



## ASX RELEASE

Thursday, 18 August 2011

# Toro's Theseus Uranium Prospect in WA confirmed as a major uranium discovery

Toro Energy Limited (ASX: "TOE") can now confirm that current drilling shows the Theseus Prospect to be a large uranium mineralised system that is at least 7.5km<sup>2</sup> in area. The tenor of the uranium mineralisation reported from several holes has defined grades at levels that Toro consider, warrant further economic analysis.

### Significant averaged drillhole intersections

**4.46m @ 837 ppm eU<sub>3</sub>O<sub>8</sub>** from 98.11m in LP00177\*  
*including 1.54m @ 1909ppm eU<sub>3</sub>O<sub>8</sub> from 98.47*

**1.8m @ 430 ppm eU<sub>3</sub>O<sub>8</sub>** from 102.08m in LP00178\*

**3.54m @ 378 ppm eU<sub>3</sub>O<sub>8</sub>** from 105.63m in LP00184\*  
*including 0.44m @ 1469ppm eU<sub>3</sub>O<sub>8</sub> from 106.57m*

**4.84m @ 293 ppm eU<sub>3</sub>O<sub>8</sub>** from 107.54m in LP00187\*  
*including 0.66m @ 1032 ppm eU<sub>3</sub>O<sub>8</sub> from 108.6m*

**9.02m @ 619 ppm eU<sub>3</sub>O<sub>8</sub>** from 100.38m in LP00191\*  
*including 0.78m @ 1156ppm eU<sub>3</sub>O<sub>8</sub> from 101.14m and  
1.46m @ 2204ppm eU<sub>3</sub>O<sub>8</sub> from 102.58m*

*(using a 100ppm eU<sub>3</sub>O<sub>8</sub> cut off)*

The aircore drilling campaign at Theseus commenced on 1 August 2011 ("TOE": ASX release 4 August 2011) with drill centres located at an approximate 500m spacing, designed to initially test an area of 8km by 5km. This follows a one kilometre spaced reconnaissance aircore drilling program in 2009 that intersected anomalous uranium mineralisation at depths around 100m below surface ("TOE": ASX release 28 October 2009).

Nineteen of a planned 60 drillholes (LP00173 to LP00191) have been drilled and gamma logged so far to total depths ranging from 103m to 210m, passing through a basement interface at roughly 125m. Significantly, **twelve** of the nineteen holes drilled so far report uranium intersections with grades above 100ppm eU<sub>3</sub>O<sub>8</sub> and widths greater than 0.5m.

The prospect is part of the 100% Toro owned Lake Mackay Project that represents the flagship exploration asset for Toro, located 650 kilometres west of Alice Springs but inside the WA border. Access to the area was previously negotiated and a Native Title agreement reached reflecting a close working relationship with traditional owners and the Central Desert Native Title Services. Toro are first mover explorers for uranium in this area.

Toro is evaluating two mineralisation models being, a Kazakhstan style "tabular model" and a Beverley style "roll front model" both of which could be amenable to In Situ Recovery (ISR) mining methods. Toro is also developing the advanced Wiluna uranium project which is further west in WA and scheduled for first production from late in 2013, pending government approvals.

