

# Open File Envelope

---

**NUMBER 9067**

**EL 1837 CAMPBELL RISE**

**PARTIAL RELINQUISHMENT REPORT  
7 MAY 1996**

**Submitted by**

**CRA Exploration Pty Ltd  
1996**

© 17/10/96

---

**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 9067**

**TENEMENT:** EL 1837, Campbell Rise

**TENEMENT HOLDER:** CRA Exploration Pty Ltd

**CONTENTS**

			<b>MESA NO.</b>	
<b>REPORT:</b>	<b>Newbery, S.P., 1996.</b> Partial relinquishment report for the Exploration Licence 1837, Campbell Rise, South Australia for the period ending 7th May 1996 (CRAE report no. 22180).		<b>9067 R 1</b>	
			Pgs 3-11	
<b>APPENDIX 1:</b>	Geological drill log sheets and diamond sample location data.		Pgs 12-14	
<b>APPENDIX 2:</b>	Drilling assay results.		Pgs 15-16	
<b>PLANS</b>	<b>Scale</b>	<b>Company plan no.</b>		
Campbell Rise. Location plan.	1:250 000	SAa 6125	Pg. 17	<i>A3</i>
Flight path (surrendered portion).	1:100 000	SAa 6320	9067-1	
Aeromagnetic contours – Kingoonya SH53-11.	1:100 000	SAa 6321	9067-2	
Harcus Hill aeromagnetic survey – YH3 target area.	1:5 000	SAa 6316	9067-3	
Ground magnetic traverses:				
YH4 target area.	1:2 500	SAa 6317	9067-4	
YH3 target area.	1:5 000	SAa 6318	Pg. 18	<i>A3</i>
Ground magnetic contours Y3 target area.	1:5 000	SAa 6319	Pg. 19	<i>A3</i>

**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.

94 CR1, 94 CR2

CRA EXPLORATION PTY. LIMITED

PARTIAL RELINQUISHMENT REPORT FOR  
EXPLORATION LICENCE 1837 CAMPBELL RISE, SOUTH AUSTRALIA  
THE PERIOD ENDING 7TH MAY, 1996

*Kingoonya SH5311, South Australia  
Andamooka SH5312, South Australia*



AUTHOR: S.P. NEWBERY  
COPIES TO: MESA  
ET&I BOX HILL  
CRAE ADELAIDE  
DATE: JUNE, 1996  
SUBMITTED BY:  
ACCEPTED BY:

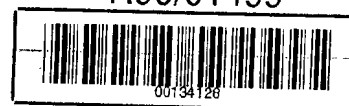
A handwritten signature in black ink, appearing to be a stylized 'S' or 'J' followed by a horizontal line.

\*ALL RIGHTS IN THIS REPORT AND ITS CONTENTS (INCLUDING RIGHTS TO CONFIDENTIAL INFORMATION AND COPYRIGHT IN TEXT, DIAGRAMS AND PHOTOGRAPHS) REMAIN WITH CRA AND NO USE (INCLUDING USE OF REPRODUCTION, STORAGE OR TRANSMISSION) MAY BE MADE OF THE REPORT OR ITS CONTENTS FOR ANY PURPOSE WITHOUT THE PRIOR WRITTEN CONSENT OF CRA.  
© CRA EXPLORATION PTY. LIMITED 1988\*

22180

Mines & Energy SA

R96/01499



CONTENTS

	PAGE
LIST OF PLANS	
LIST OF TABLES	
1. SUMMARY .....	1
2. INTRODUCTION.....	1
3. CONCLUSIONS AND RECOMMENDATIONS .....	1
4. INVESTIGATIONS.....	2
4.1 Airborne and Ground Magnetics.....	2
4.1.1 Magnetic Anomaly - YH3 .....	2
4.1.2 Magnetic Anomaly - YH4 .....	2
4.2 Radiometrics.....	2
4.3 Drilling.....	3
REFERENCES .....	4
LOCATION.....	4
KEYWORDS .....	4

LIST OF PLANS

<u>Plan No.</u>	<u>Title</u>	<u>Scale</u>
SAa 6125	Campbell Rise EL 1837 - S.A. Location plan showing position of aeromagnetic anomalies followed up on the ground	1:250 000
SAa 6320	Campbell Rise EL 1837 - S.A. Flight path map for the 1993 Woomera airborne magnetic/radiometric survey covering the licence area	1:100 000
SAa 6321	Campbell Rise EL 1837 - S.A. Magnetic contours for the 1993 Woomera airborne magnetic/radiometric survey covering the licence area	1:100 000
SAa 6316	Campbell Rise EL 1837 - S.A. Magnetic contour map, YH3 target area, 1984 Marcus Hill aeromagnetic survey	1: 5 000
SAa 6317	Campbell Rise EL 1837 - S.A. Ground magnetic traverses, YH4 target area	1: 2 500
SAa 6318	Campbell Rise EL 1837 - S.A. Ground magnetic traverses, YH3 target area	1: 5 000
SAa 6319	Campbell Rise EL 1837 - S.A. Ground magnetic contours, YH3 target area	1: 5 000

LIST OF TABLES

Table 1	Survey Specifications, 1993 Woomera Airborne Magnetic/Radiometric Survey.
Table 2	Anomalies from the AGC Processing on the 1993 Woomera Airborne Magnetic Survey.

