

86-163-15270

7/87

GEOPHYSICAL REPORT

INDUCED POLARIZATION SURVEY

ALLIES PROPERTY

KAMLOOPS AREA, B.C.

Kamloops Mining Division

NTS: 92 I/15E Lat.: 50 <sup>58'</sup> N Long.: 120 <sup>34'</sup> W  
52.2' 33.6'

on behalf of

FILMED

Operator: RELAY CREEK RESOURCES LTD.  
711 - 850 West Hastings Street  
Vancouver, B.C. V6C 1E1

Owner: Laramide Resources Ltd.

Field work completed: October 15 - 19, 1985

by

Alan Scott, Geophysicist

October 28, 1985

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**15,270**

## TABLE OF CONTENTS

	page
1 Introduction	1
2 Location and Access	1
3 Claims and Ownership	1
4 Geology	2
5 Survey Grid and Survey Coverage	2
6 Procedures and Instrumentation	2
7 Discussion of Results	3
8 Recommendations	4

## APPENDIX

- I Statement of Expenditures
- II Survey Report
- III Certification

## Figures

1 Location Map	body of report
2 Claim and Grid map	body of report
3 Chargeability Contour Plan (n=2)	map pocket
4 Apparent Resistivity Contour Plan (n=2)	map pocket
5 Line 300W: Chargeability and Resistivity Pseudosection	
6 Line 250W: Chargeability and Resistivity Pseudosection	
7 Line 200W: Chargeability and Resistivity Pseudosection	
8 Line 150W: Chargeability and Resistivity Pseudosection	
9 Line 100W: Chargeability and Resistivity Pseudosection	
10 Line 50W: Chargeability and Resistivity Pseudosection	
11 Line 0: Chargeability and Resistivity Pseudosection	
12 Line 50E: Chargeability and Resistivity Pseudosection	
13 Line 100E: Chargeability and Resistivity Pseudosection	
14 Line 150E: Chargeability and Resistivity Pseudosection	
15 Line 200E: Chargeability and Resistivity Pseudosection	
16 Line 250E: Chargeability and Resistivity Pseudosection	
17 Line 300E: Chargeability and Resistivity Pseudosection	

## 1. INTRODUCTION

Induced polarization and apparent resistivity surveys were conducted over portions of the Allies Property, Kamloops area, B.C. on behalf of Relay Creek Resources Ltd. in the period October 15 to 19, 1985. The field work was performed by Alan Scott, Geophysicist. Jim Dawson, Consulting Geologist, directed the work on behalf of Relay Creek Resources.

The pole dipole electrode array, at an "a" spacing of 25 meters and "n" separations of 1, 2, 3, 4, and 5, was used on the survey. The online current electrode was to the south of the receiving electrodes on all survey lines.

Background chargeability and resistivity response is very low in the survey area, and only weak chargeability highs were defined on the survey. As the exploration target on the property is gold, which may be associated with small concentrations of sulphides, these weak highs could represent drill targets providing they have supporting evidence (geological and/or geochemical).

## 2. LOCATION AND ACCESS

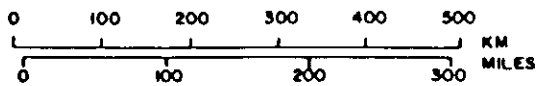
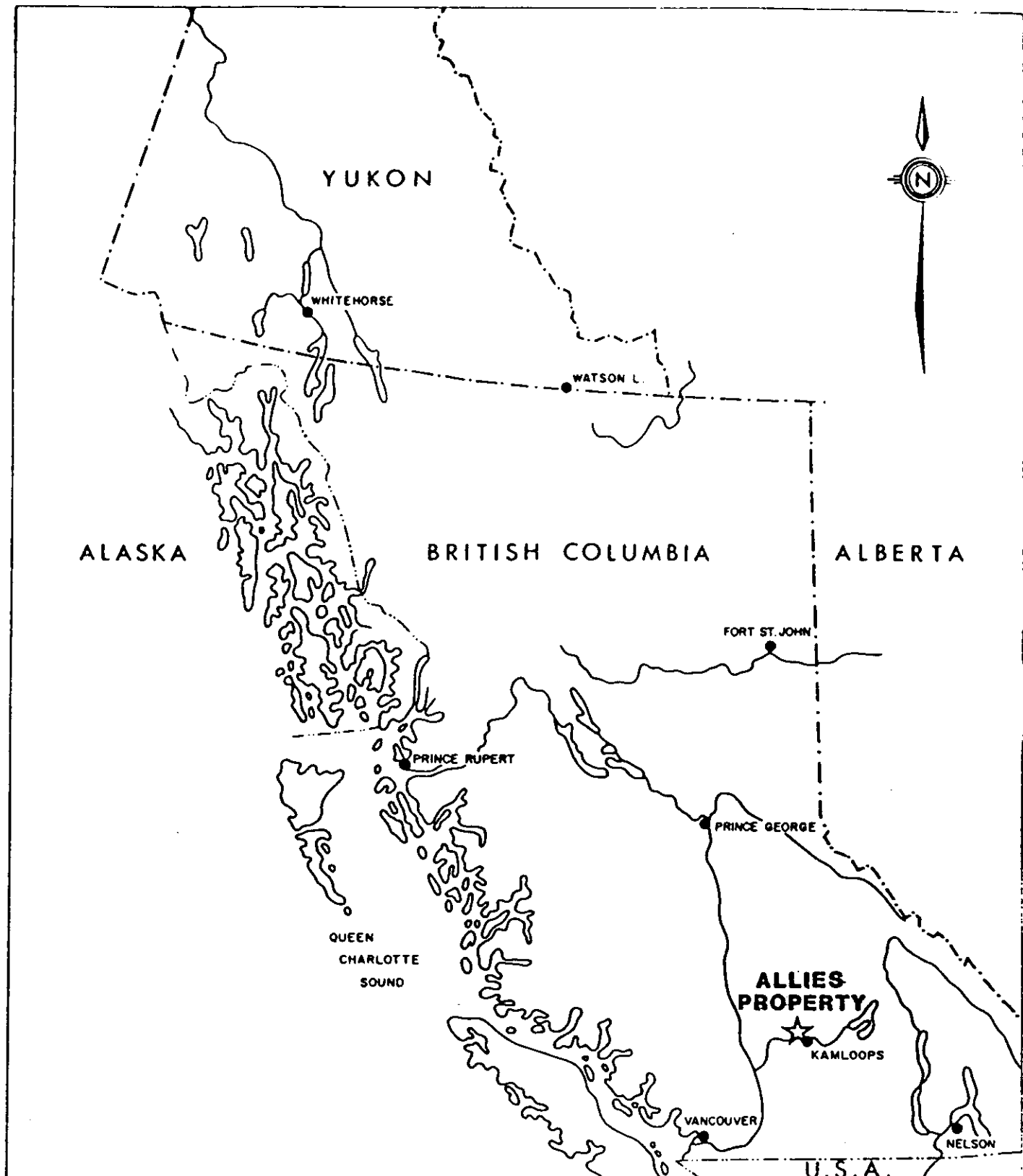
The Allies property is located some 35 km northwest of Kamloops, B.C. Access is via a network of logging roads from the Lac du Bois Road northwest from North Kamloops. The gridded area lies 2 kms east of Sidney Lake (refer to figures 1 and 2). The NTS sheet covering the area is 92 I/15E.

