



# FINAL REPORT

**Exploration Licence 26077  
Alcoota region  
Northern Territory**

**November 2008**

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**Distribution:**

- Geoscience Information, Northern Territory Geological Survey, Department of Primary Industry, Fisheries & Mines, N.T.
- Matilda Minerals Ltd
- Austwide Mining Title Management Pty Ltd

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## **1. SUMMARY**

This is the Final Report for EL26077.

Since its grant, Matilda has been attempting to farm-out EL26077 but has been unsuccessful. This along with the October 2008 world financial crisis has resulted in Matilda surrendering the EL.

No on-ground exploration or any ground disturbing work of any nature was carried out during the term of the EL by Matilda Minerals Limited or its agents.

## **2. INTRODUCTION**

Matilda Minerals Ltd ("Matilda") was admitted to the Australian Stock Exchange on 15 September 2004. Matilda owns and operates the Andranangoo mineral sand mine on Melville Island in the Northern Territory. The mine started production in November 2006 and produces a heavy mineral concentrate comprising approximately 50% zircon, 25% rutile + other valuable heavy minerals for export directly to China. Until recently Matilda has specialised in mineral sands exploration and development using state-of-the-art exploration and production techniques. Matilda's mineral sand interests are on the Tiwi Islands, the Top End of Northern Territory, Cape York in Queensland, Broome in Western Australia, and Narrabri in New South Wales. Matilda started to diversify its portfolio with the search for other commodities in Northern Territory and Western Australia and applied for a number of ELs prospective for uranium.

The EL is situated in the Alcoota region, approximately 95km north-north-east of Alice Springs and 12km south of the Gem Fields Roadhouse on the Plenty Highway and comprises the land held as the Alatyeye Community.

The exploration rationale for EL26077 is based on its location in the Arunta Basin, an area of high prospectivity for a number of minerals including Uranium (see figure 4).

