

# 98-4174



EL36/96 Pieman 1

230001

**Final Report and incorporating work done**

**for the period January to May 1998**

**SK5503, Burnie, 1:250 000 Map Sheet, Tasmania, Australia**

**OPEN FILE**

EL36/96  
See folio 25

**Author(s):** TF McConachy

**Date:** June 1998

**Submitted to:** Chief Geologist - Eastern District

**Copies to:** Rio Tinto Exploration - Perth  
Mineral Resources Tasmania

98-4174

FINAL REPORT-EL 36/96  
PIEMAN 1 - RIO TINTO  
TF MCCONACHY

**MICROFILMED**  
FICHE No.014639-

**Report No: 24000**

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### Abstract

Pieman No 1, EL36/96 was granted to Rio Tinto Exploration Pty. Limited on 11 January 1997. The licence covers 44 sq km and is centred approximately 9 km north of the township of Corinna in north-west Tasmania (Plan Tv1161).

Rio Tinto acquired EL36/96 to explore for economic diamondiferous pipe-like structures. Historically, approximately 30 diamonds have been found in creeks draining the Cambrian metasediments of west coast Tasmania, the majority from Sunday Creek.

Work conducted during the first year of tenure included:

- A comprehensive data review conducted by J G Purvis & Associates Pty. Limited;
- Purchase of Mineral Resources Tasmania 1996 NW Tasmanian aeromagnetic data.

Work completed during the five months in the second year of tenure included:

modelling of two weak (18 and 12nT) bullseye anomalies immediately to the north of Sabbath Creek.

It is concluded that there is insufficient encouragement to warrant follow-up and it was therefore recommended that the tenement be relinquished in full.

No field work was conducted and therefore no rehabilitation required.

Abstract

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## 1. Conclusions and Recommendations

### Conclusions:

- Two small weak (18 and 12 nT) bullseye anomalies exist immediately to the north of Sabbath Creek. These were modelled as moderately east dipping cylindrical bodies, with depth to source from surface or near surface to 120 - 140m.
- Widespread auriferous Tertiary gravels contain a heavy mineral suite dominated by ilmenite, chromite, spinel and topaz, and are probably the source for diamond.
- There is insufficient encouragement to warrant further work.

### Recommendation:

- That EL 36/96 Pieman 1 is relinquished in full.

## 2. Introduction

Pieman No 1, EL 36/96 was granted to Rio Tinto Exploration Pty. Limited on 11 January, 1997. The licence covers 44 sq km and is centred approximately 9 km north of the township of Corinna in north-west Tasmania (Plan Tv1161).

Rio Tinto acquired EL 36/96 to explore for economic diamondiferous pipe-like structures. Historically, approximately 30 diamonds have been found in creeks draining the Cambrian metasediments of west coast Tasmania, the majority from Sunday Creek.

ML 12M/96 (5ha) is wholly within and excluded from the licence area of EL 36/96. ML 37M/90 overlaps an area of approximately 1ha in the south eastern portion of the Pieman licence.

The geology of the area is dominated by Proterozoic sediments such as pelitic siltstone, conglomerate and quartz arenite of late Pre Cambrian age. There are also common outliers of Tertiary gravels. The licence is cross cut by a large NE - SW oriented fault and an earlier phase of dominantly NW - SE oriented faulting.

The Mineral Resources Tasmania west coast aeromagnetic survey shows a bullseye anomaly in the catchment of Longback Creek, north of Sunday Creek. Rio Tinto has no knowledge of this anomaly being tested for diamonds.

## 3. Review of Previous Work

### 3.1 Prior to Current Tenement

A comprehensive summary of historical exploration was undertaken and has been reported (Russell, 1997).

### 3.2 Exploration Completed in 11 Month Period Ending 11 December 1997

The following work was conducted on EL, 36/96 Pieman No 1 during the current tenement:

- Literature review conducted by J G Purvis & Associates Pty. Limited.
- Purchase of Mineral Resources Tasmania 1996 NW Tasmanian aeromagnetic data.

Major findings from the literature review are summarised in Appendix 1. *- previous report*

### 4. Exploration Completed in 6 month period ending 31 May 1998

Modelling of two discrete magnetic anomalies suggest east dipping cylindrical bodies, with depth to source from surface to 120 - 140 m. (See Appendix 1).

### 5. Rehabilitation

No field work was conducted, hence no rehabilitation was required.

### 6. Expenditure

Expenditure for EL 36/96, Pieman No 1 for the 6 month period ending 31 May 1998 is \$14,877.

### 7. References

Russell, SAJ 1997                      EL 39/96 First Annual Report for the 11 month period ending 11 December 1997. Rio Tinto Report No. 23623.

### 8. Location

Burnie	SK55-03	1:250,000
Pieman	7914	1:100,000
Interview	3239	1:25,000
Meredith	3439	1:25,000

### 9. Keywords

Tasmania \* Diamonds \* Proterozoic \* Sabbath Creek \* Aeromagnetics \* alluvial

Table 1

EL 36/96 Pieman 1  
Expenditure Table

	6 months ending 31/5/98
Drilling	0
Contractors	7,085
Laboratory	0
Rent & Property	103
Payroll & Benefits	2,400
Field & Transport	682
Travel & Accommodation	0
Computer Services	517
Professional	0
Office & Miscellaneous	1,570
District Administration	760
Regional Costs	1,100
Tenements	660
<b>TOTAL</b>	<b>14,877</b>

**Appendix 1**

Aeromagnetic Anomalies A & B

EL 39/96 Pieman 1

Memorandum by R J Hurren

# RIO TINTO

230009

## Memorandum

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To: **Sarah Russell**  
Copy: Tim McConachy (no plans)  
From: R.J. Hurren  
Date: **6<sup>th</sup> February 1998**

File: Pieman 1 EL 36/96  
Technical

### **Aeromagnetic Anomalies A and B - EL 36/96 Pieman 1**

#### **Summary**

The AGSO P652 airborne magnetic survey over EL 36/96 Pieman 1 in NW Tasmania shows three discrete magnetic anomalies within EL 36/96. Plan Tv1292 displays the magnetics image and flight lines at 1:25,000 scale.

Magnetic anomalies labelled A and B are of interest here. The third and most obvious anomaly (Longback 1) has been diamond drilled previously by Geopeko in 1983 whilst searching for sulphides and is of no real interest.

Three flight lines in total were used in the modelling of the anomalies. One for magnetic anomaly A and two for magnetic anomaly B. Data obtained from the flight lines was modelled in MAGMOD, POTENT and Model Vision.

The modelling results are presented in plans Tv1293-1304 and figures 1-4.

The best fitting models indicate moderately dipping cylindrical bodies. Both anomalies dip towards the east and extend relatively deeply (>1km). Magnetic anomaly A is at depths ranging from the surface to 141m. Magnetic anomaly B is at depths ranging from 15m to 126m.

## Discussion

Plan Tv1292 shows a colour image of the total magnetic field superimposed over flight lines at 1:25,000 scale. This image encompasses EL 36/96 Pieman1. The locations of Magnetic Anomaly A and B are shown on the plan. They are located at approximately 339900E, 5395400N and 339450E, 5394950N respectively.

Flight lines intersecting these anomalies are 103240 (Mag Anomaly A) and 103260 & 103270 (Mag Anomaly B).

The Aeromagnetic data was initially modelled using MAGMOD and POTENT, inverting on single flight lines only. Model Vision was used to model a number of lines thus allowing inversion of both targets simultaneously.

Starting with MAGMOD a variety of vertical tabular bodies both thick and thin were trialed, although close, the fits were unsatisfactory. A dipping tabular body (great depth extent) of moderate thickness provided the most satisfactory fit for both anomalies. This type of body was then modelled in POTENT and Model Vision. The parameters defining this type of body for both anomalies are given in the table below. Profiles for each of these models can be seen in plans Tv1293, Tv1297 and Tv1298 and figures 1, 2 and 3.

Moderately thick tabular body								
	X (m)	Y (m)	Depth (m)	Dip (deg)	Susc. (SI)	A	B	C
A MAGMOD	339846	5395435	141	54E	.00984	47	25	11835
B MAGMOD	339356	5395034	126	29E	.00124	120	200	447
B MAGMOD	339326	5394837	101	23E	.00104	156	200	330
A POTENT	339870	5395312	95	76E	.0023	250	250	1600
A ModelVision	339873	5395412	0	72E	.0025	150	150	5000
B ModelVision	339408	5394858	15	65E	.0025	230	225	5000

Table 1. Parameters of the tabular body giving for each modelling program, giving a reasonable fit to the data.

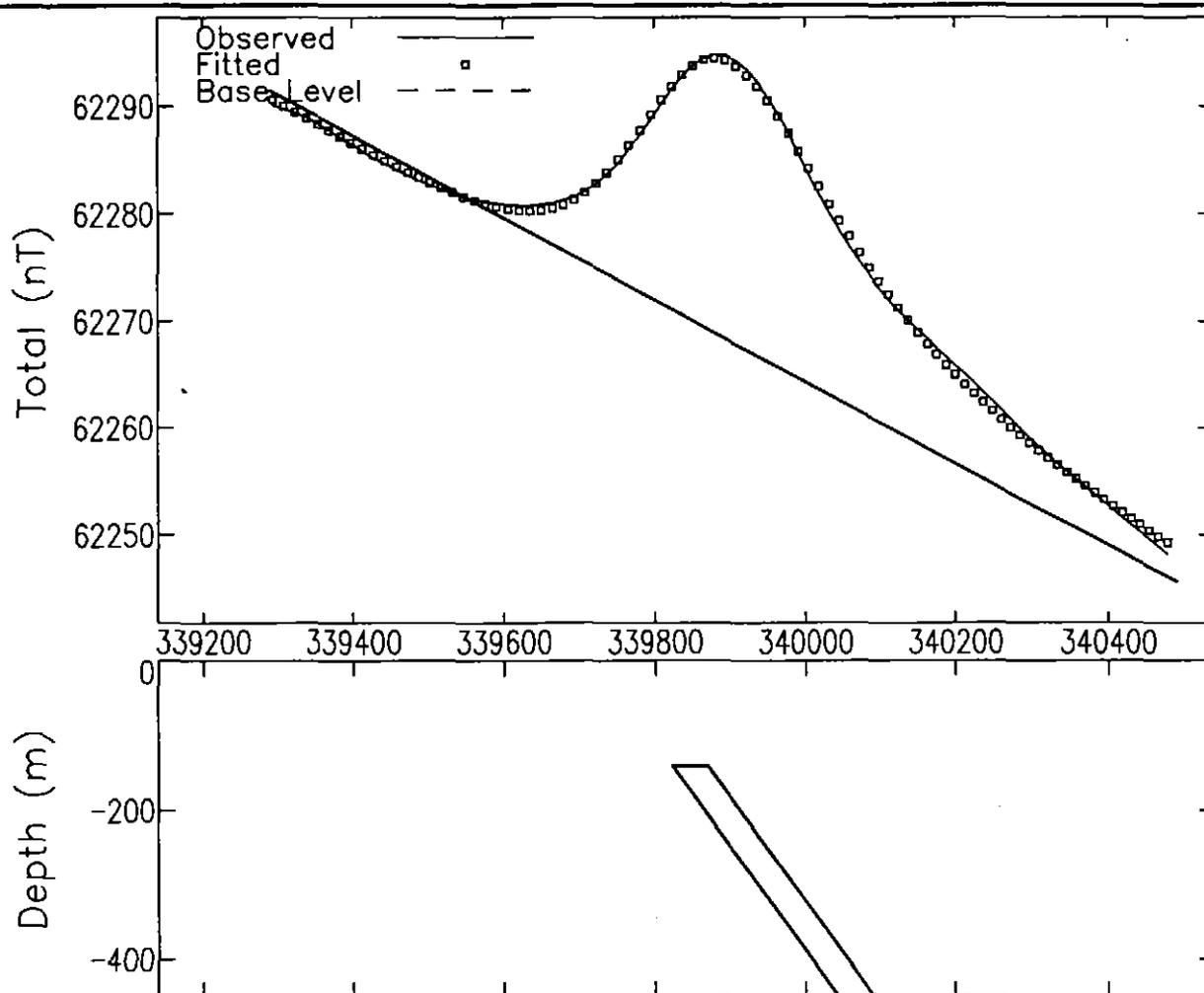
These results show that the magnetic sources are relatively shallow with a maximum depth around 150m. The modelling of the anomalies was based on a dyke like structure be it vertical or dipping (as the results show). Other different shape bodies not mentioned here were trialed, but produced poor fits to the data.

