

ARIS SUMMARY SHEET

District Geologist, Prince George

Off Confidential: 92.08.22

ASSESSMENT REPORT 21799

MINING DIVISION: Omineca

PROPERTY: Eagle
LOCATION: LAT 55 12 00 LONG 124 52 00
UTM 10 6118422 381189
NTS 093N02W
CLAIM(S): Eagle 9
OPERATOR(S): Noranda Ex.
AUTHOR(S): Walker, T.
REPORT YEAR: 1991, 20 Pages
KEYWORDS: Triassic, Hogen Batholith, Diorites, Hornfels, Tuffs
WORK
DONE: Geophysical, Physical
IPOL 10.5 km
Map(s) - 2; Scale(s) - 1:5000
LINE 10.0 km
RELATED
REPORTS: 19239, 20245, 20406, 21762
MINFILE: 093N 091

GEOPHYSICAL ASSESSMENT REPORT

ON THE

EAGLE 9 CLAIM

OMINECA MINING DIVISION

N.T.S. 93 N/02

Latitude: 55° 12'
Longitude: 124° 52'

NORANDA EXPLORATION COMPANY, LIMITED
(no personal liability)

GEOLOGICAL BRANCH
ASSESSMENT REPORT

21,799

TABLE OF CONTENTS

SUMMARY	1
INTRODUCTION	2
LOCATION & ACCESS	2
CLAIM STATISTICS	2
PREVIOUS WORK	2
REGIONAL GEOLOGY	3
PROPERTY GEOLOGY	3
GEOPHYSICAL SURVEY:	4
INSTRUMENTATION	4
DATA PRESENTATION	4
DISCUSSION OF RESULTS	5
CONCLUSIONS	7
RECOMMENDATIONS	7

LIST OF FIGURES

FIGURE 1	Project Location Map	1:8,000,000
FIGURE 2	Claim Location Map	1:50,000
FIGURE 3	I.P. Chargeability Map	
FIGURE 4	I.P. Resistivity Map	

LIST OF APPENDICES

APPENDIX I	I.P. Pseudo-sections
APPENDIX II	Statement of Costs
APPENDIX III	Statement of Qualifications

SUMMARY:

During September of 1990, a semi-detailed IP survey was carried out in the NW quadrant of the Eagle 9 claim over a strong, NW-SE trending multi-element base-precious metal soil anomaly discovered earlier in the year.

Several zones of strong chargeability with corresponding low resistivity were detected within the soil anomaly area. The most intense anomaly overlies a zone of Au-Ag-Pb-Zn breccia vein mineralization exposed at shallow depth by hand trenching. Continuity of character in the chargeability anomalies suggest this mineralization may extend for several hundred metres along strike and to at least 150 m depth. Other sub-parallel IP anomalies suggest multiple mineralized zones.

The width of the zones as suggested by the IP, however, may be exaggerated since pyritic hornfelses appear to be the host rock for the exposed base metal mineralization.

INTRODUCTION:

This report describes the procedures and results of a 10.5 km follow up IP/Resistivity survey conducted on the subject claim in an attempt to evaluate a complex Au-Ag-Pb-Zn-As soil anomaly and the significance of a coincident polymetallic breccia vein showing.

LOCATION & ACCESS:

The Eagle property is located in the Omineca Mining Division approximately 210 km northwest of Prince George. The grid work was done on the southern shore at the east end of Tchentlo Lake (see Figures 1 & 2).

Access to the property can be gained by a 23 km boat ride from the Tchentlo Lake Lodge at the west end of the lake, or by float plane and helicopter out of Fort St. James. The property is situated 15 km from all weather logging roads to the south.

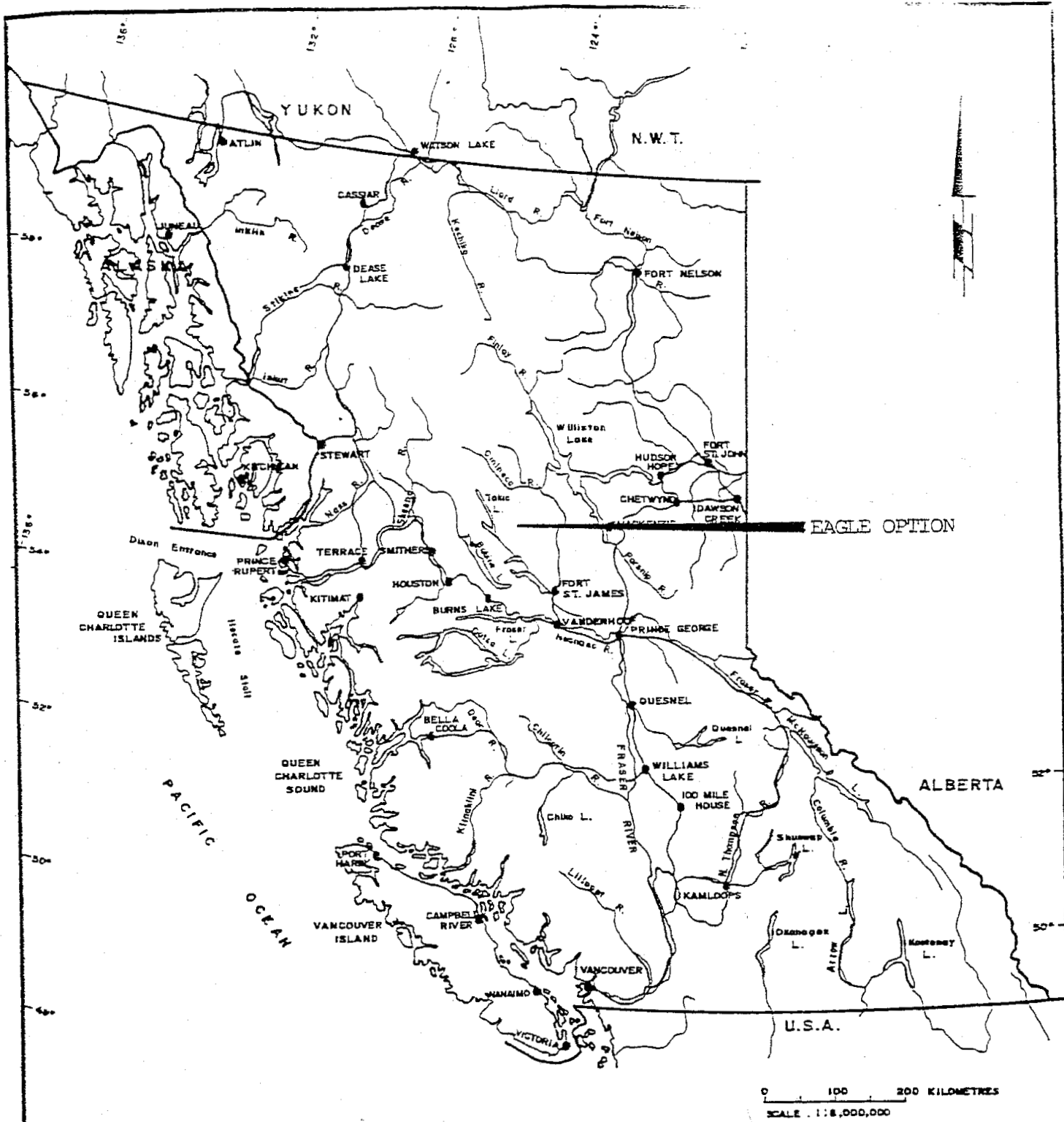
CLAIM STATISTICS:

The Eagle 9 claim was staked by Norex personnel and is 100% owned by Noranda Exploration Company, Limited. Essential claim statistics are as follows:

<u>NAME</u>	<u>RECORD #</u>	<u>UNITS</u>	<u>RECORD DATE</u>	<u>OWNER</u>
Eagle 9	242623	12	Aug 24, 1990	Norex

