

ADDENDUM REPORT

ON

GEOPHYSICAL SURVEYS

CARRIED OUT ON THE

CONCHA PROPERTY

PRINCETON AREA, BC

NTS: 92 H/8W, SIMILKAMEEN M.D.

FOR

CANICA MINERAL DEVELOPMENT INC.

SURVEY BY

SJ GEOPHYSICS LTD.

LATITUDE 40° 29.5' LONGITUDE 120° 27.5'

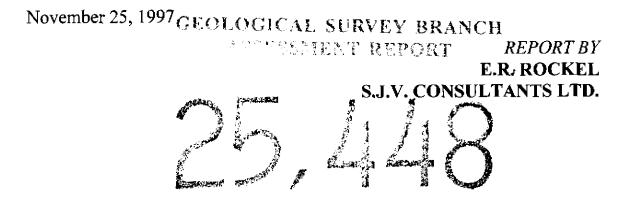


TABLE OF CONTENTS

INTRODUCTION 1
FIELD WORK 1
INSTRUMENTATION 1
DATA PRESENTATION
List of North Grid Pseudosection Maps2
List of south Grid Pseudosection Maps
List of Plan Maps
DISCUSSION OF RESULTS
CONCLUSIONS
North Grid
South Grid4
RECOMMENDATIONS
North Grid
South Grid
REFERENCES 6
APPENDIX G1
Statement of Qualifications - E. R. Rockel
APPENDIX G2
North Grid Pseudosection Maps
APPENDIX G3
South Grid Pseudosection Maps

i

INTRODUCTION

This report is meant to be an addendum to a more detailed geological and geochemical report for Canica Development Inc. Therefore, location maps, property history and local geology will not be included.

Induced polarization and resistivity (IP), total field magnetic and VLF EM surveys were carried out on two grids, within the boundaries of the Concha Property, near Princeton, B.C. The Concha Property is comprised of the Concha 1, 2, 3, 5 and 6 claims in the north group (north grid) and Concha 15, 16, 19, 20, 21 and GNU 88 claims in the south group (south grid). The current geophysical work took place on the Concha 1, 2, 3 and 5 claims in the north and on the Concha 20, 21 and GNU 88 claims in the south.

The survey was carried out over an area mapped as Nicola Group volcanic rocks with Hardwick Sandstones in the northwest corner of the northern grid. This area has potential for copper-gold mineralization similar to other mineralization in the area. The purpose of the survey was to determine the presence and location of sulphide mineralization within the grid, which can be explored further.

FIELD WORK

The geophysical survey was carried out by SJ Geophysics Ltd., of Delta, B.C. during the period from October 8 to October 17, 1997. Grid location was carried out on October 8, 9, 10, and 13, 1997. Surveying was carried out from October 10 to 16, 1997.

SJ Geophysics Ltd. established 4.5 km of survey line on the north grid and 4.75 km on the south grid. During the 1997 program a total of 4.5 km of IP, magnetic and VLF EM survey was carried out on the north grid and 4.75 km on the south grid.

INSTRUMENTATION

An Androtex TDR6 time domain 6 dipole IP receiver was used for the data acquisition. The receiver time delay was set at 80 msec with subsequent windows M1 through M10 at intervals of 80, 80, 80, 80, 160, 160, 160, 320, 320 and 320 msec respectively. A 50-meter, n of 1 to 6, pole dipole array was used for both grids as shown on the survey plan maps. A custom designed six-dipole receiver cable was used with stainless steel potential electrodes. An Androtex STX-10 10 kW. transmitter was used with a "2 sec on, 2 sec off" duty cycle.

DATA PRESENTATION

Magnetic data are presented as profiles on plan map plate G1a and as contours on plate G1b. VLF EM data are presented as in-phase, out-of-phase and total field strength profiles on plan map plates G2a (Seattle) and G2b (Hawaii).

IP survey results are presented in pseudosection form for each individual survey line as listed in the List of Pseudosection Maps sections of this report. Only local coordinates are displayed on the pseudosections. Both the M3 and M6 time slices are presented as well as the resistivity values. Resistivity and M6 chargeability values were filtered using the triangular "Fraser Filter A". The filtered resistivity values for each grid are presented as contours on plan map plate G3a. The filtered chargeability values are presented as contours on plan map plate G3b. The IP, magnetic and VLF EM geophysical interpretations are presented on a compilation plan map plate G4. Both the local coordinate system and the NAD 27 UTM coordinate system are presented on all plan maps.

LINE	TITLE	LOCATION
4400E	Line 4400E Pseudosection	Appendix G1
4500E	Line 4500E Pseudosection	Appendix G1
4600E	Line 4600E Pseudosection	Appendix G1
4800E	Line 4800E Pseudosection	Appendix G1
4900E	Line 4900E Pseudosection	Appendix G1

List of North Grid Pseudosection Maps

List of South Grid Pseudosection Maps

LINE	TITLE	LOCATION
3700E	Line 3700E Pseudosection	Appendix G2
3800E	Line 3800E Pseudosection	Appendix G2
3900E	Line 3900E Pseudosection	Appendix G2
4000E	Line 4000E Pseudosection	Appendix G2
4100E	Line 4100E Pseudosection	Appendix G2
4200E	Line 4200E Pseudosection	Appendix G2

PLATE	TITLE	LOCATION
Gla	MAGNETIC TOTAL FIELD (nT) PROFILES	Map Pocket
G1b	MAGNETIC TOTAL FIELD (nT) CONTOURS	Map Pocket
G2a	SEATTLE (NLK 24.8 kHz.) VLF EM PROFILES	Map Pocket
G2b	HAWAII (NPM 21.4 kHz.) VLF EM PROFILES	Map Pocket
G3a	TRIANGULAR FILTERED RESISTIVITY (ohm-meter)	Map Pocket
G3b	TRIANGULAR FILTERED M6 CHARGEABILITY (msec)	Map Pocket
G4	COMPILATION MAP	Map Pocket
G5	GRID PLAN MAP	Map Pocket

List of Plan Maps

DISCUSSION OF RESULTS

Local grid coordinates were converted to Nad 27 UTM coordinates using two common local/UTM coordinates. The UTM coordinates were obtained in the field using a Trimble Scout Master hand held GPS averaging 2000 readings.

In this report *apparent resistivity* values are referred to as *resistivity* values and *apparent chargeability* values are referred to as *chargeability* values. Resistivity values in the north grid were generally low, ranging from less than 20 ohm-meters to a maximum of just over 300 ohmmeters. Chargeability values were also very low and ranged from about 2 msec to nearly 10 msec as demonstrated by the M6 time slice. In the south grid both resistivity and chargeability values were slightly higher than in the north. Resistivity values in the south grid ranged from around 75 ohmmeters to over 500 ohmmeters. Chargeability ranged from 3 msec to anomalous values of almost 13 msec (on the M6 time slice).

Page 3

CONCLUSIONS

North Grid

The north grid survey defined a region of low resistivity values in the northwest corner of the grid with an abrupt change to higher resistivity values in the southeast. The different resistivity regions are believed to reflect a change from Hardwick Sandstone in the northwest corner to Nicola Group volcanic rocks in the southeast portion of the north grid.

Slight increases in chargeability values seen on pseudosections are believed to reflect local increases in the background sulphide content of the volcanic rocks. A deep slight increase in chargeability seen on line 4500E at about 5675N was considered too weak to pick as an anomaly but may represent the nose of a deeper chargeable feature beyond the depth capability of the present electrode configuration.

An abrupt linear magnetic gradient, from low in the west to high in the east, coincides with the resistivity change and supports the rock type change from sediments to volcanic rocks. The steep magnetic gradient may represent a fault at the contact, as shown on plate G4.

VLF EM conductors in this grid are weak near surface features, which probably reflect local changes in overburden. An exception is a conductive trend from line 4400E to 4500E, which coincides with an interpreted fault. If the fault can be confirmed, the VLF EM response may reflect conductive material, possibly sulphides, within the interpreted fault. A VLF EM conductor, which is coincident with a fence along the baseline, is caused by the metal fence wires.

South Grid

VLF EM conductive trends in the south grid are also mainly believed to be caused by overburden effects. Here an exception is a conductive trend that coincides with a buried pipeline and is caused by the metal pipe.

Both magnetic and IP results indicate an anomalous feature in the center of the south grid. A magnetic low, shown on plate G4, may indicate an alteration zone within the volcanic rocks. An increase in background chargeability values, shown as chargeability zone C1 on plate G4, includes four chargeability trends, which seem to be cut and offset by a fault. Within this high background zone (about twice the background of roughly four msec) exists a chargeable core of approximately three times the

background, interpreted as anomalous zone C2. The coincidence of a magnetic low zone (possible alteration), anomalous chargeability values (possible disseminated sulphides) and a cross cutting fault (possible trap) combine to create an interesting target for addition exploration. The four chargeability trends mentioned above vary in depth from surface. The outside trends are deepest and are probably of the order of 100 meters below surface. The two inner trends seem to vary from around 75 meters through 25 meters to near surface on line 4000E. These two trends, although shown as separate, combine into a single wide anomaly as displayed on the pseudosection. The interpreted northwest fault gains support from a coincident linear topographic low reinforcing the possibility of a fault trap for mineralization.

RECOMMENDATIONS

North Grid

Geophysical results suggest that the most geologically interesting region of this grid is in the vicinity of the interpreted northeast trending contact between Nicola Group volcanics and the Hardwick Sandstones. Based on the present geophysical surveys additional mineral exploration in this grid area is recommended in the vicinity of the conductive portion of the interpreted fault and contact zone. A detailed geological examination of this region is suggested to check for mineralization, possibly within a fault, which may be associated with the VLF EM conductor. If geological and geochemical support is present then a deeper penetrating IP survey array, possibly using 100-meter dipole separations, should be considered to investigate the deeper chargeability "nose" seen on line 4500E.

South Grid

A ground follow-up exploration program should be planned to further explore the geophysical target in the center of the south grid. Geological and geochemical data should be obtained to confirm the presence of economic minerals in preparation for subsurface investigation by trenching or drilling. The chargeability anomaly on line 4000E is closest to the surface and should be the focus of initial ground follow-up.

Respectfully submitted,

Per S.J.V. Consultants Ltd.,

E. R. Rockel, B.Sc., P.Geo.

Page 5

SJ Geophysics Ltd./S.J.V. Consultants Ltd., 11762 – 94th Avenue, Delta, B.C. V4C 3R7 tel: (604) 582-1100, fax: (604) 589-7466, e-mail: sydv@sjgeop.bc.ca

r

REFERENCES

Read, P.B. (1987)

Tertiary Stratigraphy & Industrial Minerals, Princeton & Tulameen Basins, British Columbia, Province of British Columbia, Ministry of Energy Mines and Petroleum Resources & Energy Mines and Resources Canada, Open File 1987-19 - 1:25,000 map.

Sookochoff, L. (1996)

Compilation Report on the Concha Property for Mr. Doug Hopper, June 17, 1996.

Page 6

APPENDIX G1

Statement of Qualifications - E. R. Rockel

I, Edwin Ross Rockel, of the city of Surrey, Province of British Columbia, hereby certify that:

- I received a B.Sc. degree in Geophysics from the University of British Columbia in 1966.
- I currently reside at 13000 54A Avenue, in the City of Surrey, in the Province of British Columbia.
- I have been practising my profession since graduation.
- I am a Professional Geoscientist registered in the Province of British Columbia.
- I am a Professional Geoscientist registered in the Province of Newfoundland.
- I am a Professional Geoscientist registered in the Northwest Territories.
- I hold no direct or indirect interest in, nor expect to receive any benefits from, the mineral property or properties described in this report.
- This report may be used for the development of the property, provided that no portion will be used out of context in such a manner as to convey meanings different from that set out in the whole.
- Consent is hereby given to the company for which this report was prepared to reproduce the report or any part of it for the purposes of development of the property, or facts relating to the raising of funds by way of a prospectus and/or statement of material facts.

