Titleholder	Kurilpa Uranium Pty Ltd
Project Operator	Renaissance Uranium Ltd
Tenement Agent	Australian Mining & Exploration Title Services Pty Ltd
Titles/Tenements	EL 28285
Project Name	Lyndavale West
Report Title	Partial Relinquishment Report for period ending 3 April 2013
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Corporate Author	Renaissance Uranium Ltd
Target Commodity	Sandstone hosted Uranium
Date of Report	28 May 2013
Datum/Zone	GDA94 / Zone 53
250,000K mapsheet	Kulgera (SG53-05)
100,000K mapsheet	Sentinel Bore (5346), Angas (5347), Victory (5446) & Ebenezer (5447)
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## **EL 28285 LYNDAVALE WEST**

## PARTIAL RELINQUISHMENT REPORT

For the report period ending 3 April 2013

#### **ABSTRACT**

This report represents the partial relinquishment report for EL 28285 Lyndavale West 100 % owned by Kurilpa Uranium Pty Ltd a wholly owned subsidiary or Renaissance Uranium Limited. EL 28285 Lyndavale West initially covered 327 Blocks, but now represents 161 Blocks with the relinquishment of 166 Blocks. The tenement is located within the Amadeus Basin, approximately 250 km south-west of Alice Springs, Northern Territory. Within the relinquished area the project was targeting major sandstone hosted uranium in areas not previously recognised or thoroughly evaluated for uranium mineralisation.

Exploration within the relinquished area involved a desktop based assessment of historic data, particularly nearby seismic, looking for structural and stratigraphic traps for uranium associated with helium gas.

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#### 1. LOCATION, TITLE HISTORY, PHYSIOGRAPHY AND ACCESS

EL 28285 is located within Kurilpa Uranium's Amadeus Basin Project which comprises in total, seven (7) exploration licences (Figure 1). The properties cover the central and southern parts of the intracratonic Amadeus Basin, approximately 250 km south-west of Alice Springs. This project area is entirely greenfields with no record of any significant past mineral exploration.

Kurilpa Uranium Pty Ltd. (Kurilpa) was granted EL 28285 on 4<sup>th</sup> April 2011 for a tenure period of six (6) years. The area of the exploration licence now covers 161 Blocks with the relinquishment of 166 Blocks (Figure 2) in May 2013.

EL 28285 is located within the Kulgera (SG53-05) 1:250 000 Map Sheet; Sentinel Bore (5346), Angas (5347), Victory (5446) & Ebenezer (5447)1:100 000 map sheets and covers native title affected, freehold land.

The goal of the Amadeus Basin Project is to locate a major sandstone hosted uranium deposit by applying hydrocarbon concepts and basin analysis technologies. As part of a regional assessment of exploration opportunities in areas of uranium-enriched sources, Kurilpa has focussed on areas not previously recognised or thoroughly evaluated for uranium mineralisation. This has provided evidence in the Central Australian Basins of significant remobilisation of uranium from radiogenic basement into overlying Neoptoterozoic, Palaeozoic and younger sedimentary cover units. Kurilpa believes that the uranium deposits at Angela (Amadeus Basin), Bigrlyi and Napperby (Ngalia Basin) are examples of such a process.

However with the current lack of support for nuclear power and the stagnation of the uranium price, Kurilpa acknowledges obtaining funds for uranium only exploration has been difficult this year hence no on-ground exploration was undertaken.

The relinquished area is covered by native title affected freehold land and the land is used primarily for cattle grazing.

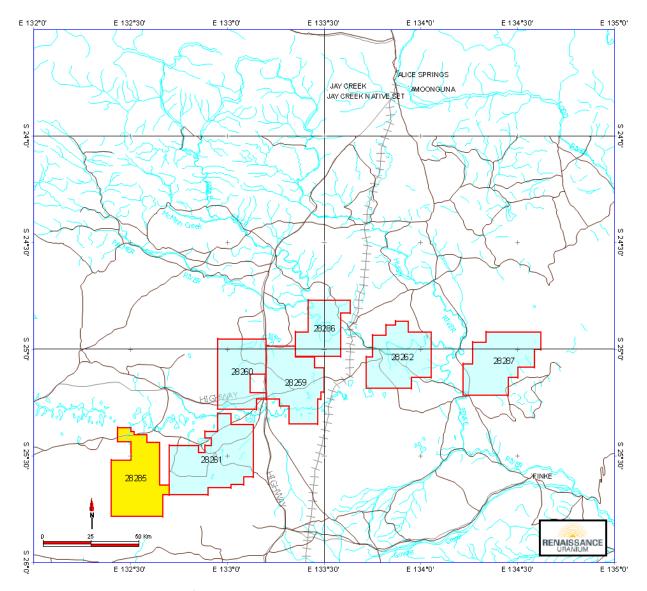


Figure 1: Kurilpa Uranium's Northern Territory tenement locations with EL 28285 highlighted (yellow).

