

High Resolution Airborne Magnetic and Radiometric Survey to commence at Alligator's Nabarlek North

Alligator Energy (ASX: AGE, 'Alligator' or 'the Company') is pleased to announce initiation of a detailed high resolution airborne magnetic and radiometric survey over its **Nabarlek North Project** in the Alligator Rivers Uranium Province ("ARUP"), Northern Territory.

Highlights

- **12,000-line kilometres of high-resolution magnetic and radiometric data to be acquired over the entire Nabarlek North Project (Figure 1).**
- **The quality and resolution of this survey is a step change improvement on the existing historical geophysical data. Alligator will now have a single seamless coverage to support AGE's uranium exploration particularly in the lesser explored northern area of the Project.**
- **Identification of radiometric anomalies, major structures and prospective geology is the focus of this survey and will inform the location of specific drill targets for the approaching 2024 field season.**
- **The survey is co-funded by the Northern Territory Department of Industry, Tourism and Trade (DITT), following AGE's recent successful grant application through the Geophysics and Drilling Collaborations Program.**

Alligator Acting CEO, Andrea Marsland-Smith¹, said: *"Through our recent drilling programs we have discovered that uranium fertile Cahill Formation is widely present throughout our Nabarlek North project. This contrasts from a few years ago where understanding of bedrock geology was camouflaged by a few metres of cover. Taking lessons learnt, this survey is now key for deployment of targeted uranium exploration particularly in the lesser explored northern area and will potentially uncover a new pipeline of targets to be incorporated into our 2024 drilling program. Alligator looks forward to advancing our exploration work in this prospective area."*

¹ Andrea Marsland-Smith has been fulfilling CEO duties while existing CEO, Greg Hall, is travelling for business and then on annual leave

Nabarlek North Airborne Magnetic & Radiometric Survey

- The 12,000-line km airborne magnetic and radiometric survey is estimated to take two weeks to complete and will be flown by Thomson Airborne Pty Ltd with a fixed-wing aircraft covering AGE's entire Nabarlek North Project (~ 600 km², Figure 1).
- Line spacing is 100m and will be flown on east-west lines orthogonal to the main structural elements within the region. There is an allowance to acquire down to 50m line spacing to follow-up features of interest that are detected at the initial 100m line spacing pass.
- This survey will markedly improve on the historical geophysics over this area and will assist to identify radiometric anomalies, map structural complexities ("dilation zones") and basement geology. The focus lies in identifying mineralisation 'traps' within lower units of the Cahill Formation; one of the key hosts to the majority of structurally controlled high-grade uranium mineralisation known in this region (Ranger, Nabarlek, Angularli, U40 etc.).
- Anomalies and areas of key geology will then undergo ground reconnaissance and priority areas considered and drill testing this field season, 2024.
- The survey will be co-funded by the Northern Territory Department of Industry, Tourism and Trade (DIIT), following AGE's recent successful grant application through the Geophysics and Drilling Collaborations Program ([Exploration grants | Resourcing the Territory](#)).

