Alligator acquires exploration licence with existing uranium mineralisation adjacent to Samphire Project – 18 May 2021

Key Highlights

- **Alligator have signed a Binding Terms Sheet to acquire from Stellar Resources EL6350, which lies adjacent the Samphire Project.**
- **The acquisition will consolidate Alligator's holding of the Samphire Project area and provides significant future exploration opportunities.**
- **Existing historic drilling on EL6350 containing uranium intercepts, including 7.3 metres at 445ppm eU3O8 in hole MRM136.**
- **The Plumbush deposit (non JORC compliant) remains open and largely untested on the northern boundary of the tenement to be acquired.**

Alligator Energy (ASX: AGE, 'Alligator' or 'the **Company')** is pleased to announce that it has entered into a Binding Terms Sheet to acquire EL6350 from Stellar Resources Limited (**ASX: SRZ** or '**Stellar Resources'**). The tenement, which contains existing historic uranium intersections, borders the southern end of Alligator's 100% owned Samphire Uranium Project (refer Figure 1) and is deemed prospective for extensions to the historic non JORC compliant Plumbush Uranium Deposit. [1,2,3]

Under the terms, Alligator through its wholly owned subsidiary S Uranium Pty Ltd will acquire a 100% interest in EL 6350 from Stellar Resources for $135,000 to be satisfied through the issue of AGE shares. The number of Consideration Shares to be issued will be determined based on the lower of $0.019 and the 10 business day volume weighted average price (VWAP) immediately prior to execution of the binding terms sheet.

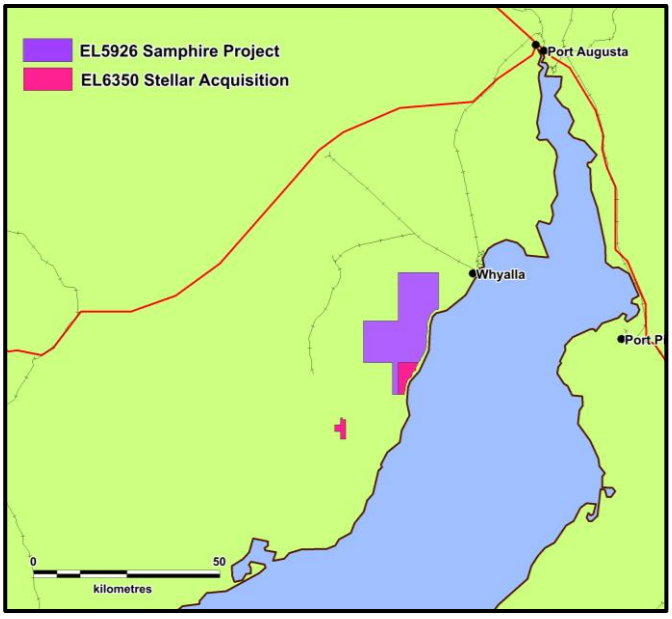


Figure 1. EL6350 location

Alligator Energy Ltd

ABN 79140575604

Suite 2
128 Bowen Street
Spring Hill,
QLD 4000

Ph: (07) 3839 3904

ASX Code: AGE

Number of Shares:
2,362M Ord Shares
125.8M Listed Options
60M Perform Shares
19.2M Unlisted Options

Board of Directors:

Mr Paul Dickson (Non Exec. Chairman)

Mr Peter McIntyre (Non Exec. Director)

Mr Andrew Vigar (Non Exec. Director)

Mr Greg Hall (CEO & Managing Director)

Greg Hall, Alligator CEO, said: "*We are very pleased to consolidate our holding of the Samphire uranium project through the acquisition of EL6350. Alligator's initial focus is the advancement of the Blackbush deposit, however the potential value to be added to the project through the improvement of resource confidence and extensions to the Plumbush deposit on our existing tenement and extending onto EL6350 is an excellent value opportunity.*"

The Opportunity

EL6350 is a split tenement, with the main area of interest being directly adjacent to Alligator's existing tenure at the Samphire Uranium Project. The Project is deemed prospective for paleochannel hosted mineralisation as seen at Blackbush and Plumbush.

The Project was explored by Samphire Uranium (then UraniumSA), with 18 regional scout rotary mud holes drilled in 2009 and 2010 by Samphire Uranium in joint venture with Stellar Resources *(see ASX release (SRZ), 28th July 2010 "Pirie Basin Continues to Deliver Good Uranium Results").* Of the 18 holes 9 recorded uranium values of over 1m at 100ppm eU3O8, with the most significant result being 7.3 metres at 445ppm eU3O8 (see Table 1).

