

# Toro Energy Limited

# Wiluna Uranium Project

June 2010

*Toro Energy is an Australian resource company with a multi-project uranium portfolio and the aim of achieving sustainable medium-term production at its flagship Wiluna Uranium Project in Western Australia...*



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All amounts in A\$ unless stated otherwise.

## **Competent Persons Statements:**

The information in this report that relates to Mineral Resources is based on information compiled by Mr Daniel Guibal who is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Guibal is a fulltime employee of SRK Consulting 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 Persons as defined in the 2004 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Mr Guibal 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 presentation relating to exploration results of the Napperby Project and Lake Mackay is based on information compiled by Dr David Rawlings BSc (Hons) who is a Member of the Australasian Institute of Mining and Metallurgy. Dr Rawlings is a full-time employee of the Company.

Dr Rawlings has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which 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’. Dr Rawlings consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.

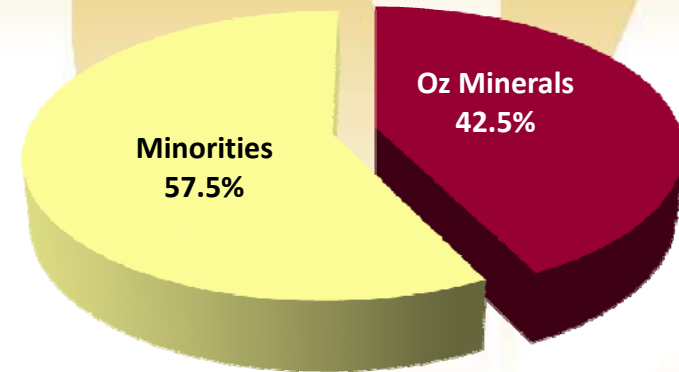


# Corporate Snapshot

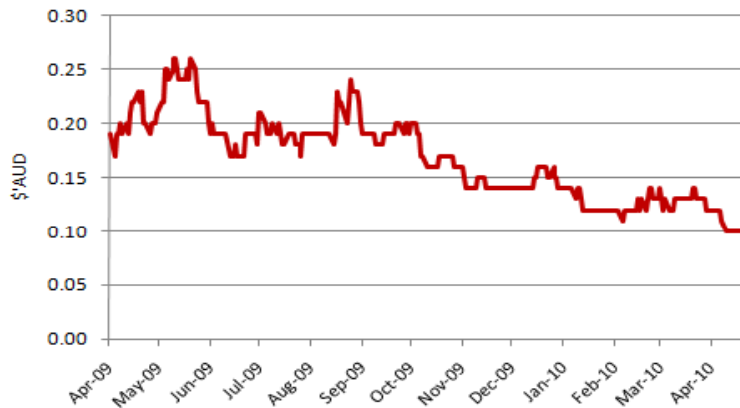
## Capital structure

Exchanges	ASX: TOE
Share Price (June 2010)	A\$0.08
Options (unlisted)	21.69m
Shares	964.95m
<b>Fully Diluted Market Cap</b>	<b>A\$77.2m</b>
Cash (at March 31 2010)	A\$59.2m
Debt	Nil
<b>Enterprise Value</b>	<b>A\$18.0m</b>
12 Month High / Low	A\$0.26 / \$0.08

## Shareholder profile



## 12 Month Share Price Graph

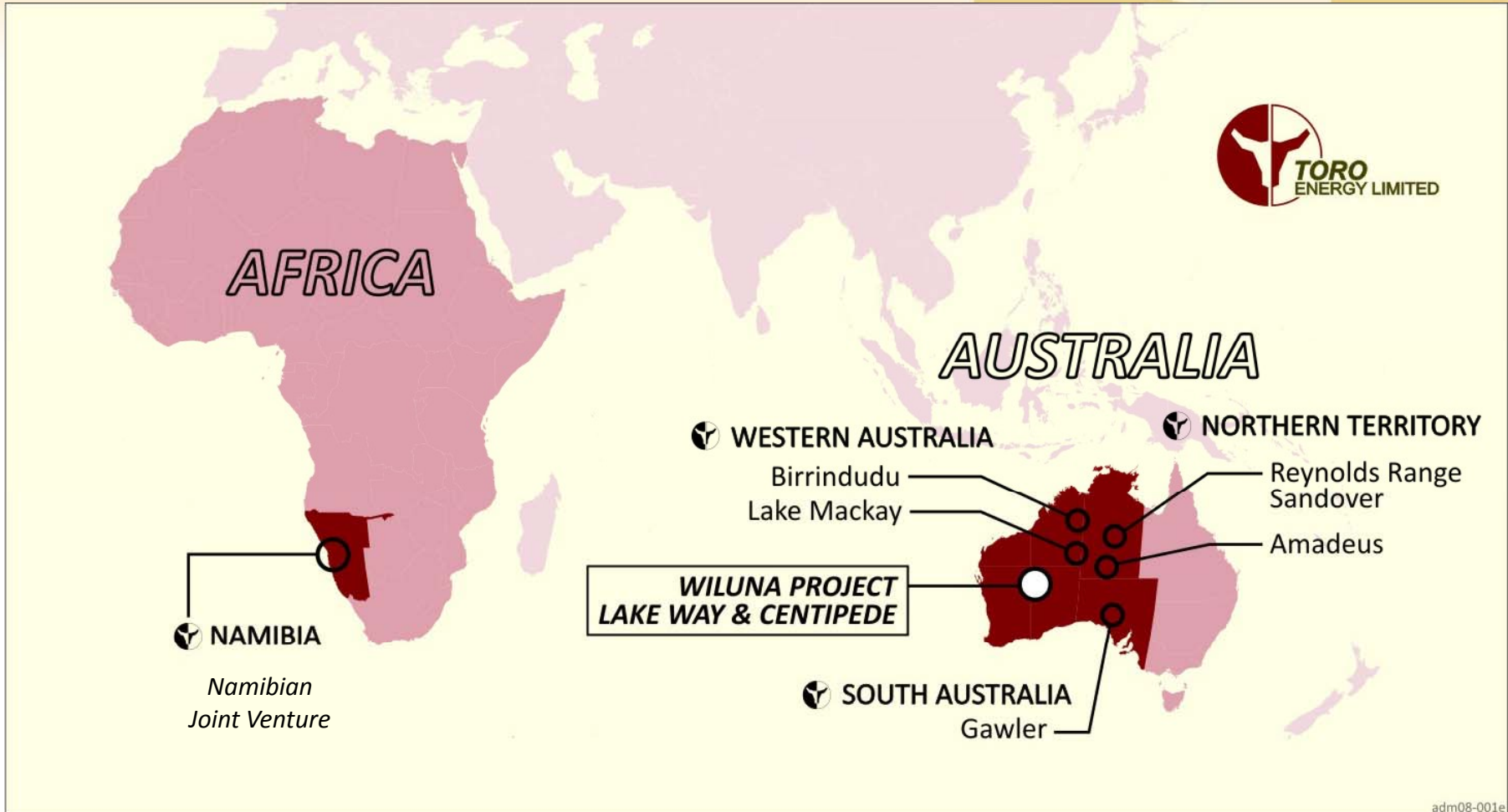


## Brief Corporate History

- Listed on ASX March 2006
- Entered into Option Agreement on Napperby early 2007
- Completed merger with Nova Energy late 2007
- Completed Wiluna PFS in 2008
- Rights Issue late 2008
- Completed Wiluna Optimisation September 2009
- Share placement to OZL and Institutions in Sept/Oct 2009
- Share Purchase Plan Oct/Nov 2009

