

ASX:AGE

# Advancing Samphire Uranium Project into Trial Production



**Alligator  
Energy**

**Andrea Marsland-Smith CEO**  
**23 July 2025**





## Forward Looking Statements

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 and Previously Reported Information

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 Executive Officer (CEO) 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.

In relation to Exploration results and Mineral Resource estimates referred to in the announcements referred to on slides 7, 9 & 13 the Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. In relation to production target referred to on slide 7 & 8, the Company confirms that all material assumptions underpinning the production target, and the forecast financial information derived from the production target, in the initial announcement continue to apply and have not materially changed.

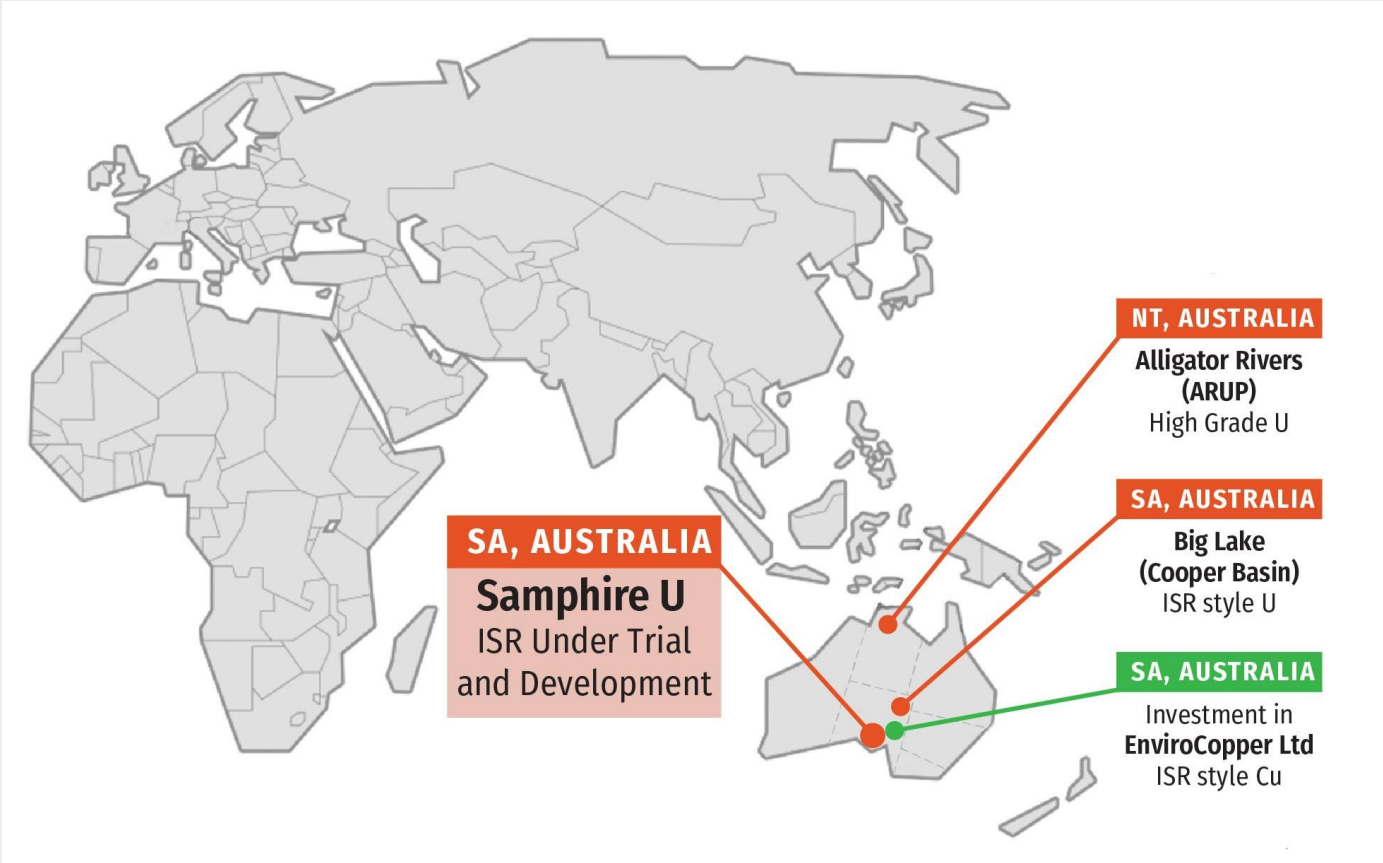
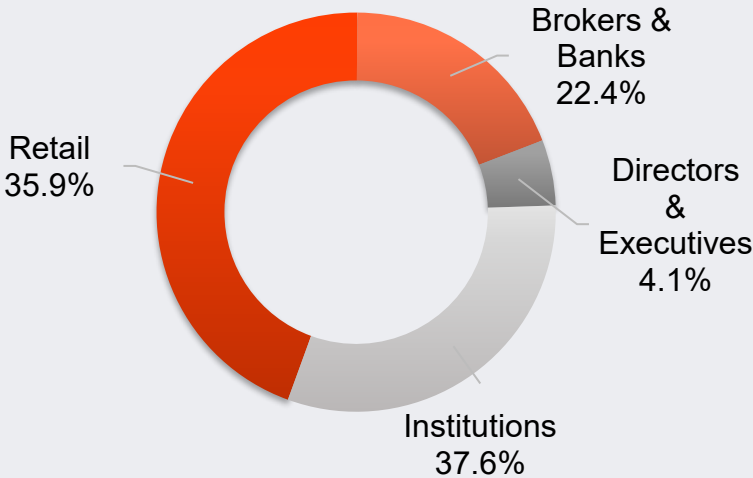


