

COMINCO LTD.

EXPLORATION
NTS: 92H/9E

WESTERN DISTRICT
15 JULY 1980

GEOPHYSICAL REPORT

ON

INDUCED POLARIZATION, VLF, AND MAGNETICS SURVEYS

RED STAR PROPERTY

PRINCETON AREA, B.C.

SIMILKAMEEN MINING DIVISION

LATITUDE: 49°10' N - LONGITUDE: 120°35' W

FIELD WORK PERFORMED:

10 TO 20 JUNE 1980

ON CLAIM:

RED STAR CLAIM (18 UNITS)

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

8170
Part 2
of 2

REPORT BY:

ALAN R. SCOTT

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COMINCO LTD.

EXPLORATION

NTS: 92H/2E

WESTERN DISTRICT

15 JULY 1980

GEOPHYSICAL REPORT

ON

INDUCED POLARIZATION, VLF, AND MAGNETICS SURVEYS

RED STAR PROPERTY

SIMILKAMEEN MINING DIVISION

INTRODUCTION

The Red Star mineral claim straddle the Hope-Princeton Highway (#3) about one kilometer west of the confluence of the Pasayten and Similkameen Rivers. The present survey work was restricted to the portion of the claims immediately north of the highway. Plate 176-80-1 shows the general location of the property, and Plate 176-80-2 the location of the grid relative to the claims.

The work was done during the period 10-20 June 1980, and consisted of 16.5 line kilometers of induced polarization survey, 17 line kilometers of VLF electro-magnetics survey, and 10 line kilometers of magnetics survey.

The exploration target is the massive sulphide volcanogenic type deposit. This report describes the procedures of the various geophysical surveys, presents the data, and discusses the results of those surveys.

GEOPHYSICAL SURVEYS

The geophysical surveys were done by a Cominco in-house crew. The party chief on the survey was S. Holland, geophysicist in training.

Induced Polarization

A Hunttec Mk IV LOPO portable induced polarization transmitter, in combination with a Scintrex IPR-8 receiver, were used on the Red Star IP survey. Readings were taken in the time domain using a 2 second current on / 2 second current off alternating square wave signal. The chargeability values plotted are those for the M232 window from 650 to 1170 milliseconds after cessation of the current pulse. Units for the IPR-8 receiver are in millivolts per volt.

The Wenner electrode array was used on the survey with "a" spacings of 50 m and 150 m. This array was chosen primarily to ensure adequate signal strength from the relatively low power LOPO transmitter.

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 electrodes during the current on a period (I), and K is a constant dependant on the "a" spacing and array geometry.

VLF Electromagnetometer

A Crone Radem VLF electromagnetometer was used for the VLF survey. The plotted values are the in phase dip angle of the resultant field and the horizontal component of the field strength. The dip angle data is plotted so as to give a right wave crossover over conductive bodies. The survey was looped to obtain drift corrections for the field strength values.

Magnetometer

A Scintrex MP-2 proton precession magnetometer was used on the magnetics survey. The instrument has a digital display which gives the value of the earth's total magnetic field to the nearest gamma. The data was corrected for diurnal changes by the standard base station looping method.

DISCUSSION OF RESULTS

The geophysical survey results are presented on accompanying Plates 176-80-3 to 16 inclusive (survey lines 0 to 13N). The numerical values of the chargeability (IP) and apparent resistivity are given in pseudosection format. This is a schematic form of presentation and no target depth or geometry is implied by it. In addition, the chargeability values are plotted as line profiles with anomalies coded as follows:-

- ██████████ Chargeability anomaly; a=50 m and a=150 m
- — — Chargeability anomaly; a=150 m only

The VLF and magnetic field data are plotted as line profiles. The dip angle values are plotted so as to give a right wave crossover over a conductive body. The location of such conductors is noted on the profiles by a heavy vertical line. The magnetometer survey was conducted only on lines 300 to 1000N. Magnetic field highs are indicated on the profiles by a heavy horizontal line between inflection points. (Note that this does not imply a width of the magnetic body. More data points would be required to obtain width and dip estimates).

Of the three geophysical surveys performed, IP, VLF, and magnetics, the IP (chargeability) is considered the most important parameter. Therefore the following discussion is biased towards the chargeability response.

Three distinct zones of high chargeability were detected on the survey. These are labelled A, B, and C on the profiles. Line to line correlation of these zones is very clear.

Zone A, the westernmost zone, is a relatively narrow anomaly and was detected at both the a=50 meter and a=150 meter electrode separations. The anomalous zone can be traced from line 100N; 575W to line 1000N; 600W. The near separation peak amplitude varies from $12.8 \frac{mV}{V}$ on line 600W to $39.0 \frac{mV}{V}$ on line 300N. On lines 200N to 700N, where the $\frac{mV}{V}$ chargeability response is strongest, there is a coincident VLF conductor. Zone A lies immediately east of a magnetic field high. There is a weak magnetic high coincident with Zone A on line 600N (525W).

Zone B, the central chargeability high, was detected only at the a=150 meter separation. The zone is defined on the profiles from line 300N to 1200N. The peak a=150 meter response of $37.0 \frac{mV}{V}$ is at line 600N; 275W. Zone B does not have a coincident VLF conductor but is coincident with a distinct magnetic field high.

Zone C, the easternmost chargeability high, is a very broad response zone and was detected at both the a=50 meter and a=150 meter separations. The anomaly is defined on the sections from line 400N; 100W-75E (open to east) to line 1200N; 275W-275E. The anomaly also gives a weak response on line 1300N. The strongest response from anomaly C is $59.5 \frac{mV}{V}$ (a=150 meters) at line 800N; 25W. Anomaly C lies in an area of low magnetic field values.

CONCLUSIONS

Portions of the Red Star mineral claims were surveyed with time domain IP, VLF electromagnetics, and total field magnetics in the summer of 1980.


Three distinct zones of anomalously high chargeability response were detected on the survey, and have been labelled as Zones A, B, and C on the profiles which accompany this report.

Zone A is relatively narrow zone which lies on the east side of the contact of high magnetic susceptibility (on the west) to lower susceptibility (on the east and including Zone A). The strongest response of $39.0 \frac{mV}{V}$ is at line 300N; 525W. It is coincident with a VLF conductor on those $\frac{mV}{V}$ lines where the IP response is strongest. Zone A was detected at both the a=50 meter and a=150 meter separations.


Zone B was detected only on the a=150 meter separation. The peak value of $37.0 \frac{mV}{V}$ is at line 600N; 275W. Zone B does not have a coincident VLF conductor, but is coincident with a distinct magnetic field high.

Zone C is a very broad anomaly, and was detected at both the a=50 meter and a=150 meter separations. The peak value of $59.5 \frac{mV}{V}$ (a=50 meter) is at line 800N; 25W. Anomaly C is coincident with low (background) magnetic field values.

Respectfully Submitted By: _____


Alan R. Scott, Geophysicist

Endorsed For Release By: _____


G. Harden, Manager
Exploration, Western District

ARS:hmr

Attachments.

Distribution.

Mining Recorder (2) ✓
Western District Files (1)
Geophysics Files (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 RED STAR MINERAL CLAIM
ON THE RED STAR PROPERTY
LOCATED 35 KM SOUTHWEST OF PRINCETON IN THE SIMILKAMEEN MINING DIVISION
OF THE PROVINCE OF BRITISH COLUMBIA, MORE PARTICULARLY
N.T.S.: 92H/9E

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 the annexed hereto and marked as "Appendix II" to this statement is a true copy of expenditures incurred on geophysical survey on the Red Star mineral claim;
3. THAT the said expenditures were incurred for the purpose of mineral exploration of the above noted claim between the 10th day of June and the 20th day of June, 1980.



Alan R. Scott, Geophysicist

15 July 1980.

APPENDIX II

RED STAR PROPERTY

STATEMENT OF EXPENDITURES

(Induced Polarization, VLF-EM, and Magnetics Surveys)

1. SALARIES

S. Holland, geophysicist in training 10-20 June	11 days @ \$105.	\$1,155.
D. Milne, geophysical technician 10-20 June	11 days @ \$105.	1,155.
E. Bernshaw, IP crewman 10-20 June	11 days @ \$ 83.	913.
Y. Fortin, IP crewman 10-20 June	11 days @ \$ 83.	913.
D. Campbell, IP crewman 10-20 June	11 days @ \$ 83.	913.
J. Allen, IP crewman 10-20 June	11 days @ \$ 83.	913.
		<hr/>
		\$ 5,962.00

2. EQUIPMENT RENTALS

LOPO/IPR-8 IP Survey System, Mag, Radem VLF	1,665.10
4X4 Truck and Equipment Trailer	470.60
	<hr/>
	\$ 2,135.70

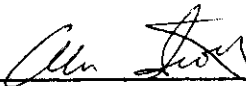
3. OPERATING CHARGES

(Towards report, drafting, supervision) Geophysical Survey	10 days @ \$175/day	\$ 1,750.00
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4. MISCELLANEOUS

Food, Lodging, Gas, Consumables	<hr/>	\$ 2,510.30
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TOTAL EXPENDITURES	<hr/>	\$12,358.00
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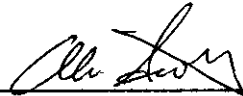
Alan R. Scott, Geophysicist

APPENDIX III

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

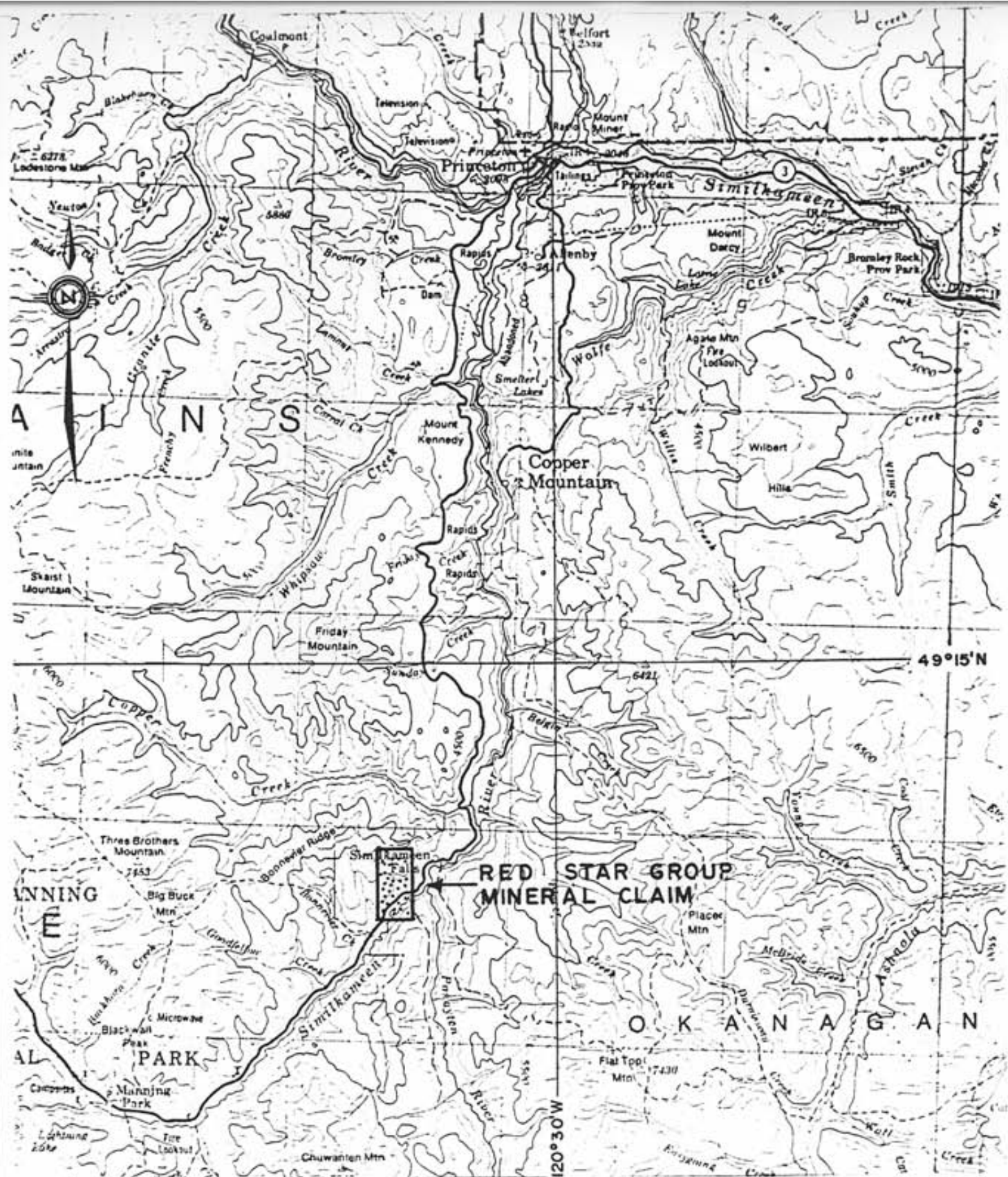
I, Alan R. Scott, of 4013 West 14th Avenue, in the City of Vancouver, in the Province of British Columbia, do hereby certify:-

1. THAT I graduated from the University of British Columbia in 1970 with a B.Sc. in Geophysics;
2. THAT 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. THAT I have been practising my profession for the past ten years.



Alan R. Scott, Geophysicist

15 July 1980.

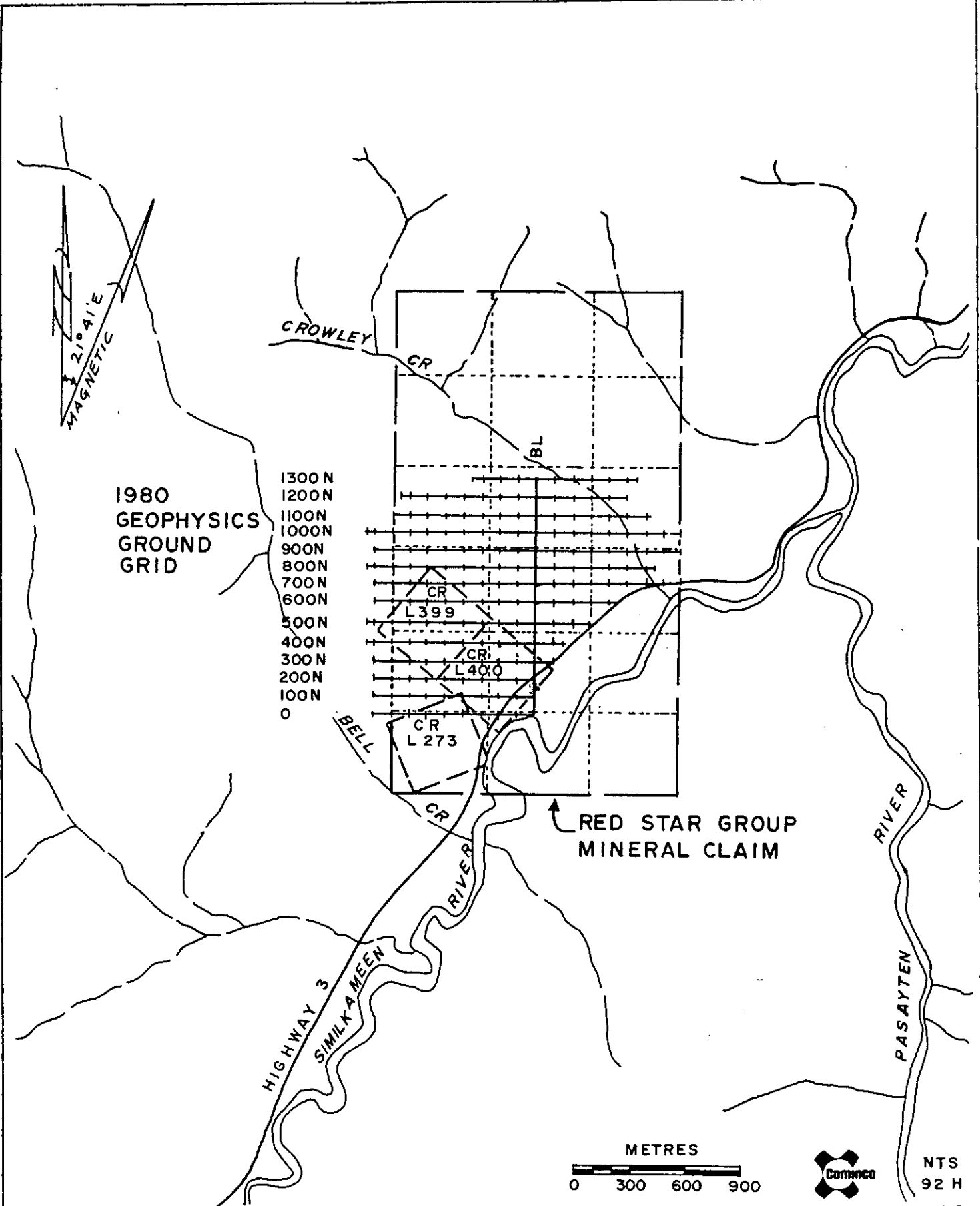


RED STAR GROUP  NTS
92 H

Drawn by:		Traced by:	
Revised by	Date	Revised by	Date

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

Scale: 1:250,000 Date: JULY 1980 Plate: 176-80-1



Drawn by:		Traced by:	
Revised by	Date	Revised by	Date

CLAIM AND GRID MAP
SIMILKAMEEN M.D., B.C.