**Toro's strategy is to become a significant sustainable uranium producer.**

# Key Assets





# Toro Energy Strategy

**Toro's strategy encompasses both qualitative and quantitative targets**

**“To become a significant sustainable uranium mining company focusing on developing a top tier exploration and production profile in the global uranium mining sector.”**

## **“Significant”**

- **production of greater than 2.2mlb (1,000t) U<sub>3</sub>O<sub>8</sub> pa by 2015**
- **production of greater than 5.5mlb (2,500t) U<sub>3</sub>O<sub>8</sub> pa by 2020**

## **“Sustainable”**

- **a JORC Resource greater than 100mlb (45,000t) U<sub>3</sub>O<sub>8</sub> by 2011**
- **a JORC Resource greater than 220mlb (100,000t) U<sub>3</sub>O<sub>8</sub> by 2015**

*Note: quantitative targets are aspirations for the company and do not constitute specific projections*



# Uranium Market



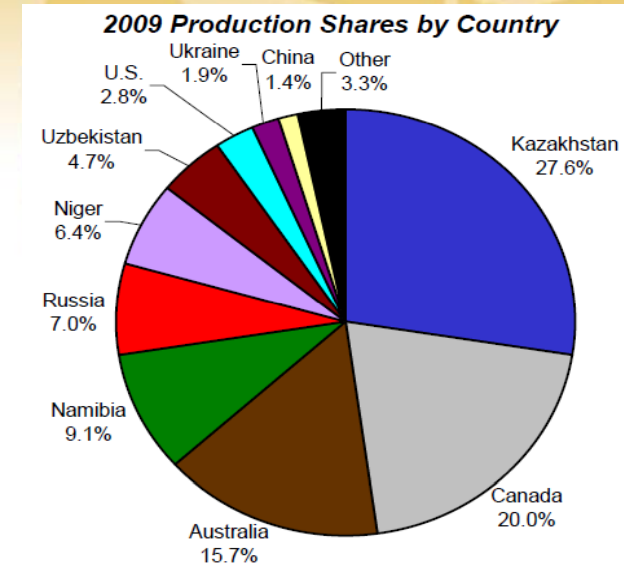
# Uranium Market

## Demand

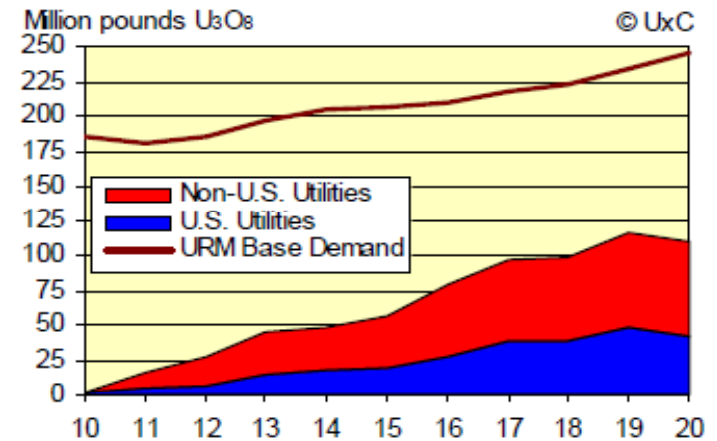
- Ongoing long term contracting by utilities
- New power station construction still increasing (57)
- New reactors in Western countries now being planned and supported
- Short term softer demand – discretionary
- Uncertainty over China’s future purchasing methodology

## Supply

- Kazakhstan now largest global producer – ARMZ also exerting control
- Locking up of future potential production sources by utilities and majors
- New projects and discoveries – time to development – reality creeping into costs – need for supportive pricing



