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REF. No. 6811/82				

25 AUG 1982

INTERIM REPORT

EXPLORATION LICENCE 15/73

HATFIELD

TASMANIA

For 6 months ending December 25, 1981

This report covers the
Aberfoyle periods 7-12/81
and 1/82

J.R. Sise,
Project Geologist.

Distribution: Hawthorn
Burnie
Dept. of Mines

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Mac 47B	'C'-horizon geochemistry - Zn	1:2,500

INTRODUCTION

The general conditions governing exploration licences have recently been reviewed by the Department of Mines with important changes taking effect from the 1st July, 1982.

Full technical reports on exploration activities are now required on an annual basis to coincide with and support the new twelve month renewal period of licences. In past years Aberfoyle Exploration Pty. Ltd. have submitted an annual report on the Hatfield Licence in June each year. This practice is now at odds with the annual renewal due on the 25th December each year. To bring the reporting cycle into line with the revised conditions, an interim report for the six months to 25th December, 1981 is hereby submitted; to be followed in December 1982 by an annual report.

Another new condition to affect the Hatfield Licence is that Aberfoyle Exploration will now be given five (5) years to complete exploration. However as the Hatfield Licence has a current area of only 65 sq. km., no reduction in area is required during this period.

Hatfield Exploration Licence 15/73 was pegged on May 5, 1973, by Cominco Exploration Pty. Ltd. The Exploration Licence was transferred from Cominco to Abminco N.L. on 10th April, 1978. The licence was transferred to Cleveland Tin Limited on 28th March, 1979, and then to Aberfoyle Exploration Pty. Ltd. on 1st September, 1979. Work is managed by Aberfoyle Exploration Pty. Ltd. E.L. 15/73 is partly over private land owned by Associated Forest Holdings Pty. Ltd. who also have a timber concession covering the entire licence area.

The exploration programme during 1980-81 summer field season (Sise, 1981) was successful in defining an anomalous I.P. trend from 7200 N to 8200 N centred about 4000 E. The I.P. Survey on these lines was of a reconnaissance nature using a 100 metre dipole spread (Plate Mac 62). This anomaly is located over a button grass swamp in an area where extensions along strike of known prospective volcanics are inferred.

5 cm

Hatfield
E.L. 15/73

Mackintosh
E.L. 2/70

← AMOEBA ANOMALY

Mayday Creek
E.L. 5/74

LP. Chargeability Contours 1980-81
(contour interval 25 milliseconds)

TOTAL LP. COVERAGE

-  SINGLE LINE 1980-81
-  PRE 1980 SINGLE LINE
-  PRE 1980 BLOCK OF 100 M SPACED LINES

0 500 1000 SCALE 2000 3000
metres

Aberfoyle Exploration Pty Ltd

Drawn	JRS
Traced	JLR
Checked	

NORTH WEST TASMANIA
Mackintosh West / Hatfield Licence Areas
I. P. COVERAGE 1980-81

Location code	
Date	May, 1981
Scale	1:50,000

A single point anomaly of 400 ppm Pb, (Amoeba Anomaly No.18, Plate QR 100) was recorded in the anomalous zone, but overall the geochemistry was very low, possibly due to the inability of the hand auger to effectively penetrate the swamp.

The follow-up programme during the six months to 25th December, 1981 involved reconnaissance re-sampling using a bombardier-mounted auger rig and further detailed I.P. geophysics as follows:

GEOCHEMISTRY

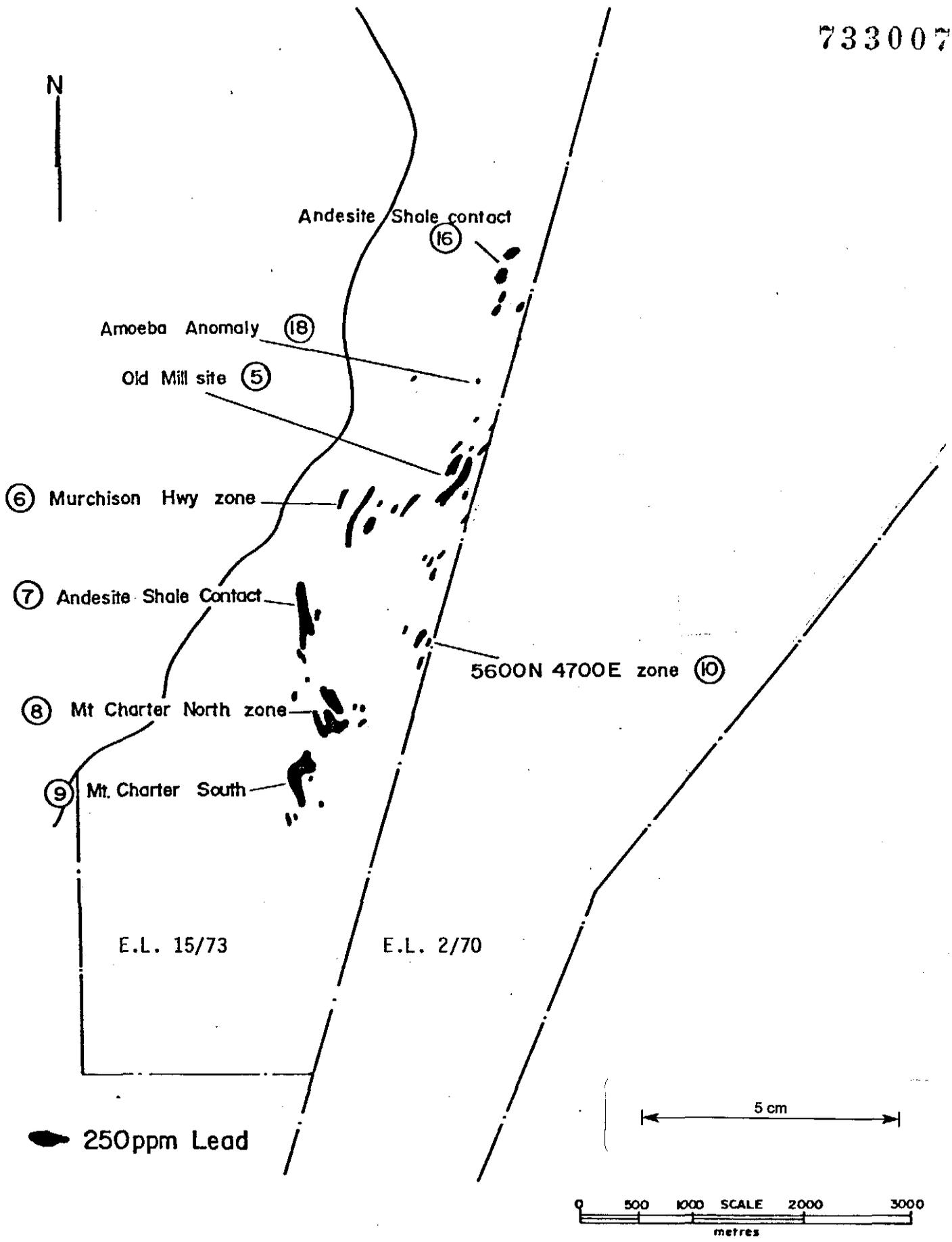
In order to test the effectiveness of soil geochemical samples collected over the button grass swamp, a bombardier-mounted Jacro rig was contracted for a reconnaissance re-sampling traverse on line 8000 N, from 4050 E to 4190 E (Appendix I). The depth to bedrock (up to 9.5 m) was considerably greater than anticipated causing penetration problems in the swamp, and severely limiting the number of drill holes completed. Due to contractual obligations the equipment was unable to complete the proposed programme (180 holes approx.) However, the limited re-sampling was successful in returning sulphide-bearing samples anomalous in lead and zinc at sites where analyses of previous hand auger samples indicated trace values only (Plate Mac 45B, 46B, 47B).

By the end of 1981 it had not been possible to complete the re-sampling of the button grass swamp due to a suitable rig being unavailable.

GEOPHYSICS

The anomalous I.P. trend between lines 7200 N and 8200 N centred about 4000 E was located during the 1980-81 programme using a reconnaissance 100 metre spaced dipole spread on lines 200 metres apart. In order to detail this anomaly two intermediate lines were read using 50 metre dipole spreads as follows:

<u>LINE</u>	<u>FROM</u>	<u>TO</u>	<u>LENGTH (m)</u>
7900 N	3900 E	4500 E	600
8100 N	3900 E	4600 E	<u>700</u>
		TOTAL:	<u>1300 m</u>



Aberfoyle Exploration Pty. Ltd.

Drawn:	J.R.S.
Plotted:	R.J.E.
Checked:	
Revised by:	Date

NORTH WEST TASMANIA
 MACKINTOSH / HATFIELD E.L. AREAS
 GEOCHEMICAL SUMMARY PLAN

Location code:	
Date:	July, 1981
Scale:	1:50,000
Drawn by:	

In addition part of a reconnaissance line extending from the adjacent Mackintosh Licence was surveyed using 100 metre spaced dipoles:

<u>LINE</u>	<u>FROM</u>	<u>TO</u>	<u>LENGTH (m)</u>
9200 N	3900 E	4280	380

The detailed I.P. survey was successful in more clearly defining the anomalous zone on the two lines read (Appendix II). From the data available it is evident that the I.P. source is shallow (less than 25 metres from the surface), and represents a formation with a sulphide content of 20% and above, with a depth extent greater than 200 metres.