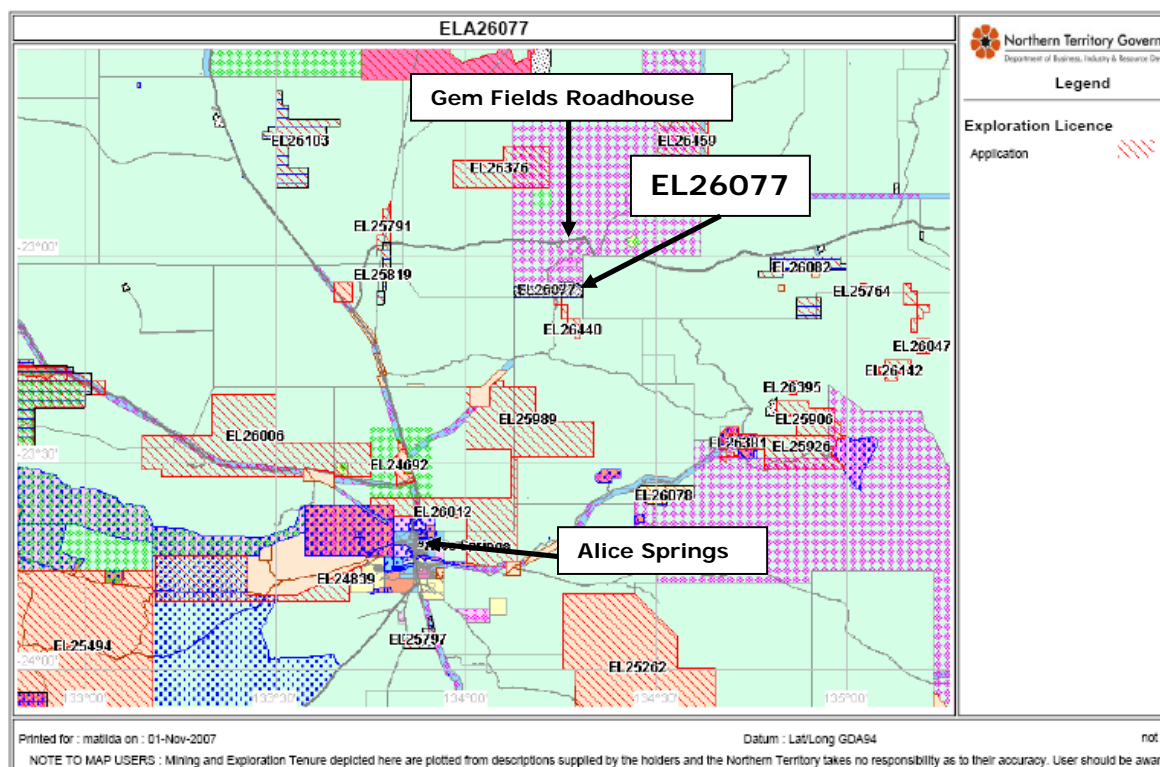
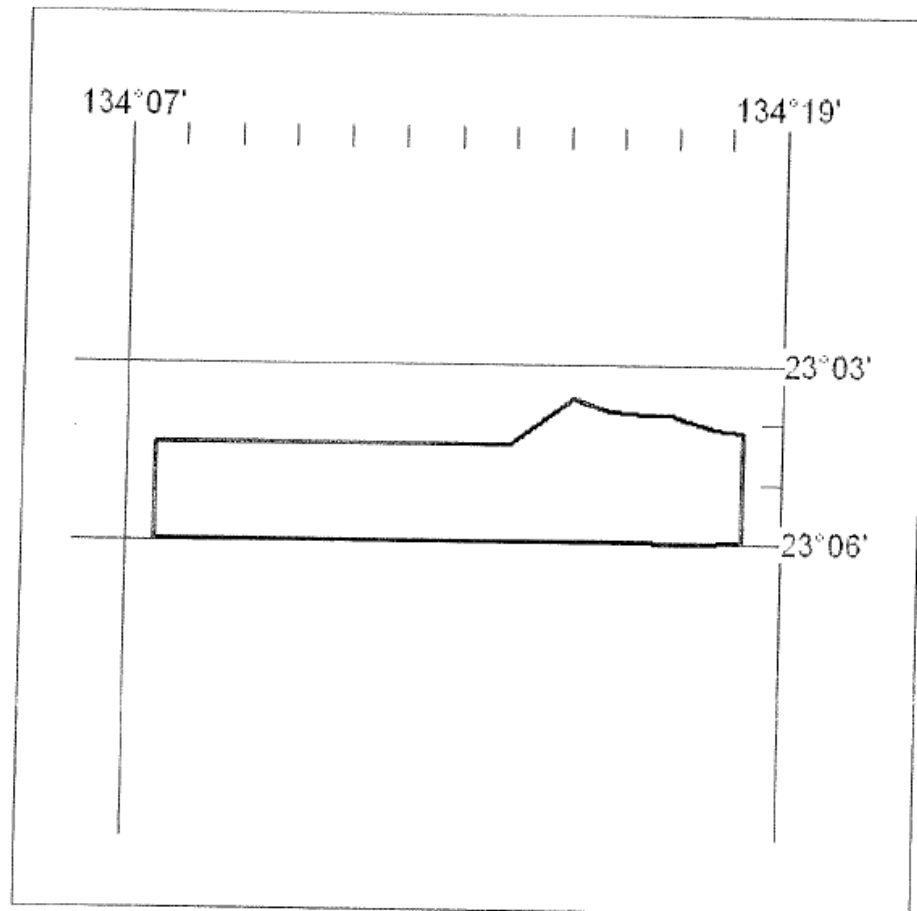


Figure 1 - EL26077 location

### 3. TENURE

EL #	Date granted	Blocks	Area Sq Km (approx)	Expenditure commitment
26077	18/12/2007	28	61.35	\$12,300



**EL26077**  
**28 Blocks**  
**61.35 sq kms**

**Figure 2 –EL26077 blocks**

## **4. GEOLOGY**

EL26077 occurs in the Ngalia Basin – eastern part:

The Ngalia Basin and its immediate surrounds host a variety of known uranium deposits and occurrences. Sandstone-type uranium mineralisation occurs in the northern and central parts of the Ngalia Basin, within the uppermost preserved unit, the Mount Eclipse Sandstone. This is a medium- to coarse-grained feldspathic sandstone, with a carbonate cement, that can contain significant amounts of carbonaceous material. Surficial (calcrete) uranium mineralisation also occurs within Cenozoic calcrete near the southern margin of the basin. Within the basin Uranium deposits include Biglyi, Nigalia, Malawiri and Currinya. Known deposits within the Arunta Province adjacent to the Basin are Napperby, Nolans Bore, Brookes, Yalyarumbi and Woodford River. This area lies to the south west of the Reynolds Range between the uraniferous granite and gneiss source rocks of the Arunta Province and the known calcrete-hosted uranium resource at Napperby. Both the palaeo-channels and palaeo-lakes were formed from alluvium derived from the nearby uraniferous granites and gneisses of the Arunta and Strangways Complexes and offer excellent potential for the development of secondary uranium deposits.