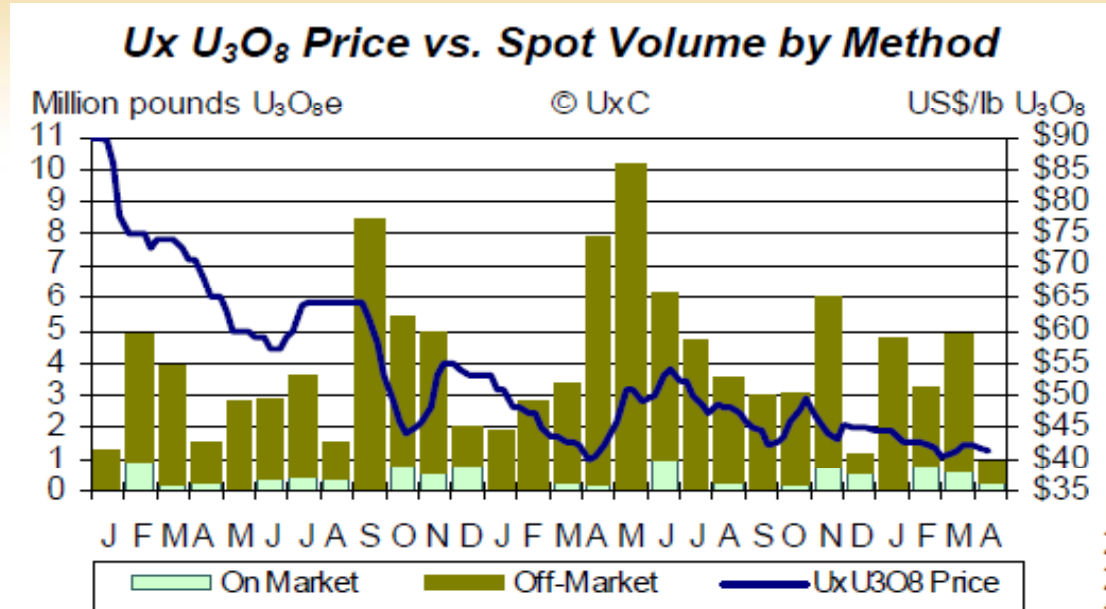
**Figure E-5. Uncovered Requirements**



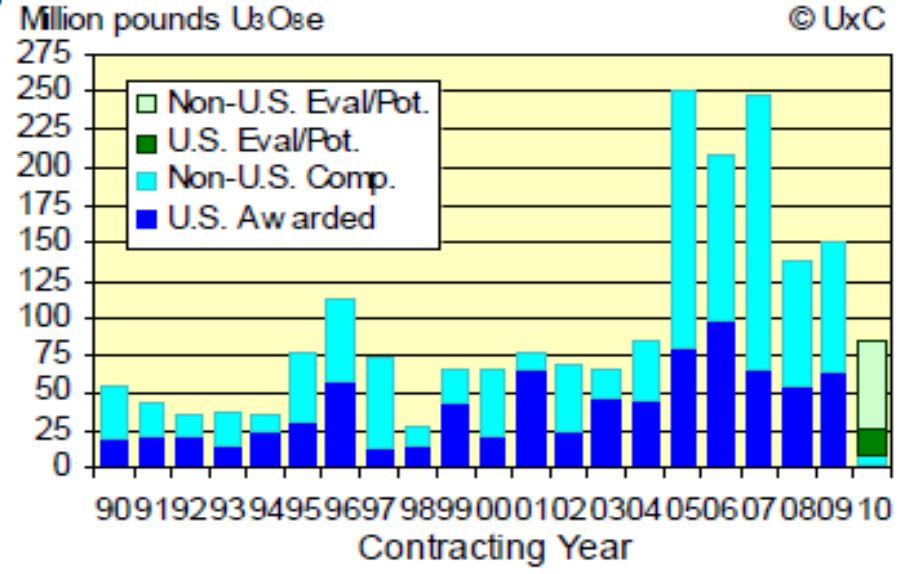
**Source: Ux Consulting**



# Uranium Market



**Figure E-3. Utility LTC Volume**



Source: Ux Consulting





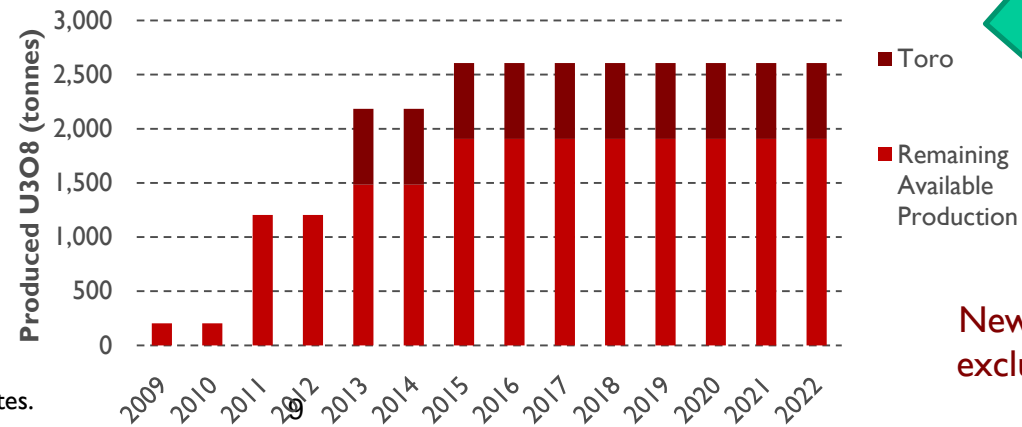
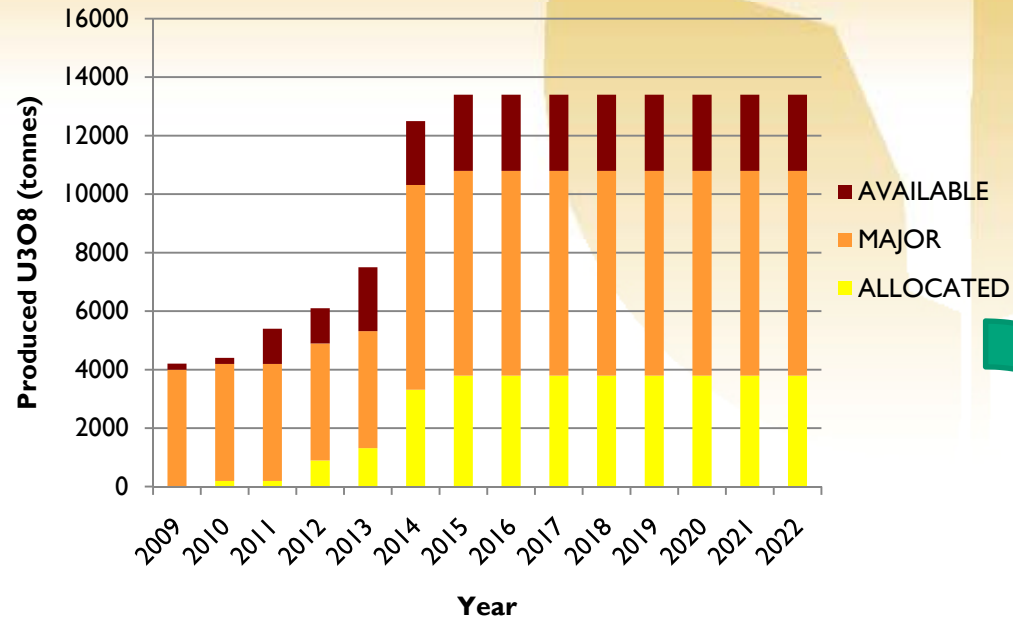
# Australia : New Production

Perhaps something poorly appreciated by the offshore utilities is the relatively small amount of uranium resource that is available.

Most material is either fully committed or in the hands of the major companies.

Toro holds a significant portion of this 'available' production.

### Available New Production Per Year



New production excluding Majors

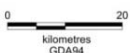
Source: Public announcements and Toro estimates.



# **Wiluna Uranium Project Western Australia**



# Wiluna Uranium Project



## WILUNA URANIUM PROJECT REGIONAL LOCATION

Scale 1:750,000 (A4) Date: 12/10/09 Author: M.M.  
Plan Ref: p09-027-3 Rev: Drawn: J.F.



## WILUNA PROJECT PROJECT LOCATION

Scale 1:200,000 (A4) Date: 6/3/09 Author: J.T.  
Plan Ref: p09-005-1 Rev: A 7/4/09 Drawn: J.F.



# Wiluna Uranium Project

## Project Overview

- **Mining** - Calcrete / sand / clay hosted carnotite mineralisation – shallow (~10m deep) open pit strip type mining – progressive rehabilitation – hyper-saline groundwater
- **Processing** – two options being considered:
  - Alkaline heap leach with direct precipitation
  - Agitated (tank) leach with direct precipitation
- **Production** is approximately 1,200t UOC (1,000 tpa  $U_3O_8$  equivalent)
- **Transport** – road/rail shipment with export via ports of Port Adelaide and/or Darwin
- **Waste Material and Tailings** – either run-of-mine material washed and returned to pit (heap leach) or tailings storage beside and within mined out pits and covered (agitated leach)
- **Estimated disturbance footprint** is approximately 1,200 ha
- **Water use** – up to 2.5 GLpa



# Wiluna Uranium Project

**Total 25m lbs U<sub>3</sub>O<sub>8</sub> [20.2mt @ 548ppm]#**

## Lake Way

- 12.6Mlb U<sub>3</sub>O<sub>8</sub> resource#
  - 10.5Mt @ 543ppm
- near surface calcrete-style deposit

