

# **Open File Envelope**

## **No. 11,370**

**EL 3474**

**LAKE YOUNGHUSBAND**

**ANNUAL AND PARTIAL SURRENDER REPORTS  
TO LICENCE EXPIRY/SURRENDER FOR THE PERIOD  
5/12/2005 TO 4/12/2009**

Submitted by  
Marathon Resources Ltd and Uranium SA Ltd  
2010

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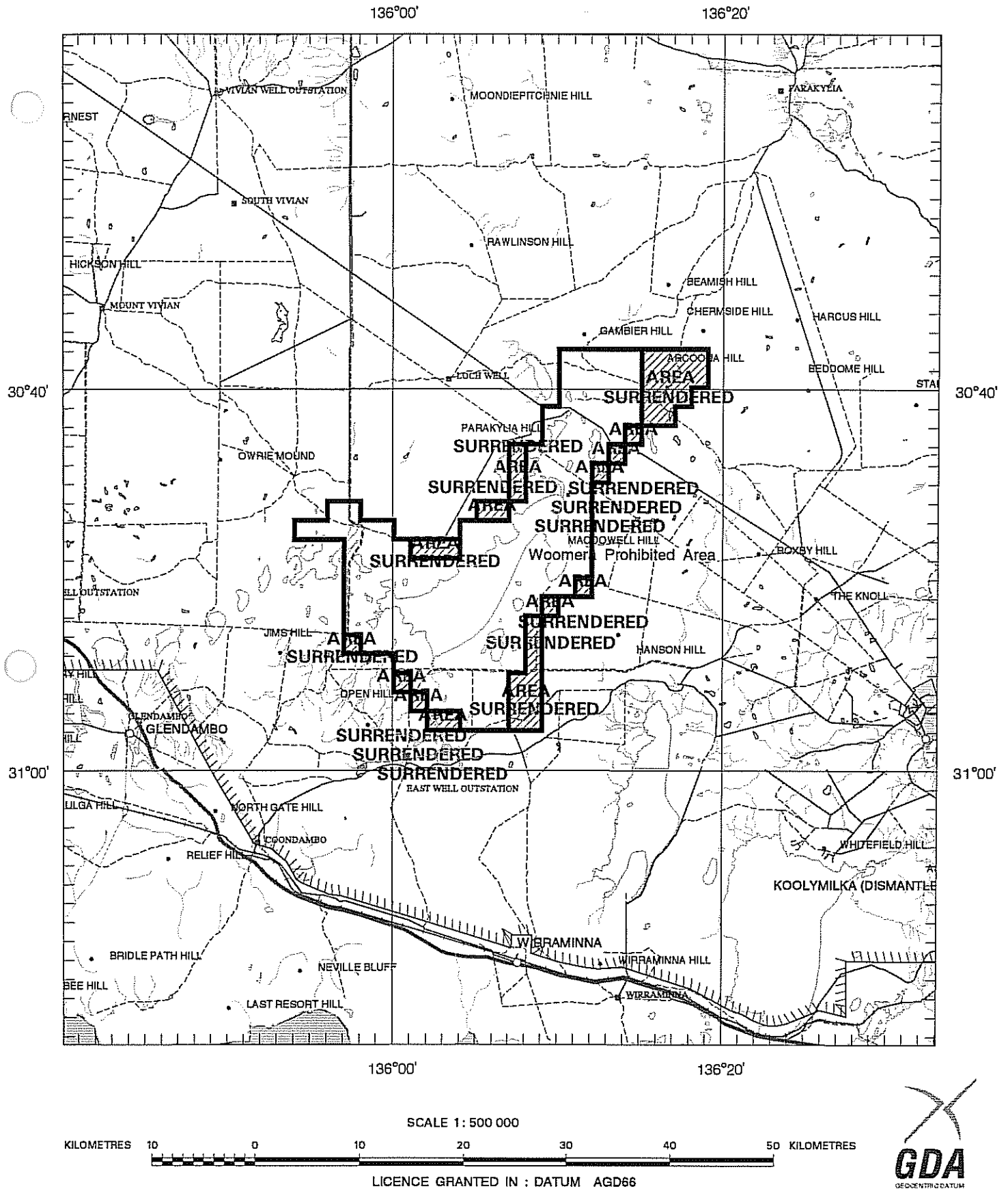
**Enquiries:** Customer Services Branch  
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7th Floor  
101 Grenfell Street, Adelaide 5000

Telephone: (08) 8463 3000  
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**Government of South Australia**  
Primary Industries and Resources SA

# SCHEDULE A



APPLICANT : MARATHON RESOURCES LTD

FILE REF : 358/05

TYPE : MINERAL ONLY

AREA : 459 km<sup>2</sup> (approx.)

