

6 July 2022

Alligator enlarges tenure and progresses evaluation of the Samphire Uranium Project

Alligator Energy (ASX: AGE, 'Alligator' or 'the Company') is pleased to announce receipt of final remaining assays from its sonic core drilling program, new tenement applications surrounding the Samphire Project and commencement of the Blackbush resource re-estimation and Scoping Study.

Highlights

- Assays from the 6 remaining holes from the Phase 1 sonic core drill program³ have been received further validating the consistency of the uranium grades previously reported¹ from the Blackbush West deposit. The best Grade Thickness (GT²) result was 4.33m @ 0.289% (2,892ppm) U₃O₈ for a GT of 12,522 in sonic hole BBS21- 010. Most assay intersections continue to be above our initial estimated GT cut-off of 2,000.
- Alligator has applied for two additional exploration licenses surrounding the current Samphire Project tenure based upon anticipated and potential extensions to the interpreted paleochannels. AGE's strategic land holding for the Samphire Project will extend from 370.7 km² to 551.8 km² once granted.
- AMC Consultants (Perth) commenced resource re-estimation of the Blackbush Deposit based on the additional infill drilling results. This has the objective of confirming a JORCcompliant indicated portion of the previous global 32mlb inferred resource, targeting areas amenable to In-Situ Recovery (ISR).
- ANSTO testwork on representative core is now well underway with promising results so far.
- Wallbridge Gilbert Aztec (Adelaide) have commenced a Scoping Study now that the resource estimation and the ANSTO leach/ion exchange recovery test work is underway. Timing of completion is towards the end of Q3 due to delays in initiating the above.

Greg Hall, Alligator CEO, said: "The review and updated interpretations of the available gravity data, along with review of historical drill logs in detail plus our recent sonic and rotary mud drilling is providing additional clarity on the palaeochannel location interpretation. We will continue this work as we plan our next drilling program for later this year. ANSTO testwork is showing very promising initial leach results, with further work continuing."

¹Drilling details including JORC Table 1 previously reported by Alligator Energy Ltd (ASX:AGE) in ASX release "Samphire Uranium Project update and further assay results – Blackbush Deposit" 10 May 2022. <u>02520049.pdf</u> (weblink.com.au)

² GT= grade(ppm) x thickness(m)

³ See ASX Announcement – 19 November 2021

Expanded Tenement Footprint

Alligator Energy has applied for two (2) new mineral exploration licences (2022/0026 & 2022/0025) surrounding its current Samphire Uranium Project tenements EL 5926 and 6350 (Figure 1). Alligator's Samphire Project now encompasses 551.8 km² (increased from 370.7 km²) and further stabilises the tenure in this region, particularly as our regional exploration strategy is highlighting significant opportunities for extensions of the Samphire palaeochannel system which hosts the Blackbush and Plumbush resources.

An in-house re-interpretation of the existing ground gravity data, along with current and historical drilling data, has been undertaken. This work confirms that the palaeochannel hosting the known deposits are part of a much larger palaeochannel system, with approximately 50 lineal kilometres of channels identified for investigation between Blackbush and Plumbush resources (Figure 1). Further ground gravity surveys are planned to extend this coverage within EL 6350 and 5926, to investigate the high likelihood of further expansion of palaeochannel system, an area of more than 200km².

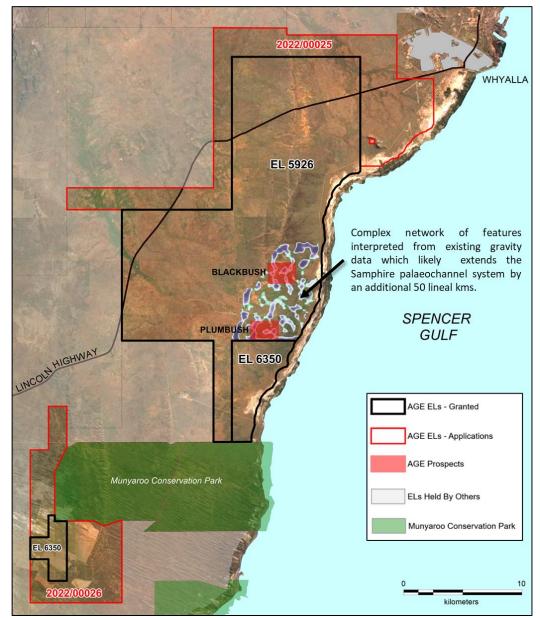


Figure 1: Location map of Exploration Licence Applications – Samphire Uranium Project, South Australia.

