



Napperby Uranium Project Update on Project Evaluation AusIMM Uranium Conference

D. Kenny, R. Lal, T. Hilder

June 2009





Disclaimer

This presentation has been prepared by Toro Energy Limited (“Toro”). The information contained in this presentation is a professional opinion only and is given in good faith.

Certain information in this document has been derived from third parties and though Toro has no reason to believe that it is not accurate, reliable or complete, it has not been independently audited or verified by Toro.

Any forward-looking statements included in this document involve subjective judgement and analysis and are subject to uncertainties, risks and contingencies, many of which are outside the control of, and maybe unknown to, Toro. In particular, they speak only as of the date of this document, they assume the success of Toro’s strategies, and they are subject to significant regulatory, business, competitive and economic uncertainties and risks. Actual future events may vary materially from the forward looking statements and the assumptions on which the forward looking statements are based. Recipients of this document (“Recipients”) are cautioned to not place undue reliance on such forward-looking statements.

Toro makes no representation or warranty as to the accuracy, reliability or completeness of information in this document and does not take responsibility for updating any information or correcting any error or omission which may become apparent after this document has been issued.

To the extent permitted by law, Toro and its officers, employees, related bodies corporate and agents (“Agents”) disclaim all liability, direct, indirect or consequential (and whether or not arising out of the negligence, default or lack of care of Toro and/or any of its Agents) for any loss or damage suffered by a Recipient or other persons arising out of, or in connection with, any use or reliance on this presentation or information.

All amounts in A\$ unless stated otherwise.



Napperby Uranium Project Evaluation Update

- ❑ Toro Energy
- ❑ Napperby Uranium Project
 - ❑ Location
 - ❑ Ownership
 - ❑ History
 - ❑ Geology
 - ❑ Resource
 - ❑ Metallurgical Testing
 - ❑ Scoping Study





Toro Energy

- **Two Australian uranium projects targeting initial production by 2012/13**
 - ✓ **Wiluna (WA) – Pre-feasibility completed, current optimisation study**
 - ✓ **Napperby (NT) – Resource drilling completed, current scoping study**

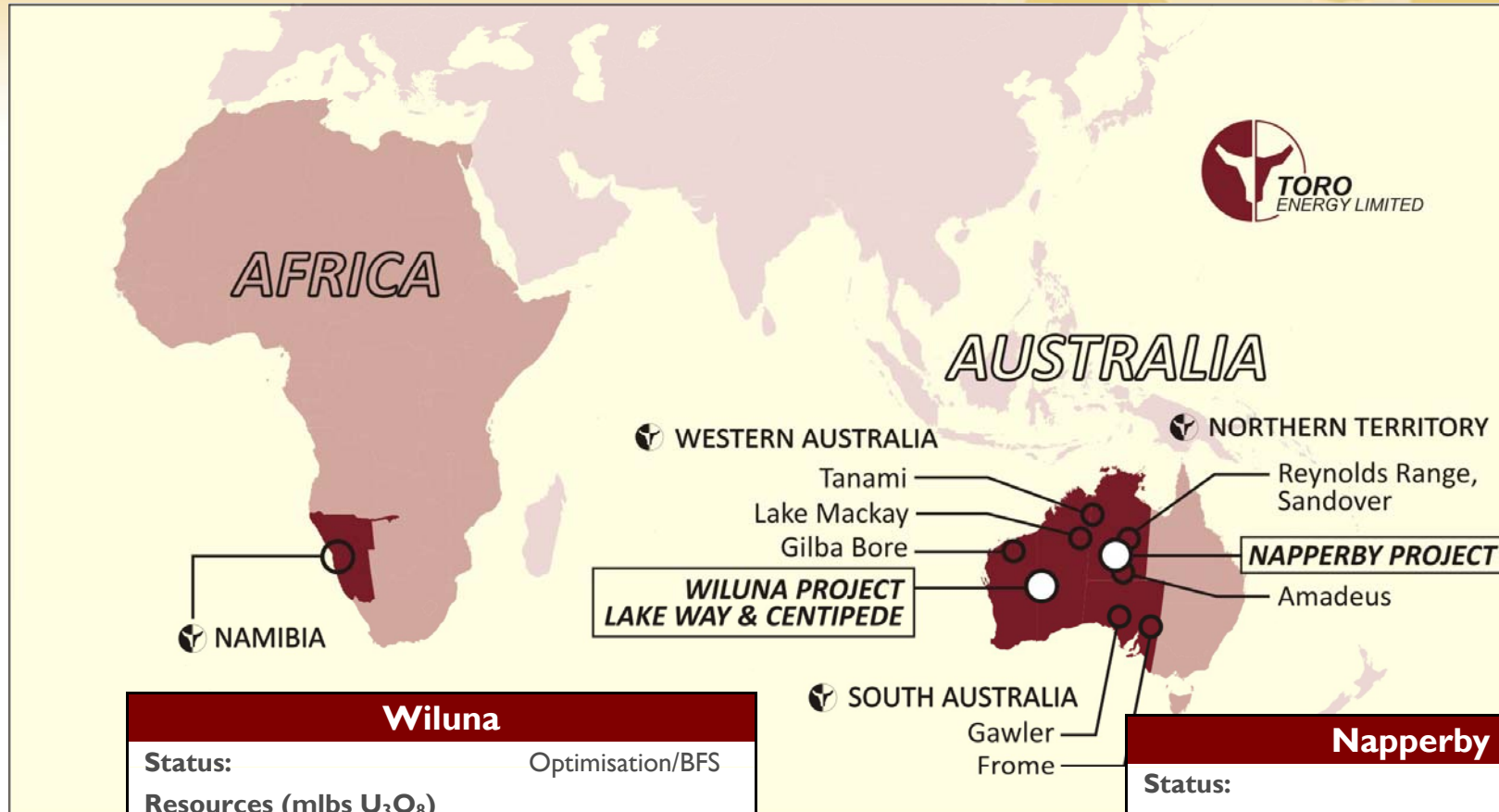
- **Combined JORC resource of 31m lb U₃O₈ (>14kt) and growing**

- **Active greenfield and brownfield exploration in the pro-uranium states of South Australia, Northern Territory and Western Australia**