CONCLUSIONS

The follow-up exploration programme during the six months to 25th December, 1981 on the Hatfield Licence has been successful in further defining an anomalous I.P. trend with limited coincident anomalous soil geochemistry. The I.P. response is similar on all lines surveyed with no specific point target indicated. Completion of the proposed bombardier-mounted auger programme has continually been frustrated by the unavailability of a suitable drilling rig. Accordingly, the funds allocated for auger drilling have now been re-assigned to diamond drilling.

It is planned to complete one diamond drill hole at the "Amoeba" (button grass swamp) anomaly to test the geochemical and geophysical responses on the line 8000 N as well as testing the geological environment. Since no specific target is defined within the overall geophysical anomaly, line 8000 N is selected for drilling on account of the available surface geochemistry which may be correlated with any down-hole information. A drill hole of around 150 metres will commence in January 1982 following the construction of an access track. Down-hole geophysical logging is planned to supplement the geological information.

EXPENDITURE

The Statement of expenditure is for the Aberfoyle periods 8/81 to 12/81, commencing June 30, 1981 and ending November 16, 1981.

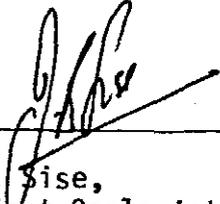
	\$
Geology	7,032
Survey	110
Geophysics	1,444
Geochemistry	4,237
Access	942
Tenure	267
Indirect Costs	2,105
	<hr/>
	\$16,137

REFERENCES

Sise, J.R. (1981):

Annual Report, Exploration Licences 15/73
and 2/70, Hatfield and Mackintosh West.
For the 12 months ending June 1, 1981.

SIGNED: _____



J.R. Sise,
Project Geologist.

ENDORSED: _____



E.H. Skey,
Exploration Manager.

APPENDIX I

AUGER SAMPLE LEDGER

Line 8000 N

QUE RIVER
(SWAMP I.P. ANOM)

9/7/81 1

EASTINGS	NORTHINGS	SAMPLE NUMBER	DEPTH (FT)	ANALYSIS					GEOLOGICAL LOG	
				Ag	Au	Cu	Pb	Zn		
4050		8000256901	300				15	45	145	
4060	§	902	420				25	10	95	
4070		903	800				X	15	105	
4080		904	500				X	40	20	
4090		905	500				X	5	105	
4100	§	906	500				10	20	50	
4110		907	500				15	45	75	
4120		908	500				35	45	100	
4130	§	909	400				15	215	120	
4140		910	300				20	425	140	Pyrite v. h. galena Pyrite } Pyrite } to 50% Pyrite }
4150		911	625	Ag, Au	1.0	0.200	30	135	105	
4160		912	800		3.0	0.072	35	300	170	
4170	§	913	950		0.5	0.008	125	305	340	
4180		914	800				55	35	120	
4190	§	915	800				135	140	530	
AUGER SAMPLES - JACKED DRILL										

