



ACN 102 912 783

**Scimitar Resources Ltd.**

**Eclipse Uranium Project**

**EL 24636 and EL 24637.**

**Partial Surrender Report to the Northern Territory, Department of  
Regional Development, Primary Industry, Fisheries and Resources  
for the Period 8<sup>th</sup> December 2005 to 7<sup>th</sup> December 2008.**

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**Distribution:**

- 1. DRDPIFR**
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## **Contents**

1. Introduction
2. Location, Access and Tenure
3. Regional Geology
4. Project Geology
5. Previous Exploration
6. Work Completed
7. Conclusions and Recommendations

## **References.**

## **Figures.**

- Figure 1. Eclipse Project – Geology and Tenements
- Figure 2. Eclipse Project – EL 24636 Relinquished Area
- Figure 3. Eclipse Project – EL 24637 Relinquished Area
- Figure 4. Eclipse Project – Tempest EM Flight Lines
- Figure 5. Eclipse Project – Tempest EM Flight Lines over  
Retained and Relinquished Areas.
- Figure 6. Eclipse Project – Tempest EM Section

## **Tables.**

- Table 1. Eclipse Project Tenement Details

## **Summary.**

This report details the exploration activities carried out over recently relinquished parts of Scimitars licences EL24636 and 24637, part of the Eclipse Project in the Northern Territory, during the period 8<sup>th</sup> December 2005 to 7<sup>th</sup> December 2008. Work included research, data base compilation, field reconnaissance, target generation and a trial airborne Tempest EM survey.

Third year compulsory 50% reduction was requested by the DRDPIFR in November 2008. Partial relief from this requirement was given by the DRDPIFR in December 2008. Consequently, EL 24636 was reduced by 199 blocks (50%) and EL 24637 was reduced by 123 BLOCKS (30%) in January 2008.

## 1.0 Introduction.

Scimitar's Eclipse Uranium Project covers parts of the Ngalia Basin and Arunta Block granites, which are prospective for uranium mineralisation. The licences cover a number of active stream systems that drain uranium enriched granites to the north. Interpretation of airborne radiometric imagery indicates that these drainages are depositing uranium within their channels and around the margins of Lake Lewis. The New Well uranium deposit is located on one of these drainages in ground adjacent to and down stream of Scimitar's licences.

This report details the exploration activities carried out over recently relinquished parts of Scimitar's licences EL24636 and 24637, part of the Eclipse Project in the Northern Territory, during the period 8<sup>th</sup> December 2005 to 7<sup>th</sup> December 2008. Work included research, data base compilation, field reconnaissance, target generation and a trial airborne Tempest EM survey. (Figure 2 & 3)

## 2.0 Location, Access and Tenure.

The Eclipse Uranium Project is located approximately 200 km northwest of Alice Springs and lies astride the Tanami Hwy on the Napperby and Narwietooma Pastoral Leases. (Figure 1)

The two exploration licences cover 2,553 km<sup>2</sup> and form a contiguous block which is found on the Napperby SH 53-09 and Hermannsburg SF 53-13 1:250,000 map sheets, centred on 240000 E / 7470000 N (GDA94).

**Table 1. Eclipse Project Tenement Details.**

Licence	Holder	Date Granted	Expiry Date	Area km <sup>2</sup>	Minimum Expenditure
EL 24636	Scimitar Resources Ltd 100%	08/12/2005	07/12/2011	1238	\$130,000
EL 24637	Scimitar Resources Ltd 100%	08/12/2005	07/12/2011	1315	\$140,000