Sonic Core Assay Results

All assay results from the sonic core drilling program have now been received from the 6 remaining holes (BBS21-006, 009, 010, 011, 012 & 013) drilled during Q4'2021-Q1'2022 at Blackbush West Samphire Uranium Project, 20kms south of Whyalla in SA (Figures 1 & 2). Assays continue to validate the presence of high-grade uranium in anticipated intervals within unconsolidated basal sands of the Tertiary Kanaka Beds ~55 to 80 m below surface in the Samphire palaeochannel system, consistent with AGE's initial estimated GT cut-off of 2,000. A subset of the U₃O₈ and GT highlights are reported below in Table 1 and in Figure 2. Table 2 (see Appendix 1) provides detail of all significant⁴ assay intersections from the 14 sonic core holes drilled in the program.

| Hole ID: BBS21- | Metres @ U ₃ O ₈ % | U₃Oଃ ppm | Depth from (m): | GT | |
|-----------------|--|----------|-----------------|--------|--|
| 006 | 2.26m @ 0.177% | 457 | 54.19 | 3,996 | |
| 010 | 7.17m @ 0.046% | 2892 | 75.46 | 3,276 | |
| and | 4.33m @ 0.289% | 2892 | 75.46 | 12,552 | |
| 013 | 3.66m @ 0.250% | 2499 | 74.23 | 9,147 | |

0.5m minimum thickness, >0.025% U_3O_8 (250ppm U_3O_8), internal dilution 1.0m.

Receipt of these results have been added to the data provided for the resource re-estimation by AMC Consultants (Perth) to assess what portion of the 32Mlb global inferred resource in the ISR amenable portion of the Blackbush deposit can be upgraded to an indicated category.

Pre-Development Work Update

Wallbridge Gilbert Aztec (Adelaide) have been engaged to commence a Scoping Study on the Blackbush deposit. Results from the AMC resource estimation and the completion of ANSTO leach/ion exchange recovery test work will be driving the delivery date of the study as they are critical inputs. It is anticipated this will be towards the end of Q3, 2022.

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

Table 1: Subset of U3O8 and GT highlights from recent results

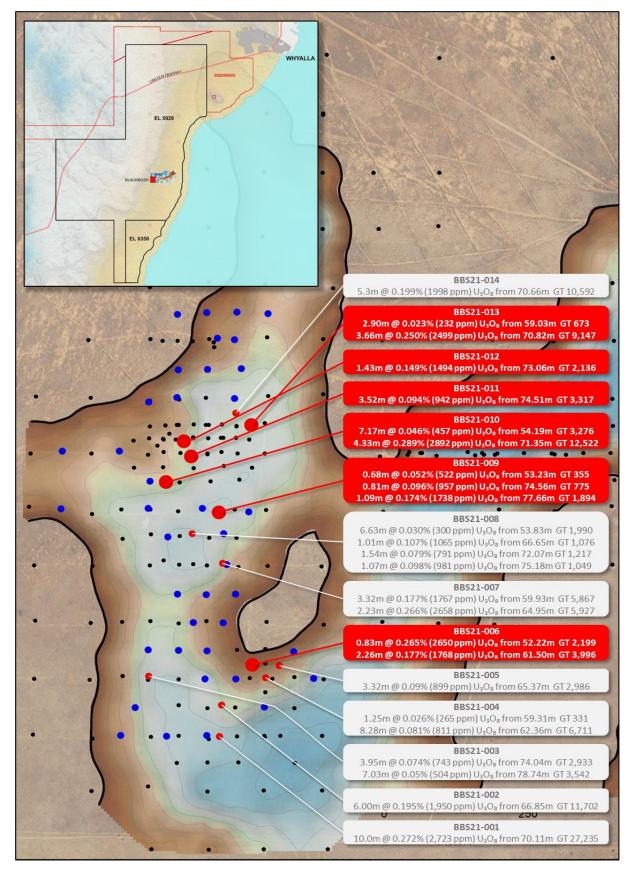


Figure 2: Intercepts from geochemical analysis of sonic core. Locations of sonic drillholes for which assays have recently been received shown as large red dots, with intercepts shown in red text boxes. Previously reported holes and intercepts shown as small red dots and in white text boxes respectively. Blue dots are previously reported AGE rotary mud drill holes and black dots are historically reported drillholes.

