

ASX: AGE

Noosa Mining Conference
November 2023



**Alligator
Energy**

Disclaimer

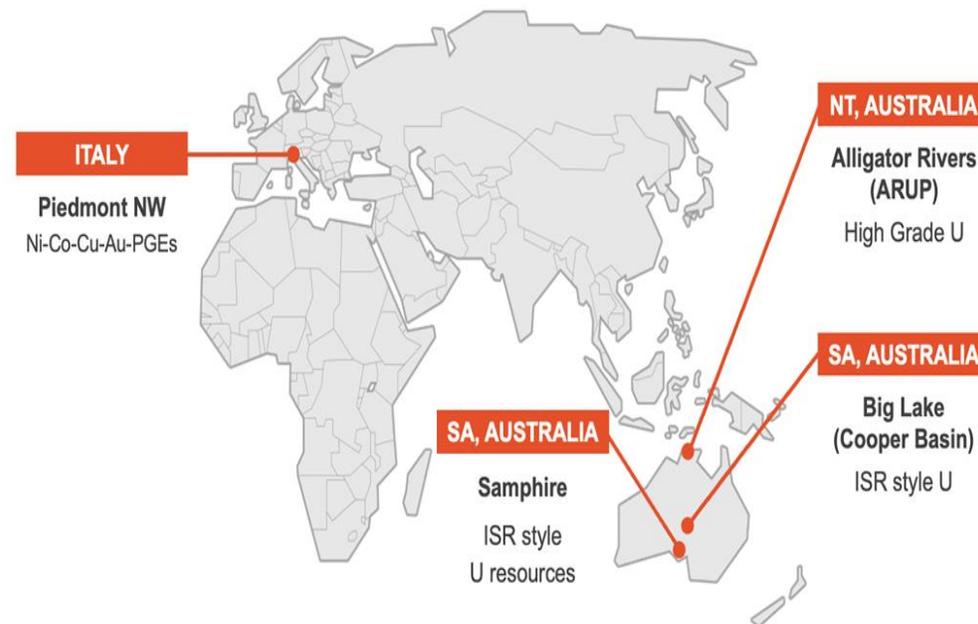
This presentation contains projections and forward-looking information that involve various risks and uncertainties regarding future events. Such forward-looking information can include without limitation statements based on current expectations involving a number of risks and uncertainties and are not guarantees of future performance of the Company. These risks and uncertainties could cause actual results and the Company's plans and objectives to differ materially from those expressed in the forward-looking information. Actual results and future events could differ materially from anticipated in such information. These and all subsequent written and oral forward-looking information are based on estimates and opinions of management on the dates they are made and expressly qualified in their entirety by this notice. The Company assumes no obligation to update forward-looking information should circumstances or management's estimates or opinions change.

Competent Person's Statement – Uranium

Information in this report is based on current and historic Exploration and Resource Drilling Results compiled by Dr Andrea Marsland-Smith, who is a Member of the AusIMM. Dr Marsland-Smith is employed by Alligator Energy as Chief Operating Officer (COO) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity she is undertaking (including 21 years working with ISR uranium development and operations) to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Marsland-Smith consents to the inclusion in this release of the matters based on her information in the form and context in which it appears.

Competent Person's Statement – Nickel Cobalt exploration

Information in this report is based on current and historic Exploration Results compiled by Mr Geoffrey Chapman who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Chapman is a Consultant Geologist with Alligator Energy Limited 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 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Chapman consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.

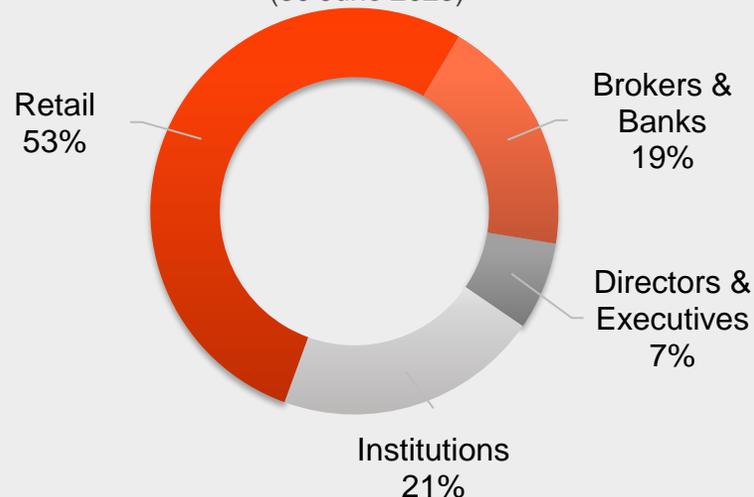


Capital Structure (at 14 November 2023)

Share Price	0.054
Ordinary Shares*	3,862.3 M
Performance Shares & Unlisted Options	175.3 M
Cash at 30 September* [Add'n \$3.26M from SPP on 20 Oct 2023]	~\$37.9 M
Market Cap	\$208.6 M

Top 50 Shareholders

(30 June 2023)



