

# INVESTOR PRESENTATION

Toro Energy Ltd  
ASX:TOE

*RIU Resurgence Conference*

*The Westin, Perth, Western Australia*

*22 November 2023*



**toro energy**  
AUSTRALIA'S URANIUM

*Powering a Clean Energy Future*

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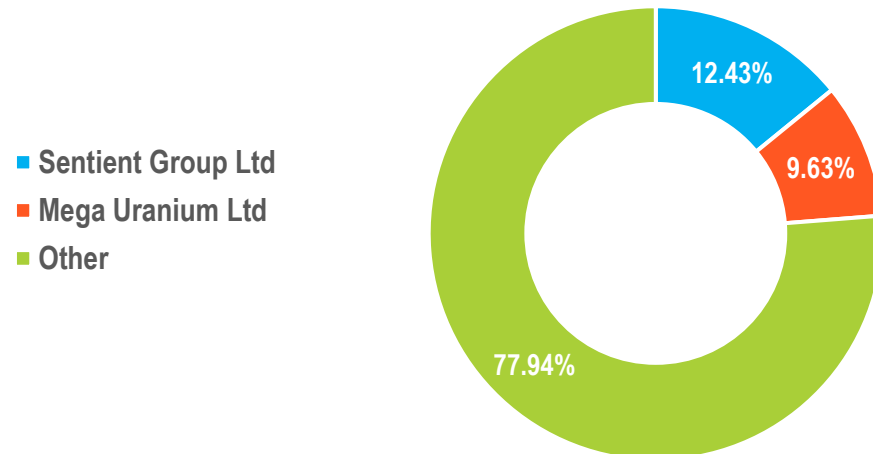


# CORPORATE SNAPSHOT



## Capital Structure

ASX Code	TOE
Shares on issue	4,781,297,635
ASX Share price (21 Nov 2023)	\$0.011
Cash and Securities (30 September 2023)	\$5.65m
Market Cap	\$52.6m



## Experienced Board and Management

### Richard Homsany

#### Executive Chairman

An officer of Mega Uranium (TSE:MGA), director of various ASX & TSXV companies. Experienced corporate lawyer and Certified Practising Accountant advising numerous clients in the energy and resources sector, including public listed companies.

### Richard Patricio

#### Non-Executive Director

Currently CEO of Mega Uranium (TSE:MGA) and Director of NexGen Energy (TSE:NXE). Richard Patricio is the Chief Executive Officer of Pinetree Capital Ltd., a Toronto-based diversified investment, financial advisory and venture capital firm which specializes in the early-stage resource and technology investments.

### Michel Marier

#### Non-Executive Director

Co-founder and executive director of Integrated Energy Metals Pte Ltd (IEM) and Integrated Battery Metals Pte Ltd (IBM) from early 2023. Previously an investment manager for Sentient Equity Partners (SEP) division of la Caisse de dépôt et placement du Québec.

### Dr Greg Shirliff

#### Geology Manager

Leads technical team with more than 20 years uranium geology and geochemistry experience and holds a PhD in mine-related uranium geology and geochemistry from the Australian National University. Held prior roles with Cameco and ERA.

# INVESTMENT HIGHLIGHTS

## Significant Uranium & Vanadium Inventory

- 100% owned **Wiluna Uranium Project** offers significant uranium exposure of 52Mlt @ 548ppm for **62.7M pounds  $U_3O_8$**  within JORC 2012 Mineral Resources **total of 90.9M pounds  $U_3O_8$**  (200ppm cut-off) across various projects.
- Vanadium by-product may be processed at low marginal cost.
- Toro has a significant maiden total Inferred JORC 2012 Resource of **68.3M pounds of  $V_2O_5$**  (200ppm cut-off) inside the uranium resource envelopes for each uranium deposit.

## Government Approvals

- Federal and State environmental approvals received.
- Retrospective amendment to substantial commencement date condition will be required.
- Amendment to mining proposal may be required resulting from further studies which significantly enhance the Project.
- All mining leases granted.

## Wiluna Uranium Project Studies continue

- Scoping Study for the Lake Maitland Uranium Deposit disclosed a **strong A\$610M NPV pre tax**, and modest capital and operating costs.
- CAPEX of AUS\$270M (**US\$189.5M**) (US\$:AUS\$ 0.70), inclusive of a 20% contingency and 15% EPCM allowance.
- 2.5 year payback.**
- Life of Mine C1 operating cost **US\$23.10/lb  $U_3O_8$**  and **AISC US\$28.02/lb  $U_3O_8$**
- Pit re-optimisation at Lake Maitland resulted in a **transformational potential increase in production** from processing improvements and cost reductions.

## Dusty Nickel Project Drilling Continues

- Four (4) Discoveries of Massive/Semi-Massive Nickel Sulphides to date** at Toro's 100% owned Dusty Nickel Project located in the Yandal Greenstone Belt approx.
- 50km east of world-class Mt Keith Nickel deposit.
- Over 15km testing for extension strike length of komatiite - ultramafic target rock for Massive Ni Sulphides.**
- Diamond drilling continues.

# MACRO OVERVIEW OF URANIUM SECTOR

## Favourable market fundamentals

**Key driver is the demand from nuclear energy utilities.** Affected by demand for, and share of, electricity generated by nuclear.

Contract pricing is mostly on a long term supply basis (3-5 years) priced at a premium to spot pricing.



### Increasing Demand

#### Near-term

- Reversal of early retirement / closures.
- Geopolitical impacts.

#### Medium-term

Clean, secure energy focus, reactor life-extensions.

#### Long-term

Reactor new builds and development of small modular and micro reactors.



### Buoyant Pricing

#### Buoyed Uranium prices from:

- mine production cuts from excess supply and depressed demand and COVID.
- Increased inventory holdings by **Sprott Physical Uranium Trust**.
- Increased physical buying of physical uranium by competing funds such as UK **Yellow Cake PLC** and Kazakhstan **ANU Energy OEC Limited**.



### Net-zero Carbon Targets

#### Energy Poverty

- Significant portion of global population inadequate access to energy.
- Global focus to lift 1/3 of global population from energy poverty.

#### Thermal Replacement

- Targets to replace carbon-emitting thermal power with a clean, reliable alternative.

#### Electrifying Industries

- Electrify industries largely powered by carbon-emitting thermal energy.

# MACRO OVERVIEW OF URANIUM SECTOR

## Energy Diversification and Security

- The move away from coal and Russian fuels are key drivers of the Uranium sector.
- Recent supply-chain & geopolitical events affecting fossil fuel markets have resulted in record high natural gas prices making nuclear power a relatively cheaper option.
- Russia-Ukraine conflict has impacted the uranium market. Nuclear utilities & fuel suppliers expressing concerns with less affinity to transact with Russia.

## Need for Reliable Back-up Power Generation

- The increasing but intermittent renewable energy supply increases the need for reliable back-up power generation.
- As available grid storage options are currently limited by costs and other factors, natural gas generators remain the key back-up power source.
- High costs of energy infrastructure construction facilitates life extensions to existing nuclear reactors.

## De-Carbonisation

- The uranium market is forecast to be driven by increases in demand for **cleaner base load electricity production**.
- As concerns about greenhouse gas emissions from fossil fuels continue rising, uranium is seen as an attractive alternative for reliable base load power supply as it produces no greenhouse gas emissions and consumes relatively little fuel in comparison to fossil fuel plants.
- Once a nuclear reactor is up and running, fuel cost (uranium rods) in the OECD is typically approx. 1/3rd of a coal-fired plant and between 1/4th or 1/5th of those for a gas combined cycle plant.

## Consumption

- Nuclear power development being adopted by a broader array of countries with several building nuclear power for the first time or pivoting back to it.
- **France:** six (6) new nuclear reactors are to be constructed & a further eight (8) are under consideration.
- **China:** continues to progress with numerous reactors.
- Multiple nuclear reactor re-starts in **Japan** (3rd largest economy) announced by PM in Aug 2022 and desire to build next gen reactors.
- Construction of **Small Modular Nuclear Reactors** to complement carbon free renewable energy an increasing source of uranium demand.
- April 2022: **US Department of Energy** announced US\$6 billion Civil Nuclear Credit Program to support continued operation of US nuclear reactors and avoid "premature retirements...and protect our supply of carbon free electricity generation".

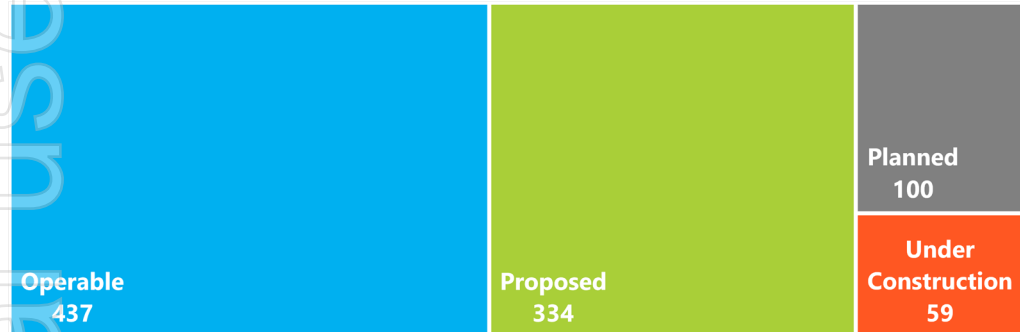
## Production

- Large suppliers shifting back towards full production eg Cameco's McArthur River.
- Supply shortfalls may emerge as existing mines gradually deplete over the medium term. Uranium mines typically require an extensive approvals process, potentially exacerbating supply shortages in long term and creating a baseline for structurally higher prices.

