

ASX: **AGE**



GLOBAL URANIUM
CONFERENCE 2023

15-16 November 2023
Adelaide Convention Centre



Global Uranium Conference
November 2023



**Alligator
Energy**

Disclaimer

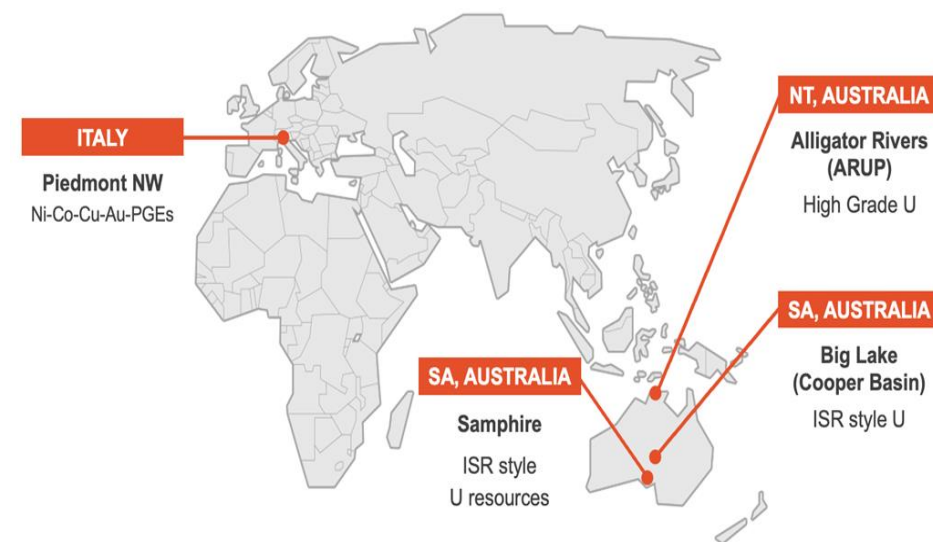
This presentation contains projections and forward-looking information that involve various risks and uncertainties regarding future events. Such forward-looking information can include without limitation statements based on current expectations involving a number of risks and uncertainties and are not 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.

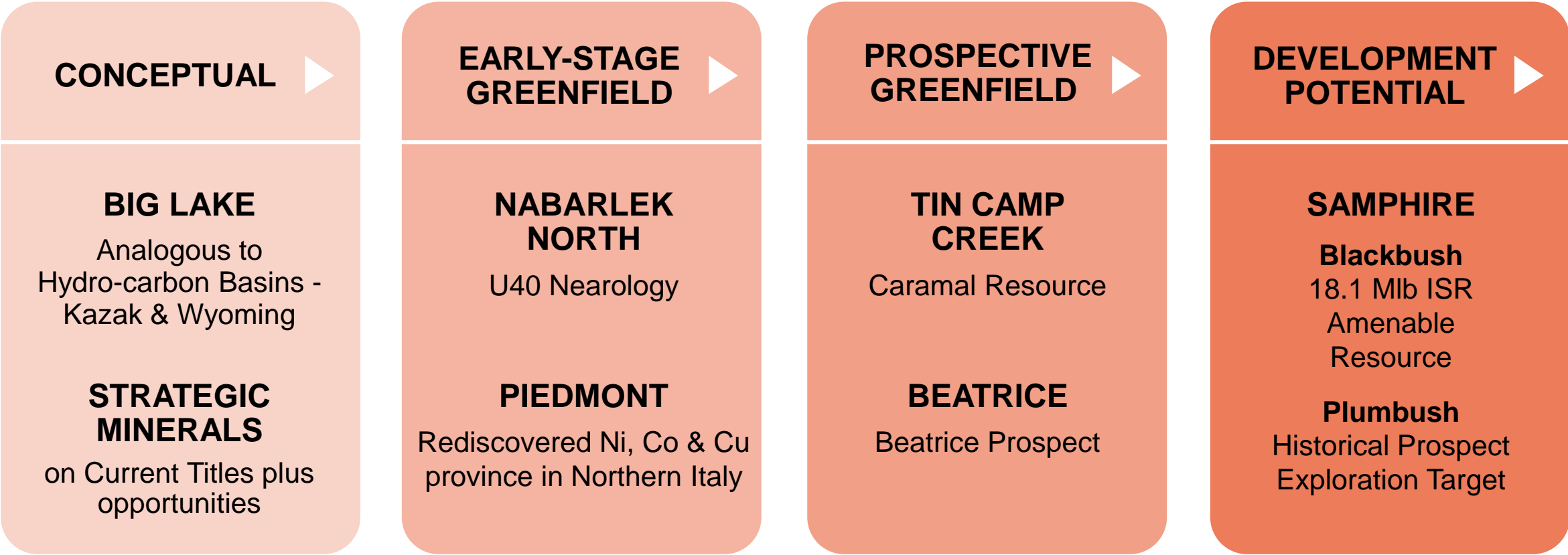
Competent Person's Statement – Uranium

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.





