

## ASX ANNOUNCEMENT

30 November 2021

# TORO TO ASSESS VALUE OPPORTUNITIES FOR ITS 90.9 Mlbs U<sub>3</sub>O<sub>8</sub> PORTFOLIO

### HIGHLIGHTS

- Review underway to identify value opportunities across Toro's Australian uranium portfolio which currently includes 90.9 Mlbs of contained U<sub>3</sub>O<sub>8</sub> (at a 200ppm U<sub>3</sub>O<sub>8</sub> cut-off – see below for references)
- Toro holds significant uranium resources inside the Wiluna Uranium Project with 62.7 million pounds (Mlbs) contained U<sub>3</sub>O<sub>8</sub> (at a 200ppm U<sub>3</sub>O<sub>8</sub> cut-off – JORC 2012, refer to ASX announcement 1 February 2016 and Appendix 1) in three deposits, Lake Maitland, Lake Way and Centipede-Millipede
- 96% of the Resources are Measured and Indicated in the Wiluna Uranium Project (JORC 2012 – refer to table in Appendix 1)
- The U<sub>3</sub>O<sub>8</sub> mineralisation envelope of these three deposits also contains a Vanadium Resource of 96.3Mt grading 322ppm V<sub>2</sub>O<sub>5</sub> for 68.3Mlbs of contained V<sub>2</sub>O<sub>5</sub> at a 200ppm V<sub>2</sub>O<sub>5</sub> cut-off (refer to ASX announcement of 21 October 2019) which initial testwork has shown may be utilised as a value-add by-product
- A further 28.2 Mlbs of contained U<sub>3</sub>O<sub>8</sub> (at a 200ppm U<sub>3</sub>O<sub>8</sub> cut-off) is 100% held by Toro in three assets outside the Wiluna Uranium Project (refer to Appendix 1 and Appendix 2):
  - Dawson Hinkler
    - 9.4 Mlbs contained U<sub>3</sub>O<sub>8</sub> (at a 200ppm U<sub>3</sub>O<sub>8</sub> cut-off – JORC 2012 refer to ASX announcement 1 February 2016)
  - Nowthanna
    - 11.9 Mlbs contained U<sub>3</sub>O<sub>8</sub> (at a 200ppm U<sub>3</sub>O<sub>8</sub> cut-off – JORC 2012 refer to ASX announcement 1 February 2016)
  - Theseus
    - 6.9 Mlbs contained U<sub>3</sub>O<sub>8</sub> (at a 200ppm U<sub>3</sub>O<sub>8</sub> cut-off – JORC 2012 refer to ASX announcement 5 December 2012 and information below)
    - There is an Exploration Target Range (ETR) for Theseus of 28-35 Mt at 450-520 ppm U<sub>3</sub>O<sub>8</sub> for 28-40Mlbs of contained U<sub>3</sub>O<sub>8</sub>\* (refer to ASX announcement 5 December 2012)
- Toro is evaluating significant exploration and/or development opportunities outside of its Wiluna resource base to take advantage of (1) improving uranium market conditions and (2) intellectual property held by Toro regarding metallurgical optimisation at the Wiluna Uranium Project

- Toro owns a 15% interest in a joint venture actively exploring for uranium in Namibia. Joint venture partners include a subsidiary of Deep Yellow Ltd (ASX: DYL) (39.5%) (another subsidiary of which is manager/operator of the joint venture) and the Japanese Oil, Gas and Metals National Corporation (JOGMEC) (39.5%). The joint venture's tenements are proximal to the world class Rossing, Husab and Langer Heinrich uranium deposits.

\* **CAUTIONARY STATEMENT:** The ETR is conceptual in nature and there has been insufficient exploration completed to define this as a Mineral Resource. There is no certainty further work will result in the determination of a Mineral Resource.

Toro Energy Limited (**ASX: TOE**) ('the **Company**' or '**Toro**') is pleased to announce that it has initiated an assessment of its entire Australian uranium asset portfolio to identify opportunities to optimise and add further value to its **current resource base of 90.9 Mlbs of contained U<sub>3</sub>O<sub>8</sub>**.