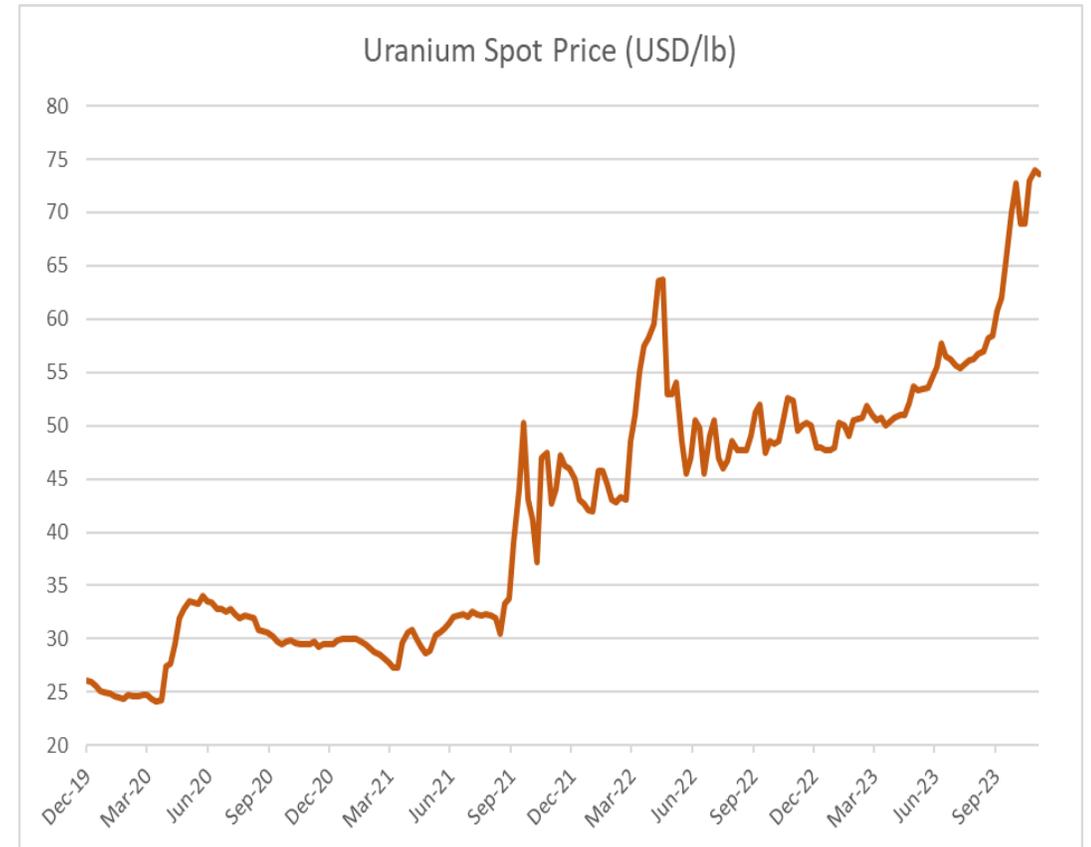
Leading Uranium Focussed Board

Member	Description		
Paul Dickson Chairman	Paul is a finance and corporate advisory professional with more than 30 years' experience in the finance services industry. Paul has been an AGE Board member since inception and Chairman for 3 years.		
Gregory Hall CEO & Managing Director	Greg is an experienced mining engineer and CEO with 35+ years' experience in uranium and other mine management. He previously held roles at WMC Olympic Dam & nickel mines, LKAB Iron Ore (Sweden), ERA Ranger & Jabiluka Uranium and international commodities marketing with Rio Tinto (ERA) Uranium, and Bauxite & Alumina groups. Greg was also founding CEO of Toro Energy Ltd.		
Peter McIntyre Non-Executive Director	Peter is a civil engineer and experienced CEO. He previously held GM roles with WMC Ltd, including development of major mining projects. Peter was the founding MD of Extract Resources during the discovery and pre-feasibility of Husab Uranium mine in Namibia, sold for US\$2.2 billion.		
Fiona Nicholls Non-Executive Director	Fiona has 30 years of experience working across a range of business functions including strategy, planning, ESG and operations, multi-country project development and approvals and due diligence processes. Fiona was previously on the Board of Rössing Uranium and alternate director for ERA uranium.		
Callum McIntyre Alternate Non-Executive Director	<table border="0"> <tr> <td>Dr Andrea Marsland-Smith Chief Operating Officer</td> <td>Mike Meintjes - CFO Michael Barlow – Exploration Manager</td> </tr> </table>	Dr Andrea Marsland-Smith Chief Operating Officer	Mike Meintjes - CFO Michael Barlow – Exploration Manager
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* Note as of 20 Sept 2023, AGE announced a successful placement of 491M shares to institutional and sophisticated investors at A\$0.052 for a raising of \$25.5M before costs. An SPP to all shareholders was subsequently undertaken raising an additional \$3.26M announced on 20 October 2023.

Key drivers behind the pick-up in the Uranium spot price:

- **Global Energy Transition – Net Zero by 2050 initiative**
 - Biden Administration and EU support for nuclear
 - 60 reactors under construction across 15 countries –
WNA Aug 2023
 - 11 reactors (33 still in commission) restarted in Japan –
Aug 2023
- **Increased global energy security concerns**
 - Ukraine war/Russian sanctions
- **Inventory rundown**
 - Limited new production, supply disruption (Niger) and emergence of EFTs (Sprott/Yellow Cake)
 - 118 Mlbs under LT contract already – *Aug 23*



