ASX Announcement

10 May 2022

Samphire Uranium Project update and further assay results - Blackbush Deposit

Alligator Energy (ASX: AGE, 'Alligator' or 'the **Company')** is pleased to announce receipt of further assay results from its sonic core drilling along with preliminary geological interpretation of the western portion of the Blackbush Deposit (Blackbush West). In addition, analysis of recently acquired geophysical data, in conjunction with the re-examination of historical data, has highlighted several opportunities for resource extensions at the Blackbush Deposit.

Key Highlights

- Assay results received from a further 4 holes from Phase 1 sonic core drilling continues to confirm high-grade uranium over anticipated intervals and validates Prompt Fission Neutron (PFN) grades at the Blackbush Deposit. The best Grade Thickness (GT) result was 5.1m @ 0.208% (2,080ppm) U_3O_8 for a GT of 10,608 in sonic hole 014. Most assay intersections received continue to be above our initial estimated GT cut-off of 2,000.

- Correlations between rotary-mud, sonic core and historical drilling show coherent multi-level high-grade zones (>250ppm cut-off) spanning 1km along the Samphire palaeochannel in the western portion of the Blackbush deposit (Blackbush West).

- Multiple open positions of high-grade zones not adequately tested by recent drill programs will be targeted in follow-up rotary-mud drilling in Q4, 2022 pending completion of a cultural heritage survey. Re-investigation and drilling of the eastern part of the Blackbush Deposit (Blackbush East) will also be undertaken.

- The framing of a regional exploration strategy to target resource extension has commenced which will include selecting and planning relevant geophysics in line with consultation with pastoralists. Work already undertaken shows significant potential for extensions of the Samphire palaeochannel in the immediate area around Blackbush, including district-scale extensions within AGE's tenement package.

- Australian Nuclear Science and Technology Organisation (ANSTO) commenced uranium leach and ion exchange (IX) extraction test work on ISR amenable mineralised cores sampled from Blackbush West.

- A detailed Samphire Project workflow plan has now been established for the next two to three years, and detailed costing and identification of required resources is underway.

- Engagement initiated with the State Government in preparation for a Retention Lease application to allow for a planned Field Leach Trial at Blackbush West.

Greg Hall, Alligator CEO, said: *"The correlation between Alligator's new drilling results (both PFN and assay) and the historical drilling dataset is coming together very well, and is indicating excellent consistency and continuity of the mineralised zones. Work on developing a regional exploration strategy is highlighting significant opportunities for extension of the Blackbush resource and within AGE's wider tenement holding. I thank our team for the detailed and quality data analysis work being done, which is invaluable for our understanding of the Samphire mineralisation. This is important for the upcoming resource review and update work and in creating opportunities for additional discoveries.*

AMC consultants have been secured to undertake the JORC compliant re-estimation of the Blackbush resource later this quarter. This exercise will use a higher cut-off grade in the ISR-amenable resource core than the previous global Blackbush resource. The goal will be to target a more likely mineable portion of the overall global resource, as well as upgrade a portion of the resource confidence level from inferred to indicated status."

Sonic Core Assay Results

Assays were received from a further 4 sonic core holes (BBS21-005, BBS21-007, BBS21-008 and BBS21-014) drilled during Q4'2021-Q1'2022 in the western portion of the Blackbush Deposit (Blackbush West), Samphire Uranium Project, 20kms south of Whyalla in SA (*Figure 1*). Assay results from 9 out of 14 core holes have been received and reported to date.

All uranium mineralisation reported from sonic core is hosted in the Samphire palaeochannel within unconsolidated basal sands of the Tertiary Kanaka Beds ~55 to 80 m below surface (*Figure 2 & Figure 4*). The most recent assay results report uranium (U_3O_8) and grade thickness's (GT) listed in Table 1 below.

Table 1: *Uranium intersections from recent assay results from sonic core holes (BBS21-005, 007, 008 & 014) above 0.5m minimum thickness, >0.025% U_3O_8 (250ppm U_3O_8), internal dilution 1.0m.*

Hole ID: BBS21-	Metres @ U_3O_8 %	U_3O_8 ppm	Depth from (m):	GT
005	**2.80m @ 0.096%**	963	64.20	2,696
007	**4.10m @ 0.164%**	1,643	59.00	6,736
	2.25m @ 0.264%	2,638	64.75	2,638
008	**6.75m @ 0.030%**	300	53.25	2,025
	1.00m @ 0.107%	1,078	66.30	1,078
	3.65m @ 0.066%	663	71.60	2,420
014	**5.10m @ 0.208%**	2,080	70.40	10,608

Table 2 (see Appendix 1) provides a detail of assay intersections received from all sonic core holes to date.

