Partial Relinquishment Report

for Period

18th September 2009 to 17th September 2012

EL 27138 Cooloola

<table>
<thead>
<tr>
<th>Titleholder</th>
<th>Toro Energy Ltd</th>
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<tr>
<td>Operator</td>
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<tr>
<td>Tenement Agent</td>
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</tr>
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<td>Partial Relinquishment Report for period 18th September 2009 to 17th September 2012</td>
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<td>Toro Energy Ltd</td>
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<td>Target Commodity</td>
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<td>Date of Report</td>
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<td>Datum</td>
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Summary

This Partial Relinquishment Report for EL27138 covers work carried out over the relinquished portion of EL27138 during the period from 18th September 2009 to 17th September 2012. Exploration activities during the period have involved:

- **SkyTEM** airborne electromagnetic (AEM) survey over EL27138, covering 1625 km² (full survey); a collaborative geophysical survey between Toro Energy and the NT Department of Resources
- **Reconnaissance** field work to check access and liaise with stakeholders and inspect water bores in the east.
- Water bores and AEM data both indicate the absence of an appropriate saline groundwater system in the east where Taylor Creek feeds the local fresh groundwater system. This area has been relinquished on this basis.
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1 INTRODUCTION
This report outlines the work conducted within the relinquished portion of exploration tenement EL27138 during 2009 to 2012 by Toro Energy Limited (“Toro”; ticker code “TOE”).

EL27138 is located approximately half way between Alice Springs and Tennant Creek on the Stuart Hwy and is situated on the southern edge of the Wiso Basin and northern edge of the Arunta Block. Access from Alice Springs is 340km north along the sealed Stuart Highway and then west along station tracks (Figure 1 and Figure 2). It covers the Lander River (SF53-01), Bonney Well (SF53-02) and Barrow Creek (SF53-06) 1:250,000 mapsheet areas, and the Jarrah Jarrah 5556, Numagalong 5656, Wauchope 5756, Crawford 5655, Taylor 5755 1:100,000 mapsheet areas (Figure 3). It lies within Stirling and Neutral Downs pastoral properties (Figure 4).

The Tanami Region is semi arid with monsoonal influences, with 75-80% of rainfall occurring 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. Adjacent are sand plains with minor sand dunes containing Spinifex, Acacia, Blue Gum and Mallee scrub plants. 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.

Toro are exploring the Wiso Basin component of this tenement for palaeochannel/roll front – style uranium mineralisation with Tertiary cover and Bigrlyi-style uranium in the underlying Palaeozoic Wiso Basin. The survey area has received no uranium exploration in the past and only limited petroleum exploration. However, based on available data, it is analogous with the Amadeus and Ngalia Basins, being of similar age and having sedimentary components and intracratonic-foreland setting, and therefore has potential for Bigrlyi and Angela style deposits. There is also a likely presence of younger (Tertiary?) palaeochannel systems that might host tabular or roll front uranium akin to Beverley in South Australia. In an effort to progress both concepts, Toro undertook a collaborative AEM survey with the NT Government. The survey confirmed the latter concept and showed extensive structural dismemberment of the Wiso Basin, supporting the former concept.
Figure 1 Location EL27138 Cooloola

Figure 2 Original boundary of EL27138 on topo
Figure 3 EL27138 (original) Tenement Location over 250k and 100k mapsheets

Figure 4 EL27138 (original) Location of Pastoral properties
2 TENEMENT

EL27138 was granted on 18th September 2009 to Toro Energy Ltd for a period of 6 years. This lease is in its third year of tenure and originally consisted of 500 blocks covering a total area of approximately 1525 square kilometres. Partial Relinquishment occurred on 17th September 2012 resulting in the surrender of 273 blocks (Figure 5 and Table I).