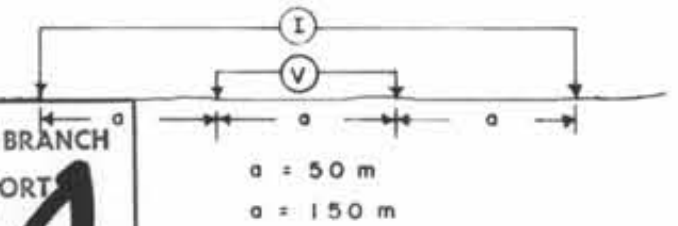
Scale: 1:30,000 Date: JULY 1980 Plate: 176-80-2



COMINCO LTD. RED STAR GROUP SIMILKAMEEN M.D., B.C.

LINE NO. 0

WENNER
ELECTRODE CONFIGURATION



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8170
PART 2
OF 2

SCALE 1:5000

DATE SURVEYED JUNE 11, 12, 13, 1980

CONTOUR INTERVALS:

APP. RES. — 1, 1.5, 2, 3, 5, 7.5, 10 Ohm metres
APP. CHARG. — 5.0 Mv/V

APPROVED [Signature]

DATE _____

TRANSMITTER — HUNTEC LOPO MK IV
RECEIVER — SCINTREX IPR 8

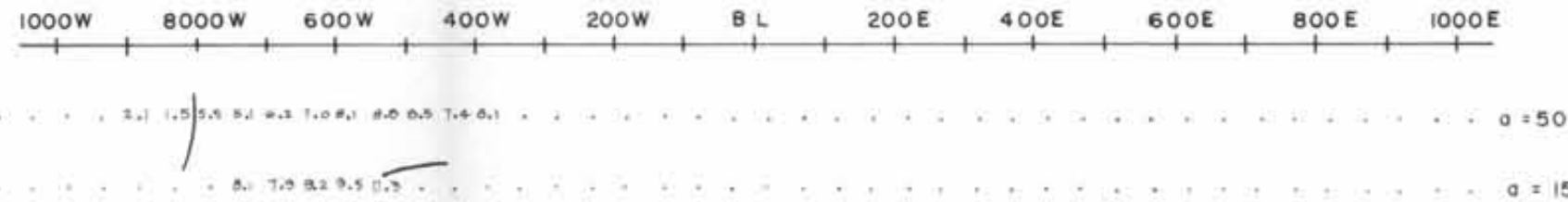
INDUCED POLARIZATION AND RESISTIVITY SURVEY
SURVEYED BY COMINCO LTD., EXPLORATION DIVISION

LINE 0

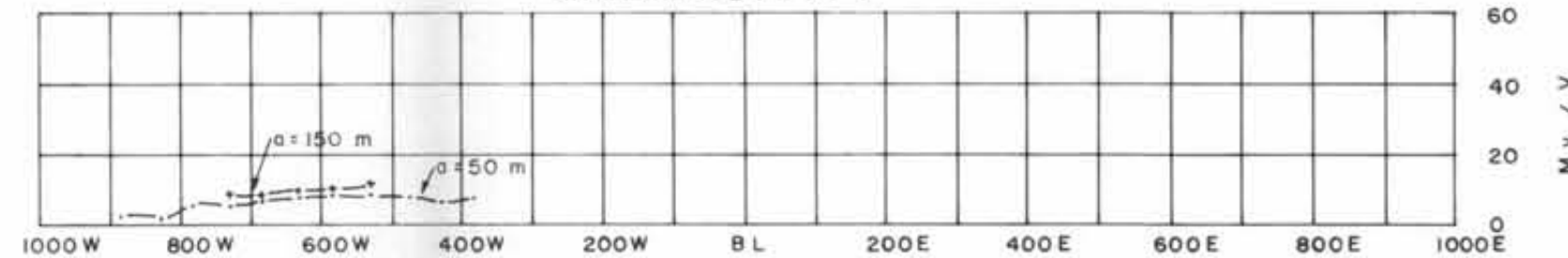
Apparent Resistivity Ohm metres



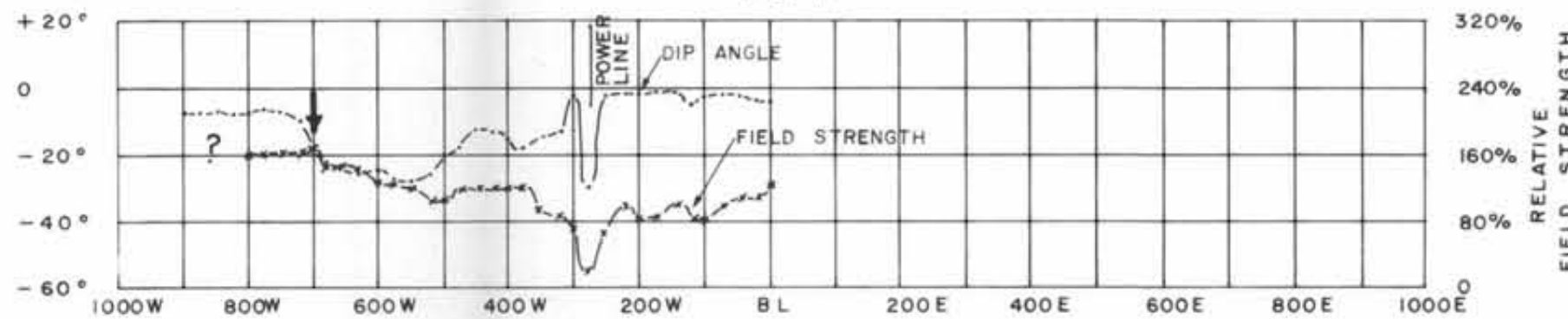
Apparent Chargeability Mv/V



CHARGEABILITY



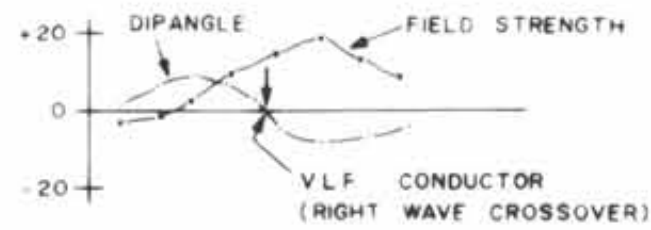
V. L. F.



CHARGEABILITY PROFILE — a = 50 m
— a = 150 m

CHARGEABILITY ANOMALY
a = 50 m and 150 m

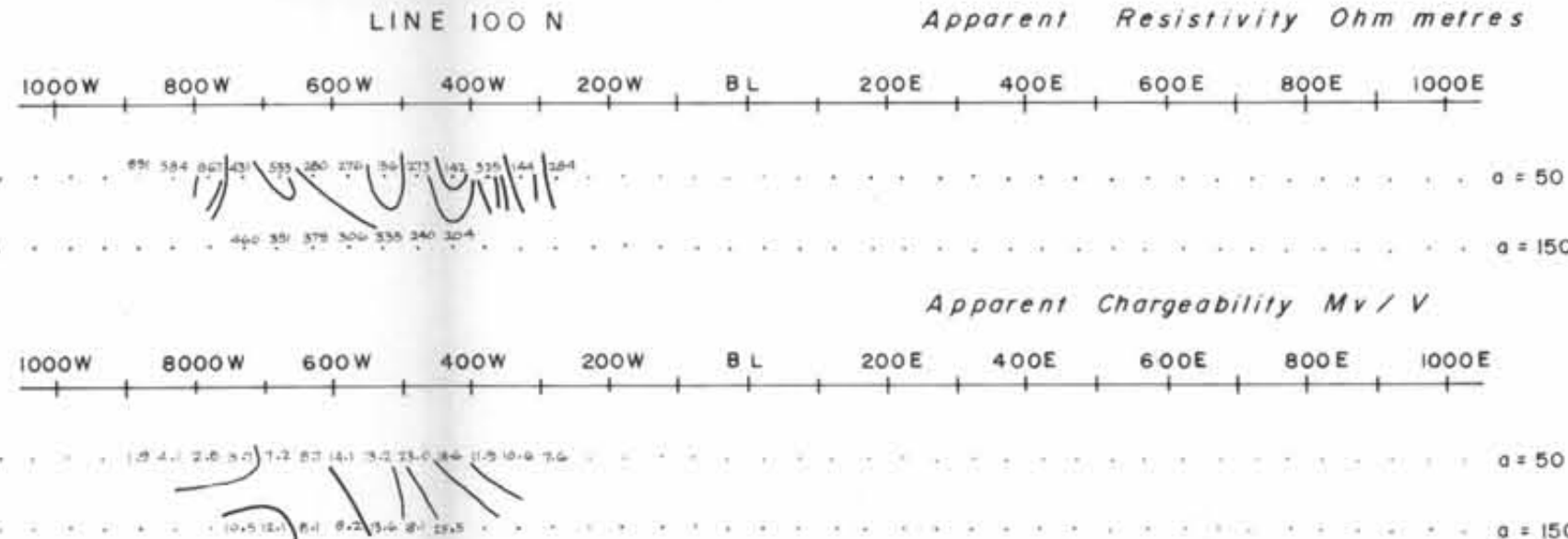
CHARGEABILITY ANOMALY
a = 150 m only



CRONE RADEM
STATION NLK (SEATTLE)
FACED S W

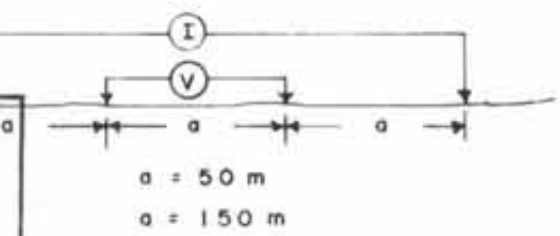
LINE 0

COMINCO LTD. RED STAR GROUP SIMILKAMEEN M.D., B.C.



LINE NO. 100 N

WENNER
ELECTRODE CONFIGURATION



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
NO. **8170**
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of 2

SCALE 1:5000

DATE SURVEYED JUNE 11, 12, 13, 14, 1980

CONTOUR INTERVALS:

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APP CHARG — 5.0 Mv/V

APPROVED [Signature]

DATE _____

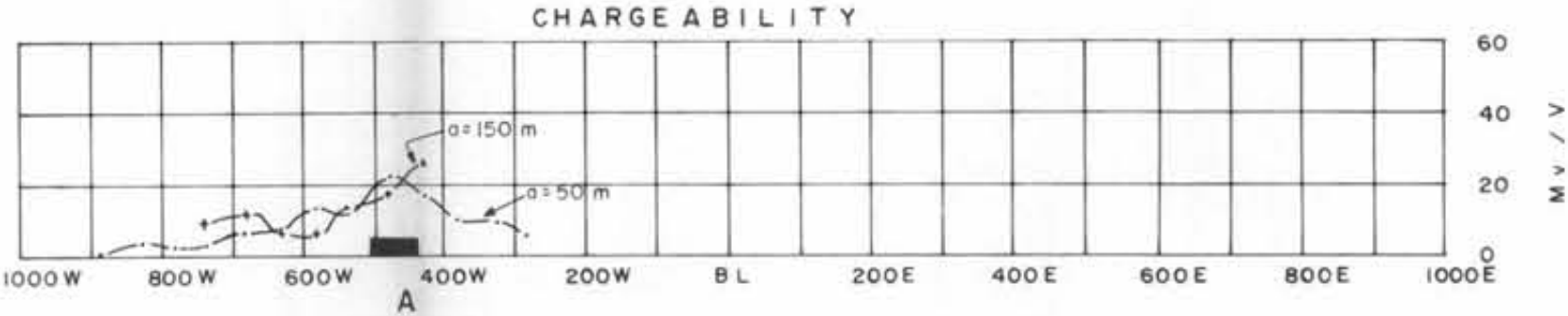
TRANSMITTER — HUNTEC LOPO MK IV
RECEIVER — SCINTREX IPR B

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

CHARGEABILITY PROFILE
a = 50 m
a = 150 m

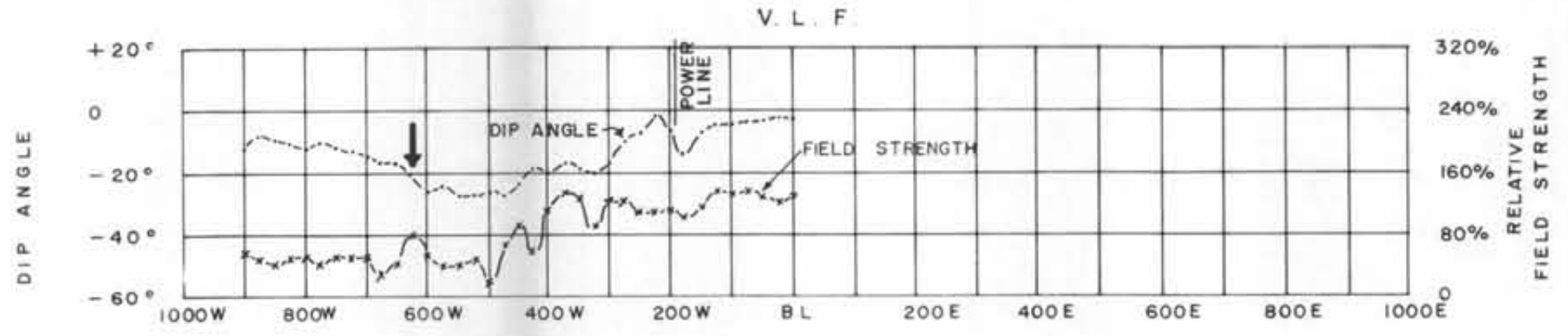
CHARGEABILITY ANOMALY
a = 50 m and 150 m

CHARGEABILITY ANOMALY
a = 150 m only



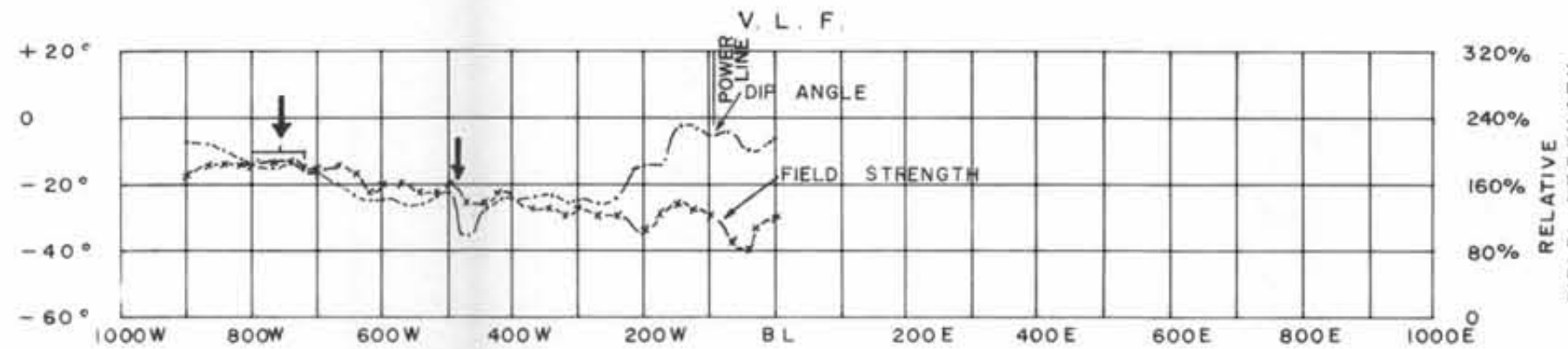
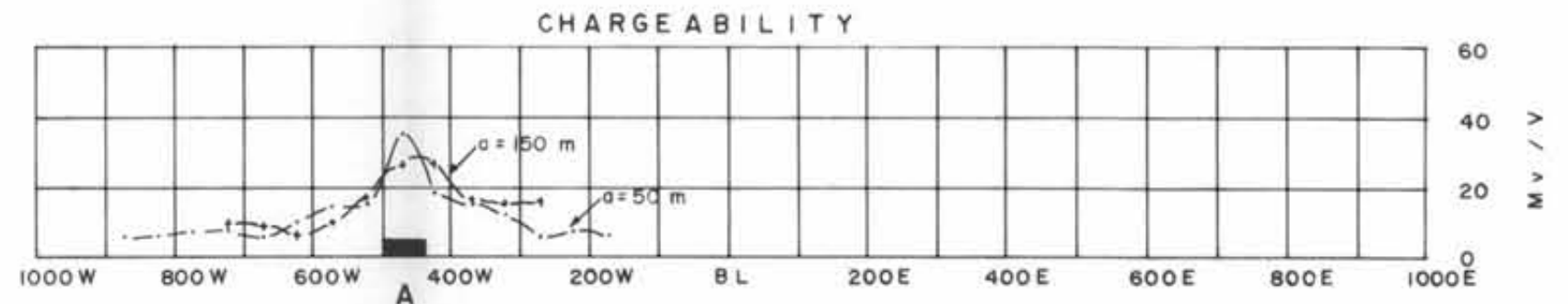
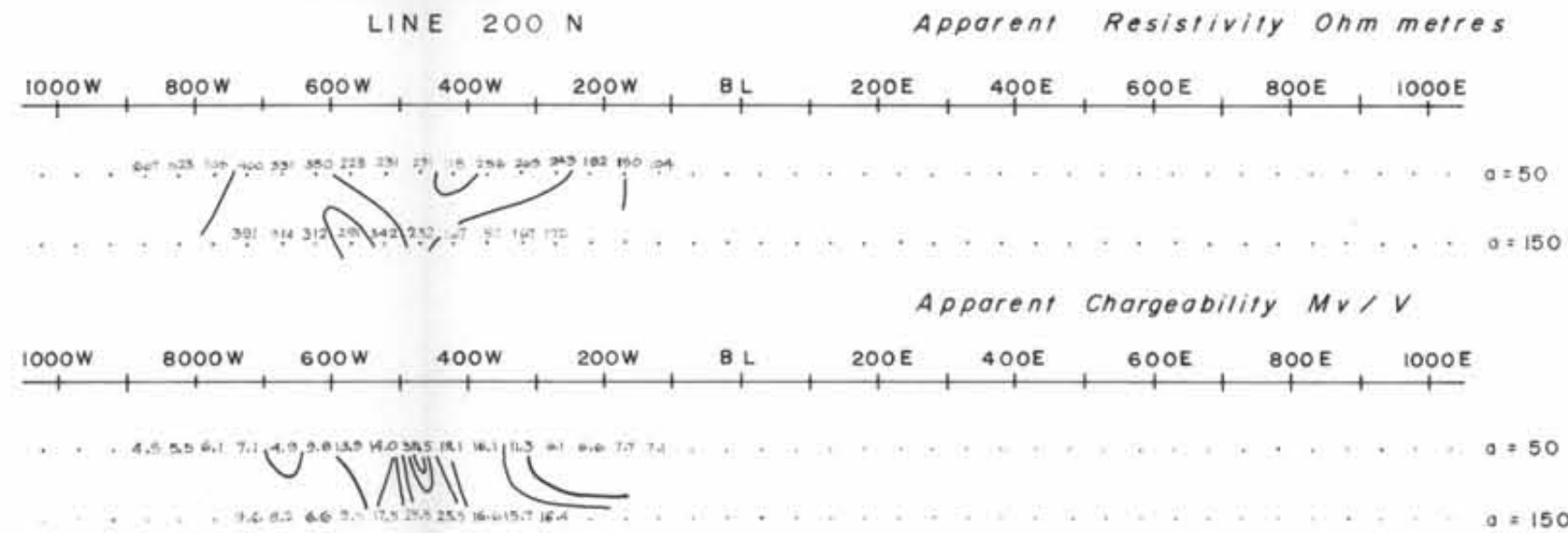
DIP ANGLE
FIELD STRENGTH
VLF CONDUCTOR
(RIGHT WAVE CROSSOVER)

CRONE RADEM
STATION NLK (SEATTLE)
FACED S W



LINE 100 N

COMINCO LTD.
RED STAR GROUP
SIMILKAMEEN M.D., B.C.