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APPENDIX II

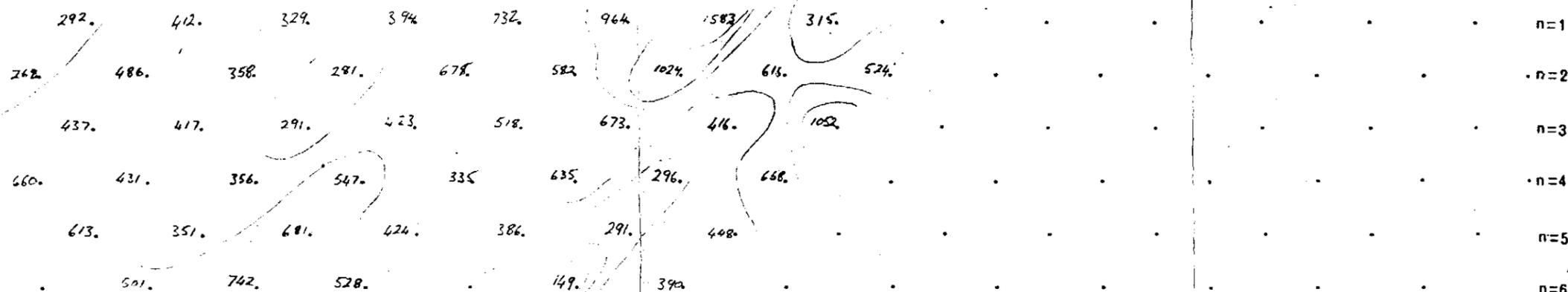
I.P. PROFILES

Line 7900 N and 8100 N

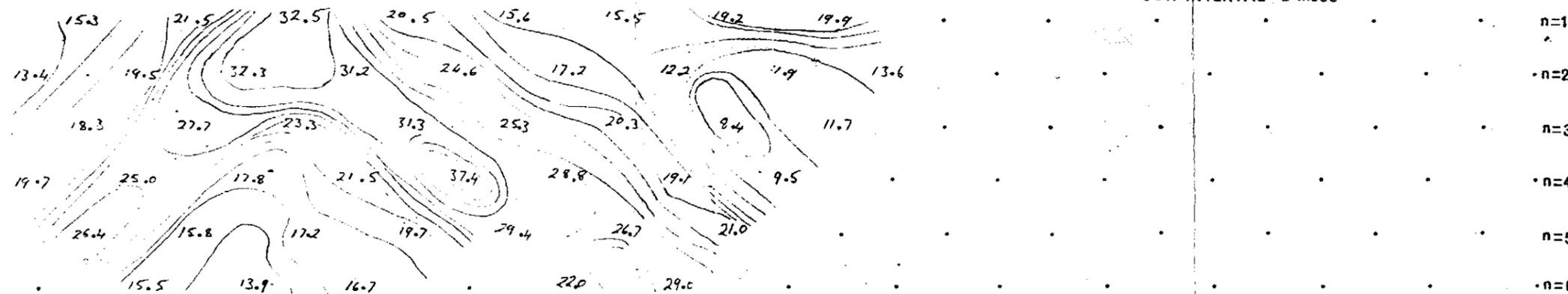
I.P. & RESISTIVITY SURVEY (DIPOLE-DIPOLE ARRAY L=50)

CULTURE PLAN

APPARENT RESISTIVITY (ohm m)
LOGARITHMIC CONTOUR INTERVAL



APPARENT CHARGEABILITY (mv/v)
CONTOUR INTERVAL 2 msec



TRANSMITTER TYPE: Phoenix IPT- 1B
TIMING SEQUENCE: 2 sec on 2 sec off
RECEIVER TYPE: Huntec Mk IV (Serial No. 10311)
INTEGRATION TIME: 400 m/sec after cut off

ABERFOYLE EXPLORATION PTY. LTD.

AREA: AMEOBA

SOLO GEOPHYSICS AND COMPANY

LINE: 7900N
SCALE: 1:5000
DATE: 22-12-81

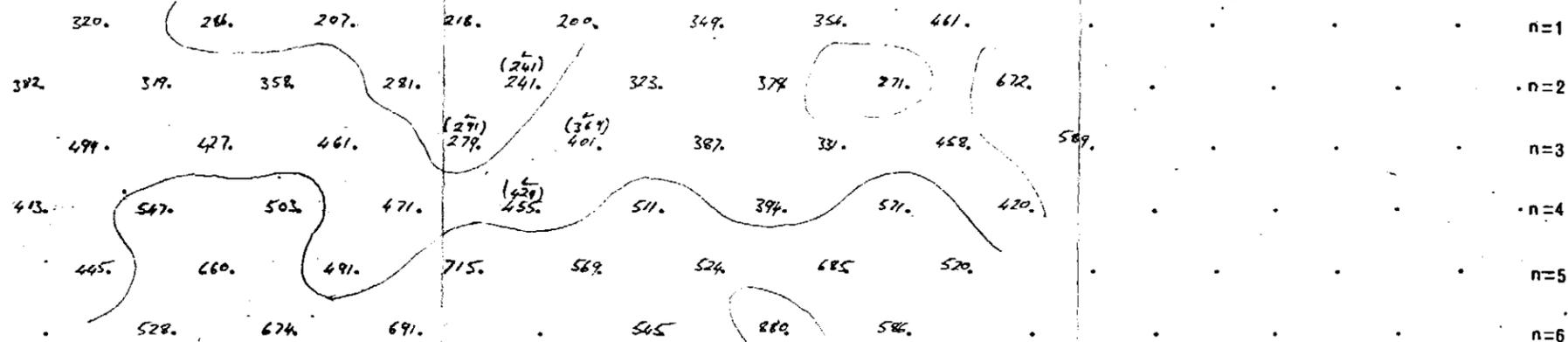
5 cm

I.P. & RESISTIVITY SURVEY (DIPOLE-DIPOLE ARRAY L=50)