## Capital Structure (as at 30 June 2025)

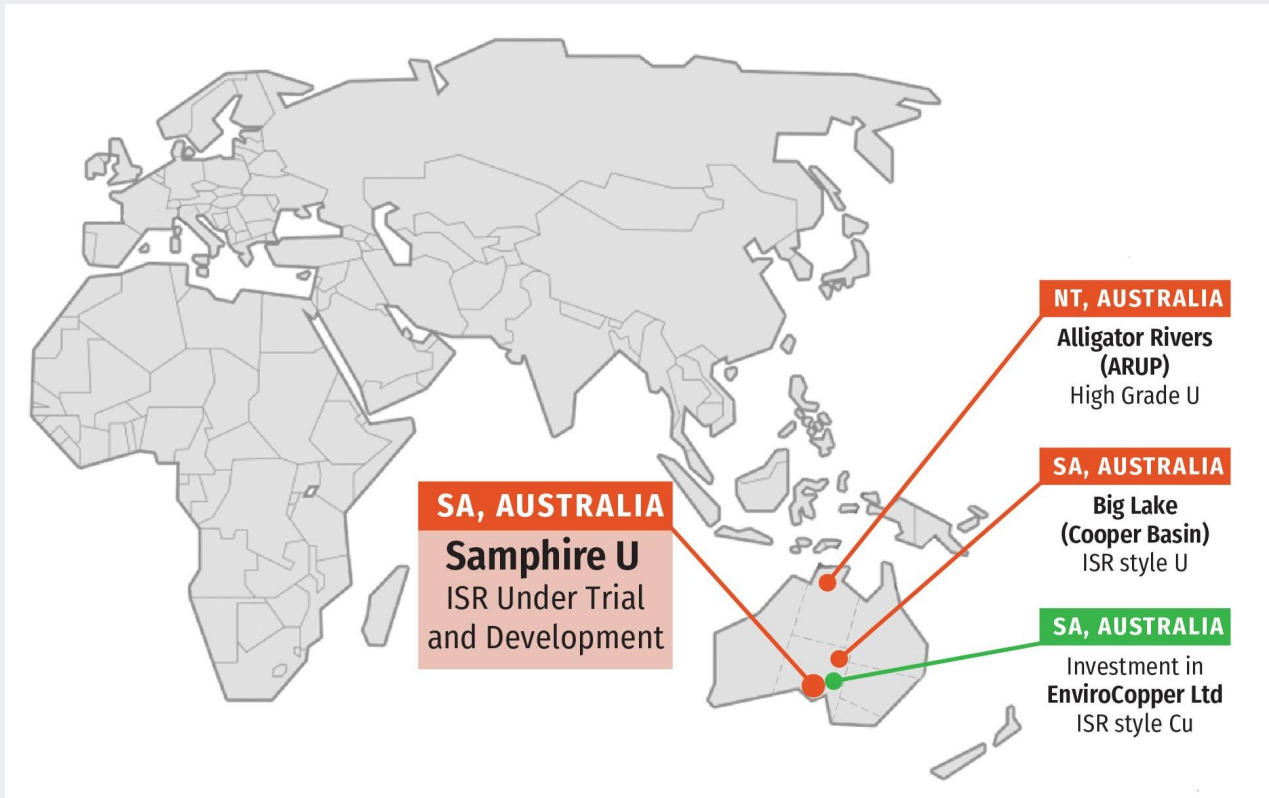
Share Price A\$	\$0.029
Ordinary Shares	4,430.1 M
Listed & Unlisted Options	460.2M
Cash as at 30 June 2025 (A\$)	\$ 30.1 M
June Share Placement (post issue costs)	\$ 16.2 M
Market Cap A\$	\$128.5 M

## Top 50 Shareholders

30 June 2025



# Alligator Energy Limited – Samphire Uranium Project, South Australia



- Safe, tier one uranium mining jurisdiction
- Proven approvals process – 5 mines approved
- Staged long life project - significant ISR resource with known expansion potential
- Coming to market late this decade
- On-ground in August this year with In-Situ field recovery trial
- Experienced In-Situ uranium mining team
- New discovery for potential ISR pipeline

# Board & Management – uranium development, operational and marketing exp



**Paul Dickson** | Non-Executive Chairman

Finance and corporate advisory professional and private equity manager with more than 30 years' experience. Specialising in junior and mid-tier ASX listed resources companies, AGE Board member since inception and Chairman for 3 years.



**Callum McIntyre** | Alternate Director

Extensive experience in the finance and technology industries in Australia and overseas. Director Business and Investment at a private investment company, and Business Operations Manager at a private Company focused on exploration and production of gas in the Perth Basin.



**Gregory Hall** | Executive Director

Mining engineer, marketing professional and CEO with 35+ years' experience – uranium, nickel, bauxite, alumina, iron ore. Uranium projects; Olympic Dam, ERA Ranger & Jabiluka, Uranium marketing for Rio Tinto, CEO of Toro Energy and Alligator Energy Ltd



**Mike Meintjes** | CFO & Company Secretary

Chartered Accountant / CFO / Company Secretary. Over 30 years professional services with a Big Four accounting firm and independent consulting. Extensive exposure to mining, oil & gas sectors in WA, QLD and South Africa. CFO and Co Sec for Alligator for 12 years



**Peter McIntyre** | Non-Executive Director

Civil engineer and experienced CEO – General Manager roles with WMC Ltd, including development of major mining projects. Founding CEO of Extract Resources - discovery and feasibility of Husab Uranium mine in Namibia.