In accordance with ASX Listing Rule 5.7.2 the Company provides the following information.

All significant uranium intersections assay of the sonic core holes (series BBS21-001 to BBS21- 014) above 0.5m minimum thickness, >0.025% U308 (250ppm U_3O_8) with internal dilution 1.0m.

| Holeid | Easting (GDA94, Z53) | Northing (GDA94, Z53) | RL | Azimuth | Dip | Sample From (m) | Sample To (m) | Thickness (m) | U3O8 ppm | GT |
|------------|-------------------------|--------------------------|----|---------------|--------------|-----------------------|------------------|----------------------------|----------------------|--------|
| BBS21-001 | 722822 | 6323799 | 20 | 000 | -90.00 | 71.00 | 80.50 | 9.50 | 2,353 | 22,354 |
| | | | | | | | | | | |
| BBS21-002 | 722823 | 6323855 | 20 | 000 | -90.00 | 54.10 | 56.00 | 1.90 | 291 | 553 |
| | | | | | | 65.00 | 71.60 | 6.60 | 2,130 | 14,058 |
| | | | | Note: BBS21 | 1-002, 69-70 |)m, 1m of miss | ing assay - sam | oled for metallur | gical testwork | |
| | | | | | | | | | | |
| BBS21-003 | 722697 | 6323904 | 20 | 000 | -90.00 | 58.00 | 61.50 | 3.50 | 390 | 1,365 |
| | | | | | | 72.45 | 76.77 | 4.32 | 1,651 | 7,132 |
| | | | | Note: BBS21 | 1-003, 74-76 | 5m, 2m of miss | ing assay - sam | oled for metallur | gical testwork | |
| | | | | | | | | | | |
| BBS21-004 | 722902 | 6323901 | 20 | 000 | -90.00 | 58.95 | 59.92 | 0.97 | 268 | 260 |
| | | | | | | 62.00 | 70.00 | 8.00 | 1,182 | 9,456 |
| | | | | Note: BBS21 | 1-004, 63-64 | 1m and 67-68r | n, 2m of missing | assay - sampled | for metallurgical te | stwork |
| | | | | | | | | | | |
| BBS21-005 | 722924 | 6323924 | 20 | 000 | -90.00 | 64.20 | 67.00 | 2.80 | 963 | 2,696 |
| | | | | Note: BBS21 | 1-005, 61-62 | m, 1m of miss? | ing assay - sam | oled for metallur | gical testwork | 1 |
| | | | | | | | | | | |
| BBS21-006 | 722905 | 6324547 | 20 | 000 | -90.00 | 52.22 | 53.05 | 0.83 | 2,650 | 2,200 |
| | | | | | | 61.50 | 63.76 | 2.26 | 1,768 | 3,996 |
| | | | | Note: BBS21 | 1-006, 61-62 | 2m, 1m of miss | ing assay - sam | oled for metallur <u>a</u> | gical testwork | |
| | | | | | | | | - | | |
| BBS21-007 | 722826 | 6324105 | 20 | 000 | -90.00 | 59.00 | 63.10 | 4.10 | 1,643 | 6,736 |
| | | | | | | 64.75 | 67.00 | 2.25 | 2,638 | 5,936 |
| | | | | | | | | | | |
| BBS21-008 | 722773 | 6324157 | 20 | 000 | -90.00 | 53.25 | 60.00 | 6.75 | 300 | 2,025 |
| | | | | | | 66.30 | 67.30 | 1.00 | 1,078 | 1,078 |
| | | | | | | 71.60 | 75.25 | 3.65 | 663 | 2,420 |
| | | | | | | | | | | |
| BBS21-009 | 722748 | 6324546 | 20 | 000 | -90.00 | 53.23 | 53.91 | 0.68 | 522 | 355 |
| | | | | | | 74.56 | 75.37 | 0.81 | 957 | 775 |
| | | | | | | 77.66 | 78.75 | 1.09 | 1738 | 1,894 |
| | | | | Note: BBS21 | 1-009,72-73 | m, 1m of missi | ng assay - samp | led for metallurg | ical testwork | |
| BBS21-010 | 722800 | 6324449 | 20 | 000 | -90.00 | 54.19 | 61.36 | 7.17 | 457 | 3,276 |
| 010221-010 | 722000 | 0324445 | 20 | 000 | -30.00 | 71.35 | 75.68 | 4.33 | 2892 | 3,270 |
| | | | | Note: BBS21 | 1-010 73-74 | | | led for metallurg | | 12,322 |
| | | | | Note: 00521 | 1 010,73 74 | in, 111 oj 11133 | ing assay samp | | icar icstwork | |
| BBS21-011 | 722749 | 6324448 | 20 | 000 | -90.00 | 74.51 | 78.03 | 3.52 | 942 | 3,317 |
| | | | | | | | | led for metallurg | _ | -, |
| | | | | | ,,. | , | 5, -ump | , | | |
| BBS21-012 | 722858 | 6324450 | 20 | 000 | -90.00 | 73.06 | 74.49 | 1.43 | 1494 | 2,136 |
| | | | - | | | | _ | - | | , |
| BBS21-013 | 722647 | 6324304 | 20 | 000 | -90.00 | 59.03 | 61.93 | 2.90 | 232 | 673 |
| | | | - | | | 70.82 | 74.48 | 3.66 | 2499 | 9,147 |
| | | | | Note: BBS21 | 1-013,72-73 | | _ | led for metallurg | | .,, |
| | | | | | , | , , , | | , | | |
| BBS21-014 | 722849 | 6324371 | 20 | 000 | -90.00 | 70.40 | 75.50 | 5.10 | 2,080 | 10,608 |
| | | | | nte: BBS21_01 | 4 67-68m-7 | 1-72m 75-76 | | | for metallurgical te | , |