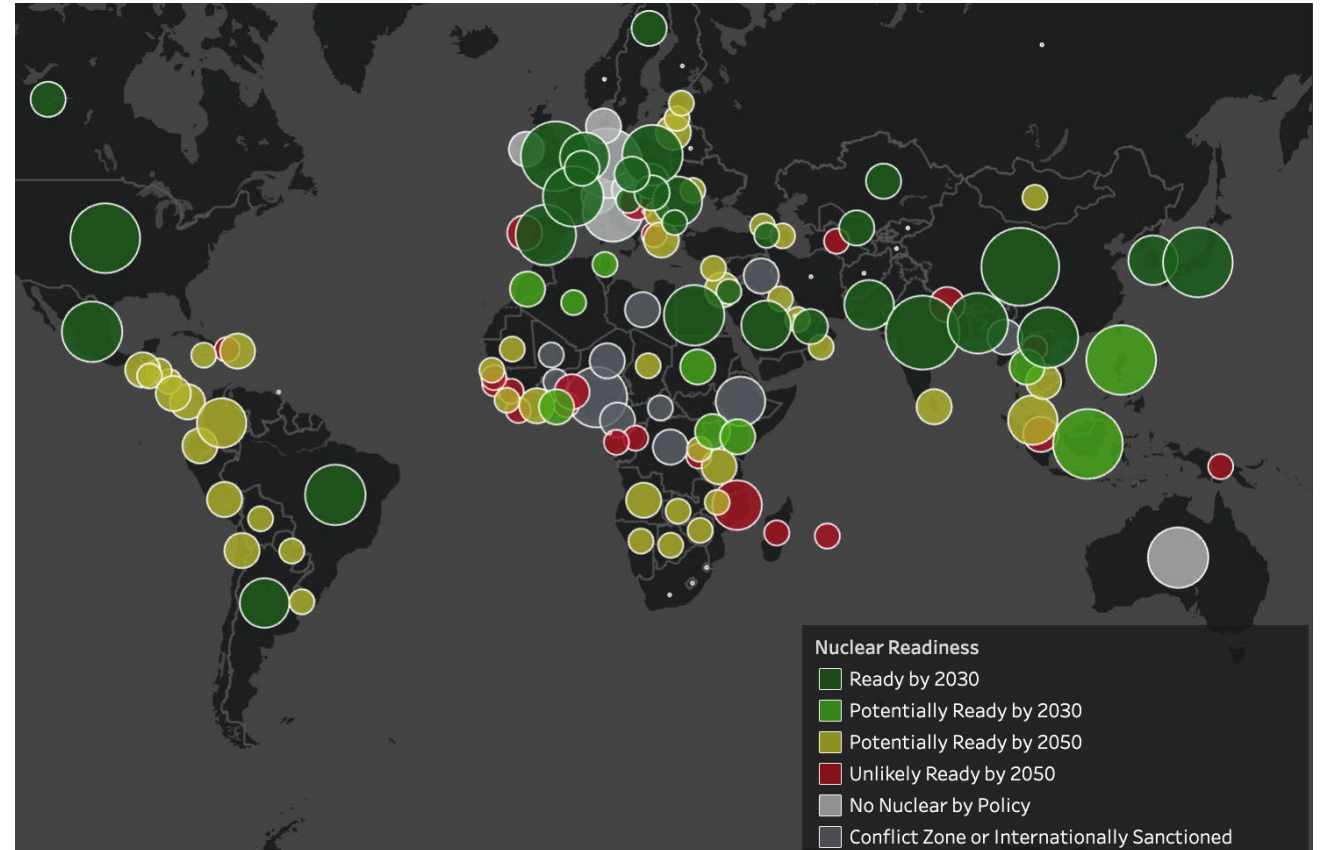
# MACRO OVERVIEW OF URANIUM SECTOR

*Global nuclear reactor fleet will continue to grow with demand for Uranium escalating*

Global Nuclear Reactor Fleet:



Source:  
World Nuclear Association, World Nuclear Power Reactors & Uranium Requirements (October 2022)



Source:  
Energy for Growth Hub, Future of Energy Tech (November 2022)



# WILUNA URANIUM PROJECT

*Key risk areas addressed, leaving focus on process design and project costs*

## Resources

96% of 62.7Mlb permitted resources is **Measured & Indicated** supporting long life operations (at 200ppm  $U_3O_8$  cut-off).

## Approvals

State and Federal government environmental approvals obtained (require amendment).

## Mining Leases

All Granted

## Mining

Simple mining  
Mineralisation from surface to 15m: Ave.1:17 strip ratio.

Lake Maitland has reputable Japanese JV partners: JAURD/Itochu.

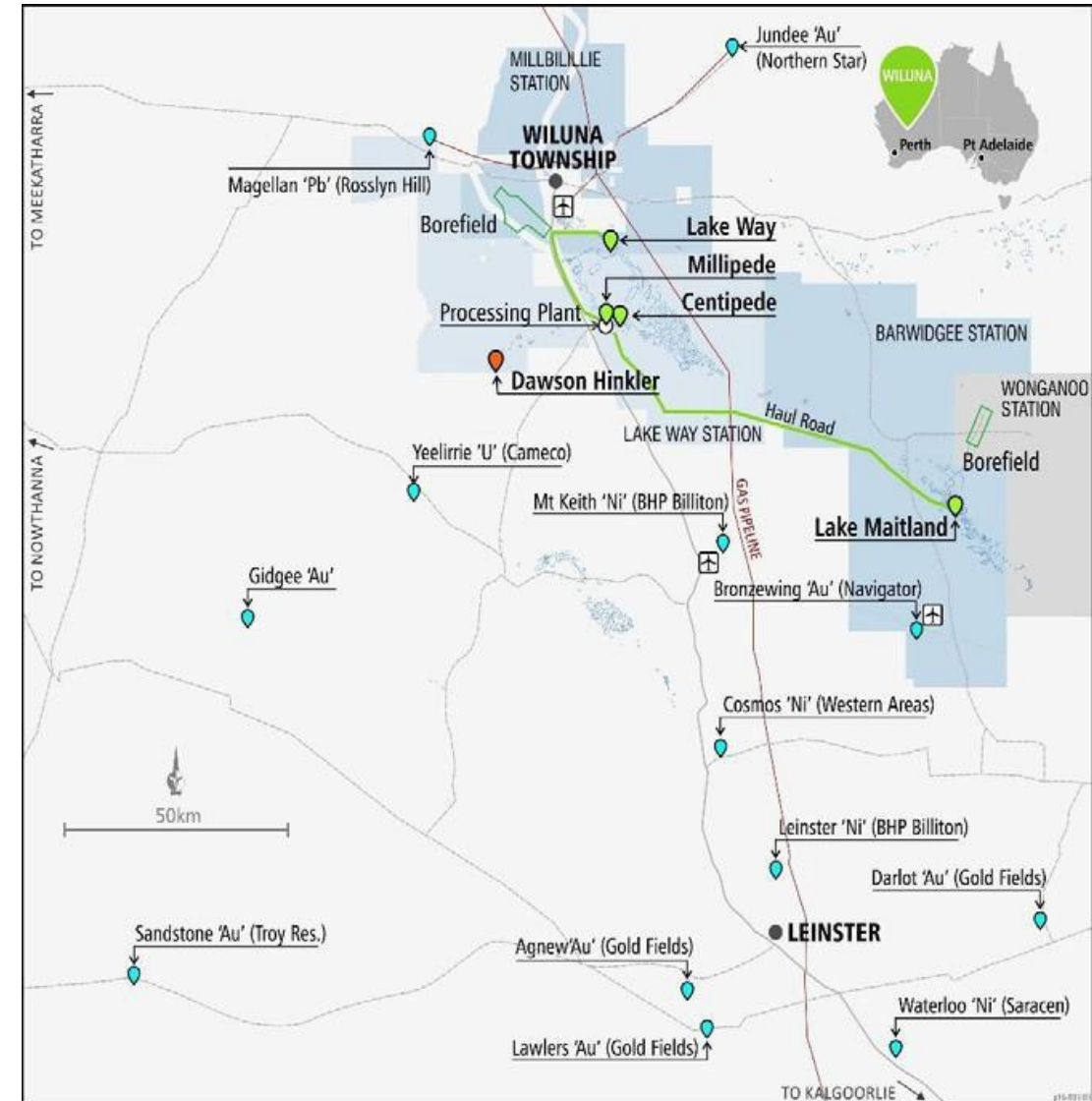
## Infrastructure

Established mining centre with access to water, power and services.

## Vanadium By-Product

Vanadium – potential valuable by- product with low marginal production cost.