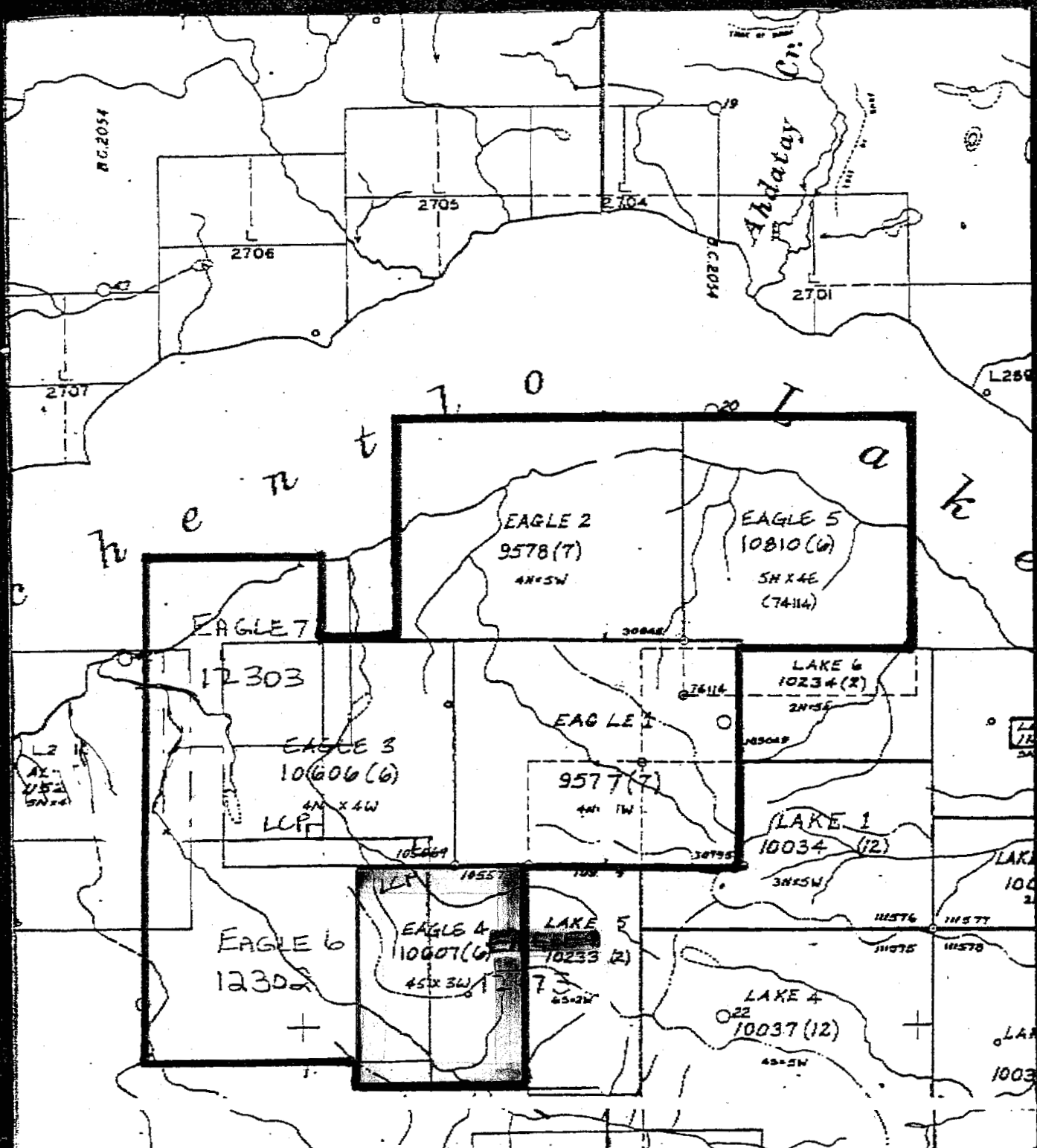
PREVIOUS WORK:

During June-July 1990, reconnaissance soil surveys were completed over the northern half of the claim along with prospecting and mapping. Several hand trenches were dug at the site of a 3.1 ppm Au soil value and Au-Ag bearing Pb-Zn-Cu-As breccia vein mineralization discovered. The vein showing (Gibson) appears to be of the type commonly found peripheral to Cu + Au porphyry systems and is hosted with biotite and calc-silicate hornfelsed alkali volcanics.



REVISED	EAGLE CLAIM LOCATION MAP	
	LOCATION MAP	
PROJ. No. 284	SURVEY BY: F. Stewart	DATE: Feb. /91
N.T.S.	DRAWN BY: S.K.E.	SCALE: 1:8,000,000
DWG. No.	NORANDA EXPLORATION	
1	OFFICE: PRINCE GEORGE, B.C.	

VANCAL 11927



REVISED	EAGLE CLAIM LOCATION MAP	
	SCALE : 1 : 50,000	
PROJ. No. _____	SURVEY BY: F. Stewart	DATE: Feb. /91
N.T.S. _____	DRAWN BY: F. Stewart	SCALE: _____
DWG. No.	NORANDA EXPLORATION	
2	OFFICE: Prince George	

REGIONAL GEOLOGY:

The dominant structural feature proximal to the Eagle property is the Pinchi Fault zone. To the west of the Pinchi Fault are Permian rocks of the Cache Creek Group, and to the east Upper Triassic-Lower Jurassic rocks of the Takla Group. The Pinchi Fault zone trends at 160° and runs through the western leg of Tchentlo lake.

The Takla Group rocks occur within a large structural feature called the Quesnel Trough, which is a subdivision of the Intermontane tectonic belt. The Quesnel Trough is fault bounded to the west by the Pinchi Fault, and to the east by a major eastward merging shear zone. The narrow belt of rocks in the Quesnel trough have been traced southward to beyond the international border.

The Quesnel Trough was the site of extensive island-arc volcanism and associated volcanic derived sedimentation. These rocks are members of the Takla Group and are Upper Triassic to Lower Jurassic in age. The most common lithologies within this group are: argillites, augite porphyries, feldspar porphyries, and andesitic tuffs, flows and breccias.

Block faulting and tilting are the dominant structural styles in and around the Quesnel Trough. The Quesnel trough is in fault contact with older rocks to the east and west and is therefore thought to be a graben.

The Upper Triassic to Middle Jurassic Hogem batholith along with other "Omineca Intrusives" intrude the Takla Group rocks within the Quesnel trough. Garnett et. al, suggests; "There are three phases of the Hogem batholith distinguished on the basis of age and lithology. The earliest phase I consists of diorites, monzonites, and granodiorites. A later phase II consists mainly of syenites. The latest phase III consists of granites and quartz syenites."

PROPERTY GEOLOGY:

The Eagle property covers the SW contact of the Hogem Batholith with Takla group volcanics and sediments south of Tchentlo Lake. This contact passes roughly through the northeast quadrant of the Eagle 9 claim. This contact where observed is gradational over several metres. The intrusive grades from coarse to fine grained diorite commonly containing 2-5% magnetite

whilst the volcanic rocks are invariably hornfelsed and calc-silicate altered. Locally remnant banding is present suggesting tuffs and feldspar and augite porphyritic flows can sometimes be identified.

The hornfelsed volcanics are generally very fine grained purple coloured rocks with commonly 3-5% disseminated pyrite and locally some chalcopyrite.

The most significant surface mineralization however, is the Gibson vein roughly at the centre of the grid. This occurrence consists of fine grained arsenopyrite and pyrite filling a quartz sericite breccia zone within which are banded galena-sphalerite veins and pods. The quartz-sulphide mineralization is enveloped within a zone of very fine grained clay-carbonate alteration with 5-10% disseminated pyrite.

GEOPHYSICAL SURVEY:

INSTRUMENTATION:

The I.P. surveys were conducted by Pacific Geophysical of Vancouver, B.C. Instrumentation included a 1.2 Kw Phoenix IPT-1 I.P. transmitter powered by a Phoenix MG-1 motor generator, and the BRGM IP-6 receiver. The period of the transmitted signal was 8 seconds, 50% duty. The double dipole electrode array was used with dipole spacing of 25 and 50 m. For both dipole spacings, readings were recorded for $n=1$ to $n=6$. Chargeability was measured in Mv/V.

10.5 km of line were surveyed with I.P. on the Eagle II Grid.

DATA PRESENTATION:

The I.P. results are presented in pseudo-section format at a scale of 1:5,000 for the 50 m. dipole spacing array and a scale of 1:2,500 for the 25 m. dipole spacing array. (Appendix I)

Contoured 1:5,000 scale plan maps of the Fraser filtered chargeability and resistivity plan maps, with the I.P. interpretation compilation, are also presented (Figures 3 and 4).

DISCUSSION OF RESULTS:

The threshold chargeability response is considered to be 12 mV/V throughout the survey area.

L.40000N: Localized chargeability responses are found on this line. A shallow depth limited response is centred at 38025E, while a deeper response, centred at 38100E, is associated with a high resistivity feature. Deep seated I.P. anomalies remain open at the west end.

L.40200N: A deep, strong chargeability response, centred at 37675E, is directly associated with a high resistivity feature.

L.40400N: Two distinct I.P. signatures are found within the central, wide anomalous package.

Signature 1 shows a strong, shallow, pod-like source lying within a well defined, low resistivity unit.

Signature 2 is found within a high resistivity package; a surficial, weak and narrow I.P. response is found at 37712.5E while a deeper response is found at 37837.5E.

L.40600N: The pod of the previous line is still well defined. The high resistivity package continues, however its associated I.P. responses have either weakened or their sources have deepened from the previous line.

A moderate response appears at the extreme west of the line.

L.40800N: The pod feature, centred at 37525E, weakens while a complicated response, centred at 37675E, flanks its east side.

Centred at 37900E, is a deep response that correlates with a moderation of resistivities within the high resistivity package.

An isolated, depth-limited response appears centred at 38325E while moderate responses appear at the east end of the line.