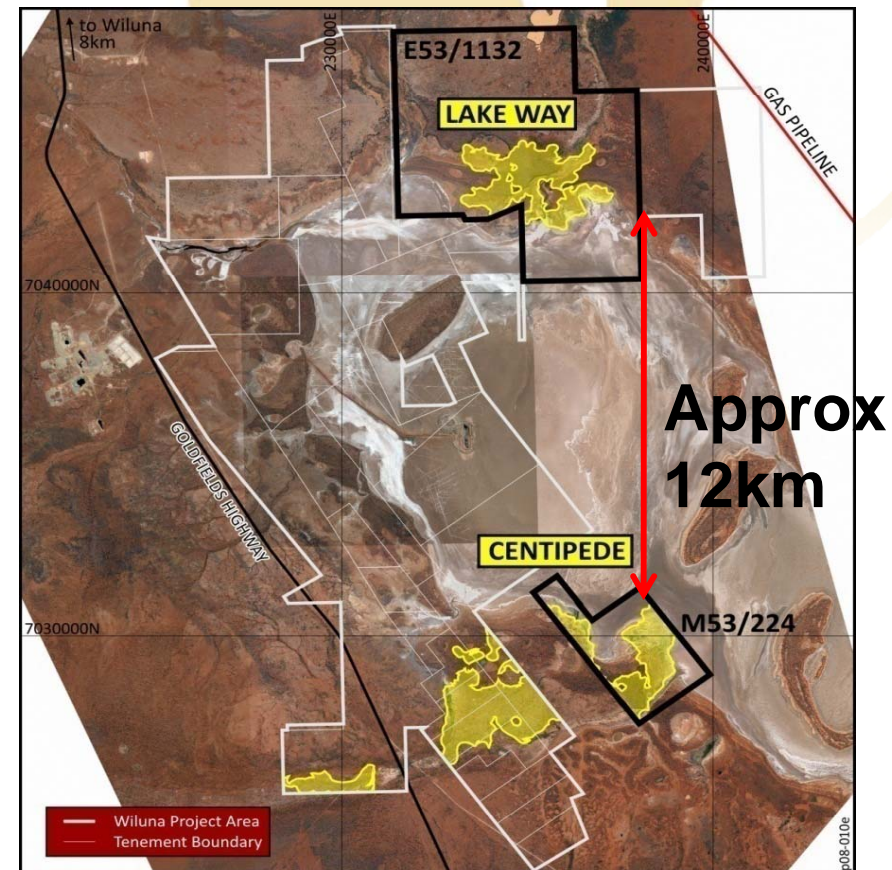
## Centipede

- 11.8Mlb U<sub>3</sub>O<sub>8</sub> resource#
  - 9.7Mt @ 554ppm
- 90% of currently defined resource now in **Indicated** category#

## Mineralisation type

- Calcrete / clay hosted carnotite
- Within delta, generally below water table
- Resource estimate using uniform conditioning at 200ppm cut off
- Lake Way all assay data
- Centipede mainly gamma data

**100% Toro owned project**



# Refer Competent Persons Statements on Page 2 and category of resources on Page 14



# Upgraded Resource

**...31% increase in TOTAL resource grade**

**...with slight increase in contained metal**

As at June 2009	Category	Resource	Grade*		Contained U3O8#	
		Mt	ppm	% U3O8	tonnes	Mlbs
<b>Centipede</b>	Measured	0.3	588	0.059	176	0.4
	Indicated	7.7	619	0.062	4,754	10.5
	Inferred	1.7	251	0.025	424	0.9
	<b>TOTAL</b>	<b>9.7</b>	<b>554</b>	<b>0.055</b>	<b>5,355</b>	<b>11.8</b>
<b>Lake Way</b>	Inferred	10.5	543	0.054	5,718	12.6
	<b>TOTAL</b>	<b>10.5</b>	<b>543</b>	<b>0.054</b>	<b>5,718</b>	<b>12.6</b>
<b>TOTAL WILUNA PROJECT</b>		<b>20.2</b>	<b>548</b>	<b>0.055</b>	<b>11,072</b>	<b>24.4</b>

\*200ppm cut-off

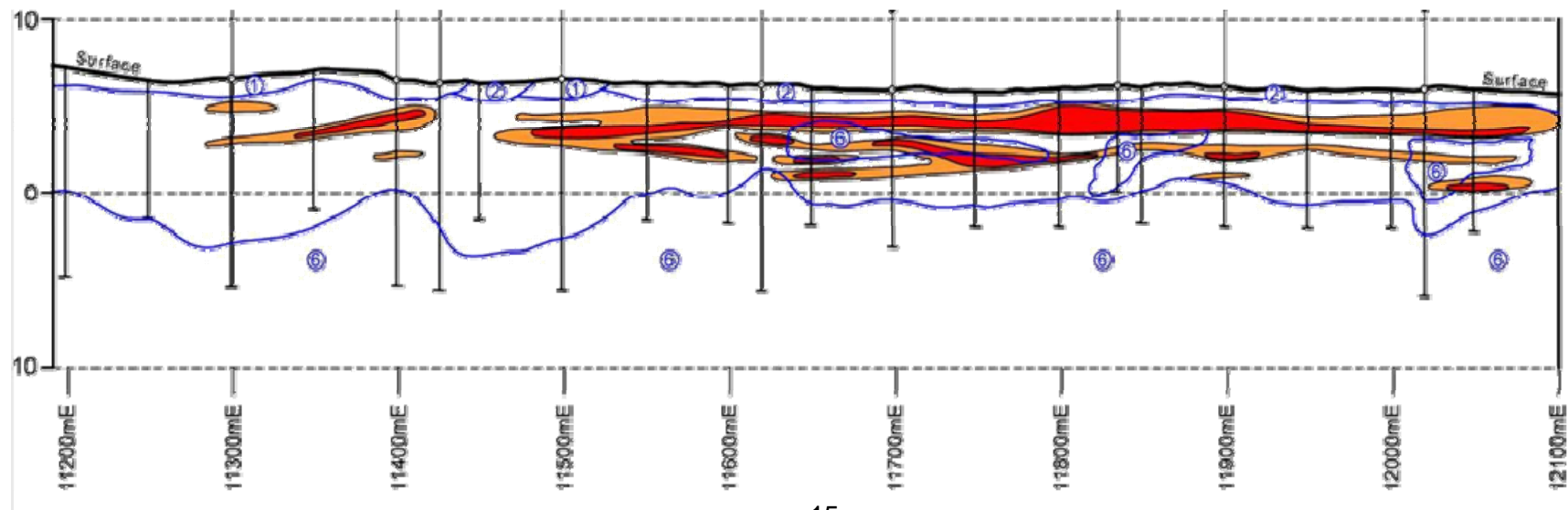
# Refer Competent Persons Statements, Page 2

