

# Alligator Energy - Projects Update - Amended

# THE ANNOUNCEMENT OF 17 JULY 2024 HAS BEEN AMENDED AS IT INADVERTANTLY OMITTED THE COMPETENT PERSON'S STATEMENT – THIS IS THE ONLY CHANGE TO THE RELEASE.

Alligator Energy (ASX: AGE, 'Alligator' or 'the Company') is pleased to provide the following update regarding recent progress on its portfolio of development and exploration projects:

#### Highlights:

#### Samphire Project

- The Samphire Retention Lease application continues to progress with lodgement of all additional information requested by the Department of Energy and Mining (DEM) relating to the conduct of the Field Recovery Trial (FRT) on track for later this week.
- An Expression of Interest for the on-site assembly of the FRT plant modules and associated infrastructure has been issued to seven short-listed local Whyalla contractors. Five have now progressed through the next round of evaluation.
- Construction work for the FRT set to commence once all approvals are in place and currently targeted for Q4.
- Since the last Samphire update (May 2024<sup>1</sup>), drilling has focussed primarily on areas up to 2kms from the Blackbush mineralisation, investigating encouraging historical intercepts and those encountered in previous AGE drilling programs (Blackbush Extension 2) and a new area Blackbush Northeast (Figure 1). At this stage, drilling in Blackbush Northeast has confirmed the presence of both oxidised and reduced sands within the paleochannel which are key ingredients when exploring for uranium roll front mineralisation. In addition, encouraging medium-high uranium grades were intersected at Blackbush Extension 2, namely:
  - BBRM24-255: 1.18m @ 0.016% (1,682ppm)  $pU_3O_8$  from 54.04m and 0.87m @ 0.14% (1,399ppm)  $pU_3O_8$  from 60.35m,
  - o BBRM24-258: 0.57m @ 0.13% (1,357ppm) pU<sub>3</sub>O<sub>8</sub> from 54.76m, and
  - o BBRM24-267: 1.18m @ 0.53% (5,332ppm) pU<sub>3</sub>O<sub>8</sub> from 52.96m.

<sup>&</sup>lt;sup>1</sup> AGE ASX Release 1 May 2024: Extension of Uranium Mineralisation at Samphire Uranium Project Blackbush Deposit, <u>02801940.pdf (weblink.com.au)</u>



These areas will be further tested with follow-up drilling along with new exploration target areas in the north and northeastern palaeochannels (Figure 1).

- In addition, step-out drilling at the Blackbush Deposit has focused on uranium mineralisation
  recently delineated west of Blackbush West<sup>1</sup> (Blackbush Extension 1 Figure 1). Interpretation
  suggests that the palaeochannel as well as the uranium mineralisation is extending northwards
  and drilling is currently underway to investigate this trend. Key intercepts showing that this
  mineralisation has not yet been closed out in this area include:
  - $\circ~$  BBRM24-275: 0.53m @ 0.019% (192ppm) pU\_3O\_8 from 61.26m and 0.71m @ 0.48% (4807ppm) pU\_3O\_8 from 65.01,
  - $\circ$  BBRM24-276: 0.51m @ 0.06% (618ppm) pU<sub>3</sub>O<sub>8</sub> from 65.93m.

Drilling in this area will continue in addition to commencing exploration north of Blackbush West as part of Blackbush Extension 1 drilling program.

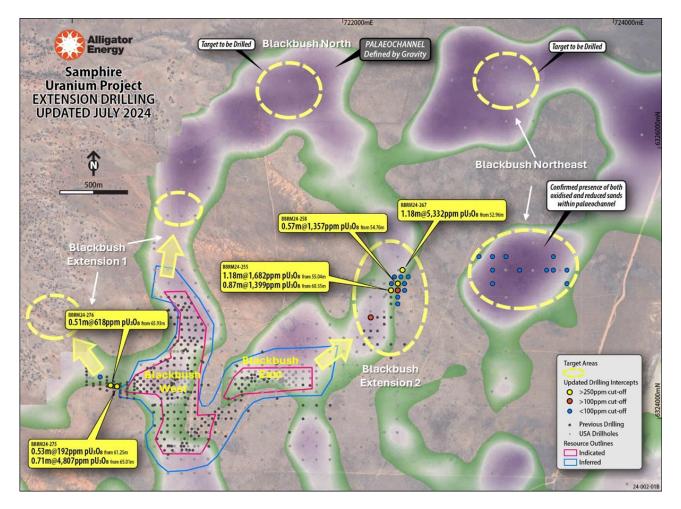


Figure 1: Recent drilling at the Samphire Project. Intercepts above 250ppm  $pU_3O_8$  (yellow dots), 100ppm-250ppm  $pU_3O_8$  (red dots) and <100ppm  $pU_3O_8$  (blue dots). Areas to be drilled tested for the remainder of 2024 also shown.