L.41000N: The entire survey can be considered anomalous; a deep sourced response at 37275E is flanked by less intense, possibly deeper, chargeability sources. The I.P. responses are coincident with moderate resistivities.

APPENDIX I

I.P. PSEUDO-SECTIONS

APPENDIX II

STATEMENT OF COSTS

A. GRID PREPARATION:

10 km: 10 days @ 350/day	\$ 350.00
Camp: 20 man days @ 50/day	1,000.00
Travel-Helicopter: 3 days @ 700/day	2,100.00
Truck: 10 days @ 50/day	<u>500.00</u>
	\$ 7,100.00

B. GEOPHYSICAL SURVEY:

10 days @ 1500/km	\$15,000.00
Mob/Demob Helicopter: 2 days @ 700/day	1,400.00
Truck: 10 days @ 50/day	<u>500.00</u>
	\$16,900.00

C. REPORT PREPARATION:

Author: 1 day @ 300/day	\$ 300.00
Geophysicist: 2 days @ 300/day	600.00
Drafting & Typing:	<u>200.00</u>
	\$ 1,100.00

TOTAL FIELD COST: \$25,100.00

APPENDIX III

STATEMENT OF QUALIFICATIONS

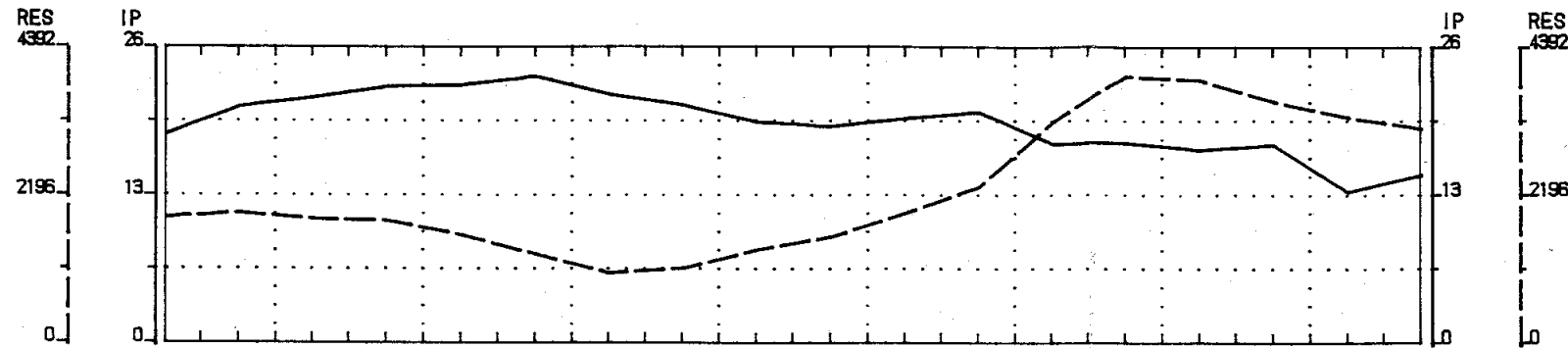
STATEMENT OF QUALIFICATIONS

I, Terence Walker, of Prince George, British Columbia hereby certify that:

1. I am a graduate of University College, London with a B.Sc. degree in Geology (1968) and a graduate of McGill University, Montreal with an M.Sc. in Mineral Exploration (1978).
2. I have practiced my profession with various mining companies in Europe and North America since graduation.
3. I am currently employed as a Senior Project Geologist working for Noranda Exploration Company, Limited.
4. I am a member of the Canadian Institute of Mining and Metallurgy, the Geological Association of Canada, the Prospectors and Developers Associations and the British Columbia and Yukon Chamber of Mines.
5. The information contained in this report is based on published and unpublished reports on the property and surrounding area, and on work done by Noranda.
6. I have no current interest in the property.

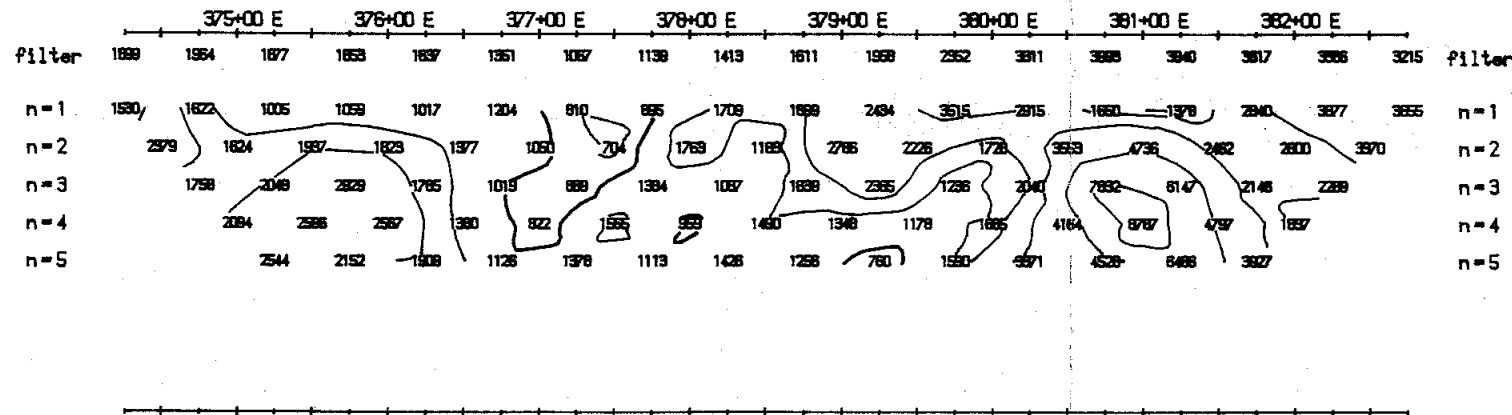


Terence Walker
Sr. Project Geologist

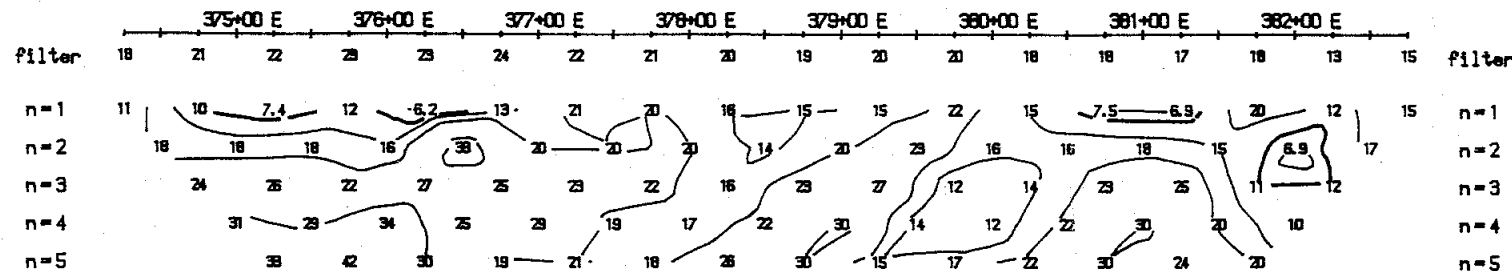


INTERPRETATION

RESISTIVITY
(OHM_M)



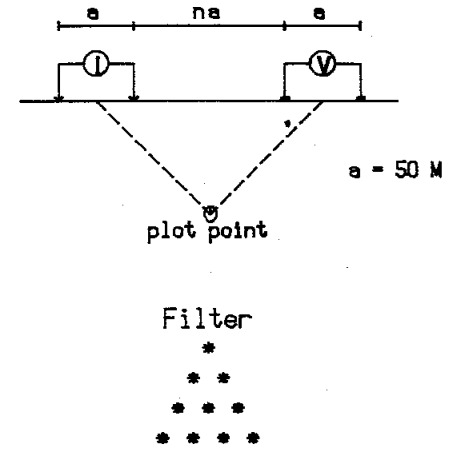
IP
(mV/V)



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

21,799

Line 40000 N
Dipole-Dipole Array



INTERPRETATION

RESISTIVITY
(OHM_M)

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Pronounced resistivity increase
- Pronounced resistivity decrease