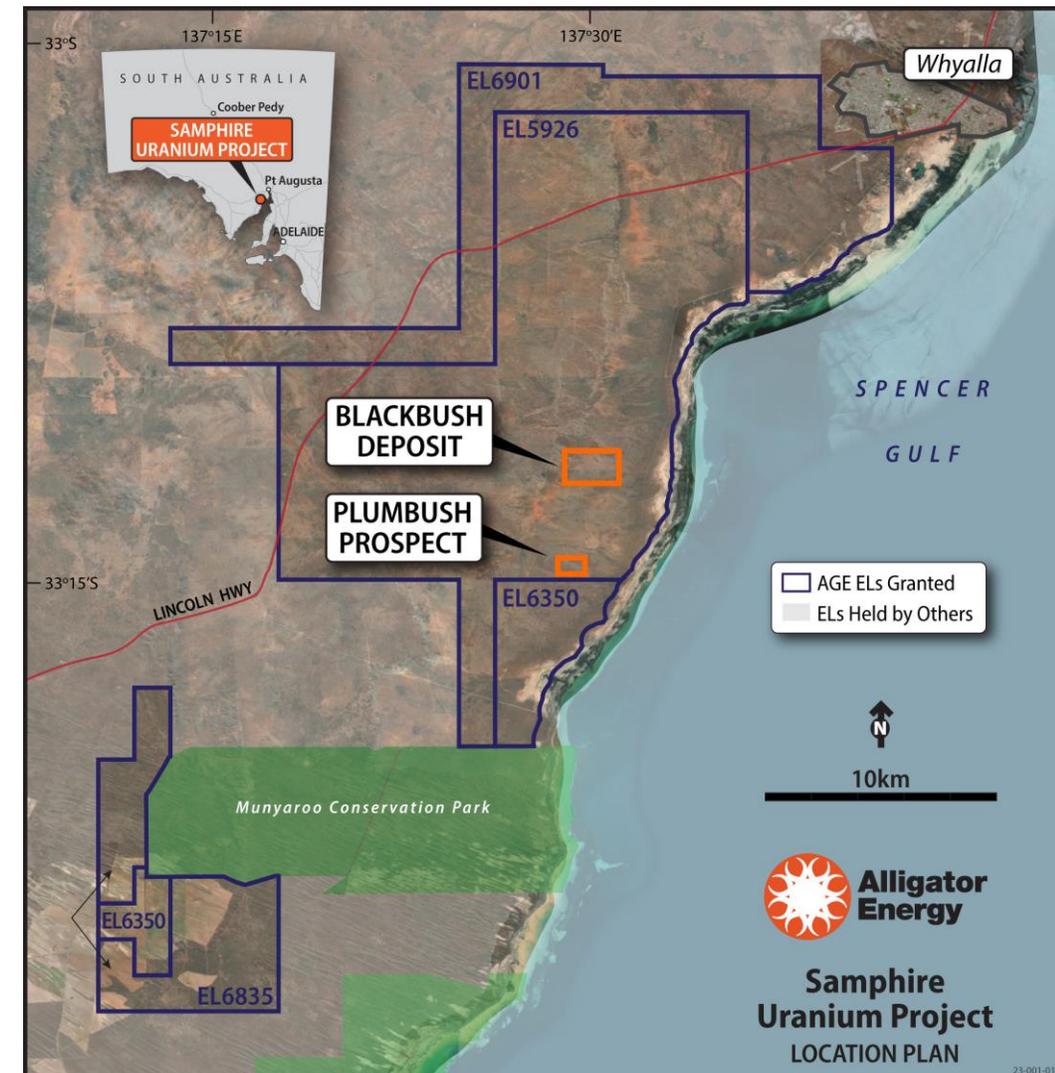
Medium term influences – advancing technologies – SMRs (< 300MW) and Micros (1-10MW)

Samphire Uranium Project: Introduction

ISR uranium project near Whyalla, with robust economics

- Proven In Situ Recovery (ISR) operation planned, allowing **very low impact mining**.
- JORC Resource Estimate of 18.1Mlbs U₃O₈ **and growing**.
- Robust initial Scoping Study based on 10Mlbs U₃O₈ over 12 years, using **Blackbush Deposit only**.
- Drilling ongoing to support a further Resource Estimate update at Blackbush.
- Scoping Study update in parallel targeting improved economics.
- Exploration target range (including Plumbush) being determined.
- Field Recovery Trial for 1H of 2024* to confirm parameters to be used in a full feasibility study during 2024.

* On receipt of all regulatory approvals



Samphire Uranium Project Scoping Study: Key Metrics



A\$129.3 m

CAPEX
(including contingency)



3.5 years

Payback



29%

IRR*
(post-tax, real, ungeared)



A\$152.0 m

NPV₈*
(post-tax, real, ungeared)



US\$30.20 /lb

AISC
(A\$ 43.2 /lb)



US\$17.9 /lb

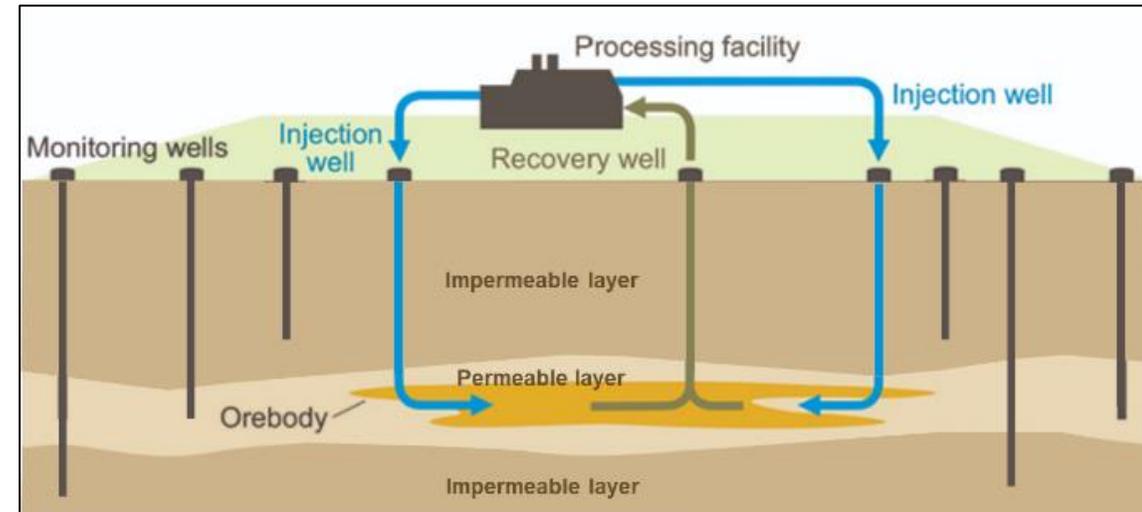
Cash Costs
(A\$25.6 /lb)

*Calculated using US\$65 per lb uranium price and 0.70 US/A\$ exchange rate

Samphire Uranium project: Competitive and Optimisation Opportunities

- ISR - Low initial capital cost estimate, despite inclusion of significant contingencies and inflation of 40%.
- Low end AISC due to shallow deposit, excellent formation porosity, high leaching dynamics.
- Location near Whyalla offers locally based workforce (no FIFO and camp), experienced mining services and business support, lower cost of key infrastructure.