**...grade increase significantly improves project economics**

# Wiluna Uranium Project

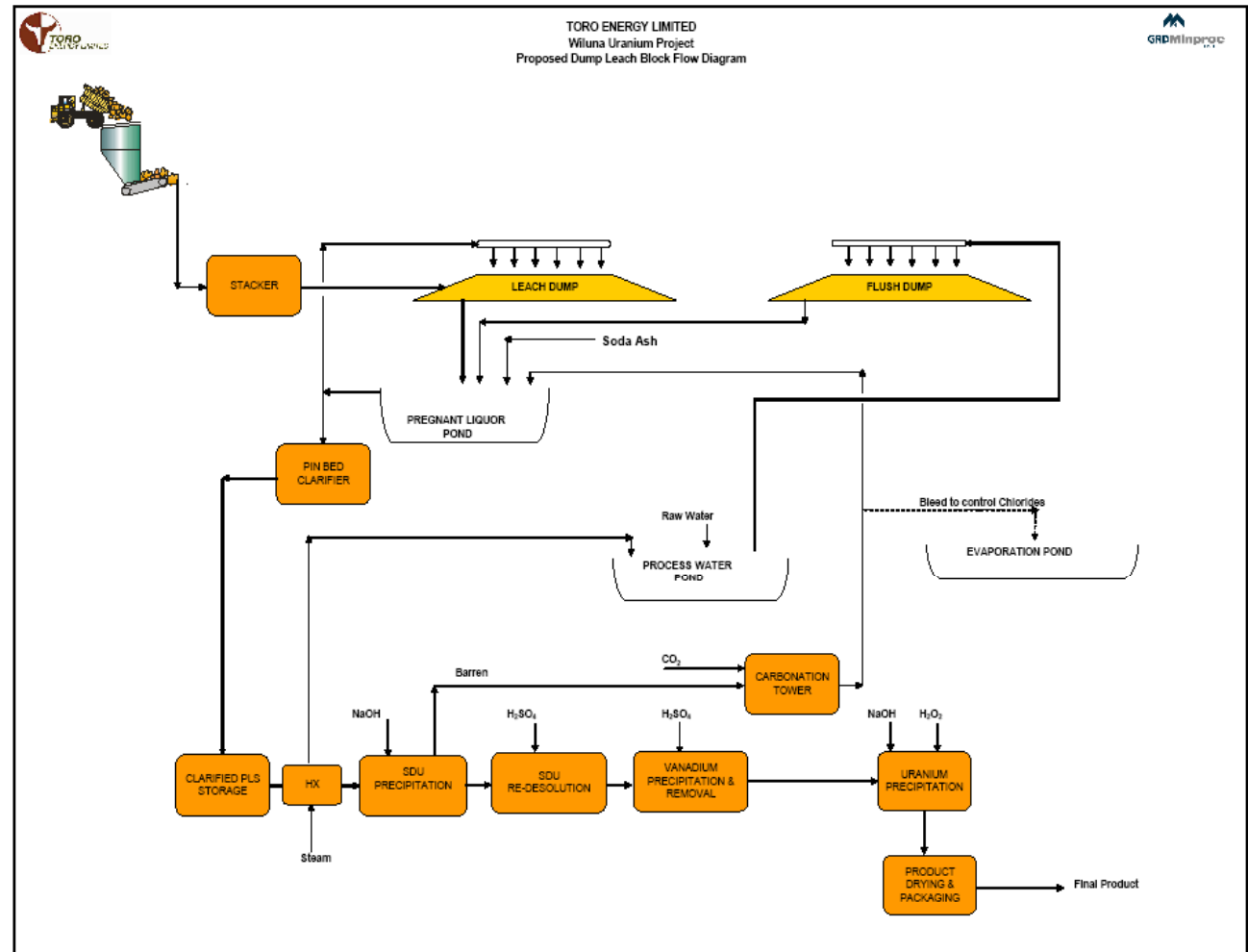
## Mining

- Selective mining up to 2.0 Mtpa ore
- Intensive grade control
- Strip ratio approx 3.8 : 1
- Progressive rehabilitation
- Ore is within shallow hypersaline water table



## Processing – Option I Alkaline heap leach

- On / off pads at a central location
- Direct precipitation from pregnant liquor
- Processing ~1.6Mtpa
- Average head grade 653ppm  $U_3O_8$
- Recovery 70%
- Production 700tpa  $U_3O_8$  equivalent
- Make up water 700MLpa
- Installed power capacity ~5MW
- Spent heaps washed and returned to the mine void
- Project life up to 14 years

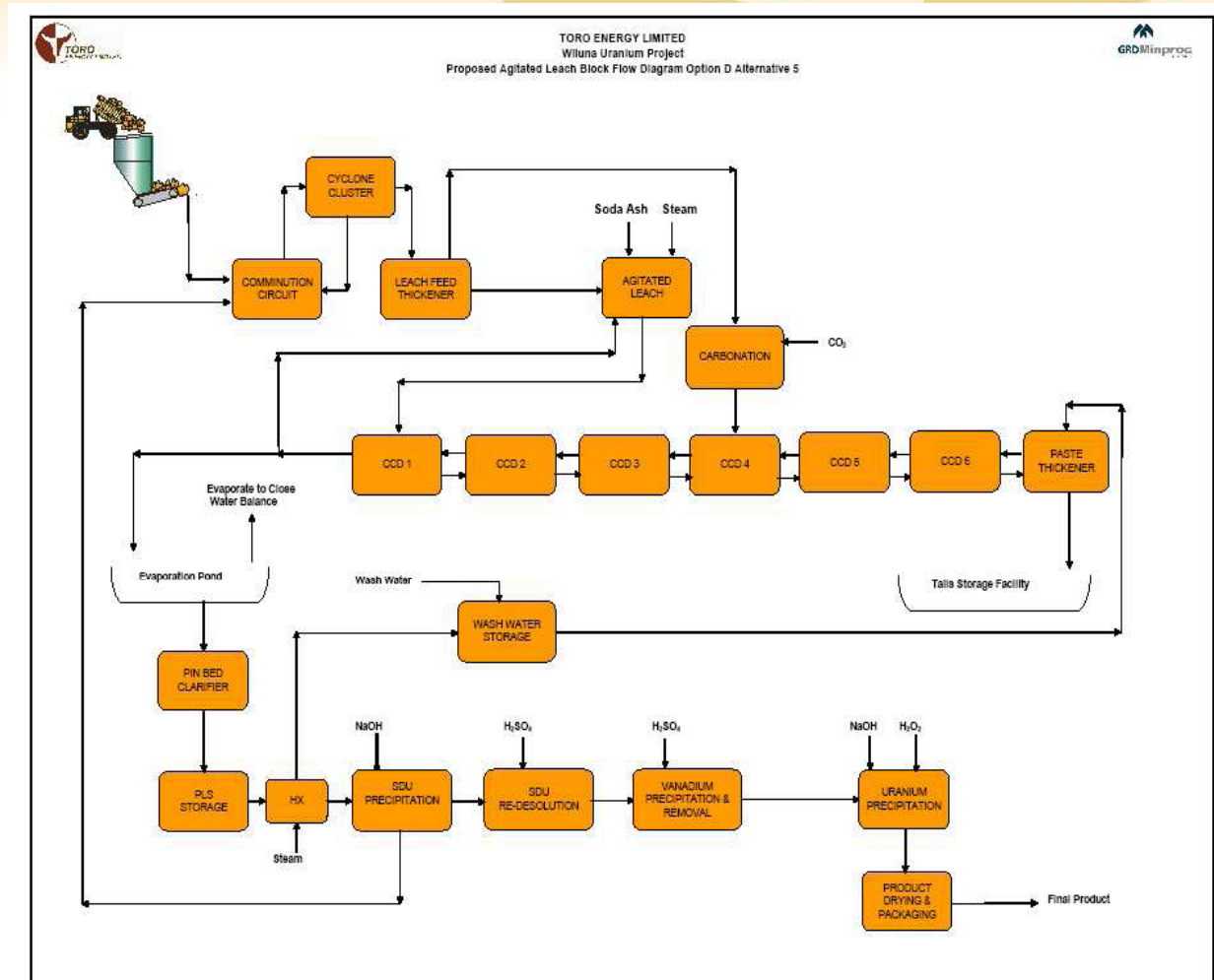




## Processing – Option 2

### Alkaline agitated leach

- Direct precipitation of uranium from pregnant liquor
- Processing 1.3 to 2.0Mtpa
- Average head grade 668ppm  $U_3O_8$
- Recovery 86%
- Production 700 to 1,000tpa  $U_3O_8$  equivalent
- Leaching at elevated temperature ( $<100^{\circ}C$ )
- Make up water 2,500MLpa
- Installed power capacity ~12 MW
- Project life up to 14 years