The modelling results are limited by the assumptions of no remanence and that the magnetic sources are uniformly magnetised.

Regards



Roger Hurren.



## MODEL PARAMETERS:

Model Type		Tabular2
Depth	F	141 m
Half Width	F	23.6 m
Half Length	X	25.0 m
Offset	X	0 m
Dip	F	54 deg
Thickness	L	11835 m
Susceptibility	F	0.00984 emu
Remnance Ratio	X	0
Remnance Incl	X	0 deg
Remnance Decl	X	0 deg
Main Position	F	339846 m
Cross Position	X	5395435 m
Base Level	F	62270.2 nT
Base Slope	F	-0.0382443 nT/m
Base Curvature	X	0 nT/m <sup>2</sup>

(F-fitted, X-fixed, L-limit)

## GEOMAGNETIC FIELD:

Field Strength	62020 nT
Inclination	-72 deg
Declination	12 deg

## COORDINATES:

Sensor Height	60 m
Strike Perp	90 deg
Line Direction	90 deg
Main Direction	90 deg
Main Offset	
Cross Direction	0 deg
Cross Offset	

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EL 36/96 Pieman 1  
AGSO P652 - Magnetic Anomaly A  
Magmod inversion - Free Fit  
E-W line 103240

1:250 000 Reference Sheet No. SK55-03 Burnie

AMG

AUTHOR: M.H. Dransfield

REPORT No.:

DATE: Dec 1997

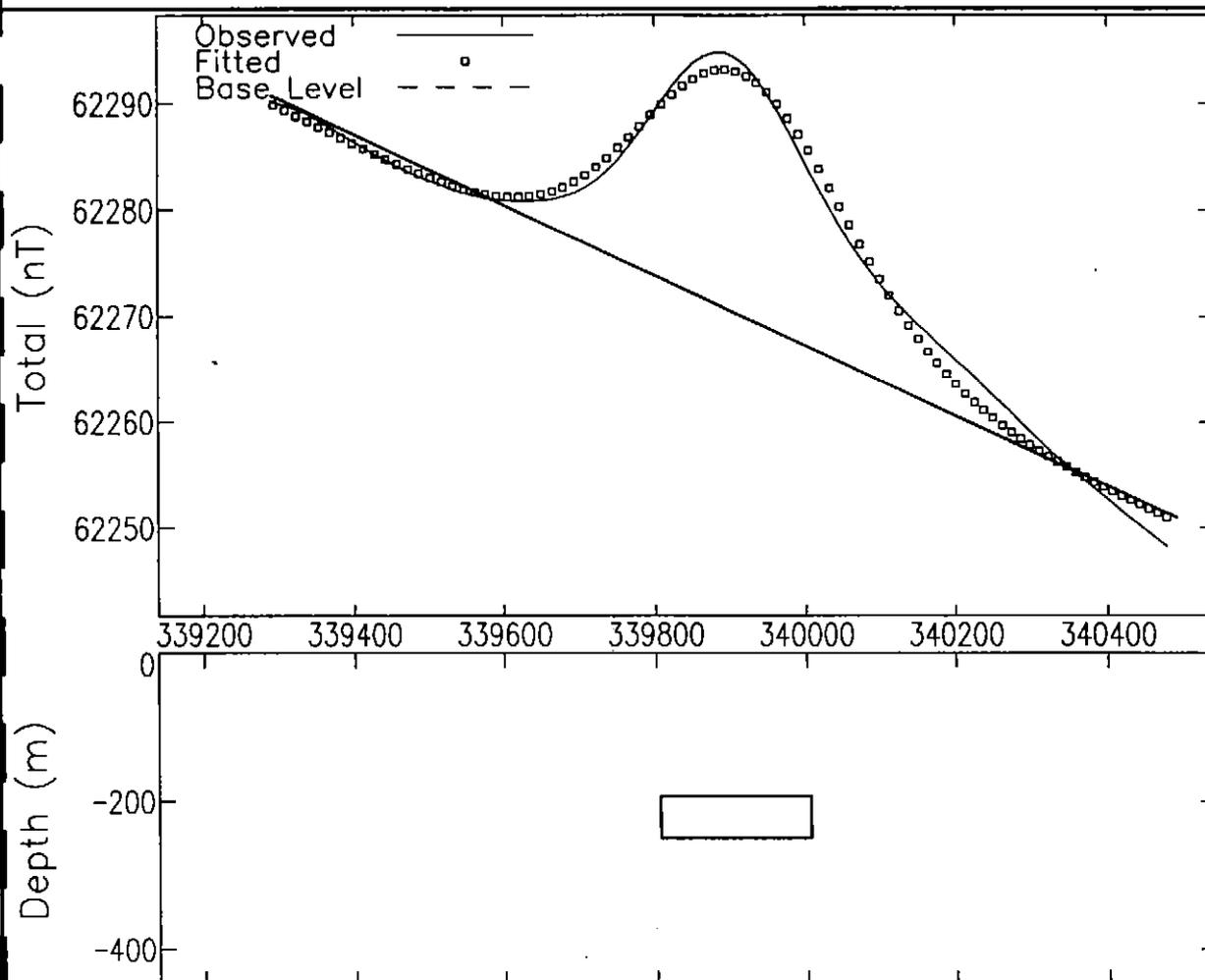
DRAWN: M.H. Dransfield

PLAN No.: Tv 1293

SCALE 1:10 000

5 cm

5 cm



## MODEL PARAMETERS:

Model Type		Tabular2
Depth	F	193 m
Half Width	X	100 m
Half Length	X	100 m
Offset	X	0 m
Dip	X	90 deg
Thickness	F	56.6 m
Susceptibility	F	0.00260 emu
Remnance Ratio	X	0
Remnance Incl	X	0 deg
Remnance Decl	X	0 deg
Main Position	F	339904.8 m
Cross Position	X	5395435 m
Base Level	F	62270.37 nT
Base Slope	F	-.033127 nT/m
Base Curvature	X	0 nT/m <sup>2</sup>

(F-fitted, X-fixed, L-limit)

## GEOMAGNETIC FIELD:

Field Strength	62020 nT
Inclination	-72 deg
Declination	12 deg

## COORDINATES:

Sensor Height	60 m
Strike Perp	90 deg
Line Direction	90 deg
Main Direction	90 deg
Main Offset	
Cross Direction	0 deg
Cross Offset	

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EL 36/96 Pieman 1

AGSO P652 - Magnetic Anomaly A

Magmod inversion - Force to be wide

E-W line 103240

1:250 000 Reference Sheet No. SK55-03 Burnie

AMG

AUTHOR: M.H. Dransfield

REPORT No.:

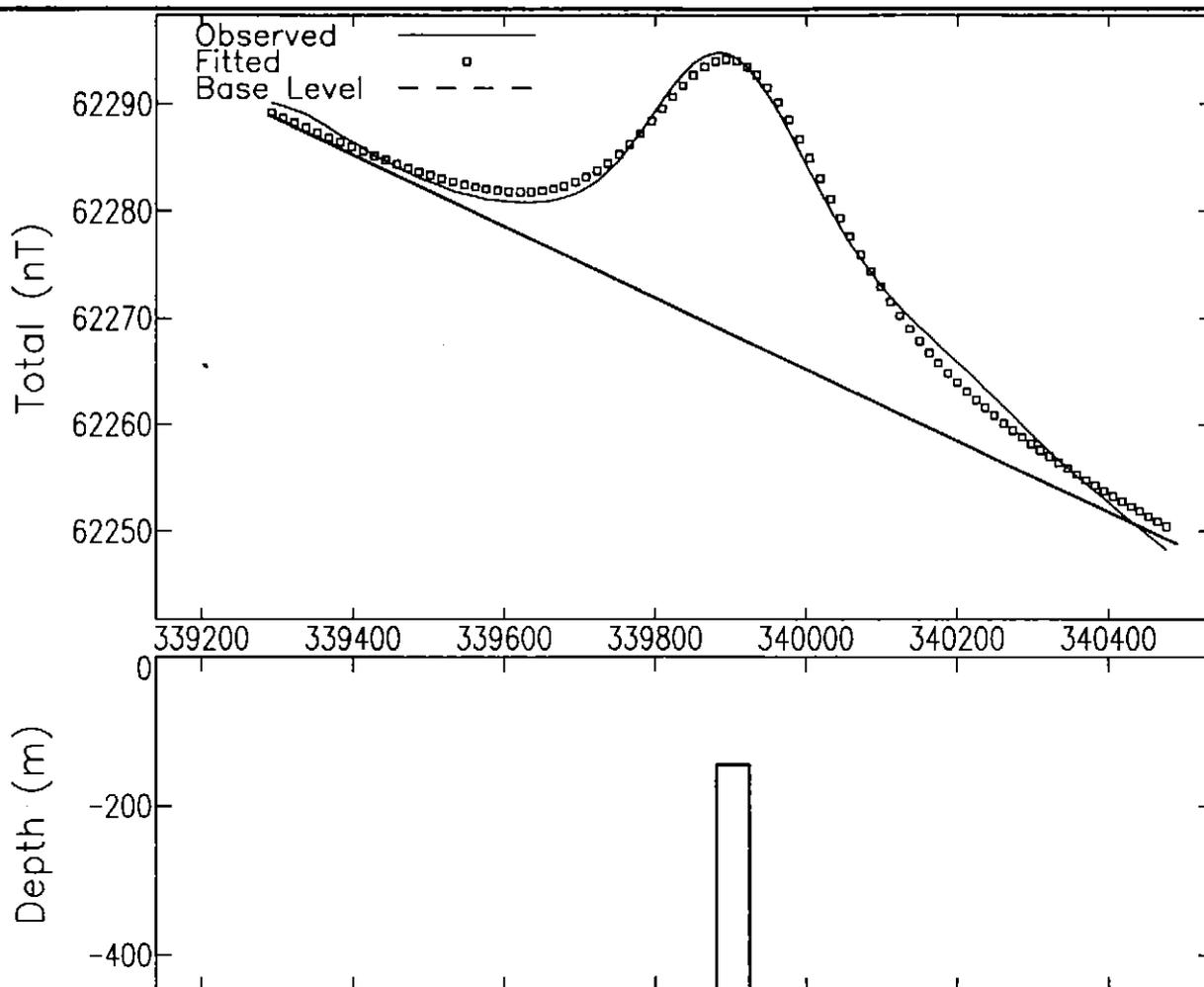
DATE: Dec 1997

DRAWN: M.H. Dransfield

PLAN No.: Tv1294

SCALE 1:10 000

5 cm



## MODEL PARAMETERS:

Model Type		Tabular2
Depth	F	145 m
Half Width	F	21.9 m
Half Length	X	25.0 m
Offset	X	0 m
Dip	X	90 deg
Thickness	F	11558 m
Susceptibility	F	0.00938 emu
Remnance Ratio	X	0
Remnance Incl	X	0 deg
Remnance Decl	X	0 deg
Main Position	F	339903.4 m
Cross Position	X	5395435 m
Base Level	F	62268.41 nT
Base Slope	F	-.0334392 nT/m
Base Curvature	X	0 nT/m <sup>2</sup>