Dated 100-25 97

Signed

E. R. Rockel, B.Sc., P.Geo.

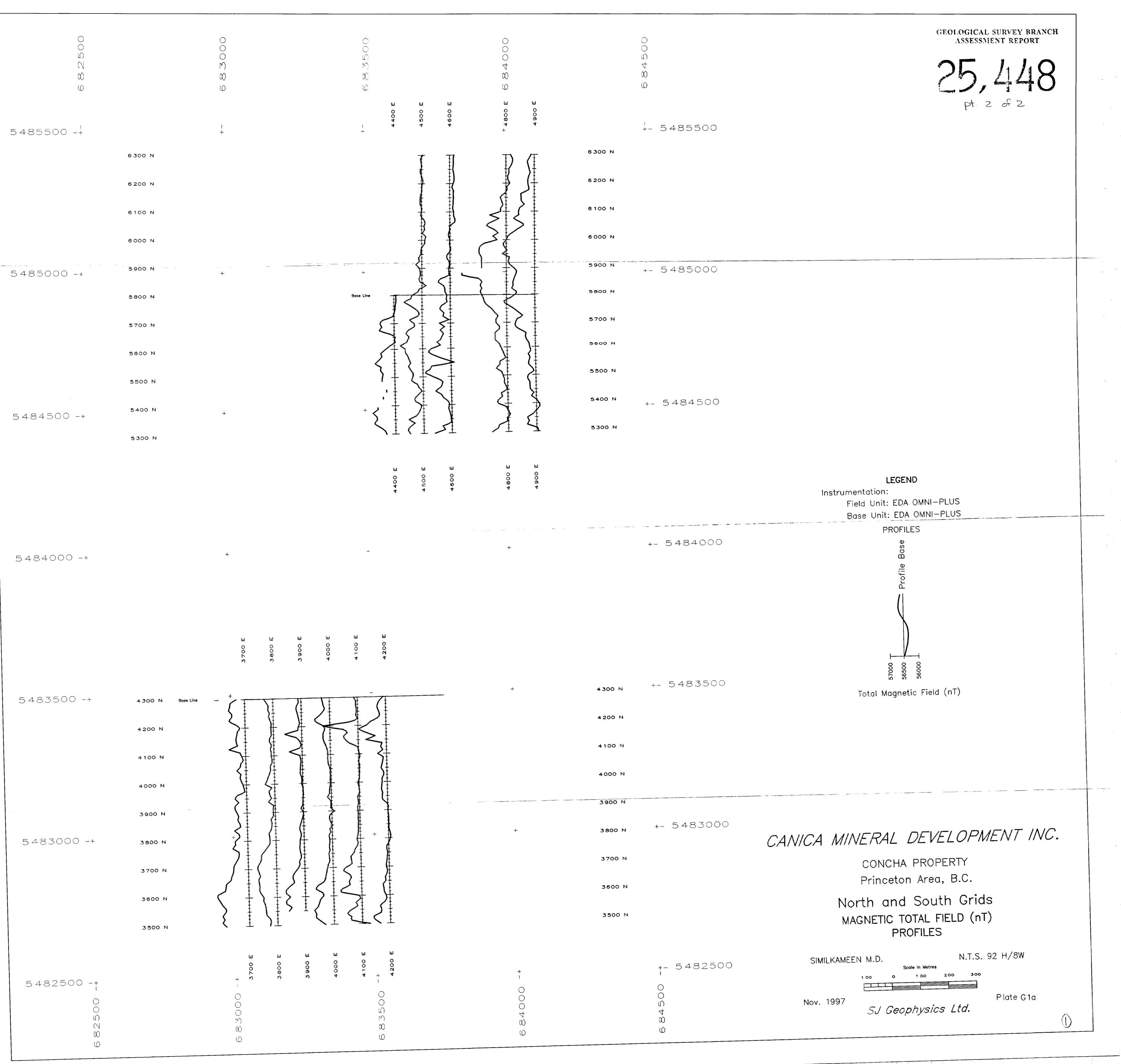
t

۲

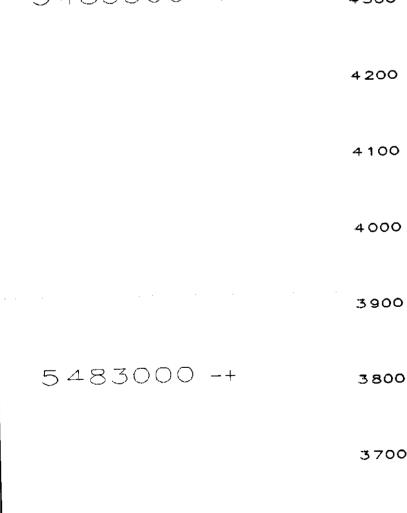
4

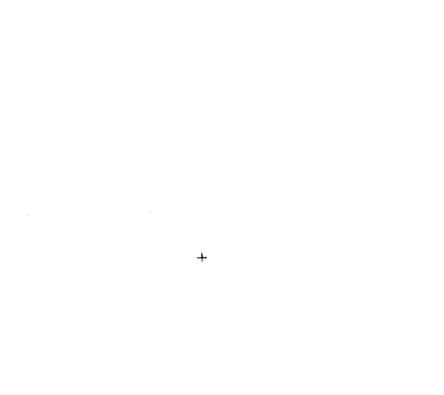
APPENDIX G2

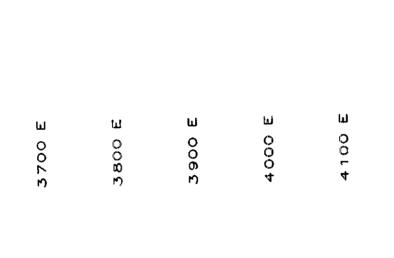
North Grid Pseudosection Maps

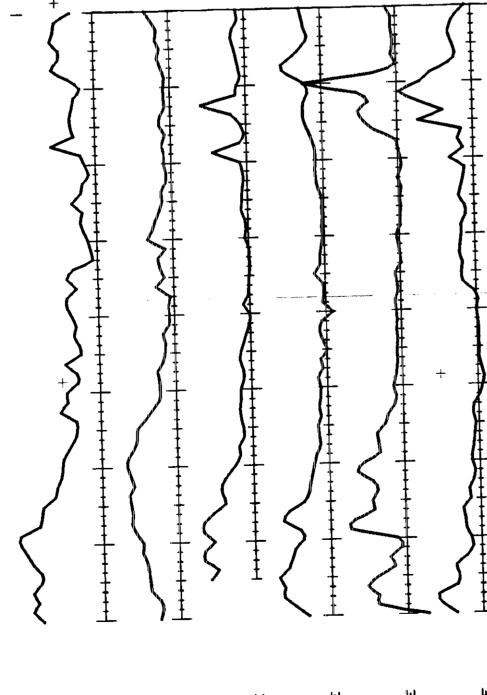


ł.



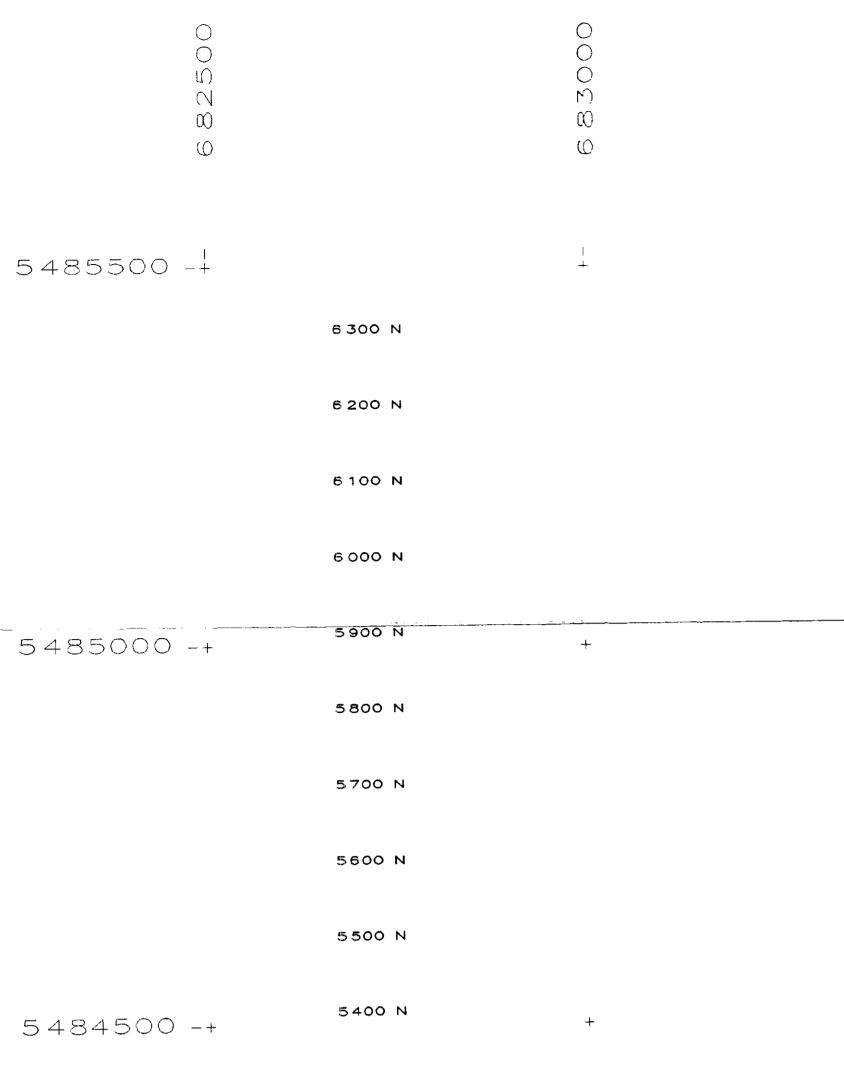








IN M.D.				N.T.S.	92	H/8W
		Scale in Metres				
1 00	0	1 00	200	300		
L					F	Plate G
5J	Ge	ophysic	s L	td.		