These assay results continue to confirm the robustness of uranium grades obtained from the downhole PFN tool in AGE's recent sonic and rotary-mud drilling campaigns. They also correlate well with the PFN (pU_3O_8) and gamma-derived uranium grade data (eU_3O_8) from historical drilling (*Figure 3*). This has been key to demonstrate before commencing a resource re-estimation to assess what portion of the current inferred resource can be upgraded into an indicated category, which will be undertaken from mid-May to mid-June 2022 by AMC Consultants (Perth)

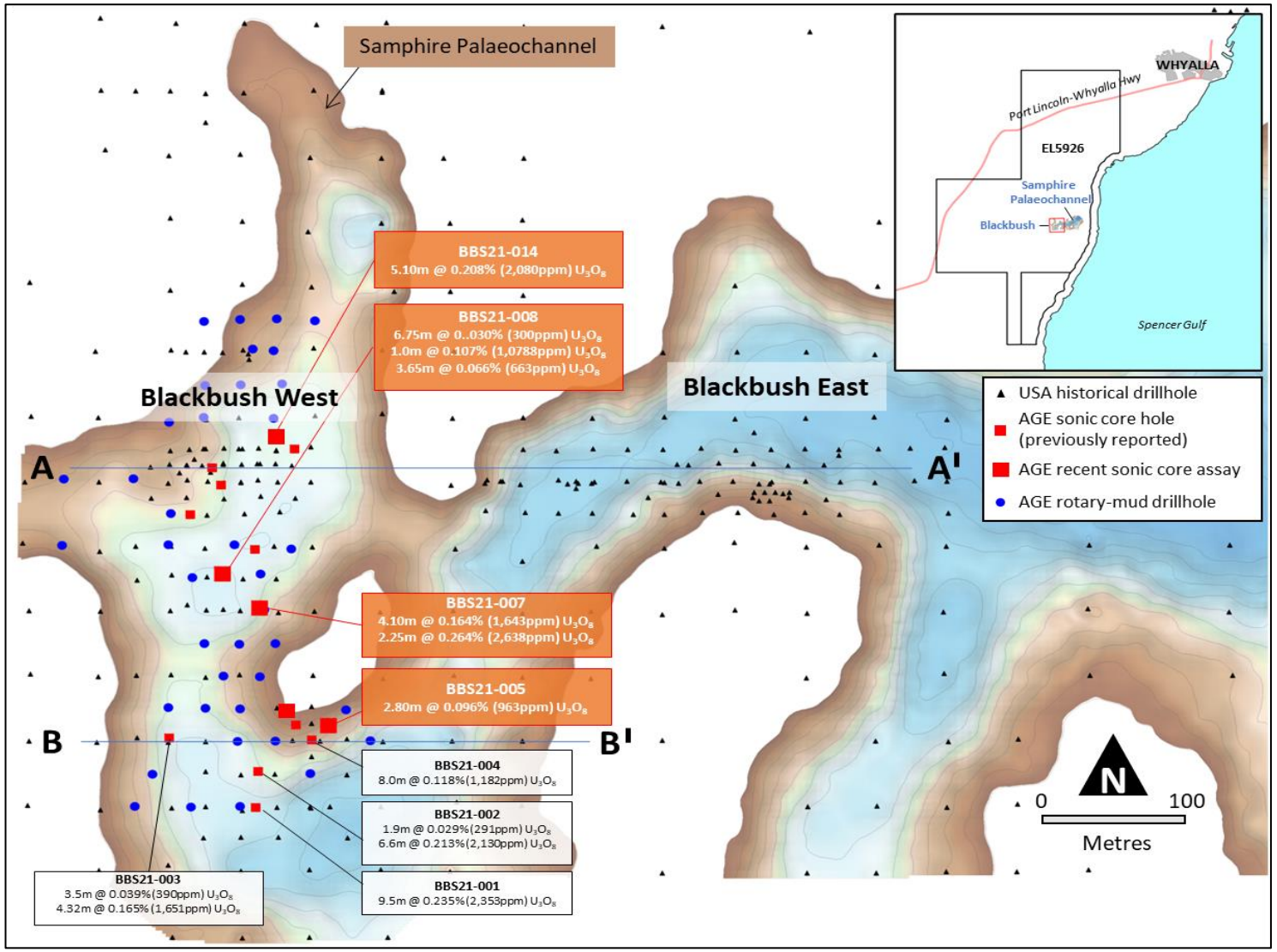

Figure 1: *Location of recent sonic core assays (large red squares), Blackbush West, Samphire palaeochannel. Previously reported assays in small red squares and labelled with intercepts. Cross section lines for Figure 4 denoted by A-A' and B-B'.*