Conceptual Model of ISR



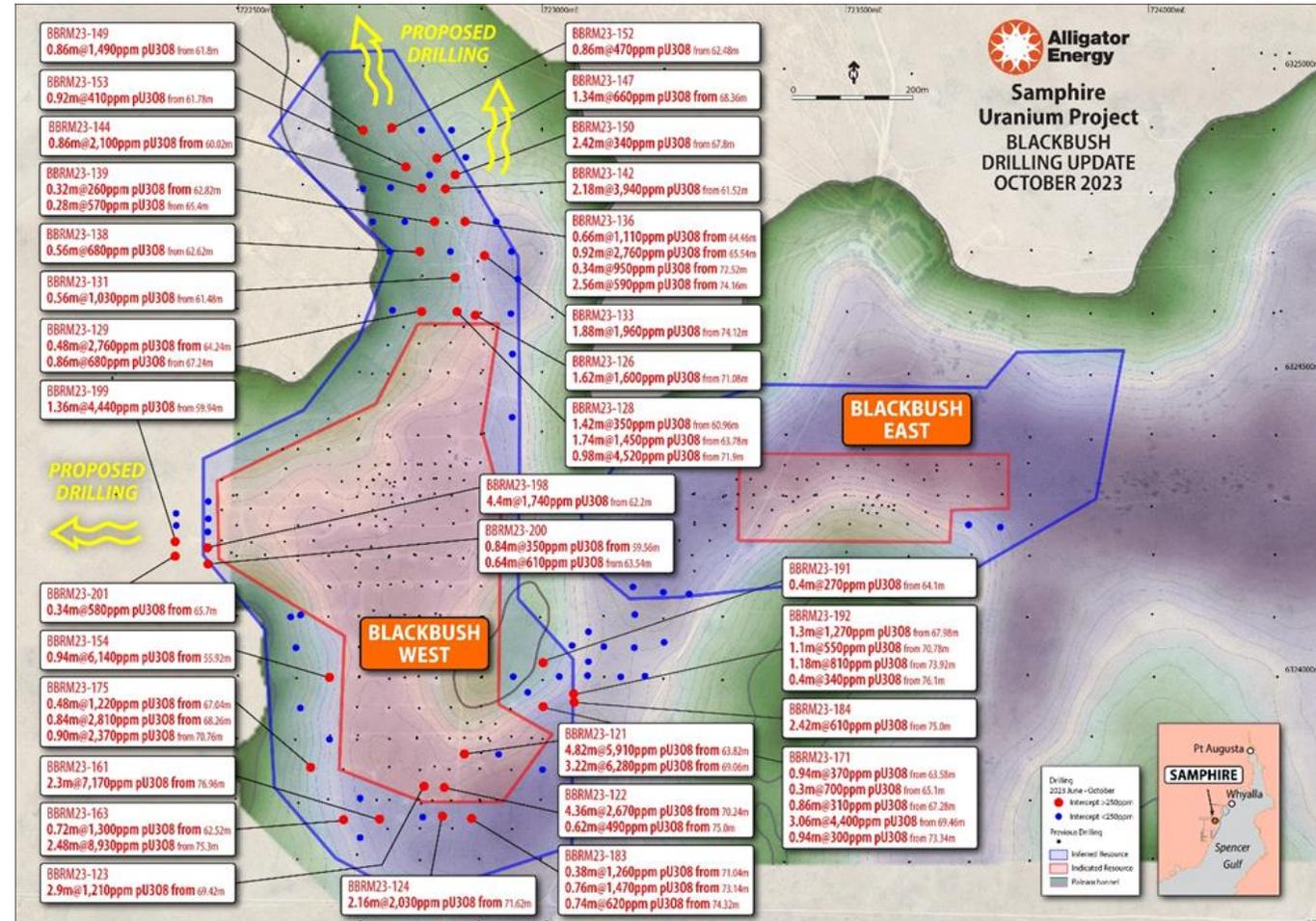
Potential to scale and optimise plant

- Currently undertaking resource and Scoping Study update – plan for increased production target of 1.2Mlbs pa.
- Modular plant makes production capacity scalable.
- Further exploration potential for additional uranium at Blackbush deposit, then south to Plumbush deposit plus wider exploration on known channels.
- Scope for processing efficiencies, in particular to reduce costs around RO plant, and increase recovery rates.