This internal review will include a focus on the three (3) significant assets containing JORC resources outside the Wiluna Uranium Project, namely the Dawson Hinkler Deposit, the Nowthanna Deposit and the Theseus Deposit.

#### **Some of the potential areas of opportunity to be assessed:**

1. Improving Toro's resource base both from inside and outside the Wiluna Uranium Project, inclusive of exploration potential
2. Evaluating potential work programmes on uranium assets outside the Wiluna Uranium Project
3. Further metallurgical and engineering opportunities with the potential to continue to optimise both CAPEX and OPEX
4. The potential to integrate the key findings from the metallurgical test-work, new processing plant design and engineering studies (still to be completed) at the Lake Maitland Uranium Deposit across the entire Wiluna Uranium Project

Toro also advises that the Lake Maitland Uranium Project engineering study is in its final phase.

#### **Toro's Executive Chairman Richard Homsany commented:**

*"Toro is now aggressively pursuing several cost-effective pathways that it believes can add significant value to its 90.9 Mlbs uranium asset portfolio in the near to medium term.*

*Re-engineering and scoping studies completed on the Lake Maitland operation to date have already revealed significant optimisation opportunities, and with further work, our team is confident these improvements have potential to be applied across the broader Wiluna Uranium Project. One such potential improvement currently being investigated is the lowering of the optimised mining cut-offs at the Lake Maitland Deposit as a result of improved economics in the proposed new processing flow sheet, resulting in more of the resource being processed over the life of the mine, which could add considerable value.*

*Our technical team has identified significant potential to grow the value in our footprint outside the existing Wiluna resource base and a key focus will be on assessing exploration potential across Toro's entire uranium portfolio. We are also actively testing several priority exploration targets including nickel targets at Yandal where a diamond drill programme is currently underway. Toro*

*has a busy pipeline of activity planned across both its uranium portfolio and its emerging Dusty Nickel Project in WA, so we look forward to providing further updates on exploration progress.”*

## **Wiluna Uranium Project**

### **Uranium Resource**

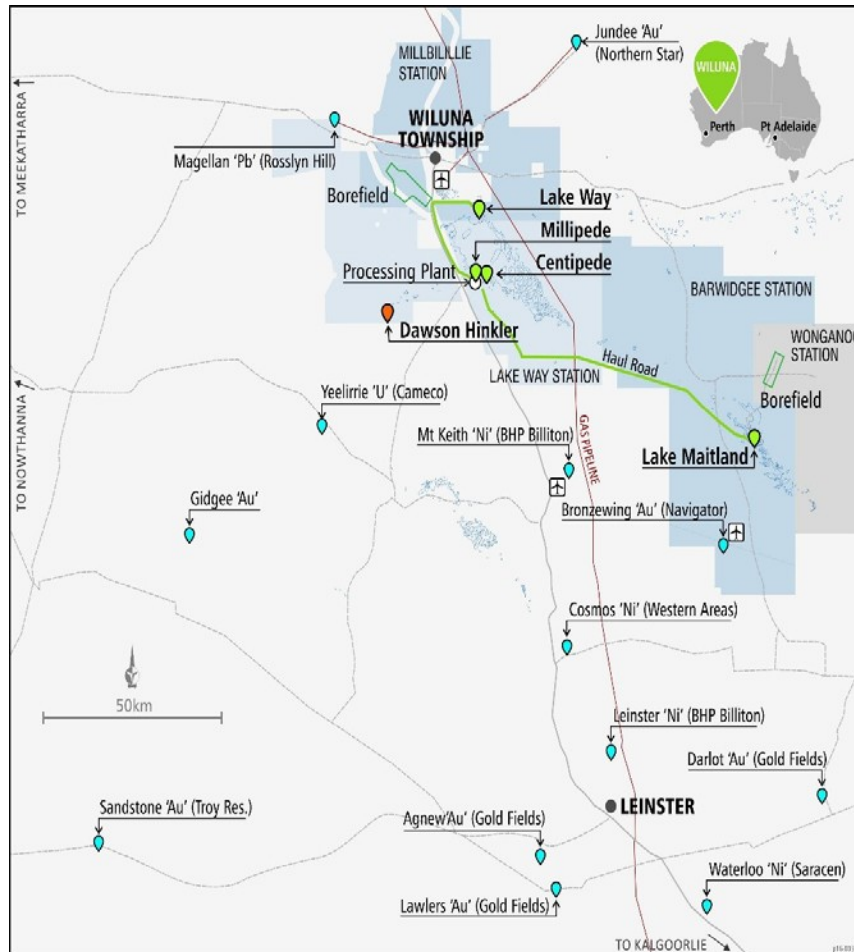
Toro's 100% owned Wiluna Uranium Project consists of the Lake Maitland, Lake Way, and Centipede-Millipede Deposits. Together, these deposits of the **Wiluna Uranium Project contain some 52 million tonnes (Mt) grading 548ppm  $U_3O_8$  for 62.7 million pounds (Mlbs) of contained  $U_3O_8$  at a 200ppm  $U_3O_8$  cut-off** (JORC 2012 – refer to ASX announcements of 15 October 2015, 1 February 2016 and 21 October 2019 and to **Appendix 1**).