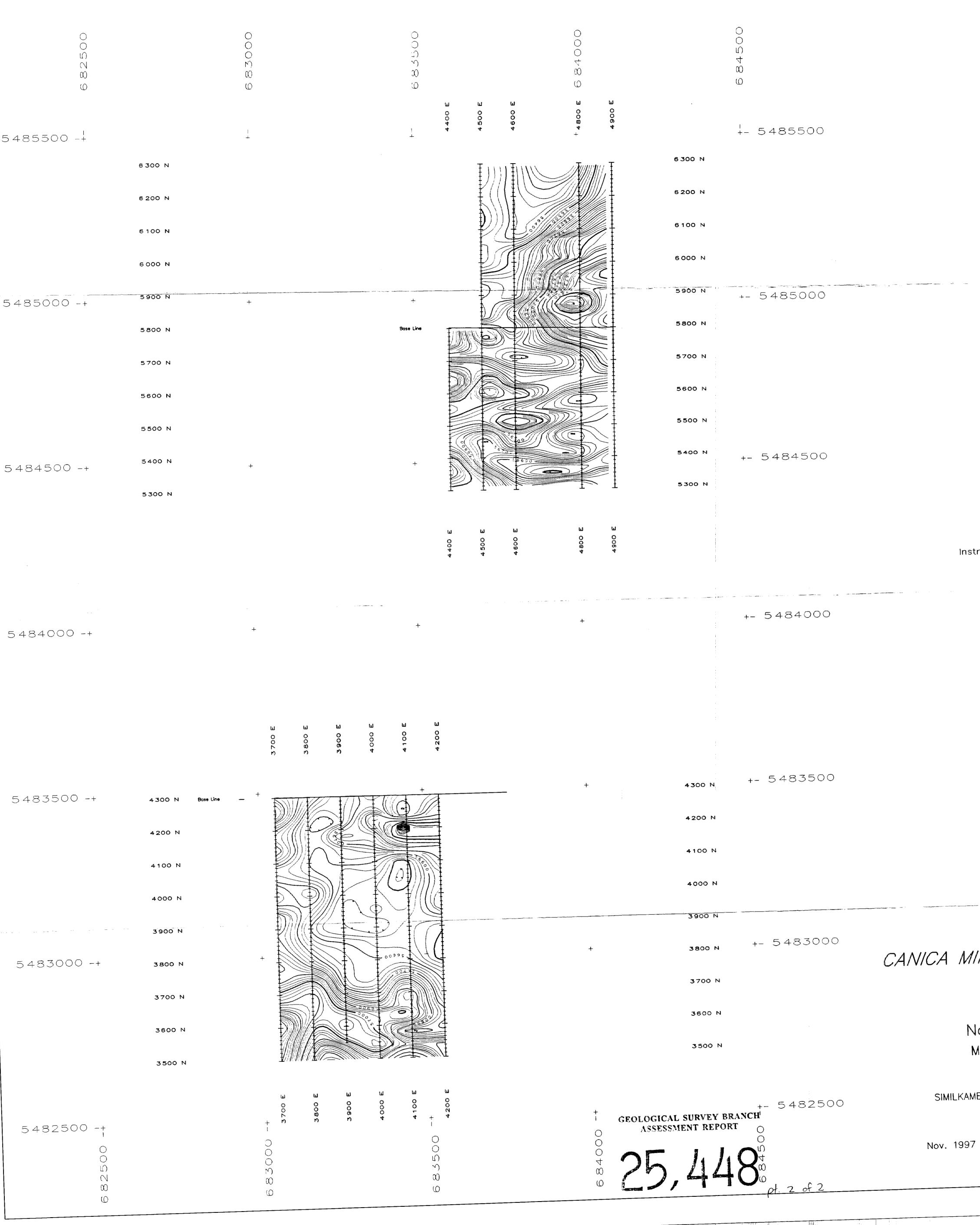
Ì

| |

|

. |

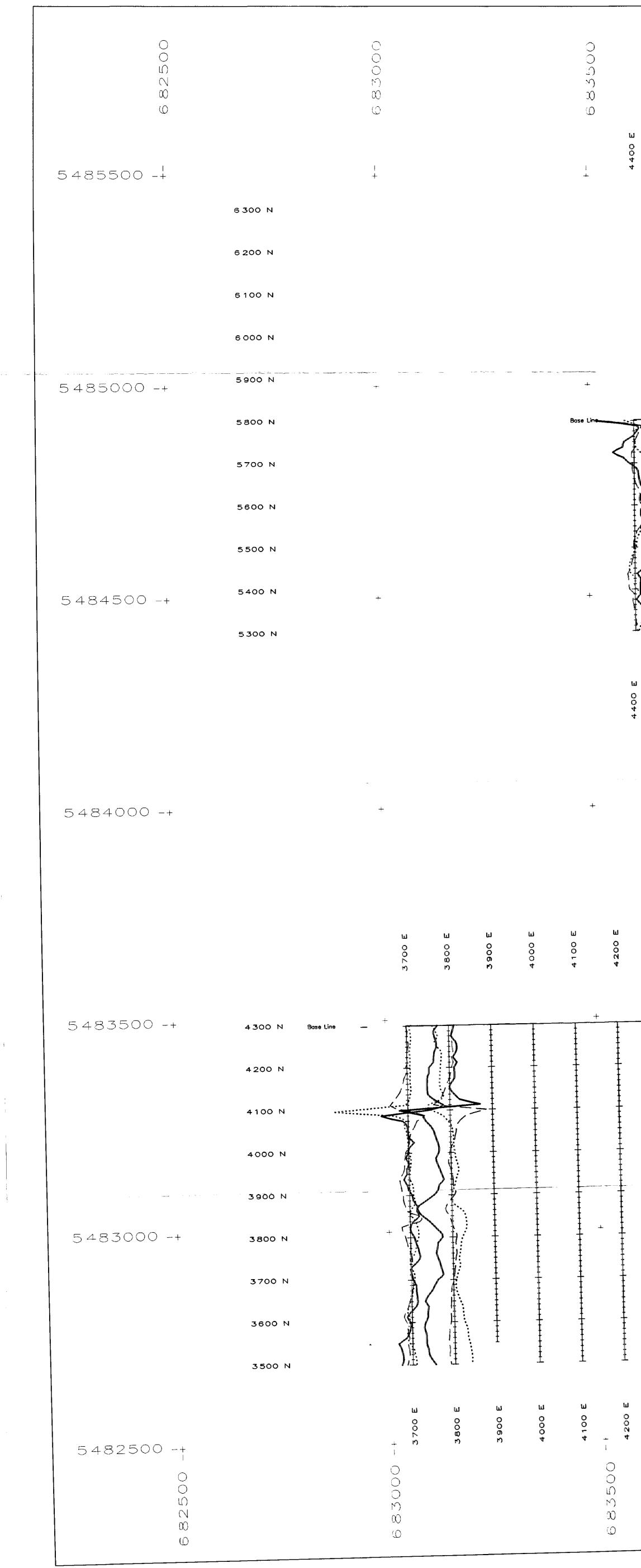
. .



and the second ` LEGEND Instrumentation: Field Unit: EDA OMNI-PLUS Base Unit: EDA OMNI-PLUS Magnetic Contour Levels _____ 25 nT 100 nT 500 nT CANICA MINERAL DEVELOPMENT INC. CONCHA PROPERTY Princeton Area, B.C. North and South Grids MAGNETIC TOTAL FIELD (nT) CONTOURS N.T.S. 92 H/8W SIMILKAMEEN M.D. Scale in Metres 300 200 1 00 1 00 0 Plate G1b SJ Geophysics Ltd. (2)

.

;•



	+- 5485000	5900 N				
		5800 N			γ	
		5700 N				
		5600 N				
		5500 N				
	+- 5484500	5400 N				
		5300 N	(; ⊥/)		/ <u>1</u> ()	⊌\ <u>₽</u>
			ш О О б	ш О		Ш
			4 0	4 00 0	4 6 0 0	4 500
Instru	•					
	+- 5484000			+		
	+- 5483500	4300 N		-		
		4200 N				
		4100 N				
		4000 N				
		3900 N		·	********************************	
CANICA MI	+- 5483000	3800 N	+			
		3700 N				
N		3600 N	BRANCH	SURVE	edi.061CAL	
SEA		3500 N	PORT	JENT RE	edi.ogical Assessv	G
SIMILKAM	<u>+</u> - 5482500		48	,4	25	ć
	0		+ 1		() +. 2 of 2	F
Nov. 1997	8 0 0 0 0		8 000 000			
	Ŵ		W W			

4000

0)