CHARGEABILITY PROFILE

a = 50 m
a = 150 m

CHARGEABILITY ANOMALY
1.5 m and 5.1 m

CHARGEABILITY ANOMALY
a = 50 m only

DIP ANGLE

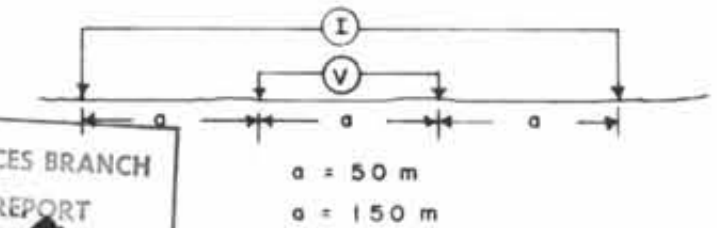
FIELD STRENGTH

VLF CONDUCTOR
(RIGHT WAVE CROSSOVER)

CRONE RADEM
STATION NLK (SEATTLE)
FACED S W

LINE NO. 200 N

WENNER
ELECTRODE CONFIGURATION



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

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SCALE 1:5000

DATE SURVEYED JUNE 11, 12, 13, 1980

CONTOUR INTERVALS:

APP. RES. — 1, 1.5, 2, 3, 5, 7.5, 1.0 Ohm metres
APP. CHARG. — 5.0 Mv/V

APPROVED *AK*

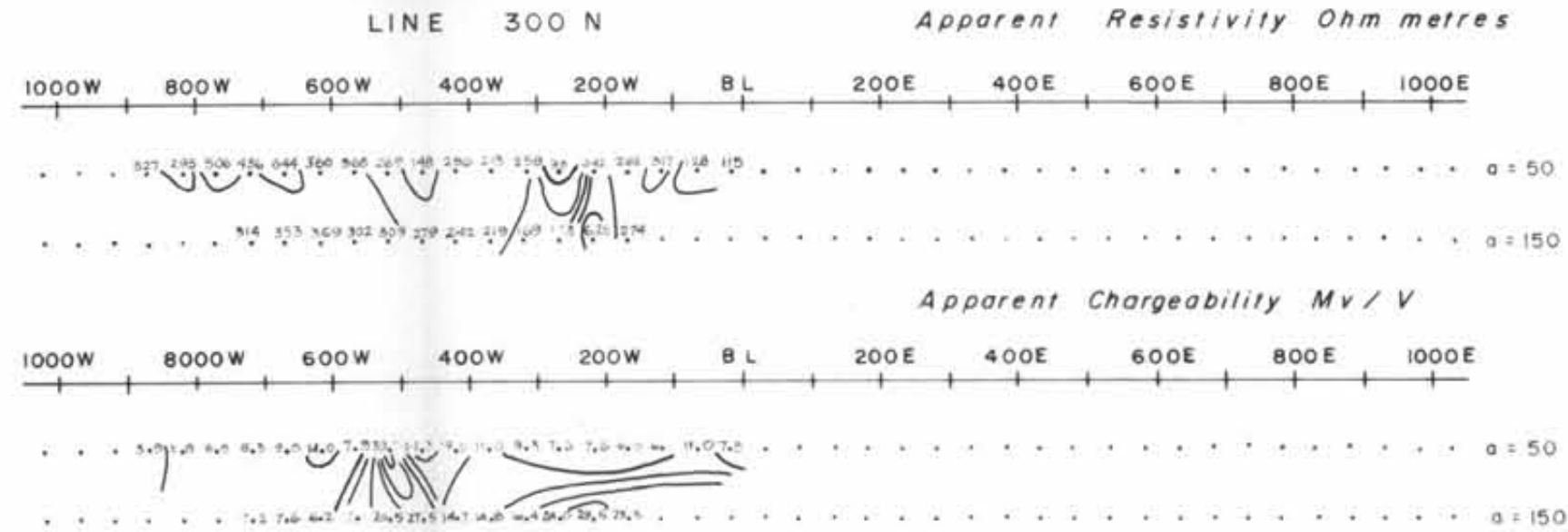
DATE _____

TRANSMITTER — HUNTEC LOPO MK IV
RECEIVER — SCINTREX IPR 8

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

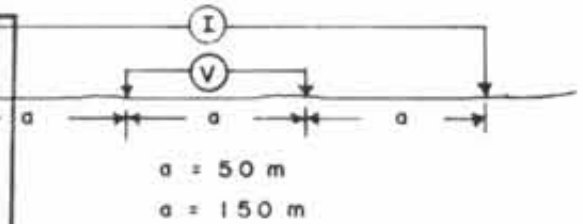
LINE 200 N

COMINCO LTD. RED STAR GROUP SIMILKAMEEN M.D.,B.C.



LINE NO. 300 N

WENNER
ELECTRODE CONFIGURATION



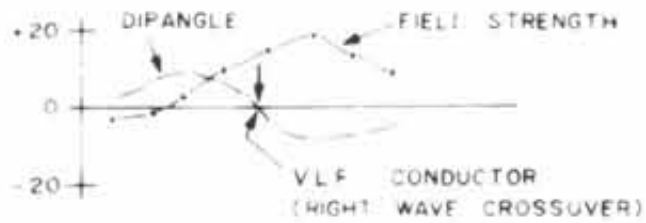
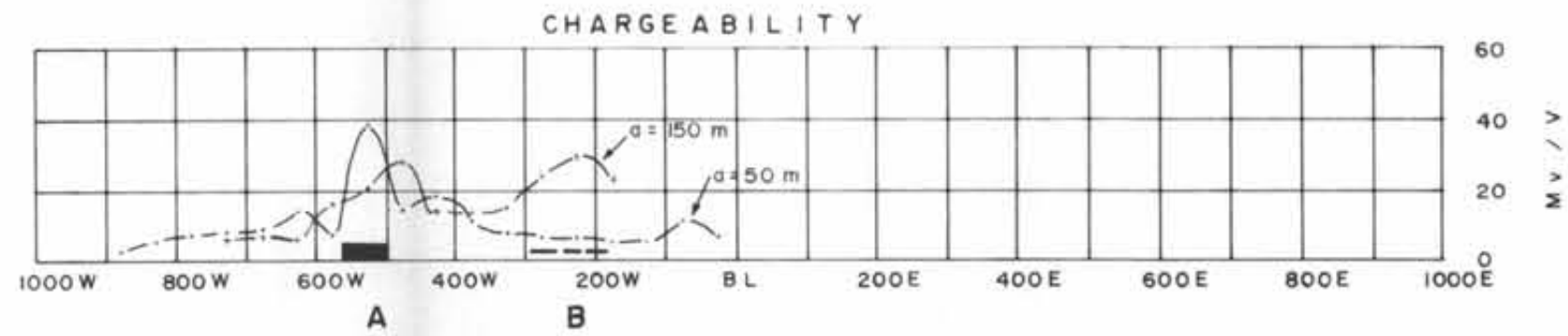
MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

8170
part 2
of 2

CHARGEABILITY PROFILE
a = 50 m
a = 150 m

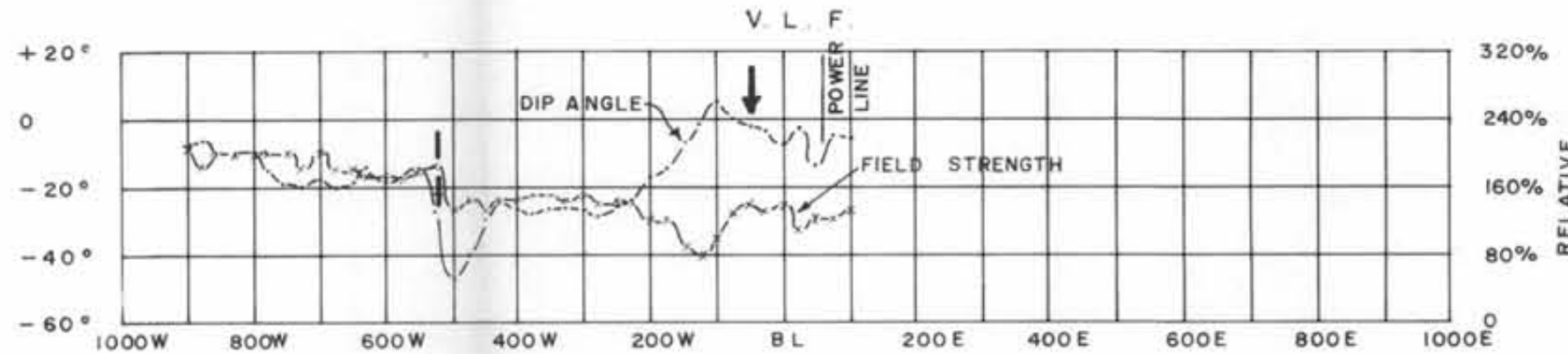
CHARGEABILITY ANOMALY
a = 50 m and 150 m

CHARGEABILITY ANOMALY
a = 150 m only



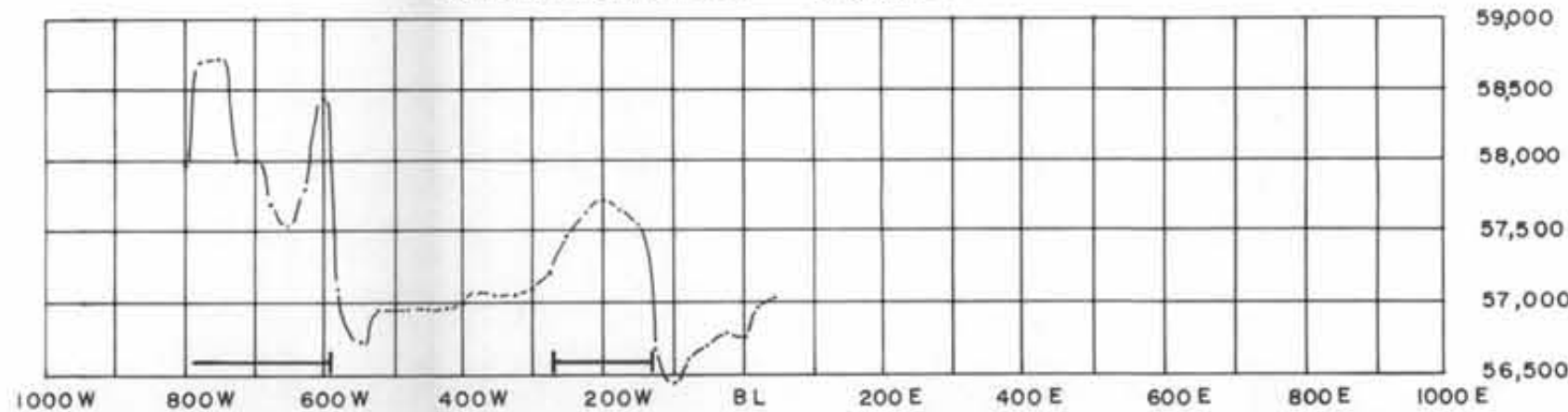
CRUNE RADEM
STATION NLK (SEATTLE)
FACED S W

DIP ANGLE



RELATIVE FIELD STRENGTH

MAGNETOMETER SURVEY



GAMMAS

SCINTREX MP-2 PROTRON PROCESSION
TOTAL FIELD MAGNETOMETER
MAGNETIC FIELD HIGH

SCALE 1:5000

DATE SURVEYED JUNE 11,12,14, 1980

CONTOUR INTERVALS:

APP. RES. - 1,1.5,2,3,5,7.5,1.0 Ohm metres
APP. CHARG. - 5.0 Mv/V

APPROVED *[Signature]*

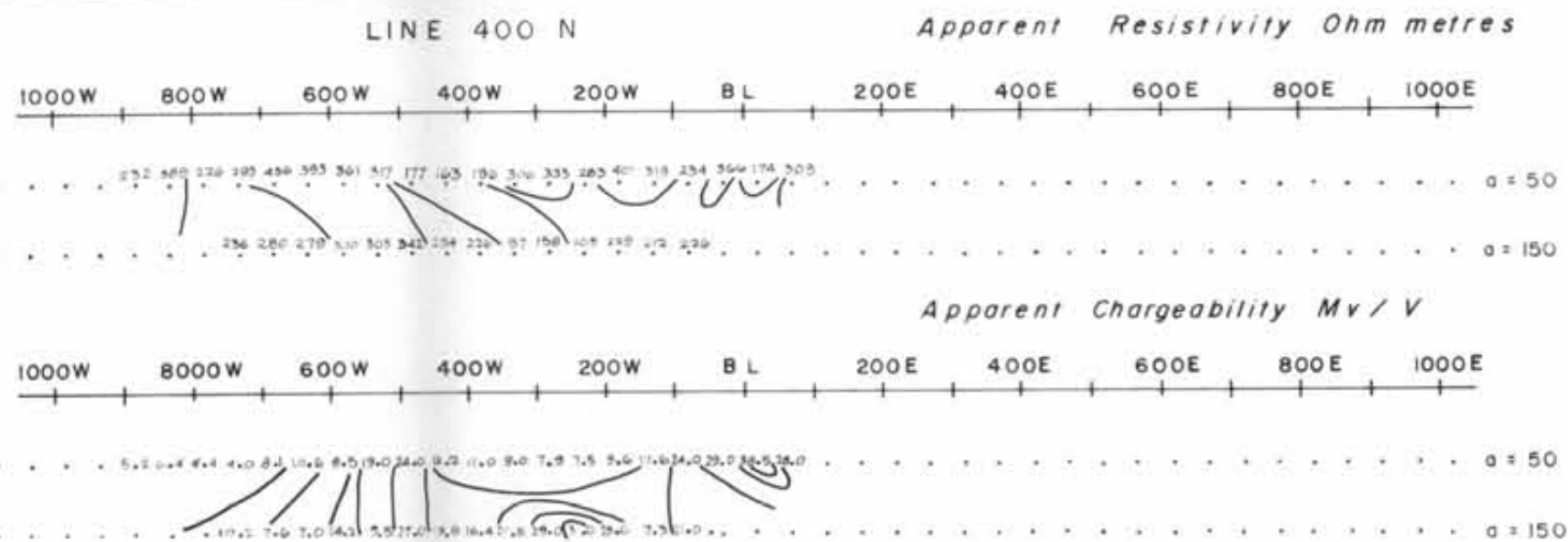
DATE _____

TRANSMITTER - HUNTEC LOPO MK IV
RECEIVER - SCINTREX IPR 8

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

LINE 300 N

COMINCO LTD. RED STAR GROUP SIMILKAMEEN M.D., B.C.