**Dr Andrea Marsland-Smith** | CEO

Early exploration geologist roles in uranium exploration. Previously a member of the Executive Management Team at Heathgate Resources with roles over 17 years covering technical and field positions in Geology, Head of Geology, Head of Regulatory & Compliance, Head of Operations and Head of Government Relations and Indigenous Affairs.



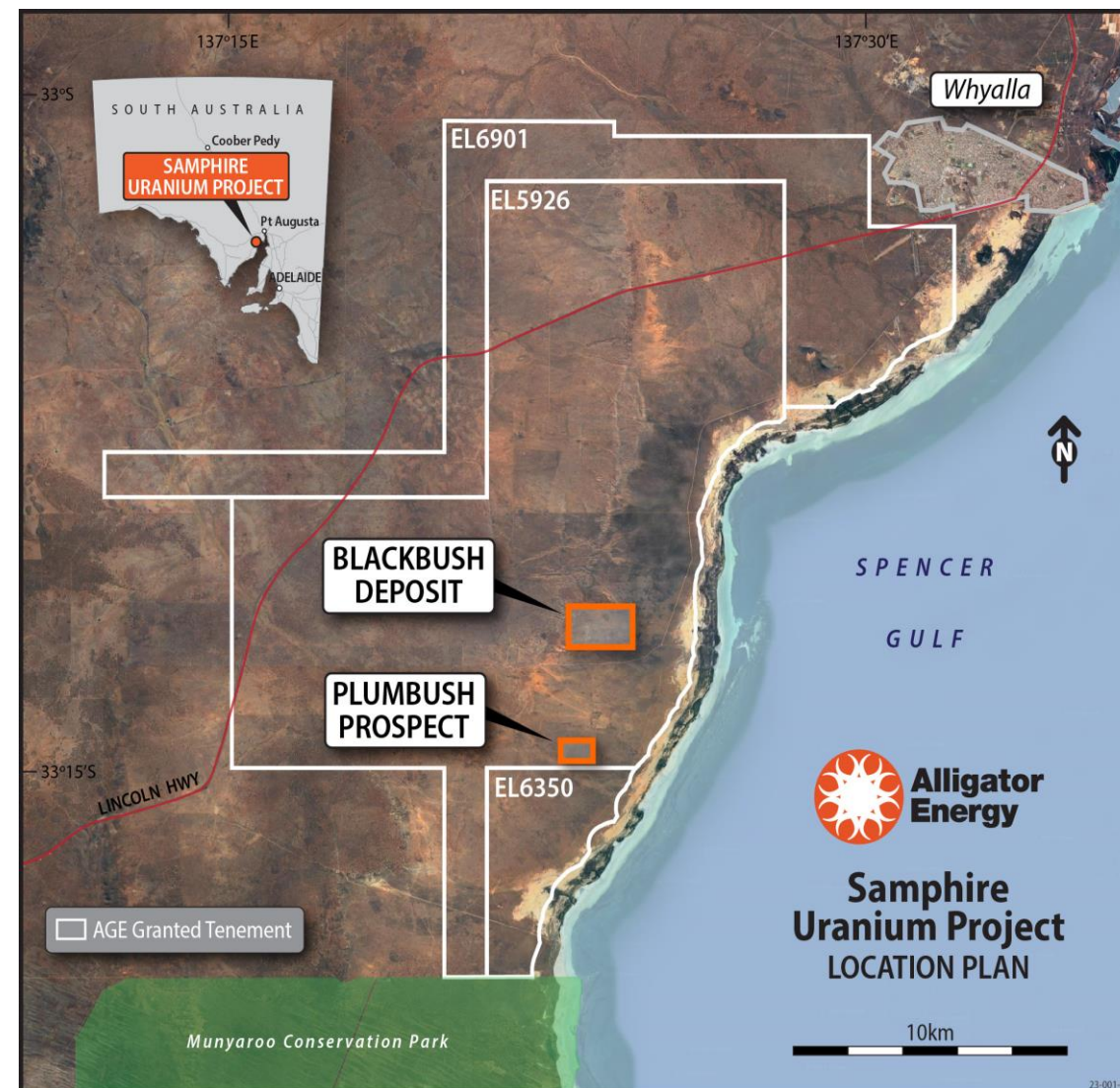
**Fiona Nicholls** | Non-Executive Director

30 years across a range of business functions including strategy, planning, ESG and operations, multi-country project development, approvals and due diligence processes. Previously Rio Tinto on the Board of Rössing Uranium and ERA uranium.

Management and operating team with extensive uranium mine operations experience, particularly with In-Situ Recovery (ISR), including stakeholder engagement, approvals, operations, uranium marketing and contracting, environmental and sustainable production.