Samphire Uranium Project – Scope for Mineral Resource Growth

Strong Resource growth potential at Blackbush

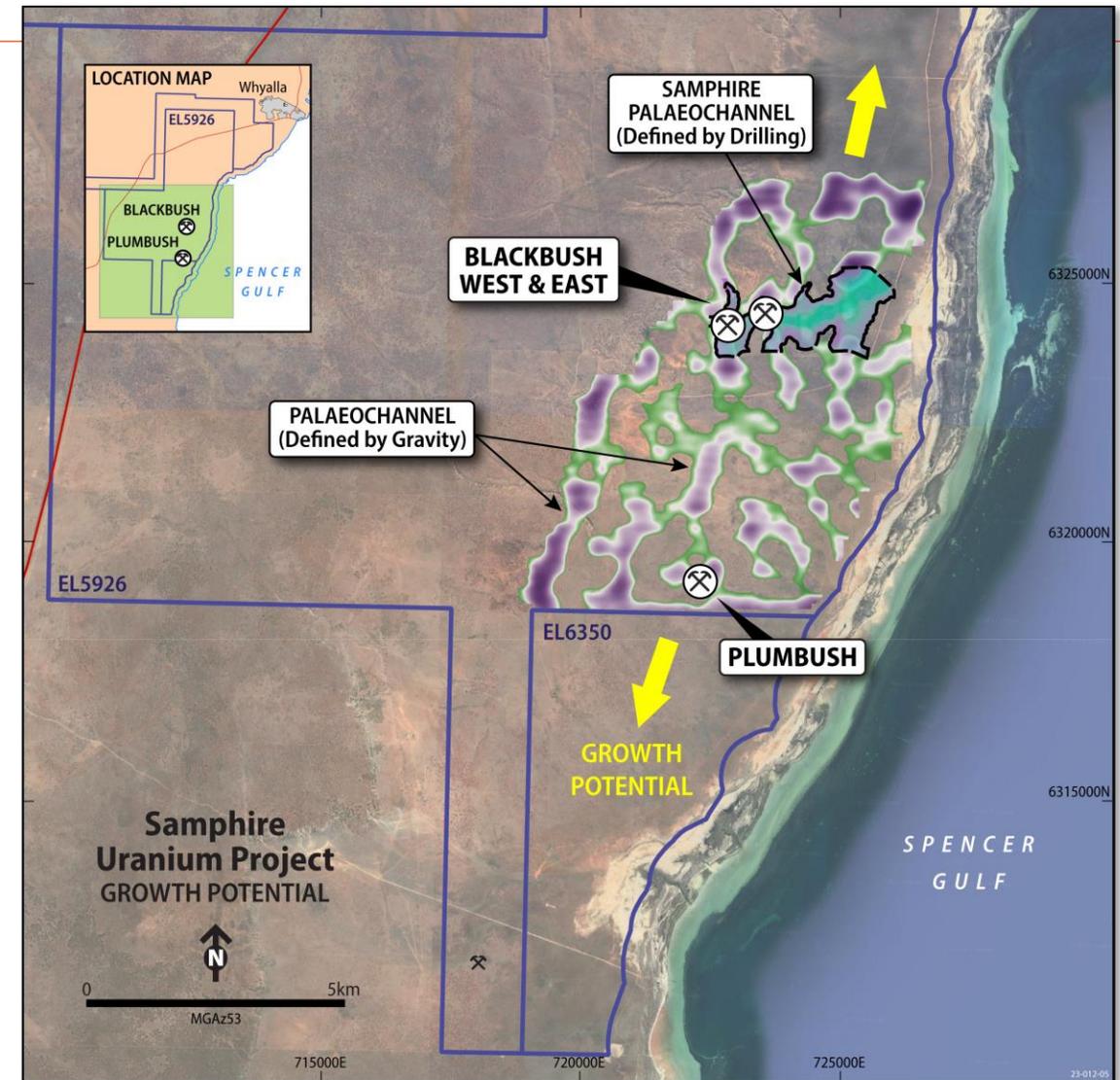
- Currently 18.1Mlbs U₃O₈ from 11.4 million tonnes at 720 ppm U₃O₈.
- Coherent multi-level high-grade zones with cumulative strike length of >2,700m and width between 300-450m.



Samphire Uranium Project – Scope for Resource Growth

Local and district-scale resource growth potential

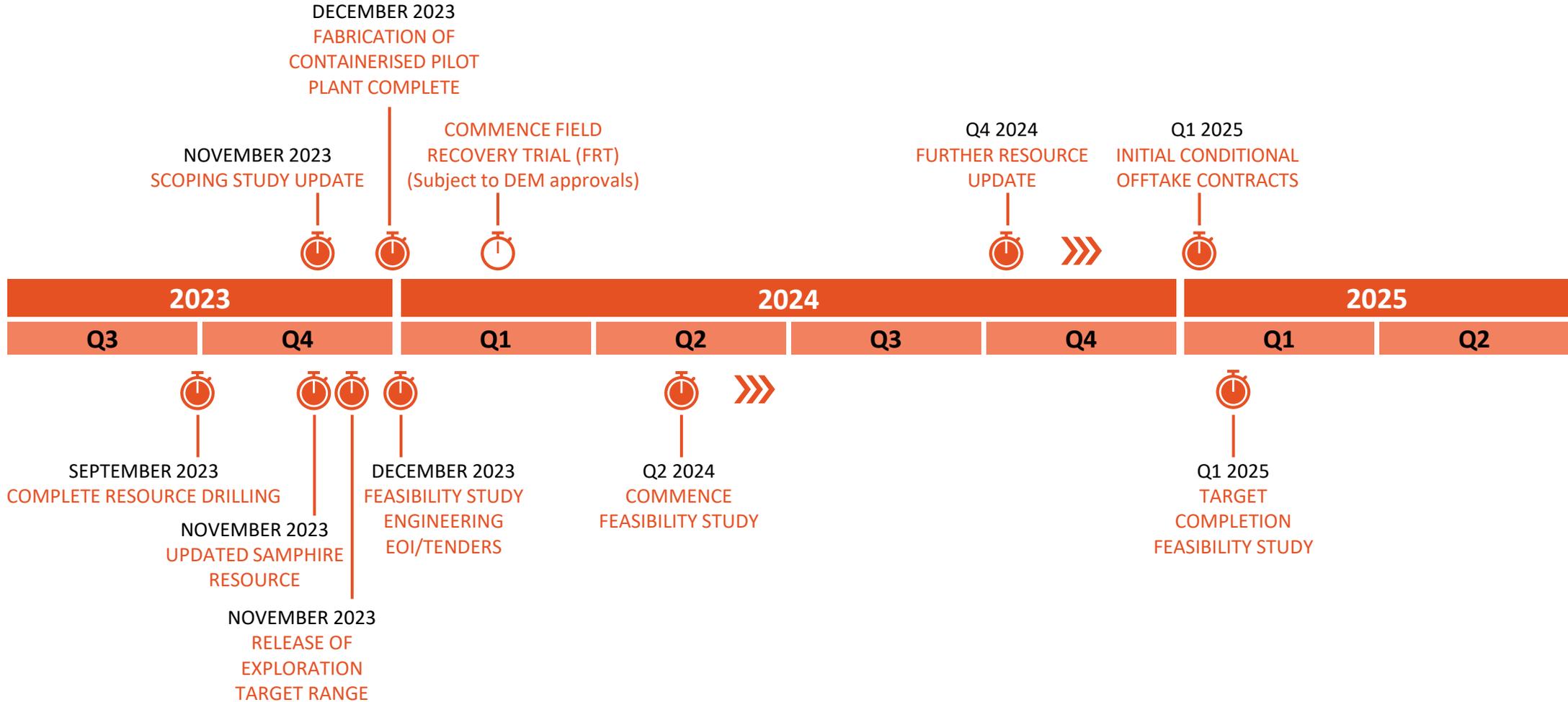
- Plumbush Deposit not adequately tested nor is its relationship to Blackbush Deposit known.
- High-resolution ground gravity acquired September 2022 to improve palaeochannel resolution.
- Regional ground gravity shows significant palaeochannel extensions.
 - Immediate focus for near-future drill programs
 - Potential for palaeochannel system to extend north and south of the current defined area
 - Potential for additional satellite deposits
- Developing an ‘exploration target range’ for the Project.