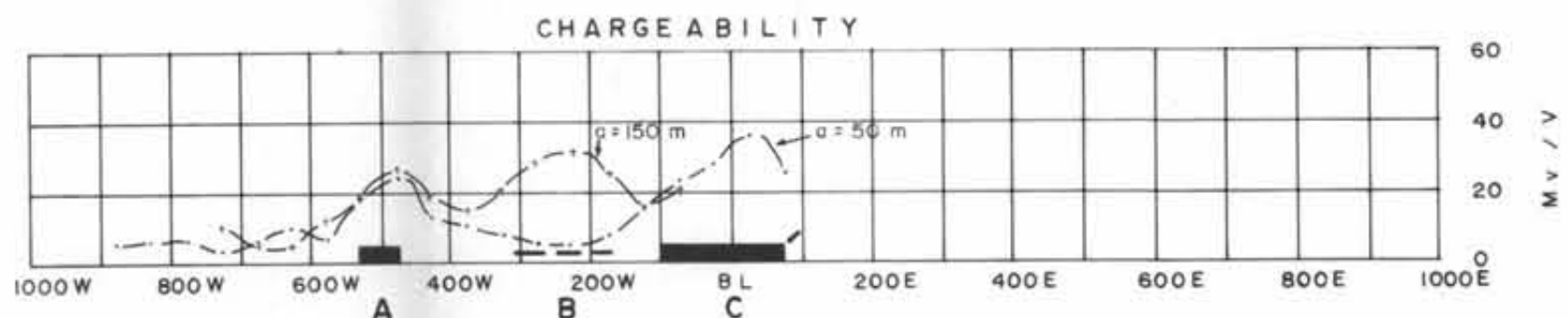


CHARGEABILITY PROFILE

--- a = 50 m
- - - a = 150 m

CHARGEABILITY ANOMALY
a = 50 m and 150 m

CHARGEABILITY ANOMALY
a = 150 m only

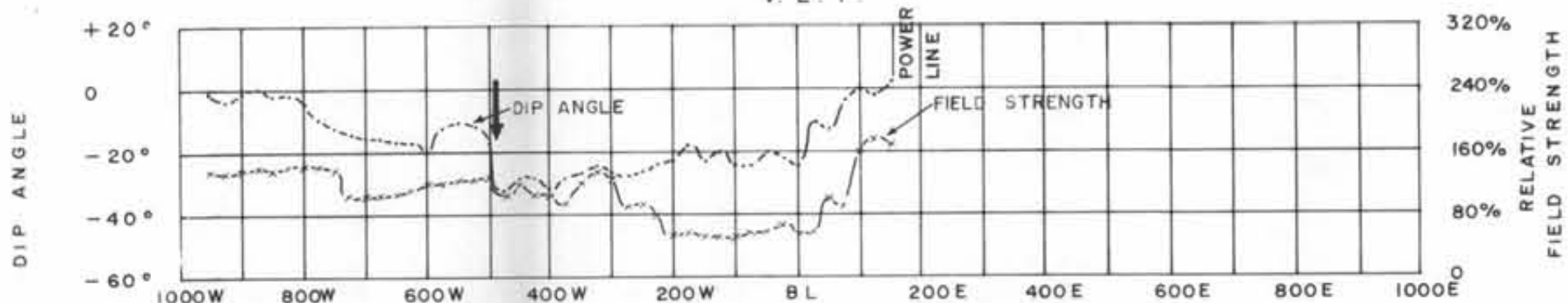


DIP ANGLE

FIELD STRENGTH

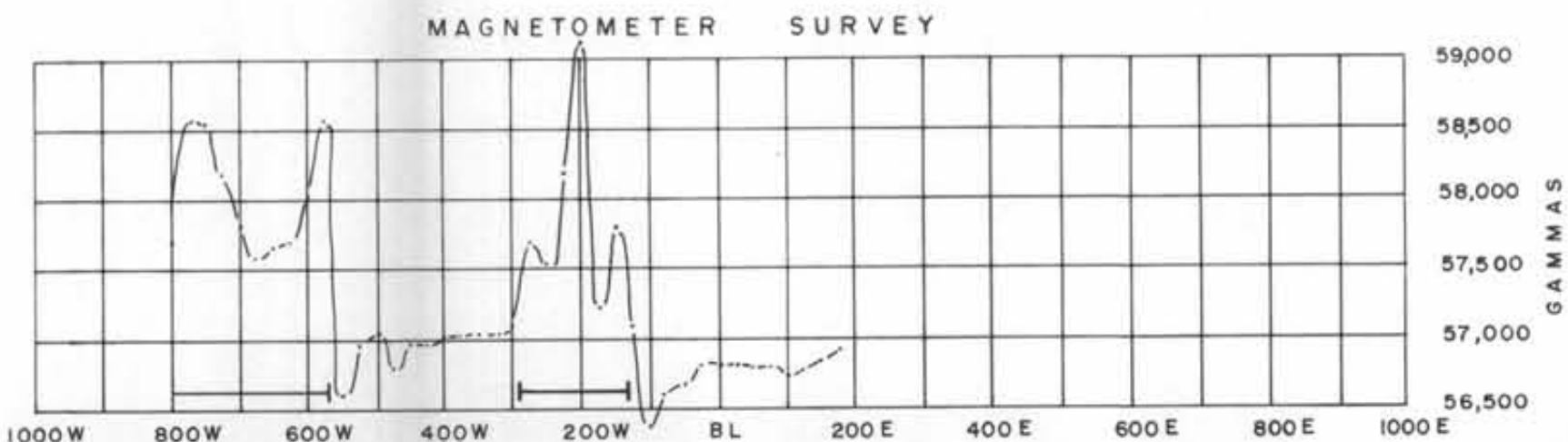
VLF CONDUCTOR
(RIGHT WAVE CROSSOVER)

CRUNE RADEM
STATION NLK (SEATTLE)
FACED S-W



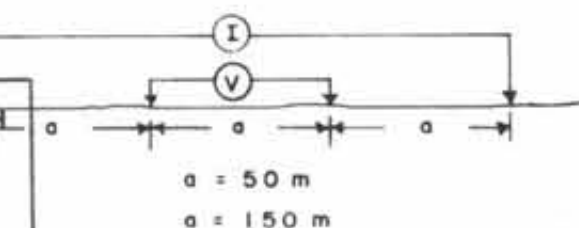
SCINTREX MP-2 PROTRON PROCESSION
TOTAL FIELD MAGNETOMETER

MAGNETIC FIELD HIGH



LINE NO. 400 N

WENNER
ELECTRODE CONFIGURATION



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SCALE 1:5000

DATE SURVEYED JUNE 11, 12, 15, 1980

CONTOUR INTERVALS:

APP. RES. — 1, 1.5, 2, 3, 5, 7.5, 1.0 Ohm metres
APP. CHARG. — 5.0 Mv/V

APPROVED

DATE _____

TRANSMITTER — HUNTEC LOPO MK IV
RECEIVER — SCINTREX IPR 8

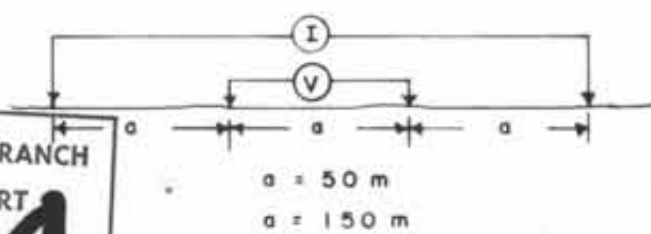
INDUCED POLARIZATION AND RESISTIVITY SURVEY
SURVEYED BY COMINCO LTD., EXPLORATION DIVISION

LINE 400 N

COMINCO LTD. RED STAR GROUP SIMILKAMEEN M.D., B.C.

LINE NO. 500N

WENNER
ELECTRODE CONFIGURATION



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SCALE 1:5000

DATE SURVEYED JUNE 11, 12, 15, 1980

CONTOUR INTERVALS:

APP. RES. — 1, 1.5, 2.3, 5.7, 5.1, 1.0 Ohm metres
APP. CHARG. — 5.0 Mv/V

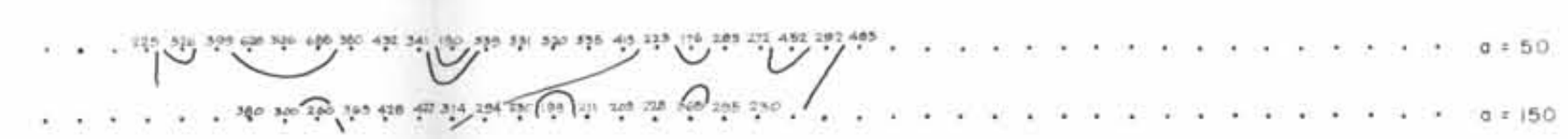
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DATE _____

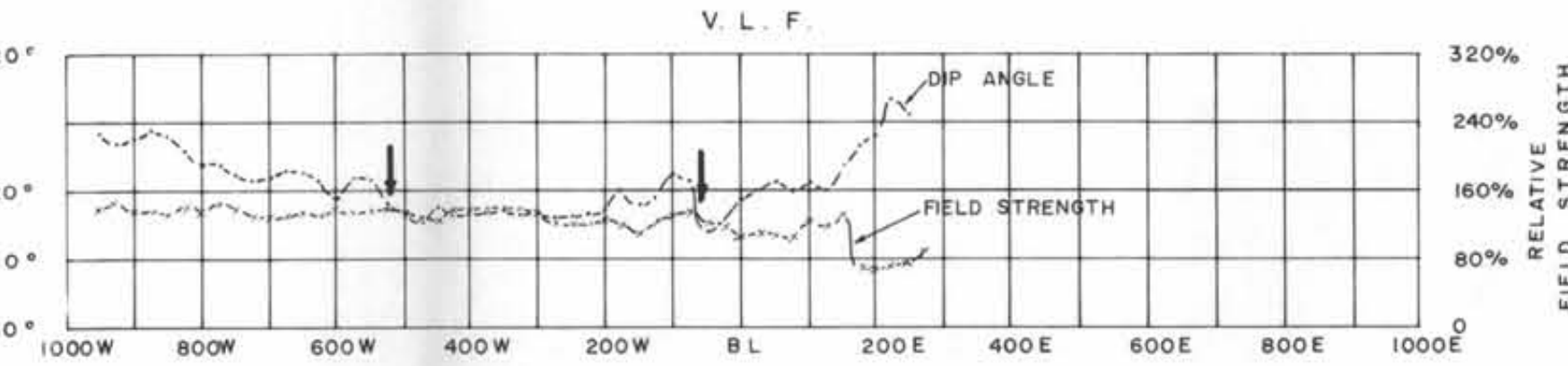
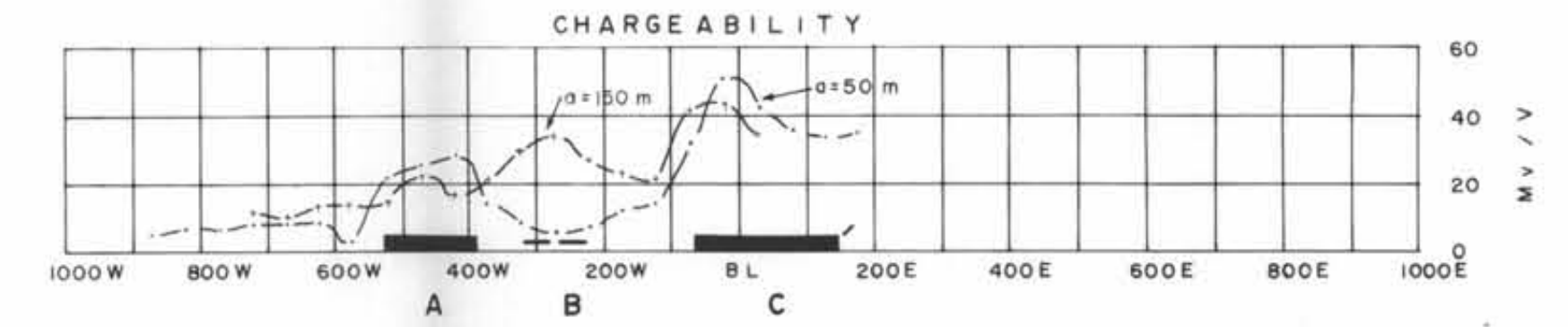
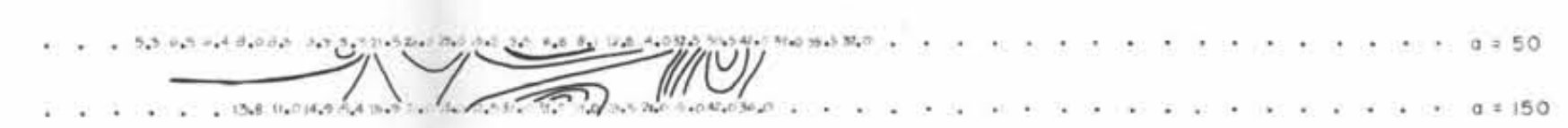
TRANSMITTER — HUNTEC LOPO MK IV
RECEIVER — SCINTREX IPR 8

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

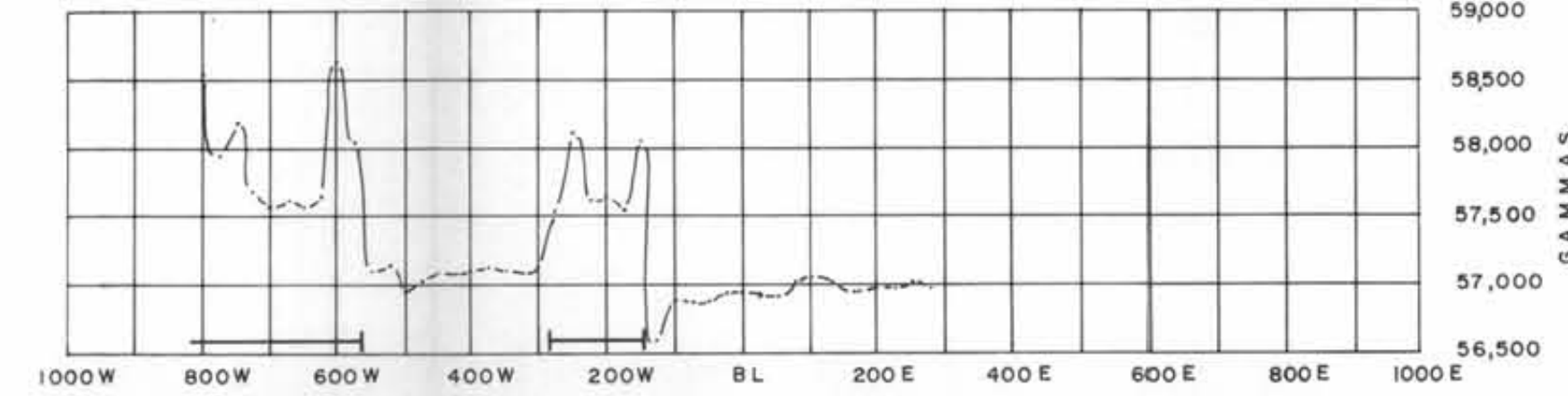
LINE 500 N
Apparent Resistivity Ohm metres



Apparent Chargeability Mv/V



MAGNETOMETER SURVEY



CHARGEABILITY ANOMALY
 ——— CHARGEABILITY ANOMALY
 a = 50 m only

DIP ANGLE
 FIELD STRENGTH
 VLF CONDUCTOR
 HIGH WAVE RECEIVER
 PHONE TALKING
 STATION NUMBER (SEATTLE)
 FACED S.W.

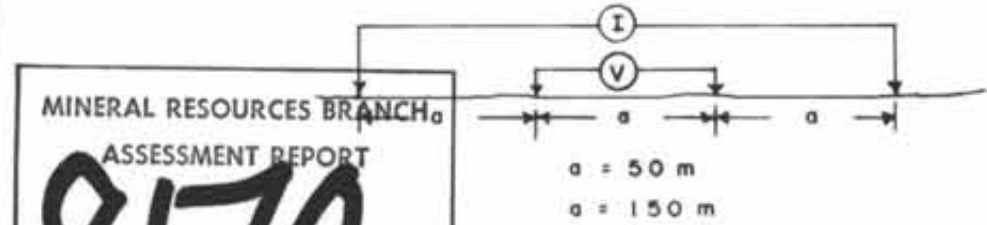
SCINTREX MK 2 PROTON PRESSION
 TOTAL FIELD MAGNETOMETER
 ——— MAGNETOMETER

LINE 500 N

COMINCO LTD.
RED STAR GROUP
SIMILKAMEEN M.D., B.C.

