

Open File Envelope

NUMBER 8846

EL 1885 UNDUCURRA HILL

**ANNUAL AND FINAL REPORTS FOR THE PERIOD
1/11/93 TO 22/5/95**

Submitted by

**Stockdale Prospecting Ltd
1995**

© 15/11/95

**MINES AND ENERGY
SOUTH AUSTRALIA**



This report was supplied as part of the requirement to hold a mineral or petroleum exploration tenement in the State of South Australia.

MESA accepts no responsibility for statements made, or conclusions drawn, in the report or for the quality of text or drawings. All rights reserved under the copyright. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without the written permission of Mines and Energy South Australia, PO Box 151, Eastwood, SA 5063

Enquiries: Records Management

Mines and Energy South Australia
191 Greenhill Road, Parkside 5063

Telephone: (08) 274 7687
Facsimile: (08) 272 7597

ENVELOPE 8846

TENEMENT: EL 1885 Unducurra Hill

TENEMENT HOLDER: Stockdale Prospecting Ltd

CONTENTS

REPORTS:	Sumpton, J.D.S., 1995. Annual report EL 1885. [Note: Colour microfilm images of Pgs 5-15 follow the text on the microfiche].	MESA NO. 8846 R 1 Pgs 3-15
ANNEXURE 1:	Marx, M.R., 1995. Final technical report - EL 1885 - Unducurra Hill (Stockdale Prospecting Ltd and Normandy Exploration Ltd Joint Venture). Helimag contours. [Note: Pgs 19-29 correspond to Pgs 5-15 so have not been microfilmed in colour].	8846 R 2 Pgs 16-17 Pgs 18-29
ANNEXURE 2:	Drill logs (ABM 36 A-D, ABM 20 A-B, ABM 43 A-D).	Pgs 30-41
ANNEXURE 3:	Mineralogical report.	Pgs 42-44

END OF CONTENTS

SEPARATELY HELD DATA

DRILLHOLE SAMPLES (held by MESA Core Library):

For up to date information on available drillhole samples, contact the Supervisor, MESA Core Library and quote the Exploration Licence and drillhole number/s you wish to query.
(10 percussion holes, total 187 m).

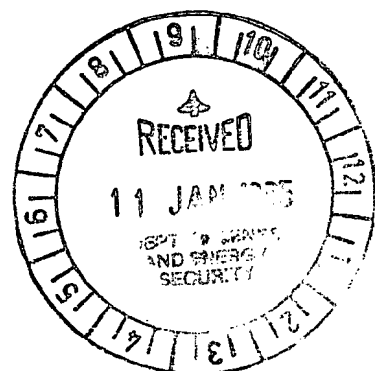
00003

ANNUAL REPORT

EXPLORATION LICENCE NO. 1885

J D S SUMPTON

JANUARY 1995



Mines & Energy SA

R95/00028



STOCKDALE PROSPECTING LIMITED**EXPLORATION LICENCE 1885: UNDUCURRA HILL****REPORT FOR THE SIX MONTHS ENDING 31ST OCTOBER 1994**

INTRODUCTION

Exploration Licence 1885 is located on the Abminga 1:250,000 map sheet in the far north of South Australia. The licence was taken out to cover a number of aeromagnetic anomalies resolved from a portion of the airborne geophysical data made available through the South Australian Exploration Initiative. These anomalies may be attributable to diamondiferous kimberlite pipes.

GEOLOGICAL SETTING

The Unducurra Hill area lies within the Pedirka Basin, to the east of the margin of the Musgrave Block, and to the north of the Gawler Craton. Sediments of Cretaceous age and younger outcrop within the licence boundaries.

WORK TO DATE

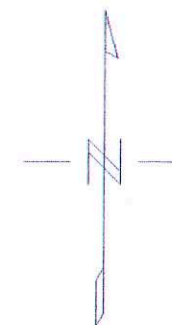
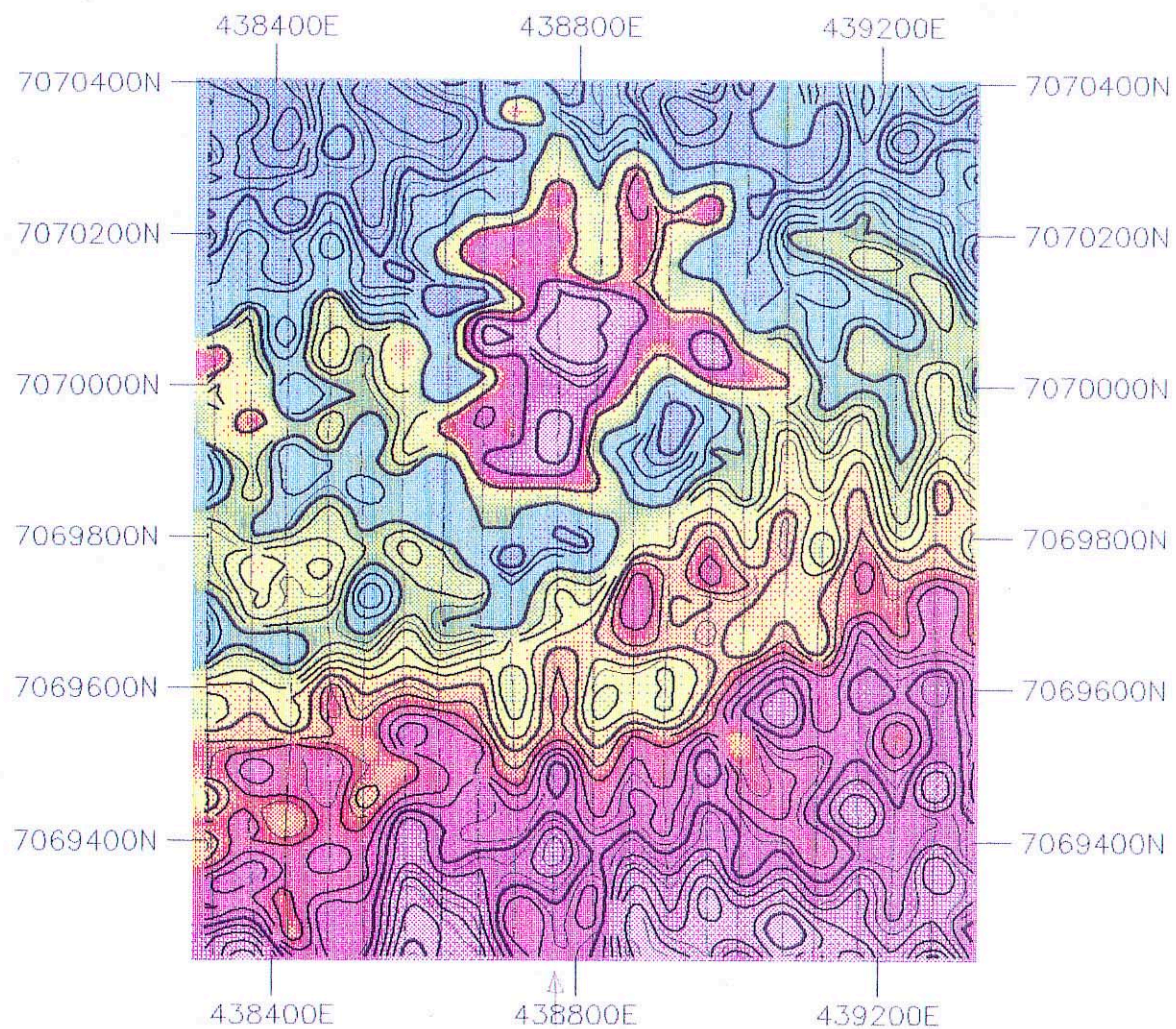
Eleven of the magnetic anomalies identified from the SAEI airborne survey were followed up with detailed helicopter magnetics. A helium vapour magnetometer in a towed bird was used for this work. Line spacing was 50m and the sensor height was 10m.

Contour plans of the helimag data from each anomaly are attached.

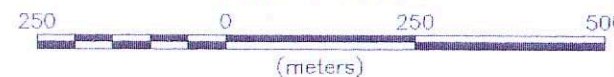
WORK PLANNED FOR THE NEXT PERIOD

It is planned to drill several of the more favourable targets identified from the geophysical data. This work will be reported on by Normandy Exploration, Stockdale Prospecting's Joint Venture partner in this project.

J.D.H. SUMPTON
CHIEF GEOPHYSICIST
MELBOURNE



Scale 1:10000



STOCKDALE PROSPECTING LTD

ABM18

Helimag Total Field Magnetics

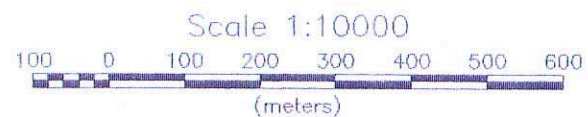
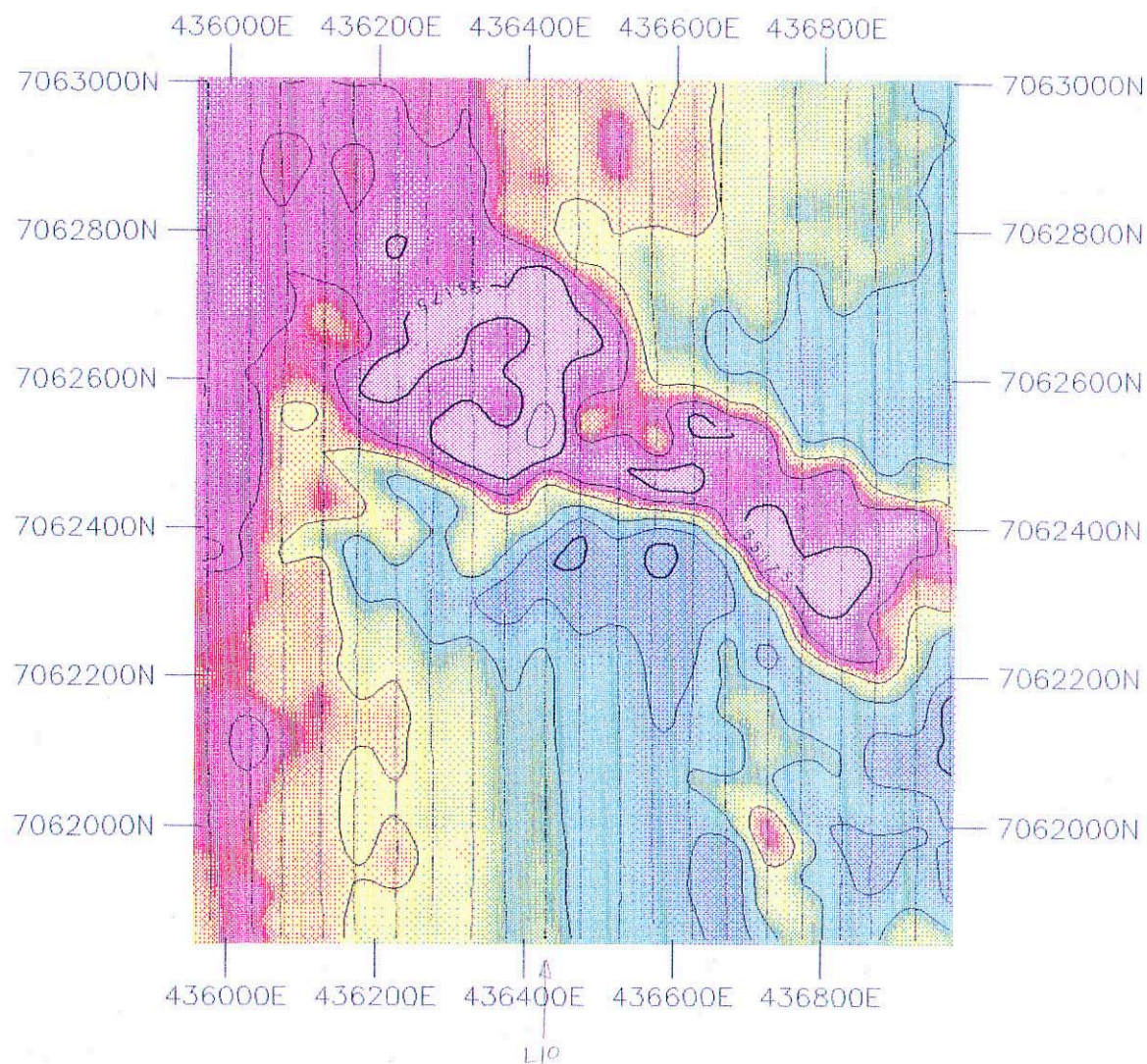
Sensor Height = 10m