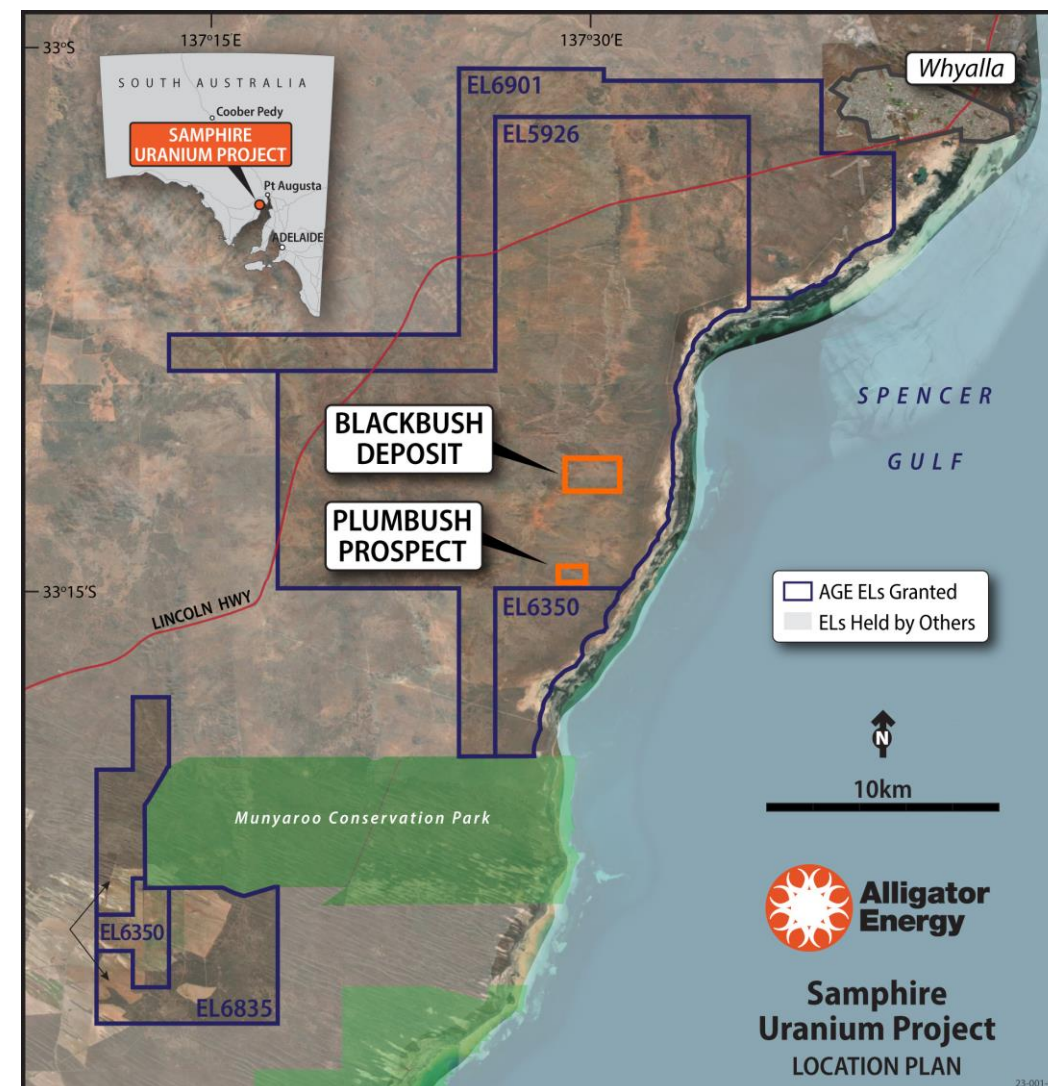
**OTHER URANIUM + ENERGY
MINERAL OPPORTUNITIES**