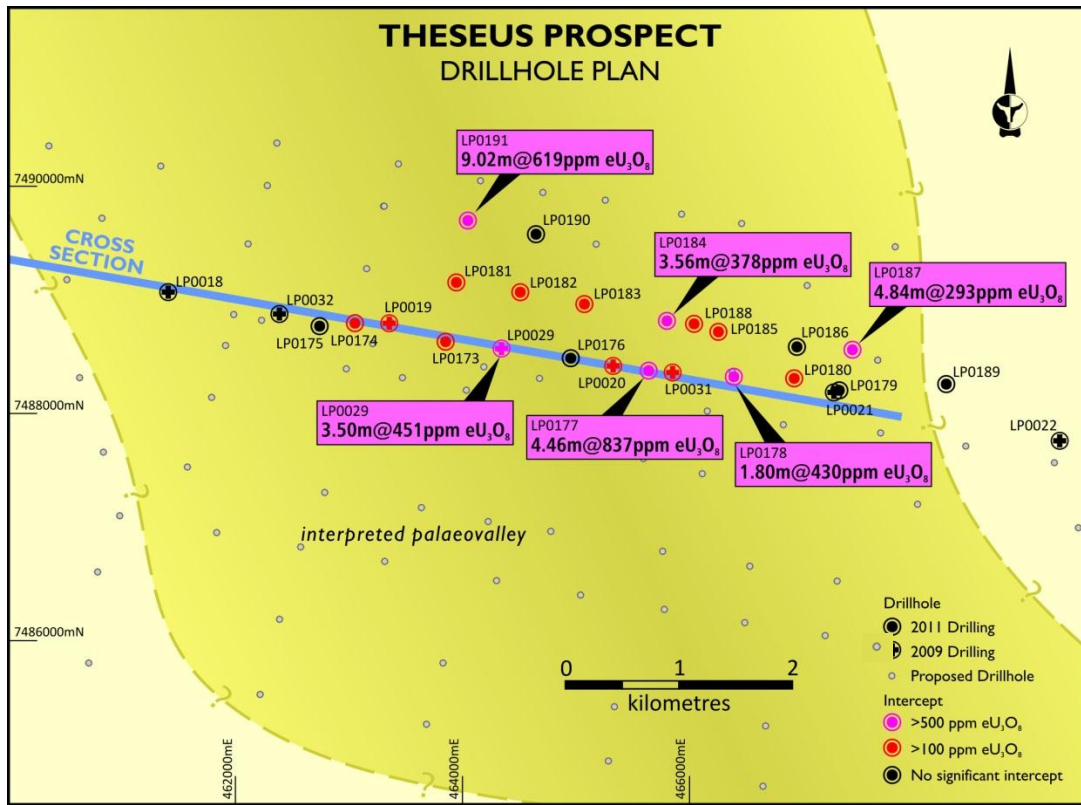


Figure 1: Drill hole location plan for the Theseus Prospect


The drillhole location map (Figure 1) shows the size of the prospect and the significant uranium intersections, while the composite cross-section (Figure 2) demonstrates the continuity of uranium mineralisation at depths of 100m below surface. It should also be noted that three of the aircore holes drilled terminated on a silcrete layer, failing to fully test the mineralised zone.

Geologically, the Theseus Prospect is situated within an interpreted northerly trending palaeovalley broadly defined by previous drilling. The mineralisation is considered open in all directions.



Uranium mineralisation is logged within an oxidised and reduced sand/clay sequence (see chip tray photograph), often associated with up to 3% pyrite, partially cementing some sand units.

The sequence of sands and clays with the potential to be uranium mineralised occur between 70m and 125m below surface. The highlighted zone between 87m and 103m from drillhole LP00177 averages 307ppm eU<sub>3</sub>O<sub>8</sub> in this example.