## 1. SUMMARY

Exploration Licence 1837 was granted in May, 1993 with diamonds as the principal commodity.

The majority of the licence area is covered by post Palaeozoic sediments. Airborne magnetic data has been utilised in an attempt to delineate potential kimberlitic and/or lamproitic intrusive complexes. The data used represents a compilation of the BHP 1984 Marcus Hill survey and the 1993 Woomera aeromagnetic survey.

A total of nine anomalies were identified as being potential kimberlite type sources occurring at shallow depths. Ground follow-up attributed all but two of the anomalies to cultural effects, flight path errors or near surface iron oxide accumulations. Target, YH3 and YH4 were recommended for additional ground follow-up and were traversed with ground magnetics. Target YH4 was drill tested with two aircore holes to a maximum depth of 111m. The source of the anomaly was a mafic lithology at 107m with magnetic susceptibility of  $5000 \times 10^{-5}$ .

## 2. INTRODUCTION

Campbell Rise EL 1837 is located to the immediate west of Woomera in South Australia and lies within the Woomera Prohibited Area, shown in plan SAa 6125. The lease was granted to CRA Exploration in May of 1993 and covered an area of 2120 square kilometres. After one year of exploration, a partial relinquishment was applied for in June, 1994, reducing the area to 1610 square kilometres. The principal commodity was diamonds.

With the exception of the most eastern limits, post Palaeozoic sediments overlay most of the tenement and the detection of diamonds and tracer minerals using gravel sampling was unsuitable. As an alternative reconnaissance tool, an aeromagnetic survey was flown with the intention of detecting magnetic singularities possibly associated with kimberlite pipes.

The following report covers the geophysical and geological investigations undertaken in the recent area of relinquishment.

## 3. CONCLUSIONS AND RECOMMENDATIONS

Interpretation of the airborne magnetic data over the tenement area highlighted two discrete dipolar anomalies. Ground follow-up of the two low amplitude magnetic anomalies indicated that only YH3 warranted further investigation.

Drill testing of the anomaly intersected moderately magnetic mafic lithologies. The target was considered adequately tested.

On the basis of the available exploration data and results the area was regarded as being adequately tested and it was recommended to withdraw from this portion of the exploration licence.

## 4. INVESTIGATIONS

### 4.1 Airborne and Ground Magnetism

In November of 1993 Geoterrex P/L flew an airborne magnetic and radiometric survey across EL 1837 and adjoining tenements EL 1839 (Fred Swamp) and EL 1840 (Vivian Well). Table 1 lists survey specifications and configuration. Plans SAa 6320 and SAa 6321 show flight paths and magnetic contours covering the current exploration licence area.

The response across the region is dominated by the Gairdner Dykes that strike north west-south east and have amplitudes ranging from 50 to 200nT.

A close analysis of the profile data revealed two subtle anomalies, YH3 and YH4, that could not be attributed to known cultural features and did not appear to be appendages of dykes or relate to fault-induced magnetic lineaments. These were recovered in April of 1994 using ground magnetic traverses. Anomaly locations and sources are listed in Table 2 with positions plotted in plan SAa 6125. Magnetic profile maps for the four locations are presented in plans SAa 6317 and 6318 and in contour form for YH4 in plan SAa 6319.

#### 4.1.1 *Magnetic Anomaly - YH3* (Plans SAa 6318 & SAa 6319)

The recently acquired aeromagnetic data does not cover this portion of the tenement and the YH3 anomaly was in fact identified from the Marcus Hill aeromagnetic survey, flown for BHP in 1984. A portion of this data is included as plan SAa 6316. YH3 can be clearly identified as a 40nT bullseye anomaly peripheral to the response from a Gairdner dyke striking north west south east in the left southern corner of the data window.

Three north south and three east west traverses were used to define the anomaly on the ground, as illustrated in profile and contour format in plan SAa 6318 and SAa 6319 respectively. The target now appears to be more of a dipolar feature with a strike concomitant to the Gairdner dyke and with a plunge to the south. Assuming a point source, the depth to target is approximately 80 m (using a  $1/r^2$  field fall off rate).

Based on the above ground work and subsequent modeling, YH3 is considered to be a viable kimberlite target and a drilling is proposed.

#### 4.1.2 *Magnetic Anomaly - YH4* (Plans SAa 6317)

The four ground traverses centred on the YH4 location failed to identify any significant anomaly that could explain the aeromagnetic response. There is, however, some surface noise present but it appears more likely that the anomaly has been generated by either a small perturbation in the flight line path or a residual response from noise spike rejection.

### 4.2 Radiometrics

Five channels of radiometric data were recorded concurrently with the aeromagnetic data with specifications as outlined in Table 1. No anomalies were detected with the exception of the large counts recorded on all channels across the salt lakes, such as Lake Hanson.