(F-fitted, X-fixed, L-limit)

## GEOMAGNETIC FIELD:

Field Strength	62020 nT
Inclination	-72 deg
Declination	12 deg

## COORDINATES:

Sensor Height	60 m
Strike Perp	90 deg
Line Direction	90 deg
Main Direction	90 deg
Main Offset	
Cross Direction	0 deg
Cross Offset	

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**EL 36/96 Pieman 1**  
**AGSO P652 - Magnetic Anomaly A**  
 Magmod inversion - Force Vertical  
 E-W line 103240

1:250 000 Reference Sheet No. SK55-03 Burnie

AMG

AUTHOR: M.H. Dransfield

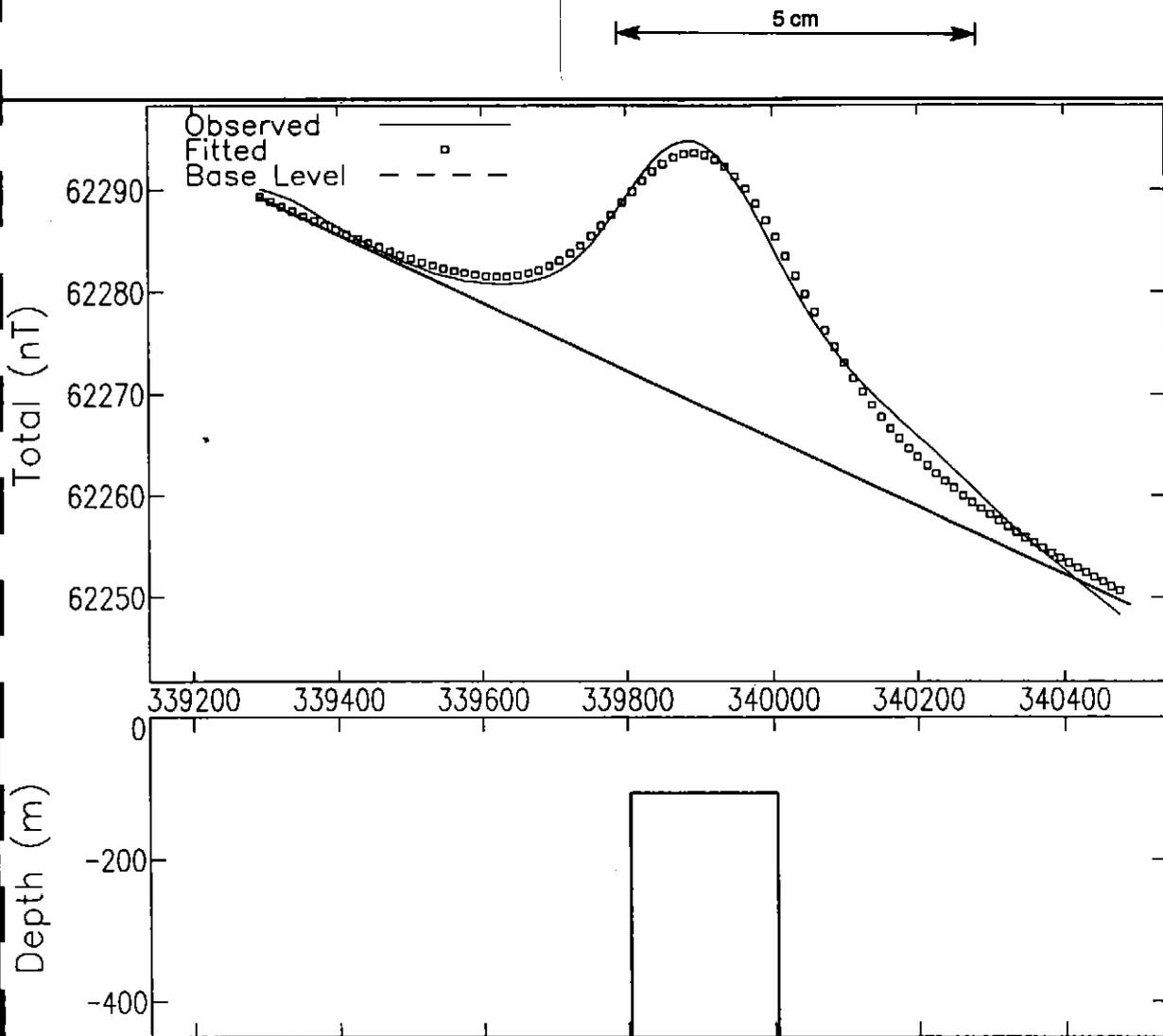
REPORT No.:

DATE: Dec 1997

DRAWN: M.H. Dransfield

PLAN No.: TV 1295

SCALE 1:10 000



## MODEL PARAMETERS:

Model Type		Tabular2
Depth	F	107 m
Half Width	X	100 m
Half Length	X	100 m
Offset	X	0 m
Dip	X	90 deg
Thickness	X	5000 m
Susceptibility	F	0.000435 emu
Remnance Ratio	X	0
Remnance Incl	X	0 deg
Remnance Decl	X	0 deg
Main Position	F	339904 m
Cross Position	X	5395435 m
Base Level	F	62268.82 nT
Base Slope	F	-.0333866 nT/m
Base Curvature	X	0 nT/m <sup>2</sup>

(F-fitted, X-fixed, L-limit)

## GEOMAGNETIC FIELD:

Field Strength	62020 nT
Inclination	-72 deg
Declination	12 deg

## COORDINATES:

Sensor Height	60 m
Strike Perp	90 deg
Line Direction	90 deg
Main Direction	90 deg
Main Offset	
Cross Direction	0 deg
Cross Offset	

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EL 36/96 Pieman 1

AGSO P652 - Magnetic Anomaly A

Magmod inversion - Force Vertical &amp; Extended

E-W line 103240

1:250 000 Reference Sheet No. SK55-03 Burnie

AMG

AUTHOR: M.H. Dransfield

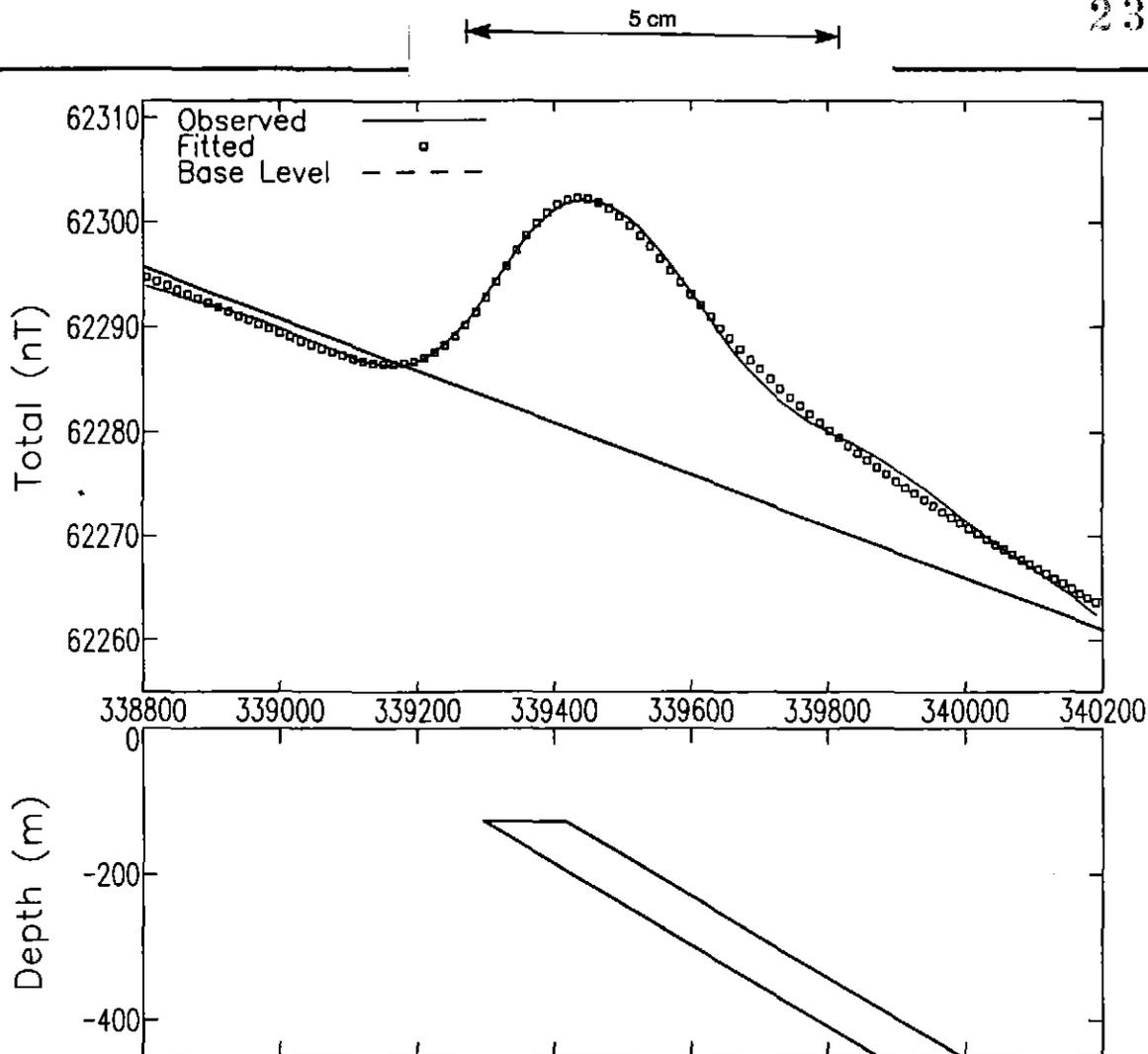
REPORT No.:

DATE: Dec 1997

DRAWN: M.H. Dransfield

PLAN No.: Tv 1296

SCALE 1:10 000



## MODEL PARAMETERS:

Model Type		Tabular2
Depth	F	126 m
Half Width	F	60.1 m
Half Length	X	100 m
Offset	X	0 m
Dip	F	29 deg
Thickness	F	447 m
Susceptibility	F	0.00124 emu
Remnance Ratio	X	0
Remnance Incl	X	0 deg
Remnance Decl	X	0 deg
Main Position	F	339356.6 m
Cross Position	X	5395034 m
Base Level	F	62281.96 nT
Base Slope	F	-0.0247901 nT/m
Base Curvature	X	0 nT/m <sup>2</sup>

(F-fitted, X-fixed, L-limit)

## GEOMAGNETIC FIELD:

Field Strength	62020 nT
Inclination	-72 deg
Declination	12 deg

## COORDINATES:

Sensor Height	60 m
Strike Perp	90 deg
Line Direction	90 deg
Main Direction	90 deg
Main Offset	
Cross Direction	0 deg
Cross Offset	

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**EL 36/96 Pieman 1**  
**AGSO P652 - Magnetic Anomaly B**  
 Magmod inversion - Free Fit  
 E-W line 103260

1:250 000 Reference Sheet No. SK55-03 Burnie

AMG

AUTHOR: R.J. Hurren

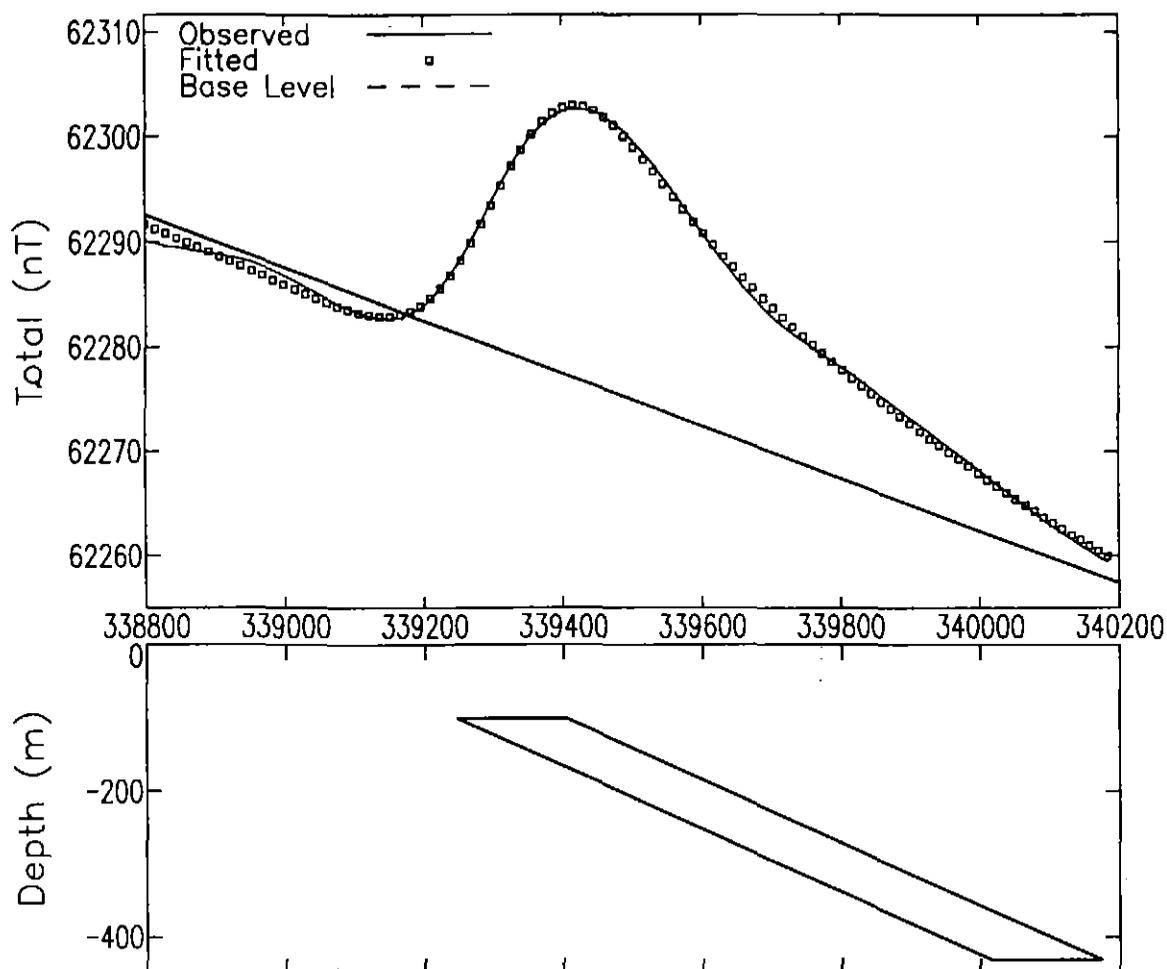
REPORT No.:

DATE: Jan 1998

DRAWN: R.J. Hurren

PLAN No.: Tv 1297

SCALE 1:10 000



## MODEL PARAMETERS:

Model Type		Tabular2
Depth	F	101 m
Half Width	F	78.1 m
Half Length	X	100 m
Offset	X	0 m
Dip	F	23 deg
Thickness	F	330 m
Susceptibility	F	0.00104 emu
Remnance Ratio	X	0
Remnance Incl	X	0 deg
Remnance Decl	X	0 deg
Main Position	F	339326.2 m
Cross Position	X	5394837 m
Base Level	F	62279.36 nT
Base Slope	F	-.0251356 nT/m
Base Curvature	X	0 nT/m <sup>2</sup>

(F-fitted, X-fixed, L-limit)

## GEOMAGNETIC FIELD:

Field Strength	62020 nT
Inclination	-72 deg
Declination	12 deg

## COORDINATES:

Sensor Height	60 m
Strike Perp	90 deg
Line Direction	90 deg
Main Direction	90 deg
Main Offset	
Cross Direction	0 deg
Cross Offset	

Rio Tinto Exploration Pty. Limited

EL 36/96 Pieman 1

AGSO P652 - Magnetic Anomaly B

Magmod inversion - Free Fit

E-W line 103270

1:250 000 Reference Sheet No. SK55-03 Burnie

AMG

AUTHOR: R.J. Hurren

REPORT No.:

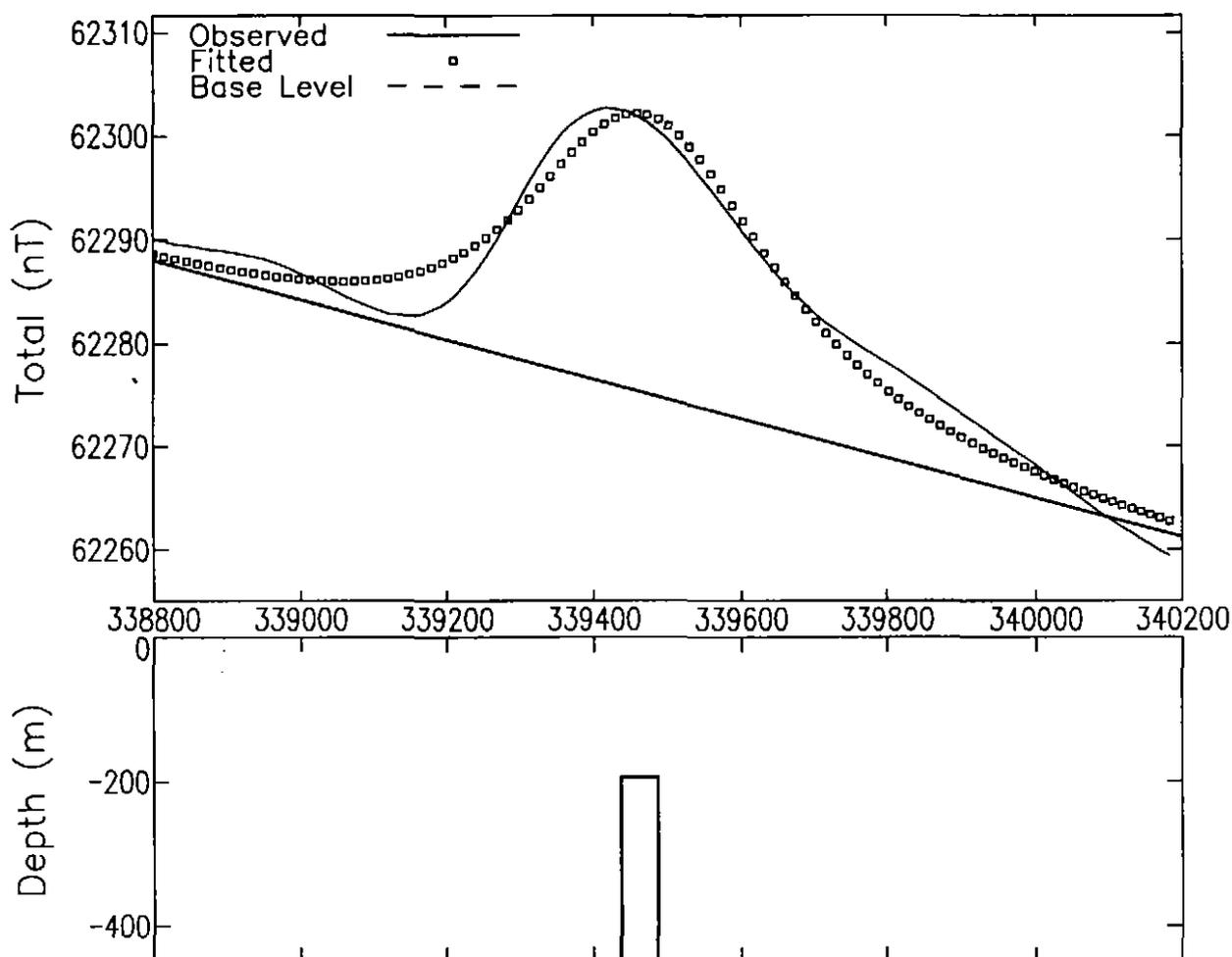
DATE: Jan 1998

DRAWN: R.J. Hurren

PLAN No.: Tv 1298

SCALE 1:10 000

5 cm



## MODEL PARAMETERS:

Model Type		Tabular2
Depth	F	194 m
Half Width	X	25.0 m
Half Length	X	25.0 m
Offset	X	0 m
Dip	X	90 deg
Thickness	L	13829 m
Susceptibility	F	0.0131 emu
Remnance Ratio	X	0
Remnance Incl	X	0 deg
Remnance Decl	X	0 deg
Main Position	F	339461.8 m
Cross Position	X	5394836 m
Base Level	F	62275.38 nT
Base Slope	F	-0.0191266 nT/m
Base Curvature	X	0 nT/m <sup>2</sup>

(F-fitted, X-fixed, L-limit)

## GEOMAGNETIC FIELD:

Field Strength	62020 nT
Inclination	-72 deg
Declination	12 deg

## COORDINATES:

Sensor Height	60 m
Strike Perp	90 deg
Line Direction	90 deg
Main Direction	90 deg
Main Offset	
Cross Direction	0 deg
Cross Offset	

