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Gold Commissioner's Office
VANCOUVER, B.C.

**GEOPHYSICAL REPORT
on the
RATERIA MINERAL CLAIMS**

**KAMLOOPS MINING DIVISION
NTS 92I/7W**

Latitude 50° 22'

Longitude 120° 52'

**for
COMINCO LTD.,
400-1066 W. HASTINGS ST.,
VANCOUVER, BC
V6E 3X1**

**Report by
LORNE A. BOND, P.GEO.
661 GARNET ROAD,
KAMLOOPS, BC**

V2B 6K2 GEOLOGICAL SURVEY BRANCH

ASSESSMENT REPORT

October 10th, 2000

26,409



TITLE OF REPORT [type of survey(s)] <u>Geophysical</u>	TOTAL COST \$ <u>16,290</u>
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AUTHOR(S) Lorne A. Bond SIGNATURE(S) Lorne Bond

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S) Kam 2000-0300.584-571 YEAR OF WORK 2000

STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATES(S) _____

PROPERTY NAME RATERIA

CLAIM NAME(S) (on which work was done) RATERIA, HIGH GRADE 1-10

COMMODITIES SOUGHT Cu, Mo

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN 92ISE92

MINING DIVISION Kamloops NTS 92I 17W

LATITUDE 50° 22' " LONGITUDE 120° 52' 57.34" (at centre of work)

OWNER(S)
1) Brian Thomson Malahoff 2) _____

MAILING ADDRESS
8568 Selkirk Street
Vancouver, B.C.
V6P 4H9

OPERATOR(S) [who paid for the work]
1) Cominco Ltd 2) _____

MAILING ADDRESS
400-1066 W. Hastings St.
Vancouver, B.C.
V6E 3X1

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):
Induced Polarization / Resistivity surveys over portions
of the calc-alkaline Triassic age Guichon
Batholith. Exploration target is porphyry
type copper and molybdenum sulfide
mineralization.

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS _____

#1790 3552 3709 4050 7560 9953 (OVER)

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In Pocket

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1.0 INTRODUCTION

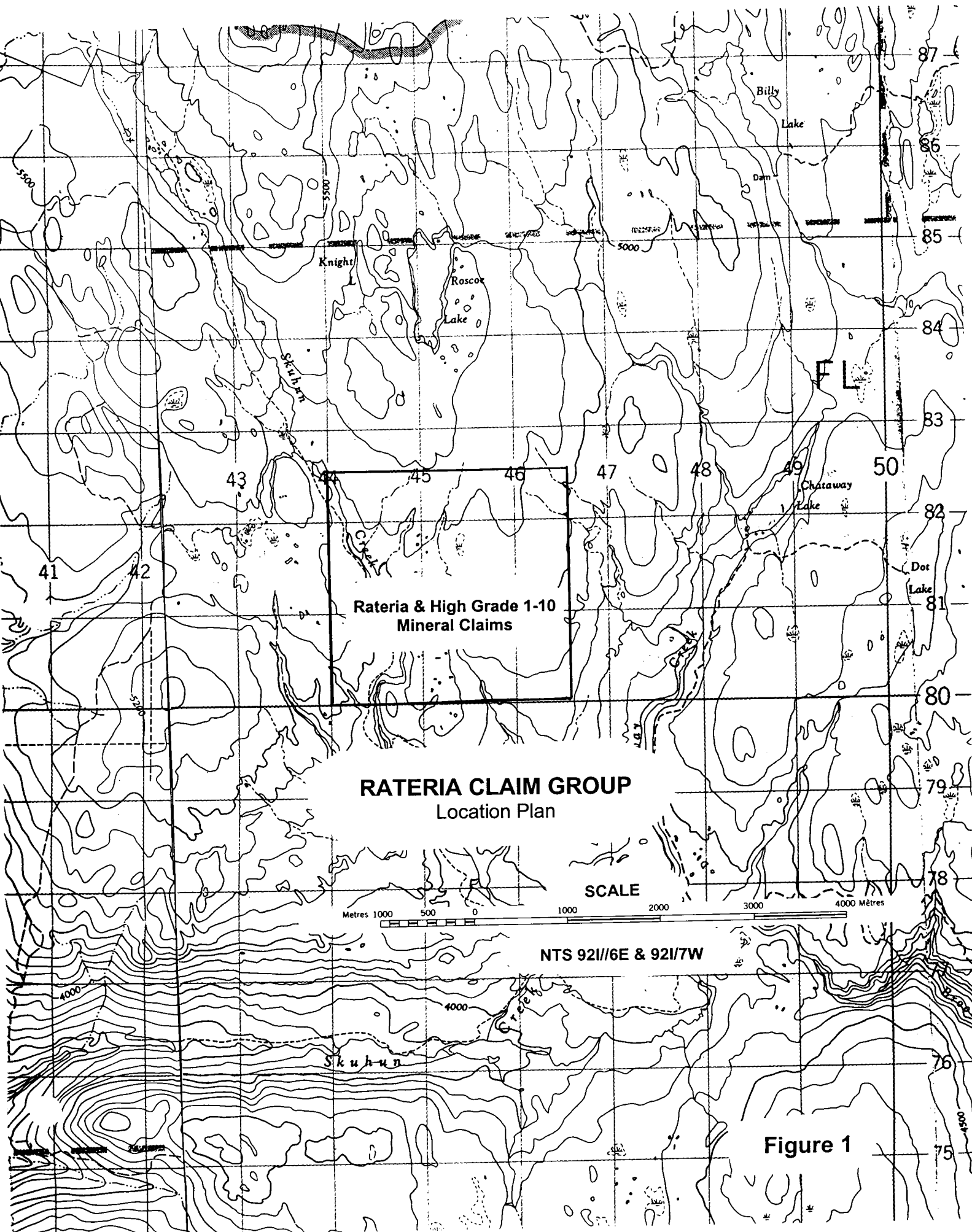
During the period July 28 to August 24, 2000, a program of induced polarization and resistivity surveys was conducted on the RATERIA and HIGH GRADE 1 - 10 mineral claims. The claims are owned by Brian Thomson Malahoff (F.M.C. 116699) and are currently under option to Cominco Ltd.. Cominco Ltd. was the operator of this program and provided the funding. The mineral claims on which the survey grid is located are situated approximately 10 kilometers southeast of the Highland Valley Copper mill site and some 30 kilometers northwest of the town of Merritt, BC. Access to the RATERIA claim group is by good gravel logging road starting from Highway 8 at Lower Nicola. The logging road transects the property and numerous secondary roads and trails provide further access to the claims. Figure 1 shows the general location of the survey grid and Figure 2 shows the position of the gridlines relative to the mineral claims.

