Combined Annual Technical Report
For Period
5th March 2011 to 4th March 2012

EL 26704 Ingellina Gap
EL 26848 Walabanba
EL 27115 Anningie
EL 27876 Englands Well

Titleholder | Toro Energy Ltd
Operator | Toro Energy Ltd
Tenement Agent | Toro Energy Ltd
Title | EL26704 Ingellina Gap, EL26848 Walabanba, EL27115, Anningie, EL27876 Englands Well
Project | Reynolds Range
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Corporate Author | Toro Energy Ltd
Target Commodity | Uranium
Date of Report | 4th April 2012
Datum | GDA94 Zone 53
250k Mapsheets | Napperby SF53-09, Mt Peake SF53-05
100k Mapsheets | Mt Peake 5454, Reynolds Range 5453, Anningie 5554
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Summary

This third Combined Annual Technical Report for Anningie group tenements (Reynolds Range area) covers work carried out during the twelve month period from 5th March 2011 to 4th March 2012. During 2011, Toro completed a 14 hole, aircore program testing airborne EM defined, palaeochannels with limited success. Although reduced and oxidized sands to 200m were intersected, no uranium radiometric or assay anomalies are reported.
1 INTRODUCTION

This report outlines the work conducted within the exploration tenements EL26704, EL26848, EL27115 and EL27876 during 2011/2012 by Toro Energy Limited ("Toro"; ASX code "TOE").

Toro is assessing this area for Palaeochannel-hosted uranium. The exploration model takes into account radiogenic Palaeoproterozoic metasediments and granites of the Reynolds Range Group South that are drained by Tertiary sedimentary aprons and palaeochannels.

The presence of loose sands over significant thicknesses with obvious redox variations is considered highly encouraging for the discovery of a 'palaeochannel style' uranium deposit, similar to Beverley in SA.

This tenement group is located approximately 250km north-northwest of Alice Springs (Figure 1 and Figure 2) in the Reynolds Range province on the Napperby and Mt Peake 1:250,000 mapsheets (Figure 3).

The Reynolds Range region is semi arid with minor monsoonal influences. Most rain, about 75-80% of rainfall falls in the summer months. Annual rainfall is generally higher in the north of the region. The mean annual rainfall for Tennant Creek (to the North) is 375 mm. Rainfall is extremely erratic.

Most of the region is hilly range country, covered by Spinifex (hummock grassland) and a variety of stunted vegetation. Sand plains with minor sand dunes containing Spinifex, Acacia, Blue Gum and Mallee scrub plants lie adjacent to the ranges. Drainage from the high-relief ranges quickly dissipates into shallow water courses and floodplains that break up the sand plains, or locally into ephemeral salt lakes. This tenement lies at the southeastern end of the Reynolds Range and incorporates largely hilly country in the south and dissected low hills at the headwaters of the Lander River in the north.

Access to the region is via Alice Springs or Tennant Creek along the Stuart Highway, 230km north or 270km south respectively. The tenements lie within
Coniston and Anningie Stations (Figure 4). Further access is via a network of minor station tracks.

2 TENEMENT

Group Reporting status was approved for the original group of exploration licences on 17th February 2010, with an amendment to add newly granted EL27876 on 7th September 2011. Tenement details are listed in Table 1. An area of 30.4% (or 92 blocks) of EL26704 was relinquished at the end of the second year of tenure, on 23rd October 2010. During the reporting period a Waiver of Relinquishment was granted for all three original tenements; EL26848 (2nd year reduction waiver granted), EL27115 (2nd year reduction waiver granted) and EL26704 (3rd year reduction waiver granted) on 7/09/2011.

Table 1 Tenement Details

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Figure 2 Anningie Group tenements over zone 53 topographic map

Figure 3 Anningie Group Tenement Location over 250k and 100k mapsheets
3 GEOLOGICAL SETTING

The Reynolds Range project lies within the Arunta region of the Northern Territory (shown in brown – Figure 5). Basement is comprised of Palaeoproterozoic to Mesoproterozoic metasedimentary and granitic rocks assigned to the Aileron Province, including the Reynolds Range Group. These granites (in red) and orthogneisses are notably highly-radiogenic within the Reynolds Range, hosting numerous veins and pegmatites with anomalous uranium and thorium (Figure 6). Locally, the Aileron Province rocks are overlain by a veneer of Tertiary to Recent clastic sequences, derived from erosion of the radiogenic granites in the Reynolds Range (Figure 7 and Figure 8).

Uranium mineralisation is known in the region and is restricted (thus far) to the Proterozoic Aileron Province and nearby Carboniferous Ngalia Basin. Uranium at Nolans Bore (Arafura Resources), to the southeast, occurs in phosphatic and REE-enriched metasomatic pods and veins within the high-metamorphic-grade Lander Rock beds.
Figure 5 Anningie Group tenements over 1:2.5m geological regions (NTGS) REDO with EW

Figure 6 Location of Anningie Group tenements over 1:2.5m solid geology interpretation (NTGS)
This deposit is the subject of ongoing feasibility studies. Uranium is also present in high grades at Bigrlyi (Energy Metals-Paladin JV) to the west, within reduced sandstones of the Mt Eclipse Sandstone. The deposit is a roll-front style formed during uplift and deformation of the basin in the early Carboniferous.

The local geology comprises sodic granites, gneisses and minor amphibolites, folded metasediments and intruded metabasic rocks. Major northwest shears cut the sequence and are associated with barren quartz intrusion. The two most prominent structures are located along the Lander River Valley and along the Salt Creek – Blue Bush Bore Valley.

The granite batholiths are interpreted to be shallowly eroded and exposure is of their roof pendants and upper levels only, resulting in an abundance of pegmatite outcrop typically of quartz-feldspar-muscovite-tourmaline composition. Some very coarse examples occur in association with minor tantalum or tin mineralisation that has in places been mined.

