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Samphire Uranium Project
Investigating the potential for near carbon-free energy mine project

Greg Hall – CEO

Austmine Conference 2023 - Adelaide

Alligator Energy

Disclaimer

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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 member of the Australian Institute of Geoscientists. 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.

Alligator Energy – Strategy

- Advance Samphire Uranium Project through resource evaluation, pilot field recovery trial, approvals and pre-development into production
- Active uranium exploration in Alligator Rivers Uranium Province (ARUP), Arnhem Land, NT
- Commence uranium exploration in the Cooper Basin, SA
- Nickel-Cobalt (Cu, Au) exploration in Piedmont, Italy
- Evaluating and acquiring further uranium or energy mineral assets in key target regions
- Strategic relationship with Traxys Energy group for uranium marketing

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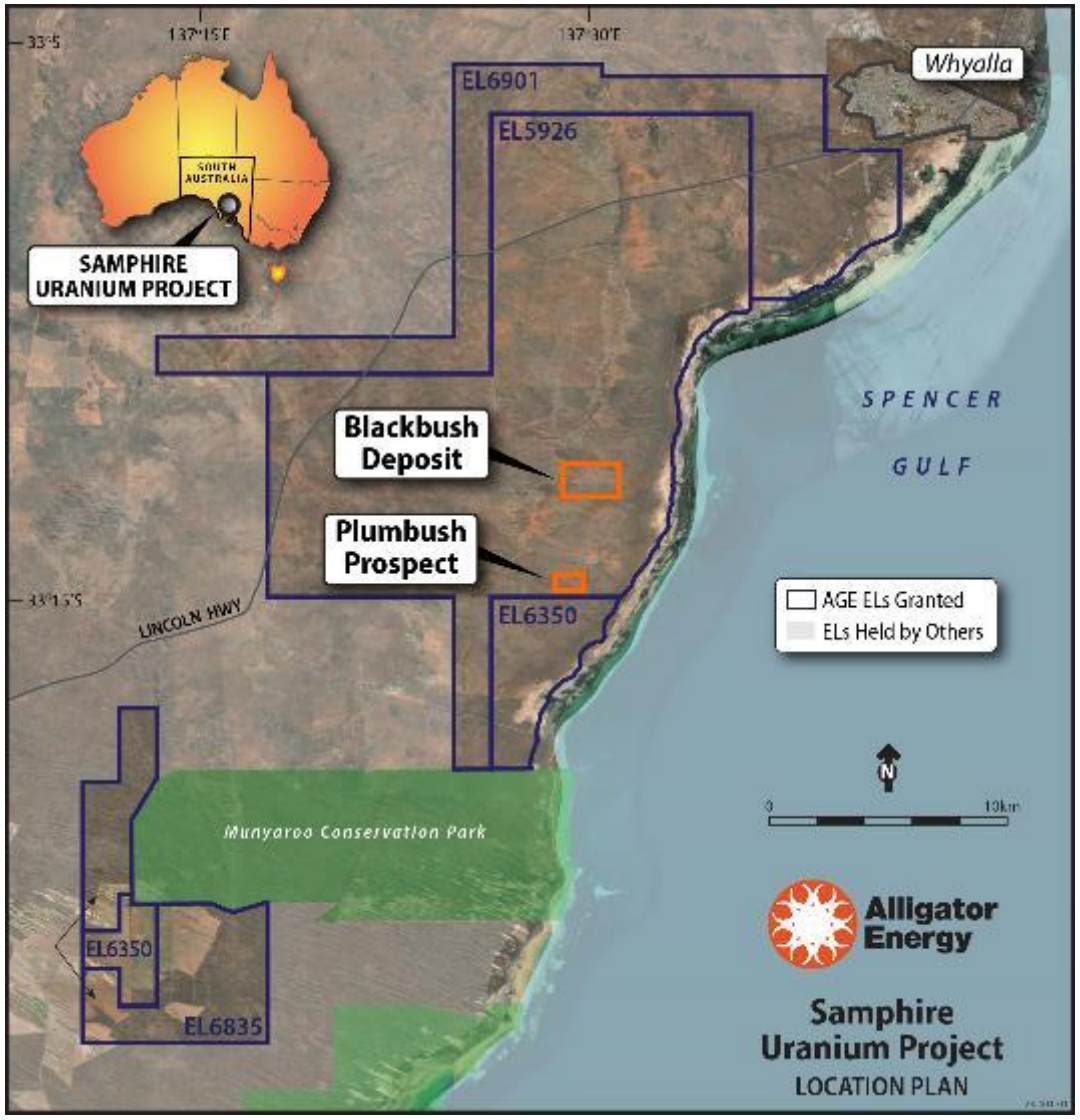
Samphire Uranium Project Scoping Study

