ASX: AGE

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Corporate Presentation
September 2023

Alligator Energy

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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 15 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.

Company Snapshot

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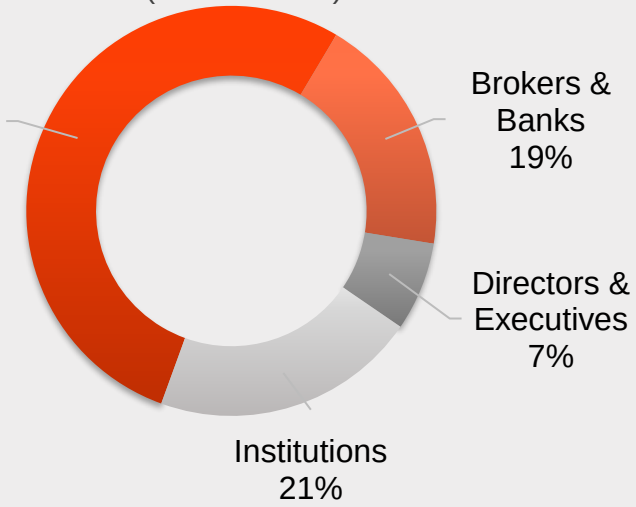
Capital Structure (at 4 September 2023)

Share Price	0.05
Ordinary Shares	3,305.9 M
Performance Shares & Unlisted Options	179.5 M
Cash as at 30 June 2023	~$18.5 M
Market Cap	$165.3 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	Callum has extensive experience in the finance and technology industries, both in Australia and overseas. Previously based in London with international finance group Thomson Reuters.

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Board & Management

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Board and Management Team

Paul Dickson
Non-Executive Chairman

Gregory Hall
CEO & Managing Director

Peter McIntyre
Non-Executive Director

Fiona Nicholls
Non-Executive Director

Callum McIntyre
Alternate Director

Mike Meintjes
CFO & Company Secretary

Dr Andrea Marsland-Smith
COO

Mike Barlow
Exploration Manager

Alligator Energy: Multi-Project Uranium & Energy Mineral Portfolio

Samphire Uranium Project, SA

- Defined uranium JORC Resource and Scoping Study with competitive economics. Significant scope to expand resource.

Alligator Rivers Uranium Province, Arnhem Land, NT

- Existing JORC Resource Estimate and exploration activity underway focused on area north of U40 Prospect.

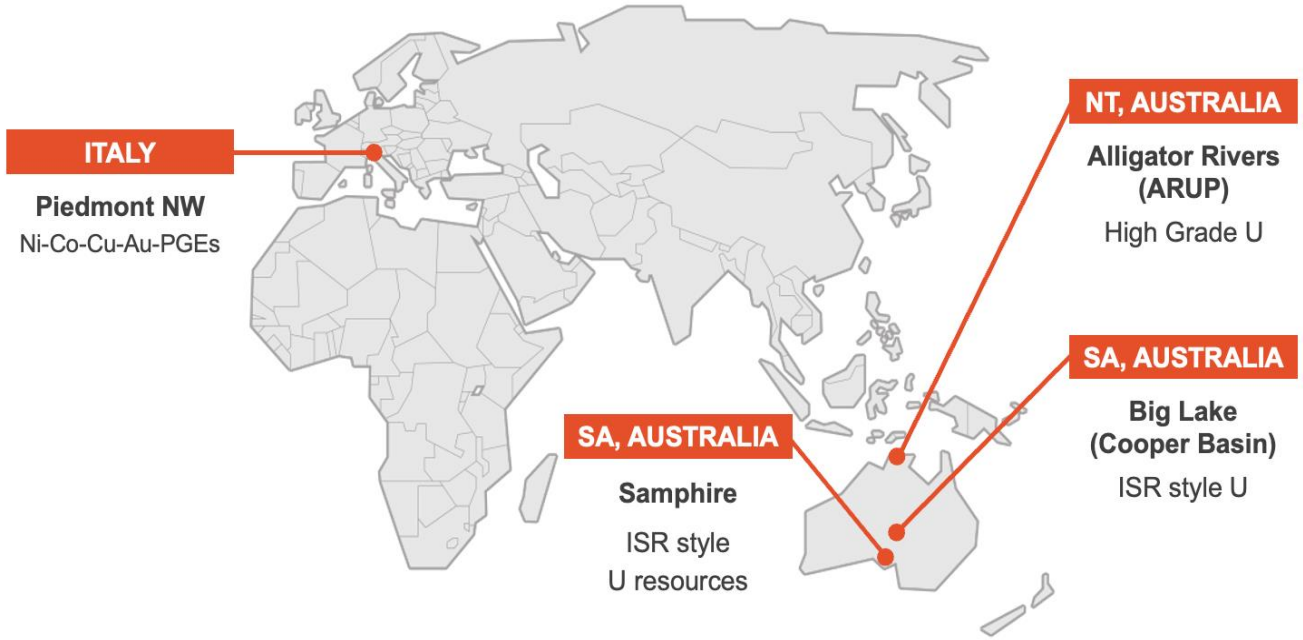
Big Lake Project, Cooper Basin, SA

- ISR uranium model – Inaugural exploration program underway.

Piedmont Project, Italy

- Nickel and cobalt exploration in historical mining region.

AGE will continue to evaluate and acquire further uranium or energy mineral assets in key target regions.



