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SUMMARY

The Napperby Project area, comprising Exploration Licences 24246 and 24606, is located approximately 180 kilometres north-west of Alice Springs.

EL 24246 was granted on 11 October 2004 to Paladin Resources NL for a period of 6 years. The tenement was subsequently transferred to Deep Yellow Ltd (DYL) in 2005. This report covers the eighth year of tenure of EL 24246 which, for the majority of the reporting period, consisted of 245 blocks covering a total area of 775 km$^2$. EL 24606 was granted on 28 December 2005 to DYL for a period of 6 years. This report covers the seventh year of tenure of EL 24606 which consisted of 111 blocks covering a total area of 355 km$^2$.

In 2007 Toro Energy Limited (Toro) entered into an Earn-In Agreement with DYL to purchase 100% of the project based on an agreed JORC compliant resource to be outlined by Toro by July 2010, or based on 6,000 tonne U$_3$O$_8$ JORC resource if purchased earlier.

During 2007, Toro completed a program of 515 sonic core holes, 123 auger holes and 814 aircore holes followed in 2008 by a further 333 sonic core holes and 784 aircore holes. Assay data from both the 2007 and 2008 drilling programs were used to calculate a JORC Code Mineral Resource estimate of 3,351 tonnes of U$_3$O$_8$ (including 670 tonnes U$_3$O$_8$ previously outlined by DYL).

The 2009 (and current) JORC Inferred Mineral Resource at Napperby is 9.34 million tonnes at 359 ppm U$_3$O$_8$ containing 3,351 tonnes of U$_3$O$_8$ (7.39 Mlb). Only 50% of the known mineralised area was redrilled and included in the JORC compliant resource.

After two years of exploration Toro considered the financial terms of the Earn-In Agreement to be unfavourable and they ultimately withdrew from the project after a Scoping Study was completed (which included baseline environmental, radiation and heritage studies and groundwater monitoring activities as a pre-cursor to a Pre-Feasibility Study).
1. INTRODUCTION

Exploration Licences 24246 and 24606 form the Napperby Project and are being explored for deep palaeochannel (roll front) and shallow calcrete-hosted styles of uranium mineralisation by Deep Yellow Ltd (DYL).

This report covers exploration conducted on Exploration Licences 24246 and 24606 for the period 28 November 2011 to 27 November 2012. The Napperby Project, along with DYL’s Northern Territory tenure is shown in Figure 1.

Figure 1: Northern Territory Project Locations
1.1. Tenure

The Napperby Project comprises Exploration Licences 24246 and 24606 (Figure 2). Details of the tenements as at the end of the reporting period are shown in Table 1.

Table 1: Napperby Tenement Details

<table>
<thead>
<tr>
<th>Tenement No.</th>
<th>Name</th>
<th>Blocks at Grant</th>
<th>Blocks as at 27 Nov 2012</th>
<th>Grant Date</th>
<th>Expiry Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL 24606</td>
<td>Napperby West</td>
<td>201</td>
<td>111</td>
<td>28 Dec 2005</td>
<td>27 Dec 2013</td>
</tr>
</tbody>
</table>

EL 24246 was granted on 11 October 2004 over an area of 245 blocks. The tenement was renewed for a further two years expiring 10 October 2012. A partial relinquishment of 76 blocks was undertaken at the end of the eighth year of term, 10 October 2012. A further renewal in respect of the reduced area of 169 blocks is currently pending.

EL 24606 was granted over an area of 201 blocks on 28 December 2005 and was renewed over an area of 111 blocks expiring 27 December 2013. A partial relinquishment of 90 blocks was lodged at the end of the 6th year of term. A further relinquishment of 27 blocks was lodged at the end of the reporting period reducing EL 24606 to 84 blocks for the 8th year of term.

