations

The chargeability values of the two lines surveyed show mainly background levels (< 5 msec. or mV/V) with one value rising just above that level (Line 4N, 150W, n=1 and 2).

CONCLUSIONS

A small, 7.9 km, two line induced polarization/resistivity survey was executed over a portion of the ISLAND property. The values measured were of background level only and uninteresting from an economic point of view. No further work can be recommended on that portion of the property covered with the present survey.

Report by: 
J. Klein

Approved for
Release: 
G. Harden
Manager, Exploration
Western District

Distribution:

Mining Recorder	(2)
Western District	(1)
Vernon Office	(1)
Administration	(1)
Geophysics File	(2)

APPENDIX I


IN THE MATTER OF THE B.C. MINERAL ACT
AND IN THE MATTER OF A GEOPHYSICAL PROGRAM
CARRIED OUT ON PORTIONS OF ISLAND MINERAL CLAIMS 12A AND 13
ON THE ISLAND PROPERTY
LOCATED IN THE HIGHLAND VALLEY AREA, KAMLOOPS MINING DIVISION, B.C.
OF THE PROVINCE OF BRITISH COLUMBIA, MORE PARTICULARLY
N.T.S.: 92I/11

S T A T E M E N T

I, JAN KLEIN, OF THE CORPORATION OF RICHMOND, IN THE PROVINCE OF BRITISH COLUMBIA, MAKE OATH AND SAY:-

- 1) 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 the annexed hereto and marked as "Appendix II" to this statement is a true copy of expenditures incurred on geophysical survey on the ISLAND Property;
- 3) THAT the said expenditures were incurred for the purpose of mineral exploration of the above-noted claims between the 13th day of July and the 18th day of July, 1982.

Signed:



J. Klein
Chief Geophysicist

20 August 1982

APPENDIX II

STATEMENT OF EXPENDITURES

ISLAND PROPERTY

(Induced Polarization/Resistivity Survey; July 13-18, 1982)

1.	Crew Salaries, Equipment and Truck Rentals Six days @ \$ 1,400/day	\$ 8,400.00
2.	Data Reduction and Reporting	500.00
3.	Food and Camp Supplies	800.00
		<hr/>
		\$ 9,700.00
		<hr/> <hr/>

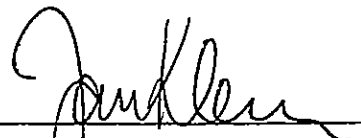
APPENDIX III

C E R T I F I C A T I O N

I, JAN KLEIN, of 4371 Coventry Drive, in the Corporation of Richmond, in the Province of British Columbia, do hereby certify:-