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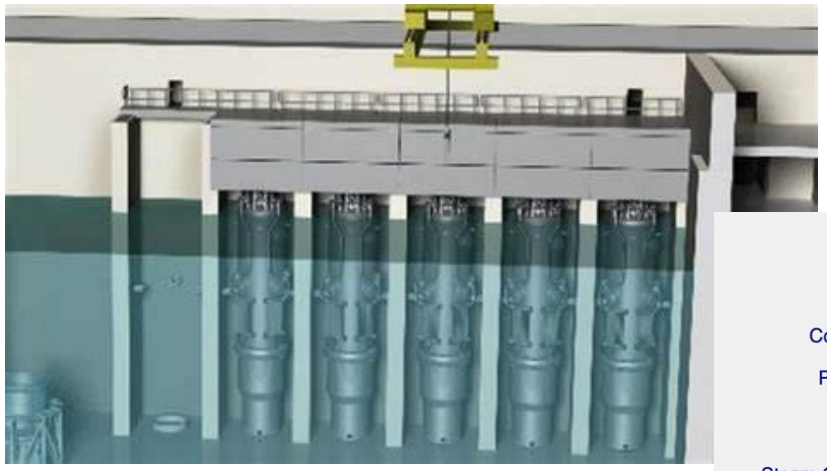
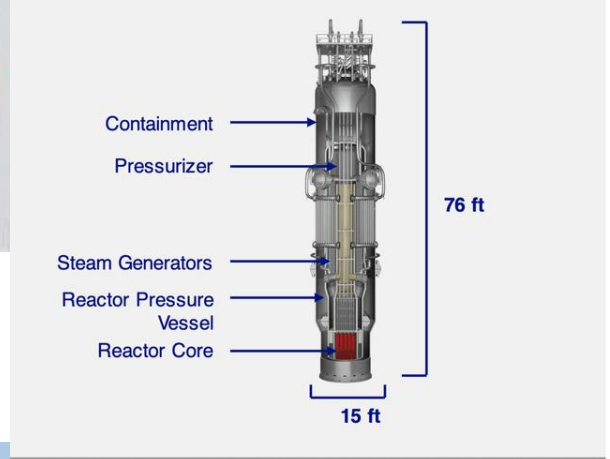
Uranium, Nuclear and Nuclear Fuels Market

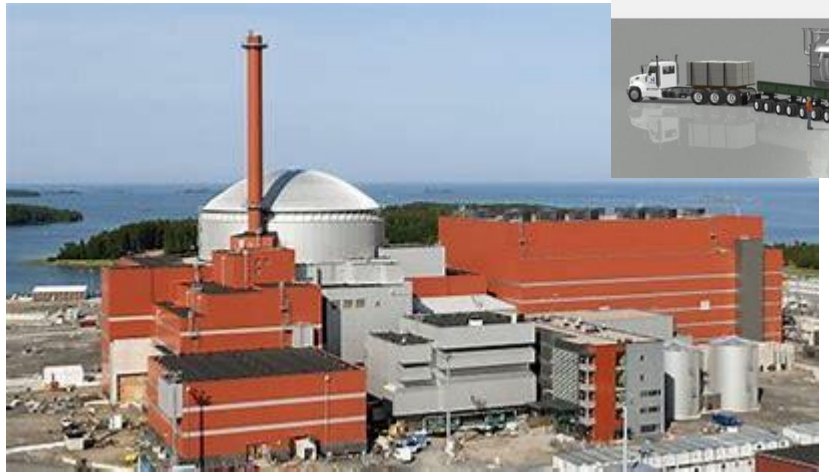
What has occurred, and where is it heading?

- Dec 2020 – Biden Administration support
- Mar 2020 – uranium spot price increase starts
- June 2021 – Sprott Physical Uranium Fund
- Feb 2022 – EU adds nuclear to Sustainable Energy
- Mar 2022 – Ukraine war impacts Russian U supply
- Apr 2022 – spot price peaks at US$65 / lb
- Dec 2022 – 122 Mlbs put under LT contract for year
- Jan 2023 – enrichment and conversion crunch
- May 2023 – multiple countries commit to new builds
- Jul 2023 – Niger coup
- Aug 2023 – 118 Mlbs under LT contract already for 23

From here – supply restart and expansion, Kazak uranium availability, selling and buying “blocks”,







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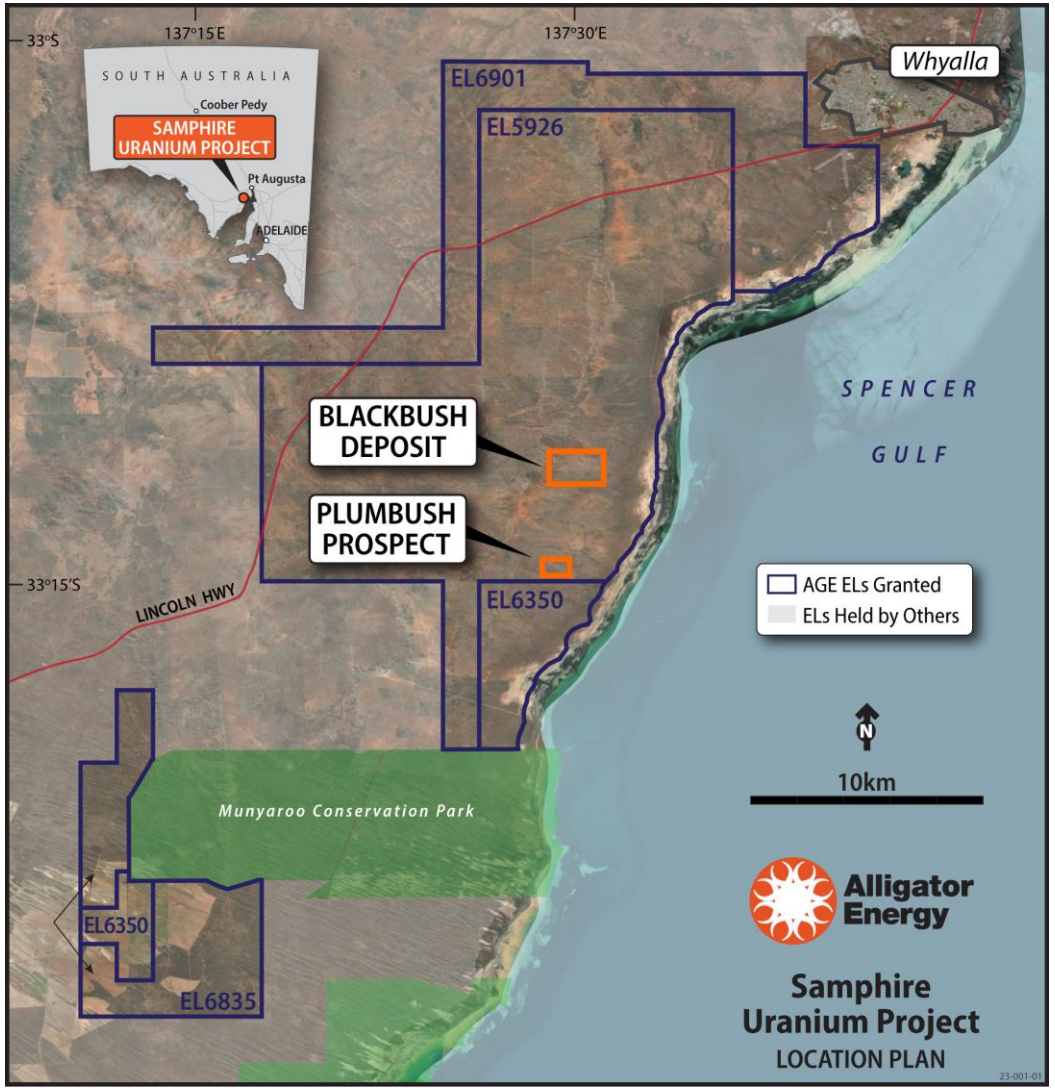
Samphire Uranium Project: Introduction