 \bigcirc

۱IJ

Ø

4 500

600

Ш

Ο

84500

Û

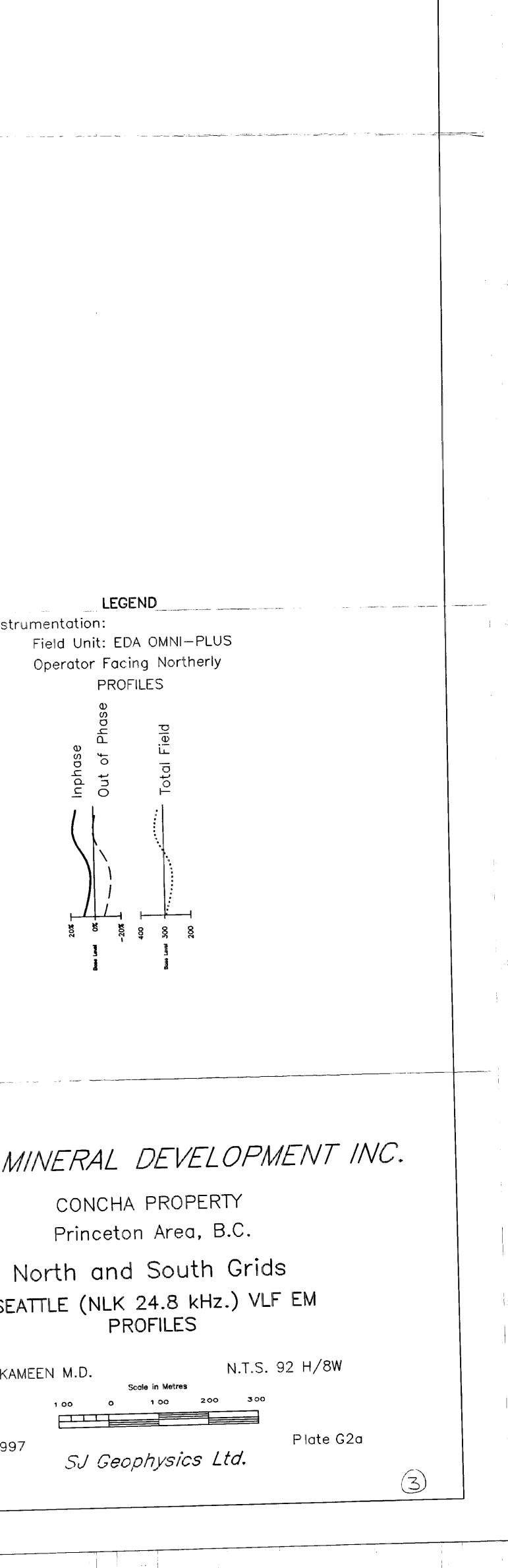
6300 N

6200 N

6100 N

6000 N

-+- 5485500





5400 N

5484500 -+

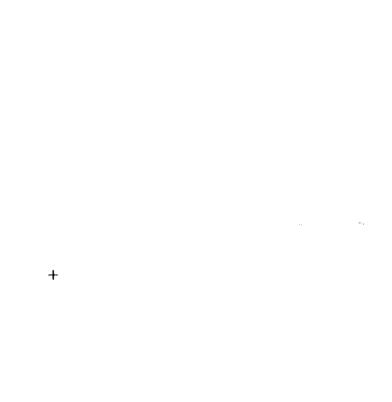
5300 N

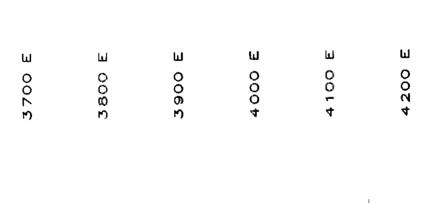
5484000 -+

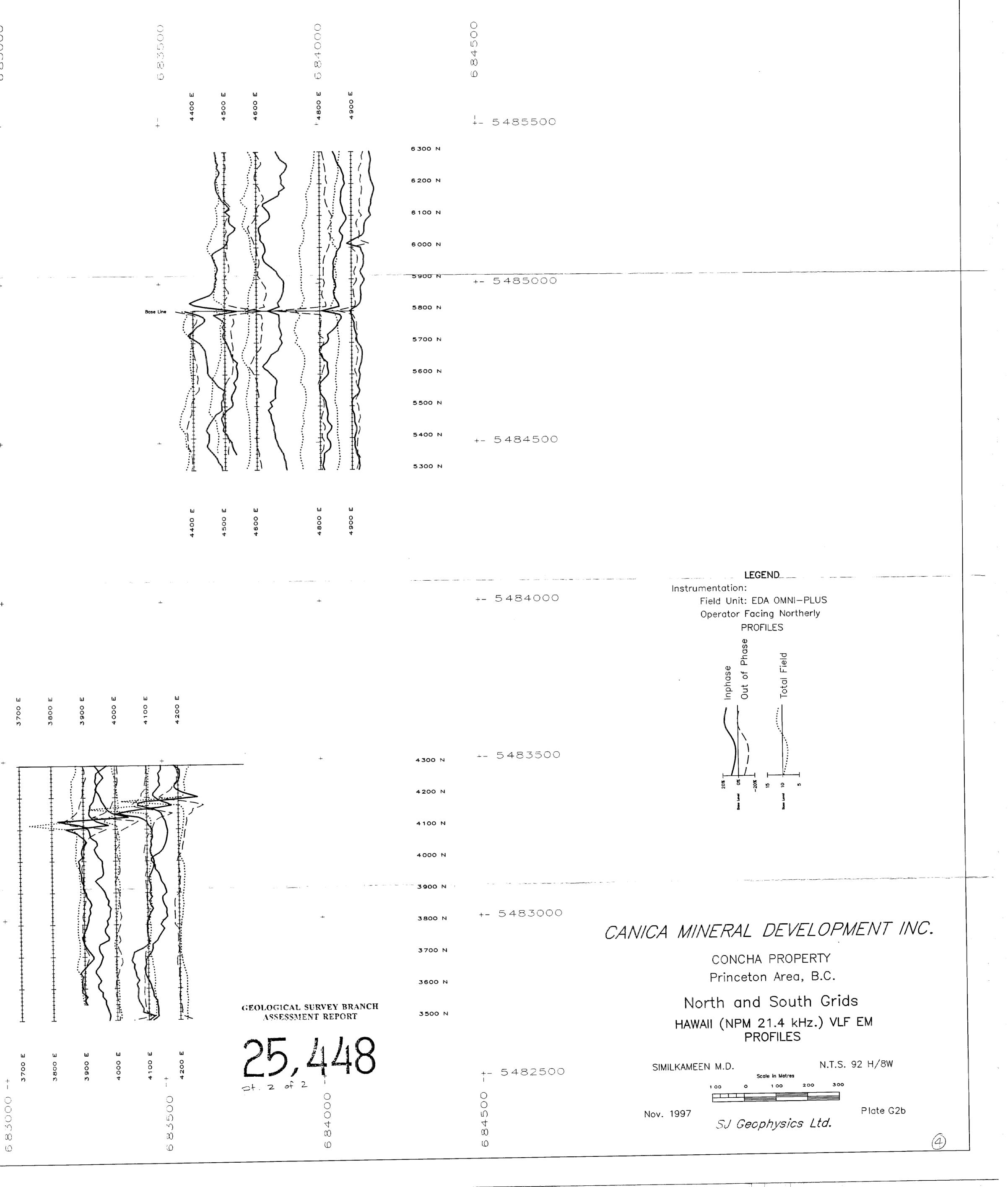
5483500 -+ 4300 N

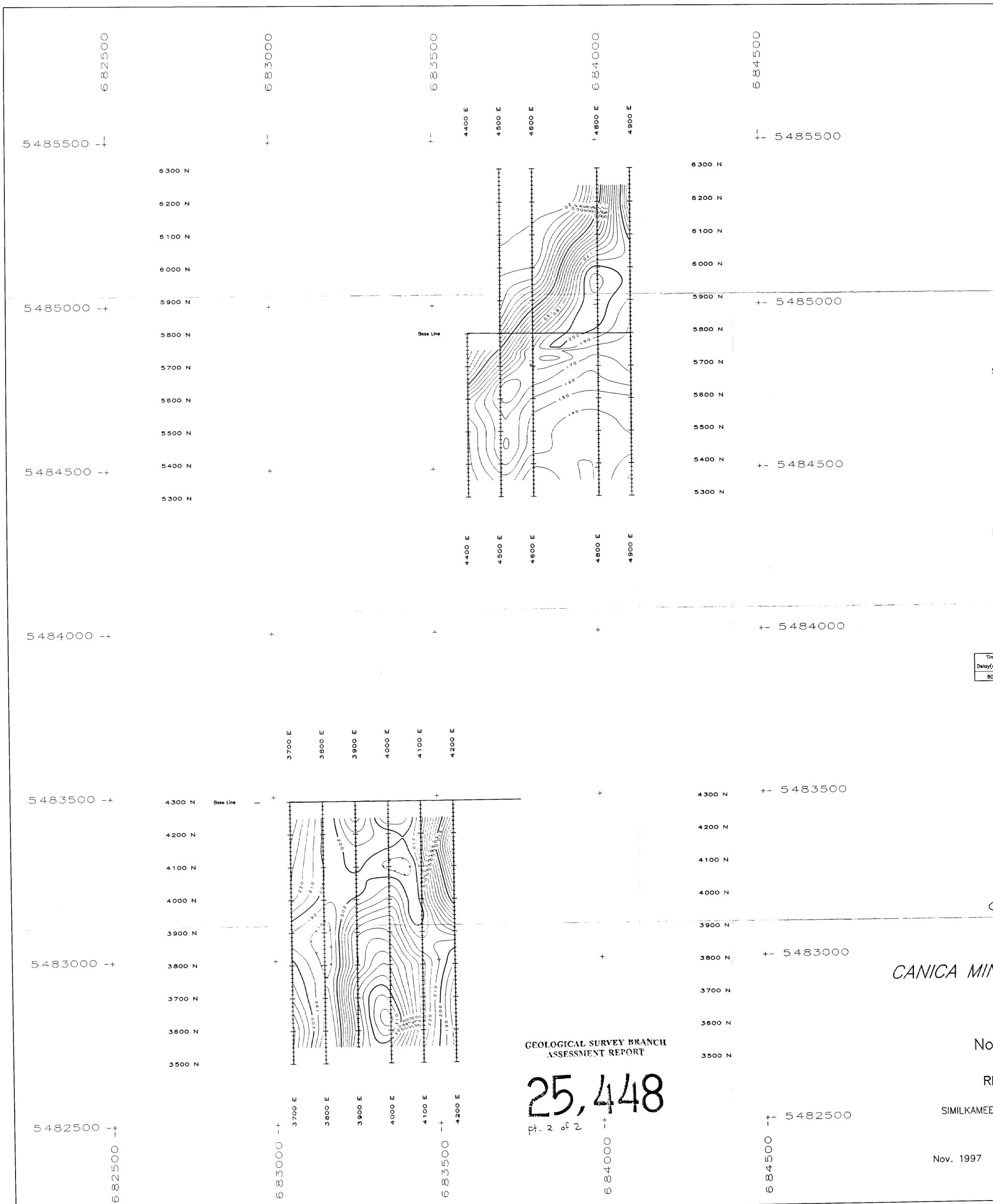
5483000 -+

5482500 -+ 682500 4200 N 4100 N 4000 N 3900 N 3800 N 3700 N 3600 N 3500 N









1

Ŷ

1

; ; ·

. 1

i

Ú

	:
	· · · · · · · · · · · · · · · · · · ·
	, • ;
	:
	1
INDUCED POLARIZATION	· ·
SURVEY SPECIFICATIONS	· · · · · · · · · · · · · · · · · · ·
Receiver: Androtex TDR6	
Transmitter: Androtex STX—10 (10 kW)	•
POLE-DIPOLE ARRAY	, !
DEPTH POIN	· · . · ·
Θ	
N=1, 2, 3, 4,	
"A" SPACING = 50 Meters	
Fime Time Windows(msec) y(msec) M1 M2 M3 M4 M5 N6 W7 M8 M9 M10	
80 80 80 80 160 160 160 320 320 320	
Resistivity Contours	
00	
NERAL DEVELOPMENT INC.	
NERAL DEVELOT MENT TNO.	
CONCHA PROPERTY	
Princeton Area, B.C.	
orth and South Grids	
TRIANGULAR FILTERED	
RESISTIVITY (ohm-meter)	
EN M.D. N.T.S. 92 H/8W Scale in Metres	
Plate G3a	
SJ Geophysics Ltd.	
5	

r

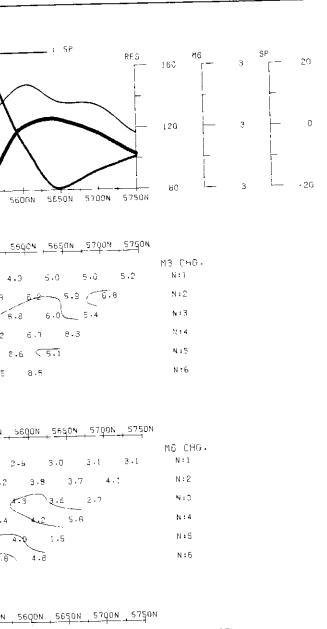
4

APPENDIX G3

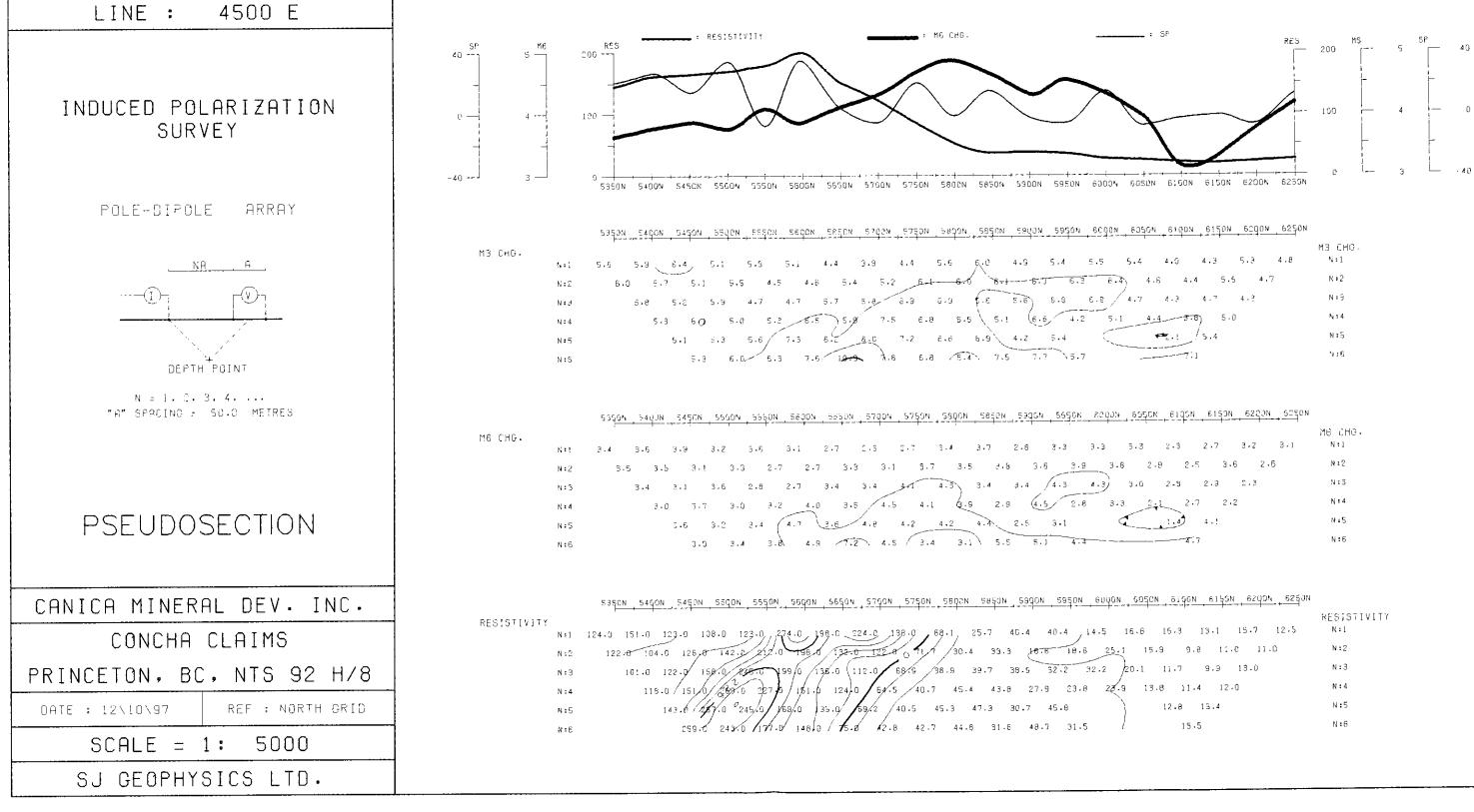
South Grid Pseudosection Maps

LINE : 4400 E	
INDUCED POLARIZATION SURVEY	$20 \xrightarrow{\text{SP}} 3 \xrightarrow{\text{M6}} 160 \xrightarrow{\text{RES}} 120 \xrightarrow{\text{RESISTIVITY}} 146 \text{ C}$
POLE-DIPOLE ARRHY	535 <u>0N 5400N 5450N 5500N 55</u>
	M3 (MG). N:1 5.9 5.5 4.7 5.0 4.1 N:2 5.7 4.7 5.1 4.2 N:3 4.1 5.1 4.8 5.6 N:4 6.5 4.5 5.0 N:5 4.2 5.1 7.6 N:6 6.6 7.1
N = 1, 2, 3, 4, "A" Spacing = 50.J Metres	535 <u>0N 545CN 550CN 55</u> M6 CHG. N:1 3.5 3.3 2.9 3.0 2. N:2 3.4 2.8 3.1 2.5
PSEUDOSECTION	N:2 3.4 2.8 3.1 2.5 N:3 2.1 3.0 3. N:4 4.3 2.5 2.7 N:5 2.9 3.6 4. N:6 3.9 4.0
CANICA MINERAL DEV. INC.	535 <u>0N 5400N 5450N 5500N 550N 5500N </u>
CONCHA CLAIMS	N:1 74.5 84.3 89.0 121.0 272. N:2 96.3 90.7 27.8 229.0
PRINCETON, BC, NTS 92 H/8	N:3 83.2 23.8 226.0 247 N:4 129.0 227.0 78.9
CATE : 12\10\97 REF : NORTH GRID	N:5 211.0 759.7 80 N:6 160.0 78.5
SCALE = 1: 5000	
SJ GEOPHYSICS LTD.	

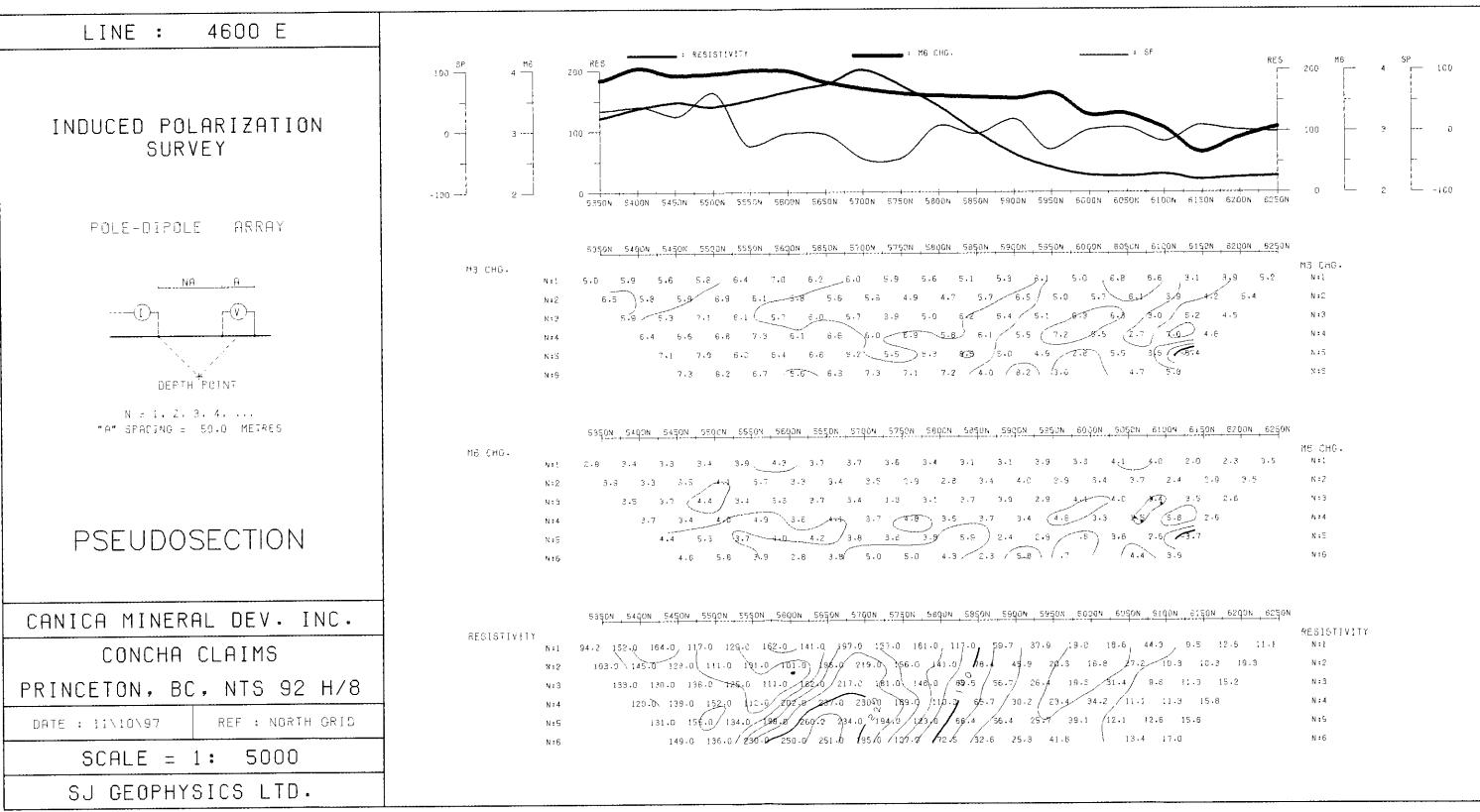
.