Table 2: All significant uranium intersections assay of the sonic core holes (BBS21-001 – 014) above 0.5m minimum thickness, >0.025% U308 (250ppm U_3O_8) with internal dilution 1.0m.

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

| Criteria | JORC Code explanation | Commentary |
|------------------------|---|---|
| Sampling techniques | Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. | Rotary Mud Drilling Rotary mud drilling was used to obtain 2m samples in the non-target area and 1m mud /chip samples within the target area. Downhole wireline logging using a Prompt Fission Neutron (PFN) tool was used to calculate pU₃O₈ from the ratio of epithermal and thermal neutrons. The PFN used in this program was calibrated using industry standard procedures at the Australian Mineral Development Laboratories (AMDEL) calibration facility (Adelaide). Sonic Core Drilling Sonic drilling maximises core recovery in soft sediments compared to other coring techniques. Drill core was extracted direct from the drill rod and placed into a 1-metre-long plastic sleave to contain the core. The sleaved core was then sealed and placed in 1 metre intervals in core trays. Down hole core run depths were marked on the core trays. Due to the nature of the sonic drilling technique some redistribution of unconsolidated material can take place. Adjustment of core downhole depths and sampling intervals may be required following review of measured core depths and downhole geophysical data. This adjustment has not been undertaken on the data in this announcement. Following collection and prior to sampling trays of core were transported to a coldroom for storage at 1.5 °C. |
| Drilling techniques | Drill type (eg core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). | Rotary Mud Drilling All holes were drilled by Watson Drilling with typical hole diameter being 6" (152.4mm). All holes were vertical. Sonic Core Drilling All holes were drilled by Star Drilling using sonic drilling Hole diameter was 100cm within 150cm steel cased Core was not oriented (vertical) |