**M&A TEAM
IN PLACE**

Samphire Uranium Project - Overview

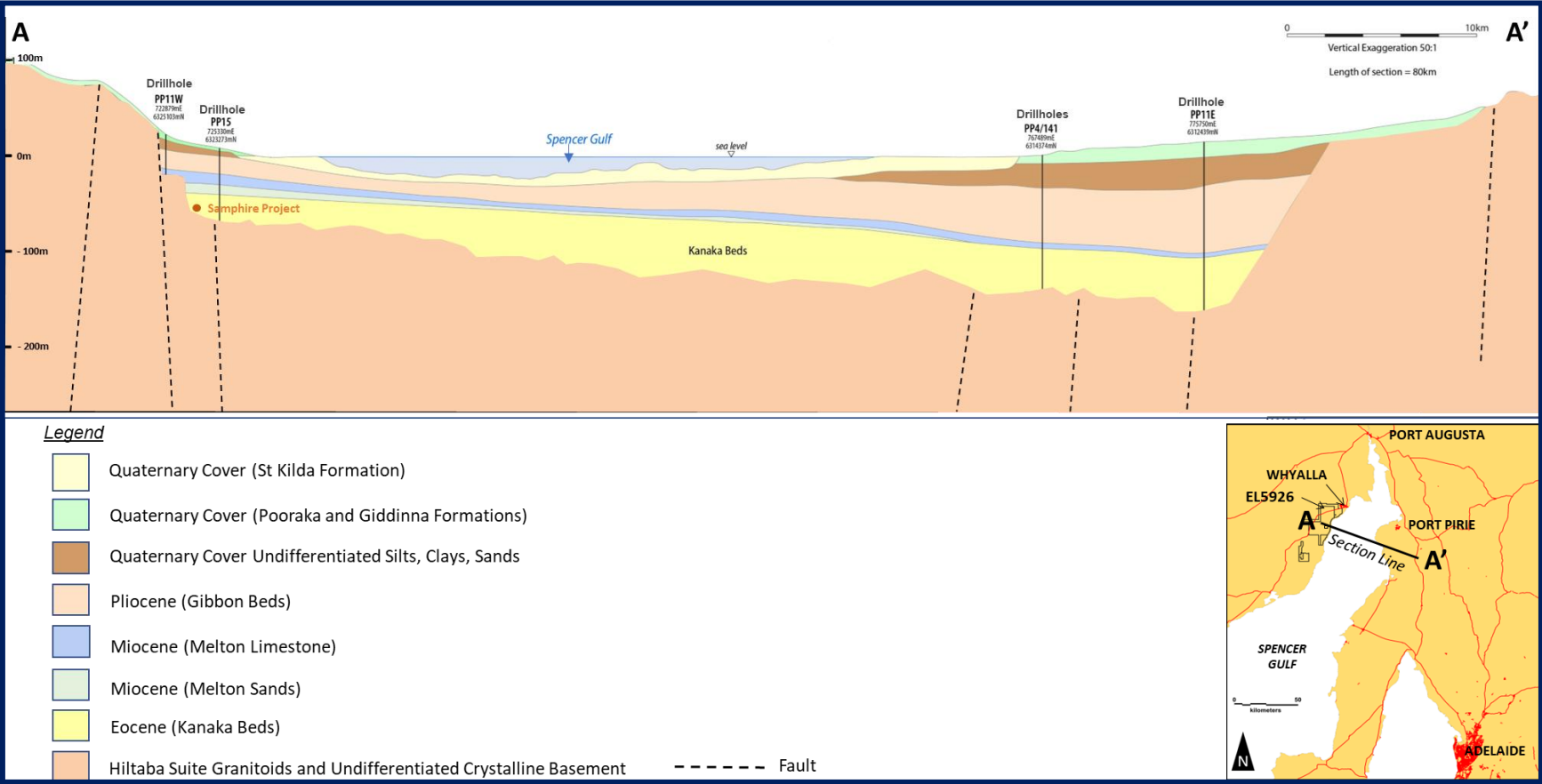
- 20km south of Whyalla
- Previously the focus of work by UraniumSA between 2009 and 2012 – drilled over 500 drillholes. AGE acquired the project in late 2020.
- One uranium deposit (Blackbush, 18.1Mlbs U_3O_8 ⁽¹⁾) and historical prospect (Plumbush) hosted in the Kanaka sand beds in palaeochannels ~ 60-80m depth.
- AGE 's work at Blackbush since early 2022
 - Confirmatory and extensional drilling
 - Geophysics
 - Metallurgical test-work (ANSTO)
 - Retention Lease approvals to conduct a field recovery trial
 - Two mineral resource estimations (update in progress)
 - Scoping study for full-scale operation (update in progress)



