

COMINCO LTD.

EXPLORATION
N.T.S.: 92I/9W

WESTERN DISTRICT

INDUCED POLARIZATION AND MAGNETICS SURVEY

REG/BYR CLAIMS

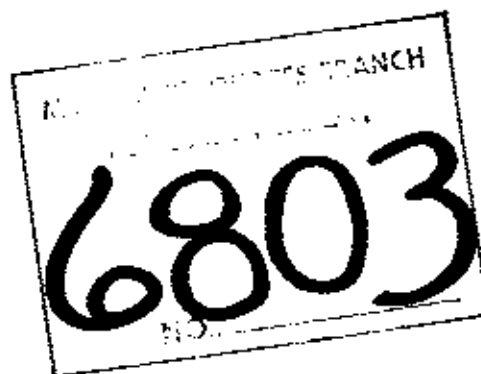
Kamloops Area, Kamloops M.D.
British Columbia

Latitude: $50^{\circ}35'N$; Longitude: $120^{\circ}20'W$

Work Performed: April 23, 27, 28, May 4, 1978

Claims Covered: BYR 1, BYR 3, REG 11, REG 12,
REG, 5, REG 7, REG 9, ACE 1,

and C.G. Lot 1560



JULY 1978

A. R. Scott

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* * * * *

ATTACHMENTS

Plate 130-78-1	General Location Map
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4 to 10	Induced Polarization and Apparent Resistivity Pseudo Sections
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* * * * *

INTRODUCTION AND SUMMARY

The REG/BYR mineral claims are located some 10 kilometers south of the city of Kamloops along highway 5, as indicated on the accompanying location plan plate 130-78-1. The lines surveyed are indicated on accompanying claim map, plate 130-78-2.

During April 23, 27 and 28, 1978 a Cominco geophysical crew completed some 4.5 line kilometers of induced polarization surveying over a portion of the REG/BYR claim group. On May 4, a magnetometer survey was conducted over the same grid lines.

This report describes these geophysical surveys and discusses the results obtained.

GEOPHYSICAL SURVEYS

Magnetics Survey

The magnetics survey was conducted by Boris Lumm, geophysicist in training. A Scintrex MP-2 total field proton precession magnetometer was deployed on the survey. The unit has a scale sensitivity of 1 gamma. Readings were normally taken at 30 meter intervals, with fill in readings in areas of steep magnetic gradients. The data is presented in contour plan form as accompanying plate 130-78-3.

Induced Polarization

G.J. Niemeyer, geophysical technician, was the party chief/receiver operator on the IP survey.

A Scintrex IPR-8 receiver in combination with a Hunttec 7.5 KW motor generator/transmitter were utilized. The equipment operates in the time domain with a 2 sec on and 2 sec off pulse. The data plotted is the M_{232} value and the units are millivolts per volt. To correct to the more usual millisecond value (such as the IPR-7) the numbers would be multiplied by 0.7 (for a "typical" decay curve). The reader is referred to the Scintrex manual for a more detailed discussion of this instrument.

The pole-dipole electrode array was used on the survey, with an "a" spacing of 90 meters and "n" separations of 1, 2, 3 and 4. Readings were taken at 90 meter intervals.

The chargeability and apparent resistivity data are presented in standard pseudo section form as plates 130-78-4 to 130-78-10.

DESCRIPTION OF RESULTS

The survey was conducted over two separate areas, namely lines 220, 390, and 550N and lines 590, 730, 880, and 1030W. The data is presented on plates 130-78-4 to 130-78-10 inclusive.

The strongest response in the northerly area is on line 380N. An n=4 chargeability value of 26 millivolts/volt at station 90W was obtained. This is part of a very broad moderate amplitude high which was also detected on lines 550N and 220N. It is best defined at n=1 on line 550N at station 225W, where a value of 15.4 millivolts per volt was obtained. The 15.2 millivolt per volt value at n=3 station 225E on line 550N, may indicate a separate polarizing source.

No magnetic field highs are associated with these high chargeability values.

The highest chargeability value obtained on the westerly survey lines was 18.5 mv/v at station 135S on line 1030W. Chargeability values on these lines are generally lower than on the northern grid, but tend to be more complex.

Magnetic field values show much stronger variation on this grid, with several highs being apparent. The highest magnetic field value is 9195 gammas at 240 meters S on line 1030W (note that base is 56000 gammas).

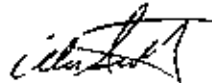
CONCLUSIONS

Portions of the REG, BYR, and ACE mineral claims, and Crown Grant Lot 1560, were surveyed with multi separation pole dipole time domain IP, and total field magnetics, in

the spring of 1978.

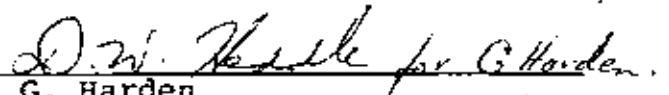
A moderately anomalous chargeability high was detected on the northern survey lines. A geological and geochemical evaluation of this anomaly may indicate if drill testing is warranted.

Report by:



A. R. Scott
Geophysicist

Endorsed for
Release by:



G. Harden
Manager, Exploration
Western District

ARS/deb
12 July 1978

Distribution:

Mining Recorder (2)
Western District (1)
Geophysics File (1)

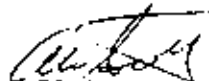
APPENDIX I

IN THE MATTER OF THE B.C. MINERAL ACT
AND IN THE MATTER OF A GEOPHYSICAL PROGRAMME
CARRIED OUT ON PORTIONS OF THE REG/BYR/ACE MINERAL CLAIMS
ON THE REG/BYR PROPERTY
LOCATED 10 KM SOUTH OF KAMLOOPS IN THE KAMLOOPS MINING DIVISION
OF THE PROVINCE OF BRITISH COLUMBIA, MORE PARTICULARLY
N.T.S.: 92I/9W

S T A T E M E N T

I, ALAN R. SCOTT OF THE CITY OF VANCOUVER 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 ANNEXED HERETO AND MARKED AS "APPENDIX II" TO
THIS STATEMENT IS A TRUE COPY OF EXPENDITURES INCURRED
ON GEOPHYSICAL SURVEY ON THE REG/BYR/ACE MINERAL CLAIMS;
3. THAT THE SAID EXPENDITURES WERE INCURRED BETWEEN THE
23rd OF APRIL AND THE 4th OF MAY, 1978, FOR THE PURPOSE
OF MINERAL EXPLORATION OF THE ABOVE NOTED CLAIMS.