## 3.0 Regional Geology.

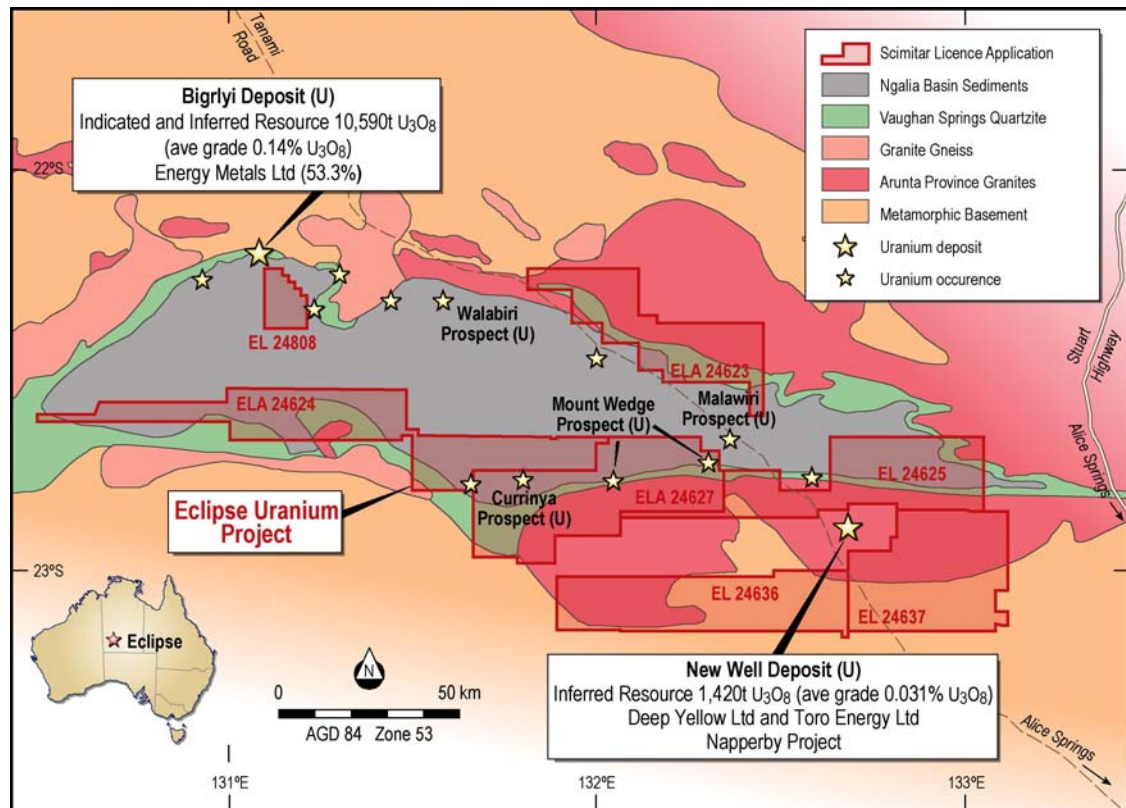
The Eclipse project covers the southern part of the Ngalia Basin and parts of the surrounding Arunta Block. The Ngalia Basin is a large 300 km long by 70 km wide east west trending intra-cratonic basin, which contains up to 5000 metres of late Proterozoic to Carboniferous aged fluvial and marine sediments. These sediments were derived from the surrounding uranium enriched early to mid Proterozoic granites and metamorphic rocks of the Arunta Block. (Figure 1)

The Ngalia Basin developed around 900mya and comprises a succession of basal late Proterozoic continental and possibly marine sediments overlain by continental fluvio-glacial sediments. Later sedimentation during the Cambrian and Ordovician resulted in epicontinental sediments including carbonates. Uplift during the Alice Springs Orogeny resulted in the deposition of Devonian to Carboniferous fluvial sediments. Subsequent deformation of the basin has resulted in folding and faulting, with major thrust faults, strong folding and over turning of lithology along the northern margin of the basin. Deformation in the south is less intense with only gentle folding along the southern margin. (Freeman et al 1990)

The Arunta Block is composed of metamorphic basement lithology's, which have been intruded by later granites. Three areas are recognised within the Arunta Block, The northern, central and southern provinces. The Ngalia basin sits between the northern and central provinces. Formation of the Arunta Craton is divided into three stages. The earliest phase (2000mya) comprises mafic, felsic and aluminous granulite and calc-silicate rocks of the Strangways Metamorphic Complex, which comprises most of the Central Province. The second phase of formation is dominant in the northern and southern provinces and comprises aluminous and silicious sediments with a few mafic flows and sills. The third phase is less extensive and is found as ortho-quartzite outliers scattered around the northern and southern provinces. (Shaw 1990)

The Arunta Block underwent deformation and metamorphism during the Proterozoic, including the intrusion of granites, some of which are highly uriferous, particularly those from around 1750mya. During the late Devonian and early Carboniferous the Arunta Block was extensively disrupted by thrust faulting, particularly along the boundary between the northern and central provinces. (Shaw 1990)