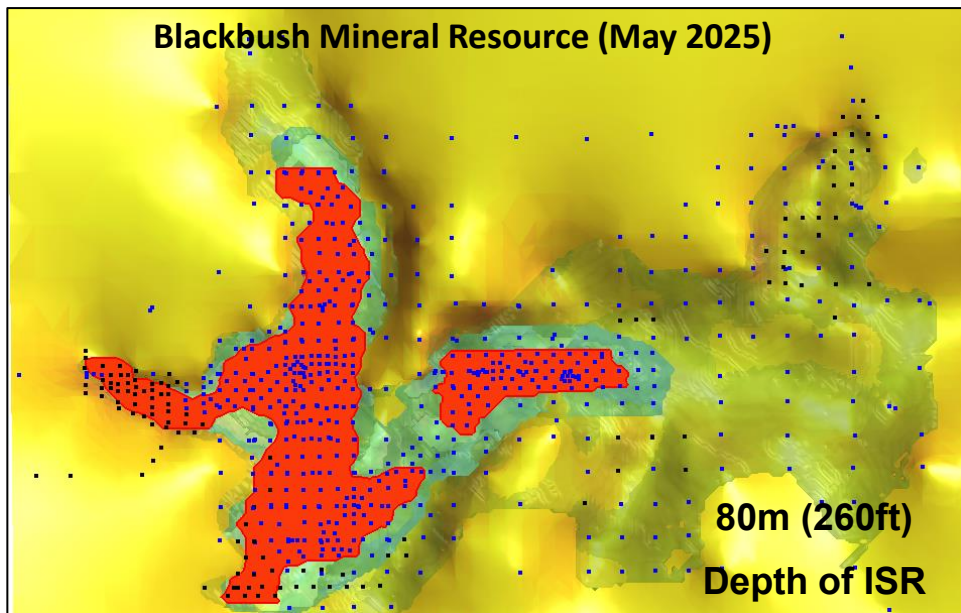
# Samphire Uranium project: South Australia – Experience in Uranium







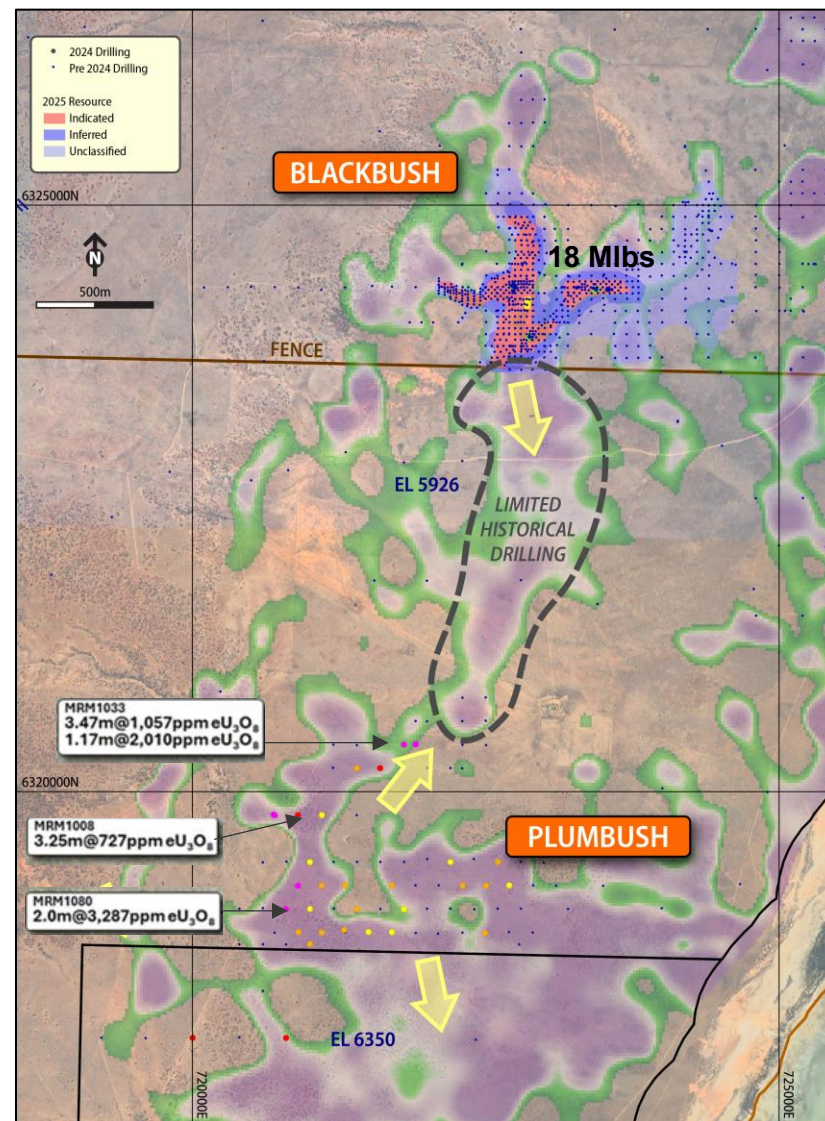
# Samphire Uranium Project: A highly competitive In-Situ Recovery Project



Plan view of Blackbush channel - Collar locations (pre 2024 blue dots, 2024 in black dots) and current Indicated (red shell), Inferred (green shell) and Unclassified (pale green shell) MRE.

- **18 Mlbs** to support startup mining operation with staged expansion (14.2Mlbs Indicated, 3.8Mlbs Inferred)
- Scoping study (Dec 2023) shows **project is economic at today's LT U prices**
  - 12yr mine life at 1.2 Mlbs production rate per annum
- Size and integrity ready for detailed well field and future mine design
- **Definitive Feasibility Study (DFS)** will consider increase in production rate upwards to **1.5 Mlbs**

Refer AGE ASX Release 6 May 2025 - Increased Mineral Resource Estimate and Upgrade of Indicated Resource for the Blackbush Deposit, Samphire U Project.  
<https://wcsecure.weblink.com.au/pdf/AGE/02943740.pdf>