Scale 1:5000

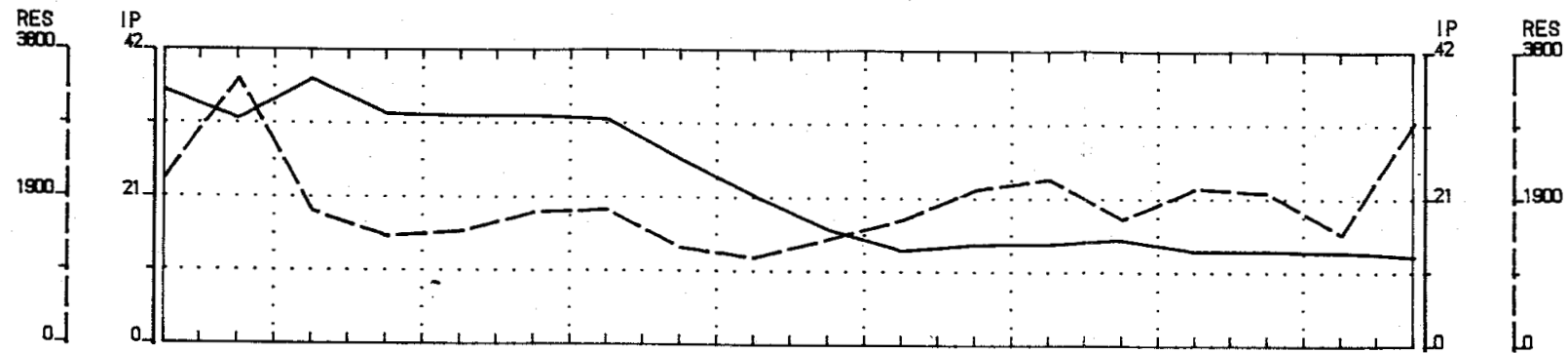


EAGLE II GRID

INDUCED POLARIZATION SURVEY
Line 40000 N
Project #284 Central District

Date: 88/10/19
Interpretation by: L. Bredish

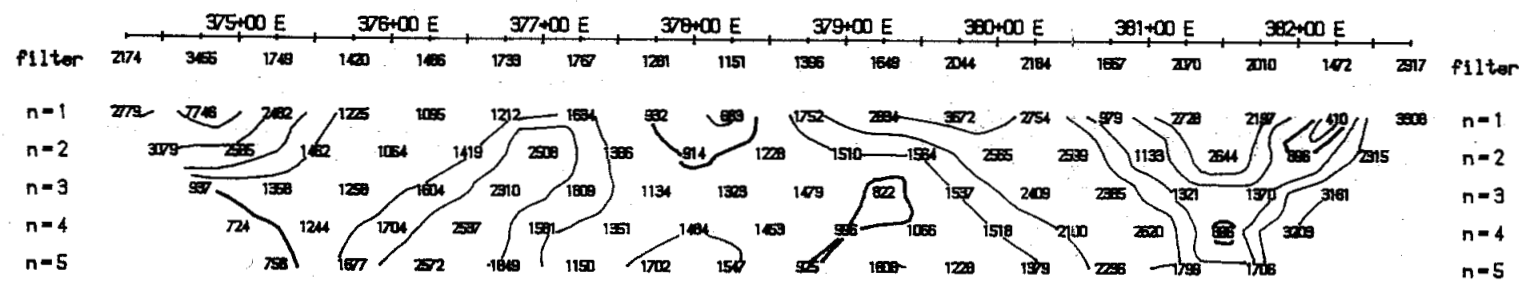
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INTERPRETATION



RESISTIVITY
(OHM.M)

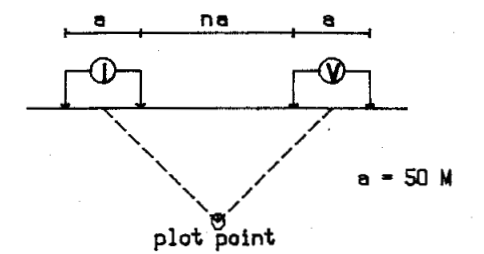


INTERPRETATION

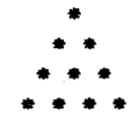
RESISTIVITY
(OHM.M)

Line 40200 N

Dipole-Dipole Array



Filter

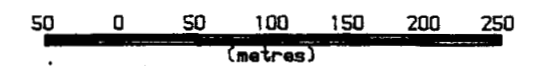


Logarithmic Contours
1, 1.5, 2, 3, 5, 7.5, 10, ...

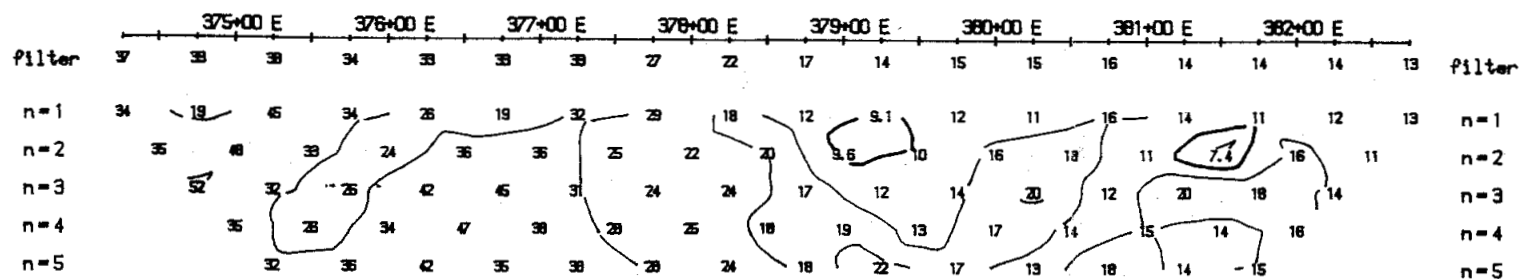
INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Pronounced resistivity increase
- Pronounced resistivity decrease

Scale 1:5000



IP
(mV/V)



IP
(mV/V)

GEOLOGICAL BRANCH ASSESSMENT REPORT

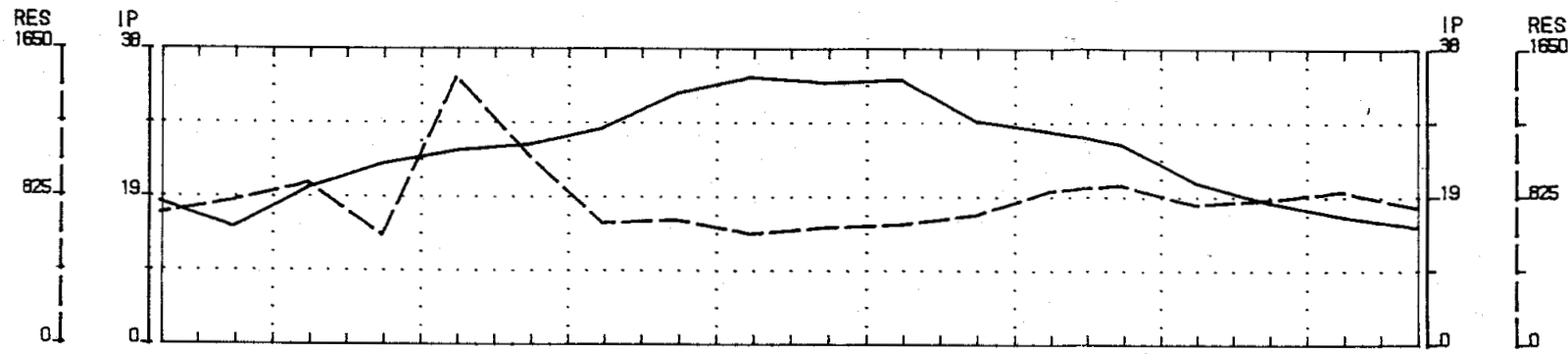
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EAGLE II GRID

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Line 40200 N
Project #284 Central District

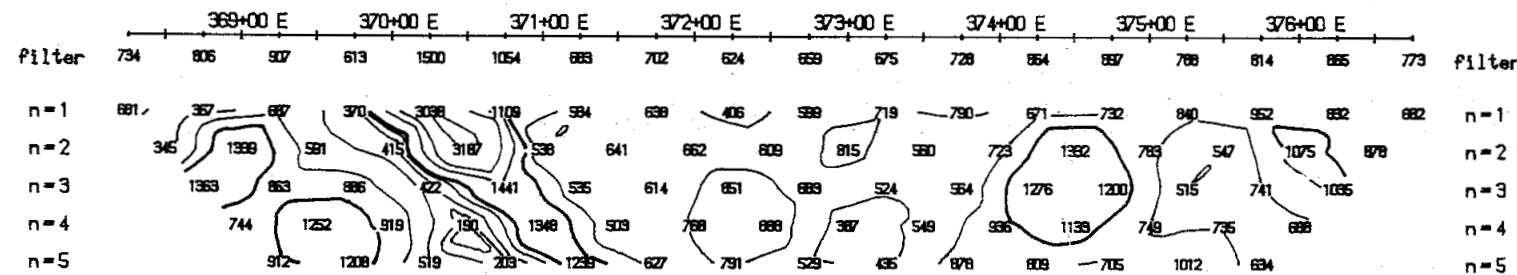
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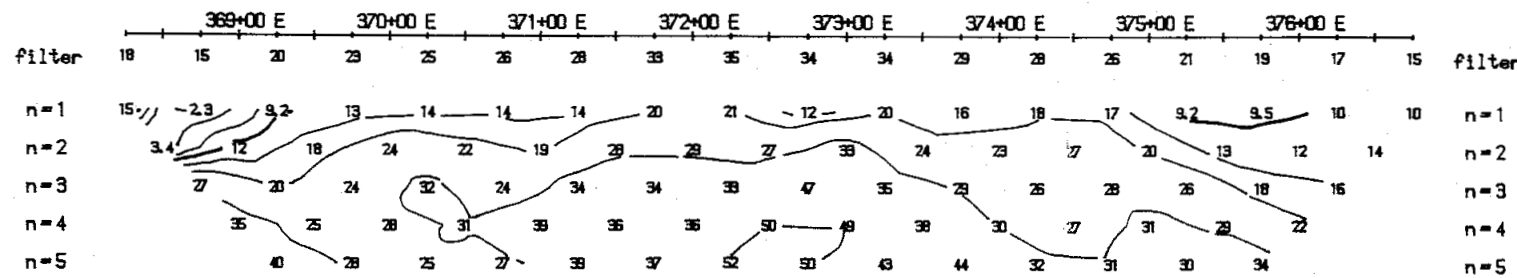


