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No. 9084

EL 2094, EL 2095 AND EL 2096

ANNA CREEK, BELT BAY AND LONDON SPRINGS

JOINT FIRST ANNUAL REPORT FOR THE PERIOD 3/7/95 TO 2/7/96

Submitted by
MIM Exploration Pty Ltd
1996

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**PRIMARY INDUSTRIES
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ENVELOPE 9084

TENEMENT: EL 2094, Anna Creek; EL 2095, Belt Bay; EL 2096, London Springs

TENEMENT HOLDER: MIM Exploration Pty Ltd

CONTENTS

				MESA NO.
REPORT:	McGeough, M., 1996. EL 2094 "Anna Creek", EL 2095 "Belt Bay" and EL 2096 "London Springs", West Lake Eyre Project. Annual report for the year ending July 3, 1996 (MIM technical report no. 2716).			9084 R 1 Pgs 3-12
PLANS		Scale	Company plan no.	
Fig. 1	Location diagram with relinquished areas.	1:500 000	Dwg 51124	Pg. 9 <i>A3</i>
	Aeromagnetic pixel map. Colour scaled total magnetic intensity, area C4.	1:250 000	Dwg 51162	9084-1 <i>A1</i>
	Gow, P., 1995. Anna Creek TMI (vertical gradient), automag calculation.	1:100 000	Dwg 51163	9084-2 <i>A1</i>
	Gow, P., 1995. Anna Creek TMI automag calculations.	1:100 000	Dwg 51164	9084-3 <i>A1</i>
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	[Note: Colour microfilm images of Plans 9084-1, 9084-2, 9084-3 and 9084-4, follow the plans on the microfiche.]			

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TECHNICAL REPORT

No. 2716

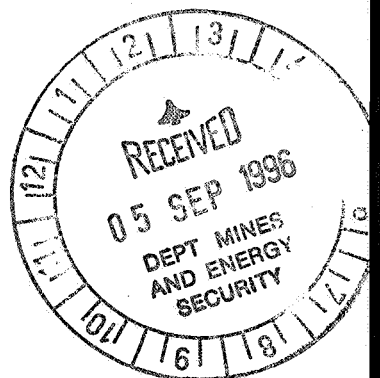
TITLE

**EL 2094 "ANNA CREEK", EL 2095 "BELT BAY"
and EL 2096 "LONDON SPRINGS"
"West Lake Eyre Project"**

**Annual Report for the Year ending
July 3, 1996**

**AUTHOR
DATE
COPY No.**

**M. McGeough
August 1996
3 - MESA**



Mines & Energy SA

R96/01879



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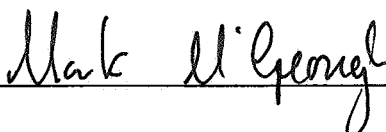
(ACN 009 681 118)

TECHNICAL REPORT**No. 2716****TITLE:****EL 2094 "ANNA CREEK",
EL 2095 "BELT BAY and
EL 2096 "LONDON SPRINGS"****"West Lake Eyre Project"****ANNUAL REPORT FOR THE
YEAR ENDING July 3, 1996****ISSUING DEPARTMENT:****EXPLORATION****AUTHOR:****M. McGEOUGH****INVESTIGATIONS
CONDUCTED BY:****M. McGEOUGH****SUBMITTED BY:****M. McGEOUGH****DATE:****AUGUST 1996**

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Approved for Distribution:

A handwritten signature in black ink, reading "Mark McGeough", is written over a horizontal line.

M. McGeough

District Geologist - South Australia

KEY WORDS:

Peake and Dennison Inlier

Magnetic Anomalies

Gravity Anomalies

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EL 2094, EL 2095 and EL 2096 “West Lake Eyre Project”

ANNUAL REPORT FOR THE YEAR ENDING JULY 3rd, 1996

1. INTRODUCTION and SUMMARY

Exploration Licences 2094 “Anna Creek”, 2095 “Belt Bay” and 2096 “London Springs” are located approximately 160 km by road due east of Coober Pedy (Figure 1). EL 2094 (2639 km²), 2095 (2008 km²) and 2096 (1011 km²) were granted on July 3, 1995. The three licences are presented in a report together as they form one project area being explored concurrently.