Alan R. Scott
Geophysicist

ARS/deb
12 July 1978

APPENDIX II

REG/BYR/ACE

STATEMENT OF EXPENDITURES

(Linecutting, IP and Ground Magnetic Survey)

SALARIES:

G.J. Niemeyer	2½ days @ \$120.00/day	\$ 300.00
C. LaPrairie	2½ days @ \$ 82.00/day	\$ 205.00
R.B. Grant	2½ days @ \$ 56.36/day	\$ 140.90
J.M. Niemeyer	2½ days @ \$ 56.36/day	\$ 140.90
D.M. Carr	2½ days @ \$ 69.81/day	\$ 174.52
B. Lumm	1 day @ \$105.00/day	\$ 105.00

MISCELLANEOUS:

Food, lodging, gas, salt for IP \$ 383.57

OPERATING CHARGES:

3 days @ \$175.00/day \$ 525.00

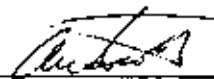
GEOPHYSICAL EQUIPMENT AND TRUCK RENTAL:

3 days @ \$282.00/day \$ 846.00

LINECUTTING:

John Young 6.4 km @ \$100.00/km \$ 640.00

TOTAL COST:..... \$ 3,458.89



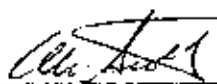
Alan R. Scott
Geophysicist

APPENDIX III

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

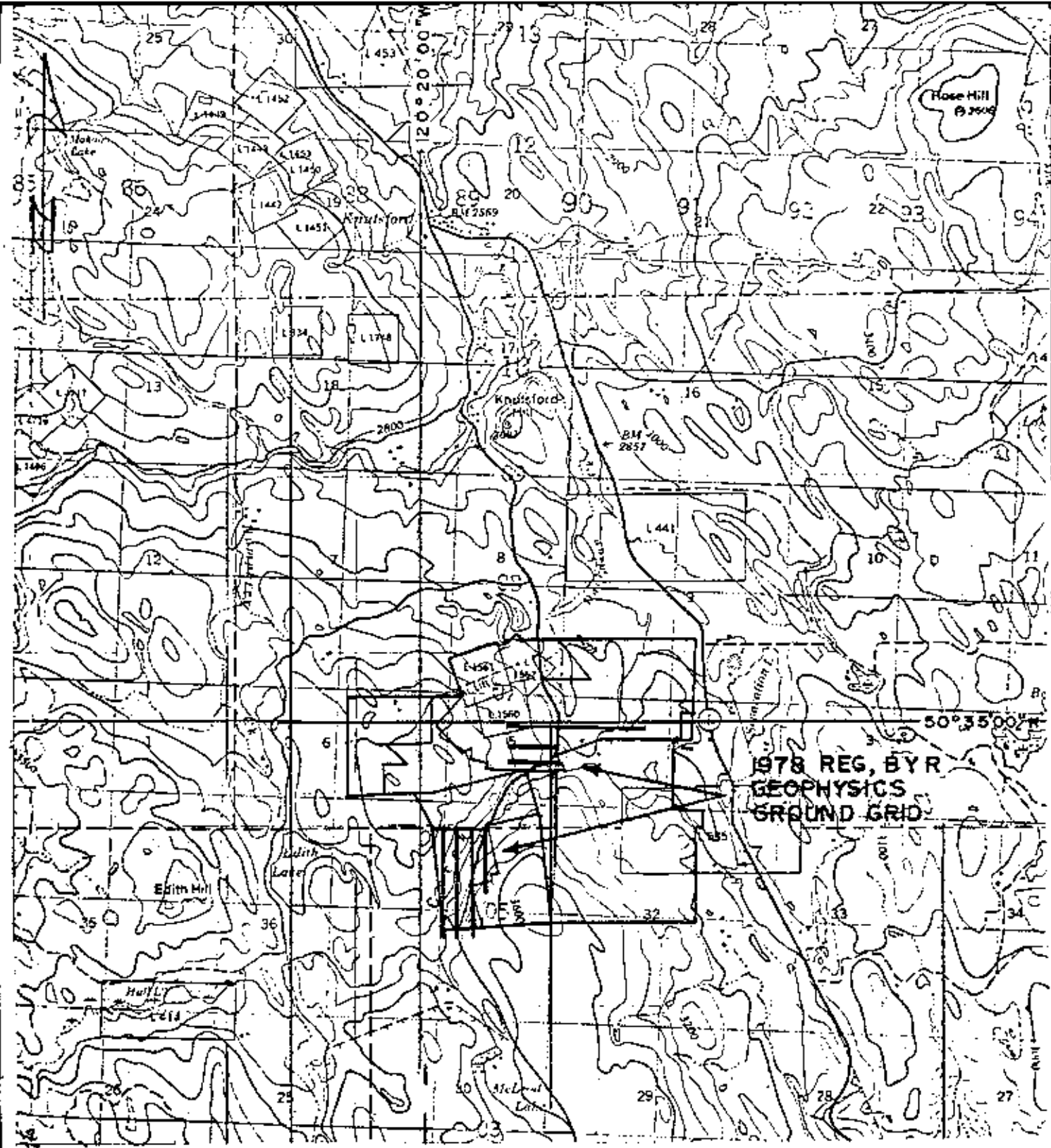
I, ALAN SCOTT, OF 4013 W. 14th AVENUE IN THE CITY OF VANCOUVER, IN THE PROVINCE OF BRITISH COLUMBIA, DO HEREBY CERTIFY THAT: -

1. I graduated from the University of British Columbia in 1970 with a B.Sc. in Geophysics.
2. I am a member of the Association of Professional Engineers of the Province of Saskatchewan, the Society of Exploration Geophysicists of America, and the British Columbia Geophysical Society.
3. I have been practising my profession for the past eight years.



Alan R. Scott
Geophysicist

ARS/deb
12 July 1978



Scale 1:50,000



NTS
Corrections
92 1 9

Drawn by:		Traced by:	
Checked By	Date	Revised By	Date

LOCATION MAP

KAM LOOPS M. D., B. C.