# Wiluna Uranium Project

## Product Transport

- One to two 60t road trains a month (800t – 1,200t UOC per annum)
- Specialised transport, spill kits, secure stop overs
- Highly regulated by the Commonwealth Government (ASNO)
- Containerisation and transport in place for many years in NT and SA
- Requires container port, Class 7 ships
- Potential export ports Darwin or Port Adelaide
- Darwin, Port Adelaide have existing secure facilities
- Collaboration with other WA producers on logistics solution





# Wiluna Uranium Project



## Previous Environmental Work

- Environmental baseline
- Radiological baseline
- Weather station since 2007
- Heritage surveys (2006, 2007 & 2009)
- Resource drilling
- Metallurgical testing
- Tailings characterisation
- Ground water testing
- Market monitoring
- Prefeasibility and Optimisation Studies

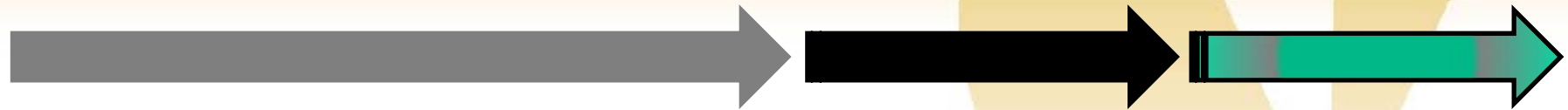
## Current Environmental Work

- Air quality modelling
- Green house gas emissions
- Meteorological data collection
- Environmental baseline
  - Subterranean fauna, Fauna & Short Range Endemics, Flora & Vegetation, Soils
- Aerial Surveys
  - Radiological baseline, Aerial photographic record, Lidar survey – 0.2m contours
- Water
  - Hydrology, Hydrogeology, Water management
- Materials characterisation
  - Minerals characterisation, Chemical modelling /laboratory testing
- Radiation Management, Rehabilitation and Closure,
- ERMP, EPBC submissions



# Wiluna Uranium Project

2006	2007	2008	2009	2010	2011	2012	2013
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## Previous Indigenous Relations Work

- Wiluna and Tarlpa claimant groups
- Consultation directly with groups and through Central Desert Native Title Services (CDNTS) as representative body
- Protocols established for heritage survey work to clear exploration drilling areas
- Toro has proposed to CDNTS process for negotiating mining agreement

## Current Indigenous Relations Work

- Toro providing information on radiation and environmental management including funding of independent advice and visits to uranium operations by claimant group representatives
- Development of Heritage Management Plan including cultural mapping of entire project site
- Development of training and employment program initially with trial pit and environmental studies
- Negotiate mining agreement



# Wiluna Project Milestones

- **Wiluna Resource Upgrade**
- **Wiluna Optimisation Study**
- **Trial pit approved by WA Govt**
- **Mining proposal submitted to WA Govt for heap leach trial**
- **Full Project Approvals** - now underway – level of assessment at ERMP
- **Bankable Feasibility Study** – under preparation – management in place
- **Financing** – BFS & Approvals funded – Options under review for construction



***...advancing toward a project development decision***



# Wiluna Uranium Project

## Project Timetable

	2009				2010				2011				2012				2013			
Optimisation	█	█	✓																	
Project referral	█	█	█	✓																
Environmental Impact Assessment				█	█	█	█	█	█	█	█	█								
Metallurgical Trials			█	█	█	█	█	█												
Decision to Proceed with BFS				🚀																
Bankable Feasibility Study ("BFS")				█	█	█	█	█	█	█										
Indigenous Engagement	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█	█
Native Title Agreement			█	█	█	█	█	█												
Off-take Agreements					█	█	█	█	█	█										
Decision to Proceed with Construct												🚀								
Design and Construct									█	█	█	█	█	█	█	█				
Commissioning & Production																	█	█	█	█