MIM Exploration undertook a regional airborne magnetic survey in joint venture with MESA covering all three tenements. The data and images are open file and available from MESA.

Automag calculations were completed over a small area to establish depth to basement.

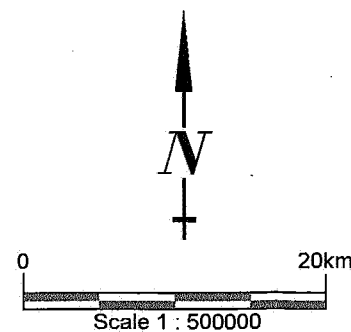
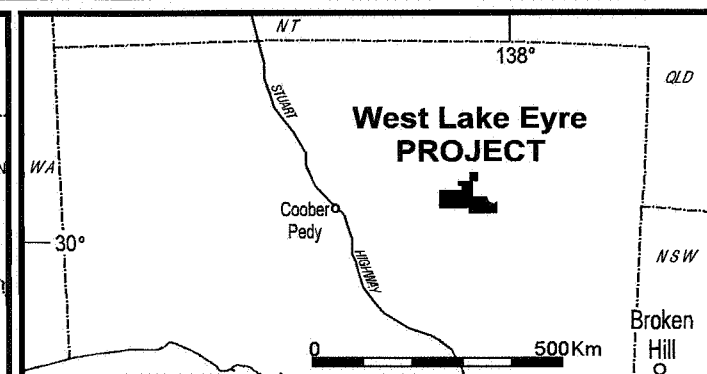
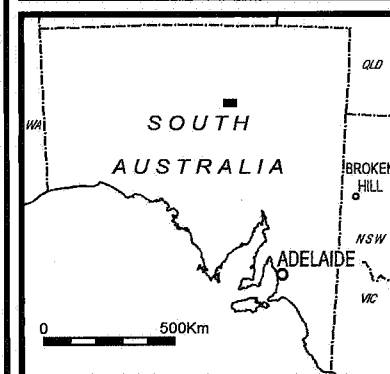
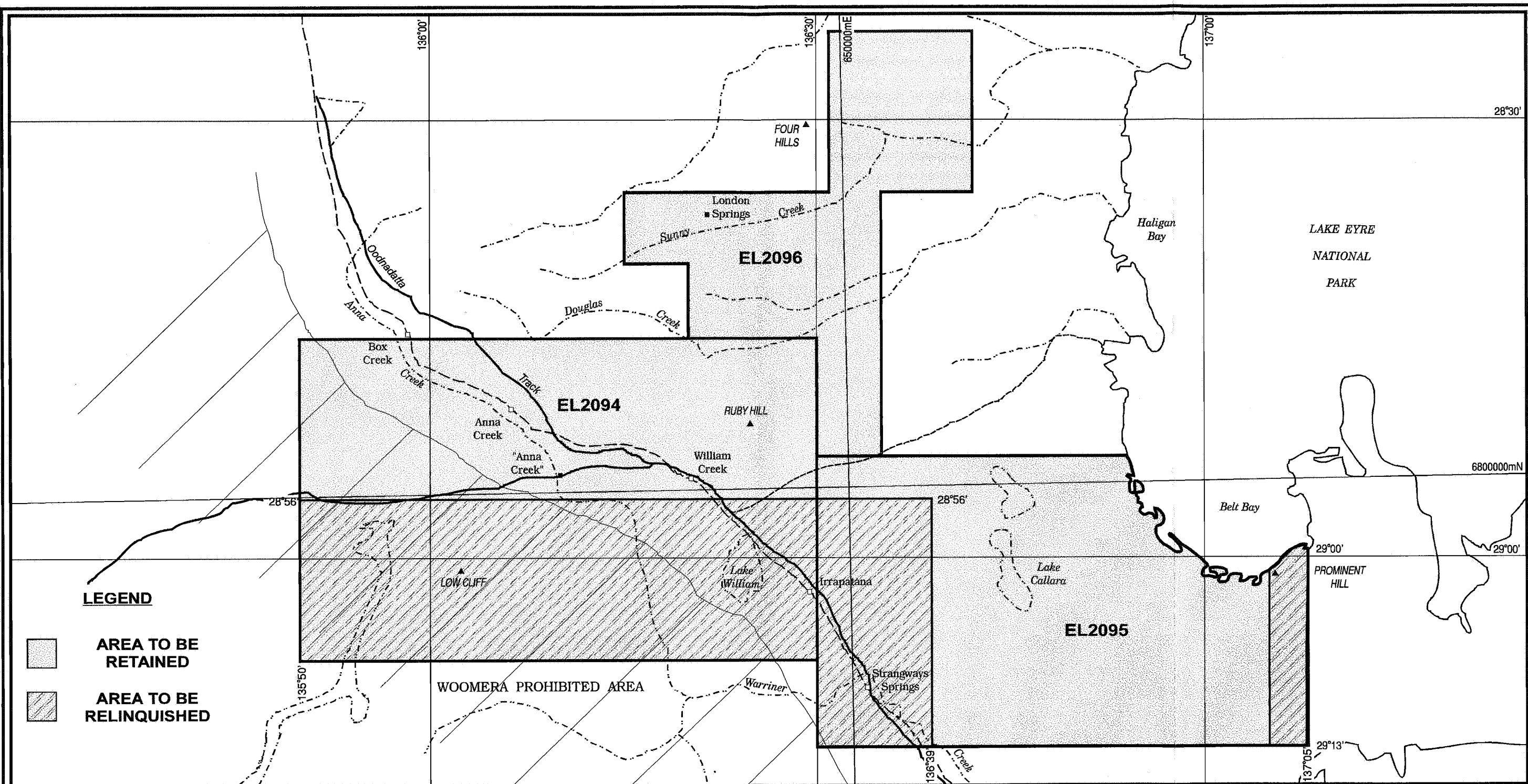
2. LOCATION and ACCESS