Contour Interval = 0.5 nT

Geo Instruments & Helimuster

Abminga (G53-10) 1:250 000

00000



STOCKDALE PROSPECTING LTD

ABM19

Helimag Total Field Magnetics

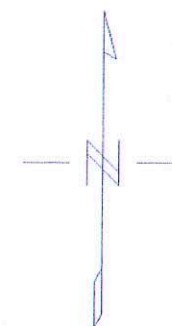
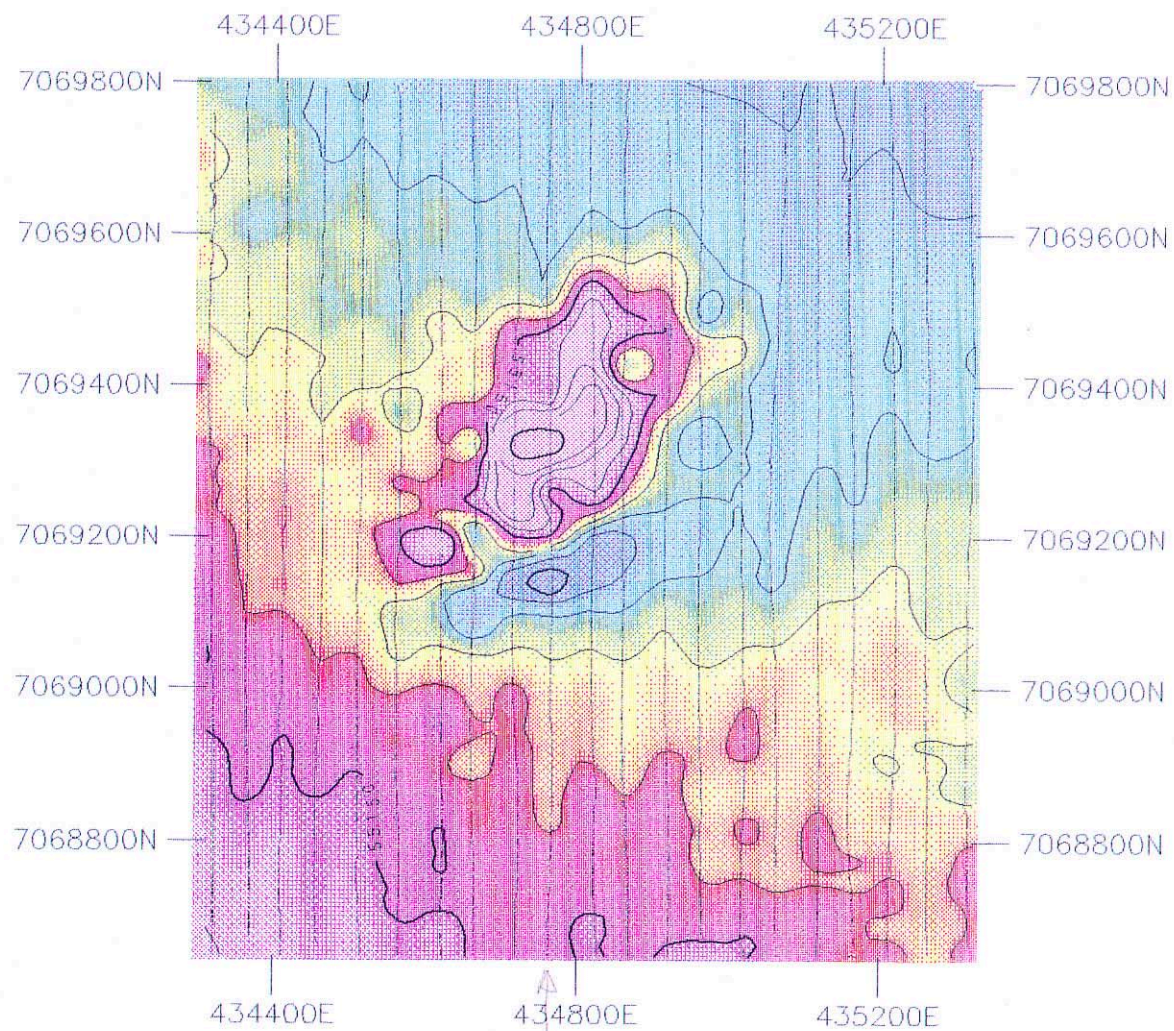
Sensor Height = 10m

Contour Interval = 5 nT

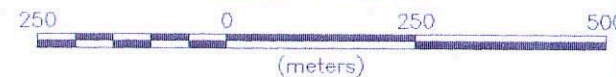
Geo Instruments & Helimuster

Abminga (G53-10) 1:250 000

00007



Scale 1:10000



STOCKDALE PROSPECTING LTD

ABM20

Helimag Total Field Magnetics

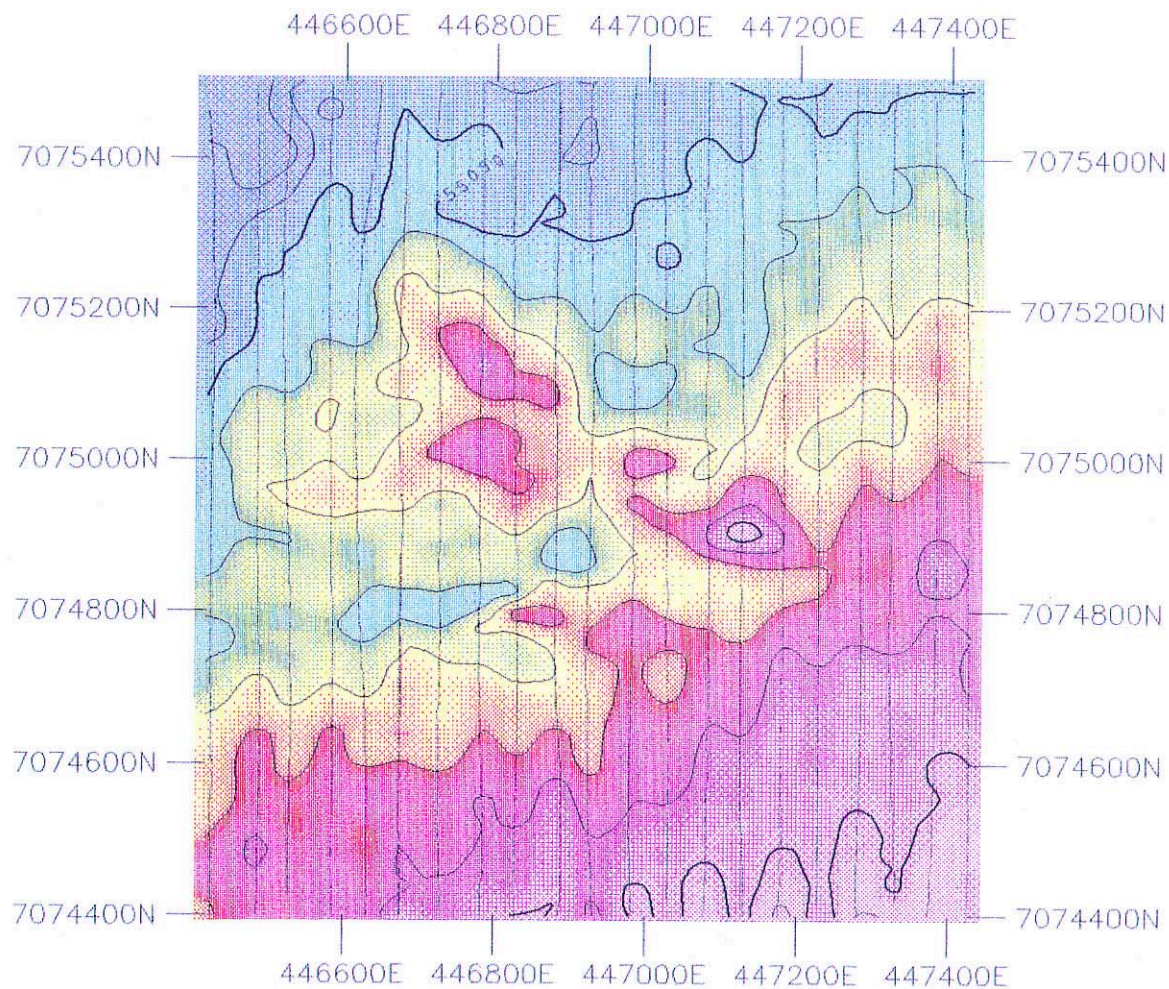
Sensor Height = 10m

Contour Interval = 5 nT

Geo Instruments & Helimuster

Abminga (G53-10) 1:250 000

80008



Scale 1:10000



STOCKDALE PROSPECTING LTD

ABM34

Helimag Total Field Magnetics

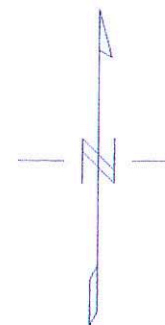
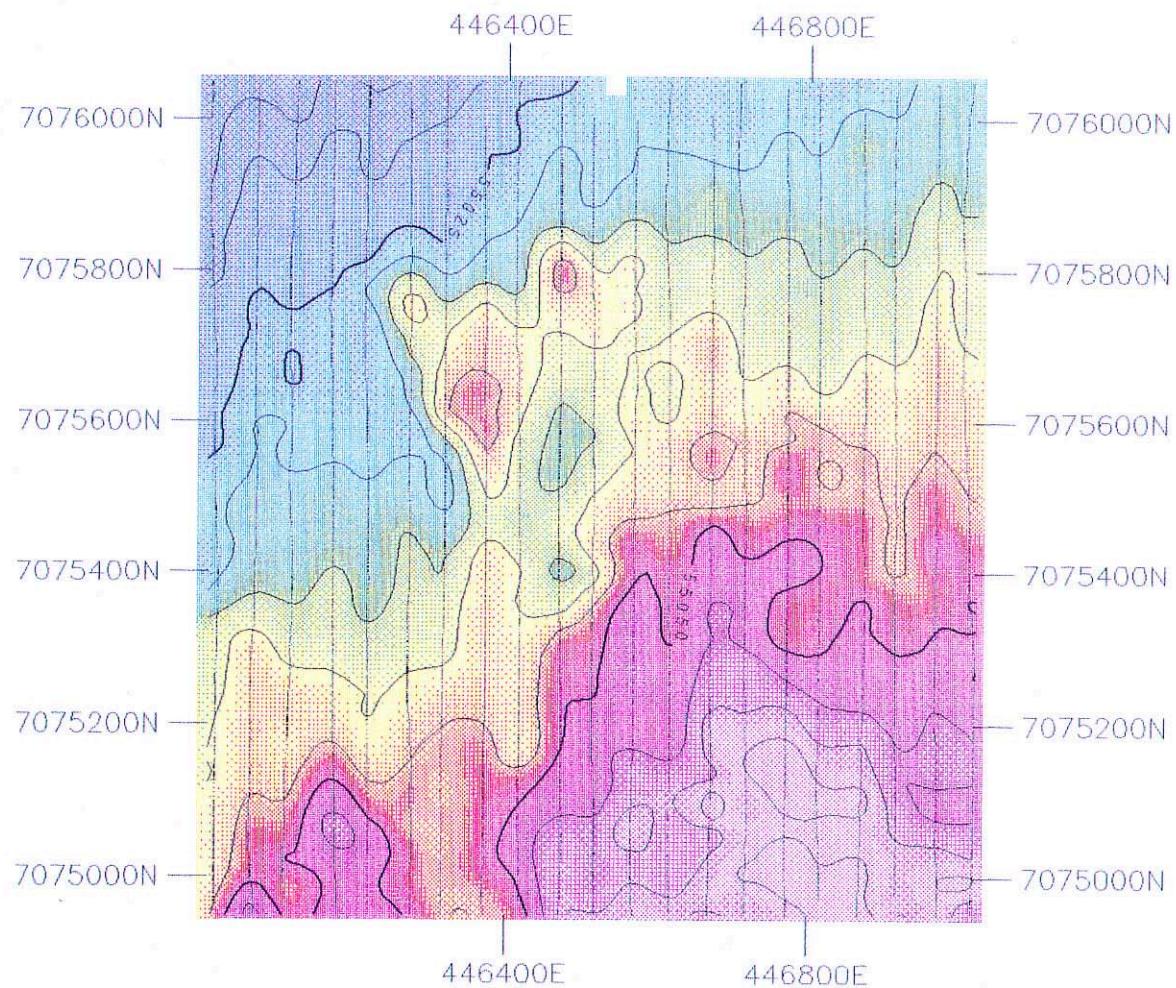
Sensor Height = 10m