Rio Tinto Exploration Pty. Limited

EL 36/96 Pieman 1

AGSO P652 - Magnetic Anomaly B

Magmod inversion - Force Vertical

E-W line 103270

1:250 000 Reference Sheet No. SK55-03 Burnie

AMG

AUTHOR: R.J. Hurren

REPORT No.:

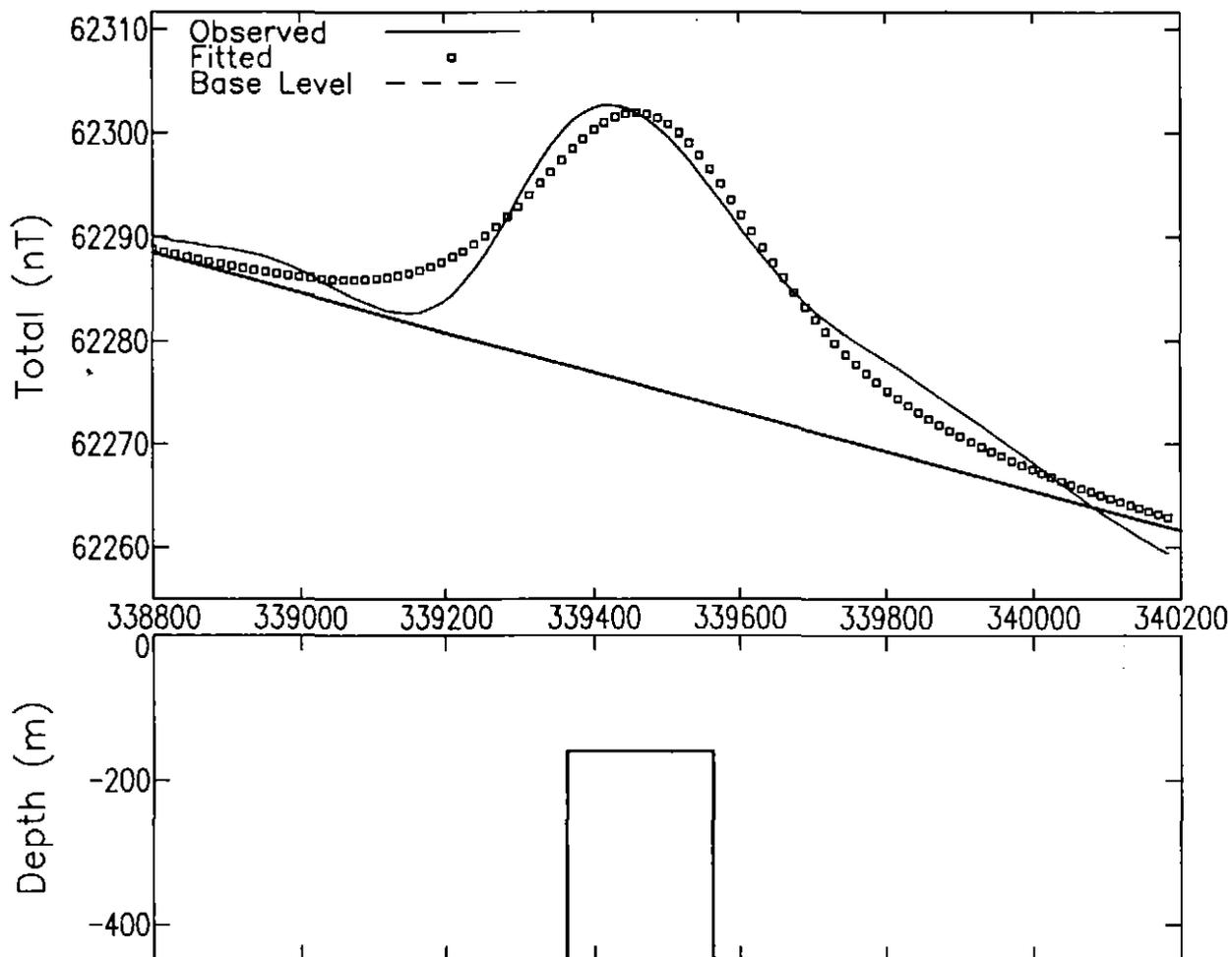
DATE: Jan 1998

DRAWN: R.J. Hurren

PLAN No.: Tv 1299

SCALE 1:10 000

5 cm



## MODEL PARAMETERS:

Model Type		Tabular2
Depth	F	160 m
Half Width	X	100 m
Half Length	X	100 m
Offset	X	0 m
Dip	X	90 deg
Thickness	X	5000 m
Susceptibility	F	0.000714 emu
Remnance Ratio	X	0
Remnance Incl	X	0 deg
Remnance Decl	X	0 deg
Main Position	F	339462.4 m
Cross Position	X	5394836 m
Base Level	F	62275.8 nT
Base Slope	F	-.0191462 nT/m
Base Curvature	X	0 nT/m <sup>2</sup>

(F-fitted, X-fixed, L-limit)

## GEOMAGNETIC FIELD:

Field Strength	62020 nT
Inclination	-72 deg
Declination	12 deg

## COORDINATES:

Sensor Height	60 m
Strike Perp	90 deg
Line Direction	90 deg
Main Direction	90 deg
Main Offset	
Cross Direction	0 deg
Cross Offset	

Rio Tinto Exploration Pty. Limited

EL 36/96 Pieman 1

AGSO P652 - Magnetic Anomaly B

Magmod inversion - Force Vertical &amp; Extended

E-W line 103270

1:250 000 Reference Sheet No. SK55-03 Burnie

AMG

AUTHOR: R.J. Hurren

REPORT No.:

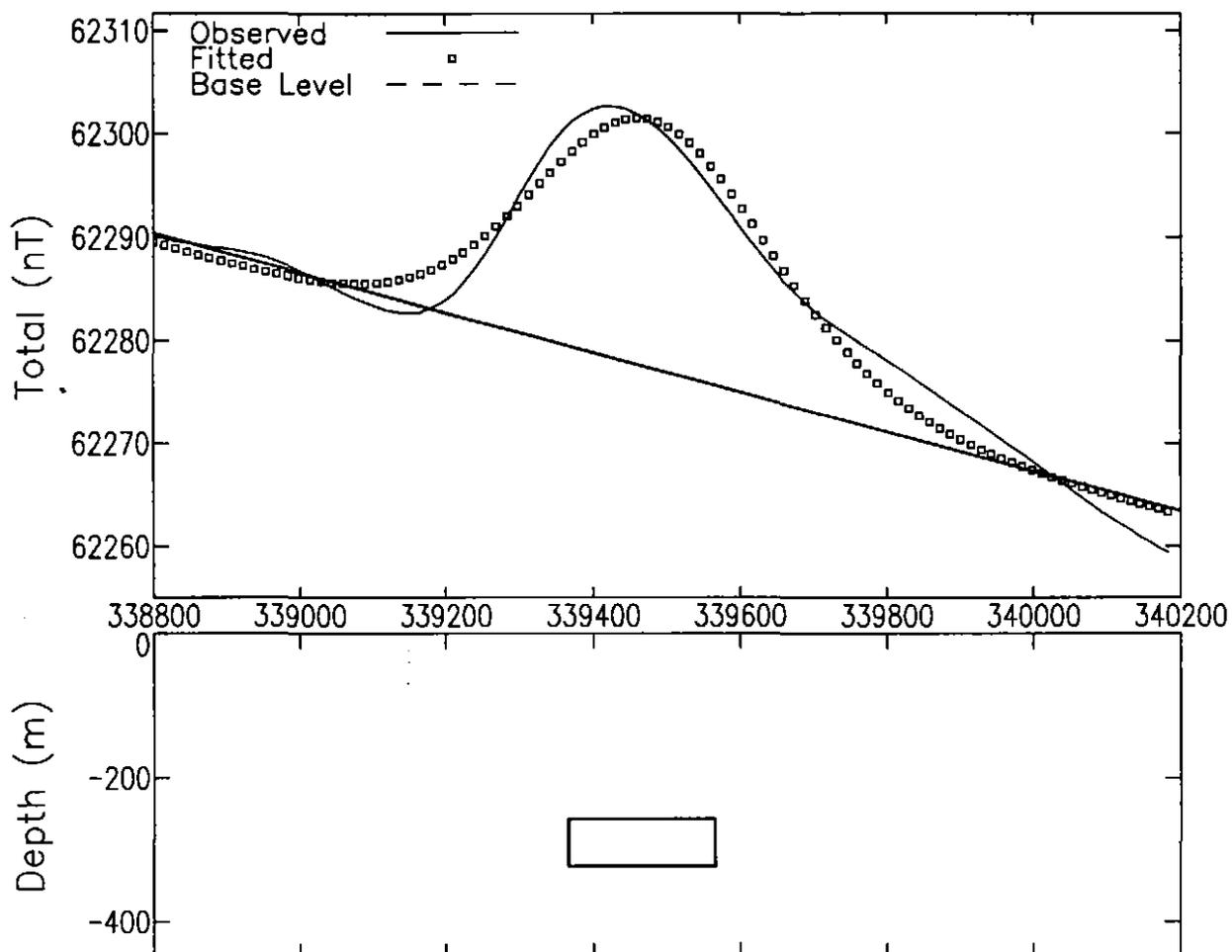
DATE: Jan 1998

DRAWN: R.J. Hurren

PLAN No.: Tv 1300

SCALE 1:10 000

5 cm



## MODEL PARAMETERS:

Model Type		Tabular2
Depth	F	257 m
Half Width	X	100 m
Half Length	X	100 m
Offset	X	0 m
Dip	X	90 deg
Thickness	F	65.9 m
Susceptibility	F	0.00420 emu
Remnance Ratio	X	0
Remnance Incl	X	0 deg
Remnance Decl	X	0 deg
Main Position	F	339466.4 m
Cross Position	X	5394836 m
Base Level	F	62277.59 nT
Base Slope	F	-.0192144 nT/m
Base Curvature	X	0 nT/m <sup>2</sup>

(F-fitted, X-fixed, L-limit)

## GEOMAGNETIC FIELD:

Field Strength	62020 nT
Inclination	-72 deg
Declination	12 deg

## COORDINATES:

Sensor Height	60 m
Strike Perp	90 deg
Line Direction	90 deg
Main Direction	90 deg
Main Offset	
Cross Direction	0 deg
Cross Offset	

Rio Tinto Exploration Pty. Limited

EL 36/96 Pieman 1

AGSO P652 - Magnetic Anomaly B

Magmod inversion - Force to be wide

E-W line 103270

1:250 000 Reference Sheet No. SK55-03 Burnie

AMG

AUTHOR: R.J. Hurren

REPORT No.:

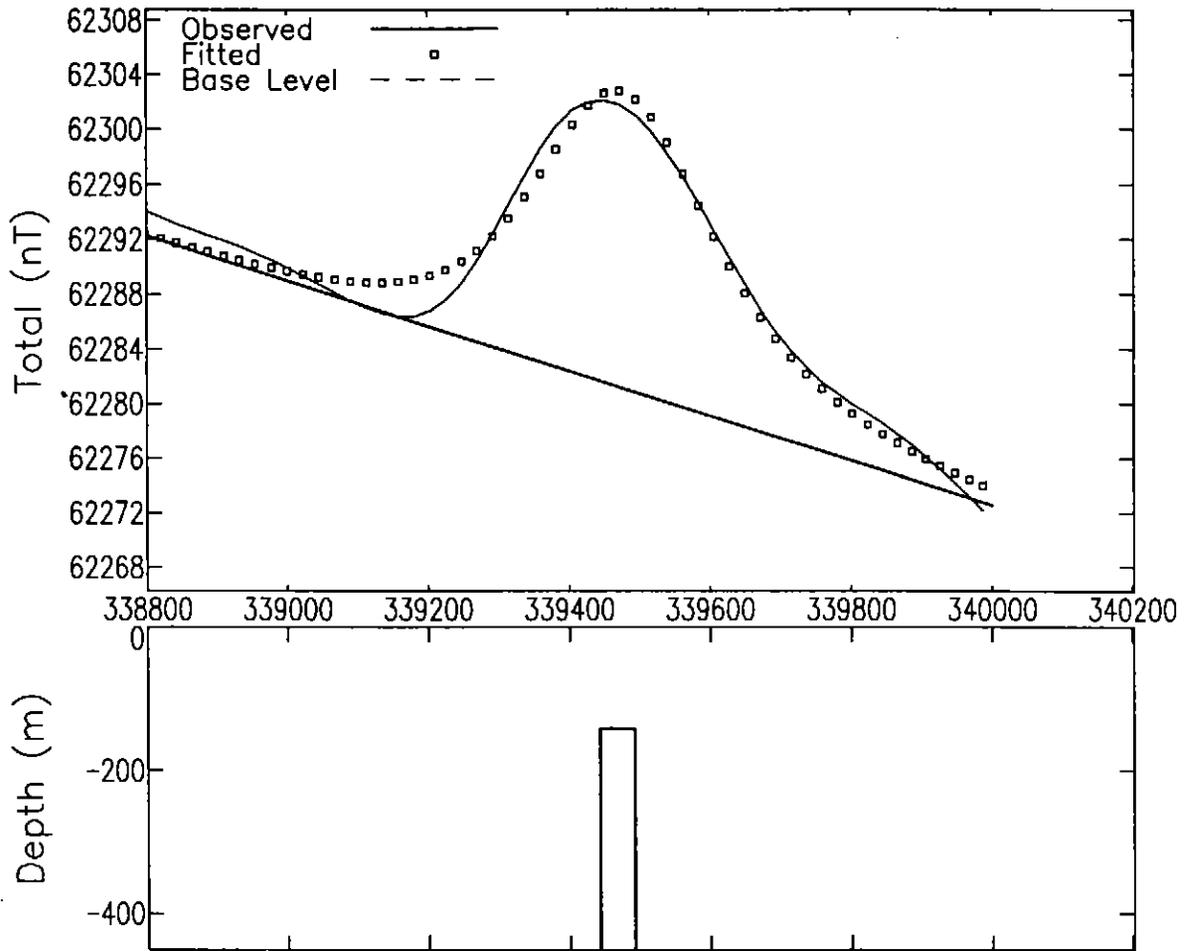
DATE: Jan 1998

DRAWN: R.J. Hurren

PLAN No.: Tv 1301

SCALE 1:10 000

5 cm



## MODEL PARAMETERS:

Model Type		Tabular2
Depth	F	142 m
Half Width	X	25.0 m
Half Length	X	25.0 m
Offset	X	0 m
Dip	X	90 deg
Thickness	F	4996 m
Susceptibility	F	0.00671 emu
Remnance Ratio	X	0
Remnance Incl	X	0 deg
Remnance Decl	X	0 deg
Main Position	F	339467 m
Cross Position	X	5395033 m
Base Level	F	62281.32 nT
Base Slope	F	-0.0163772 nT/m
Base Curvature	X	0 nT/m <sup>2</sup>

(F-fitted, X-fixed, L-limit)

## GEOMAGNETIC FIELD:

Field Strength	62020 nT
Inclination	-72 deg
Declination	12 deg

## COORDINATES:

Sensor Height	60 m
Strike Perp	90 deg
Line Direction	90 deg
Main Direction	90 deg
Main Offset	
Cross Direction	0 deg
Cross Offset	

Rio Tinto Exploration Pty. Limited

EL 36/96 Pieman 1

AGSO P652 - Magnetic Anomaly B

Magmod inversion - Force Vertical

E-W line 103260

1:250 000 Reference Sheet No. SK55-03 Burnie

AMG

AUTHOR: R.J. Hurren

REPORT No.:

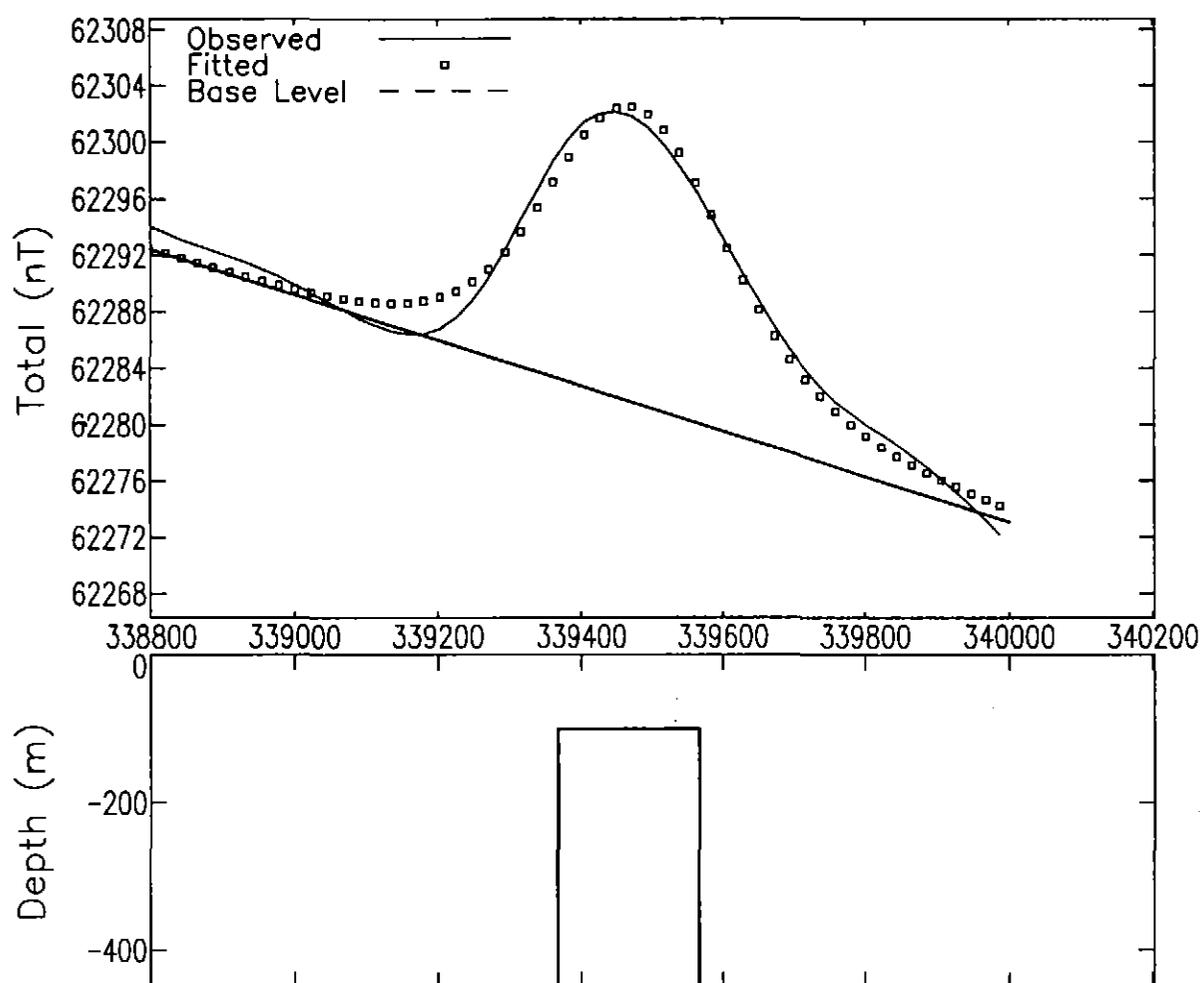
DATE: Jan 1998

DRAWN: R.J. Hurren

PLAN No.: T1302

SCALE 1:10 000

5 cm



## MODEL PARAMETERS:

Model Type		Tabular2
Depth	F	99.9 m
Half Width	X	100 m
Half Length	X	100 m
Offset	X	0 m
Dip	X	90 deg
Thickness	X	5000 m
Susceptibility	F	0.000344 emu
Remnance Ratio	X	0
Remnance Incl	X	0 deg
Remnance Decl	X	0 deg
Main Position	F	339466.6 m
Cross Position	X	5395033 m
Base Level	F	62281.7 nT
Base Slope	F	-.0160842 nT/m
Base Curvature	X	0 nT/m <sup>2</sup>

(F-fitted, X-fixed, L-limit)

## GEOMAGNETIC FIELD:

Field Strength	62020 nT
Inclination	-72 deg
Declination	12 deg

## COORDINATES:

Sensor Height	60 m
Strike Perp	90 deg
Line Direction	90 deg
Main Direction	90 deg
Main Offset	
Cross Direction	0 deg
Cross Offset	