The metasediments, comprising meta shales, cherts, siltstone and fine sandstone range in grade from lower to upper greenschist facies and are common in the Lander valley. Some exhibit quartz sericite alteration.

Tertiary to Recent cover comprising lateritic sands and clays, calcrete and ferricrete is common in low lying areas and can be up to 70m thick, although Toro’s recent drilling indicates that it is over 200 m thick in places. Some calcrete shows replacement by chalcedonic silica and this silcrete has been demonstrated to be uraniferous, with a chip sample grading 500 ppm in the region.

The present static watertable is significantly below the base of calcrete in drilling and thus is older than the present hydrogeological scheme. This is likely to have an influence on both the preservation and appropriate media of trap sites for secondary uranium mineralisation and the recognition of palaeo flow directions and source rocks.
In the Hann Range, the Vaughan Springs Quartzite (which unconformably overlies the Arunta Palaeoproterozoic rocks) preserves the basal conglomerates of that sequence. These conglomerates have been shown to be anomalous in uranium (40-50ppm) at surface, where leaching is expected to have occurred. Take out as is referring to south.

Figure 7 Location of Anningie tenements over geology outcrop 250K published geology sheet
4 PREVIOUS EXPLORATION

Previous mineral exploration work is detailed in the first combined Annual Technical Report. Although Uranium has been extensively explored for in the area, the nature of the exploration has been restricted to bore water sampling, hard rock and limited near surface calcrete styles of Uranium within or proximal to outcropping terrains. Following a desktop review of previous exploration, open file data was assessed by a consultant geophysicist and an area was set aside for an AEM (Airborne Electromagnetic) survey with the aim of identifying conductors within covered basement and/or palaeochannels. A TEMPEST AEM survey was carried out by Fugro Airborne Surveys Pty Ltd during August 2009. Toro undertook a brief reconnaissance field trip in August 2009, which involved foot traverses and rock chip sampling along public roads. During 2010/2011 after long delays in gaining AAPA clearance, an aircore program was cut short by unseasonal rain. Only two aircore holes were completed by Toro over in interpreted palaeochannel as defined by the 2009 AEM survey.
5 EXPLORATION OBJECTIVES

After reviewing of the available data, reports and results from sixteen aircore holes, Toro composed the following objectives for these tenements:

- Determine the extent of redox variations and possibility of more concentrated uranium within other areas of elevated AEM response.
- Determine the degree to which calcrete and uranium are associated.
- Determine the degree to which the basement/cover contact and uranium are associated.
- Determine the likelihood of economic ‘hard-rock’ U mineralisation in the Palaeoproterozoic granites and gneisses under cover.

6 EXPLORATION COMPLETED

Following on from the abandoned 2010 aircore drilling program, Toro completed fourteen aircore holes totalling 2083m (Table 2). Collar locations are shown in Figure 9 and Figure 10. Holes were drilled to refusal through interpreted Tertiary sediments consisting of varying sand, silt and clay. Holes were drilled in most cases to refusal in either granite basement or silicified Tertiary sediments.

One metre samples were collected from the drilling cyclone in plastic bags. Each metre sample was litho-logged and radiation was recorded with a scintillometer. Gamma logging was carried out on all holes using a 27mm probe. Gamma logging of all but one hole was carried out through the drill rods. A total of 271 assay samples consisting of either composites (2 to 10m - varied) or 1m original samples (in samples associated with elevated gamma) were collected by scoop into calico bags and sent to ALS Alice Springs. Samples were assayed for As, Ce, Cu, Mo, Ni, Pb, Se, Th, U, W by 4A ICP-MS.

Groundwater was generally encountered around 60m and again at around 130m.
### Table 2 2012 aircore drill hole locations

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![Figure 9 Location of Toro 2012 drilling](image-url)
Generally there was a slightly elevated gamma response associated with a calcrete/chalcedony unit high up in the Tertiary sequence as well as at the boundary between the basement and overlying Tertiary sediments, the latter also correlating with a redox change. Pyrite is observed in several holes at the interpreted basement/overlying sediment interface as well as in fine (2-3cm) bands at various intervals throughout the Tertiary sequence.

The highest uranium assay (40.1ppm) was encountered in RP0050 at 15m depth in calcrete. This correlated with a gamma spike (probe) of 254cps with a corresponding 32.4ppm eU3O8. RP0040 also contained slightly elevated (30.5ppm) uranium at 26m in a hard, white silcrete/chalcedony which lies within a calcretised tertiary sediment package. This correlated with a gamma spike (probe) of 157cps.

RP00043 (Figure 11) spiked at around 130m. This corresponded with scintillometer reading of 400cps and was associated with the interface between granite basement and
overlying clayey sands. A redox change was noted as was the presence of pyrite. The assay result was 14.9ppm uranium 49.3ppm thorium. It was concluded that the gamma response was most probably due to monazite.

![Figure 11: RP0043 27mm downhole gamma probe](image)

7 EXPLORATION EXPENDITURE
For expenditure over the past year, see individual EL expenditure reports for details on each licence.

8 EXPLORATION PROPOSED
No exploration is proposed for 2012 and this group of tenements is considered low priority for Toro. Toro are currently pursuing JV opportunities over the project area.
9 REFERENCES


10 APPENDICES

A Drilling data

EL26704 26848 27115 27876_2012_A_02_DHLocations.txt
EL26704 26848 27115 27876_2012_A_03_DH Lithology.txt
EL26704 26848 27115 27876_2012_A_04_DHAssay.txt
EL26704 26848 27115 27876_2012_A_06_File_Verification.txt
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