



**ACN 102 912 783**

**Scimitar Resources Ltd.**

**Amadeus Project**

**EL24704**

**Partial Surrender Report to the Northern Territory, Department of  
Regional Development, Primary Industry, Fisheries and Resources  
for the Period 28<sup>th</sup> February 2006 to 31<sup>st</sup> January 2009.**

**Author: Andrew Rust**

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**Scimitar Resources Ltd  
P.O Box 285  
West Perth  
WA 6872**

**Distribution:**

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## **Summary.**

This report details the exploration activities carried out over recently relinquished parts of Scimitar licence EL24704, part of the Amadeus Project in the Northern Territory, during the period 28<sup>th</sup> February 2006 to 31<sup>st</sup> January 2009. Work included research, data base compilation, field reconnaissance and target generation.

Third year compulsory 50% reduction was requested by the DRDPIFR in late 2008. Scimitar has relinquished 26 sub blocks (30%) covering ground that is deemed not to be prospective for sediment-hosted uranium mineralisation. This ground was relinquished on the 16<sup>th</sup> February 2009.

## 1.0 Introduction.

Scimitar's Amadeus Uranium Project covers the central and eastern parts of the Amadeus Basin, to the south of Alice Springs, which is prospective for sandstone uranium mineralisation. EL 24704 covers the north eastern corner of the basin and is located 10 km to the east of the Pamela and Angela uranium deposits.

This report details the exploration activities carried out over the recently relinquished portion of EL24704 during the period 28<sup>th</sup> February 2006 to 31<sup>st</sup> January 2009. This work included research, data base compilation, field reconnaissance and target generation.

## 2.0 Location, Access and Tenure.

The Amadeus Uranium Project is located 25 to 50 km southeast of Alice Springs. Access to the area is provided by a number of major unsealed roads, including the Old South Road and the Santa Teresa Road. (Fig. 1)

Exploration Licence EL 24704 currently covers 276 km<sup>2</sup> (88 blocks) and is found on the Alice Springs SF 53-14 and Rodinga SG 53-02 1:250,000 map sheets, centred on 413000 E / 7355500 N (GDA94). The tenement was subject to a compulsory 50% reduction during the reporting period. The Company requested a partial waiver to 30% reduction and 26 sub blocks (approximately 83 sqkm) were relinquished on the 16<sup>th</sup> February 2009. (Fig. 3)

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

Licence	Holder	Date Granted	Expiry Date	Area km <sup>2</sup>	Minimum Expenditure
EL 24704	Scimitar Resources Ltd 100%	02/03/2006	01/03/2012	276	\$60,000

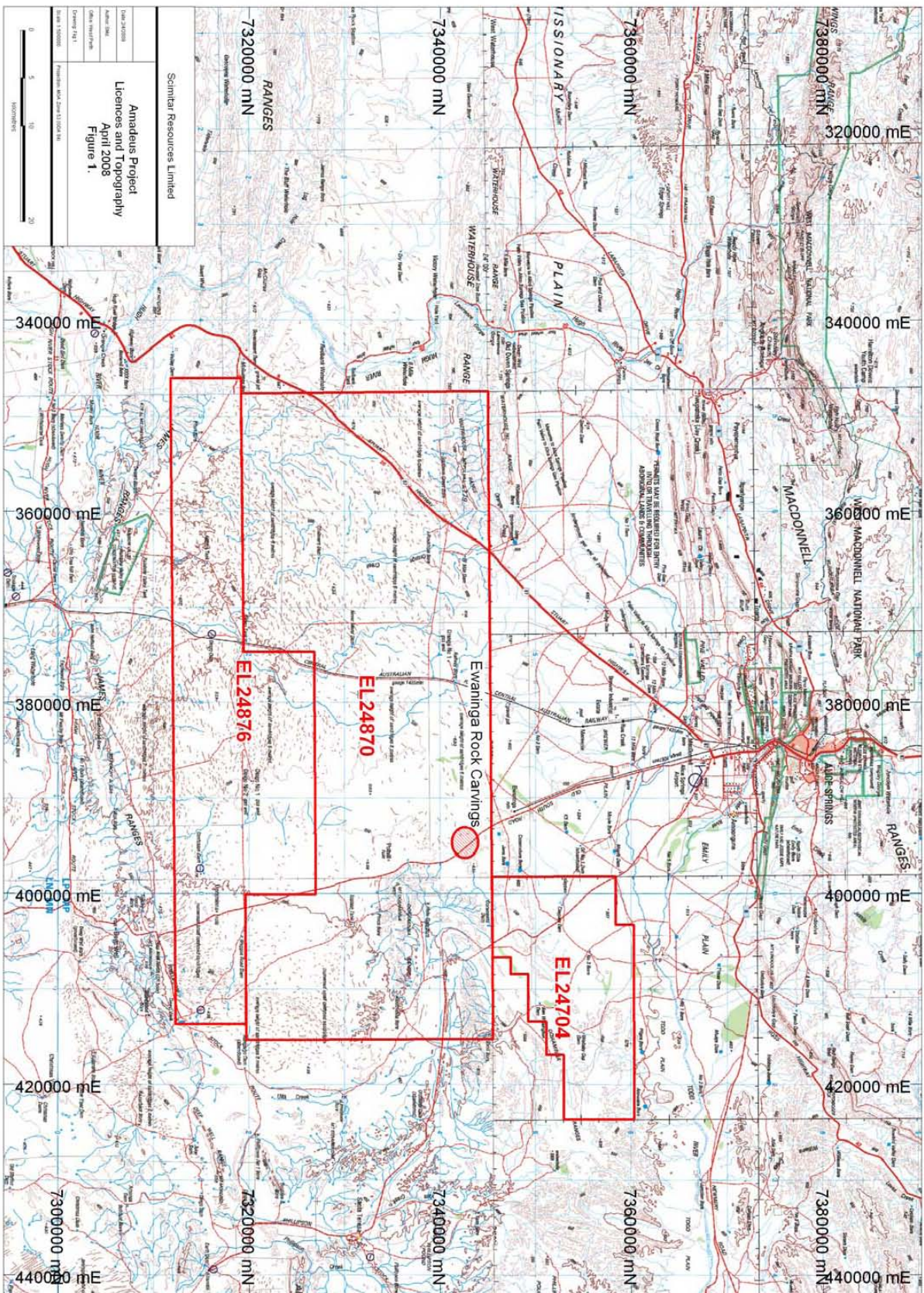
## 3.0 Regional Geology.