Study confirms potential for globally competitive In-Situ Recovery uranium mine – similar to Beverley, Four Mile and Honeymoon uranium mines

- 10Mlbs drummed uranium oxide production over 12 years initially
- 1 Mlbs pa with ramp up/down – Opportunity to increase
- Capital cost forecast of A$129.3M inclusive 40% contingency and escalation
- All In Sustaining Cost A$43.19/lb U_3O_8 (US$30.23/lb U_3O_8)
- Current U_3O_8 price A$78.4/lb (US$53/lb) long term
- Ungeared, real post-tax NPV_8 of A$152M @ US$65 /lb
- Post-tax internal rate of return (IRR) of 29%
- Payback period of 3.5 years from start of production



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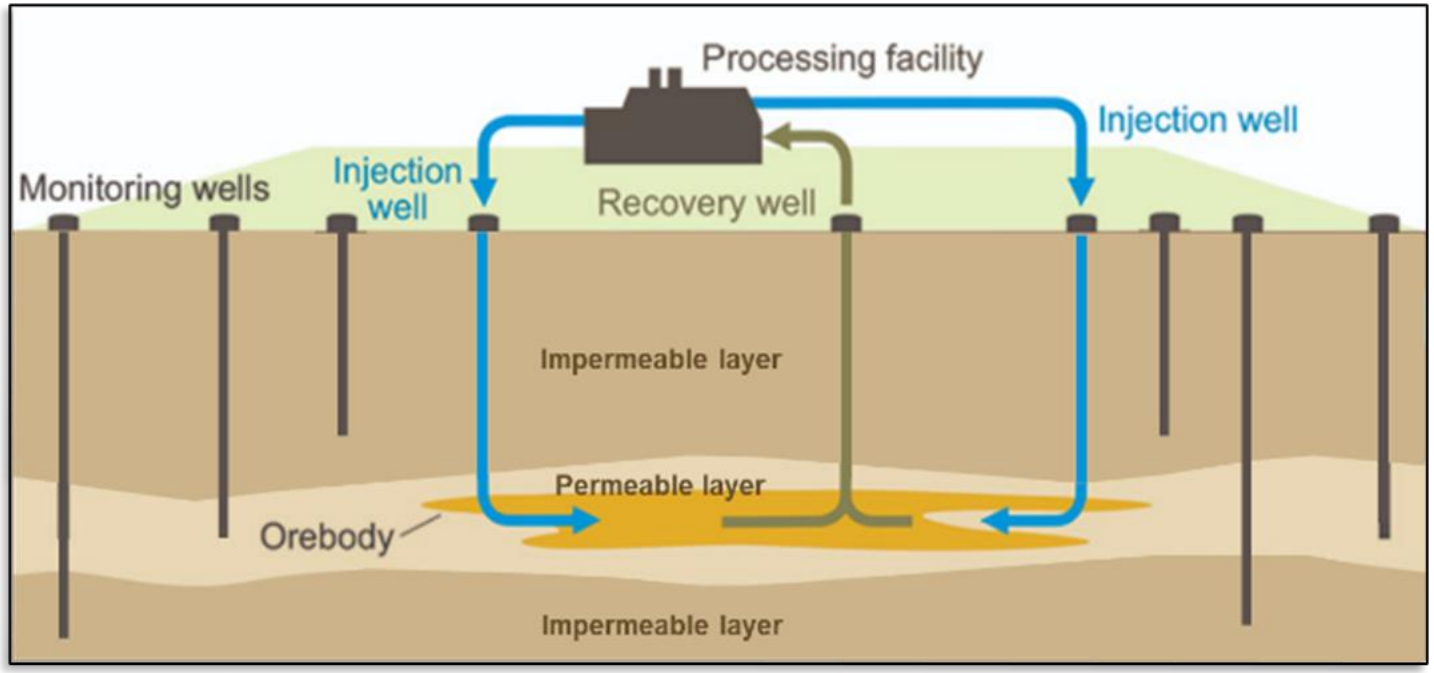
In-Situ Recovery system advantages