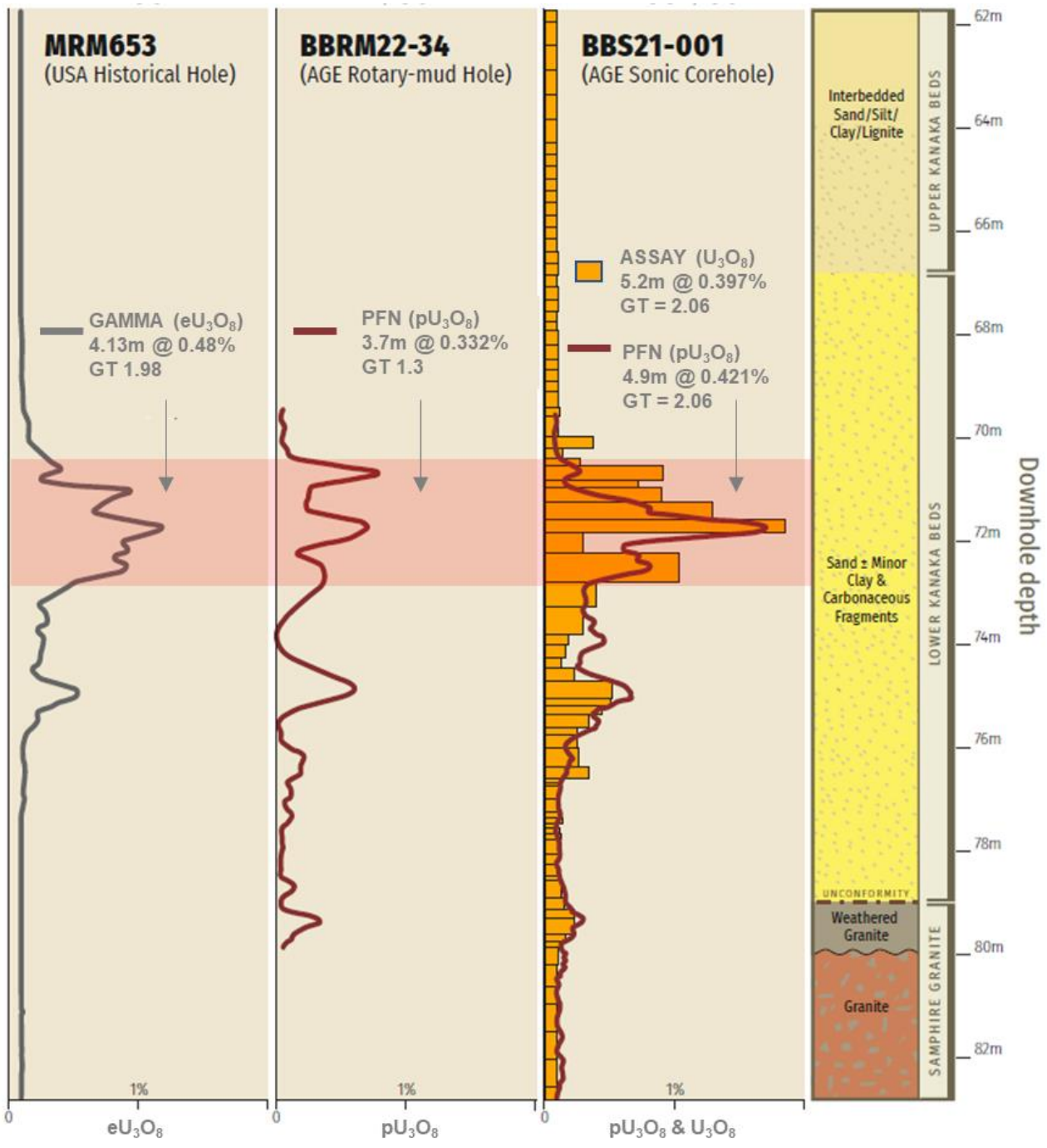

Figure 2: *Data correlation of assay (U_3O_8) and PFN (pU_3O_8) from AGE sonic core hole (BBS21-001: 722820E, 6323797N), pU3O8 from AGE rotary mud drillhole BBRM22-034 (722798E, 6323799N) and gamma-derived uranium grades (eU_3O_8) from historical drillhole (MRM653, 722802E, 6323793N). Note: All three holes are not twinned but within 22m along the easting and 5m on the northing, hence the minor variability in GT intersections between some holes.*

Interpretation of Drilling Results - Blackbush West

Modelling of uranium mineralisation (above 250ppm cut-off) within the basal sands of the Kanaka Beds has been undertaken using the combination of historical data and AGE's recent sonic core/rotary-mud drilling data at Blackbush West.

Mineralisation occurs within 2-3 stacked levels (between 55m – 85 m below surface) and is laterally coherent along and across the Samphire palaeochannel (*Figure 4*). Thicknesses of mineralisation vary between 1 and 10m. A number of open positions that were not adequately tested by previous drilling are present, indicating potential for extensions of the known mineralisation (*Figure 3*).

Historical drilling previously identified uranium mineralisation at Blackbush East where the channel wraps around a basement high (*Figure 4*). Our modelling shows uranium grades above 250ppm occurring in the same horizon as Blackbush West. The open positions at Blackbush East, in addition to investigating the connection between Blackbush West and East area will be the focus of follow-up drilling planned for Q4 2022 pending completion of a cultural heritage survey.