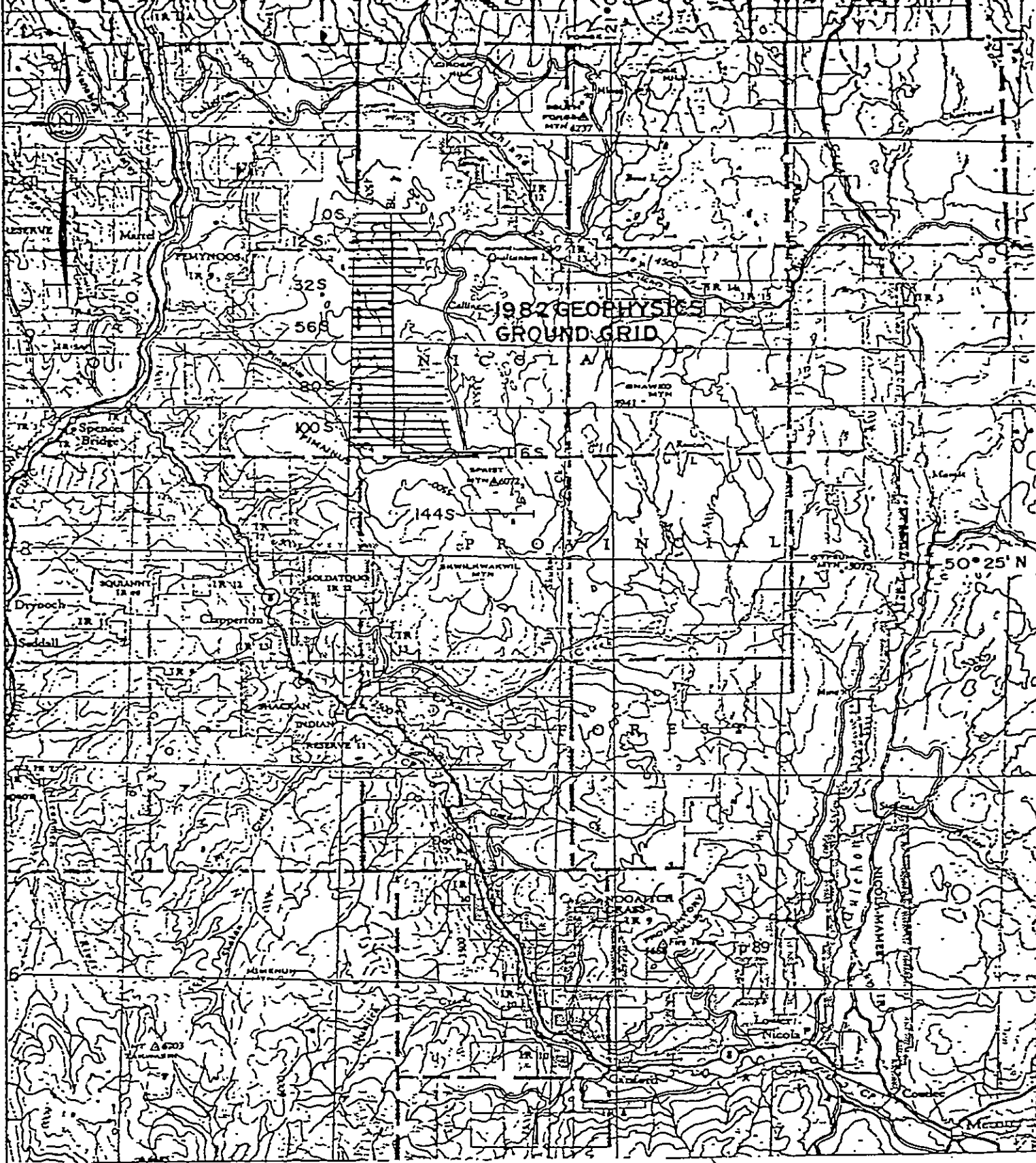
- 1) THAT I graduated from the Technological University of Delft Netherlands in 1965 with a M.Sc. in Geophysics;
- 2) THAT I am a member of the Association of Professional Engineers of the Province of British Columbia, the Society of Exploration Geophysicists of America, and the British Columbia Geophysical Society;
- 3) THAT I have been practising my profession for the past seventeen years.

Signed:

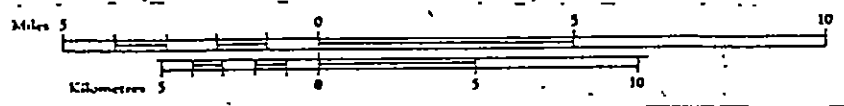


J. Klein
Chief Geophysicist

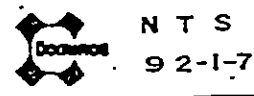
20 August 1982



1982 GEOPHYSICS
GROUND GRID



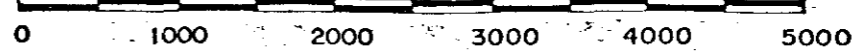
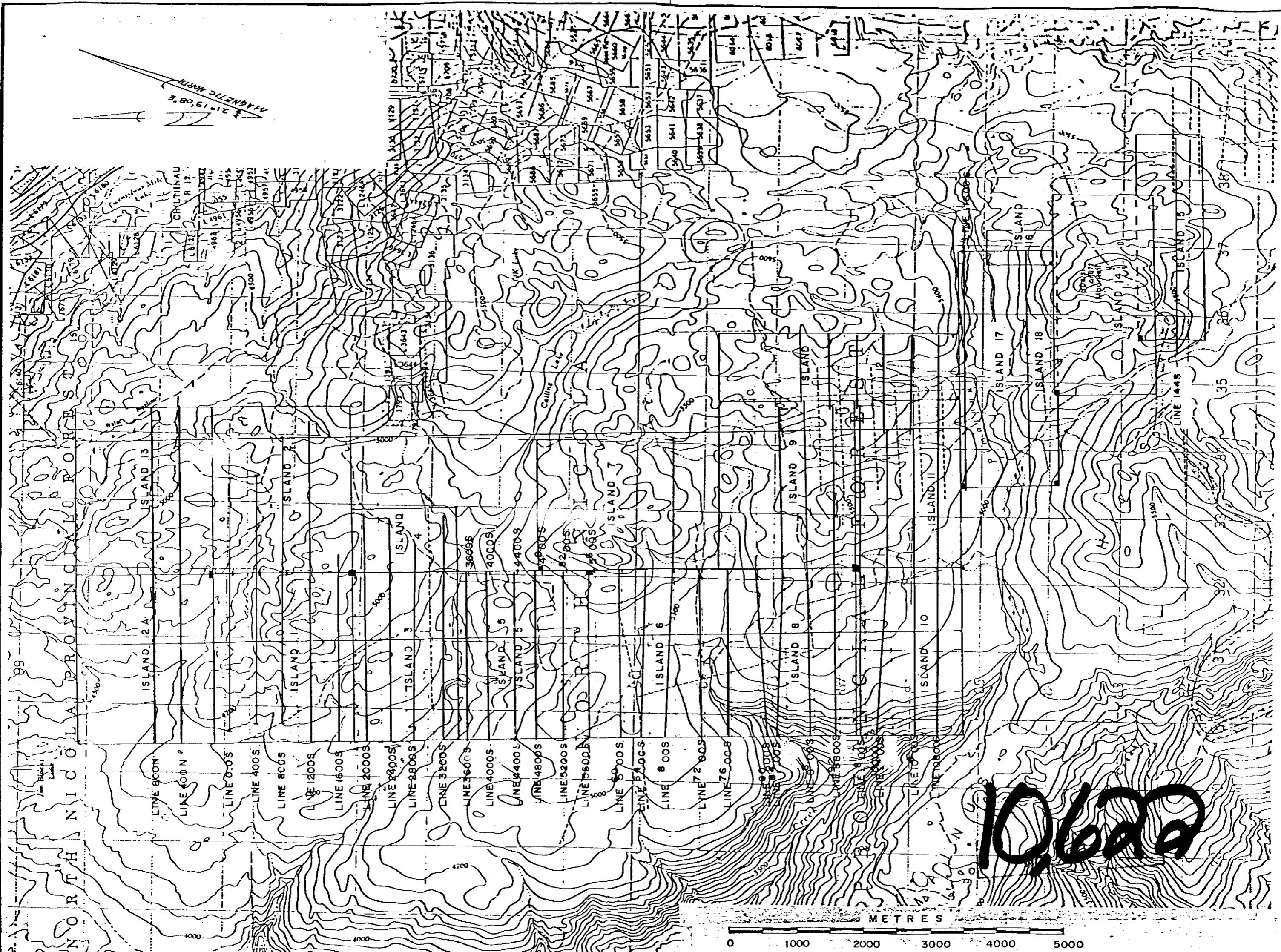
ISLAND
PROPERTY



Drawn by:		Traced by:	
Revised by	Date	Revised by	Date
G.E.I.	APRIL 1982		
J.P.S.	AUG 1982		

LOCATION MAP
NICOLA M.D., B.C.