- In-Situ Recovery circulates existing hyper-saline groundwater, dosed with 0.025% lixiviant.
- Solution falls under head pressure down injector wells, dissolving uranium within sand pore spaces, and pumped up recovery wells to an IX plant.
- **Samphire low costs due to shallow deposit (60 to 80m depth), excellent formation porosity, high leaching dynamics, location near Whyalla – locally based workforce (no FIFO and camp), experienced mining services and business support, lower cost of key infrastructure.**



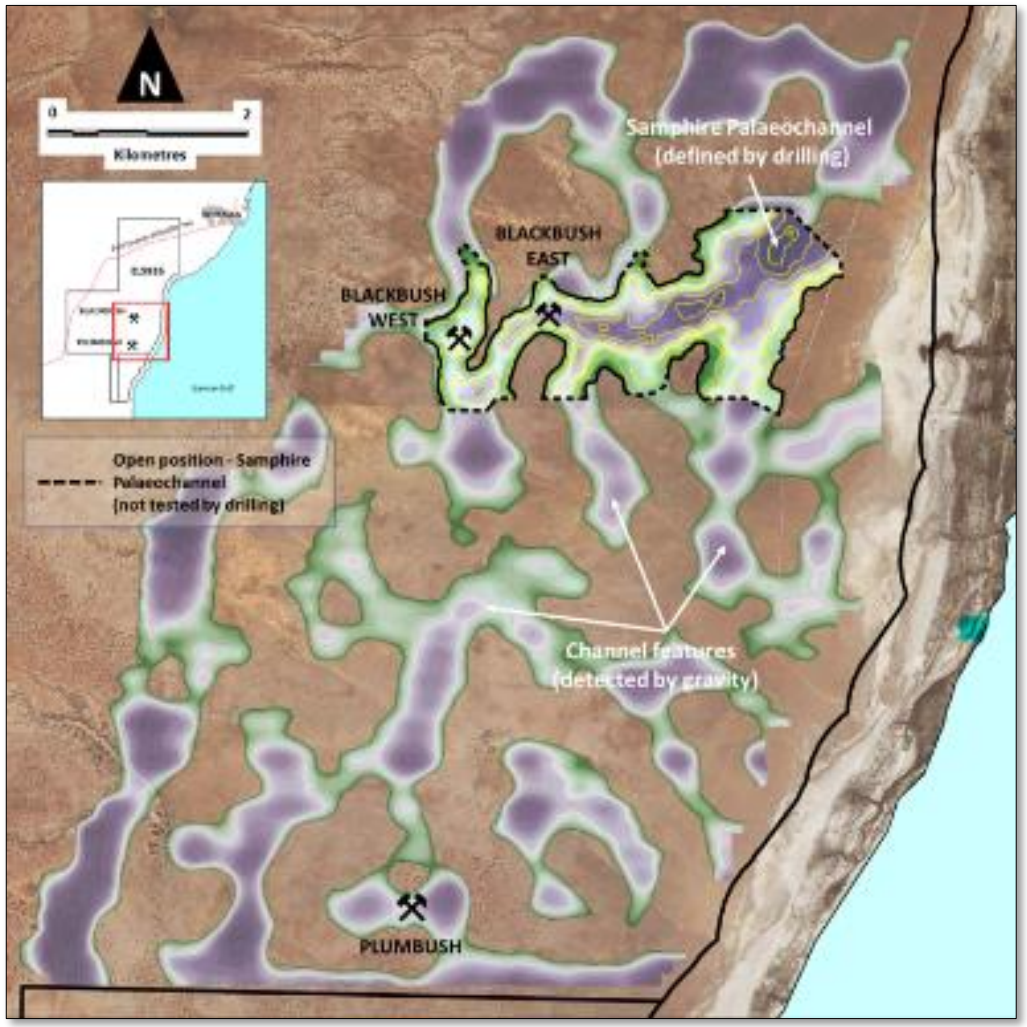
- Field Recovery Trial for late 2023 to confirm parameters to be used in a full feasibility study planned for 2024