Drill hole details					Sediment hosted mineralisation			Basement mineralisation	
Hole ID	Easting	Northing	Elevation	Total Depth (m)	Depth From (m)	Cumulative Thickness (m)	Average Grade eU3O8 (ppm)	Cumulative Thickness (m)	Average Grade eU3O8 (ppm)
MRM1026	719601	6317898	17.88	78.0	57.93	2.01	218	No mineralisation	
MRM1028	720398	6317906	17.83	60.0	No mineralisation			2.83	116
MRM1034	720600	6318300	18.97	70.0	No mineralisation			No mineralisation	
MRM123	723700	6317102	6.37	82.0	No mineralisation			0.45	100
MRM124	722905	6317107	8.90	92.0	No mineralisation			No mineralisation	
MRM125	722092	6317099	11.60	96.0	No mineralisation			4.62	126
MRM126	721300	6317104	13.97	138.0	No mineralisation			No mineralisation	
MRM127	720502	6317102	15.09	136.0	64.4	1.05	285	No mineralisation	
MRM128	719700	6317100	15.27	131.0	61.01	2.86	162	Basement not reached	
MRM135	719222	6317901	19.57	138.0	64.6	0.90	106	No mineralisation	
MRM136	720000	6317901	18.75	96.0	58.09	7.32	445	1.41	105
MRM137	720797	6317900	17.94	101.0	65.58	4.89	315	2.18	153
MRM138	722414	6317885	12.86	132.0	78.04	0.41	144	1	102
MRM144	718997	6314500	9.29	111.0	68.34	0.46	120	0.89	114
MRM145	719799	6314501	7.23	108.0	No mineralisation			No mineralisation	
MRM146	720601	6314502	5.40	84.0	No mineralisation			No mineralisation	
MRM147	721403	6314499	3.95	96.0	No mineralisation			5.43	125
MRM148	719500	6312697	5.27	134.0	No mineralisation			No mineralisation	

Table 1 – Known historic drilling within the tenement.

The Plumbush deposit is directly north of EL6350, with this additional tenement remaining largely untested through drilling (see Figure 2 below). Alligator believes the latest geophysics techniques employed at the Blackbush deposit will assist to identify channel locations on this acquired tenement in a more effective way. Whilst Alligator's immediate priority remains resource confidence upgrade and extension of the Blackbush deposit, assessment of the work required to upgrade the Plumbush deposit to a JORC 2012 Compliant Resource will commence in parallel. No access agreement for the Plumbush area (including EL6350) is currently in place with the pastoral holders. [1,2,3]

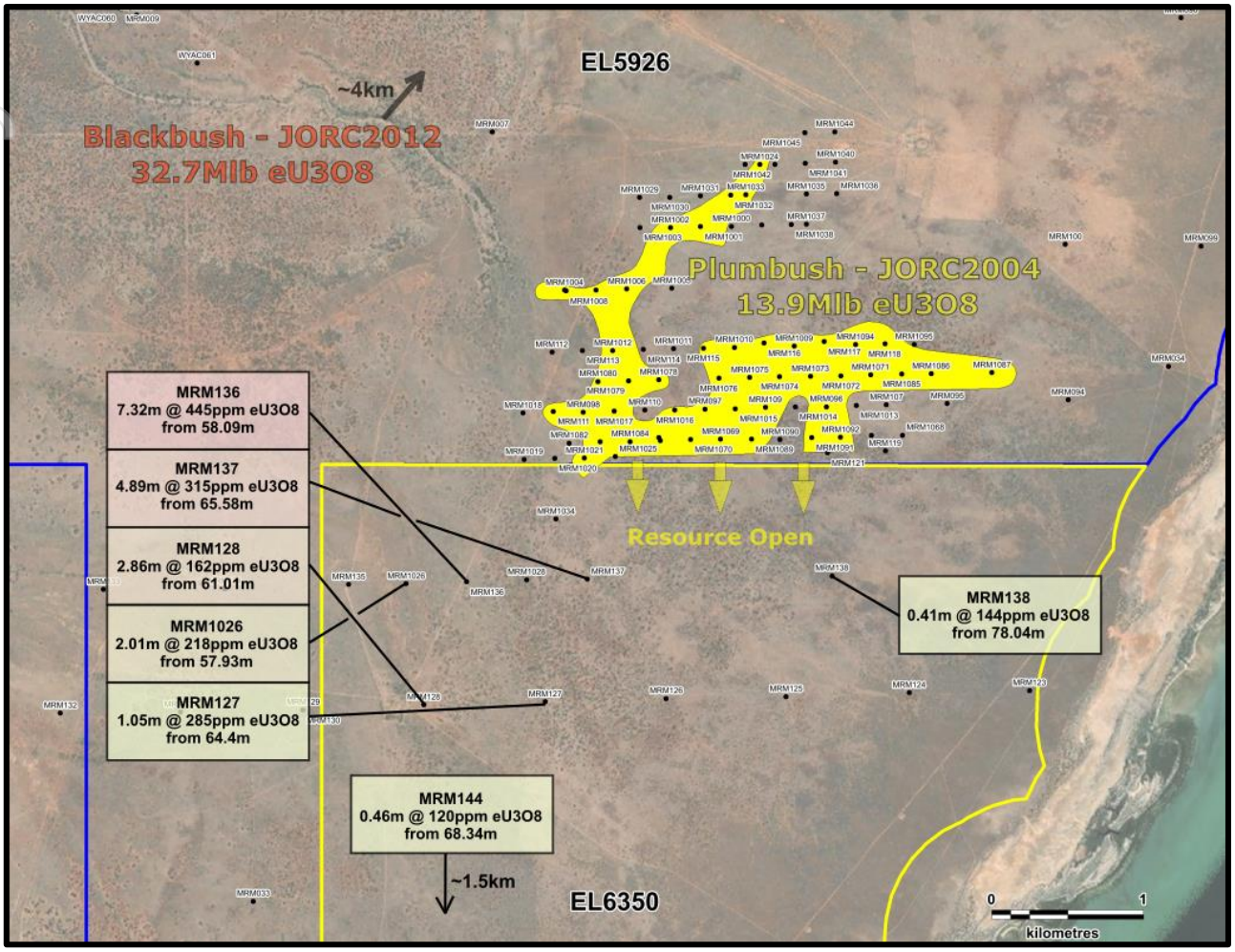


Figure 2. EL6350 historic drilling proximal to Plumbush JORC2004 resource [1,2,3]