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Table I EL27138 tenement details

Figure 5 EL27138 original outline (green) with retained tenement blocks (red)
3 GEOLOGICAL SETTING

EL27138 lies within the Palaeozoic Wiso Basin region of the Northern Territory (Figure 6). It forms a broad, intracratonic depression which comprises an east southeast trending trough (Lander) in the south and an extensive shallow shelf to the north. The Wiso Basin sequence was deposited on a basement of deformed Proterozoic rocks, the Granites-Tanami Block in the west, the Arunta Block in the south and the Tennant Creek block in the east (Figure 7). The basin is continuous with the Daly River Basin and the Georgina Basin in the North and East and with the Dulcie Syncline of the Georgina Basin in the SE.

The Lander Trough at the southern edge of the basin covers an area of approximately 30,000 sq km. Sediments range from 2000-3000m deep and represent shallow marine to fluviatile depositional environments with the lower and upper limits of the sequence defined by unconformity surfaces. Two additional unconformities are recognised in the sequence.

The most significant faulting is along the southern margin of the Lander Trough. A series of parallel, ESE trending faults with an overall displacement >2000m places sediments of the Wiso Basin against the crystalline rocks of the Arunta Complex (1989, NTGS). This is illustrated in the regional magnetic image for the NT (Figure 8).

The Arunta complex is a late Palaeoproterozoic to Ordovician succession of sedimentary, volcanic, and intrusive rocks interrupted by several tectonothermal events (deformation, metamorphism, granite production). The region comprises three provinces: Aileron Province, which makes up most of the Arunta, Warumpi Province along the south margin of the Arunta, and the triangular Irindina Province in the east. The Aileron Province consists of: (1) a basal Lander Package (1880-1840 Ma), which makes up about 60% of the north, centre, and west of the region; (2) the Ongeva Package (1810-1800 Ma) in the southeast, of unknown relationship to the Lander Package; (3) an unnamed sandstone unit above the Lander Package, with a maximum depositional age of 1820-1800 Ma; (4) the Reynolds Package, which is unconformable on the Lander Package and unnamed sandstone (Geoscience Australia, 2009).
Figure 6  EL27138 (original) over major Geological provinces

Figure 7  EL27138 (original) on NT Govt 2.5M scale geology interpretation & faults
4 PREVIOUS EXPLORATION

The Wiso Basin and its structurally-controlled southern margin are poorly understood compared with other areas of the NT, largely because the basin has not attracted the attention of explorers for its mineral economic potential. Regionally, existing data consists of 22 BMR shallow stratigraphic bores with an average depth of 100m (two occurring on licence). Geophysics included one seismic survey (5 fold, 1967; 200km), two aeromagnetic surveys (1967) and one gravity survey (1965). In addition, stratigraphic boreholes, a seismic survey, regional gravity and aeromagnetic surveys were carried out at various times. The basin is also substantially covered by Tertiary sediments and the eastern extension of the Tanami Desert. Limited historic exploration has been focussed on petroleum systems, analogous with the gas-producing Amadeus Basin. The maximum overlap of any historical tenement over the proposed survey area was 25%. Most historical exploration occurred over the southern edge of the proposed survey area and was mainly for base metals and gold with some uranium within the Arunta Complex. Toro Energy are exploring for a completely different style of mineralisation within the Wiso Basin, redox-controlled uranium. For more detailed information
on previous exploration, see EL27138 Annual Technical Report – 2010 (closed file at time of reporting).

5 EXPLORATION COMPLETED

Year 1: 2009-2010 Toro

In July 2010, Toro Energy commissioned GroundProbe Geophysics to carry out a SkyTEM helicopter-borne electromagnetic (AEM) survey over EL27138, covering 1625 km² (Figure 9). The collaborative geophysical survey between Toro Energy and the NT Department of Resources involved the acquisition, processing and interpretation of approximately 1100 line kilometres (1500m line spacing) of helicopter-borne electromagnetics. The survey was designed to test a number of exploration models including: Angela-Bigrlyi style uranium in foreland sedimentary sequences and shallow calcrete-sandstone and deeper palaeochannel-style uranium in Tertiary outwash fans. Survey data has been submitted to the Department in an open file report as part of the conditions of accepting cofounding under the Exploration Initiative.