(1) AGE ASX Release <https://wcsecure.weblink.com.au/pdf/AGE/02639068.pdf>

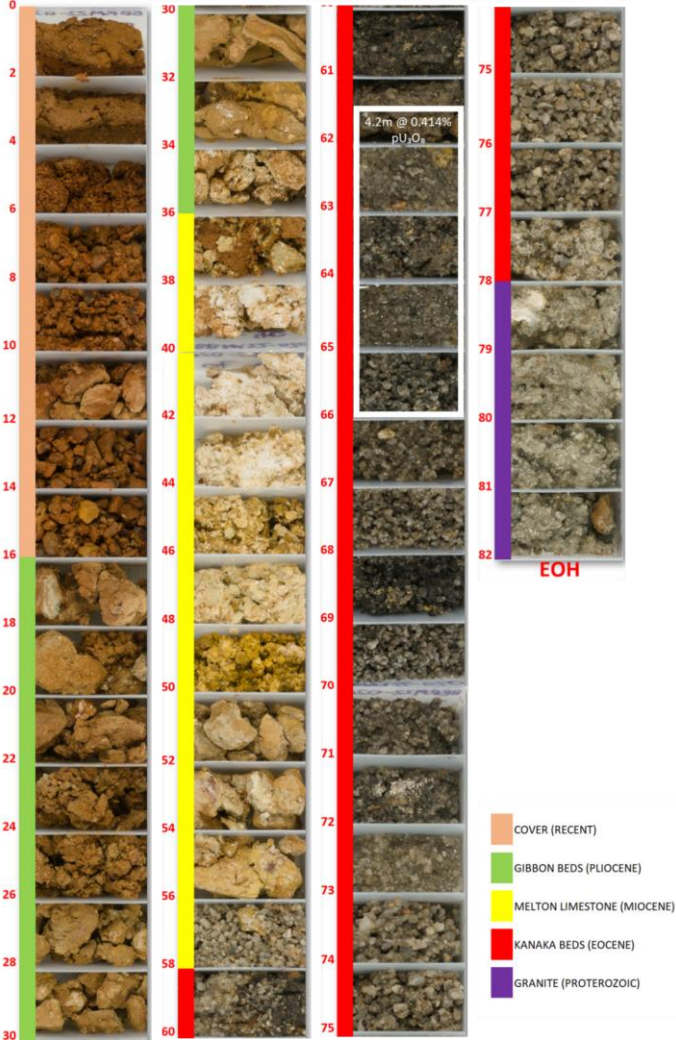


Samphire Uranium Project - Geology



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PROJECT: SAMPHIRE URANIUM
PROGRAM: 2022 ROTARY MUD DRILLING
DRAWING: CHIP TRAY PHOTOGRAPHS
DRILLHOLE ID: BBRM22-020



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Samphire Uranium Project: Mineral Resource Estimates

- **Initial ISR Mineral Resource Estimate (August 2022)** for the Blackbush Deposit of 14.8 Mlbs (combined Inferred and Indicated) for a cut-off grade of 250ppm U_3O_8 .
- **Increased to 18.1 Mlbs U_3O_8 (March 2023)** following additional drilling. Using same cut-off grade – resulting in a 78% category transfer and increase in the Indicated Mineral Resource.
- **Further increase based on** drilling underway targeted for Nov 2023.

