



8 October 2014

ASX Announcement

**Assays confirm high grade uranium at NE Myra, Drilling re-commences
on Tin Camp Creek Project**

- **Drilling Re-commences on Tin Camp Creek Project**
- **Assay results received for NE Myra and Orion North Drilling**
- **Best intersection of 3m @ 1489ppmU₃O₈ at NE Myra confirming presence of uranium mineralisation.**
- **Drilling underway at Orion South prospect.**
- **Further drilling to be undertaken at Mintaka to test down dip extensions of mineralisation followed by initial drill testing of Orion East.**

Alligator Energy Ltd (AGE) is pleased to provide a further update of exploration activities at the Tin Camp Creek Project.

Assay results confirm presence of uranium mineralisation at NE Myra

Laboratory assay results have been received for drill samples obtained from recent drilling in the NE Myra Orion North area.

A best intersection of 3m @ 1489ppm U₃O₈ from 60m was returned from drill hole OBR14-111 located on the eastern most drill line completed at the NE Myra prospect. An intersection of 2m @ 1005ppm U₃O₈ from 93m was returned from OBR14-108 which is located approximately 500 metres to the west and along strike from OBR14-111. These two intersections are hosted in altered schists and are interpreted to be linked by a mineralised structure. Further potential exists further to the northeast and along strike of existing drilling.

Anomalous uranium mineralisation (>200 – 1000 ppm U₃O₈) was also intersected over narrow intervals in four additional drill holes in the Orion North-NE Myra area.

The presence of high grade uranium mineralisation worth pursuing in the NE Myra area is encouraging. However, in the Orion North area although anomalous uranium mineralisation was encountered, potential for high grade mineralisation has been

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Number of Shares:
304M Ordinary Shares
12.0M Unlisted
Options

Board of Directors:
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(Chairman)

Mr Robert Sowerby
(CEO, Director)

Mr Paul Dickson
(Non Exec. Director)

Mr Peter McIntyre
(Non Exec. Director)

Mr Andrew Vigar
(Non Exec. Director)

downgraded.

Both targets were derived from the recent SAM – MMR airborne geophysical survey results and give great confidence that this technology coupled with geochemical information is providing good quality drill targets. Planning and prioritisation of further work in the NE Myra area will be undertaken following completion of drill testing and assessment of the Orion South, Mintaka and Orion East targets. No further work is planned for Orion North

Drill hole locations are shown on **Figure 1** and a summary of assay results are provided in **Table 1**.

Drilling Re-commences on Tin Camp Creek Project

Alligator has re-commenced drilling at the Tin Camp Creek Project. Drilling over the next month will include initial testing of two new target areas (Orion South and Orion East) as well as further drilling to test the down dip extensions of uranium mineralisation identified at Mintaka in September. A further 1500 metres of RC and diamond drilling is planned in this campaign over the next four to six weeks.

Drilling has commenced to test the Orion South area. Drilling is testing SAM/MMR and EM targets defined by recent surveys. Two 300 metre drill holes are to be completed.