Contour Interval = 5 nT

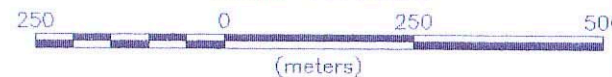
Geo Instruments & Helimuster

Abminga (G53-10) 1:250 000

60000



Scale 1:10000



STOCKDALE PROSPECTING LTD

ABM35

Helimag Total Field Magnetics

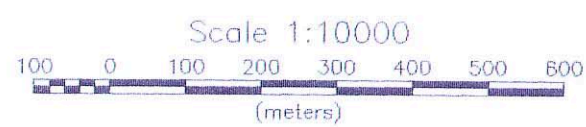
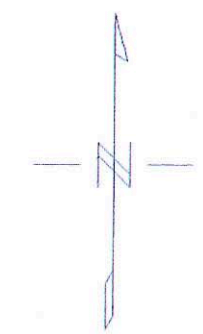
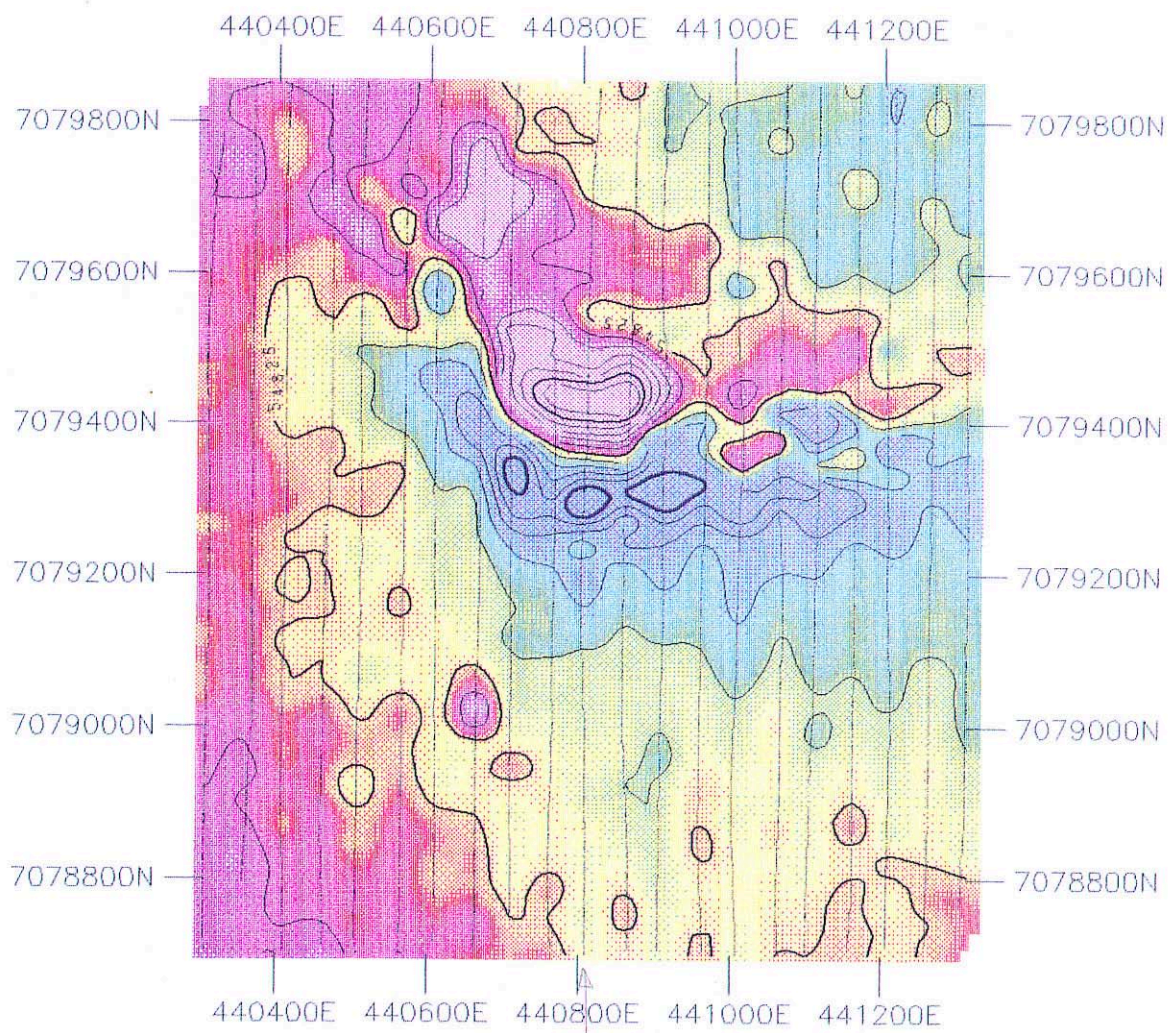
Sensor Height = 10m

Contour Interval = 5 nT

Geo Instruments & Helimuster

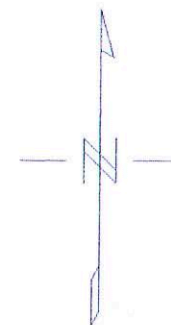
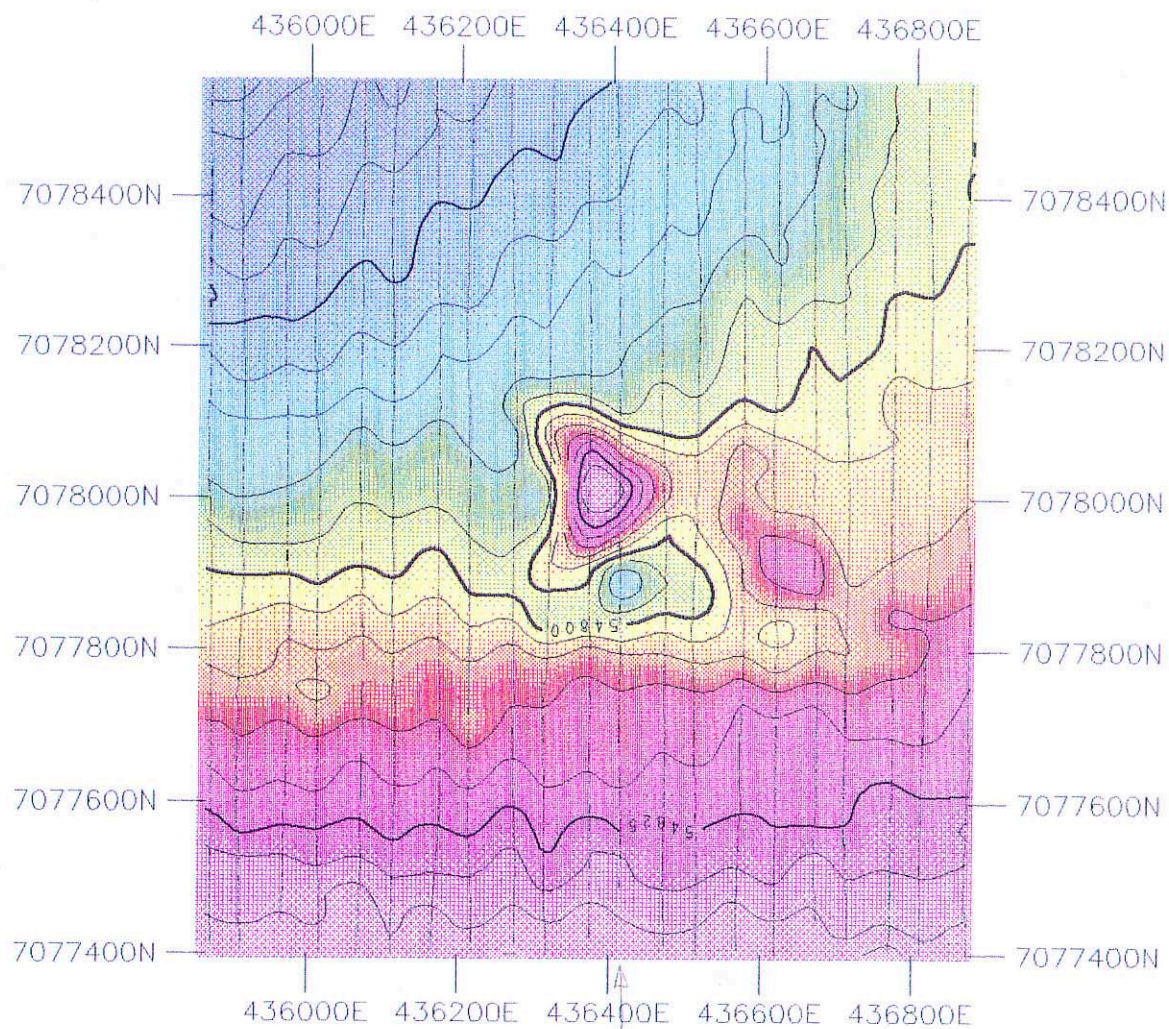
Abminga (G53-10) 1:250 000

00010



STOCKDALE PROSPECTING LTD
ABM36
Helimag Total Field Magnetics
Sensor Height = 10m Contour Interval = 5 nT Geo Instruments & Helimuster
Abminga (G53-10) 1:250 000

170011



Scale 1:10000

100 0 100 200 300 400 500 600

(meters)

STOCKDALE PROSPECTING LTD

ABM41

Helimag Total Field Magnetics

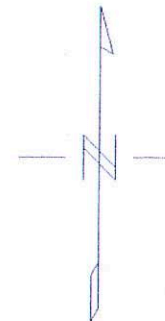
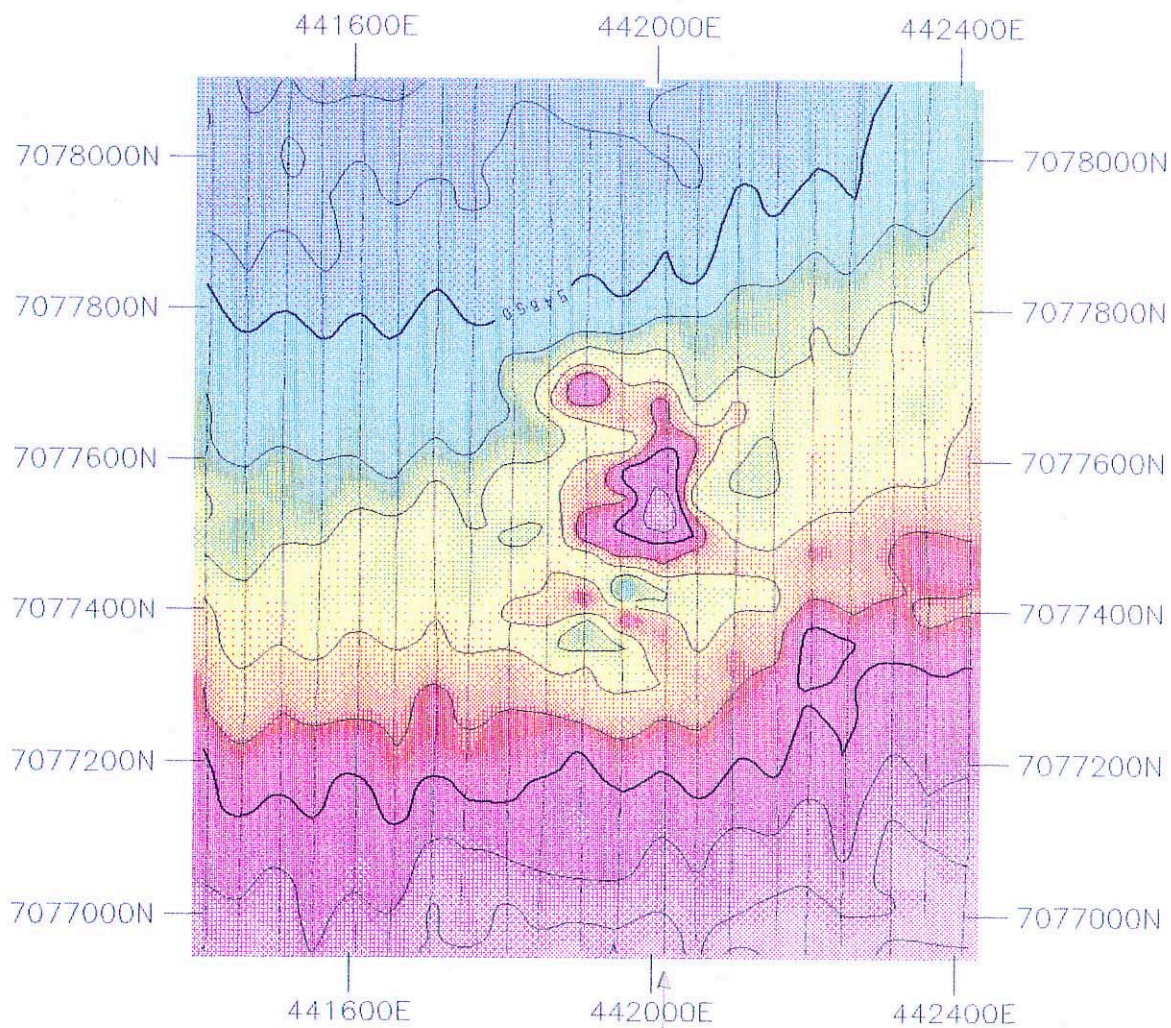
Sensor Height = 10m

Contour Interval = 5 nT

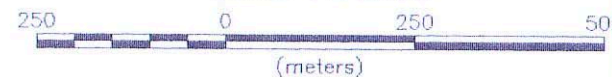
Geo Instruments & Helimuster

Abminga (G53-10) 1:250 000

00012



Scale 1:10000



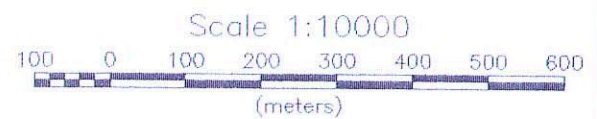
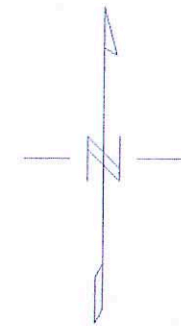
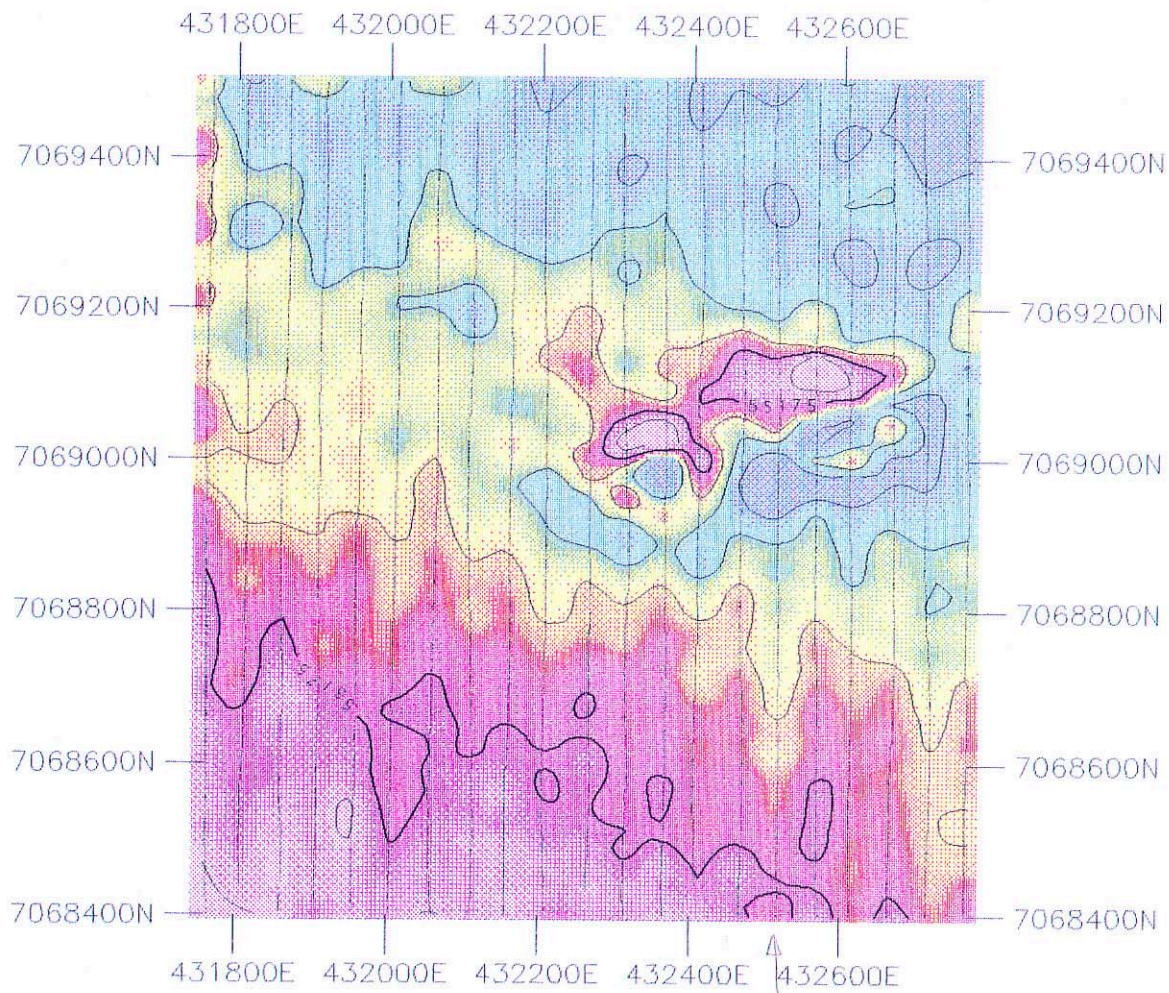
STOCKDALE PROSPECTING LTD

