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## **ALICE SPRINGS PROJECT**

### **ANNUAL REPORT**

### **AMADEUS EAST, NORTH ANGELA**

### **Exploration Licence 25266**

**for the period 19/01/2008 to 18/01/2009**

Date of Report: February 2009  
Tenement Holder: Carbon Energy Ltd  
Operator: Carbon Energy Ltd  
Prepared By: P. Sauter (Sauter Geological Services Pty Ltd)  
Authorised By: B. Tavčar  
Map References: Alice Springs (SF5314) 1:250,000  
Alice Springs (5650), Undoolya (5750) 1:100,000  
Distribution:  
1. NT Department of RDPIFR  
2. Carbon Energy Ltd

## Bibliographic Data Sheet

**Project Name:** Amadeus East, North Angela

**Tenement Number:** EL 25266

**Tenement Operator:** Carbon Energy Ltd

**Tenement Holder:** Carbon Energy Ltd

**Report Type:** Annual

**Report Title:** Alice Springs Project, Annual Report, Amadeus East, North Angela, Exploration Licence 25266, for the period 19/01/2008 to 18/01/2009.

**Report Period:** 19/01/2008 to 18/01/2009

**Author:** P. Sauter, Sauter Geological Services Pty Ltd

**Date of Report:** February 2009

**1:250 000 map sheet:** Alice Springs (SF5314)

**1:100 000 map sheet:** Alice Springs (5650), Undoolya (5750)

**Target Commodity:** U

**Keywords:** Uranium, data review

**Prospects Drilled:** n/a

### ABSTRACT:

**Location:** 10km SE of Alice Springs, Northern Territory

**Geology:** NE margin of Amadeus Basin, Neoproterozoic to Silurian sediments

**Work done:** Open file report compilation and review.

**Results/Conclusions:** The eastern portion of the tenement will be surrendered..

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## 1 SUMMARY

Exploration Licence 25266 (Amadeus East / North Angela) is owned and operated by Carbon Energy Ltd. (“Carbon”). The company changed to this name from Metex Resources Ltd (“Metex”) on the 23<sup>rd</sup> June 2008. The tenement is part of the Company’s “Alice Springs” Project, and is located 10 km southeast of Alice Springs in the Northern Territory.

EL 25266 was acquired following an Australia-wide generative program targeting uranium mineralisation. The tenement was granted on 19<sup>th</sup> January 2007, for a period of six years.

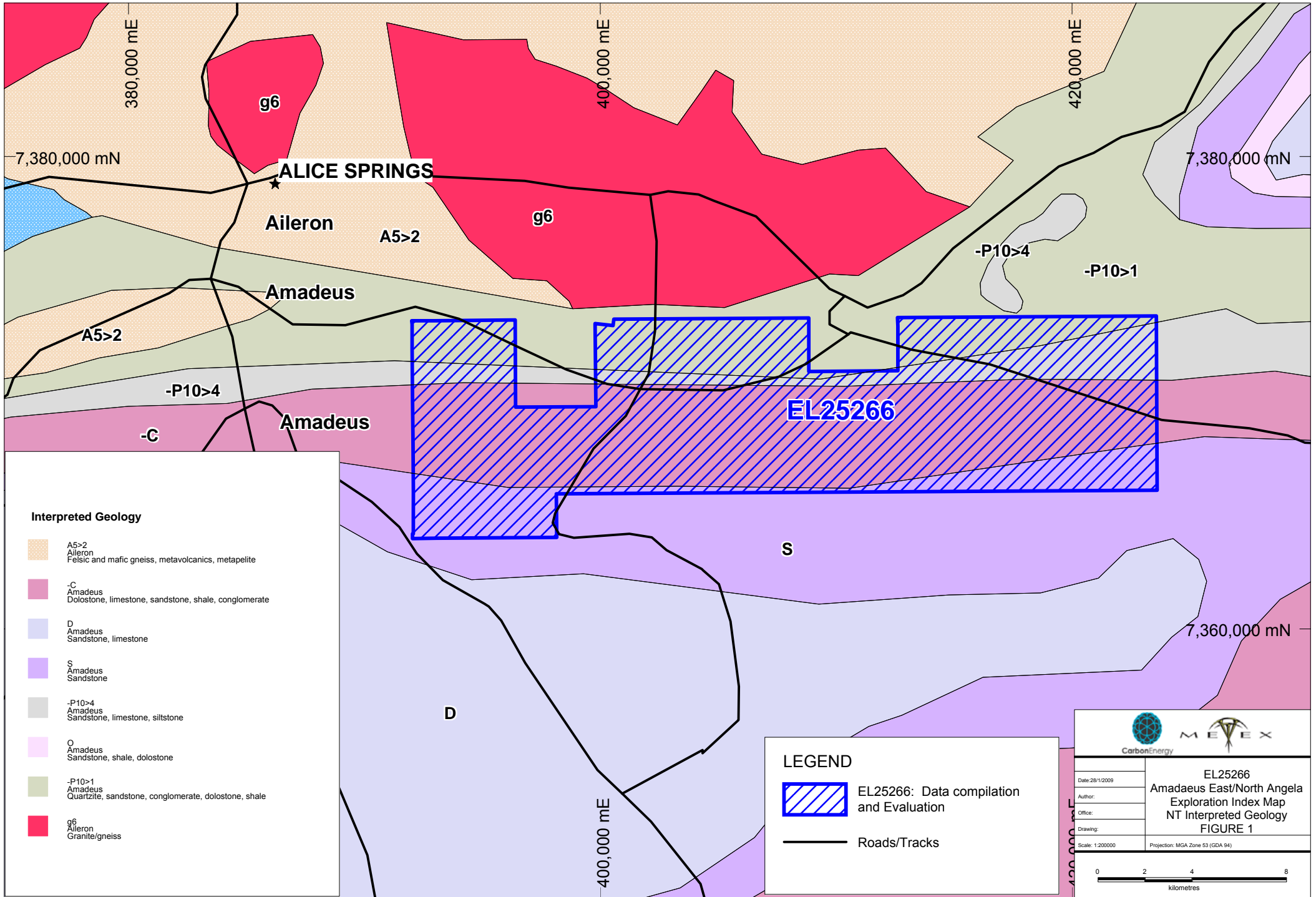
Work by Carbon on the tenement during 2008 included:

- Open-file data compilation (in progress);
- Review by consultant M de Angelis.

Table 1: Summary of Exploration

Tenement	Activities
EL 25266	Data compilation and review

Areas of exploration during the reporting period are shown in the Exploration Index Map, Figure 1.


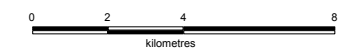


**Interpreted Geology**

- A5>2  
Aileron  
Felsic and mafic gneiss, metavolcanics, metapelite
- C  
Amadeus  
Dolostone, limestone, sandstone, shale, conglomerate
- D  
Amadeus  
Sandstone, limestone
- S  
Amadeus  
Sandstone
- P10>4  
Amadeus  
Sandstone, limestone, siltstone
- O  
Amadeus  
Sandstone, shale, dolostone
- P10>1  
Amadeus  
Quartzite, sandstone, conglomerate, dolostone, shale
- g6  
Aileron  
Granite/gneiss

**LEGEND**

- EL25266: Data compilation and Evaluation
- Roads/Tracks

	
<b>EL25266</b> Amadeus East/North Angela Exploration Index Map NT Interpreted Geology <b>FIGURE 1</b>	
Date: 28/1/2009 Author: Office: Drawing:	Scale: 1:200000 Projection: MGA Zone 53 (GDA 94)
	

## 2 LOCATION AND ACCESS

EL 25266 is situated approximately 10 km southeast of Alice Springs, on the Alice Springs (SF5314) 1:250,000 scale and the Alice Springs (5650) and Undoolya (5750) 1:100,000 scale map sheets. The tenement lies approximately 5 km east of the Alice Springs airport.

Access to the tenement is via sealed road from Alice Springs and a series of smaller unsealed tracks.

The project area location is shown in Figures 1 and 2.