The objective of the survey was to test for large tonnage, porphyry type, sulfide mineralization within the grid area. This report describes the procedures used for this survey, presents the data and discusses the results.

Expenditures on this program have been applied to the RATERIA and HIGH GRADE 1 - 10 mineral claims (tenure nos. 378880 and 374747 - 756) as noted on the accompanying statement of work.

2.0 SURVEY PARAMETERS AND EQUIPMENT

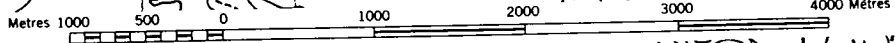
Daryl Calder of Cranbrook was retained to complete the grid preparation program. During the period July 28 to August 4, 2000, gridline 9450S and the line 11500E were cut and chained for a total of 3.819 kilometers. Stakes with metal tags were placed at 100 meter intervals. A map of the completed grid with actual gridline locations was submitted by the linecutting contractor.



Rateria & High Grade 1-10
Mineral Claims

RATERIA CLAIM GROUP
Location Plan

SCALE



NTS 92I/6E & 92I/7W

Figure 1

HIGH
GRADE 10

L8700S

L9000S

HIGH
GRADE 9

L9300S

L9450S

L9600S

HIGH
GRADE 8

L9900S

HIGH
GRADE 7

L10200S

L10500S

HIGH
GRADE 6

L10800S

HIGH
GRADE 5

HIGH
GRADE 4

HIGH
GRADE 3

HIGH
GRADE 2

HIGH
GRADE 1

RATERIA

L11500E

0 100 250 500 1000

METRES

NET MAP



LEGEND

— GRID LINES

COMINCO LTD.

RATERIA CLAIM GROUP
CLAIM / GRID MAP
NTS 9217W

Author: L. Stone / Oct 2000	Drawn: Oct 11, 2000
Checked: B. Aita / Oct 2000	Scale: 1 : 20000m
Approved: L. Stone / Oct 2000	Drawn: Robert G. Sp...
Revised:	Scale:

Figure 2

The contract for the 2000 Induced Polarization/Resistivity survey was awarded to Scott Geophysics Ltd. of Vancouver. A five man crew was employed on the project. Geophysical surveying of the RATERIA grid was conducted between August 12 and 24, 2000. A total of 19.0 line kilometers was surveyed on nine east-west gridlines. The exploration target was a large, low grade, porphyry copper system. The survey program was reconnaissance in scope, with surveys carried out on gridlines 300 meters apart.

A pole-dipole array was used for the Induced Polarization/Resistivity survey, with an "a" spacing of 100 meters and "n" separations of 1, 2, 3, 4, 5 and 6. A Scintrex IPR12 receiver and Scintrex TSQ4(10kw) transmitter were used on the survey. All measurements were taken using a two (2) second alternating square wave. Chargeability values reported are for the interval 120 to 1,020 milliseconds after current interruption (midpoint at 570 msec).

3.0 DATA PRESENTATION

The chargeability and resistivity results are presented in standard pseudosection format and as contour plans for the triangular filtered values. The location of the current electrode with respect to the receiving electrodes is given in the title block area of each pseudosection. Chargeability results are expressed in mV/Volt (Mx for 120-1020 msec) and apparent resistivities are reported in ohm-m. Horizontal scale on the pseudosections is 1:10,000 and contours are at 1.0 mV/Volt and 200 ohm-m increments for the chargeability and apparent resistivity respectively.

The results are also presented in contour plan for the triangular filtered values for chargeability and apparent resistivity. The filter applied to this data is the standard Fraser triangular filter whereby one value is selected at n=1, two values at n=2, up to six values at n=6. The average of the average values for each of the n separations is the filtered

value for the given $n=1$ location. The contour plans illustrate general trends only and the pseudosections must be utilized to assess specific features.

4.0 DESCRIPTION OF RESULTS AND CONCLUSIONS

The RATERIA mineral claims are situated within the Guichon Batholith and straddle a north striking Skeena/Bethsaida contact with Bethsaida quartz monzonite to the west and Skeena quartz diorite to the east (McMillan, 1985). These are the host lithologies for the Valley and Lornex porphyry Cu-Mo ore bodies situated to the northwest. Several small copper showings have been delineated on and in the vicinity of the claim group.

Background chargeabilities on the RATERIA group are in the 3.0 ± 1 mV/V range, which can be considered non-anomalous. Resistivities range from 200 to 2000 ohm-m with most values in the 400 - 900 ohm-m range. A narrow persistent trend of slightly elevated chargeabilities and higher resistivities can be traced from Station 9300E on Line 8700S to Line 9900S at Station 9900E. The responses are likely associated with a strong throughgoing structural feature. Chargeabilities are low, approximately twice background, with higher values including 6.6 mV/V for $n=6$ at Line 8700S - Station 9300E, 7.0 mV/V for $n=6$ at Line 9000S - Station 9400E, and 6.0 mV/V for $n=6$ at Line 9900S - Station 9800E. Higher resistivities associated with this trend range up to 1300 ohm-m with one peak response of 2353 ohm-m for $n=4$ at Line 8700S - Station 9300E. Other sporadic occurrences of higher chargeabilities occur on the east side of the property associated with weak to moderate resistivities (i.e. 6.0 mV/V for $n=3$ at Line 9000S - Station 11200E). Again chargeability values are of the order of twice background and are not considered anomalous. The induced polarization/resistivity survey was reconnaissance in scope and designed to explore for large tonnage deposits. Results from this survey do not suggest the presence of anomalous sulfide concentrations indicative of a large tonnage porphyry system.

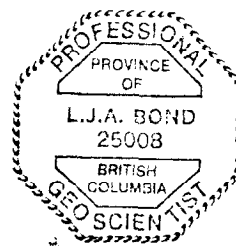
5.0 STATEMENT OF COSTS
Rateria Property

Geophysics	Induced Polarization/Resistivity survey - 19.0 kilometers - Period August 12 - 24, 2000 conducted by Scott Geophysics Ltd.	\$ 11,976
Linecutting	grid preparation - 3.819 kilometers Daryl Calder and Associates - Period July 28 - August 9, 2000	\$ 1,814
Project Management - Lorne Bond	Planning, supervision, report preparation 5 days at \$ 500 per day	\$ 2,500
	Total	\$ 16,290

6.0 STATEMENT OF QUALIFICATIONS

I, Lorne Allan Bond, of the city of Kamloops, British Columbia, do hereby certify that

- 1/ I am a graduate of Loyola College (Concordia University) with a B.Sc. (1967) in Geotechnical Sciences.
- 2/ I am a member of the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
- 3/ I have practiced my profession since 1967 while employed with Sherritt Gordon Mines Ltd., Cominco Ltd., Afton Operating Corporation, Highland Valley Copper and as an independent practitioner.
- 4/ This report describes geophysical exploration programs performed under my direction during the period July 28 to August 24, 2000.