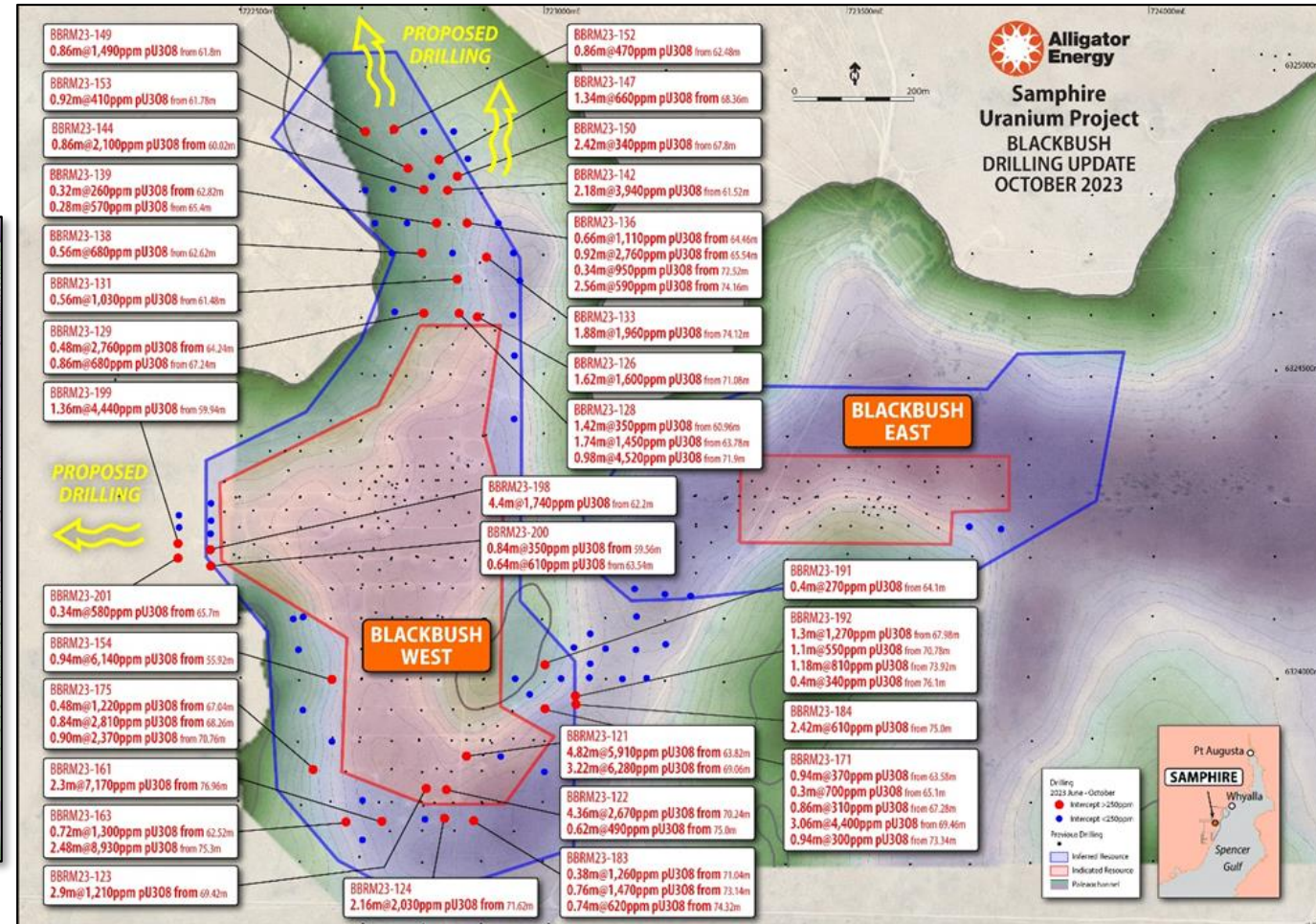
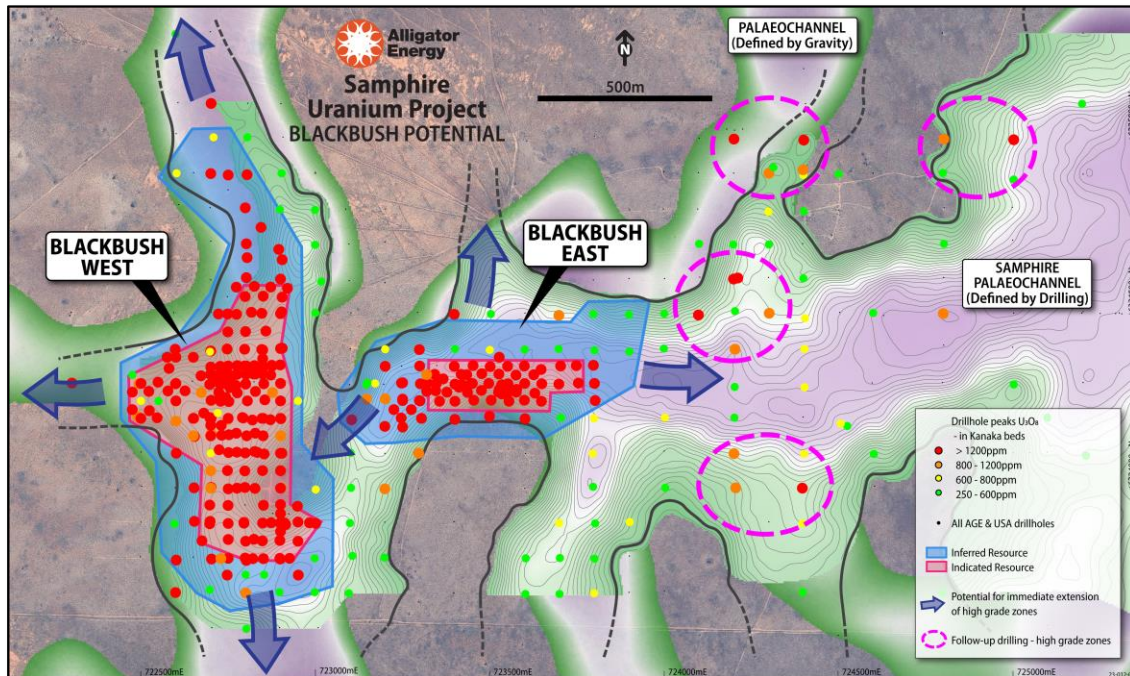
JORC Category	Mt	Grade (U_3O_8 ppm)	U_3O_8 Metal (KTonnes)	U_3O_8 Metal (Mlbs)
Indicated	6.1	796	4.8	10.7
Inferred	5.3	633	3.4	7.4
Total	11.4	720	8.2	18.1

