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EL 2690

ANDAMOOKA ISLAND

**ANNUAL AND FINAL REPORTS TO LICENCE
EXPIRY/SURRENDER FOR THE PERIOD
10/1/2000 TO 9/1/2004**

Submitted by
Minotaur Gold NL
2003

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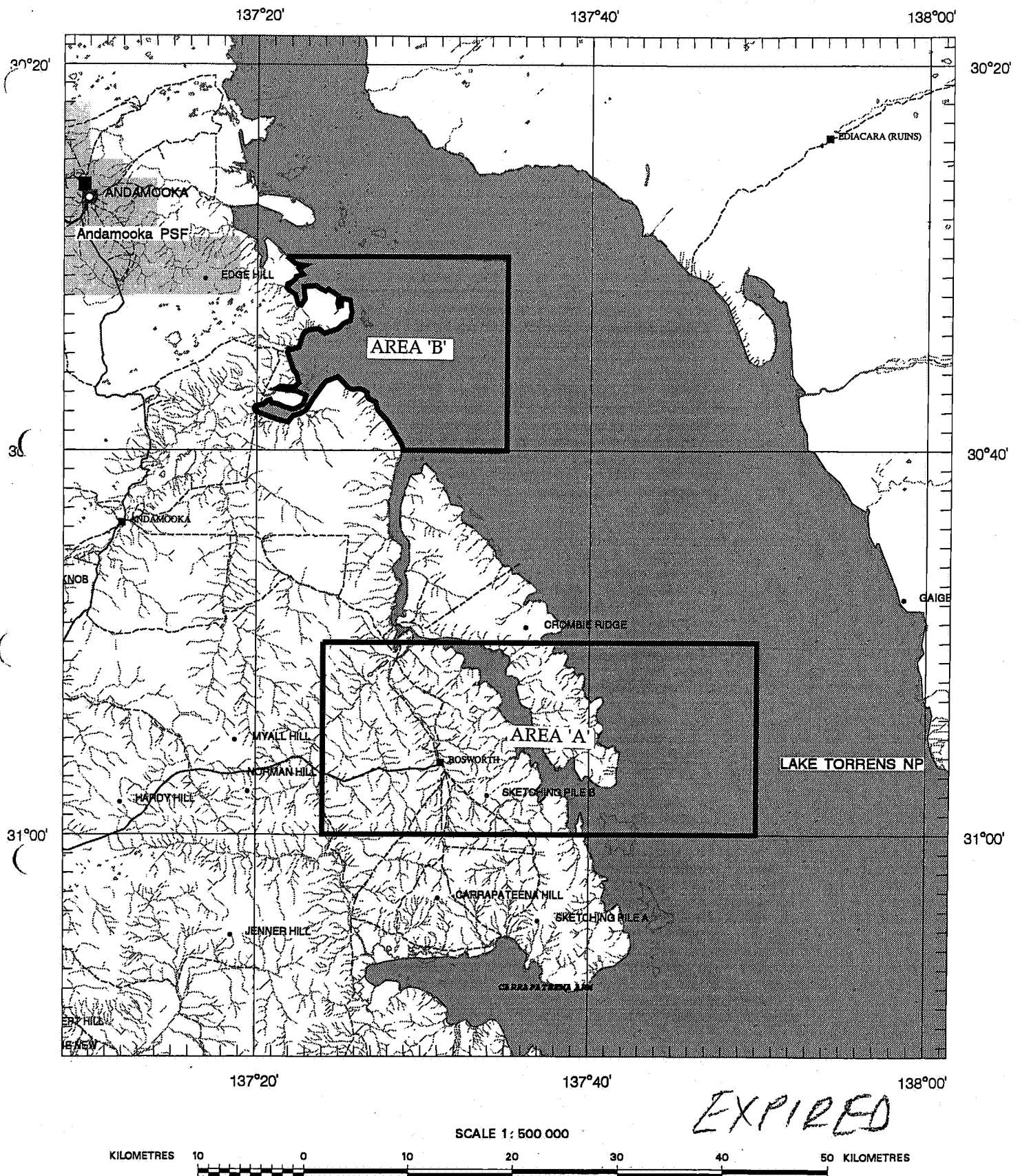
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Government of South Australia
Primary Industries and Resources SA

SCHEDULE A



APPLICANT : ~~MINOTAUR GOLD NL~~ MINEX (SA) PTY LTD

FILE REF : 117/99

TYPE : MINERAL ONLY

AREA : 1079 km² (approx.)

1:250000 MAPSHEETS : ANDAMOOKA

LOCALITY : ANDAMOOKA ISLAND AREA - Approximately 80 km WSW of Leigh Creek

DATE GRANTED : 10 January 2000

DATE EXPIRED : 9 January 2001

EL No : 2690

2002
2003
2004

94 520 1779

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EL 2690 ANDAMOOKA ISLAND 1ST ANNUAL TECHNICAL REPORT

**FOR THE PERIOD
10TH JANUARY 2000 TO 9TH JANUARY 2001**

**A. P. BELPERIO
CHIEF GEOLOGIST**

5TH APRIL 2001

MAP REFERENCE : ANDAMOOKA (SH 53-12)

1:100,000 MAP SHEET : 6436

DISTRIBUTION: PIRSA
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BILLITON EXPLORATION (AUSTRALIA) LTD

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Figure 1 Location of EL 2690, Andamooka Island & adjacent EL 2533

APPENDIX 1

Andamooka Island Gravity Survey – November 2000 Haines surveys

1.0 INTRODUCTION

Exploration License 2690 (Andamooka Island) was originally granted to Minotaur Gold on 10th January 2000 for a period of one year. The tenement was transferred to Minex (SA) Pty Ltd as part of the spin-off and listing of Minotaur Resources Ltd, and forms a significant joint venture (along with Pima/Kelaray's adjacent EL 2533) with Billiton Exploration (Australia). Minotaur is manager of this combined Andamooka Joint Venture.

The license is in two parts, located approximately 250km north of Port Augusta on the Andamooka 1:250 000 map sheet, at the edge of Lake Torrens (**Figure 1**). A significant proportion of EL 2533 comprises the floor of saline Lake Torrens and lies within Lake Torrens National Park.

The ground was acquired for the purpose of exploration for large Olympic Dam-style Fe-oxide-Cu-Au deposits. Investigation of previous drill hole data and existing geophysical datasets in this area indicates high prospectivity for large-scale deposits of this type (Szmidel, 2000).

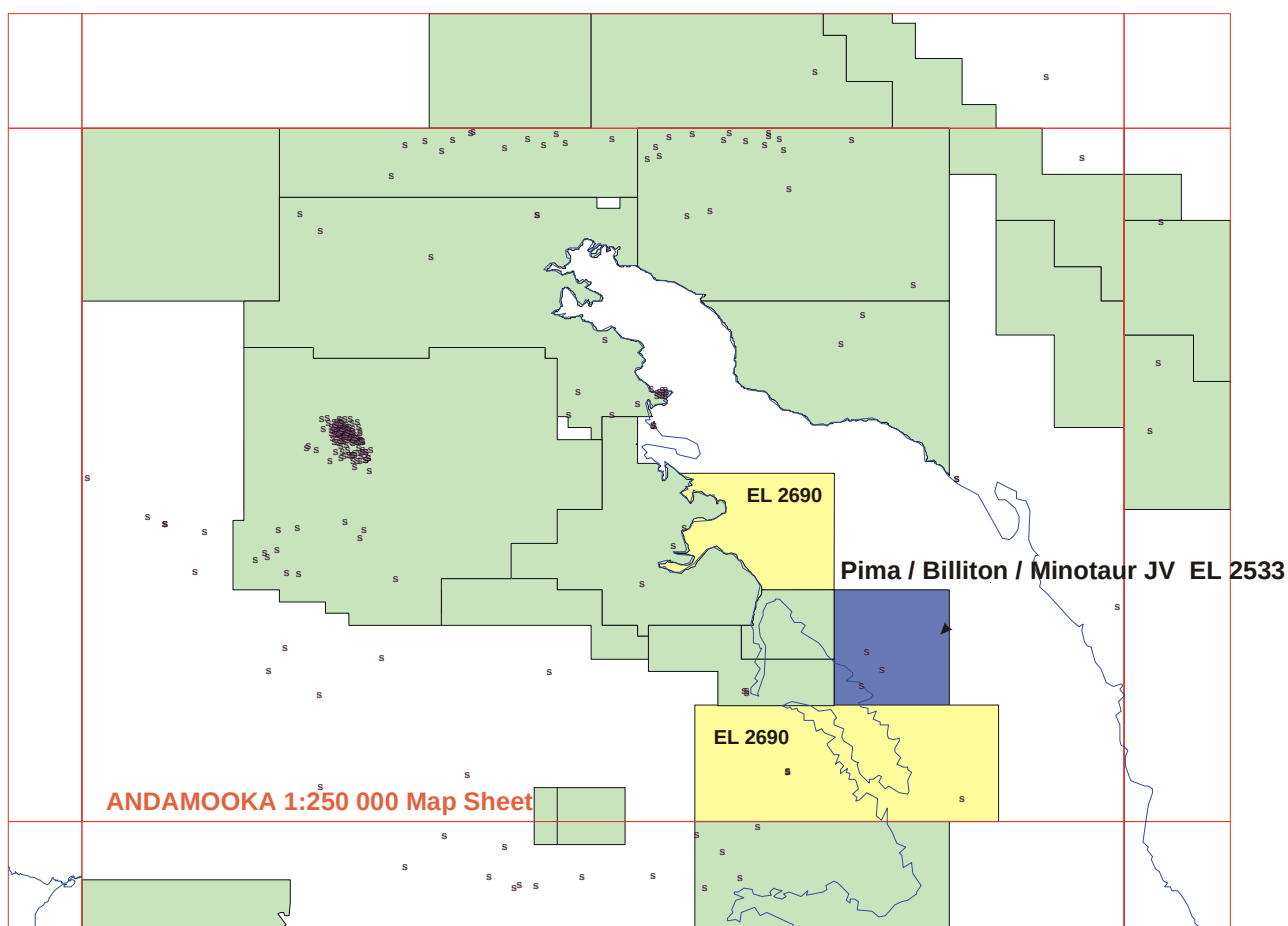


Figure 1 Location of EL 2690 and contiguous EL 2533 and historic drill holes.

2.0 SUMMARY OF OPERATIONS

Work completed during the 12 months to 9th January 2001 includes:

- Reprocessing and re-evaluation of existing gravity and aeromagnetic datasets.
- Site visits to inspect lake margin, lake surface and access points
- Submission of environmental approvals for a proposed regional and infill gravity survey on the bed of Lake Torrens.
- Formal native title negotiations commenced but access to lake floor denied
- Small gravity survey undertaken on land.

Expenditure for the first twelve month reporting period totals \$94,341.

3.0 DECLARATION OF ENVIRONMENTAL FACTORS FOR PROPOSED GRAVITY SURVEY

3.1 INTRODUCTION

Minotaur Gold NL as operator of the Andamooka Joint Venture (EL2690, EL2533) with Kelaray Pty Ltd and Billiton Exploration (Australia) Pty Ltd proposed to undertake a tenement-wide gravity survey that includes portions of the bed of Lake Torrens within Lake Torrens National Park. Operations within the National Park required a Declaration of Environmental factors be prepared.

Tenements: Exploration Licences 2690 and 2533

Location: 1:250,000 Map Sheet- ANDAMOOKA SH 53-12
The two Exploration Licences cover 1374 km². Approximately 75% of this area is the bed of Lake Torrens and falls within the jointly proclaimed Lake Torrens National Park (**Figure 1**).

Exploration Proposal Summary:

To undertake a tenement-wide gravity survey using quad bikes on 1km x 1km centres (approx 1000 stations). To undertake selected infill on 400m and 200m centres (up to 1500 stations) depending upon results of the regional work

Timing The gravity survey is expected to take 3 weeks and, subject to this application, is expected to commence late May 2000.

3.2 WORK UNDERTAKEN IN PREPARING THE DEF

The tenements were visited to ascertain the suitability of existing tracks leading to the Lake margin, access points onto the Lake, and the suitability of the Lake floor for vehicular traversing. Discussions with the leaseholder of Bosworth Station, PIRSA and National Parks personnel, and

gravity contractors experienced in operations on salt lakes were used to identify critical environmental factors and formulate an appropriate work proposal.

3.3 PREVIOUS EXPLORATION

Intensive exploration over the Arcoona Plateau area occurred in the 1970's and 80's following the discovery of Olympic Dam in 1975. Magnetic and gravity surveys extended over much of the lake and 4 deep drillholes were sited over magnetic features beneath the western lake floor. The capped drillhole collars remain intact on the lake floor. The western margin of the lake is controlled by major basement structures that define the eastern margin of Gawler Craton. Hence the geological processes that make the region an exploration focus are also responsible for the existence of the lake.