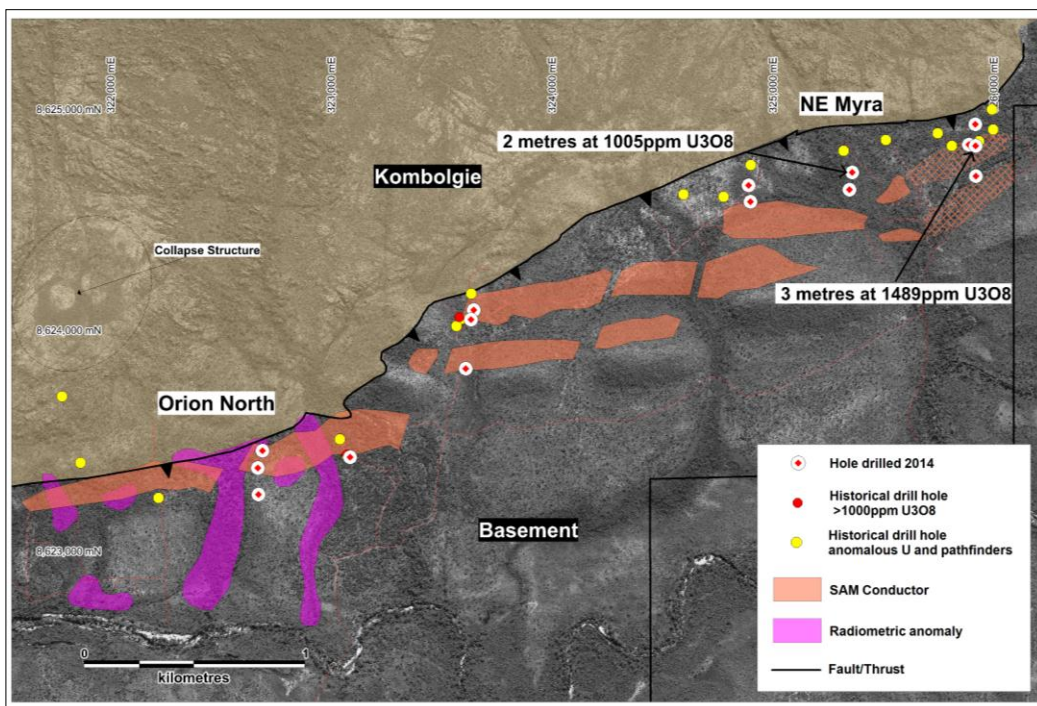


Figure 1: Location map showing completed drilling at Orion North and holes with >1000cps measured radioactivity