The Licences lie on the Warrina (SH53-3), Lake Eyre (SH53-4), Curdimurka (SH53-8) and Billa Kalina (SH53-7) 1:250 000 scale geological sheets.

Access is via the Oodnadatta track and Anna Creek Station tracks.

3. TENURE

Exploration Licences 2094 “Anna Creek”, 2095 “Belt Bay” and 2096 “London Springs”



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A.C.N. 009 681 118

PROJECT / TITLE :

WEST LAKE EYRE PROJECT

Mining District or Region: WEST LAKE EYRE			Compiled by : MM	Scale : 1:500000
Revised by :	Date :	1 : 250 000 Ref : SH53-4	Drawn by : REMc	Date : 26/6/96
		1 : 100 000 Ref : n/a	Drwg No : 51124	Fig. No. 1

are located approximately 160 km by road due east of Coober Pedy (Figure 1). EL 2094 (2639 km²), 2095 (2008 km²) and 2096 (1011 km²) were granted on July 3, 1995.

The exploration commitment was set at \$640,000 for the three tenements.

Part of EL 2094 and EL 2095 were relinquished on the July 3, 1996. The relinquished areas and the present tenement boundaries are shown on Figure 1.

4. REGIONAL GEOLOGY

The majority of the licences are covered by Cretaceous shale and siltstone, masked by Recent aeolian sand (parallel dunes), minor gibber plains, gypcrete, calcrete and salt lakes.

Beneath this various Adelaidean and Peake Metamorphic units have been intersected in isolated drill holes. Over the northern part of EL 2094, 2095 and most of EL 2096 up to 50m of Jurassic sediments have been intersected overlying the Willouran, Torrensian and Sturtian sediments and volcanics.

The Airborne magnetic data indicates magnetic mafic volcanics to be common in fault bounded troughs.

