

# Alligator commences drilling of TCC4 uranium prospect in Arnhem Land, NT – 4 September 2018

## Highlights

- The TCC4 prospect represents Alligators most advanced untested undercover uranium target with a large strongly coherent geochemical pathfinder anomaly, significant SAM geophysical anomaly indicative of alteration, and favourable stratigraphy of the Cahill Formation unconformably concealed by sandstone;
- Drilling operations commenced on Monday 3<sup>rd</sup> September on the first line of four planned lines to be tested;
- The planned drill program consists of up to 3,000 metres or up to 10 holes, varying from 250 to 400 metres deep;
- Drilling will be a combination of RC pre-collars through the main part of the sandstone cover, with diamond cored tails through the target horizons;
- The exploration team will undertake rapid and ongoing evaluation of geology, lithology, alteration and any mineralisation encountered during drilling to enable real-time modification of the program based on results;
- Samples will be sent away for assay once a reasonable quantity of core has been obtained

Alligator Energy Limited (Alligator or the Company) is pleased to advise that its exploration team and drilling contractor (DDH1) have commenced exploration drilling operations at its TCC4 uranium prospect in the Alligator Rivers Uranium Province (ARUP) in Arnhem Land, Northern Territory.

The TCC4 prospect represents the most advanced undercover uranium potential in AGE's tenements, with identification of underlying Cahill Formation geology (hosts both the Ranger and Jabiluka deposits), along with overlapping SAM geophysics and geochemical sampling indicators.

Alligator's Acting CEO Greg Hall commented; "Our exploration team has done an excellent job in preparing access, setting up support systems and readying sites for drilling in rapid time. All procedures, safety and environment protocols have been followed and are in place for drilling."

The Company will be sending samples away for assay during drilling operations and will report results once assays have been completed. Any important findings during drilling may be reported if considered of significance under ASX rules."

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ASX Code: AGE

Number of Shares: 987.9 M Ordinary Shares 310.4 M Listed Options 4.2 M Unlisted Options

Board of Directors: Mr John Main (Chairman)

Mr Paul Dickson (Non Exec. Director)

Mr Peter McIntyre (Non Exec. Director)

Mr Andrew Vigar (Non Exec. Director)

> Mr Greg Hall (CEO & Exec. Director)



## Drilling plan for TCC4 Prospect

Alligator Energy has the second largest exploration tenement holding in the uranium prospective ARUP region in Arnhem Land. After several years of work, the TCC4 prospect (refer location Figure 1) contains the most advanced quality uranium target outlined by the Company's proprietary pathfinder and modified SAM undercover exploration techniques (together our R&D exploration IP). The location is adjacent to other uranium occurrences drilled by Alligator and others in previous exploration campaigns.

AGE believes the TCC4 prospect represents the best complete undercover target with close similarities to the major uranium deposits of the Alligator Rivers Uranium Province. While uranium prospects occurring at surface may have been eroded over time, those which may exist under the sandstone cover have the best chance of being complete and of economic size.

A significant drilling program is required to test the concept, and a drilling program of up to 3,000 metres drilling is now underway.



Figure 1 – Location of Alligators uranium tenements in the ARUP

At a recent exploration planning workshop, Alligator's geologists, consultants and exploration experienced Board members reviewed the full status of work compiled on TCC4 to date and the recommended drilling locations. In particular, Alligator recently completed an up to date reprocessing of the original raw SAM data using the latest data processing techniques. This has re-affirmed the SAM targeting, and clearly showed the less resistive zones indicative of alteration patterns seen from major uranium deposits in the area. The data was reviewed along with the existing geochemical pathfinder results to aid in finalising drill targeting.

The TCC4 prospect is located adjacent to two historical and previously drilled (by AGE and others) uranium prospects – South Horn and Mintaka. Both of these prospects are exposed within the valley structure to the south and east of TCC4 and contain intersections of uranium mineralisation associated with the dolerite present in that area (refer Figure 2).





Figure 2 – Location of Alligator's TCC4 and other prospects in the ARUP



Figure 3 – TCC4 plan from 2017 showing coincident SAM and pathfinder element



In 2017, during compilation of the latest geochemical pathfinder isotope results, it was found that this area was coincident with an area of low resistivity which underlies the sandstone at TCC4 as determined by the SAM geophysics. Along with this a nearby historical drill hole indicates that the Cahill Formation is also coincident with the low resistivity geophysical anomaly. (refer Figure 3).

Figure 4 below shows the updated highlighted SAM conductor geophysics in the TCC4 area, along with isotope anomaly envelope and the four preferred drill lines designed to test Alligators R&D exploration IP targets.



Figure 4 – Planned TCC4 drill lines on SAM conductor and geochemical anomaly outline

## **Greg Hall**

## **Executive Director & CEO**

## FOR FURTHER INFORMATION, PLEASE CONTACT

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

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 an employee 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 Moorhouse 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's uranium exploration projects are in the world class Alligator Rivers Uranium Province in Arnhem Land, Northern Territory. The Alligator Rivers Uranium Province contains nearly 1 billion pounds of high grade uranium resources, including past production from the Ranger Mine and the undeveloped Jabiluka deposit. The company's Tin Camp Creek and Beatrice tenements form the focus of its exploration but the company also assesses other opportunities as they arise. The exploration target is a deposit containing no less than 100 million pounds of uranium preserved beneath covering sandstone.

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 Company's high priority drill target is TCC4 on the Tin Camp Project. The previously drilled Caramal (6.5Mlb U3O8 at 3100ppm U3O8) 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.

#### 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.



### NT Australia – ARUP U:



# Northwest Italy – Piedmont Ni-Co:

