053001

Aberfoyle Resources Limited

EXPLORATION DIVISION

STICHT RANGE EL 7/91

TASMANIA

Technical Progress Report

for the period

February 1992 - June 1992

Prepared by:

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GEOLOGIST

Endorsed by:

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REGIONAL MANAGER

Distribution

Aberfoyle - Burnie	(1/4)
Aberfoyle - Hawthorn	(2/4)
Department of Resources & Energy	(3/4)
CRA Exploration - Canberra	(4/4)

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PLATES

Plate No.	Scale	Title
SR2	1:100000	EL 7/91 Sticht Range Locality Map
SR1	1:10000	EL 7/91 Sticht Range Ground EM Follow Up

APPENDICES

Appendix I - Sticht Range Area: Ground EM Follow Up Results

1. Summary

A conductive feature in the Sticht Range Licence (EL 7/91) was followed up by a single loop, five line ground EM survey.

EM data indicates the Sticht Range conductor to be caused by a lithological conductor; namely outcropping carbonaceous phyllites associated with the Cambrian Sticht Range Beds.

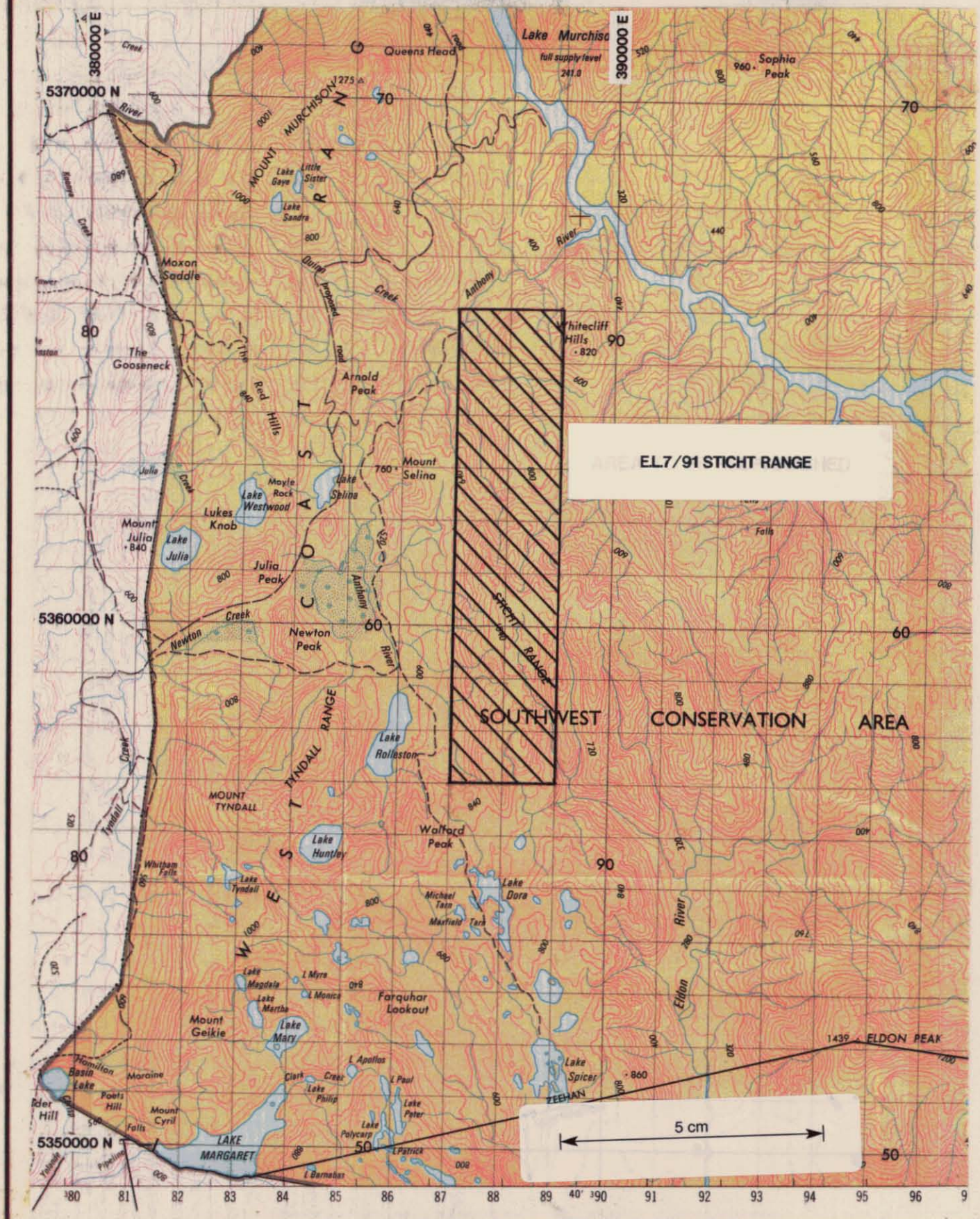
No further exploration is recommended for the area, which is currently nominated for relinquishment.

2. Introduction

EL 7/91 Sticht Range (18 sq. km.) is located 16 km. northeast of Queenstown (Figure 1), within the southwest conservation area. Access is gained via an existing track which traverses the Anthony Dam construction site.

EL 7/91 Sticht Range was granted to Aberfoyle Resources Limited on the 31st of January, 1992. Exploration has been conducted by Aberfoyle under terms of the Mount Read Volcanic joint venture with CRA Exploration Pty. Ltd.

This report summarises exploration completed on EL 7/91 for the period February 1992 to June 1992.



Aberfoyle Resources Limited

EXPLORATION DIVISION

REVISIONS			
Init.	Date	Init.	Date

Location Code :

WESTERN TASMANIA

STICHT RANGE E.L. 7/91

LOCALITY MAP

Scale : 1 : 100000

Date : JUNE 1992

Compiled : RdeB

Drawn : LANDS DEPT.

