

Samphire Uranium Project – Drilling update

Key Highlights

Alligator Energy Limited **ASX: AGE (Alligator or the Company)** is pleased to update the market and shareholders on drilling activities at its Samphire Uranium Project, south of Whyalla, South Australia.

- Drilling **successfully completed on 5 of the 14 planned sonic core holes** within the uranium-bearing zones at the Blackbush deposit, with drilling continuing in subsequent holes.
- Hand-held scintillometer survey of the core has detected **extensive zones of radiation emanation where anticipated** by nearby historical drilling.
- **Detailed geological logging and core sampling** is being undertaken with samples to be packaged and sent to an **Adelaide based laboratory for analysis to obtain accurate assays for uranium and other minerals**. Due to high laboratory workloads assay results are not anticipated for some 6 weeks or so.
- Hole locations have been designed to add high quality geochemical data within the Blackbush higher grade uranium zone (refer Figure 1) – this is needed both for the targeted increased confidence level of the JORC compliant resource (**resource**) being sought by Alligator, and to tie in the historical probe-logged resource data
- **Composite samples from selected cores within various holes** are now also being accumulated, with the composite samples to be sent (when completed) to The Australian Nuclear Science and Technology Organisation (ANSTO) in NSW for **updated uranium leach and IX extraction testwork to be undertaken**.
- The ANSTO testwork will feed into the resource modelling and compilation of a Scoping Study, to be undertaken during the first half of next year.
- After delays due to extensive rains, drilling is now proceeding at a good pace, with pre-collar drilling through barren overlying sediments down to approximately 50 metres, followed by sonic coring down to end of hole in the underlying hard granite (approximately 85 to 90 metres total).
- **The quality of the sonic core recovered within and around the uranium-bearing sediments is exceptionally good** (refer Figure 3 below) and will facilitate and enhance understanding of the geological interpretation and hydrogeology.
- All core is chilled to reduce risk of changes due to oxidation, and samples selected for the ANSTO composite leach testing are vacuum sealed at the drill rig immediately after being drilled and chilled to maintain core integrity and entrained groundwater.
- Following the sonic core drilling, up to 40 rotary mud holes will be drilled in early 2022 with uranium results obtained by Prompt Neutron Fission (PFN) and gamma probe – holes will be designed and located for both resource confidence and potential extensional work. Sonic cored holes will also be probed as above for the required correlation with assay results.

Alligator will keep the market informed of additional progress and first results once these are obtained.

Alligator's CEO Greg Hall stated: "Our team has worked hard to establish the right core handling, recording and logging techniques and quality control systems to ensure best value data will be obtained from this drilling work. This is important for us to be able to tie in the previous historical drilling results into an updated resource estimate next year. The drilling and core processing is being undertaken under established radiation safety and environmental management protocols. I thank our team and the drilling crew for their focussed work so far."

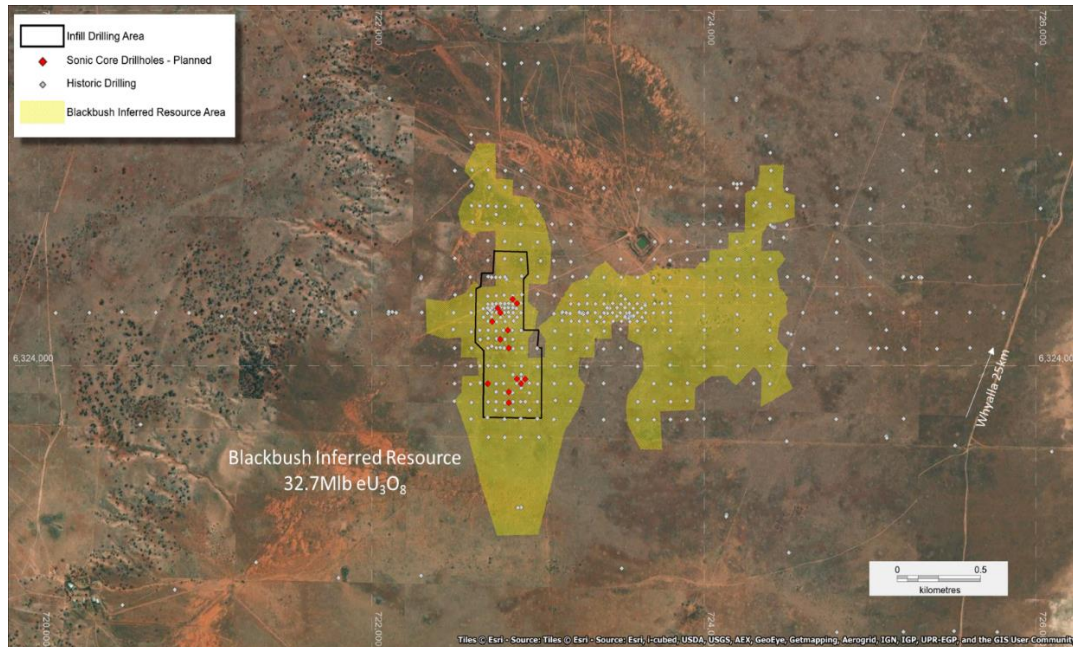


Figure 1 – Planned sonic core holes – final locations may vary depending on active field decisions



Figure 2 – Sonic core drilling rig on Blackbush deposit, Sapphire Uranium Project



Figure 3 - Sonic core hole BBS21-001 from 70 to 75 metres depth at Alligator's Whyalla core shed prior to geological logging and sampling

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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 Mr Geoffrey John Chapman who is a Fellow of the AusIMM. Mr Chapman is a senior consultant 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.

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