1:250000 MAPSHEETS : KINGOONYA

LOCALITY : LAKE YOUNGHUSBAND AREA - Approximately 70 km northwest of Woomera

DATE GRANTED : 05-Dec-2005

DATE EXPIRED : 04-Dec-2006

EL NO : 3474

Marathon Resources Ltd  
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235 Port Road  
Hindmarsh SA 5007  
T 08 8348 3500  
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admin@marathonresources.com.au  
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**MARATHON**

6 May 2007

Records Officer  
Mineral Tenements  
PIRSA  
GPO Box 1671  
ADELAIDE SA 5001

Dear Sir/Madam

**EL 3474 Annual Technical Report for the year ending 4 December 2006  
EL 3474 Partial Surrender Report**

During the first year of tenure no field work was undertaken on EL 3474. As no new technical data were acquired a formal Annual Technical Report will not be submitted.

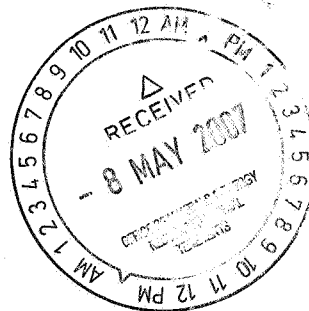
The partial surrender of EL 3474 was based on the company's interpretation of pre-existing data. As with the Annual Report, as no new data were acquired, a formal Partial Surrender Report will not be submitted.

Please contact me if you require further information.

Yours sincerely



**Teena Coppin  
Tenement Manager**



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1 October 2008

Minerals Researches Group  
Primary Industries and Resources SA  
GPO Box 1671  
ADELAIDE SA 5001

**Attention: Records Officer**

**EL 3474 McDowell Hill**  
**Annual Technical Report for the period ending 4<sup>th</sup> December 2007**

Please find attached a digital copy of the Annual Technical Report for EL 3474 'McDowell Hill'. The report is for the period 5 December 2006 to 4 December 2007.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Nicole Galloway Warland'.

Nicole Galloway Warland  
Exploration Manager  
UraniumSA Limited

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## Annual Technical Report

For the period 5<sup>th</sup> December 2006 to 4<sup>th</sup> December 2007

EL 3474 'McDowell Hill'

UraniumSA Limited  
Marathon Resources Limited

Nicole Galloway Warland  
UraniumSA Ltd  
20/5/2008

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## BIBLIOGRAPHIC DATA

<b>Report Title</b>	Annual Technical Report for Exploration Licence EL 3474 'McDowell Hill' for the reporting period 5 December 2006 to 4 December 2007.
<b>Project Name</b>	McDowell Hill
<b>Tenement Number</b>	EL 3474
<b>Tenement Holder</b>	Marathon Resources Limited
<b>Operator</b>	UraniumSA Limited
<b>Commodities</b>	Uranium
<b>Tectonic Unit</b>	Gawler Craton
<b>Stratigraphic Units</b>	Mulgathing Complex Sleaford Complex
<b>1:250,000 Map Sheet</b>	SH 53-11 Kingoonya
<b>1:100,000 Map Sheets</b>	6036 Vivian 6136 Younghusband
<b>Keywords</b>	Kingoonya, Palaeochannel System, Gawler Craton, Algebuckina Sandstone

## SUMMARY

Exploration Licence 3474 'McDowell Hill', held by Marathon Resources with UraniumSA Ltd as operator, is located approximately 30km east of Glendambo and 270km north of Port Augusta, on the central Gawler Craton.

Exploration at 'McDowell Hill' is targeting sedimentary uranium in Tertiary palaeochannels, IOCG-Uranium deposits (Olympic Dam) and for unconformity related uranium deposits of the Athabasca Basin (Canada) and Alligator River (Northern Tertiary).

UraniumSA has defined several areas of immediate exploration potential and have completed an airborne magnetic survey. This report details work completed by UraniumSA Ltd to date.

Exploration field work is currently at a stand still due to 'No Access' into the Woomera Prohibited Area. The Director has given no indication as to when or if exploration personnel will be given access. UraniumSA has approached PIRSA for advice as future expenditure and work can not be met.