#### Alligator Rivers Uranium Province

- A high resolution airborne magnetic and radiometric survey has recently been completed over the entire Nabarlek North tenement package (Alligator Rivers Uranium Province, Figure 2). Several similar surveys were flown historically over disjointed areas and varying resolutions (to 200 x 200m) within the tenement package. The intention of this Alligator initiated survey was to:
  - $\circ~$  re-fly at a higher resolution at 100m x 100m and then at 50m x 50m over identified areas of interest, and
  - o obtain data from one single survey of the entire tenement package for consistency and increased precision for drill targeting.
- Preliminary results show a significant improvement in data resolution highlighting previously unknown structural trends (U40 trend) and prospective geological domains and structural complexities (Figure 2). Alligator has not yet received the final data from the Contractor as processing is in progress. A full release upon receipt of the final data and interpretation will be issued showing targets selected for the 2024 drilling program planned to commence midlate August.

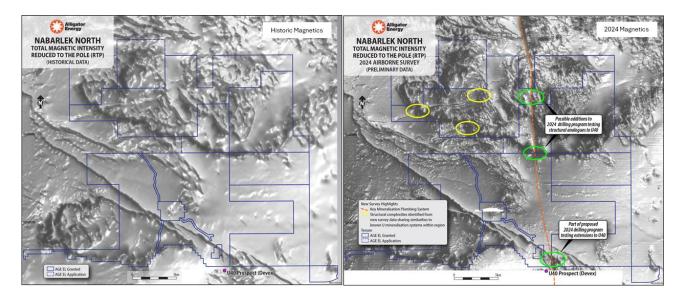


Figure 2: Comparison between resolutions of historical vs newly acquired preliminary magnetic data (flown by AGE, June – July 2024). Yellow circles denote areas of structural complexities that share similarities to known uranium mineralisation in the region and will be subject to further detailed interpretation. Green circles highlight areas already considered to be potential targets areas of interest for the 2024 drill program. Note this data is preliminary and not the final product to be delivered by the Contractor.

#### Big Lake Uranium Project

• The inaugural Big Lake drill program on Alligator's 100% owned EL6367 remains underway with activities at all primary drill targets completed except for location 2 which is currently impacted by rain (Figure 3). Other areas tested include site 10 where drilling to date has shown evidence of potential paleochannel sands which will be tested further.

- Drilling has been suspended for a 2-3 week break to allow for rain affected areas to dry before
  resumption of the program particularly to test area 10 will be completed early-mid August. The
  objective of the inaugural drill campaign was to calibrate the seismic/AEM interpretations of
  the upper (<500m) sections of the Cooper basin with the potential for existence of uranium rollfront systems in prospective host formations.</li>
- Results from this program will be presented in a forthcoming release once drilling and interpretation has been completed.

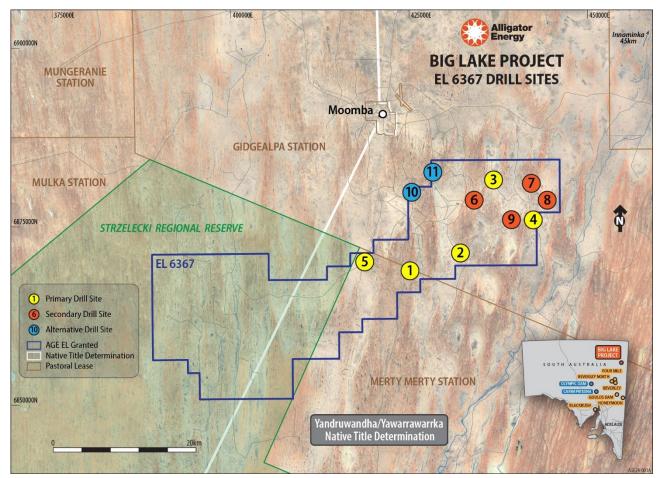


Figure 3: Proposed (priority and secondary drill sites) on EL6367 for 2024. Priority based on logistical simplicity and testing a broad range of basin sections and interpretations.