INTERPRETATION

RESISTIVITY
(OHM_M)



IP
(mV/V)

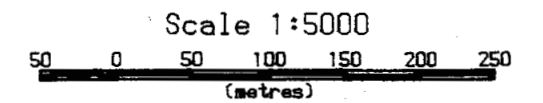


INTERPRETATION

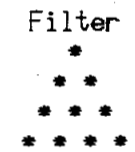
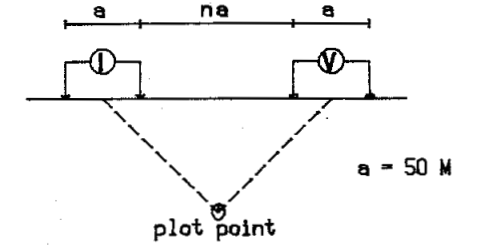
RESISTIVITY
(OHM_M)

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

- INTERPRETATION
- █ Strong increase in polarization
 - ▒ Moderate increase in polarization
 - Pronounced resistivity increase
 - ▬ Pronounced resistivity decrease



Line 41000 N
Dipole-Dipole Array



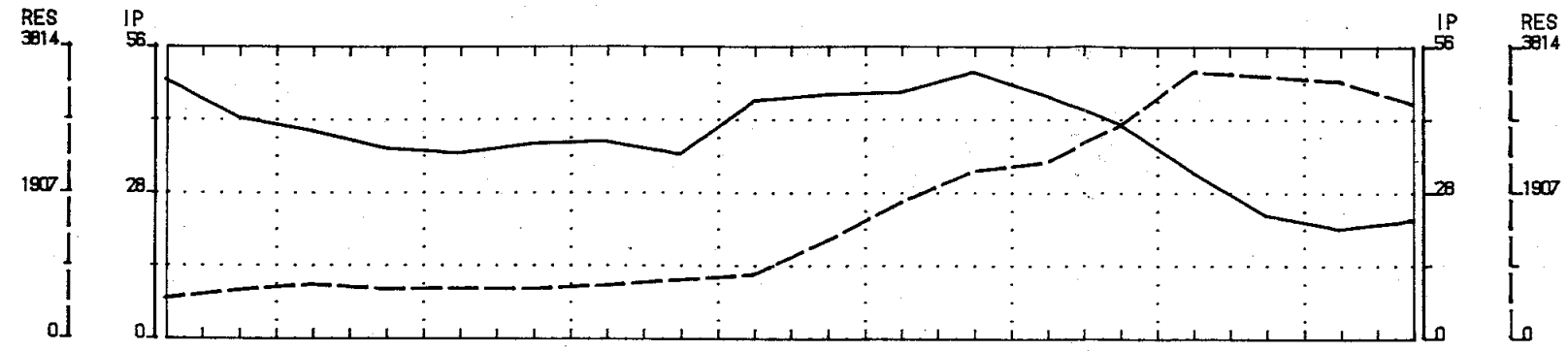
**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

EAGLE II GRID
INDUCED POLARIZATION SURVEY
Line 41000 N
Project #284 Central District

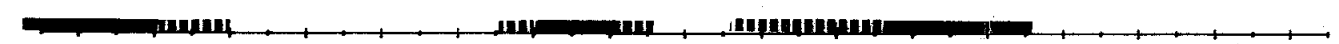
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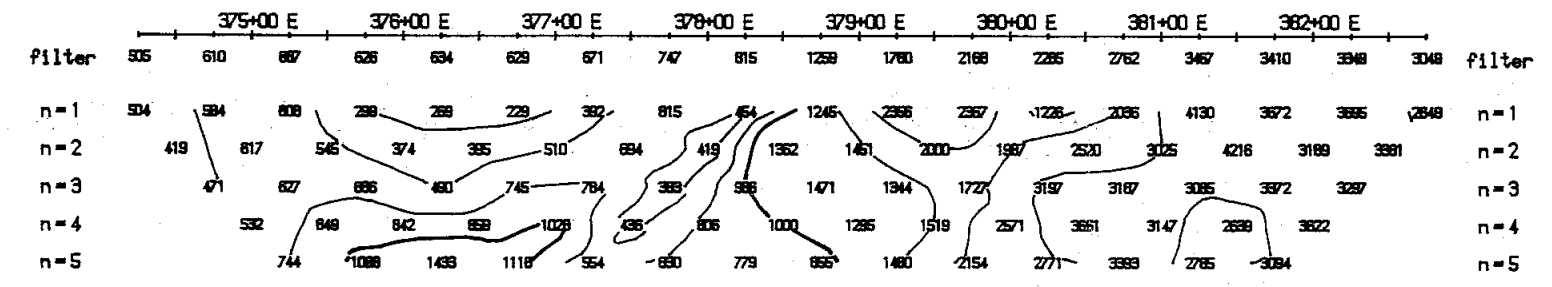
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INTERPRETATION



RESISTIVITY (OHM_M)



INTERPRETATION

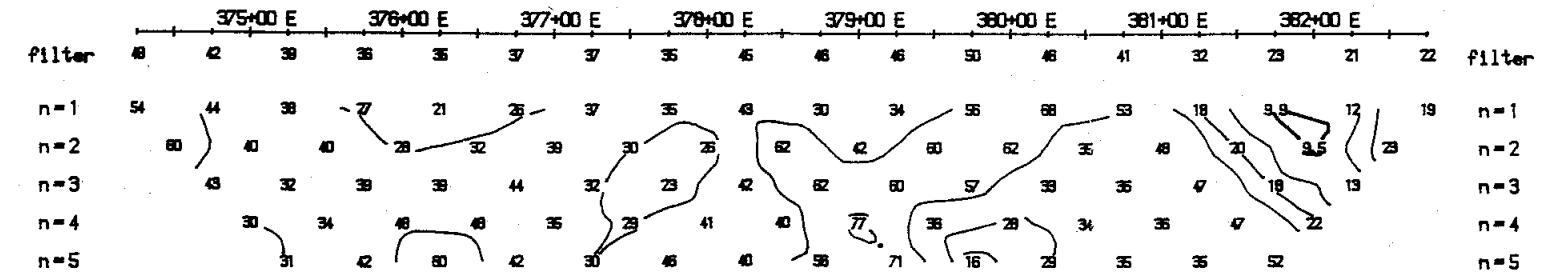
RESISTIVITY (OHM_M)

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

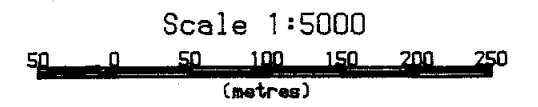
INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Pronounced resistivity increase
- Pronounced resistivity decrease

IP (mV/V)



IP (mV/V)



GEOLOGICAL BRANCH ASSESSMENT REPORT

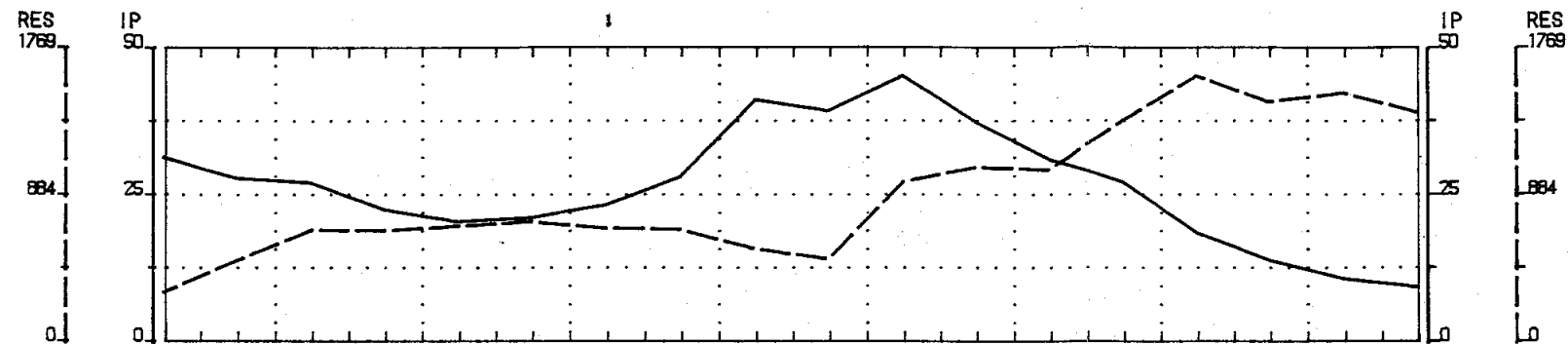
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EAGLE II GRID