The Company remains focussed on the long-term feasibility of uranium production for its shareholders from the Wiluna Uranium Project, from which it is permitted to mine up to 62 million pounds of measured or indicated uranium resources (JORC 2012). There is a substantial commencement condition contained in the State environmental approval for the Wiluna Uranium Project, granted pursuant to Ministerial Statement 1051 (MS 1051). Toro considers that, should it not proceed to substantial commencement of the Wiluna Uranium Project by the date required by that condition, being 9 January 2022, the environmental approval will remain valid and it will be open to the Company to apply under the *Environmental Protection Act 1986* (WA) for an extension of time for that condition later in the currency of the approval.

### **Vanadium Resource**

Within the  $U_3O_8$  mineralisation envelope of the three uranium deposits, the Wiluna Project also contains a vanadium resource of 96.3Mt grading 322ppm  $V_2O_5$  for 68.3Mlbs of contained  $V_2O_5$  at a 200ppm  $V_2O_5$  cut-off (JORC2012 -Inferred – refer to ASX announcement 21 October 2019). Successful metallurgical testwork completed by Toro has shown that these vanadium resources may be utilised as a value-add by-product of any potential future uranium mine.

The uranium and vanadium resources of the Wiluna Uranium Project are sub-surface groundwater carbonate associated deposits, which are situated no more than 12m beneath the surface and which can be mined with conventional open-cut mining methods.



**Figure 1: Location of the Wiluna Uranium Project. This map also shows the location of the Dawson Hinkler Deposit relative to the deposits of the Wiluna Uranium Project.**

Toro also owns a number of JORC 2012 resources in Western Australia outside the Wiluna Uranium Project, which bring **Toro's total uranium assets in Australia to 90.9 Mlbs contained at a 200ppm  $U_3O_8$  cut-off** (all resources are JORC 2012 – refer to individually referenced ASX announcements for the related resources as outlined above and below).

### **Dawson Hinkler Uranium Deposit**

The **Dawson Hinkler Deposit**, like the deposits of the Wiluna Uranium Project, is a groundwater carbonate associated uranium deposit and contains **9.4 Mlbs at a 200ppm  $U_3O_8$  cut-off** (JORC 2012 – refer to ASX announcement of 1 February 2016 and to **Appendix 2**). It is located only 25km from the Centipede-Millipede Deposit (refer to **Figure 1**) and as such has the obvious opportunity to potentially contribute resources to the planned greater Wiluna Uranium Project's mill to be located at Centipede-Millipede if uranium prices permit.