201.0, 92,1 95.5 , 42.6	RESISTIVITY N:1
1 60.1 -99.5 38.2	N:2
95.9 62.3 37.7	N:3
.9 72.0 29.7	N : 4
77.5 30.2	N:5
.9 32.1	N:6



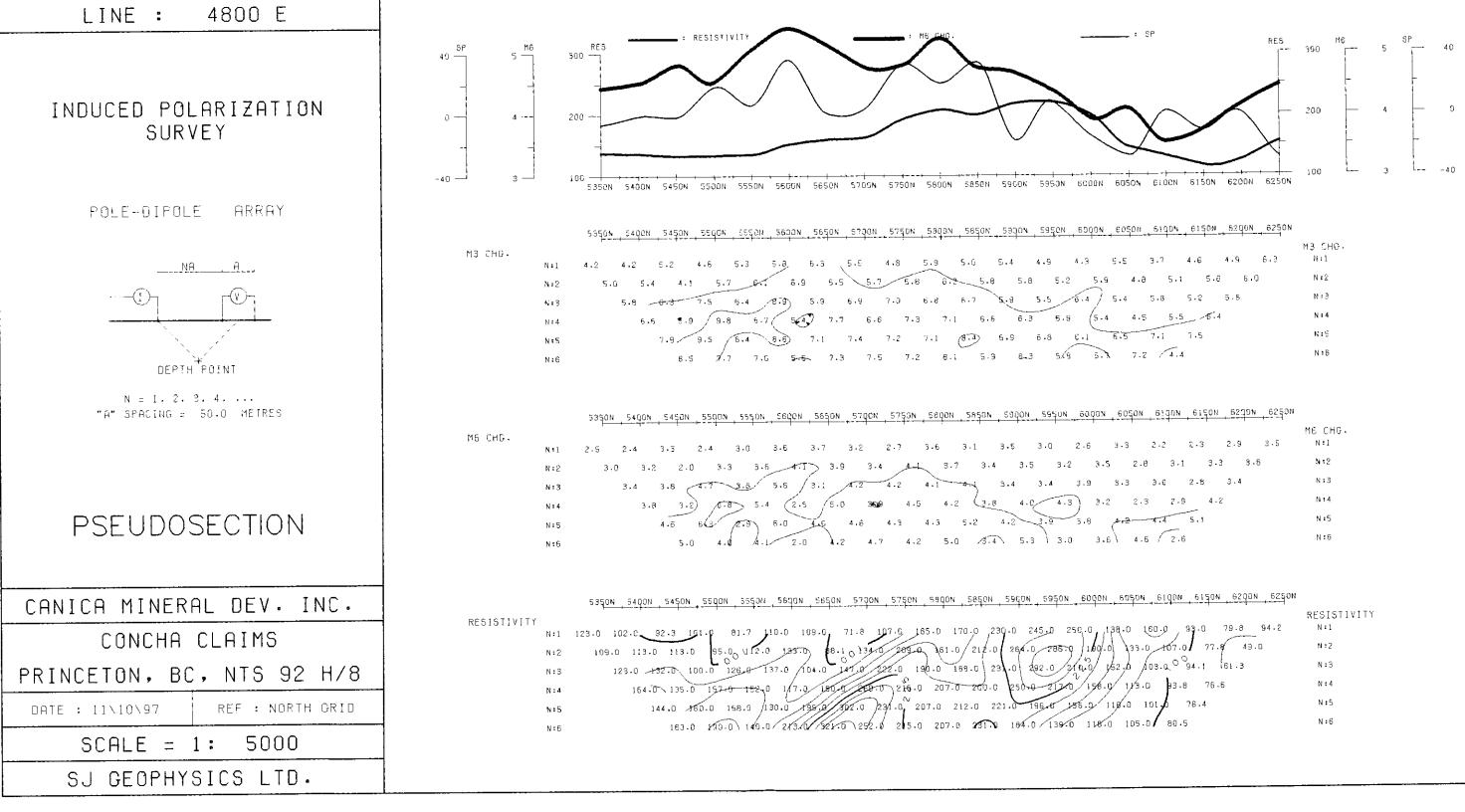
5.3 13.1 15.7 12.5	RESISTIVITY N:1
9.8 11.0 11.0	N:2
1.7 9.9 13.0	N:3
11.4 12.0	N:4
2.8 13.4	N:5
15.5	N : 6

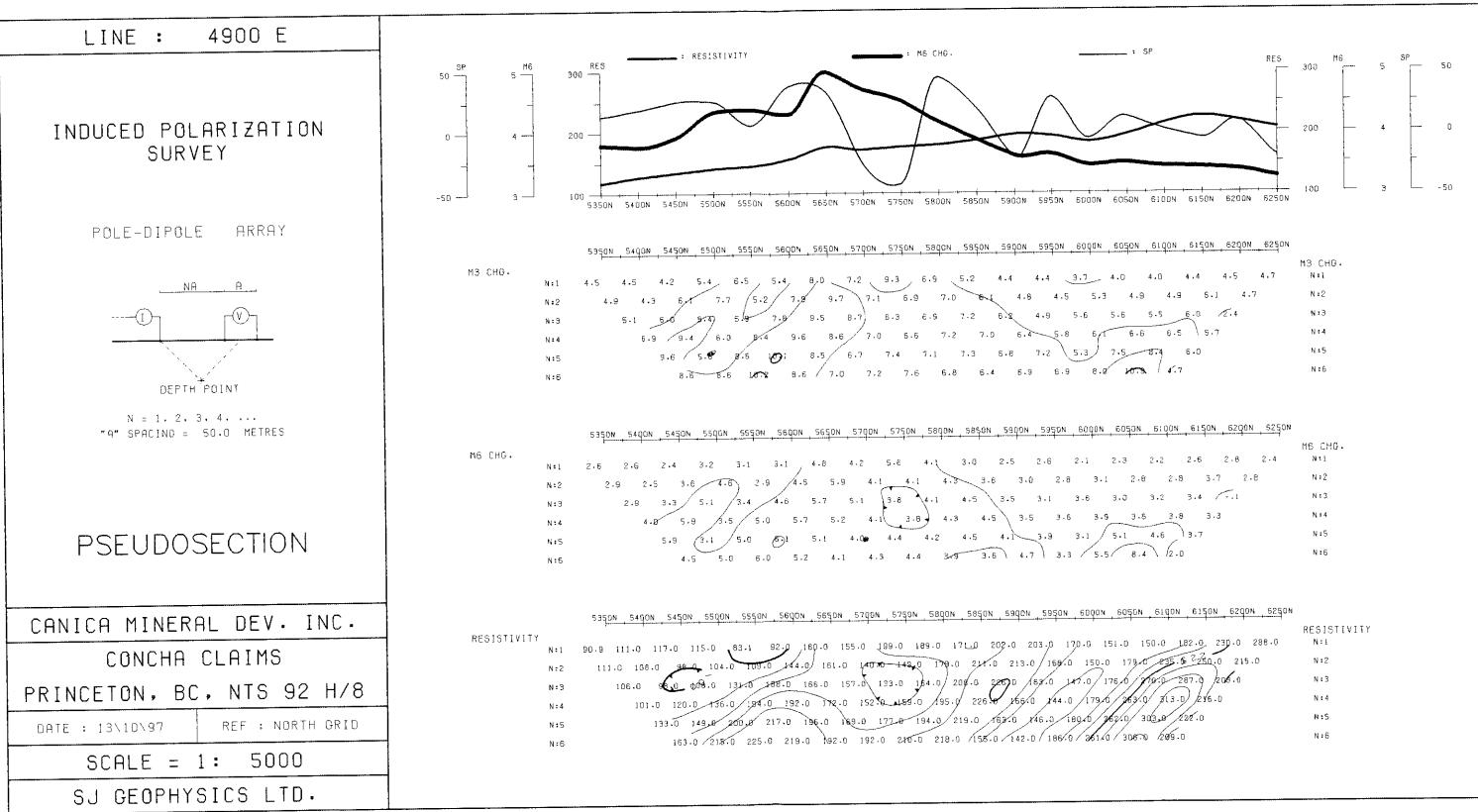


	M3 ÇH0.
.8 3.1 3,9 5.2	N÷l
3.9 4.2 5.4	N # 2
.0 / 5.2 4.5	N # 3
4.6	N = 4
5 -5.4	N#5
5.8	NSS

•0	2.0	2.3	3.5	MS CHG. N≭1
2.	. 4	2.9 3	. 5	N + 2
D	3.5	2.6		۲:3
5	.8_)	2.6		ti z 4
.5	1.7			N : 5
3.	9			N16