## 1. Introduction

EL 3474 'McDowell Hill' is located approximately 270km north west of Port Augusta and is 30km east of the township of Glendambo (Figure 1). Access is gained from the Stuart Highway to the west of the tenement and numerous station tracks throughout the tenement. This report details exploration work completed by UraniumSA between 5 December 2006 and 4 December 2007.

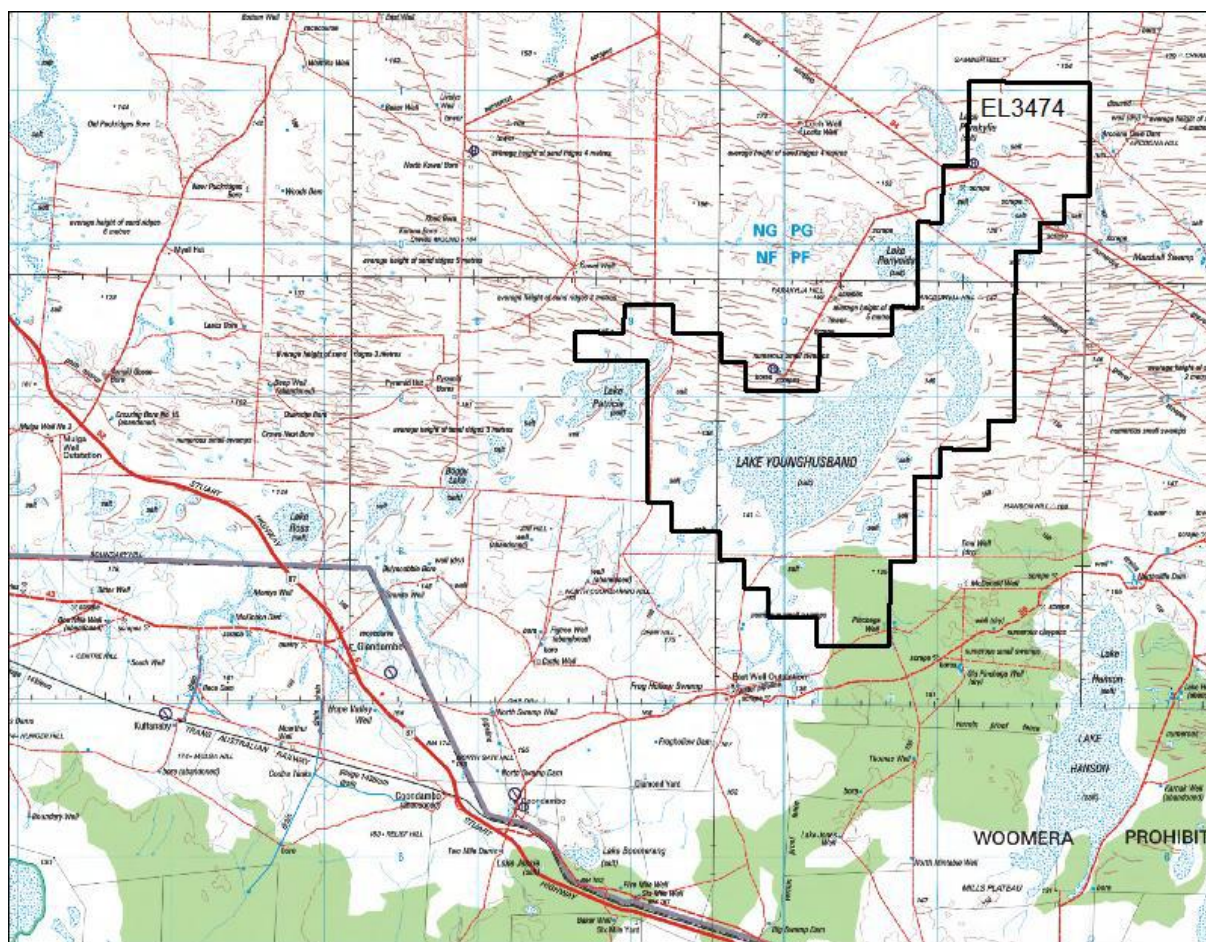


Figure 1: Location Map

## **2. Tenure**

EL 3474 'McDowell Hill' covering 577 square kilometres was granted to Marathon Resources Pty Ltd on 5 December 2005 for a term of 1 year. The Licence was renewed in full at anniversary and now expires on 4 December 2008. During the second year of tenure Gingertom Pty Ltd (a wholly owned subsidiary of UraniumSA Limited) signed a farm-in and JV agreement with Marathon Resources to earn 70% interest in EL 3474.