| Criteria | JORC Code explanation | Commentary |
|---|--|---|
| Drill sample recovery | Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. | Rotary Mud Drilling Caliper data show that borehole size increases in zones of unconsolidated sands, hence all pU₃O₈ grades were calculated and corrected for borehole size from caliper data taken every 5cm downhole using the equation {2.737*({EPITHERM}/{THERMAL}-0.02)}*{-1*Power(10,-06)*Power({CAL},2)+0.0097*{CAL}-0.0313} For sonic core holes PFN grade calculations this equation was 2.737*({EPITHERM}/{THERMAL}-0.02)}*0.94 |
| Logging | Whether core and chip samples have been | Sonic Core Drilling Sonic drilling maximises core recovery in soft sediments compared to other coring techniques. All intervals measured for length during logging and sampling. Sample lost in the sample cutting process was collected and weighed for each metre. This was minimal in relation to the core interval. No analysis conducted on sample recovery and grade |
| Logging | Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. | Chip/mud samples were collected 2m in non-target areas and then 1m in the zones of interest (i.e. the target Kanaka Beds). All samples are geologically logged compliant with industry standards which included lithology, mineralogy, grain size/rounding/sorting, colour, redox. All samples were photographed using a high-resolution camera. Sonic Core Drilling All (100%) drill core has been geologically logged and core photographs taken. Logging is qualitative with description of colour, weathering status, major and minor rock types, texture, sedimentary features grain size, regolith zone, presence of organic material, veining, alteration and comments added where further observation is made. |
| Sub- sampling techniques and sample preparation | If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and | Rotary Mud Drilling The depth of investigation of the PFN tool approximately 25-40 cm radius around the borehole to allow for accurate measurement of the ratio of epithermal/thermal neutrons for |

| Criteria | JORC Code explanation | Commentary |
|----------|--|--|
| | appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. | pU3O8 calculations. QA/QC of pU₃O₈ data included repeatability checks by regularly logging a fibreglass-cased calibration hole onsite (MRC002,723703E, 6324350N (GDA94), depth 84.5m). MRC002 has sufficient assay data in the target zone to compare/calibrate PFN data. Repeat runs in rotary mud holes that remained open after drilling for sufficient time to allow for PFN logging was also performed. |
| | | Sonic Core Drilling |
| | | Core was halved, photographed and geologically logged. Due to the core being generally soft material comprising sand and clay zones it was cut using carving knife or box cutter. Initial halving of core was undertaken in a contained guide designed to minimise disruption to the core and core loss. One half core component was subsequently halved by knife or boxcutter within core trays to create quarter core increments for chemical assay samples. Sample intervals were determined by geological boundaries with a maximum sample length of 0.5 metres and a minimum interval of 0.1 metres. Full quarter core sample increments were selected directly from the core tray using a modified scoop or plaster knife. Samples were placed directly in uniquely numbered calico sample bags with a waxed paper sample ticket showing the same sample number placed inside the bag with the sample. Each individual sample was weighed following collection. The sample mass ranged from 0.15 kg to 2.4 kg with average mass of 0.88kg. Duplicate quarter core samples were analysed at a frequency of 1:20 primary samples. Contamination was minimised in the cutting and sampling process by regular washing of cutting equipment in fresh water. Sampling areas were routinely vacuum cleaned and wiped down to remove loose dust and fragments and checked with handheld scintillometer, to check for and |
| | | eliminate potential radiation contamination in the cutting and sampling process. |

| Criteria | JORC Code explanation | Commentary |
|--|--|--|
| Quality of assay data and laboratory tests | The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. | Rotary Mud Drilling Three geophysical tools were used: Prompt Fission Neutron Tool (PFN) serial number 22 manufactured by Geoinstruments Inc, Nacogdoches, Texas. Neutron generator 78-80kV, logging at 0.5m/minute. Multisurvey tool (MST) serial number 24 manufactured by Geoinstruments Inc, Nacogdoches, Texas. Measures 16Normal, 64Long borehole resistance, Point Resistance, and Self Potential and uncalibrated natural gamma for depth matching. GeoVista 3-arm caliper, serial number 5589, measures the bore-hole size in millimetres for the length of the bore hole. |
| | | Sonic Core Drilling Laboratory techniques are industry standard Analysis is considered total for all elements Commercial analytical standards inserted in sample submission at a rate of a minimum of 1: 20 primary samples. Analytical blank samples submitted at a rate of 1:20 primary samples and following suspected high-grade samples. Duplicate ¼ core samples submitted at a rate of 1:20 primary samples. QAQC results indicate no bias in analysis. |
| Verification of sampling and assaying | The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. | Rotary Mud Drilling ~20% of rotary mud holes twinned historical and/or sonic core holes which were used as a calibration check on the pU₃O₈ grades being acquired in this program. Natural gamma (on the caliper tool) was used for depth matching the PFN. No wireline stretch was observed during the program. Sonic Core Drilling No independent verification of significant intersections undertaken No twinning of holes No procedures for data storage and management have not been compiled as yet. Assay data was received in digital format from the laboratory and merged with sampling data into an Excel spreadsheet format for QAQC analysis and review against field data. Data validation of assay data and sampling |