.3 9.5 12.6 11.1	RESISTIVITY N:1
10.3 10.3 19.3	N:2
1.8 1;.3 15.2	N ; 3
:1.3 15.8	N:4
.6 15.6	N:5
17.0	N : 6

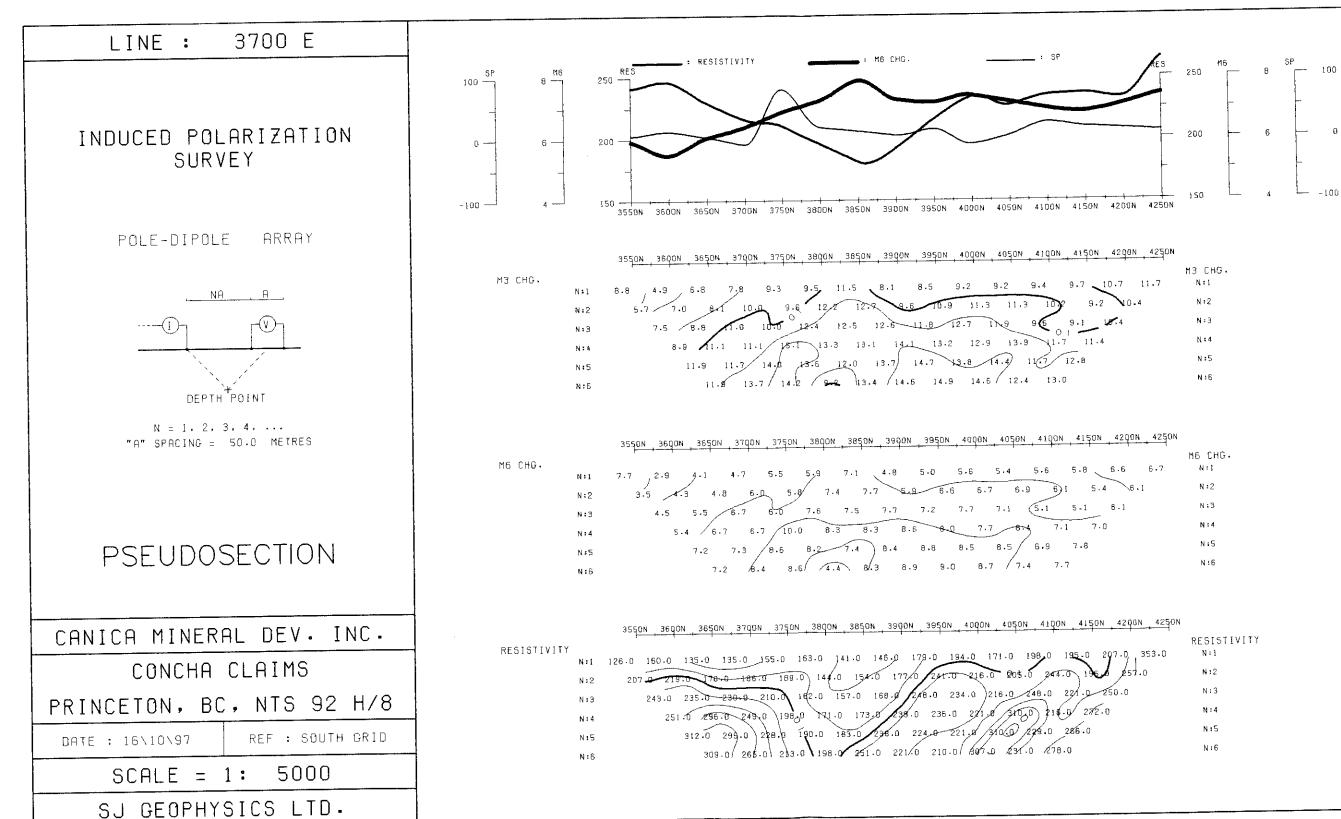




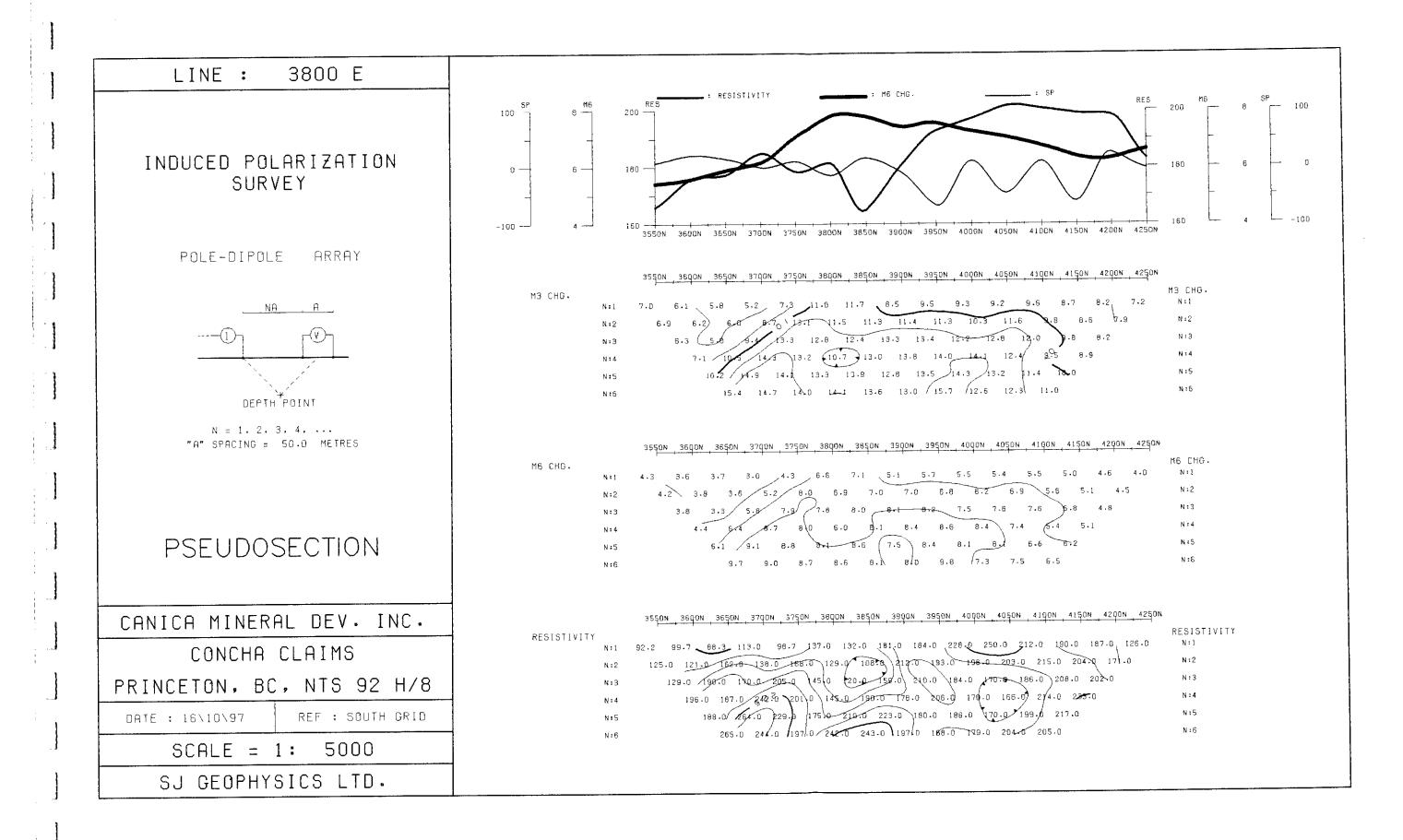
_					CHG
.0	4.4		4.		• 1
	4.9	S.1	4.7	N	:2
.5	6.0	12.4		N	:3
	6.5	5.7		N	:4
-4	6.0			N	:5
1	4.7			N	:6

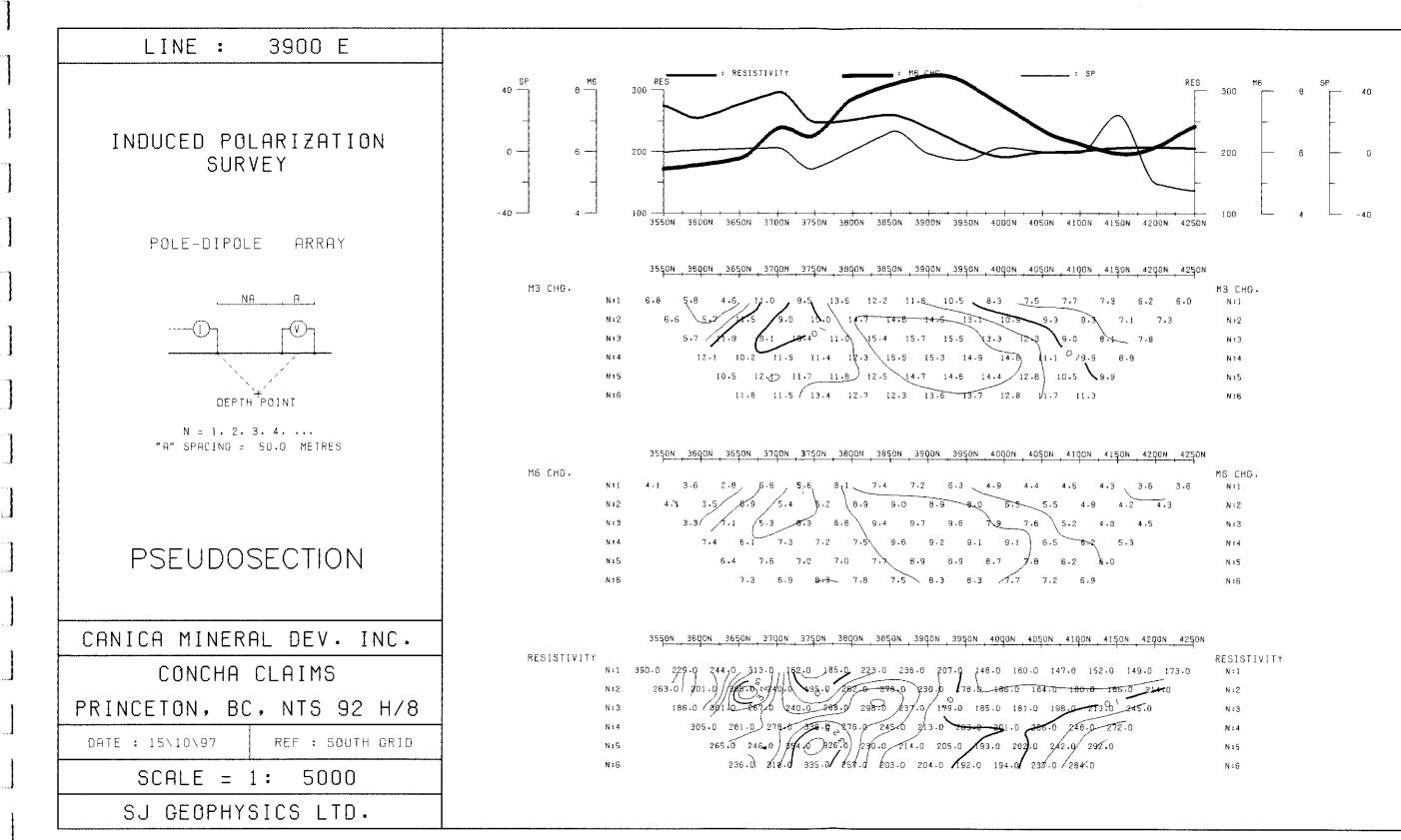
.2 2.6	5 2.B	2.4	M6 CHG. Nºi
2.8	3.7 2	-8	N #2
1.2 3.4	4 -1		N:3
3.8	3.3		N ± 4
 	7		N:5
1 12.0			N:6

	RESISTIVITY
0.0 182.0 230.0 288.0	N÷E
235.6 2250.0 215.0	N:2
9:0 287.9 200.0	N : 3
\$13.0) 2Y6.0	N:4
3.0 /222.0	N:5
1209-0	N = 6