Scale: 1:50,000 Date: JUNE 1978 Plate 130-78-1

REG PROPERTY AND PROPERTY

450W 360W 270W 180W 90W BL 90E 180E 270E 360E 450E 540E 630E 720E 810E 900E

Apparent Resistivity ρ_a



REG PROPERTY

450W 360W 270W 180W 90W BL 90E 180E 270E 360E 450E 540E 630E 720E 810E 900E

Apparent Chargeability M_a



REG PROPERTY

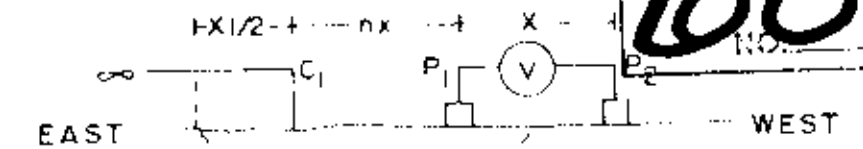
450W 360W 270W 180W 90W BL 90E 180E 270E 360E 450E 540E 630E 720E 810E 900E

Station	450W	360W	270W	180W	90W	BL	90E	180E	270E	360E	450E	540E	630E	720E	810E	900E
n-1																
n-2																
n-3																
n-4																

COMINCO LTD.
REG PROPERTY
KAMLOOPS M.D., B.C.

LINE NO. 220 N

POLE-DIPOLE
ELECTRODE CONFIGURATION



6803

PLOTTING POINT
n=1, 2, 3, 4

CURRENT ELECTRODE EAST OF POTENTIAL DIPOLE

SCALE 1:1

CONTOUR INTERVALS:

APP RES - 50 ρ_a

APP CHARG - 5.0 Mv/V

DATE SURVEYED APRIL 24, 1978

APPROVED

DATE

TRANSMITTER - HUNTEC 7.5 KW

RECEIVER - IPRB

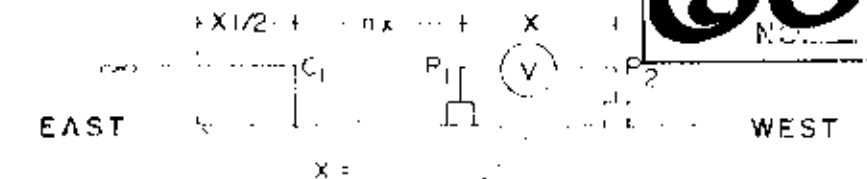
INDUCED POLARIZATION AND RESISTIVITY SURVEY
SURVEYED BY COMINCO LTD., EXPLORATION DIVISION

LINE 220 N

COMINCO LTD. REG PROPERTY KAMLOOPS M.D., B.C.

LINE NO. 550 N

POLE DIPOLE
ELECTRODE CONFIGURATION



6803

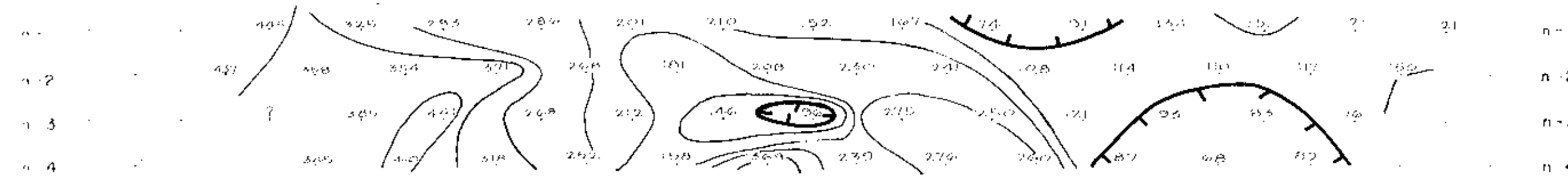
PLOTTING POINT

n = 1, 2, 3, 4

CURRENT ELECTRODE EAST OF POTENTIAL DIPOLE

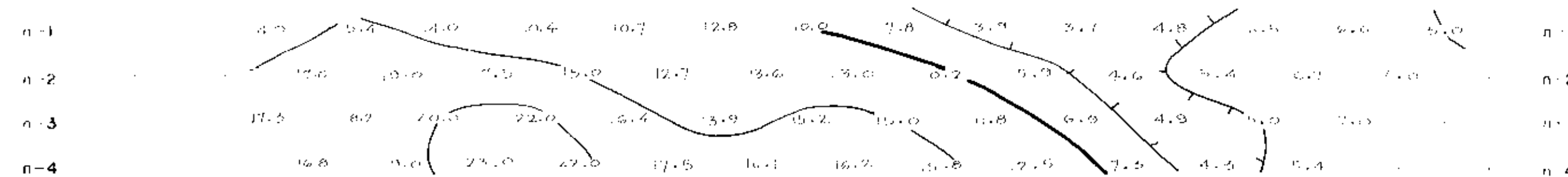
Apparent Resistivity ρ_a

450W 360W 270W 180W 90W BL 90E 180E 270E 360E 450E 540E 630E 720E 810E 900E



Apparent Chargeability M_a

450W 360W 270W 180W 90W BL 90E 180E 270E 360E 450E 540E 630E 720E 810E 900E



	450W	360W	270W	180W	90W	BL	90E	180E	270E	360E	450E	540E	630E	720E	810E	900E
n-1																
n-2																
n-3																
n-4																

SCALE 1:1

CONTOUR INTERVALS:

APP RES. -- 50 ρ_a
APP CHARG -- 5.0 mV/V

DATE SURVEYED APRIL 23, 1978

APPROVED *CH*

DATE

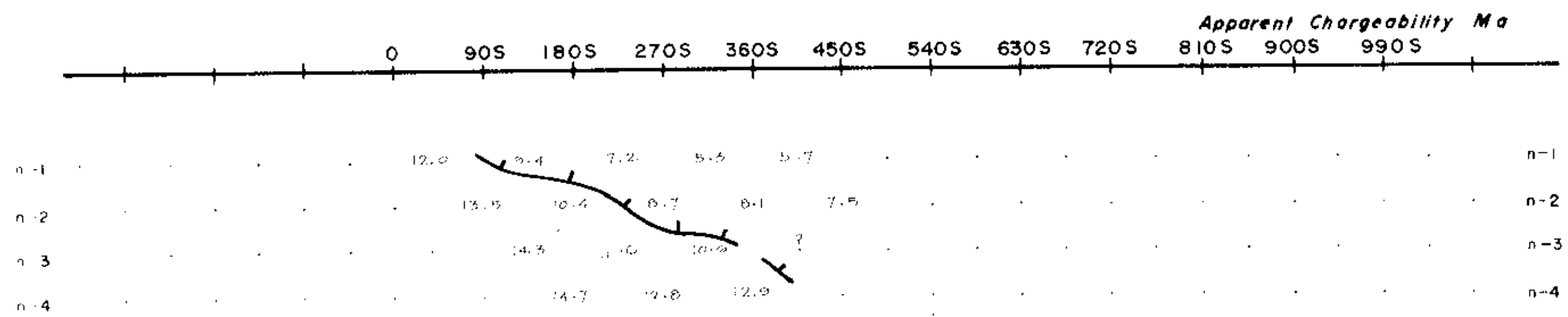
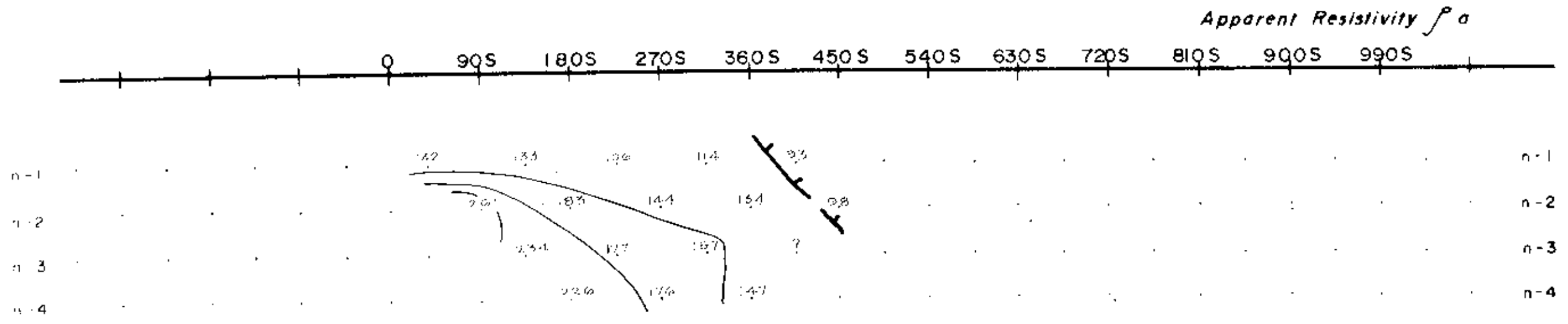
TRANSMITTER -- HUNTEC 7.5 KW

RECEIVER -- IPR8

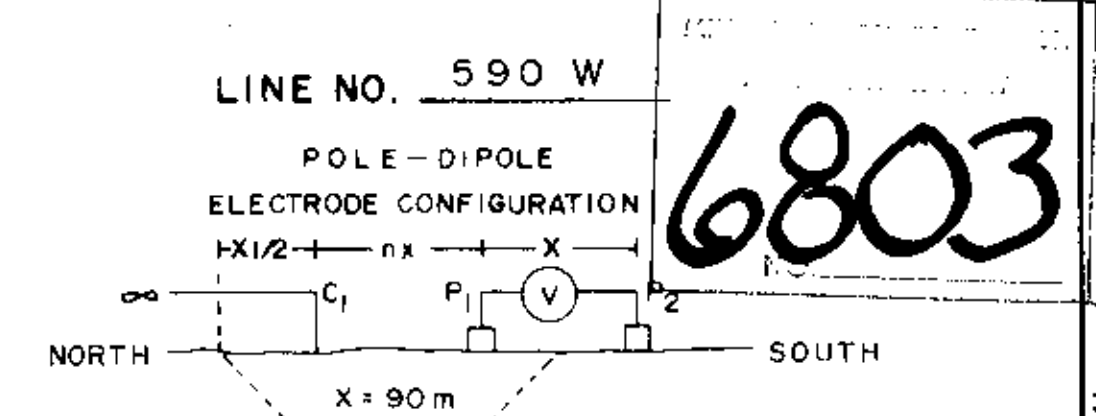
INDUCED POLARIZATION AND RESISTIVITY SURVEY
SURVEYED BY COMINCO LTD., EXPLORATION DIVISION

LINE 550 N

COMINCO LTD.
REG PROPERTY, BYR CLAIMS
KAMLOOPS M. D., B.C.



	0	90S	180S	270S	360S	450S	540S	630S	720S	810S	900S	990S
n-1												
n-2												
n-3												
n-4												

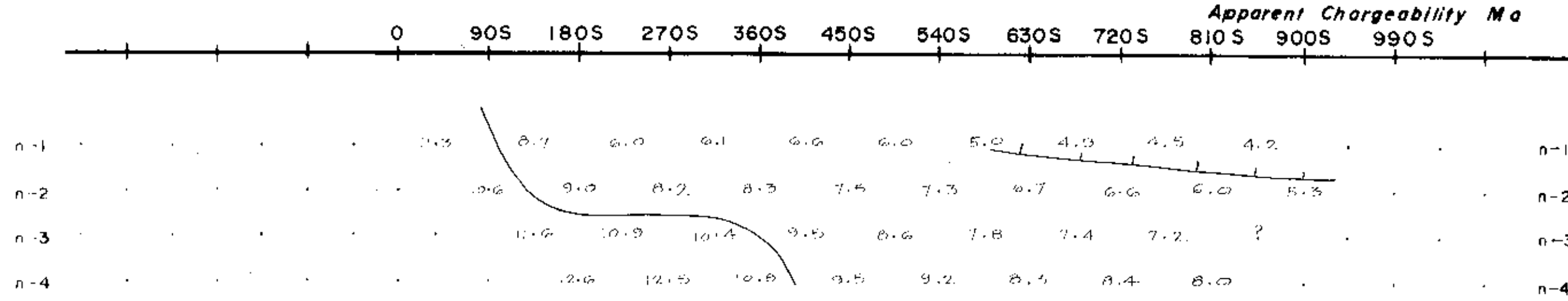
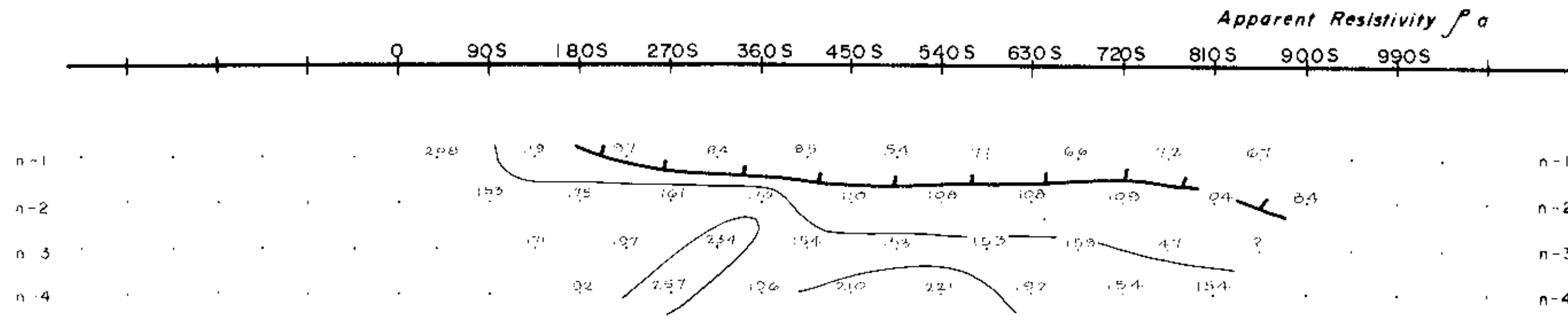