## 3. CLAIMS AND OWNERSHIP

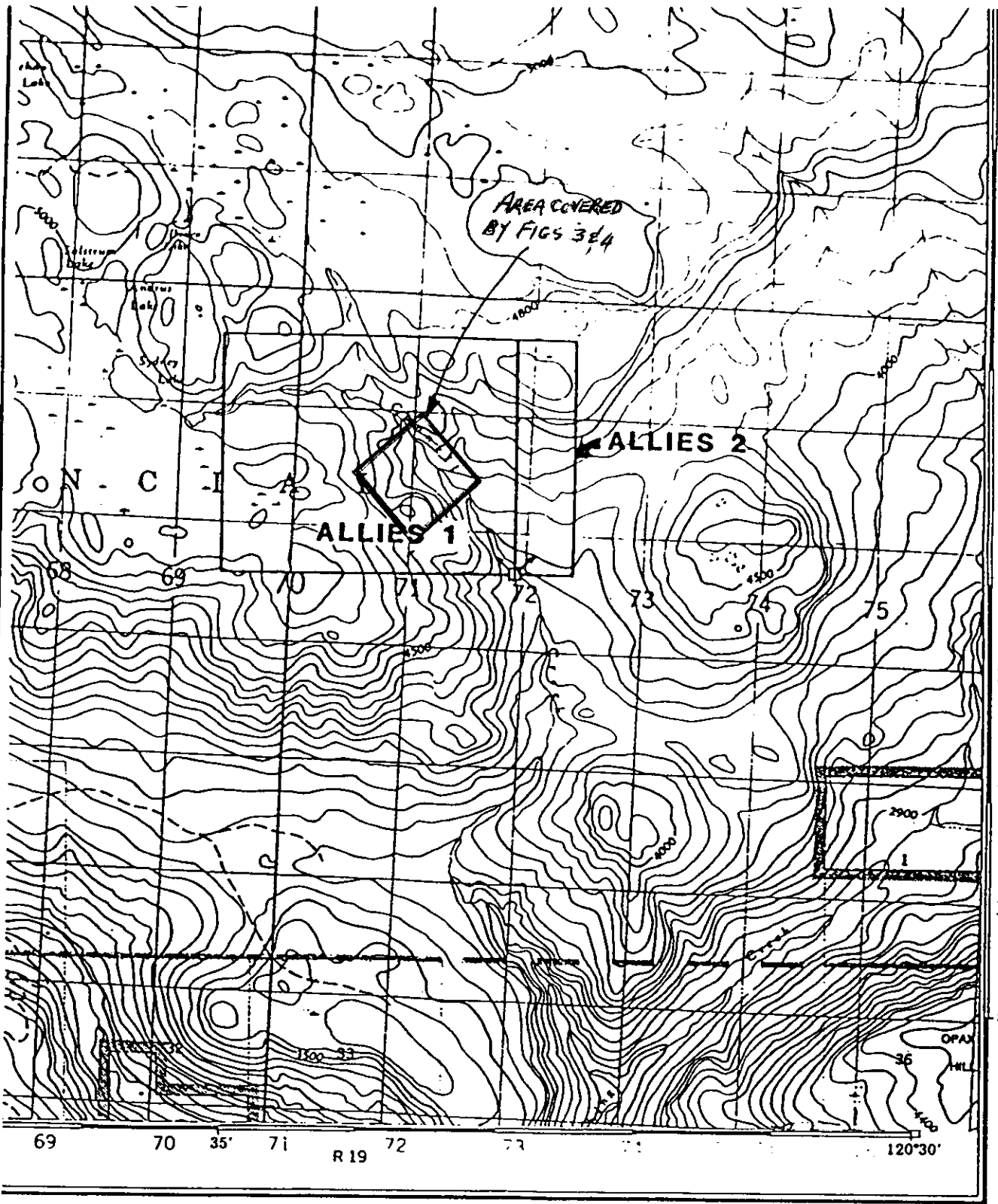
The property consists of two metric claims totalling 24 units (figure 2). Allies 1 consists of 20 units and has record number 3617. Allies 2 consists of 4 units and has record number 6308.

## 4. GEOLOGY

The property has been described by Riccio (September, 1985) as being underlain by Miocene plateau basalts, with the immediate area of the survey as being underlain by a window of older picrites, Nicola "greenstones", and porphyry dikes.



<b>RELAY CK. RESOURCES LTD.</b>	
<b>ALLIES PROPERTY LOCATION MAP</b>	
As shown	SEPT, 85
92 17 15	



**RELAY CK. RESOURCES LTD.**

**ALLIES PROPERTY CLAIM MAP**

Geology by:	Drawn by: D.M.C.	Date: SEPT, 85
Scale: 1:50,000	N.T.S. 02 I / 15 E	Figure no. 2

#### 5. SURVEY GRID AND SURVEY COVERAGE

13 lines (6.18 km) were surveyed on the Allies property, for a total of 234 stations at multiple n separations. The grid baseline runs southwest to northeast, and the lines are numbered as SW and NE lines. Stations are numbered as NW and SE from this baseline. However, the pseudosections have been labelled as lines E and W, and stations as N and S of the baseline.

#### 4. PROCEDURES AND INSTRUMENTATION

The pole dipole electrode array, with an interelectrode spacing ("a" spacing) of 25 meters, and separations from the current electrode ("n" separations) of 1, 2, 3, 4, and 5, was used on the survey. The online current electrode was to the south of the receiving electrode on all survey lines, and the infinity electrode was some 400 meters to the S of station 275S on line 200E.

A Scintrex IPR-11 time domain microprocessor based induced polarization receiver was used on the survey. This instrument operates on an alternating square wave transmitted current pulse train, and samples the decay curve at ten semilogarithmically spaced times after cessation of each pulse. A 2 second on/2 second off pulse was used on the survey. The data is continually averaged until the operator is satisfied convergence has occurred, and is filed into solid state memory. The eighth slice (from 690 to 1050 milliseconds after shutoff; midpoint at 870 milliseconds) is the chargeability value that has been plotted on the plans and pseudosections.

A Scintrex IPC-7 2.5 kw time domain transmitter was used for the survey. Transmitted current was read from a digital ammeter.

The survey data was archived, processed, and plotted using a Corona PPC 400 microcomputer running the Scintrex Soft II software.


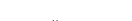
## 5. DISCUSSION OF RESULTS

The results of the survey are presented in standard pseudosection format as figures 5 to 18. The second separation (n=2) values are plotted in contour plan form on figure 3 (chargeability) and figure 4 (apparent resistivity).

The 8th slice (690 to 1050 milliseconds after shutoff) is the chargeability value that has been plotted on the pseudosections and on the contour plan. The contour interval is 1.0 millivolts/volt. The apparent resistivity has been contoured at logarithmic intervals of 1.0, 1.5, 2.0, 3.0, 5.0, 7.5, 10.0 etc. Units are ohm meters on the contour plan and ohm meters/100 on the pseudosections.

The survey area is characterized by low background chargeability and apparent resistivity response. As the exploration target is gold, which may be associated with minor volume concentrations of polarizable sulphides, the weak increases in chargeability detected on the survey may represent drill targets if they are supported by the geological and geochemical results.

Chargeability highs on the Allies property have been identified on the plans and pseudo sections as follows:

-  weak chargeability high (>4 mv/v, well defined)
-  very weak chargeability high (2.5 - 4 mv/v)

The location of chargeability highs is discussed below with reference to the above anomaly symbols. However, this does not imply a width to the source of these highs as the method measures the average response of a large volume of material and is limited in its horizontal resolution to the electrode spacing.

Only two weak chargeability highs were detected on the survey. They are located on line 250E at 0-25N and on line 0 at 250S-300S. The former correlates to the very weak high on line 300W (0-50N), and the latter lies within a trend of very weak highs at the south end of lines 100E to 50W, and possibly the weak high at the south end of line 200E. This trend lies along an assumed fault contact.

A trend of very weak chargeability highs extends from line 300E (25N-50N @ n=3), to line 250E (25S-25N @ n=2,3), to line 200E (75S-25N), to line 150E (75S-0), to line 100E (100S-0), and possibly to line 50E (125S-100S). This trend is coincident with increased apparent resistivity. The strongest response within this trend is on line 200E centered at about 40S.

Isolated very weak chargeability highs are noted on line 300E (250S-200S); line 250E (225S-200S) and (125N-150N); line 200E (150S-125S) and (75N-100N); line 50E (100N-150N), line 50W (75S-25N), and line 200W (50N-100N).

## 6. RECOMMENDATIONS

The induced polarization survey on the Allies property indicated the presence of weak and very weak chargeability highs within a very low chargeability background. As the exploration target is gold, which may be associated with minor concentrations of sulphides, these weak responses could represent drill targets providing there is supporting evidence (geological and/or geochemical).

A detailed correlation of these results to the geological and geochemical data bases is recommended, focussing on the weak chargeability highs detected on line 250E (0-25N) and on line 0 (250S-300S), and the trend of very weak chargeability highs in the vicinity of the baseline from line 300E to 100E (best defined on line 200E at 40S).

Respectfully Submitted,



Alan Scott,  
Geophysicist



APPENDIX I

Statement of Expenditures

Relay Creek Resources - Allies Property, Kamloops Mining Division, B.C.

Contract IPR11 Survey:

October 15 - 19, 1985: \$6070.12

Report preparation:

October 25, 28: A. Scott, geophysicist 2 days @ 300 600.00

Contract drafting: October 24, 25, 28: 16 hrs. @ 20/hr. 320.00  
materials and reproduction costs 60.72

TOTAL EXPENDITURES: \$7050.84



APPENDIX II

Survey Report

ALAN SCOTT, GEOPHYSICIST  
 4013 West 14th Avenue  
 Vancouver, B.C. V6R 2X3

GEOPHYSICAL SURVEY PRODUCTION REPORT

page 1 of 1

Project No.: 8553 Client: Relay Creek Res. Area: Kamloops, B.C.