The Amadeus Basin is a large east west trending intra-cratonic basin of Late Proterozoic to Carboniferous aged marine and continental sediments. These were derived from the surrounding early to mid Proterozoic granites and metamorphic rocks of the Arunta Block to the north and Musgrave Block to the south.

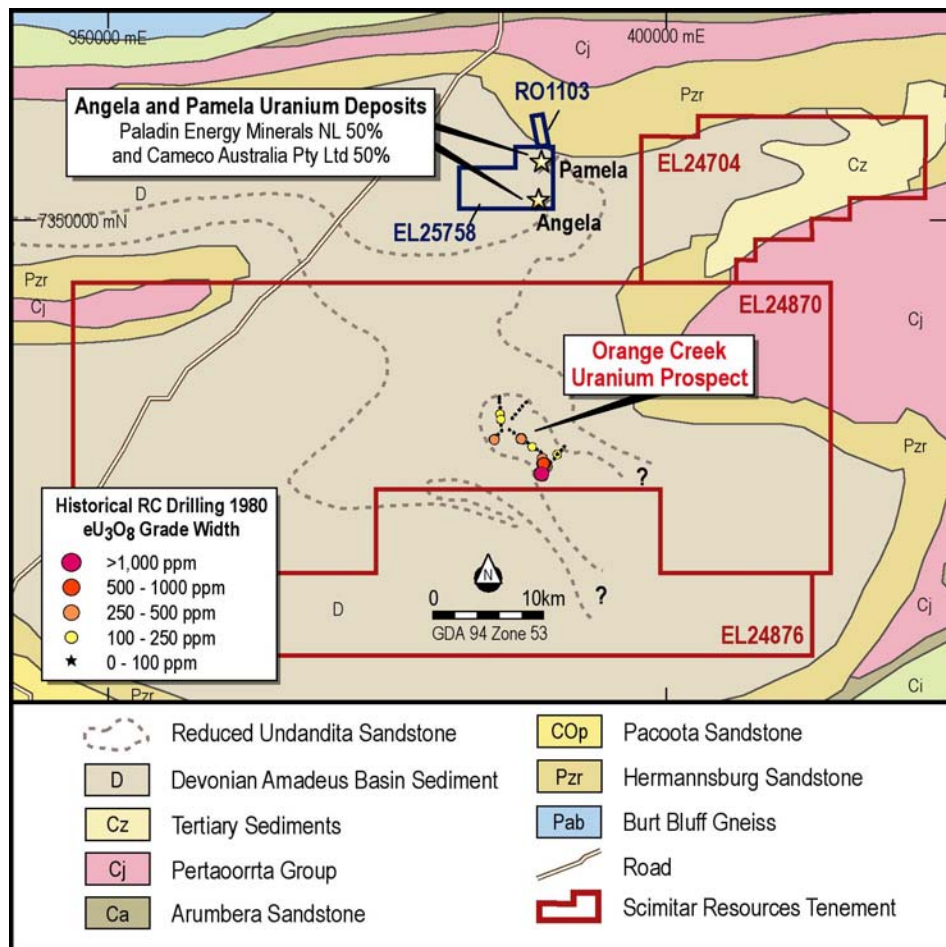
The basin is rimmed by the Phanerozoic Canning Basin to the west, The Musgrave block to the south, the Palaeozoic Pedirka Basin to the east and the Arunta Block to the north. Sedimentation commenced about 900 Mya and resulted in a sequence up to 10,000 metres thick. The basal (Late Proterozoic) sequence comprises shelf, sediments, lagoonal and continental fluvio-glacial deposits which are disconformably overlain by Cambrian continental to shallow marine sediments including carbonates and evaporate. Late Cambrian and Ordovician marine sediments disconformably overlies parts of the basin, with Devonian – Carboniferous continental sediments unconformably overlaying other areas. (Freeman et al 1990)