- **Exploration joint venture with Deep Yellow in Namibia**

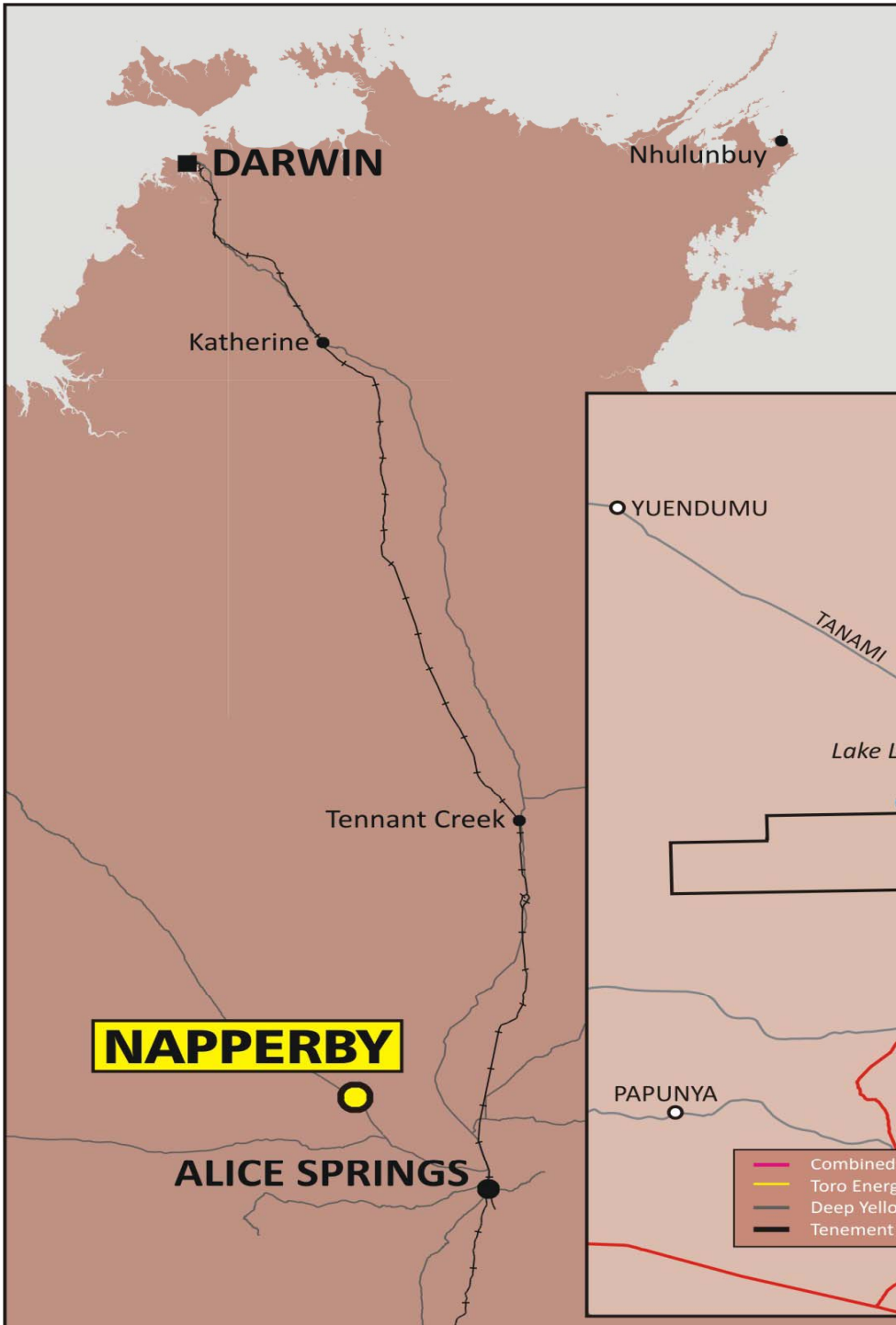
- **A corporate and mining experienced Board with one of the few uranium experienced Management teams**

Toro Energy Activities Location



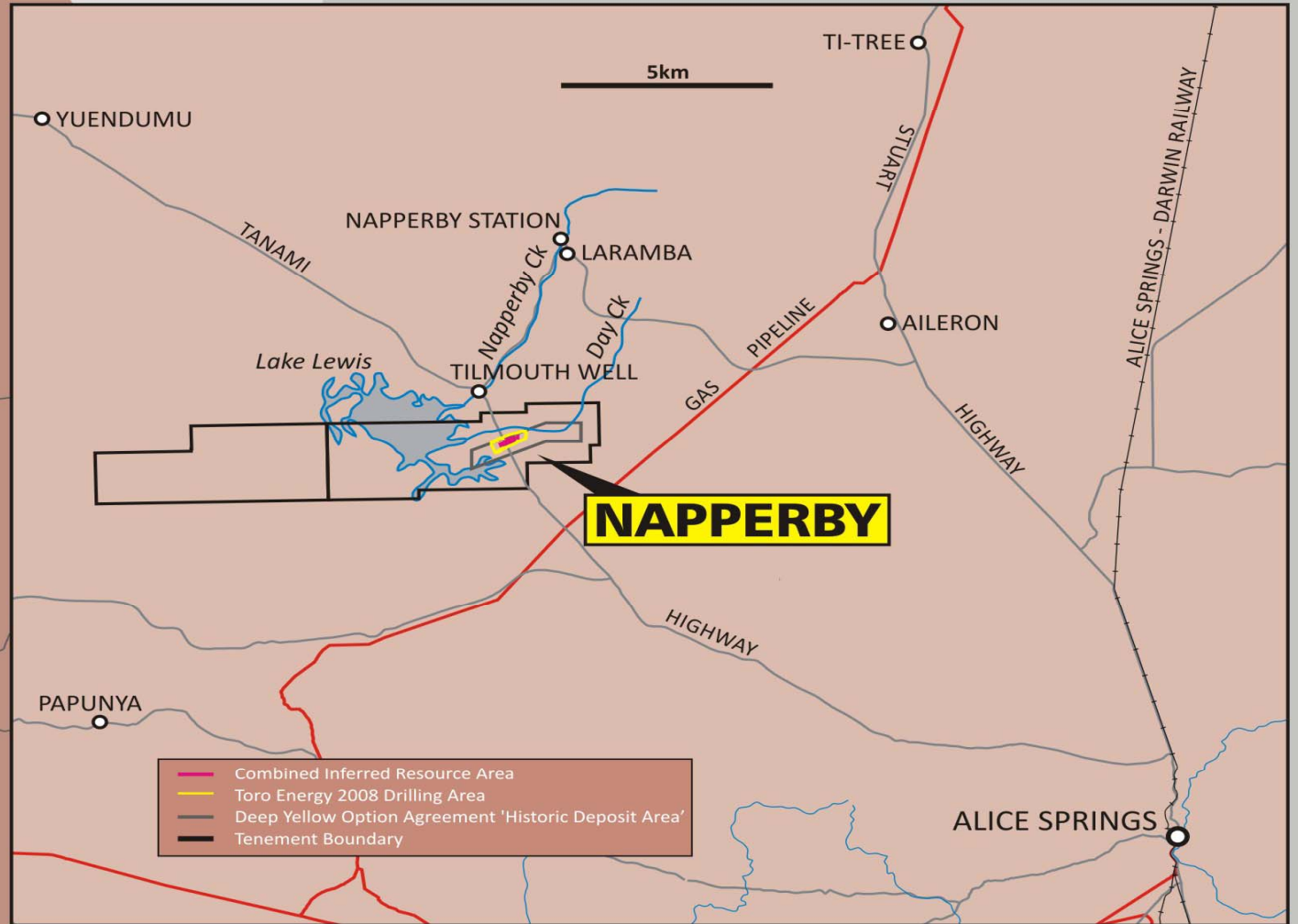
Wiluna	
Status:	Optimisation/BFS
Resources (mlbs U₃O₈)	
Indicated	10.0
Inferred	13.9
Total	23.9 mlbs