## **3. Native Title**

EL 3474 is covered by four Native Title claims: the Antakirinja Matu-Yankunytjatarra, (SC95/007); Barngala Native Title Claim (SC97/007); Gawler Ranges (SC97/007) and the Kokatha Native Title Claim (SC99/002). During reporting period negotiations on an ILAU agreement with the Antakirinja were instigated and UraniumSA was also well advanced in negotiating a Part 9B agreement (Native Title Mining Agreement for Exploration) with the Antakirinja Land Management Aboriginal Corporation – this has since been signed. A regional clearance survey for regional exploration was completed in November 2007; a site-specific clearance may be required for a deep drill holes, if the location of the hole is close to the lake system.

## **4. Geology**

'McDowell Hill' lies within the Pre-Cambrian Gawler Craton, which underlies a large part of South Australia, and is dominated by felsic volcanic rocks of the Gawler Range Volcanics to the south and arenaceous sediments of the Pandurra Formation to the north and east (figure 2).

The Gawler Range Volcanics are of Mesoproterozoic age (approx 1593Ma) and consist primarily of calc-alkaline dacite-rhyodacite-ryolite pyroclastic rocks deposited sub-aerially on an older late Archaean to Palaeo-Proterozoic basement (Blissett et al, 1993). Basement comprises Archaen gneisses of the Mulgathing Suite and Archaen mafic to ultramafic rocks of the Harris Greenstone Sequence (Tonkins, D., 2006).

Exploration focus to date is on the Eocene and Miocene sediments relating to the Kingoonya Palaeochannel System (figure 2).

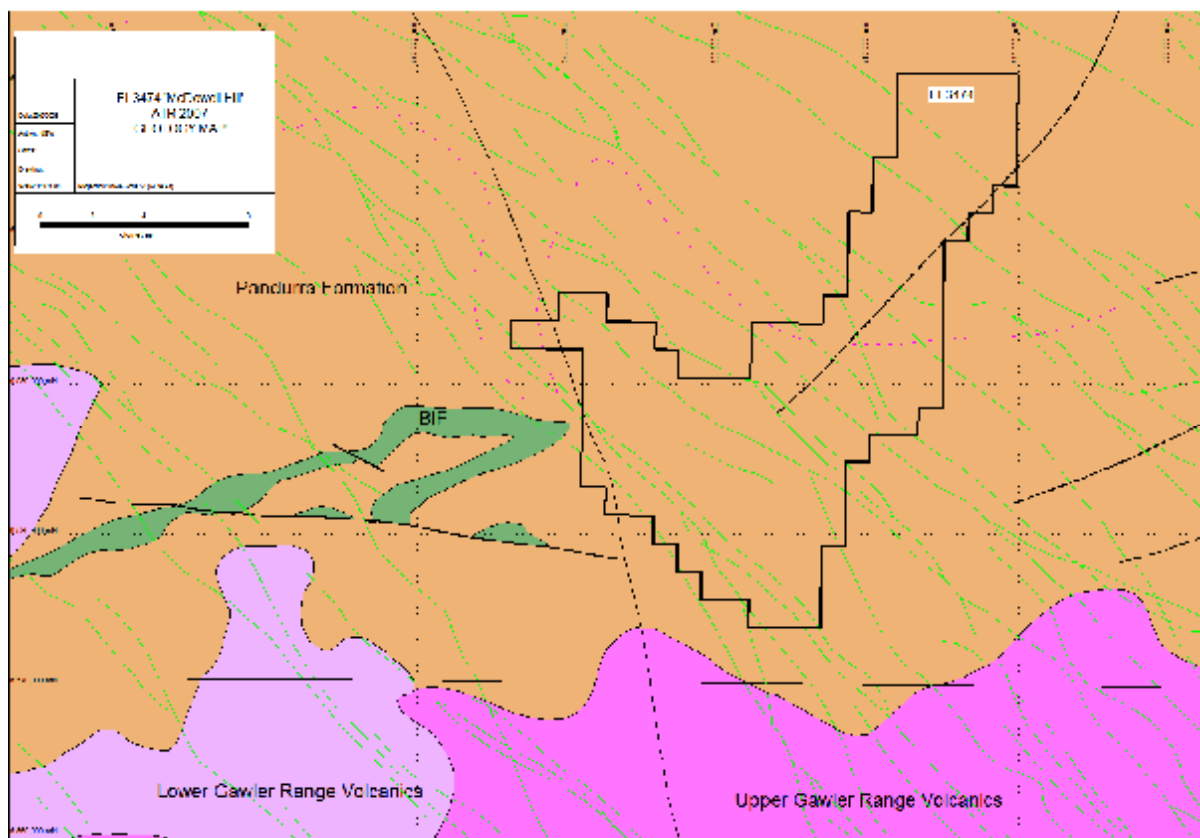


Figure 2: Geology (PIRSA)