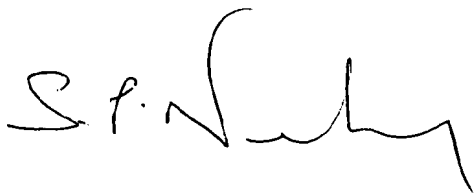
### 4.3 Drilling

Two drill holes AC94CR1 and RC94CR2 drilled to test the better of the two magnetic anomalies YH3. All geological log sheets are presented in Appendix 1 and multi-element geochemistry in Appendix 2.

Hole AC/RC94CR2 was designed to intersect the YH3 magnetic anomaly, as documented in the previous annual report. YH3 was identified from the 1984 BHP Marcus Hill survey and constitutes a dipolar feature striking north west that sits on the northern edge of an interpreted Gairdner dyke.

The hole intersected a dark green mafic rock at 107m drilling depth. Measured susceptibilities ranged up to  $5000 \times 10^{-6}$  SI. With a model depth of 100m, the airborne and ground magnetic response can be adequately explained with this susceptibility.

Geochemical analyses did not reveal anomalous metal values for any of the rocks intersected.



S.P. NEWBERY

SPN/dt Reports#Campbell Rise#1837#ARPT#05/96



REFERENCES

Barlow, M.G., August 1994; Report on Area Surrendered for EL 1837 Campbell Rise, South Australia, June 1994. (CRAE Report No. 20184)

Taylor, R.J. & Davies, M., 1985; Progress & Final Reports from 24/02/84 to October, 1985, Marcus Hill EL 1224 (BHP Minerals Ltd.). South Australian Department of Mines & Energy Open File Company Report (Env. 5547).

LOCATION

Kingoonya SH 53-11  
Andamooka SH53-13

KEYWORDS

Diamonds, Woomera, Airborne Magnetism, Ground Magnetism, Gravel Sample, Kimberlite Indicators, Pyrope, Picroilmenite, Chromite, Microdiamond.

TABLE 1

1993 WOOMERA AEROMAGNETIC SURVEY SPECIFICATIONS

Contractor:	Geoterrex
Survey Type:	Magnetic/Radiometric
Approximate Size:	21 300 line km
Flight Line Direction:	180°/360° AMG
Line Spacing:	300 m
Tie Line Direction:	90°/270° AMG
Tie Line Spacing:	5 km
Mean Terrain Clearance:	80 m AGL
Navigation:	DGPS/Doppler

Magnetometer

Type:	Scintrex Cesium Vapour Optical Absorption magnetometer sensor mounted in a Stinger
Resolution:	0.01 nT
Sensitivity:	0.001 nT
Sampling Rate:	0.1 s (nominally 7 m)
Recording:	Digital

Gamma Ray Spectrometer

Type:	Nuclear Data ADC 560 System
Crystal Volume:	33 l (NaI crystal - Thallium saturated)
Channels:	256
Sample Rate:	1.0 s (nominally 65 m)
Recording:	Total count 0.4 - 3.0 MeV
	Potassium 1.35 - 1.57 MeV
	Uranium 1.63 - 1.89 MeV
	Thorium 2.42 - 2.82 MeV
	Cosmic 3.00 - 6.00 MeV

**TABLE 2**  
**ANOMALIES FROM THE AGC PROCESSING ON THE**  
**1993 WOOMERA AIRBORNE MAGNETIC SURVEY**

Anomaly	Easting	Northing	Comments/ Source *
1	651310	6575250	Rubbish tip
2	651610	6576200	Fence line
3	649160	6569620	Lightly vegetated, no culture evident
4	647715	6576240	Lightly vegetated, no culture evident
5	647980	657035	Lightly vegetated, no culture evident
6	648310	6572910	Lightly vegetated, no culture evident
7	646800	6573715	Lightly vegetated, no culture evident
8	646220	6569340	Pipe line
9	645000	6577525	Observation tower
10	645610	6573160	High voltage transmission line pole
11	645000	6570000	High voltage transmission line pole
12	643510	6580720	Road scrapes, rubbish
13	642560	6580930	High voltage transmission line pole
18	652190	6585690	Pump, windmill
19	658030	6558880	?
24	662090	6573750	?
25	665060	6573230	Observation tower
26	666300	6573990	Observation tower
27	666280	6575580	?
28	658500	6569450	?
29	664220	6591460	Swamp, no culture evident
30	658180	6594020	?

NOTE: \*Analysis based on survey video and 1:50 000 topographic sheets.