Traced :

Checked : RAS

Plate No. : SR 2

1511

3. Previous Exploration

The Sticht Range area was originally within EL 5/85 Lake Margaret, but was relinquished in October 1990 (Noonan, 1990) as part of that EL's partial relinquishment requirment on the fifth anniversary.

3.1 Geology

Prior to relinquishment in October 1990, no geological mapping had been completed by either CRA Exploration Pty. Ltd. or Aberfoyle Resources Ltd. within the Sticht Range area (Noonan, 1990). Mapping by McNeill (1987) and Corbett and Jackson (1987) identified Precambrian basement (pelite and quartzite) flanked by Cambrian Sticht Range Beds (SRB). The SRB include siliciclastic grey conglomerates and sandstones with minor interbedded carbonaceous phyllites. Basement rocks are frequently overlain by Pleistocene glacials.

3.2 Geophysics

A 1991 UTEM survey undertaken in the northern Lake Selina area of EL 5/85 Lake Margaret, detected a significant conductor off the eastern ends of reading lines. This conductive source was indicated to have a strike length of at least 1.2 km. (4000N to 5200N) and interpreted to lie 200 m. east of the boundary to EL 5/85, with a depth to top of 200-250 metres on line 5000N (Richardson, 1991).

UTEM data was not extensive enough to satisfactorily define the nature and location of the conductive source.

4. 1992 Exploration

4.1 Geophysics

The 1992 ground follow up EM survey was designed to investigate the posibility that the Sticht Range conductor lies within Cambrian volcanics. In view of evidence for common place thrusting in western Tasmania, the possibility that Precambrian basement rocks and SRB have been thrust over mineralised Cambrian volcanics indicated VMS potential.

To further investigate the nature and location of the Sticht Range conductor, a single loop ground EM survey was undertaken.

Survey Specifications

A 600 * 800 km. loop with front edge at 7000E was used to energise the ground. Vertical and horizontal data was collected on four reading lines from 4600N to 5200N (refer Plate SR1) between 7000E and 7700E at 25 metre station spacings. Measurements were taken using a Zonge GDP-16 reciever operating at a base frequency of 32 HZ. Vertical and horizontal line profiles are presented in Appendix One

Conclusions

A total of 5 km griding and 2.8 line km of EM data was recorded on four lines from 4600N to 5200N.

EM data indicated the Sticht Range conductor to be the result of outcropping carbonaceous phyllites within the Cambrian SRB.

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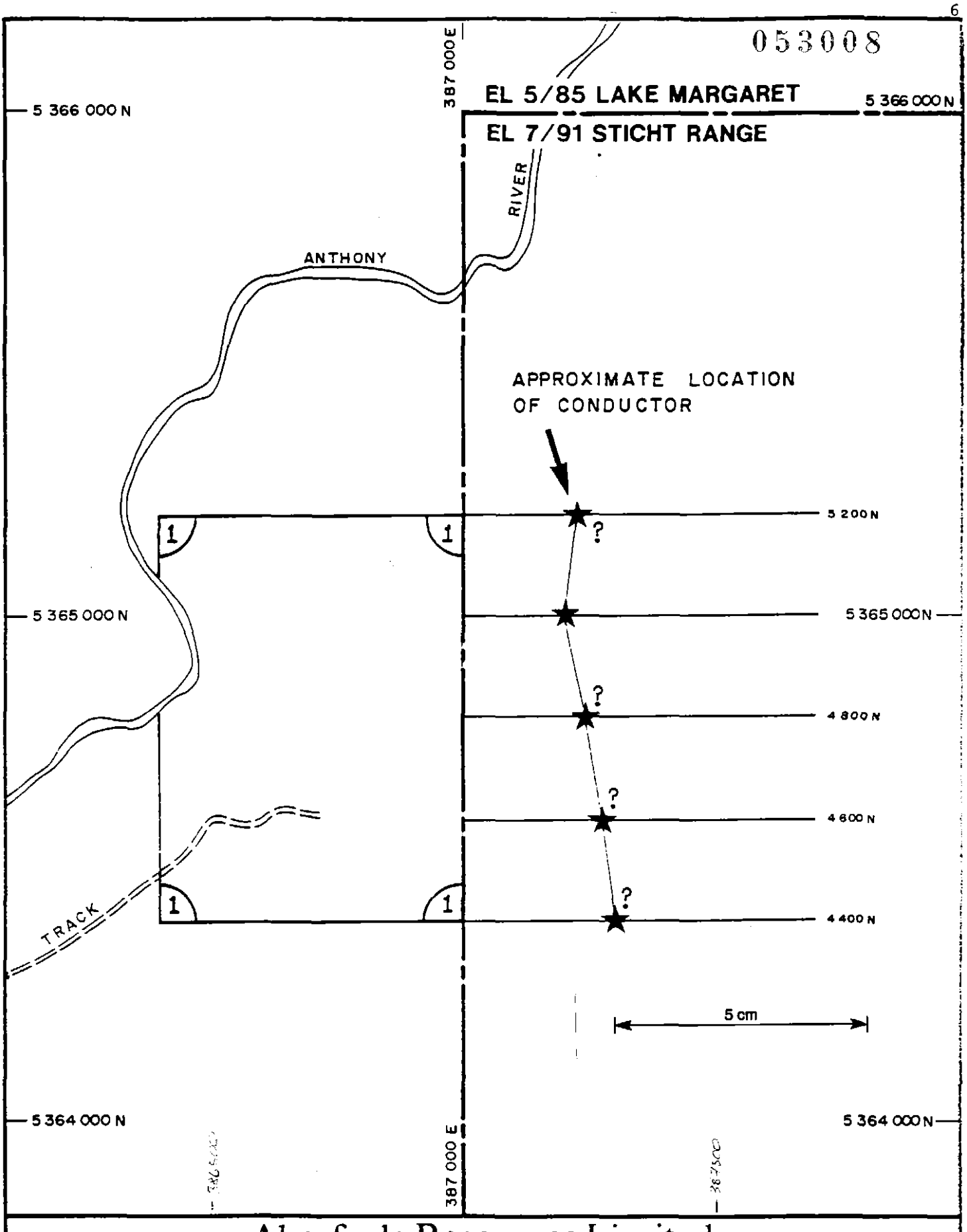


Aberfoyle Resources Limited

EXPLORATION DIVISION

REVISIONS			
Init.	Date	Init.	Date

WESTERN TASMANIA

STICHT RANGE EL 7/91

Ground EM Follow Up

Compiled :	R. A. S.
Drawn :	J.M.S.
Traced :	
Checked :	R.A.S.
Location Code :	
Scale :	1 : 10 000
Date :	MARCH 1992
Plate No. :	S R 1

6. REFERENCES

Corbett, K.D. and Jackson, J.C., 1987. Geology of the Tyndall Range area. Map 5, Mount Read Volcanics Project. Department of Mines, Tasmania.