ASX Release – 2 March 2023

- **Resource suitable for a small start-up ISR operation**
 - Favourable ANSTO testwork for (33 days test using typical ISR conditions on core show a high level of uranium extraction (92 to 96% range)
 - Favourable permeability of the host formation from previous hydrogeological work undertaken by Uranium SA Ltd
 - Proximity to Whyalla – locally based workforce (no FIFO and camp)
 - Shallow deposit (60 to 80m depth)
 - Local experienced mining services and business support, lower cost of key infrastructure.

Samphire Uranium Project – Resource Growth at Blackbush

- Coherent multi-level high-grade zones with cumulative strike length of >2,700m and width between 300-450m.

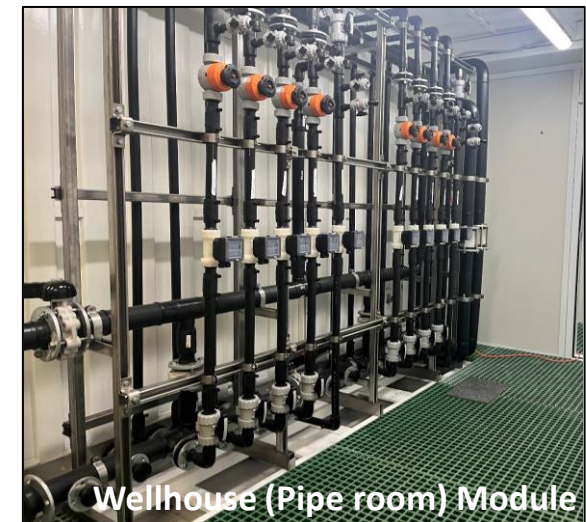
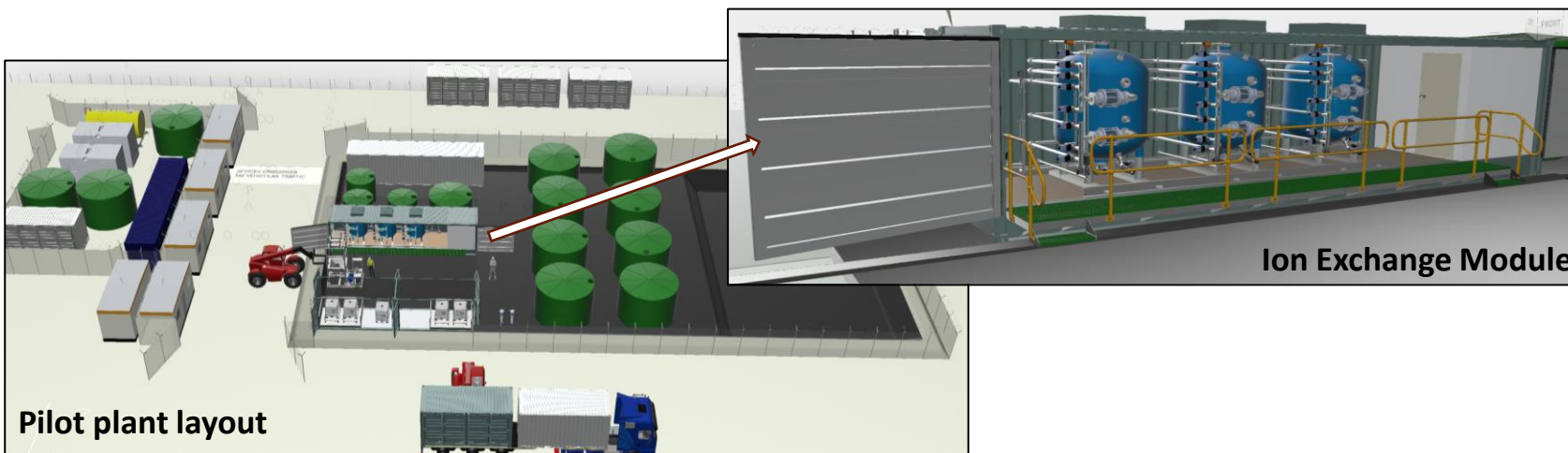


