

21 October 2014 ASX Announcement

High grade assay results at Mintaka

- ➤ Alligator Energy has completed drilling at 4 of 5 targets to be drilled in its 2014 Exploration Season
- > Assay results have now been received for drilling at Mintaka target and intersected high grade uranium
- ➤ Best intersection of 5m @ 723ppm U3O8 (including 1m @ 2299ppm) at Mintaka.
- > Drilling also now completed at Orion South and intersected intense chlorite alteration further drilling required to fully test this target.

Alligator Energy Ltd (AGE) (Alligator, the Company) is pleased to announce the latest assay results from its ongoing drilling program at the Tin Camp Creek Uranium Project, in the Alligator Rivers Uranium Province in the Northern Territory.

Alligator has committed to drill testing five targets at the Tin Camp Creek project area in its 2014 exploration season. To date drilling has been completed at Orion North, NE Myra, Mintaka and Orion South. High grade uranium mineralisation has been intersected at two of these prospects - NE Myra and Mintaka - and anomalous uranium and alteration has been intersected at Orion North.

Three initial drill holes have recently been completed at Orion South with one drill hole intersecting intense chlorite alteration at the unconformity. Drilling is currently nearing completion at the Orion East Prospect.

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ASX Code: AGE

Number of Shares:

304M Ordinary Shares 11.0M Unlisted Options

Board of Directors: Mr John Main

(Chairman)

Mr Robert Sowerby (CEO, Director)

Mr Paul Dickson (Non Exec. Director)

Mr Peter McIntyre (Non Exec. Director)

Mr Andrew Vigar (Non Exec. Director)



Assay results confirm presence of uranium mineralisation at Mintaka

The Company advises that laboratory assay results have been received for drill samples from the recent completed drilling at the Mintaka area, and is delighted to report that they have delivered intersections of high grade uranium mineralisation.

A best intersection of **5m** @ **723ppm U308** from 38m was returned from drill hole OBR14-120, including **1m** @ **2299ppm U308**, north of historical drilling at the Mintaka prospect. An intersection of **1m** @ **1356ppm U308** from 86m was also returned from OBR14-122, located approximately 125 metres north of OBR14-120. These mineralised intersections occurred in strongly altered dolerite.

Anomalous uranium was also intersected in intensely chlorite altered Cahill Formation Schists in OBR14-122. Anomalous uranium mineralisation (>200 – 1000 ppm U3O8) was also intersected over narrow intervals in OBD14-121 (located a further 1.5km to the south) and in OBD14-116.

Of note is that all drill holes which have intersected anomalous uranium in the 2014 exploration to date were located within targets identified from the Company's Sub-audio Magnetic (SAM)/MMR geophysical survey conducted earlier this year. Drill hole locations are shown on **Figure 1** and a summary of assay results are provided in **Table 1**.

Additional Drilling at Mintaka

A further two Diamond drill holes have been completed at Mintaka to test a prominent Transient Field Electromagnetic (TFEM) anomaly to the north of mineralisation reported above. The two drill holes have intersected variably chlorite and sericite altered lower Cahill Schists. No significant radiometric anomalism has been detected in these drill holes, however anomalous uranium has been detected using an Olympus Portable XRF instrument in narrow chlorite veins associated with fracturing in drill hole OBRD14-128. The presence of uranium, albeit in narrow veins is considered encouraging as it indicates the broader presence of uranium in this area.

Drilling at Mintaka has now defined uranium mineralisation and anomalism over a broad area, extending from OBR14-122 in the north to OBR14-121 over a strike length of approximately 2km. While there are both north-west and north-east trending components to mineralisation, it is now considered that the dominant trend of mineralisation is north-east.

The focus of ongoing exploration at Mintaka will be the definition of the main zone of structural dislocation focusing uranium mineralisation in this area, which is considered key to the discovery of a significant uranium deposit in the area.



Initial Drilling completed at Orion South.

Three diamond drill holes have been completed to test SAM/MMR and structural targets under the Kombolgie Sandstone cover sequence at Orion South.

Drilling has intersected variably altered sandstone and underlying Cahill Formation schists. No significant radiometric anomalism was detected by field screening however, pervasive "bleaching" and silicification of overlying sandstones was intersected in drill hole OBRD14-126 and intense chlorite alteration was intersected over a 20 metre interval at the unconformity of drill hole OBRD14-129. In both cases the drill holes steepened significantly from their initial dip and consequently the structural target has not been properly assessed.

The extent of alteration in these drill holes is encouraging and further drilling is required to properly test this target area.