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



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Samphire Uranium Project: Mineral Resource Estimates

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- **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

Samphire Uranium Project Scoping Study: Key Metrics

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A$129.3 m
CAPEX
(including contingency)

3.5 years
Payback

29%
IRR*
(post-tax, real, ungeared)

A$152.0 m
NPV_8*
(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 Advantages of Future Project

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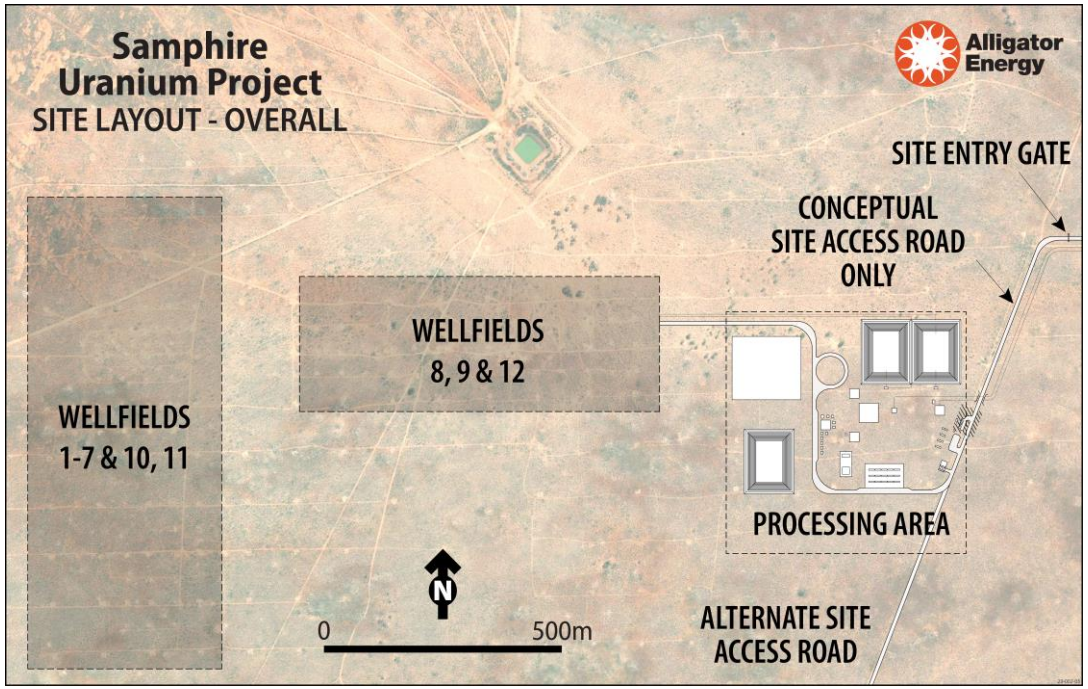
Project boasts several key advantages

- Standard ISR, low impact mining - reduces capital and operating costs, easier to rehabilitate.
- 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.
- Expansion potential from resource and exploration upside, modular expandable type plant, all which will improve project economics further.

Conceptual Site Layout Plan



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Samphire Uranium project: Optimisation Opportunities

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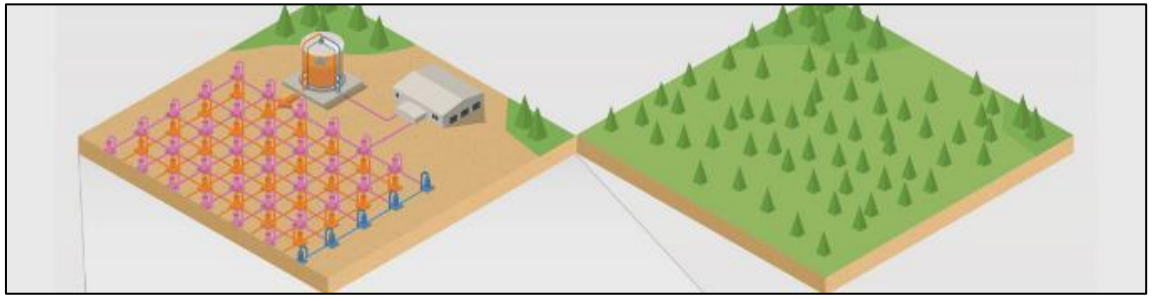
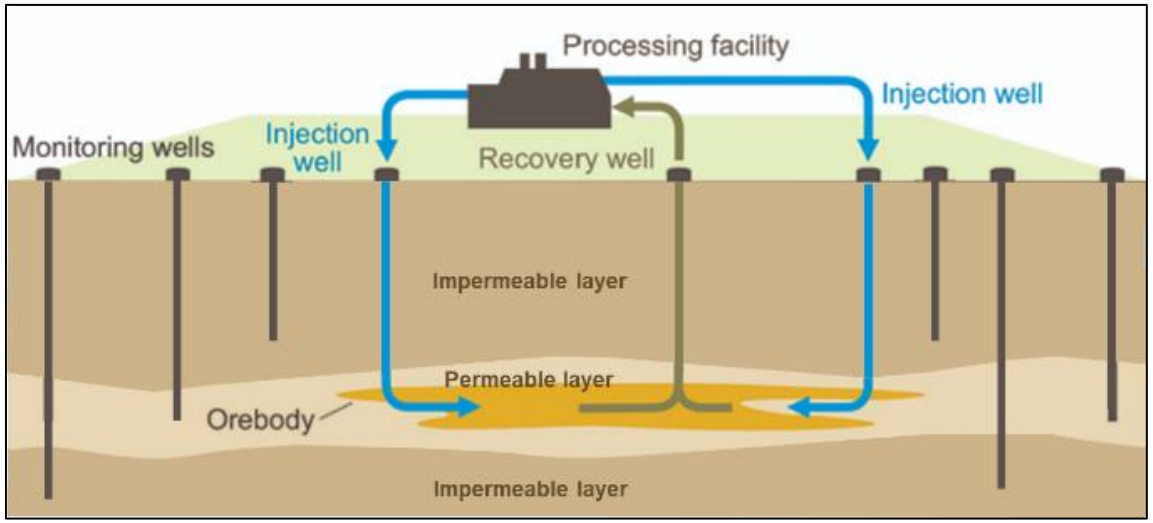
Potential to scale and optimise plant

- Potential for higher initial production target with minimal capex increase, as major capital in Scoping Study sized for 20% additional operating capacity at 1.2Mlbs pa.
- Modular plant makes production capacity scalable.
- Further exploration potential for additional uranium at Blackbush deposit.
- Potential for Plumbush deposit to become a satellite deposit, plus wider exploration.
- Scope for processing efficiencies, in particular to reduce costs around RO plant, and increase recovery rates.