SCALE 1:1
 DATE SURVEYED APRIL 27, 1978
 CONTOUR INTERVALS:
 APP. RES. — 50 ρa
 APP. CHARG. — 5.0 Mv/V
 APPROVED *[Signature]*
 DATE _____
 TRANSMITTER — HUNTEC 7.5 Kw
 RECEIVER — 1PR8

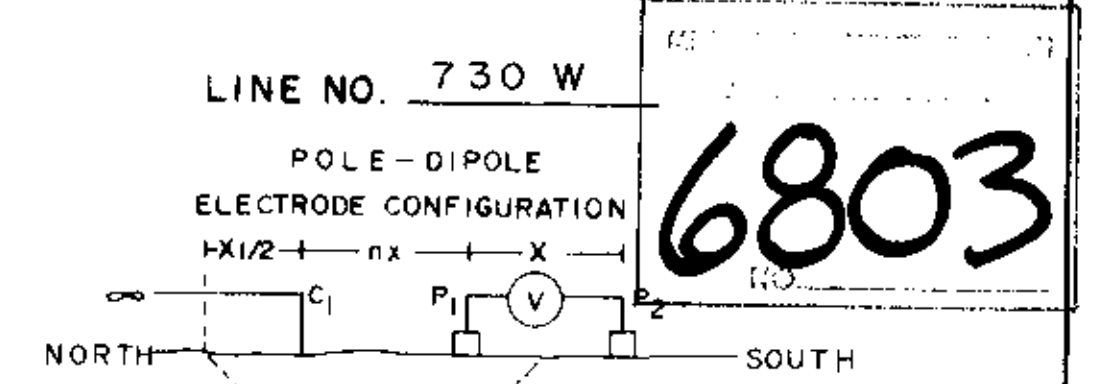
INDUCED POLARIZATION AND RESISTIVITY SURVEY
 SURVEYED BY COMINCO LTD., EXPLORATION DIVISION

LINE 590 W

COMINCO LTD.
REG PROPERTY, BYR CLAIMS
KAMLOOPS M. D., B.C.



	0	90S	180S	270S	360S	450S	540S	630S	720S	810S	900S	990S



LINE NO. 730 W
 POLE-DIPOLE ELECTRODE CONFIGURATION
 $\frac{X}{2}$ — n_x — X
 NORTH — SOUTH
 $X = 90m$
 PLOTTING POINT
 $n = 1, 2, 3, 4$
 CURRENT ELECTRODE NORTH OF POTENTIAL DIPOLE

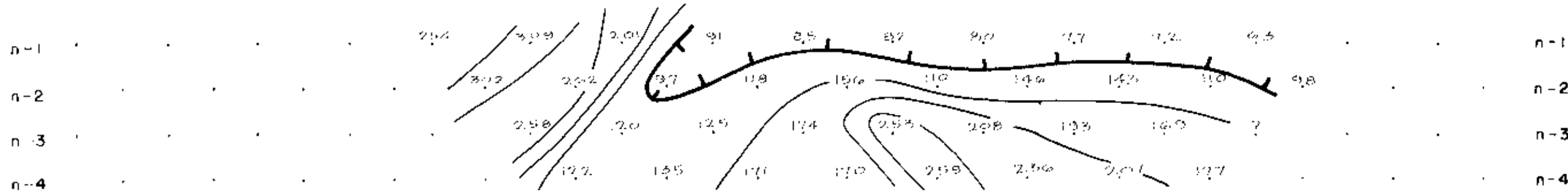
SCALE 1:1
 DATE SURVEYED APRIL 27, 1978
 CONTOUR INTERVALS:
 APP RES. — $50 \rho_a$
 APP CHARG — 5.0 Mv/V
 APPROVED CH
 DATE _____
 TRANSMITTER — HUNTEC 7.5 Kw
 RECEIVER — IPR 8
 INDUCED POLARIZATION AND RESISTIVITY SURVEY
 SURVEYED BY COMINCO LTD., EXPLORATION DIVISION

LINE 730 W

COMINCO LTD. REG PROPERTY, BYR CLAIMS KAMLOOPS M.D., B.C.