## 5. Work Completed

The focus of exploration was in the western region of the tenement, whereby electro-magnetic data was collected to develop an understanding on the Kingoonya Palaeochannel System. This is to be followed up with rotary mud drilling, down-hole radiometric logging and chemical assaying to provide data for an interpretation of the palaeodrainage to assist in identifying and testing mineralized targets.

### 5.1 Geophysics

A reconnaissance airborne electromagnetic survey was conducted on EL 3474 during May 2007. GPX Airborne Pty Ltd conducted the survey using the REPTM Domain Electromagnetic System. The survey was flown using a Squirrel BA helicopter. Line spacing was 2000m, with approximately 204 total line km (Figure 3). Data processing and



interpretation is in progress. The REPTeM survey is to assist with mapping the palaeochannel floodplains within the tenement area (Figure 3).

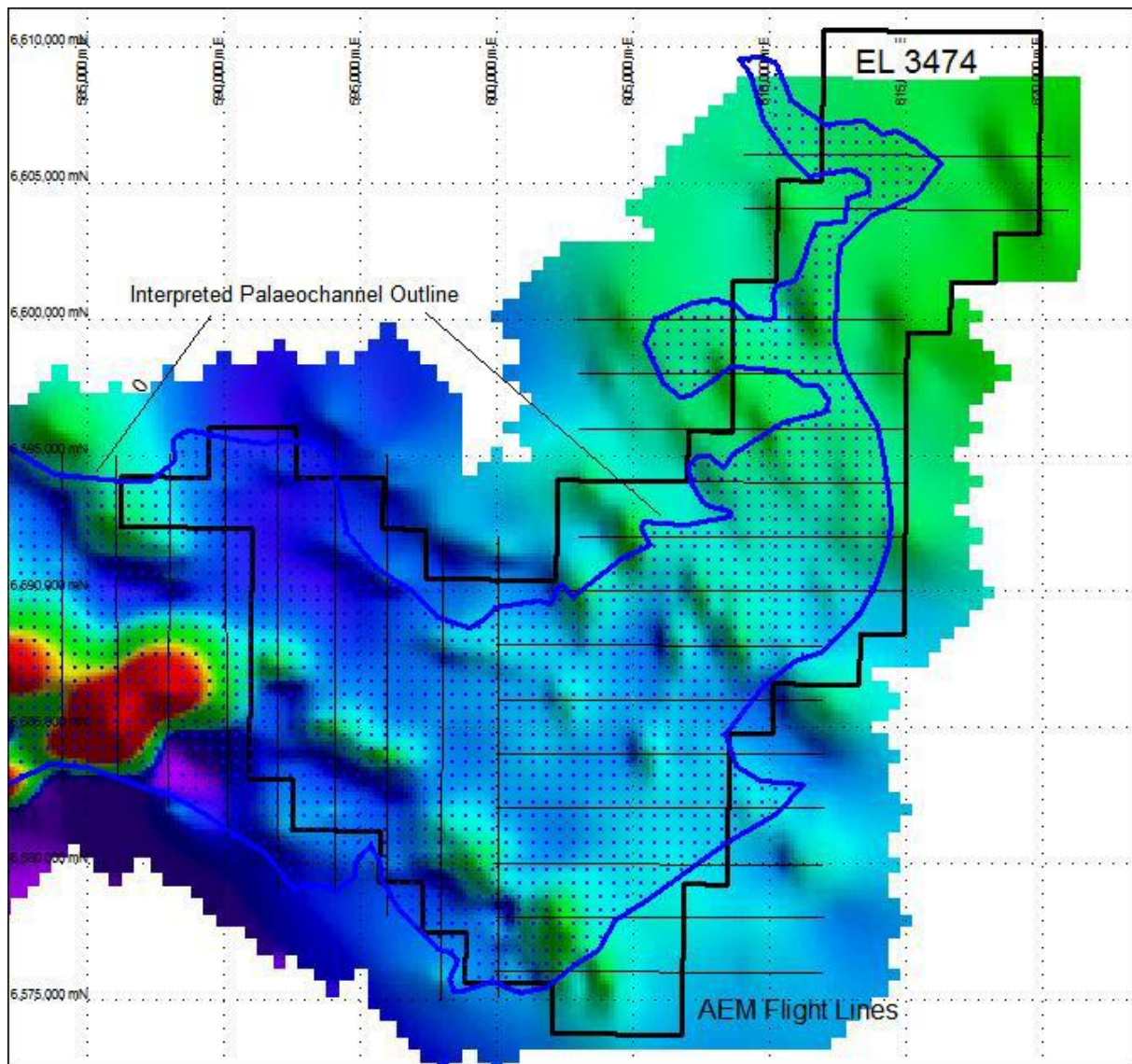


Figure 3: REPTeM Survey – magnetics with flight lines and Interpreted Palaeochannel Outline

## 6. Expenditure

Annual expenditure for EL 3474 was \$56,400

Table 1: Annual Expenditure.

Tenure	\$ 167.07
Wages & on costs	\$ 8,783.25
Access & title	\$ 10,033.03
Drilling	\$ 464.10
Geophysics	\$ 26,900.97
Geology	\$ 2,704.18
Administration	\$ 7,357.89
<b>Total</b>	<b>\$ 56,410.49</b>

## 7. Conclusion

To date exploration has focused on the Kingoonya Palaeochannel System whereby electro-magnetic data was collected to develop an understanding on the Palaeochannel drainage. Available open file drill-hole data will be scrutinised to determine the vertical and lateral extents of the palaeochannel through the tenement. A follow-up rotary mud drilling program with down-hole radiometric logging is scheduled for mid 2008, confirming palaeochannel boundaries and establishing stratigraphy, and ultimately to test identified palaeochannel targets.

Exploration field work is currently at a stand still due to 'No Access' into the Woomera Prohibited Area. The Defence Force Director has given no indication as to when or if exploration personnel will be given access. UraniumSA has approached PIRSA for advice as future expenditure and work can not be met.