CULTURE PLAN

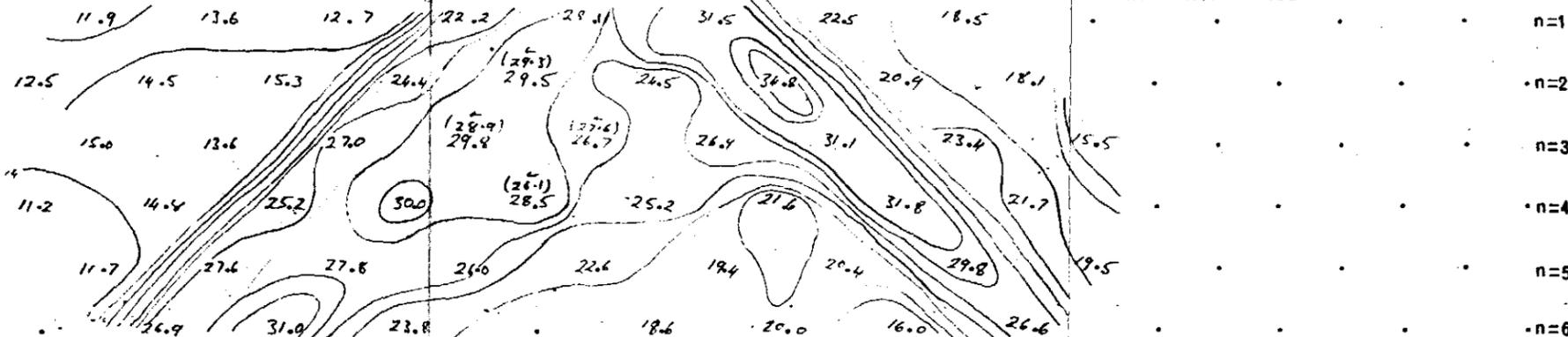
420011

APPARENT RESISTIVITY (ohm m)
LOGARITHMIC CONTOUR INTERVAL



STATION

APPARENT CHARGEABILITY (mv/v)
CONTOUR INTERVAL 2 msec



TRANSMITTER TYPE: Phoenix IPT-1B
 TIMING SEQUENCE: 2 sec on 2 sec off
 RECEIVER TYPE: Huntec Mk IV (Serial No. 1001)
 INTEGRATION TIME: 140 mV/sec after cut off

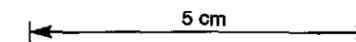
ABERFOYLE EXPLORATION PTY. LTD.

AREA: AMOEBA

LINE: 8100N
 SCALE: 1:5000
 DATE: 22-12-81

SOLO GEOPHYSICS AND COMPANY

8100N





E.L. 2/70
E.L. 15/73

RE-SAMPLED BY POWER AUGER

Highway

Murchison

733016

All survey lines Pre 1981 are drawn as dashed positions except lines BODON - BODON and the Mt. Charter Line
 All 1981 survey lines shown in true position, measured by chain & compass
 For accurate survey location of Pre 1981 lines see Drawg No. GR 8
 Assays for 1981 work, completed by ANALABS, Coode, Tas. Method AAS 1

Aberfoyle Exploration Pty Ltd 12-1987.	
Drawn by RJE	Traced by RJE
Checked by RJE	REVISED BY DATE
REVISED BY DATE	REVISED BY DATE
REVISED BY DATE	REVISED BY DATE
Location code K55/6/44	Scale 1:2500
Date June, 1975	Plate MOC 45B

NORTH WEST TASMANIA
 MACKINTOSH & HATFIELD AREA
 'C' HORIZON GEOCHEMISTRY - Cu p.p.m.



733017

Aberfoyle Exploration Pty Ltd 82-807.

**NORTH WEST TASMANIA
MACKINTOSH & HATFIELD AREA
C'HORIZON GEOCHEMISTRY - Pb p.p.m.**

Drawn by RJE	Traced by RJE
Checked by	Revised by
DATE	DATE
1/11/75	1/11/75

Location code K55/B/44 Scale 1:2500 Date June, 1975 Plate No. 46 B

*All surveyed lines Pre 1981 are drawn so (shown) positions except lines BECON - B300N and the Mt. Charter Line
All 1981 survey lines shown in this position, measured by chain & compass
For accurate survey location of Pre 1981 lines see Drawing No. 001/81
Assays for 1981 work, completed by ANALABS, Coee, Tas. Method AAS 1*