Napperby	
Status:	Scoping Study
Resources (mlbs U₃O₈)	
Uranex (non-JORC)	(10.1)
Indicated	
Inferred	7.4
Total	7.4 mlbs



NAPPERBY PROJECT

NORTHERN TERRITORY





Napperby Uranium Project

Location and Access

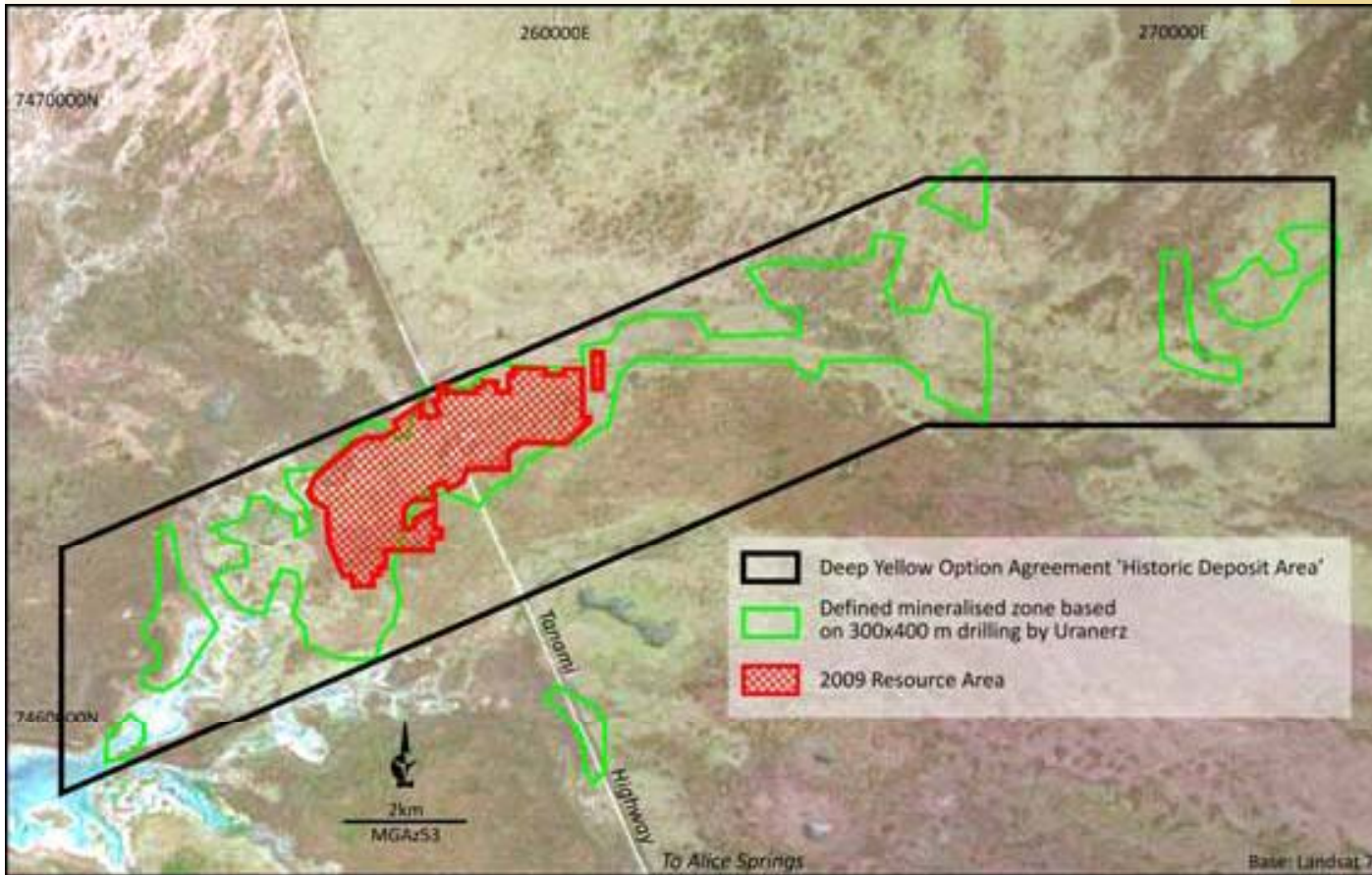
- ❑ 175 km NW of Alice Springs by road
- ❑ Sealed Tanami Highway to site
- ❑ Tilmouth Well Roadhouse 10 km to North
- ❑ Flat and lightly-vegetated at fringe of Tanami Desert

Ownership

- ❑ Toro Energy has an option to purchase the Napperby Project from Deep Yellow Limited for a capped price per pound of contained resource, refer to ASX release 15/02/2007 for details.