Maiden  $V_2O_5$  JORC 2012 Resource of **68.3Mlbs.**





# LAKE MAITLAND ONLY SCOPING STUDY RESULT

## Deposits

## Mine Life

## Potential ore mined

## U<sub>3</sub>O<sub>8</sub> production

## V<sub>2</sub>O<sub>5</sub> production

### In 2014

3 Deposits:  
Lake Way, Centipede-  
Millipede and Lake  
Maitland

16-Years

20.1Mt

14.4 Mlbs  
Potential (Lake  
Maitland only)

Nil  
Potential

↑ 9.4%

↑ 75.1%

↑ 58.3%

+11.9  
Mlbs

### In 2023

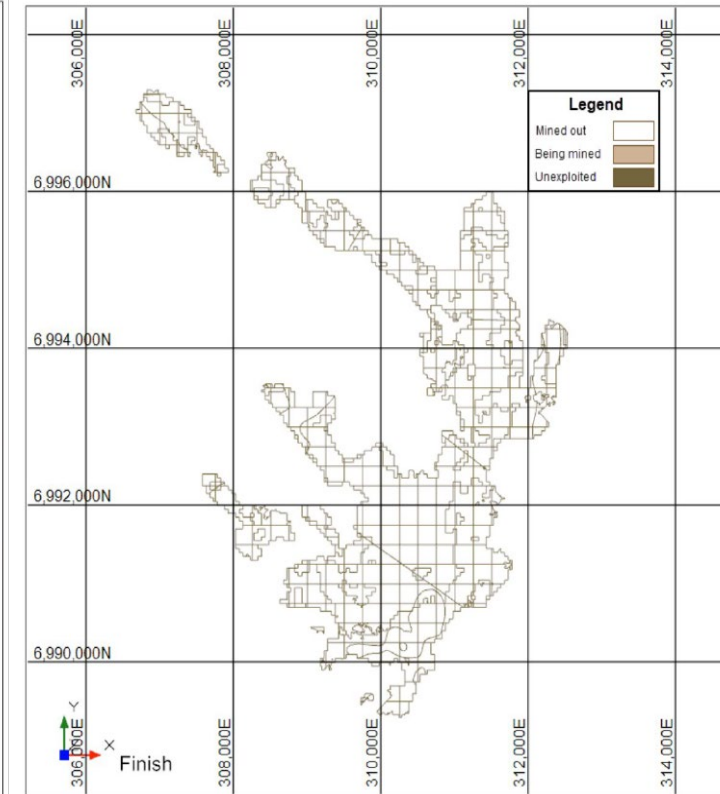
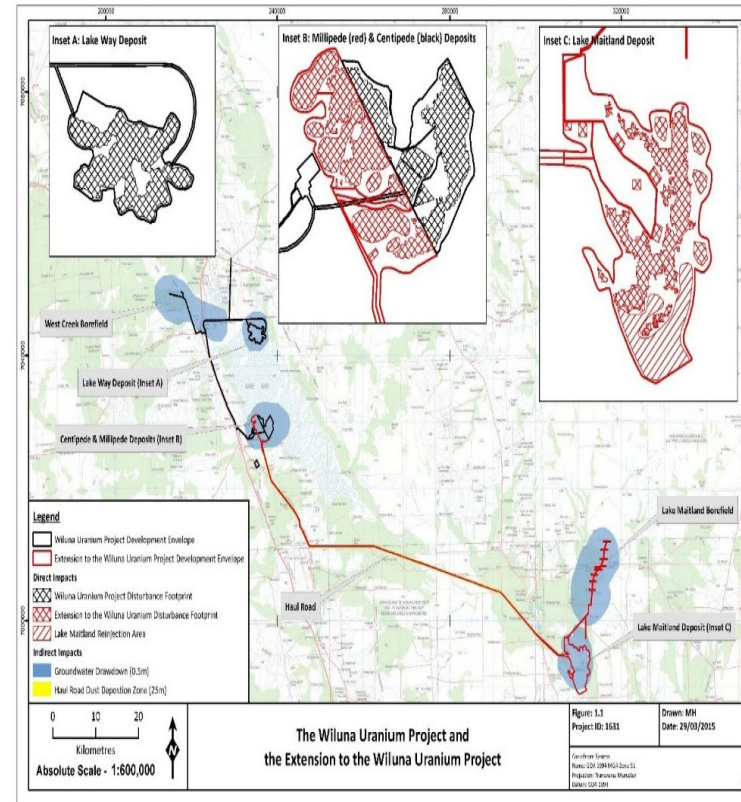
Single Deposit  
—  
Lake Maitland Only

17.5-Years

35.2Mt

22.8 Mlbs  
Potential

11.9 Mlbs  
Potential



End of LOM Pit –  
2023 Scoping Level Only

# LAKE MAITLAND ONLY SCOPING STUDY

## RESULT PROJECT NPV

	U <sub>3</sub> O <sub>8</sub> US \$Price/lb	A\$:US\$	NPV (Pre-tax)
Scenario 1 (Base Case)	\$70	0.70	\$609.6M
Scenario 2	\$70	0.65	\$676.6M
Scenario 3	\$65	0.70	\$506.5M
Scenario 4	\$65	0.65	\$570.6M
Scenario 5	\$60	0.70	\$423.2M
Scenario 6	\$60	0.65	\$484.9M

*U<sub>3</sub>O<sub>8</sub> Price and  
exchange rate  
impacts on Lake  
Maitland Uranium  
Project NPV*

# LAKE MAITLAND DEPOSIT SCOPING STUDY

## Strong results

Scoping Study for a stand-alone Lake Maitland Uranium-Vanadium Operation completed in late October 2022 (SRK Consulting Australasia & Strategic Metallurgy)

### Excellent financial outcomes

- NPV<sub>8</sub> pre-tax of approximately **A\$610M**
- IRR of 41%
- Rapid **payback period of 2.5 years**
- Total EBITDA of \$1,768.6M
- Average EBITDA of A\$101M per annum
- Estimates assume a US\$70/lb U<sub>3</sub>O<sub>8</sub>, US\$5.67/lb V<sub>2</sub>O<sub>5</sub> price and a US\$:A\$0.70 exchange rate

### Modest Capex

- **US\$189M** (or A\$270M) capital cost estimate including contingency (20%) and EPCM (15%).
- Includes all infrastructure for the proposed stand-alone Lake Maitland operation, including:
  - Entire processing facility with beneficiation plant to produce both a uranium and vanadium product
  - All mining & administration related infrastructure, access roads, power plant, borefield and a reverse osmosis desalinisation plant for water supply
- A\$133M processing infrastructure
- A\$137M non-processing infrastructure



**Strong financial metrics**



**Modest Capex**



**Low operating cost estimate**



**AVG annual production  
~ 1.3Mlbs U<sub>3</sub>O<sub>8</sub>**



# LAKE MAITLAND DEPOSIT SCOPING STUDY

## Low operating cost estimates

- C1 Cash operating cost of US\$15.84/lb  $U_3O_8$  over the first 7 years
- C1 Cash operating cost of US\$23.10/lb  $U_3O_8$  over Life of Mine (LoM)
- **All In Sustaining Cost (AISC) of US\$20.32/lb  $U_3O_8$  over the first 7 years**
- **AISC of US\$28.02/lb  $U_3O_8$  over LoM**
- Robust estimate operating margins
- C1 (US\$15.84) and AISC (US\$20.32) for the first 7 years provides Toro with very strong margins during the initial payback period

## Mining and Production

- **Mine life of approximately 17.5 years**
- Low average strip ratio of 1.17
- Process approximately 1.94Mt of ore per annum (front of beneficiation plant)
- **Annual average production approximately 1.3Mlbs  $U_3O_8$  (100% Indicated Resource) and 0.7Mlbs  $V_2O_5$  (100% Inferred Resource)**
- Total production approximately 22.8Mlbs of  $U_3O_8$  and 11.9Mlbs of  $V_2O_5$
- See release of 24 October 2022 for further information



### ASX Listing Rule 5.19.2

The Company confirms that all material assumptions underpinning the production target and the derived forecast financial information disclosed in the Scoping Study announced by the Company on 24 October 2022 continue to apply and have not materially changed.

# LAKE MAITLAND DEPOSIT SCOPING STUDY

- Vanadium (as  $V_2O_5$ ) successfully integrated into the Lake Maitland  $U_3O_8$  resource.
- Re-optimisation of the proposed Lake Maitland open cut uranium mine has been completed and takes into account:
  1. the added net value of the  $V_2O_5$  production;
  2. the downstream changes & improvements in the processing stream; and
  3. all of the resulting cost efficiencies.
- Re-optimisation successfully lowered the optimised mining cut-offs and results in more of the resource being processed over the life of the mine - **significant increase in the Wiluna Uranium Project's value.**
- The successful scoping level research and improvements achieved at Lake Maitland to date highlight opportunities within the entire Wiluna Uranium Project resulting from the potential improved economics at Lake Maitland.



# LAKE MAITLAND PIT RE-OPTIMISATION

*Results showed huge expansion of the pit and increase in potential uranium ore is transformational for the value of Toro's Wiluna assets*

## New Pit Shell

Revised pit rim cut-off grade of 109ppm  $U_3O_8$ .

Stretching beyond bounds of current stated resource at a 200ppm  $U_3O_8$  cut-off.

Significant lowering of  $U_3O_8$  grade for the potential Lake Maitland ore (**631ppm to 380ppm  $U_3O_8$** )

## ↑ Potential Ore

Increasing from **13.2Mt to 35.2Mt** (up 167%)

## ↑ Life of Mine

Increasing from **10.1 to 17.5 years** (up 74%)