Exploration activities in the 70's and 80's were less environmentally-sensitive than modern methods. Repeated traversing of surveying lines and improperly rehabilitated drillsites have left imprints on the landscape that remain visible today.

3.4 ENVIRONMENTAL FACTORS

Existing Land Use

The gravity survey encompasses parts of pastoral leases Bosworth (Lease 2211), Andamooka Island (Lease 2333A) and Lake Torrens National Park.

Climate

The region is arid with hot dry summers and high evaporation rates (2500mm per year). Rainfall is low and erratic, averaging 140mm per year, with no particular seasonal influence. Large diurnal extremes of temperature are common

Landforms and Drainage

Lake Torrens, a dry lake bed of some 6000km², dominates the landscape. Flanking its western shore, the Arcoona Plateau (or "Range") is a dissected tableland of ancient flat lying resistant quartzites. The surface of the Plateau is strewn with a gibber scree of flat quartzite slabs derived from the underlying rocks. Erosional breakaways leave a legacy of low mesas and coalescing scree and outwash fans merge with the western margin of Lake Torrens. Drainage channels are shallow and poorly defined with surface water mostly collected in gilgai depressions (Johns, 1968).

The surface sediments of the lake are dominated by gypsiferous clays originating from water and wind blown silt together with evaporitic precipitation in and on the lake floor. Halite accumulations are small and ephemeral, migrating as winds blow thin (<2cm) intermittent layers of water across the lake floor. The main drainage into Lake Torrens is from the Flinders Ranges side, but even here the main creeks rarely discharge directly to lake. The last significant flooding of the lake was 1989, when it was filled with 0.5 to 1.5m of water. Aquatic life appeared soon after the water, but disappeared as salinities began to rise with evaporation. The lake was dry within one year.

Flora and Fauna

The Arcoona Plateau and gibber spreads supports sparse vegetation growth dominated by low-grey saltbush and scattered grasses. Small creeks are outlined by species of Acacia, and Casuarina can be found in larger depressions and on escarpment breakaways. The colluvial spreads and sand dune areas towards Lake Torrens are characterised by mulga (Acacia aneura) and native pine (Callitris glauca) with an understory of salt bush and blue bush (Specht, 1972).

The hypersaline Lake floor supports no significant vegetation or fauna when dry. After heavy rains, brine shrimp and other ephemeral aquatic species abound as do a wide range of bird life. However, small rocky “islands” within the lake may contain unique floral and faunal habitats.

Owner/Occupier Comments and Requirements

Discussions with the leaseholder of Bosworth (D. Greenfield) and the Regional Manager for the Lake Torrens National Park (B. Arnold, J. Watkins) have identified access tracks onto the lake as the main issue to be addressed.

PIRSA/DEH are to be advised prior to entry and on leaving the park area and to be kept informed of all aspects of the work relevant to their interests.

3.5 PROPOSED FIELD OPERATIONS

Tenders were called from Australian gravity/survey teams with experience operating on salt lakes, including TESLA 10, FUGRO, TERRADAT, SURTEC, DAISHAT, HAINES, DSS and SOLO. Information in this Work Approval is based on proposed survey methods submitted by these companies. The successful tender was to be selected after feedback was obtained to this DEF.

With the advent of real-time kinematic GPS, gravity surveys have become a relatively quick, simple, non-intrusive procedure. An operator with a gravity meter (black box) and GPS receiver moves from pre-determined site to site spending a few minutes taking a reading at each site. Previous surveys in the 1960's and 1970's required surveyed lines to be prepared, cleared and pegged. This is no longer required and in general sites are only visited/traversed once and pegs are not required where cm accuracy is utilised in GPS operations. Operations on salt lakes have typically resulted in a data collection rate of up to 100 sites per day using purpose-designed light-weight, balloon-tyred quad bikes.

The successful gravity contractor will establish a temporary base camp on Andamooka Island some 500m back from the shore of the lake with a field crew of 3. Access to this area will be via existing tracks, and where these are not present, across open gibber plains. In areas where existing tracks are not present, a single route will be chosen to avoid the creation of multiple tracks. A light-weight, balloon-tyred quad bike will be used on the Lake, taking gravity readings along pre-planned routes. Much of the lake floor is dry and easily traversable without impact. Some surficial slushiness occurs close to the gibber-strewn Andamooka Island coast and access points will be chosen to avoid these soft areas, with removable matting to be used if required. Base stations will be established at easily accessible points on land. Base stations from previous survey lines across the lake will be accurately located by GPS to allow previous data to be merged with new regional data and minimize the

amount of infill gravity required. Previous drillholes on the lake will also be accurately located with the GPS equipment.

Data will be downloaded each evening and processed on site allowing decisions on infill surveys of anomalous areas to proceed immediately on from the regional work. Temporary, biodegradable flagging may be used at some sites.

All contractors have extensive OH & S and Environmental Policies governing their field work and are experienced in operating in harsh and environmentally sensitive areas including salt lakes. Field personnel will be briefed on, and expected to abide by, the overriding requirements of PIRSA/DEH as well as the OH&S and Environmental Policies of Minotaur Gold. Field personnel will also be briefed on their obligations under the Aboriginal Heritage Act and appropriate site avoidance. Minotaur representatives will be on site at key times including the commencement and completion of operations on the Lake.

3.6 EXPLORATION PROGRAM – IDENTIFICATION, REDUCTION AND REHABILITATION OF IMPACTS

As discussed under Field Operations, the proposed exploration program comprises a gravity survey of some 3 weeks duration. Access to the area will be along existing tracks and open gibber plains to the shore of Lake Torrens on Andamooka Island. A camp site will be established in low open sand dunes approximately 500m back from the Lake margin. Daily traverses by a light weight, balloon-tyred quad bike will emanate from Andamooka Island onto the lake surface with readings of gravity, location and elevation undertaken initially every kilometre. Traverses will loop back so that in general, a given track path on the Lake will only be used once and obvious damp patches will be avoided. Key access points will be chosen to minimize traversing damper areas close to the lake margin.

Significant potential impacts of the work relate to camp establishment, and access to the Lake floor. To minimise any deleterious effects, the following procedures will be adopted:

Camp Site

- Camp site to be located at least 200m back from the shore of the Lake
- No clearing to be undertaken in setting up the camp and access route
- Access to and from the camp to be along a designated route
- Camp management practises as per PIRSA guidelines including vehicle and fuel containment areas
- All rubbish to be removed
- Camp site and access track to be restored to original appearance

Access to the Lake

- Light weight quad bike with balloon tyres to be only vehicle used on the Lake floor.
- Suitable access points to the Lake floor that minimise tyre impressions be identified with temporary rubber matting used if necessary.
- Traverse loops be planned to minimise repeat driving along traverses and avoid damp areas
- Flagging and other non-biodegradable markers not to be used on the Lake

- The survey is to be postponed if rain/surface conditions on the lake are not conducive to environmentally-sensitive work
- Small islands within the Lake are to be avoided
- Tracks marks and matting leading onto the lake are to be removed / rehabilitated to eliminate their re-use by third parties in the future.

Environmental Monitoring

An Environmental Management Report is to be prepared for PIRSA/DEH detailing activities on the Lake, the practices used to minimise environmental impacts of the project and rehabilitation measures undertaken. Photographic records are to be used where appropriate.

3.7 PROGRAM APPROVAL

The above DEF was approved by PIRSA and National Parks, with certain conditions attached to minimise the formation, and potential re-use by third parties, of track marks leading on to the lake.

4.0 NATIVE TITLE NEGOTIATIONS

Formal Native Title negotiations were commenced but stalled over the question of access to the lake floor. Despite several presentations, it became obvious that the Kokotha and Barngala were opposed to access for drilling on the lake although the Kuyani were not worried. It was decided to suspend the lake-based gravity work so as not to further alienate the opposing groups.

5.0 LAND-BASED GRAVITY SURVEY

A gravity survey was undertaken over the land-based (southern) portion of the tenement only in November 2000 comprising 84 stations on an approximate 2 sq km grid. The report by Haines Surveys is included as Appendix 1. Gravity data generated by the Haines Survey are also attached.

6.0 REFERENCES

Johns, R.K. (1968) Investigations of Lake Torrens and Gairdner Geological Survey of South Australia. Report of Investigation 31

MESA (1996) Environmental Guidelines for Mineral Exploration Activities in South Australia. Mines and Energy SA Information Sheet E8

MESA (1996) Aboriginal Site Avoidance Guidelines. Mines and Energy SA Information Sheet E10

Specht, R.L. (1972) The Vegetation of South Australia. A.B. James, Government Printer

Szmidel, R. (2000) Exploration Licence 2533 – Bosworth. First Annual Report for the period ending 13th July 2000. Pima Mining NL.

APPENDIX 1

Andamooka Island Gravity Survey November 2000

**Haines Surveys Pty Ltd
P.O. Box 196
Aldgate SA 5154**

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Introduction

A GPS regional gravity survey designated Andamooka Island Gravity Survey has been carried out in an area approximately 30 kilometres south of Andamooka in South Australia over 5 days from 5 November 2000 to 9 November 2000 on behalf of Minotaur Exploration Pty Ltd.

The proposed survey consisted of a total of 537 gravity stations in 3 separate areas of South-north lines mainly over the bed of Lake Torrens. The southern area comprised 243 stations in 23 separate lines with the following details:

Line E	Line	SOL N	EOL N	Line Length	Stns	Int
730000	7300	6569000	6585000	16000	9	2000
732000	7320	6569000	6585000	16000	9	2000
734000	7340	6569000	6585000	16000	9	2000
736000	7360	6569000	6585000	16000	9	2000
738000	7380	6569000	6585000	16000	9	2000
740000	7400	6569000	6585000	16000	9	2000
742000	7420	6569000	6585000	16000	9	2000
744000	7440	6569000	6585000	16000	9	2000
746000	7460	6569000	6585000	16000	9	2000
748000	7480	6569000	6585000	16000	9	2000
750000	7500	6569000	6585000	16000	9	2000
752000	7520	6569000	6583000	14000	8	2000
753000	7530	6584000	6585000	1000	2	1000
754000	7540	6569000	6583000	14000	8	2000
755000	7550	6581000	6585000	4000	5	1000
756000	7560	6569000	6575000	6000	4	2000
757000	7570	6573000	6585000	12000	13	1000
759000	7590	6568000	6585000	17000	18	1000
761000	7610	6568000	6585000	17000	18	1000
763000	7630	6568000	6585000	17000	18	1000
765000	7650	6568000	6585000	17000	18	1000
767000	7670	6568000	6580000	12000	13	1000
767000	7670	6581000	6585000	4000	3	2000
769000	7690	6568000	6580000	12000	13	1000
769000	7690	6581000	6585000	4000	3	2000
Stations					243	

The central area comprised 144 stations in 8 separate lines with the following details:

Line E	Line	SOL N	EOL N	Line Length	Stns	Int
749000	7490	6586000	6604000	18000	19	1000
751000	7510	6586000	6604000	18000	19	1000
753000	7530	6586000	6604000	18000	19	1000
755000	7550	6586000	6604000	18000	19	1000
757000	7570	6586000	6604000	18000	19	1000
759000	7590	6586000	6600000	14000	15	1000
759000	7590	6602000	6604000	2000	2	2000
761000	7610	6586000	6598000	12000	13	1000
761000	7610	6600000	6604000	4000	3	2000
763000	7630	6586000	6598000	12000	13	1000
763000	7630	6600000	6604000	4000	3	2000
Stations					144	

The northern area comprised 150 stations in 10 separate lines with the following details:

Line E	Line	SOL N	EOL N	Line Length	Stns	Int
729000	7290	6612000	6616000	4000	5	1000
729000	7290	6621000	6623000	2000	3	1000
731000	7310	6612000	6623000	11000	12	1000
731000	7310	6621000	6623000	2000	3	1000
733000	7330	6612000	6623000	11000	12	1000
735000	7350	6610000	6623000	13000	14	1000
737000	7370	6607000	6623000	16000	17	1000
739000	7390	6605000	6623000	18000	19	1000
741000	7410	6605000	6623000	18000	19	1000
743000	7430	6605000	6620000	15000	16	1000
745000	7450	6605000	6619000	14000	15	1000
747000	7470	6605000	6619000	14000	15	1000
Stations					150	

The survey was curtailed after 5 days and the completed survey comprised 84 stations in the southern area stations covering the non-lake area (apart from 3 stations used to test accessibility on Lake Torrens)

Bouguer anomaly processing has been performed using a country rock density of 2.67 g/cc.