McNeill, A.W., 1987. Geology of the Mount Murchison Area. Map 4, Mount Read Volcanics Project. Department of Mines, Tasmania.

Noonan, D.J., 1990. EL 5/85 Lake Margaret, Report on exploration in areas to be relinquished. Report to the Department of Mines, Tasmania. Aberfoyle Resources Ltd., Unpub. Report.

Richardson, S.M., 1991. EL 5/85 Lake Margaret, Technical Progress Report for the Period October 1990 - September 1991. Report to the Department of Mines, Tasmania. Aberfoyle Resources Ltd., Unpub. Report.

APPENDIX I

ABERFOYLE 053011 MEMORANDUM

Date	22 July 1992	Ref	JS:AAI
To	D B Wallace R Sharpe	From	J Silic
At	Burnie	At	Hawthorn
Copies to	SMR	Keep	

Subject Stich Range EM

The survey confirmed the existence of a substantial conductor as predicted by the previous interpretation.

However, close analysis of the data suggests that the conductor is due to a broad near surface conductive source, and is most likely outlining a broad graphitic unit within the Stich Range beds.

In particular, it is noted that the sharp breaks in the vertical component data located at the peaks and the troughs of the crossover (eg Figure 3, 4 and 1) are marking the edges of this unit.

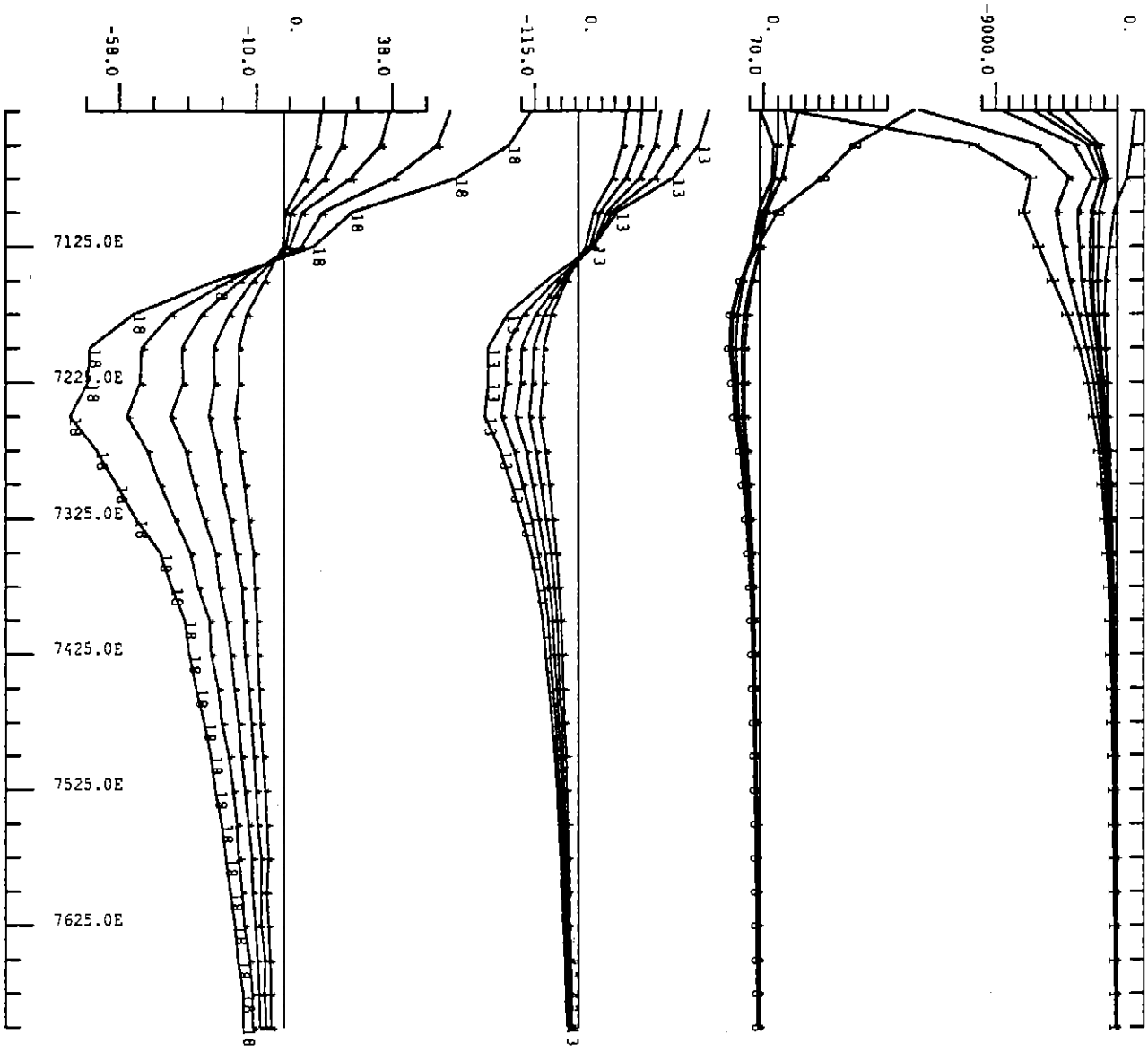
Data from the reconnaissance line from 1991 (Figure 2), appears to be free from these effects.