1.2 Location and Access

EL 24246 and EL 24606 are located 180 km north-west of Alice Springs (Figure 1) in the Arunta Province. The 1:250,000 Napperby SF53-09 map sheet covers 95% of EL 24246 with the southern 2 kilometre margin within 1:250,000 Hermannsburg SF53-13 map sheet. EL 24606 is also predominantly covered by the 1:250,000 Napperby SF53-09 map sheet, however, the western quarter lies within the 1:250,000 Mt Doreen SF52-12 map sheet, the southernmost 2 kilometres of EL 24606 fall in the 1:250,000 Hermannsburg SF53-13 and 1:250,000 Mt Liebig SF52-16 map sheets. The project area is accessed north-west from Alice Springs via the Tanami Road to Tilmouth Roadhouse (Figure 2).
Figure 2: Tenement Location Plan and Napperby Uranium Deposit (as at 27 November 2012)
2. GEOLOGY AND URANIUM MINERALISATION

2.1 Regional Geology

The Napperby Project lies within the Arunta-Ngalia region of the Northern Territory. Basement is comprised of Palaeoproterozoic to Mesoproterozoic metasedimentary and granitic rocks. These are overlain by Neoproterozoic to Devonian Ngalia Basin sediments immediately north of the tenements, and in turn by Tertiary to Recent clastic sequences (Figure 3), derived by erosion of highly radiogenic basement uplifts to the north in the Reynolds Range area.

Shallow covered to partly outcropping granite to granitic gneiss terrane underlies EL 24246 and EL 24606. The crystalline basement comprises deep to shallow incised palaeodrainages infilled with from 100m to 10m of Recent clastic material. The Napperby drainage is saline near the confluence with Lake Lewis with hypersaline groundwaters being recorded. Calcrete capping and aeolian sand overlie mineralised alluvial sands and sandy clays of palaeodrainage fill. The mineralised sands and clays are carbonaceous in part and may act as redox fronts.

2.2 Deposit Lithology

A brief description of the lithology of the Napperby deposit is described below based on sonic core and auger drilling in 2007 and 2008 (by Toro). A detailed lithological description is outlined in Sullivan and Rawlings 2009.

The Napperby sequence is topped by a ferruginous alluvial horizon which exhibits extremely consistent thickness (averaging 0.5 m) over most of the area investigated. A gradual transition exists between the surficial alluvial layer and underlying calcareous horizon(s), most commonly a weathered orange/pink pedogenic calcrete. The thickness for the combined calcareous units ranges between 1-3 m. Silcrete is common throughout the soil profile; although it is most common in the upper 5 m. Nodular silcrete occurs at every level of the profile and is believed to result from the silica-replacement of evaporite mineral gypsum nodules.

Pale green to fawn silts and fine clayey-sands with minor coarse, angular quartz constitute much of the pallid zone, below the upper water table (3.5 - 4.5 m). Redox boundaries are clearly visible as orange/brown mottling. Further evidence for fluid percolation is the occasional presence of fine, acicular gypsum / salt crystals throughout the unit.

Scour sequences are associated with a particular depositional sequence that tends to occur below the green clayey sand units, however, can also occur within them. A sharp transition with the underlying lithology follows the basal sands. The sudden influx of energy implied by the coarse base may represent flood events.

Hematitic granite/gneiss saprolite underlies much of the deposit area, characterised by distinctive brick-red clay containing very coarse, angular quartz. It is clear that the saprolite has been reworked at some point, as evidenced by the presence of thin beds of green clayey-sands within the unit itself.

2.3 Uranium Mineralisation

The Napperby deposit (also referred to as the New Well deposit or prospect) lying immediately below and to a lesser extent within a calcrete layer, and in the underlying sandy clays, as coatings, disseminations, pellets and blobs ('nuggets') up to 5 cm long. The sand also hosts carnottite as disseminations or concretions. Underlying the sedimentary fill is a lateritised, red, granitic clay-saprolite/palaeosol. This rests on a very irregular palaeotopographic surface on radiogenic granite. (See Figure 4)
Figure 3: Napperby Project Geology (Tenement outline as at 27 November 2012)
Figure 4: Typical Mineralised Profile – Trench 3, 2007
3. PREVIOUS EXPLORATION

The Napperby deposit was first identified through shallow auger drilling by CRAE in 1971. CRAE continued to explore the area before surrendering the ground in 1974. Uranerz also explored the prospect from 1977 to 1984 and estimated resources of between 5700 and 6200 tonnes of U$_3$O$_8$ at an average grade of between 360 and 380ppm (pre JORC code).

During the first year of tenure of EL 24246 DYL undertook an extensive aircore drilling programme across the Napperby deposit. Throughout the following reporting periods, after entering into the option agreement, Toro undertook multiple drilling programmes, analysis and geophysical surveys to lead up to the establishment of a JORC compliant Inferred Resource of 9.34Mt at 359ppm U$_3$O$_8$ for 3,351 t (7.39 Mlbs) using a 200ppm U$_3$O$_8$ cut off (Figure 2).

Toro also commissioned URS Australia Pty Ltd (URS) to prepare a desktop Concept Study for the development of the Napperby Uranium Project. The conclusions of this study are outlined in Sullivan and Rawlings 2009.

Additional details of historic exploration and exploration carried out by Toro under the option agreement are documented in previous annual reports including Sullivan and Rawlings 2009.

In 2011 DYL commissioned Fugro Airborne Services to undertake a 316 line kilometre airborne electromagnetic survey across the Napperby Project covering both EL 24246 and EL 24606 (Figure 5). The survey was designed to delineate subsurface palaeochannels around the periphery of Lake Lewis with the potential to host both calcrete and roll-front style uranium deposits.

The AEM survey indicated large areas of EL 24246 with no underlying palaeochannels (i.e. no conductors) and accordingly the tenement was reduced in size on both the 2011 and 2012 anniversary dates.

4. EXPLORATION COMPLETED

During the reporting period DYL undertook only office related review of the AEM data with respect to identifying areas to relinquish at the anniversary date.

DYL has continued to try to joint venture the Napperby Project tenements, however the continued downturn of the uranium section during 2012 meant that only opportunistic bids were received which DYL rejected. In December 2012 and January 2013 the Company received two bids which it is evaluating, both of which would include exploration drilling to extend the Napperby resource and to explore for new deposits within the project tenements.
Figure 5: AEM Survey Lines (Tenement Outline as at 27 November 2012)
5. REHABILITATION

Toro completed rehabilitation over all drill holes with the exception of 50 water monitoring bores as outlined in the Toro MMP closure report for Authorisation No. 0387-01 in respect of the Napperby project. DYL undertook monitoring of the aforementioned water bores in 2010 and 2011 to ensure that no subsidence/damage had occurred. In addition, the secure storage area was rehabilitated and waste materials removed from site.

6. CONCLUSION AND RECOMMENDATION

Whilst DYL believes that ultimately the Napperby Uranium project has the potential to be developed as a mine, a number of factors have an influence on decisions to proceed in the short term. The factors include:

- The continuing influence on the short term demand for uranium due to the incidents at nuclear reactors in Japan’s Fukushima Prefecture following the March 2011 tsunami and the shutdown of all Japanese reactors;
- The flat uranium prices which make investment decisions more difficult with the spot price per lb of \( \text{U}_3\text{O}_8 \) trading around the $US50 mark during the year to August 2012 and the current price of US$43.50 continuing the downward trend; and
- The 2009 scoping study indicated that the Napperby Project would ‘work’ at a uranium price of US$75 per lb.

DYL continues to try to joint venture the Napperby Project tenements, however the continued downturn of the uranium section during 2012 meant that only opportunistic bids were received which DYL rejected. In December 2012 and January 2013 the Company received two bids which it is evaluating, both of which would include exploration drilling to extend the Napperby resource and to explore for new deposits within the project tenements.

7. BIBLIOGRAPHY


Gee G., 2006. EL24246 Napperby Annual Report for Year Ending 10 October 2006. DYL

Hogan S., 2006. EL24606 Lake Lewis First Annual Report for Year Ending 28 December 2006. DYL


Sawyer L., 2007 First Combined Annual Report for EL24246 and EL24606 for Year Ending 28 December 2007. GEOS Mining for TOE.