**Figure 1. Eclipse Project - Geology and Tenements.**



## **4.0 Project Geology.**

The project area is typified by flat sandy plains overlying granites of the Arunta Block in the south. The project area abuts and extends into the Ngalia basin to the north. The basin margin within the project area is marked by a pronounced quartzite ridge, the Stuart Bluff Range and the Reaphook Hills, which trend east west along the basin margin and dip gently to the north. Sandy and calcrete soils are found extensively within the basin and overlying the Arunta Block. A number of isolated granite hills emerge from the plain within the project area, especially in the east where granite hills, including Mount Harris, appear to flank a buried salt lake. The vegetation in the area consists of acacia scrubland associated with grasslands and minimally modified pastures in places. Taller eucalypts are present within and along the main drainage systems.

The project area includes the northern part of the Lake Lewis salt lake. This lake is fed by two large ephemeral creek systems, the Napperby and Day Creeks, which drain uranium enriched granites along the northern boundary of the Ngalia Basin. A number of smaller less continuous drainages feed the lake along its western margin.

## **5.0 Previous Exploration.**

Historical work conducted during the 1970's and 1980's involved broadly spaced drilling targeting sandstone and calcrete hosted uranium mineralisation within the Ngalia basin and overlying the granites of the Arunta Block.

In 1973, CRA Exploration Ltd. (CRAE) undertook exploration over the north eastern part of EL24625, around Mount Harris. A program of mapping and sampling over the outcropping granites indicated that they were uraniferous and hence potential source rocks for secondary uranium mineralisation. Sampling returned values up to 40ppm uranium from the granites. Mapping of the surrounding plains failed to locate any suitable sediments or calcrete likely to host secondary uranium mineralisation. (Hughes 1973)

During 1981 Alcoa Australia Ltd. (Alcoa) held a large exploration licence covering the southern parts of EL 24636 and 24637. The company was targeting sandstone and calcrete hosted uranium within calcrete and tertiary sands of the Narwietooma Basin, which overlies the granites of the Arunta Block. Eleven mud rotary holes (NA001-NA011) were completed for 1,555m within and to the south of EL 24636 and 24637. The drilling intersected thick sequences of oxidised tertiary sediments, clays, sandy clays and minor unconsolidated sand units. This suggested that oxidising fluids had moved through all the permeable beds in the area, diminishing the prospect of locating uranium mineralisation. All holes were gamma probed and a number of sections were assayed for uranium. The highest result was 2m @ 7ppm uranium from hole NA011. (Howard 1981)

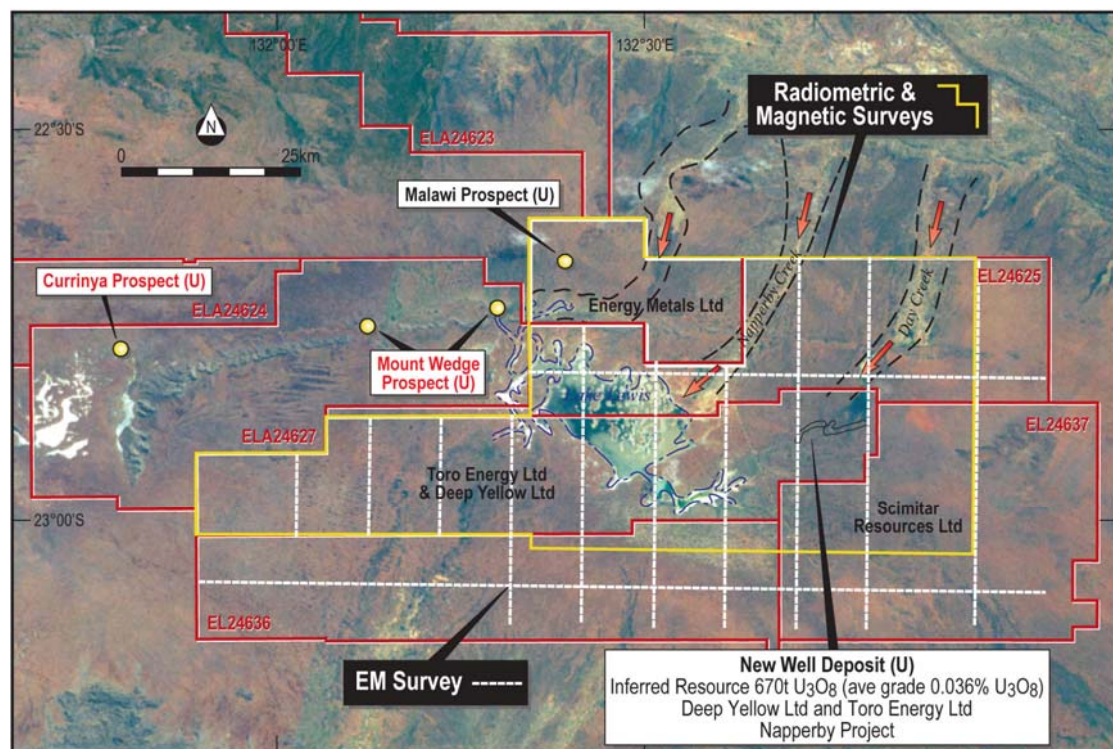
The most detailed and successful exploration within the immediate project area was carried out by Uranerz at the New Well uranium prospect, adjacent to Scimitars licences. Shallow auger drilling conducted during the 1970's identified a mineralised near surface palaeodrainage system over 20 km long and up to 4km wide that drains into Lake Lewis along the Day creek. An economic scoping study on the New Well prospect, indicated that it could contain up to 6,000 tonnes of  $U_3O_8$ , based on a grade range of 360-380ppm  $U_3O_8$ . This prospect is in the drainage adjacent to Scimitars licences and is currently the focus of resource drilling by Toro Energy Ltd. (Toro), the current operators of the project.