Conceptual Model of ISR





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Samphire Uranium Project – Scope for Mineral Resource Growth

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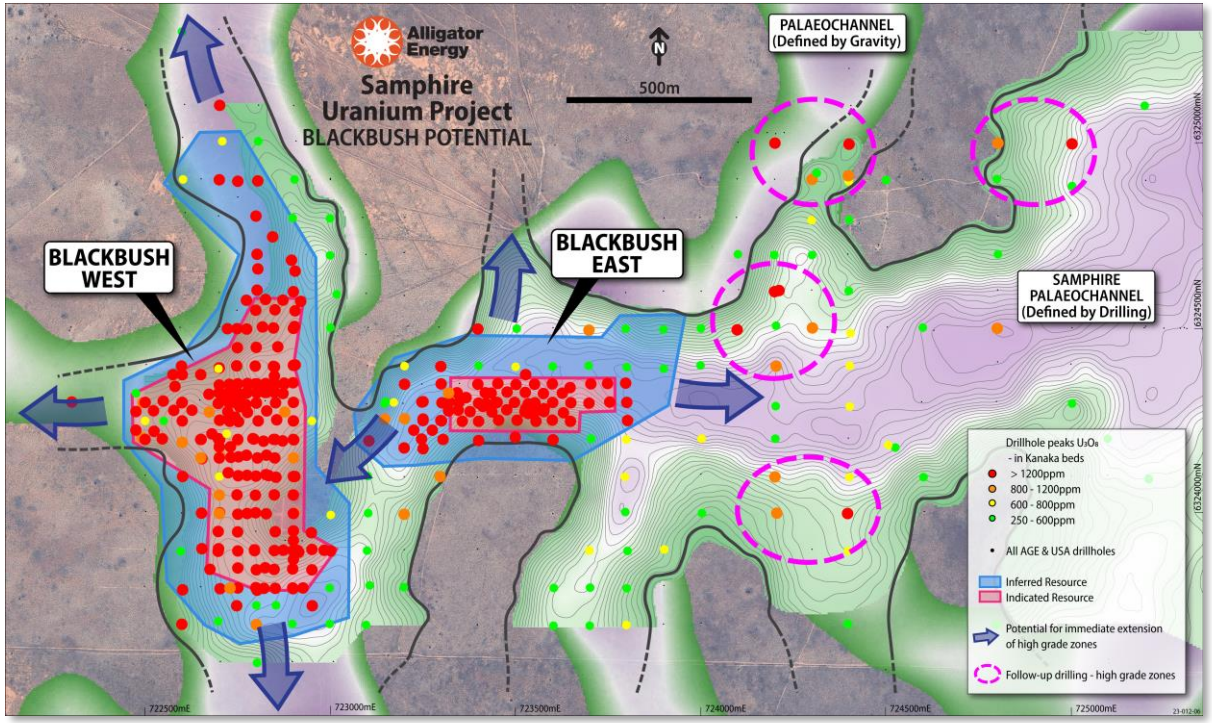
Strong Resource growth potential at Blackbush

- Currently 18.1Mlbs U_3O_8 from 11.4 million tonnes at 720 ppm U_3O_8.
- Coherent multi-level high-grade zones with cumulative strike length of >2,700m and width between 300-450m.
- Further drilling for resource enhancement (inferred to indicated) and growth.
- Following-up extensions of the known high-grade zones where mineralisation is not closed off.
- A number of open positions not adequately tested by previous drilling show potential for extensions of the known mineralisation.



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Samphire Uranium Project – Scope for Resource Growth

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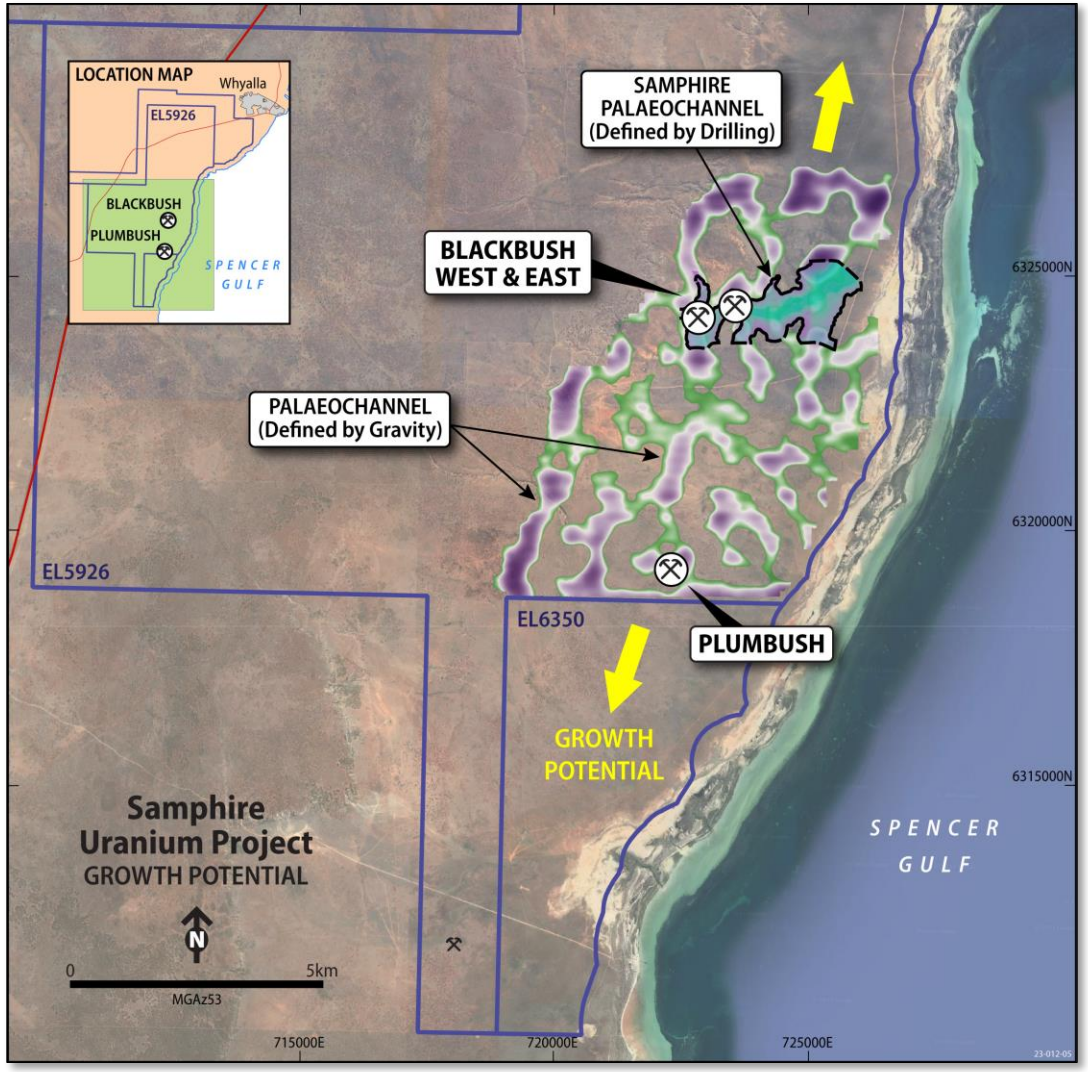
Local and district-scale resource growth potential

- 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).

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Samphire Uranium Project: Next steps

Intention to rapidly progress next steps

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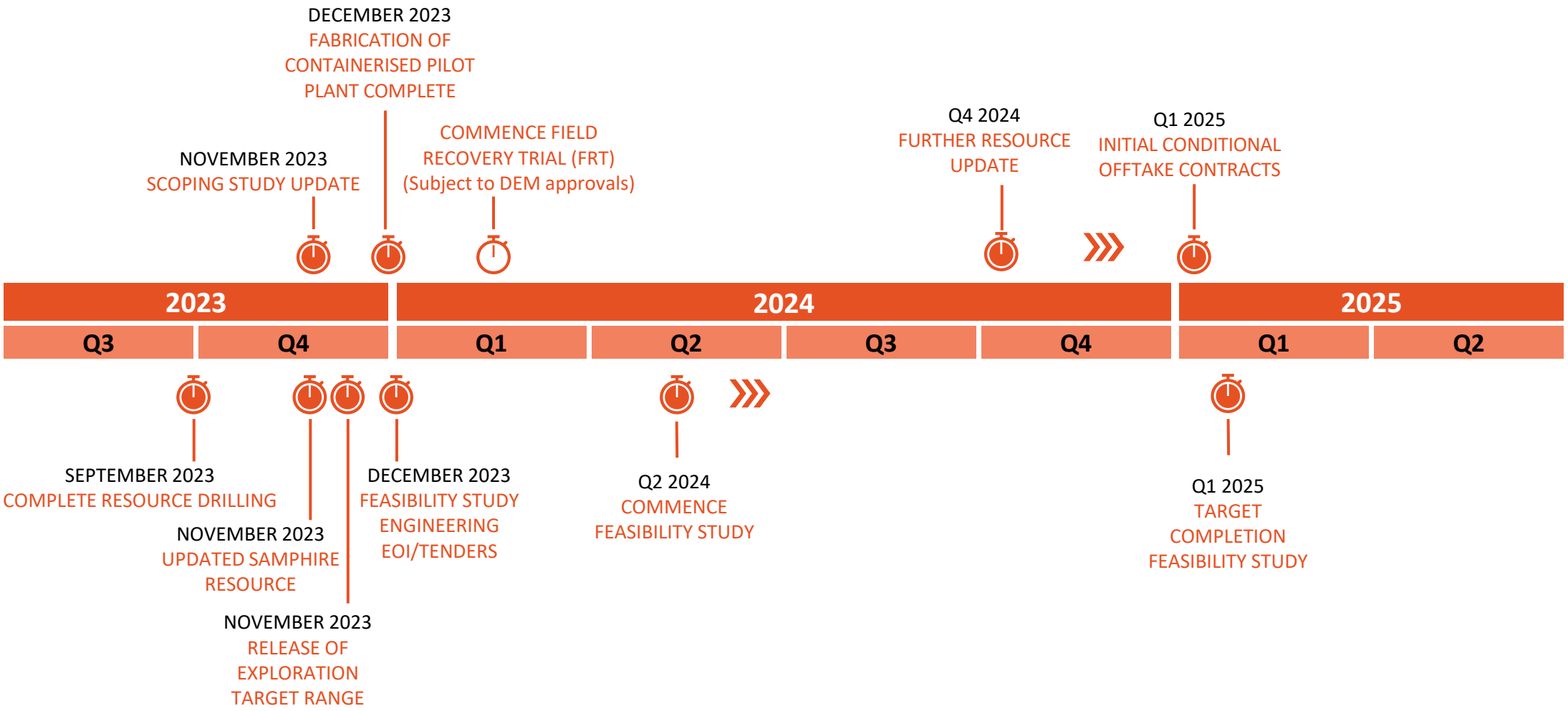

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Samphire Uranium Project: Next steps and news flow