LINE NO. 600 N

WENNER
ELECTRODE CONFIGURATION



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8170
Part 2
of 2

SCALE 1:5000

DATE SURVEYED JUNE 11, 12, 15, 1980

CONTOUR INTERVALS:

APP. RES. — 1, 1.5, 2, 3, 5, 7.5, 1.0 Ohm metres
APP. CHARG. — 5.0 Mv/V

APPROVED [Signature]

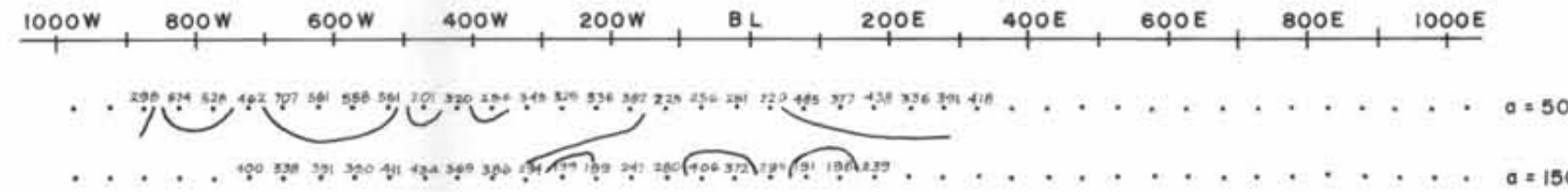
DATE _____

TRANSMITTER — HUNTEC LOPO MK IV
RECEIVER — SCINTREX IPR 8

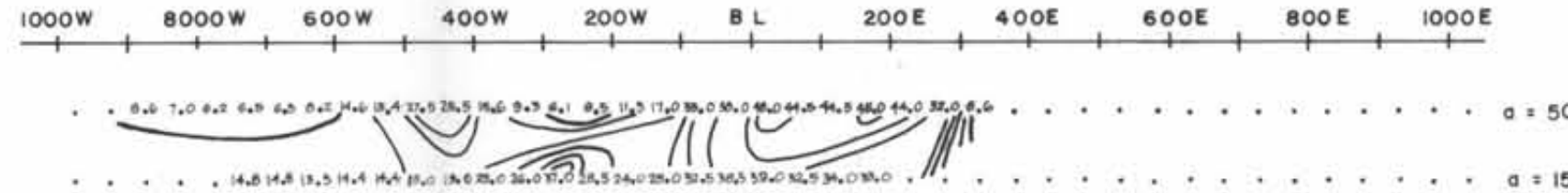
INDUCED POLARIZATION AND RESISTIVITY SURVEY
SURVEYED BY COMINCO LTD., EXPLORATION DIVISION

LINE 600 N

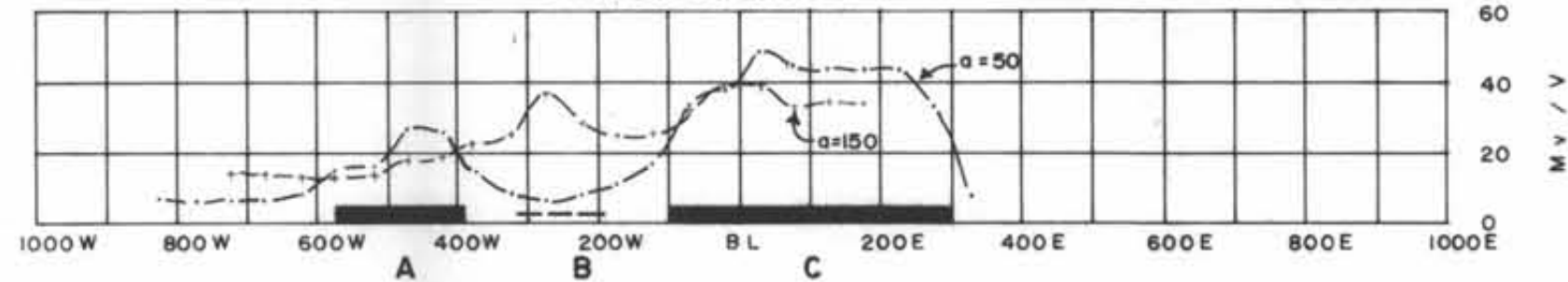
Apparent Resistivity Ohm metres



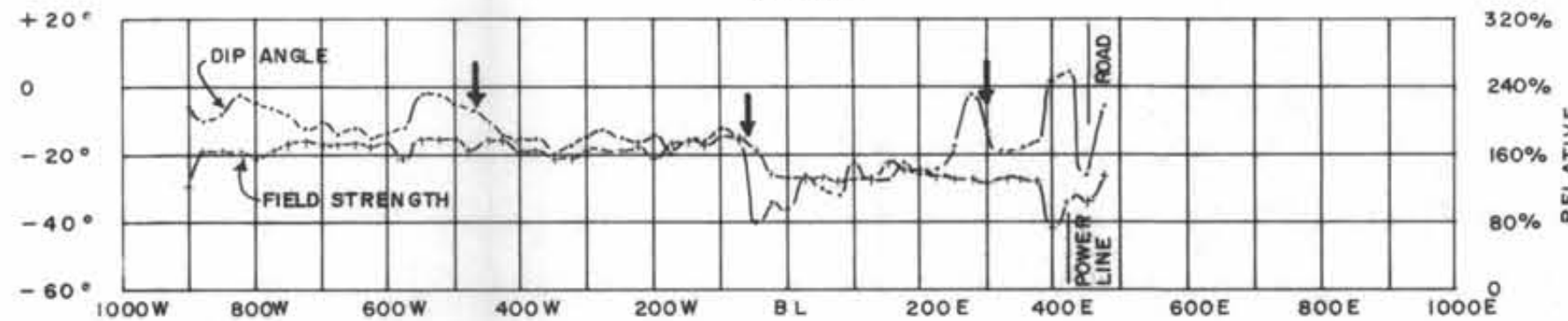
Apparent Chargeability Mv/V



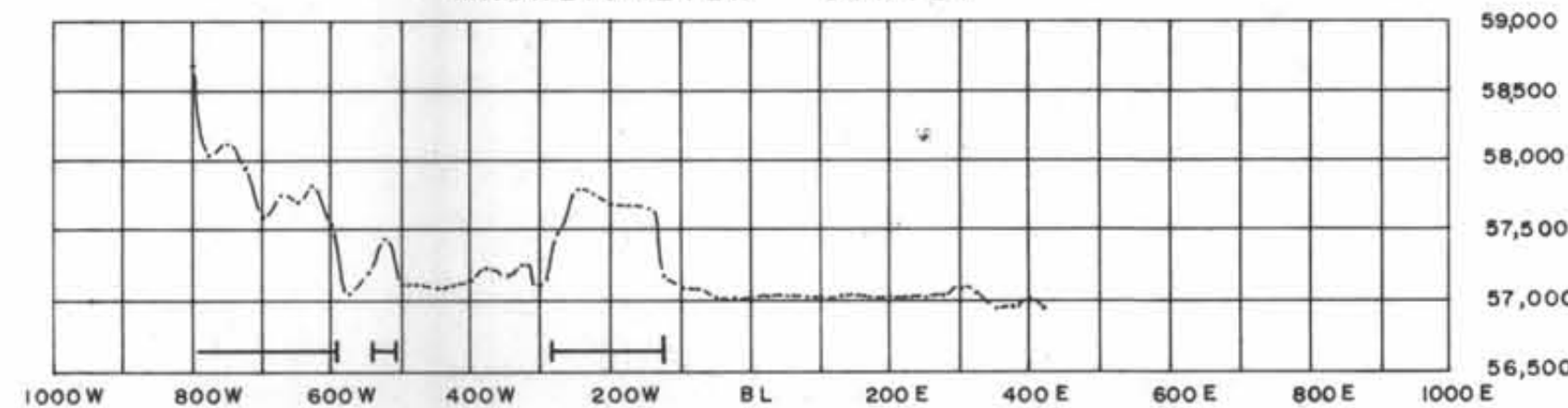
CHARGEABILITY



V. L. F.



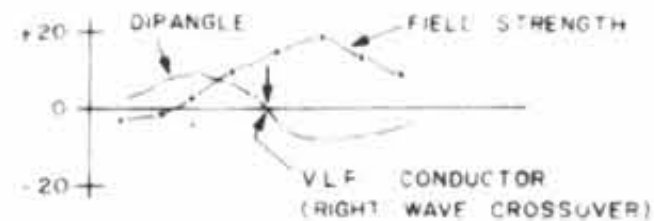
MAGNETOMETER SURVEY



CHARGEABILITY PROFILE
a = 50 m
a = 150 m

CHARGEABILITY ANOMALY
a = 50 m and 150 m

CHARGEABILITY ANOMALY
a = 50 m only



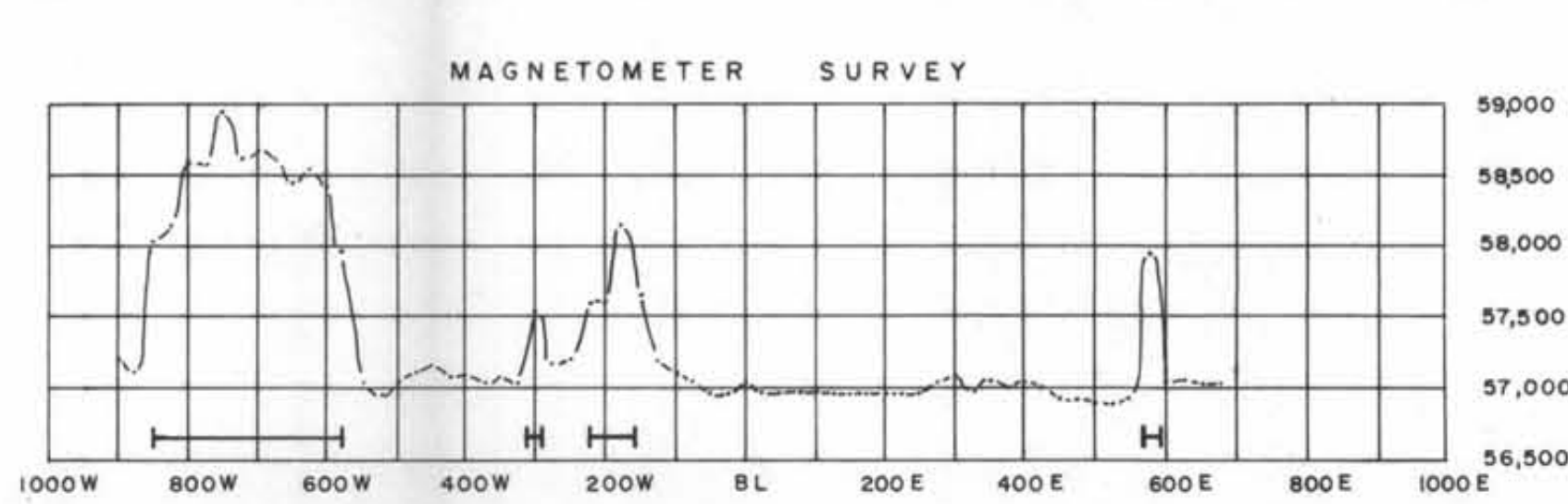
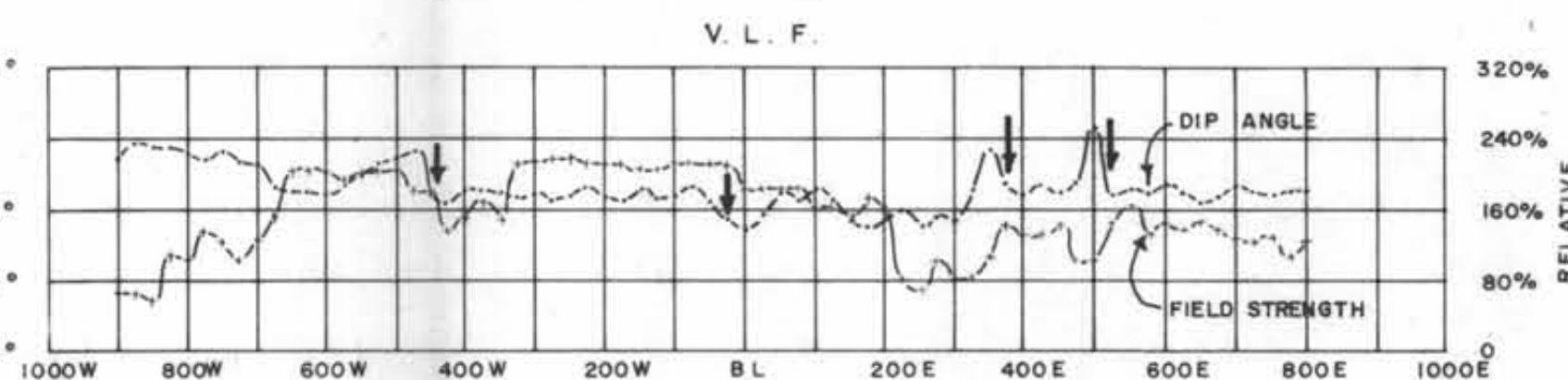
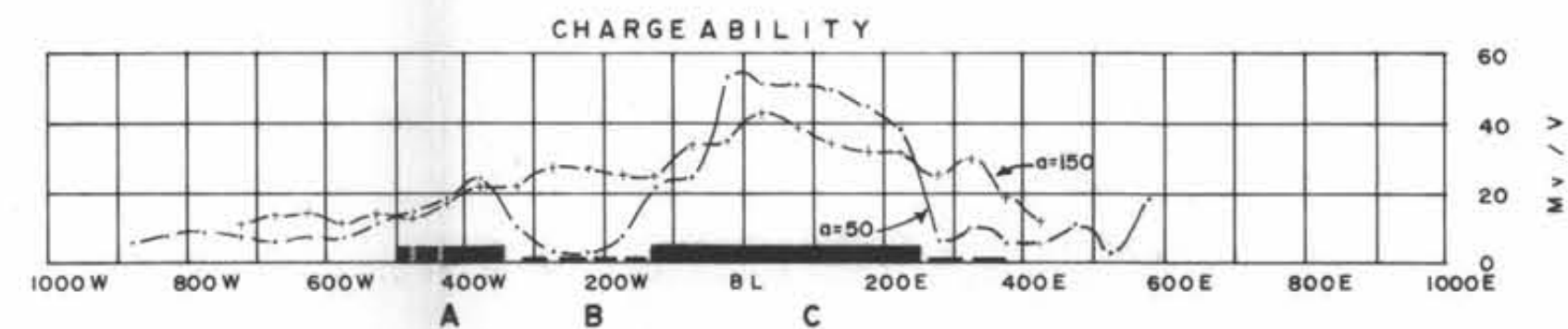
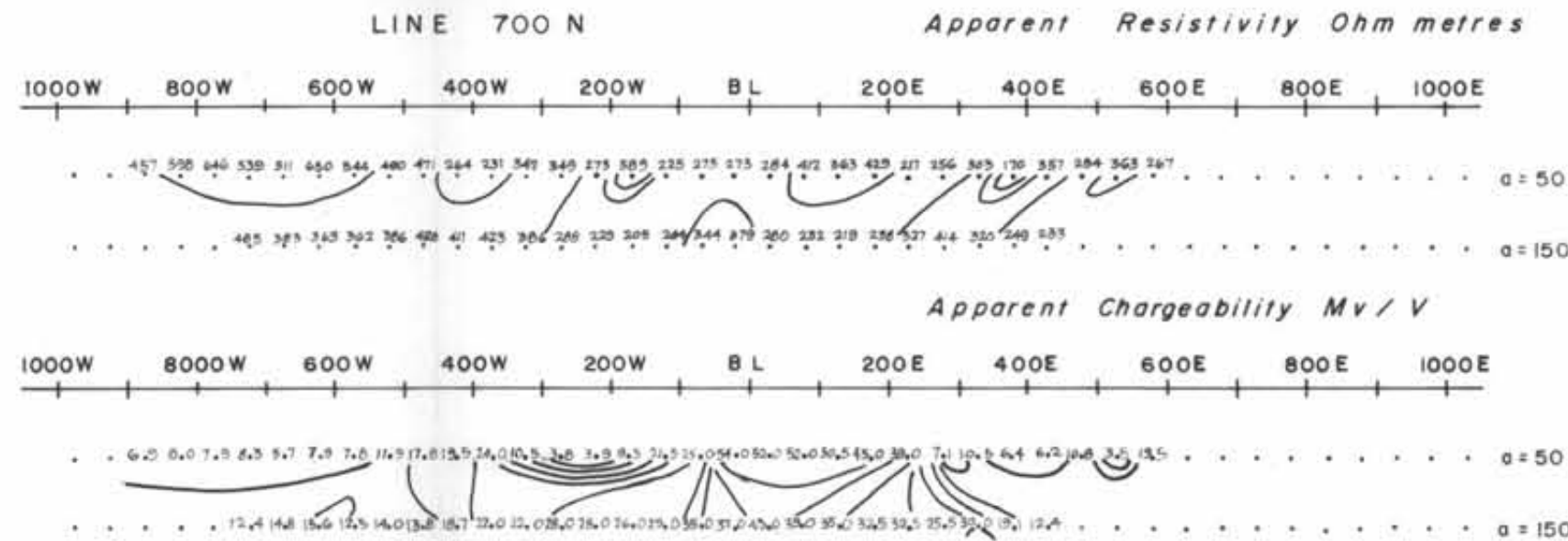
CRONE RADEM
STATION N.L.K. (SEATTLE)
FACED S.W.

SCINTREX MP-2 PROTRON PROCESSION
TOTAL FIELD MAGNETOMETER

MAGNETIC FIELD HIGH

LINE 600 N

COMINCO LTD. RED STAR GROUP SIMILKAMEEN M.D., B.C.



CHARGEABILITY PROFILE
 - - - - - a = 50 m
 - - - - - a = 150 m

CHARGEABILITY ANOMALY
 a = 50 m and 150 m

CHARGEABILITY ANOMALY
 a = 150 m only

DIP ANGLE

FIELD STRENGTH

VLF CONDUCTOR
 (RIGHT WAVE CROSSOVER)

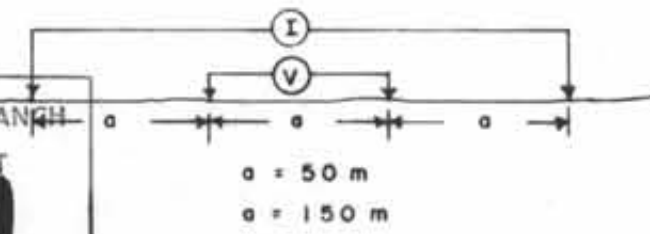
CRONE RADEM
 STATION NLK (SEATTLE)
 FACED S W

SCINTREX MP 2 PROTRON PROCESSION
 TOTAL FIELD MAGNETOMETER

MAGNETIC FIELD HIGH

LINE NO. 700 N

WENNER
ELECTRODE CONFIGURATION



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

8170
Part 2
Part 2

SCALE 1:5000

DATE SURVEYED JUNE 11, 12, 17, 1980

CONTOUR INTERVALS:

APP. RES. - 1, 1.5, 2.3, 5.7, 5.1, 0 Ohm metres
APP. CHARG. - 5.0 Mv/V

APPROVED *[Signature]*

DATE _____

TRANSMITTER - HUNTEC LOPO MK IV
RECEIVER - SCINTREX IPR 8

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

LINE 700 N

COMINCO LTD. RED STAR GROUP SIMILKAMEEN M.D., B.C.