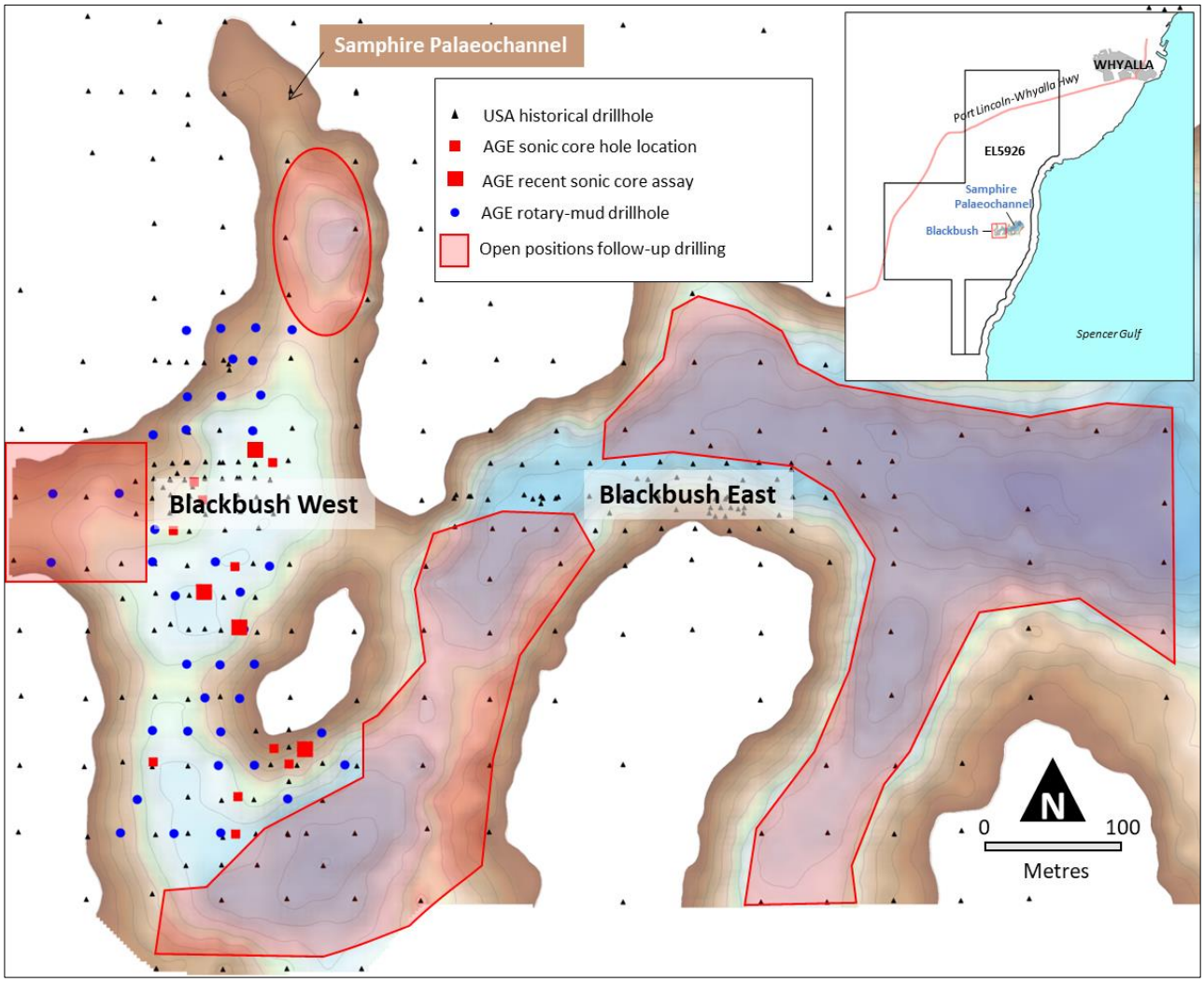

Figure 3 *- Samphire channel showing open positions for follow-up drilling*

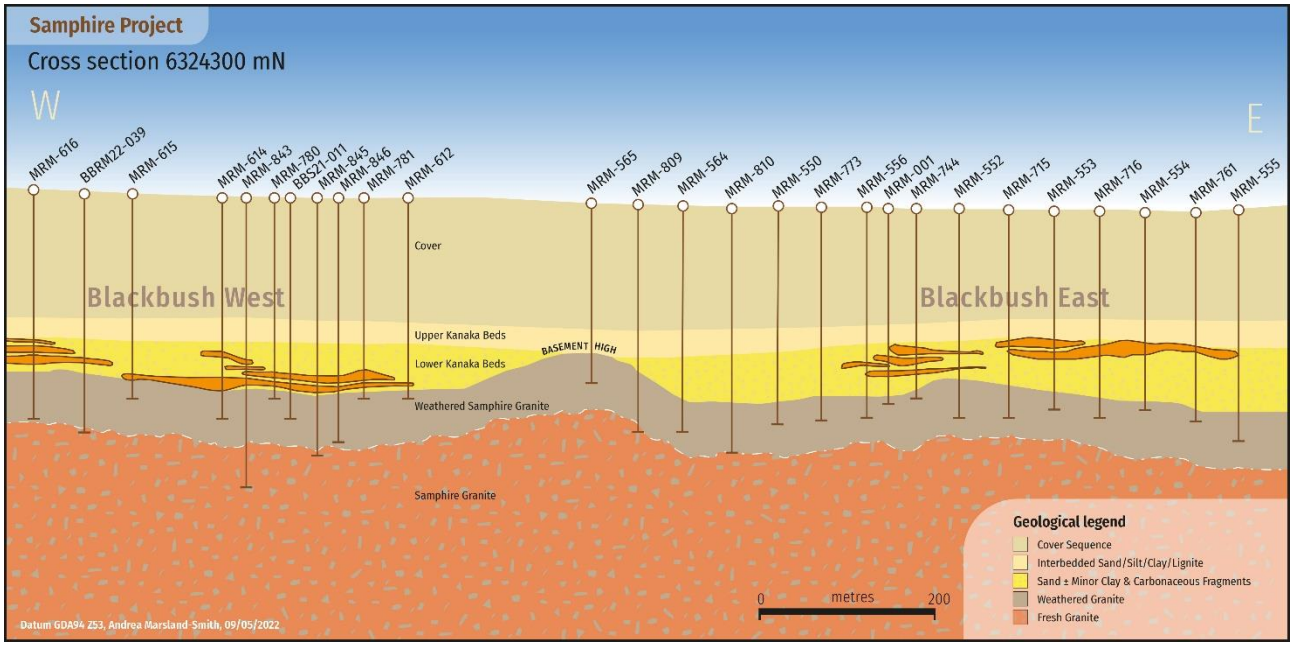

Figure 4: *Cross section A-A' 6324300 mN (refer Figure 1 for location) showing multi-level high-grade zones (>250ppm cut-off) on simplified geology, AGE pU3O8 intersection from BBRM22-034[1] and historic drilling eU$_3$O$_8$ intersections[2].*

Regional Exploration

We have commenced a re-examination of historical regional geophysics, in conjunction with our more recent ground magnetics and trial passive seismic work over the Samphire Project. The goal is to select the best geophysical method for mapping the Samphire channel beyond its known limits defined by drilling (*Figure 5*).