The Ngalia Basin is an elongate intracratonic basin within the Palaeo- to Mesoproterozoic Arunta Region, infilled by Neoproterozoic- to Carboniferous-aged sedimentary rocks that have a cumulative thickness of about 5000 m Cambrian and Ordovician shallow-marine sedimentary rocks, including carbonates, unconformably overlie Neoproterozoic continental and fluvioglacial marine sedimentary rocks. These are unconformably overlain by Devonian to Carboniferous fluvial sandstone and minor mudstone, conglomerate and greywacke, which were deposited in response to uplift during the 320–300 Ma Alice Springs Orogeny. The northern margin of the basin is marked by low-angle north-dipping thrust faults and the southern margin is a gently north dipping unconformity.

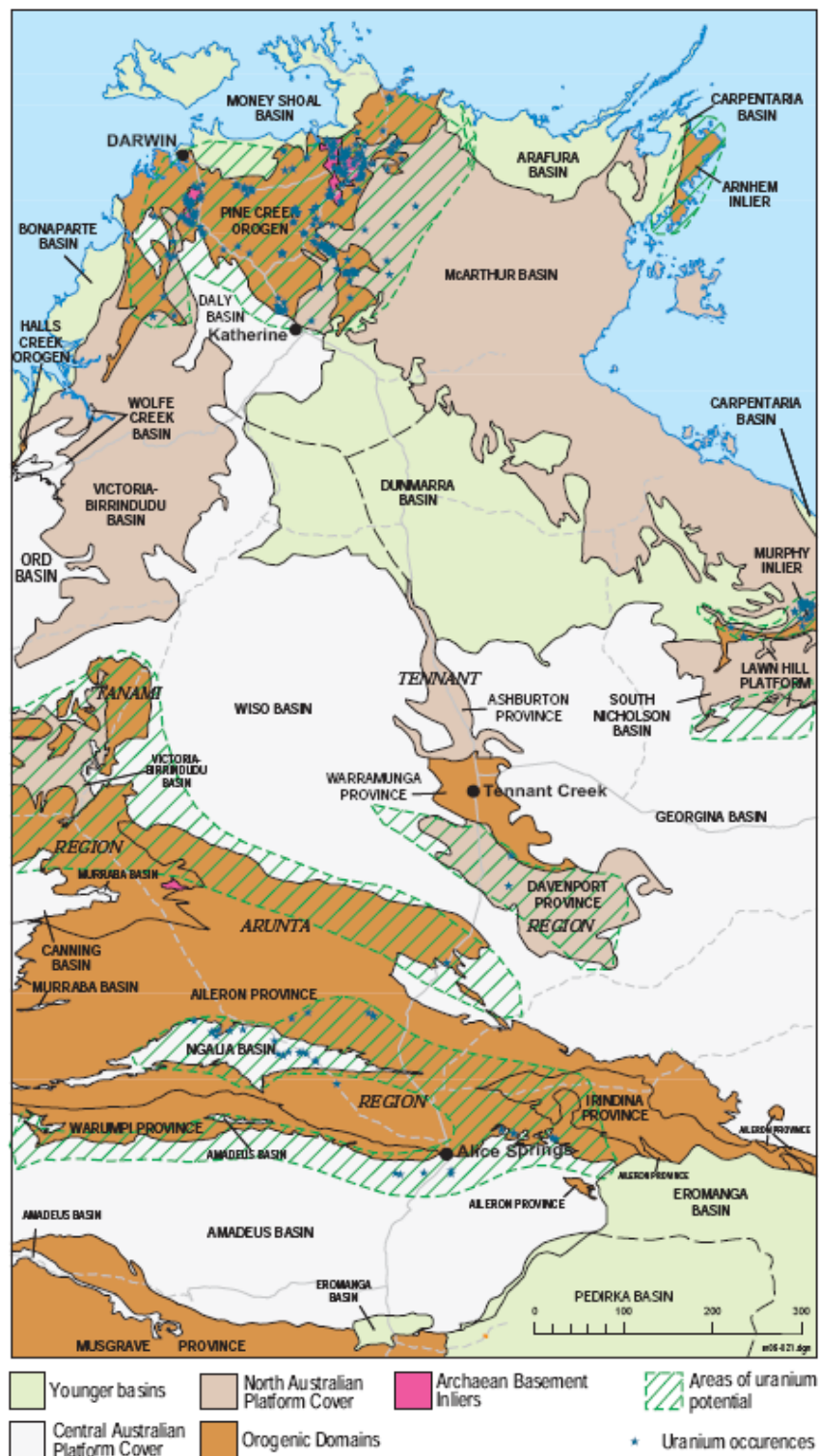


Figure 46. Uranium occurrences and areas with potential for uranium in the Northern Territory, (from M Ahmad, NTGS, unpublished data).

**Figure 3 - Northern Territory Geology showing areas of uranium potential (after NTGS)**


## **5. EXPLORATION**

No on-ground exploration or any ground disturbing work of any nature was carried out during the term of EL26077 by Matilda Minerals Limited or its agents.

During the 2008 field season, Matilda attempted to farm-out the tenement but, despite some interest from several companies, was unable to secure a deal. Exploration was planned to commence at the start of the 2008 dry season however, due to the on-going discussions this did not happen.



## APPENDIX I - AAPA registered sites EL26077

		ABORIGINAL AREAS PROTECTION AUTHORITY	
		<b>COPY</b>	
		GPO BOX 189C DARWIN NT 0801 TELEPHONE: 08 8981 4700 FACSIMILE: 08 8981 4169 EMAIL: enquiries.aapa@nt.gov.au	
Our Ref: 89/2005		RECEIVED Please Quote: 512407 and 512408	
18 December 2007		21 DEC 2007	
Matilda Minerals PO Box 124 West Perth WA 6872		Doc# 512479	
ATTENTION: Steve Milner		ABORIGINAL AREAS PROTECTION AUTHORITY	
<b>RE: ABORIGINAL SACRED SITES WITHIN THE AREAS OF EL26077 &amp; EL25815</b>			
<p>I refer to your electronic mail dated 19<sup>th</sup> November 2007 seeking advice on the location of sacred sites within the above area.</p> <p>I advise that the Aboriginal Areas Protection Authority has a record of a number of sacred sites within the areas.