Day	Date	Type of Work	Production
Mon			
Tues	Oct. 15	mob Vancouver - Kamloops	
Wed	Oct. 16	IPR11 Survey p-d array a=25m n=1-5 L300E, 250E, 200E & set up equip.	59 stations 1550 meters
Thur	Oct. 17	IPR11 Survey p-d array a=25m n=1-5 L150E, 100E, 50E, 0	96 stations 2500 meters
Fri	Oct. 18	IPR11 Survey p-d array a=25m n=1-5 L50W, 100W, 150W, 200W, 250W, 300W	79 stations 2125 meters
Sat	Oct. 19	IPR11 Survey reel up wires & pack up equip. demob to Vancouver	
Sun			
Total:			234 stations 6175 meters

Remarks:

Personnel:	MITIWITIFISIS
Alan Scott	m r r r s
Steve Ocsko	m t t t s
Richard Hall	m c c c c s
Rick Henderson	p p p
Frank Robinson	p p

APPENDIX III

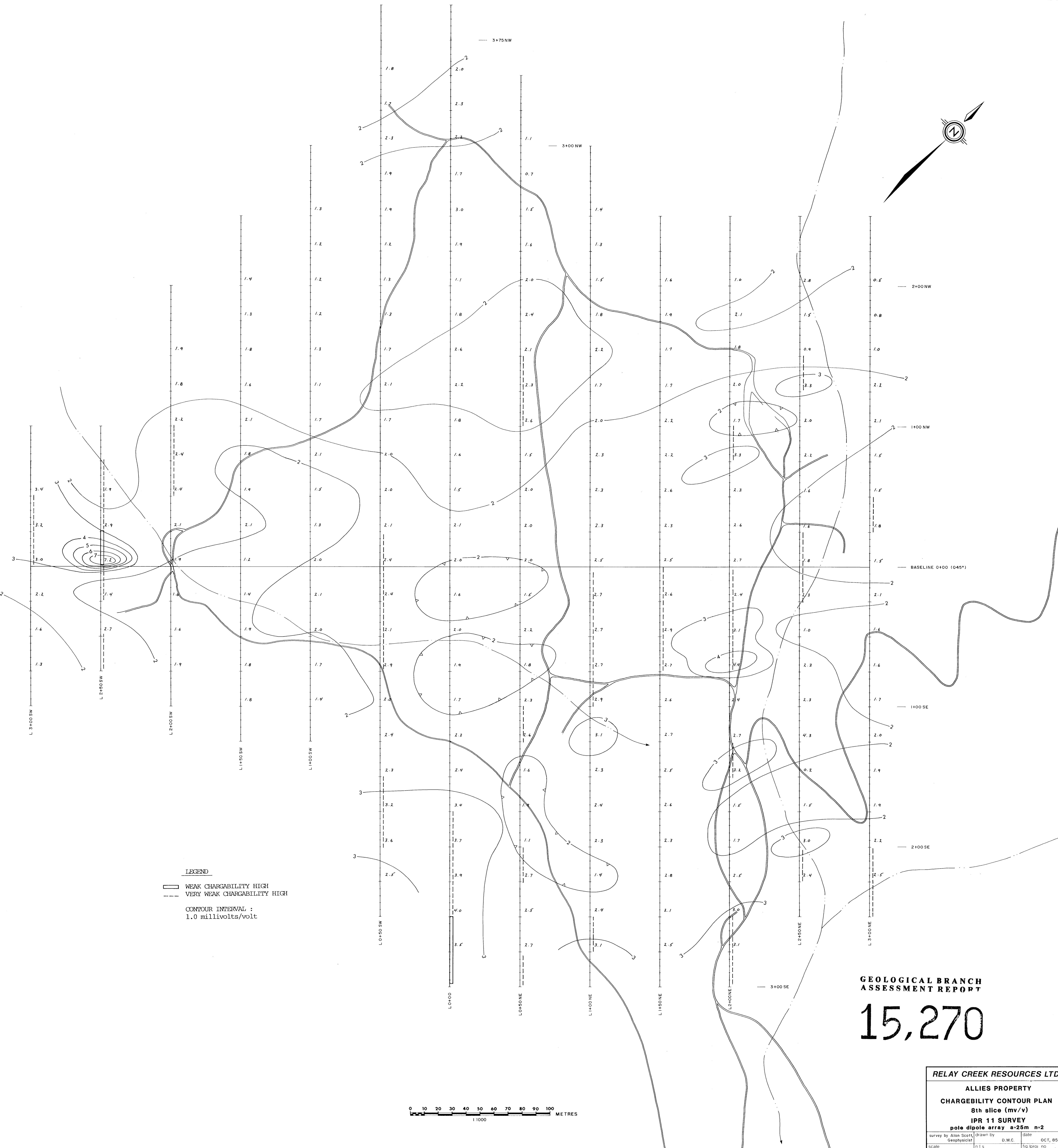
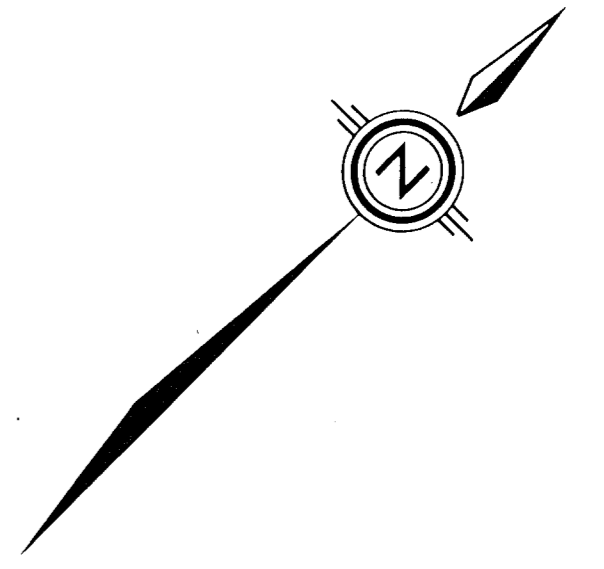
Certification

I, Alan Scott of 4013 West 14th Avenue, Vancouver B.C. V6R 2X3, attest that I am a consulting geophysicist and that:

- 1 I graduated from the University of British Columbia in 1970 with a Bachelor of Science degree in geophysics.
- 2 That I am a member of the Society of Exploration Geophysicists and the British Columbia Geophysical Society.
- 3 That I have been practising my profession for the past 15 years.



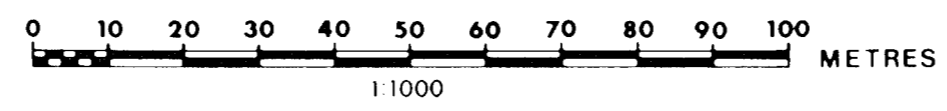
Alan Scott  
Geophysicist



**LEGEND**

- WEAK CHARGABILITY HIGH
- - - VERY WEAK CHARGABILITY HIGH

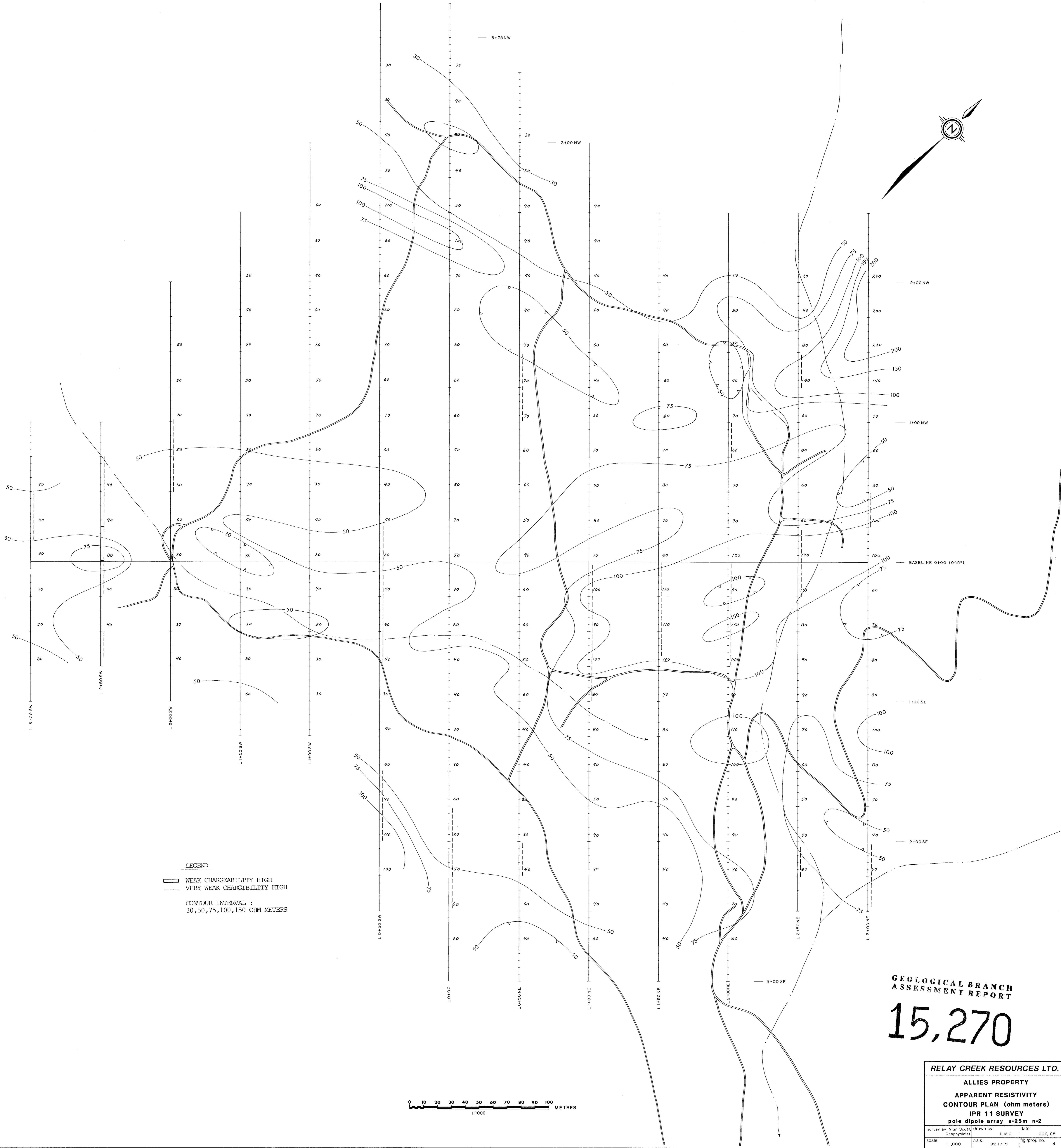
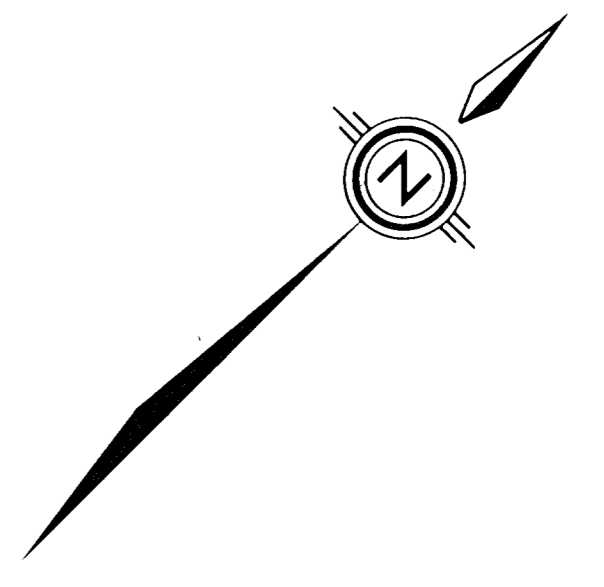
CONTOUR INTERVAL :  
1.0 millivolts/volt



