



## Resource Extension Drilling Recommences and Project update for Samphire Uranium Project.

Alligator Energy Limited **ASX: AGE (Alligator or the Company)** is pleased to confirm that the 2024 Blackbush resource extension and broader exploration drilling programs have recommenced at the Samphire Uranium Project, south of Whyalla, South Australia.

### Highlights

- Resource extension drilling for 2024 commenced at the Blackbush Deposit in late January and continued until mid-April when the program was suspended for the pastoral lambing season.
- Significant intersections from that drilling as set out in ASX Announcement - 1 May 2024 included:
  - **1.47m @ 0.40% (3,992ppm) pU<sub>3</sub>O<sub>8</sub><sup>1</sup>; 4.44m @ 0.43% (4,370ppm) pU<sub>3</sub>O<sub>8</sub>; 3.07m @ 0.05% (493ppm) pU<sub>3</sub>O<sub>8</sub>; and 1.32m @ 0.10% (978ppm) pU<sub>3</sub>O<sub>8</sub>.**
  - Continued refinement in understanding the roll front morphology at Blackbush has delivered broader step-out targets for the upcoming round of exploration drilling.
- The Company's drilling contractor is back on site with the following objectives:
  - Initial focus on further investigation of Blackbush Extension Areas 1 and 2; and
  - Assess expansion potential within the Project area targeting historical gamma intercepts within the Blackbush North and Blackbush North-eastern palaeochannels. (**Figure1**)
- Evaluation is underway to increase the drilling rate up to the maximum of our down-hole logging capacity, to assist in exploring the vast palaeochannel system within the Samphire Project area during the second half of 2024.
- Resource extension drilling and step-out exploration drilling planned through to Q4 of 2024 will then be incorporated in an update of the Blackbush Mineral Resource Estimate.

### Project Update – Field Recovery Trial (FRT)

- Retention lease assessment for the planned FRT is continuing, with some additional information requested by SA Govt departments which Alligator is now compiling and working with the Regulator to complete. We will advise the market as approvals are received, which will start the process of operating plan authorisation, FRT site construction followed by FRT operations.

**Alligator's Managing Director and CEO, Greg Hall stated:** "Alligator is planning near-continuous Blackbush deposit resource extension drilling through this year, with a target to increase the resource and hence the potential annual production rate in a future feasibility study. We have worked closely with the local pastoralist to ensure that our operations do not impact their important lambing season. Drilling and logging results will feed into a further update to the Blackbush resource estimate at year end."

<sup>1</sup> Note: pU3O8 denotes that the grade has been determined by PFN downhole logging.

## Commencement of Second Round Drilling

Drilling has re-commenced at the Samphire Uranium Project following a short break due to the lambing season. Drilling will initially focus on investigating encouraging results intersected in the first round of drilling within the Blackbush Extensions 1 and Blackbush Extension 2 areas (**Figure 1**). Encouraging results included:

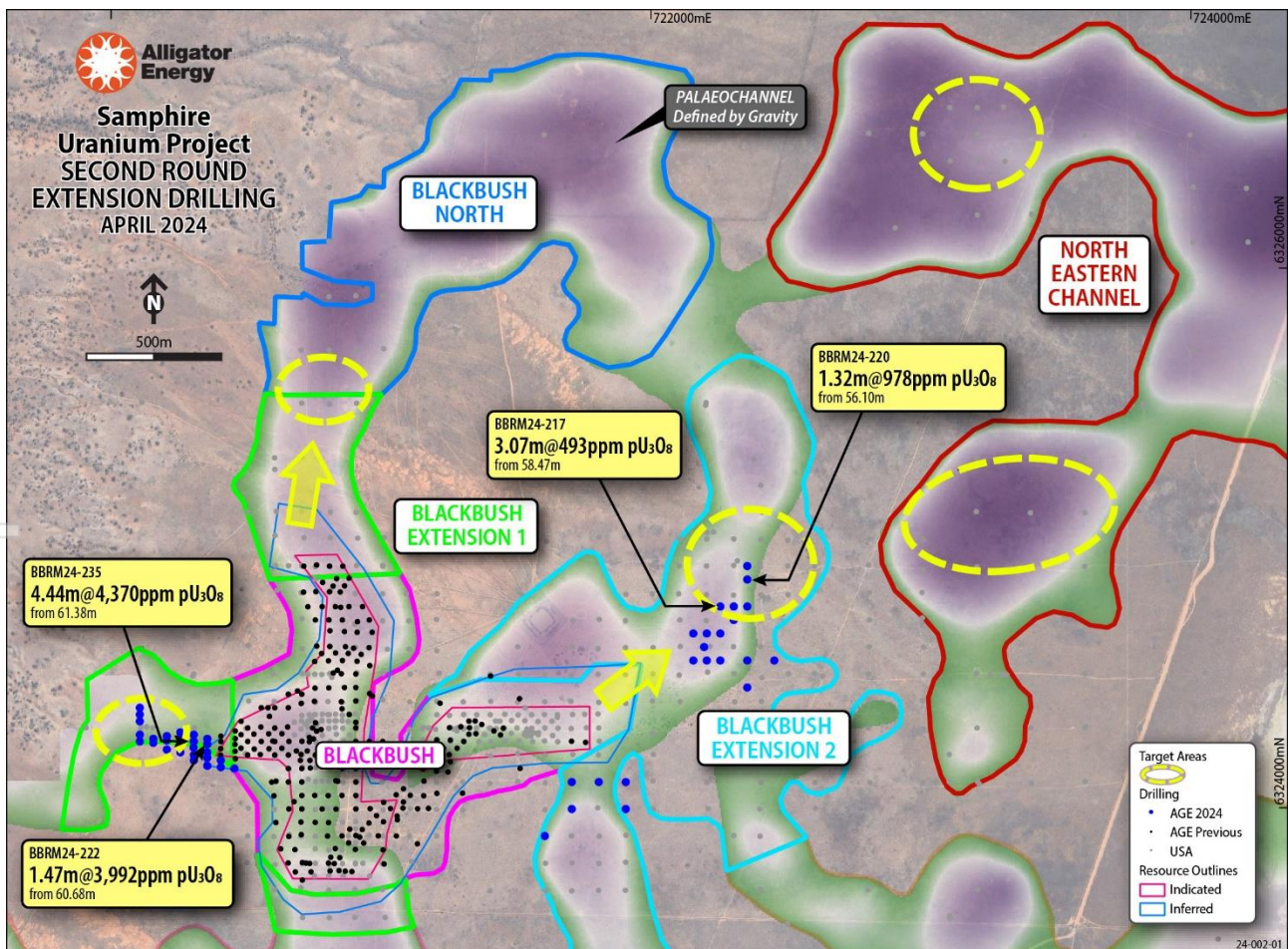
### **Blackbush Extensions 1 Target Area**

BBRM24-235 4.44 meters at 0.43% (4,370ppm) pU<sub>3</sub>O<sub>8</sub> from 61.38m (GT 19,403)  
BBRM24-222 1.47 meters at 0.40% (3,992ppm) pU<sub>3</sub>O<sub>8</sub> from 60.68m (GT 5,868)

### **Blackbush Extension 2 Target Area**

BBRM24-217 3.07 meters at 0.05% (493ppm) pU<sub>3</sub>O<sub>8</sub> from 58.47m (GT 1,514)  
BBRM24-220 1.32 meters at 0.10% (978ppm) pU<sub>3</sub>O<sub>8</sub> from 56.10m (GT 1,291)

The First Round Drilling confirmed the presence of roll fronts and redox fronts extending out from the known Blackbush mineralisation. This will form the basis of a focused exploration approach to extend the existing mineralisation envelope and identify the broader existence uranium mineralisation. Drilling will also be carried out in the Blackbush north and Northeastern palaeochannel areas (**Figure 1**) to investigate anomalous historical gamma intercepts, and to confirm the presence of prospective palaeochannels interpreted from ground gravity data.



**Figure 1:** Map highlighting some of the encouraging intercepts discovered in the First-Round drilling at Blackbush. Target areas to be drill tested in the coming months are also highlighted.

An increase to the drilling rate (up to the capacity of the down hole logging equipment) in the second half of 2024 is being evaluated to increase the drilling coverage given the vast area of interpreted palaeochannels that exist in the Sapphire Project area. This would then lead into the drilling of the required production wells following the approval of a Retention Lease and operating plan (PEPR) for the Field Recovery Trial.

It is anticipated that drilling over the next 6 months will then lead into an update of the Blackbush Mineral Resource Estimate in Q4, 2024.

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

## Contacts

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## 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.

## 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