Samphire Uranium Project – Field Recovery Trial

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

- FRT will finalise in-situ chemistry, hydrogeology, uranium recovery, environmental and economic factors for Feasibility Study.
- Approval for Retention Lease for FRT – post public consultation now final stage.
- Will consist of three producing wells and a containerised pilot plant (on for 3-4 months)
- 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 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 inclusion of significant contingencies and inflation of 40%.*

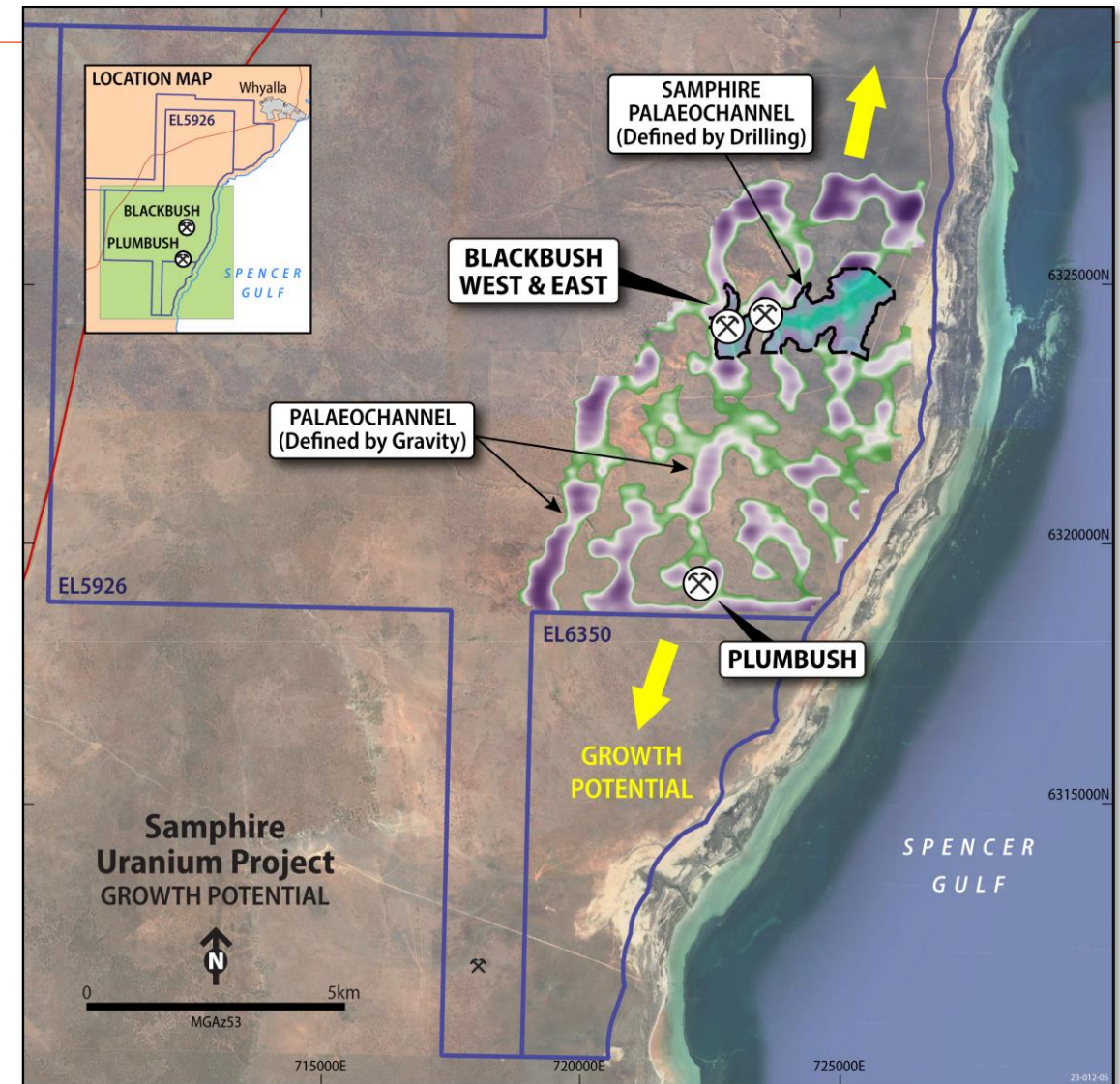
Potential to scale and optimise plant

- Currently undertaking resource and Scoping Study update – plan for increased production target of 1.2Mlbs pa.
- Modular plant to enable 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 – Exploration