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**15,270**

<b>RELAY CREEK RESOURCES LTD.</b>			
<b>ALLIES PROPERTY</b>			
<b>CHARGEABILITY CONTOUR PLAN</b>			
<b>8th slice (mv/v)</b>			
<b>IPR 11 SURVEY</b>			
<b>pole dipole array a=25m n=2</b>			
Survey by Alan Scott, Geophysicist	Drawn by D.M.C.	Date OCT, 85	Fig./Proj. no 3
Scale 1:1,000	n/s	92 1/15	



LEGEND  
—— WEAK CHARGEABILITY HIGH  
- - - - - VERY WEAK CHARGEABILITY HIGH  
CONTOUR INTERVAL :  
30, 50, 75, 100, 150 OHM METERS

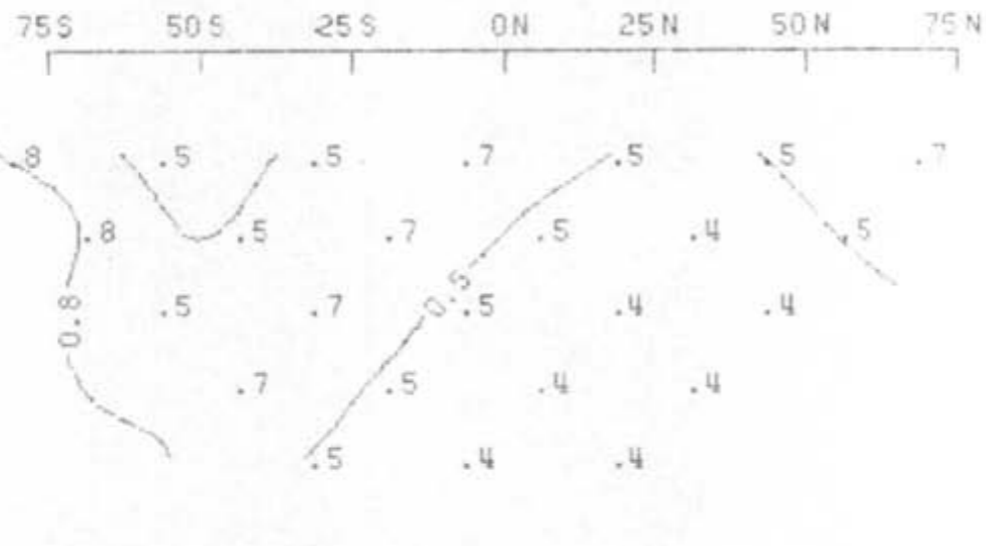
0 10 20 30 40 50 60 70 80 90 100  
1:1000 METRES

GEOLOGICAL BRANCH  
ASSESSMENT REPORT

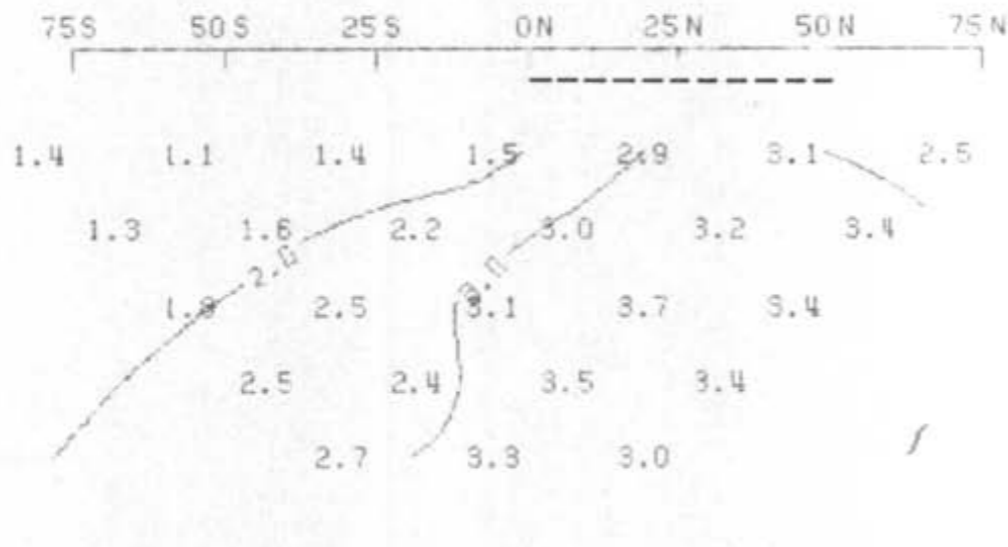
15,270

RELAY CREEK RESOURCES LTD.			
ALLIES PROPERTY			
APPARENT RESISTIVITY			
CONTOUR PLAN (ohm meters)			
IPR 11 SURVEY			
pole dipole array a=25m n=2			
Survey by: Alan Scott,	Drawn by:	D.M.C.	Date: OCT, 85
Geophysicist			
Scale: 1:1000	n.s.	92 1/15	fig./proj. no 4

RESISTIVITY / 100



SLICE 8

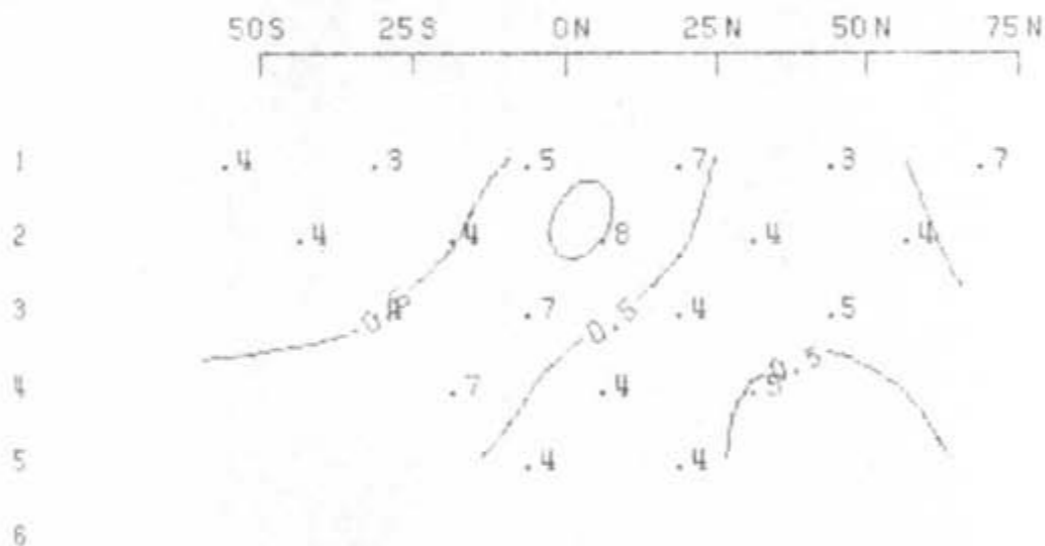


GEOLOGICAL BRANCH  
ASSESSMENT REPORT

# 15,270

LINE NUMBER: 300 W  
 AREA: RELAY CREEK RES. - ALLIES PROP  
 "A" METRES: 25.0  
 N=1 TO 5  
 SCINTREX IPA-11 RECEIVER  
 POLE-DIPOLE ARRAY  
 TRANSMIT PULSE TIME (SECI): 2.0  
 RECEIVE TIME (SECI): 2.0  
 SCALE 1: 1250