ABM42
Helimag Total Field Magnetics

Sensor Height = 10m
Contour Interval = 5 nT
Geo Instruments & Helimuster

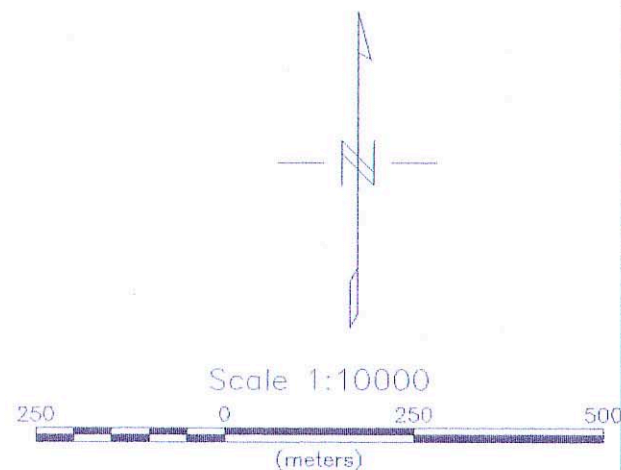
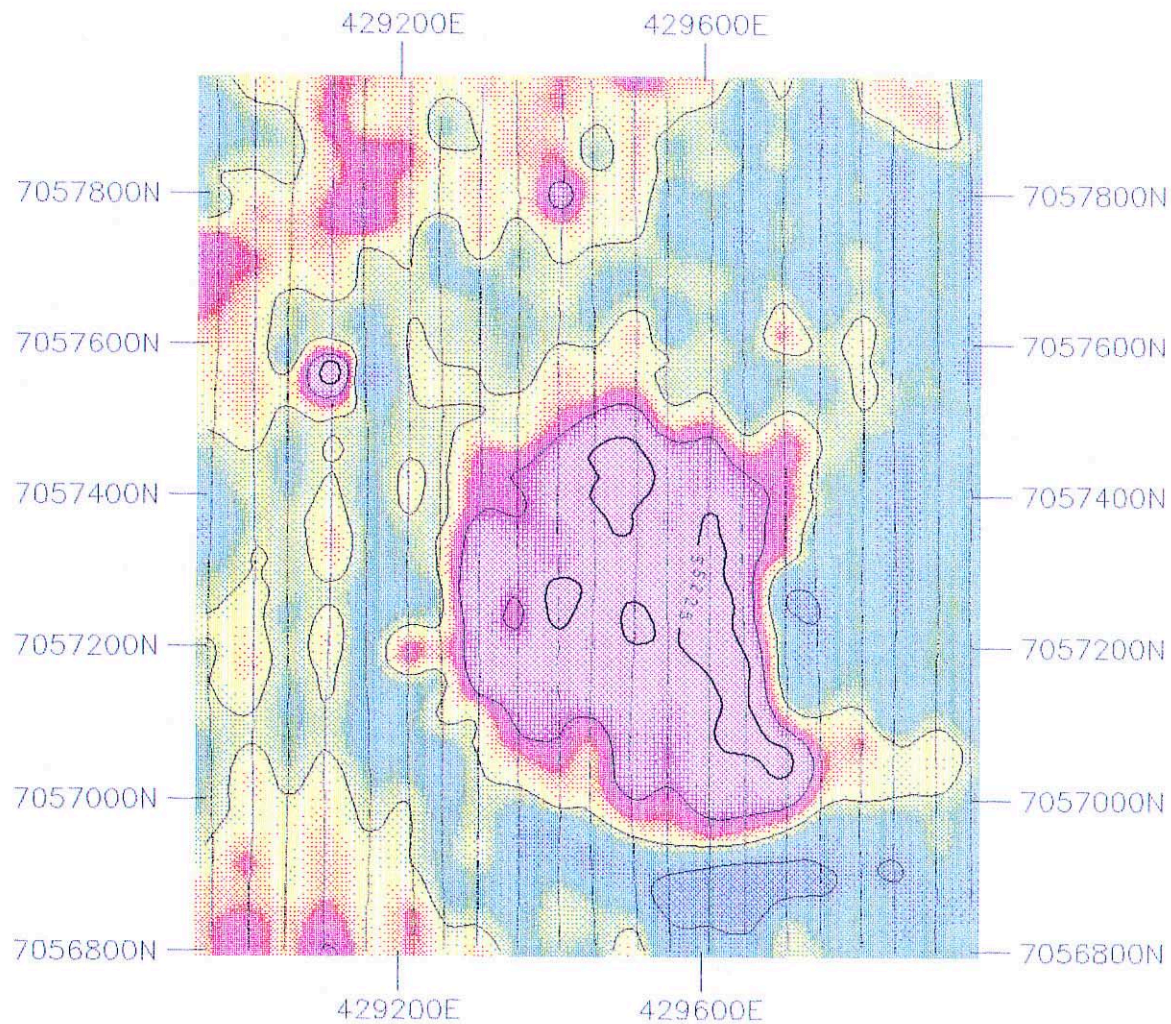
Abminga (G53-10) 1:250 000

00013



STOCKDALE PROSPECTING LTD
ABM43
Helimag Total Field Magnetics
Sensor Height = 10m Contour Interval = 5 nT Geo Instruments & Helimuster
Abminga (G53-10) 1:250 000

00014



STOCKDALE PROSPECTING LTD

ABM44

Helimag Total Field Magnetics

Sensor Height = 10m

Contour Interval = 5 nT

Geo Instruments & Helimuster

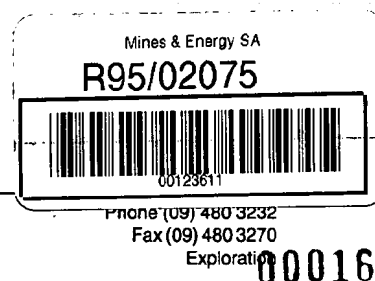
Abminga (G53-10) 1:250 000

00015



**NORMANDY EXPLORATION
LIMITED**

8 Kings Park Road, West Perth, Western Australia
PO Box 1143, West Perth, WA 6872



5 September 1995

The Director General
Department of Mines & Energy
P O Box 151
EASTWOOD SA 5063

Dear Sir

RE: FINAL TECHNICAL REPORT - EL 1885 - UNDUCURRA HILL
(Stockdale Prospecting Ltd - Normandy Exploration Ltd Joint Venture)

Introduction

Exploration Licence 1885 is located on the Abminga 1:250,000 sheet in the far north of South Australia. The licence covers a number of aeromagnetic anomalies generated by the airborne geophysical data from the South Australian Exploration Initiative.

The licence was granted on 1 November 1993 and a 12 months extension was approved on 31 October 1994.

No primary volcanic diamond sources were found and the licence was surrendered on 18 May 1995.

Geological Setting

The Unducurra Hill area lies within the Pedirka Basin, to the east of the margin of the Musgrave Block and to the north of the Gawler Craton. Sediments of Cretaceous age and younger cover most of this project area.

Magnetics

Eleven of the aeromagnetic anomalies identified from the SEE1 survey were followed up with detailed helicopter borne magnetics.

A helium vapour magnetometer in a towed bird was used for this survey. Line spacing was 50 metres and the sensor height was 10 metres.

Contour plans are attached of the helimag data for each anomaly ABM17-20, ABM34-36, ABM41-44. (annexure 1)

Drilling Programme

Three of these anomalies were selected for the RAB percussion drilling programme viz ABM20, ABM36 and ABM43. Drill hole locations are marked on the magnetic

contour plans (annexure 1) and their co-ordinates recorded on the drill logs (annexure 2).

Prior to the commencement of this work the ethnographic site clearance was undertaken through Mr A Ahchee, the chairman of the Irrwanyere Aboriginal Corporation. All three targets were cleared.

A Jacro 350 percussion drill from Jack Schubert Diamond Drilling Services was contracted for this job.

Computer modelling gave target depths of 40 to 50 metres for anomalies ABM20 and ABM36 with magnetic susceptibilities of 0.1 SIU ($10,000 \times 10^{-5}$). Target depth for anomaly ABM43 was 30 metres with susceptibilities of 0.01 SIU ($1,000 \times 10^{-5}$).

Two drill holes were sited on each anomaly.

Ground conditions were unfavourable causing loss of sample to the extent that only anomaly ABM20 was tested to the required depth. JJ

On all three anomalies a shallow magnetic layer exists at an average depth of 12 metres. This magnetic source is confined to the target only and hence is believed to be the sole cause of the magnetic dipole. (annexure 2)

The drilling on the Eringa pastoral property was completed in November 1994.

No kimberlitic indicator minerals were recovered from the 18 drill samples submitted to the Stockdale Prospecting Ltd laboratories (annexure 3).

Conclusion

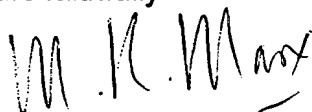
The magnetic anomalies are interpreted as being due to magnetic accumulations in valley-fill sediments of Cainozoic age resting on a Cretaceous land surface.

Exploration Licence 1885 is unlikely to have any economic diamond potential and was surrendered on 18 May 1995.

Expenditure

The expenditure is recorded as \$77,646.87. (annexure 4)

Yours faithfully



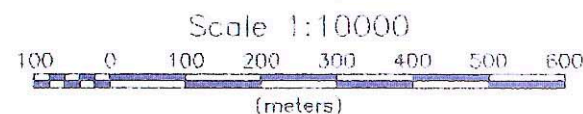
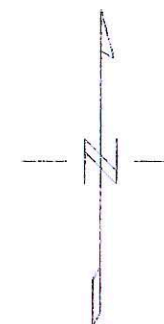
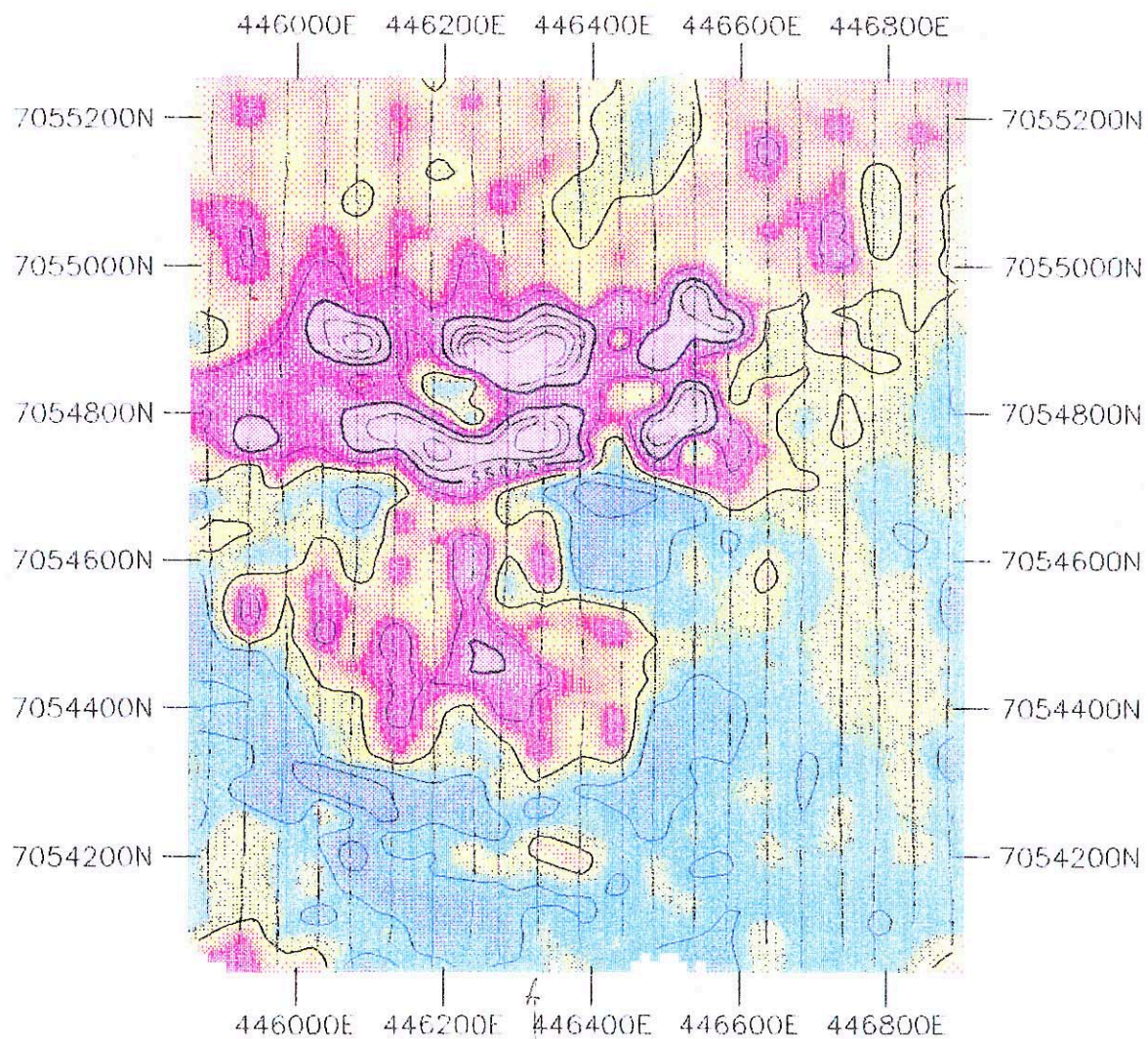
MANFRED R MARX