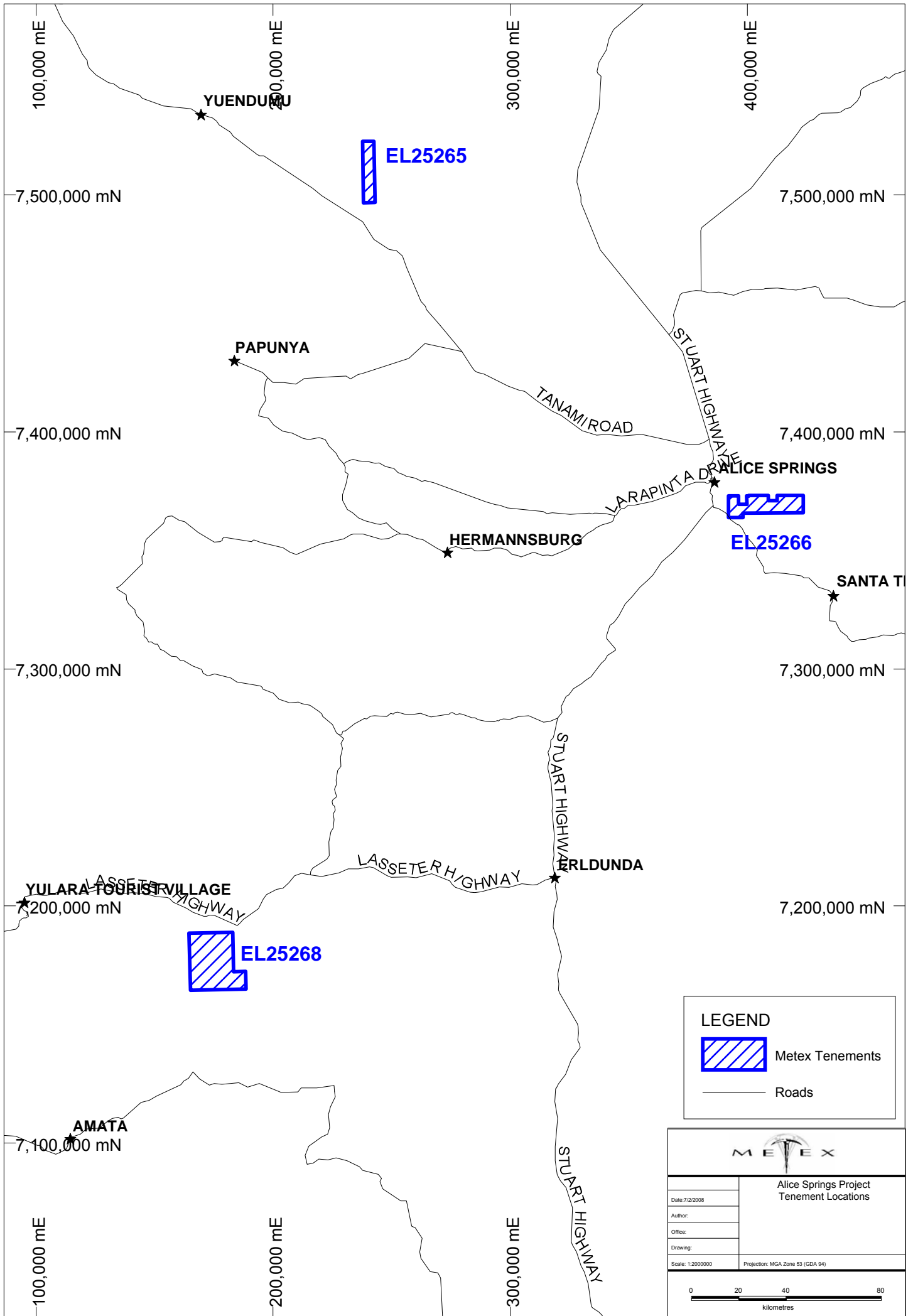
## 3 TENEMENT DETAILS

EL 25266 is held and managed by Carbon Energy Ltd. The company changed to this name from Metex Resources Ltd (“Metex”) on the 23<sup>rd</sup> June 2008. Tenement details are listed in Table 1 and the location is shown in Figures 1 and 2.

**Table 2: Tenement Details**

Tenement No	Holder	Grant Date	Expiry Date	Area
EL 25266	Carbon Energy Ltd	19/01/2007	18/01/2013	223.5 km <sup>2</sup>

The eastern portion of EL25266 has been partially surrendered on the 2009 anniversary date. There will be a separate Partial Surrender Report.



**Fig 2**

## **4 GEOLOGY AND MINERALISATION**

(from de Angelis, 2006)

The tenement is located at the far north-eastern margin of the Amadeus Basin, in Neoproterozoic to Silurian sedimentary sequences, close to the contact with the Aileron metamorphics of the Arunta Block (Figure 1). The intracratonic Amadeus Basin is located to the south of the Ngalia Basin and is bounded on the north and south by granite-gneiss and schist of the Arunta and Musgrave-Mann Complexes.

Uranium deposits are located within the uppermost units of the Devonian Pertnjara Group, a 7000 metres thick sequence of calcareous lithic sandstones and conglomerates. Two uranium deposits, Angela and Pamela, have been found in the upper units of the Pertnjara Group (Undandita Member), in the upper redox boundary within the reduced sandstone. The mineralized zone is sub-parallel to the axis of the Missionary Syncline and continues down-plunge. Uranium mineralization was transported by an oxidizing U-rich groundwater system and deposited along the regional redox interface. Previous workers suggest that the groundwater flowed from north to south with reduced lithologies preserved only in the southern parts of the Missionary Syncline.