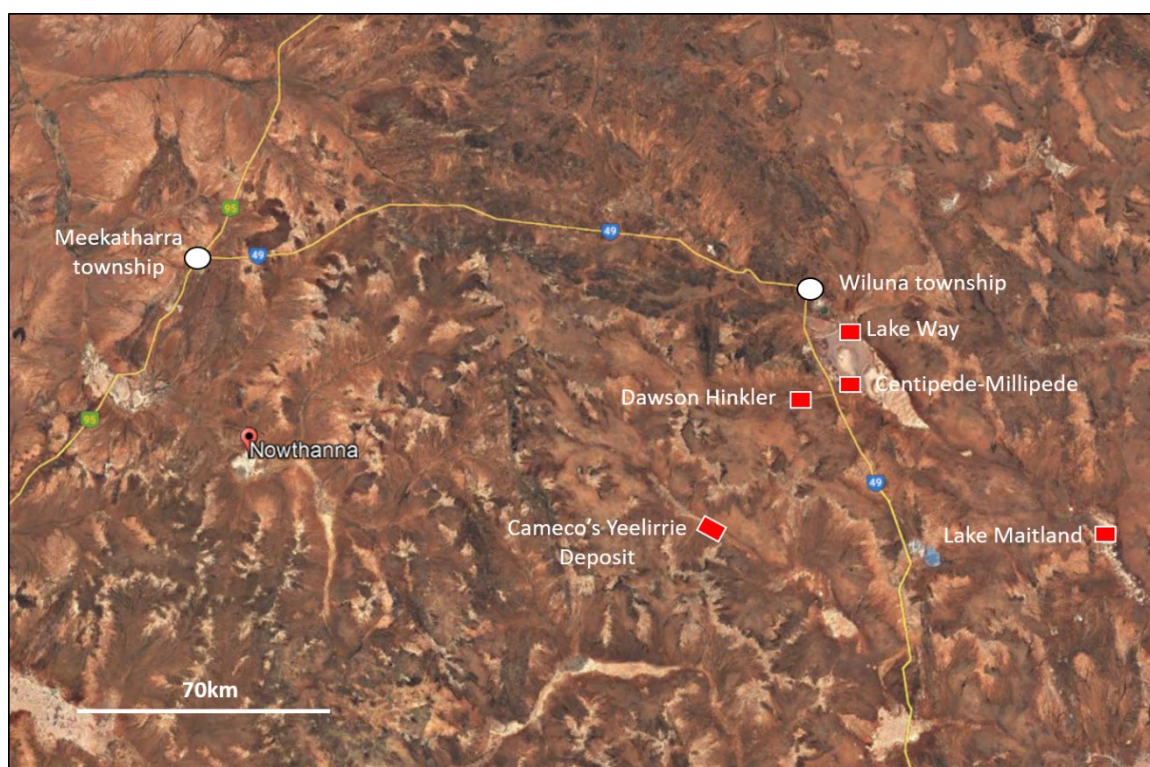
Being of the same deposit type as those of the Wiluna Uranium Project, any potential ore from the Dawson Hinkler Deposit may also have the opportunity for a  $V_2O_5$  by-product.



## Nowthanna Uranium Deposit

The Nowthanna Deposit is also a groundwater carbonate associated uranium deposit located just beneath the surface of Lake Nowthanna, some 60km south of Meekatharra and 170km WSW of the Centipede-Millipede Deposit. The **current JORC 2012 uranium resource contained at Nowthanna stands at 11.9 Mlbs  $U_3O_8$  at a 200ppm  $U_3O_8$  cut-off** (refer to ASX announcement of 1 February 2016 and to **Appendix 2**). The Nowthanna Deposit has not been drilled since 2015, when 15 holes were drilled to confirm historical drilling results.

Once again, Nowthanna will also have the potential for a  $V_2O_5$  by-product being of the same deposit type as those of the Wiluna Uranium Project.