Extensive broad folding and thrusting along the northern basin margin, during the Alice Springs Orogeny (Devonian-Carboniferous) and along the southern margin during the late Proterozoic Petermann Orogeny, has given rise to the broad regional synclines and anticlines that are visible today. (Freeman et al 1990)

**Figure 1. Amadeus Project Location.**



**Figure 2. Amadeus Project Geology and Tenements.**



#### 4.0 Project Geology.

The project area is typified by undulating sandy plains overlying the Devonian Undandita sandstone Member of the Brewer Conglomerate, part of the Pertnajara Group. Exposures of the Undandita Member are common in the northern part of the basin but lacking over much of the project area.

The Undandita Member is the youngest unit in the Amadeus Basin and is the host for the Angela and Pamela uranium deposits as well as a number of other uranium prospects throughout the basin. It was deposited in a fluvial braided channel environment and ranges from fine to coarse grained lithic arenite through to medium to coarse grained lithic arkose. Thin mudstone and siltstone units are common. The sandstone interfingers with the Brewer Conglomerate and reaches a maximum thickness of 3000m in the Missionary Syncline, 15 km south west of Alice Springs. (Borshoff & Farris 1990) Source rocks for the Brewer Conglomerate include uranium enriched granitic orthogneiss of the Iwupataka Metamorphic Complex and the Teapot Granite Complex. (Lally and Bajwah, 2006)

The Undandita Member is generally oxidised but contains a wedge of reduced sediments between regionally extensive upper and lower redox boundaries. This reduced wedge is extensive throughout the basin and is found both in the Missionary Syncline, where it is associated with uranium mineralisation at Pamela and Angela, and in the Orange Creek Syncline where it is associated with mineralisation at the Orange Creek Prospect. (Fig. 2)

## **5.0 Previous Exploration.**

During the 1970's and early 1980's the Amadeus basin was the centre of active uranium exploration, with the focus on sandstone hosted roll front uranium mineralisation within the late Devonian aged Undandita Sandstone. A number of significant uranium deposits and occurrences were identified including the Pamela and Angela uranium deposits located along the northern basin margin and the Orange Creek prospect on Scimitar's licence EL 24870.

BHP explored the eastern part of the current EL 24704 during 1976. The target was phosphate mineralisation within the Todd River Dolomite. A total of eleven holes for 1049 metres of rotary percussion, were completed in the area. Only three (PD 9, 10 & 11) occur in the current licence. The drilling intersected a package of phosphatic and calcareous sandstone, siltstones and dolomite. The best result was 2m @ 4.13% P<sub>2</sub>O<sub>5</sub> form PD2. (Anon 1976)

AGIP Australia Ltd undertook exploration for uranium, over the Emily Plain, to the east of the Pamela and Angela deposits during 1978. Two holes for 164 metres (AER1 & 2) were completed. The drilling failed to intersect the Brewer Conglomerate and the ground was relinquished. (Anon 1978)

During 1981 Magellan Petroleum Ltd. completed a wild cat oil and gas hole (Wallaby1) within the current licence area. The hole of 2,425m total depth encountered insignificant gas and florescence within the target early Cambrian dolomite and only small gas shows within late Proterozoic to early Cambrian sandstones. (Gorter et al 1982)

Uranerz Australia P/L (Uranerz) held a large ground position within the Amadeus Basin during the 1970's to the early 1980's and undertook basin wide exploration for uranium mineralisation. The target was roll front mineralisation within the Undandita sandstone Member. Most of this work was concentrated to the immediate west of the current licence EL 24704.