## **5 HISTORIC EXPLORATION**

### **5.1 EXPLORATION PREVIOUS TO METEX/CARBON**

Previous exploration on the tenement was carried out by a number of companies. Minor stream sediment and rock chip sampling was carried out by CRA and BHP, between 1971 and 1992, in the far NE corner of the current tenement. Highest U value in stream sediments was 1ppm. In addition, CRA, as part of their diamond exploration, collected three samples in 1992, also from the far Eastern part of the tenement.

Gutnick Resources, as part of their Rand Project, explored for Witswatersrand-type gold in a wide area between 2001 and 2003, including the current tenement. A literature review and reprocessing of open-file geophysics and Landsat was carried out. No sampling was undertaken on the current tenement (Washburn, 2004).

Relevant CR reports are: CR1971-0017, CR1976-0066, CR1976-0073, CR1978-0066, CR1981-0252, CR1982-0149, CR1984-0103, CR2003-0084, CR2003-0085, CR2004-0166.

There are no samples or drillholes on the current tenement registered on the NT Strike system.



## **5.2 PREVIOUS EXPLORATION BY METEX/CARBON**

Exploration by Metex during 2007 consisted of a data compilation and review, carried out by Jigsaw Geoscience Pty Ltd, and a compilation and reprocessing of open-file geophysical (airborne magnetics and radiometrics, gravity, Landsat) data, by Southern Geoscience Consultants (SGC). Exploration during 2007 has been reported by Sauter (2008).

## **6 EXPLORATION DURING THE REPORTING PERIOD**

### **6.1 DATA COMPILATION AND REVIEW**

Additional compilation of open-file geological reports B. Tavcar of Carbon Energy Ltd is progressing (Tavcar, pers.comm. 2008). A short review was carried out by consultant M. de Angelis. He noted the presence of U deposits (Angela, Pamela) some 9km SSW in Brewer Conglomerate (Amadeus Basin), with favourable formations trending toward EL.

## **7 CONCLUSIONS AND RECOMMENDATIONS**

As a result of the review, the eastern portion of the tenement will be surrendered. Further exploration will be planned once the internal data compilation and review has been completed.

## **8 REFERENCES**

De Angelis, M. 2006. Report on Uranium Exploration in Australia. Consultants report prepared for Metex Resources Pty Ltd.

Sauter, P., 2008. Alice Springs Project, Annual Technical Report, Amadeus East, North Angela, Exploration Licence 25266, for the period 19/01/2007 to 18/01/2008.

Washburn, C. 2004. Joint Surrender Report for the Period 28<sup>th</sup> March 2001 to 23<sup>rd</sup> June 2003. Gutnick Resources report. CR2004-0166.

**APPENDIX 1**

**VERIFICATION LISTING FORM**

**VERIFICATION LISTING FORM**

<b>Exploration Work Type</b>	<b>File Name</b>	<b>Format</b>
Office Studies		
Literature search/review		
Database compilation		
Computer modelling		
Reprocessing of data		
Reports	EL25266_2009_A_01_reportbody.pdf	pdf
Airborne Exploration Surveys		
Aeromagnetics		
Radiometrics		
Electromagnetics		
Gravity		
Digital terrain modelling		
Other (specify)		
Remote Sensing		
Aerial photography		
LANDSAT		
SPOT		
MSS		
Radar		
Other (specify)		
Ground Exploration Surveys		
Geological Mapping		
Regional		
Reconnaissance		
Prospect		
Underground		
Costean		
Ground geophysics		
Radiometrics		
Magnetics		
Gravity		
Digital terrain modelling		
Electromagnetics		
SP/AP/EP		
IP		
AMT		
Resistivity		
Complex resistivity		
Seismic reflection		
Seismic refraction		
Well logging		
Geophysical interpretation		
Other (specify)		
Geochemical Surveying		
Surface Geochemistry		
Stream sediment		
Soil		
Rock chip		
Laterite		
Water		
Biogeochemistry		
Isotope		
Whole rock		
Mineral analysis		
Other (specify)		
Drilling		
Lithology Codes		
Collar		
Assay		
Survey		
Lithology		
Verification	part of EL25266_2009_A_01_reportbody.pdf	