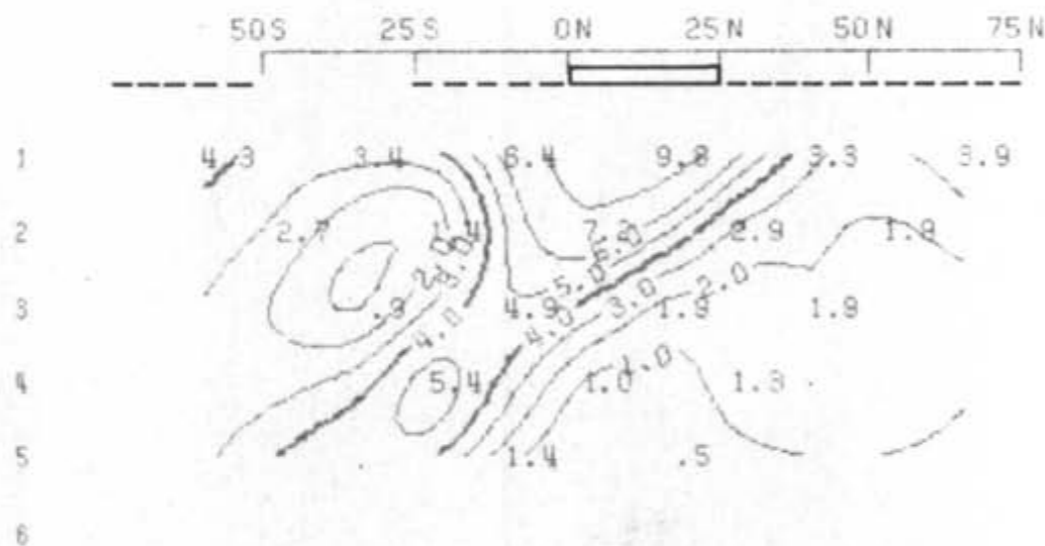
RESISTIVITY /100



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

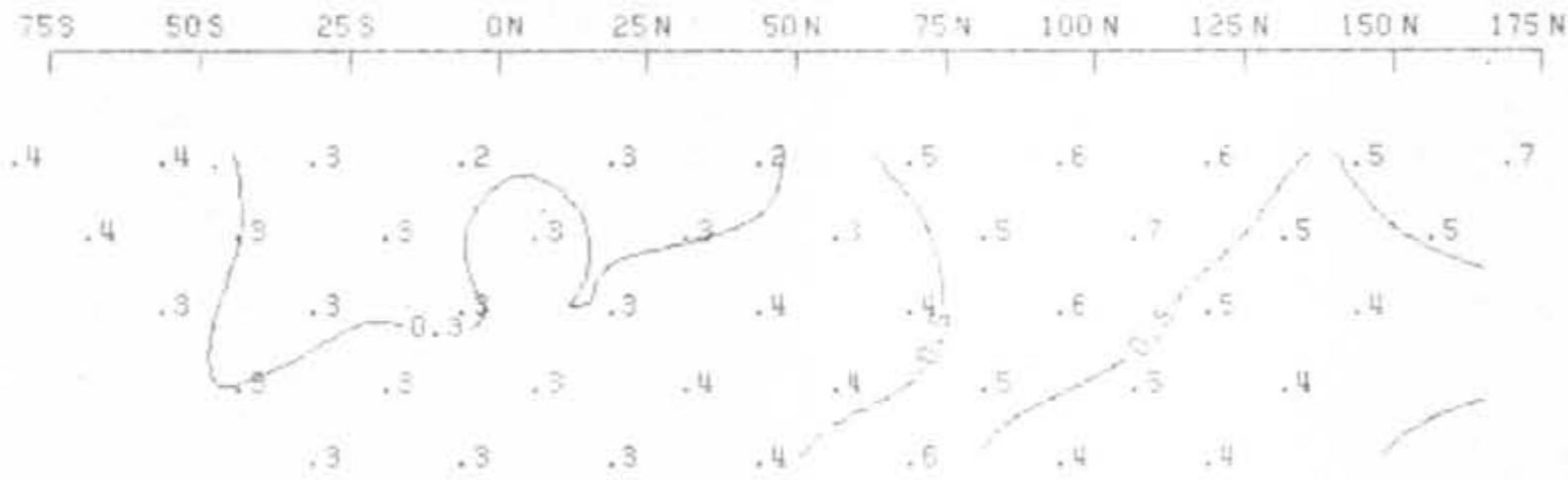
15,270

SLICE 8



LINE NUMBER: 250 W  
AREA: RELAY CREEK RES. - ALLIES PROP  
"A" METRES: 25.0  
N=1 TO 5  
SCINTREX IPR-11 RECEIVER  
POLE-DIPOLE ARRAY  
TRANSMIT PULSE TIME (SEC): 2.0  
RECEIVE TIME (SEC): 2.0  
SCALE 1: 1250

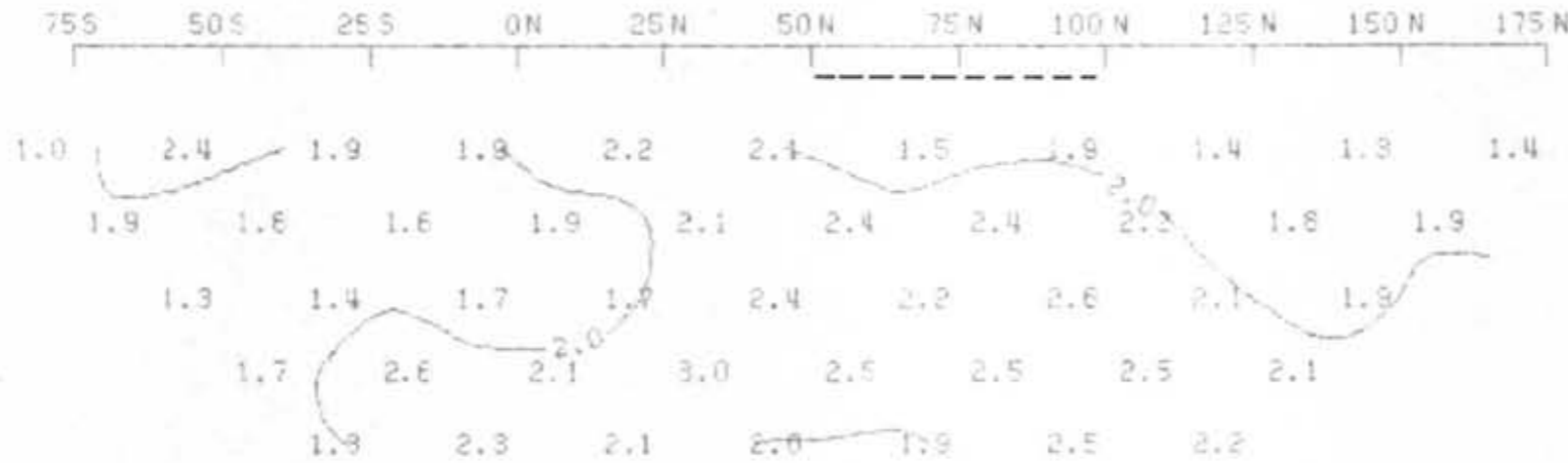
RESISTIVITY /100



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

# 15,270

SLICE 8

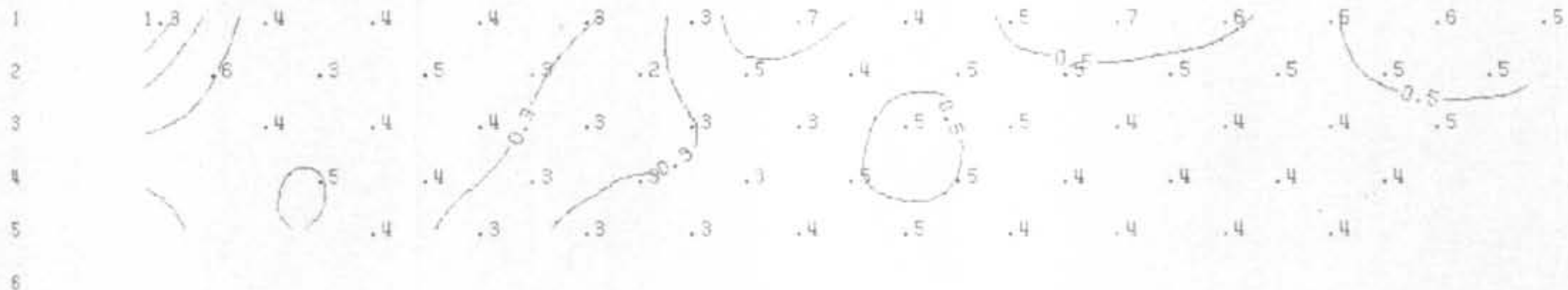


LINE NUMBER: 200 N  
 AREA: RELAY CREEK R6S. - ALLIE'S PROP  
 "A" METRES: 25.0  
 N=1 TO 5  
 SCINTREX 1PA-11 RECEIVER  
 POLE-DIPOLE ARRAY  
 TRANSMIT PULSE TIME (SEC): 2.0  
 RECEIVE TIME (SEC): 2.0  
 SCALE 1: 1250