Figure 1 below shows the location of the survey area.

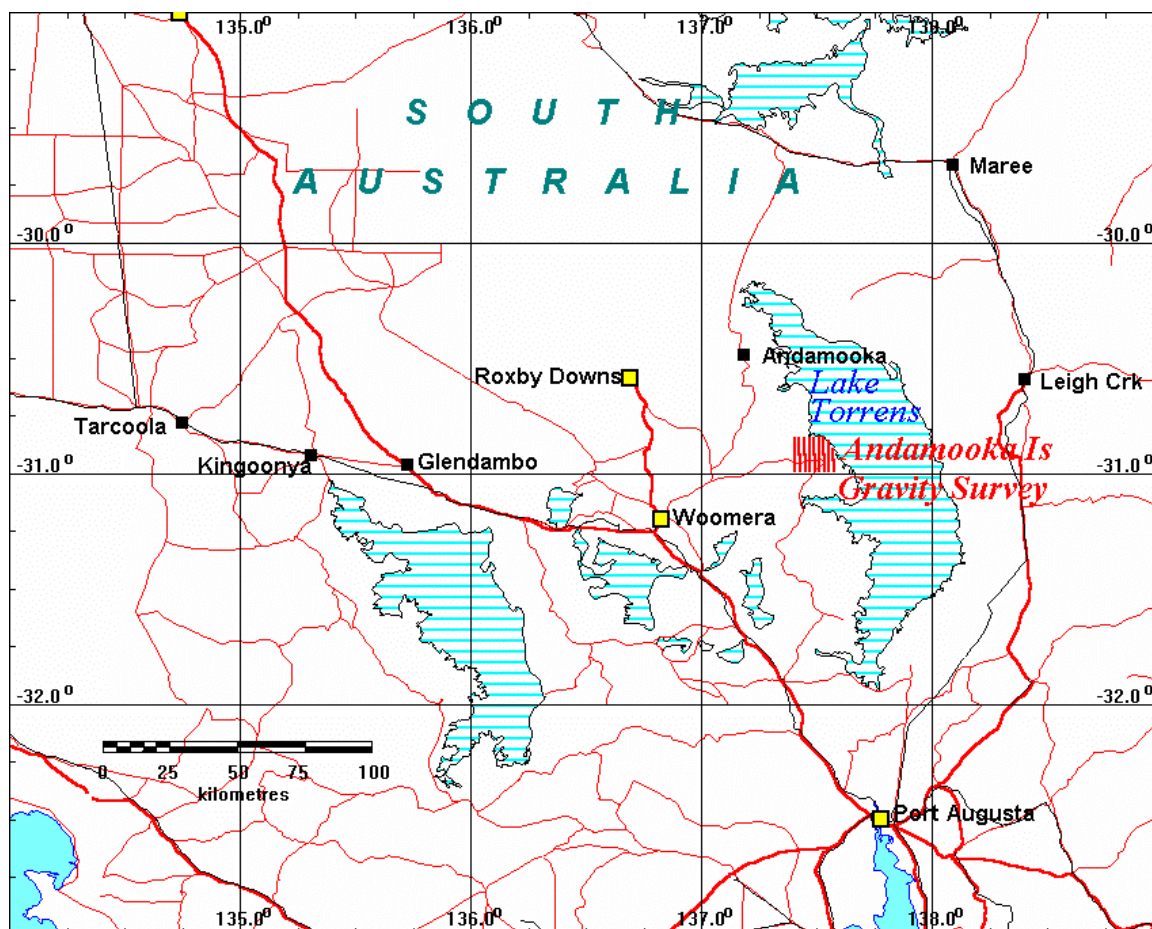


Figure 1. Location Diagram

GPS Observations and Processing

Carrier phase GPS data has been collected using *Trimble 4000* series Geodetic receivers.

Measurements to existing control have been made using Static techniques. The static baselines has been processed to double difference fixed solutions resulting in horizontal and vertical prevision of approximately 2 centimetres.

Measurements for gravity observations have been made using post processed Fast Static techniques. This method gives horizontal and vertical accuracies of at least 5 centimetres.

The Static and Fast Static processing has been done using Trimble GPSurvey Version 2.30 software.

The GPS horizontal coordinates (WGS84 datum) have been transformed to and from AGD coordinates using the ICSM published 7 parameters for WGS84 to AGD84. The AGD Latitude and Longitude is then converted into AMG Zone 53 grid coordinates.

The GPS ellipsoidal heights (WGS84 datum) have been corrected to orthometric heights (AHD) using the AusGeoid98 geoid model for the control and the gravity stations.

Details of Horizontal and Vertical control are given in the sections below.

Gravity Observations

Gravity measurements have been made using *Scintrex CG3 Autograv* instruments. The instrument number 643319 has been used in this project.

Readings of 120 seconds were taken at base station. Readings of 40 seconds were taken at all other gravity survey points.

Base station readings were taken at the beginning of the day and at the end of the day's fieldwork. The original specification was for an additional base observation to be done in the middle of the day and this was done on one day but subsequently waived due to the difficulty of the terrain.

The CG3 instrument applies an instrument drift correction to its final gravity reading. Any residual drifts between base station readings are corrected by the gravity post processing software. The instrument also applies Earth Tide Correction to its final gravity reading at each station. The instrument calibration constants are contained in the daily gravity data files.

Survey Control

One local gravity/GPS base was established in the survey area and designated 1000. The groundmark is a metal pin at the natural surface with an adjacent witness post (steel star picket) with metal tag stamped "Base 1000".

Horizontal and vertical control was established using the South Australian Coordinated Survey Mark 6436/1021 with coordinate values supplied by South Australian Department of Environment. Note that both horizontal and vertical values are Fourth Order: it was intended that the vertical control would be strengthened later in the survey.

Gravity control was established by observations opening and closing on the AGSO gravity base, 6491.0138 at Woomera Airport using the AGSO supplied Isogal84 value.

Control information (**WGS84 heights derived using AusGeoid98**):

ANDAMOOKA ISLAND SURVEY / GRAVITY CONTROL

Station	WGS 84			AMG Zone 53		AHD	Isogal84
	Latitude	Longitude	Height	Easting	Northing	Height	Gravity mgal
6436/1021	30° 57' 55.52455"	137° 34' 04.43829"	134.824	745145.599	6571229.590	129.000	
6491.0138	31° 09' 31"	136° 48' 23"	169.274	672040	6551250	166.780	979358.793
1000	30° 56' 10.71503"	137° 31' 14.45361"	58.726	740707.246	6574560.723	52.981	979372.470

Point Numbering and Marking

An 8 digit point number is used to identify each gravity station. The first 4 digits indicate the line number. The second 4 digits indicate the station number

For the north-south lines the 8 digits are constructed from the planned AMG coordinates for each gravity station using

$$\begin{aligned} \text{Line No} &= (\text{AMG E}) / 100 & \text{Stn No} &= (\text{AMG N} - 6000000) / 100 \\ \text{eg. Planned gravity station AMG coordinates} & & & \\ & 732000.000\text{E} & & 6579000.000\text{N} \\ \text{Line No} &= 7320 & \text{Station No} &= 5790 \\ \text{i.e. Pt No} &= 73205790 \end{aligned}$$

Line and station numbers have not been expanded in the processed data.

The gravity stations have not been marked in the field.

Gravity Processing

The gravity values for this survey are assumed to be related to the *Australian Gravity Base Station Network* using the *Isogal84 (IGSN 71)* values at known Gravity Stations as provided by *DMR*.

Note that all gravity values shown in these surveys are expressed in units of milligals.

The field gravity observations have been processed using standard formulae and constants to produce a Bouguer Anomaly for each gravity station.

The meter reading as recorded in the raw Scintrex data file is corrected for instrument tilts, meter drift and Earth Tide. Post processing corrections are detailed below.

Drift

The residual drift between base station readings is calculated for each station reading proportionately by time. This is the drift value shown in the processing output.

$$\text{Drift} = [(t_1 - t_n) ((b_2 - b_1) / (t_2 - t_1))]$$

- t_n = time of meter reading at each station
- b_1 = base meter reading prior to station reading
- t_1 = time of base reading b_1
- b_2 = base meter reading after station reading
- t_2 = time of base reading b_2

Obs mgal

This is the observed gravity value in milligals.

$$\text{Obs} = b_g + (r_n - \text{drift}) - b_1$$

- b_g = base stn gravity value (Isogal84)
- r_n = meter reading at each station as shown in the CG3 .dat file
- drift = residual drift correction as shown above
- b_1 = base meter reading prior to station reading

Anom

This is the difference between the observed gravity and the theoretical gravity value at each station. The theoretical value is calculated using the *1967 International Gravity Formula*.

$$\text{Anom} = \text{Obs} - g_{th}$$

Obs = observed gravity as explained above

$$g_{th} = 978031.8 (1 + 0.0053024 \sin^2\phi - 0.0000059 \sin^2 2\phi)$$

ϕ = WGS84 Latitude

Freeair corrn

The freeair correction is calculated using

$$\text{Freeair corrn} = 0.3086 H$$

H = height above sea level (AHD height)

Bouguer corrn

$$\text{Bouguer corrn} = 0.04192 \rho H$$

ρ = density (2.67 g/cc used for this survey)

H = height above sea level (AHD height)

Bouguer Anom

$$\text{Bouguer Anom} = \text{Anom} + \text{Freeair corrn} + \text{Bouguer corrn}$$

Results Formats

Printed results of the gravity processing (with Bouguer corrections at density 2.67 g/cc) are included in the Appendix of this report. The results are also supplied in digital form on floppy disk with the following of files being supplied.

ALLAMG.XYZ ALLGEO.XYZ ALLCSV.CSV

Field gravity observation files with the extension .DAT and GPS solution summary files with the extension .GPS is also supplied.

ALLAMG.XYZ format

This is a *GEOSOF*T compatible XYZ (space delimited columns) file. The data is sorted by Day then Line and Stn number. The column order is as follows:

AMG E	AMG N	Line	Stn	drift	corr'd	obs	anom	freeair	bouguer	bouguer	height
					meter	mgal		corr	corr	anom	(AHD)
											(2.67)

ALLGEO.XYZ format

This is a *GEOSOF*T format XYZ (space delimited columns) file. The data is sorted into Line and Stn number suitable for profiling. The column order is as follows:

Line	Stn	AMG E	AMG N	drift	corr'd	obs	anom	freeair	bouguer	bouguer	height
					meter	mgal		corr	corr	anom	(AHD)
											(2.67)

ALLCSV.CSV Format

This is a Comma Separated Variable format file. This format facilitates data import into spreadsheet and database software. Each record (line) contains the following data fields:

Pt Number, Line No, Station No, Date, Day Number, Local Time, WGS Latitude, WGS Longitude, WGS Height, AMG East, AMG North, AHD Height, Meter reading, Meter reading standard deviation, Earth Tide Correction, drift correction, corrected meter reading, gravity difference (mgal) from base, observed gravity (mgals), gravity anomaly, freeair correction, Bouguer correction (2.67), Bouguer anomaly

*.DAT

These are the raw data files from the *Scintrex* CG3 gravimeter. There is a separate file for each day's data. The files are identified by the Julian day number (001 = Jan 1st) with the prefix G. eg. G142 = day 142 (21st May).

