TANAMI PROJECT

EL 24885

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Minerals targeted:
Uranium and gold were the two main minerals being targeted during the report period. Potential for REE and phosphate mineralization was also identified. Exploration has the potential to identify minerals other than those being targeted and as a consequence all minerals with potential for economic extraction are included as “target” minerals.

The Granites 1:250,000 SF 52-3
McFarlane 1:100,000 4757
Pedestal Hill 1:100,000 4756

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2. Exploration Index Map: Interpreted anomalous uranium locations and planned work areas.

Appendices
1. Airborne geophysical survey, operations report, Tanami 24885 NT
   (The survey data was submitted to geoscience.info@nt.gov.au on the same day that this report was lodged).

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Abstract
Gold and uranium were the principal minerals sought. Exploration for gold mineralisation is targeting sediments of Paleoproterozoic age located adjacent to structural faults with magnetic sediments in such locations attracting more interest. Exploration for uranium is targeting deposits associated with major unconformities within the underlying Proterozoic Birrindudu rocks, or associated with permeable units within the Lucas Formation ("roll-front" deposits). Magnetic and radiometric data was acquired by fixed-wing aircraft at 100 metre and 200 metre line spacing and sensor height at 45 metre terrain clearance (total of 2,365 line kilometres acquired). This survey data is being submitted to the Department of Mines and Energy on the same date as this report is submitted. Preliminary interpretation of the geophysical data has identified structural faults, potentially magnetic sediments adjacent to faults and radiometric anomalies considered prospective for REE and phosphate. Further investigations to follow up the results received were planned.
1. INTRODUCTION

Exploration Licence 24885 is located in the western part of The Granites 1:250,000 (SF 52-3) map sheet abutting the Western Australian border and about 590 kilometres north west from Alice Springs (figure 1). The tenement initially covered 272 square kilometres at date of grant and was reduced to 136 square kilometres on 11 March 2014.

EL 24885 was granted to Reedy Lagoon Corporation Limited (“RLC”) on 28 February 2012 for a term of 6 years expiring on 27 February 2018.

RLC is exploring the tenement area with a focus on gold, uranium, REE and phosphate.

This report includes all work completed in connection with the tenement during the report period.

Figure 1. Project location. Subsequent to the end of the report period the area south of the broken line within the tenement boundary was surrendered.

2. REGIONAL AND LOCAL GEOLOGY

The tenement area covers part of the Proterozoic Birrindudu Basin, beneath younger sediments, in the Northern Territory. The overlying Paleozoic sediments, include sandstones and mudstones of the Lucas Formation. These sediments have been intersected by shallow stratigraphic holes drilled by the Bureau of Mineral Resources (“BMR”) in the early 1970s (Blake, 1974).
At depth, the Birrindudu Basin comprises Proterozoic sediments, metamorphics and granites, the uppermost unit of which includes the Gardiner Sandstone (Blake et al, 1979). The Proterozoic Redcliff Pound Group may be present above the Gardiner Sandstone. Each of the major stratigraphic boundaries may be an unconformity.

Uranium mineralisation has been reported in association with the base of the Gardiner Sandstone formation in the Killi Killi Hills at a location approximately 100 km north-north-west of EL 24885. Proterozoic granite is thought to be a likely source of uranium in this area (Plumb, 1990).

The Proterozoic (to Palaeozoic) Ngalia Basin, approximately 300 km south-east of the tenement area, hosts the Bigryli Uranium deposit. At Bigryli, the uranium occurs in lenses within and towards the base of the Palaeozoic Mount Eclipse Sandstone (Fidler et al, 1990). RLC believes there may be similarities between the Lucas Formation and the Mount Eclipse Sandstone in the Ngalia Basin.

RLC’s exploration targets within EL 24885 include uranium deposits associated with major unconformities within the underlying Proterozoic Birrindudu rocks, or associated with permeable units within the Lucas Formation (“roll-front” deposits). The anomalous uranium responses interpreted from the 1988 GeoScience Australia airborne radiometric survey will also be investigated although they are unlikely to be related to Proterozoic or Lucas Formation rocks.

Gold is present in the Tanami region with 75% of the known gold occurring in siltstone and fine grained greywackes. Other host rocks include iron formation, metamorphosed mafic sill and turbidites. Newmont Mining Limited’s world class Callie deposit (> 6 Moz gold) is located 70 kilometres east from the tenement. The Callie deposit is deep-level mesothermal mineralization hosted by decarbonized siltstone mainly within the Dead Bullock Formation. (http://www.ga.gov.au/image_cache/GA8823.pdf, 19/04/2013).


3. TITLE AND ACCESS
EL 24885 was granted to RLC on 28 February 2012 for a term of 6 years expiring on 27 February 2018. The tenement is held solely by RLC and there are no joint venture partners.

The tenement covers Aboriginal Land (freehold) vested in the Mangkururrpa Aboriginal Land Trust. A deed for exploration dated 30 October 2011 between the Central Land Council and RLC has been executed. The deed establishes procedures which RLC must follow in connection with RLC’s work on the licence.
4. **EXPLORATION CONDUCTED DURING THE PERIOD**

Magnetic and radiometric data was acquired by fixed-wing aircraft at 100 metre and 200 metre line spacing. A total of 2,365 line kilometres data was acquired (appendix 1).

The data was processed and initial interpretations were generated.

Interpretations of the airborne data acquired suggest the presence in the northwest of the licence area of sedimentary rocks similar to rocks which are associated with gold mineralization elsewhere in the Tanami Goldfield. In other areas of the licence radiometric anomalies were interpreted to potentially indicate the presence of REE and phosphate accumulations.

Major structural faults were also interpreted in the geophysical data acquired. These features could be associated with fluid pathways for both gold and or uranium mineralisation to be transported into receptive lithologies. RLC was initially targeting uranium deposits associated with major unconformities within the Proterozoic underlying the Birrindudu rocks, or associated with permeable units within the Lucas Formation (“roll-front” deposits). Whilst interpretations of the recently acquired geophysical data are assisting to develop this exploration strategy, these initial interpretations are also suggesting that the target depths for the uranium mineralisation may be too deep.

5. **REHABILITATION**

There had been no ground based activities during or prior to the report period. No rehabilitation activities were conducted.

6. **CONCLUSIONS AND RECOMMENDATIONS**

RLC’s exploration targets within EL 24885 include gold, REE, phosphate and uranium deposits.

Geophysical data acquired during the report period and initial interpretations of it have opened significant new leads for continued exploration of an increased range of minerals that may be present within the licence area.

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2 May 2014
References


Proposed fieldwork:

- Areas of radiometric anomalism
- Areas of interpreted deep-seated faulting and shallower level more magnetic rocks (for potential gold mineralisation)

Initial work to comprise selective sampling & traverse rock and shallow soil sampling; taking geophysical readings; reconnaissance mapping.

Very wide-spaced sampling may also be conducted alongside tracks throughout the licence.