RESISTIVITY /100

100S 75S 50S 25S 0N 25N 50N 75N 100N 125N 150N 175N 200N 225N



SLICE 8

100S 75S 50S 25S 0N 25N 50N 75N 100N 125N 150N 175N 200N 225N



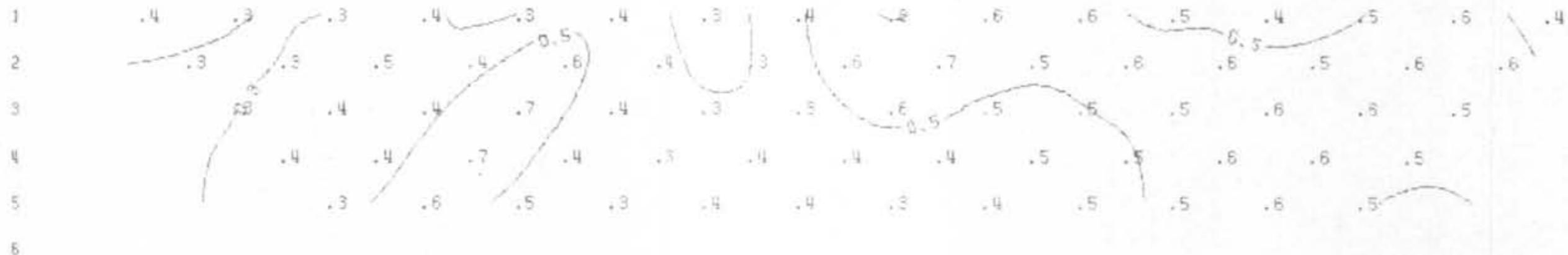
**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**15,270**

LINE NUMBER: 150 N  
 AREA: RELAY CREEK RES. - ALLIES PROP  
 "A" METRES: 25.0  
 N=1 TO 5  
 SCINTREX IPA-11 RECEIVER  
 POLE-DIPOLE ARRAY  
 TRANSMIT PULSE TIME (SEC): 2.0  
 RECEIVE TIME (SEC): 2.0  
 SCALE 1: 1250

RESISTIVITY / 100

100S 75S 50S 25S 0N 25N 50N 75N 100N 125N 150N 175N 200N 225N 250N 275N

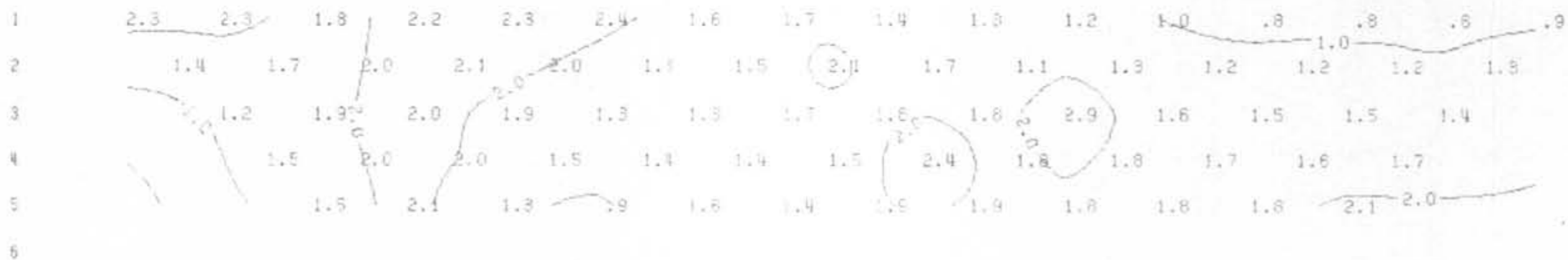


**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

# 15,270

SLICE 8

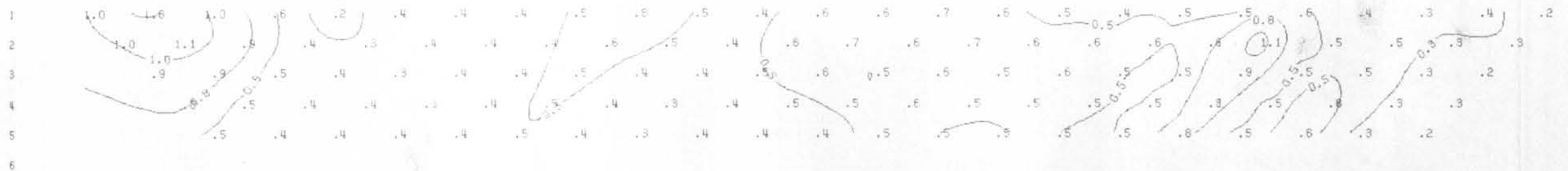
100S 75S 50S 25S 0N 25N 50N 75N 100N 125N 150N 175N 200N 225N 250N 275N



LINE NUMBER: 100 W  
 AREA: RELAY CREEK RES. - ALLIES PROP  
 "A" METRES: 25.0  
 N=1 TO 5  
 SCINTREX IPR-11 RECEIVER  
 POLE-DIPOLE ARRAY  
 TRANSMIT PULSE TIME (SEC): 2.0  
 RECEIVE TIME (SEC): 2.0  
 SCALE 1: 1250

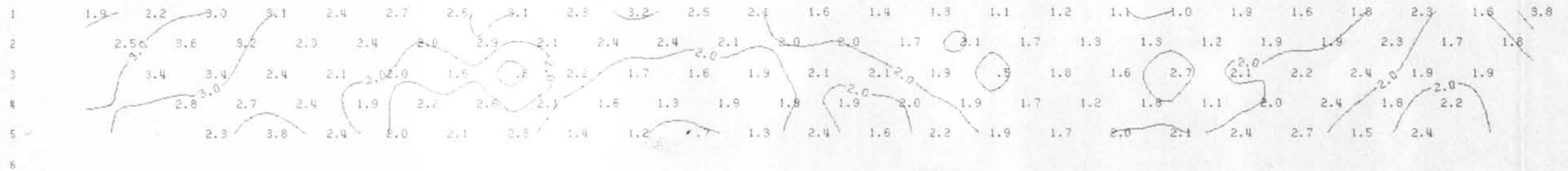
RESISTIVITY /100

225 S 200 S 175 S 150 S 125 S 100 S 75 S 50 S 25 S 0 N 25 N 50 N 75 N 100 N 125 N 150 N 175 N 200 N 225 N 250 N 275 N 300 N 325 N 350 N 375 N



SLICE 8

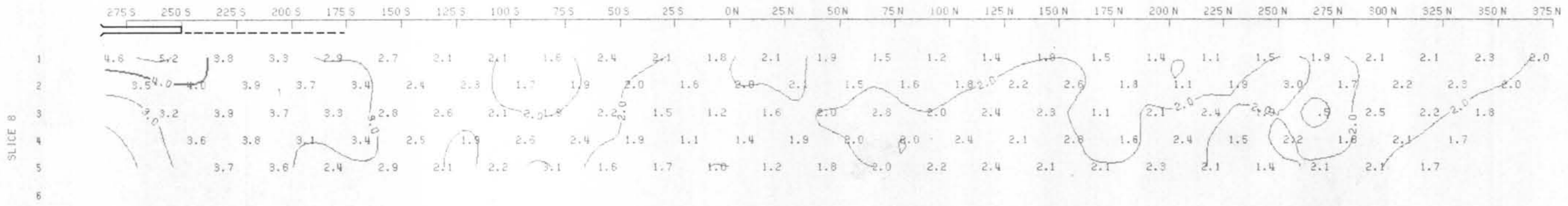
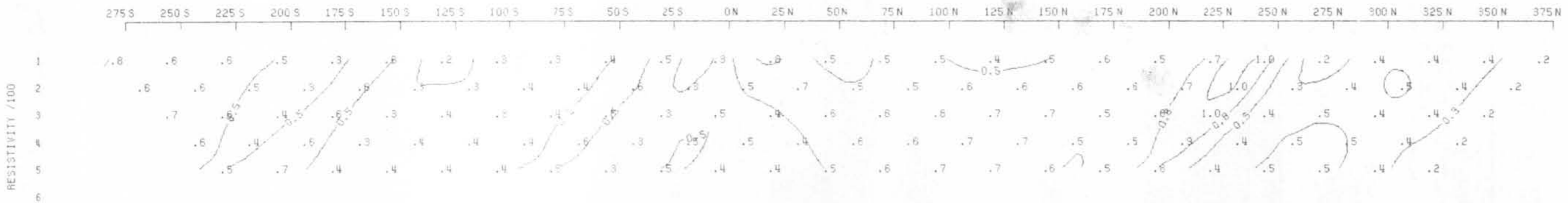
225 S 200 S 175 S 150 S 125 S 100 S 75 S 50 S 25 S 0 N 25 N 50 N 75 N 100 N 125 N 150 N 175 N 200 N 225 N 250 N 275 N 300 N 325 N 350 N 375 N