Rio Tinto Exploration Pty. Limited

EL 36/96 Pieman 1

AGSO P652 - Magnetic Anomaly B

Magmod inversion - Force Vertical &amp; Extended

E-W line 103260

1:250 000 Reference Sheet No. SK55-03 Burnie

AMG

AUTHOR: R.J. Hurren

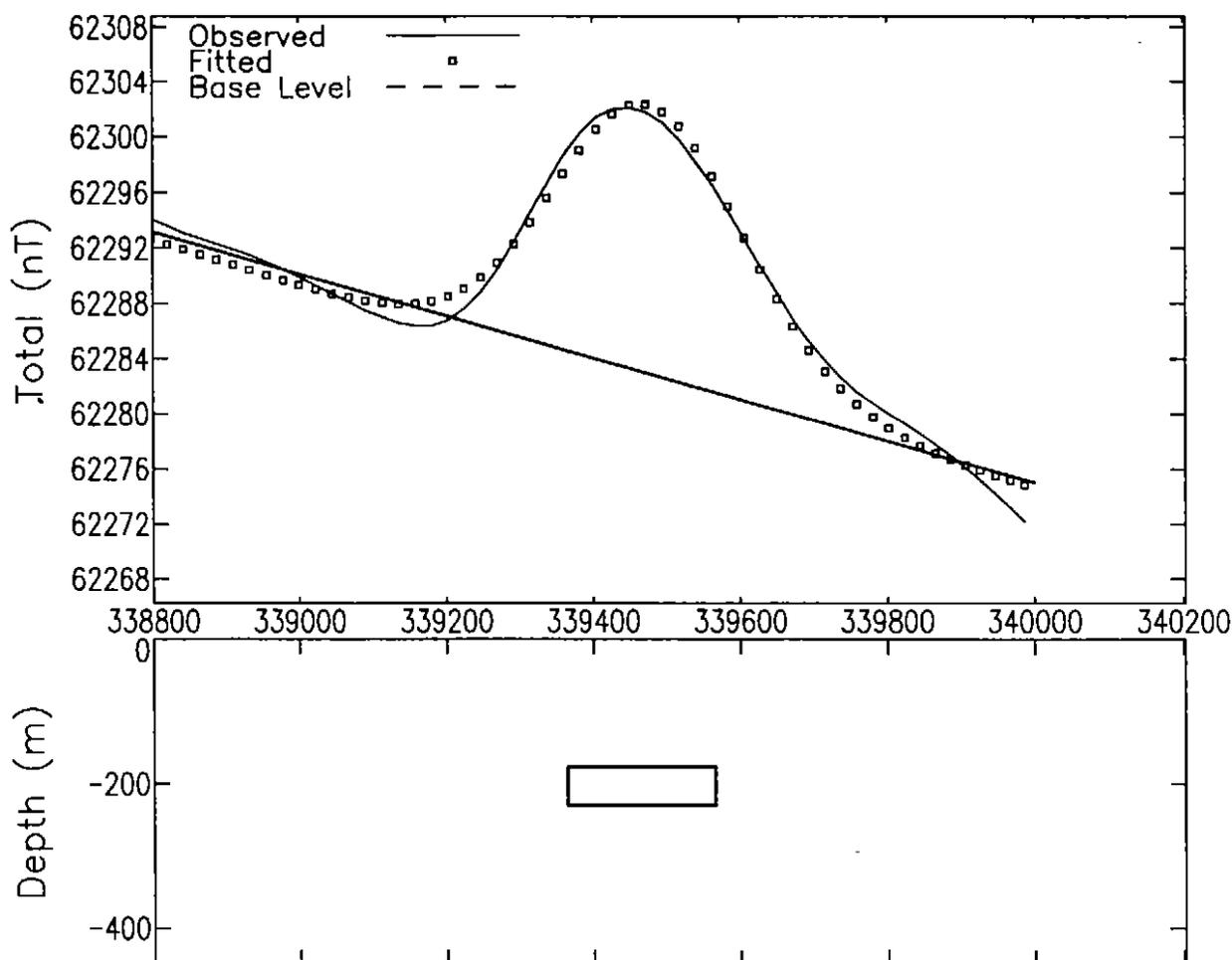
REPORT No.:

DATE: Jan 1998

DRAWN: R.J. Hurren

PLAN No.: Tv 1303

SCALE 1:10 000



## MODEL PARAMETERS:

Model Type		Tabular2
Depth	F	176 m
Half Width	X	100 m
Half Length	X	100 m
Offset	X	0 m
Dip	X	90 deg
Thickness	F	53.6 m
Susceptibility	F	0.00198 emu
Remnance Ratio	X	0
Remnance Incl	X	0 deg
Remnance Decl	X	0 deg
Main Position	F	339465.2 m
Cross Position	X	5395033 m
Base Level	F	62283.1 nT
Base Slope	F	-.0151037 nT/m
Base Curvature	X	0 nT/m <sup>2</sup>

(F-fitted, X-fixed, L-limit)

## GEOMAGNETIC FIELD:

Field Strength	62020 nT
Inclination	-72 deg
Declination	12 deg

## COORDINATES:

Sensor Height	60 m
Strike Perp	90 deg
Line Direction	90 deg
Main Direction	90 deg
Main Offset	
Cross Direction	0 deg
Cross Offset	

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EL 36/96 Pieman 1

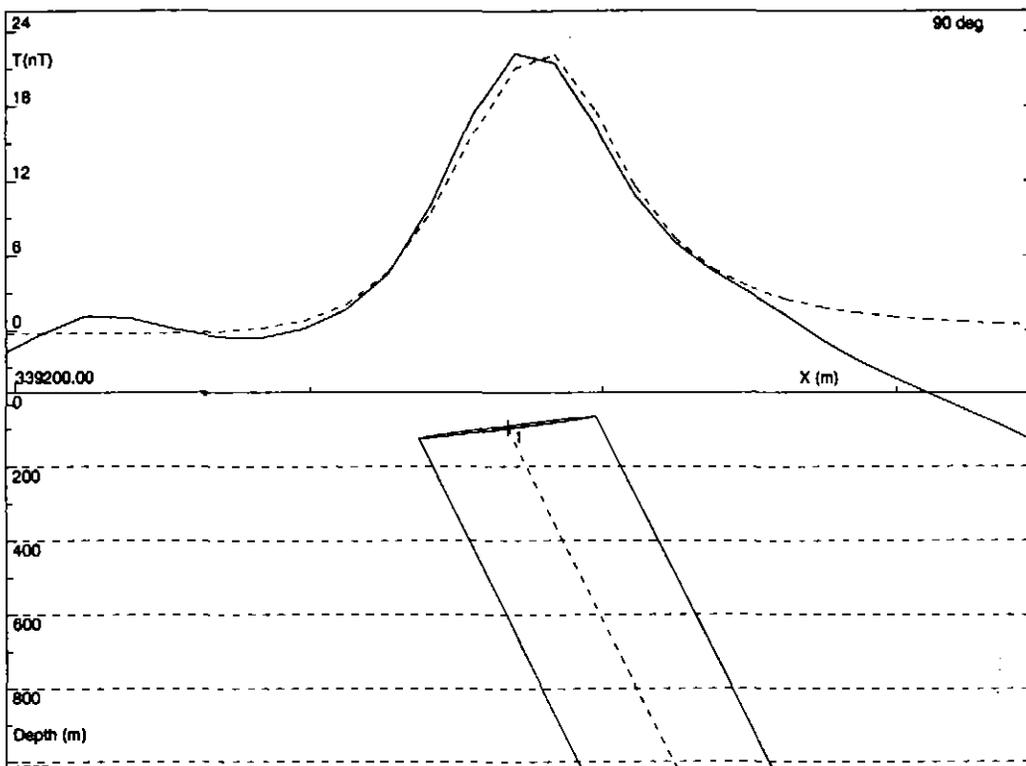
AGSO P652 - Magnetic Anomaly B

Magmod inversion - Force to be wide

E-W line 103260

1:250 000 Reference Sheet No. SK55-03 Burnie		AMG
AUTHOR: R.J. Hurren	REPORT No.:	DATE: Jan 1998
DRAWN: R.J. Hurren	PLAN No.: Tv 1304	SCALE 1:10 000

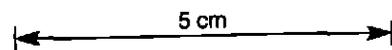
←————— 5 cm —————→



Observations:  
 Profile #1;  
 Model:  
 Calculation mode: Total Magnetic Intensity  
 Observed: ——— Calculated: - - - - -  
 Residual: . . . . . Individual body: - - - - -  
 POTENT v3.10 Profile drawn at 14:02 07/01/1998 for Rio Tinto

POTENT v3.10 Model Summary Report created at Jan 1998 for Rio Tinto

Inducing field - Intensity = 62020  
 Azimuth = 12  
 Inclination = -72



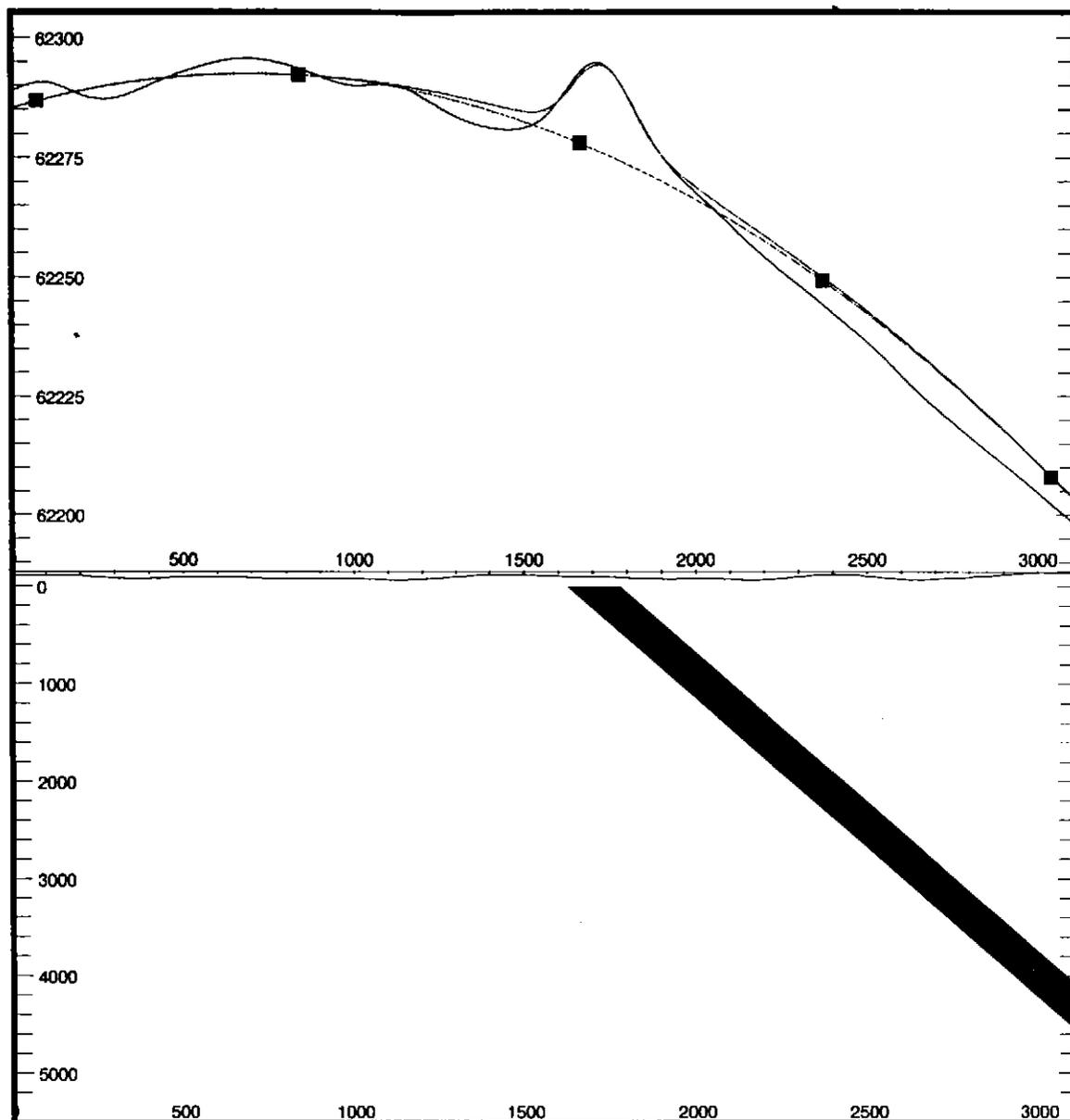
Body type abbreviations and the shape parameters have the following significance:  
 Cylindr CYLINDER A, B are axes lengths; C = thickness; D = slope