### **5.1 Angela and Pamela Deposits.**

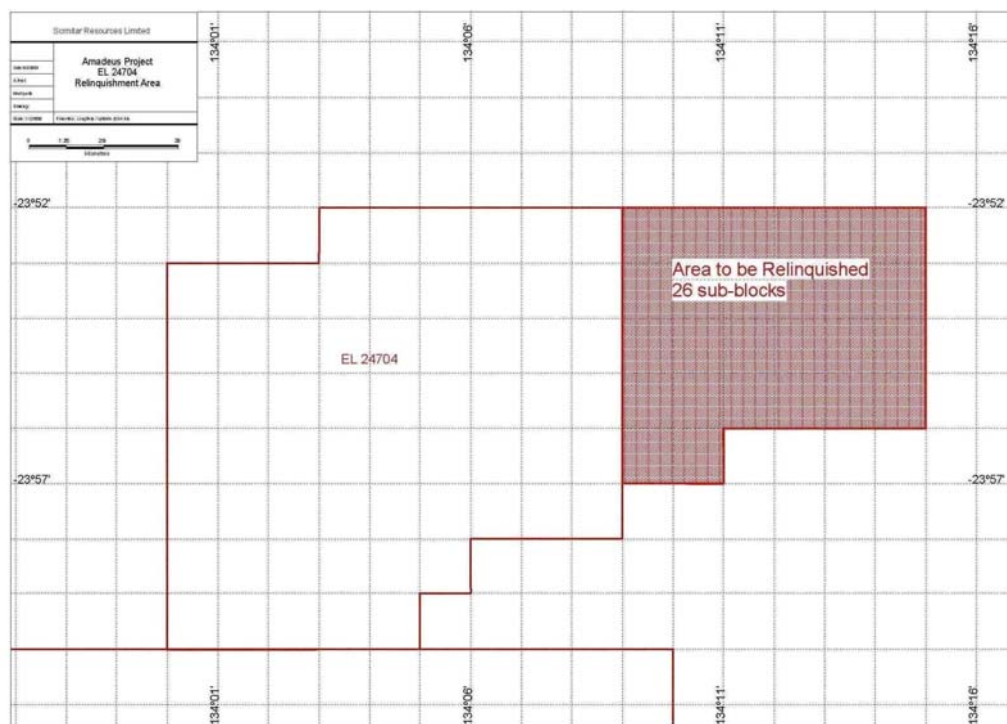
First pass airborne and ground based radiometric surveys, during 1972, identified three surface uranium anomalies. Follow up trenching and drilling led to the recognition of the Pamela and Angela prospects in 1973 and 1974. Detailed ground mapping in association with shallow vacuum drilling indicated that uranium mineralisation is associated with gently north dipping redox boundaries within the Undandita Member.

Detailed drilling during 1975-1979 identified further mineralised bodies subordinate to the main Angela deposit (Angela I), these were designated Angela II to V. The reported maximum total resource within Angela I-V is 12,650 t of U<sub>3</sub>O<sub>8</sub> grading 0.1% U<sub>3</sub>O<sub>8</sub>.

## **6.0 Work Completed.**

During the first three years of tenure, Scimitar has undertaken a review of the available open file reports and data, acquired airborne radiometric imagery, undertaken data entry and the creation of a project data base, undertaken a number of reconnaissance field trips and generated targets for follow up drilling programs.

**Figure 3. Amadeus Project – EL24704 Relinquished Area**



As part of a basin wide review of data and the creation of an up to date electronic data base for the Amadeus Project, all the available historical reports were acquired from the NT government. The data from these reports has been entered into an access data base, which will reference drill collar data with down hole information including geology, assays and radiometric data. The compilation and geo-referencing of this data is continuing and will be used to target further exploration programs within the Amadeus Basin.

Two reconnaissance field trips were undertaken during mid to late 2006 and one in late 2007. The aim of these trips was to get an understanding of the general lie of the land, access, geology and potential target areas, including locating outcrops of calcrete, which could potentially host secondary uranium mineralisation. Field work during 2008 included ground based mapping, geophysical surveying and track and drill pad preparation for RC drilling.

## **7.0 Conclusions and Recommendations.**

Investigation of open file reports has indicated that very little exploration for uranium has been undertaken within the licence area. The work completed during the early 1970's consisted of limited car-borne radiometric surveys and limited drilling along the western boundary of the licence.

Based on the lack of conclusive historical work, particularly the lack of drilling, Scimitar believes that there is still potential for uranium mineralisation to be hosted within EL 24704.

30% of the tenement (comprising 26 sub blocks) was subject to third year compulsory relinquishment. The areas shown on Figure 3, were assessed by Scimitar not to be prospective for sediment-hosted uranium mineralisation and were relinquished on the 16<sup>th</sup> February 2009.



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