Alligator CEO, Greg Hall, said: "The team at Alligator remain exceptionally busy on preparations ahead of the anticipated final approvals for the field recovery trial, our first foray into the Cooper Basin targeting the potential to be a new uranium-bearing basin at Big Lake and finalising plans for our 2024 drilling program at Nabarlek North. This platform sets the Company up for significant progress on all three core projects and hence the potential for solid news flow in the second half of the year"

This announcement was authorised for release by the CEO and Managing Director.

#### 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.

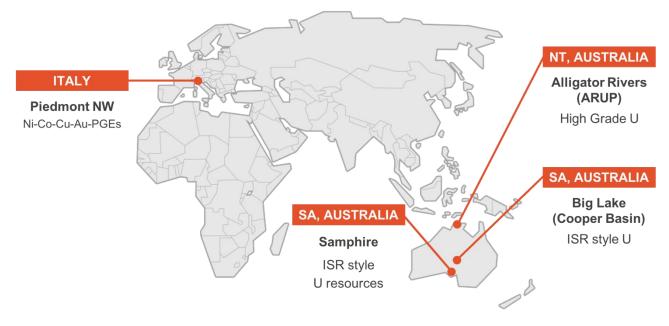
#### **Competent Person's Statement**

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



#### **APPENDIX 1** - In accordance with ASX Listing Rule 5.7.2 the Company provides the following information.

**Table 1A**: All significant uranium intersections from PFN logging ( $pU_3O_8$ ) of the rotary mud drilling program summarised above 0.5m minimum thickness,  $\geq 0.010\%$  pU3O8 (100ppm pU3O8) with internal dilution 0.25m.

Note: pU3O8 grades have been acquired by a Prompt Fission Neutron Tool (PFN22) which was calibrated at the Australian Mineral Development Laboratories (AMDEL) calibration facility (Adelaide) and then checked for repeatability by regularly logging a fibreglass-cased calibration hole onsite (MRC002,723703E, 6324350N (GDA94), depth 84.5m). All pU<sub>3</sub>O<sub>8</sub> grades were calculated and corrected for borehole size from caliper data taken every 5cm downhole and using the equation {2.737\*({EPITHERM}/{THERMAL}-0.02)}\*{-1\*Power(10,-06)\*Power({CAL},2)+0.0097\*{CAL}-0.0313}