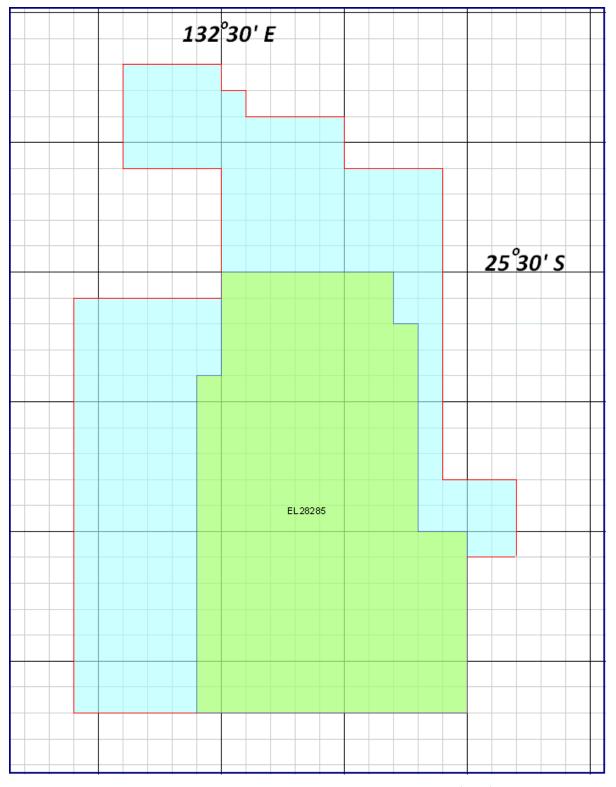


Figure 2: EL 28285 showing the relinquished 166 Blocks (blue)

# 2. GEOLOGICAL SETTING, EXPLORATION/MINING HISTORY AND EXPLORATION RATIONALE

#### 2.1. GEOLOGICAL SETTING

EL 28285 is located dominantly within the Amadeus Basin, with the southern portion located in the Mesoproterozoic Musgrave Province (Figure 1). The Amadeus Basin is a large intracratonic basin extending across the southern part of the Northern Territory and into Western Australia. It is approximately 800 km long in the east-west direction and up to 300 km wide in the north-south direction containing a thickness of up to 14 km of sedimentary rocks of Neoproterozoic to Palaeozoic age. These are partially covered by surficial Tertiary and Quaternary deposits. The basin has had a long-lived multi-event tectonic history.

Both the Palaeoproterozoic and Mesoproterozoic metamorphic rocks of the Arunta Complex and the Mesoproterozoic crystalline rocks of the Musgrave Province are dominated by felsic gneisses and granites which are potentially important uranium-enriched source rocks that have repeatedly been shed into the basin during major tectonic inversions (uplifts) of its margins.

The present day shape of the Amadeus Basin effectively results from two major orogenic cycles. Extensive broad folding and thrusting deformed the southern margin of the basin during the Petermann Orogeny (late Proterozoic). The Alice Springs orogeny (Devonian-Carboniferous) similarly deformed the northern margin. These events are regarded as important to ore forming processes.

Uranium mineralisation in the Amadeus Basin is localised at redox interfaces in the Devonian-Carboniferous sequence, related to reduced sequences contained in oxidised redbed sequences.

#### 2.2. EXPLORATION HISTORY

#### 2.2.1. Previous Exploration by Other Company

Uranerz Australia Pty Ltd (UAL) initiated uranium exploration in the Amadeus Basin in 1972, targeting sandstone-hosted deposits similar to those known in the western United States. Reconnaissance airborne radiometric surveys identified several small anomalies south of Alice Springs, near the northern margin of the Amadeus Basin about 100 km north of the current project. Scout drilling during 1973-74 discovered uranium mineralisation at Angela and Pamela prospects, which were delineated by detailed drilling during 1975-79, operating under a joint venture between UAL and MIM Exploration.

The current project area lies in the southern Amadeus Basin, 100 km to the south of the Angela and Pamela uranium prospects. Here, minerals exploration has been active since 1988 and mainly involved evaluation of evaporate deposits. There was one uranium exploration and also a search for diamond and/or base metals.