**APPENDIX I**  
**GEOLOGICAL DRILL LOG SHEETS & DIAMOND SAMPLE LOCATION DATA**

Sample No.		Easting	Northing	100	DPO	Report	Results	Micro Diamonds
3335369	G	648475	6572850	KOOLYMILKA	54548	O1/95	1Pic / 148 Chr	Nil Micro
3335370	G	649650	6571700	KOOLYMILKA	54548	51/94	54 Chr	Nil Micro
3335371	G	649600	6570150	KOOLYMILKA	54548	51/94	1py /193 Chr	
3335372	G	649500	6569850	KOOLYMILKA	54548	51/94	160 Chr	Nil Micro
3335378	G	667700	6579200	KOOLYMILKA	54548	51/94	8Chr	
3335379	G	667950	6576550	KOOLYMILKA	54548	O1/95	36Chr	
3335380	G	656050	6583100	KOOLYMILKA	54548	O2/95	14Chr	
3335381	G	657050	6581250	KOOLYMILKA	54548	O1/95	Negative	Nil Micro
3335382	G	657700	6580300	KOOLYMILKA	54548	O2/95	6Chr	
3335389	G	654500	6571300	KOOLYMILKA	54548	O5/95	87Chr / 2 Py	Nil Micro
3335390	G	655400	6574450	KOOLYMILKA	54548	O2/95	36Chr	
3944051	G	646700	6572250	KOOLYMILKA	54549	15/95	1Ch / 1Pic	Nil Micro
3944052	G	648200	6573050	KOOLYMILKA	54549	O9/95	Negative	Nil Micro
3944053	G	646900	6570100	KOOLYMILKA	54549	O9/95	3 Chr	Nil Micro
3944054	G	647750	6569700	KOOLYMILKA	54549	O11/95	5Ch	Nil Micro
3944060	G	653900	6570000	KOOLYMILKA	54549	O11/95	19Ch	Nil Micro
3944061	G	654300	6570150	KOOLYMILKA	54549	O11/95	8Ch	Nil Micro
3944062	G	655100	6572000	KOOLYMILKA	54549	O9/95	79 Ch	Nil Micro
3944063	LM	652600	6570900	KOOLYMILKA	54549	O9/95	43 chr	Nil Micro
	G	Denotes -2mm gravel sample						
	LM	Denotes Loam sample						

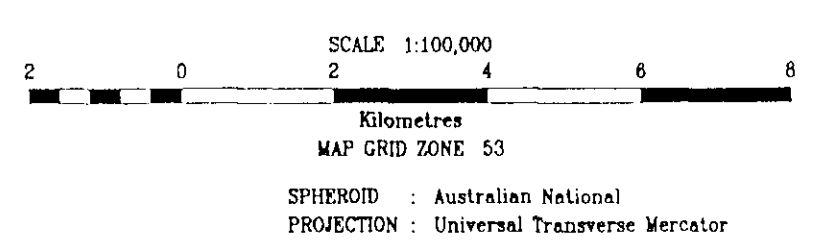
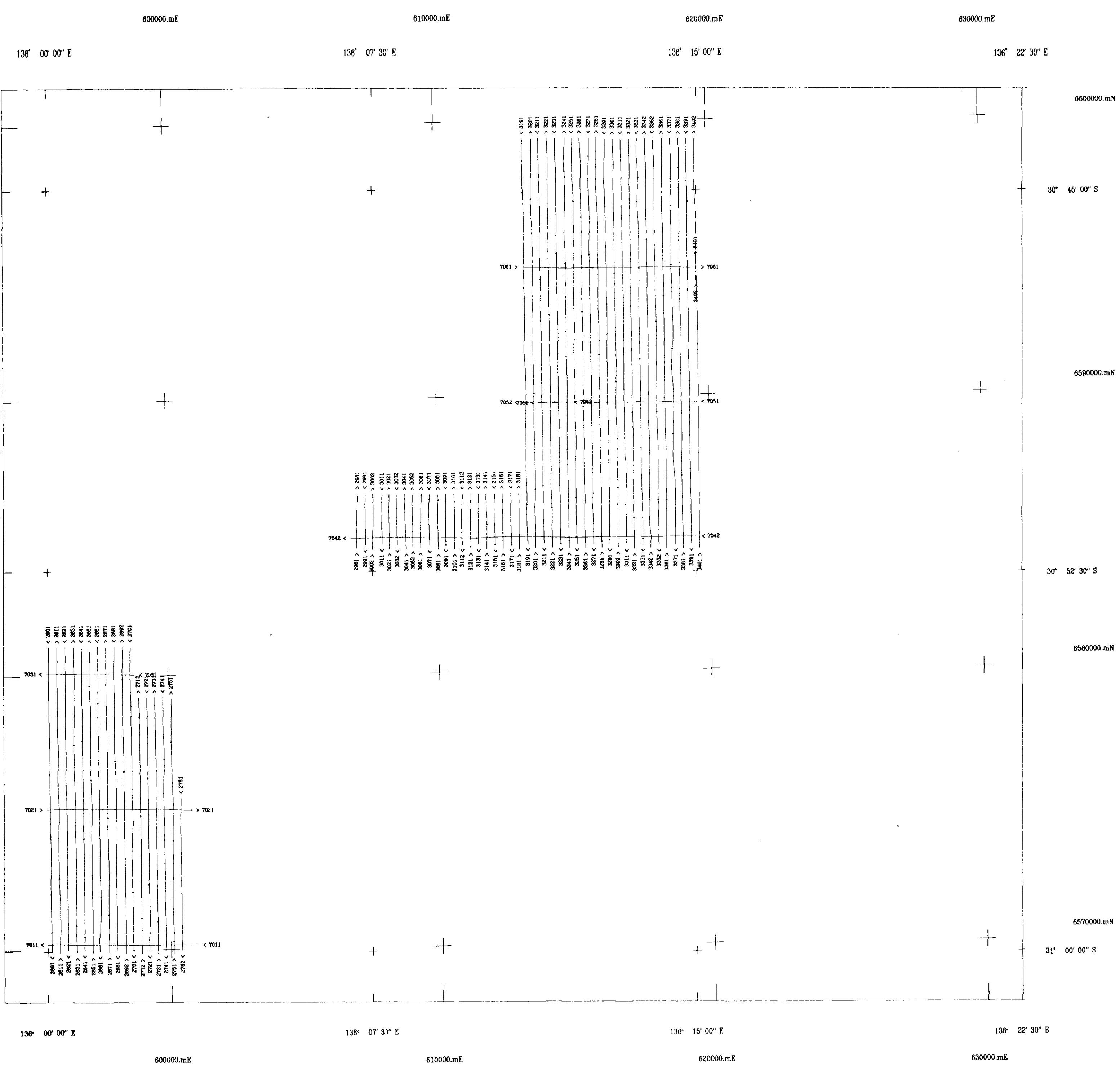
## **DIAMOND SAMPLES**