Summarised abo	ve 0.25m minimum	thickness, ≥0.010%	6 pU3O8 (100	ppm pU3O8) v	vith internal	dilution 0.25m.							
HoleID	Easting (GDA94, Z53)	Northing (GDA94, Z53)	RL	Azimuth	Dip	Hole Depth (m)	Depth From (m)	Depth To (m)	Thickness (m)	pU3O8 (%)	pU3O8 (ppm)	Grade x Thickness (m%)	Grade x Thickness (mppm)
BBRM24-251	724199	6324750	13.8	0	-90	84	62.82	63.11	0.29	0.0397	397	0.0115	115
BBRM24-252	724400	6324849	12.0	0	-90	75	No significant intersections						
BBRM24-253	724400	6324898	12.3	0	-90	78			No sigr	ificant interse	ctions		
BBRM24-254	724400	6324950	12.6	0	-90	72	55.05	55.39	0.34	0.0055	55	0.0019	19
BBRM24-254	724400	6324950	12.6	0	-90	72	56.72	57.33	0.61	0.0453	453	0.0276	276
BBRM24-255	724349	6324950	13.0	0	-90	109.4	54.54	56.32	1.78	0.1152	1152	0.2050	2051
BBRM24-255	724349	6324950	13.0	0	-90	109.4	60.35	61.22	0.87	0.1399	1399	0.1217	1217
BBRM24-256	724450	6324951	12.8	0	-90	75			No sigr	ificant interse	ctions		
BBRM24-257	724350	6325001	13.4	0	-90	72			No sigr	ificant interse	ctions		
BBRM24-258	724400	6325001	12.9	0	-90	83	54.76	55.36	0.6	0.1299	1299	0.0779	779
BBRM24-259	724450	6325000	12.8	0	-90	72			No sigr	ificant interse	ctions		
BBRM24-260	724375	6325051	17.6	0	-90	69	No significant intersections						
BBRM24-261	724424	6325051	12.9	0	-90	82			No sigr	ificant interse	ctions		
BBRM24-262	724476	6325051	13.0	0	-90	67			No sigr	ificant interse	ctions		
BBRM24-263	725100	6325000	9.7	0	-90	87	No significant intersections						
BBRM24-264	725100	6325100	9.9	0	-90	110	No significant intersections						
BBRM24-265	725100	6325200	10.5	0	-90	68	No significant intersections						
BBRM24-266	725199	6325201	10.2	0	-90	68			No sigr	ificant interse	ctions		
BBRM24-267	724436	6325100	13.7	0	-90	105	52.14	52.43	0.29	0.2741	2741	0.0795	795
BBRM24-267	724436	6325100	13.7	0	-90	105	52.96	54.14	1.18	0.5332	5332	0.6292	6292
BBRM24-267	724436	6325100	13.7	0	-90	105	74.91	75.33	0.42	0.0113	113	0.0047	47
BBRM24-267	724436	6325100	13.7	0	-90	105	87.83	89.29	1.46	0.0311	311	0.0453	454
BBRM24-267	724436	6325100	13.7	0	-90	105	93.27	93.76	0.49	0.0290	290	0.0142	142
BBRM24-267	724436	6325100	13.7	0	-90	105	94.21	94.49	0.28	0.0235	235	0.0066	66
BBRM24-268	725001	6325200	10.9	0	-90	66	No significant intersections						
BBRM24-269	725299	6325101	9.3	0	-90	110	No significant intersections						
BBRM24-270	725500	6325100	8.1	0	-90	110	No significant intersections						
BBRM24-271	725552	6325099	7.9	0	-90	108			No sigr	ificant interse	ctions		
BBRM24-272	725651	6325100	7.7	0	-90	110			No sigr	ificant interse	ctions		
BBRM24-273	725649	6325000	7.3	0	-90	102	No significant intersections						
BBRM24-274	725550	6325200	8.1	0	-90	110	No significant intersections						
BBRM24-275	722325	6324240	23.9	0	-90	83	61.05	61.79	0.74	0.0146	146	0.0108	108
BBRM24-275	722325	6324240	23.9	0	-90	83	63.87	64.34	0.47	0.0588	588	0.0276	276
BBRM24-275	722325	6324240	23.9	0	-90	83	64.99	65.8	0.81	0.4221	4221	0.3419	3419
BBRM24-276	722275	6324250	27.1	0	-90	85	61.56	61.98	0.42	0.0063	63	0.0026	26
BBRM24-276	722275	6324250	27.1	0	-90	85	62.3	62.8	0.5	0.2427	2427	0.1214	1214
BBRM24-276	722275	6324250	27.1	0	-90	85	64.06	64.41	0.35	0.1286	1286	0.0450	450
BBRM24-276	722275	6324250	27.1	0	-90	85	65.92	66.47	0.55	0.0588	588	0.0324	323
BBRM24-277	722250	6324310	28.2	0	-90	72			No sigr	ificant interse	ctions		•

**Table 1B**: All significant uranium intersections from PFN logging ( $pU_3O_8$ ) of the rotary mud drilling program summarisedabove 0.5m minimum thickness,  $\geq 0.025\%$  pU3O8 (250ppm pU3O8) with internal dilution 0.25m.