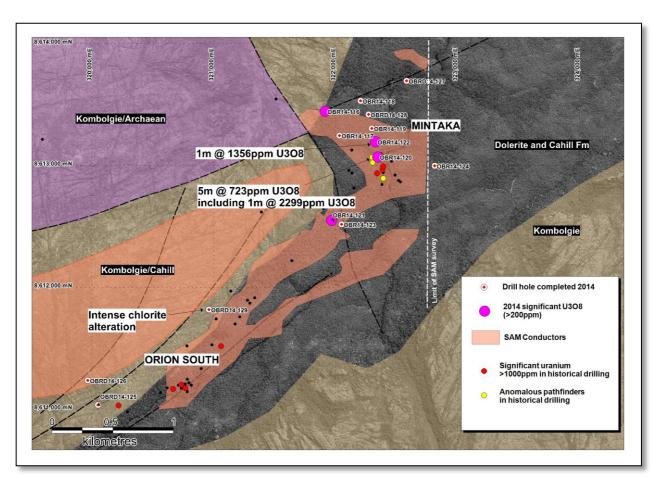


Figure 1: Location map showing completed drilling at Mintaka and Orion South



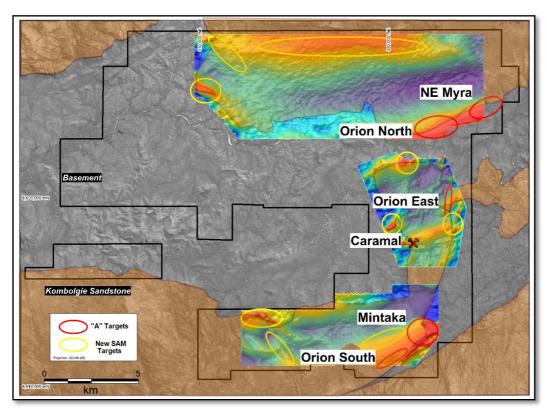


Figure 2: Tin Camp Creek Project - Prospect Location



Hole ID	Prospect	MGA 94 Easting	MGA 94 Northing	Azimuth (Mag)	Dip	From (m)	Length (m)	Grade (ppm)		
ODD14.11C	Mintolo	224045	0642445	0642445	512.445	225	70	49	1	264
OBR14-116	Mintaka	321915	8613445	335	-70	54	1	297		
OBR14-117	Mintaka	322030	8613244	335	-75	No sig	nificant minerali	sation		
OBR14-118	Mintaka	322204	8613530	335	-75	No sig	nificant minerali	sation		
OBR14-119	Mintaka	322296	8613304	335	-75		ant mineralisation malism up to 119	•		
						38	5	723		
OBR14-120	Mintaka	322343	8613069	340	-75	inclu	ıding 1m @ 2299	ppm		
						55	1	220		
OBR14-121	Mintaka	321968	8612550	290	-75	83	4	257		
						86	1	1356		
OBR14-122	Mintaka	322326	8613193	160	-60	97	4	253		
						165	1	215		
OBR14-123	Mintaka	322048	8612517	290	-60	No sig	nificant minerali	sation		
OBR14-124	Mintaka	322810	8612996	153	-60	No sig	nificant minerali	sation		

Table 1: Laboratory Assay results Summary



Drilling commences at Orion East

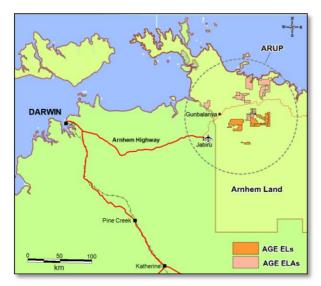
Alligator also advises that drilling is nearing completion at the Orion East Prospect, which is the last of five targets to be drilled in the 2014 exploration season.

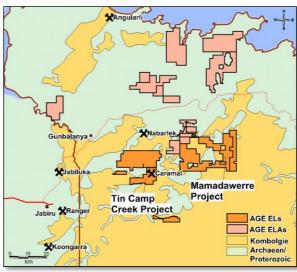
The drilling at Orion East is targeting the extrapolated continuation of high grade uranium mineralisation discovered by the Company in 2012. Three 100 metre reverse circulation (RC) drill holes are to be drilled initially, and the Company will report results as they become available.