**Figure 2: Approximate location of Toro's Nowthanna Deposit relative to the deposits of the Wiluna Uranium Project. Note, the approximate location of Cameco's Yeelirrie Uranium Deposit is also presented. See text for further details. This map has been created by modifying an image from Google ©.**

## Theseus Uranium Deposit

The Theseus Deposit is a sandstone hosted in situ recovery (**ISR**) uranium deposit discovered by Toro in 2009 beneath the southern edge of Lake Mackay in Western Australia. This is a similar deposit to those mined for uranium product in South Australia since the year 2000 – Beverley, North Beverley (Heathgate Resources Pty Ltd) and Four Mile (Quasar Resources Pty Ltd). The processing plants at Beverley are still in operation, processing the ore stream from the Four Mile Deposit. ISR operations are relatively non-intrusive mining methods, using a controlled water flow with weak acid to recover uranium in situ from buried unconsolidated sediments and processing at the surface.

The Theseus Deposit currently has an **Inferred JORC 2012 resource of 6.3Mt grading at 493ppm U<sub>3</sub>O<sub>8</sub> for 6.9Mlbs of contained U<sub>3</sub>O<sub>8</sub> at a 200ppm U<sub>3</sub>O<sub>8</sub> cut-off** (refer to ASX announcement of 5 December 2012, **Appendix 2** and statement below). At the same time as the Maiden Resource was announced Toro also announced an **Exploration Target Range (ETR) for Theseus of 28-35 Mt at 450-520 ppm U<sub>3</sub>O<sub>8</sub> for 28-40Mlbs of contained U<sub>3</sub>O<sub>8</sub>**. **CAUTIONARY STATEMENT:** The Exploration Target Range is conceptual in nature and there has been insufficient exploration completed to define this material as a Mineral Resource. There is no certainty that the further work referred to herein will result in the determination of a Mineral Resource). There has been no significant work on Theseus since the 2012 drilling campaign.

There are a number of opportunities for further exploration and/or development outside of the Wiluna Uranium Project that could improve Toro's position to take advantage of any sustained improvement in the uranium market. These evaluation activities outside of the Wiluna Uranium Project have now commenced.

### **Active Uranium Exploration in Namibia**

Through its 100% owned subsidiary, Nova Energy (Namibia) Pty. Ltd., Toro has a 15% share of the Nova Joint Venture (**NJV**) which is actively exploring for uranium in Namibia. Other significant partners in the NJV are Reptile Uranium Namibia Pty. Ltd. (39.5%), a 100% owned subsidiary of Deep Yellow Ltd (ASX: DYL), the Japanese Oil, Gas and Metals National Corporation (JOGMEC) (39.5%) and Sixzone Investments Pty. Ltd. (6%). Reptile Mineral Resources and Exploration (Pty) Ltd, also a 100% subsidiary of Deep Yellow Ltd., is the manager/operator of the NJV.

The NJV is actively exploring for uranium in the basement and the overlying sediments within two exploration licenses, EPL3669 and EPL3670, which are proximal to the world class Rossing, Husab and Langer Heinrich uranium deposits. Current exploration is focussed on EPL3669 and is targeting large basement related mineralisation like that of Rossing and Husab, which are approximately situated only 50 and 35km to the NE respectively. It is also important to realise that the NJV ground is situated over the same paleochannel system that hosts the groundwater carbonate associated surficial uranium deposits of Langer Heinrich further upstream some 60km to the east .

Results to date are encouraging with significant uranium mineralisation having been intersected in the basement rocks in recent drilling (2020-2021) at the Barking Gecko Prospect (refer to ASX announcements by Deep Yellow Ltd.).

## IMPORTANT NOTE RELATING TO RESULTS OF RESOURCE ESTIMATIONS REPORTED HERE

For the competent person statements, JORC Table 1 and included drill hole details relevant specifically to the resource estimates for the **Dawson Hinkler Uranium Deposit**, please refer to the statement highlighted below and to those already presented in the ASX announcement of 1 February 2016 and earlier on 15 October 2015.

For the competent person statements, JORC Table 1 and included drill hole details relevant specifically to the resource estimates for the **Nowthanna Uranium Deposit**, please refer to the statement highlighted below and to those already presented in the ASX announcement of 1 February 2016.