5. PREVIOUS EXPLORATION

Most previous exploration has concentrated on the exposed Peake and Dennison Inlier to the west. A number of companies have also explored the area for diamonds. Over the Licence areas:

Uranerz (EL 33) carried out a radiometric survey and followed up with ground reconnaissance. No significant anomalies were reported.

Newmont (EL 341) drilled one deep hole SR13/2 between 1977 and 1978. This hole was extended twice and completed at 900.27m in probable Burra Group.

In 1981, CRA Exploration drilled 8 percussion holes (prefix 81RHP) to depths ranging from 60m to 182m. Drill holes 1 to 5 and 8 were drilled to test diamond targets with 6 and 7 designed to evaluate possible base metal targets. Only drill hole 8 was drilled on the Anna Creek licence.

In 1982, Aquitaine (EL 823) carried out a detailed gravity survey near Lake Callara. A 5 milliGal anomaly was defined but the company decided not to drill evaluate the anomaly, due to possible artesian water.

In 1983, BHP (EL 1136) carried out a gravity and ground magnetics survey partly on the eastern half of the London Springs tenement.

6. EXPLORATION conducted by MIM EXPLORATION in 1996

Exploration has been limited to processing of the airborne magnetic survey C4 obtained by MESA in joint venture with MIM Exploration. The TMI image is given as Drawing No. 51162. Automag interpretation was also carried out on a selected area of EL 2095. The TMI automag contours are shown on Drawing No. 51164 and the TMI automag vertical derivative contours on Drawing No. 51163. It is not clear if the depth to basement is to the Peake Metamorphics or the Cadlareena Volcanics of the Willouran.

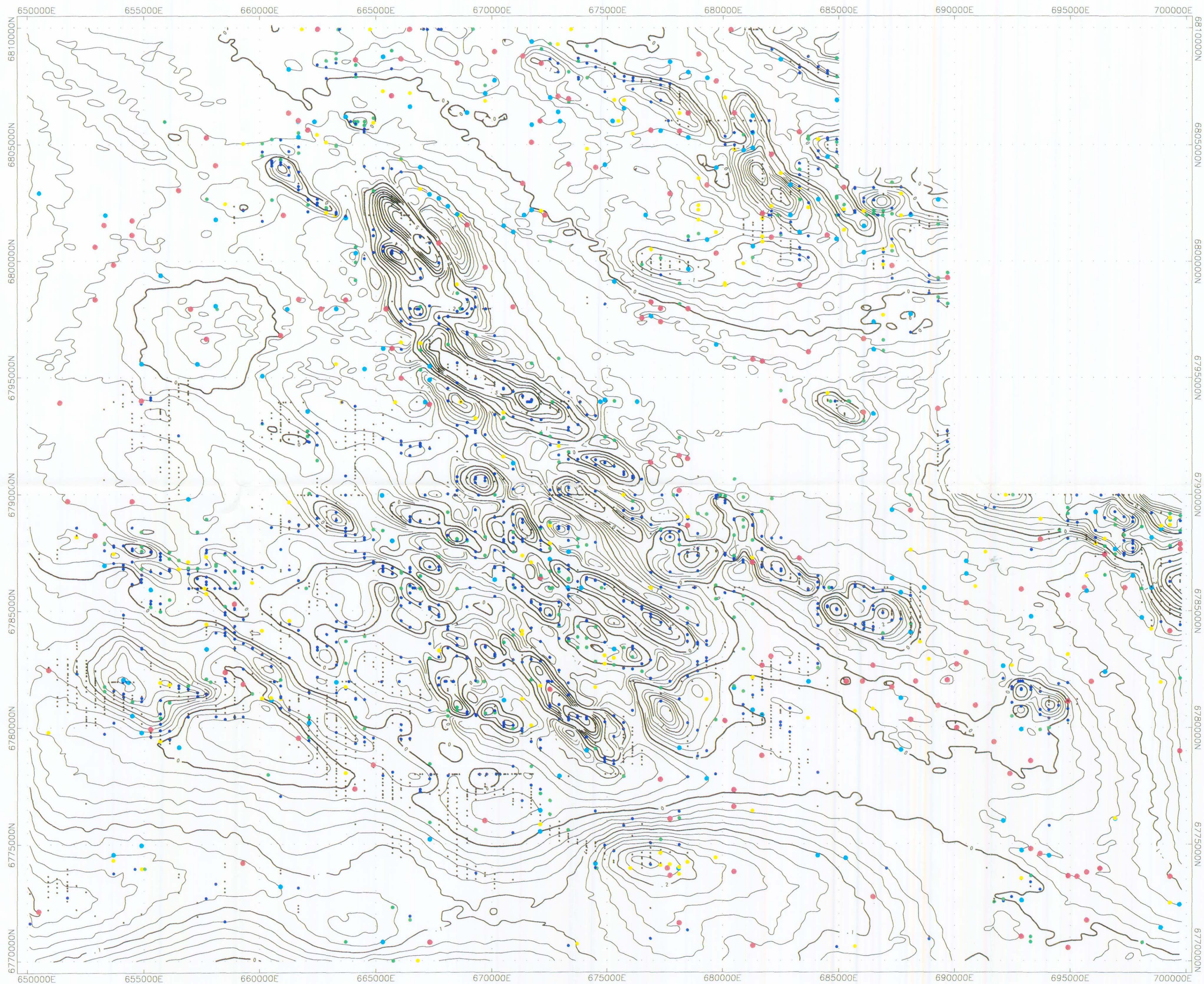
Drillhole information from the MESA state database has also been assessed. This is shown on Drawing No. 51165. This information, on depth to probable target stratigraphy, was used to relinquish a major part of EL 2094 and the western part of EL 2095.