Lorne A. Bond, P.Geo.
Kamloops, BC

A handwritten signature in black ink that reads "Lorne Bond." with a period at the end.

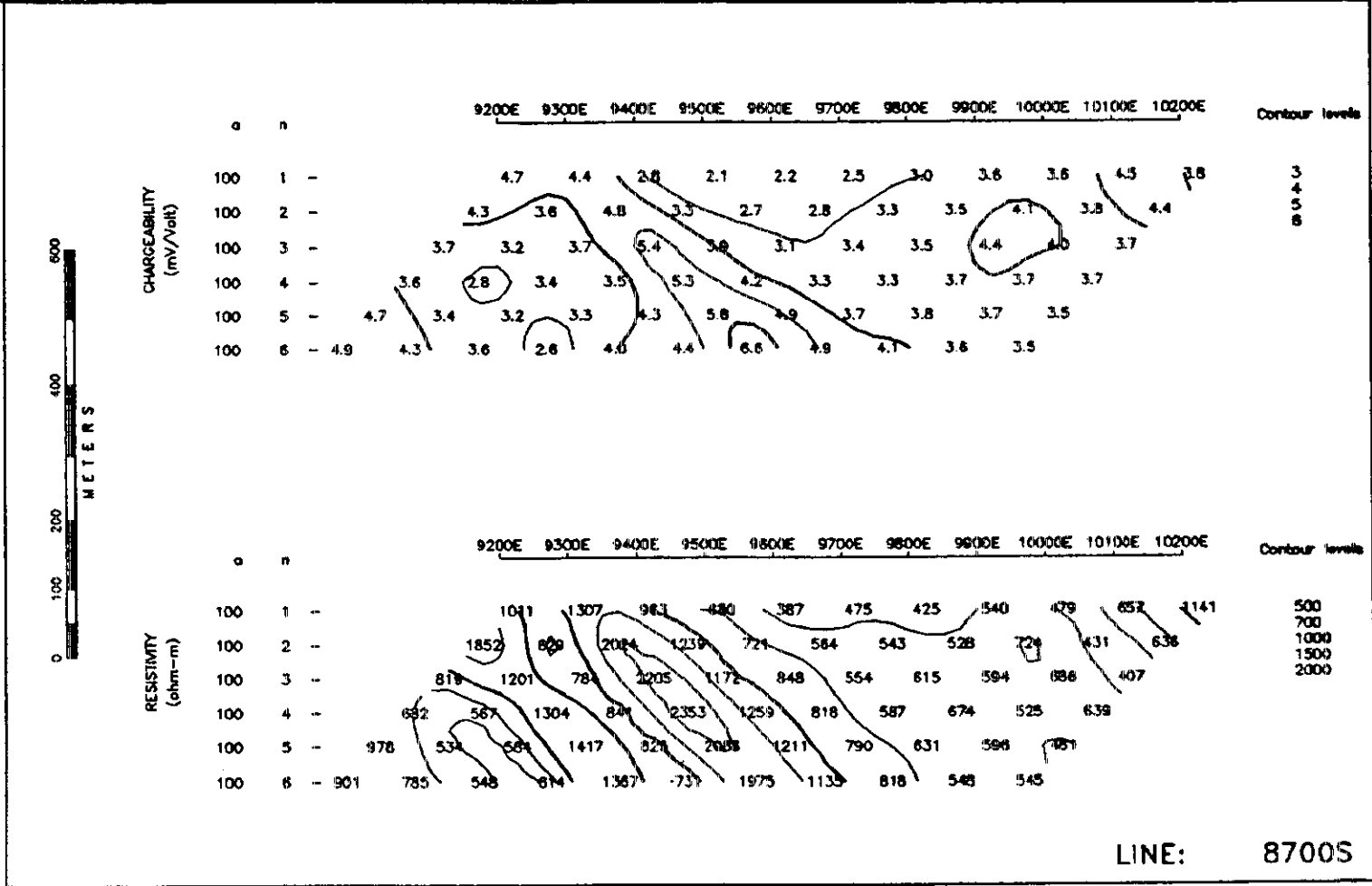
7.0 REFERENCES

McMillan, W.J., 1985. Geology and Ore Deposits of the Highland Valley Camp. *In* Mineral Deposits Division Field Guide and Reference Manual Series, Number 1. Edited by A.J. Sinclair, Geological Association of Canada, 121 pp.

FIGURE 3

COMINCO EXPLORATION LTD.

RATERIA PROPERTY, MERRITT AREA, B.C.
LINE: 8700S
INDUCED POLARIZATION SURVEY (Pole-Dipole Array)
SCOTT GEOPHYSICS LTD.
Suntrex IPR12
Pulse Rate: 2 sec
August/00
Current electrode East of potential electrodes (array heading West)
Max Chargeability is for the interval 120 to 1020 masca after shutoff