✓ Completed

**Target for first production - 2013**

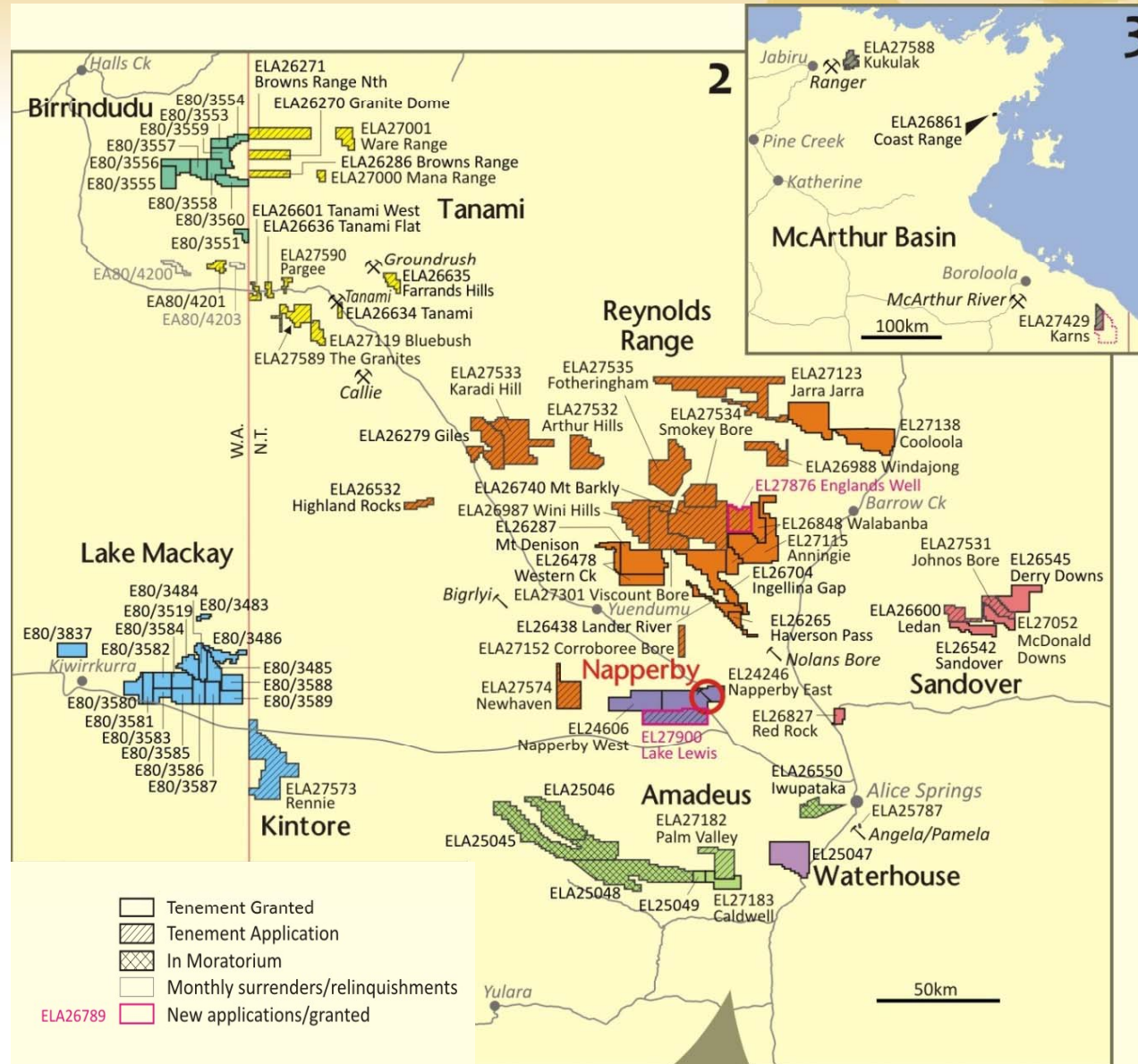


## **Project Pipeline & Exploration**

- **A\$4.5m in 2010 on NT and WA projects**
- **Namibian projects farm in**
- **Project and consolidation opportunities**

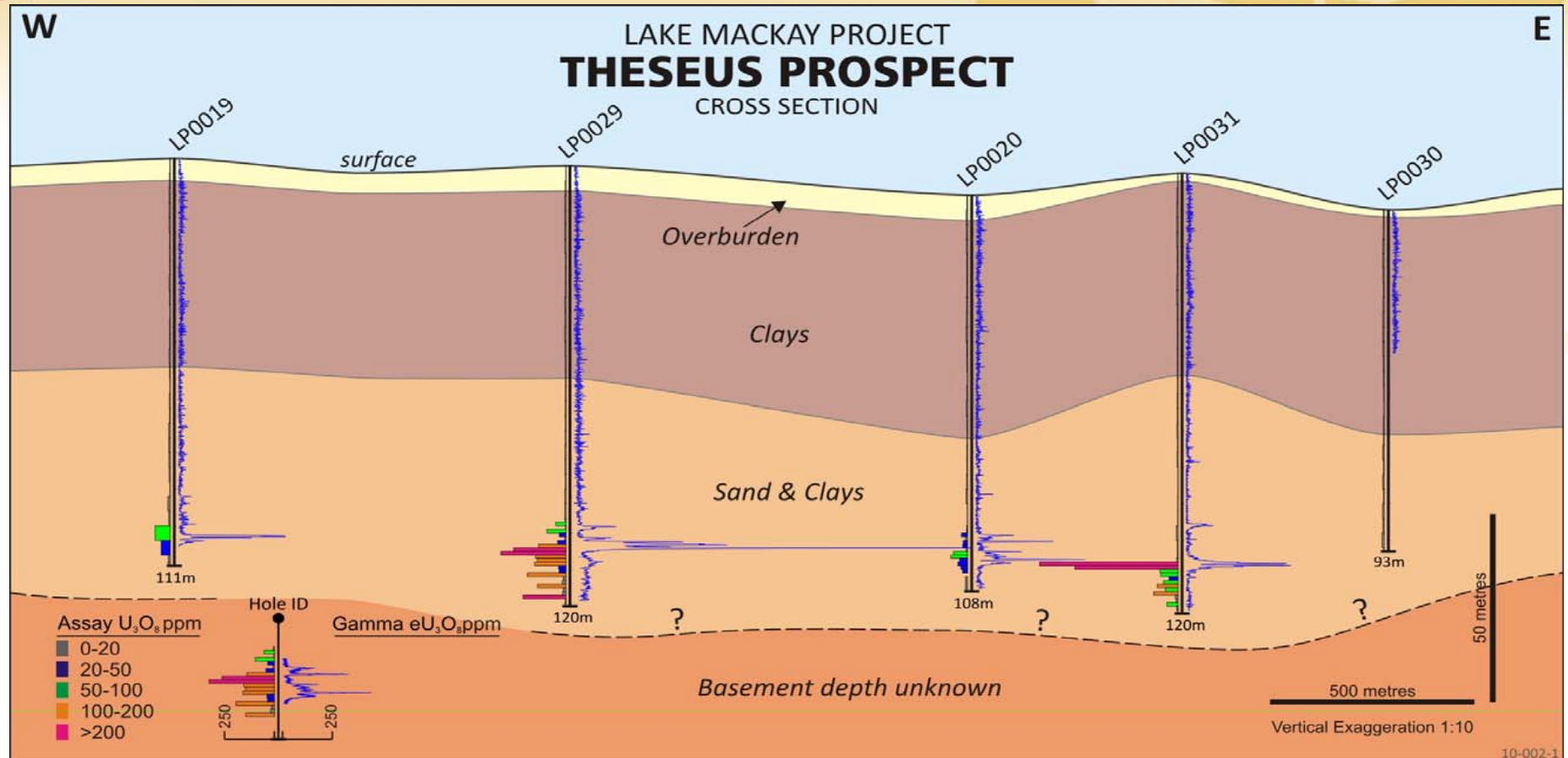


# Central Australia Exploration Tenement Snapshot





# Lake Mackay Project (WA)



## Uranium in Tertiary reduced sands and clays

- Hole LP0029 - 6m @ 216ppm U<sub>3</sub>O<sub>8</sub> (assays) OR 4.5m @ 365ppm U<sub>3</sub>O<sub>8</sub> (gamma)#
- Hole LP0031 - 2m @ 646ppm U<sub>3</sub>O<sub>8</sub> (assays) OR 3m @ 175ppm U<sub>3</sub>O<sub>8</sub> (gamma)#

# Refer to the Toro ASX release "Uranium Discovery at Lake Mackay" dated 28/10/2009 for complete list of drill hole results

# Namibia

## Namibia Uranium Prospect

NAMIBIA [TOE: currently 90%]