For the competent person statements, JORC Table 1 and included drill hole details relevant specifically to the resource estimates for the **Theseus Uranium Deposit**, please refer the statement highlighted below and to those already presented in the ASX announcement of 5 December 2012. Note also that the Inferred Theseus Deposit was updated from JORC 2004 to JORC 2012 via a review of the 2012 resource estimate and data that it included, which was completed by Mr Daniel Guibal of SRK in March 2017. Mr Guibal is a Fellow of the AusIMM and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity they are undertaking to qualify as Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012)'. Mr Guibal is the competent person for all of Toro's uranium resources. See further below.

For the competent person statements, JORC Table 1 and included drill hole details specifically relevant to each of the resource estimates for the **Lake Maitland, Lake Way and Centipede-Millipede Deposits of the Wiluna Uranium Project** please refer to the statement highlighted below and the JORC Table 1 presented in the ASX announcement of 15 October 2015, 1 February 2016 and more recently, including for V<sub>2</sub>O<sub>5</sub>, the ASX announcement of 21 October 2019.

## CAUTIONARY STATEMENT FOR THE EXPLORATION TARGET RANGE GIVEN FOR THE THESEUS URANIUM DEPOSIT

It should be understood that an Exploration Target Range (**ETR**) is conceptual in nature and there has been insufficient exploration completed to define this material as a Mineral Resource. There is no certainty that the further work referred to herein will result in the determination of a Mineral Resource.

This announcement was authorised for issue by the board of Toro Energy Limited.

Katherine Garvey  
Legal Counsel and Company Secretary, Toro Energy Limited.  
60 Havelock Street, West Perth WA 6005

**FURTHER INFORMATION:**

Richard Homsany	Toro Energy	08 9214 2100
Greg Shirliff	Toro Energy	08 9214 2100

**Competent Persons' Statement**

**Wiluna Project Mineral Resources – 2012 JORC Code Compliant Resource Estimates – Centipede, Millipede, Lake Way, Lake Maitland, Dawson Hinkler and Nowthanna Deposits**

The information presented here that relates to Mineral Resources of the Centipede, Millipede, Lake Way, Lake Maitland, Dawson Hinkler and Nowthanna deposits is based on information compiled by Dr Greg Shirliff of Toro Energy Limited, Mr Sebastian Kneer formerly of Toro Energy Limited and Mr Daniel Guibal of SRK Consulting (Australasia) Pty Ltd. Mr Guibal takes overall responsibility for the Resource Estimate and Dr Shirliff takes responsibility for the integrity of the data supplied for the estimation. Dr Shirliff is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM), and Mr Guibal is a Fellow of the AusIMM and they have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012)'. The Competent Persons consent to the inclusion in this release of the matters based on the information in the form and context in which it appears.

**Competent Person's Statement**

**Theseus Uranium Project Mineral Resources – 2012 JORC Code Compliant Resource Estimates**

The information presented here that relates to Mineral Resources of the Theseus Uranium Project is based on work supervised by Michael Andrew, who is a member of the Australian Institute of Mining and Metallurgy of the Australian Institute of Geoscientists. Mr Andrew is a full time employee of Optiro, and has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity he is undertaking to qualify as a Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Andrew consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.

**Competent Persons' Statement**

**Wiluna Project Mineral Resources – 2012 JORC Code Compliant Resource Estimates – V<sub>2</sub>O<sub>5</sub> for Centipede-Millipede, Lake Way and Lake Maitland.**

The information presented here that relates to V<sub>2</sub>O<sub>5</sub> Mineral Resources of the Centipede-Millipede, Lake Way and Lake Maitland deposits is based on information compiled by Dr Greg Shirliff of Toro Energy Limited and Mr Daniel Guibal of Condor Geostats Services Pty Ltd. Mr Guibal takes overall responsibility for the Resource Estimate, and Dr Shirliff takes responsibility for the integrity of the data supplied for the estimation. Dr Shirliff is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM) and Mr Guibal is a Fellow of the AusIMM and they have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity they are undertaking to qualify as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012)'. The Competent Persons consent to the inclusion in this release of the matters based on the information in the form and context in which it appears.