 = depicts potential mineralised zone

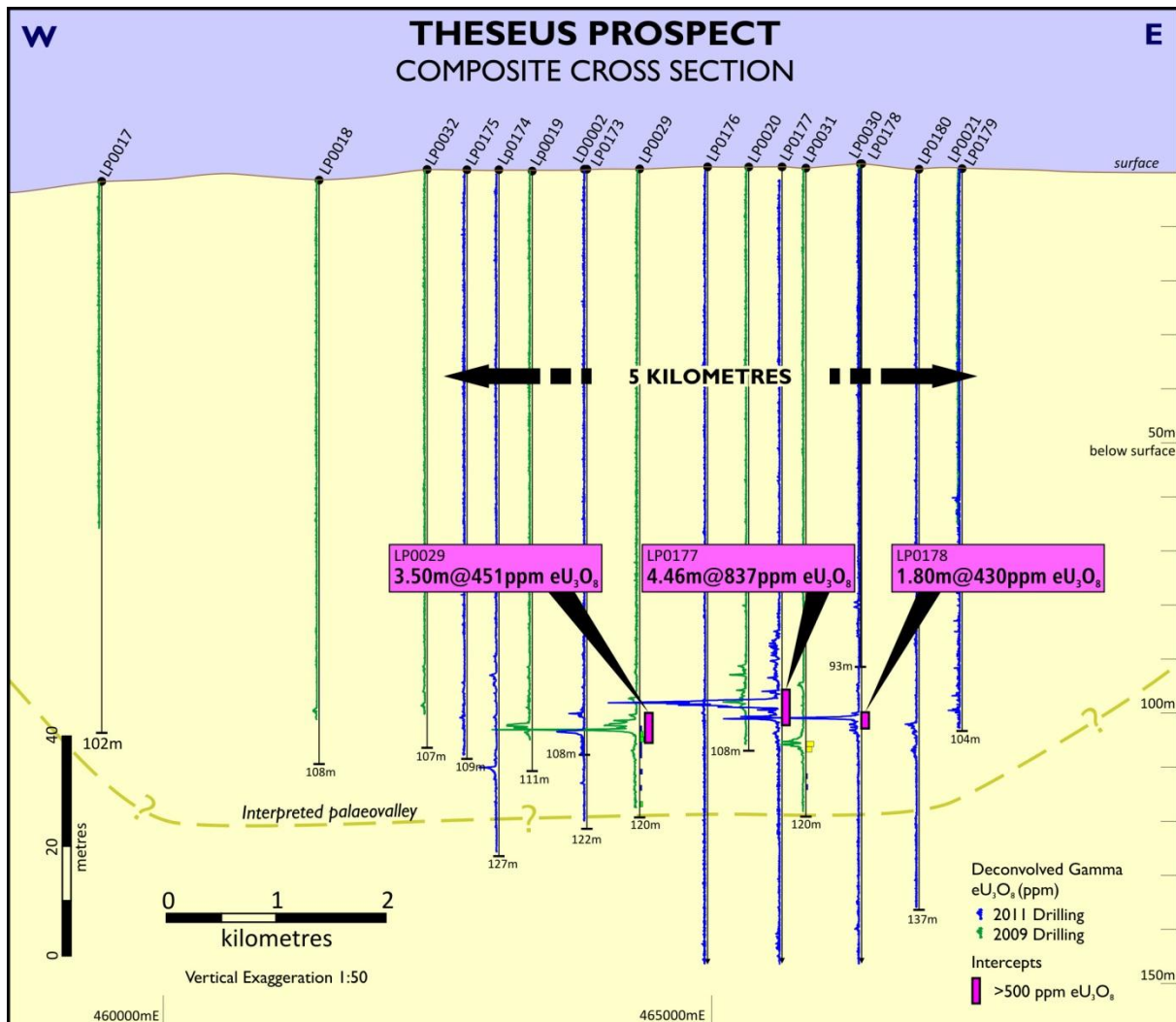


Figure 2: Composite cross section showing significant drill results

### Potential in-situ recovery

The lithological and mineralogical association at Theseus is very similar to the 4 Mile and Beverley uranium deposits in South Australia which are currently being developed or are in production. Both uranium deposits are amenable to In Situ Recovery (ISR) where slightly acidified water is pumped to depths of 150m through confined sand layers, extracting and transporting uranium to a surface processing plant. Similarities can also be drawn to operating ISR mines in the US and Kazakhstan where uranium mineralisation is mined by ISR techniques.

The geological environment and the consistency of the mineralised zones at Theseus, albeit at an early stage, continue to support the possibility of ISR extraction methods as a potential development scenario for Theseus although the development scenarios and economics remain undefined at this time.



*Figure 3: Photograph of aircore drill rig at work at the Theseus Prospect*

**Toro Managing Director, Mr Greg Hall:**

*“We are excited and encouraged by the size, extent and grade of uranium mineralisation so far intersected. The minimum extent of the system is now 5km x 1.5km in area and is open in all directions. Toro now intends to ramp up its drilling effort at the prospect.*

*Toro’s systematic approach to defining the location of the higher grade uranium mineralisation in Theseus is key to ensuring the system is well defined before more closely spaced drilling is used to define a resource prepared in accordance with the JORC code”.*

**Greg Hall**  
Managing Director

Information in this report is based on information compiled by Mr Mark McGeough, who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr McGeough is a full-time employee of Toro, and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr McGeough consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.

Information in this report relating to Deconvolved Gamma Results, is based on information compiled by Mr David Wilson BSc MSc who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Wilson is a full-time employee of 3D Exploration Ltd, a consultant to Toro and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Wilson consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.

\* Downhole gamma logging of drill holes provides a powerful tool for uranium companies to explore for and evaluate uranium deposits. Such a method measures the natural gamma rays emitted from material surrounding a drill hole. Gamma radiation is measured from a volume surrounding the drill hole that has a radius of approximately 35cm. The gamma probe is therefore capable of sampling a much larger volume than the geological samples recovered from any normal drill hole.