*.GPS

These are the GPS solution summaries for post processed Fast Static baselines for the control survey. Each record (line) contains the following data fields:

Station, Solution Type, GPS Time, WGS84 Latitude, WGS84 Longitude, WGS84 Height, WGS84 dX, WGS84 dY, WGS84 dZ, Wgs84 dH, Baseline Distance, Solution Reference Variance, Solution RMSE, Rover Antenna Height, Baseline Standard Deviation , Solution Variance Ratio, Observation Count/Rejects, Observation Start time, Observation Finish time

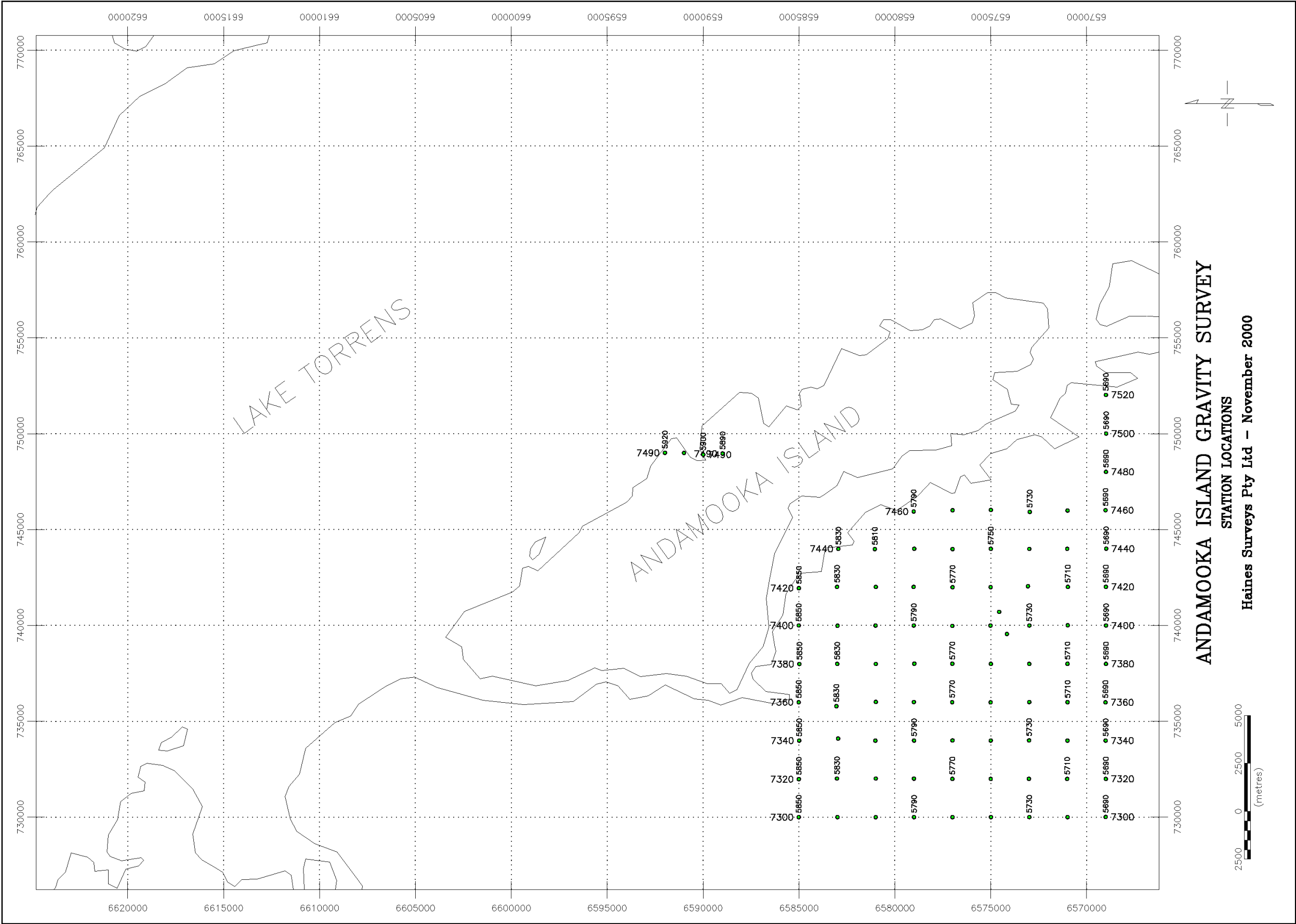
PRODUCTION LOG

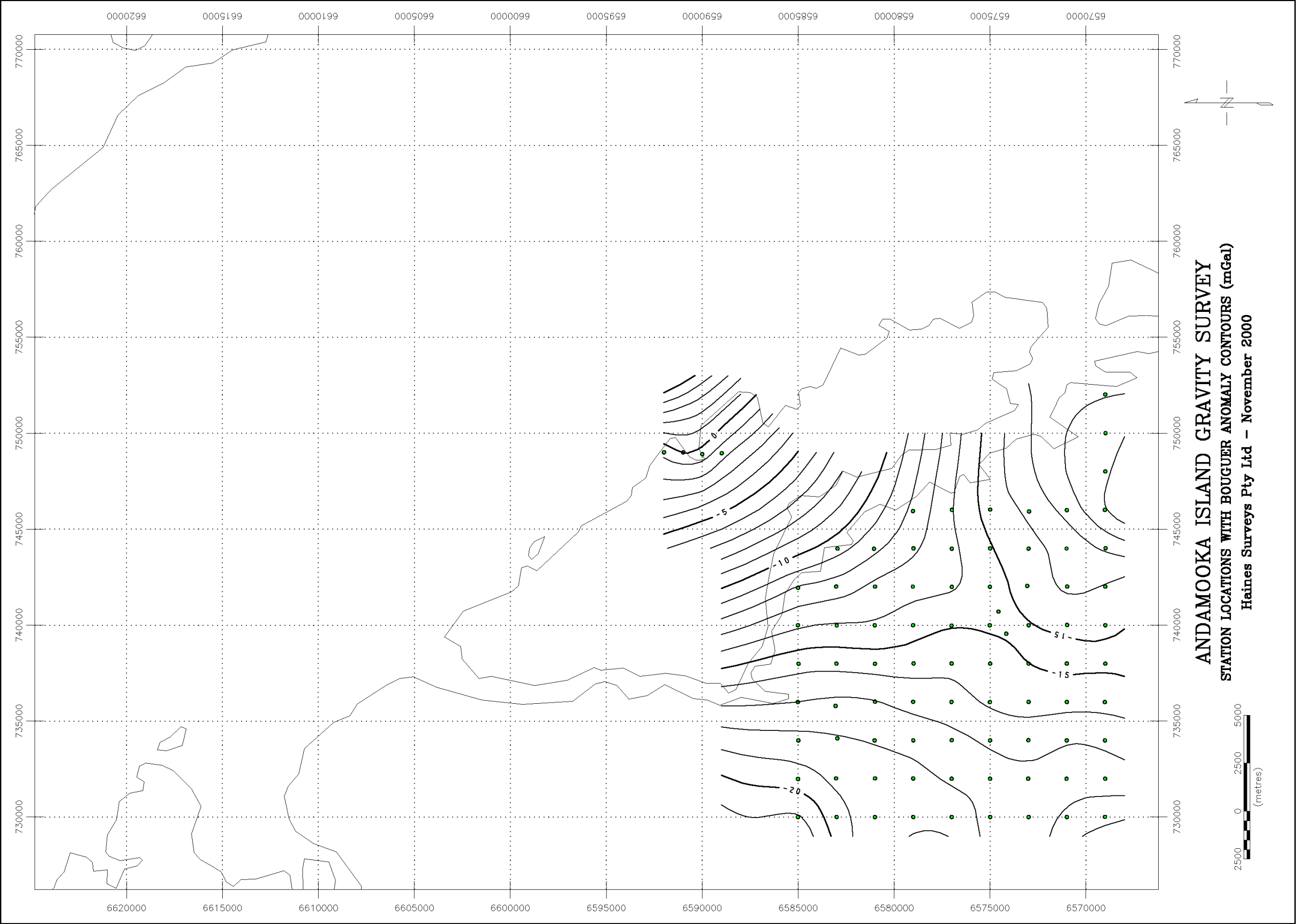
Andamooka Island Gravity Survey Production Log

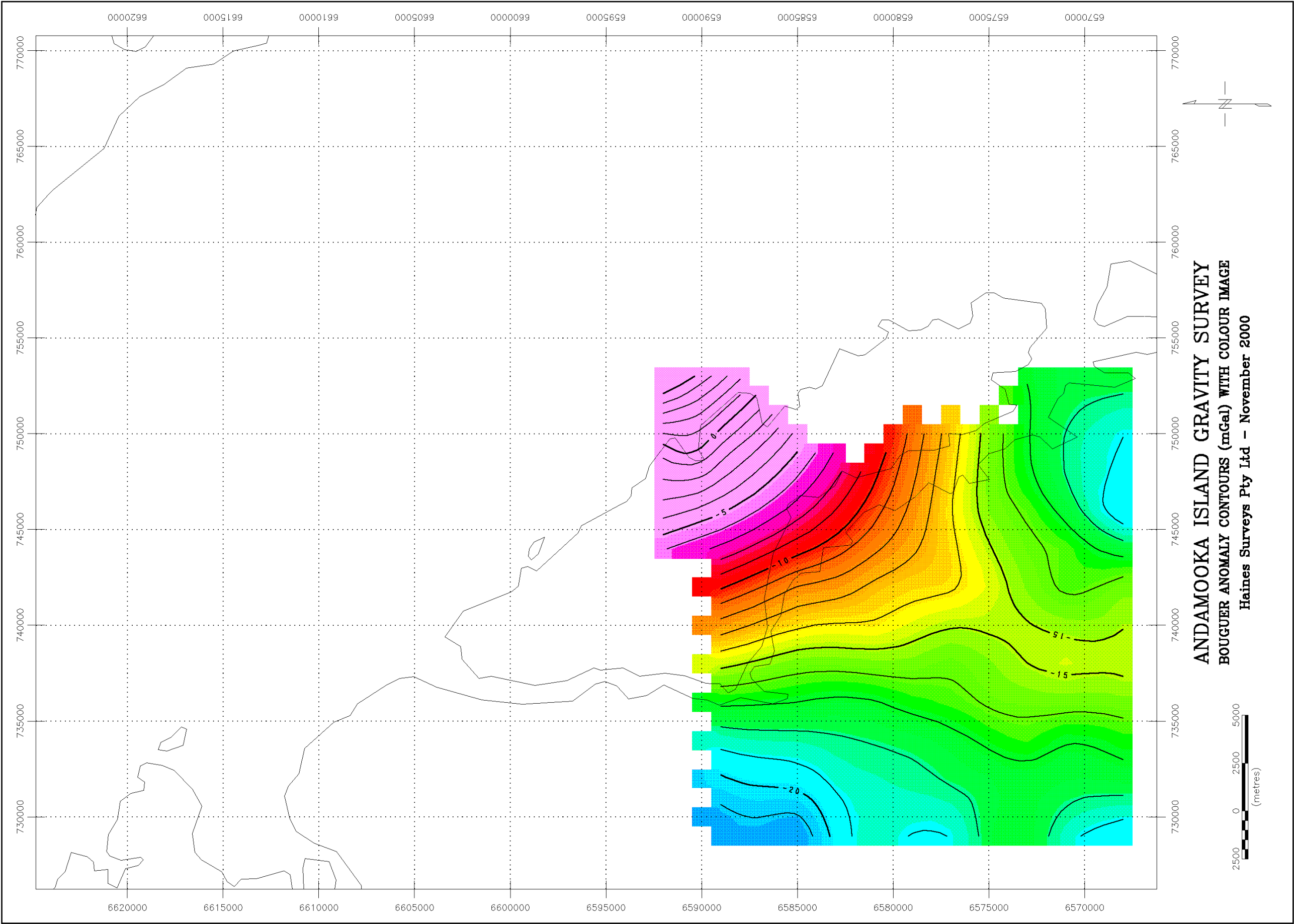
Date	GPS Day	Observed	Comments
5-Nov-00	D310		Mobilise to Bosworth HS, control survey
6-Nov-00	D311	30	Commence gravity survey
7-Nov-00	D312	19	Continue gravity survey
8-Nov-00	D313	8	Continue gravity survey, production reduced due to rain
9-Nov-00	D314	27	Continue gravity survey
10-Nov-00	D315		Gravity survey curtailed, depart Bosworth HS
	Total	84	