### Plans

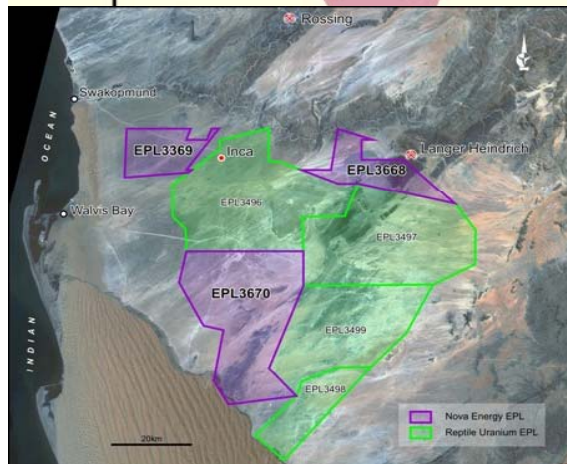
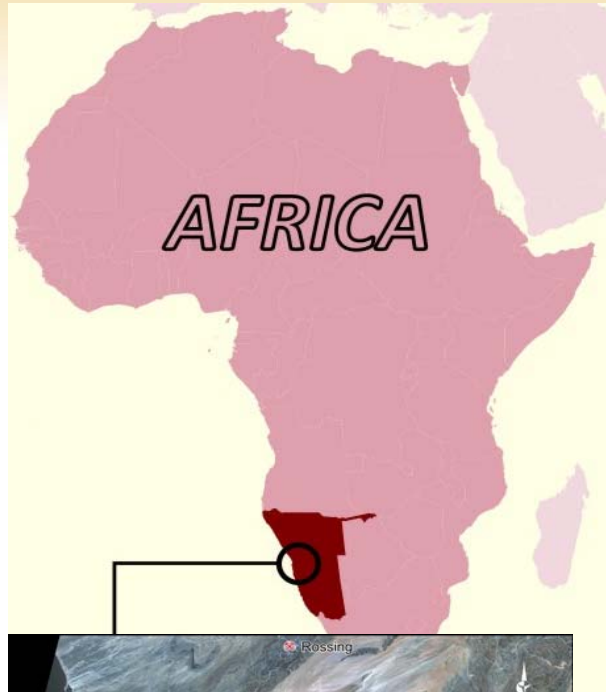
- Toro in JV with **Deep Yellow** (DYL to earn 65%)
- Covers three EPLs
- Total acreage: 1326km<sup>2</sup>
- Toro to retain 25% interest
- Namibian BEE Company 10%\*

### Targets

- Palaeochannel calcrete; Rössing-style bedrock
- Possible extensions of Langer Heinrich palaeo-valley

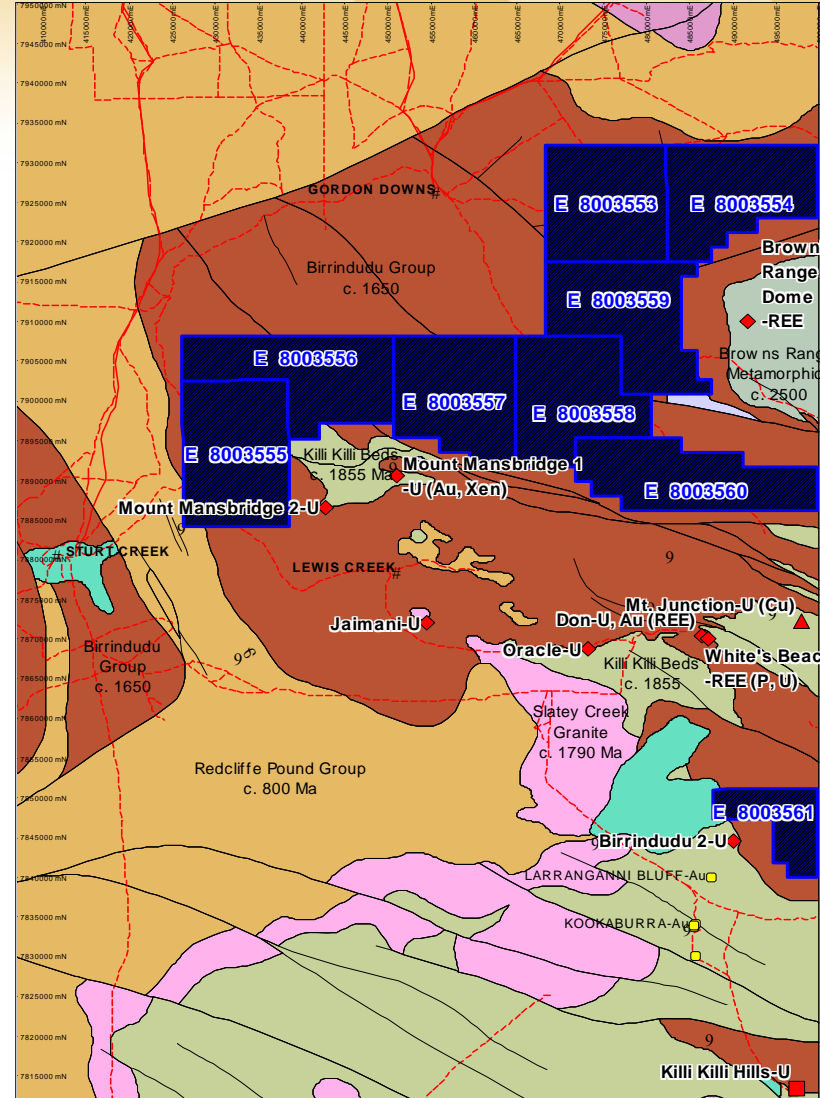
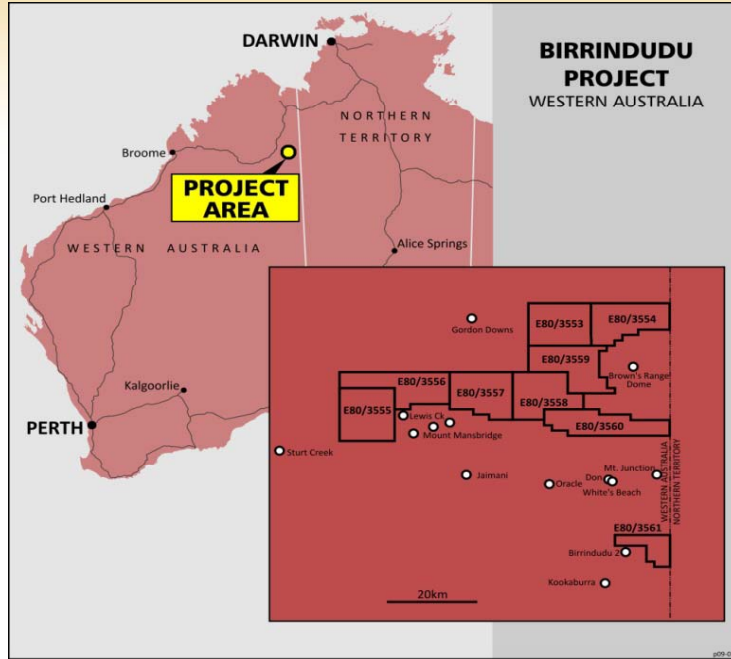
### Budget

- A\$3.5 million spend over 2.5 years





# Birrindudu JV with Cameco (NT)



- Over \$1m of airborne geophysics completed by Cameco
- Multiple unconformity uranium targets
- Toro \$1m farm-in for 51%



# Outlook

- Wiluna Uranium Project
  - Approvals, Bankable Feasibility Study, Indigenous engagement, product marketing underway
  
- Exploration initiatives
  - Lake Mackay – new uranium discovery in greenfields project
  - Namibia – leveraging on-ground expertise through Deep Yellow
  - Birrindudu – new uranium exploration province
  
- Continuing evaluation of corporate and project opportunities
  
- Long term uranium demand fundamentals remain strong, driven by:
  - improved utilisation / operational life extensions / construction pipeline
  - delayed supply / new production / current soft pricing



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