Napperby Uranium Project Exploration History



Late 70s - Discovered by CRAE

Early 80s - Drilled at broad spacing by Uranerz (aircore & auger) identified a significant mineralised zone

2005 – Acquired by Deep Yellow Ltd

2005 - Deep Yellow aircore – poor sample recovery > low grades; not prepared to trust assay or gamma

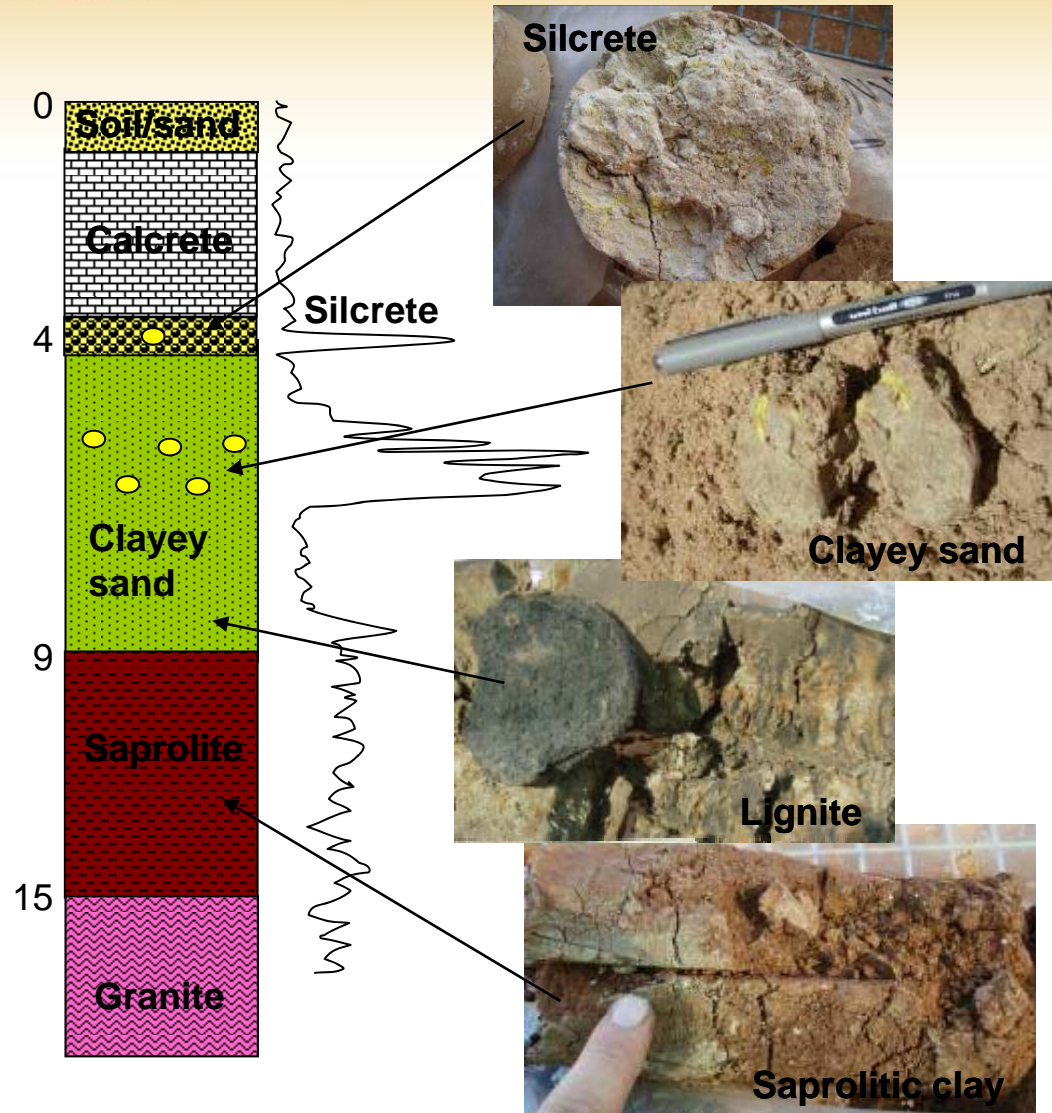
2006 – Deep Yellow auger on small 0.6 km² block defined 670t (1.5m lb) U₃O₈ @ 360 ppm JORC resource. Also trenching to characterise grade variation & geology

2007 Toro Agreement with Deep Yellow

2007-2008 - Toro Energy auger, aircore & sonic core

Napperby Uranium Project

Local Geology



Napperby deposit is 20 km long x 1.5 km wide 'palaeochannel' (prograding delta)

Regular stratigraphy, but % porous sand & degree of silicification vary

Carnotite (yellow, uranium vanadate)

Disseminated and podiform ("nuggety")

3-7 m below surface

U hosted in mottled green-yellow clayey sand (some in silcrete & lignite)

Broadly Redox & Groundwater interface

Grades:

- variable over short distances
- typically in the order of 200-600 ppm U₃O₈ over 1-2 m
- up to 2000 ppm U₃O₈ over 1.5 m

Distinct gamma peak(s)