AREA	PROSPECT	SAMPNO	GRID_NAME	TENEMENT_NO	EAST	NORTH	MATERIAL	DPO	ZONE	MAPSHEET_250
CAMPBELL RISE	REGIONAL	3944051	AMG	EL1837	646700	6572250	GRAVEL	54549	54	SH53-12
CAMPBELL RISE	REGIONAL	3944052	AMG	EL1837	648200	6573050	GRAVEL	54549	54	SH53-12
CAMPBELL RISE	REGIONAL	3944053	AMG	EL1837	646900	6570100	GRAVEL	54549	54	SH53-12
CAMPBELL RISE	REGIONAL	3944054	AMG	EL1837	647750	6569700	GRAVEL	54549	54	SH53-12
CAMPBELL RISE	REGIONAL	3944060	AMG	EL1837	653900	6570000	GRAVEL	54549	54	SH53-12
CAMPBELL RISE	REGIONAL	3944061	AMG	EL1837	654300	6570150	GRAVEL	54549	54	SH53-12
CAMPBELL RISE	REGIONAL	3944062	AMG	EL1837	655100	6572000	GRAVEL	54549	54	SH53-12
CAMPBELL RISE	REGIONAL	3944063	AMG	EL1837	652600	6570900	LM	54549	54	SH53-12
CAMPBELL RISE	REGIONAL	3335369	AMG	EL1837	648475	6572850	GRAVEL	54548	53	SH53-12
CAMPBELL RISE	REGIONAL	3335370	AMG	EL1837	649650	6571700	GRAVEL	54548	53	SH53-12
CAMPBELL RISE	REGIONAL	3335371	AMG	EL1837	649600	6570150	GRAVEL	54548	53	SH53-12
CAMPBELL RISE	REGIONAL	3335372	AMG	EL1837	649500	6569850	GRAVEL	54548	53	SH53-12
CAMPBELL RISE	REGIONAL	3335378	AMG	EL1837	667700	6579200	GRAVEL	54548	53	SH53-12
CAMPBELL RISE	REGIONAL	3335379	AMG	EL1837	667950	6576550	GRAVEL	54548	53	SH53-12
CAMPBELL RISE	REGIONAL	3335380	AMG	EL1837	656050	6583100	GRAVEL	54548	53	SH53-12
CAMPBELL RISE	REGIONAL	3335381	AMG	EL1837	657050	6581250	GRAVEL	54548	53	SH53-12
CAMPBELL RISE	REGIONAL	3335382	AMG	EL1837	657700	6580300	GRAVEL	54548	53	SH53-12
CAMPBELL RISE	REGIONAL	3335389	AMG	EL1837	654500	6571300	GRAVEL	54548	53	SH53-12
CAMPBELL RISE	REGIONAL	3335390	AMG	EL1837	655400	6574450	GRAVEL	54548	53	SH53-12