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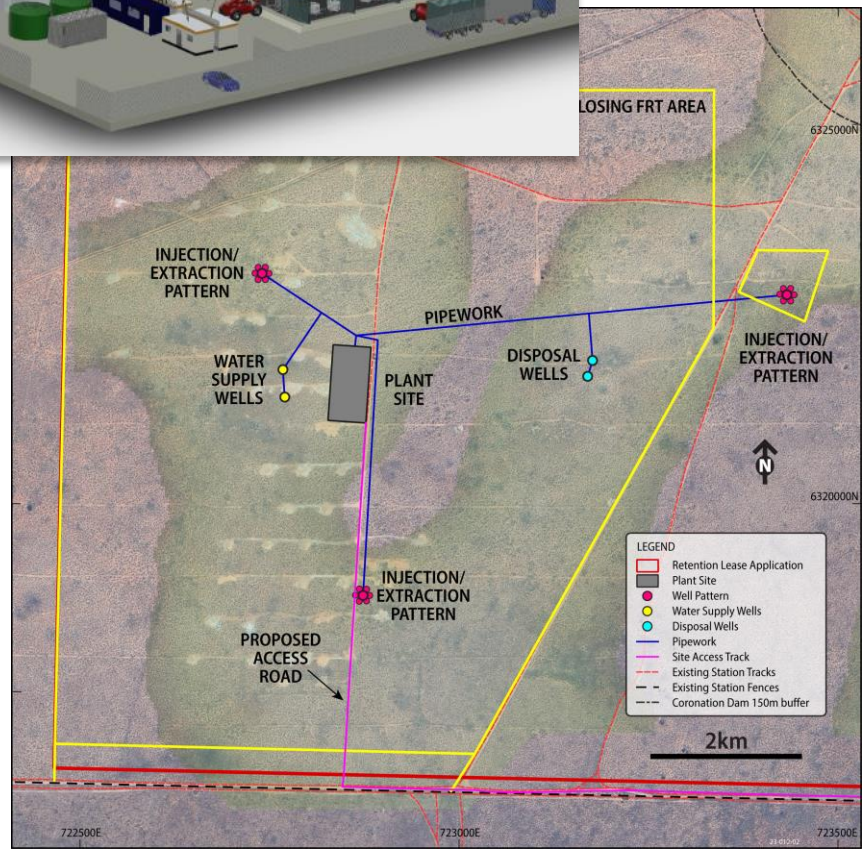
Intention to rapidly progress next steps

- Resource drilling at Blackbush leading to updated Samphire resource – targeted announcement Nov 2023.
- Updated Scoping Study in parallel with anticipated higher production rate / minimal capital increase – targeted announcement Nov 2023.
- Exploration target range being developed for Blackbush expansion, Plumbush deposit and other areas - targeted announcement late 2023.
- Fabrication of containerised pilot processing plant underway, targeted completion December 2023.
- Announcement of Retention Lease and subsequent Program for Environmental Rehabilitation (PEPR) approvals from SA Department for Energy and Mining for construction and operation of Field Recovery Trial (FRT).
- Pilot Plant and FRT targeted for early 2024 (subject to approvals) to de-risk and finalise key technical and economic factors for Feasibility Study.
- Expressions of interest / tender process, selection and announcement (by end 2023) of engineering company for Feasibility Study – targeted to commence during Q2 2024, ongoing through 2024.
- Consideration of initial conditional offtake contracts for portion of future production – during Feasibility and into 2025
- Ongoing stakeholder and community engagement to outline very small footprint and low environmental impact, and engage around detailed work program, feasibility, future mining approvals.

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-months) pilot FRT in early 2024, following receipt of all necessary approvals.
- Approval for Retention Lease for FRT – now out for public consultation.
- 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 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.



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

- Project Task and Cost Schedule has been finalised.
- Engineering Design of the processing plant and detailed P&ID's have been finalised.
- Equipment procurement process has commenced with priority given to long lead items.
- Process chemicals and supply identified. Currently in consultation with local reagents suppliers for logistics and supply.
- Fabrication and fit out of containers with built in bunding has commenced.

Wellhouse Container with bunding under fabrication

Site Plan

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Samphire Uranium Project: Opportunity for a near carbon-free energy project

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Potentially close to carbon free project

- Lower power consumption as ISR method has no rock / material movement, nor crushing / grinding of rock. Renewable power with backup adequate?
- Distance to Whyalla may allow all electric vehicles, light trucks, cranes etc to be used.
- Advances in battery on-highway prime movers may support the level of logistics and product transport needed.
- This potential opportunity aligns with SA Government Hydrogen Hub for Whyalla region and extensive potential renewable projects.
- We will be scoping this opportunity in parallel with our economic studies.

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Other Projects

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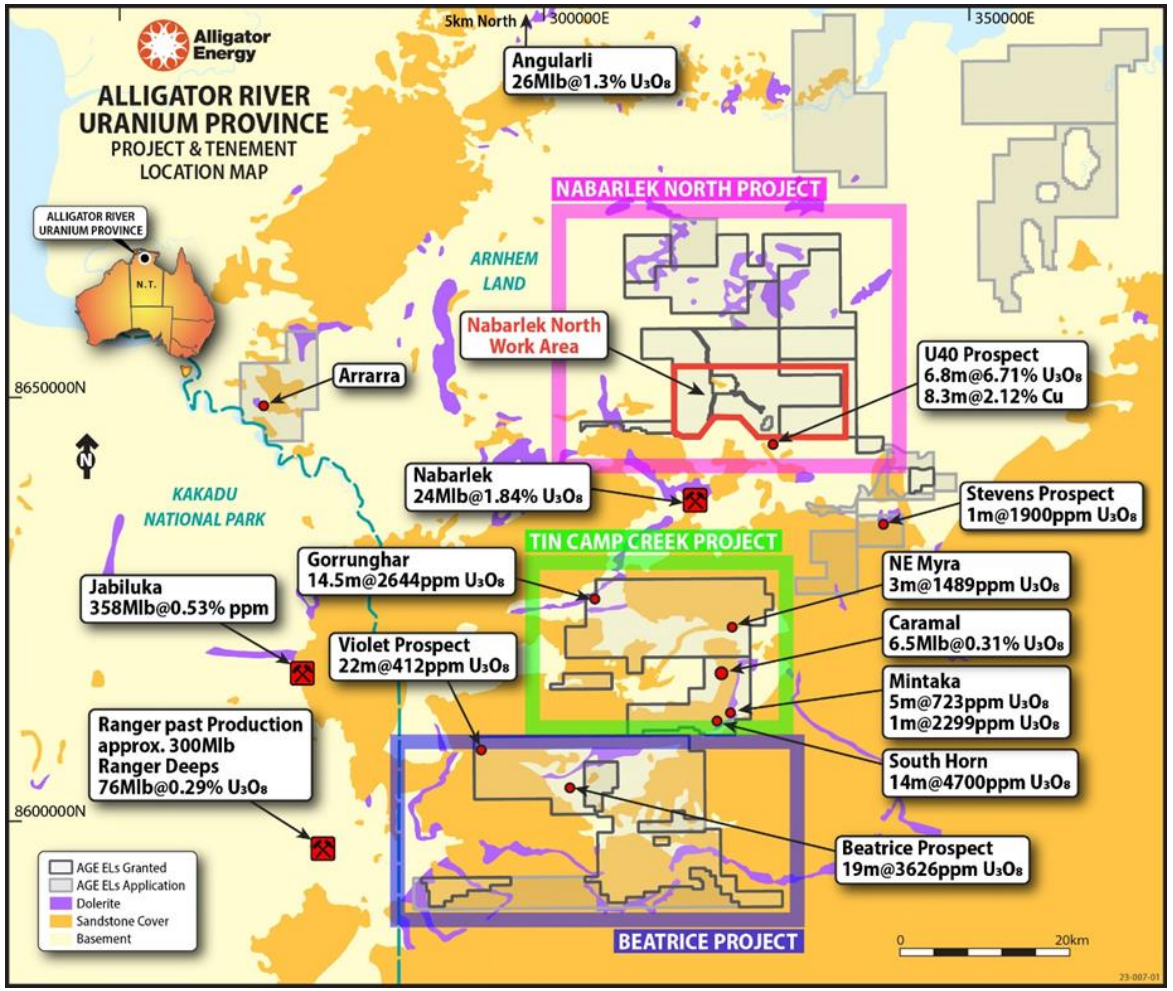
Alligator Rivers Uranium Province, NT