## ↑ $U_3O_8$ Production

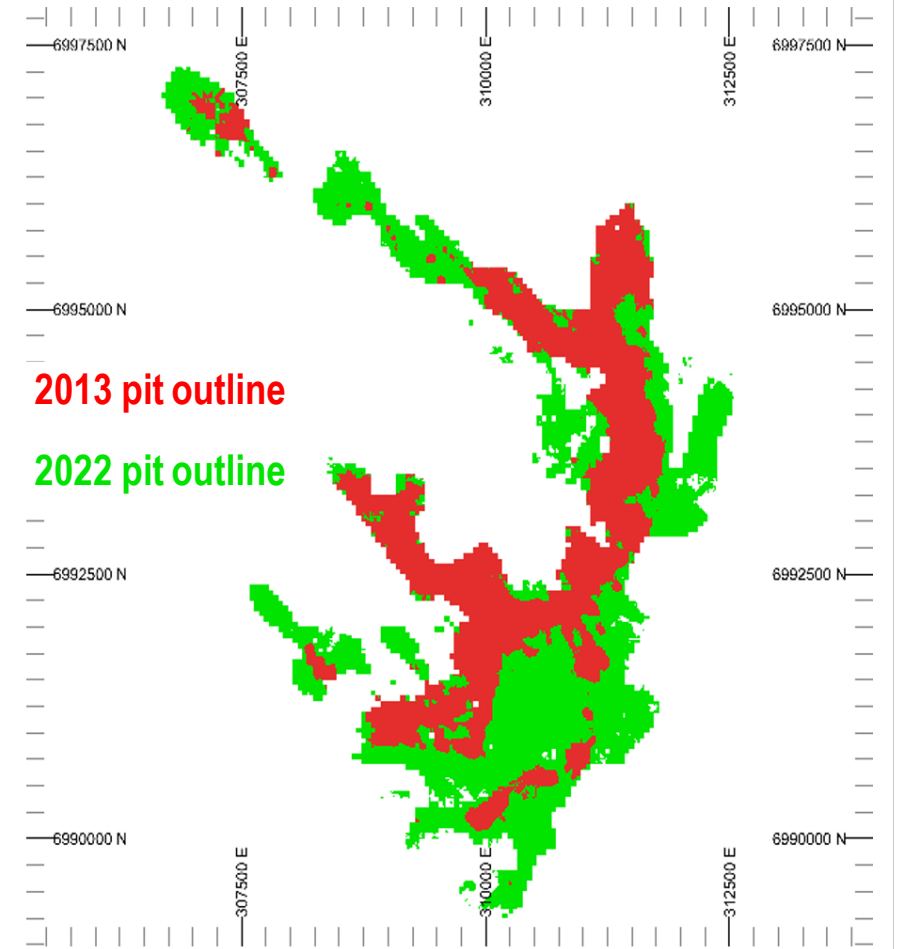
Potential  $U_3O_8$  production increasing from **15.8Mlbs to 22.8Mlbs** at assumed price of US\$70/lb  $U_3O_8$ .

## 11.9 Mlbs $V_2O_5$

**11.9Mlbs of  $V_2O_5$**  by-product produced (at assumed price of US\$5.67/lb  $V_2O_5$ )



Additional **US\$560,000,000** in potential gross product value is created



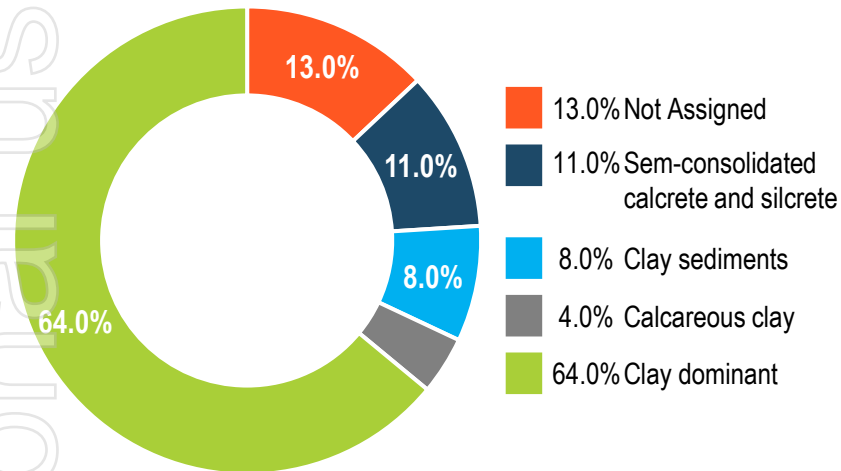


# SIGNIFICANT PROCESS IMPROVEMENTS

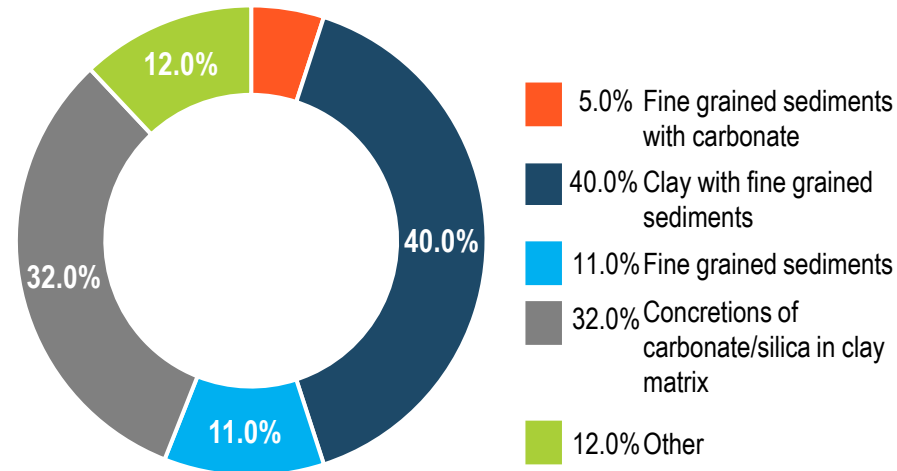
## Geology re-interpretation ... Economic Significance

- Two dominant lithologies identified:
  - High clay content
  - Sediments with concretions of carbonate (nodular)
- Uranium associated with clay and fine sediments

**Lake Maitland Lithology-  
Proportion of Resource**  
(Mlbs  $U_3O_8$  - 500 ppm cut-off)



**Main Lithologies of the Wiluna Project-  
Proportion of High Grade Ore**  
( $>500$  ppm  $U_3O_8$ )



All Clay and/or fine grained sediments combined = 56 % of all high grade material

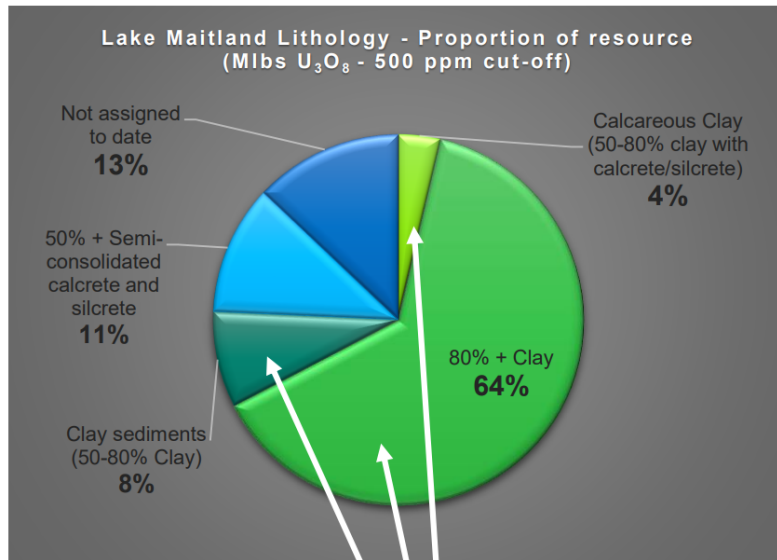
Test work shows this material can be beneficiated to:

- 3.3x original  $U_3O_8$  grade
- 27% of original mass
- 84% recovery of  $U_3O_8$

.... Leads to beneficiation test work and process re-design

# DOMINANCE OF CLAY AT LAKE MAITLAND

The dominance of clay in the Lake Maitland deposit has provided enough 'ore' of that particular lithology type to consider a processing opportunity that has the potential to deliver significant opportunities in cost reduction, both operationally and in the capital requirement for the build – all because of a better understanding of geology.



**76% of the high grade resource (>500 ppm  $U_3O_8$ ) is hosted in a lithology dominated by clay**

Plan view of all blocks in the Lake Maitland Resource Block Model with an average grade > 500 ppm  $U_3O_8$ .

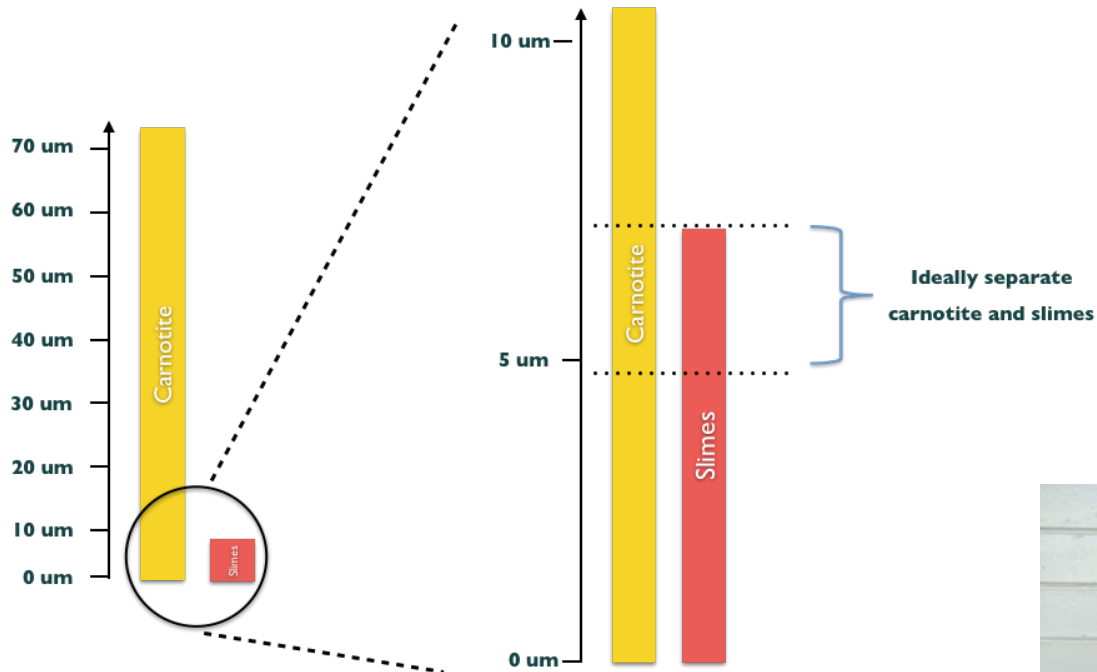
**Blocks coloured red denote all high grade blocks (> 500 ppm  $U_3O_8$ ) that have over 50% of their volume consisting of the 80% + clay lithology.**