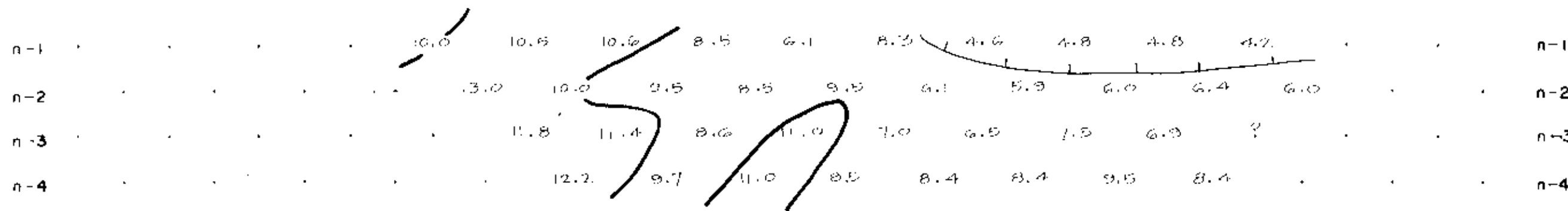
Apparent Resistivity ρ_a

0 90S 180S 270S 360S 450S 540S 630S 720S 810S 900S 990S



Apparent Chargeability M_a

0 90S 180S 270S 360S 450S 540S 630S 720S 810S 900S 990S

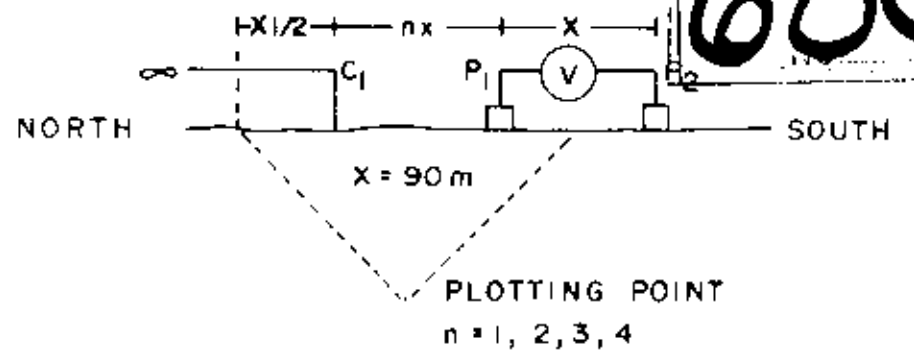


Station	0	90S	180S	270S	360S	450S	540S	630S	720S	810S	900S	990S
n-1												
n-2												
n-3												
n-4												

LINE NO. 880 W

6803

POLE-DIPOLE
ELECTRODE CONFIGURATION



CURRENT ELECTRODE NORTH OF POTENTIAL DIPOLE

SCALE 1:

DATE SURVEYED APRIL 27, 1978

CONTOUR INTERVALS:

APP. RES. - $50 \rho_a$
APP. CHARG. - 5.0 Mv/V

APPROVED

DATE

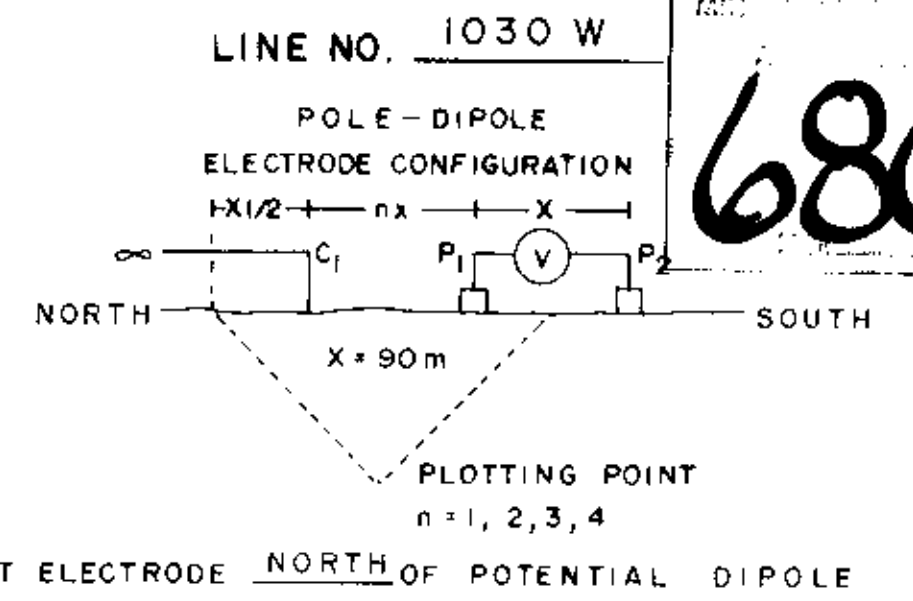
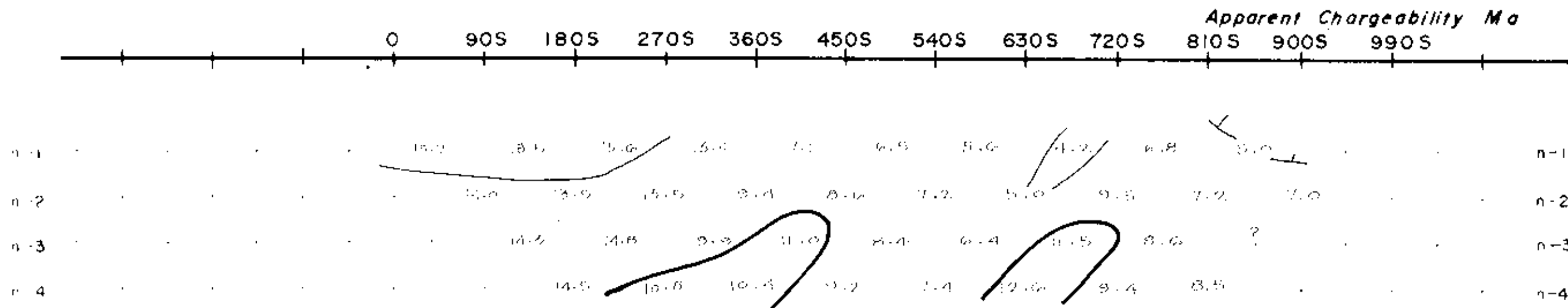
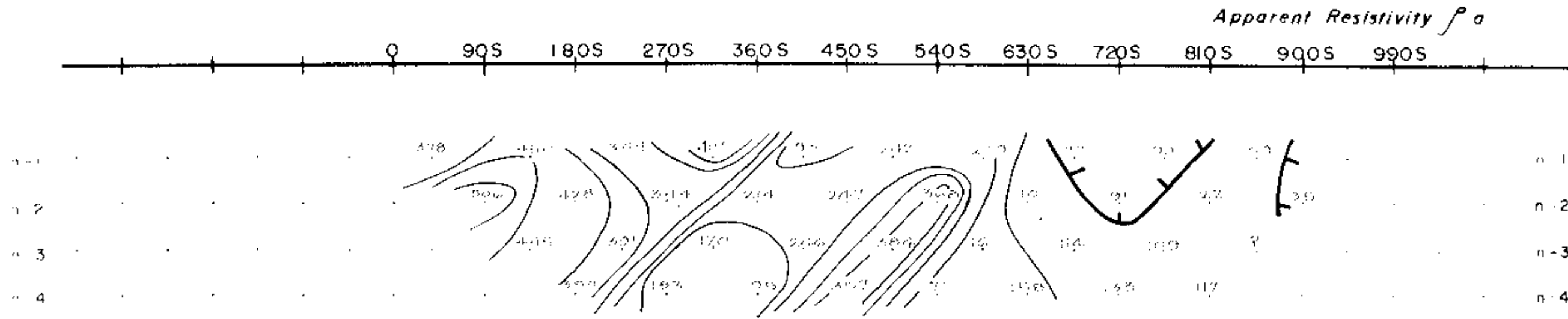
TRANSMITTER - HUNTEC 7.5 Kw
RECEIVER - IPR8