**APPENDIX II**  
**DRILLING ASSAY RESULTS**

CAMPBELL RISE AC DRILLING																								
HOLE	SAMPNO	DFROM	DTO	Ag	As	Co	Cr	Cu	Ce	Fe	K	Mg	Bi	Mn	Mo	Na	Ni	Pb	Th	U	Zn	Au		
AC94CR001	3339447	0	4	0.6		6	4.9	38	12	17	1.58	0.61	0.64	0.2	75	1.1	0.225	11	7.7	6	1.88	38	1	
AC94CR001	3339448	4	8	0.1		8	6.5	75	9	43	7.45	1.54	0.54	0.6	60	2	0.3	16	22	10	4.1	60	<1	
AC94CR001	3339449	8	12	<0.1		6	4.3	75	9	27	3.4	1.86	0.54	0.4	35	0.8	0.365	7	21	4.6	3.5	32	<1	
AC94CR001	3339450	12	16	<0.1		8	14	65	40	38	8.85	1.48	0.6	0.5	120	1.2	0.41	30	16	7.4	4.4	80	<1	
AC94CR001	3339451	16	20	0.1		6	14	65	44	45	7.35	1.48	0.74	0.5	220	1.3	0.44	31	21	8.1	6.2	65	<1	
AC94CR001	3339452	20	24	0.2		6	12	65	65	37	5.45	1.84	0.78	0.4	130	0.6	0.365	31	18	6.9	5.5	60	<1	
AC94CR001	3339453	24	28	<0.1		8	21	65	46	23	6.1	1.22	1.38	0.4	580	0.4	0.405	44	13	4.7	3.7	95	<1	
AC94CR001	3339454	28	32	<0.1	<1		20	65	42	24	5.75	1.46	1.46	0.4	560	0.5	0.48	39	13	5.2	3.5	85	<1	
AC/RC94CR002	3339455	0	4	<0.1		6	6.1	50	14	23	1.98	0.79	0.59	0.1	90	1.5	0.19	16	9.8	5.3	3	30	<1	
AC/RC94CR002	3339456	4	8	<0.1		12	5.2	70	19	46	10	1.82	0.53	0.4	80	1.6	0.23	12	10	9.4	2.6	34	<1	
AC/RC94CR002	3339457	8	12	<0.1		6	6	70	19	50	7.05	1.98	0.6	0.5	55	0.9	0.245	16	18	8.2	4	42	1	
AC/RC94CR002	3339458	12	16	<0.1	<1		4.5	60	36	29	5.35	1.68	0.53	0.4	50	0.5	0.31	10	16	4.7	3.7	32	<1	
AC/RC94CR002	3339459	16	20	<0.1		6	8.3	70	90	38	3.96	1.52	0.71	0.4	60	0.5	0.365	24	15	6.5	6.2	50	<1	
AC/RC94CR002	3339460	20	24	<0.1		6	19	65	44	28	6	1.44	1.24	0.4	500	0.6	0.4	55	15	5.2	4.7	85	<1	
AC/RC94CR002	3339461	24	28	<0.1		6	24	70	36	46	6.65	2.32	1.56	0.4	760	0.6	0.455	47	13	10	3.3	85	<1	
AC/RC94CR002	3339462	28	32	<0.1		6	23	75	48	44	5.8	1.64	1.66	0.5	700	0.7	0.58	40	13	8	4.1	80	<1	
AC/RC94CR002	3339463	32	36	<0.1		8	19	65	48	36	5.6	1.22	1.56	0.4	370	0.8	0.53	38	13	6.3	3.9	65	<1	
AC/RC94CR002	3339464	36	40	<0.1		6	19	70	48	27	5.05	1.32	1.6	0.4	400	0.8	0.57	43	11	4.7	3.1	70	<1	
AC/RC94CR002	3339465	40	44	<0.1		8	19	70	38	31	5	1.54	1.58	0.4	370	1	0.62	55	16	5.4	4	70	<1	
AC/RC94CR002	3339466	44	48	<0.1		8	17	70	44	34	5.4	1.24	1.6	0.4	380	0.7	0.71	38	1					





9067-1	
CRA EXPLORATION PTY LIMITED	
CAMPBELL RISE EL 1837 - S.A.	
Flight Path	
( Surrendered Portion )	
REF. :	KINGOONYA SH53-11
SCALE :	1 : 100 000
AUTHOR :	SPN
DATE :	July 96
DRAWN :	REPORT : 22180
PLAN NO. :	SAa 6320