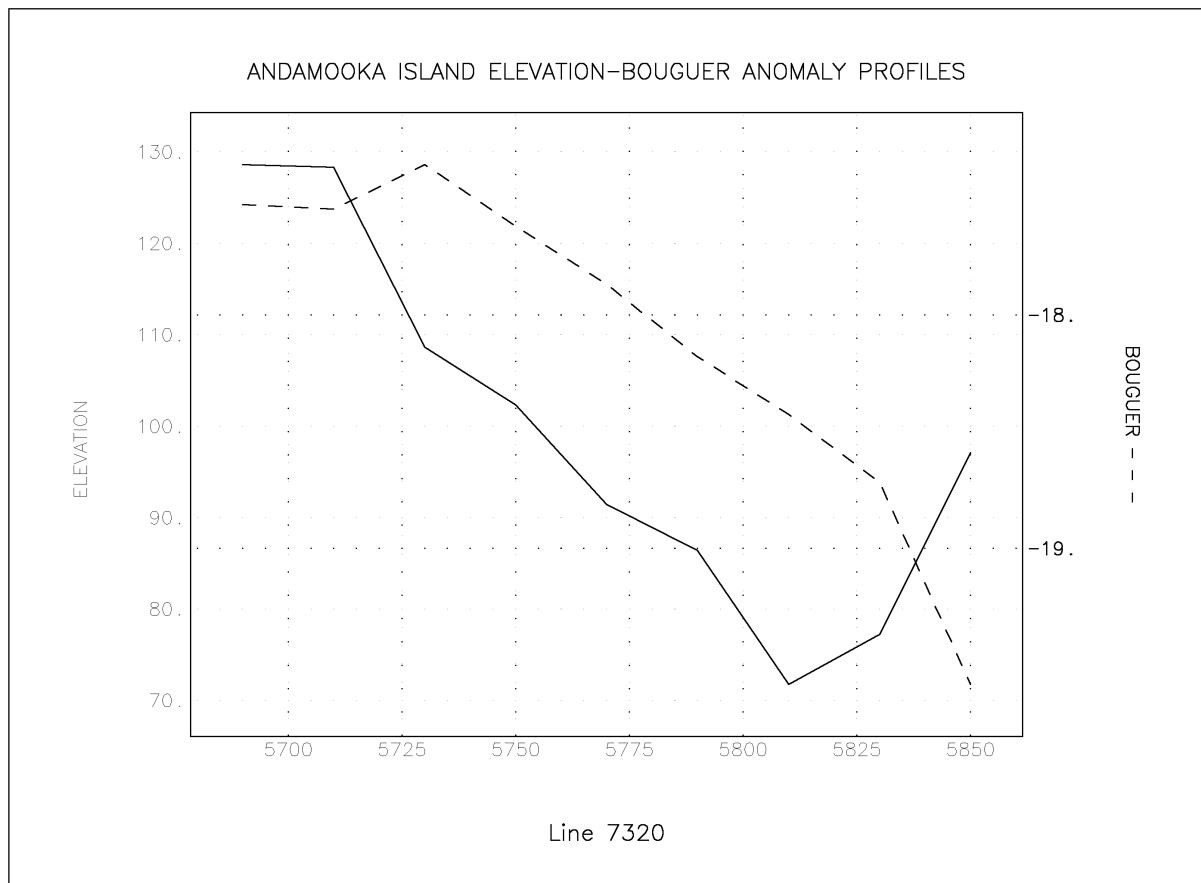
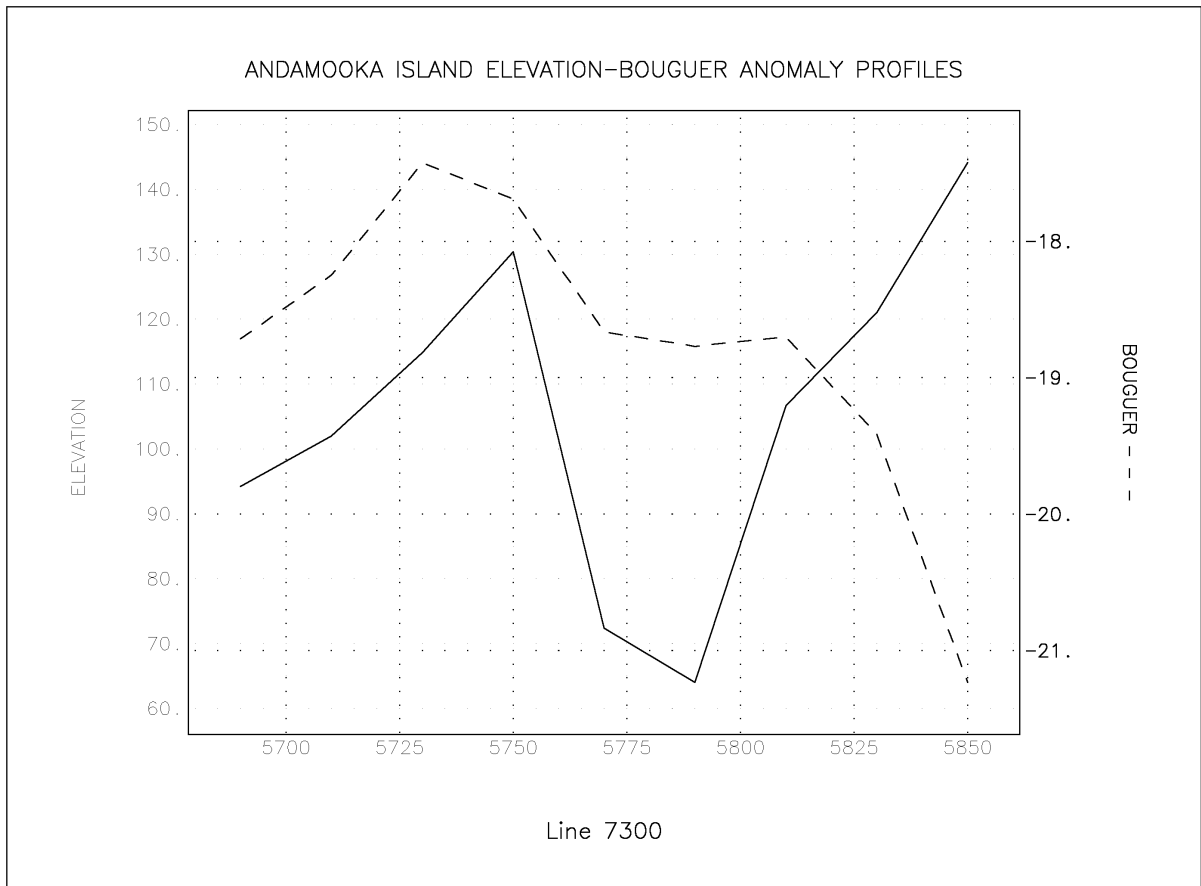
Plots

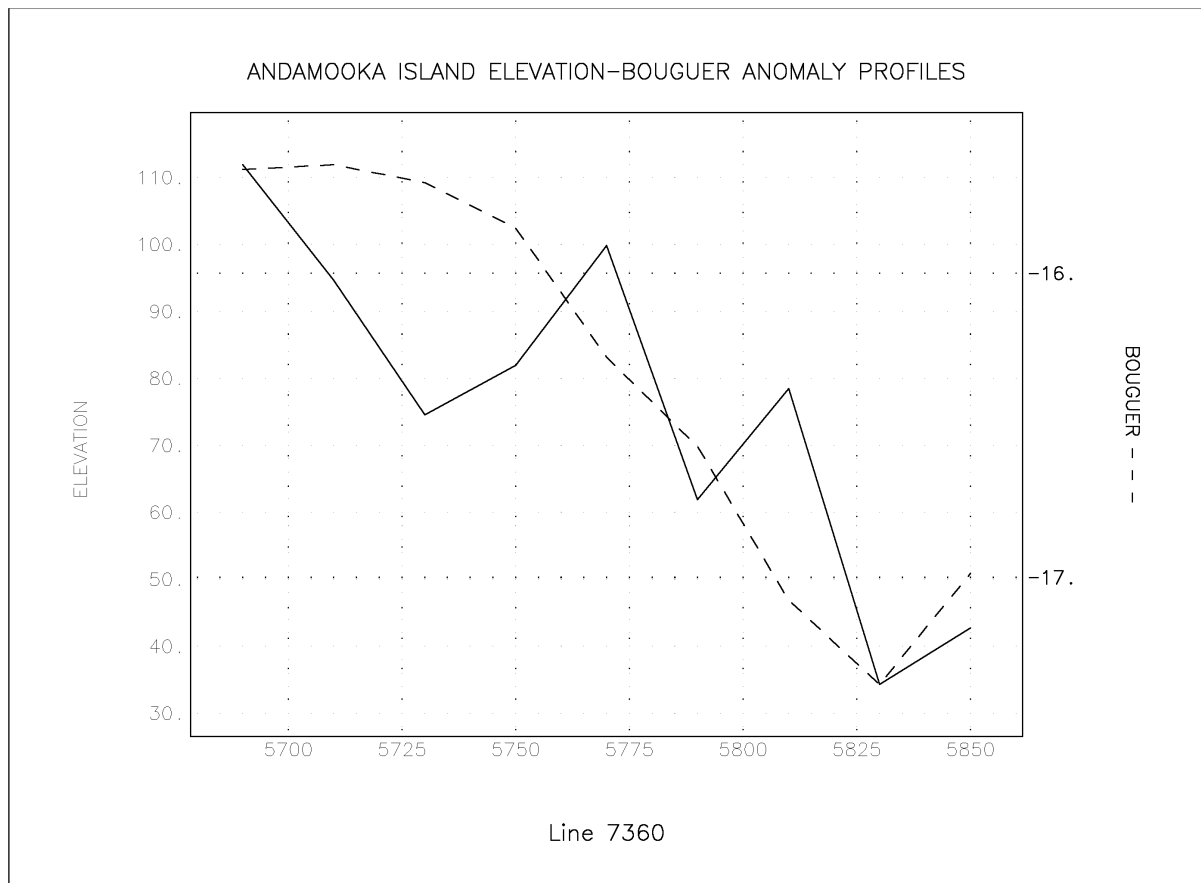
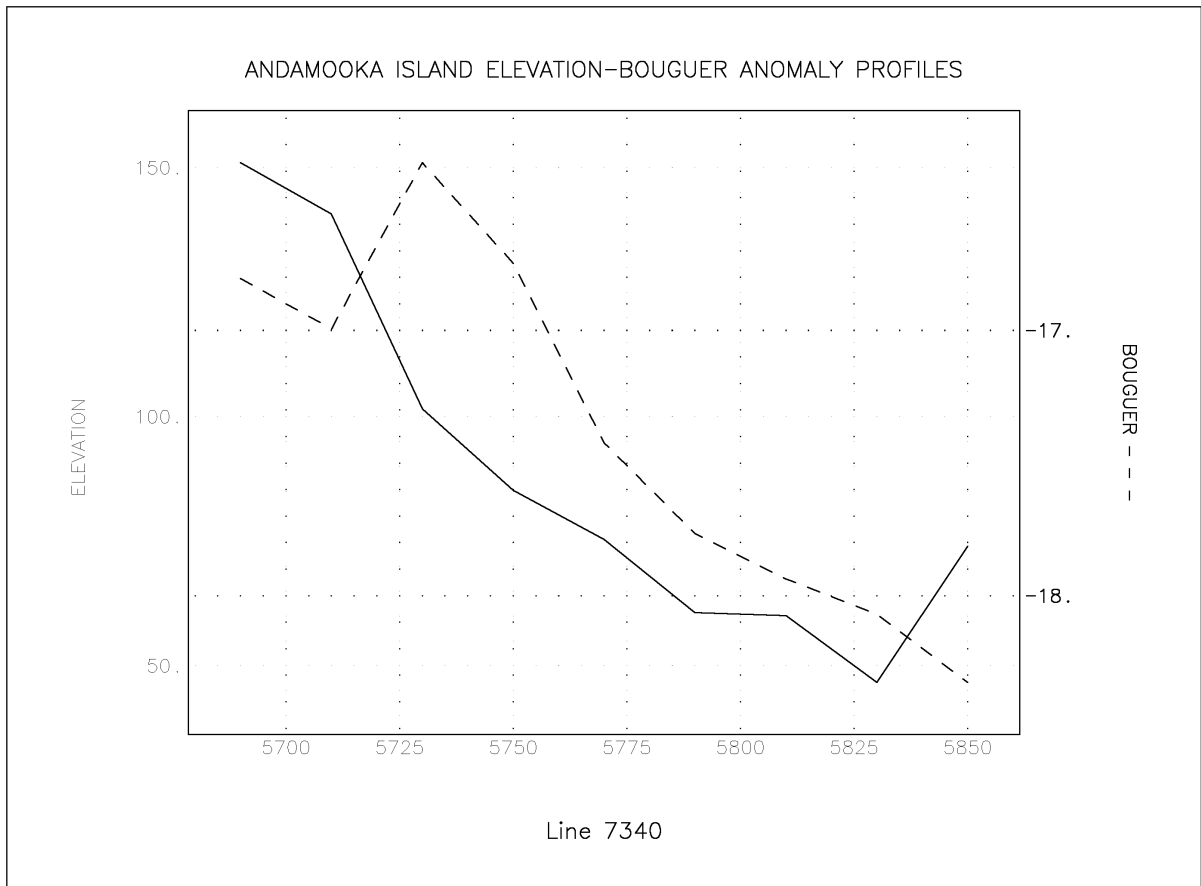
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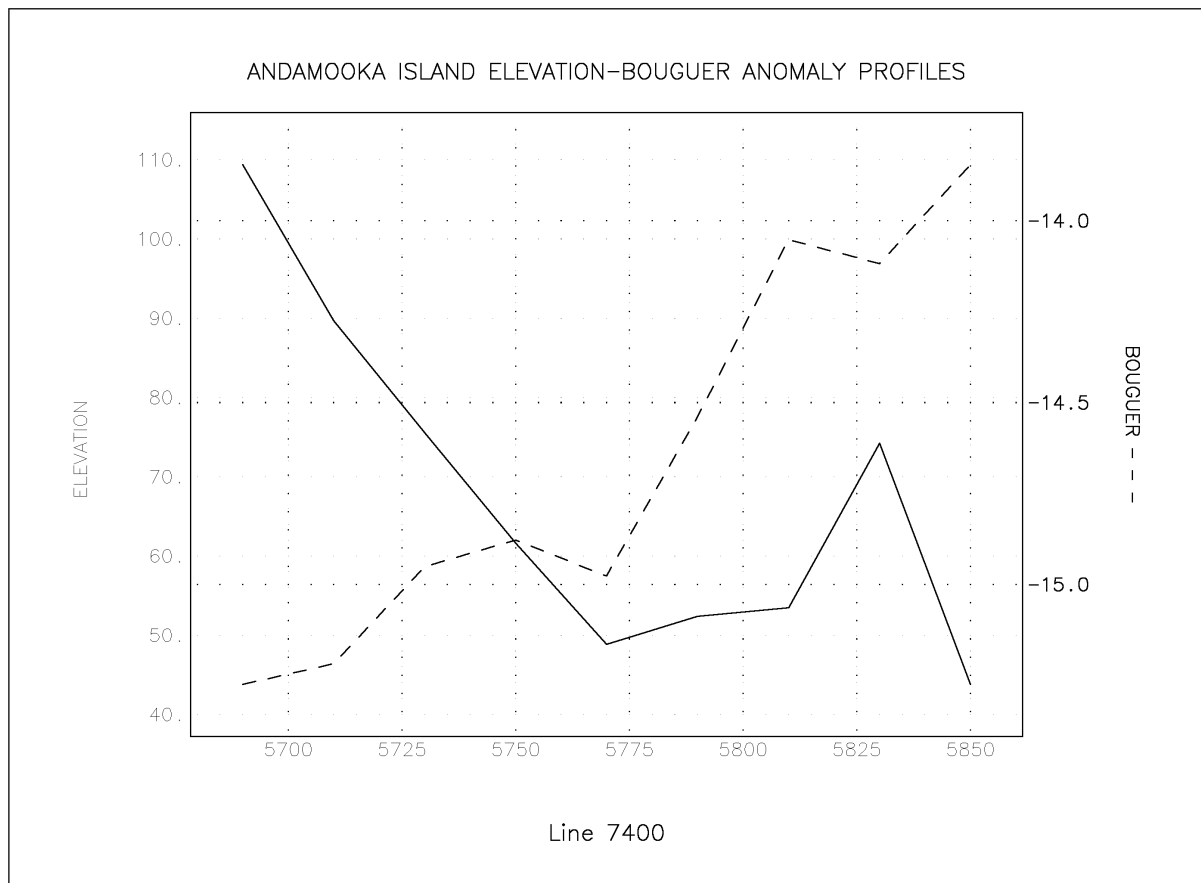
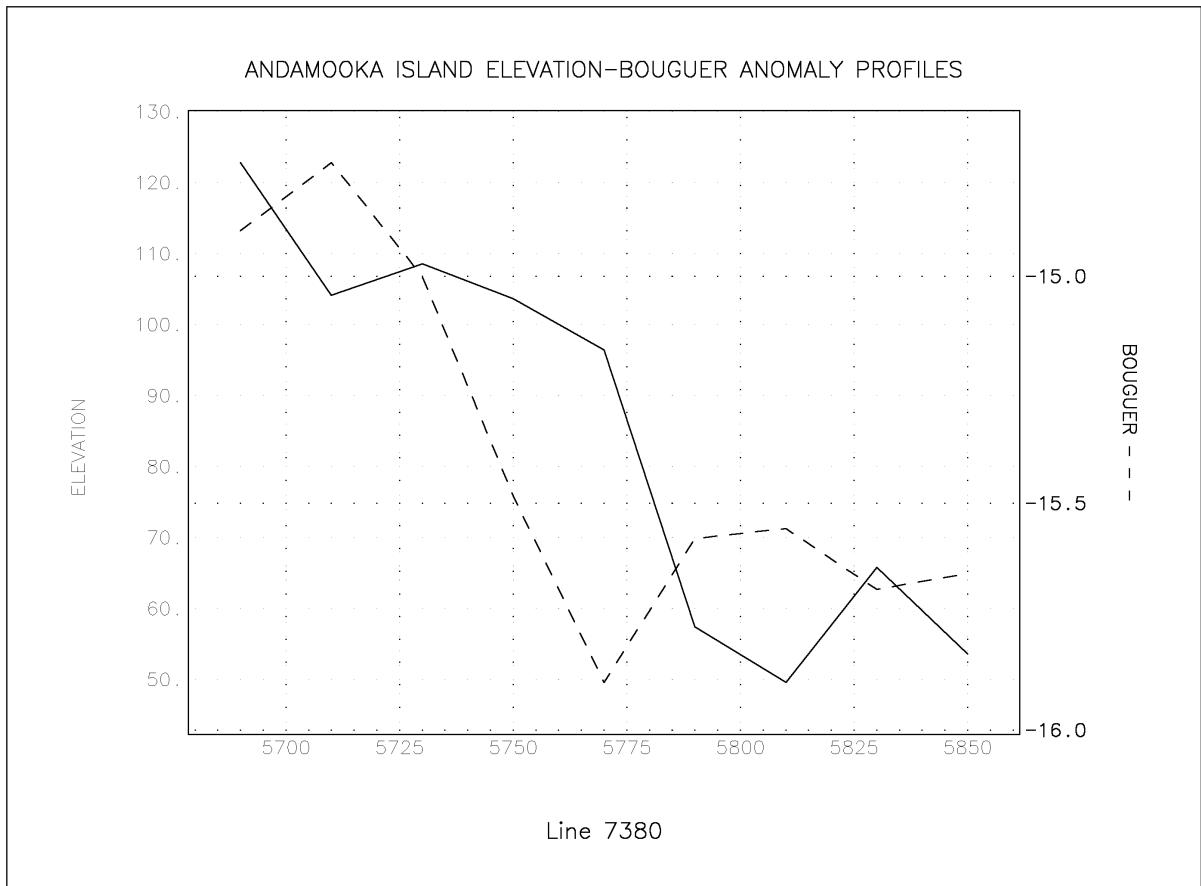