Summarised abo	Summarised above 0.5m minimum thickness, ≥ 0.025% pU3O8 (250ppm pU3O8) with internal dilution 0.25m.												
HoleID	Easting (GDA94, Z53)	Northing (GDA94, Z53)	RL	Azimuth	Dip	Hole Depth (m)	Depth From (m)	Depth To (m)	Thickness (m)	pU3O8 (%)	pU3O8 (ppm)	Grade x Thickness (m%)	Grade x Thickness (mppm)
BBRM24-251	724199	6324750	13.8	0	-90	84		No significant intersections					
BBRM24-252	724400	6324849	12.0	0	-90	75		No significant intersections					
BBRM24-253	724400	6324898	12.3	0	-90	78	No significant intersections						
BBRM24-254	724400	6324950	12.6	0	-90	72		No significant intersections					
BBRM24-254	724400	6324950	12.6	0	-90	72			No sigr	nificant interse	ctions		
BBRM24-255	724349	6324950	13.0	0	-90	109.4	55.04	56.22	1.18	0.1682	1682	0.1984	1985
BBRM24-255	724349	6324950	13.0	0	-90	109.4	60.35	61.22	0.87	0.1399	1399	0.1217	1217
BBRM24-256	724450	6324951	12.8	0	-90	75			No sigr	nificant interse	ctions		
BBRM24-257	724350	6325001	13.4	0	-90	72	No significant intersections						
BBRM24-258	724400	6325001	12.9	0	-90	83	54.76	55.33	0.57	0.1357	1357	0.0774	773
BBRM24-259	724450	6325000	12.8	0	-90	72	No significant intersections						
BBRM24-260	724375	6325051	17.6	0	-90	69	No significant intersections						
BBRM24-261	724424	6325051	12.9	0	-90	82	No significant intersections						
BBRM24-262	724476	6325051	13.0	0	-90	67	No significant intersections						
BBRM24-263	725100	6325000	9.7	0	-90	87	No significant intersections						
BBRM24-264	725100	6325100	9.9	0	-90	110	No significant intersections						
BBRM24-265	725100	6325200	10.5	0	-90	68	No significant intersections						
BBRM24-266	725199	6325201	10.2	0	-90	68	No significant intersections						
BBRM24-267	724436	6325100	13.7	0	-90	105	52.96	54.14	1.18	0.5332	5332	0.6292	6292
BBRM24-267	724436	6325100	13.7	0	-90	105	87.84	88.94	1.1	0.0375	375	0.0413	413
BBRM24-268	725001	6325200	10.9	0	-90	66	No significant intersections						
BBRM24-269	725299	6325101	9.3	0	-90	110	No significant intersections						
BBRM24-270	725500	6325100	8.1	0	-90	110	No significant intersections						
BBRM24-271	725552	6325099	7.9	0	-90	108	No significant intersections						
BBRM24-272	725651	6325100	7.7	0	-90	110	No significant intersections						
BBRM24-273	725649	6325000	7.3	0	-90 -90	102	No significant intersections No significant intersections						
BBRM24-274 BBRM24-275	725550 722325	6325200 6324240	23.9	0	-90 -90	110 83	61.26	61.79	0.53	0.0192	192	0.0102	102
BBRM24-275	722325	6324240	23.9	0	-90 -90	83	65.01	65.72	0.53	0.0192	4807	0.3413	3413
BBRM24-275	722325	6324250	23.3	0	-90	85	65.93	66.44	0.51	0.0618	618	0.0315	315
BBRM24-277	722250	6324310	28.2	0	-90	72	No significant intersections						

# JORC Code, 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>Rotary mud drilling was used to obtain 2m samples in the non-target area and 1m mud /chip samples within the target area.</li> <li>Downhole wireline logging using a Prompt Fission Neutron (PFN) tool was used to calculate pU<sub>3</sub>O<sub>8</sub> from the ratio of epithermal and thermal neutrons.</li> <li>The PFN used in this program was calibrated using industry standard procedures at the Australian Mineral Development Laboratories (AMDEL) calibration facility (Adelaide).</li> </ul>
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).	<ul> <li>All holes were drilled by Watson Drilling with typical hole diameter being 6" (152.4mm).</li> <li>All holes were vertical.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Caliper data show that borehole size increases in zones of unconsolidated sands, hence all pU<sub>3</sub>O<sub>8</sub> 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}</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support</li> </ul>	Chip/mud samples were collected 2m in non-target areas and then 1m in the zones of interest (i.e. the target Kanaka Beds).