Gamma ray measurements are used to estimate uranium concentrations with the commonly accepted initial assumption being that the uranium is in (secular) equilibrium with its daughter products (or radio-nuclides) which are the principal gamma ray emitters. If uranium is not in equilibrium (viz. in disequilibrium), as a result of the redistribution (depletion or enhancement) of uranium and/or its daughter products, then the true uranium concentration in the holes logged using the gamma probe will be higher or lower than those reported in this announcement.

The logging programme was undertaken by Toro Energy Ltd utilising an Auslog Logging System. The gamma tools were calibrated in Adelaide at the Department of Water in calibration pits constructed under the supervision of CSIRO. Toro Energy carries out regular recalibration checks to validate the accuracy of gamma probe data.

The gamma ray data was converted from counts per second to eU308 using calibration factors obtained from measurements made at the calibration pits. The eU308 data was also adjusted by an attenuation factor, determined onsite, due to logging in drill rods. These factors also take into account differences in drill hole size and water content. The eU308 data has been filtered (deconvolved) to more closely reproduce the true grades and thicknesses where thin narrow zones are encountered.

The various calibration factors and deconvolution parameters were calculated by David Wilson BSc MSc MAusIMM from 3D Exploration Ltd based in Perth, Western Australia.

## **MEDIA CONTACT:**

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Toro Energy is a modern Australian uranium company with progressive project development, acquisition and growth. The company is based in Adelaide, South Australia with a project office in Perth, Western Australia.

Toro's flagship and wholly-owned Wiluna uranium project (includes existing mining lease) is 30 kilometres southeast of Wiluna in Central Western Australia.

Wiluna contains two shallow calcrete deposits, Lake Way and Centipede, with prefeasibility and optimisation studies completed and technical work leading to a definitive feasibility study underway. Toro has commenced the Approvals process targeting the Company's first uranium production late 2013.

Toro has three other exploration and development projects in Western Australia, and owns uranium assets in Northern Territory, South Australia and in Namibia, Africa. Toro is well funded with a supportive major shareholder in OZ Minerals.

[www.toroenergy.com.au](http://www.toroenergy.com.au)