LINE NO. 800 N

WENNER
ELECTRODE CONFIGURATION

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

**8170
NO
PART 2
OF 2**

SCALE 1:5000

DATE SURVEYED JUNE 11, 12, 17, 1980

CONTOUR INTERVALS:

APP. RES. — 1, 1.5, 2, 3, 5, 7.5, 1.0 Ohm metres
APP. CHARG. — 5.0 Mv/V

APPROVED RA

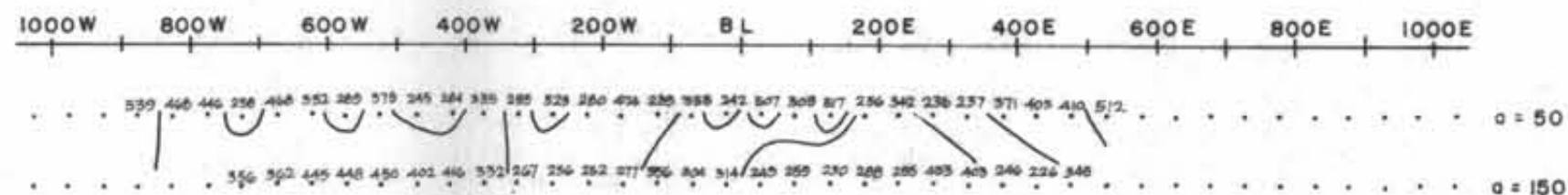
DATE _____

TRANSMITTER — HUNTEC LOPO MK IV
RECEIVER — SCINTREX IPR 8

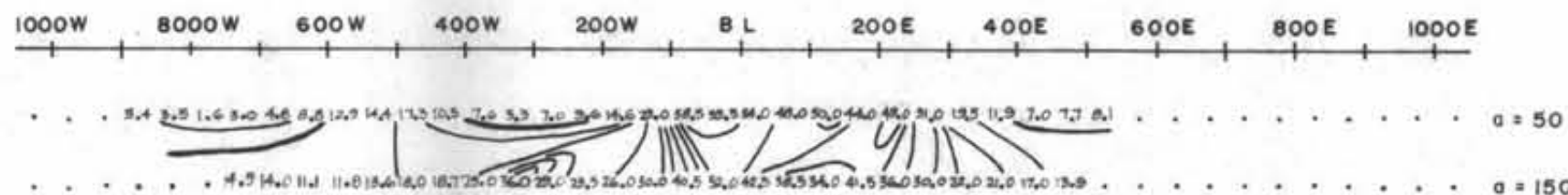
INDUCED POLARIZATION AND RESISTIVITY SURVEY
SURVEYED BY COMINCO LTD., EXPLORATION DIVISION

LINE 800 N

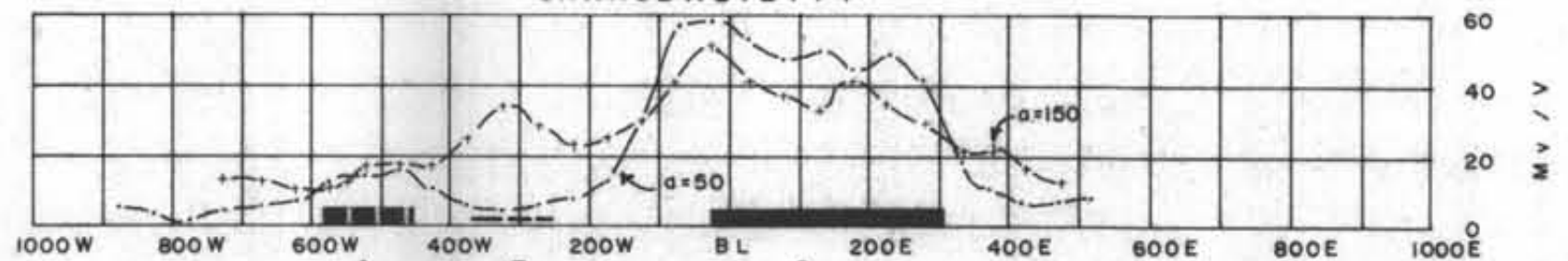
Apparent Resistivity Ohm metres



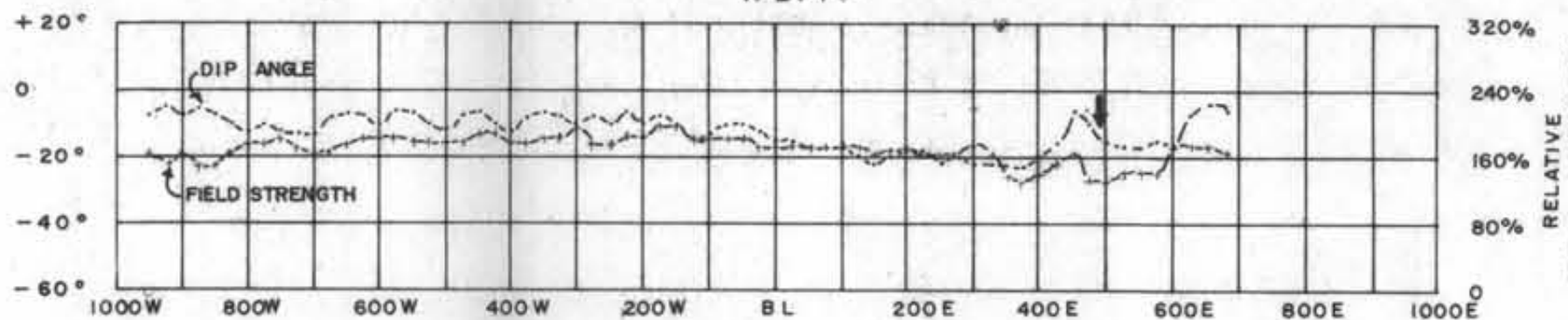
Apparent Chargeability Mv/V



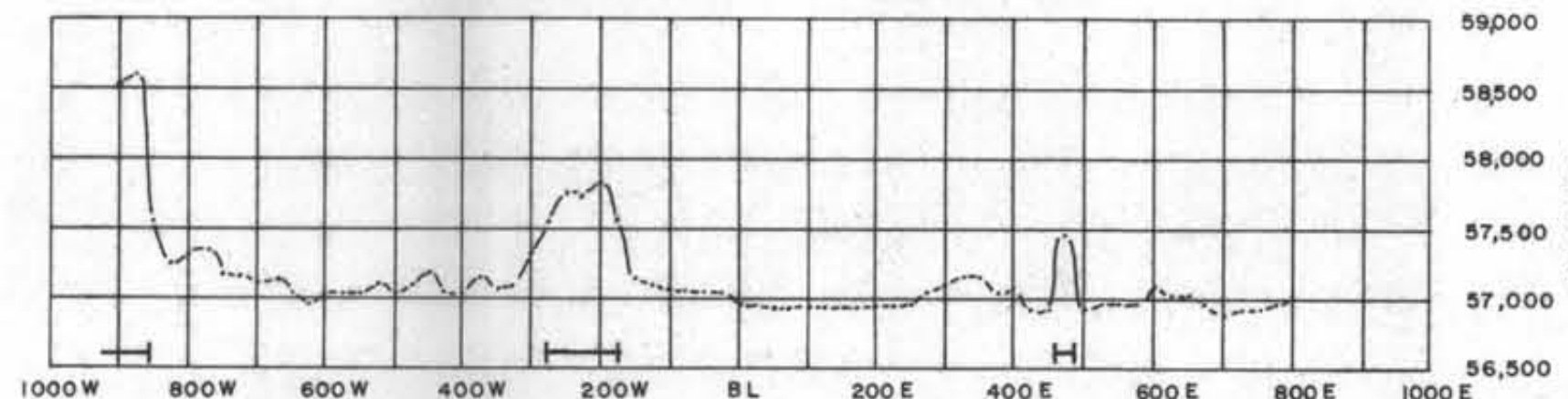
CHARGEABILITY



V. L. F.



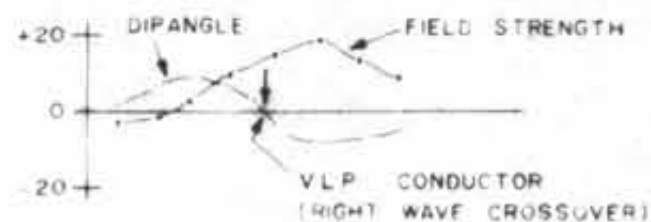
MAGNETOMETER SURVEY



CHARGEABILITY PROFILE
a = 50 m
a = 150 m

CHARGEABILITY ANOMALY
a = 50 m and 150 m

CHARGEABILITY ANOMALY
a = 150 m only



CRUNE RADEM
STATION NLK (SEATTLE)
FACED S.W.

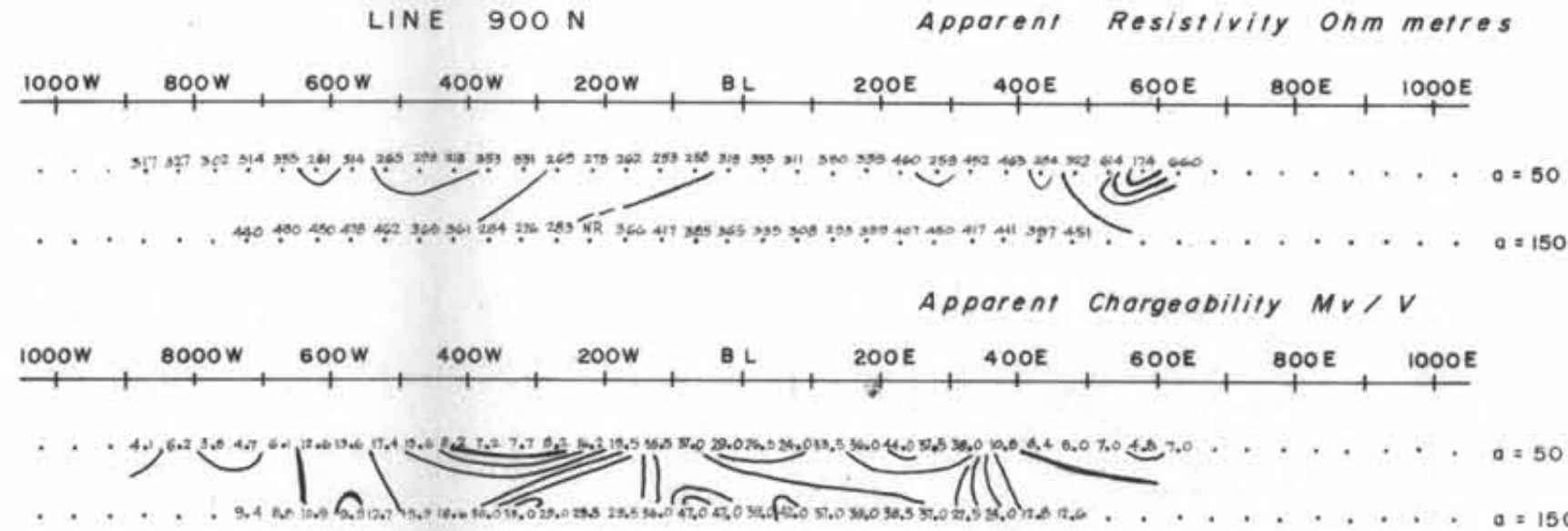
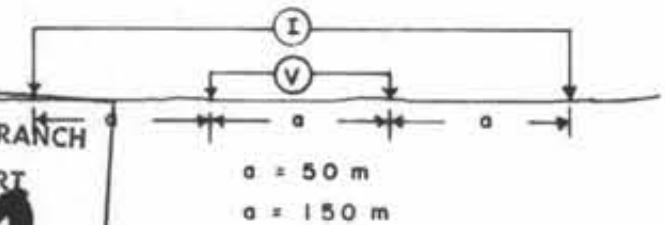
SCINTREX MP 2 PROTRON PROCESSION
TOTAL FIELD MAGNETOMETER
MAGNETIC FIELD HIGH

LINE 800 N

COMINCO LTD. RED STAR GROUP SIMILKAMEEN M.D.,B.C.

LINE NO. 900 N

WENNER
ELECTRODE CONFIGURATION

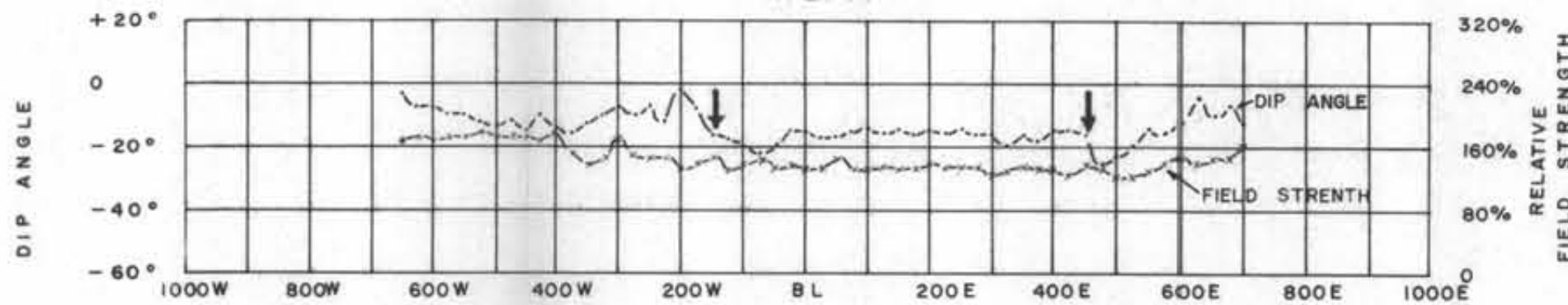
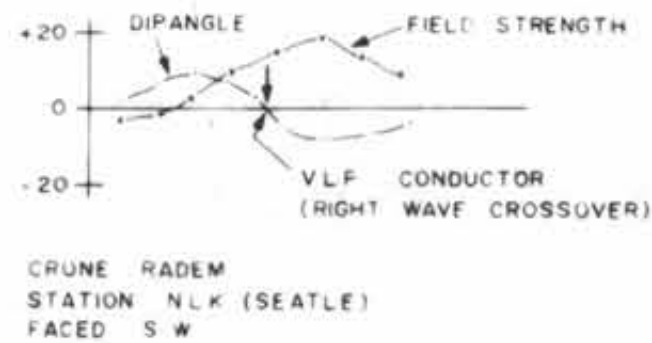
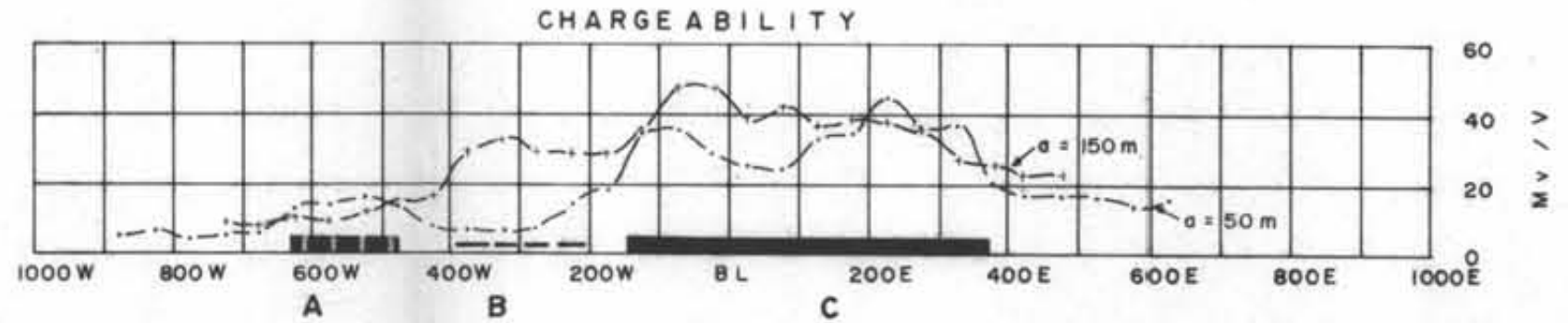


CHARGEABILITY PROFILE

--- a = 50 m
--- a = 150 m

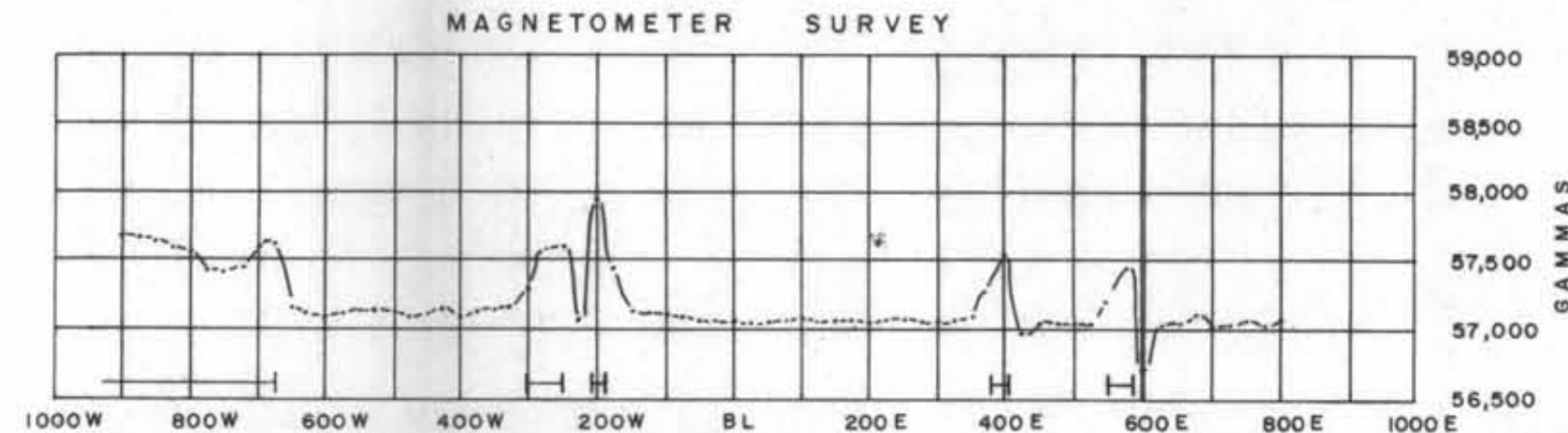
CHARGEABILITY ANOMALY
a = 50 m and 150 m

--- CHARGEABILITY ANOMALY
a = 150 m only



SCINTREX MP-2 PROTRON PROCESSION
TOTAL FIELD MAGNETOMETER

— MAGNETIC FIELD HIGH



SCALE 1:5000

DATE SURVEYED JUNE 11,12,18, 1980

CONTOUR INTERVALS :

APP. RES. — 1,1.5,2.3,5,7.5,1.0 Ohm metres
APP CHARG. — 5.0 Mv/V

APPROVED *CT*

DATE _____

TRANSMITTER — HUNTEC LOPO MK IV
RECEIVER — SCINTREX IPR 8

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

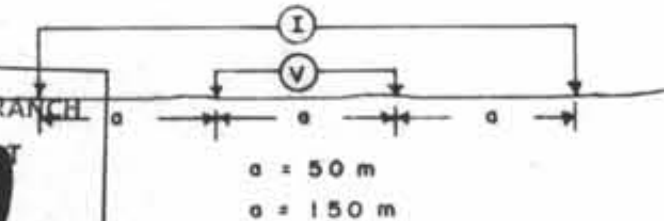
LINE 900 N

COMINCO LTD. RED STAR GROUP SIMILKAMEEN M.D., B.C.