7. CONCLUSION

To date, only limited work has been carried out on these tenements. Major fault intersections are seen in both the gravity and magnetic data.

8. FUTURE WORK

- A number of EM traverses across major faults will be carried out.
- Geochemistry will be trialed across major structures.
- Drilling of significant targets.



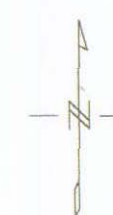
- LEGEND**
- Depth 0-50m
 - Depth 50-100m
 - Depth 100-150m
 - Depth 150-250m
 - Depth 250-500m
 - Depth > 500m

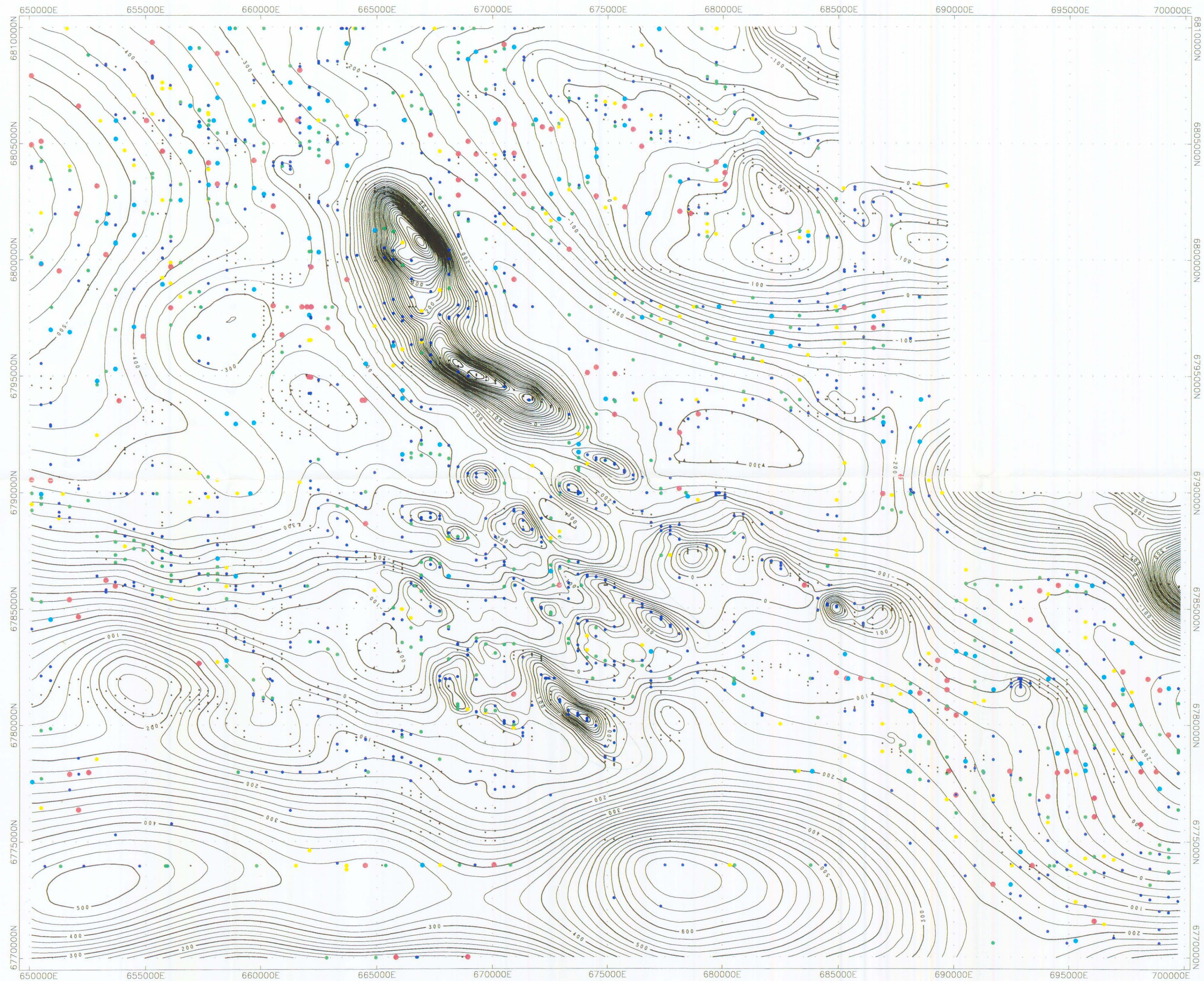
1000 0 1000 2000 3000
(metres)

9084-2

Anna Creek TMI(Vertical Gradient) Automag Calculation
Dyke Model, TMI (VG) Contours (RTP) Reduced To Pole
Paul Gow, 20/12/95, 1:100,000

Drawing No. 51163





LEGEND

- Depth 0-50m
- Depth 50-100m
- Depth 100-150m
- Depth 150-250m
- Depth 250-500m
- Depth > 500m