## Appendix 1: Broader Wiluna Uranium Project Resource Table – JORC 2012

Wiluna Uranium Project Resources Table (JORC 2012)									
		Measured		Indicated		Inferred		Total	
		200ppm	500ppm	200ppm	500ppm	200ppm	500ppm	200ppm	500ppm
Centipede / Millipede	Ore Mt	4.9	1.9	12.1	4.5	2.7	0.4	19.7	6.8
	Grade ppm	579	972	582	1,045	382	986	553	1,021
	U <sub>3</sub> O <sub>8</sub> Mlb	6.2	4.2	15.5	10.3	2.3	0.9	<b>24.0</b>	<b>15.3</b>
Lake Maitland	Ore Mt	-	-	22.0	8.2	-	-	22.0	8.2
	Grade ppm	-	-	545	929	-	-	545	929
	U <sub>3</sub> O <sub>8</sub> Mlb	-	-	26.4	16.9	-	-	<b>26.4</b>	<b>16.9</b>
Lake Way	Ore Mt	-	-	10.3	4.2	-	-	10.3	4.2
	Grade ppm	-	-	545	883	-	-	545	883
	U <sub>3</sub> O <sub>8</sub> Mlb	-	-	12.3	8.2	-	-	<b>12.3</b>	<b>8.2</b>
Sub-total	Ore Mt	<b>4.9</b>	<b>1.9</b>	<b>44.3</b>	<b>16.9</b>	<b>2.7</b>	<b>0.4</b>	<b>52.0</b>	<b>19.2</b>
	Grade ppm	<b>579</b>	<b>972</b>	<b>555</b>	<b>948</b>	<b>382</b>	<b>986</b>	<b>548</b>	<b>951</b>
	U <sub>3</sub> O <sub>8</sub> Mlb	<b>6.2</b>	<b>4.2</b>	<b>54.2</b>	<b>35.3</b>	<b>2.3</b>	<b>0.9</b>	<b>62.7</b>	<b>40.4</b>
Dawson Hinkler	Ore Mt	-	-	8.4	0.9	5.2	0.3	13.6	1.1
	Grade ppm	-	-	336	596	282	628	315	603
	U <sub>3</sub> O <sub>8</sub> Mlb	-	-	6.2	1.1	3.2	0.4	<b>9.4</b>	<b>1.5</b>
Nowthanna	Ore Mt	-	-	-	-	13.5	2.6	13.5	2.6
	Grade ppm	-	-	-	-	399	794	399	794
	U <sub>3</sub> O <sub>8</sub> Mlb	-	-	-	-	11.9	4.6	<b>11.9</b>	<b>4.6</b>
Total	Ore Mt	<b>4.9</b>	<b>1.9</b>	<b>52.7</b>	<b>17.8</b>	<b>21.4</b>	<b>3.3</b>	<b>79.0</b>	<b>23.0</b>
	Grade ppm	<b>579</b>	<b>972</b>	<b>520</b>	<b>931</b>	<b>368</b>	<b>765</b>	<b>482</b>	<b>916</b>
	U <sub>3</sub> O <sub>8</sub> Mlb	<b>6.2</b>	<b>4.2</b>	<b>60.4</b>	<b>36.4</b>	<b>17.4</b>	<b>5.5</b>	<b>84.0</b>	<b>46.4</b>

For the mineral resources and JORC 2012 categories in this table please refer to the competent persons statement presented with this ASX announcement above and the JORC Table 1 and drill hole details presented in the ASX announcement of 1 February 2016.

## Appendix 2: Theseus Uranium Project Resource Table – JORC 2012

Theseus Uranium Project Mineral Resources Table (JORC 2012) 200ppm U <sub>3</sub> O <sub>8</sub> cut-off		
TOTAL INFERRED		
Ore Mts	Grade ppm	U <sub>3</sub> O <sub>8</sub> Mlbs
6.3	493	6.9

For the mineral resources and JORC 2012 categories in this table please refer to the competent persons statement presented with this ASX announcement above and the JORC Table 1 and drill hole details presented in the ASX announcement of 5 December 2012.