| Criteria | JORC Code explanation | Commentary |
|---|--|--|
| | | data have been conducted to ensure data entry is correct. All assay data is received from the laboratory in element form is unadjusted for data entry. Elemental uranium has been converted to U₃O₈ by applying a conversion factor of: U ppm x 1.179243 = U₃O₈ ppm Percentage (%) U₃O₈ = U3O8 ppm/10,000 |
| Location of data points | Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. | Rotary Mud Drilling Drillholes are sited using a Garmin handheld GPS Drilled holes are surveyed Leica iCON GPS 60 which uses the 4G network to obtain corrections from SmartNet base stations (Continuously Operating Reference Stations (CORS)) located around Whyalla. The SmartNet corrections result in RTK RMS accuracy of 10-20mm in XY and 20-30mm in Z. Grid system GDA94 Projection 53H Sonic Core Drilling Hole collar locations measured by handheld GPS. General accuracy estimated as <u>+</u> 2 metres Downhole directional survey measured by magnetic deviation tool by Borehole Wireline. Grid system GDA94 Projection 53H |
| Data spacing and distribution | Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. | Rotary Mud Drilling Drill spacing varies from 50x100m, 200x200m, 50 x 25m and 200 x 200m centres as program was designed to validate historical drilling and infill where there is sparse historical information. pU3O8 intercepts calculated above 0.5m minimum thickness, >0.025% pU₃O₈ (250ppm pU3O8) with internal dilution 0.25m No compositing was applied. Sonic Core Drilling Single drill hole. No sample compositing |
| Orientation of data in relation to geological structure | Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. | Rotary Mud Drilling The Samphire mineralisation is interpreted to be contained in horizontal to sub-horizontal sequence of sediments and underlying weathered granite. This interpretation is derived from the significant historic drilling and geological interpretation of the area. All drillholes are vertical which is appropriate for the orientation of the mineralisation |

| Criteria | JORC Code explanation | Commentary |
|----------------------|---|---|
| | | Sonic Core Drilling The Samphire mineralisation is interpreted to be contained in horizontal to sub-horizontal sequence of sediments and underlying weathered granite. This interpretation is derived from the significant historic drilling and geological interpretation of the area. All drillholes are vertical which is appropriate for the orientation of the mineralisation. |
| Sample security | The measures taken to ensure sample security. | Rotary Mud Drilling Rotary mud/chip samples are stored in AGE's secured storage facility in Whyalla. Sonic Core Drilling Chemical assay samples were stored in a secured storage facility in Whyalla then transported by road by an Alligator Energy staff member to the Adelaide laboratory. |
| Audits or reviews | The results of any audits or reviews of sampling techniques and data. | No audits or reviews undertaken of sampling techniques to date. |