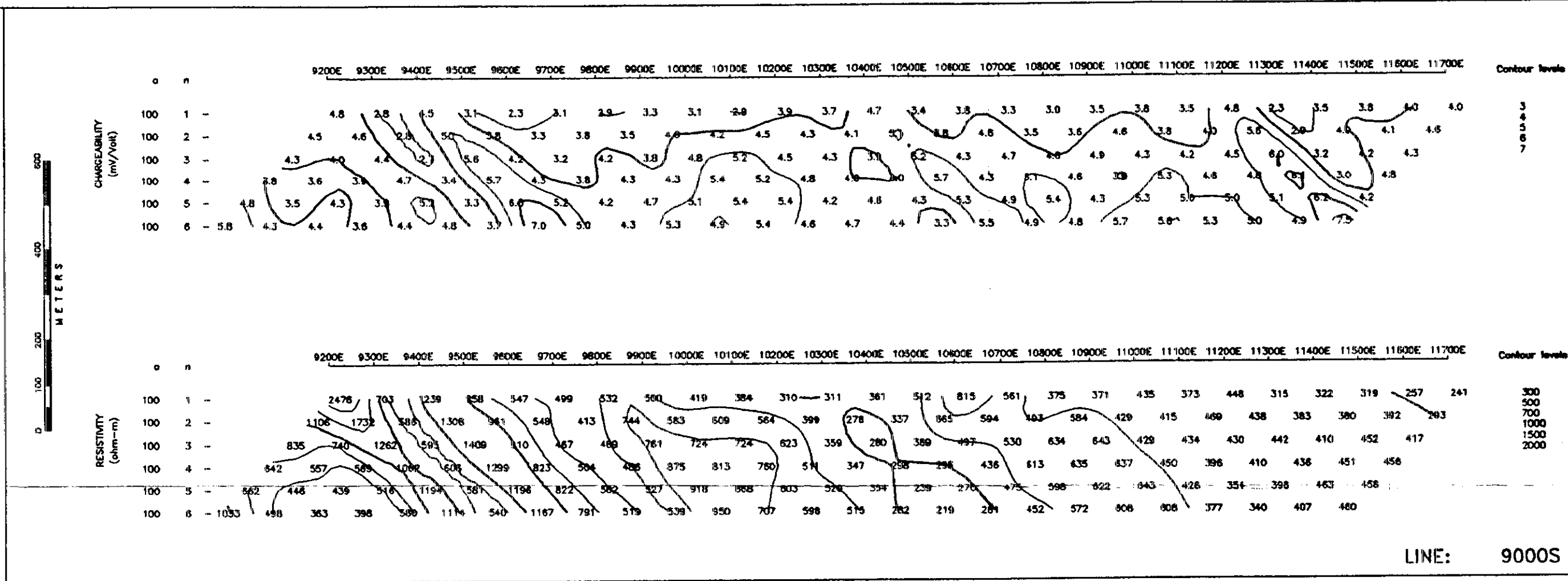
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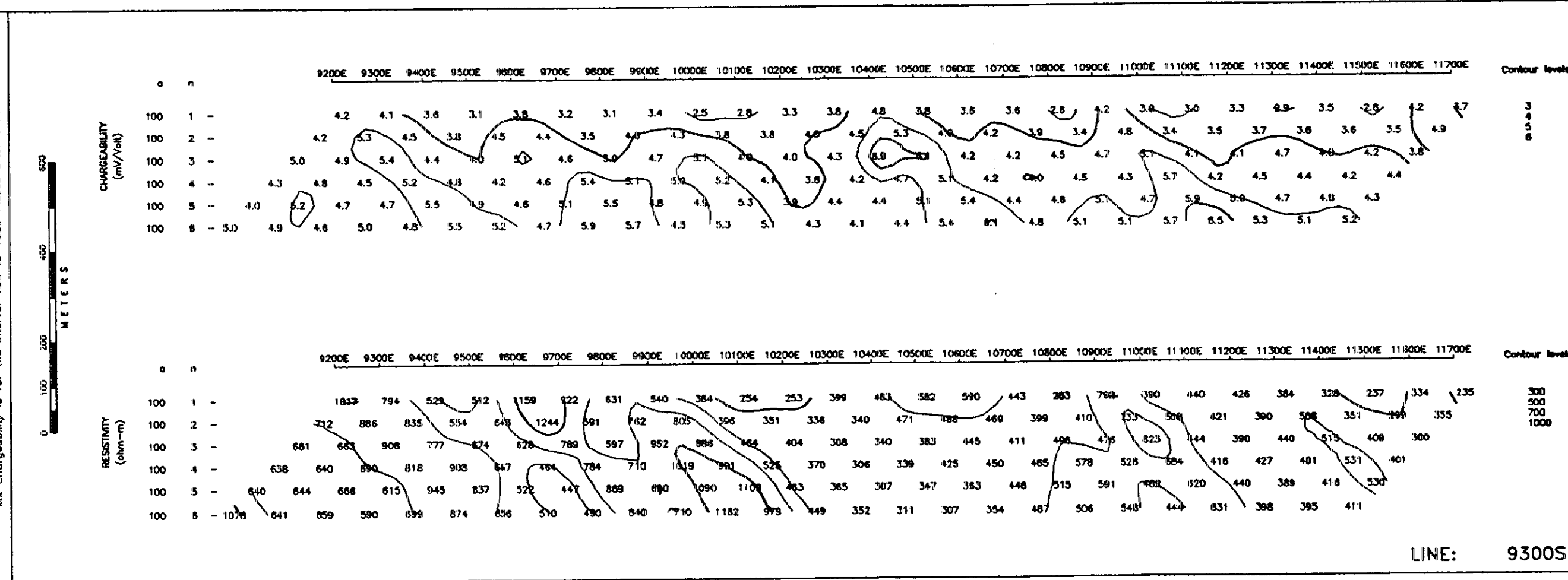
COMINCO EXPLORATION LTD.

RATERIA PROPERTY, MERRITT AREA, B.C.
LINE: 9000S
INDUCED POLARIZATION SURVEY (Pole-Dipole Array)
SCOTT GEOPHYSICS LTD.
Suntrex IPR12
Pulse Rate: 2 sec
August/00
Current electrode East of potential electrodes (array heading West)
Max Chargeability is for the interval 120 to 1020 masca after shutoff



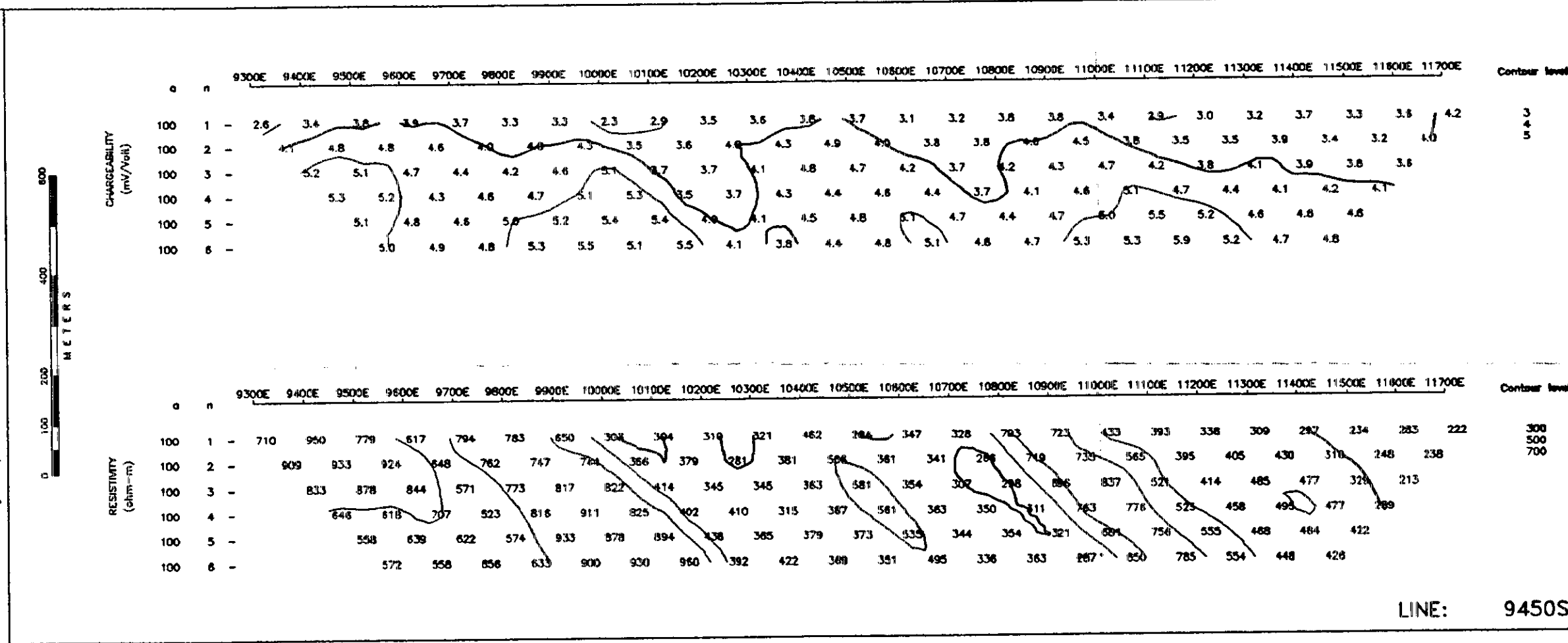
COMINCO EXPLORATION LTD.