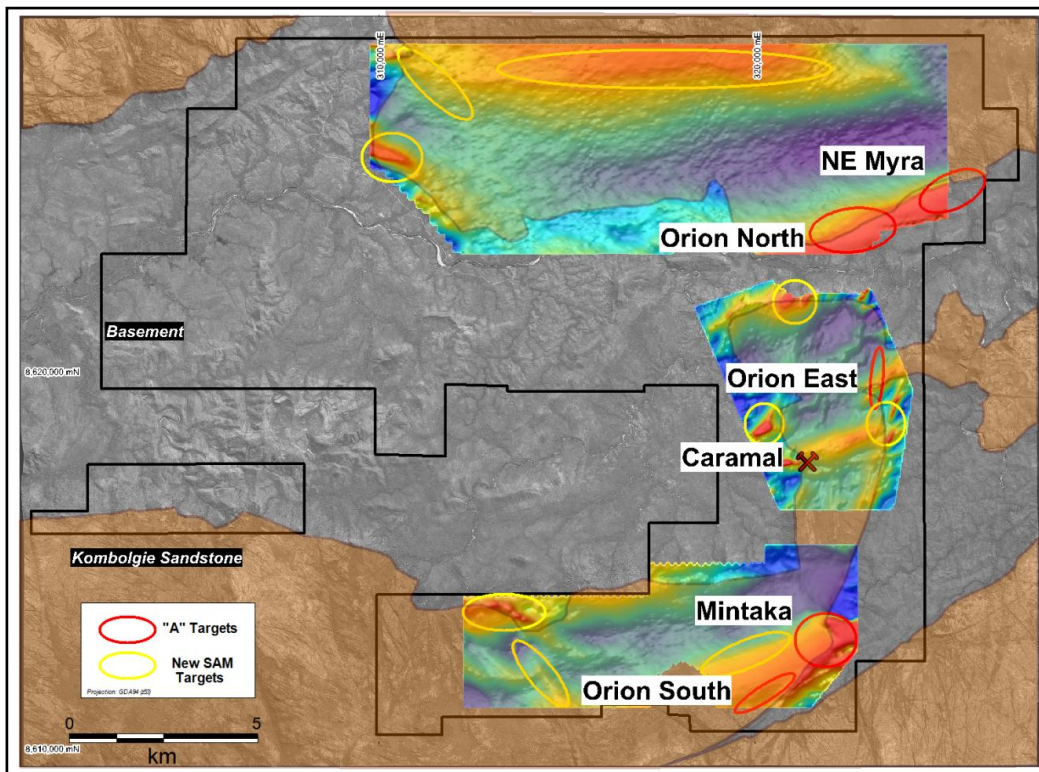


Figure 2: Tin Camp Creek Project - Prospect Location

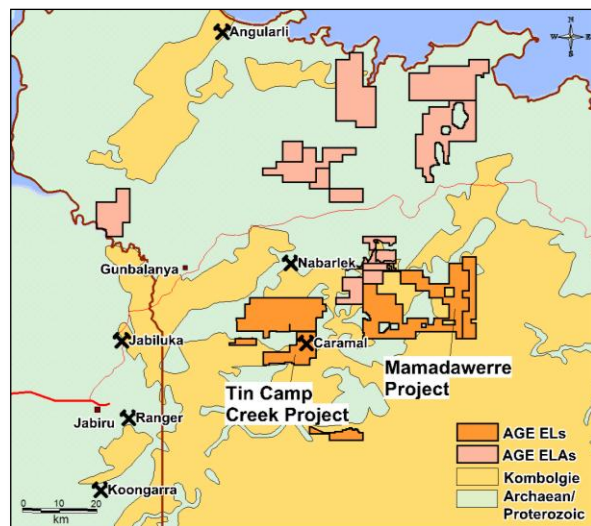
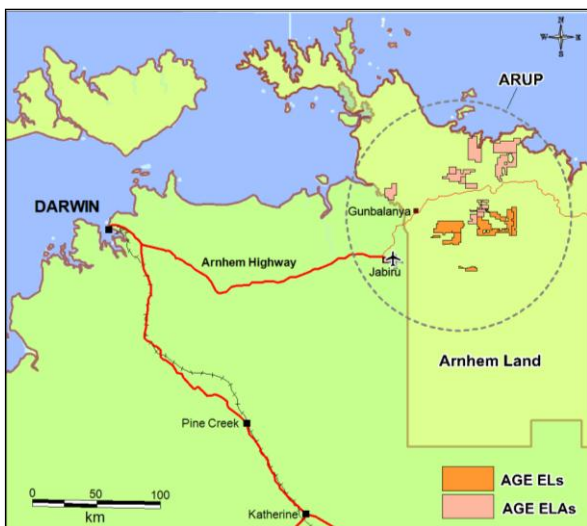
Table 1: Laboratory Assay results Summary

Hole ID	Prospect	MGA 94 Easting	MGA 94 Northing	Azimuth (Mag)	Dip	Metres From surface	Length (metres)	Grade % U3O8
OBR14-101	North Orion	322675	8623368	357	-75	No Significant Uranium mineralisation		
OBR14-102	North Orion	322677	8623247	357	-75	No Significant Uranium mineralisation		
OBR14-103	North Orion	322696	8623446	357	-80	No Significant Uranium mineralisation		
OBR14-104	North Orion	323092	8623416	340	-75	No Significant Uranium mineralisation		
OBR14-105	North Orion	323653	8624083	360	-75	No Significant Uranium mineralisation Anomalous uranium up to 1m @ 267ppm U3O8		
OBR14-106	North Orion	323640	8624040	360	-70	No Significant Uranium mineralisation		
OBR14-107	North Orion	323616	8623818	360	-75	No Significant Uranium mineralisation		
OBR14-108	North East Myra	325367	8624706	357	-75	93	2	1005
OBR14-109	North East Myra	325354	8624628	357	-60	No Significant Uranium mineralisation.		
OBR14-110	North East Myra	325895	8624832	357	-60	No Significant Uranium mineralisation Anomalous uranium up to 1m @ 315ppm U3O8		
OBR14-111	North East Myra	325926	8624827	357	-60	60	3	1489
						67	1	430
OBR14-112	North East Myra	325927	8624690	357	-70	No Significant Uranium mineralisation		
OBR14-113	North East Myra	325924	8624924	N/A	-90	No Significant Uranium mineralisation Anomalous uranium up to 1m @ 250ppm U3O8		
OBR14-114	North East Myra	324898	8624648	357	-75	No Significant Uranium mineralisation		
OBR14-115	North East Myra	324906	8624574	357	-75	No Significant Uranium mineralisation		

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 U3O8 at 3100ppm U3O8) 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 – 8 October 2014.