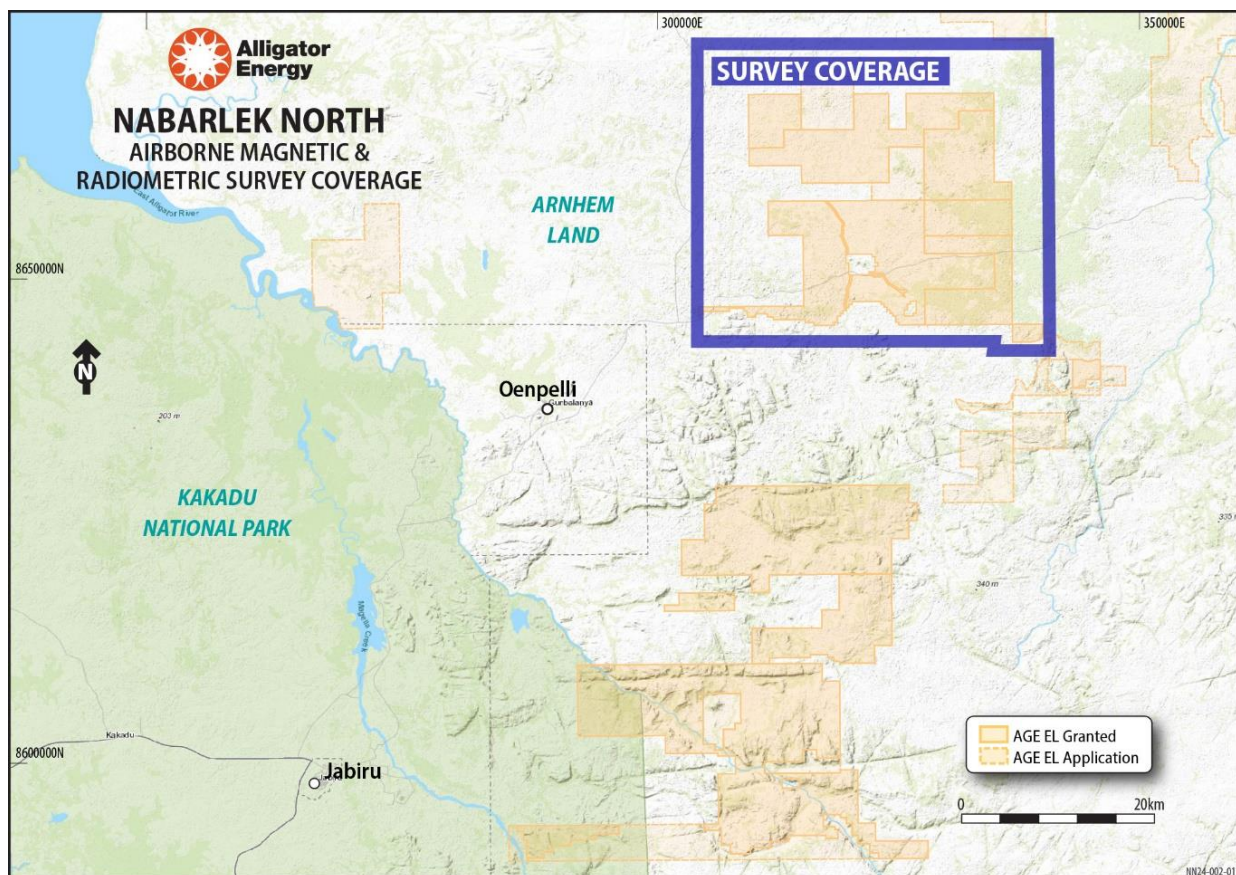


Figure 1. Nabarlek North Airborne Magnetic and Radiometric Survey Coverage

Nabarlek North Project Background

The Project is located less than 7km north of the historic Nabarlek uranium mine which produced 24Mlb of U_3O_8 at an average grade of 1.84%². The U40 Prospect, located 200m south of Alligator's southern tenement boundary, has historically reported grades of up to 6.3m @ 7.23% U_3O_8 ² demonstrating high-grade occurrences proximal to the Nabarlek North Project.

The Nabarlek North Project represents a highly prospective under-explored region within the ARUP (Figure 2). Alligator commenced exploration in this area in 2022 not knowing if fertile Cahill Formation (host to most of the economic orebodies in the ARUP³) is present due to a veneer of overlying sand cover (weathered Kombolgie Sandstone). Historically, it was widely assumed that the Project is underpinned by the barren Nimbuwah Complex granites and gneisses.

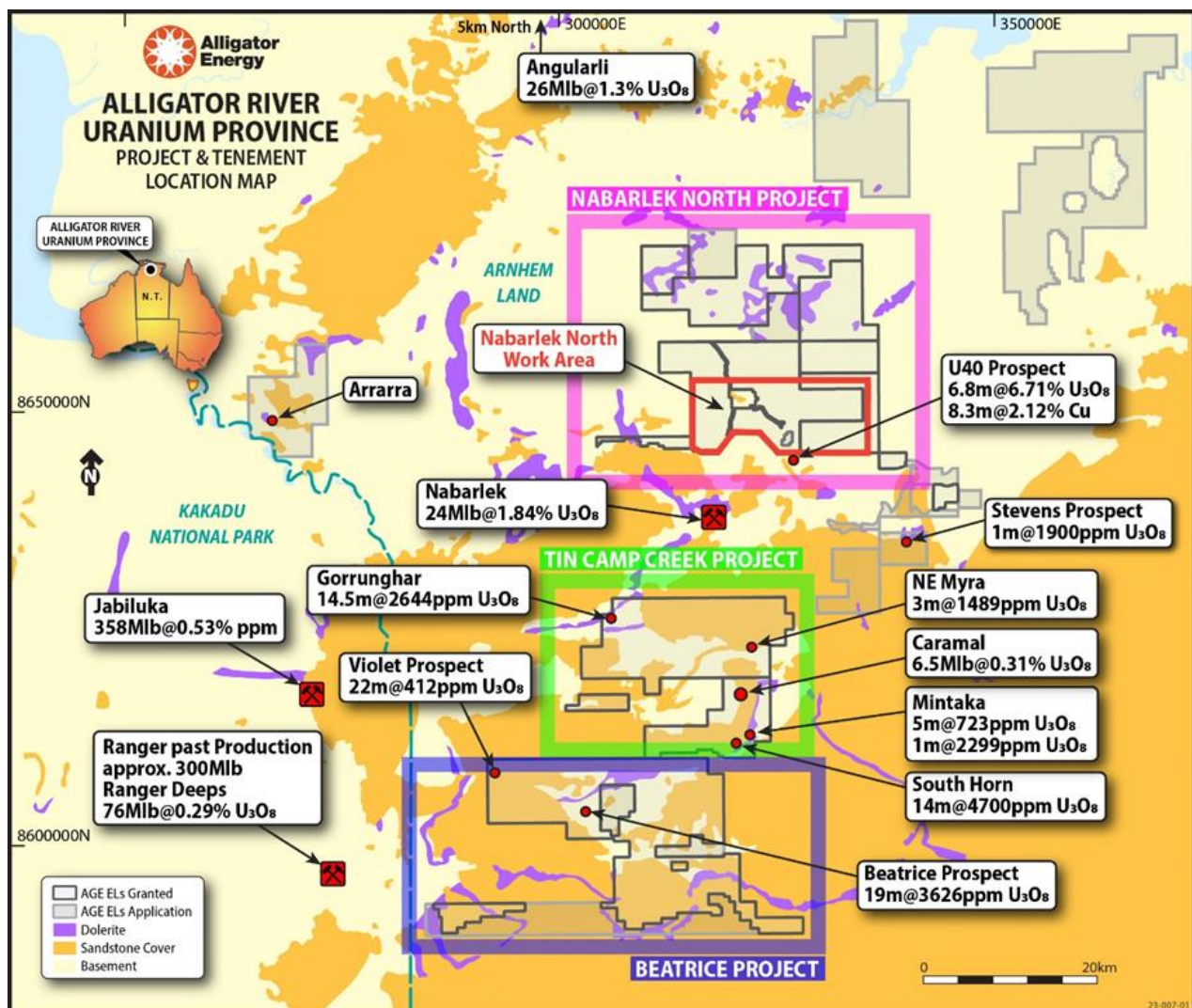


Figure 2: Location of the Nabarlek North work area and Alligators ARUP Project tenure in the NT

² Uranium Equities Limited (now DevEx Resources Limited) ASX Announcement, 4 October 2017

³ Vimy Resources Limited ASX Announcement, 21 March 2019

The work carried out in 2022 (and extended through to 2023) was the Company's first foray into this Project and was designed to establish inexpensive mechanisms to test for fertile geological formations and structures under the thin cover. The findings from Alligators 2022/23 work programs have confirmed that historical interpretations were incorrect and that the fertile Cahill Formation is widely present but segmented by regional scale structures capable of 'plumbing' a uranium mineralising system.

Alligator believes that armed with the right datasets and a predictive geological model, we will be able to take advantage of simple and inexpensive exploration techniques to make a discovery through thin cover. While sandstone cover and the associated unconformity have previously been seen as essential ingredients to the mineralisation model in Arnhem Land, the identification of mineral resources and occurrences at depth *below* the unconformity such as Ranger 3-Deeps, demonstrate it is not essential. Alligator will not only be exploring the possibility of extensions of the U40 Prospect mineralised system into the Nabarlek North tenement package, but also be pursuing identification of new uranium systems further north where Cahill Formation is now interpreted beneath a veneer of thin cover.

This announcement has been authorised for release by the Alligator Energy Board and Acting CEO.

Contacts

For more information, please contact:

Mr Greg Hall

CEO & Director

gh@alligatorenergy.com.au

Mr Mike Meintjes

CFO & Company Secretary

mm@alligatorenergy.com.au

For media enquiries, please contact:

Alex Cowie

Media & Investor Relations

alex@nwrcommunications.com.au

Forward Looking Statement

This announcement contains projections and forward-looking information that involve various risks and uncertainties regarding future events. Such forward-looking information can include without limitation statements based on current expectations involving a number of risks and uncertainties and are not guarantees of future performance of the Company. These risks and uncertainties could cause actual results and the Company's plans and objectives to differ materially from those expressed in the forward-looking information.

Actual results and future events could differ materially from anticipated in such information. These and all subsequent written and oral forward-looking information are based on estimates and opinions of management on the dates they are made and expressly qualified in their entirety by this notice. The Company assumes no obligation to update forward-looking information should circumstances or management's estimates or opinions change.

Competent Person's Statement

Information in this report is based on current and historic Exploration and Resource Drilling Results compiled by Dr Andrea Marsland-Smith who is a Member of the AusIMM. Dr Marsland-Smith is employed on a full-time basis with Alligator Energy as Chief Operating Officer and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration (including 22 years in ISR uranium mining operations and technical work) and to the activity she is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Marsland-Smith consents to the inclusion in this release of the matters based on her information in the form and context in which it appears.

About Alligator Energy

Alligator Energy Ltd is an Australian, ASX-listed, exploration company focused on uranium and energy related minerals, principally cobalt-nickel. Alligator's Directors have significant experience in the exploration, development and operations of both uranium and nickel projects (both laterites and sulphides).

Projects