Exploration Manager - Diamonds

cc J Joyce Stockdale Prospecting Ltd-Melbourne
 B D Kay Normandy Exploration Ltd - Adelaide
 Perth Library

HELIMAG CONTOURS

Annexure 1



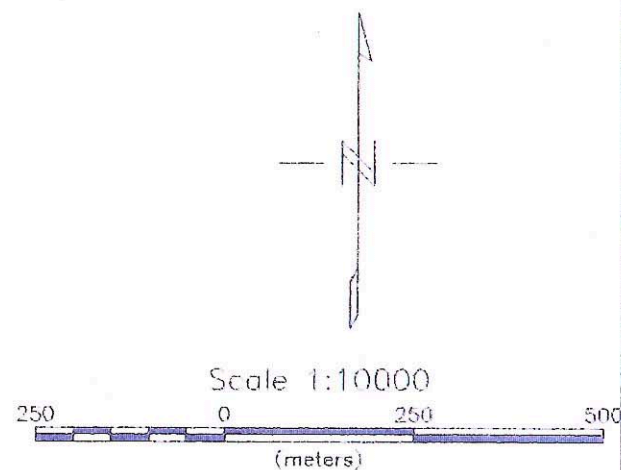
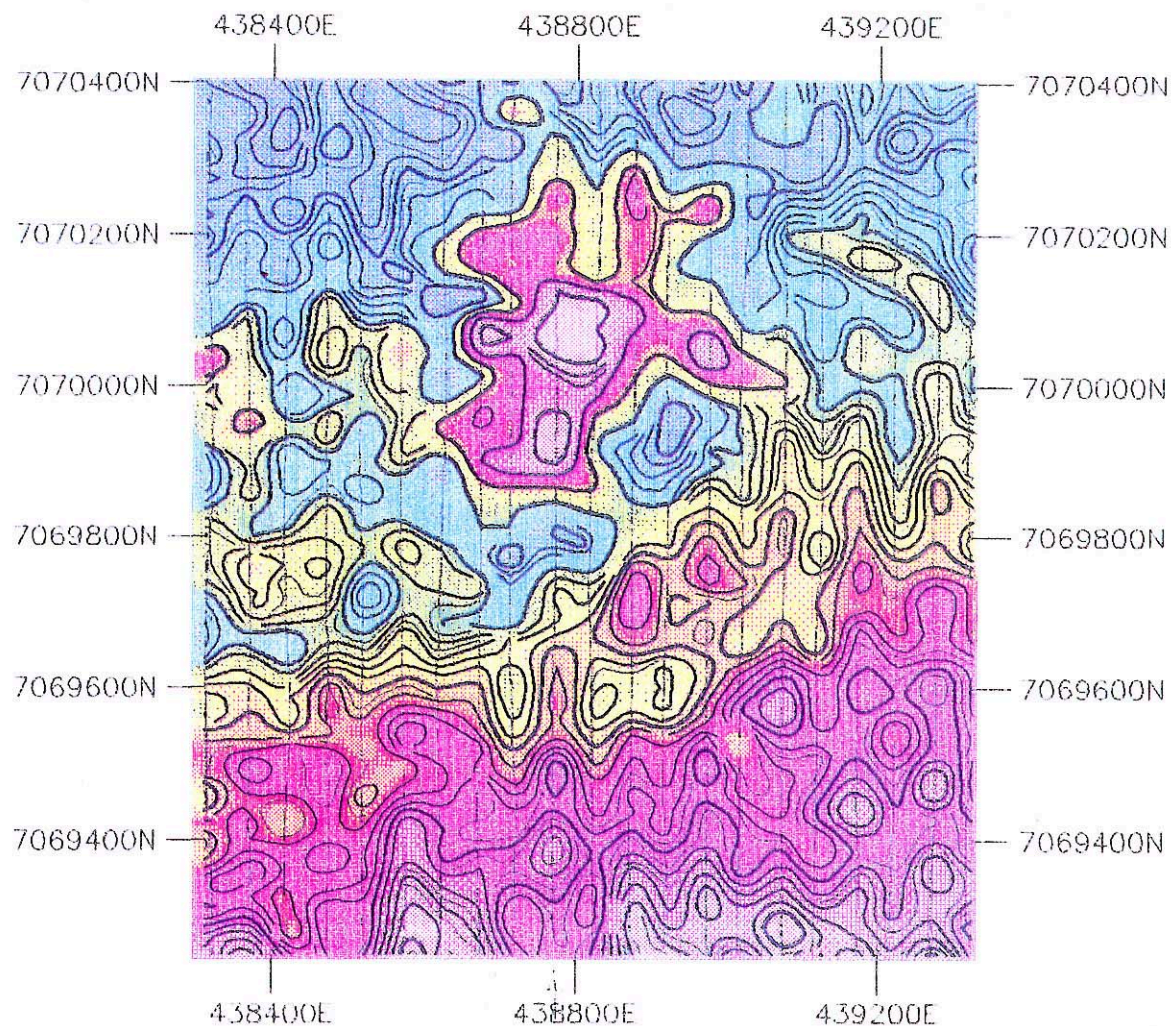
STOCKDALE PROSPECTING LTD

ABM17
Helimag Total Field Magnetics

Sensor Height = 10m
Contour Interval = 5 nT
Geo Instruments & Helimuster

Abminga (G53-10) 1:250 000

00019



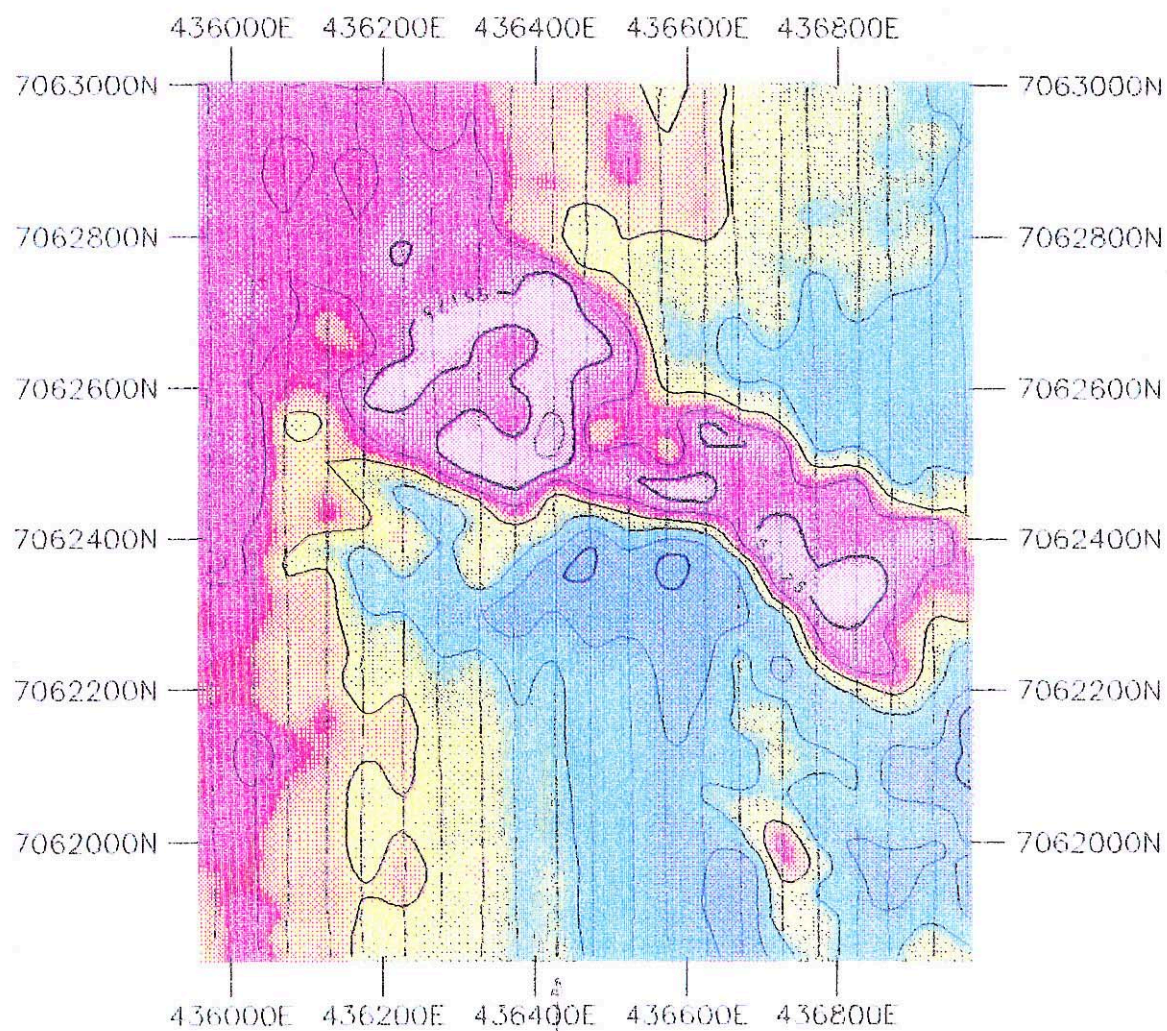
STOCKDALE PROSPECTING LTD

ABM18
Helimag Total Field Magnetics

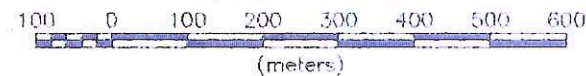
Sensor Height = 10m
Contour Interval = 0.5 nT
Geo Instruments & Helimuster