The AEM survey has added substantially to the overall geological understanding of the Wiso Basin and the overlying cover. The juxtaposition of Wiso Basin with the Arunta Inlier is shown to be steep and highly complex, with Palaeozoic units of the Wiso Basin thickening northward from the southern boundary, suggesting this former depocentre is now inverted and was the principal site of episodic deformation and uplift. This is encouraging for Toro’s exploration effort, as this type of history is crucial for the multiple phases of recycling of uraniferous sediments and development of topographic fluid flow. These allow the concentration of uranium in ‘source’ sediments that are later accessible to oxidised basinal fluids, which might carry it into locally reduced environments.

Airborne EM showed that groundwater in the Wiso region is not necessarily fresh. The western part of the tenement shows higher conductivity in shallow (<200 m deep) aquifers, indicating likely brackish or saline groundwater, whereas to the east the shallow aquifers carry non-conductive groundwater. This conclusion is supported by recent water bore drilling in the east, where locally-recharged fresh groundwater has been identified for agricultural use. A quick inspection of drill chips by Toro staff showed that the groundwater host is uniformly fine quartz sand with no interstitial clay and with no confining or interlayered clay units. This is not a positive indicator for palaeochannel uranium and downgrades the potential of the eastern half of the tenement. In the west, EM
conductivity depth images show that conductivity in the Wiso Basin sediments is variable, which is interpreted to mean that EM has distinguished some stratigraphic information (ie sandstone versus shales etc).

Figure 9 EL27138 (original and retained) showing skyTEM 124m conductivity image and flightlines (north/south)

Year 2: 2010-2011 Toro

Toro were unable to access the tenement to undertake on-ground exploration, apart from a reconnaissance trip in May and inspection of Government water bores. The principal reasons were:

- Need for a heritage clearance prior to any ground work. Toro requested a heritage clearance by Central Land Council, which did not take place until late in the year for various reasons, including the weather.

- Lengthy 2010/11 wet season, which made most of the area impassable until August 2011 (pastoral vehicles were still bogged on several sections of the road in July).

- Reluctance to undertake any on ground work until the support of traditional owners had been sought and an exploration agreement was in place.
To this end, Toro was able to progress land access negotiations with Central Land Council during the year. Toro attended a meeting with traditional owners in May 2011 and traditional owner support was gained in July. An exploration agreement was negotiated and signed in October 2011. Following this, a helicopter-supported heritage clearance was carried out during October for proposed drilling in 2012.

**Year 3: 2011-2012 Toro**

During the reporting period, no on ground exploration work has been carried out, as Toro is still engaged in negotiations with the CLC regarding access along the Hanson River. Toro field staff did manage to visit the tenement several times during the reporting year to further determine access options and liaise with pastoralists and traditional owners.

Unfortunately, in light of ballooning rentals and compensation costs, Toro have been forced to relinquish half of the tenement without having drill tested any of it. The area selected for relinquishment was identified as lower prospectivity for ISR-type uranium deposits, based on the absence of conductive sediments in the upper 150m of the Tertiary system from the AEM survey. This is supported by the presence of a single fresh water sand-supported aquifer in the east where a set of water bores have been drilled in the last 2 years for a horticultural operation. Drill cuttings from these bores were observed on a reconnaissance trip and indicate that there are no clayey aquicludes in the Tertiary at the desirable depth. In fact, fine sand appears to occupy the sedimentary section from surface down to at least 120m. Ground water is clearly being locally recharged from the run-off from Taylor Creek, rather than being topographically driven from the ranges to the south. The ground water is very fresh and unlikely to be carrying uranium in solution. In contrast, AEM indicates a buried saline groundwater system in the west, where ground has been retained, which is more conducive to an ISR type uranium system.

**6 CONCLUSION**

Water bores and AEM data both indicate the absence of an appropriate saline groundwater system in the east where Taylor Creek feeds the local fresh groundwater system. This area has been relinquished on this basis.

**7 APPENDICIES**

Wiso SkyTEM data – already submitted in full
8 REFERENCES