Quantitative analysis of this data set showed that this is not the case, with an obvious edge effect corresponding to the trough of the crossover.

No further work is recommended for this prospect.

J SILIC

053012

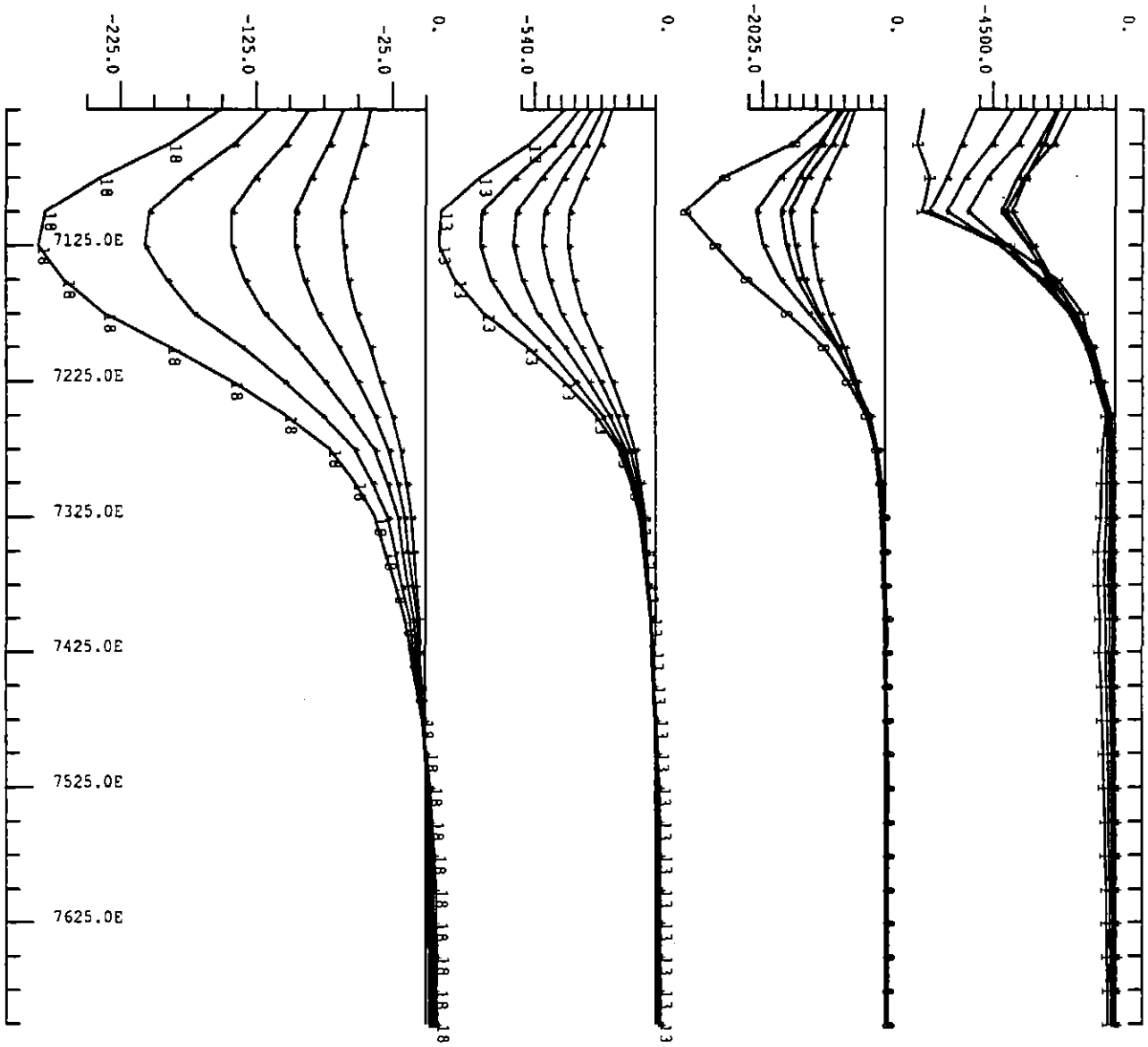


STICHT RANGE
LOOP 1
LINE 4600 NE
VERTICAL COMPONENT
ZONGE GDP_16 32HZ
SURVEY DATE APRIL 1992
Aberfoyle Resources Limited
Horiz scale 1: 5000.0 Plot number : 7