Abminga (G53-10) 1:250 000

00020



Scale 1:10000



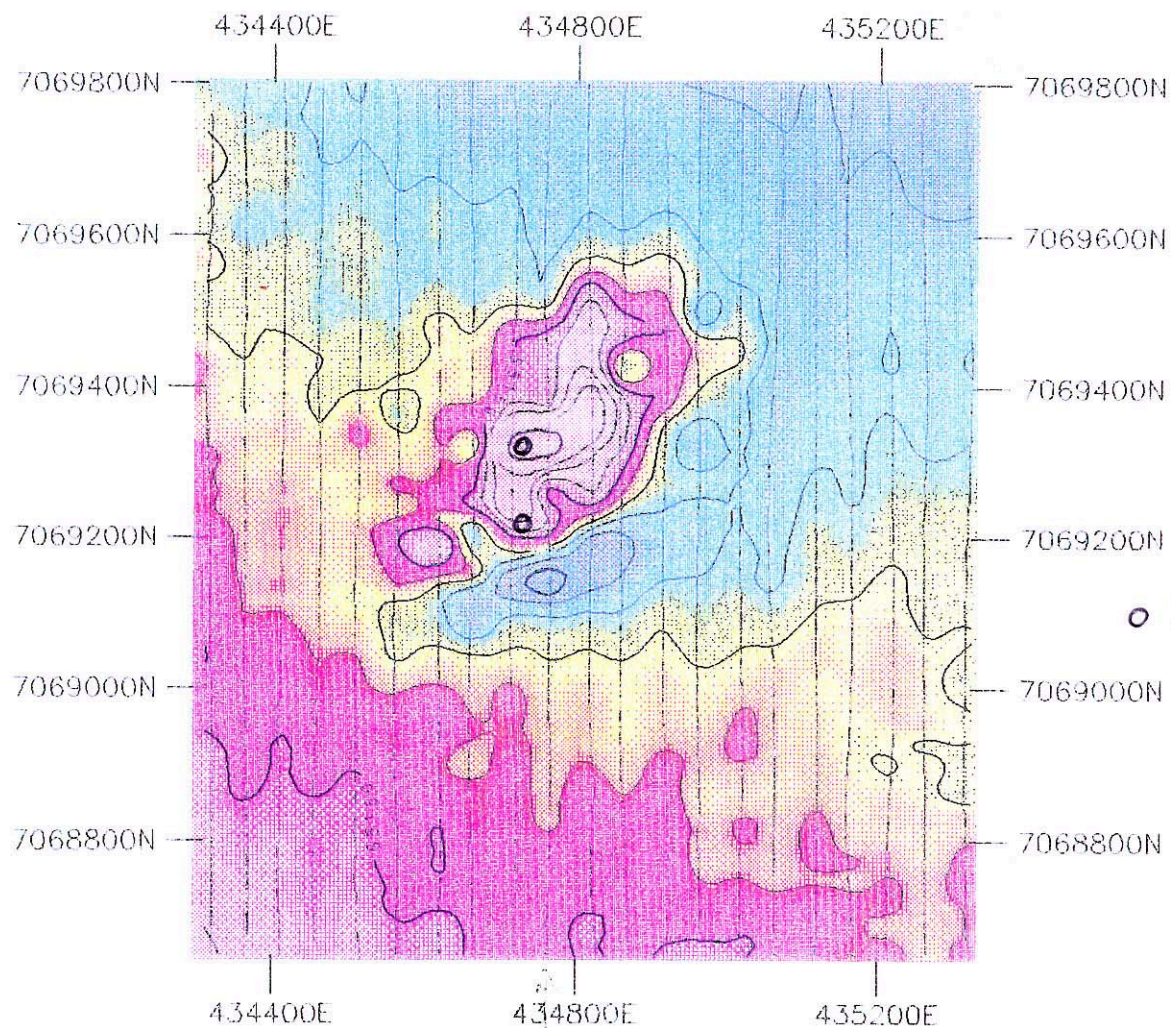
STOCKDALE PROSPECTING LTD

ABM19
Helimag Total Field Magnetics

Sensor Height = 10m
Contour Interval = 5 nT
Geo Instruments & Helimuster

Abminga (G53-10) 1:250 000

00021



STOCKDALE PROSPECTING LTD

ABM20

Helimag Total Field Magnetics

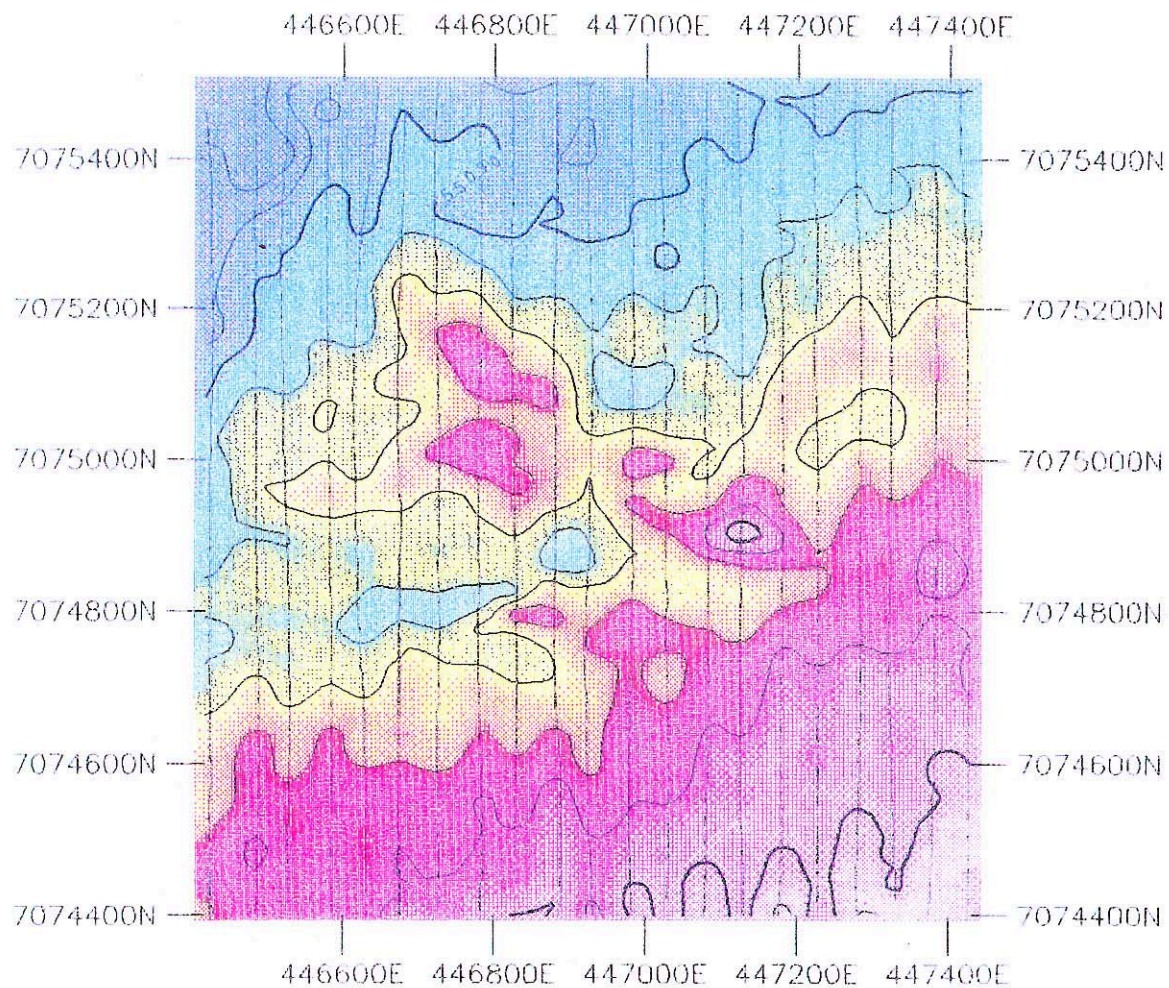
Sensor Height = 10m

Contour Interval = 5 nT

Geo Instruments & Helimuster

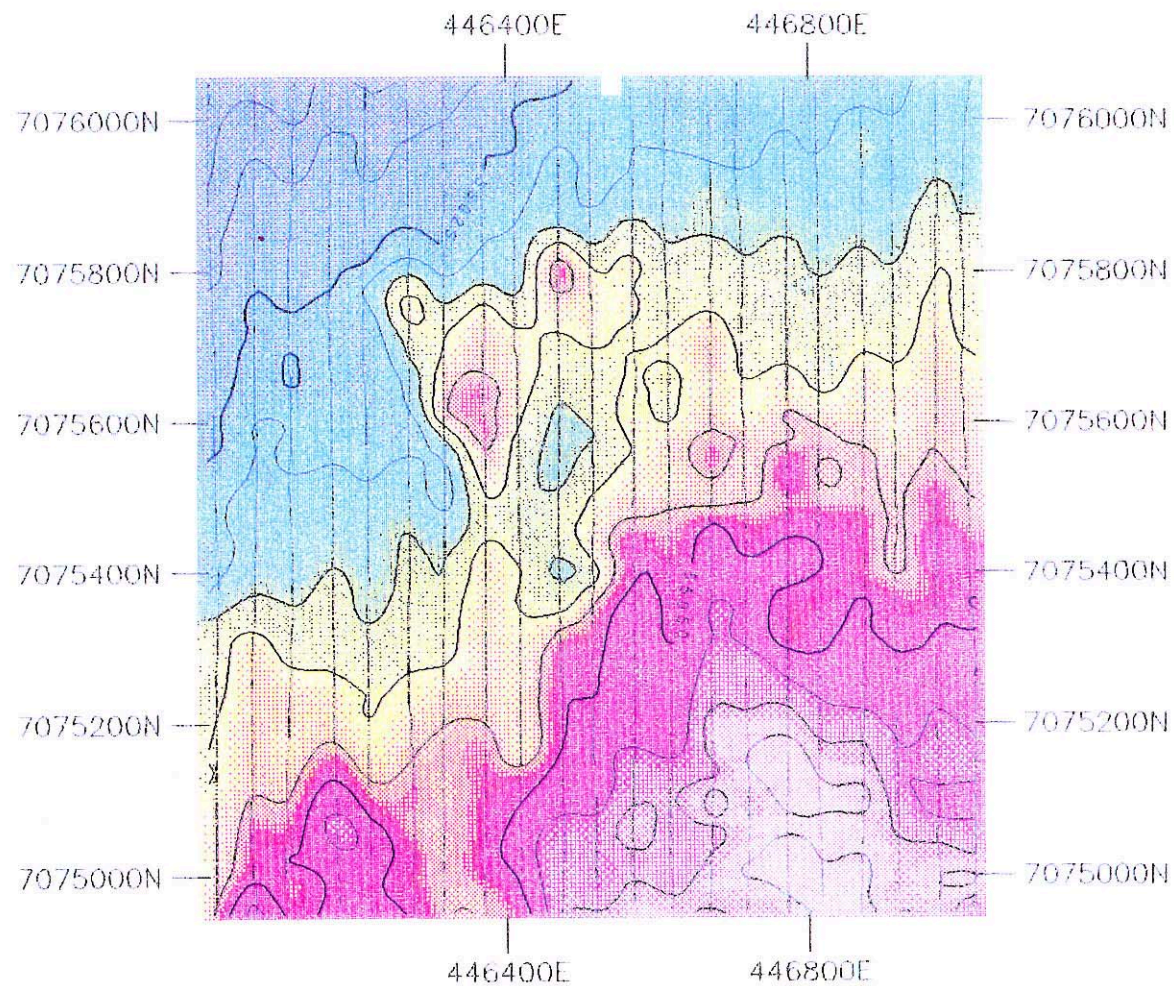
Abminga (G53-10) 1:250 000

00022



STOCKDALE PROSPECTING LTD
ABM34 Helimag Total Field Magnetics
Sensor Height = 10m Contour Interval = 5 nT Geo Instruments & Helimuster
<i>Abminga (G53-10) 1:250 000</i>