GEOLOGICAL BRANCH ASSESSMENT REPORT

15,270

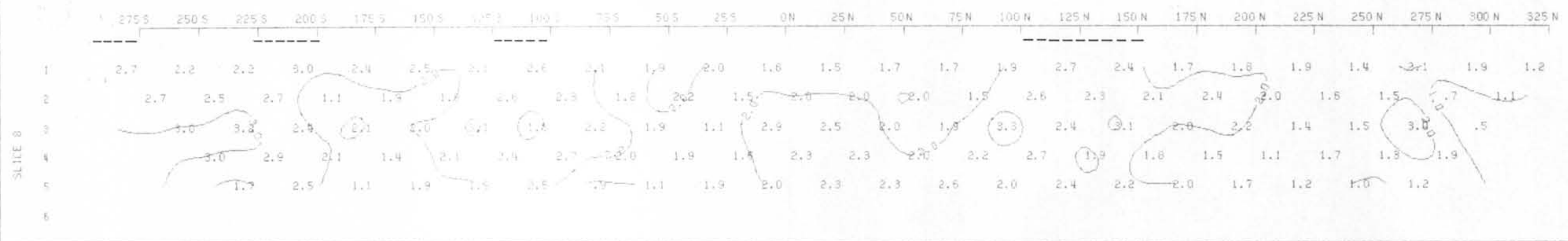
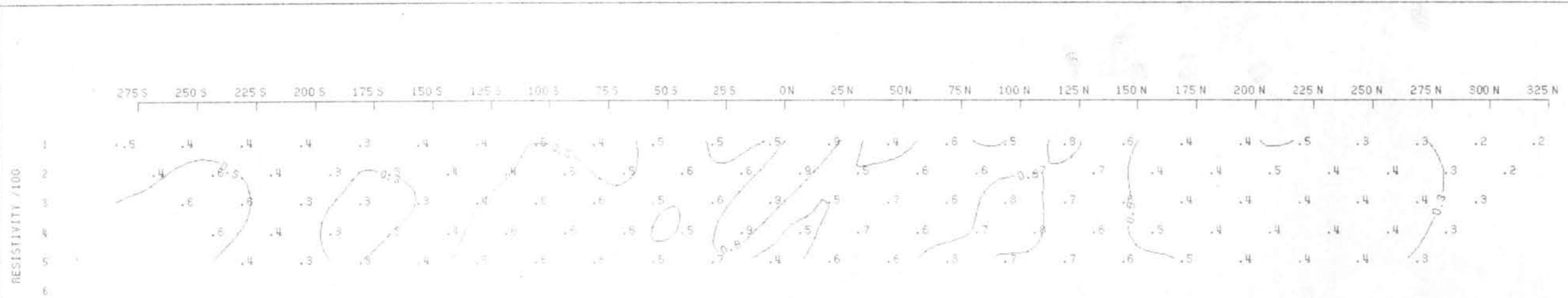
LINE NUMBER: 50 W  
 AREA: RELAY CREEK RES. - ALLIES PROP  
 "A" METRES: 25.0  
 N=1 TO 5  
 SCINTREX IPR-11 RECEIVER  
 POLE-DIPOLE ARRAY  
 TRANSMIT PULSE TIME (SEC): 2.0  
 RECEIVE TIME (SEC): 2.0  
 SCALE 1: 1250



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**15,270**

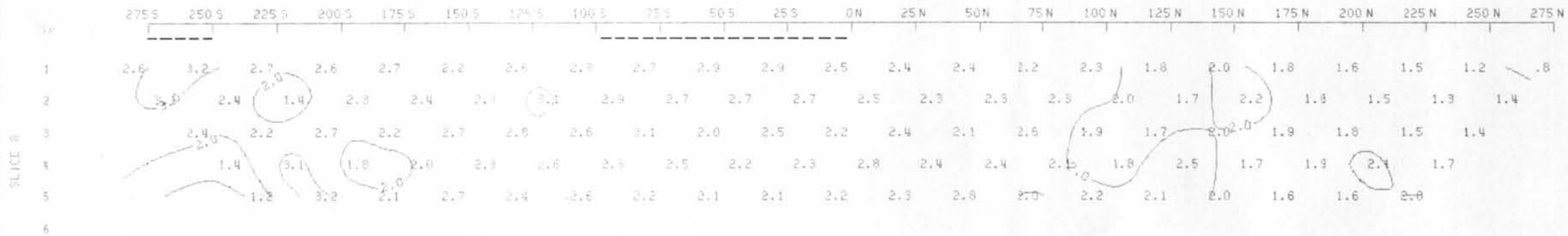
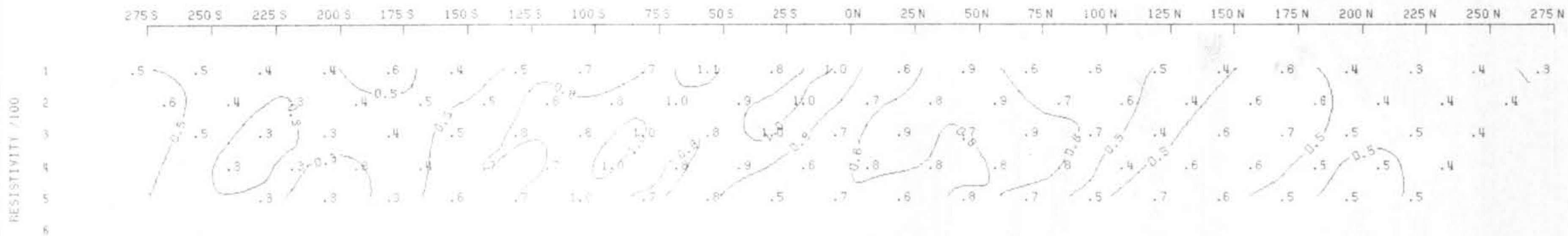
LINE NUMBER: 0  
 AREA: RELAY CREEK RES. - ALLIES PROP  
 "A" METRES: 25.0  
 N=1 TO 5  
 SCINTREX IPA-11 RECEIVER  
 POLE-DIPOLE ARRAY  
 TRANSMIT PULSE TIME (SEC): 2.0  
 RECEIVE TIME (SEC): 2.0  
 SCALE 1: 1250



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

15,270

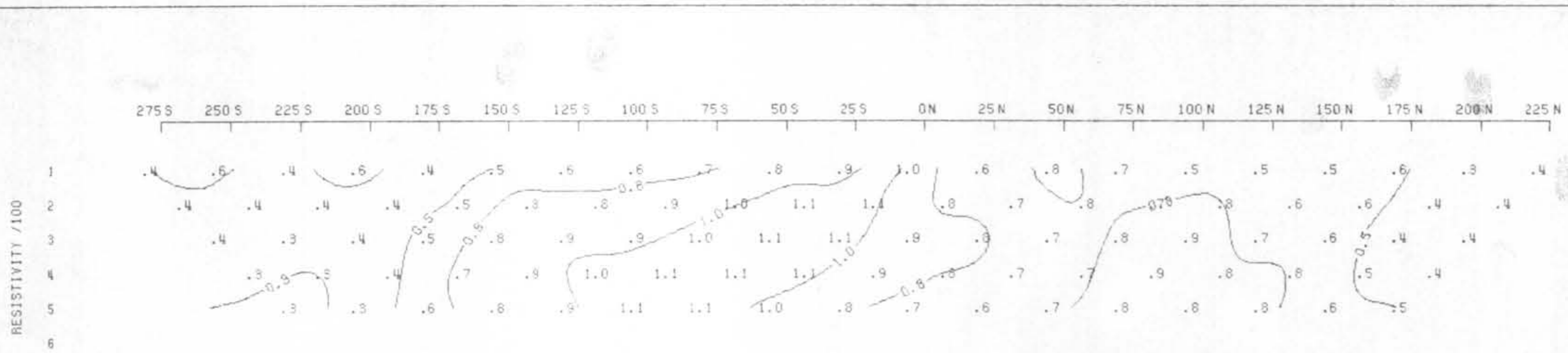
LINE NUMBER: 50E  
 AREA: RELAT CREEK RES. - ALLIES PROP  
 "A" METRES: 25.0  
 N=1 TO 5  
 SCINTREX IPR-11 RECEIVER  
 POLE-DIPOLE ARRAY  
 TRANSMIT PULSE TIME (SEC): 2.0  
 RECEIVE TIME (SEC): 2.0  
 SCALE 1: 1250



GEOLOGICAL BRANCH  
ASSESSMENT REPORT

15,270

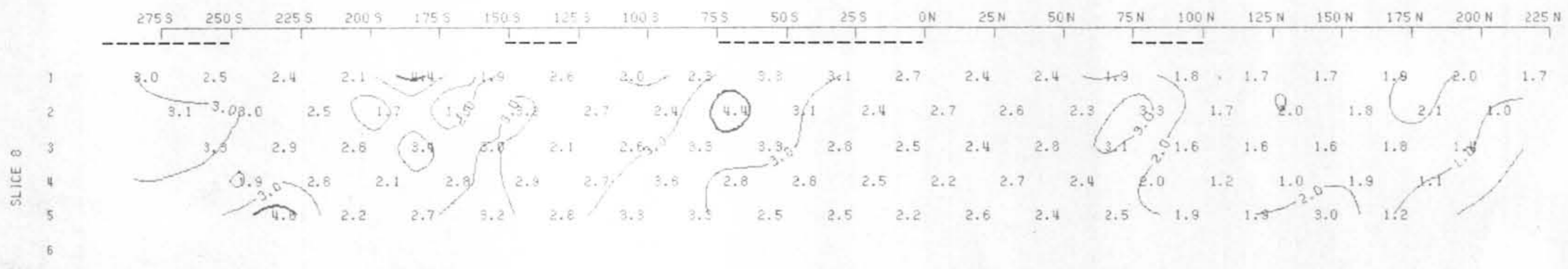
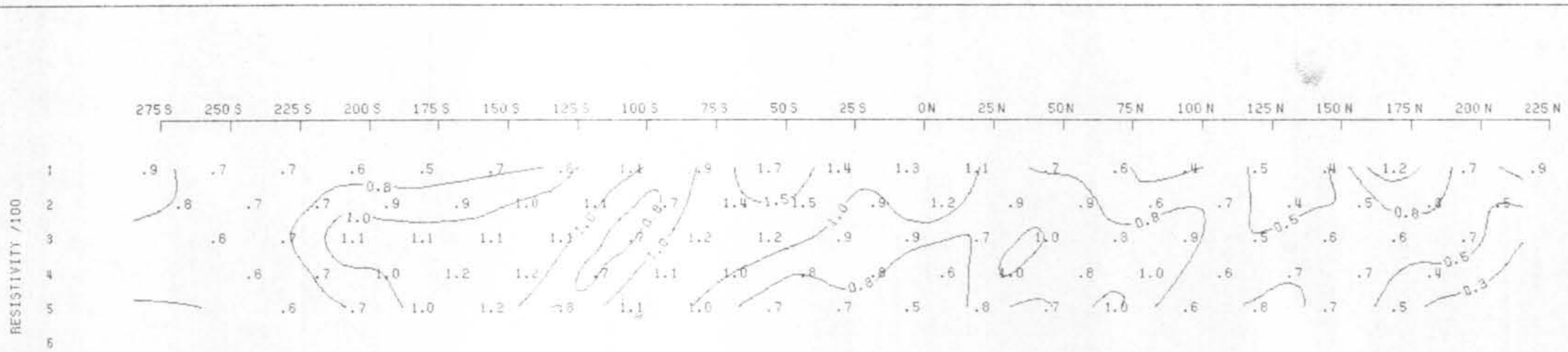
LINE NUMBER: 100 E  
AREA: RELAY CREEK RES. - ALLIES PROP  
"A" METRES: 25.0  
N=1 TO 5  
SCINTREX IPA-11 RECEIVER  
POLE-DIPOLE ARRAY  
TRANSMIT PULSE TIME (SECI): 2.0  
RECEIVE TIME (SECI): 2.0  
SCALE 1: 1250