**Each block is 10 x 10 m x 0.5m**

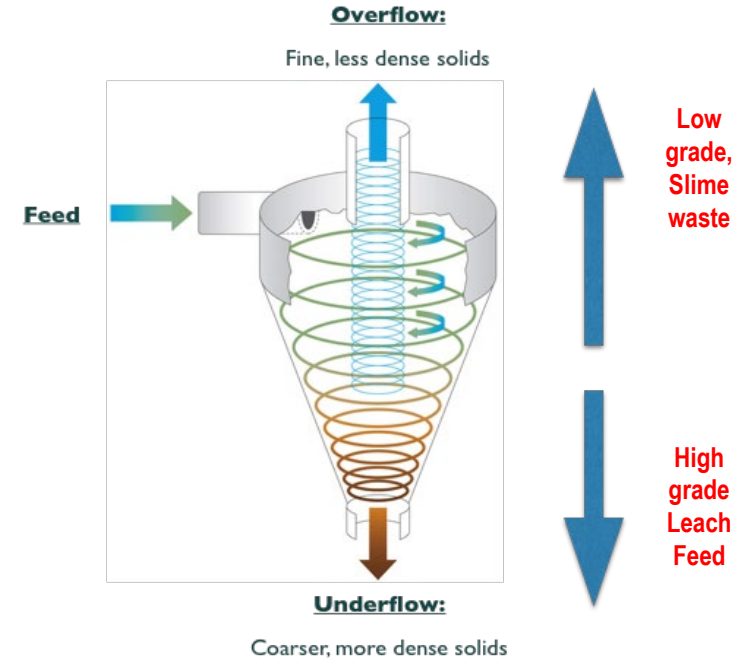


# BENEFICIATION – DESLIME

ULTRA-FINE “SLIMES” CAN BE SEPARATED  
FROM COARSER CARNOTITE



DE-SLIME WITH CONVENTIONAL CYCLONES



Conventional  
equipment

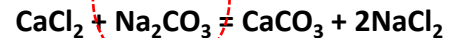
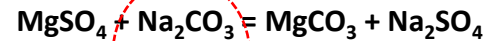


# FILTRATION IS CRITICAL

## WHY IS FILTRATION OF THE ORE SO CRITICAL?

Site water is highly saline and needs to be removed before the leach for two reasons:

1. Salts are major reagent consumers
  - $\text{MgSO}_4$ ,  $\text{CaCl}_2$  in high concentrations



High-cost  
reagent

2. High chloride content makes ion exchange impossible
  - Chloride ions compete with uranium in ion exchange

## REMOVING THE “SLIMES” CHANGES THE DEWATERING CHARACTERISTICS AND ALLOWS FOR FILTRATION OF THE BENEFICIATION CONCENTRATE

De-slimed ore: →  
Settles well and can be filtered

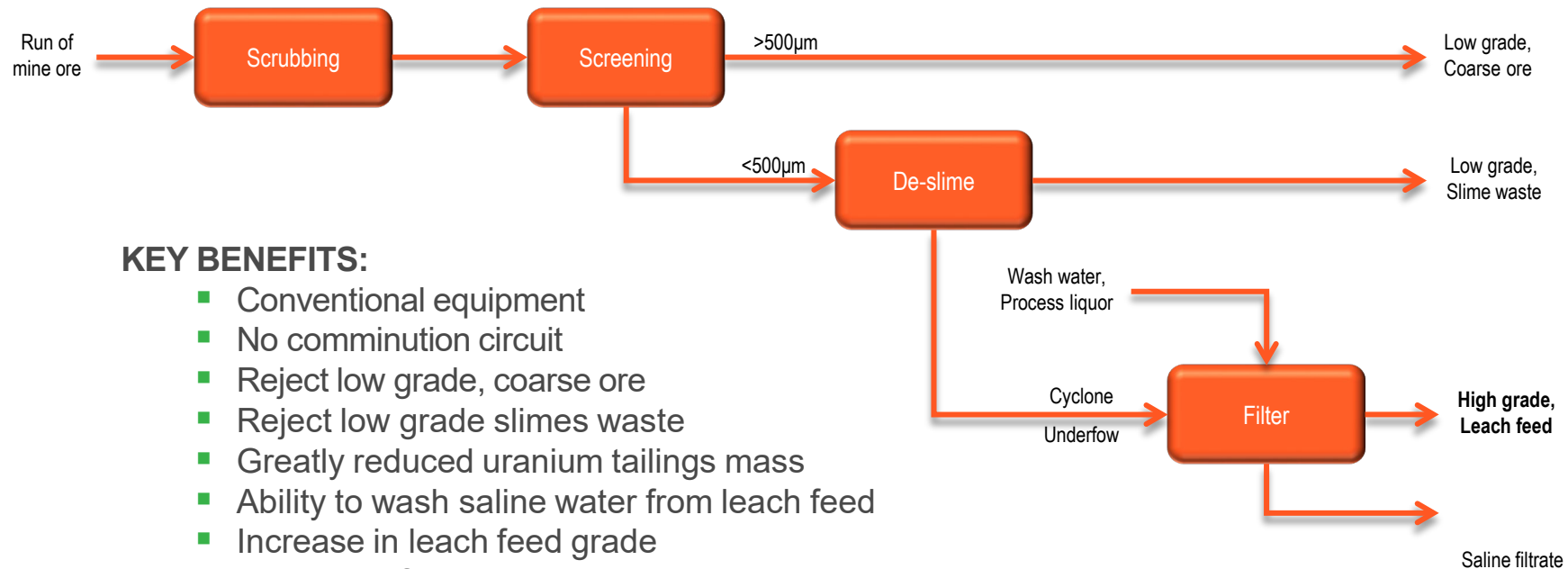


← Run of mine ore:  
Poor settling, cannot be filtered

Same mass of solids  
used in both tests!

# SCOPING STUDY BENEFICIATION CIRCUIT

## BENEFICIATION IS KEY TO NEW PROCESS FLOWSHEET – HIGHLY EFFICIENT ON CLAY ORES



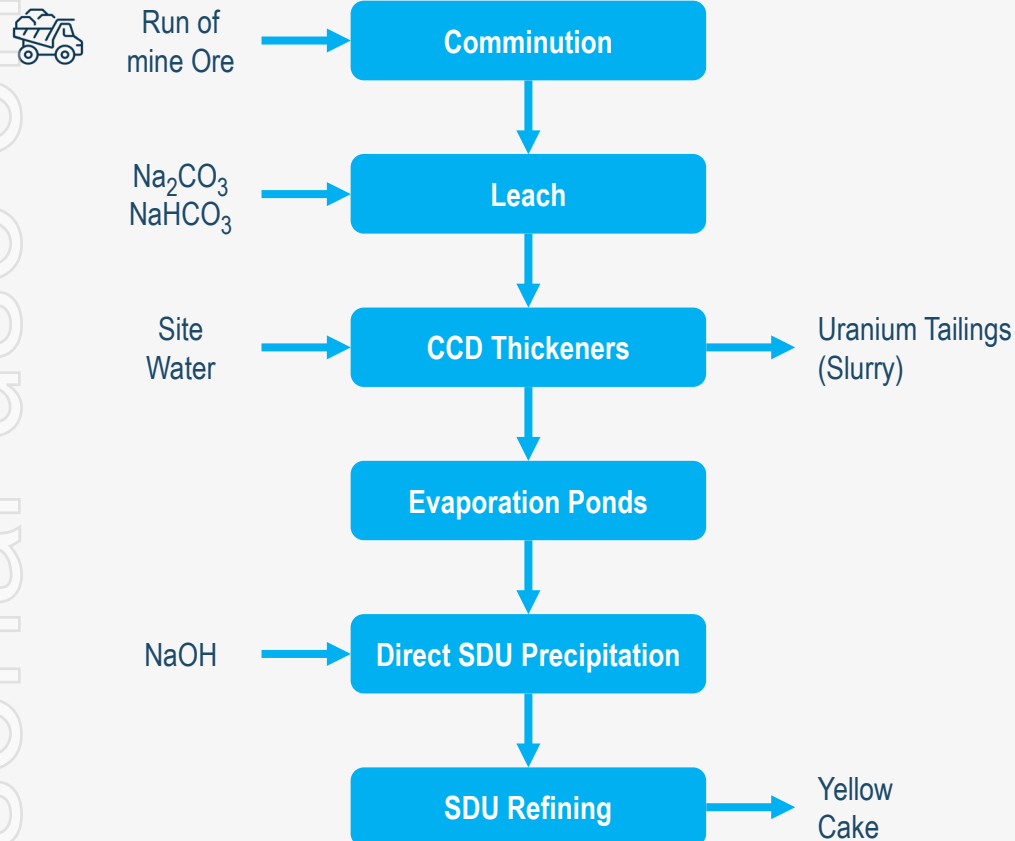
### KEY BENEFITS:

- Conventional equipment
- No comminution circuit
- Reject low grade, coarse ore
- Reject low grade slimes waste
- Greatly reduced uranium tailings mass
- Ability to wash saline water from leach feed
- Increase in leach feed grade
- Filter cake feed to leach
- Higher density leach