00023



STOCKDALE PROSPECTING LTD

ABM35

Helimag Total Field Magnetics

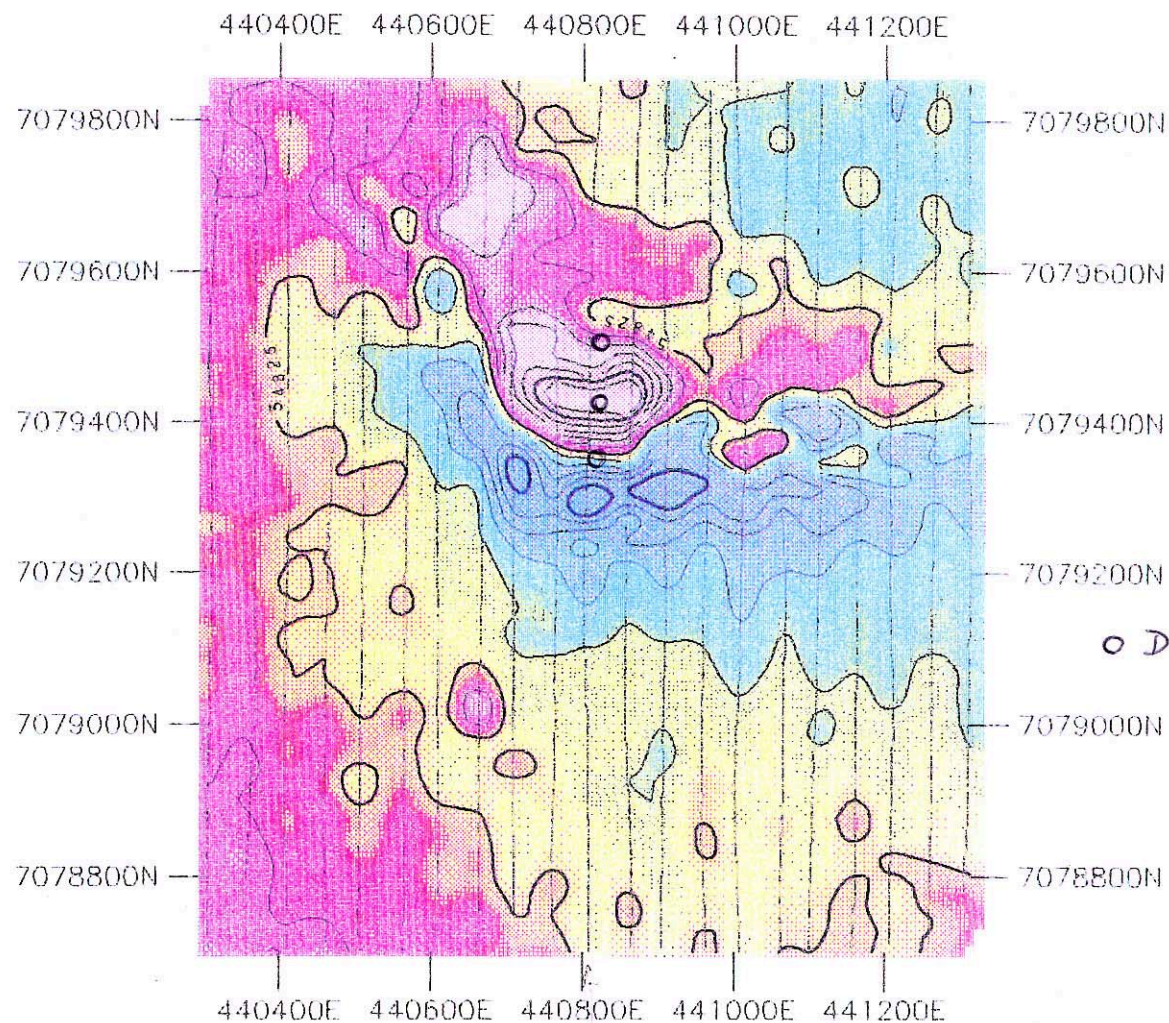
Sensor Height = 10m

Contour Interval = 5 nT

Geo Instruments & Helimaster

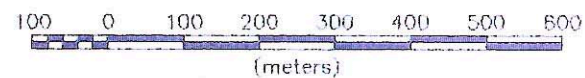
Abminga (G53-10) 1:250 000

00024



○ Drill holes RAB

Scale 1:10000



STOCKDALE PROSPECTING LTD

ABM36

Helimag Total Field Magnetics

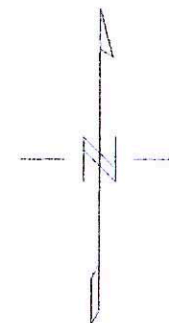
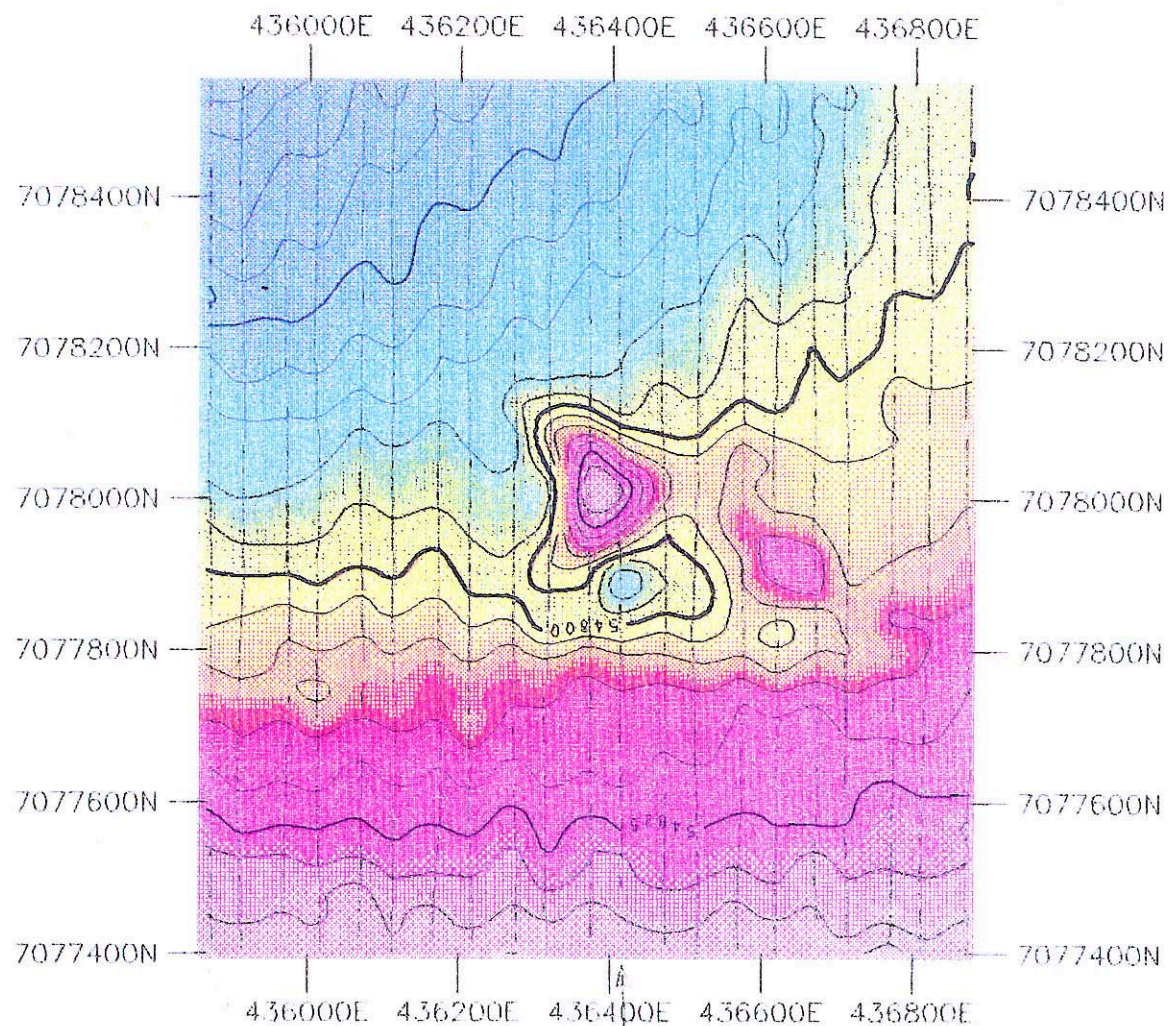
Sensor Height = 10m

Contour Interval = 5 nT

Geo Instruments & Helimuster

Abminga (G53-10) 1:250 000

00025



Scale 1:10000

100 0 100 200 300 400 500 600

(meters)

STOCKDALE PROSPECTING LTD

ABM41

Helimag Total Field Magnetics

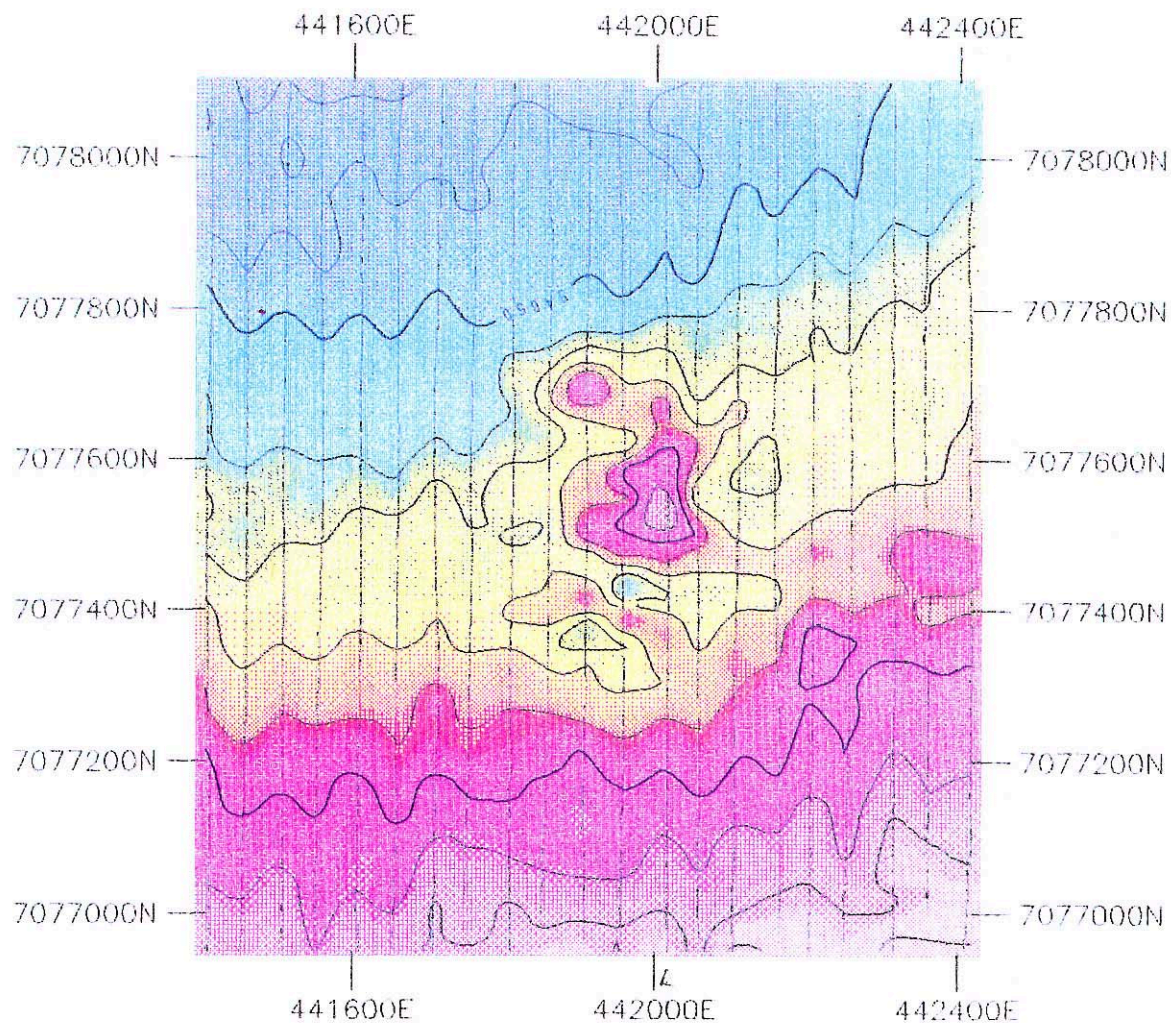
Sensor Height = 10m

Contour Interval = 5 nT

Geo Instruments & Helimuster

Abminga (G53-10) 1:250 000

00026



Scale 1:10000

250 0 250 500

(meters)

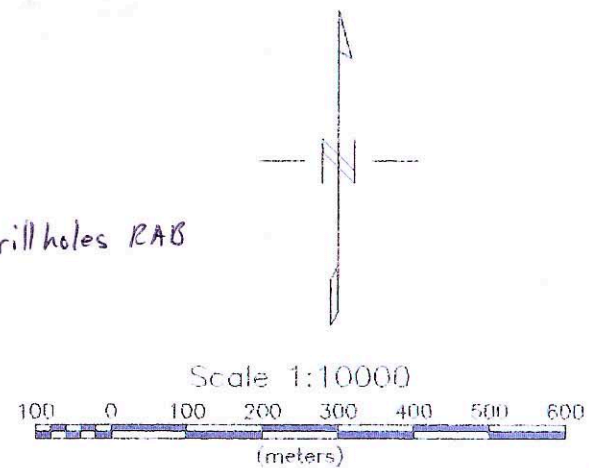
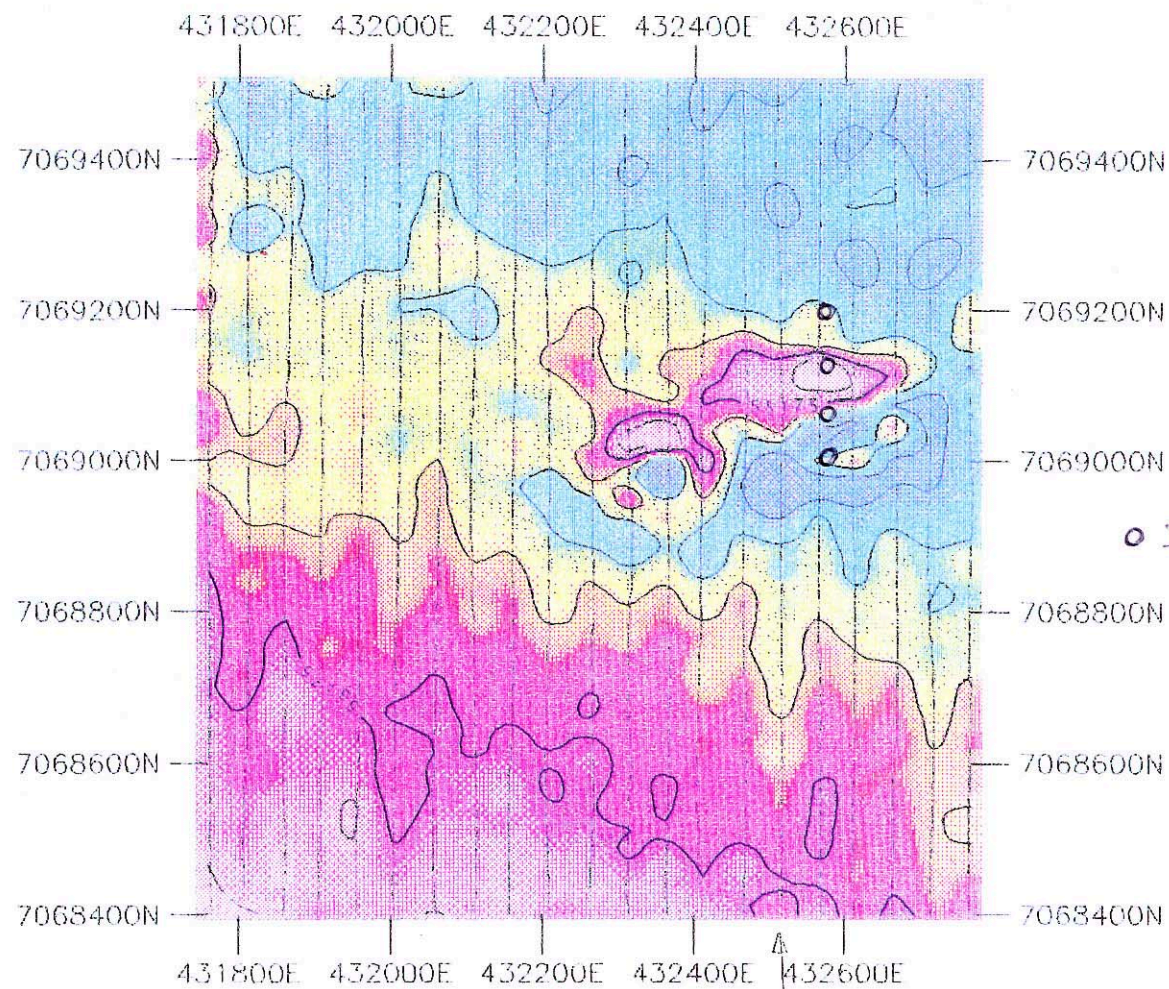
STOCKDALE PROSPECTING LTD