The Samphire palaeochannel is incised into the Hiltaba Suite Samphire Granite and the density contrast between the granite and the overlying palaeochannel sediments is clearly detected by historical regional ground gravity data (*Figure 5*).

Although the historical gravity data was collected at wide- spacing (100m x 200m), there is excellent correlation with channel features detected by gravity and the Samphire palaeochannel which is well mapped by drilling (*Figure 5*).

This highlights the potential for extensions of the Samphire palaeochannel in the immediate area around Blackbush, between Blackbush and Plumbush and district-scale extensions within AGE's tenements. This will be the focus for AGE's regional exploration strategy including follow-up high-resolution, in-fill surveys.

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[1] *Drilling details including JORC Table 1 previously reported by Alligator Energy Ltd (ASX:AGE) in ASX release "Exceptional High-grade uranium results from Samphire Uranium Project, SA" 29 March 2022.*

[2] *Historic drilling details including JORC Table 1 previously reported by Uranium SA (ASX:USA) in ASX release "Samphire Project Update" 27 September 2013*

Understanding the extension of the Samphire palaeochannel to the south of Blackbush is critical to understanding the relationship to the palaeochannel-hosted Plumbush Uranium Prospect discovered previously by UraniumSA Ltd (*Figure 5*).

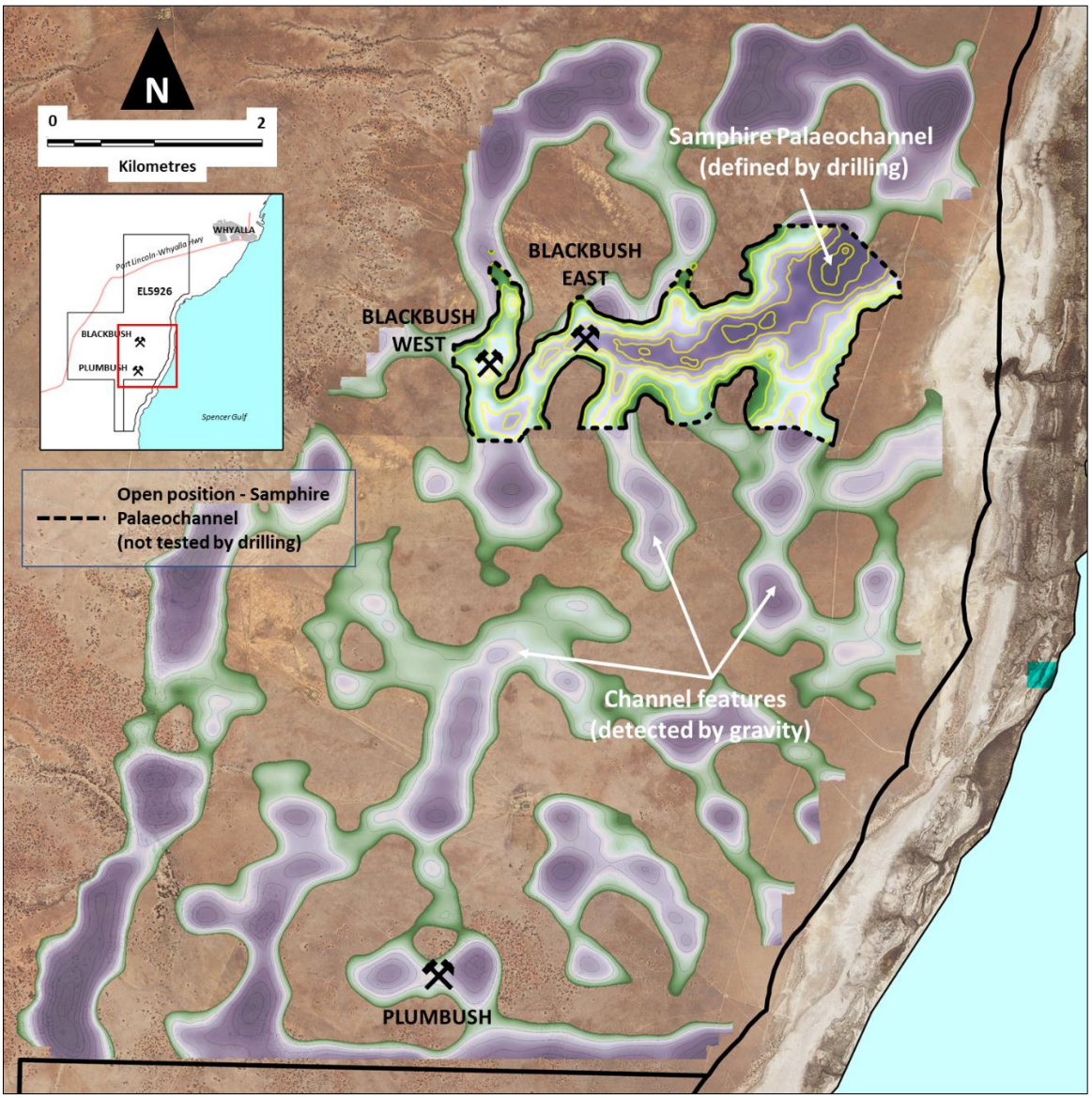

***Figure 5**: Regional ground gravity showing potential palaeochannel extensions, Blackbush and Plumbush – Samphire palaeochannel (defined by drilling).*

Samphire Project: Pre-development work

Australian Nuclear Science and Technology Organisation (ANSTO) has commenced uranium leach and ion exchange (IX) extraction test work on the ISR-amenable uranium mineralisation from Blackbush West. This work will broadly estimate expected extraction recovery and resin loading rates. This work, in conjunction with a re-estimated JORC-compliant resource, will form the basis for a Scoping Study we expect to be completed by end of Q3, 2022.

Engagement with the State Government has commenced to map the approval pathway for a Retention Lease application and operational Program for Environment Protection and Rehabilitation (PEPR) for a Field Leach Trial (FLT) at Blackbush East.

The diagram below (*Figure 6*) outlines the key workflows that form part of the Samphire Work Plan for 2022 and 2023. The Plan aims to confirm the economics of the Project, pursue opportunities for improvement and establish the framework for a "development proof of concept".