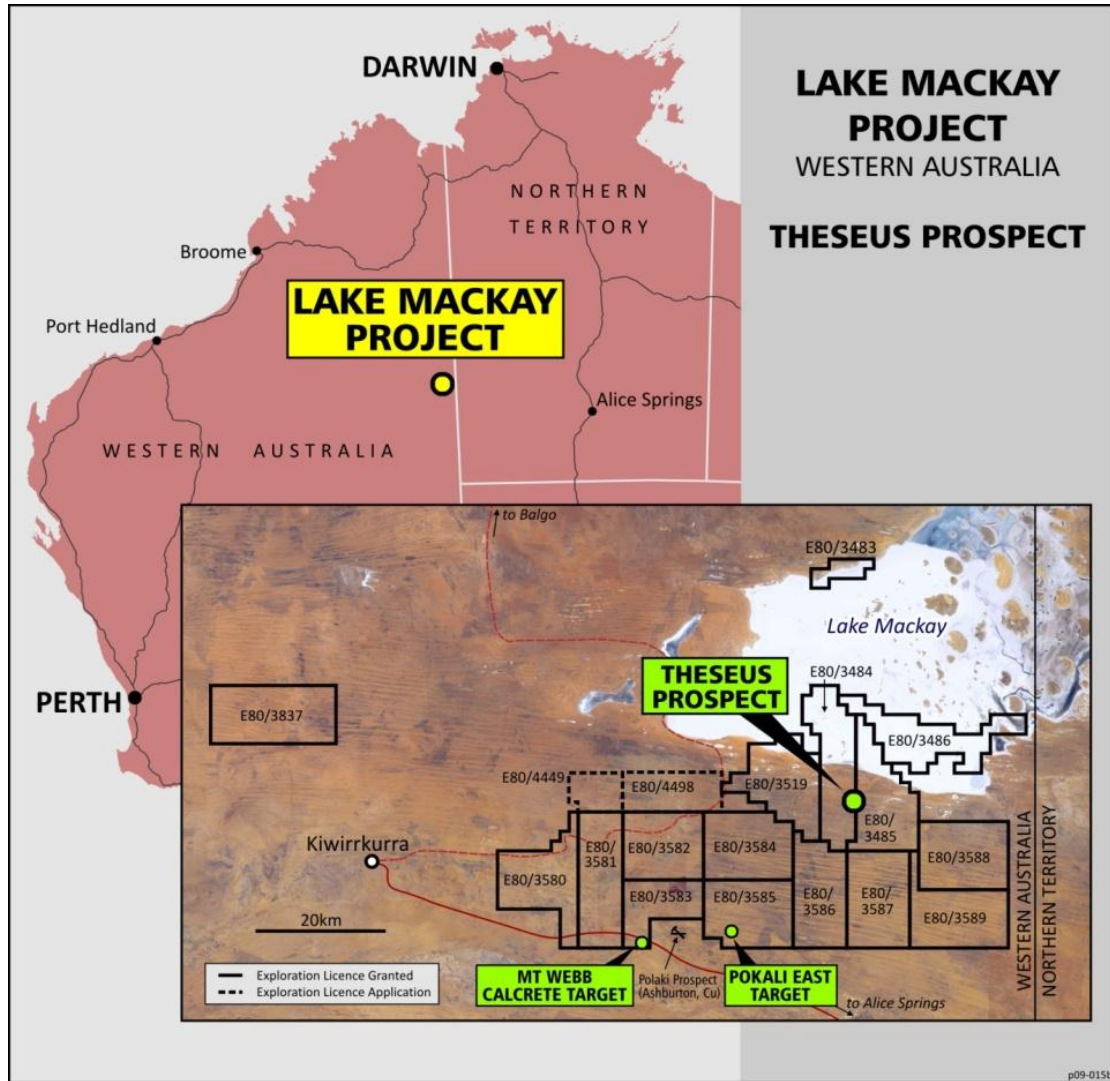


Figure 4: Location of the Theseus Prospect and Lake Mackay Project

Hole	East	North	Interval From (m)	Interval >100ppm eU3O8 (m)	>100ppm Grade eU3O8	Interval From (m)	Interval >500ppm eU3O8 (m)	>500ppm Grade eU3O8
LP00173	463847	7488636	100.56	0.76	<b>145</b>			
LP00173	463847	7488636	103.7	0.9	<b>337</b>	103.86	0.46	<b>499</b>
LP00174	463049	7488796	110.46	0.61	<b>190</b>			
LP00175	462743	7488770			No significant intersections			
LP00176	464956	7480489			No significant intersections			
LP00177	465638	7488378	87.31	3.14	<b>130</b>			
LP00177	465638	7488378	91.21	0.48	<b>153</b>			
LP00177	465638	7488378	92.57	0.6	<b>121</b>			
LP00177	465638	7488378	93.37	0.7	<b>104</b>			
LP00177	465638	7488378	94.27	0.6	<b>151</b>			
LP00177	465638	7488378	96.81	0.5	<b>196</b>			
LP00177	465638	7488378	98.11	4.46	<b>837</b>	98.47	1.54	<b>1909</b>
LP00177	465638	7488378	104.51	0.46	<b>116</b>			
LP00178	466382	7488356	102.08	1.8	<b>430</b>	102.32	0.42	<b>1286</b>
LP00179	467298	7488200			No significant intersections			
LP00180	466912	7488308	102.45	0.56	<b>142</b>			
LP00181	463946	7489154	104.04	0.68	<b>172</b>			
LP00182	464511	7489071	102.42	1.1	<b>221</b>			
LP00183	465074	7488961	109.72	1.32	<b>139</b>			
LP00184	465800	7488816	105.63	3.54	<b>378</b>	106.57	0.44	<b>1469</b>
LP00185	466257	7488720	101.86	0.72	<b>134</b>			
LP00186	467435	7488559			No significant intersections			
LP00187	467435	7488559	107.54	4.84	<b>293</b>	108.6	0.66	<b>1032</b>
LP00188	466040	7488789	74.87	1	<b>258</b>			
LP00188	466040	7488789	97.07	0.76	<b>116</b>			
LP00188	466040	7488789	99.51	0.68	<b>478</b>	99.87	0.24	<b>974</b>
LP00188	466040	7488789	106.39	0.9	<b>364</b>	106.51	0.22	<b>963</b>
LP00189	468262	7488262			No significant intersections			
LP00190	464653	7489583			No significant intersections			
LP00191	464050	7489698	100.38	9.02	<b>619</b>	101.14	0.78	<b>1156</b>
LP00191	464050	7489698	116.18	0.56	<b>138</b>	102.58	1.46	<b>2204</b>

*Table 1: uranium intersections using deconvolved data reporting greater than 100ppm eU<sub>3</sub>O<sub>8</sub>, compiled using a minimum interval width of 0.5m and max internal dilution of 0.2m*