Regional filtered ground gravity showing potential palaeochannel extensions and Blackbush palaeochannel (defined by drilling).

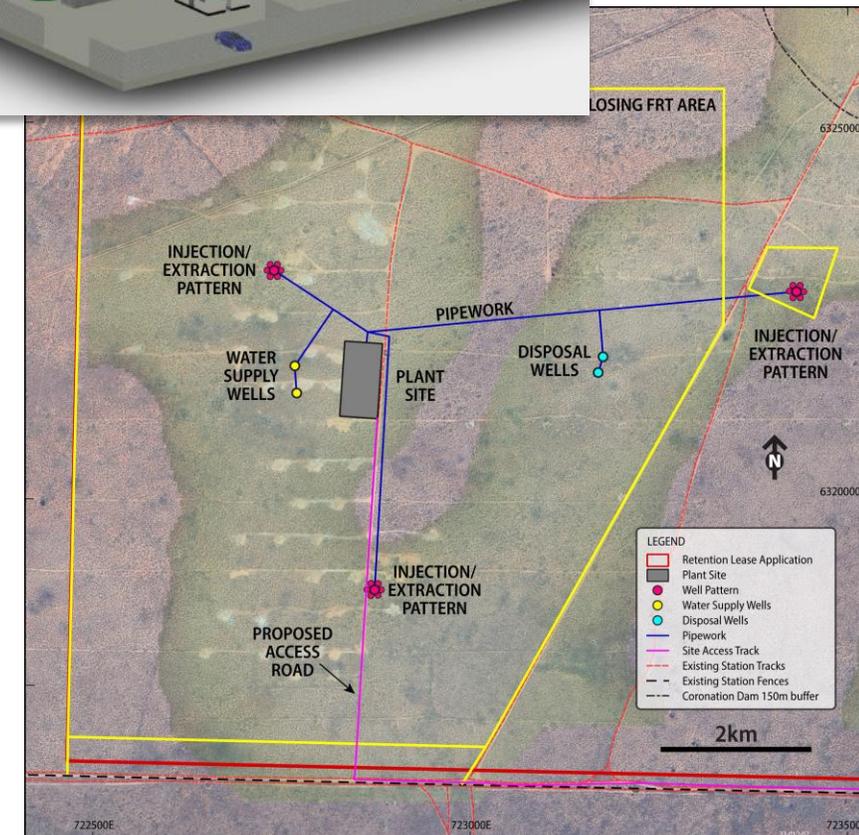
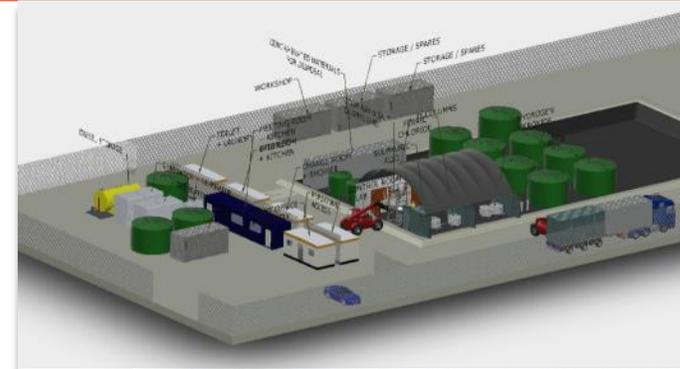
Samphire Uranium Project: Next steps

Intention to rapidly progress next steps



Samphire Uranium Project: Field Recovery Trial (FRT)

- To better understand uranium extraction from underlying sediments (60 to 80 m below the surface) using ISR.
- Short-term (approx. 3-4 months) pilot FRT in 1H 2024, following receipt of all necessary approvals.
- Approval for Retention Lease for FRT – post public consultation now final stage.
- Will consist of three producing wells and a containerised pilot plant.
- FRT will finalise in-situ chemistry, hydrogeology, uranium recovery, environmental and economic factors for Feasibility Study.
- Confirms data and information needed for Mining Lease approvals from State and Federal Governments.
- After planned and any future testing, well infrastructure and containerised pilot process plant removed, and area rehabilitated – pilot plant available for future satellite field testing.



Samphire Uranium Project: Pilot Plant & Field Recovery Trial (FRT) – early 2024

- Project Task and Cost Schedules established and operating.
- Engineering Design of pilot plant and detailed P&ID's in place.
- Fabrication and fit out of containers with built-in bunding has commenced.
- Equipment procurement process advanced – resins, IX columns, pumps, RO plant, all purchased or ordered.
- Process chemicals and supply identified.