# Samphire Uranium Project – Dec 2023 Scoping Study† : 1.2 Mlbs pa Project

Study metrics\* at US\$75 / lb long term uranium price



**A\$131m**

**CAPEX**  
(including contingency)



**2.45 years**

**Payback**



**42%**

**IRR\***  
(post-tax, real,  
ungeared)



**A\$257m**

**NPV<sub>8</sub>\***  
(post-tax, real,  
ungeared)



**US\$33.31/lb**

**AISC**  
(A\$47.58/lb)



**US\$16.06/lb**

**Cash Costs**  
(A\$22.94 /lb)

Study metrics\* based on analyst's current long-term price projections of US\$90 / lb



**A\$131m**

**CAPEX**  
(including contingency)



**1.93 years**

**Payback**



**55%**

**IRR\***  
(post-tax, real,  
ungeared)



**A\$371m**

**NPV<sub>8</sub>\***  
(post-tax, real,  
ungeared)



**US\$34.06/lb**

**AISC**  
(A\$48.96/lb)



**US\$16.06/lb**

**Cash Costs**  
(A\$22.94/lb)

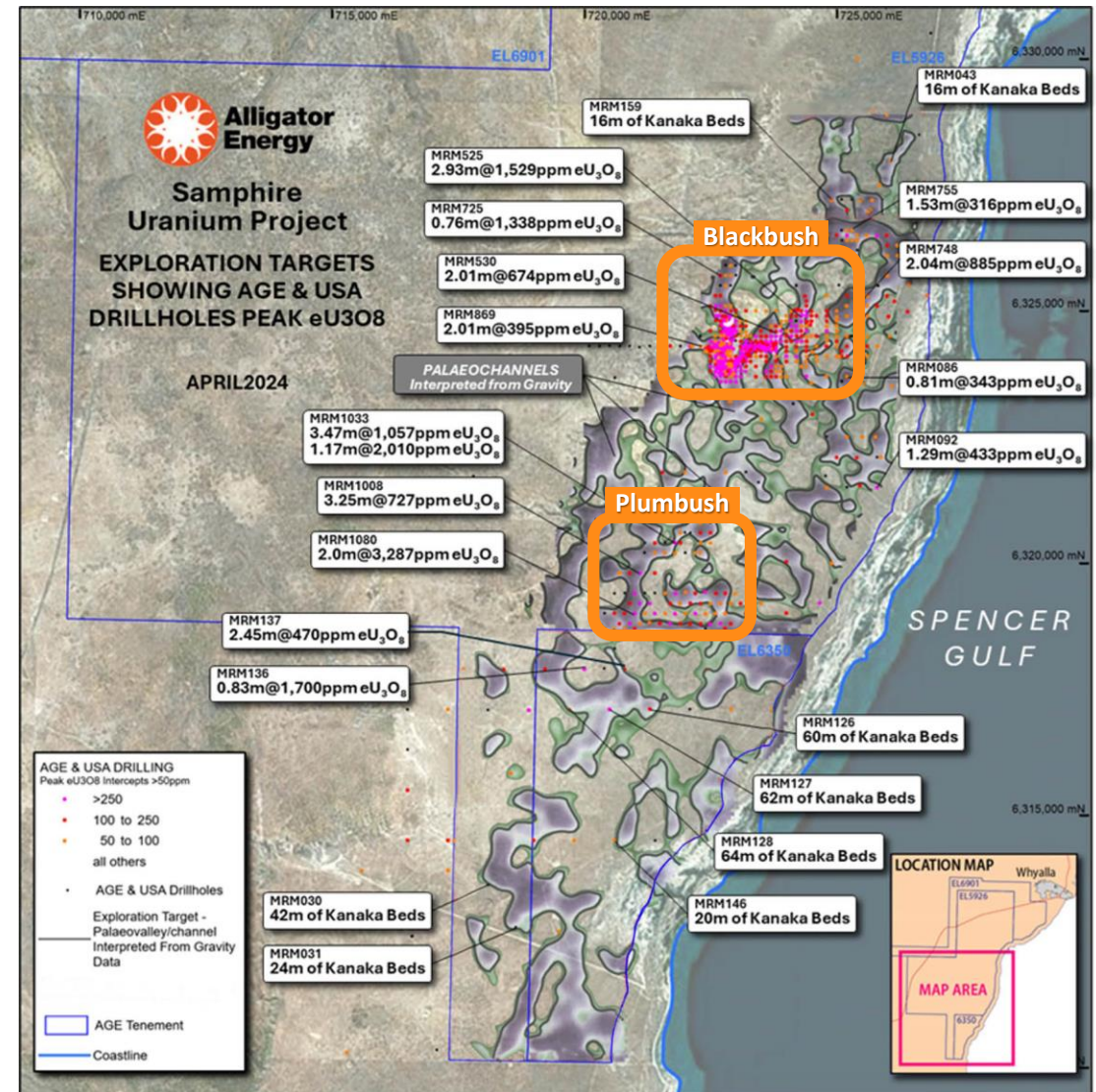
† Ref ASX release 14 December 2023 "Scoping Study Update": Alligator confirms that all material assumptions underpinning the 'production target' or the forecast financial information derived from the 'production target' continue to apply and have not materially changed other than the outlook for the long-term uranium price as set out above; \*Calculated using 0.70 US/A\$ exchange rate inclusion of significant contingencies and inflation of 35%.