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

LINE 880 W

COMINCO LTD.
REG PROPERTY, BYR CLAIMS
KAMLOOPS M. D., B.C.

6803



	0	90S	180S	270S	360S	450S	540S	630S	720S	810S	900S	990S
n-1												
n-2												
n-3												
n-4												

SCALE 1:

DATE SURVEYED APRIL 27, 1978

CONTOUR INTERVALS:

APPROVED CA

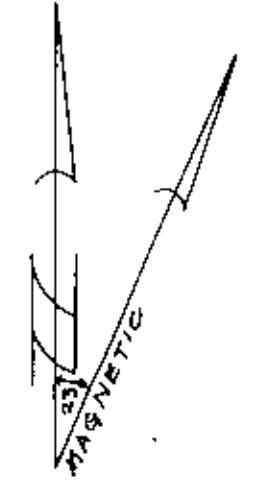
APP RES — $50 \rho_a$
 APP CHARG — 5.0 Mv/V

DATE _____

TRANSMITTER — HUNTEC 7.5 Kw
 RECEIVER — IPR 8

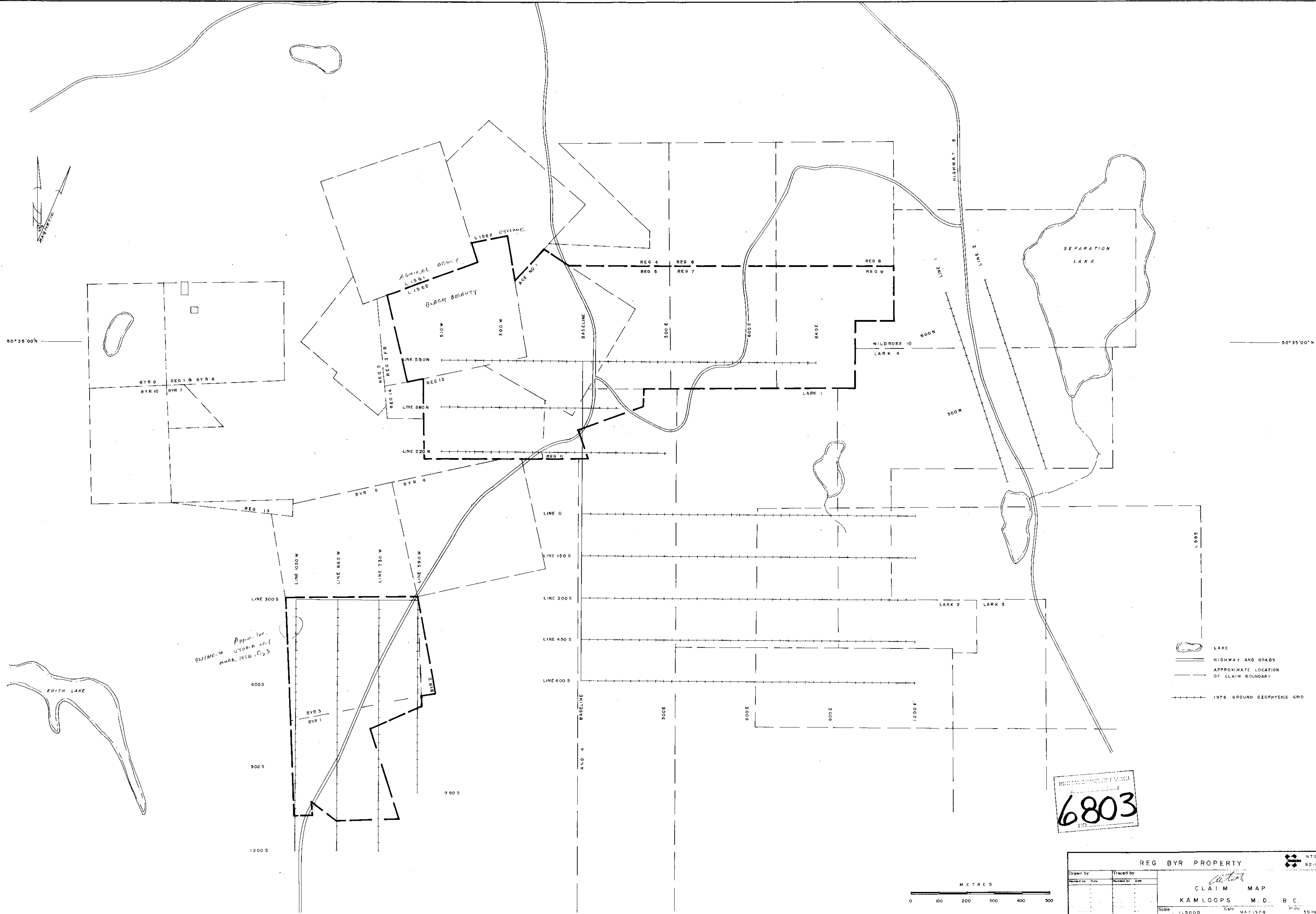
INDUCED POLARIZATION AND RESISTIVITY SURVEY
 SURVEYED BY COMINCO LTD., EXPLORATION DIVISION