LINE NO. 1000 N

WENNER
ELECTRODE CONFIGURATION

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT



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Part 2
Pot 2

SCALE 1:5000

DATE SURVEYED JUNE 11, 12, 13, 1980

CONTOUR INTERVALS:

APP. RES. — 1, 1.5, 2, 3, 5, 7.5, 1.0 Ohm metres
APP. CHARG. — 5.0 Mv/V

APPROVED [Signature]

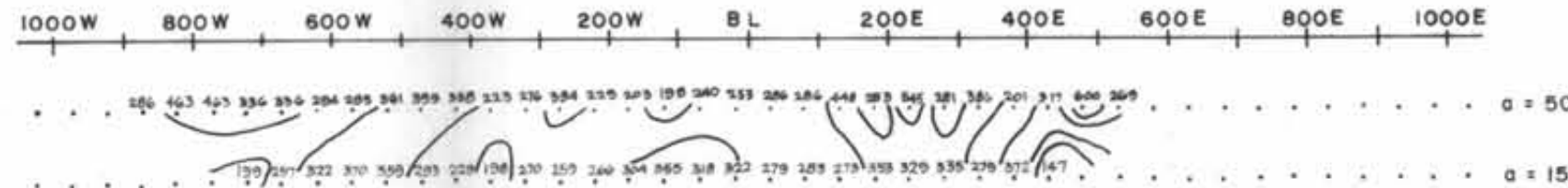
DATE _____

TRANSMITTER — HUNTEC LOPO MK IV
RECEIVER — SCINTREX IPR 8

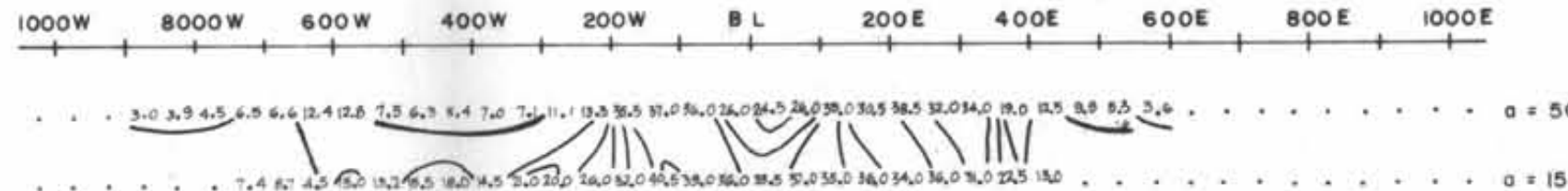
INDUCED POLARIZATION AND RESISTIVITY SURVEY
SURVEYED BY COMINCO LTD., EXPLORATION DIVISION

LINE 1000 N

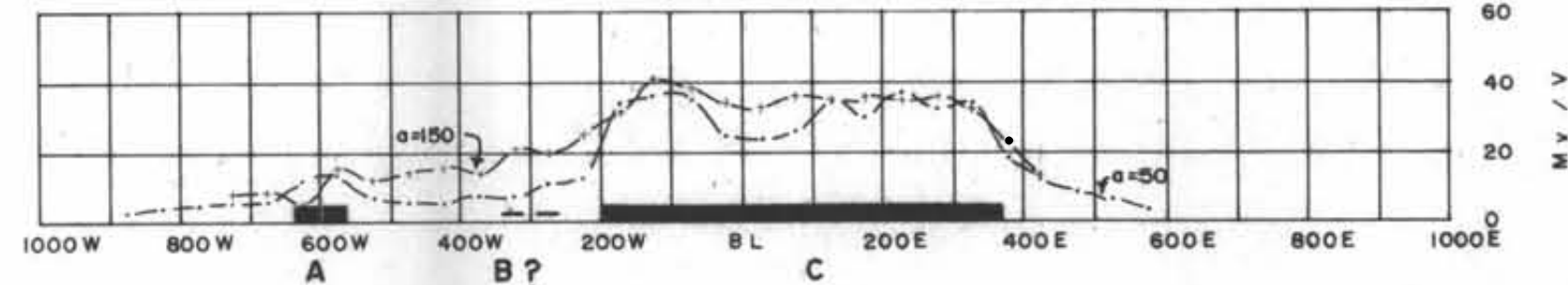
Apparent Resistivity Ohm metres



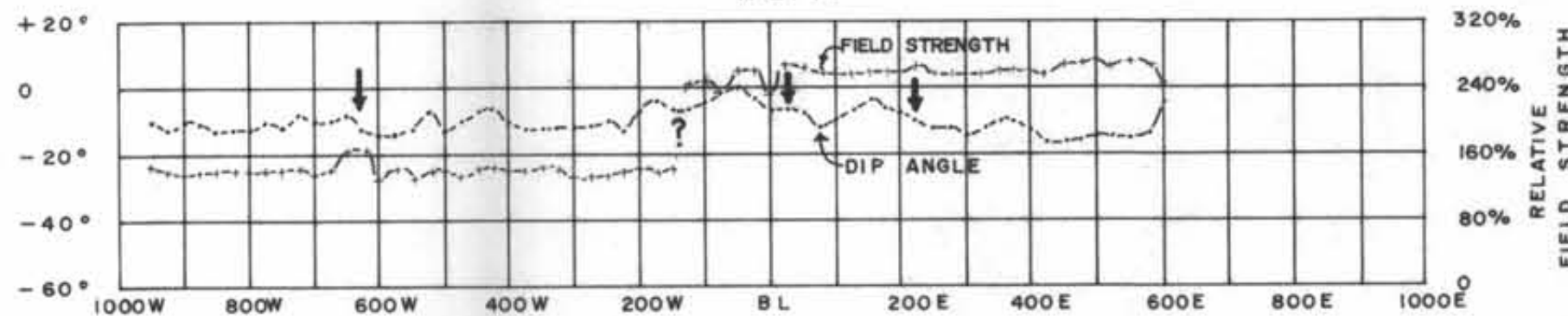
Apparent Chargeability Mv/V



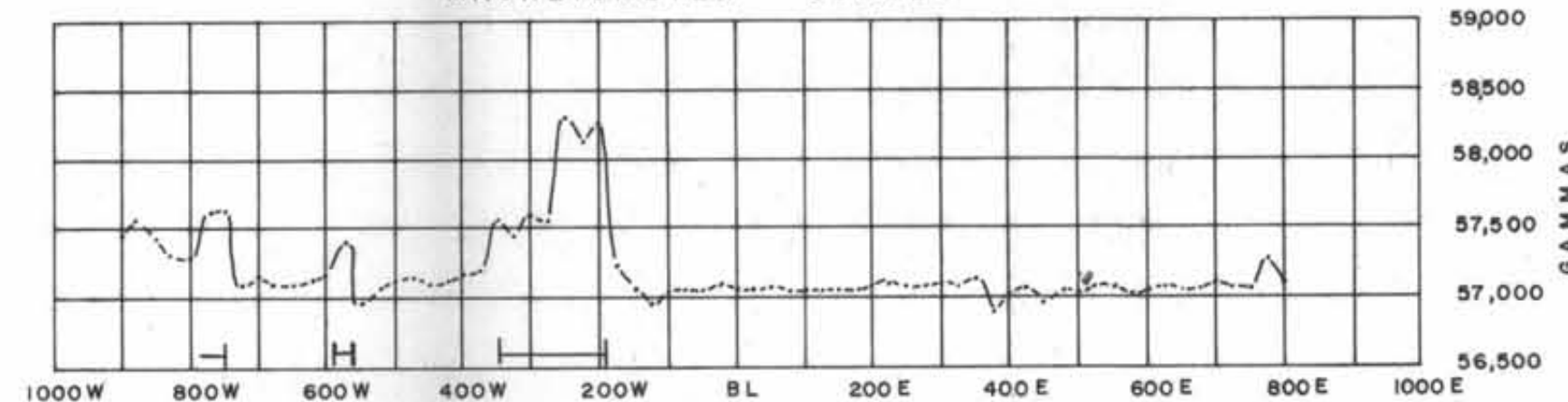
CHARGEABILITY



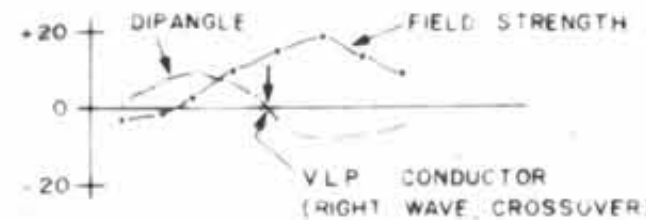
V. L. F.



MAGNETOMETER SURVEY



CHARGEABILITY PROFILE — a = 50 m
 — a = 150 m
CHARGEABILITY ANOMALY
a = 50 m and 150 m
CHARGEABILITY ANOMALY
a = 150 m only

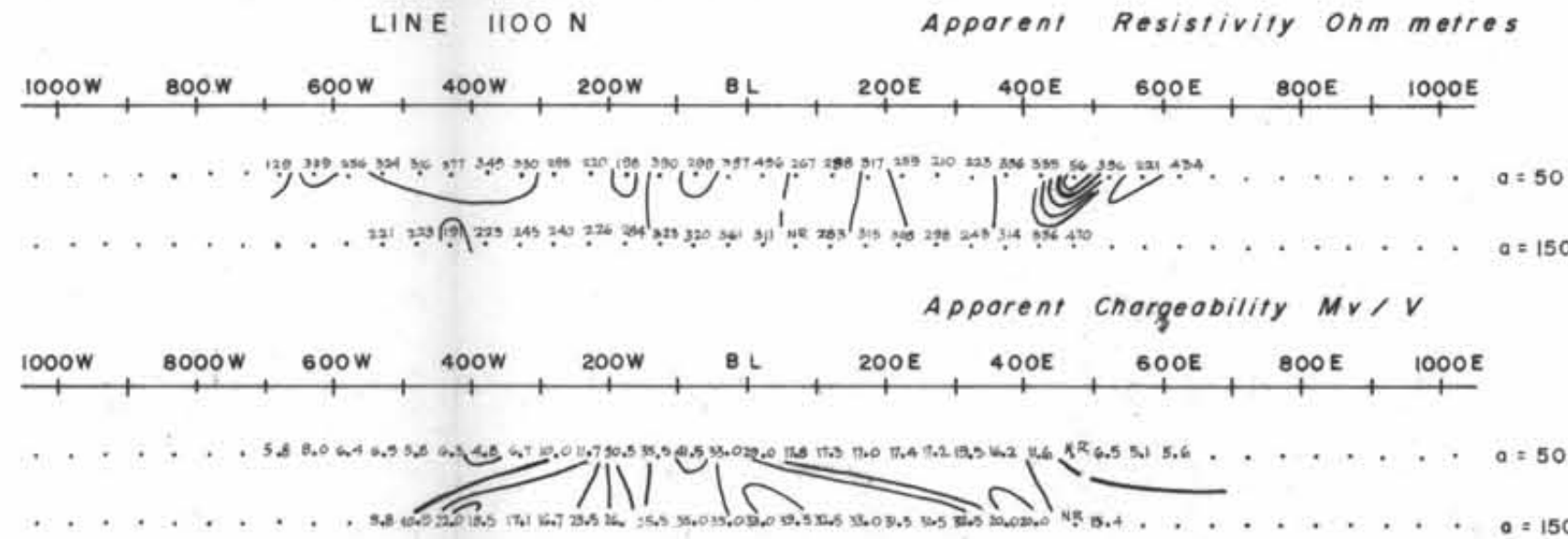


CRUNE RADEM
STATION NLK (SEATTLE)
FACED S W

SCINTREX MP-2 PROTRON PROCESSION
TOTAL FIELD MAGNETOMETER
MAGNETIC FIELD HIGH

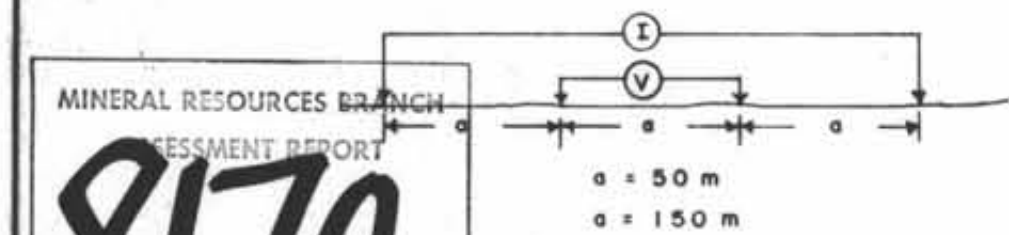
LINE 1000 N

COMINCO LTD. RED STAR GROUP SIMILKAMEEN M.D.,B.C.



