Alligator ASX Announcement



20 February 2023

Drilling Recommences at Samphire Uranium Project, South Australia

Alligator Energy Limited **ASX: AGE** (**Alligator** or the **Company**) is pleased to advise that extensional, resource upgrade and groundwater monitoring well drilling has recommenced at the Blackbush Deposit (**Blackbush**), Samphire Uranium Project south of Whyalla, South Australia.

Highlights

Drilling contractor engaged and on-site for sustained operations at Blackbush throughout 2023 to focus on:

- Targeting extension of high-grade zones where mineralisation remains open to the north, south and west and where historical data flags potential for additional accumulations of uranium mineralisation (Figure 1).
- Further upgrading the Inferred Mineral Resource Estimate to Indicated category and commencement of conversion to Measured category in areas selected for Field Recovery Trial (FRT) operation.
- Commencement of installation of groundwater monitoring wells in preparation for the planned FRT later this year.

Alligator Energy is currently completing a **further resource upgrade** for Blackbush based on rotary mud drilling completed during Q4 last year, which (as flagged in our Dec 22 Quarterly report) will be announced this quarter. Post this, the Company will complete the compilation and analysis of its Scoping Study for an initial In-Situ Recovery project based on the updated Blackbush resource.

Alligator's CEO Greg Hall stated: "Excellent forward planning and on-ground work by our project team late last year and through January has allowed rapid preparation and access to continue for our resource infill and extensional drilling into 2023. The drilling of groundwater monitoring wells is important as we compile information for our planned FRT later this year and will also be used during that operation for performance and environmental monitoring during operations. Our technical team has been working diligently to complete the current resource upgrade, to be finalised this quarter.

Alligator has continued its community and regional engagement with a further public presentation meeting and drop-in session held in Whyalla, along with ongoing discussions with pastoralists and key community groups regarding our drilling and planned pilot field recovery trial. We very much appreciate and thank all parties for the feedback, questions and comments we have been receiving around our project and are incorporating these into our future planning."

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Commencement of Drilling

Drilling has recommenced at the Blackbush to complete the second phase of the 100-hole program approved in 2022. Three groundwater monitoring wells will be initially installed as part of this program to support Alligators Field Recovery Trial (FRT) approvals and operational monitoring requirements, with more to follow.

Post monitor well drilling, the remainder of the program will focus on:

- Extending known high-grade zones where mineralisation remains open to the north, south and west (Figure 1).
- Step out to areas outside the current mineral resource where historical data flags potential
 for additional accumulations of uranium mineralisation and where historical drilling does not
 successfully test the host palaeochannel for uranium mineralisation due to wide drillhole
 spacing.
- Infill drilling in the Inferred areas of Blackbush to continue to focus on upgrading the Blackbush Mineral Resource Estimate (MRE).
- Close (<25m) spaced infill holes to upgrade the MRE to a Measured category in the three areas identified for FRT test wellfields.

Alligator is also preparing a Program for Environment Protection and Rehabilitation (PEPR) to attain approval for ongoing sustained drilling operations. Drilling and downhole logging contractors have been secured for the duration of 2023.

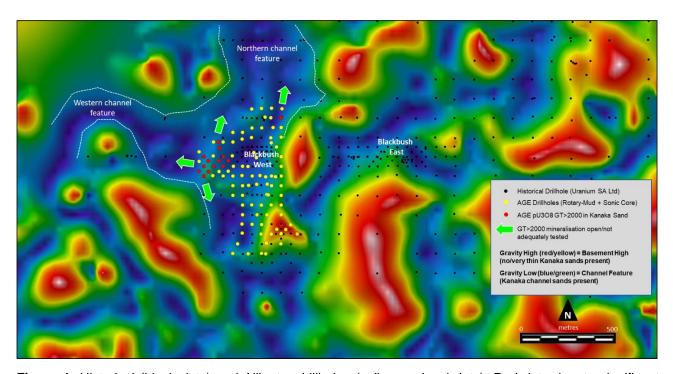


Figure 1: Historical (black dots) and Alligator drillholes (yellow and red dots). Red dots denote significant uranium mineralisation intersections hosted within the Kanaka sands > 2000 GT (m ppm)¹ from the 2022 drilling program only. Open positions not adequately tested are shown as green arrows. These areas are earmarked for priority drill testing in the first half of 2023.

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¹ GT= thickness(m) x grade(ppm) – divide by 10,000 for m% GT

This announcement has been authorised for release by the Alligator Energy CEO.

Contacts

For more information, please contact:

Mr Greg Hall

CEO & Director

gh@alligatorenergy.com.au

Mr Mike Meintjes

CFO & Company Secretary

mm@alligatorenergy.com.au

For media enquiries, please contact:

Alex Cowie

Media & Investor Relations

alexc@nwrcommunications.com.au

Forward Looking Statement

This announcement 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

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 on a full-time basis with Alligator Energy as Chief Operating Officer, and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration (including 21 years in ISR uranium mining operations and technical work) and to the activity she 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. 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.

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About Alligator Energy

Alligator Energy Ltd is an Australian, ASX-listed, exploration company focused on uranium and energy related minerals, principally cobalt-nickel. Alligator's Directors have significant experience in the exploration, development and operations of both uranium and nickel projects (both laterites and sulphides).

Projects