- 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*.

Work underway in 2023:

- Established key target areas through integration of Falcon airborne gravity, other geophysics, geology, geochemistry and drilling.
- Extensive geochemical sampling program underway with RAB, aircore and auger.
- Reconnaissance and targeted IP over specific targets areas covering >20km2 of tenure.
- Best targets to be followed up with detail IP & RC drilling later in year.
- Commence evaluation of the potential for strategic energy minerals.

** Includes 6.3m at 7.23% U_3O_8 and 8.3m @ 2.12% Cu (Uranium Equities Ltd now DevEx Resources Ltd release – 4 October 2017).*



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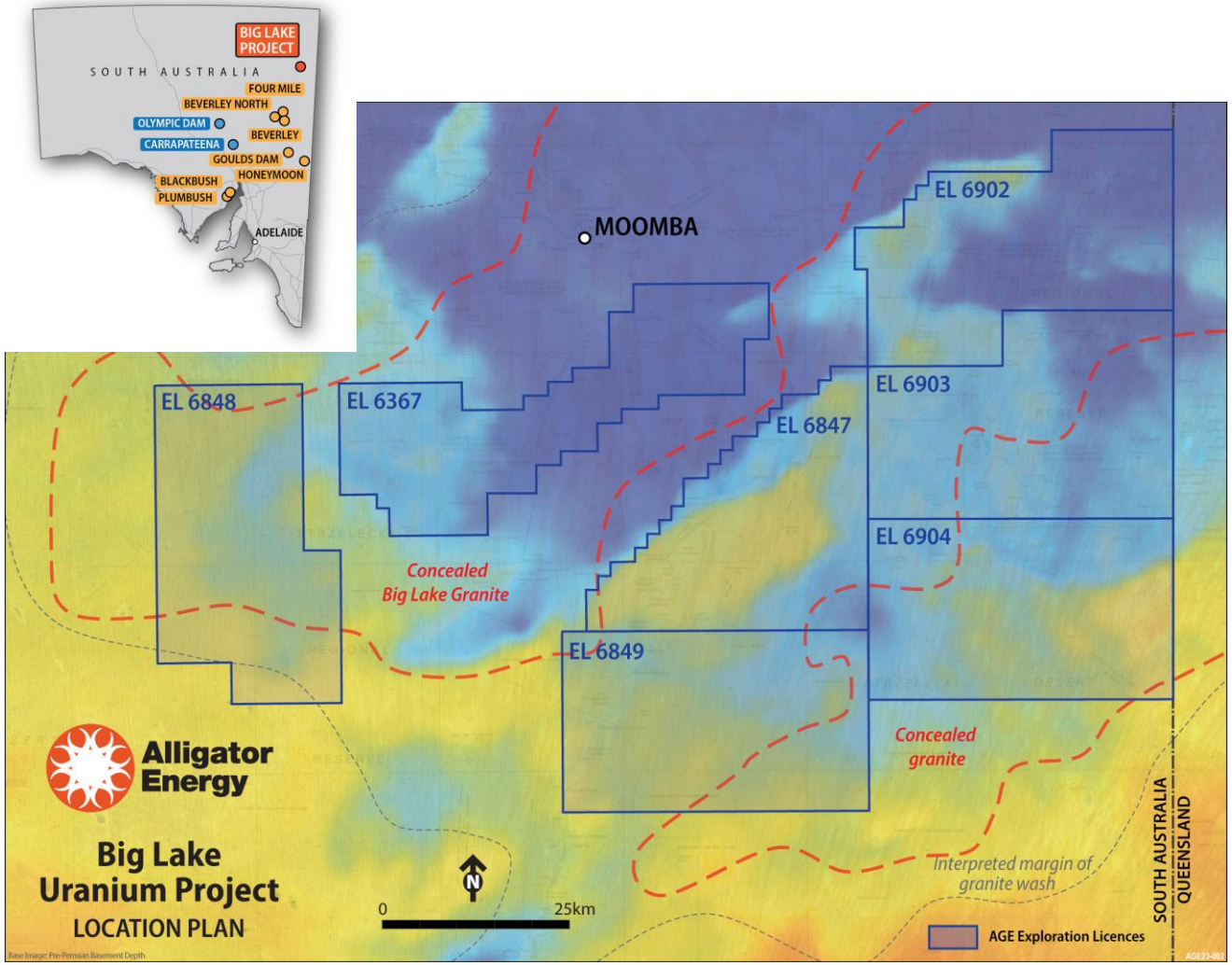
Big Lake Uranium Project, SA

- Overlies Cooper Basin in NW SA – under explored for uranium – 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.

Work underway in 2023:

- Interpretation of seismic and other datasets completed, continuing work towards full 3D basin model.
- Selection of ~20 stratigraphic drill sites to test paleochannel model and qualities of U-trap rocks – a number to be tested in 2H 2023.
- Exploration access agreement in place with TOs, and initial site visits complete – survey for drilling planned.
- Evaluation of potential across holding to host battery metals such as Li in condensates.