Polynomial coefficients used to represent background field  
 Background = a0 + a1\*x + a2\*y + a3\*x\*x + a4\*x\*y + a5\*y\*y  
 a0 = -34869.5 a1 = 0.1866 a2 = 0.0012 a3 = -0.0000002497 a4 = -0.0000000033 a5 = -0.0000000000

Model title:

No.	Type	X m	Y m	Depth m	Strike deg	Dip deg	Plunge deg	Susc. SI	A	B	C	D
1	Cylindr	339870.40	5395312.80	95.00	0	76	2	0.0023	250.00	250.00	1600.00	90.00

<b>Rio Tinto</b>		
<b>EL 36/96 Pieman 1</b>		
<b>AGSO P652 - Magnetic Anomaly A</b>		
Potent Inversion - Cylinder		
E-W line 103240		
1:250 000 Ref. Sheet No. SK55-03 Burnie		
Author: R.J. Hurren	Scale 1:20 000	Report No.
Drawn: R.J. Hurren	Date: Jan 1998	Plan No. <i>Fig 1</i>

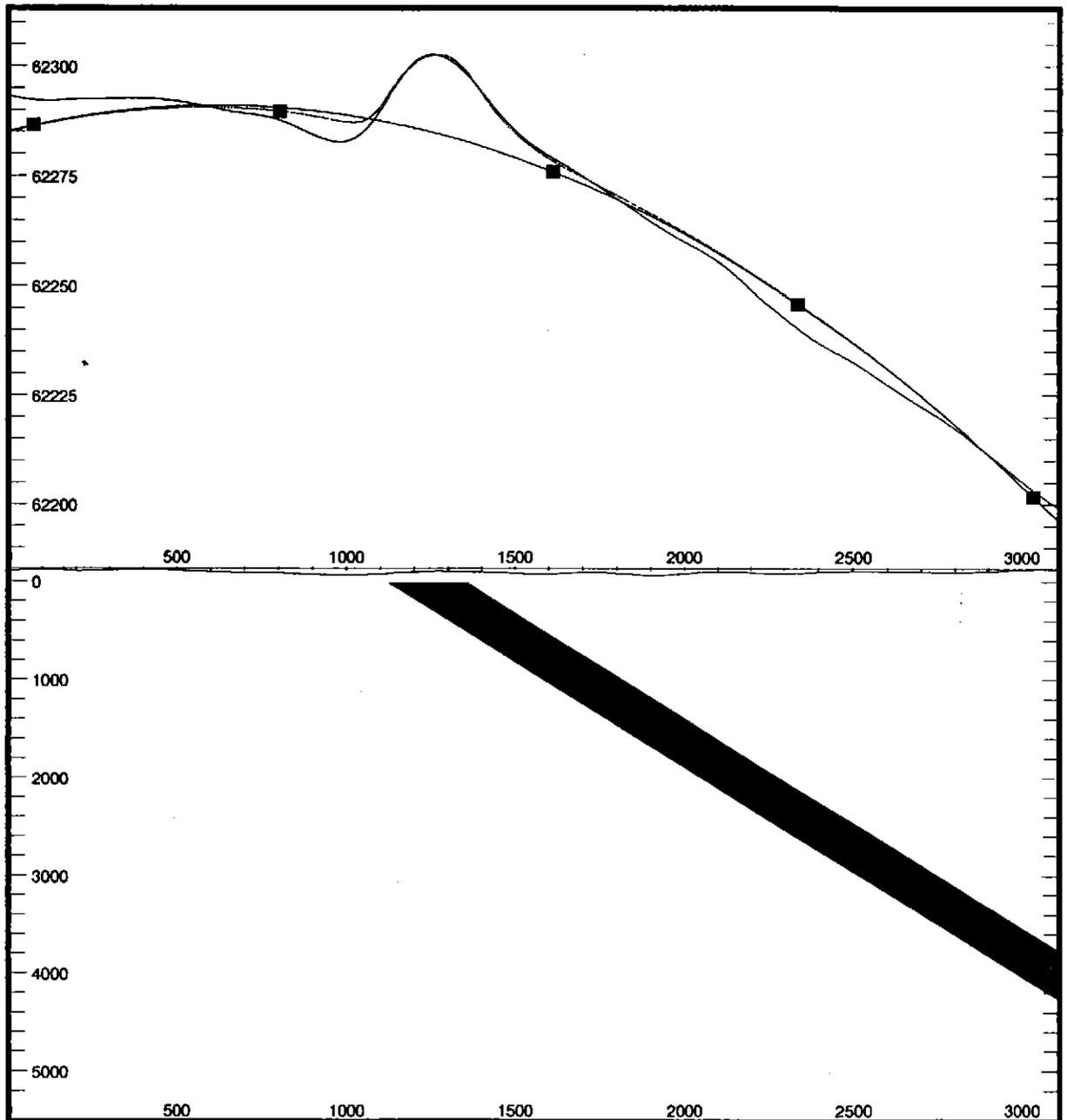


Model Type: Tabular X: 339873.2m Y: 5395412.5m Depth: 0m Dip: 72deg

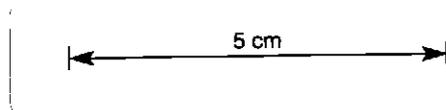
Thickness: 150m Strike Length: 150m Depth Extent: 5000m Mag Susc.: 0.002513 SI

← 5 cm →

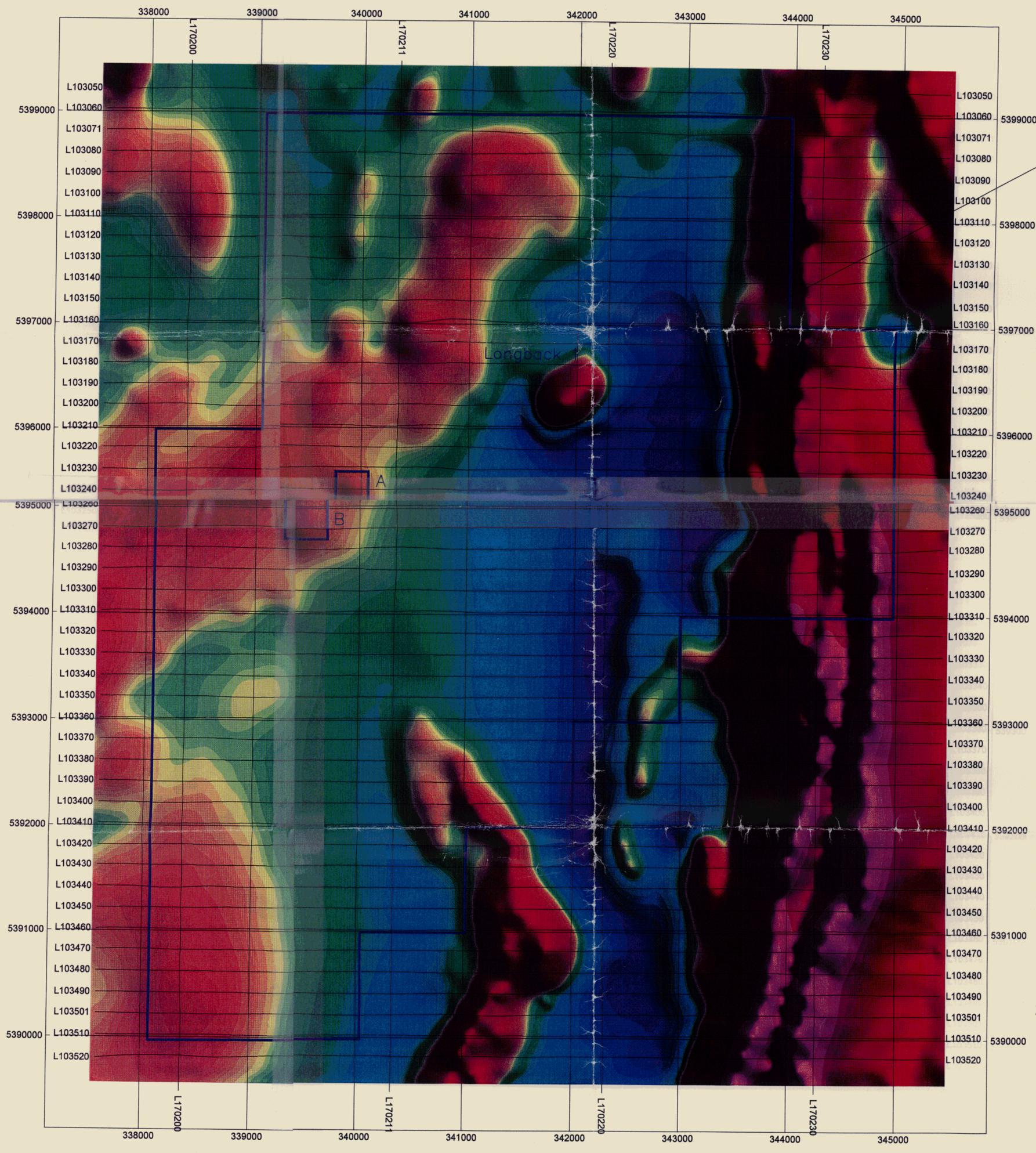
Rio Tinto Exploration Pty. Limited	
<b>EL 36/96 Pieman 1</b>	
<b>AGSO P652 - Magnetic Anomaly A</b>	
Model Vision Inversion	
E-W Line 103240	
1:250 000 Reference Sheet No. SK55-03 Burnie	
AUTHOR: R.J. Hurren	DATE: Jan 1998
DRAWN: R.J. Hurren	SCALE: 1:20 000
REPORT No.:	PLAN No.: <b>Fig 2</b>



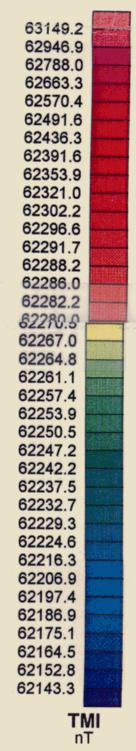
Model Type: Tabular X: 339.408.5m Y: 5394858.0m Depth: 15m Dip: 65deg  
 Thickness: 230m Strike Length: 225m Depth Extent: 5000m Mag Susc.: 0.002513 SI



Rio Tinto Exploration Pty. Limited	
EL 36/96 Pieman 1	
AGSO P652 - Magnetic Anomaly B	
Model Vision Inversion	
E-W Line 103270	
1:250 000 Reference Sheet No. SK55-03 Burnie	
AUTHOR: R.J. Hurren	DATE: Jan 1998
DRAWN: R.J. Hurren	SCALE: 1:20 000
REPORT No.:	PLAN No.: Fig 3



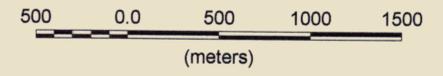
EL 36/96 Pieman 1



TMI  
nT



Scale 1:25000



230026 ← 5 cm →

Rio Tinto Exploration Pty. Limited	
EL 36/96 Pieman 1	
Airborne Magnetics Survey AGSO P652	
Magnetics Image	
Author: MH Dransfield	Ref: Burnie SK55-03
Drawn: MH Dransfield	File Name: Tv1292.tif
Date: 15 December 1997	Report No:
Scale: 25 000	Plan No: Tv1292