1. **See ASX:USA release 14 April 2011 for which the Competent Person was Mr Russell Bluck**
2. **Refer to Appendix 1, Plumbush JORC2004 Cautionary Statement.**
3. **This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported. See ASX:USA release 14 April 2013 and 1 October 2019 Samphire Annual Report for which the Competent Persons were Mr Russell Bluck and Mr Marco Scardigno.**

Key terms and conditions of the Binding Terms Sheet

The Binding Terms Sheet executed between the parties includes the following:

- Alligator through its wholly owned subsidiary, S Uranium Pty Ltd (SUPL), has agreed to acquire EL 6350 from Stellar Resources subsidiary, Hiltaba Gold Pty Ltd (Hiltaba), for the consideration of $135,000, subject to obtaining the necessary Regulatory and Shareholder approvals;
- The consideration to be settled in Alligator fully paid ordinary shares based on the lower of $0.019 (being the share price at the date of agreeing the substantial terms) and the 10 business day VWAP immediately prior to executing the Binding Terms Sheet which is $0.027. Approval from Shareholders to be obtained at an EGM targeted for the end of June 2021;
- Alligator to assume all tenement expenditure commitments and liabilities in relation to EL6350 at the time the transaction completes and to cover annual rentals and other costs from the date of executing the Binding Terms Sheet;

- The significant Conditions Precedent to the transaction completing include renewal of EL6350 (an application has been lodged with the Department of Energy and Mines); Ministerial approval of the transfer and Hiltaba completing all 2020/21 compliance reporting obligations by 25 May 2021.

Approved for release by the Board of Alligator Energy Ltd

FOR FURTHER INFORMATION, PLEASE CONTACT

Mr Greg Hall CEO & Director Alligator Energy Ltd Email: gh@alligatorenergy.com.au	Mr Mike Meintjes Company Secretary Alligator Energy Ltd Email: mm@alligatorenergy.com.au

Competent Person's Statement

Uranium

Information in this report is based on current and historic Exploration Results compiled by Mr Andrew Peter Moorhouse who is a member of the Australasian Institute of Geoscientists. Mr Moorhouse is the Exploration Manager for Alligator Energy Ltd, and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Moorhouse consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.

Nickel/Cobalt

Applicable information in this report is based on current and historic Exploration Results compiled by Mr Andrew Vigar who is a Fellow of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Vigar is a non-executive director of Alligator Energy Limited, and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Vigar consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.

About Alligator Energy

Alligator Energy Ltd (Alligator or the Company) 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)

Uranium

The Company is primarily exploring for uranium in West Arnhem, utilising modern exploration techniques, combined with the best geological knowledge acquired by Alligator and consultant geologists, in search for uranium deposits of similar mineralisation style and tenure to that of the world class Alligator Rivers Uranium deposits of Jabiluka and Ranger, concealed beneath the covering sandstone. The company's Tin Camp Creek and Beatrice tenements form the exploration focus but the Company also assesses other opportunities as they arise.

The Company is researching and developing novel uranium decay isotope geochemical techniques and has modified and is applying airborne geophysical techniques with the objective of detecting such concealed targets. The previously drilled Caramal and Beatrice deposits represent eroded remnants of once much larger deposits.

The Company also has in excess of 1000km2 of Exploration Licence applications awaiting grant within the Alligator Rivers Uranium Province.

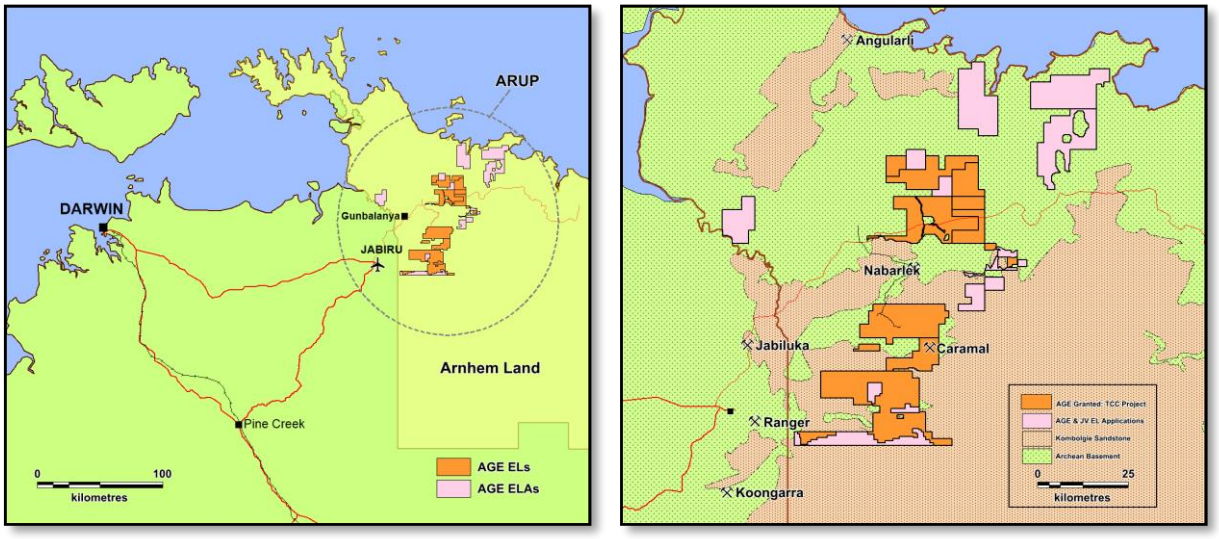
Alligator also has exploration ground in South Australia (SA) having entered into a Share Purchase Agreement to obtain up to 100% of the BLU project. This project represents an exploration opportunity for ISR shallow sandstone hosted style deposits in the Cooper Basin of SA, similar to those of the Beverley, Four Mile and Honeymoon resources of the Frome basin in SA.