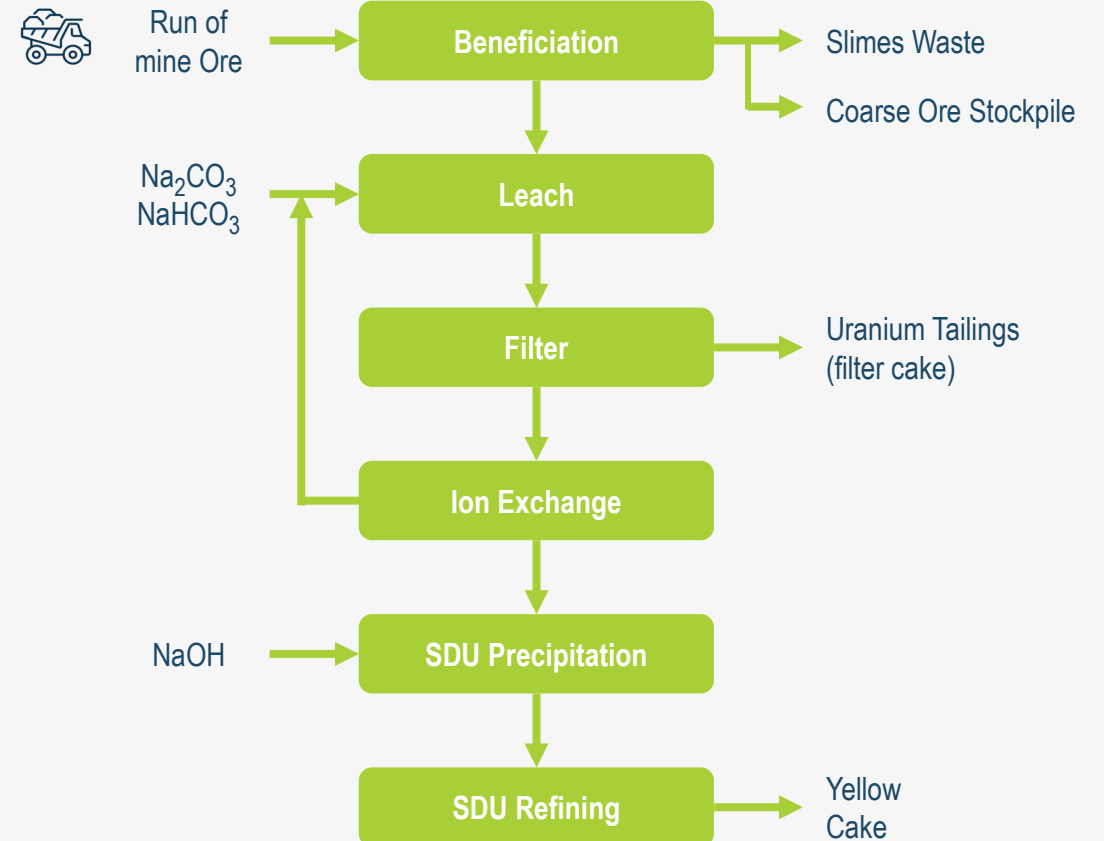
# IMPROVED PROCESSING FLOWSHEET

*New flowsheet benefits from beneficiation, filtration and ion exchange*

## Old Flowsheet



## New Flowsheet



# SUMMARY OF PROCESS IMPROVEMENTS

*Significant and continuous improvements to the overall process from:*

## Beneficiation

- Produces high grade concentrate.
- Low grade coarse ore available for future processing.
- De-slime works on all samples, allows for filtration.

## Ion Exchange

- Proven efficient on actual liquors
- Allows for substantial concentration of uranium
- Potential to separate vanadium and uranium

## Filtration

- Efficient removal of salts by washing.
- Drier leach feed cake.

## Leaching

- High uranium extraction in 8hrs
- High density in leach (58% solids)
- Vanadium leaching



## Lower Costs

### Reduced CAPEX

- ✓ Smaller processing plant and eliminating:
  - CCD circuit
  - evaporation ponds
- ✓ Smaller leach circuit
- ✓ Smaller SDU circuit

### Lower OPEX

- ✓ Less uranium tailings
- ✓ No grinding
- ✓ Easier residue storage
- ✓ Lower power consumption
- ✓ Less sodium hydroxide consumed





# DUSTY NICKEL PROJECT

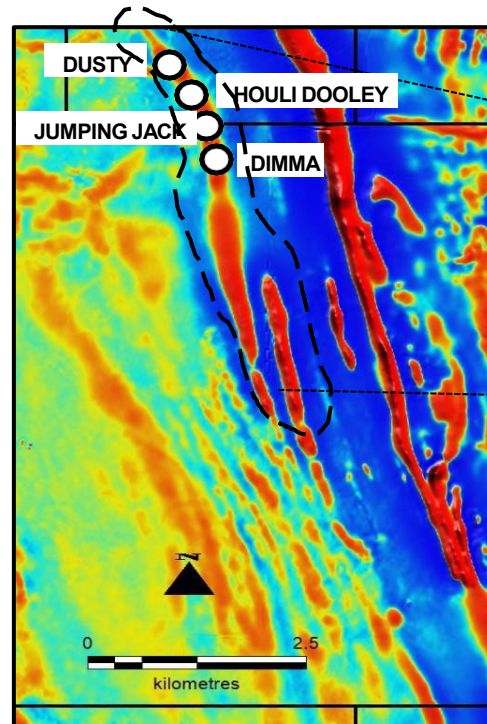
*Over 15km strike length of komatiite-ultramafic target rock for massive nickel sulphides*

The Dusty Nickel Project is located on the northern, eastern and southern shores of Lake Maitland and the Lake Maitland Uranium Deposit.

Focused on two (2) main target areas:

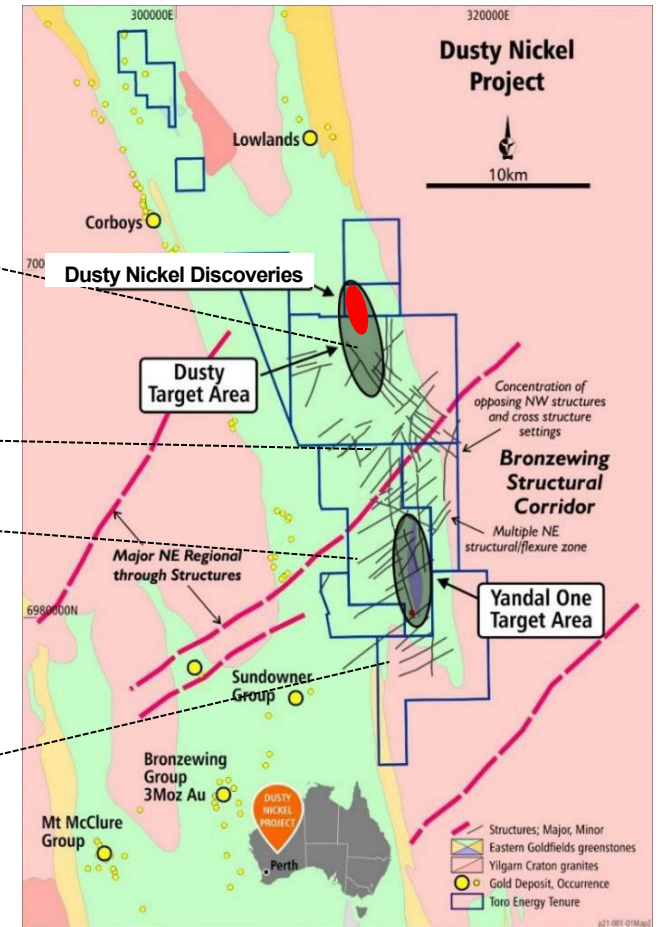
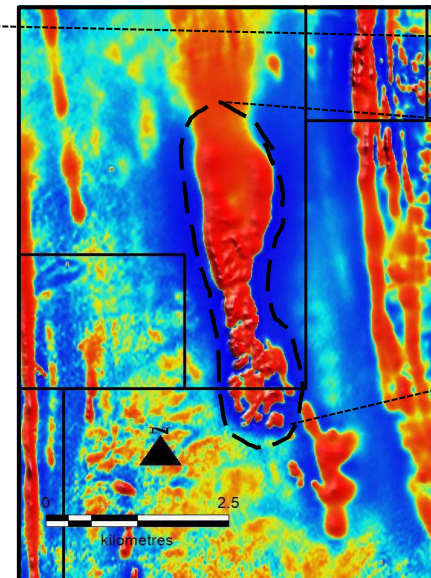
- i. Dusty
- ii. Yandal One

It has now been confirmed by drilling that Dusty and Yandal One incorporate **over 15km strike length of komatiite-ultramafic target rock for massive nickel sulphides.**



Magnetic Komatiite of the YANDAL ONE TARGET AREA

Magnetic Komatiite of the DUSTY TARGET AREA



# DUSTY NICKEL DISCOVERIES

Blind discovery of massive & semi-massive nickel sulphides at base of a **7.5km unbroken length** of previously unknown **komatiite** (Dusty komatiite) – arguably the 1st massive nickel sulphides discovered in **Yandal Greenstone Belt**, 50kmE of world class **Mt Keith nickel deposit** 15km NE of **Bronzewing Gold Mine**.

Discovered with the first hole drilled through the komatiite testing a geochemical target from aircore drilling.

The Dusty komatiite remains largely untested.

Despite being in very early stages of exploration there are **already 4 different discovery locations**, Dusty, Houli Dooley, Jumping Jack & Dimma.

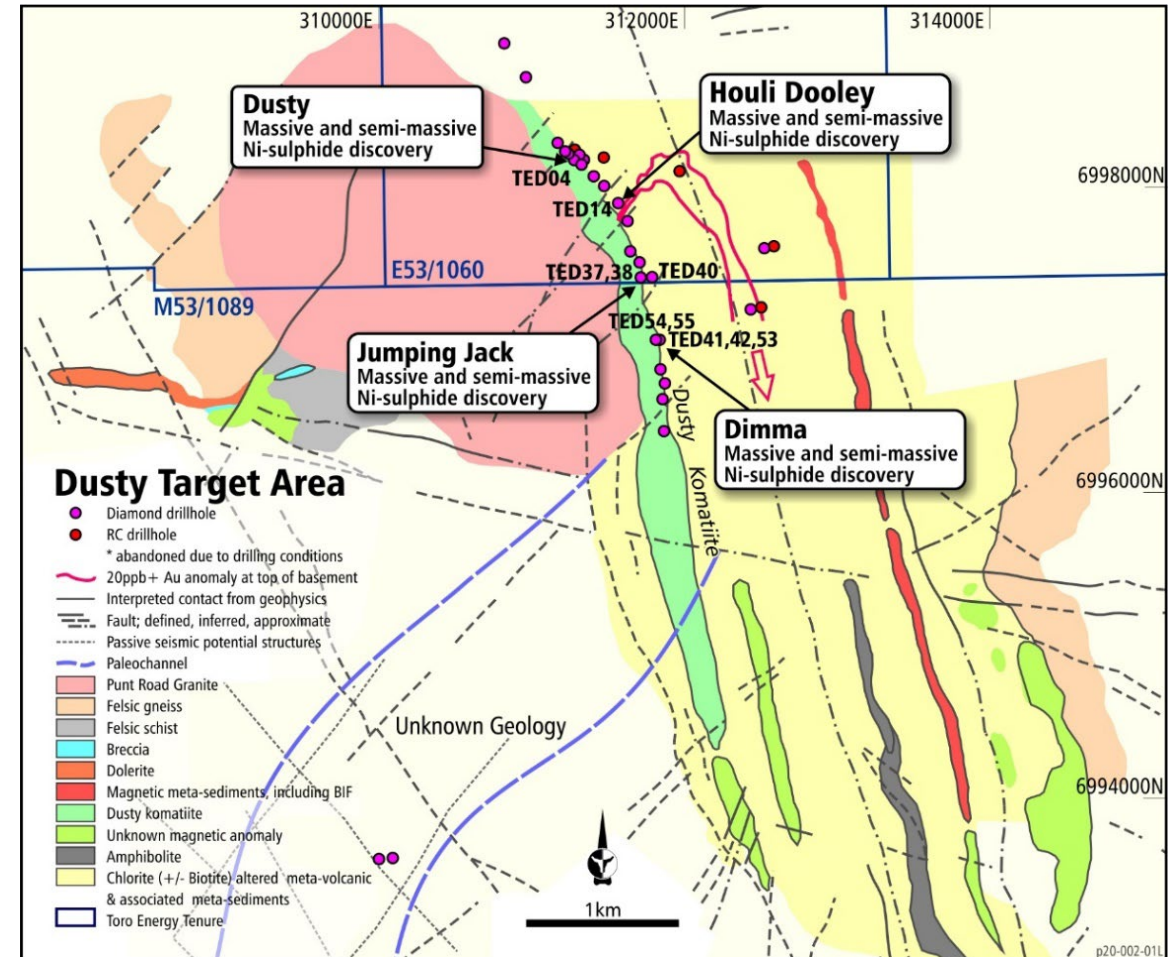
Only 4.5km so far tested at a single depth along a 7.5km komatiite magnetic trend and already **four (4) discovery locations of massive and semi-massive nickel sulphides**.

1 Dusty

2 Houli Dooley

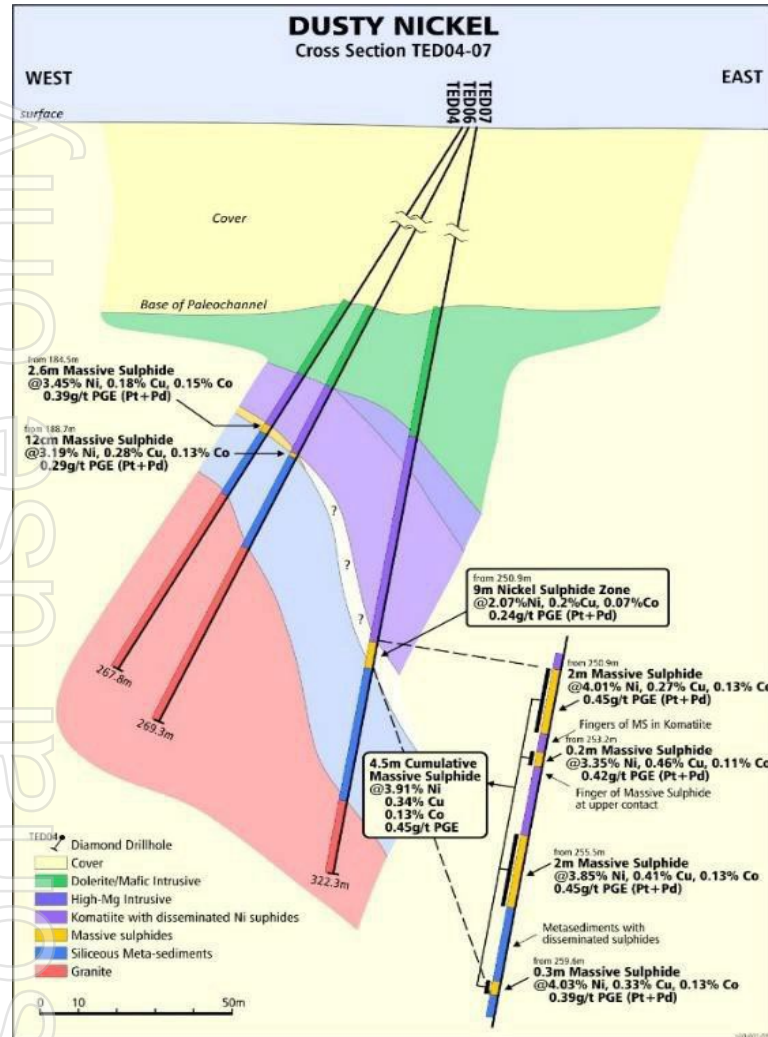
3 Jumping Jack

4 Dimma





# DUSTY NICKEL DISCOVERIES



## 1. Dusty

- **Massive and/or semi massive nickel sulphides** with up to **9.0m at 2.07% Ni** from 250.9m **including 2.0m at 4.01% Ni**, 0.27% Cu, 0.13% Co and 0.388 g/t Pt + Pd from 250.9m; and **2.0m at 3.85% Ni**, 0.41% Cu, 0.13% Co and 0.45 g/t Pt+Pd from 255.5m.
- **2.6m @ 3.45% Ni**, 0.18% Cu, 0.15% Co and 0.388g/t Pt+Pd from 184.5m downhole.

## 2. Houli Dooley

- Only one hole drilled in location so far, which intersected up to **3.05m of semi-massive nickel sulphide** grading **1.59% Ni**, 0.06% Co, 0.07% Cu and 0.34g/t Pt+Pd from 297.75m downhole, **including 0.75m at 4.3% Ni**, 0.15% Co, 0.1% Cu, 0.89g/t Pt+Pd from 297.75m downhole.

## 3. Jumping Jack

- TED37 - **3.45m at 1.42% Ni**, 0.19% Cu, 0.76 g/t Pt+Pd from 240.2m downhole.
- TED38 - **2.44m at 1.16% Ni**, 0.2% Cu, 0.77 g/t Pt+Pd from 231.6m downhole.



# DUSTY NICKEL DISCOVERIES

## 4. Dimma

- Results to date indicate Dimma is a **continuous lens of massive Ni-sulphide mineralisation at least 160m in down-dip length and open at depth.**
- TED41 - **4.31m of massive Ni-sulphides**, grading 1.16% Ni 0.29% copper (Cu), 0.386 g/t Pt+Pd from 243.33m downhole.
- TED42 – **3.13m of massive Ni-sulphide** grading 1.42% Ni, 0.17% Cu, 0.605 g/t Pt+Pd from 314m downhole.
- TED54 Ni Sulphide ZONE 1 – **4.6m of massive Ni-sulphide** at base of komatiite grading 1.61% Ni. 0.22% Cu, 0.56g/t Pt+Pd from 194.2 downhole.
- TED54 Ni-sulphide Zone 2 - **9m of blebby and disseminated Ni-sulphide near top of komatiite** grading 0.79% Ni from 162m downhole, inclusive of 3m grading 1.09% Ni from 166m downhole.
- TED55 – **2.1m of massive Ni-sulphide** grading 1.83% Ni, 0.29% Cu, 0.55 g/t Pt+Pd from 147.1m downhole.