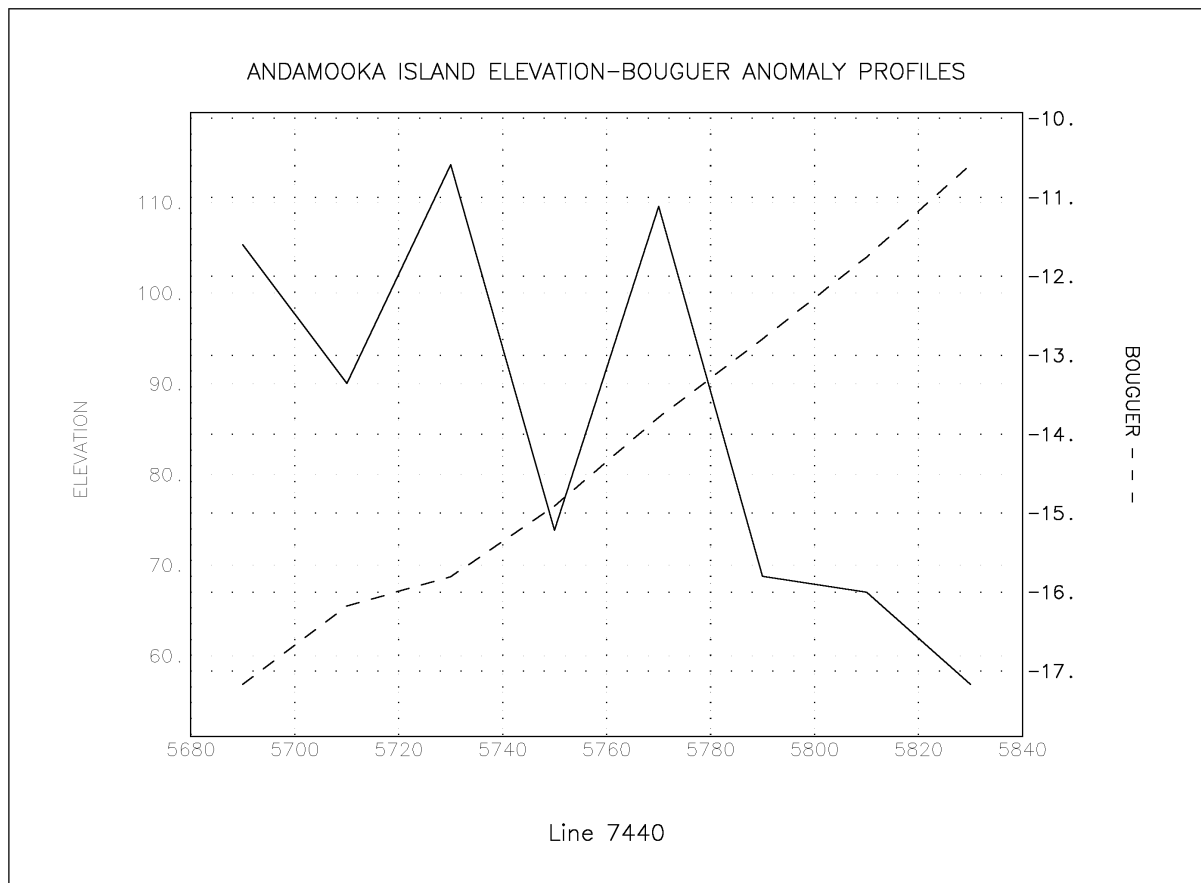
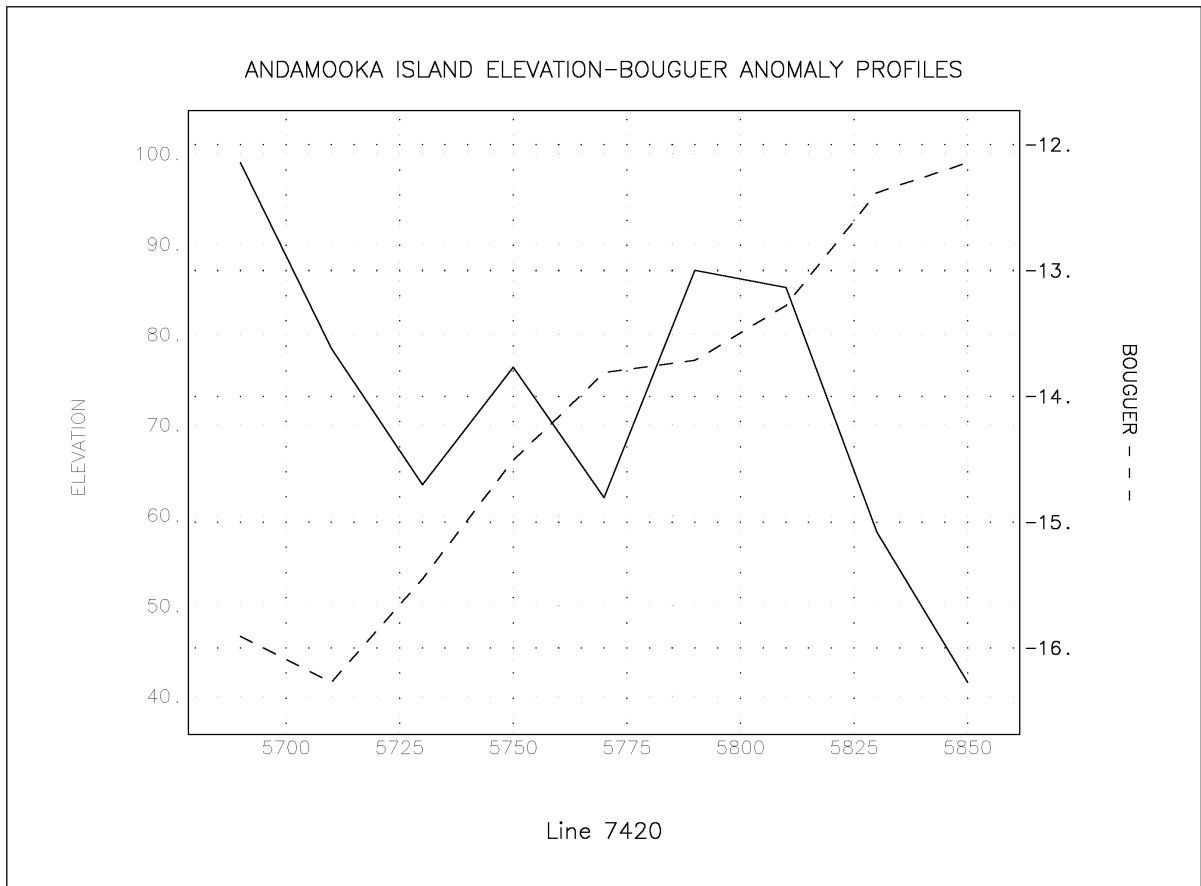