RATERIA PROPERTY, MERRITT AREA, B.C.
LINE: 9300S
INDUCED POLARIZATION SURVEY (Pole-Dipole Array)
SCOTT GEOPHYSICS LTD.
Suntrex IPR12
Pulse Rate: 2 sec
August/00
Current electrode East of potential electrodes (array heading West)
Max Chargeability is for the interval 120 to 1020 masca after shutoff



COMINCO EXPLORATION LTD.

RATERIA PROPERTY, MERRITT AREA, B.C.
LINE: 9450S
INDUCED POLARIZATION SURVEY (Pole-Dipole Array)
SCOTT GEOPHYSICS LTD.
Suntrex IPR12
Pulse Rate: 2 sec
August/00
Current electrode East of potential electrodes (array heading West)
Max Chargeability is for the interval 120 to 1020 masca after shutoff



COMINCO EXPLORATION LTD.

RATERIA PROPERTY, MERRITT AREA, B.C.
LINE: 9600S
INDUCED POLARIZATION SURVEY (Pole-Dipole Array)
SCOTT GEOPHYSICS LTD.
Suntrex IPR12
Pulse Rate: 2 sec
August/00
Current electrode East of potential electrodes (array heading West)
Max Chargeability is for the interval 120 to 1020 masca after shutoff