</p> <p>Sites listed as "recorded sacred sites" are sites that have not yet been evaluated or placed in the Register but there is information indicating that they are nonetheless significant according to Aboriginal tradition and therefore "sacred sites" within the meaning of the <i>Northern Territory Aboriginal Sacred Sites Act 1989</i>. The Authority does not purport to hold detailed information regarding all these sites. However, the information attached to this letter regarding recorded sacred sites is relevant to your query as the offence provisions of the Act apply to <u>all</u> sacred sites, whether or not these have been listed in the Register of Sacred Sites.</p> <p>The symbols representing sites on the attached map are not intended to show precisely the extent of each site. Recorded sites may be represented by a site centroid or tentative site boundary. In each case the extent of the site may be much greater. Before entering or undertaking works on, or in the vicinity of these sites, further advice should be sought from the Authority.</p> <p>Inspection of the Authority's Register is not a definitive way of determining the location of all sacred sites in a given area, particularly in circumstances where use or works are proposed that may result in disturbance of the features of the area. There is a risk that a sacred site previously unknown to the Authority may be identified after the commencement of works, leaving no option but to cease works or possibly breach the offence provisions of the Act.</p> <p>To overcome this problem the <i>Sacred Sites Act</i> enables a person, wishing to make use of or carry out works on land in the Northern Territory, to request that the Aboriginal Areas Protection Authority consult with custodians and provide written advice specifying the constraints (if any) to a particular activity imposed by the existence of sacred sites. Section 19G of the Act also provides the opportunity for an applicant to discuss the project with Aboriginal custodians at a meeting convened by the Authority.</p>			

The written advice provided by the Authority following the completion of the procedures established in Sections 19A-22 of the Act is termed an "Authority Certificate". An Authority Certificate sets out the conditions (if any) on which, under the Act the proposed work may be carried out or use made of the land. As long as the holder of a Certificate complies with its conditions the holder is indemnified against prosecution under any of the offence provisions of the Act.

If you have any queries, please do not hesitate to contact me on 8952 6366.

Yours faithfully,



for ANDREW ALLAN  
Regional Manager