5 cm

FIG 1

053013

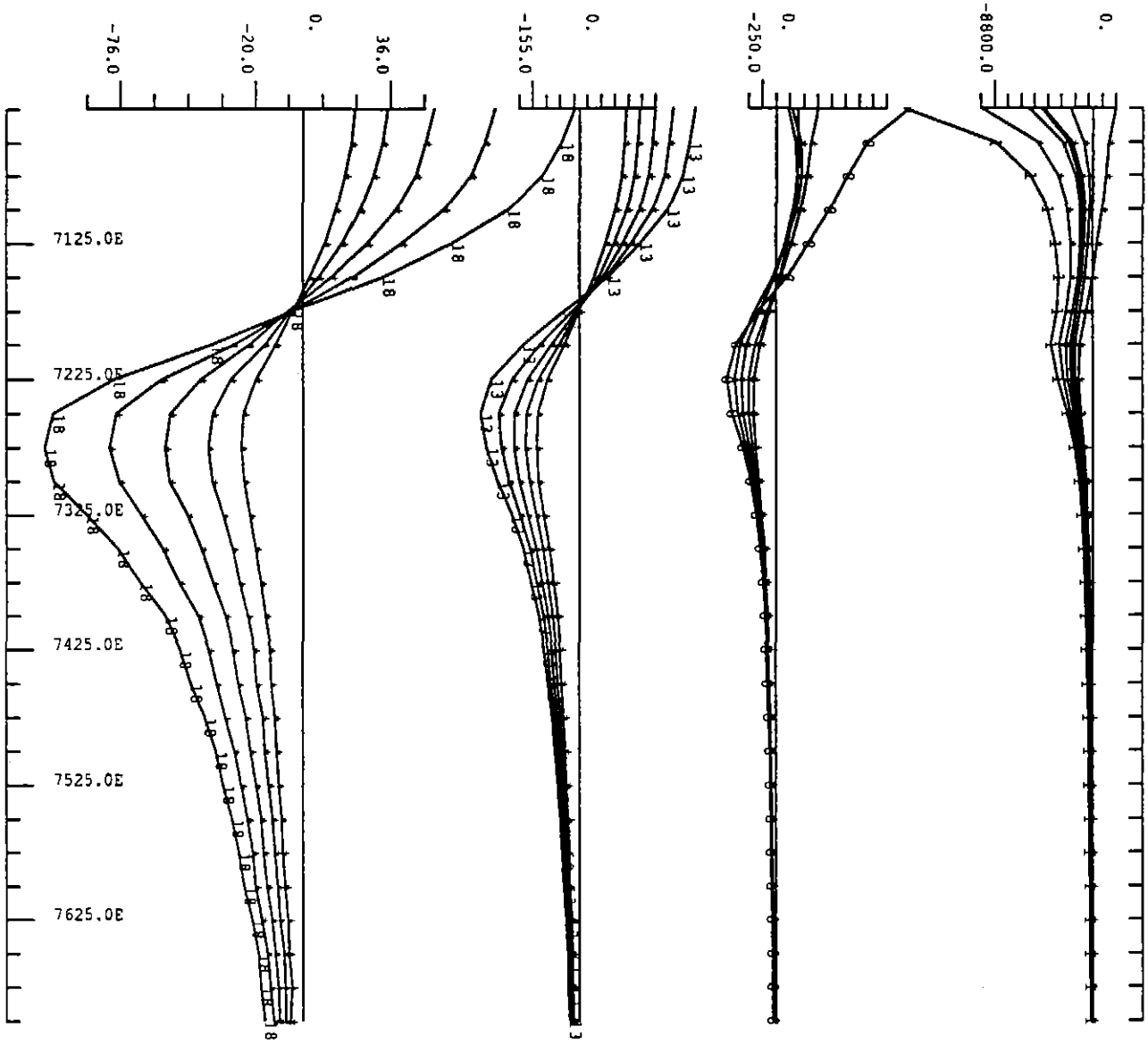


STICHT RANGE
LOOP 1
LINE 4600 N
HORIZONTAL COMPONENT
ZONGE GDP_16 32HZ
SURVEY DATE APRIL 1992
Aberfoyle Resources Limited
Horiz scale 1: 5000.0 Plot number : 17

5 cm

FIG 1a

053014

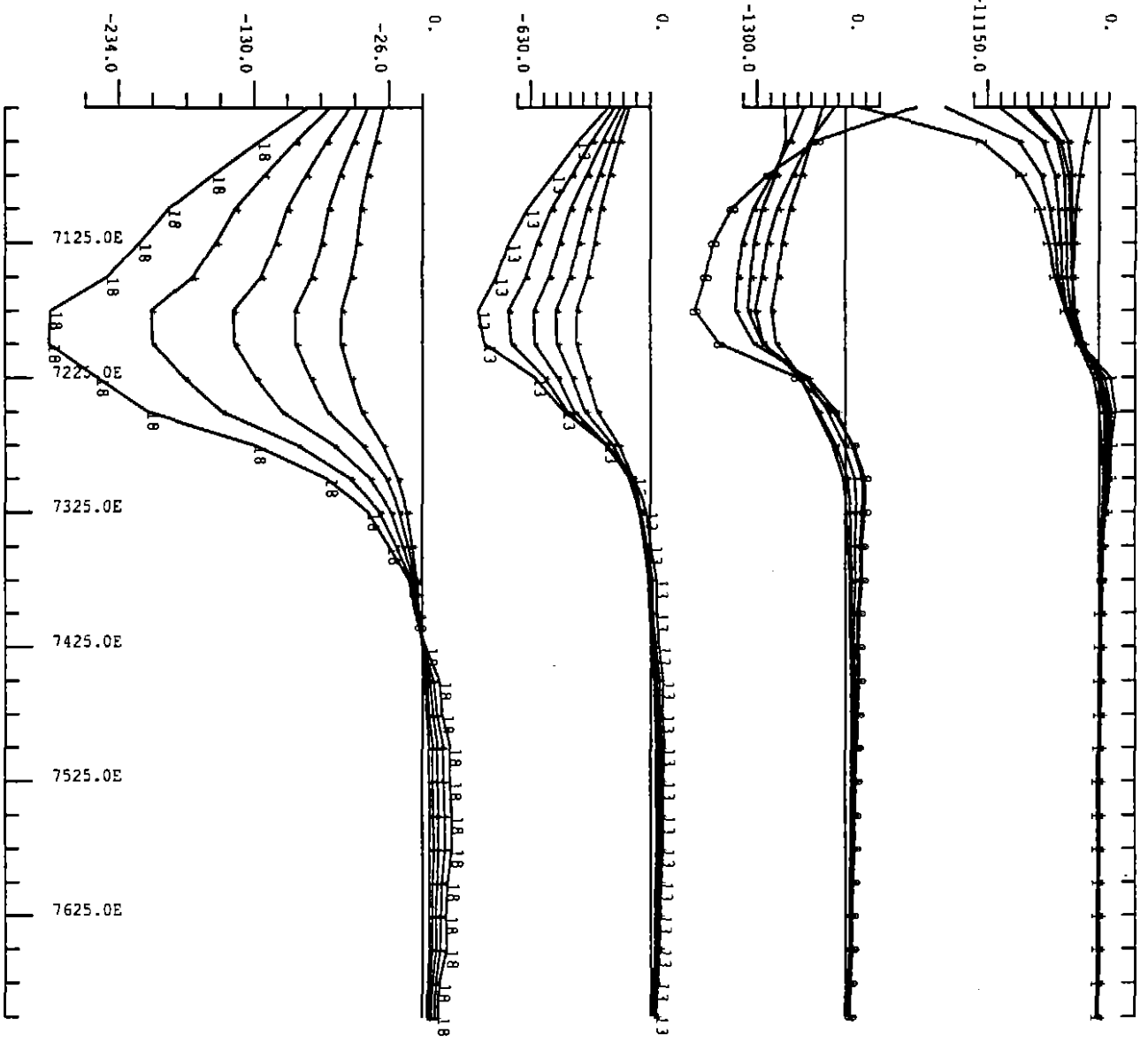


STICHT RANGE
LOOP 1
LINE 4800 N
VERTICAL COMPONENT
ZONGE GDP_16 32H2
SURVEY DATE APRIL 1992
Aberfoyle Resources Limited
Horiz scale 1: 5000.0 Plot number : 8