Napperby Uranium Project

Previous and Ongoing Work

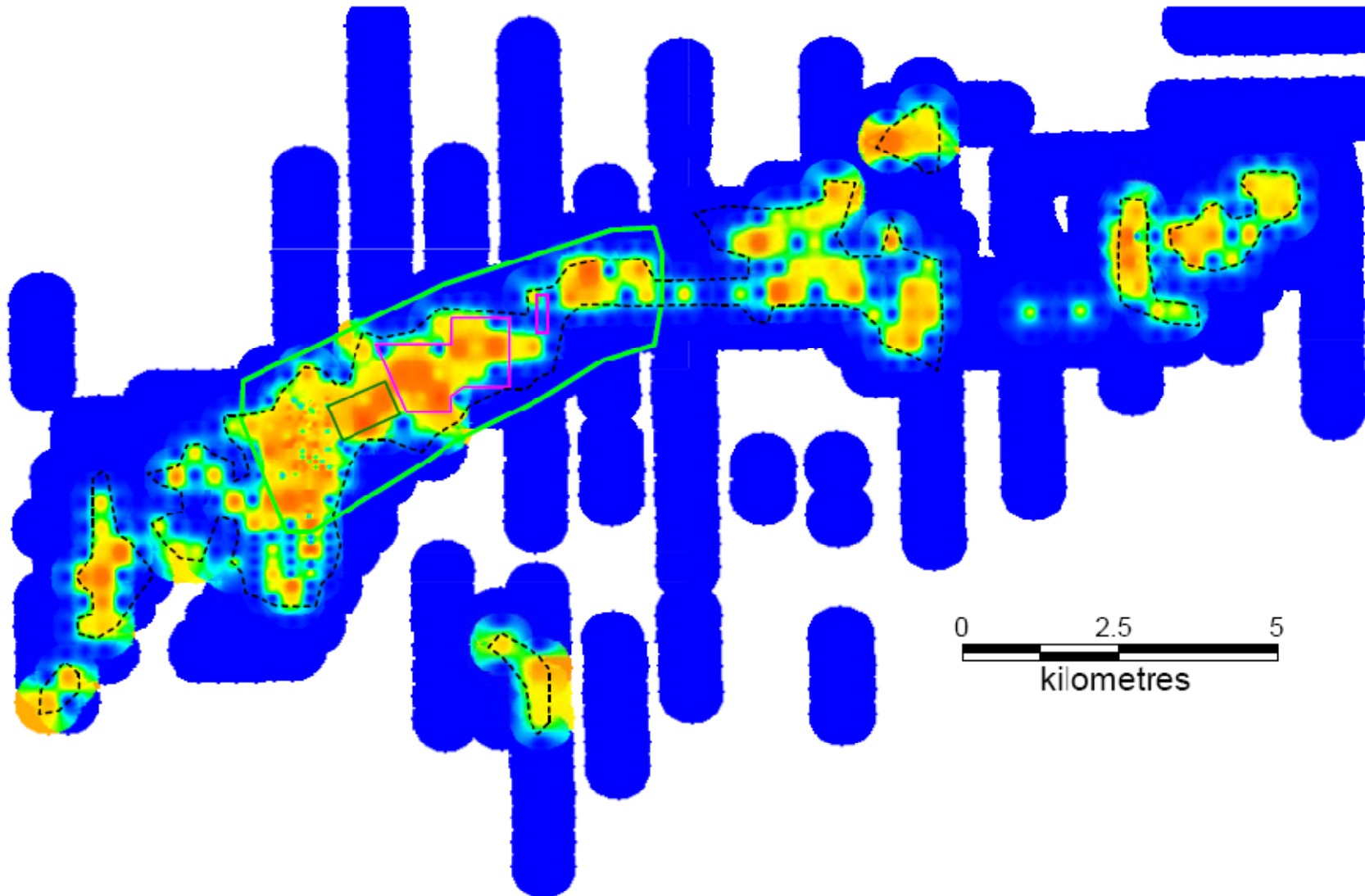
- ❑ Detailed (100 m) radiometrics, magnetics & DTM
- ❑ Airborne EM trial
- ❑ Regional aircore
- ❑ Metallurgical testwork
- ❑ Disequilibrium studies on 2007 drilling
- ❑ Hydrological sampling
- ❑ Biogeochemistry trial survey
- ❑ Rehabilitation
- ❑ Environmental Baseline Data Collection
- ❑ Radiation monitoring





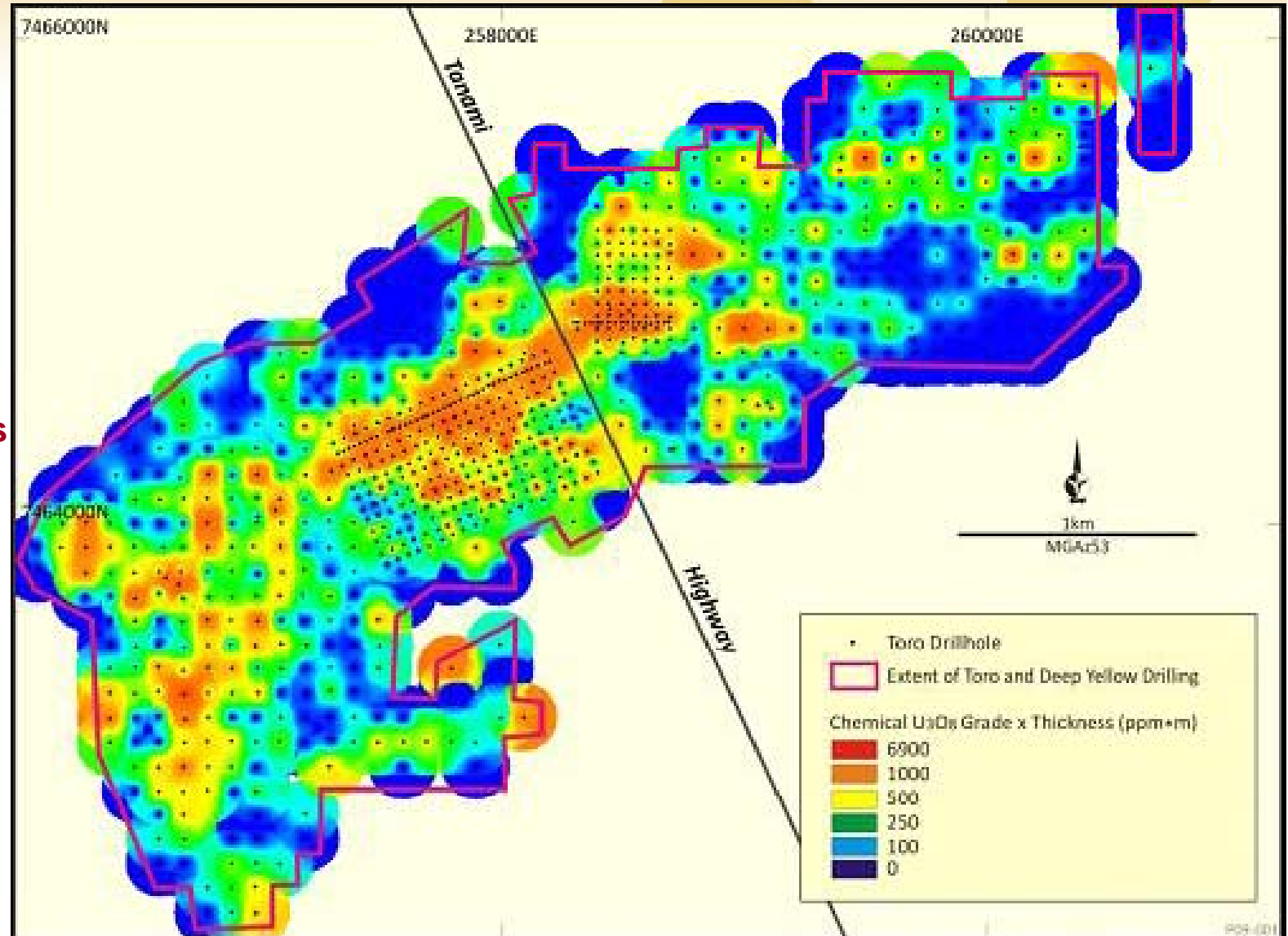
Napperby Uranium Project Historical Mineralised Zone