ABM42
Helimag Total Field Magnetics

Sensor Height = 10m
Contour Interval = 5 nT
Geo Instruments & Helimuster

Abminga (G53-10) 1:250 000

00027



STOCKDALE PROSPECTING LTD

ABM43

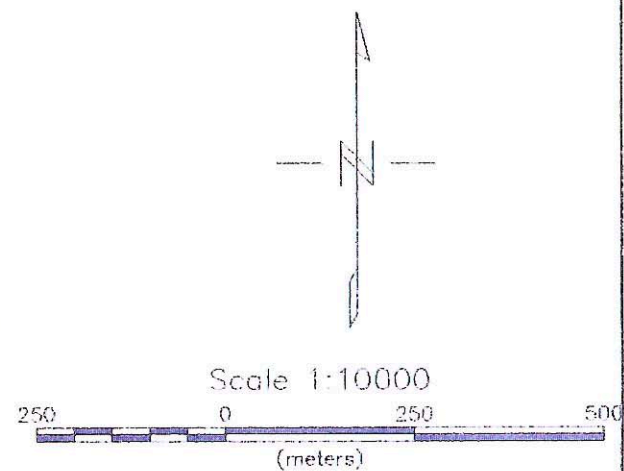
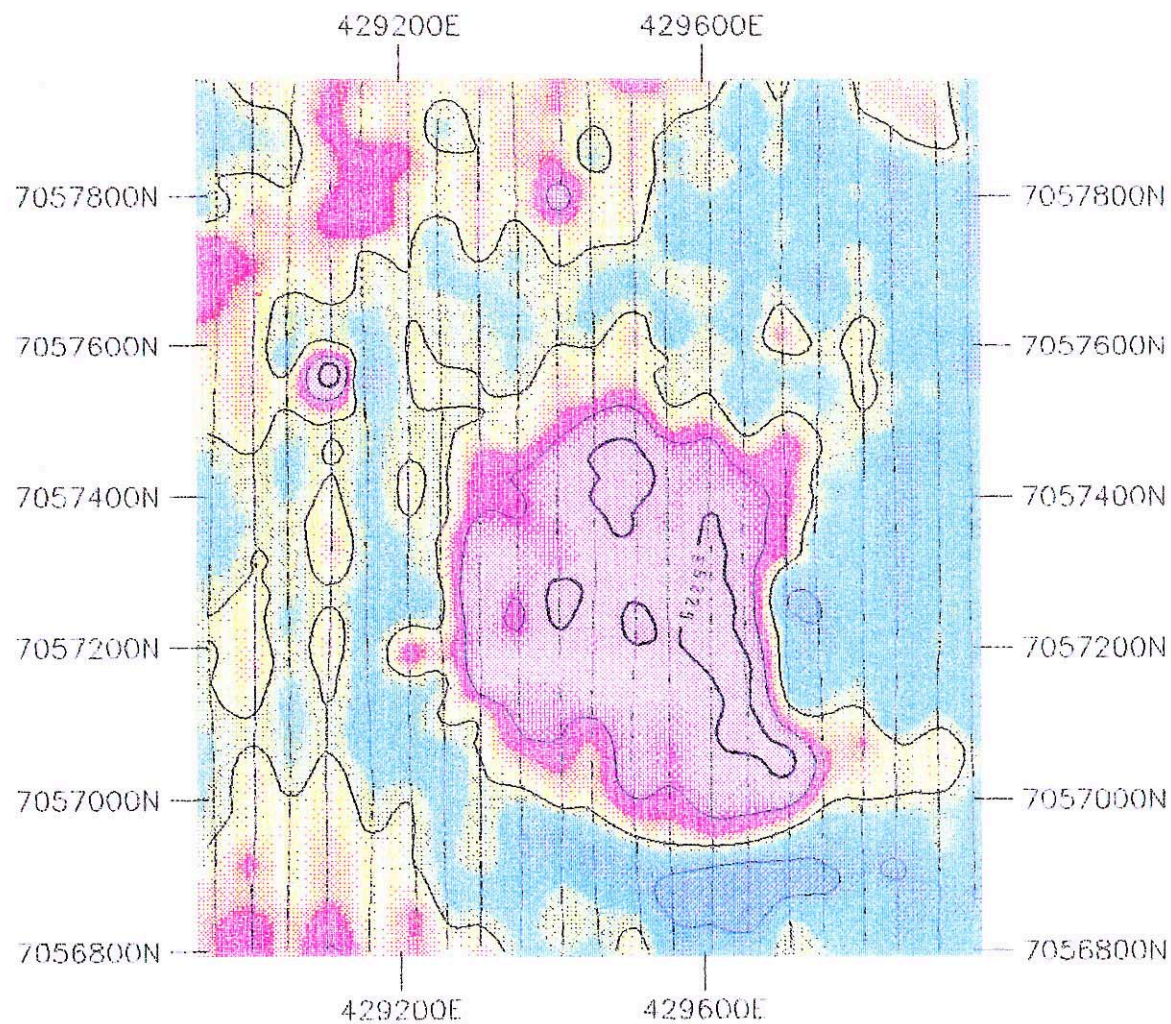
Helimag Total Field Magnetics

Sensor Height = 10m

Contour Interval = 5 nT

Geo Instruments & Helimuster

Abminga (G53-10) 1:250 000



STOCKDALE PROSPECTING LTD

ABM44

Helimag Total Field Magnetics

Sensor Height = 10m
Contour Interval = 5 nT
Geo Instruments & Helimuster

Abminga (G53-10) 1:250 000

00029

DRILL LOGS

Annexure 2

RAB DRILL HOLE LOG

00031

LOCATION ABMINGA (ERINGA) HOLE No. ABM 36 A CO-ORDS. 440 810 E, 7079375 N.

DEPTH (m) 13 AZIMUTH VERT. R.L. COLLAR _____ DATE LOGGED 17/11/94

DRILLED BY JACK SCHUBERT DRILLING DATE DRILLED 17/11/94 LOGGED BY E. R. Mannings

[illegible]

00033

DRILLED BY JACK SCHUBERT DRILLING DATE DRILLED 18/11/94 LOGGED BY E.R. Manning

[illegible]

00034

DRILLED BY J. SCHUBERT DRILLING. DATE DRILLED 18/11/94 LOGGED BY E.R. Manning

DEPTH (m)	THICKNESS	PICTORIAL	CORE LOSS	COLOUR	DESCRIPTION	REMARKS
		0	1m		0 - 1m: SILICIFIED SST. GRAVELS IN RED-BROWN SANDY CLAYS.	
		1	2m		1 - 2m: RED-BROWN SANDY CLAYS & PALE GREY SILCRETE (SILICIFIED SANDSTONE).	
		2	5m		2 - 5m: FERRUGINOUS, DARK BROWN, FINE GRAINED SANDSTONE/SILTSTONE.	
		3	7m		5 - 7m: FERRUGINOUS DARK BROWN CLAYEY SILTSTONE.	
		4			7 - 13m: BLEACHED (LIGHT GREY TO BUFF) SILTSTONE, SILTY CLAY AND CLAYSTONE: SOME SILICIFICATION.	
		5	13m		E.O.H. 13m	WATER TABLE AT 12m.
		6				
		7			MAGNETIC SUSCEPTIBILITIES BELOW 150 $\times 10^{-5}$ SIU EXCEPT 2-3m (250-300 $\times 10^{-5}$)	
		8			SAMPLES COLLECTED: 1. 8-13m	
		9				
		10				
		11				
		12				
		13				
		14				
		15				
		16				
		17				
		18				
		19				
		20				
		21				
		22				
		23				
		24				
		25				
		26				
		27				
		28				
		29				
		30				

RAB DRILL HOLE LOG

00035

1 of 2.

LOCATION	ABMINGA (ERINGA)	HOLE No.	ABM 20-A	CO-ORDS.	434740E 7069210N.
DEPTH (m)	61	AZIMUTH	VERT.	R.L. COLLAR	DATE LOGGED 20/11/94
DRILLED BY	J. SCHUBERT DRILLING	DATE DRILLED	20/11/94	LOGGED BY	E.R. Mannin

DEPTH (m)	THICKNESS	PICTORIAL	CORE LOSS	COLOUR	DESCRIPTION	REMARKS
		0	0		0-1m: RED-BROWN CLAYEY SOIL WITH SUB-ROUNDED CLASTS OF SILCRETE/SILICIFIED SANDSTONE.	
		1	1		1-4m: FERRUGINOUS SANDY/SILTY CLAYS WITH SILCRETE GRAVEL	
		4	4			
					4-11m: CHOCOLATE BROWN FERRUGINOUS SILTSTONE AND SILTY CLAYS.	
						WATER TABLE AT 12m.
					11-23m: "PORCELLANITE"?; BLEACHED SILTSTONE AND CLAYSTONE.	
					23-27m: WHITE CLAYS AND BLEACHED CLAYSTONE (PORCELLANITE?).	
					27-32m: VERY PALE YELLOW-BROWN TO BUFF COLOURED CLAYS; SILTY IN PARTS.	
					32-33m: YELLOW-BROWN SILTY CLAYS (OCCASIONALLY SANDY).	
					33-40m: PALE PURPLE-BROWN CLAYS.	
					40-43m: PALE GREY-GREEN CLAY, (MINOR YELLOW-BROWN COLOURING).	
					43-45m: PALE PURPLE SILTSTONE WITH PALE GREY-GREEN CLAY AND SANDY CLAY.	

RAB DRILL HOLE LOG

LOCATION ABMINGA (ERINGA) HOLE No. ABM 20-A CO-ORDS. _____
(CONT'D.)

DEPTH (m) _____ AZIMUTH _____ R.L. COLLAR _____ DATE LOGGED _____

DRILLED BY _____ DATE DRILLED _____ LOGGED BY ER Manning

[illegible]

00037

DRILLED BY J. SCHUBERT DRILLING DATE DRILLED 21/4/94 LOGGED BY E. R. Manning

[illegible]

RAB DRILL HOLE LOG

00038

LOCATION ABMINGA (ERINGA) HOLE No. ABM 43-A CO-ORDS. 432565 E, 7069070 N.

DEPTH (m) 14 AZIMUTH VERT. R.L. COLLAR _____ DATE LOGGED 21/11/94

DRILLED BY J. SCHUBERT DRILLING DATE DRILLED 21/11/94 LOGGED BY E.R. Manning

DEPTH (m)	THICKNESS	PICTORIAL	CORE LOSS	COLOUR	DESCRIPTION	REMARKS
		0			0 - 2 m: BROWN SANDY CLAY WITH SUBROUNDED SILICATE CLASTS.	
		1	2 m			
		2			2 - 10 m: DARK BROWN SILTY CLAYS, OCCASIONALLY SANDY, WITH LIGHT GREY SILICATE LAYERS BETWEEN 7 AND 10 m.	
		3				
		4				
		5				
		6				
		7				
		8				
		9				
		10	10 m		10 - 14 m: LIGHT GREY TO PALE BROWN SILTSTONE & SILICIFIED SILTSTONE.	
		11				
		12				
		13				
		14	14 m		E.O.H. 14 m	
		15				
		16				
		17				
		18				
		19				
		20			NO SAMPLE RECOVERY BELOW 14 m: LOSS OF CIRCULATION, HOLE TERMINATED	
		21				
		22			SAMPLES COLLECTED: 1. 3-7 m	
		23			2. 10-14 m.	
		24				
		25			HIGH MAGNETIC SUSCEPTIBILITIES BETWEEN 3 m AND 7 m, PEAKING AT ~ 550 x 10 ⁻⁵ S.I.U.	
		26				
		27				
		28				
		29				
		30				
		31				
		32				
		33				
		34				
		35				
		36				
		37				
		38				
		39				
		40				

LOCATION ABMINGA (ERINGA) HOLE No. ABM 43-B CO-ORDS. 432565 E 7069115 N.

DEPTH (m) 14 AZIMUTH VERT. R.L. COLLAR _____ DATE LOGGED 22/11/94

DRILLED BY J. SCHUBERT DRILLING DATE DRILLED 22/11/94 LOGGED BY E. R. Manning

[illegible]

00040

[illegible]

MINERALOGICAL REPORT

Annexure 3

NOREX NUMBER		SPL NUMBER	RECOVERED (Sorter Comments*)
ABM 36A	6 to 9m	BL9244	
	9 to 13m	BL9245	
ABM 36B	7 to 10m	BL9246	Laterite
	10 to 14m	BL9247	
	14 to 18m	BL9248	NK Black, Common Garnet, NK Zircon
ABM 36C	6 to 10m	BL9249	NK Zircon
ABM 36D	8 to 13m	BL9250	
ABM 20A	6 to 11m	BL9251	NK Zircon
	40 to 50m	BL9252	
	50 to 61m	BL9253	
ABM 20B	6 to 11m	BL9254	Laterite, Grey Oxide, Barite, NK Zircon
	17 to 22m	BL9255	Laterite, Grey Oxide, NK Zircon
ABM 43A	3 to 7m	BL9256	
	10 to 14m	BL9257	
ABM 43B	4 to 6m	BL9258	NK Zircon
	10 to 14m	BL9259	Laterite, Barite, NK Zircon
ABM 43C	8 to 12m	BL9260	
ABM 43D	7 to 10m	BL9261	Laterite, Barite, Oxides

EXPENDITURE SUMMARY**EL 1885 UNDUCURRA HILL****Period from 1 November 1993 to 18 May 1995**

Wages & Salaries	1,119.98
Drilling	10,974.00
Consultants	8,750.00
Regional Office Costs	6,163.63
Traditional Owners Costs	1,820.00
Vehicle Costs	532.00
Equipment Maintenance	10.00
Field Supplies - Consumables	182.01
Travel, Accommodation, Meals	24,611.30
Maps/Publications	7.25
Courier/Freight/Postage	96.70
Geophysical Contract	23,380.00
	<hr/>
	\$77,646.87
	<hr/>