Nova Energy Ltd. (Nova) explored for uranium in the northern and eastern parts of the current Project area between 2006 and 2009. Nova's focus was to identify redox related uranium mineralisation in sediments of the Upper Devonian Finke Group. These sediments are considered similar to those hosting the Pamela and Angela uranium deposits, which lie in the Amadeus Basin. Initial work included acquisition of available data and interpretation of Landsat satellite imagery. A helicopter assisted geological reconnaissance and scintillometer prospecting survey followed. Nova concluded that the margin of the Amadeus basin may contain more fluvial or deltaic facies, which they considered more prospective for sediment hosted uranium deposits associated with redox boundaries.

Toro Energy Ltd (Toro) acquired Nova in 2007. Toro proposed to carry out a drilling program aimed at testing the redox boundaries in the sequence. However, Toro surrendered the licences when Idracowie Station denied access. Other exploration included a program by CRA Exploration Pty Ltd in 1991, searching for diamonds and base metals.

#### 2.2.2. Previous Exploration by Kurilpa Uranium

Desktop based assessment of historic data, particularly nearby seismic, looking for structural and stratigraphic traps for uranium associated with helium gas.

#### 2.3. EXPLORATION RATIONALE

The south-eastern Amadeus Basin is largely unexplored. Knowledge of subsurface geology is based on limited seismic data and the drilling results from only six wells. Magee-1, the last exploration well in the basin and drilled in 1992, intersected a thin helium rich gas pay zone and tested a petroleum system in the Neoproterozoic Heavitree Quartzite. Aeromagnetic data and SEEBASE TM depth to basement modelling provide an understanding of the basement structure, which is characterised by major faults and basement highs.

Amadeus Project has potential for structurally controlled, sediment hosted uranium deposits. Seismic data show potential for focusing deep basinal brines, derived from thick Neoproterozoic evaporates and known to be effective in remobilisation of uranium, into high-level reduced ore-forming traps, along structurally reactivated conduits such as faults and salt domes. Gamma logs from the gas exploration hole Magee-1 returned elevated radiogenic signatures from Heavitree and Stairway Sandstone units. This hole also profiles evidence of remobilisation of uranium from radiogenic basement into the overlying Neoproterozoic, Palaeozoic and younger sedimentary cover units.

A thin regolith profile and overlying transported materials tend to mask radiometric signatures and restrict geochemical dispersion halos, except close to bedrock mineralisation.

#### 3. EXPLORATION INDEX MAP

As no on-ground work has been undertaken, no specific index map can be compiled other than the Seebase image shown in Figure 3.

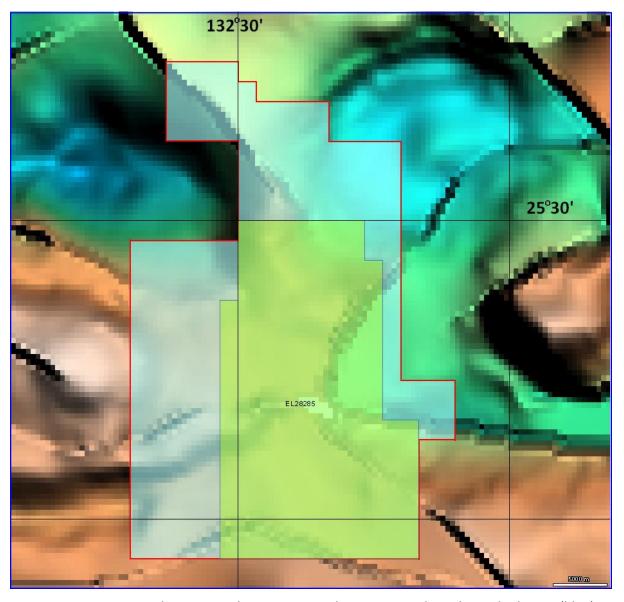


Figure 3: EL 28285 Seebase image showing potential structures within relinquished areas (blue)

#### 4. GEOLOGICAL ACTIVITES AND OFFICE STUDIES

No on-ground exploration activities were completed in the current reporting period. Internal desktop based assessment of historic geological, geophysical and seismic when available data, looking for structural and stratigraphic traps for uranium associated with helium gas was conducted.

Searches of public domain data has failed to provide any primary leads of potential helium related uranium exploration in particular the lack of seismic data has made this avenue of research more difficult to pursue. As a result areas were relinquished.

#### 5. CONCLUSIONS AND RECOMMENDATIONS

No on-ground exploration was conducted within the relinquished area. Desktop based assessment of historic data looking for structural and stratigraphic traps for uranium associated with helium gas was conducted. These assessments have failed to provide any primary leads of potential helium related uranium exploration within EL 28285, particularly the lack of seismic data making this avenue of research more difficult to pursue.