Alligator is in the process of finalising a Share Purchase Agreement with Samphire Uranium Limited for the acquisition of the Samphire Project within the shallow Kanaka Beds of the Pirie Basin at Samphire, a location approximately 20 kilometres southwest of Whyalla within the South Australian Gawler Craton. Over several years two uranium deposits were identified, Blackbush and Plumbush, with multiple other uranium targets established

Cobalt- Nickel

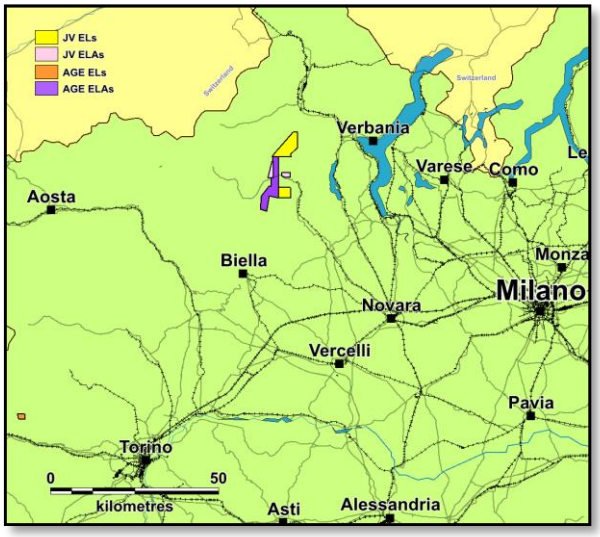
Alligator signed a binding Heads of Agreement with Chris Reindler and Partners (CRP) in January 2018 to earn up to 70% interest in the Piedmont sulphide cobalt – nickel project in Northern Italy.

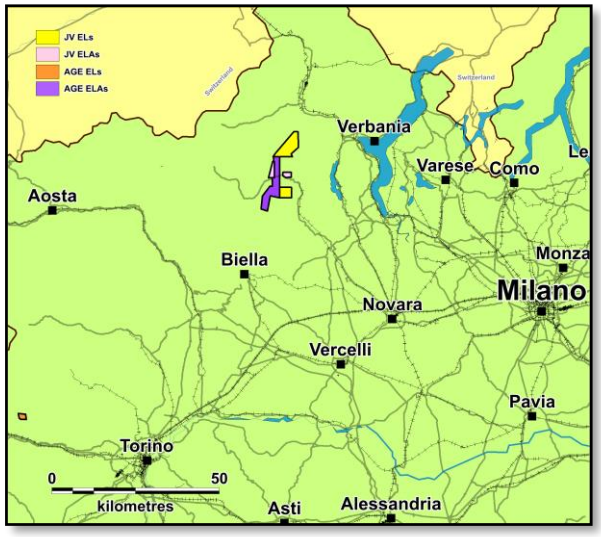
The project covers four titles containing ultramafic-hosted cobalt-nickel sulphide deposits that were mined between the 1860's and the end of World War II. Sulphides in pipe-like intrusive bodies and massive sulphide accumulations at the base of large, layered ultramafic intrusions were mined. The cobalt to nickel ratio was high in these deposits.
Airborne surveys obtained by CRP have defined a number of conductors potentially indicative of massive sulphides as well as a number of magnetic features which may represent the responses from intrusive bodies hosting disseminated sulphides. These represent very attractive targets in an area with clear cobalt-nickel pedigree untouched by modern exploration techniques.