Samphire – Investigating potential for Near Carbon-free energy mine

Key outcome of Study: **Investigate the opportunity for a near carbon-free energy project, including:**

- Lower power consumption (as ISR method has no rock or material movement, no crushing and grinding of rock) may allow full use of renewable power with battery backup;
- 20kms distance to Whyalla may allow all electric vehicles and light trucks to be used; and
- Recent advances in electric on-highway prime movers may support the relatively low level of logistics and product transport needed.

- This potential opportunity aligns with SA Government Hydrogen Hub for Whyalla region (EOI's underway), extensive potential renewable projects, and Northern Water Desal plant



Potential uranium-bearing channel extensions at Samphire

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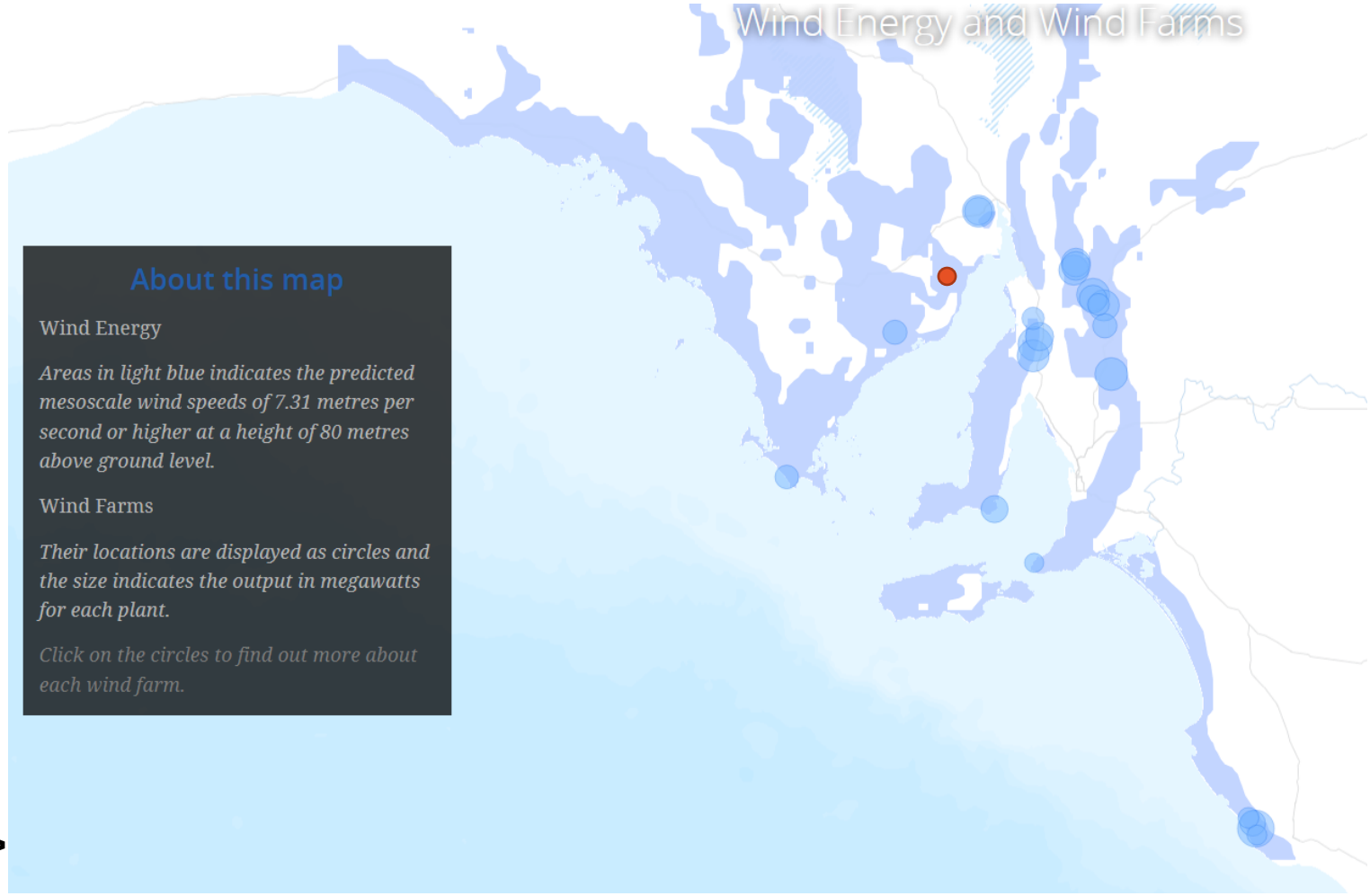
Samphire – Investigating potential for Near Carbon-Free energy mine