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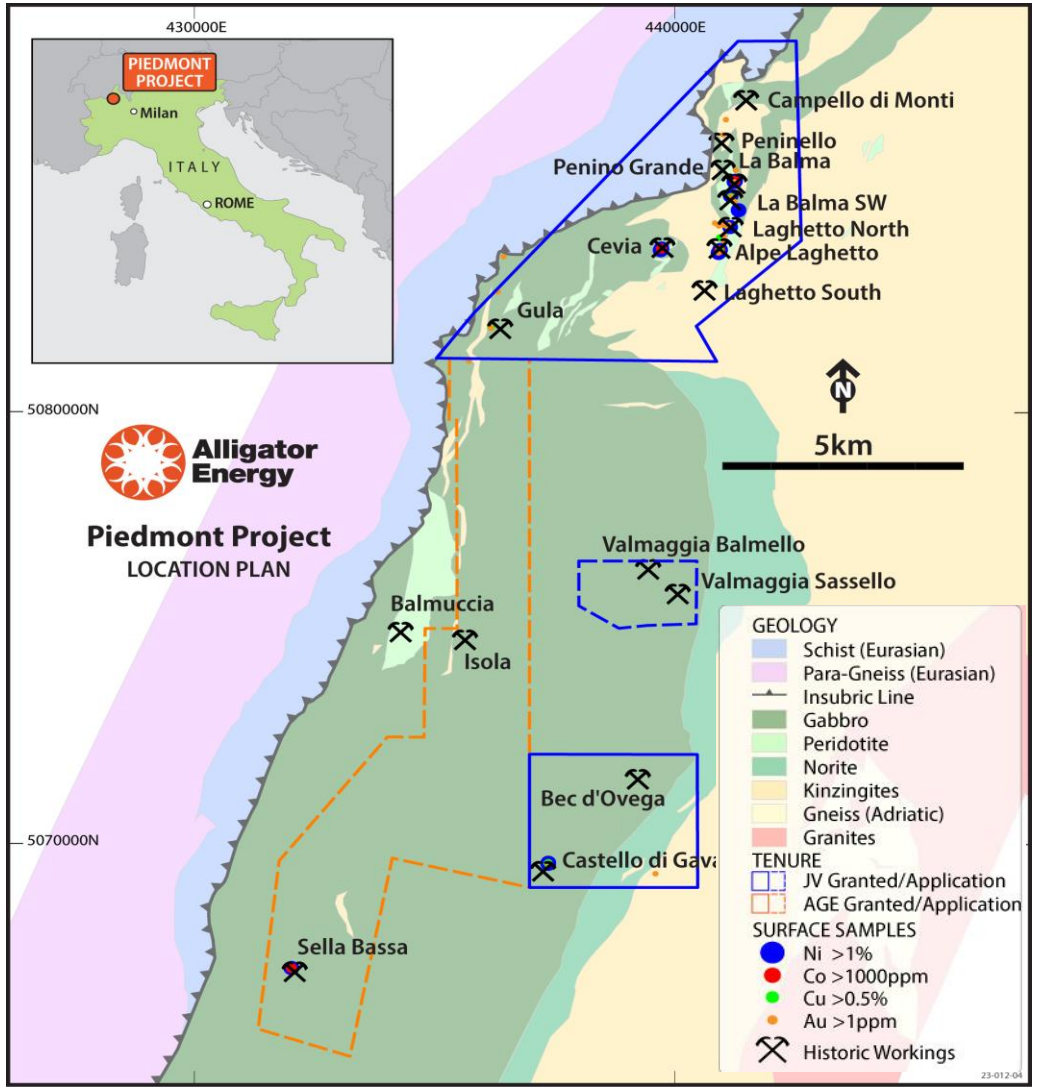
Piedmont Ni Co Project Overview, Northern Italy

- Nickel exploration with notable Cobalt, Copper, PGE and Gold credits.
- Significant metal grades from surface rock sampling: 0.19 to 2.48% Ni, up to 0.19% Co and 0.07 to 6.38% Cu*.
- Multiple Ni showings comparable to world class deposits.
- Ground EM survey across the Laghetto prospect undertaken in 2022.
- Early exploration drilling permits approved for Alpe Laghetto.

Work underway or completed 2023:

- Additional assay, geology, petrology and petrophysics data being integrated into understanding anomalies identified at Laghetto and La Balma.
- Continue to evaluate related opportunities, partnerships and projects in region.
- AGE holds 51% over JV tenements, 100% of other tenements.

** AGE ASX Releases – 26 July and 14 September 2018*



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Project Pipeline

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CONCEPTUAL

BIG LAKE

Analogous to Hydro-carbon Basins - Kazak & Wyoming

STRATEGIC MINERALS

on Current Titles plus opportunities

EARLY-STAGE GREENFIELD

NABARLEK NORTH

U40 Nearology

PIEDMONT

Rediscovered Ni, Co & Cu province in Northern Italy

PROSPECTIVE GREENFIELD

TIN CAMP CREEK

Caramal Resource

BEATRICE

Beatrice Prospect

DEVELOPMENT POTENTIAL

SAMPHIRE

Blackbush
18.1 Mlb ISR Amenable Resource

Plumbush
Historical Prospect Exploration target

OTHER URANIUM + ENERGY MINERAL OPPORTUNITIES → **M&A TEAM IN PLACE**

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ESG In Practice

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ESG in practice: Working with Stakeholders

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- We aim to add value in all of our decision-making for **shareholders**.
- We wish to provide an engaging, challenging, enjoyable and respectful workplace for our **employees**.
- We respect the rights of **landowners** and **communities** and seek to collaborate for our mutual benefit.
- We respect the cultural heritage and connection to country of **Traditional Owners** and wish to create mutually beneficial opportunities.
- We aim for a low impact on the **environment**, through innovation, use of latest technology, and responsible land management techniques.

Our aim is to discover, source and economically extract these needed commodities with an innovative approach, with either zero or minimal impact, and with positive value and experience for our stakeholders and communities.

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ESG in Practice

Alligator Rivers

- Over 40 indigenous employees on drilling and exploration programs over 10 years.
- On country work and support for indigenous ranger groups – even when not exploring.
- Nabarlek North agreement – potential for TO groups to become 25% partner.
- Drilling at Nabarlek North in 2022/23– Indigenous owned and operated drilling company.
- Exploration rehabilitation after each program.

Samphire Project

- Completed remaining historical rehabilitation during project acquisition.
- Ongoing drill hole rehab – targeting lifting of bush density to double the existing.
- Early and ongoing engagement with pastoralists, Indigenous group, Whyalla community.
- Working with pastoralists for weed and pest control, and with rangeland improvement initiatives.
- Early initiatives for low impact site facilities, sustainable energy opportunity.

Big Lake Uranium

- Full draft agreement with YYTLOAC indigenous group.
- Plans for direct indigenous employment from first program in 2023.

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