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> <i>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.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>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.</i> 	<p>A total of 319 Reverse Circulation (RC) Spear samples of 1 metre interval drill samples were submitted for analysis.</p> <ul style="list-style-type: none"> 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.
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <i>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).</i> 	<p>All drilling was undertaken using Reverse Circulation drilling with face sampling bit.</p>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i> 	<p>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</p>



	<ul style="list-style-type: none"> 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. 	<p>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.</p>
<i>Logging</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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.
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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. <p>RC samples were submitted for analyses to Bureau 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</p>



		<p>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.</p> <p>Sample sizes were considered appropriate for the type of material being sampled</p>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none">• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>• <i>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.</i>• <i>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.</i>	<ul style="list-style-type: none">• 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.
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none">• <i>The verification of significant intersections by either independent or alternative company personnel.</i>• <i>The use of twinned holes.</i>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>• <i>Discuss any adjustment to assay data.</i>	<ul style="list-style-type: none">• 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
<i>Location of data points</i>	<ul style="list-style-type: none">• <i>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.</i>• <i>Specification of the grid system used.</i>• <i>Quality and adequacy of topographic control.</i>	<ul style="list-style-type: none">• 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.



<i>Data spacing and distribution</i>	<ul style="list-style-type: none">• <i>Data spacing for reporting of Exploration Results.</i>• <i>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.</i>• <i>Whether sample compositing has been applied.</i>	<ul style="list-style-type: none">• 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
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none">• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>• <i>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.</i>	<ul style="list-style-type: none">• 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.
<i>Sample security</i>	<ul style="list-style-type: none">• <i>The measures taken to ensure sample security.</i>	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
<i>Audits or reviews</i>	<ul style="list-style-type: none">• <i>The results of any audits or reviews of sampling techniques and data.</i>	<ul style="list-style-type: none">• No audits have been undertaken for this phase of drilling

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none">• <i>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.</i>• <i>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.</i>	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).



		<p>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.</p> <p>There are no known existing impediments to operating on any tenement within the Tin Camp Creek Project area.</p>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"><i>Acknowledgment and appraisal of exploration by other parties.</i>	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).
<i>Geology</i>	<ul style="list-style-type: none"><i>Deposit type, geological setting and style of mineralisation.</i>	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.
<i>Drill hole Information</i>	<ul style="list-style-type: none"><i>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:</i><ul style="list-style-type: none"><i>easting and northing of the drill hole collar</i><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i><i>dip and azimuth of the hole</i><i>down hole length and interception depth</i><i>hole length.</i><i>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.</i>	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.
<i>Data aggregation methods</i>	<ul style="list-style-type: none"><i>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.</i><i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure</i>	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.



	<p><i>used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></p> <ul style="list-style-type: none">• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none">• <i>These relationships are particularly important in the reporting of Exploration Results.</i>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i>• <i>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').</i>	<p>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.</p>
<i>Diagrams</i>	<ul style="list-style-type: none">• <i>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.</i>	<p>Refer Figure 1 and Table 1 of ASX release</p>
<i>Balanced reporting</i>	<ul style="list-style-type: none">• <i>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.</i>	<p>All results of significance have been reported within this report</p>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none">• <i>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.</i>	<p>No significant exploration data has been omitted</p>
<i>Further work</i>	<ul style="list-style-type: none">• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>• <i>Diagrams clearly highlighting the areas of possible extensions,</i>	<p>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 will be provided following further assessment and ranking of these targets in the coming months.</p>

including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.

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.