Scale: 1:250,000 Date: JAN 1981 Plate: 229-82-1

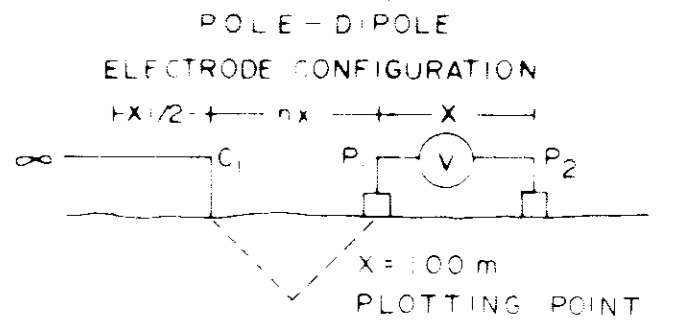


ISLAND PROPERTY			
Drawn by:		Traced by:	
Revised by	Date	Revised by	Date
E.L.	APRIL 1982		
P.S.	JULY 1982		
CLAIM MAP			
KAM LOOPS M.D., B.C.			
Scale:	1 : 50,000	Date:	MAY 1981
			Plat 229 82-2



**COMINCO LTD.
ISLAND PROPERTY
KAMLOOPS M.D., B.C.**

LINE NO. 400 N
LINE NO. 800 N



CURRENT ELECTRODE DIRECTION AS NOTED ON THE PSEUDO-SECTION

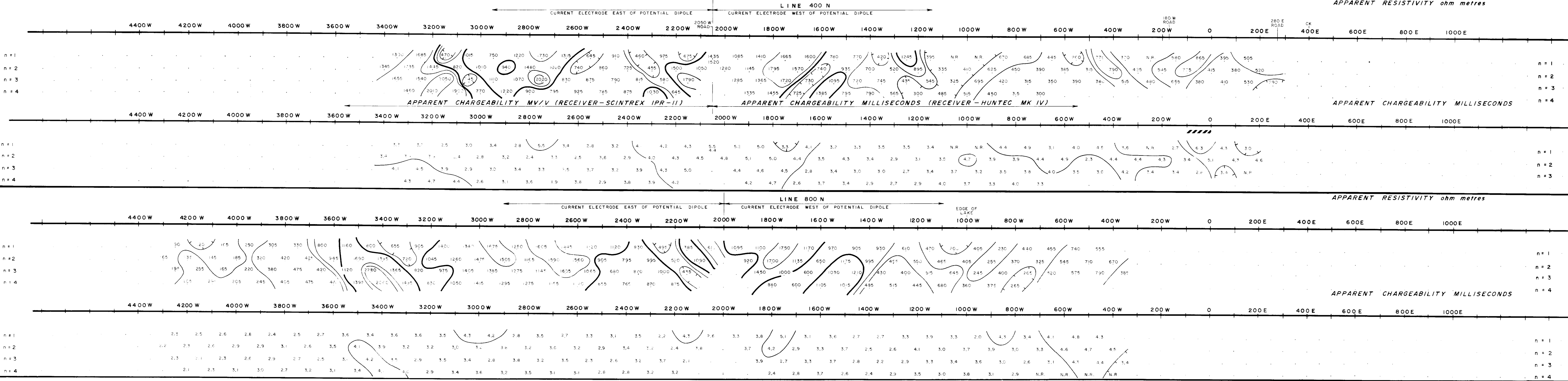
CHARGEABILITY (IP) INTERPRETATION
 [Solid black bar] STRONG CHARGEABILITY HIGH
 [Dashed bar] MODERATE CHARGEABILITY HIGH
 [Wavy bar] WEAK CHARGEABILITY HIGH
 [Diagonal lines] HIGH AT FURTHER SEPARATIONS

10,622
 LINE 400 N
 JULY 14, 16, 1982
 LINE 800 N
 DATE SURVEYED JULY 17, 18, 1982

SCALE 1:6,000
 CONTOUR INTERVAL 5
 APP. RES. 1, 5, 2.3, 5, 7.5 (ohm metres) APPROVED
 APP. CHARG. 0.2 MILL. SECONDS (HUNTEC MK IV)
 -0.2 MV/V (SCINTREX IPR 11) DATE

TRANSMITTER - HUNTEC 7.5 KW UNIT
 RECEIVER - LINE 400 N - HUNTEC MK IV
 SCINTREX IPR 11
 LINE 800 N - HUNTEC MK IV

INDUCED POLARIZATION AND RESISTIVITY SURVEY
 SURVEYED BY COMINCO LTD. EXPLORATION DIVISION



LINE 800 N
LINE 400 N