INDUCED POLARIZATION SURVEY
Line 41200 N
Project #284 Central District

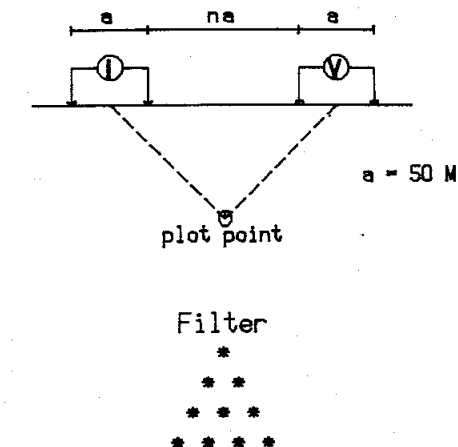
Date: 89/10/19
Interpretation by: L. Bredish

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Line 41400 N

Dipole-Dipole Array

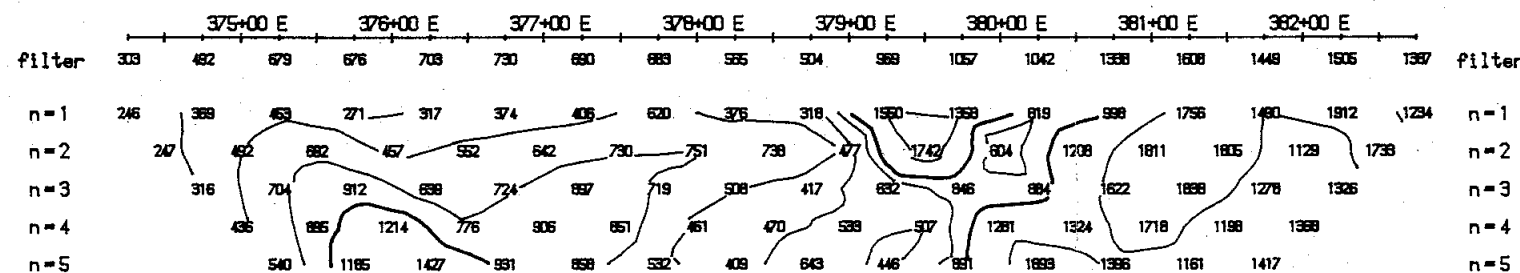


INTERPRETATION



INTERPRETATION

RESISTIVITY
(OHM_M)



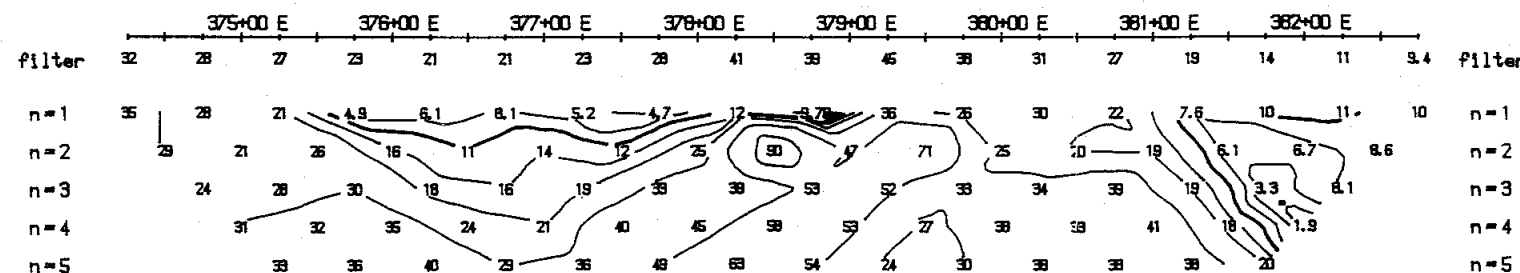
RESISTIVITY
(OHM_M)

Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

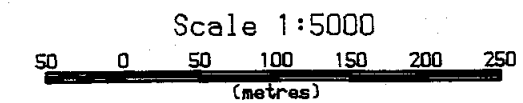
INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Pronounced resistivity increase
- Pronounced resistivity decrease

IP
(mV/V)



IP
(mV/V)



GEOLOGICAL BRANCH ASSESSMENT REPORT

EAGLE II GRID

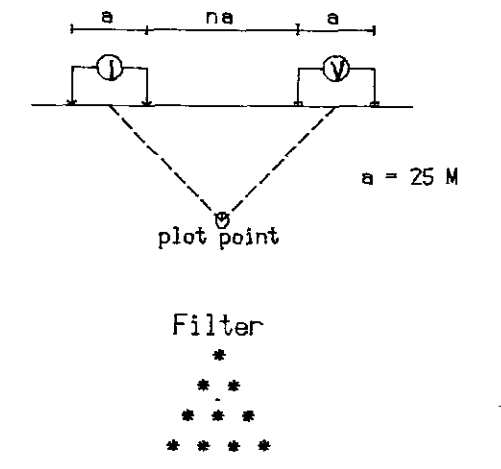
INDUCED POLARIZATION SURVEY
Line 41400 N
Project #284 Central District

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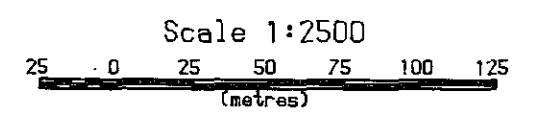
Line 40400 N
Dipole-Dipole Array



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10, ...

INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Pronounced resistivity increase
- Pronounced resistivity decrease

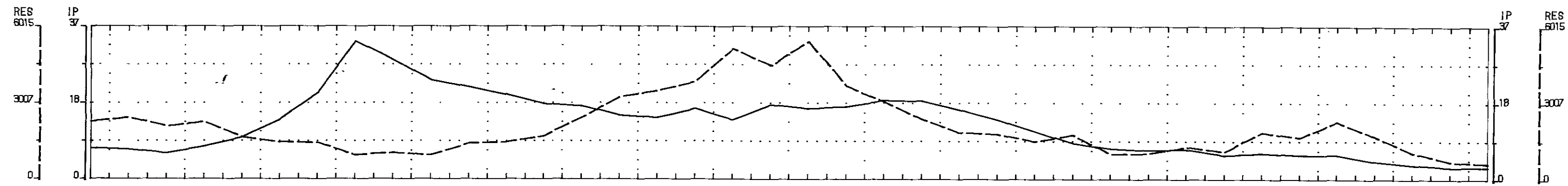


EAGLE II GRID

INDUCED POLARIZATION SURVEY
Line 40400 N
Project #284 Central District

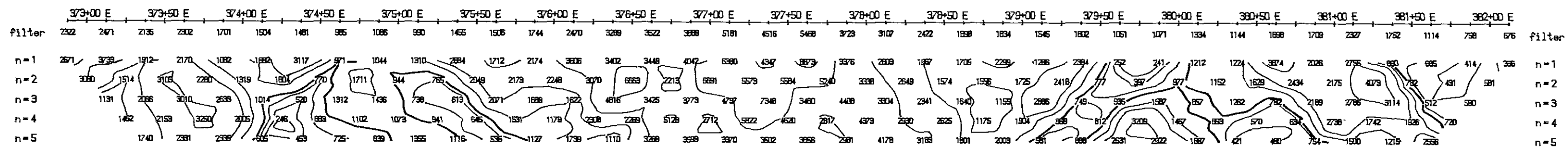
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Interpretation by: L. Bredish

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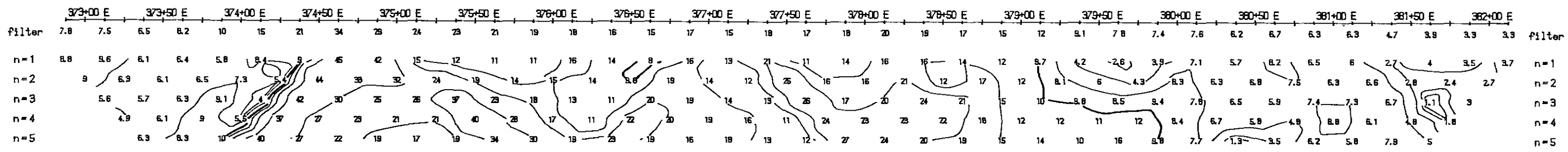


INTERPRETATION

RESISTIVITY (OHM_M)