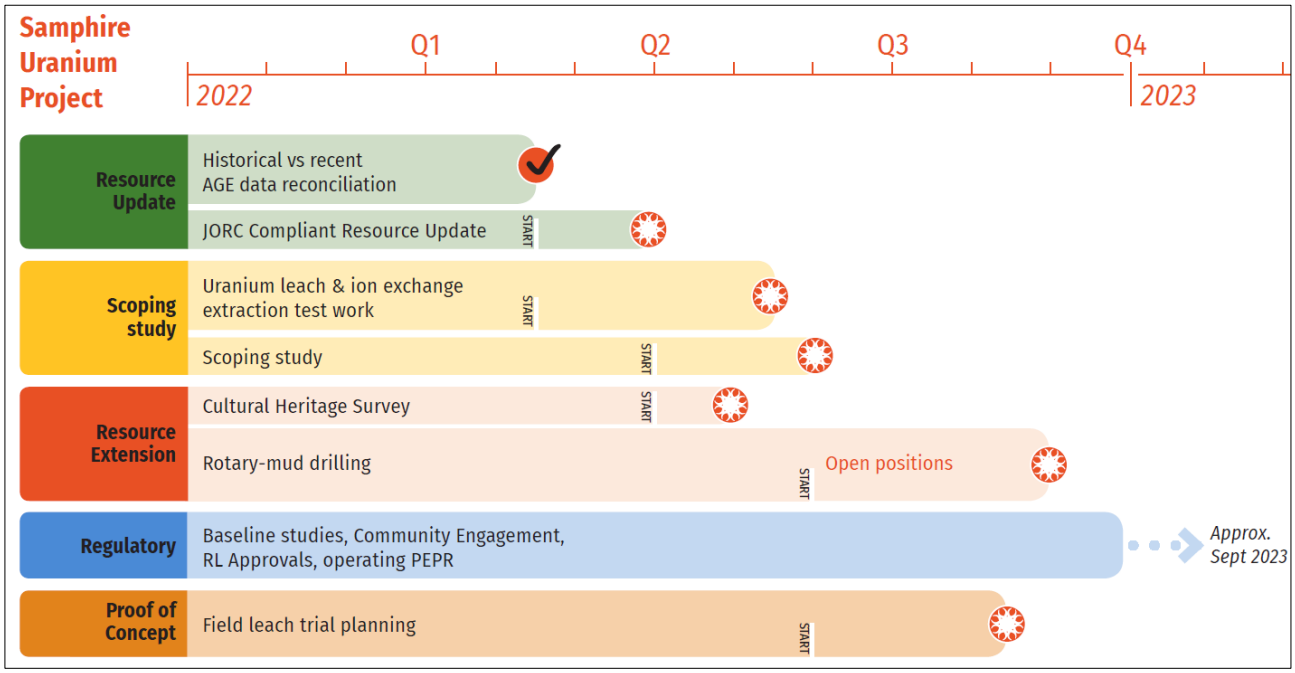

Figure 6: Samphire Project - planned activities and workflow – 2022/23

Piedmont Project Option Agreement update

We are nearing the completion of the finalisation of the full form Option Agreement granting Alligator the opportunity to purchase our Piedmont Farm-in and JV Partners' rights to the three underlying tenements. The deadline for signing has been extended to 16 May to allow for this to be completed in an orderly manner.

This announcement has been authorised for release by Greg Hall, CEO and Managing Director.

APPENDIX 1

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

Table 2: *All significant uranium intersections assay of the sonic core holes (BBS21-001, 002, 003, 004, 005, 007, 008 & 014) above 0.5m minimum thickness, >0.025% U3O8 (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	71	80.5	9.5	2353	22,354
BBS21-002	722823	6323855	20	000	-90	54.10	56.00	1.9	291	553
						65.00	71.60	6.6	2130	14,058
				Note: BBS21-002, 69-70m, 1m of missing assay - sampled for metallurgical testwork						
										0
BBS21-003	722697	6323904	20	000	-90	58.00	61.50	3.5	390	1,365
						72.45	76.77	4.32	1651	7,132
				Note: BBS21-003, 74-76m, 2m of missing assay - sampled for metallurgical testwork						
BBS21-004	722902	6323901	20	000	-90	58.95	59.92	0.97	268	260
						62.00	70.00	8	1182	9,456
				Note: BBS21-004, 63-64m and 67-68m, 2m of missing assay - sampled for metallurgical testwork						
BBS21-005	722924	6323924	20	000	-90	64.20	67.00	2.8	963	2,696
				Note: BBS21-005, 61-62m, 1m of missing assay - sampled for metallurgical testwork						
BBS21-007	722826	6324105	20	000	-90	59.00	63.10	4.1	1,643	6,736
						64.75	67.00	2.25	2,638	5,936
BBS21-008	722773	6324157	20	000	-90	53.25	60.00	6.75	300	2,025
						66.30	67.30	1	1078	1,078
						71.60	75.25	3.65	663	2,420
BBS21-014	722849	6324371	20	000	-90	70.4	75.5	5.1	2080	10,608

APPENDIX 2

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 pU_3O_8 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 pU_3O_8 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 **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.*	**Rotary Mud Drilling** • 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 pU_3O_8 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 pU_3O_8 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 U_3O_8 by applying a conversion factor of: U ppm x 1.179243 = U_3O_8 ppm • Percentage (%) U_3O_8 =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 ± 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% pU_3O_8 (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

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		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	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.

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.*	**Rotary Mud and Sonic Core Drilling** • pU3O8 intercepts for both rotary mud and holes and sonic core holes are calculated above 0.5m minimum thickness, >0.025% pU_3O_8 (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 U_3O_8 cut off with a maximum length of 1 metre internal material below this cut-off. • Historic eU_3O_8 intersections have been aggregated from historical drillhole data (released 2013) composited to 0.5 metres then averaged using a 250ppm eU_3O_8 lower cut-off and maximum of 1 metre internal material below cut-off.
Relationship between mineralisation widths and	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole*	• Mineralised widths are considered true widths or close to true widths due to the generally flat lying orientation of the mineralisation and use of perpendicular vertical drilling.

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 U_3O_8 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