## 6.0 Work Completed.

Since the grant of the exploration licences, Scimitar has conducted office based studies including acquisition and review of historical reports and associated data. The Company has completed a Mining Management Plan, developed a Radiation Management Plan, Environmental Management Plan and a Field Procedures Manual for the Eclipse Project. Heritage surveys have been completed in association with the Central Land Council and the company continues to have positive relationships with local land owners and the Traditional Owners of the area.

Field investigations undertaken by Scimitar have included a number of reconnaissance field trips, three Aircore drilling programs (not included in the relinquished area) and a trial airborne TEMPEST electromagnetic survey.

**Figure 4. Eclipse Project – Tempest EM Flight Lines.**

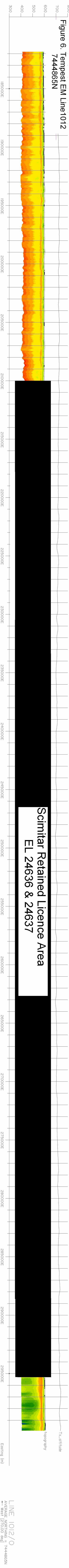


In July 2007, Fugro Airborne Surveys Pty Ltd undertook a broadly spaced trial airborne TEMPEST electromagnetic survey for Scimitar over part of the Eclipse Project to further define basement topography. This survey was part of a larger survey involving Scimitar's neighbour Toro Energy Ltd. The total coverage for the survey amounted to 550 line kilometres, of which 413 line kilometres was over Scimitar licences. (Figure 4) Only 43 line kilometres occurs within the relinquished southern part of EL 24636 and EL 24637. Data from the relinquished area is predominantly comprised of end of line segments of approximately one kilometre length. The longest segment is 28 km from line 1012/0 (7444865 N) in the western part of EL 24636. (Figure 5 & 6)

The highly saline ground conditions in this area have resulted in high conductivities which mask any subtle electromagnetic responses in the subsurface. As a result the data from the relinquished area is not particularly useful for interpretation. (Figure 6)



Figure 6. Tempest EM Line 1012  
7444865N



**Scimitar Retained Licence Area**  
EL 24636 & 24637

LINE 1012/0  
AVERAGE NORTHING = 744486.5N  
← West [270.00 deg]



## **7.0 Conclusions and Recommendations.**

Work conducted by Scimitar during the past three years has highlighted the potential of the Eclipse Project to host suitable targets for uranium mineralisation in a number of areas within EL 24625, EL 24636 and EL 24637.

The areas recently relinquished from EL 24636 and 24637 were assessed by Scimitar to be of limited prospectivity for sediment and calcrete hosted uranium mineralisation. As a result EL 24636 was reduced by 50% and EL 24637 was reduced by 30%. (Figure 2 & 3)

## References.

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