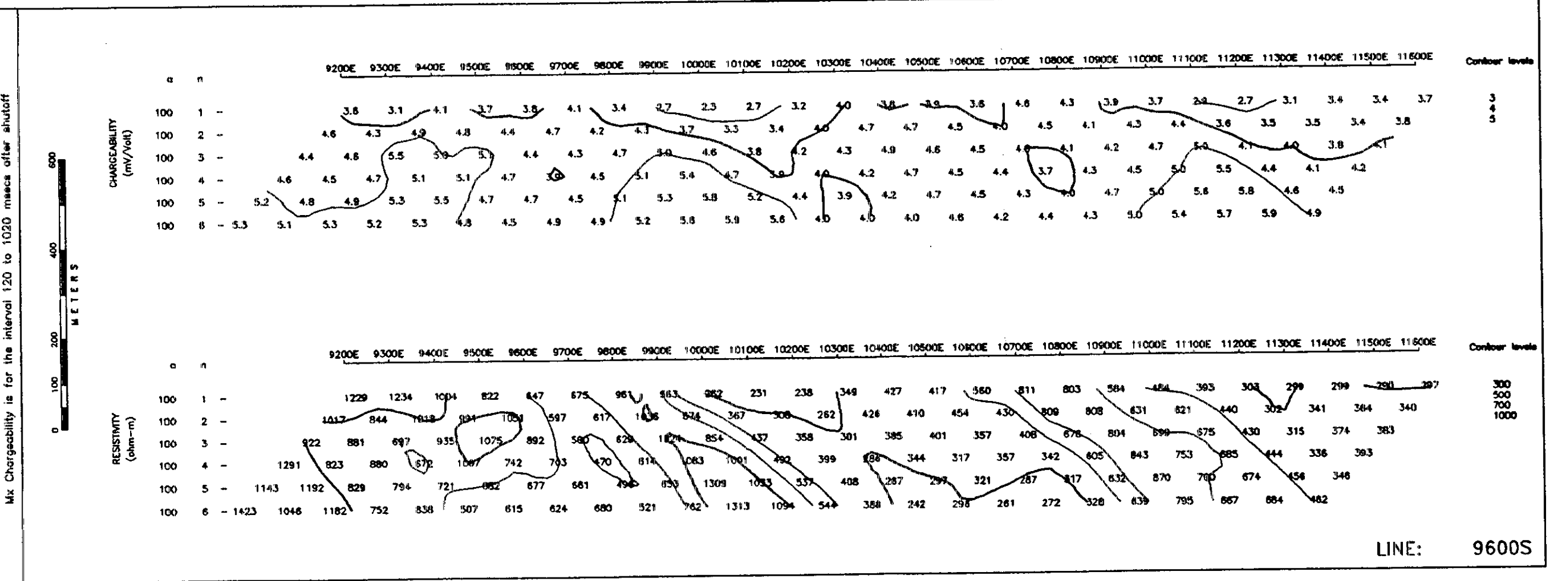
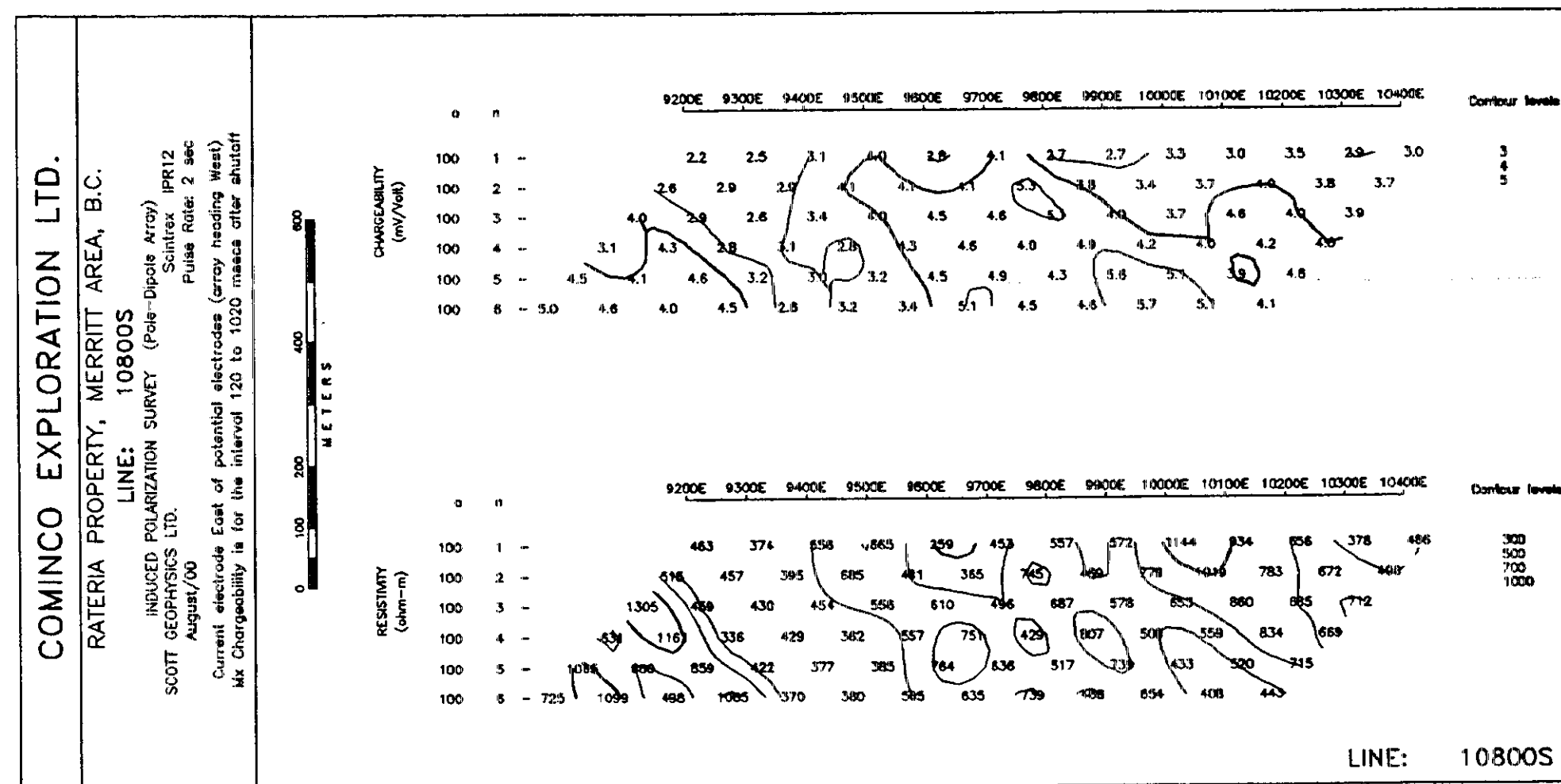
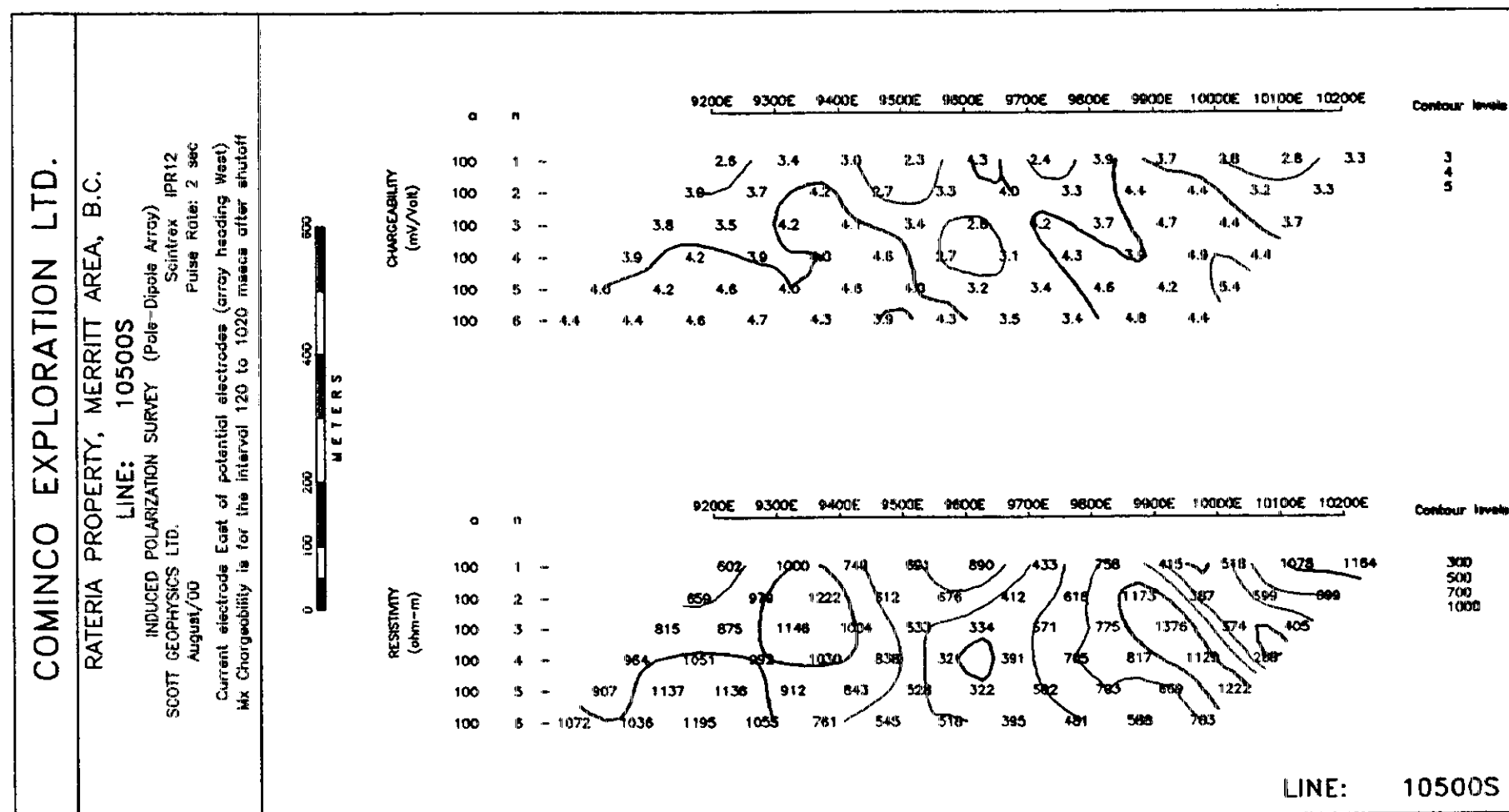