Napperby GT grid using Uranerz assays



Napperby Uranium Project Grade Thickness

Completed 2008 drilling
Grade x thickness (GT)
grid using corrected
 eU_3O_8 equivalent grades





Napperby Uranium Project Mineral Resource

Prospect Area	Category	Mar-09				Jul-08			
		Resource Million Tonnes	Grade U ₃ O ₈ ppm	Contained U ₃ O ₈ Tonnes	Contained U ₃ O ₈ Mlb	Resource Million Tonnes	Grade U ₃ O ₈ ppm	Contained U ₃ O ₈ Tonnes	Contained U ₃ O ₈ Mlb
200ppm U₃O₈ cut-off						200ppm U₃O₈ cut-off			
Napperby 2007 drilling	Inferred					4.6	305	1,420	3.1
Napperby 2008 drilling	Inferred	9.34	359	3,351	7.39				
Total	Inferred	9.34	359	3,351	7.39	4.65	305	1420	3.13

- ❑ Historical mineralised zone based on weighted average across very large blocks
- ❑ July 08 Resource - ordinary kriging with 50 x 50 x 1m blocks
- ❑ March 09 Resource - ordinary kriging with 50 x 50 x 1m blocks and uniform conditioning with 10 x 10 x 1m blocks



Napperby Uranium Project

Metallurgical Testing – Stage 1

- ❑ AMDEL completed preliminary acid, neutral and alkaline leach tests, over 8 hours at 70°C and with p80 of 106µ
- ❑ Leaching
 - Acid 43% to 97% uranium extraction @ 76 to 510 kg/t
 - Neutral - Insoluble
 - Alkaline 25% to 41% uranium extraction @ 3 to 6 kg/t
- ❑ Grinding
 - Coarse grind - no impact on uranium extraction (p80 400µ)
 - slightly increased acid consumption
 - reduced vanadium extraction
- ❑ Residue filterability
 - Acid – good
 - Alkaline – very slow