About Alligator Energy

Alligator Energy Ltd is an Australian, ASX listed, exploration company with uranium exploration tenements in the world class Alligator Rivers Uranium Province in Arnhem Land, Northern Territory. The Alligator Rivers Uranium Province hosts nearly 1 billion pounds of high grade uranium resources and past production, including the Ranger Mine and Jabiluka. The company's flagship project is the Tin Camp Creek Project. Since listing in February 2011, the company has completed in excess of 15,000m of drilling, defined a maiden high grade, JORC compliant resource at Caramal (6.5Mlb U308 at 3100ppm U308) and discovered new mineralization at Mintaka and Orion East. High Grade mineralization also occurs at the historic South Horn and Gorrunghar prospect which remain only partially tested.

The company has in excess of 1000km² of Exploration Licence applications and is also in Joint Venture with Cameco Australia Pty Ltd for the Mamadawerre Project, also within the Alligator Rivers Uranium Province





Project Location Diagrams



FOR FURTHER INFORMATION, PLEASE CONTACT

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Appendix 1- JORC Code, 2012 Edition – Table 1

Tin Camp Creek Project - Phase 1 Drilling Results - 16 October 2014.

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. 	 A total of 328 Reverse Circulation (RC) Spear samples of 1 metre interval drill samples were submitted for analysis. RC samples were collected in 1 metre intervals from bulk riffle split samples collected in plastic bags at the cyclone. A 3kg sample was subsequently obtained for assay from the riffle split sample by spear sampling. The samples obtained are considered to be representative of the intervals from which they were obtained and sampling and sub-sampling techniques were appropriate for the sample type and for exploration purposes A Radiation Solutions RS-125 spectrometer was used to measure radioactivity (in counts per second – cps) of each bulk 1m sample. Samples are selected for laboratory based geological observation and radioactivity (cps) relative to background.
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, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	All drilling was undertaken using Reverse Circulation drilling with face sampling bit.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	The project geologist remains at the rig during RC drilling activities, with logging occurring as drilled. RC Samples were collected from the cyclone via a riffle splitter and

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	 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. 	transferred directly to a plastic sample bag for each 1 metre interval. For exploration drilling sample recovery quality is monitored visually by the geologist by volume of returned sample. The option to convert to diamond drilling was available should the sample recovery have been compromised by excessive water, Sample recovery is maximised during RC drilling by use of face sampling hammers. Sample recoveries were considered to be excellent and no significant sample bias is considered to have occurred.
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. 	 All core and chip samples are logged systematically recording lithology, alteration and mineralisation. Drilling was undertaken for exploratory purposes, however logging has been undertaken to a level sufficient to support future Mineral Resource estimation, mining studies and metallurgical studies. Lithological logging is qualitative. All (100%) drill intervals have been logged.
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. 	 RC samples were collected in 1 metre intervals from riffle split drill cuttings collected at the cyclone. A 3kg sample was subsequently obtained for assay from the riffle split sample by spear sampling. The samples obtained are considered to be representative of the intervals from which they were obtained and sampling and sub-sampling techniques were appropriate for the sample type and for exploration purposes Field Blanks, duplicates and laboratory prepared standards are inserted into the sampling sequence. For exploration drilling, Blanks and standards are inserted whenever uranium mineralization is encountered as follows: Blank sample of unmineralised material (immediately following a mineralised sample) 1 in each hole intersecting a mineralized zone. Mineralised duplicate in each drill hole intersection of a mineralized zone. Certified standard for each drill hole intersecting a mineralized zone. Sampling of barren material either side of mineralised zones. RC samples were submitted for analyses to Bureau Varitas' Laboratory in Danvin, Further sample preparation.
		Veritas' Laboratory in Darwin. Further sample preparation

was undertaken by Bureau Veritas prior to assay. Drill samples were dried to a core temperature of approximately 100°C. Dried samples are then coarse crushed using a Boyd crusher to a sizing of approximately 5mm. The total

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sample is then milled in an LM5 pulveriser to 85% passing