600000m E

610000m E

620000m E

60 METRES GRID MESH

CONTOUR INTERVAL 10 m

6590000m N

6580000m N

6570000m N

30° 45' 0" S

30° 50' 0" S

30° 55' 0" S

31° 0' 0" S

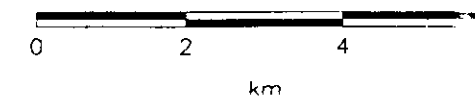
136° 5' 0" E

136° 10' 0" E

136° 15' 0" E

136° 20' 0" E

SCALE 1:100000

**9067-2**

CRA EXPLORATION PTY LIMITED

WOOMERA SA

AEROMAGNETIC SURVEY

CAMPBELL RISE EL 1837

AEROMAGNETIC CONTOURS

KINGOONYA SH53-11

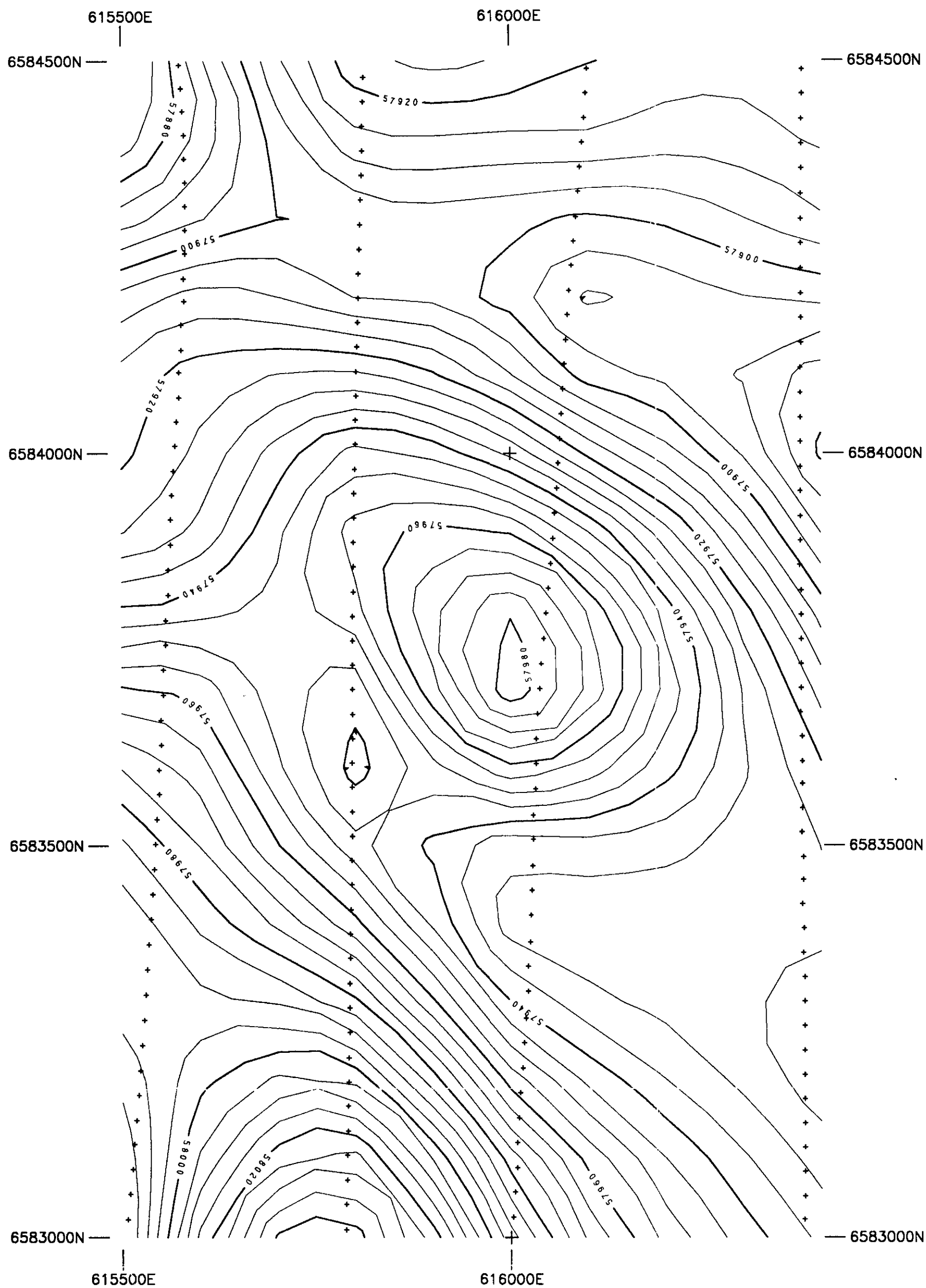
Report No. 22180

SCALE 1:100000

Plan No. SAa 6321

DRAWN BY: G.E.BIRD

DATE: 26/ 9/ 94



#### SPECIFICATIONS

For survey details see Marcus Hill  
EL 1224, Progress and Final Reports,  
24.2.84 to October 1985.

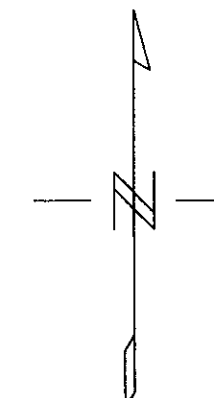
Scale 1:5000  
50 0 50 100 150 200 250 300  
(meters)

# 9067-3



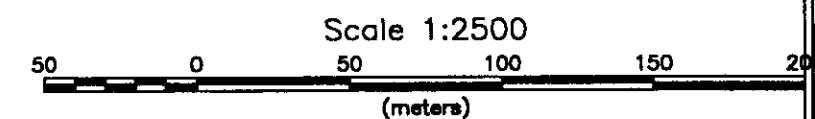
CRA EXPLORATION PTY LIMITED	
CAMPBELL RISE EL 1837	
HARCUS HILL AEROMAGNETIC SURVEY	
YH3 TARGET AREA	
REF. KINGOONYA SH53-11, ANDAMOOKA SH53-12	
SCALE 1:5,000	DRAWN MGB
AUTHOR MGB	REPORT 22180
DATE Sep 94	PLAN No SAa 6316

9067-3



SPECIFICATIONS

Base Level - 57800 nT  
Scale - 5 nT/cm  
Diurnal Removed



9067-4

CRA EXPLORATION PTY LIMITED

CAMPBELL RISE EL 1837  
GROUND MAGNETIC TRAVERSES  
YH4 TARGET AREA

REF. KINGOONYA SH53-11, ANDAMOOKA SH53-12

SCALE 1:2500	DRAWN MGB
AUTHOR MGB	REPORT 22180
DATE Sep '94	PLAN No SAa 6317



6580250N —

+

+

+

+

— 6580250N

615250E

615500E

615750E

616000E

615250E

615500E

615750E

616000E



615500E

616000E

616500E

6584000N — +

+ — 6584000N

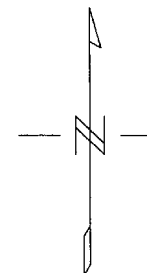
6583500N — +

+ — 6583500N

615500E

616000E

616500E



## SPECIFICATIONS

Base Level - 57800 nT  
 Scale - 50 nT/cm  
 Diurnal Removed

Scale 1:5000  
 50 0 50 100 150 200 250 300  
 (meters)