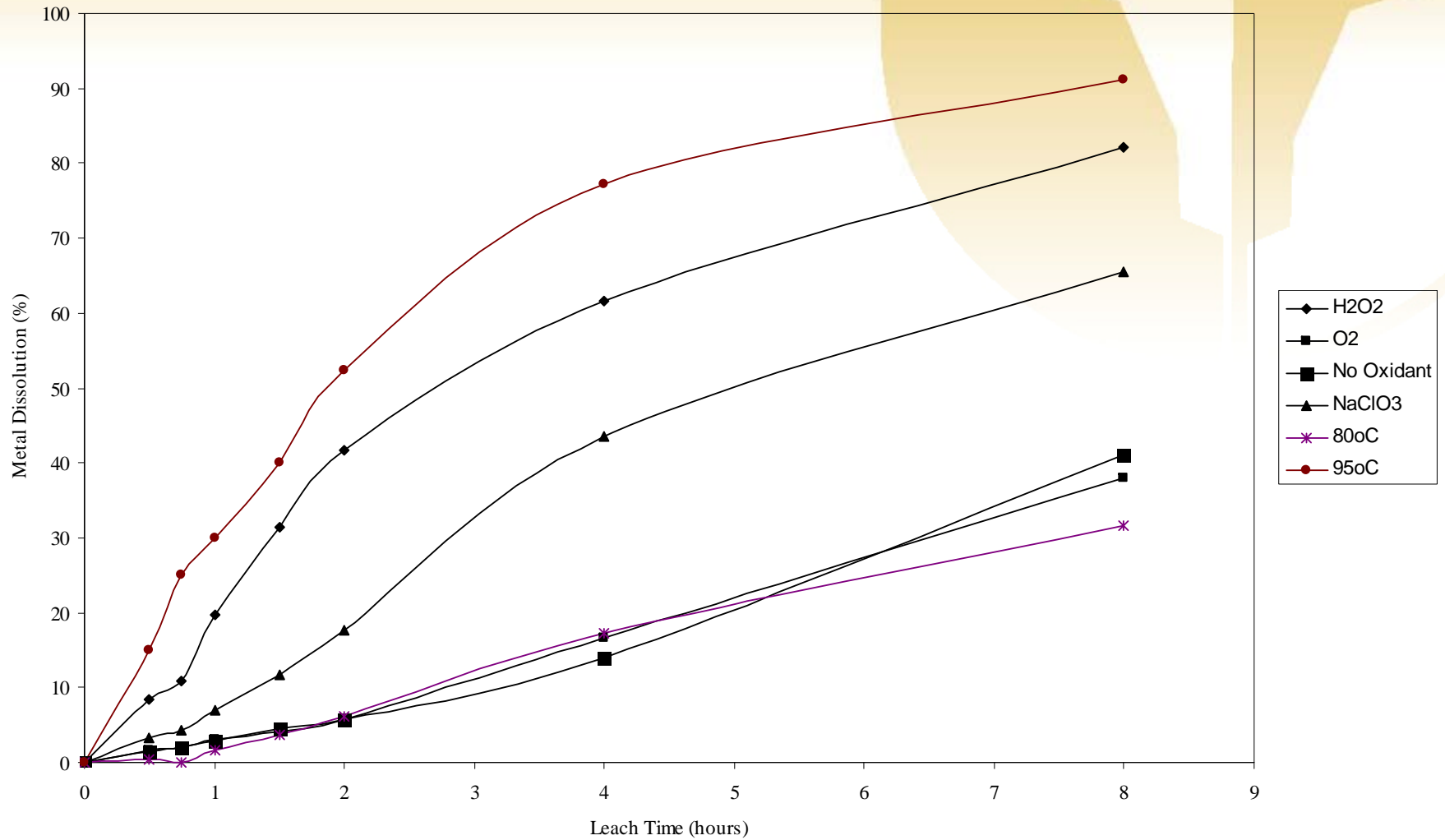
Napperby Uranium Project

Metallurgical Testing – Stage 2

- ❑ Scrubbing is not an effective means of beneficiation because of the wide uranium distribution,
- ❑ Peroxide proved to be the most effective oxidant in alkaline leach at 70°C, but reagent consumption was high,
- ❑ High temperature, 90°C, alkaline leach produced 90% uranium extraction in 8 hours.
- ❑ 1m Laboratory Column Tests

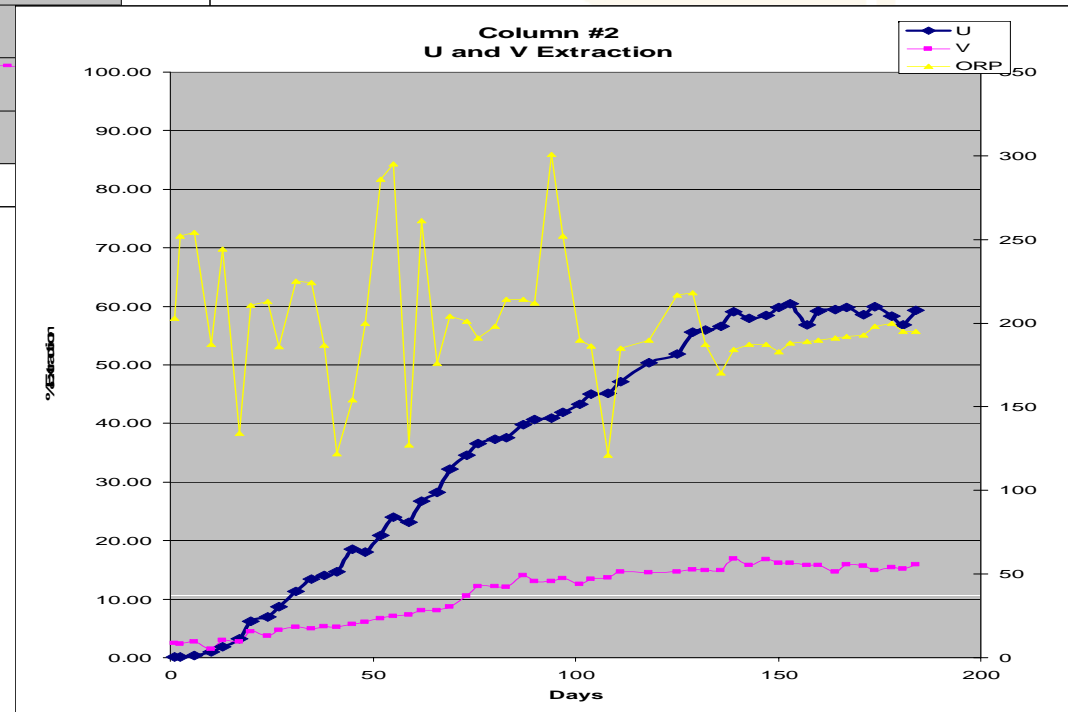
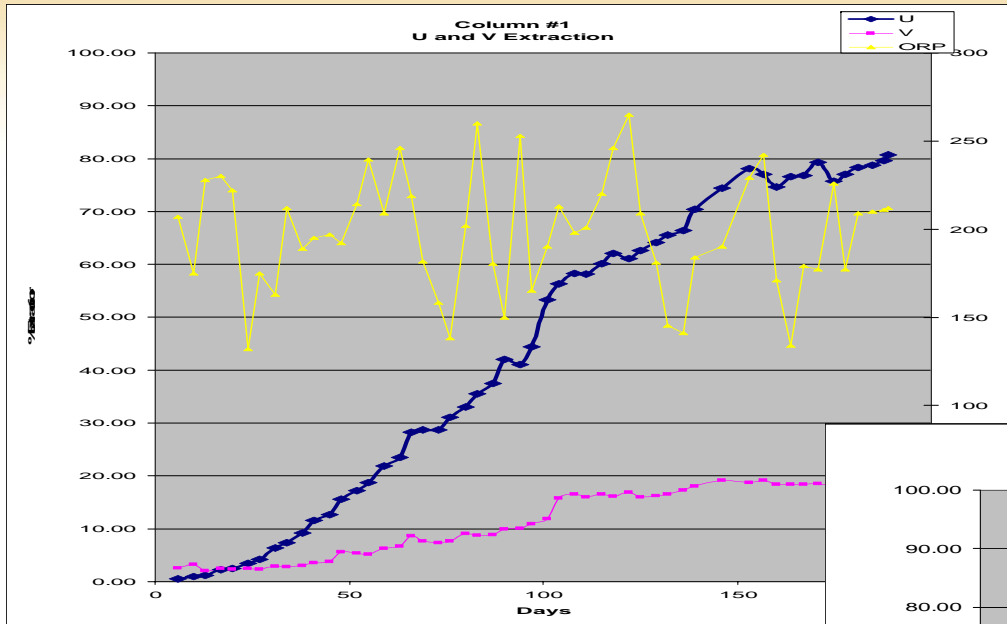