5 cm

FIG 2

053015

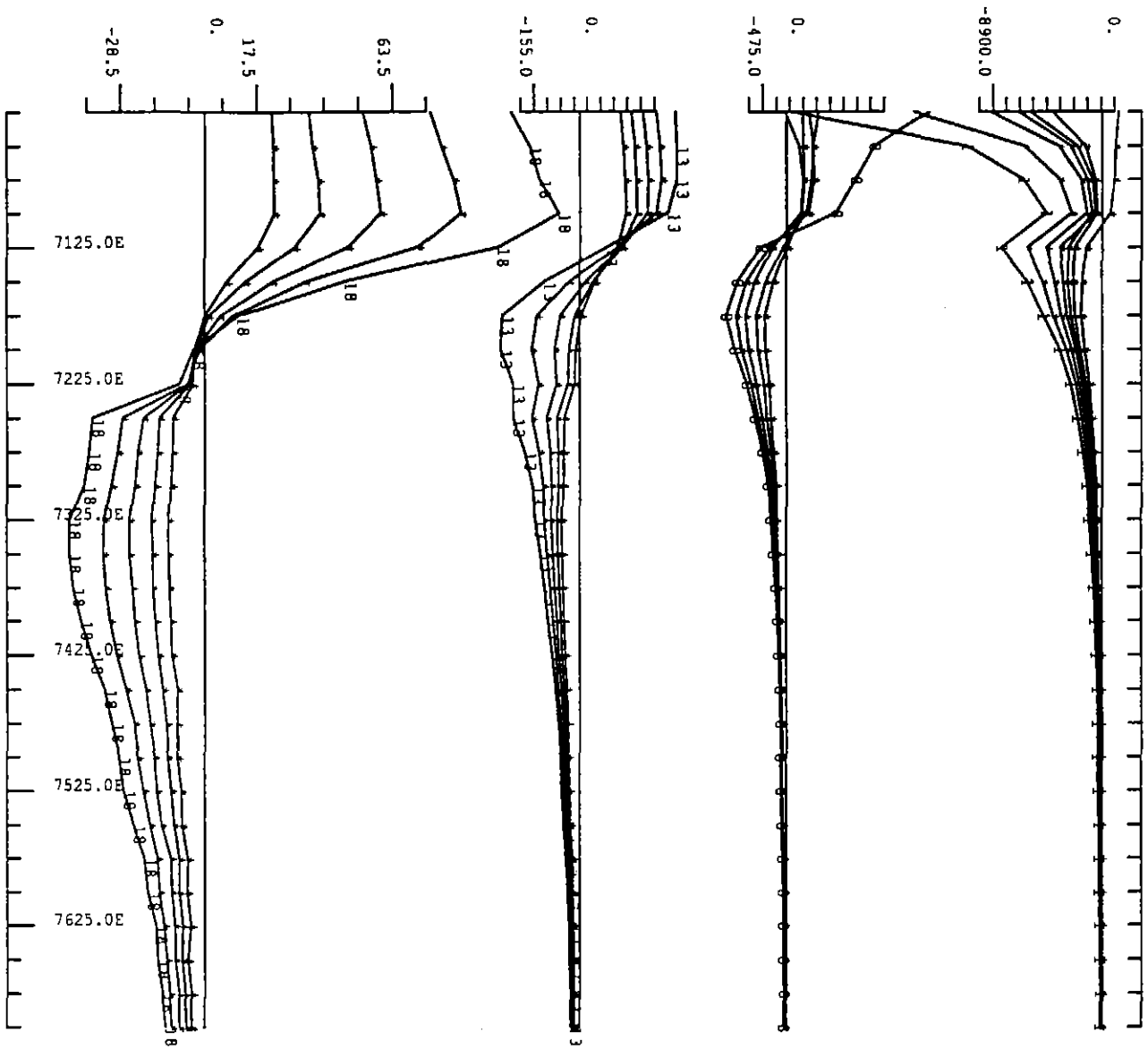


STICHT RANGE
LOOP 1
LINE 4800 N
HORIZONTAL COMPONENT
ZONGE GDP_16 32HZ
SURVEY DATE APRIL 1992
Aberfoyle Resources Limited
Horiz scale 1: 5000.0 Plot number : 13