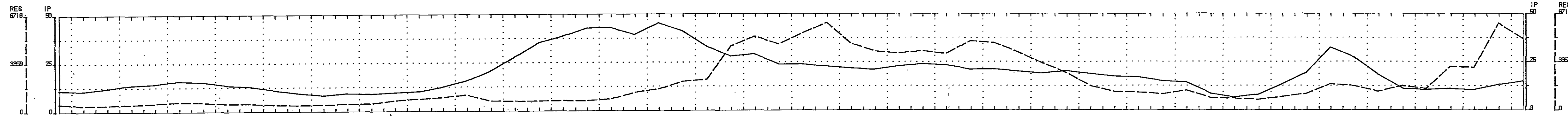


IP (mV/V)



GEOLOGICAL BRANCH ASSESSMENT REPORT

21,799

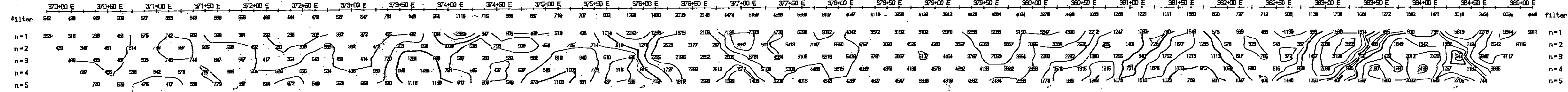


INTERPRETATION

INTERPRETATION

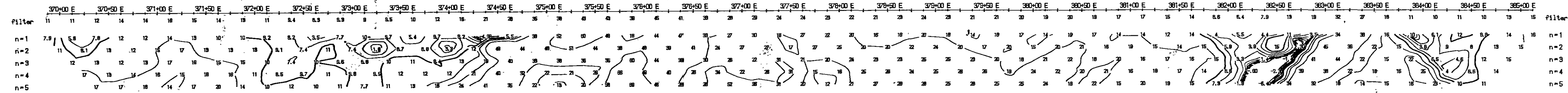
RESISTIVITY
(OHM_M)

RESISTIVITY
(OHM_M)

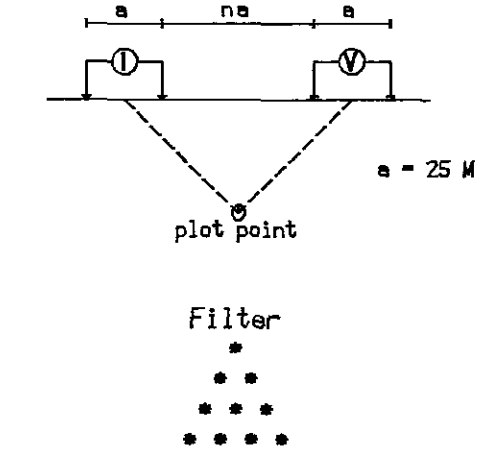


IP
(mV/V)

IP
(mV/V)



Line 40800 N
Dipole-Dipole Array



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

INTERPRETATION

- ▬ Strong increase in polarization
- ▬▬▬▬ Moderate increase in polarization
- Pronounced resistivity increase
- ▬▬▬▬ Pronounced resistivity decrease

Scale 1:2500
25 0 25 50 75 100 125
(metres)

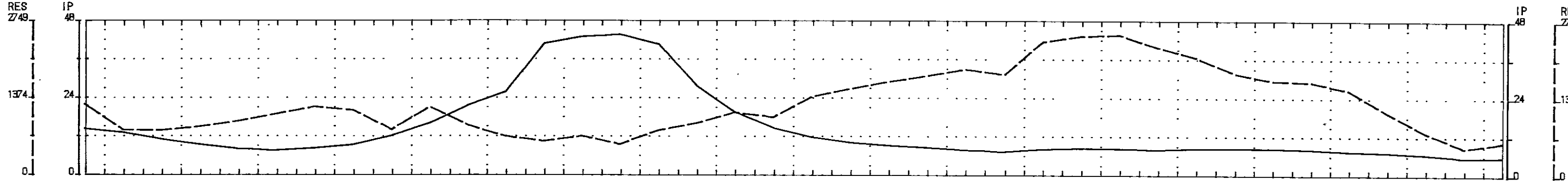
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INDUCED POLARIZATION SURVEY
Line 40800 N
Project #284 Central District

Date: 88/10/19
Interpretation by: L. Bredish

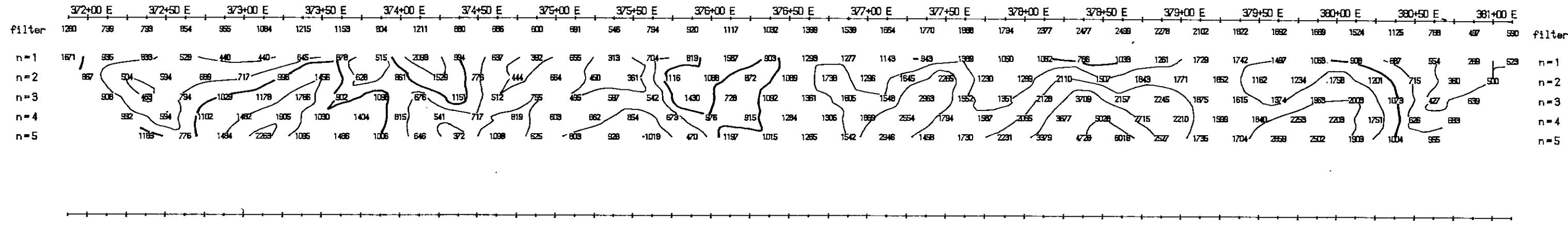
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INTERPRETATION

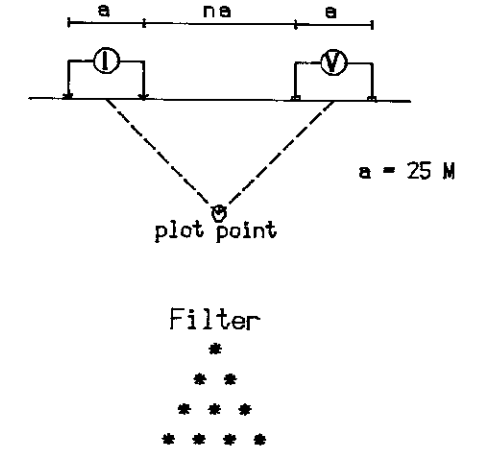
RESISTIVITY
(OHM_M)



INTERPRETATION

RESISTIVITY
(OHM_M)

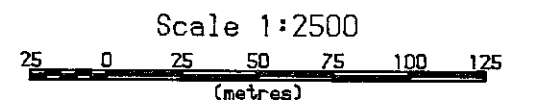
Line 40600 N
Dipole-Dipole Array



Logarithmic Contours 1, 1.5, 2, 3, 5, 7.5, 10,...

INTERPRETATION

- Strong increase in polarization
- Moderate increase in polarization
- Pronounced resistivity increase
- Pronounced resistivity decrease



EAGLE II GRID

INDUCED POLARIZATION SURVEY
Line 40600 N
Project #284 Central District

Date: 89/10/19
Interpretation by: L. Bradish

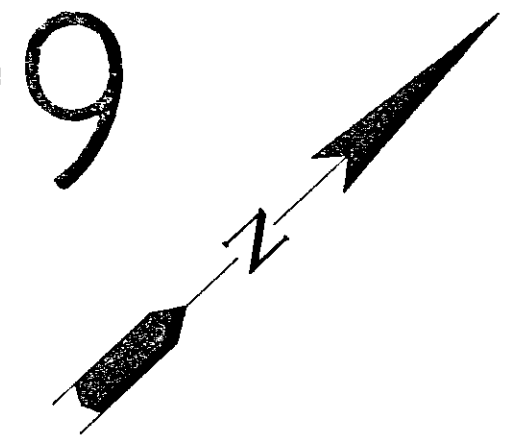
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**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