Wellhouse fabrication nearing completion



Site Plan

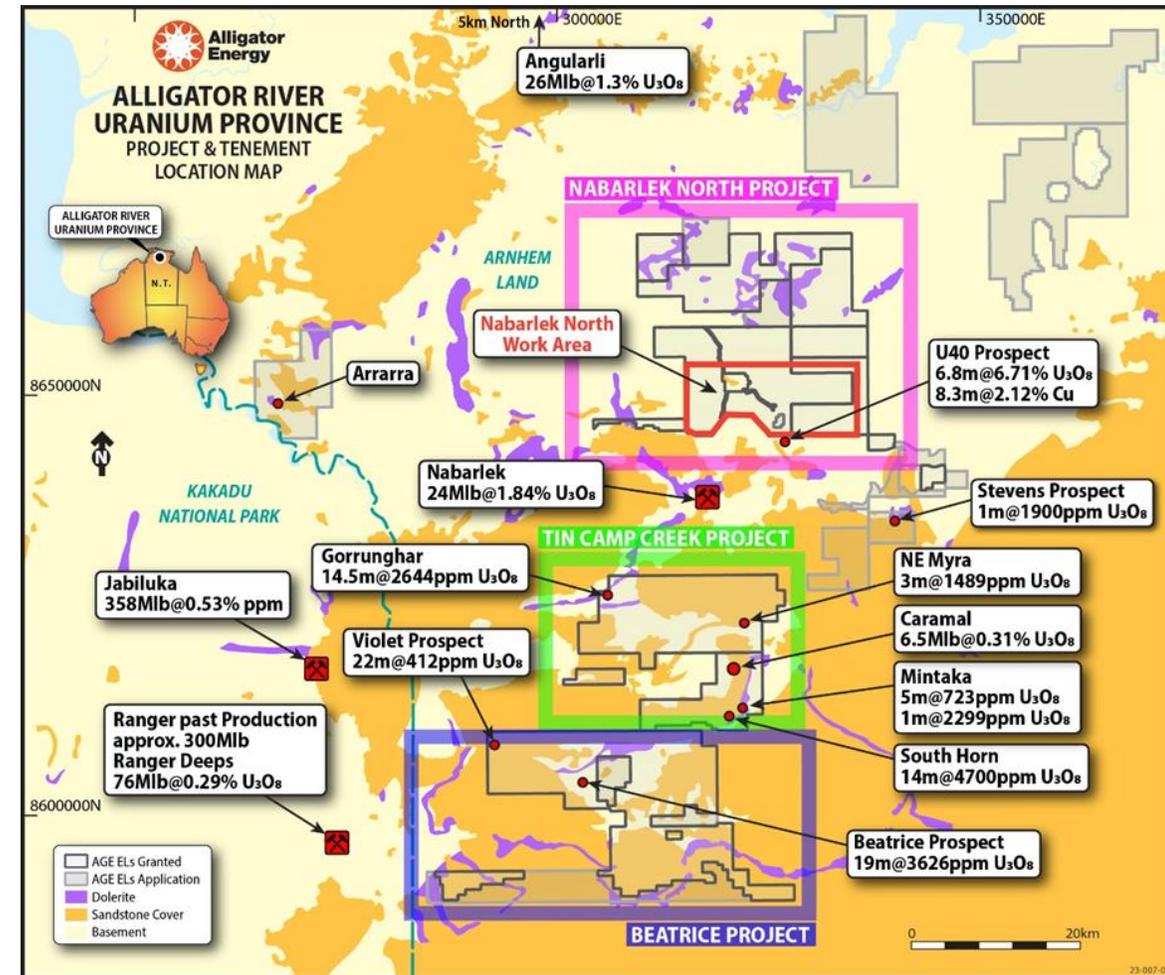
Alligator Rivers Uranium Province, NT

- 100% owned project in Australia's premier **high-grade** uranium province.
- Province is host to existing high-grade deposits including Jabiluka (358Mlb @ 5,300ppm U₃O₈).
- Multiple uranium targets in well-defined regional uranium bearing zone including the Caramal Resource 6.5 Mlbs U₃O₈ @3,100ppm.
- Extensive Nabarlek North exploration program underway – adjacent to U40 Prospect*.

Status of 2023 Work Program at Nabarlek North:

- Integration of airborne gravity, other geophysics, geology, geochemistry and drilling - collected in 2022
- Recently completed an extensive geochemical sampling program with RC, RAB, aircore and auger – **assay results awaited**
- Completed induced polarisation (IP) survey over broad areas seeking to identify alteration zones.
- **Data interpretation from recently completed work about to commence** with objective of moving to more-focussed targeting in 2024.
- Commence evaluation of the potential for strategic energy minerals.

* Includes 6.3m at 7.23% U₃O₈ and 8.3m @ 2.12% Cu (Uranium Equities Ltd now DevEx Resources Ltd release – 4 October 2017).