# Further Extensions outside the Exploration Target Range Envelope

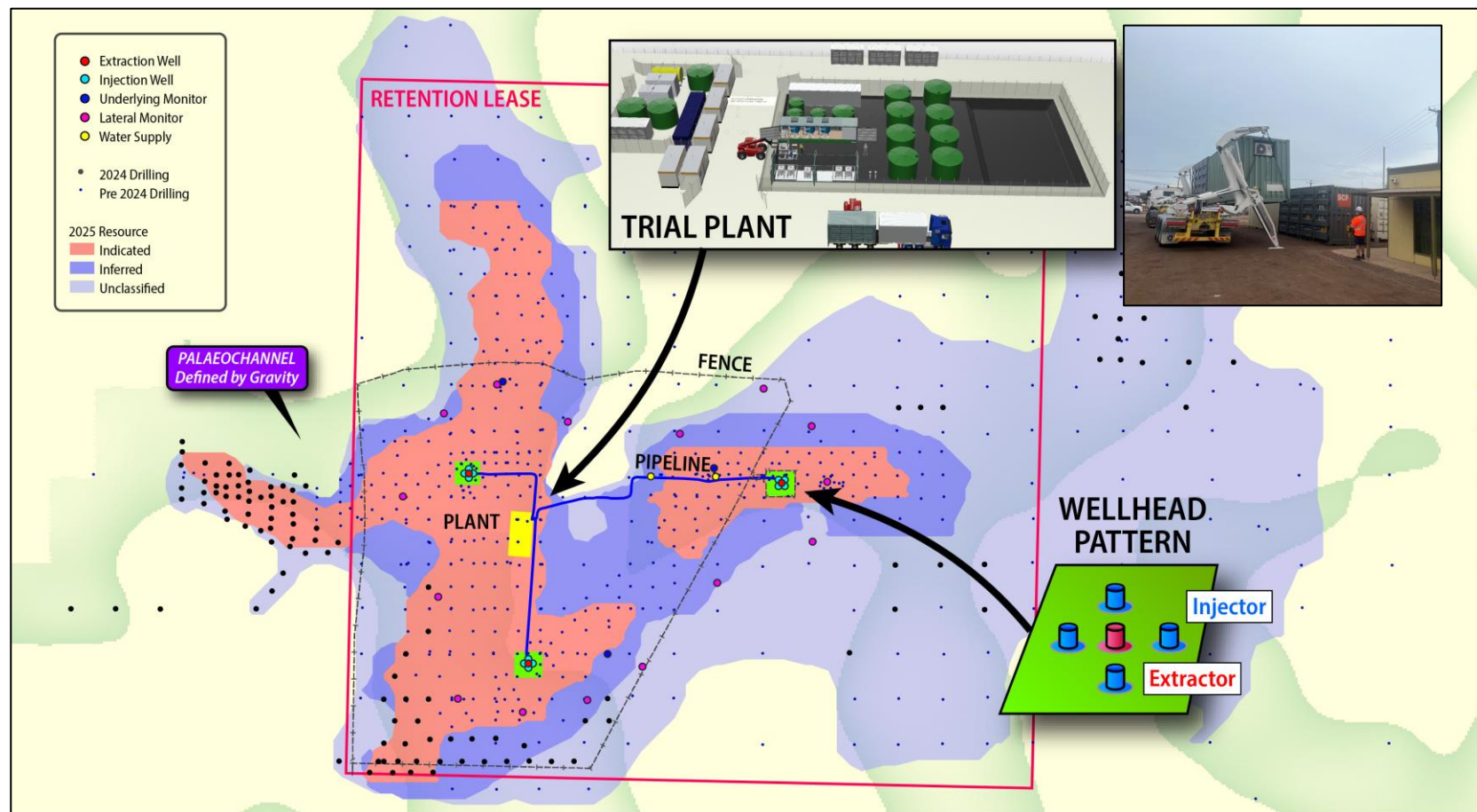
- 18 Mlbs Resource at Blackbush
- Second satellite deposit at Plumbush established – requires closer spaced drilling to become a potential resource
- Exploration Target Range – additional 14 to 75 Mlbs
  - Outstanding continuity of the Samphire palaeochannel system – ~over 90kms of channels.
  - Historical drillholes confirm that extensions contain the same thick sequences of Kanaka Bed sands which host the Blackbush Mineral Resource.
  - 72% of the prospective areas of the entire Samphire palaeochannel system remain completely untested by drilling.
  - Significant potential for new discoveries and resource growth in the Project area.

Refer AGE ASX Release 7 December 2023 - Significant Exploration Target Range established, Samphire Uranium Project, South Australia.  
<https://wcsecure.weblink.com.au/pdf/AGE/02751150.pdf>



# Samphire Uranium Project – Field Recovery Trial (FRT)

- Field Recovery Trial (FRT)
  - Final step in de-risking the Project
  - Provides the necessary inputs for DFS
  - Marks an important step toward full Mining Lease Application to commence during 2H 2025.
- Plant fully fabricated at AGE's Whyalla yard ready for on-site construction.
- Construction targeted for August/September 2025 pending final stage of regulatory approval.
- FRT operation ~ 3+ months (Oct to Dec 2025) and consists of three producing well patterns and a containerised pilot plant.
- Alligator ISR team established.
- Parameters to be assessed include in-situ chemistry, hydrogeology, uranium recovery, reagent usage, and other environmental and economic factors.