- 405° rotation (inclination) = 250-500m

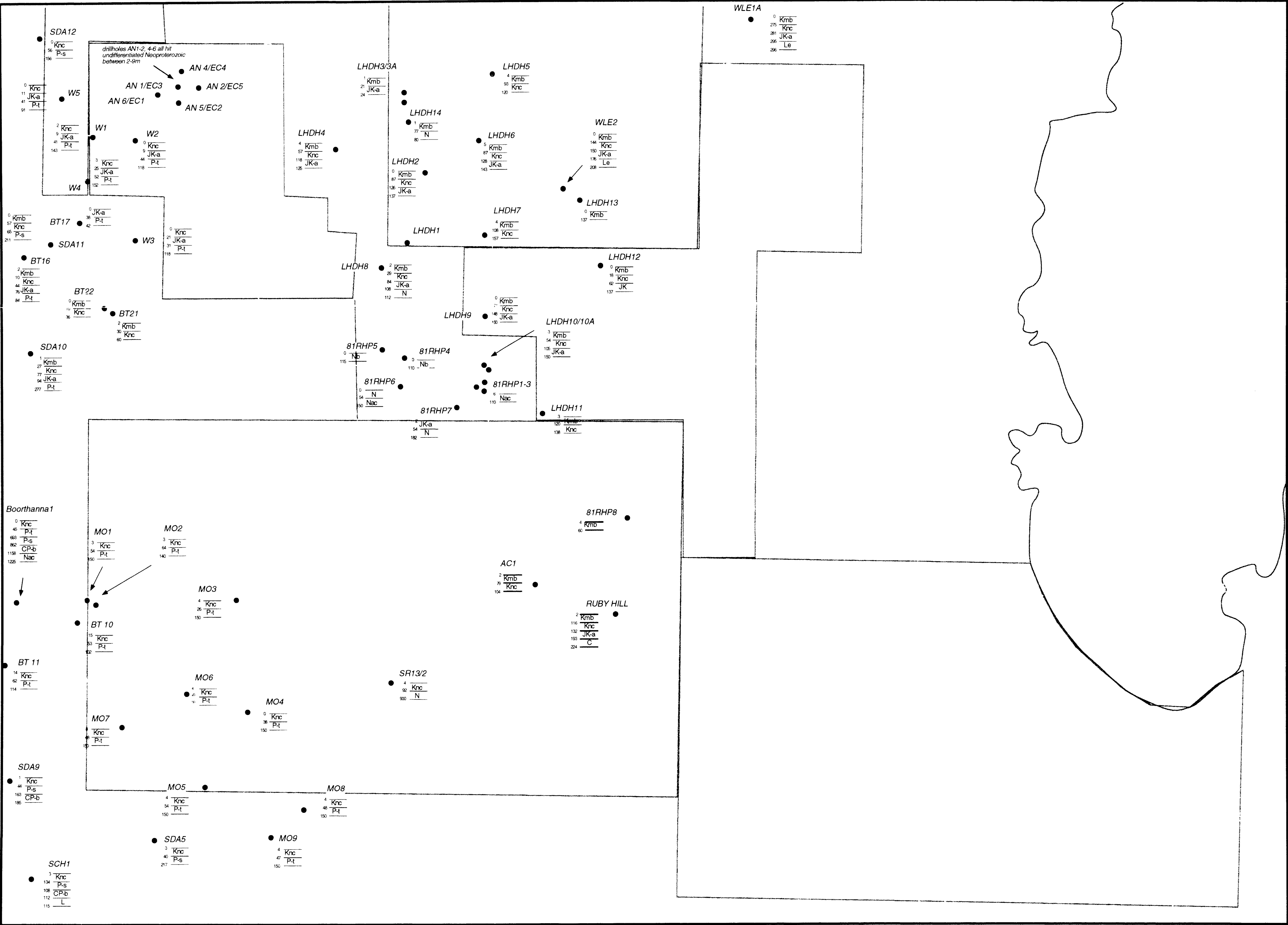
9084-3

Anna Creek TMI Automag Calculations
Dyke Model, TMI Contours (RTP) Reduced To Pole
Paul Gow, 20/12/95, 1:100,000

Drawing No. 51164

1000 0 1000 2000 3000
(metres)





STRATIGRAPHY		
CRETACEOUS	Kmb	Bulldog Shale
	Knc	Cadna-owie
	JK-a	Algebuckina Sandstone
	JK	Jurassic/Cretaceous (undifferentiated)
PERMIAN	P-t	Mt. Toondina Fm.
	P-s	Stuart Range Fm.
	CP-b	Boorthanna Fm.
	C	Carboniferous (undifferentiated)
NEOPROTEROZOIC	Nb	Burra Group
	Nac	Cadlareena Volcanics (mafic)
	N	Adelaidean (undifferentiated)
PALAEOPROTEROZOIC	Le	Peake Metamorphics
	L	Palaeoproterozoic (undifferentiated)

WEST LAKE EYRE

Drillhole Information

Universal Transverse Mercator Projection
1:250,000 Scale
9-8-96, P. Gow

Drawing No. 51165

Drillhole data taken from the MESA state database (June 1996 Release). Units younger then Cretaceous have not been mapped on this figure.

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