5 cm

FIG 2a

053016

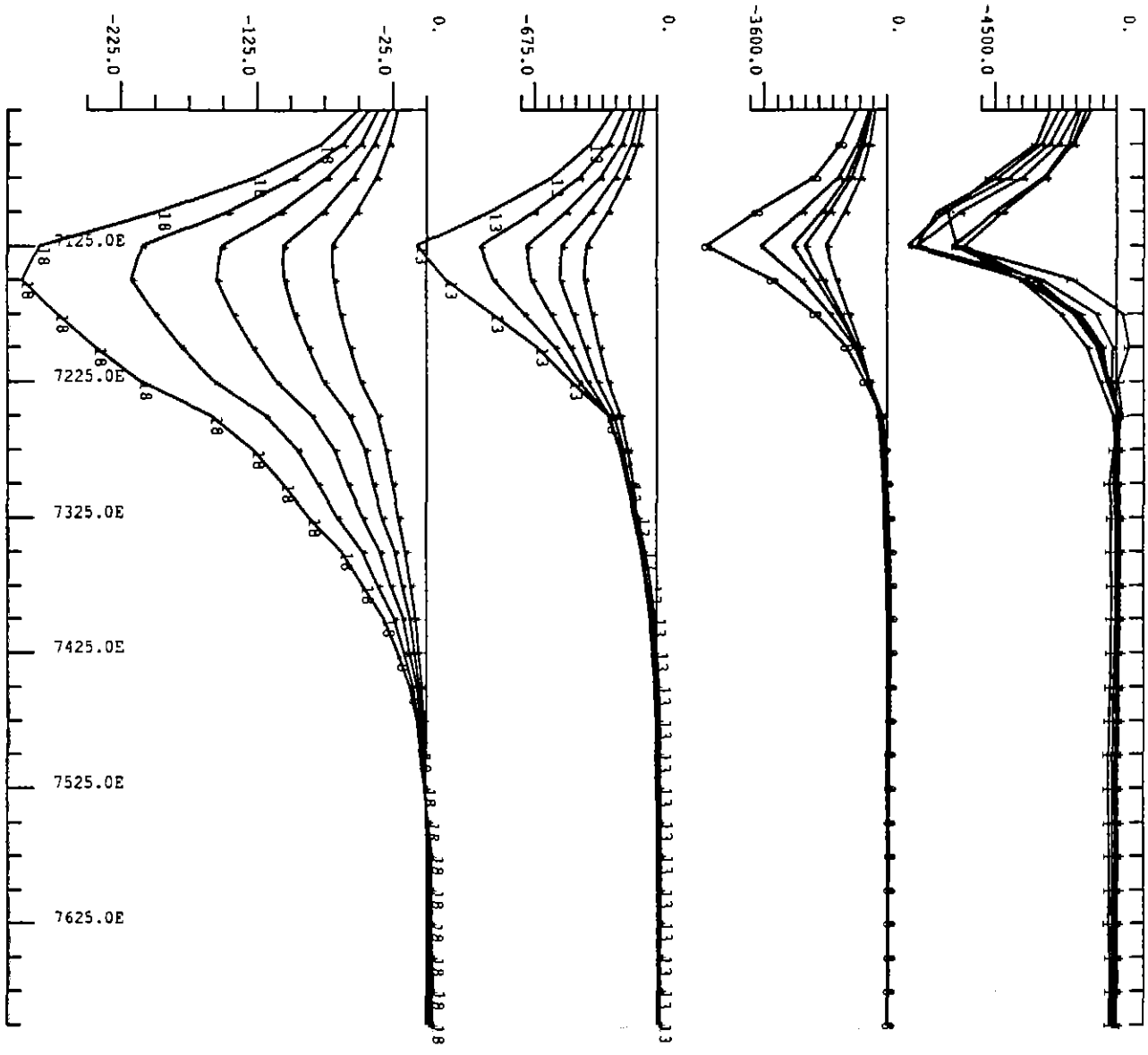


STICHT RANGE
LOOP 1
LINE 5000 N
VERTICAL COMPONENT
ZONGE GDP_16 32HZ
SURVEY DATE APRIL 1992
Aberfoyle Resources Limited
Horiz scale 1: 5000.0 Plot number : 9