Power demand and supply:

- Power demand – basically pumps and tanks only, RO plant – continuous ops
- Estimated at 2.9 to 3.4 MW installed
- Major renewable companies have exclusivity in region - Alligator under NDA for ongoing power discussions and opportunities
- 35km 5MW power line as backup, which is also dominated by renewable power
- ***Eyre Peninsula has four wind zones with speeds > 8 m/s and >38% capacity factors. Potential to support > 10,000 MW of wind generation.***



Source: https://energymining.geohub.sa.gov.au/

Samphire – Investigating potential for Near Carbon-Free energy mine

On-site electric vehicle potential:

- 20kms distance to Whyalla – also power available onsite
- Electric 4WD's being tested at SA mines (Prominent Hill, Olympic Dam) – electric 2WD utility vehicles will also suffice in our operation
- Electric mobile cranes now a reality
- Light to medium trucks becoming available

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Samphire – Investigating potential for Near Carbon-Free energy mine

On-highway electric prime movers for logistics supply and product transport:

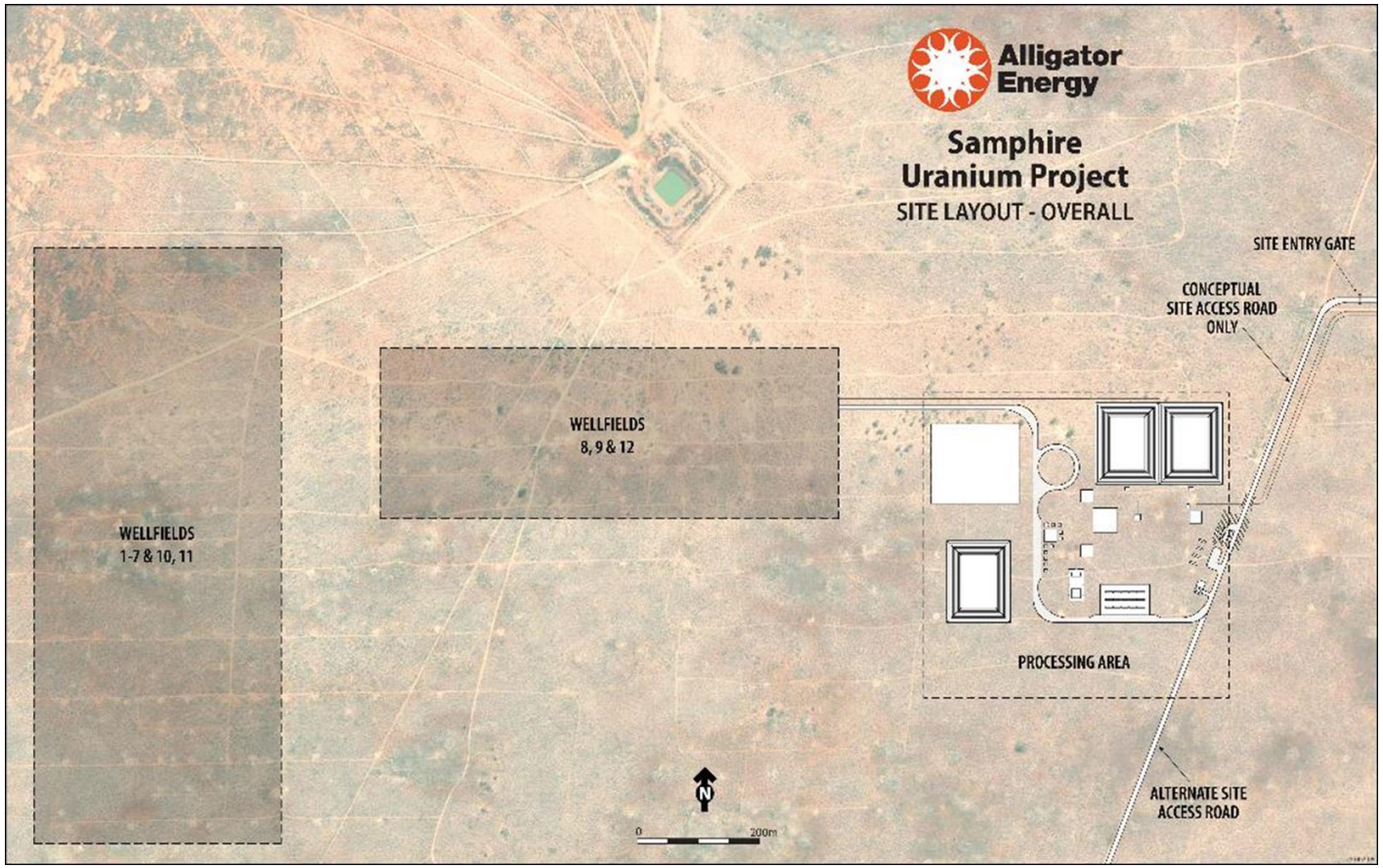
- Janus Electric (Berkeley Vale, NSW) converting diesel prime movers to electric, with slide in slide out battery packs
- OZ (BHP), Qube and Janus Electric trialling 3 trailer heavy haulage electric trucks later this year from Adelaide to Carapateena & return
- Battery charging and replacement stations in Adelaide, Pt Augusta and Carapateena
- Samphire project logistics estimate – 11 double trailer supply trucks per month, and 1 to 2 product delivery trucks per month (2 to 3 x 20ft containers)

https://www.januselectric.com.au/

Samphire – Investigating potential for Near Carbon-Free energy mine

Future considerations:

- We say “near” carbon-free as SA grid still relies on eastern states interconnector and gas backup.
- Also In-Situ Recovery requires ongoing drilling of wellfields – need to investigate the suitability of large hole electric drilling rigs for 60 to 85 m drill depth.
- However, this ignores the fact that we will be producing 1Mlbs pa of uranium oxide, which when enriched and used in a modern nuclear power station overseas will run a 1 GW station for just over a year producing only ~5 Mt CO_2.
- **This 1Mlbs pa would offset approx. 5% of Australia’s 2021 carbon based power generation footprint.**



Samphire ISR Project – Schematic layout of potential operation for initial 12 years project – plant suitable for extended production