Local and district-scale resource growth potential

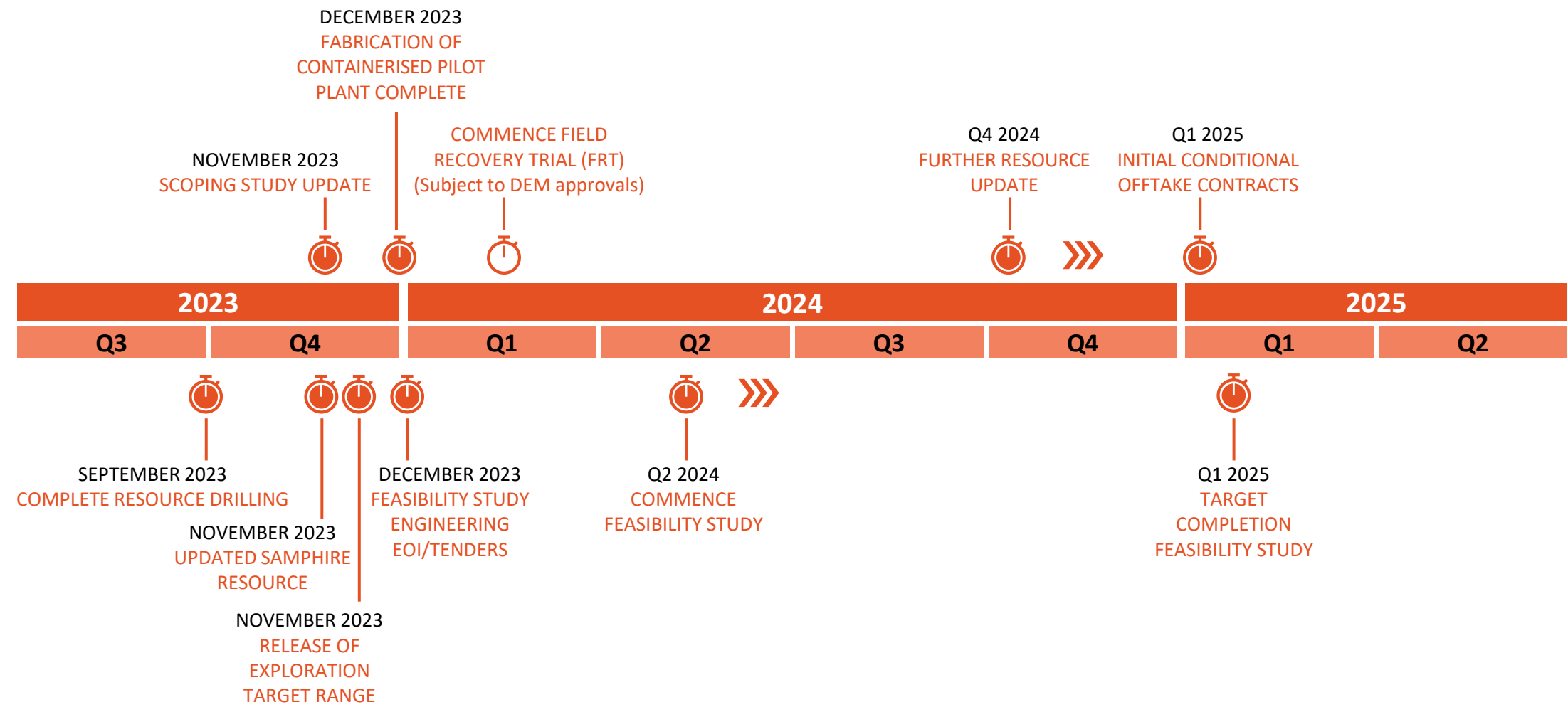
- Plumbush Deposit not adequately tested nor is its relationship to Blackbush Deposit known.
- High-resolution ground gravity acquired (Sept 2022) to improve palaeochannel resolution.
- Regional ground gravity shows significant palaeochannel extensions.
 - Immediate focus for near-future drill programs
 - 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



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