Napperby Uranium Project Agitated Alkaline Leach Tests



Napperby Uranium Project

Column Leach Tests



- ❑ Im lab trial columns
- ❑ Leach Column Trial 62% and 82% uranium extraction
- ❑ Residence 150 – 160 days



Napperby Uranium Project Scoping Study Progress

Toro Energy engaged URS Australia;

- ❑ Develop a conceptual mine plan
- ❑ Evaluate processing options
- ❑ Review environmental baseline information and advise on appropriate management strategies
- ❑ Develop management requirements for hydrogeology and hydrology
- ❑ Infrastructure requirements
- ❑ Opex and Capex for the project

Marketing and financial analysis to be completed by Toro





Napperby Scoping Study Progress Process Options Considered

Four main processing options were selected for review;

- ❑ Alkaline Heap Leach with single precipitation and production of off-spec product
- ❑ **Alkaline Heap Leach and double precipitation**
- ❑ Milling, Flotation and Conventional agitated alkaline leach with double precipitation
- ❑ **Milling and Conventional agitated alkaline leach with double precipitation**

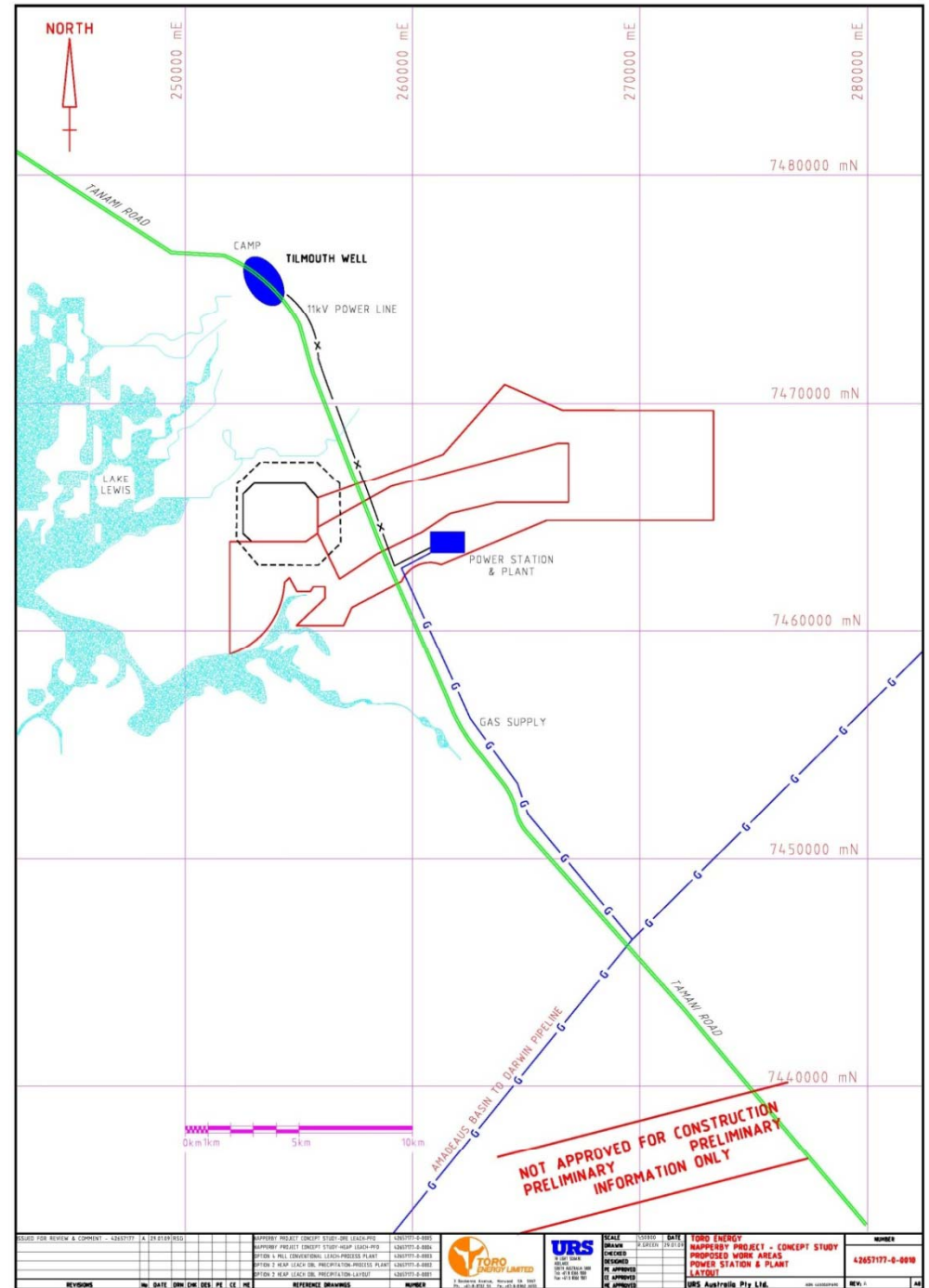




Napperby Scoping Study Progress

Proposed Infrastructure

- Gas Spur Pipeline
- Permanent Camp
- Water supply bore fields
- Power supply
- Fuel Supply
- Reagent Storage





Napperby Scoping Study Progress

- ❑ Environmental Impact
- ❑ Social Impact
- ❑ Hydrology
- ❑ Waste Management
- ❑ Hydrogeology
- ❑ Approvals and Permitting Requirements



Napperby Scoping Study Progress Possible Project Concept

- ❑ 5,000 t to 7,000t U₃O₈ potential target
- ❑ Selective near surface strip mining
- ❑ Alkaline heap leach operation with double precipitation
- ❑ In-pit tailings disposal
- ❑ Permanent camp at Tilmouth Well
- ❑ Gas spur line with on-site power generation
- ❑ Bore field water supply
- ❑ Majority of workforce ex Alice Springs
- ❑ ~120 operating personnel



ASX CODE :TOE

www.toroenergy.com.au

Compliance and Responsibility Statements:

- 1) Information in this presentation relating to exploration results of the Napperby Project 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.
- 2) 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.