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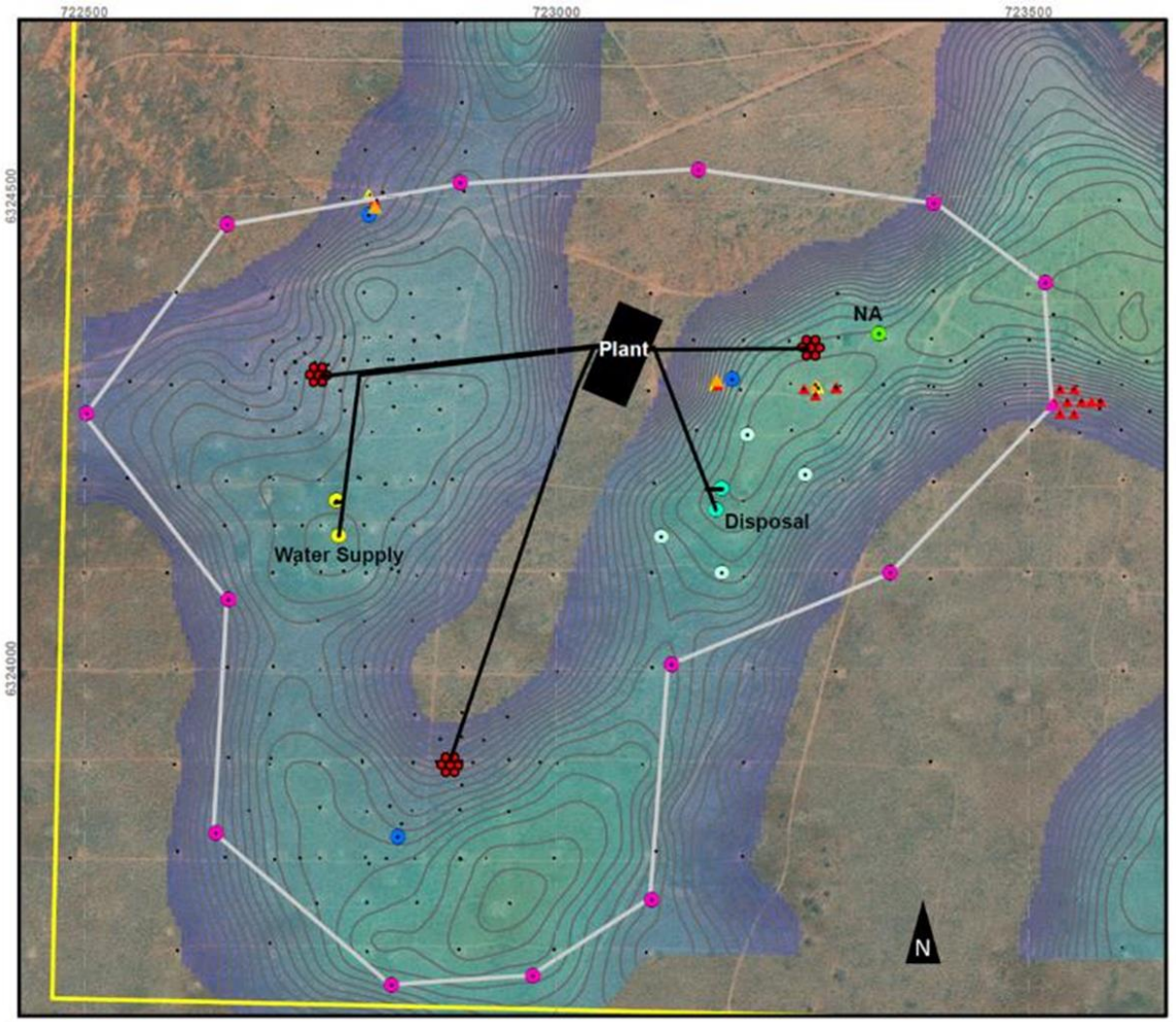
Field Recovery Trial (FRT)

- To confirm bench scale testwork, confirm RO plant operation, and better understand how well uranium is liberated from underlying sediments with ISR.
- Short-term (approx. 3-months) pilot FRT proposed for late 2023.
- Approval in process by Department for Energy and Mining.
- Will not produce uranium oxide final product
- Full-scale ISR mining ~40 to 50 producing wells ongoing – FRT only consists of 3 producing wells and a small, containerised pilot IX plant.
- Upon completion of planned and any future testing, well infrastructure and pilot processing plant removed and rehabilitated.
- If successful, will lead to feasibility study and mining lease approvals.



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Alligator Energy - ESG in practice

Alligator Rivers:

- ~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 – 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, Traditional owner group, Whyalla community reps
- Working with pastoralists for weed and pest control, and with rangeland improvement initiatives
- Early initiatives for low impact site facilities, Northern Water, sustainable energy

Big Lake Uranium

- Full draft agreement with YYTLOAC indigenous group being finalised
- Direct indigenous employment from first programs