Criteria	JORC Code explanation	Commentary
	<ul> <li>appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>All samples are geologically logged compliant with industry standards which included lithology, mineralogy, grain size/rounding/sorting, colour, redox.</li> <li>All samples were photographed using a high-resolution camera.</li> </ul>
Sub- sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>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 pU3O8 calculations.</li> <li>QA/QC of pU<sub>3</sub>O<sub>8</sub> 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.</li> <li>Repeat runs in rotary mud holes that remained open after drilling for sufficient time to allow for PFN logging was also performed.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>Three geophysical tools were used:</li> <li>Prompt Fission Neutron Tool (PFN) serial number 22 manufactured by Geoinstruments Inc, Nacogdoches, Texas. Neutron generator 78-80kV, logging at 0.5m/minute.</li> <li>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.</li> <li>GeoVista 3-arm caliper, serial number 5589, measures the bore-hole size in millimetres for the length of the bore hole.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>QA/QC of pU<sub>3</sub>O<sub>8</sub> 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.</li> <li>Natural gamma (on the caliper tool) was used for depth matching the PFN.</li> <li>No wireline stretch was observed during the</li> </ul>

Criteria	JORC Code explanation	Commentary
		program.
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Drillholes are sited using a Garmin handheld GPS</li> <li>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.</li> <li>Grid system GDA94 Projection 53H</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>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.</li> <li>pU3O8 intercepts calculated above 0.5m minimum thickness, &gt;0.025% pU<sub>3</sub>O<sub>8</sub> (100ppm pU3O8) with internal dilution 0.25m</li> <li>No compositing was applied.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>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.</li> <li>All drillholes are vertical which is appropriate for the orientation of the mineralisation</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Rotary mud/chip samples are stored in AGE's secured storage facility in Whyalla.</li> </ul>
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	<ul> <li>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.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to</li> </ul>	• The JORC2012 compliant Blackbush deposit, referenced historical drilling and geophysics covering the Samphire project are located on Exploration Licence EL5926 originally granted 20 <sup>th</sup> 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.

Criteria	JORC Code explanation	Commentary
	operate in the area.	<ul> <li>EL5926 is 100% held by S Uranium Pty Ltd a wholly owned subsidiary of Alligator Energy Ltd.</li> <li>The land covering the licence area is Crown Lease; consisting of several leases over 2 pastoral stations.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>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.</li> <li>USA conducted preliminary Insitu Recovery (ISR) hydrogeological testwork on the Blackbush deposit with pump testing and hydrogeological modelling.</li> <li>Third party drilling is confined to one rotary mud hole for lignite exploration located in the southeast of the licence area.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>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)</li> </ul>
Drill hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul> <li>Drillhole information that relates to historic drilling was previously reported by Uranium SA (ASX: USA) in ASX release "Samphire Project Update" 27 September 2013.</li> <li>Drillhole information relating to post 2021 are summarised in Table 1 Appendix 1 of the following releases:         <ul> <li>ASX release "Exceptional High Grade Uranium Results – Samphire Project" March 29, 2022</li> <li>ASX release "Resource Drilling complete with highest grades found so far at Samphire Uranium Project" November 23, 2022</li> <li>ASX release "Samphire Drilling Update" June 8, 2023.</li> <li>Table 1 Appendix 1 of this release.</li> </ul> </li> </ul>
Data aggregation methods	<ul> <li>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.</li> <li>Where aggregate intercepts incorporate</li> </ul>	<b>Rotary Mud</b> pU3O8 intercepts for both rotary mud holes are calculated above 0.5m minimum thickness, >0.025% pU <sub>3</sub> O <sub>8</sub> (100ppm pU3O8) with internal dilution 0.25m

Criteria	JORC Code explanation	Commentary
	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.	
	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationshi p between mineralisati on widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	<ul> <li>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.</li> </ul>
	<ul> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	
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.	<ul> <li>Results are reported in appropriate diagrams and tables within this release.</li> </ul>
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.	<ul> <li>All mineralised intercepts using a cut- off &gt;100ppm U<sub>3</sub>O<sub>8</sub>, minimum thickness of 0.5m with internal dilution of 0.25 metres measured by PFN have been reported.</li> <li>All relevant PFN grade data presented in Table 1.</li> </ul>
Other substantive exploration data	<ul> <li>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.</li> </ul>	<ul> <li>Geological observations have been reported in context of reported intersections.</li> </ul>
Further work	• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	<ul><li>Program for 2024 includes:</li><li>Further exploration drilling outside of the Blackbush Mineral Resource,</li></ul>
	<ul> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	