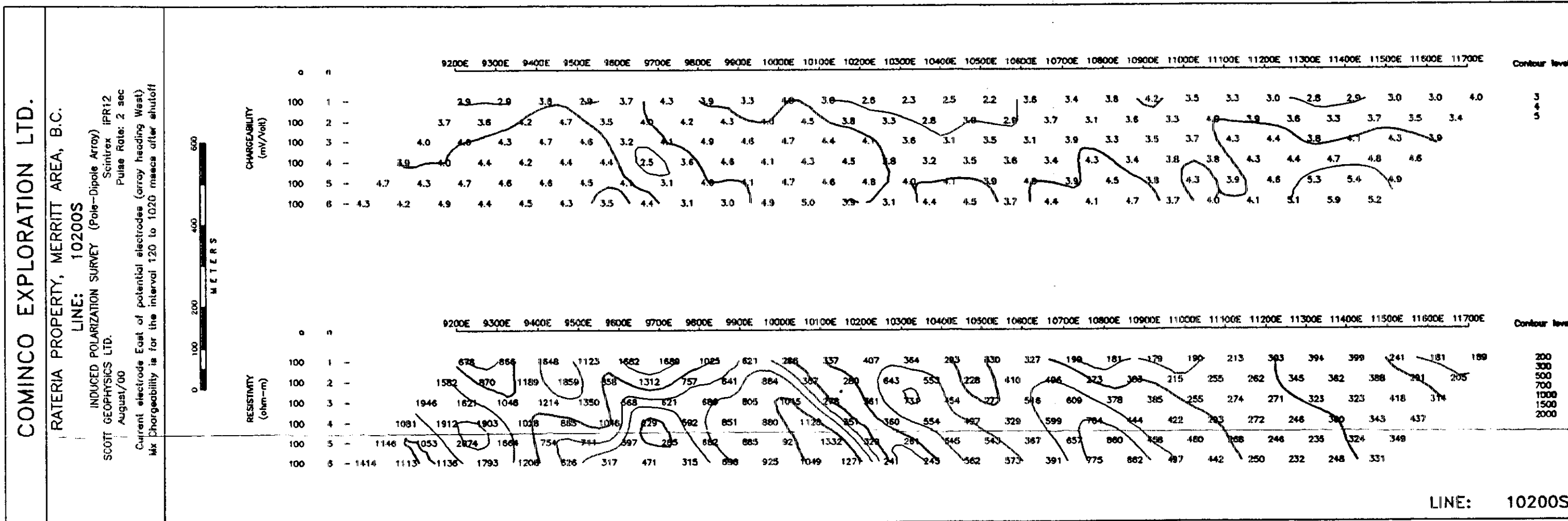
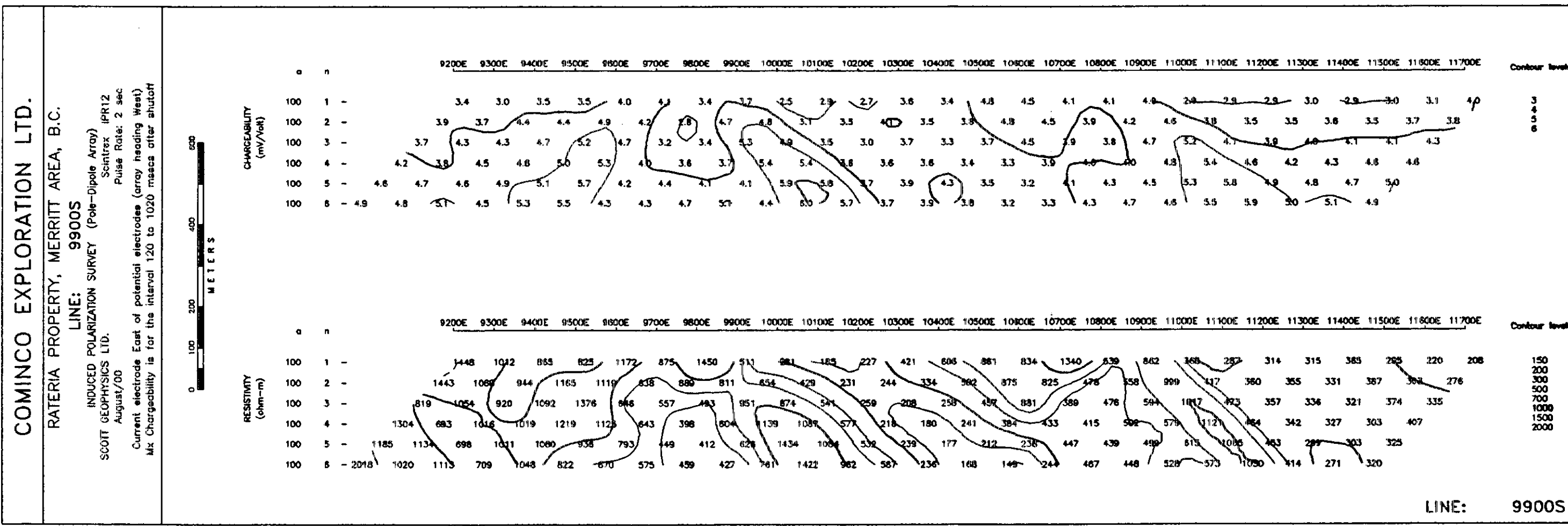