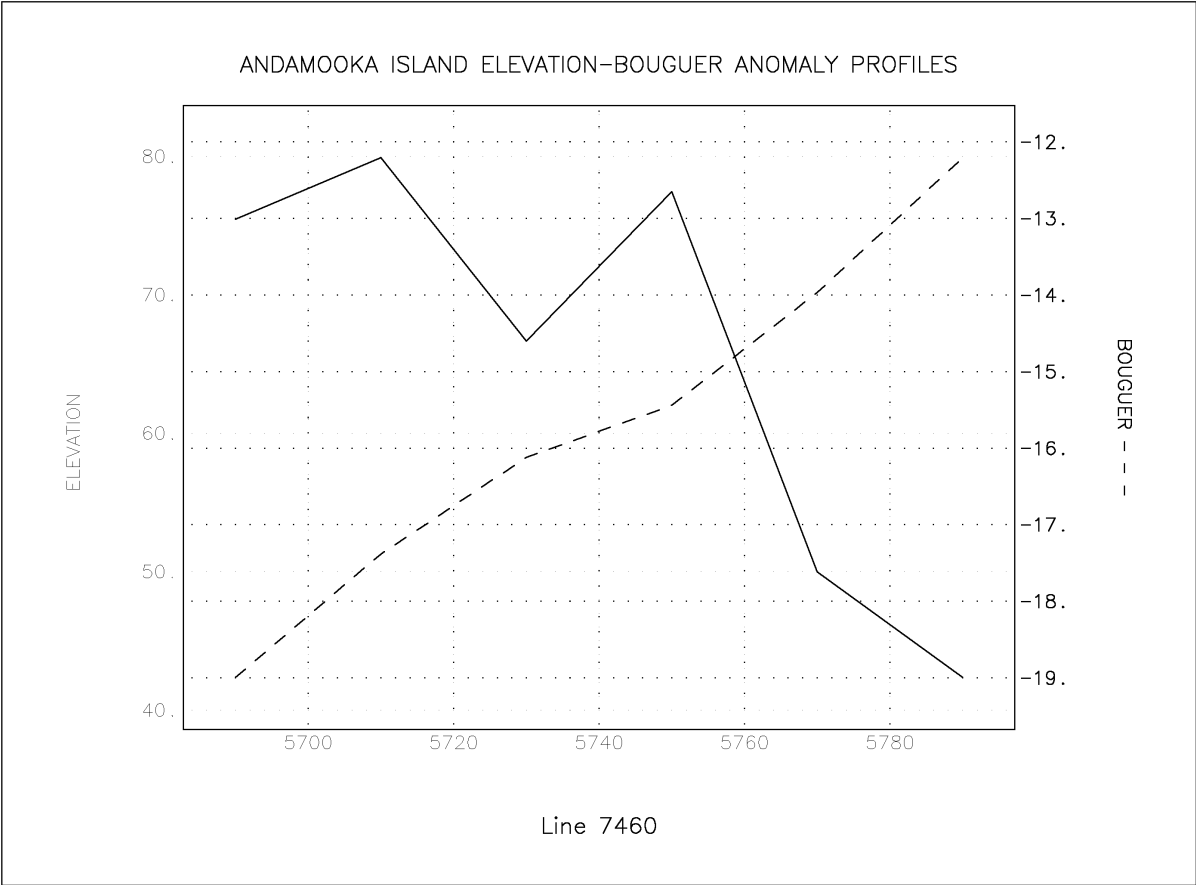












Gravity Processing Results

/	COORDS	GRID	drift	corr'd	obs	anom	freeair	bouguer	bouguer
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(AHD)									
/								(2.67)	
/D311									
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52.981									
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52.981									
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52.981									
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52.981									
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94.182									
730004.4	6570995.5	7300	5710	+0.013	5458.384	979362.291	-38.303	31.463	-11.409 -18.249
101.955									
730004.6	6572989.9	7300	5730	+0.015	5455.234	979359.141	-40.020	35.451	-12.855 -17.424
114.877									
730004.3	6574991.2	7300	5750	+0.017	5450.478	979354.385	-43.339	40.237	-14.590 -17.692
130.386									
730001.0	6576995.5	7300	5770	+0.020	5459.484	979363.391	-32.894	22.326	-8.095 -18.664
72.345									
730004.4	6578999.7	7300	5790	+0.022	5459.582	979363.489	-31.358	19.749	-7.161 -18.770
63.994									
729999.9	6581000.1	7300	5810	+0.024	5449.820	979353.727	-39.684	32.918	-11.936 -18.702
106.669									
730003.9	6582992.0	7300	5830	+0.026	5444.851	979348.758	-43.225	37.356	-13.545 -19.414
121.050									
730002.0	6585012.3	7300	5850	+0.029	5437.047	979340.954	-49.580	44.473	-16.126 -21.234
144.111									
731997.5	6569002.4	7320	5690	+0.061	5455.264	979359.171	-42.824	39.688	-14.391 -17.528
128.605									
731994.6	6571013.4	7320	5710	+0.059	5453.852	979357.759	-42.791	39.606	-14.361 -17.547
128.341									
732001.9	6573010.9	7320	5730	+0.057	5456.482	979360.389	-38.726	33.527	-12.157 -17.357
108.641									
731996.0	6575003.0	7320	5750	+0.056	5456.033	979359.940	-37.744	31.573	-11.449 -17.620
102.312									
731998.6	6577001.7	7320	5770	+0.051	5456.484	979360.391	-35.859	28.224	-10.234 -17.869
91.458									
732010.8	6579003.4	7320	5790	+0.049	5455.727	979359.634	-35.179	26.670	-9.671 -18.179
86.423									
732015.6	6580997.9	7320	5810	+0.047	5456.934	979360.841	-32.541	22.144	-8.029 -18.426
71.756									
732016.1	6583019.9	7320	5830	+0.045	5454.121	979358.028	-33.903	23.828	-8.640 -18.715
77.214									
731983.9	6585007.2	7320	5850	+0.034	5447.916	979351.823	-38.684	29.969	-10.867 -19.582
97.112									
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151.002									
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140.714									
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101.546									
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85.209									
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73.953									
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111.904									
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94.710									
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74.559									
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42.753									
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122.804									
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104.112									
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108.568									
/D312									
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52.981									
740707.2	6574560.7	0	1000	+0.000	5468.310	979372.470	-25.393	16.350	-5.929 -14.972
52.981									
740707.2	6574560.7	0	1000	+0.047	5468.310	979372.470	-25.393	16.350	-5.929 -14.972
52.981									

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52.981										
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75.380										
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60.683										
733992.4	6581016.7	7340	5810	+0.041	5459.421	979363.581	-29.756	18.543	-6.724	-17.937
60.089										
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46.660										
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81.944										
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99.793										
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61.903										
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78.466										
735789.6	6583048.4	7360	5830	+0.039	5463.592	979367.752	-24.100	10.586	-3.838	-17.352
34.302										
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103.642										
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96.444										
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57.405										
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49.587										
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65.764										
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53.600										
748962.2	6588984.3	7490	5890	+0.018	5472.208	979376.368	-11.015	14.762	-5.353	-1.606
47.835										
748908.7	6589995.8	7490	5900	+0.017	5474.188	979378.348	-8.312	12.691	-4.602	-0.223
41.125										
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43.218										
749005.1	6591990.2	7490	5920	+0.016	5473.937	979378.097	-7.133	10.028	-3.636	-0.742
32.494										
/D313										
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52.981										
740707.2	6574560.7	0	1000	+0.000	5468.086	979372.470	-25.393	16.350	-5.929	-14.972
52.981										
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52.981										
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109.368										
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89.682										
742013.3	6568997.3	7420	5690	+0.026	5462.075	979366.459	-35.380	30.549	-11.077	-15.908
98.993										
744005.4	6568980.7	7440	5690	+0.034	5459.542	979363.926	-37.892	32.512	-11.789	-17.169
105.352										
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75.463										
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66.172										
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47.858										
752021.1	6568994.8	7520	5690	+0.071	5465.997	979370.381	-31.292	20.951	-7.597	-17.938
67.892										
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52.981										
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52.981										
740707.2	6574560.7	0	1000	+0.001	5467.786	979372.470	-25.393	16.350	-5.929	-14.972
52.981										
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52.981										
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75.528										
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61.612										
739976.3	6577008.5	7400	5770	+0.001	5466.849	979371.533	-24.585	15.073	-5.466	-14.977
48.843										
739997.9	6579012.8	7400	5790	+0.001	5465.156	979369.840	-24.839	16.159	-5.859	-14.539
52.362										

739993.6	6581007.5	7400	5810	+0.001	5463.996	979368.680	-24.568	16.498	-5.982	-14.052
53.461										
739983.1	6582989.7	7400	5830	+0.001	5458.425	979363.109	-28.718	22.906	-8.306	-14.118
74.224										
739998.8	6585014.5	7400	5850	+0.000	5463.232	979367.916	-22.459	13.512	-4.900	-13.846
43.785										
742010.5	6570980.6	7420	5710	+0.000	5464.018	979368.702	-31.711	24.220	-8.782	-16.274
78.483										
742044.5	6573062.0	7420	5730	+0.000	5466.321	979371.005	-27.913	19.551	-7.089	-15.451
63.355										
741996.0	6575006.2	7420	5750	+0.001	5463.306	979367.990	-29.532	23.570	-8.547	-14.509
76.377										
741994.2	6576992.8	7420	5770	+0.001	5465.418	979370.102	-25.994	19.113	-6.930	-13.812
61.933										
742008.0	6579020.5	7420	5790	+0.001	5459.116	979363.800	-30.841	26.869	-9.743	-13.715
87.066										
742007.7	6580994.3	7420	5810	+0.001	5458.507	979363.191	-30.034	26.287	-9.532	-13.278
85.182										
742009.0	6583014.3	7420	5830	+0.000	5463.279	979367.963	-23.813	17.936	-6.504	-12.381
58.122										
741947.1	6585006.1	7420	5850	+0.000	5465.359	979370.043	-20.306	12.807	-4.644	-12.143
41.499										
743992.6	6571012.7	7440	5710	+0.000	5461.782	979366.466	-33.892	27.794	-10.078	-16.176
90.065										
743991.1	6572994.6	7440	5730	+0.001	5455.989	979360.673	-38.261	35.233	-12.775	-15.804
114.169										
743995.3	6574998.3	7440	5750	+0.001	5463.378	979368.062	-29.433	22.787	-8.263	-14.909
73.839										
743982.2	6576992.2	7440	5770	+0.001	5456.042	979360.726	-35.338	33.810	-12.260	-13.788
109.558										
743999.2	6578990.2	7440	5790	+0.001	5463.622	979368.306	-26.324	21.225	-7.696	-12.795
68.777										
743980.9	6581046.9	7440	5810	+0.000	5463.531	979368.215	-24.940	20.683	-7.500	-11.757
67.022										
743991.9	6582947.7	7440	5830	+0.000	5465.338	979370.022	-21.770	17.544	-6.362	-10.587
56.851										
745993.6	6570994.7	7460	5710	+0.000	5462.555	979367.239	-33.099	24.655	-8.940	-17.384
79.893										
745922.8	6572967.0	7460	5730	+0.000	5465.008	979369.692	-29.230	20.568	-7.458	-16.120
66.649										
746022.3	6574993.8	7460	5750	+0.000	5462.110	979366.794	-30.671	23.893	-8.664	-15.441
77.425										
746006.7	6576990.0	7460	5770	+0.000	5467.551	979372.235	-23.797	15.424	-5.593	-13.966
49.980										
745943.8	6579019.2	7460	5790	+0.000	5469.356	979374.040	-20.537	13.071	-4.740	-12.206
42.356										

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EL 2690 ANDAMOOKA ISLAND 2ND ANNUAL TECHNICAL REPORT

**FOR THE PERIOD
10TH JANUARY 2001 TO 9TH JANUARY 2002**

**A. P. BELPERIO
CHIEF GEOLOGIST**

30TH MAY 2002

MAP REFERENCE : ANDAMOOKA (SH 53-12)

1:100,000 MAP SHEET : 6436

DISTRIBUTION: PIRSA
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BHP BILLITON

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Figure 1	Location of EL 2690, Andamooka Island & adjacent EL 2533
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1.0 INTRODUCTION

Exploration License 2690 (Andamooka Island) was originally granted to Minotaur Gold on 10th January 2000 for a period of one year. The tenement was transferred to Minex (SA) Pty Ltd as part of the spin-off and listing of Minotaur Resources Ltd, and forms a significant joint venture (along with Pima/Kelaray's adjacent EL 2533) with Billiton Exploration (Australia), now BHP Billiton. Minotaur is manager of this combined Andamooka Joint Venture.

The license is in two parts, located approximately 250km north of Port Augusta on the Andamooka 1:250 000 map sheet, at the edge of Lake Torrens (**Figure 1**). A significant proportion of EL 2533 comprises the floor of saline Lake Torrens and lies within Lake Torrens National Park.

The ground was acquired for the purpose of exploration for large Olympic Dam-style Fe-oxide-Cu-Au deposits. Investigation of previous drill hole data and existing geophysical datasets in this area indicates high prospectivity for large-scale deposits of this type.

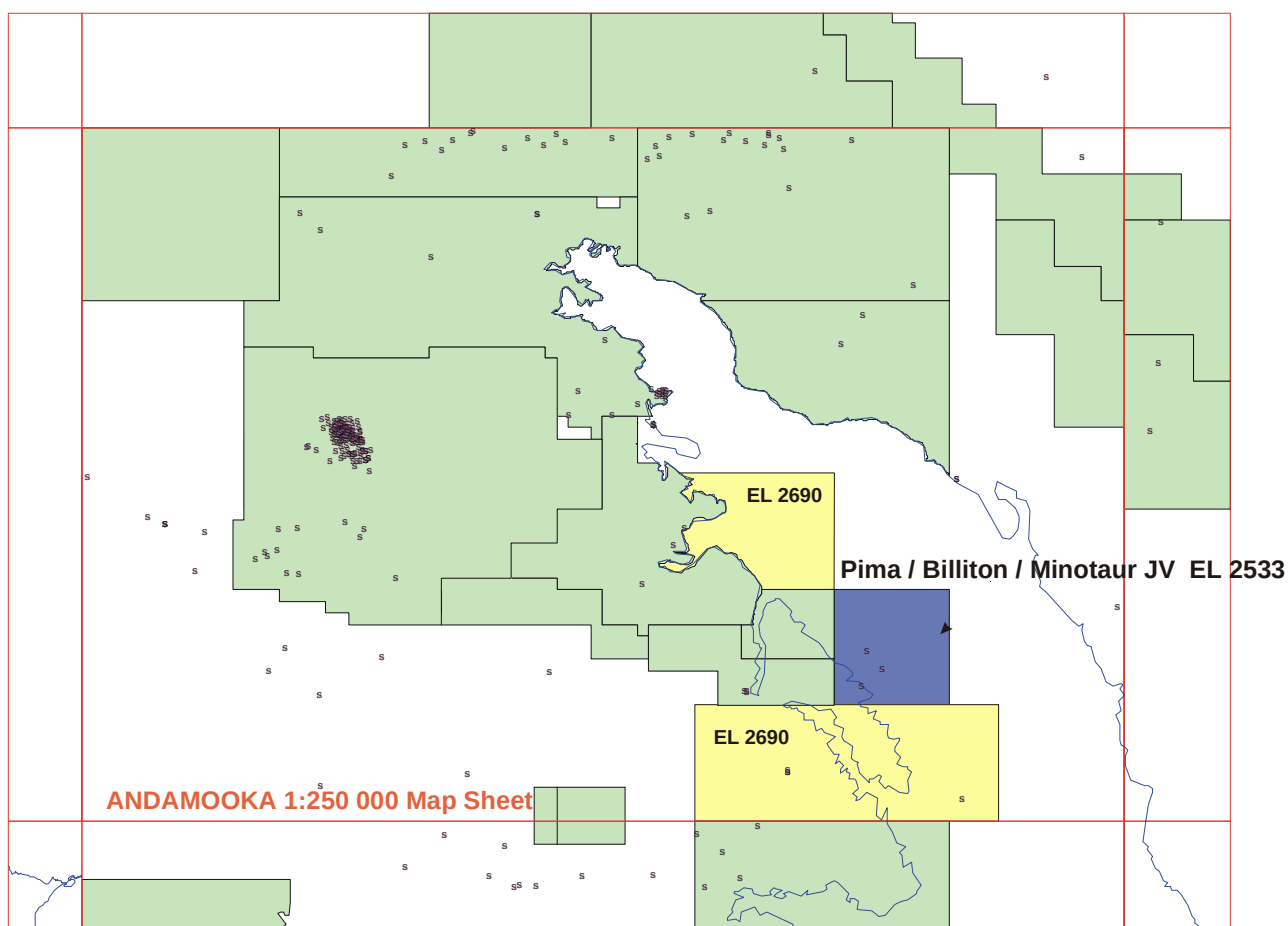


Figure 1 Location of EL 2690 and contiguous EL 2533 and historic drill holes.

2.0 SUMMARY OF OPERATIONS

Work completed during the 12 months to 9th January 2002 comprised ongoing Native Title and access negotiations to the floor of Lake Torrens.

Three overlapping Native Title claims necessitated a complex web of negotiations with claimant groups. The Kuyani group indicated they were not opposed to exploration on the lake floor (subject to normal clearance surveys), but the Kokotha and Barnjala claimant groups remained opposed to any access to the lake floor for drilling. Requests to the Government to assist in resolving the impasse remain unanswered. As a result, no technical operations were undertaken in the reporting period.

Expenditure for the twelve month reporting period totals \$15, 164, with cumulative expenditure to date totalling \$112, 205.

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EL 2690 ANDAMOOKA ISLAND 3RD ANNUAL TECHNICAL REPORT

**FOR THE PERIOD
10TH JANUARY 2002 TO 9TH JANUARY 2003**

**A. P. BELPERIO
CHIEF GEOLOGIST**

14TH FEBRUARY 2003

MAP REFERENCE : ANDAMOOKA (SH 53-12)

1:100,000 MAP SHEET : 6436

DISTRIBUTION: PIRSA
MINOTAUR RESOURCES LTD
BHP BILLITON

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Figure 1	Location of EL 2690, Andamooka Island & adjacent EL 2533
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1.0 INTRODUCTION

Exploration License 2690 (Andamooka Island) was originally granted to Minotaur Gold on 10th January 2000 for a period of one year. The tenement was transferred to Minex (SA) Pty Ltd as part of the spin-off and listing of Minotaur Resources Ltd, and forms a significant joint venture with Billiton Exploration (Australia), now BHP Billiton. Minotaur is manager of the Andamooka Joint Venture. Another joint venture on adjacent EL 2533 has now been dissolved because of lack of progress on aboriginal access issues.

The license is in two parts, located approximately 250km north of Port Augusta on the Andamooka 1:250 000 map sheet, at the edge of Lake Torrens (**Figure 1**). A significant proportion of the license area comprises the floor of saline Lake Torrens and lies within Lake Torrens National Park.

The ground was acquired for the purpose of exploration for large Olympic Dam-style Fe-oxide-Cu-Au deposits. Investigation of previous drill hole data and existing geophysical datasets in this area indicates high prospectivity for large-scale deposits of this type.

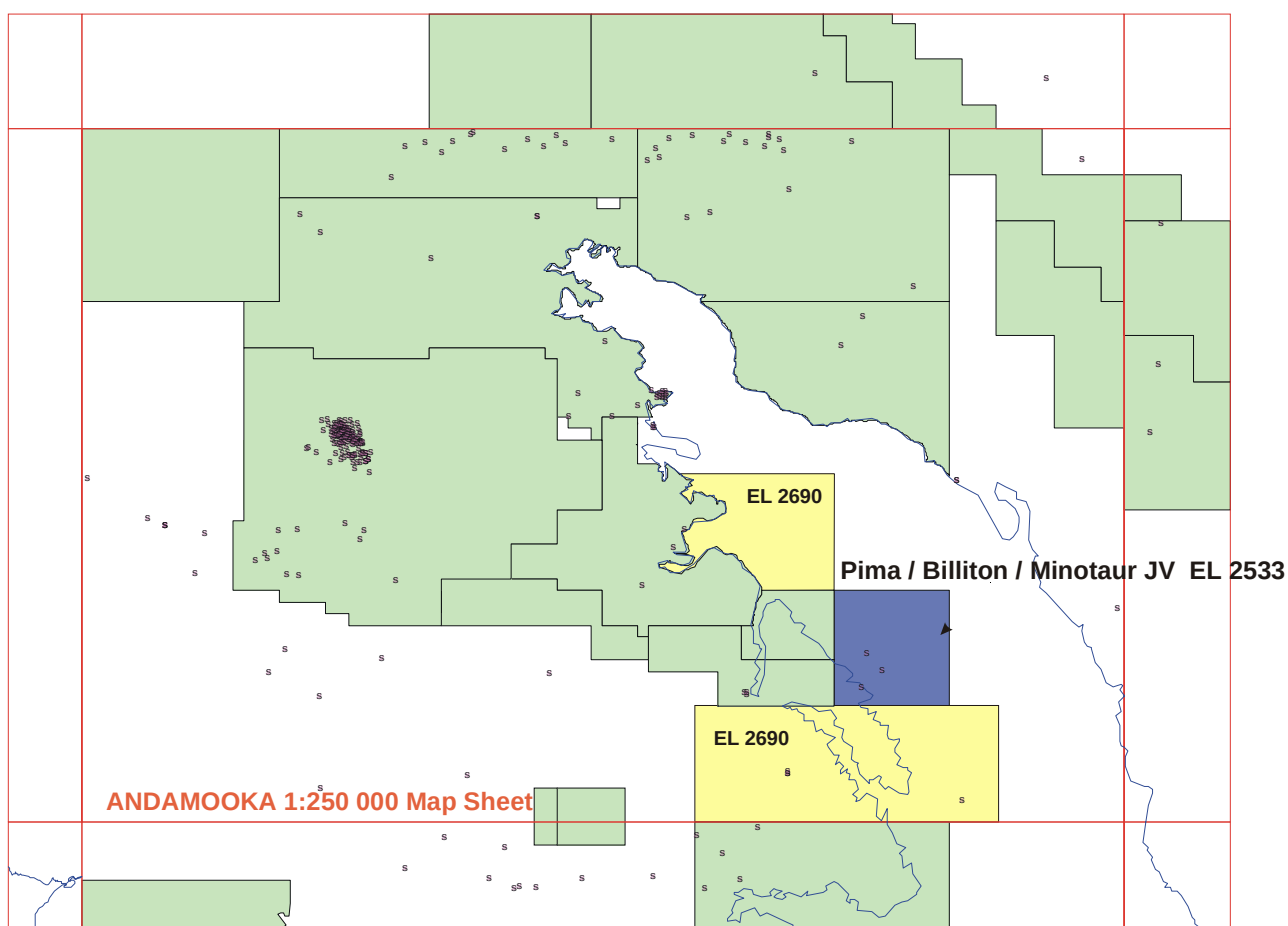


Figure 1 Location of EL 2690 and contiguous EL 2533 and historic drill holes.

2.0 SUMMARY OF OPERATIONS

Work completed during the 12 months to 9th January 2002 comprised ongoing Native Title and access negotiations to the floor of Lake Torrens.

Three overlapping Native Title claims necessitated a complex web of negotiations with claimant groups. The Kuyani group indicated they were not opposed to exploration on the lake floor (subject to normal clearance surveys), but the Kokotha and Barngala claimant groups remained opposed to any access to the lake floor for drilling. Requests to the Government to assist in resolving the impasse remain unanswered. As a result, no technical operations were undertaken in the reporting period.

An associated joint venture on adjacent EL 2533 between Minotaur, Kelaray and BHP Billiton was dissolved during the year because of similar lack of progress on access issues.

Expenditure for the twelve month reporting period totals \$15,037, with cumulative expenditure to date totalling \$127, 242.

Minotaur Resources

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9 December 2003

**Executive Director
Office of Minerals and Energy Resources
GPO Box 1671
ADELAIDE SA 5001**

Attention: GEORGE KWITKO - COMPANY EXPLORATION

Dear Sir

Re: Exploration Licence 2690 Andamooka Island.

Exploration Licence 2690 (Andamooka Island) is due to expire on 9 January 2006.

No work was undertaken in the preceding twelve month period due to access restrictions relating to Native Title.

This letter is written to inform you that Minex (SA) does not intend to renew the term of the licence.

A Final Technical report is being prepared.

Yours sincerely,

Barry van der Stelt
Tenement Administrator
Minotaur Resources Ltd
Minex (SA) Pty Ltd