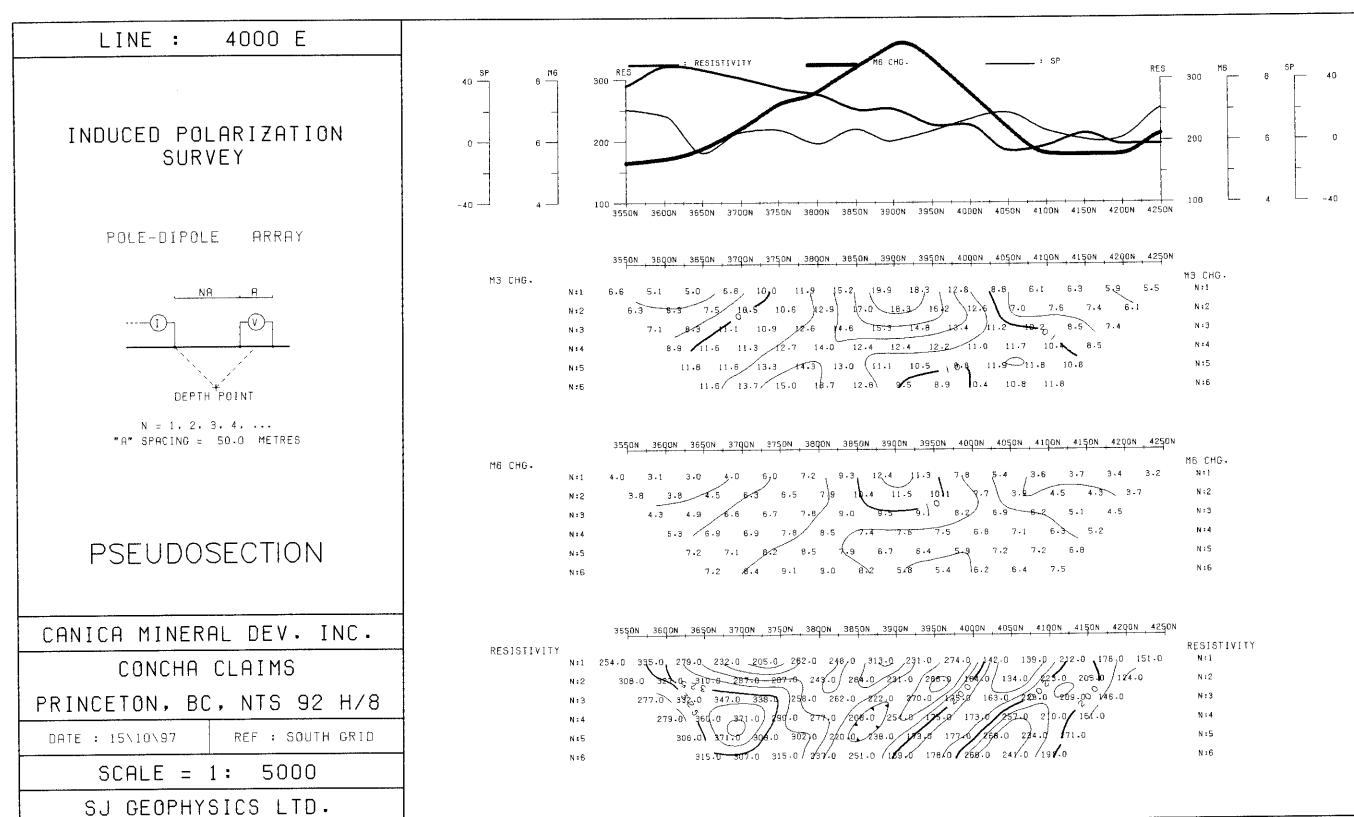


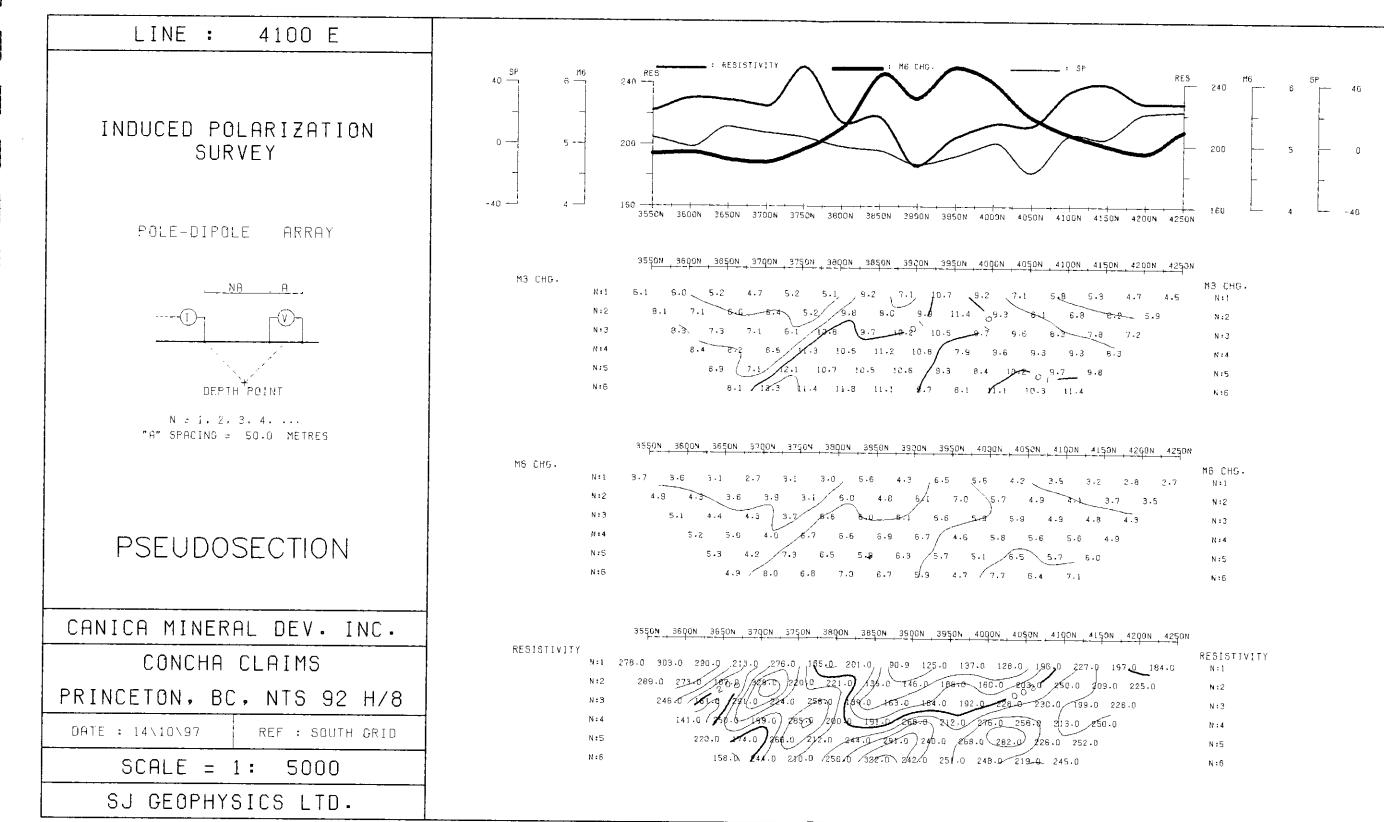
4100N 4150N 4200N 4250N	
	RESISTIVIT
198 0 195-0 207.0 353.0	N÷i
0 204.0 1900 257.0	N:2
248.0 221.0 250.0	N:3
0 216-0 272-0	N : 4
229.0 286.0	N:5
0 278.0	N:6





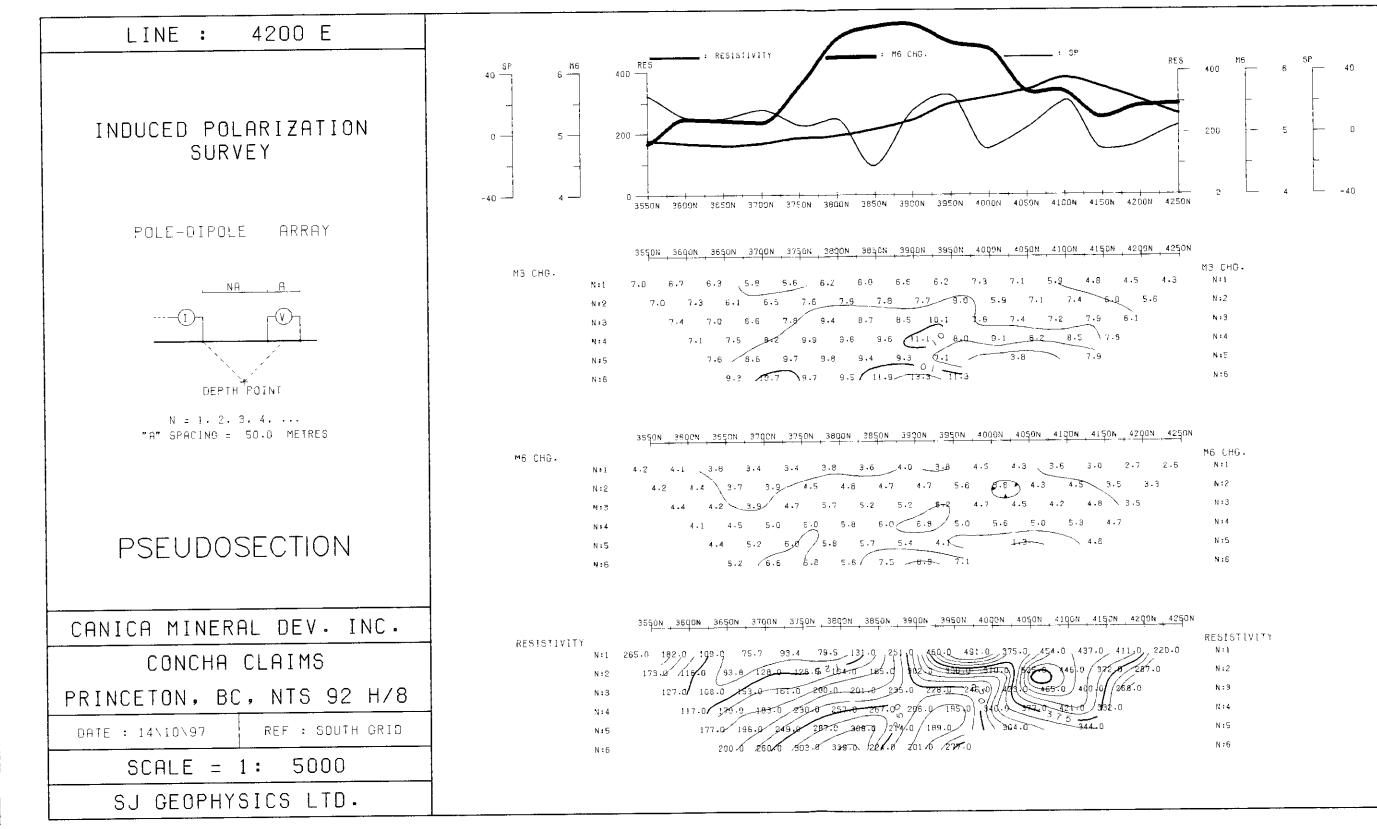
47.0	152.0	149.0	173-0	RESISTIVI N:1	ΤY
J <u>18</u> 6) .0 18 6	.0 21		N:2	
98.0	213.0	245.0		N : 3	
246	3.0-272	.0		N : 4	
A2.0/	292 0			N:5	
284	r:o			N : 6	



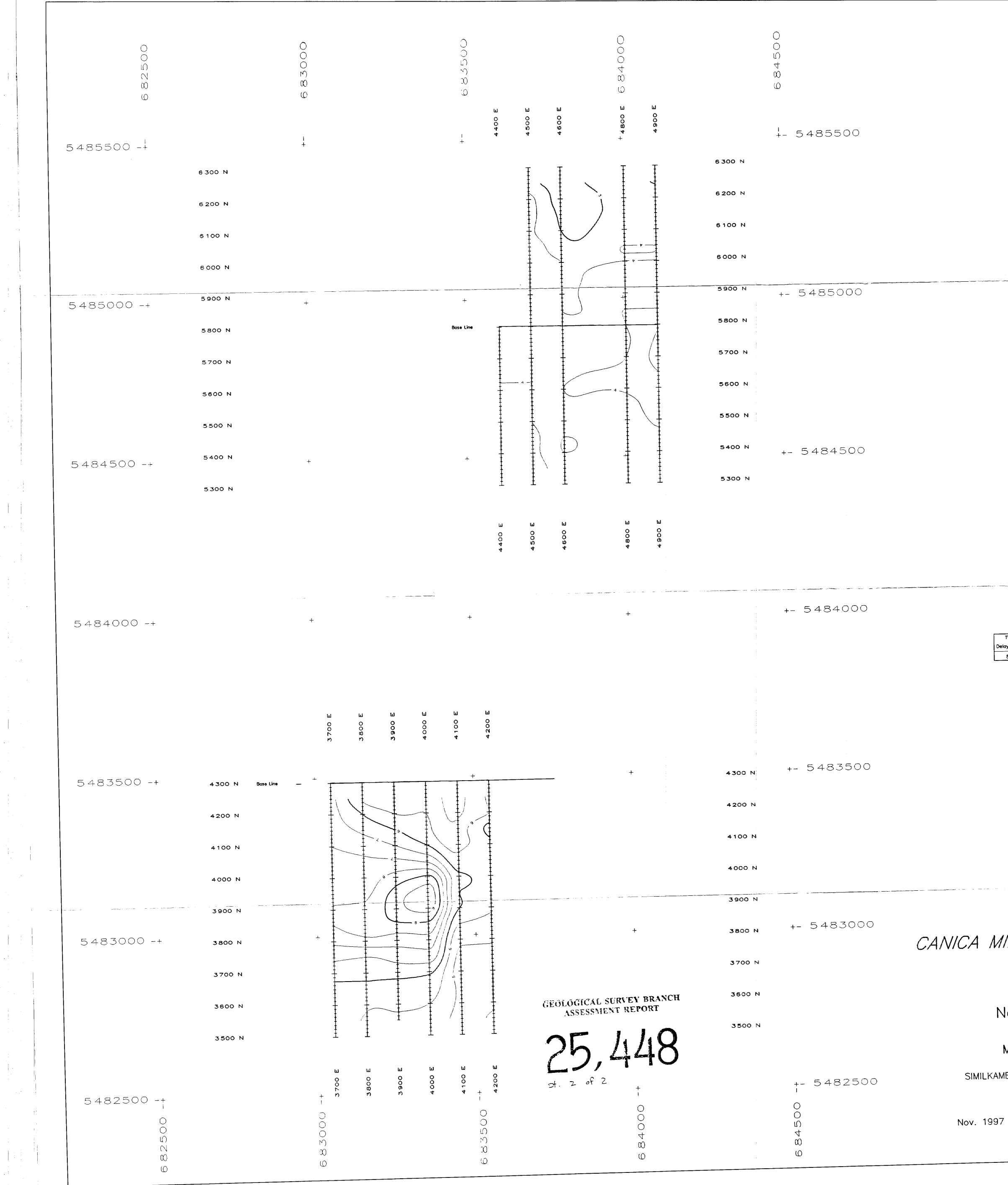


3.5	3.2	2.8	2.7	M6 CHG. N:1
4.	3.7	3.5		N:2
4.9	4.8	4.3		N = 3
5-1	6 4.9			N : 4
5.7	6.Q			N 75
7.	1			N:6

96,0 227.0 197.0 184.0	RESISTIVITY N:1
250.0 209.0 225.0	N:2
80.0 199.0 226.0	N : 3
2/13.0 250.0	N:4
26.0 252.0	N:5
245.0	N = 6



3.6	3.0	2.7	2.5	M6 CHG. N:1
4.	3 3	.5 3	.3	N = 2
4.2	4.8	3,5		N : 3
5.	34	• 7		N : 4
	4.6			N = 5
				1.0



. . .