# Field Recovery Trial – Plant Layout & Control



**Ion Exchange Module**

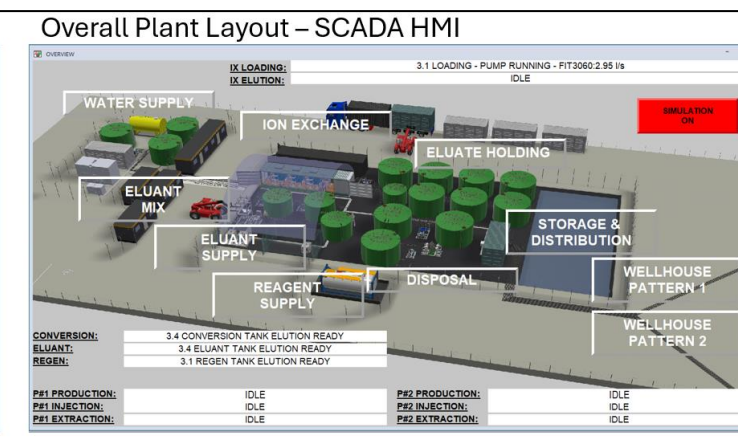
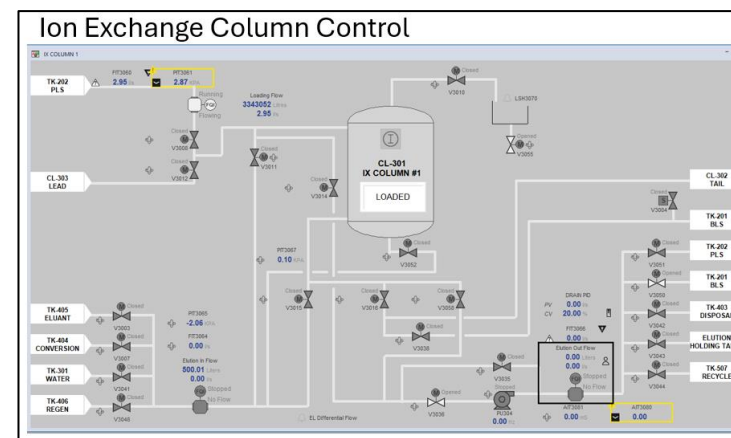


**Wellhouse (pipe room) Module**



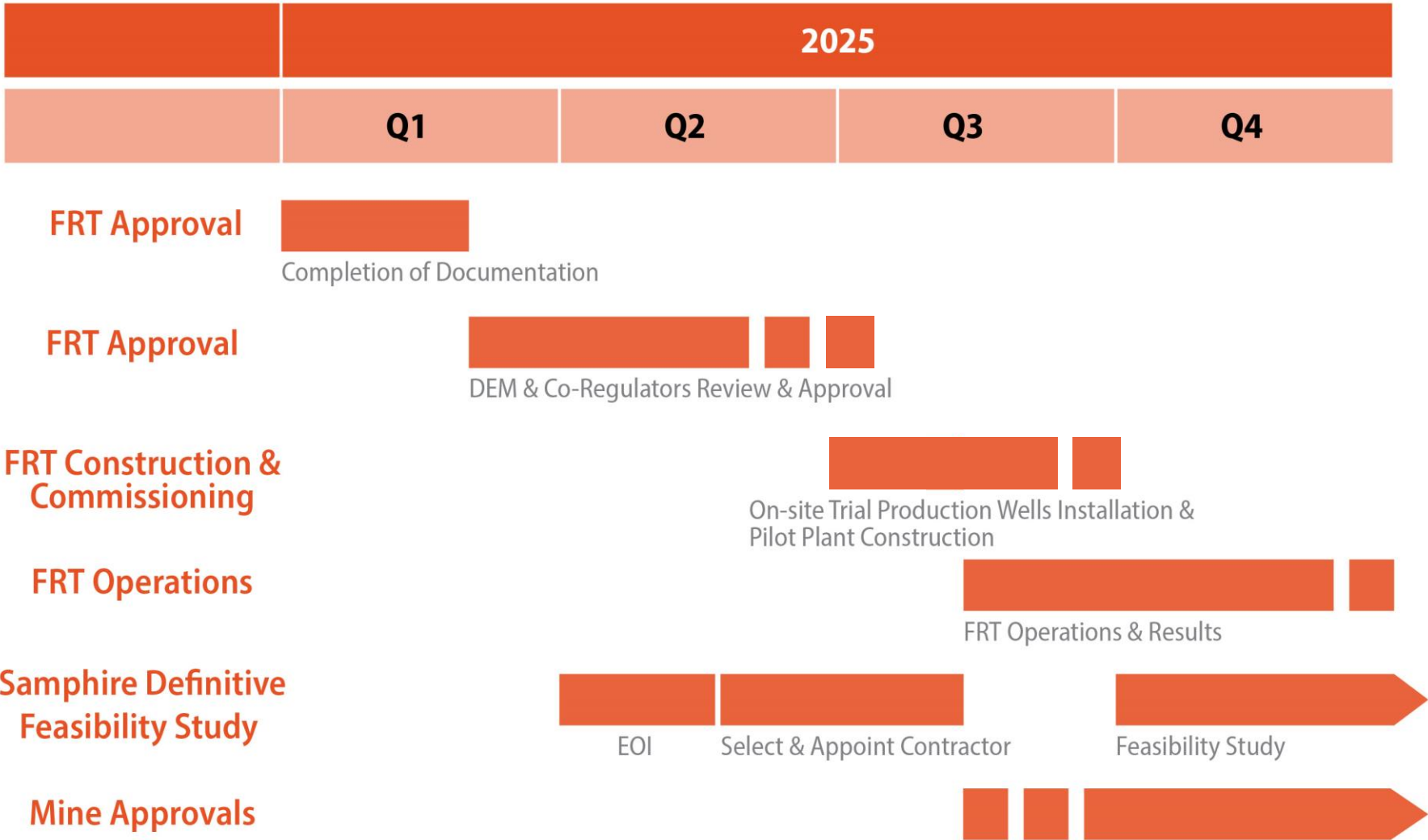
**Reverse Osmosis Plant**

- Whyalla based contractor selected for the on-site construction
- Plant control system set up and tested.
- Post-FRT and subject to any further testing, well infrastructure and plant to be removed, and area rehabilitated.
- Pilot plant available for future satellite field testing (Plumbush).
- Samples of extracted uranium oxide solution be precipitated offsite into  $U_3O_8$  concentrate for Converter quality samples.