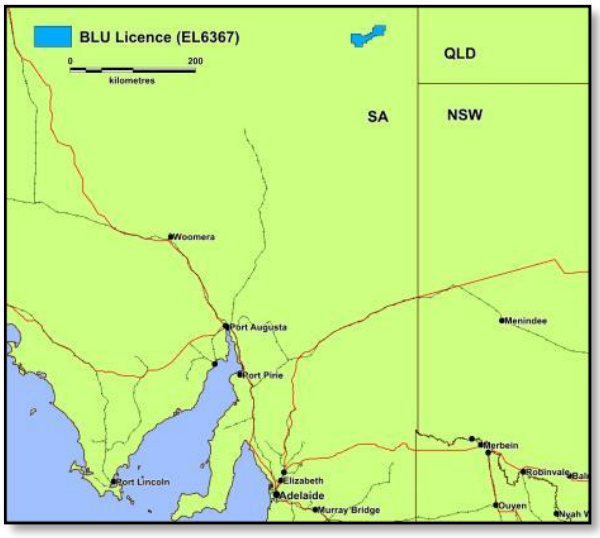
Project Location Diagrams

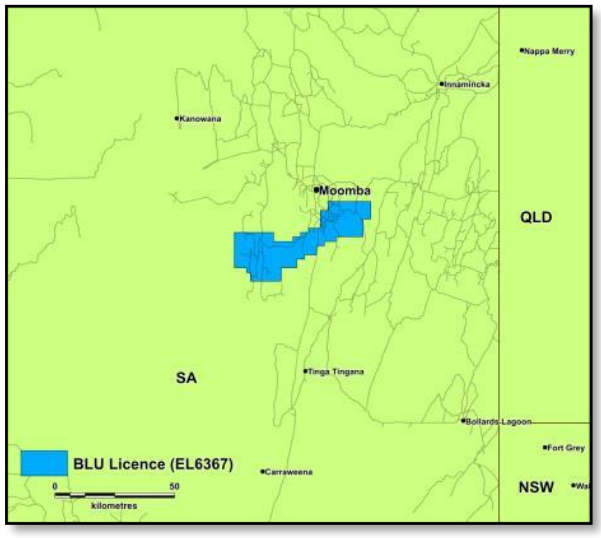
Northwest Italy – Piedmont Ni-Co:



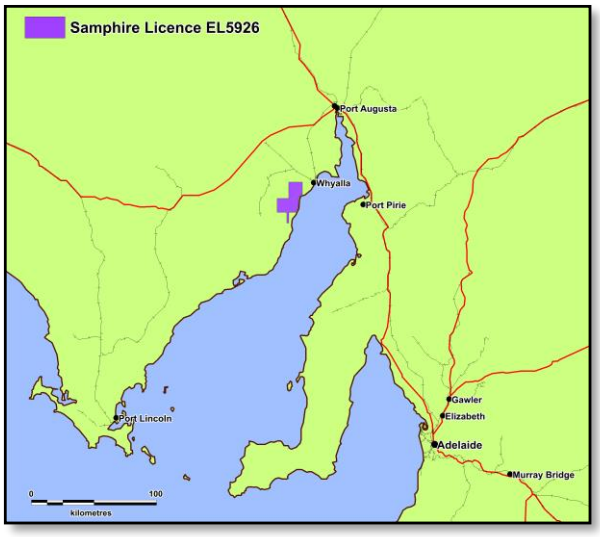


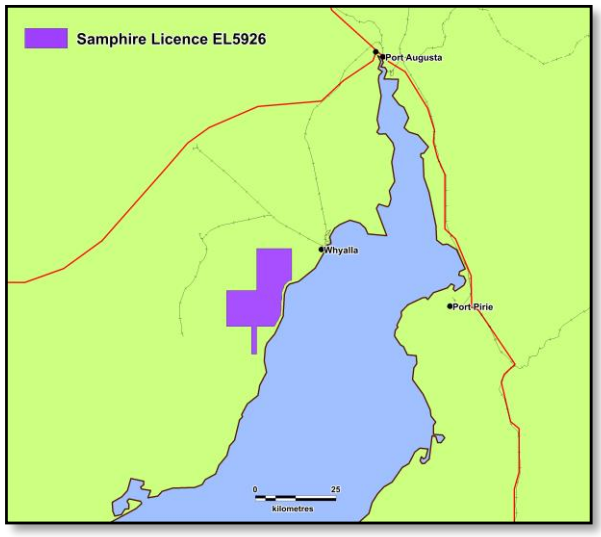
SA Australia – Big Lake U:





SA Australia – Samphire U:





Project Location Diagrams cont.

Appendix 1

Plumbush Inferred Mineral Resource - Cautionary Statement

In relation to the Plumbush Inferred Mineral Resource Estimate (stated in compliance with JORC 2004) of 21.8 million tonnes at grade of 292ppm eU_3O_8, containing 6,300t (13.9Mlbs) of mineralisation at a 100ppm eU_3O_8 cut-off grade the following cautionary statement is made:

- the Exploration Results have not been reported in accordance with the JORC Code 2012;
- a Competent Person has not done sufficient work to disclose the Exploration Results in accordance with the JORC Code 2012;
- it is possible that following further evaluation and/or exploration work that the confidence in the prior reported Exploration Results may be reduced when reported under the JORC Code 2012;
- nothing has come to the attention of the acquirer that causes it to question the accuracy or reliability of the former owner's Exploration Results; but
- the acquirer has not independently validated the former owner's Exploration Results and therefore is not to be regarded as reporting, adopting or endorsing those results.