## 8. References

- Blisset, A.H., Creaser, R.A., Daly, S.J., Flint, R.B. & Parker, A.J., 1993. Gawler Range Volcanics. In Drexel, J.F., Priess, W.V. & Parker, A.J. (eds) The Geology of South Australia, Volume 1, The Precambrian, pp107-124.

- Tonkins, D., 2006 Independent Geologists Report. Replacement Prospectus. UraniumSA Limited (unpub).

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28 February 2009

Exploration Coordinator  
Minerals Tenements  
Primary Industries and Resources SA  
GPO Box 1671  
Adelaide SA 5001

**Attention: Sue Watson**

Dear Sue,

**Final Annual Technical Report for EL 3474 'McDowell Hill' for the period ending 4/12/2008**

No field work or technical work was carried out on EL 3474 'McDowell Hill' during the reporting period; as such no annual technical report will be presented.

As you are aware access has been denied to EL 3474 by the Australian Defence Force (RAAF – Woomera Test Facility); hence no field work could be conducted during the reporting period.

Gingertom Resources (100% owned by UraniumSA) and Marathon Resources have signed Native Title Mining Agreements (NTMA) with the Barngarla Native Title Claim Group and the Gawler Ranges Claim Group.

Annual Expenditure was \$22,451; with a total expenditure for the Tenement totalling \$100,282

Tenure	\$ 37.50
Access & Title	\$ 11,855.80
Wages & on Costs	\$ 7,629.38
Administration	\$ 2,928.40
<b>Total</b>	<b>\$ 22,451.08</b>

Regards,

A handwritten signature in blue ink, appearing to read "Nicole Galloway Warland".

**Nicole Galloway Warland**  
**Exploration Manager**

14 May 2010

Records Officer  
Mineral Tenements  
PIRSA  
GPO Box 1671  
ADELAIDE SA 5001

Dear Sir/Madam

**EL 3474 Annual Technical Report for year ending 4 December 2009**

No field work was undertaken during the fourth year of tenure due to continuing denial of access to the Woomera Prohibited Area.

As no new technical data were acquired, a formal technical report will not be submitted.

Total expenditure for the year was \$4,150.00

Please contact me on 8414 3352 or 0415 397 870 if you require additional information.

Yours sincerely



**Teena Coppin**  
**Tenement Manager**