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

| Criteria | JORC Code explanation | Commentary |
|---|--|---|
| Mineral tenement and land tenure status | Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. | The JORC2012 compliant Blackbush deposit, referenced historical drilling and geophysics covering the Samphire project are located on Exploration Licence EL5926 originally granted 20th November 2016 for a term expiring 2018. The licence was subsequently renewed for a further 3 years expiring in November 2021. A further renewal has been lodged with DEM and is pending. EL5926 is 100% held by S Uranium Pty Ltd a wholly owned subsidiary of Alligator Energy Ltd. The land covering the licence area is Crown Lease; consisting of several leases over 2 pastoral stations. |
| Exploration done by other parties | Acknowledgment and appraisal of exploration by other parties. | Samphire Uranium Limited (SUL), previously UraniumSA (ASX: USA) historically conducted almost all previous exploration within EL5926 defining the Plumbush (JORC2004) and Blackbush (JORC2012) resources and all relevant drilling, geophysics except ground magnetics conducted by AGE in 2021. USA conducted preliminary Insitu Recovery (ISR) hydrogeological testwork on the Blackbush deposit with pump testing and hydrogeological modelling. |

| Criteria | IOPC Code explanation | Commontory |
|--------------------------------|---|--|
| Criteria | JORC Code explanation | Commentary |
| | | Third party drilling is confined to one rotary mud hole for lignite exploration located in the southeast of the licence area. |
| Geology | Deposit type, geological setting and style of mineralisation. | Mineralisation is dominantly sediment hosted uranium within the Eocene Kanaka Beds. Minor amounts of mineralisation are present in the overlying Miocene Melton sands (informal name) and underlying Samphire granite (informal name) |
| Drill hole Information | A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. | Drillhole information relating to 2021 sonic drilling is contained in Table 2 of this announcement, Table 2 & 3 of ASX release "High-grade Assay Results – Samphire Uranium Project", January 31, 2022 and Table 2 & 3 ASX release "Exceptional High Grade Uranium Results – Samphire Project" March 29, 2022. Drillhole information that relates to historic drilling was previously reported by Uranium SA (ASX: USA) in ASX release "Samphire Project Update" 27 September 2013. |
| D (| | |
| Data | In reporting Exploration Results, weighting averaging techniques, maximum and/or | Rotary Mud and Sonic Core Drilling |
| Data aggregation methods | In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. | pU3O8 intercepts for both rotary mud and holes and sonic core holes are calculated above 0.5m minimum thickness, >0.025% pU₃O₈ (250ppm pU3O8) with internal dilution 0.25m Sonic Core Drilling (assay) Average grades have been calculated using length weighted average. No grade cutting has been applied Intersections have been aggregated on sample intervals exceeding a nominal |
| aggregation | averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly | pU3O8 intercepts for both rotary mud and holes and sonic core holes are calculated above 0.5m minimum thickness, >0.025% pU₃O₈ (250ppm pU3O8) with internal dilution 0.25m Sonic Core Drilling (assay) Average grades have been calculated using length weighted average. No grade cutting has been applied Intersections have been aggregated on |
| aggregation | averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly | pU3O8 intercepts for both rotary mud and holes and sonic core holes are calculated above 0.5m minimum thickness, >0.025% pU₃O₈ (250ppm pU3O8) with internal dilution 0.25m Sonic Core Drilling (assay) Average grades have been calculated using length weighted average. No grade cutting has been applied Intersections have been aggregated on sample intervals exceeding a nominal 250ppm U₃O₈ cut off with a maximum length of 1 metre internal material below this cut-off. Historic eU₃O₈ intersections have been aggregated from historical drillhole data (released 2013) composited to 0.5 metres then averaged using a 250ppm eU₃O₈ lower cut-off and maximum of 1 metre internal |

| Criteria | JORC Code explanation | Commentary |
|---|--|---|
| intercept lengths | lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). | |
| Diagrams | • Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. | Results are reported in appropriate diagrams and tables within this release. |
| Balanced reporting | Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. | All mineralised intercepts using a cut- off >250ppm U₃O₈ with internal dilution not exceeding 1 metre (for sonic core using assay) and 0.25 metre when measures by PFN) have been reported. All relevant assay and PFN data presented in Tables 1- 3 |
| Other substantive exploration data | Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. | Geological observations have been reported in context of reported intersections. |
| Further work | The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. | Program for 2022 includes: Detailed geological interpretation/well log correlations of sonic and rotary mud holes, integrating these observations with historical drilling. Extraction test work on sonic core samples Re-estimation and classification of the Blackbush mineral resource. Ground geophysical surveys and follow-up exploration drilling to test for extensions to the Blackbush deposit. |

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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 over 15 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