CRA EXPLORATION PTY LIMITED

CAMPBELL RISE EL 1837

GROUND MAGNETIC TRAVERSES

YH3 TARGET AREA

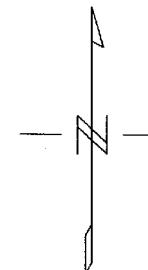
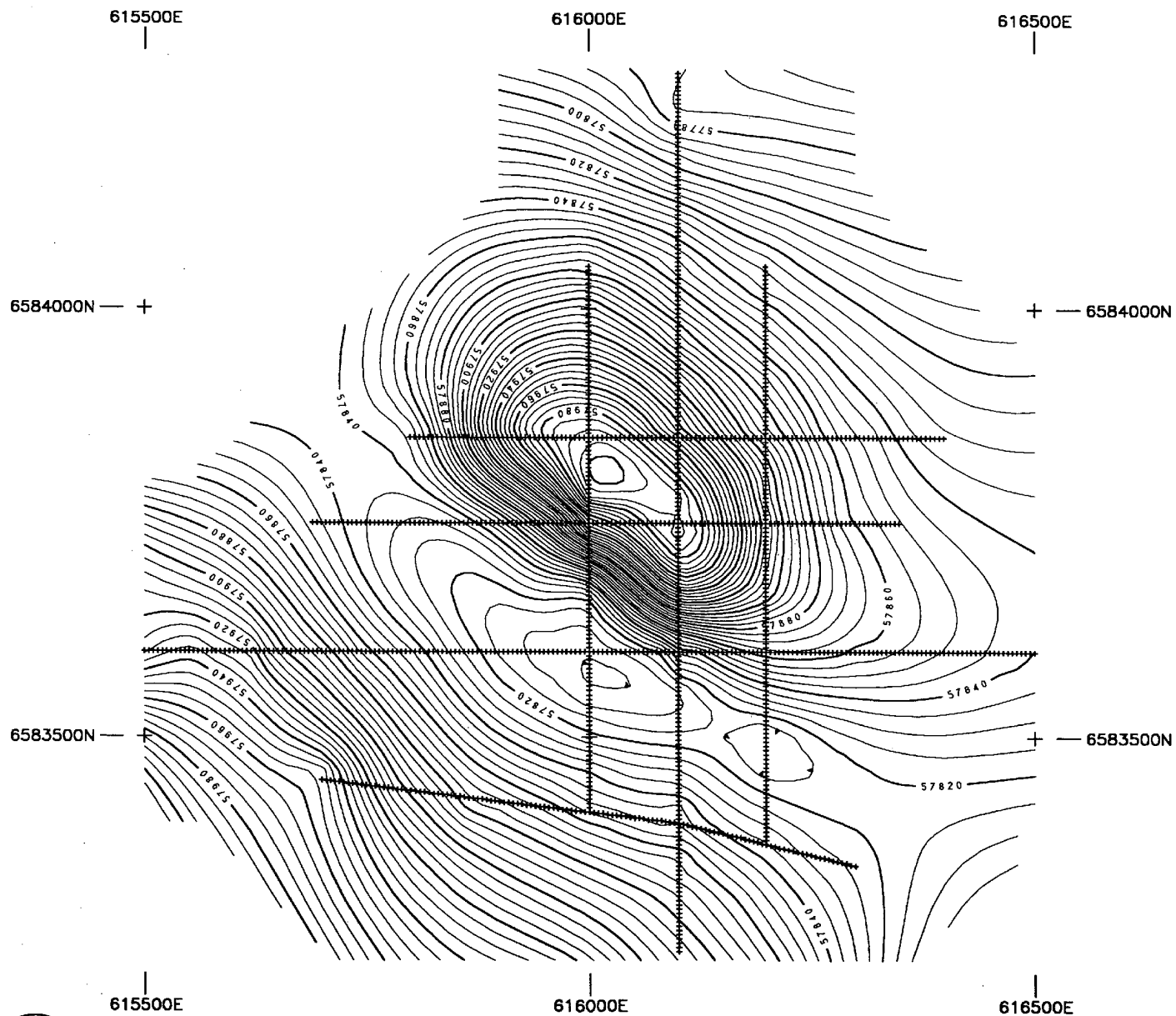
REF. KINGOONYA SH53-11, ANDAMOOKA SH53-12

SCALE 1:5000 DRAWN MGB

AUTHOR MGB REPORT 22180

DATE Sep '94 PLAN No SAa 6318

0018



Scale 1:5000  
50 0 50 100 150 200 250 300  
(metres)



CRA EXPLORATION PTY LIMITED	
CAMPBELL RISE EL 1837	
GROUND MAGNETIC CONTOURS	
YH3 TARGET AREA	
REF. KINGOONYA SH53-11, ANDAMOOKA SH53-12	
SCALE 1:5000	DRAWN MGB
AUTHOR MGB	REPORT 22180
DATE Sep '94	PLAN No SAA 6319