FIGURE 4



GEOLOGICAL SURVEY BRANCH
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(2)

9000E

10000E

11000E

12000E

GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORT

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SURVEY SPECIFICATIONS

survey performed	August/00
receiver	Scintrex IPR12
transmitter	Scintrex TSQ4
pulse time	2 seconds
Mx receive window	120-1020 msec

array	pole dipole
a spacing	100 metres
n separations	1, 2, 3, 4, 5, 6

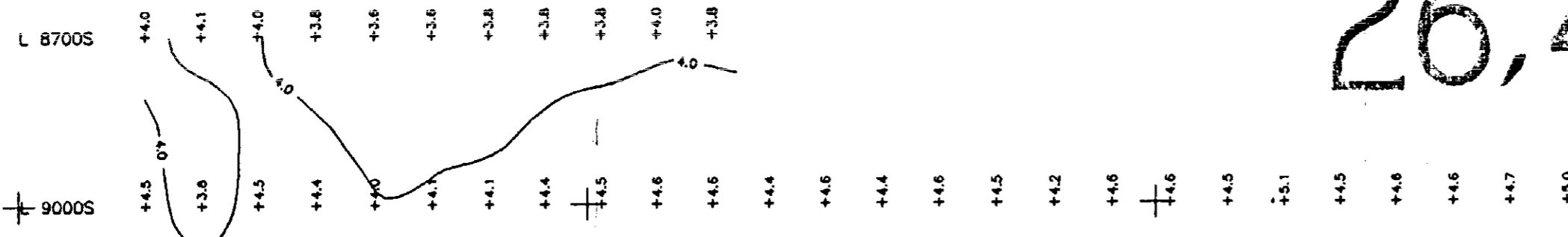
Contoured value	Filtered chargeability
Filtered values	n = 1 to 6

Contour interval 1 mV/Volt

Note: The filter applied to this data is the standard Fraser triangular filter whereby one value is selected at n=1, two values at n=2, three values at n=3, etc. The plotted value is the average of the average values of the n separations and is plotted at the n=1 data point. The filtered values give only general trends. The pseudosections must be referred to to assess specific features.

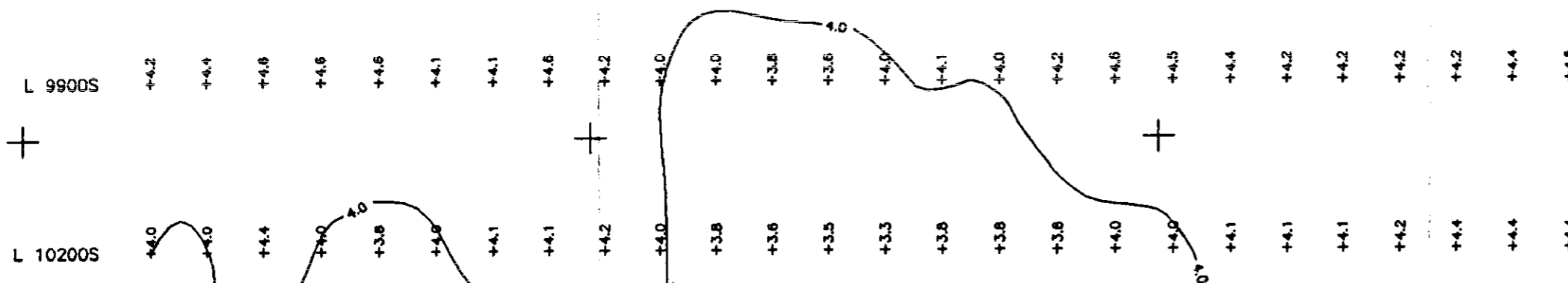
9000S

9000S



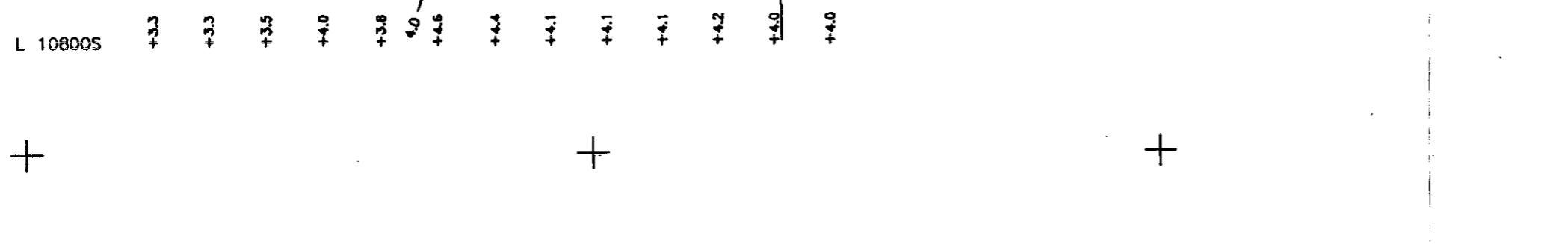
10000S

10000S



11000S

11000S

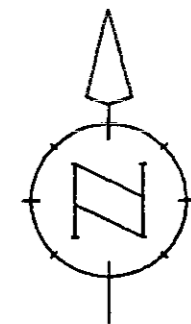


9000E

10000E

11000E

12000E



0 200 400 600 800



M E T E R S

COMINCO EXPLORATION LTD.

RATERIA PROPERTY
MERRITT AREA, B.C. (3)

Chargeability Contour Plan
Triangular Filtered Values
First to Sixth Separations

DRAWN BY: ars

DATE: Sept/00

SCOTT GEOPHYSICS LTD.

FIGURE 5

GEOLOGICAL SURVEY BRANCH
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SURVEY SPECIFICATIONS

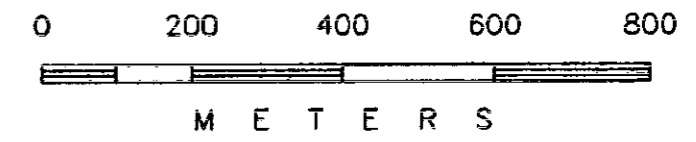
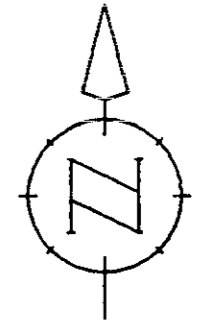
survey performed August/00
receiver Scintrex IPR12
transmitter Scintrex TSQ4
pulse time 2 seconds
Mx receive window 120-1020 msec

array pole dipole
a spacing 100 metres
n separations 1, 2, 3, 4, 5, 6

Contoured value Filtered resistivity
Filtered values n = 1 to 6

Log contour intervals:
20, 30, 50, 70, 100, 150, 200
300, 500, 700, 1000 (ohm-m)

Note: The filter applied to this data is the standard Fraser triangular filter whereby one value is selected at n=1, two values at n=2, three values at n=3, etc. The plotted value is the average of the average values of the n separations and is plotted at the n=1 data point. The filtered values give only general trends. The pseudosections must be referred to to assess specific features.



COMINCO EXPLORATION LTD.

RATERIA PROPERTY
MERRITT AREA, B.C. ④
Resistivity Contour Plan
Triangular Filtered Values
First to Sixth Separations

DRAWN BY: ars DATE: Sept/00

SCOTT GEOPHYSICS LTD. FIGURE 6