5 cm

FIG 3

053017

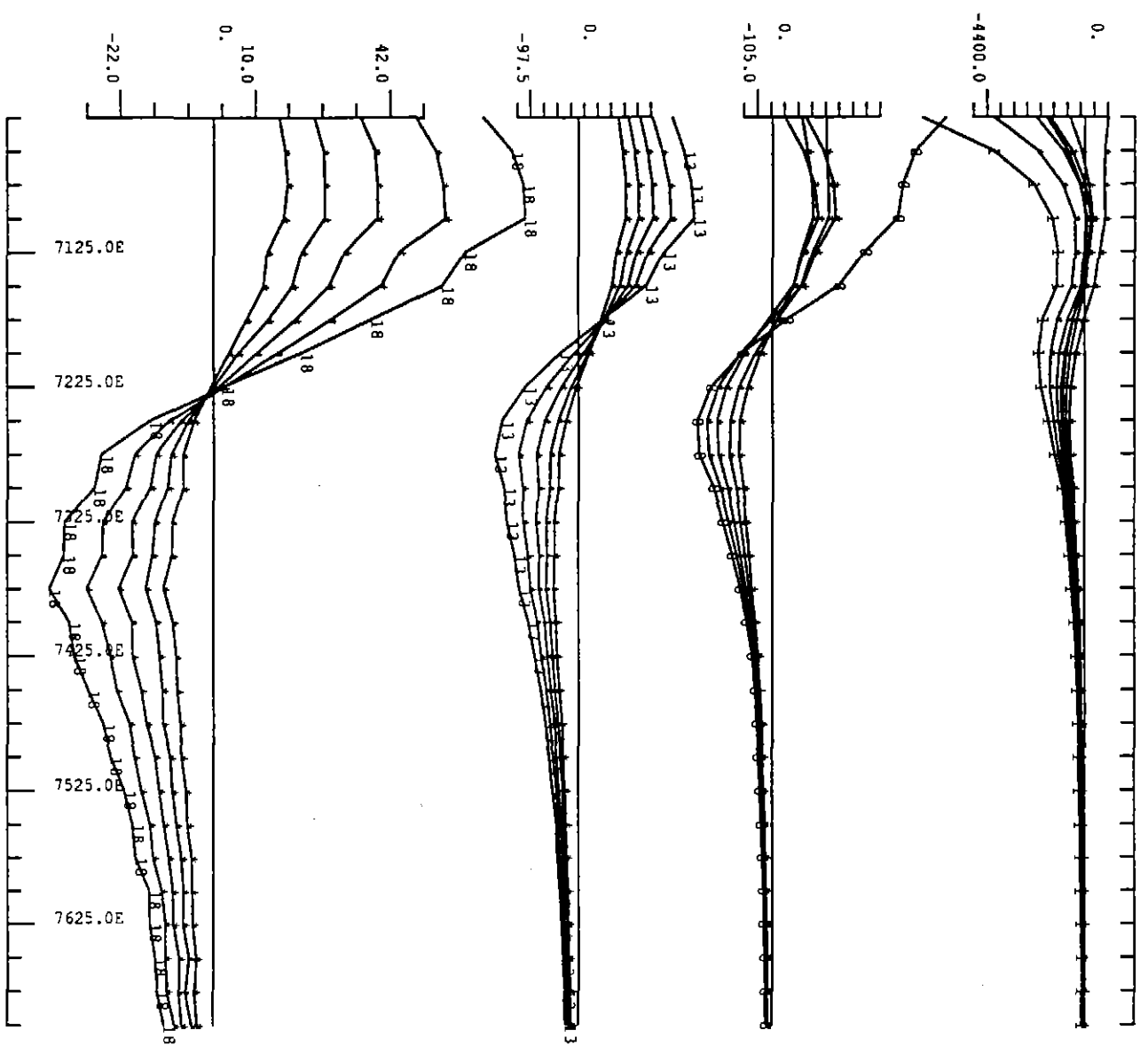


STICHT RANGE
LOOP 1
LINE 5000 N
HORIZONTAL COMPONENT
ZONGE GDP_16 32HZ
SURVEY DATE APRIL 1992
Aberfoyle Resources Limited
Horiz scale 1: 5000.0 Plot number : 12

5 cm

FIG 3a

053018

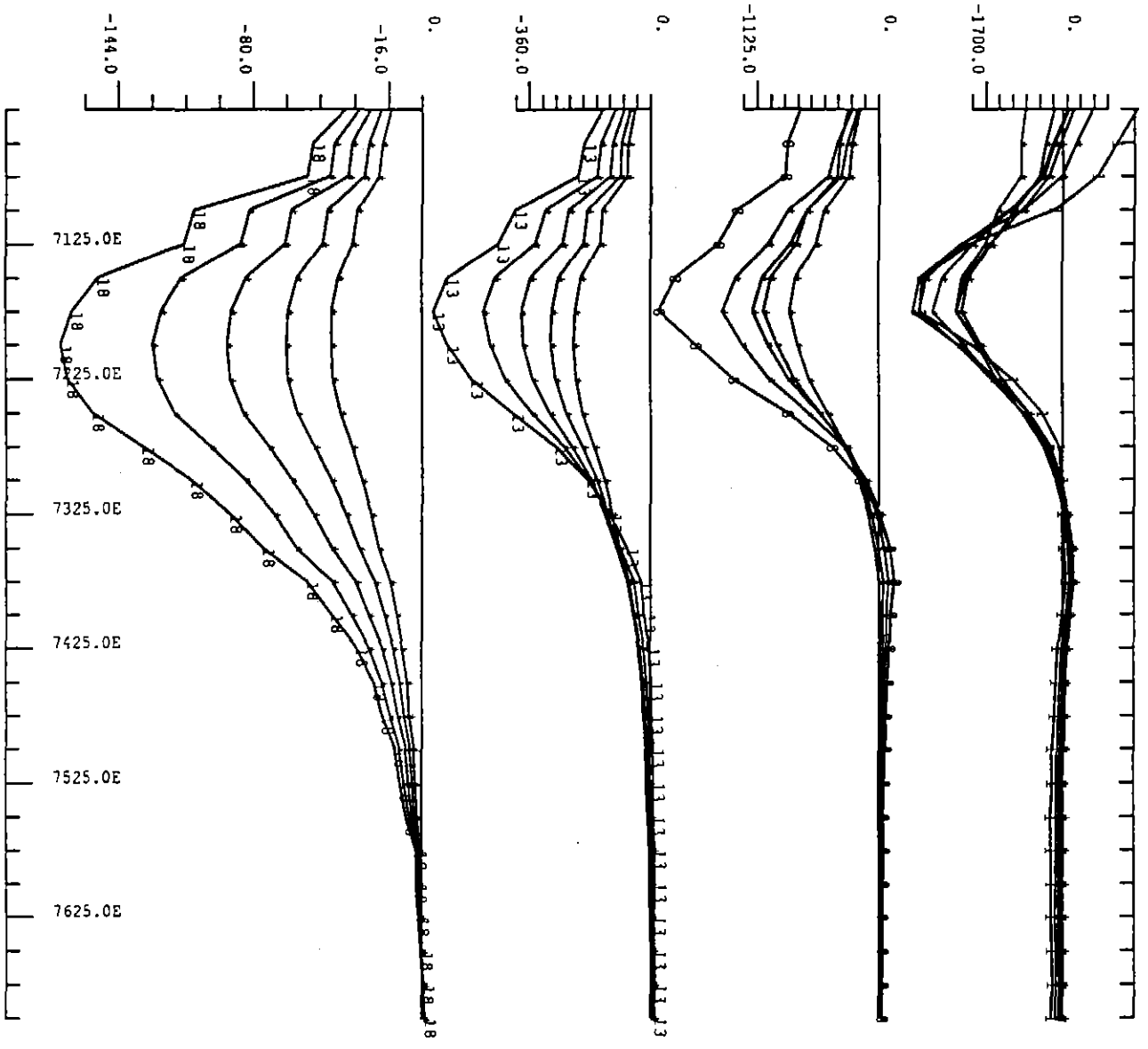


STICHT RANGE
LOOP 1
LINE 5200 N
VERTICAL COMPONENT
ZONGE GDP_16 32HZ
SURVEY DATE APRIL 1992
Aberfoyle Resources Limited
Horiz scale 1: 5000.0 Plot number : 10

5 cm

FIG 4

053019



STICHT RANGE
LOOP 1
LINE 5200 N
HORIZONTAL COMPONENT
ZONGE GDP_16 32HZ
SURVEY DATE APRIL 1992
Aberfoyle Resources Limited
Horiz scale 1: 5000.0 Plot number : 11

5 cm

FIG 4a