The Plumbush Inferred Mineral Resource is JORC 2004 compliant and therefore may not conform to the requirements in the JORC Code 2012. The Inferred Mineral Resource was previously announced by Uranium SA (ASX:USA) on the 8th April, 2011. All work to establish this Inferred Mineral Resource was completed by the vendor of the Samphire Project. It is the acquirer's view that the reliability of the Exploration Results are of a good standard. The drilling methods, drilling density, sampling, and downhole geophysical surveys are documented and appear to be of reasonable quality. Additionally, the geological setting and mineralisation style correlate with what is reported at the neighboring Blackbush deposit (JORC 2012 compliant).

The Inferred Mineral Resource was based on drilling data from 43 rotary mud holes, on roughly 200metre centers. All holes were gamma probed using a suitably calibrated tool. No studies were completed on mineralogy or bulk density, with assumptions being made from the geologically similar neighboring JORC 2012 compliant Blackbush resource.

No further recent Exploration Results or data has been identified that would be relevant to understanding the Exploration Results.

An initial assessment suggests that to restate the Plumbush Inferred Mineral Resource as 2012 JORC compliant, landholder access agreements would need to be established, a small core drill hole program would likely be required which would include some geochemical, mineralogical and density sampling. The acquirer has not established a timeframe or budget for further work at Plumbush and it should be noted that this is expected to have a lower priority than the Blackbush deposit. Any short-term funding requirements will occur using internal financial resources.

The Competent Person's Statement for this release covers this Cautionary Statement.

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

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.*	• *The historic sampling work is based on rotary mud drilling and all grade determinations are from down hole geophysical logging with appropriately calibrated Sondes.* • *Rotary mud samples are not suitable for assay for the determination of grade. Some 188 samples of core have been assayed in certified laboratories.*
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).*	• *Holes used in the historic Plumbush resource and drilled across EL6350 were drilled with industry standard rotary mud rigs.* • *Vertical rotary mud holes used industry standard bits and bit sizes. Mud was based on saline formation waters and very successfully facilitated hole stability and minimised collapse and wash out..*
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.*	• *During rotary mud drilling cuttings are collected at the stand-pipe over 2m or 1m intervals and laid out on black industrial plastic in a sample field.* • *Every interval drilled is represented in an industry standard chip tray which is retained in secure storage. End-of-hole samples were bagged in their entirety for possible geochemical assay.* • *Rotary mud collar samples are not necessarily representative of the drilled interval and fines suspended in the return drill mud (density and viscosity modified saline formation waters) by-pass to the drilling sumps. The samples are not suitable*

Criteria	JORC Code explanation	Commentary
		for assay.
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.*	• *The material laid out in sample fields was geologically logged by the Site Geologist or by a UraniumSA trained Geotechnician.* • *A standardised log sheet for rotary mud drilling was used for the project and records semi- quantitative data. The level of detail is sufficient for the construction of geological models, the investigation of sedimentology and the sub-domaining of mineralisation employed in this estimation.*
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 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.*	• *Rotary mud samples are collected at the stand pipe and are not fully representative of the interval drilled and are not suitable for assay.*
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.*	• *All drill holes referred to and used in the estimation of the historic Plumbush resource have been logged with calibrated natural gamma sonde with raw data collected and field checked using industry standard WellCad software and verified material captured to database.* • *Some 37% of drill holes across the combined Samphire project have been logged with PFN and density tools by independent contractors. QA/QC control has been applied by the contractor and UraniumSA.* • *Individual tool identifications were recorded at the time of use and cross checked to ensure they have current calibration certificates.* • *Because of the limited material available UraniumSA has not submitted duplicate samples.*
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.*	• *All holes referred to and used in resource estimations were logged by UraniumSA calibrated natural gamma tools. Duplicate runs have been used to qualitatively investigate response variation with time arising from settling of material in the fluid column and bleeding of mineralisation from the drilled formations. No material variation*

Criteria	JORC Code explanation	Commentary
		was identified. • *Natural gamma profiles are evaluated in the field by the Site Geologist or Geotechnician, intersections to standard assumptions calculated using certified algorithms and an in-house developed intercept calculator, then plotted against geology from cutting logging.* • *Raw data, field estimations and plots were electronically delivered to the Adelaide office of UraniumSA where they were interrogated and checked by a Senior Geologist, corrected if necessary in consultation with the Site Geologist and captured to database.* • *Mineralisation is known to be nuggetty and no hole twinning has been carried out. The investigation of in-ground variability has been partially investigated with relatively close spaced drilling at the proximal Blackbush resource.*
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.*	• *Hand held GPS has been used for drill collar location. All sites used in the estimation were revisited, coordinates reacquired and adjusted if results were outside a nominated error range. Precision is sufficient for the present resource estimations.* • *The grid system is AMG94 Zone 53.* • *Topographic control is from airborne survey flown at 25 meter line separation with elevation correct to 10cm. This is considered sufficient for the present estimations.*
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.*	• *Drill collar separation varies across the Plumbush deposit with a basic 200m by 200m pattern distribution increasing to 400m line spacing within the central western zone.* • *Drilling distribution within EL6350 totals 18 holes predominantly over two 800m line spaced transects with 400m infill drilling in the northeast. 4 holes on an 800m line spaced transect are located approximately 2.5km south of these northern holes with one additional hole a further 1.8km south again.* • *UraniumSA used an in-house written software to composite individual natural gamma data captured at 1cm intervals into 10cm composites for data manipulation, processing, modeling and estimation. The software was extensively checked against data and is regarded as reliable and appropriate for the present level of confidence.*
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*	• *All drill holes were collared vertical. Downhole surveys are available for ~37% of holes across the combined Samphire project and indicate end-of-hole drift in the range 1m to 5m which is within the error of GPS collar*