LINE NO. 1100 N

WENNER
ELECTRODE CONFIGURATION



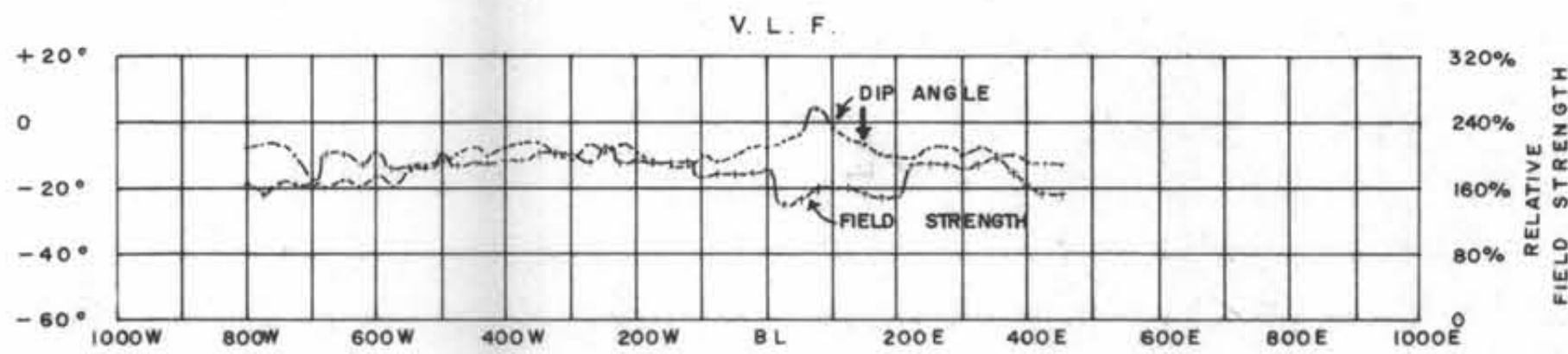
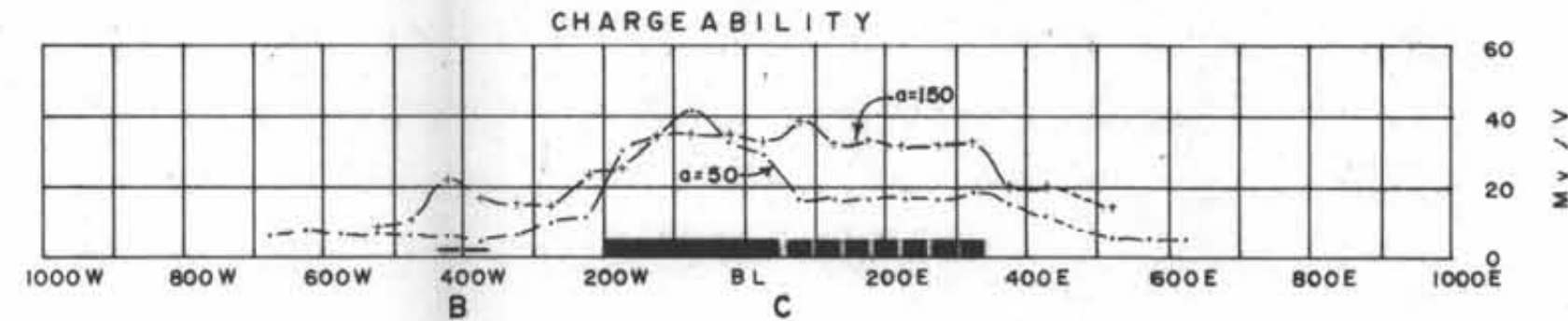
8170
Part 2
of 2

CHARGEABILITY PROFILE

..... a = 50 m
..... a = 150 m

CHARGEABILITY ANOMALY
a = 50 m and 150 m

CHARGEABILITY ANOMALY
a = 150 m only



DIP ANGLE

FIELD STRENGTH

VLP CONDUCTOR
(RIGHT WAVE CROSSOVER)

CRONE RADEM
STATION NLK (SEATTLE)
FACED S W

SCALE 1:5000

DATE SURVEYED JUNE 11, 12, 17, 1980

CONTOUR INTERVALS:

APP. RES. — 1, 1.5, 2, 3, 5, 7.5, 1.0 Ohm metres
APP. CHARG. — 5.0 Mv/V

APPROVED

DATE _____

TRANSMITTER — HUNTEC LOPO MK IV
RECEIVER — SCINTREX IPR 8

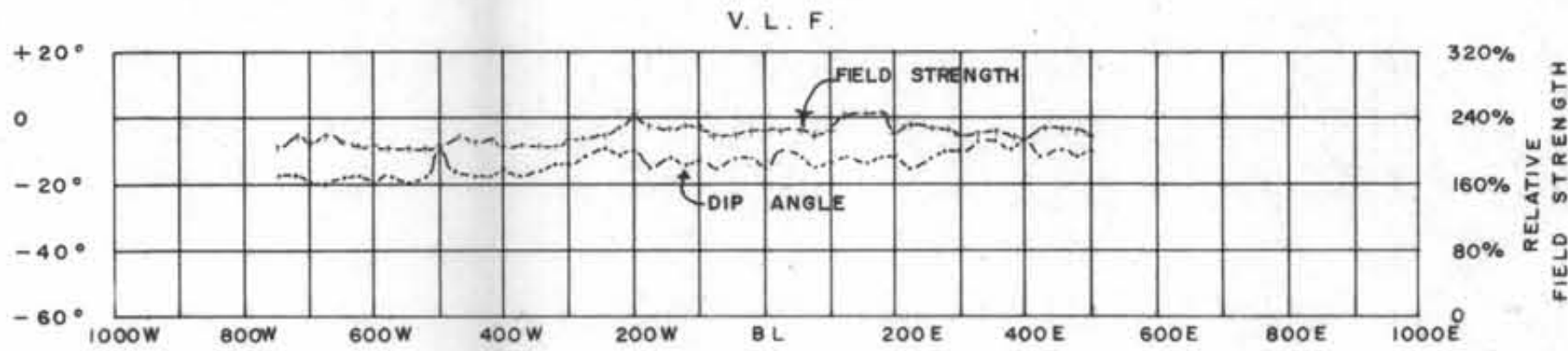
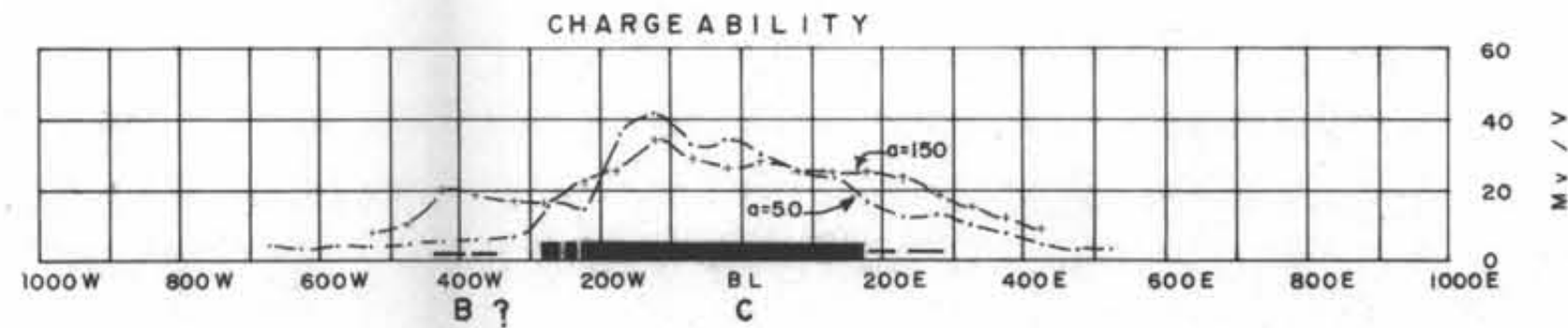
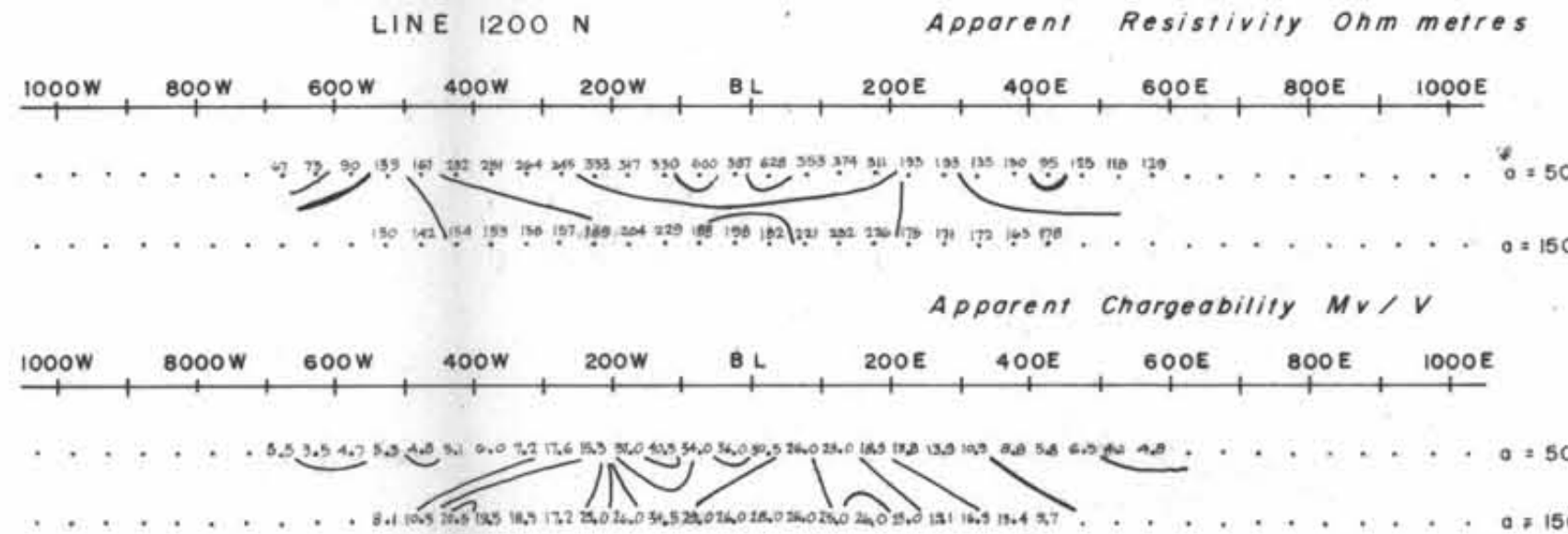
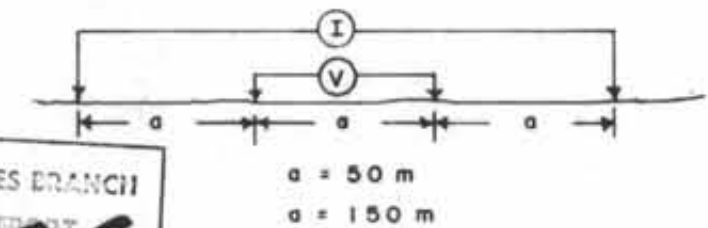
INDUCED POLARIZATION AND RESISTIVITY SURVEY
SURVEYED BY COMINCO LTD., EXPLORATION DIVISION

LINE 1100 N

COMINCO LTD.
RED STAR GROUP
SIMILKAMEEN M.D., B.C.

LINE NO. 1200 N

WENNER
ELECTRODE CONFIGURATION



CHARGEABILITY PROFILE

..... a = 50 m

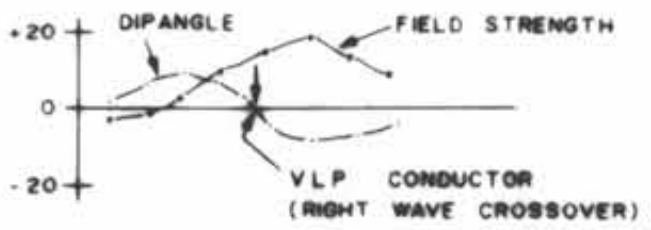
..... a = 150 m

CHARGEABILITY ANOMALY

a = 50 m and 150 m

CHARGEABILITY ANOMALY

a = 150 m only



CRONE RADEM
STATION NLK (SEATTLE)
FACED S W

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT

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Part 2
of 2

SCALE 1:5000

DATE SURVEYED JUNE 11, 12, 1980

CONTOUR INTERVALS:

APP. RES. — 1, 1.5, 2, 3, 5, 7.5, 1.0 Ohm metres

APP. CHARG. — 5.0 Mv/V

APPROVED _____

DATE _____

TRANSMITTER — HUNTEC LOPO MK IV
RECEIVER — SCINTREX IPR 8

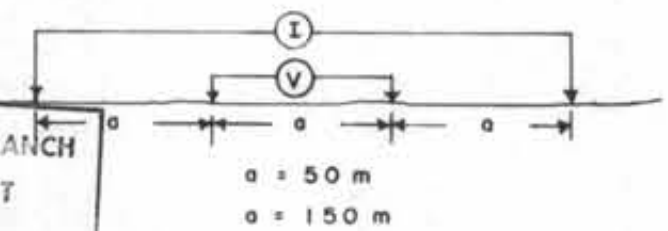
INDUCED POLARIZATION AND RESISTIVITY SURVEY
SURVEYED BY COMINCO LTD., EXPLORATION DIVISION

LINE 1200 N

COMINCO LTD. RED STAR GROUP SIMILKAMEEN M.D., B.C.

LINE NO. 1300 N

WENNER
ELECTRODE CONFIGURATION



MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
8170
PART 2
OF 2

SCALE 1:5000

DATE SURVEYED JUNE 11, 12, 20, 1980

CONTOUR INTERVALS:

APP RES - 1, 1.5, 2, 3, 5, 7.5, 1.0 Ohm metres
APP CHARG. - 5.0 Mv/V

APPROVED

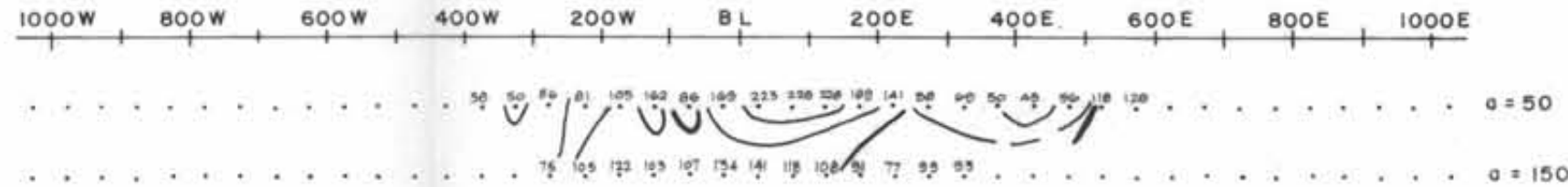
DATE _____

TRANSMITTER - HUNTEC LOPO MK IV
RECEIVER - SCINTREX IPR 8

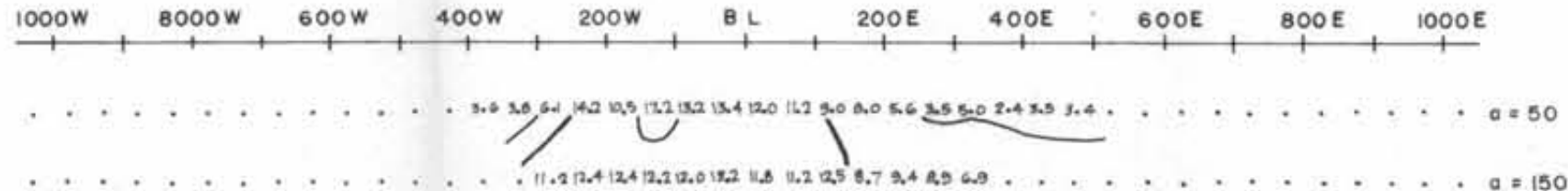
INDUCED POLARIZATION AND RESISTIVITY SURVEY
SURVEYED BY COMINCO LTD., EXPLORATION DIVISION

LINE 1300 N

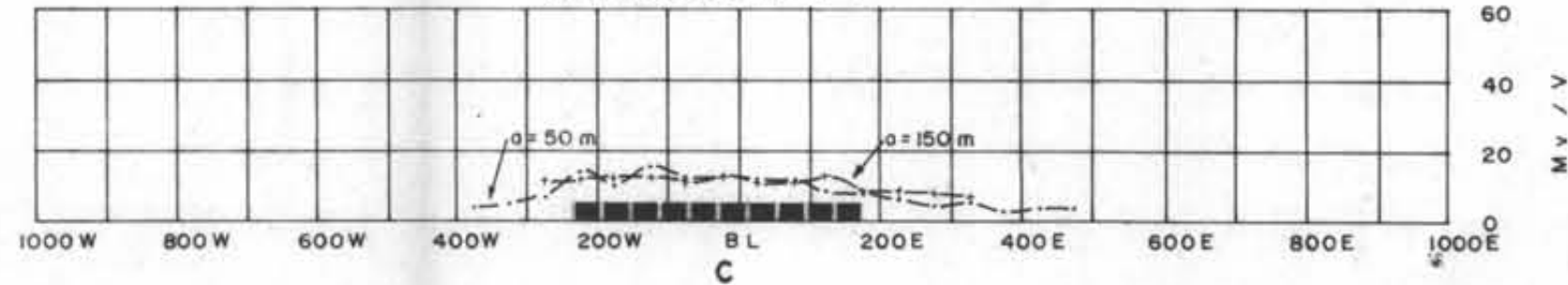
Apparent Resistivity Ohm metres



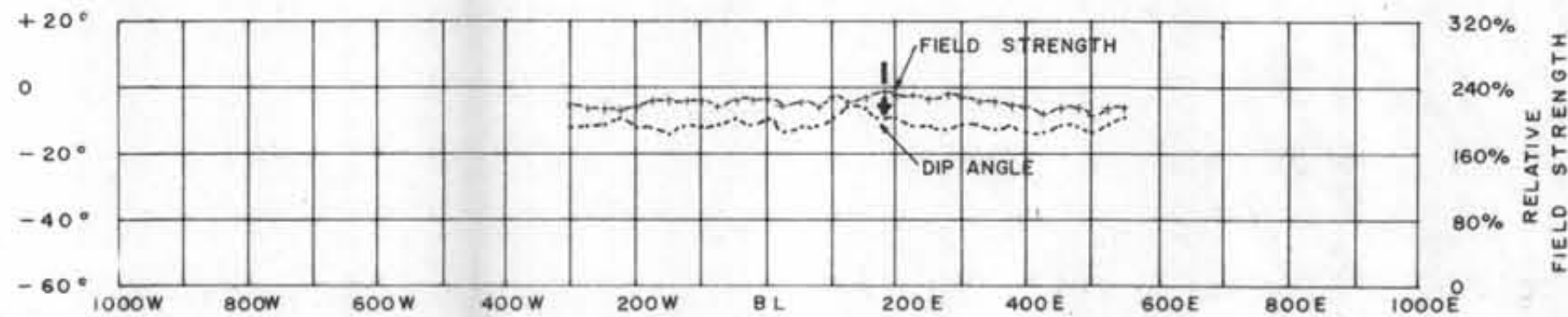
Apparent Chargeability Mv/V



CHARGEABILITY



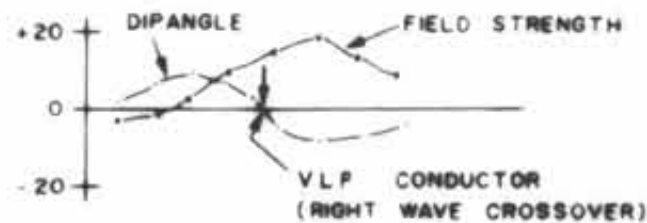
V. L. F.



CHARGEABILITY PROFILE
a = 50 m
a = 150 m

CHARGEABILITY ANOMALY
a = 50 m and 150 m

CHARGEABILITY ANOMALY
a = 150 m only



CRONE RADEM
STATION NLK (SEATTLE)
FACED S W

DIP ANGLE

LINE 1300 N