**Control System**

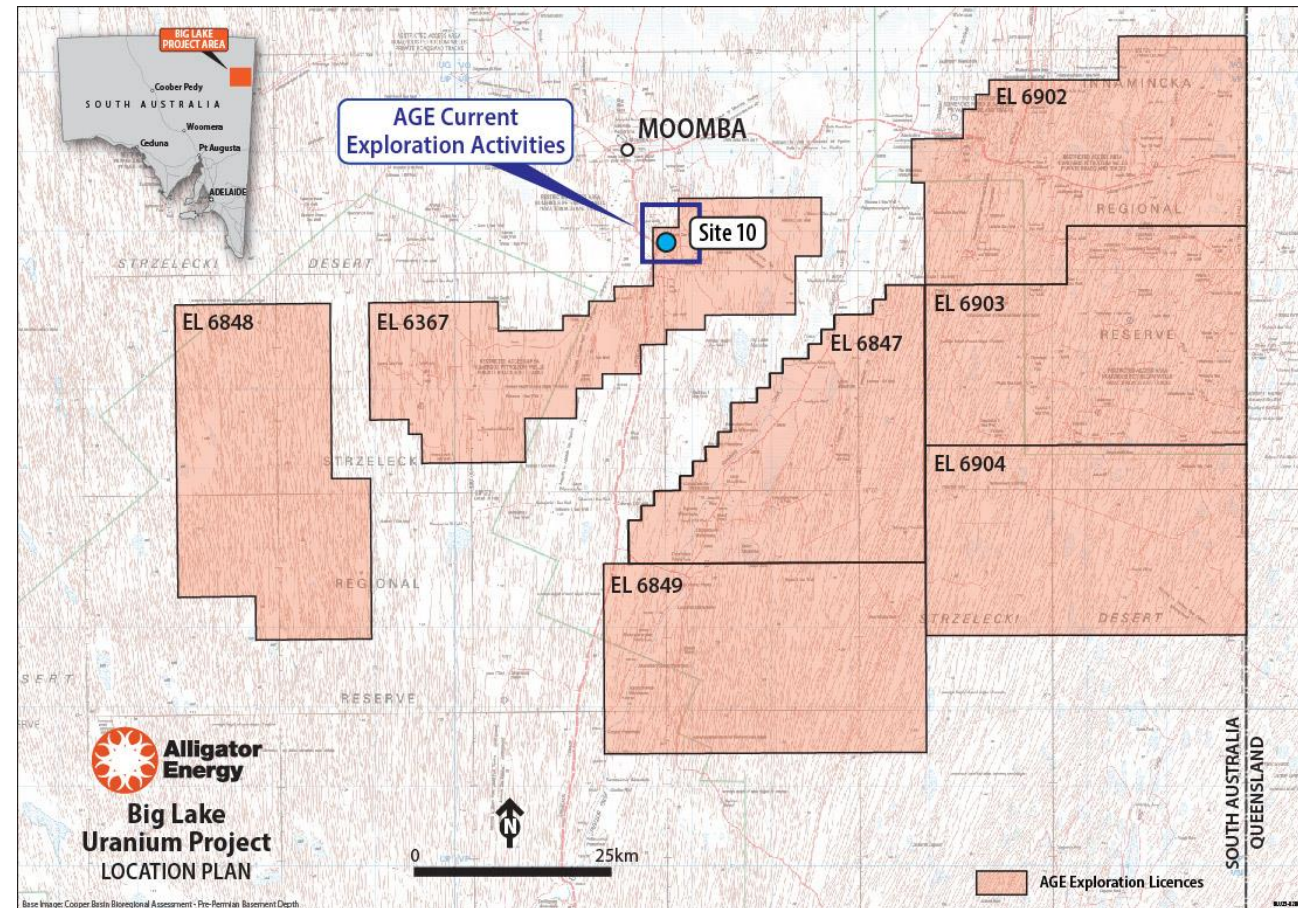
# Plans and Targets – 2025 Year and into 2026





# Big Lake Uranium Project, SA – New Discovery

- Geologically analogous to world-class ISR fields in hydrocarbon basins - Kazakhstan, Wyoming, Texas.
- Same host sands as Beverley-Four Mile & Honeymoon.
- Province never-before been drilled exploring for uranium.
- Inaugural drilling program (August 2024) intersected significant thicknesses of anomalous uranium mineralisation.
  - AC24-021 20m (65ft) @ 110 ppm U from 347ft (106m)
  - AC24-022 35m (114ft) @ 117 ppm U from 305ft (93m)
  - AC24-023 5m (16ft) @ 47 ppm U from 341ft (104m)
  - AC24-025 10m (32ft) @ 138 ppm U from 354ft (108m)
- 2025 - Second drilling program commenced but delayed due to QLD floodwaters.
- Potential to become a new uranium province in South Australia.
- Alligator's large exploration licence holding secures first mover advantage.



Refer ASX Announcements: 23 October 2024 – BLU Uranium Discovery, and 27 Feb 2025 – Follow Up drilling at BLU



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