Criteria	JORC Code explanation	Commentary
	orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	*location. For the purpose of current and previous estimations holes are regarded as vertical.* • *Geological interpretation and core logging shows the sediment sequence is flat lying.* • *3D modelling shows mineralised structures in basement dip ~10 degrees from horizontal.*
Sample security	• *The measures taken to ensure sample security.*	• *The principle grade estimation method is downhole geophysical logging.* • *All historic data was electronically generated on the drill site, verified as useable and electronically transmitted to UraniumSA head office where it is secured in DataShed formats.* • *Raw and processed data sets have been provided in full to AGE following the acquisition of S Uranium Pty Ltd (SUPL)*
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• *All data collected was subjected to internal audit and ~37% of all holes within the combined Samphire project area have been surveyed by both UraniumSA and contractors.* • *Duplicate surveys are cross-collated to verify the data is comparable within limits of precision (raw count and depth).*

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 Historic JORC2004 Plumbush resource referred to is contained almost entirely within Exploration Licence (EL) 5926 granted 20th November 2016 for a term expiring 2018 and subsequently renewed for a further 3 years expiring 2021 where a subsequent renewal will be required. Held by SUPL a wholly owned subsidiary of Alligator Energy Pty Ltd (AGE)* • *Further drilling referred to is contained within EL6350 owned by Hitaba Gold Pty Ltd, granted 25th March 2019 for two years. The licence is currently under application for renewal for a further 2 year period to March 2023.* • *The land covering the licence areas is Crown Lease; consisting of several leases over 3 respective pastoral stations.* • *No access agreements are yet in place for the areas referred to within this release.*
Exploration done by	• *Acknowledgment and appraisal of exploration by other parties.*	• *Samphire Uranium Limited (SUL), previously UraniumSA (USA) historically conducted almost all previous exploration within EL5926 and EL6350, defining the Plumbush*

Criteria	JORC Code explanation	Commentary
other parties		*(JORC2004) and Blackbush (JORD2012) resources and all relevant drilling information pertaining to this release.* • *Third party drilling is confined to two rotary mud holes 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 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.*
		• *A tabulation of all the drill holes within EL6350 and their respective significant intercepts can be found in Table 1 of this report.*
		• *The tabulation provides easting and northing of the drill hole collars, elevation of the drill hole collar, hole depth, depth to top of mineralisation, mineralisation thicknesses and grades for respective sedimentary and basement lithologies.*

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.*	• *Historic gamma data from referenced drilling was collected downhole at 1cm intervals and aggregated to 10cm composites using Samphire Uranium Limited in- house developed software.*
Relationship between mineralisation widths and intercept lengths	• *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 lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• *The mineralised widths are effective true widths.* • *Drill holes are collared vertical and lateral drift at end-of-hole is within the error band of drill collar location.* • *Core logging and geological modelling confirm the sediment sequence is flat lying.*
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being*	• *Scaled maps, sections and tabulations of intercepts for the Plumbush resource have previously been released by USA (refer to*

Criteria	JORC Code explanation	Commentary
	reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	*ASX USA 14th April 2011 https://www.asx.com.au/asxpdf/20110414/pdf/41y1y07swzhvf1.pdf)* • *All diagrams within this release have respective appropriate scales.*
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.*	• *Exploration results have been reported in prior announcements by Uranium SA (USA) relating to the Plumbush resource and Stellar resources (SRZ) relating to EL6350.* • *No new exploration results are contained within this report. Historic minor and non-mineralised hole exploration data for EL6350 with no know previous release are provided within Table 1 of this report.* • *All works within this report have used historic results for appraisal purposes.*
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.*	• *All meaningful and material results and observations relevant to previous estimation results referred to have been considered at levels of detail appropriate to their use.*
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.*	• *The possible extension of mineralisation beyond resource estimated areas is considered and exploration planning is ongoing.*

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• *The Plumbush resource referred to has previously been reported to JORC2004 standards. No works to upgrade this resource have been undertaken and as such is not considered a JORC2012 compliant resource.* • *The natural gamma data which is the basis of all resource estimations is generated and captured electronically at the drill site.* • *Data profiles are reviewed at the time of acquisition in the field to ensure they are consistent with expectation and prior experience in the area.* • *Once accepted as valid raw data is electronically delivered to the Site Geologist/Geotechnician and a further*