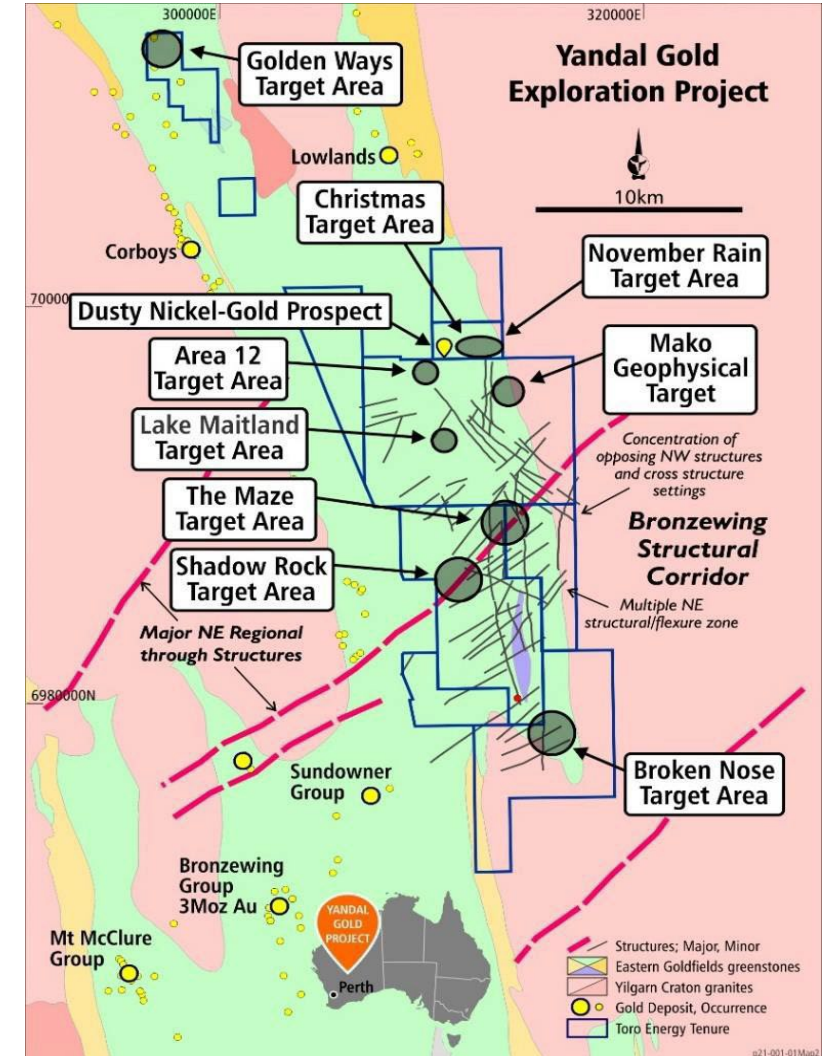


# YANDAL GOLD AND BASE METAL PROJECT

The Yandal Gold and Base Metal Project is located only 20km NE of the world class Bronzewing Gold Mine and the Mt McClure, Bronzewing and Sundowner group gold deposits.

It is a **unique exploration opportunity** - comprising some 243 square kilometres of the **mature world class gold district, the Yandal Greenstone Belt** - yet it remains relatively untested due to most of the ground being held by uranium companies since the discovery of the Lake Maitland Uranium Deposit in 1972 – a greenfields exploration project in the middle of a proven mature gold district.

- In the main Project area, the rocks are hidden beneath a thick transported cover, making exploration difficult but further ensuring the **basement geology has remained under-explored**.
- A detailed airborne magnetic survey combined with an extensive ground gravity survey and passive seismic survey has highlighted **well over 70 target zones** based on **structural relationships with physical properties alone**.
- First pass aircore drilling with limited reverse circulation drilling and geochemical signatures in diamond core has confirmed **prospective greenstone geology for gold and base metal exploration**.
- At least **10 separate target areas so far defined** despite only very limited coverage of the project to date.



# OPPORTUNITIES AND ECONOMIC UPSIDE

Opportunities identified to improve the Lake Maitland Uranium Project include:

- **The proposed production schedule does not include any Mineral Resources from Toro's three other 100% owned nearby uranium deposits comprising the Wiluna Uranium Project namely, Centipede, Millipede and Lake Way.**
- **This could lead to increased mine life, increased production and increased revenue** adding considerable value to the Lake Maitland Uranium Project. Integrating the other uranium deposits under the broader Wiluna Uranium Project may add value to the project in terms of extending the project and de-risking the dependency on Lake Maitland as a stand-alone operation.
- **Further beneficiation test work at Toro's three other 100% owned uranium deposits comprising the Wiluna Uranium Project, Centipede, Millipede and Lake Way, could show that parts of those deposit may be amenable to the same significant cost efficiencies as established in the Scoping Study for Lake Maitland.**
- $U_3O_8$  values in drilling results derived from geochemistry are often higher than what can be explained by positive disequilibrium and are often above the 1.25 disequilibrium factor already applied across the Lake Maitland deposit to gamma probe derived  $U_3O_8$  values.
- Therefore further core based drilling with geochemistry and upgrading of the  $U_3O_8$  resource from Indicated to Measured will result in an increase to the overall  $U_3O_8$  resource and ultimately more  $U_3O_8$  produced by any mining and processing operation.
- Due to the inherent relationship between uranium and vanadium in the potassium uranium vanadate ore mineral, carnotite, it is likely that with further drilling the  $V_2O_5$  resource will be upgraded to Indicated status (JORC 2012) and therefore increase the value of the resource and the Lake Maitland Uranium Project.
- **Further refinement of the Lake Maitland Uranium Project flowsheet to reduce costs may be possible after a large scale pilot of the beneficiation circuit.**
- **JAURD and Itochu have the right to Joint Venture at Lake Maitland.**
- **Investigate opportunity to process high grade well beyond the 7th year of production.**
- Updating of the Scoping Study components to ensure interfaces between each Study component are well aligned may highlight potential opportunities/synergies for the Lake Maitland Uranium Project, particularly in relation to foreseen interfaces between pit dewatering, mining, hydrology, waste rock storage, tailings storage, hydrology, hydrogeology and mine closure.

# NEAR-TERM CATALYSTS

**1 Wiluna Optimisation Opportunities** Continue to advance optimisation opportunities across the whole Wiluna Uranium Project.

**2 Maximise financial and technical feasibility – Lake Maitland Extension** Significant optionality to maximise financial and technical feasibility.  
Add material from Centipede-Millipede & Lake Way Potential high grade operation well beyond 7<sup>th</sup> year.  
Lake Maitland Extension Study by SRK is in progress.

**3 Pre-feasibility study to include beneficiation circuit.** Pre-feasibility Study to include large scale pilot of beneficiation circuit.

**4 Nickel & Gold drilling programs** Drilling programs at Dusty Nickel Project and Yandal Gold Project.

**5 Wiluna Uranium Project exploration campaign** 28.2Mlbs of  $U_3O_8$  outside Wiluna Uranium Project – exploration campaign to upgrade Mineral Resources.

**6 90.9Mlbs of  $U_3O_8$  and 68Mlbs of  $V_2O_5$**  Total Inventory of 90.9Mlbs of  $U_3O_8$  and 68Mlbs of  $V_2O_5$ .





# APPENDIX 1

## References

- Echo Resources Limited ASX release 22 August 2017.
- Phillips, G. N, and Anand, R. R. (2000) Importance of the Yandal greenstone belt, In Yandal Greenstone Belt Regolith, Geology and Mineralisation, (eds) Phillips, G. N, and Anand, R. R., CRC for Landscape Evolution and Mineral Exploration, AIG Bulletin No. 32, July 2000.
- Echo Resources Limited Mineral Resource and Ore Reserve Estimates, refer to ASX Release 27 November 2017.

For further information on the beneficiation and processing improvements on the Wiluna Uranium Project please refer to ASX announcements of 18 May, 29 August and 28 September 2016; 20 April, 20 June, 27 June, 12 September and 19 September 2018; and 7 March and 18 March 2019.

For further information on the Yandal Gold Project, including the airborne magnetic survey, ground gravity survey and all drilling releases and their accompanying JORC Table 1, please refer to ASX announcements of 23 May, 3 May, 23 May, 29 June, 26 September, 17 October, 6 November and 9 November 2018; and 21 March, 9 April, 28 May, 11 June, 26 June, 9 July and 25 July 2019.

For further information on the 2016 drilling at the Yandal One nickel prospect please refer to ASX announcements of 11 December 2015 and 25 November 2016.





# APPENDIX 2

## Resources

Wiluna Uranium Project Resources Table (JORC 2012)									
At 200ppm cut-offs inside U <sub>3</sub> O <sub>8</sub> resource envelopes for each deposit - Proposed Mine Only									
		Measured		Indicated		Inferred		Total	
		U <sub>3</sub> O <sub>8</sub>	V <sub>2</sub> O <sub>5</sub>	U <sub>3</sub> O <sub>8</sub>	V <sub>2</sub> O <sub>5</sub>	U <sub>3</sub> O <sub>8</sub>	V <sub>2</sub> O <sub>5</sub>	U <sub>3</sub> O <sub>8</sub>	V <sub>2</sub> O <sub>5</sub>
Centipede / Millipede	Ore Mt	4.9	-	12.1	-	2.7	53.6	19.7	53.6
	Grade ppm	579	-	582	-	382	327	553	327
	Oxide MIb	6.2	-	15.5	-	2.3	38.6	24	38.6
Lake Maitland	Ore Mt	-	-	22	-	-	27	22	27
	Grade ppm	-	-	545	-	-	303	545	303
	Oxide MIb	-	-	26.4	-	-	18	26.4	18
Lake Way	Ore Mt	-	-	10.3	-	-	15.7	10.3	15.7
	Grade ppm	-	-	545	-	-	335	545	335
	Oxide MIb	-	-	12.3	-	-	11.6	12.3	11.6
Total	Ore Mt	4.9	-	44.3	-	2.7	96.3	52	96.3
	Grade ppm	579	-	555	-	382	322	548	322
	MIb	6.2	-	54.2	-	2.3	68.3	62.7	68.3

# APPENDIX 3

## Competent Persons' Statements

### Geology and Exploration

The information in this document that relates to geology and exploration was authorised by Dr Greg Shirtliff, who is a full-time employee of Toro Energy Limited.

Dr Shirtliff is a Member of the Australian Institute of Mining and Metallurgy and has sufficient experience of relevance to the tasks with which he was employed to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

Dr Shirtliff consents to the inclusion in the report of matters based on information in the form and context in which it appears.

### Wiluna Project Mineral Resources – 2012 JORC Code Compliant Resource Estimates – $U_3O_8$ and $V_2O_5$ for Centipede-Millipede, Lake Way and Lake Maitland.

The information presented here that relates to  $U_3O_8$  and  $V_2O_5$  Mineral Resources of the Centipede-Millipede, Lake Way and Lake Maitland deposits is based on information compiled by Dr Greg Shirtliff 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 Shirtliff takes responsibility for the integrity of the data supplied for the estimation. Dr Shirtliff 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.



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