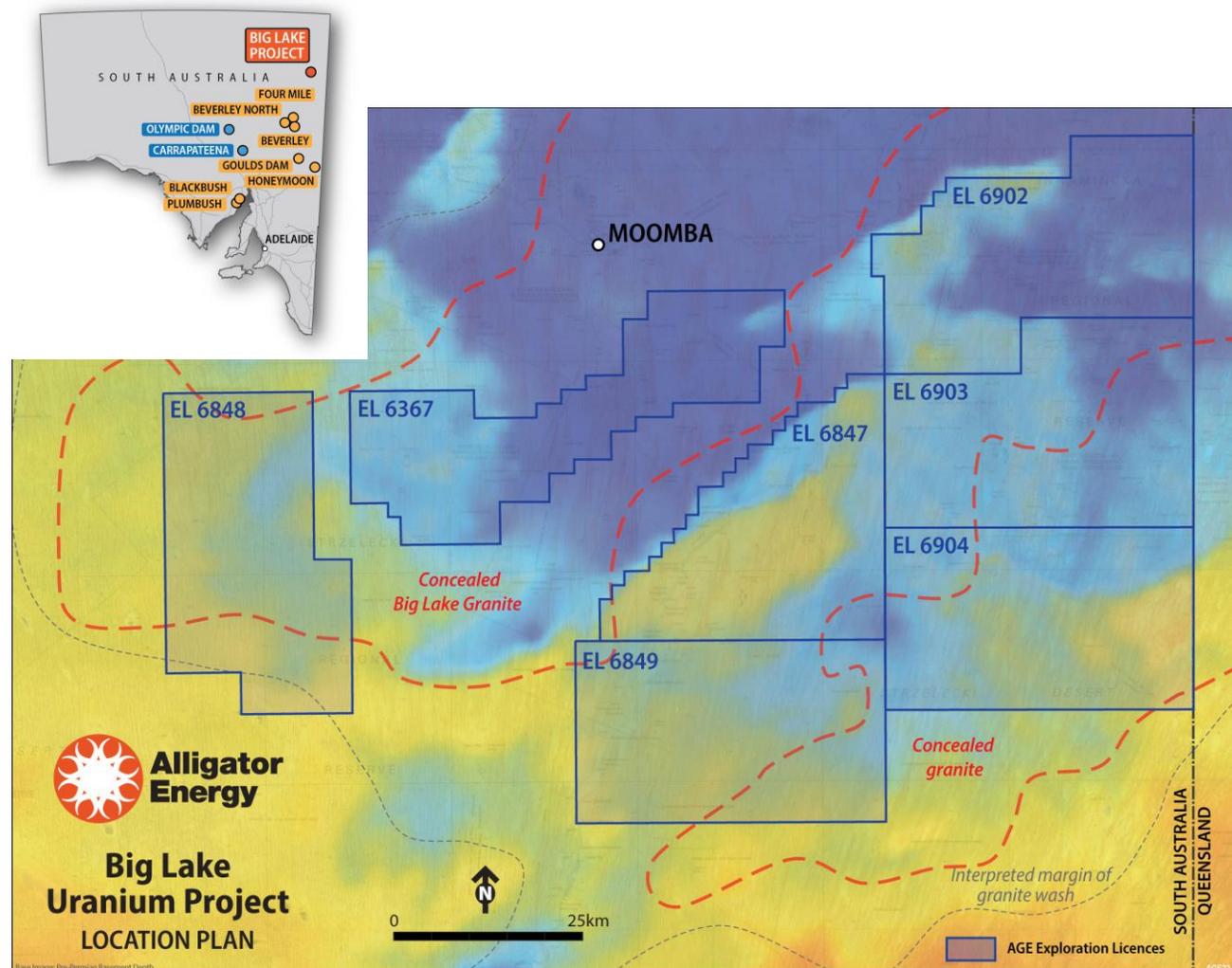


Big Lake Uranium Project, SA

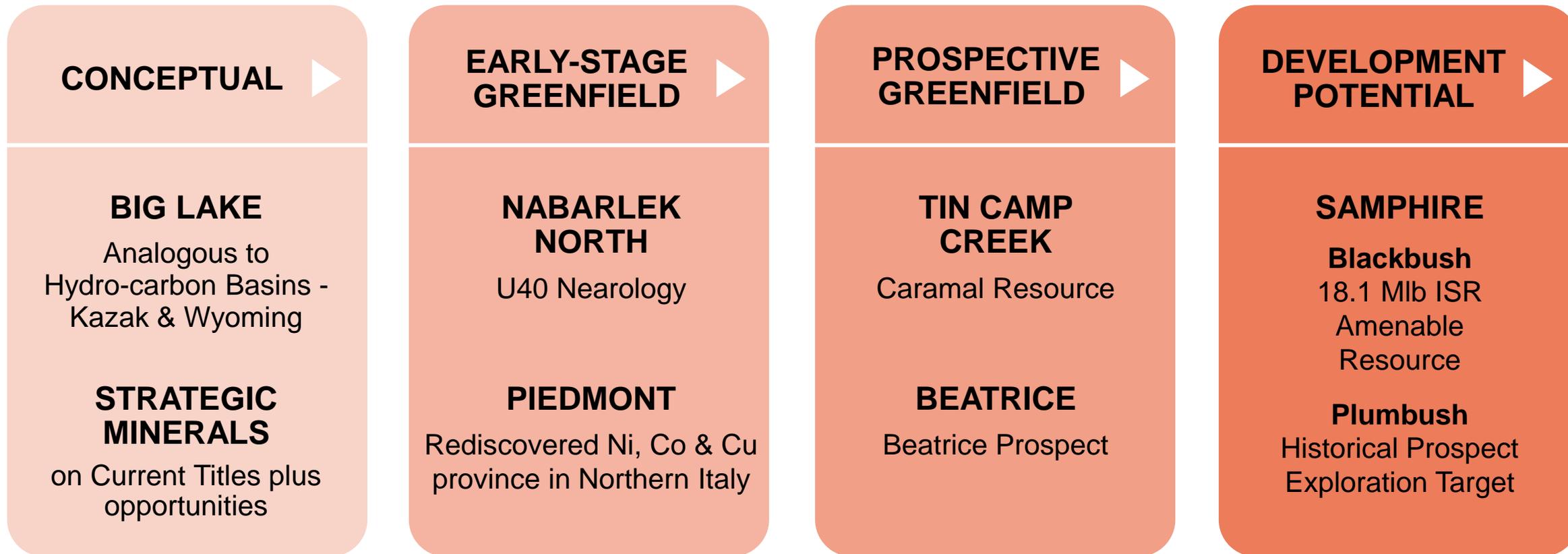
- Overlies Cooper Basin in NW SA – unexplored for uranium despite geological analogies to existing world-class ISR fields.
- Hydrocarbon basins in Kazakhstan, Wyoming and Texas represent analogous redox style uranium settings.
- Several potential uranium sources including; weathering / leaching of underlying ‘hot’ granite suite or distal migration of uranium bearing fluids toward basin depo-centres.
- EM results and analysis of publicly available 2D seismic data indicate potential presence of paleochannel systems.

Status of 2023 Work Program:

- Interpretation of seismic and other datasets completed, continuing work towards a full 3D basin model.
- Selection of ~20 stratigraphic drill sites to test paleochannel model and qualities of U-trap rocks – **testing to commence H1 2024.**
- Exploration access agreement in place with the Traditional Owners. **Clearances for proposed 2024 drilling underway.**
- Evaluation of potential across holding to host battery metals such as Li in condensates.



Project Pipeline

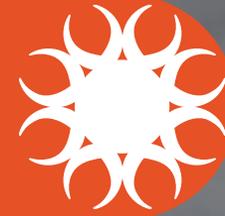


OTHER URANIUM + ENERGY MINERAL OPPORTUNITIES



M&A TEAM IN PLACE

ASX: AGE



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Energy**

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