Criteria	JORC Code explanation	Commentary
		validation against logged geology completed. • *Raw data and initial interpretations and checks were sent electronically to the Adelaide office of UraniumSA where the data sets were captured to database with original data secured in a Datashed database.* • *Cross checking and validation of referenced figures, statistics and drilling results has been conducted by AGE staff.*
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• *Site visits have been conducted by Pete Moorhouse and AGE staff to the Blackbush resource and surrounding area in conjunction with meetings with SUL staff intimately familiar with the project and involved in defining the resources.* • *Additional field trips have been conducted by AGE staff and contractors conducting site rehabilitation following the project acquisition.* • *No access agreements are currently in place for the Plumbush and EL6350 areas with all recent fieldworks located approximately 4km north of the areas referred to within this release.*
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• *There is high confidence in the geological models used in the estimation which honor the information; the knowledge available on the sedimentology and distribution of mineralisation has determined the criteria used in previous modelling.* • *Historic resource modelling and interpretation is based on broad spaced pattern drilling and targeted infill drilling which has confirmed interpretation from broader scale work.* • *There have been a series of resource estimates conducted on the neighbouring Blackbush deposit up to 2013 as continued exploration drilling delivered more information. The sequential estimates have been consistent one with the other providing confidence in the underlying geological interpretations and models for the distribution and control on mineralisation and grade.*
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• *The Plumbush resource model and estimate is constrained within a bounding box extending from 720390E/6320700N to 723710E/6318500N, the envelope of mineralisation estimated is ~3km east-west and ~2km north-south.* • *Mineralisation estimates are not laterally physically constrained and limits are determined by drill hole density and mineralised intercepts.*
Estimation and	• *The nature and appropriateness of the estimation technique(s) applied and key*	• *Two estimates of mineralization at the Plumbush deposit have been made since*

Criteria	JORC Code explanation	Commentary
modelling techniques	*assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	*2009 as drill hole density and geological understanding has increased with further mineralisation extent delineated. The initial estimate was made on the basis of a partial 200m by 200m pattern with modest subsequent infill drilling and extension.* • *Comparison of the historic estimates gives significant confidence to the geological models applied and to the lateral continuity of host sediments and contained mineralisation.* • *The deposit is uranium-only. Limited but sufficient geochemical assay of rotary mud drill cutting has not identified any other metals at potentially significant levels.* • *Formation waters are hypersaline; metallurgical research and hydrogeological investigations have investigated appropriate solutions to these issues along with the Inception Consulting Engineers desktop study previously commissioned and released by AGE.*
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• *Density estimations are natural moisture.*
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• *Various cut-off grades have previously been reported for the Plumbush deposit by USA..*
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• *A consideration of potential mining methods has previously been commissioned through an initial desktop study by Inception Consulting Engineers (ICE) and released by AGE. Refer ASX 16th December 2020.* • *The Plumbush resource referenced within this report however is not deemed JORC2012 compliant and will require further evaluation and resource upgrade prior to notable mining considerations.*
Metallurgical factors or	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of*	• *Historic mineralogical investigations of SAND and FGOR lithotypes show mineralisation is uraninite and coffinite (ASX: USA 3 Sept*

Criteria	JORC Code explanation	Commentary
assumptions	*determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	*2010)* • *Previous column leach trials (ASX: USA 16 June 2011) demonstrated mineralisation was extractable from SAND lithotypes into an acidified sea water solution.* • *Historic metallurgical analysis and testing of ion exchange resins (ASX: USA 12 Aug 2011) formed initial proof of concept for ISR potential with modern improvements discussed within the body of this report.*
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• *Ground water in the Samphire project area is saline to hypersaline and has no known domestic or pastoral use.* • *Hydrogeological investigation has established a single interconnected basal Miocene-Eocene aquifer confined below regionally extensive upper Melton Limestone and Pliocene Gibbon Bed aquatards.* • *Surficial ground waters in fluvial sequences above the Gibbon Beds extend part-way across the coastal plain at sea level. There is no hydrogeological connectivity between the Eocene-Miocene and surficial aquifers.* • *Uranium mineralisation at the Blackbush deposit occurs at depths of ~50m and below a modern coastal plain which extends from coastal mangroves in the east ~5km west to the foot of a low north-south trending topographic escarpment.* • *Systematic flora and fauna surveys have been carried out by SUL between 2009 & 2016. Vegetation is dominated by regionally prevalent native grass and saltbush species with localised wooded areas. Fauna are typical for the environment; bird species which have been recorded at the Samphire project and which are scheduled as threatened or endangered are prevalent across the district and are not specific to the Blackbush site.* • *The Samphire project is located on unimproved pastoral land used for grazing sheep for wool production.*
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of*	• *A wet bulk density of 1.73 tonnes/cubic metre was adopted for the Plumbush JORC2004 resource estimate, assumed from the neighbouring Blackbush deposit.*

Criteria	JORC Code explanation	Commentary
	the different materials.	
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• *The considerations and calculations carried out have taken appropriate account of all known relevant factors.* • *The Competent Persons consider the historical Plumbush Inferred Resource classification to be appropriate for the mineralisation estimated at its time with further work merited to upgrade the resource to JORC2012 compliant.*
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• *A review and audit of the processes, procedures and results used by UraniumSA in the determination of the Blackbush deposit was contracted to Geos Mining Minerals Consultants.* • *An independent review of the Plumbush resource has also been conducted by Inception Consulting Engineers as part of the Initial desktop study previously commissioned and released by AGE.* • *No known internal or independent audit of the Plumbush resource has been conducted.*
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• *The data, data distribution, geological modelling, grade determination and statistical procedures employed are in the opinion of the Competent Persons appropriate to the confidence level required for the level of estimation at the Plumbush deposit.*