**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**15,270**

LINE NUMBER: 150 E  
 AREA: RELAY CREEK RES. - ALLIES PROP  
 "A" METRES: 25.0  
 N=1 TO 5  
 SCINTREX IPA-11 RECEIVER  
 POLE-DIPOLE ARRAY  
 TRANSMIT PULSE TIME (SEC): 2.0  
 RECEIVE TIME (SEC): 2.0  
 SCALE 1: 1250

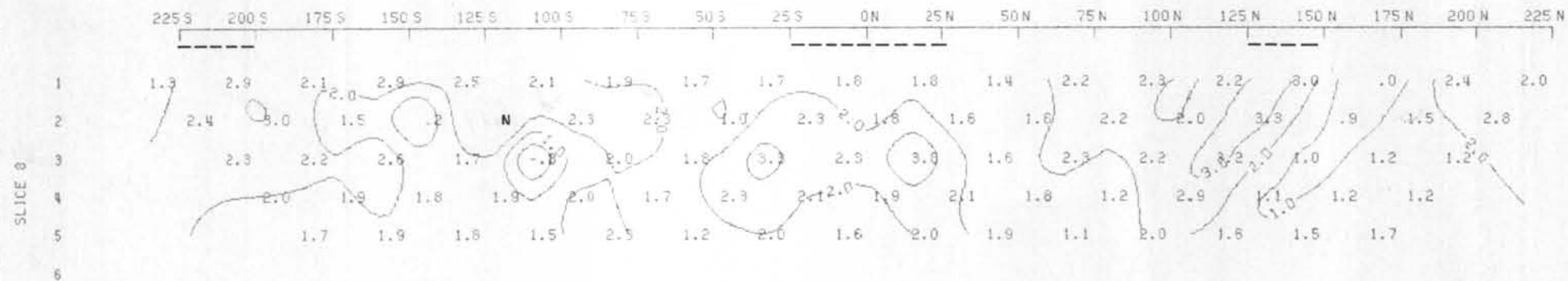
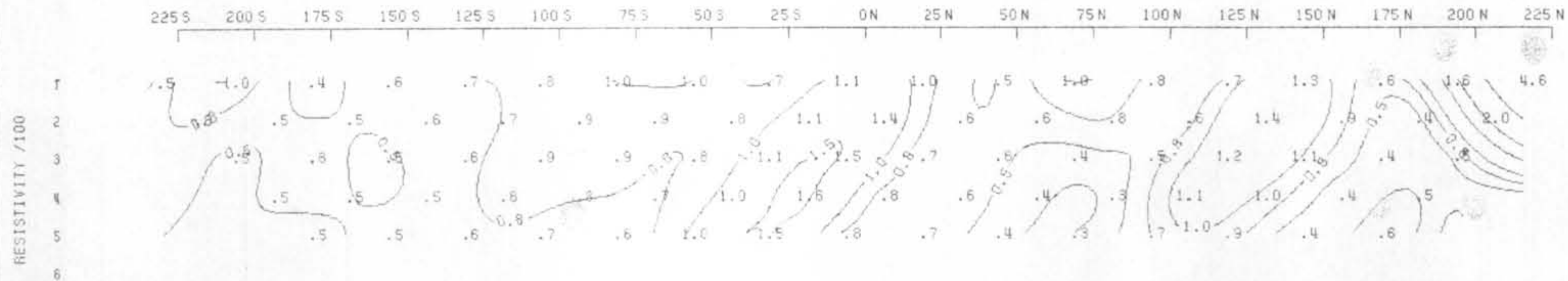


**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**15,270**

LINE NUMBER: 200 E  
 AREA: RELAY CREEK RES. - ALLIES PROP  
 "A" METRES: 25.0  
 N=1 TO 5  
 SCINTREX IPR-11 RECEIVER  
 POLE-DIPOLE ARRAY  
 TRANSMIT PULSE TIME (SECI): 2.0  
 RECEIVE TIME (SECI): 2.0  
 SCALE 1: 1250

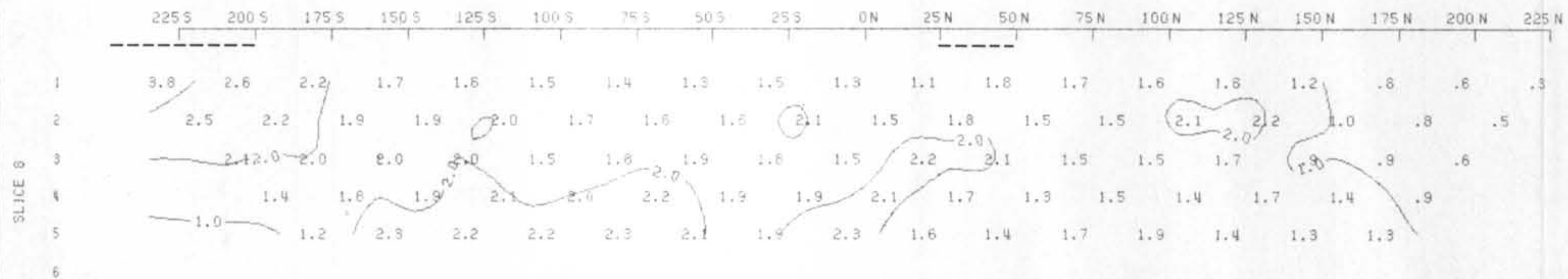
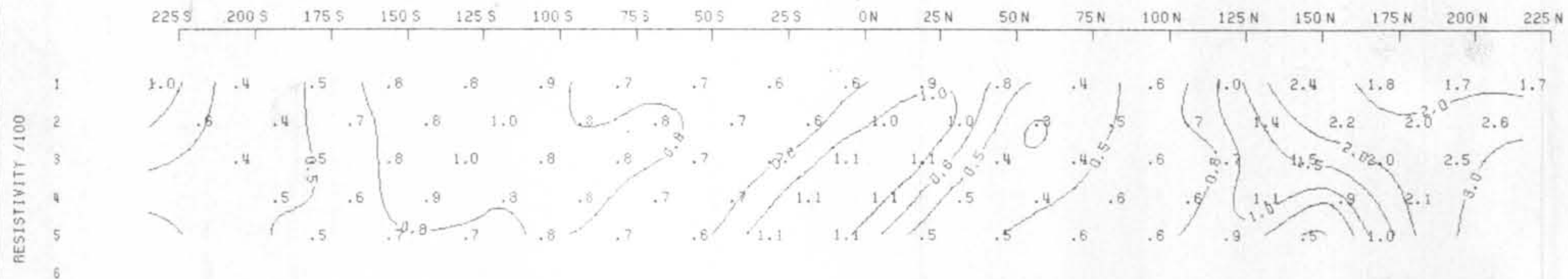




GEOLOGICAL BRANCH  
ASSESSMENT REPORT

15,270

LINE NUMBER: 250 E  
 AREA: RELAY CREEK RES. - ALLIES PROP  
 "A" METRES: 25.0  
 N=1 TO 5  
 SCINTREX IPR-11 RECEIVER  
 POLE-DIPOLE ARRAY  
 TRANSMIT PULSE TIME (SEC): 2.0  
 RECEIVE TIME (SEC): 2.0  
 SCALE 1: 1250



GEOLOGICAL BRANCH  
ASSESSMENT DEPARTMENT

15,270

LINE NUMBER: 300 E  
AREA: RELAY CREEK RES. - ALLIES PROP  
"A" METRES: 25.0  
N=1 TO 5  
SCINTREX IPR-11 RECEIVER  
POLE-DIPOLE ARRAY  
TRANSMIT PULSE TIME (SEC): 2.0  
RECEIVE TIME (SEC): 2.0  
SCALE 1: 1250