		75µm. An analytical pulp of 250 g is taken from the bulk and the residue retained. The pulp sample is then delivered to Bureau Veritas' laboratory in Adelaide. Sample sizes were considered appropriate for the type of material being sampled.
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. 	 A Radiation Solutions RS-125 spectrometer was used to measure radioactivity (in counts per second – cps) of each bulk 1m sample. Samples are selected for laboratory assay based geological observation and radioactivity (cps) relative to background. Geochemical assay of representative samples was undertaken at Bureau Veritas' Adelaide laboratory. Uranium analysis was undertaken utilising ICP-MS following a four acid digest of the pulp sample. This technique is considered a total analysis method and appropriate for the style of mineralisation intersected. Field Standards, blanks and duplicates were included in the samples submitted to the laboratory; in addition Bureau Veritas also include quality control samples routinely to monitor the precision and accuracy of analysis. Acceptable levels of accuracy have been established.
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. 	 Intersections reported for this phase of drilling have not been verified by an external party to date. No twinning of holes has been undertaken Logging, sampling and assay data is recorded and maintained digitally. Physical sample duplicates and core trays are maintained on site. No adjustment of assay data is required
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. 	 Current drill hole locations were surveyed using GPS with accuracies of between 1-4 metres All drill holes have been surveyed on Map Grid of Australia 94 (MGA94 Zone 53) A digital Terrain model (DTM) derived from previous airborne geophysical surveys is used for topographic control. Vertical resolution for the DTM is considered to be within 1 metre.

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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. 	 Drilling during this phase of work has been broad spaced for exploratory purposes to test new structural targets and until significant mineralisation is identified is insufficient to define mineral resources. Sample compositing has not been applied
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. 	 Current drilling is of an exploratory nature. There is generally insufficient data in the areas drilled during this phase of work to determine the orientation of host structures. No known sampling bias is known to have been introduced by the drilling orientation.
Sample security	The measures taken to ensure sample security.	Samples, each contained in zip tied, plastic sample bags were delivered by Alligator personnel in sealed 200 litre drums directly to the Bureau Veritas Laboratory in Darwin with Chain of Custody documentation
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 No audits have been undertaken for this phase of drilling

Section 2 Reporting of Exploration Results

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. 	All drilling reported in this ASX release was undertaken on the Tin Camp Creek Project which is comprised of contiguous exploration licences EL24921 and EL24922 in the Northern Territory. The tenement is held by TCC Project Pty Ltd (98%), a wholly owned subsidiary of Alligator Energy Ltd (Alligator) and by West Arnhem Corporation Pty Ltd (2%). The tenements were recently renewed by the Northern Territory Department of Mines and Energy for a further 2 year period (until May 2015 whereby AGE may apply for additional 2 year renewal periods) and are in good standing. Exploration and Mining agreements with the Northern Land Council (NLC) on behalf of traditional owners are in place for these tenements in accordance with the Aboriginal Land Rights Act (1976).

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		The Tin Camp Creek Project is also subject to a uranium buy back agreement with Cameco Australia Pty Ltd whereby Cameco may buy 51% of a defined resource greater than 20,000t contained U3O8. There are no known existing impediments to operating on any tenement within the Tin Camp Creek Project area.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	Regional exploration has previously been undertaken by other parties in the region by Queensland Mines Ltd (1970-1972), Afmeco (1996-2001) and Cameco Australia Pty Ltd (2001-2010).
Geology	Deposit type, geological setting and style of mineralisation.	Alligator is exploring for Unconformity Associated Style Uranium Deposits. The geology of the area being targeted is comprised primarily of Carpentarian aged sandstones of the Kombolgie Formation overlying multiply deformed meta-sediments of the lower-Proterozoic Cahill Fm and Archaean granite Gneiss Complexes.
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. 	Drill hole survey information is provided in the Table 1 of the ASX release. Collar positions were located by GPS with accuracies of 1-4metres. This accuracy is considered sufficient for exploration purposes and for the style of mineralisation targeted. A multi shot down hole camera was used at 50 metre intervals to monitor deviation from planned dip in drill holes.
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 	Uranium drill hole intercepts reported in Table 1 of the ASX release were aggregated using a lower cut-off of 200ppm U3O8. Internal waste (<200ppm U3O8) were included if less than 2m in length.

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	 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. 	
Relationship between mineralisati on 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 relationship between intercept lengths and mineralisation widths is uncertain for results reported in this release as the drilling is targeting new areas and the structural relationships of mineralisation have been shown to be complex in the broader region. Consequently, results are reported as drilled intercept lengths.
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.	Refer Figure 1and Table 1 of ASX 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 results of significance have been reported within this report
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.	No significant exploration data has been omitted
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	A number of targets have been identified on the Tin Camp Creek Project area. The drilling reported on in this release is the first part of what Alligator intends to be a systematic test of these targets. Further advice on this ongoing work

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 Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. will be provided following further assessment and ranking of these targets in the coming months.

Competent Persons Statement

Information in this report is based on current and historic Exploration Results compiled by Mr Rob Sowerby who is a Member of the Australasian Institute of Geoscientists. Mr Sowerby is CEO and Director of 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 Sowerby consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.