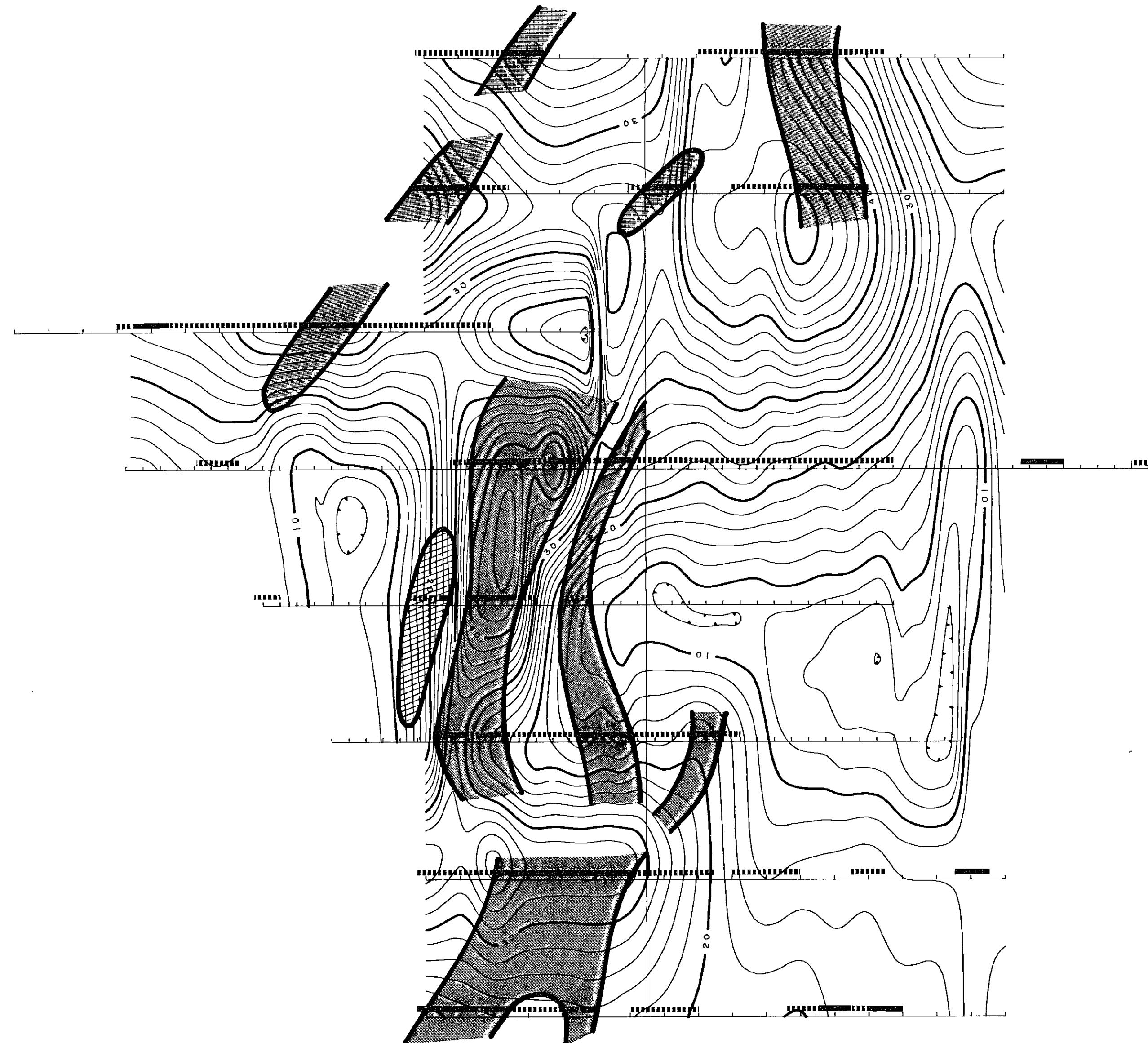
GEOLOGICAL BRANCH
ASSESSMENT REPORT

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36800E 37000E 37200E 37400E 37600E 37750E BASELINE 131° 37800E 38000E 38200E 38400E 38600E

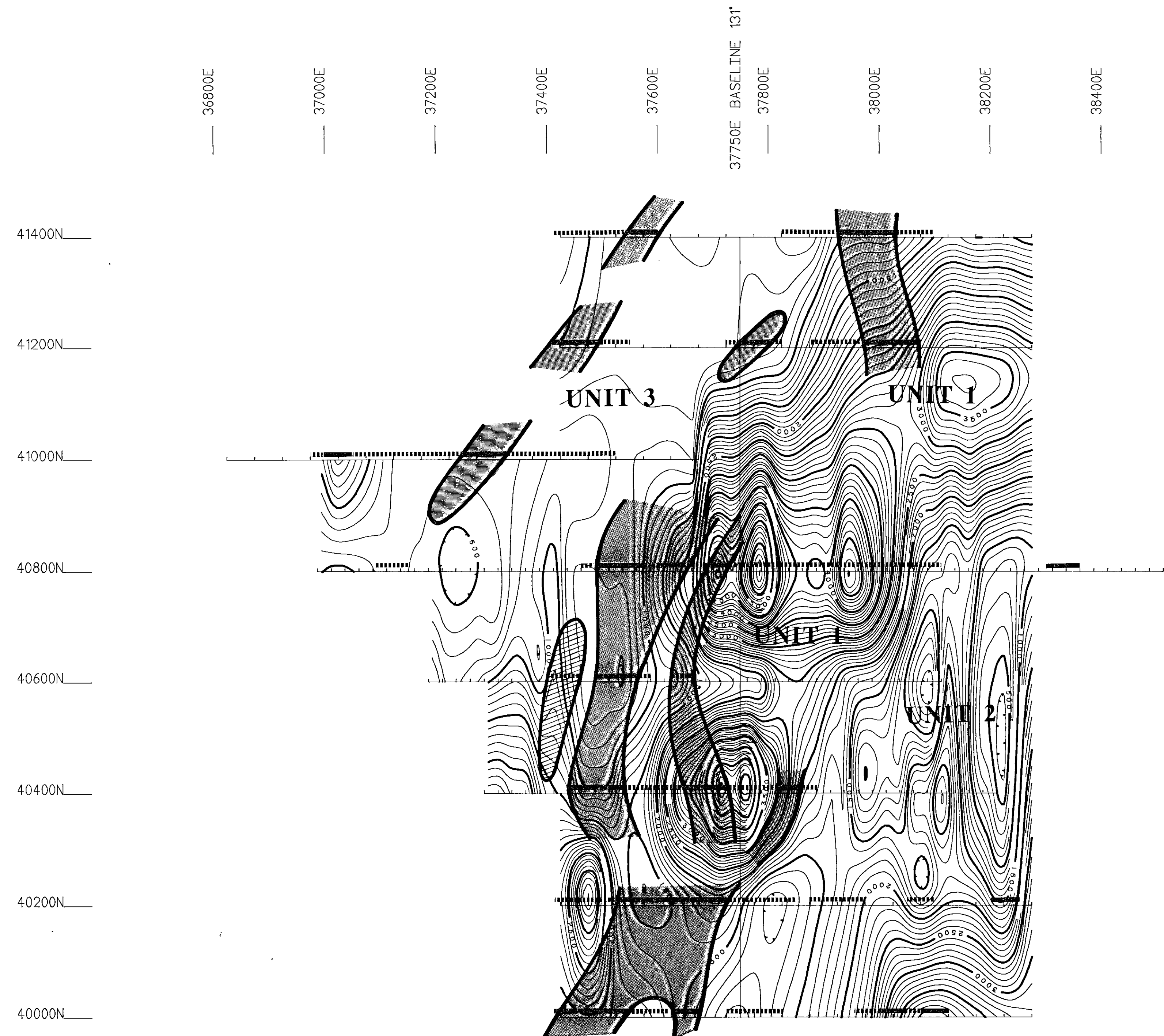
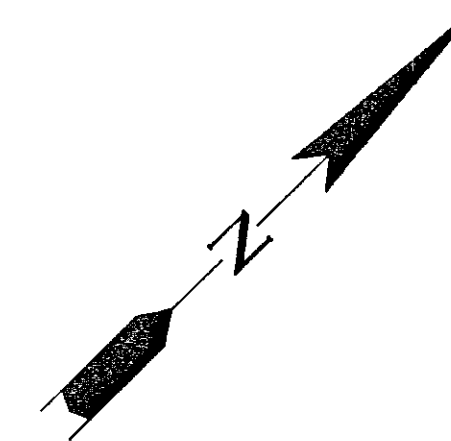
41400N
41200N
41000N
40800N
40600N
40400N
40200N
40000N



Instrument	: IP6-IP
Parameter	: Chargeability
Array	: Dipole-Dipole
Contour Interval	:
I P LEGEND	
Strong Chargeability	██████████
Moderate Chargeability	■■■■■■■■■■
Conductor Axis	:
100m 50m 0m 100m 200m	

EAGLE II GRID	
I. P. (chg) SURVEY	
PROJECT: EAGLE PROJECT # : 0284	
BASELINE AZIMUTH : 131 Deg.	
SCALE = 1 : 5000	DATE : / /
SURVEY BY : PAC GEOP	NTS : 93N/2
FILE: MEAGII	
NORANDA EXPLORATION	Fig 3

21,799



Instrument : IP6-IP
 Parameter : Resistivity
 Array : Dipole-Dipole

Contour Interval :

I.P. LEGEND
 Strong Chargeability : ██████████
 Moderate Chargeability : ●●●●●●●●
 Conductor Axis : ██████████

100m 50m 0m 100m 200m

EAGLE II GRID

I. P. (Res) SURVEY

PROJECT: EAGLE PROJECT # : 0284
 BASELINE AZIMUTH : 131 Deg.

SCALE = 1 : 5000 DATE : / /
 SURVEY BY : PAC GEOP NTS : 93N/2
 FILE: MEAGII
 NORANDA EXPLORATION *FIG 4*