LINE 1030 W



50°35'00"N

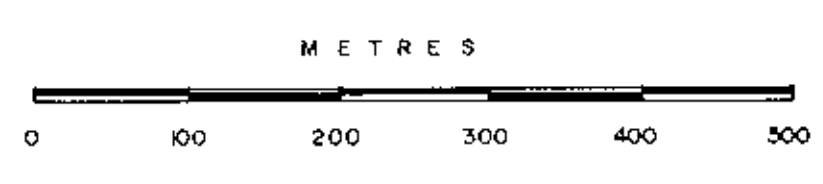
50°35'00"N



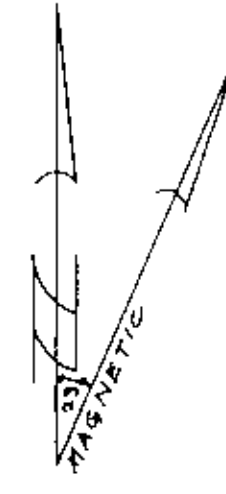
Appur. loc.
POSTING TO
UTAHIA 4414
MAY 1950, C/S 3

- LAKE
- HIGHWAY AND ROADS
- APPROXIMATE LOCATION OF CLAIM BOUNDARY
- 1978 GROUND GEOPHYSICS GRID

MINERAL INVESTMENT & MACH
6803
H.O.

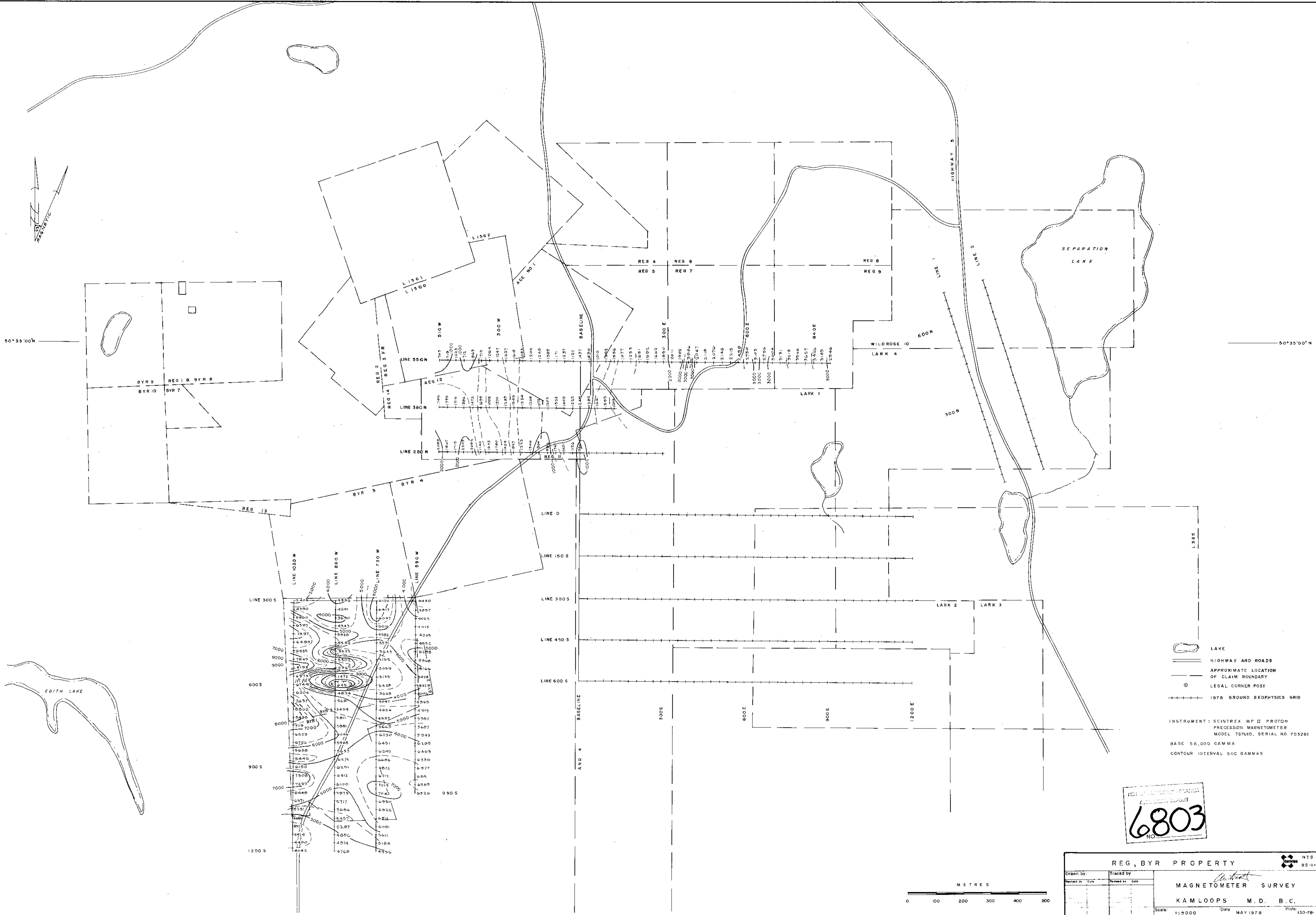


REG BYR PROPERTY		NTS 92-1-9	
Drawn by	Traced by	<i>Antea</i>	
Checked by	Reviewed by		
CLAIM MAP		KAMLOOPS M.D. B.C.	
Scale 1:5000	Date MAR 7 1978	Page 1978-2	



50°35'00"N

50°35'00"N



- LAKE
- HIGHWAY AND ROADS
- APPROXIMATE LOCATION OF CLAIM BOUNDARY
- LEGAL CORNER
- 1978 GROUND GEOPHYSICS GRID

INSTRUMENT: SCINTREX MP II PROTON
 PRECISION MAGNETOMETER
 MODEL 767010, SERIAL NO. 703281
 BASE 56,000 GAMMA
 CONTOUR INTERVAL 500 GAMMAS

6803
 NO.

REG, BYR PROPERTY		NTS 92-1-9
Drawn by:	Traced by:	
Checked by:	Reviewed by:	
MAGNETOMETER SURVEY		
KAMLOOPS M. D. B. C.		
Scale: 1:5,000	Date: MAY 1978	Plate: 130-78-3