i i

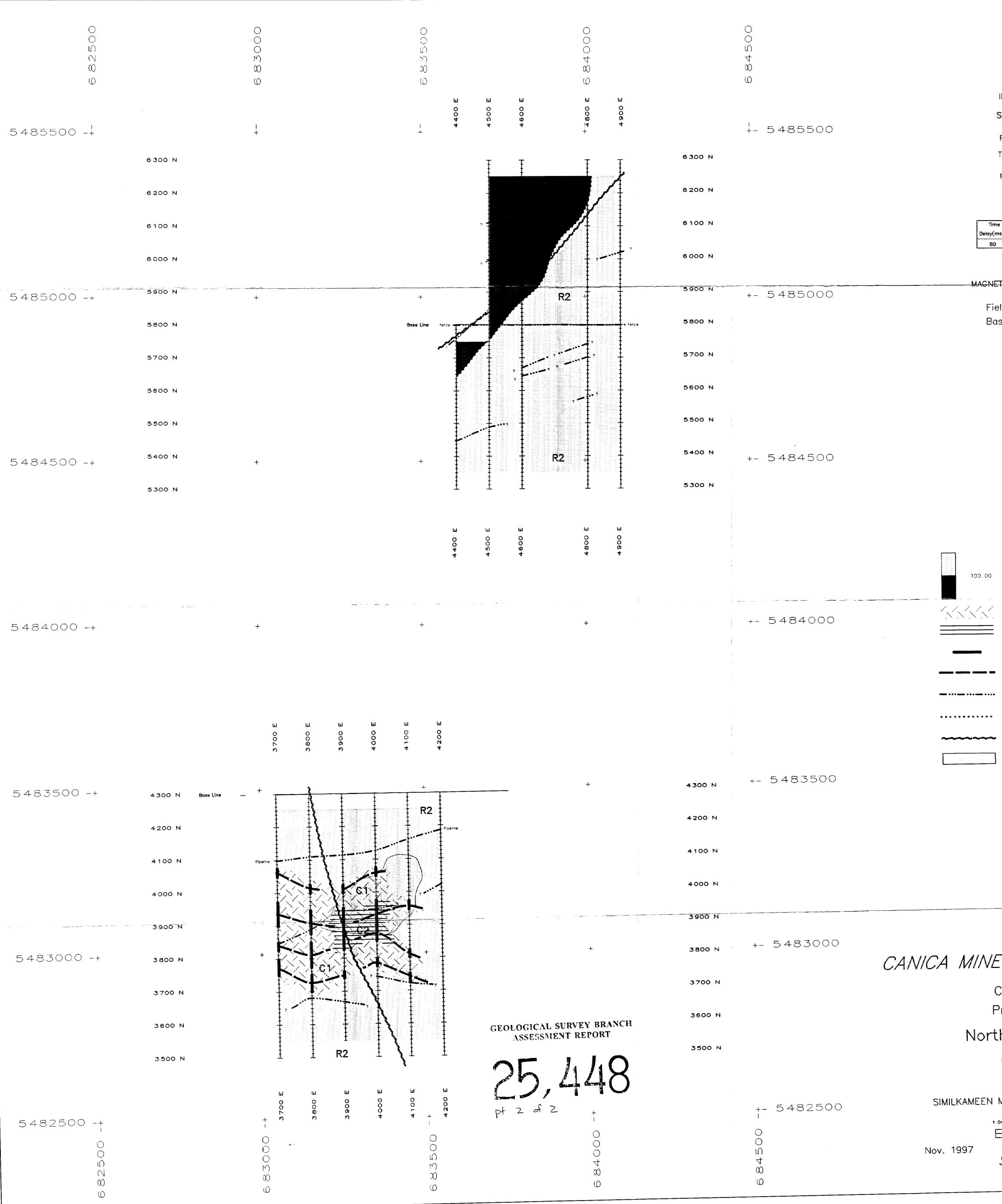
İ

•

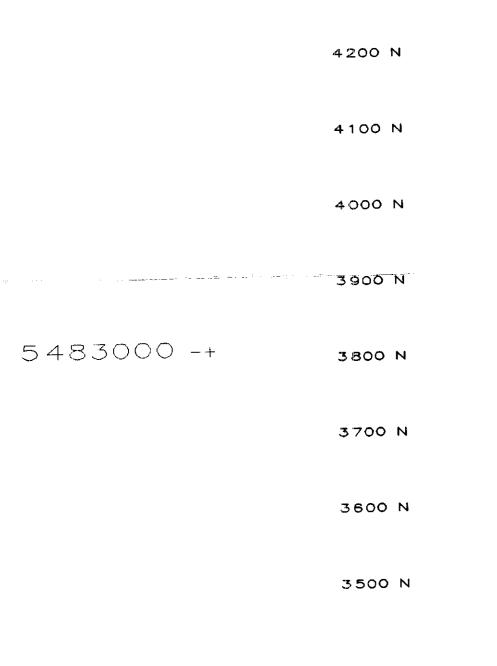
.

1.1

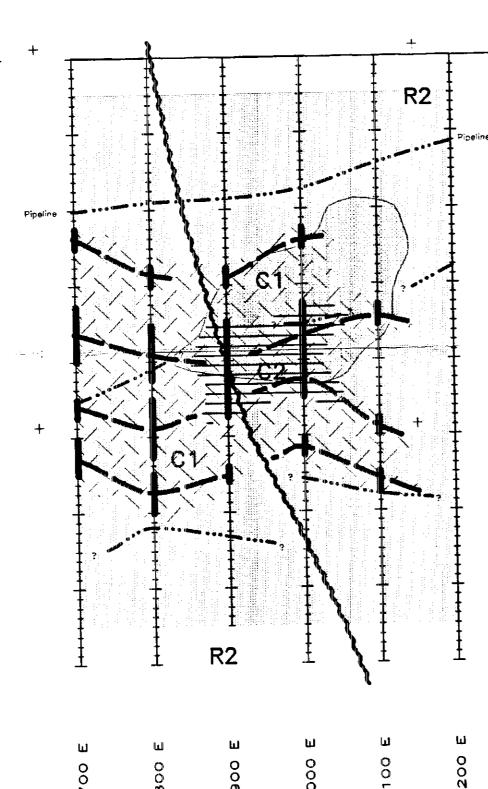
	٦	
	l.	:
		χ İ
		·
	1	
		. :
		. '
		·
	ł	:
•		
		:
		_
		-
INDUCED POLARIZATION		
SURVEY SPECIFICATIONS		
Receiver: Androtex TDR6		i .
Transmitter: Androtex STX—10 (10 kW)		
POLE-DIPOLE ARRAY		
		•
,		x I
DEPTH POINT		
DEPT		
		i
∇		
N=1, 2, 3, 4,	1	
"A" SPACING = 50 Meters Time Time Windows(msec)		
lay(msec) M1 M2 M3 M4 M5 M6 M7 M8 M9 M10		:
80 80 80 80 160 160 160 320 320 320		
		. :
		:
Chargeability Contours	<u> </u>	
INERAL DEVELOPMENT INC.		ł
CONCHA PROPERTY		- ! ;
Princeton Area, B.C.		
lorth and South Grids		
TRIANGULAR FILTERED		
M6 CHARGEABILITY (msec.)		
IEEN M.D. N.T.S. 92 H/8W Scale in Metres		
Plate G3b		
SJ Geophysics Ltd.		
(k	2	

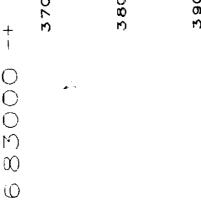


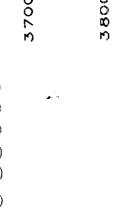




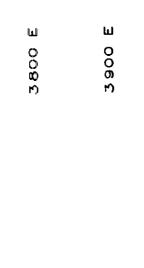


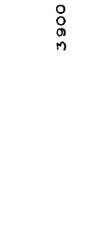








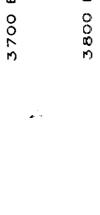


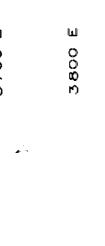




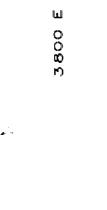


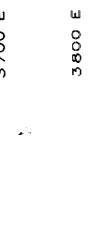










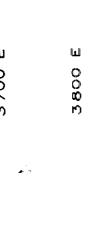




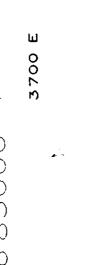






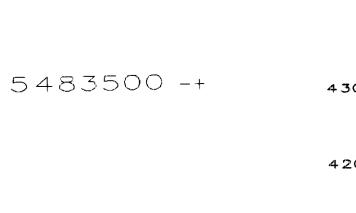












INDUCED POLARIZATION

SURVEY SPECIFICATIONS

Receiver: Androtex TDR6

Transmitter: Androtex STX-10 (10 kW)

、 |

• ;

POLE-DIPOLE ARRAY

N=1, 2, 3, 4, ... "A" SPACING = 50 Meters

Time Windows(msec)

Delay(msec) M1 M2 M3 M4 M5 M6 M7 M8 M9 M10 80 80 80 80 80 160 160 160 320 320 320

MAGNETIC & VLF EM INSTRUMENTATION

Field Unit: EDA OMNI-PLUS Base Unit: EDA OMNI-PLUS

LEGEND

	Resistivity Zone R 2 (Volcanics?)
0	Resistivity Zone R1 (Sandstone?)
/	Chargeability Zone C1 (High Background)
Ξ	Chargeability Zone C2 (Anomaly Core)
	Chargeability Anomaly
-	Interpreted Chargeability Trend
	Interpreted VLF EM Conductor
Ð	Interpreted Contact
~	Interpreted Fault
	Magnetic Low (Alteration?)

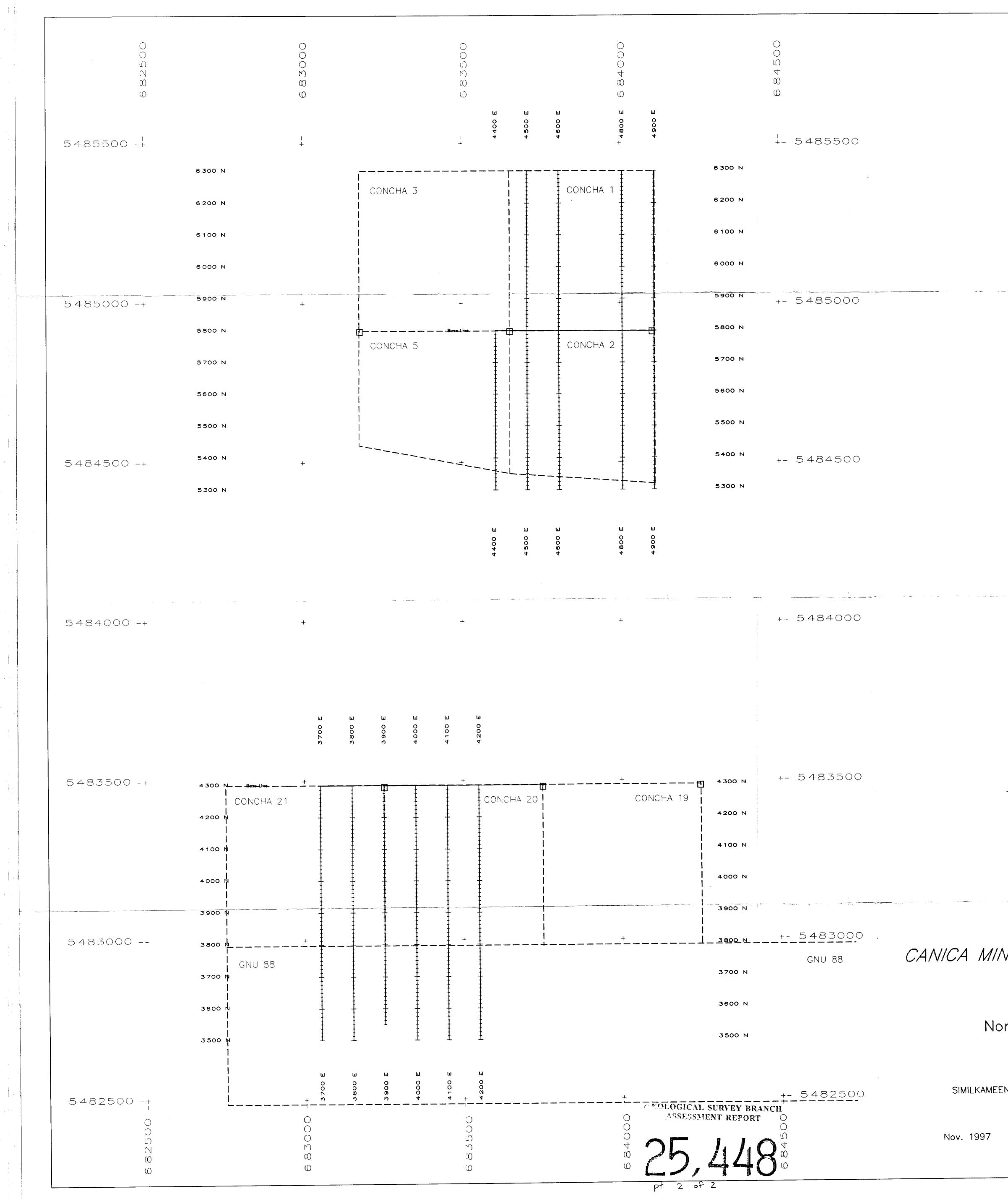
CANICA MINERAL DEVELOPMENT INC.

CONCHA PROPERTY Princeton Area, B.C.

North and South Grids COMPILATION MAP

IM.D.				N.T.S.	92	H/8W	
		Scale in Metres	1				
1 00	0	1 00	200	300			
						Plate G	;4
SJ							

 $(\overline{2})$



		:
		1
		:
		. (s:
		<u></u>
		.
		,
		-
		j.
		1
LEGEND		· · ·
Claim Post		
Claim Line		
F++++++++++++++++++ Grid Line		
		· · ·
	<u></u>	l l
VERAL DEVELOPMENT INC.		
CONCHA PROPERTY		
Princeton Area, B.C.		
rth and South Grids		
grid plan map		
N M.D. N.T.S. 92 H/8W		
Scale in Metres		
Plate G5		ļ:
SJ Geophysics Ltd.		
	8	