

## Uranium mineralisation intersected at Alligator's Nabarlek North Project in maiden RC drilling program

Alligator Energy (ASX: AGE, 'Alligator' or 'the Company') is pleased to announce the results of its maiden RC drilling at the 100% owned **Nabarlek North Project** (EL31480) in the Alligator Rivers Uranium Province ("ARUP")

### Highlights

- Assays received for AGE's maiden 1,398 m reverse circulation (RC) drilling, Nabarlek North Project.
  - NNRC23-008 drilled 200 metres along strike from the neighbouring high-grade U40 Prospect<sup>1</sup> intersected 3 metres at an average grade of 0.12% (1,211ppm) U<sub>3</sub>O<sub>8</sub>.
    - Peak interval of 1m at 0.23% U<sub>3</sub>O<sub>8</sub> (2,263ppm).
- U40 Prospect uranium mineralising system now proven to continue into the Company's Nabarlek North Project for potential future targeting and follow-up.
- 2023 ARUP field season completed with geophysics, aircore drilling and field mapping programs in addition to RC drilling, including:
  - 15km<sup>2</sup> gradient-array induced polarisation (IP) geophysics.
  - 2 Pole-Dipole IP lines at 25m dipoles for 3.4km (1.7km each).
  - Over 320 Aircore holes averaging 20m for 6,233m total.
  - 100 shallow Auger holes drilled to 1.5m.

Pending delivery of final data (including assays for all 2023 drilling), results will be integrated with historic and AGE's data compiled to date to progress the Nabarlek North Project exploration strategy for 2024.

**Greg Hall, Alligator CEO, said:** "It is pleasing to see the solid momentum and tangible outcomes as we begin to analyse the results of our first full year in the field at Nabarlek North.

*Along with the first significant intercept in our project area, the 2022 - 2023 field programs are confirming the proof-of-concept mineralisation model developed by Alligator. This includes confirming rock types that we can confidently assign to the Cahill Formation, the most uranium fertile formation present in the ARUP, and first-hand knowledge of the controls and alteration signature required for mineralisation. It all lends credence to our exploration strategy and highlights the potential for more exciting results going into 2024."*

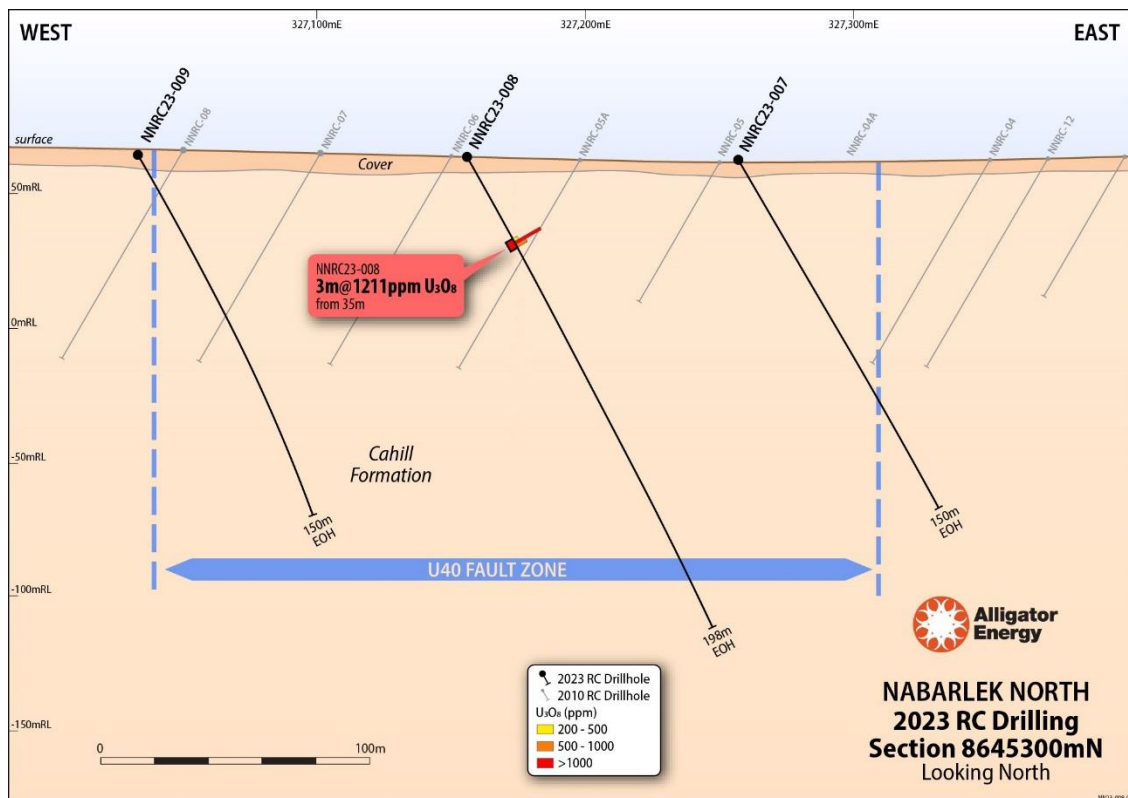
<sup>1</sup> DevEx Resources Ltd ASX Release 6 December 2023, "Deep, High-Grade Uranium Intersected at U40" [61185041.pdf](#) ([devexresources.com.au](http://devexresources.com.au))

## Key Results from the 2023 Nabarlek North RC Drilling Program

- As part of the 2023 Nabarlek North exploration program, a nine-hole RC drilling program was completed in October. A total of 1,398 m was drilled on three drill lines (3-holes per line) with a typical hole depth of 150 m. All holes were sampled and assayed at ten-meter intervals from surface to total depth in combination with selected intervals.
- Drillhole NNRC23-008, on the southernmost drill line (**Figure 1 & 2**) intersected an average grade of 0.12% U<sub>3</sub>O<sub>8</sub> over 3 metres from 35 m, with a peak of 0.23% between 36 and 37 m (**Table 1**). The intercept lies 200 m to the north of the known DevEx Resources' U40 Prospect.

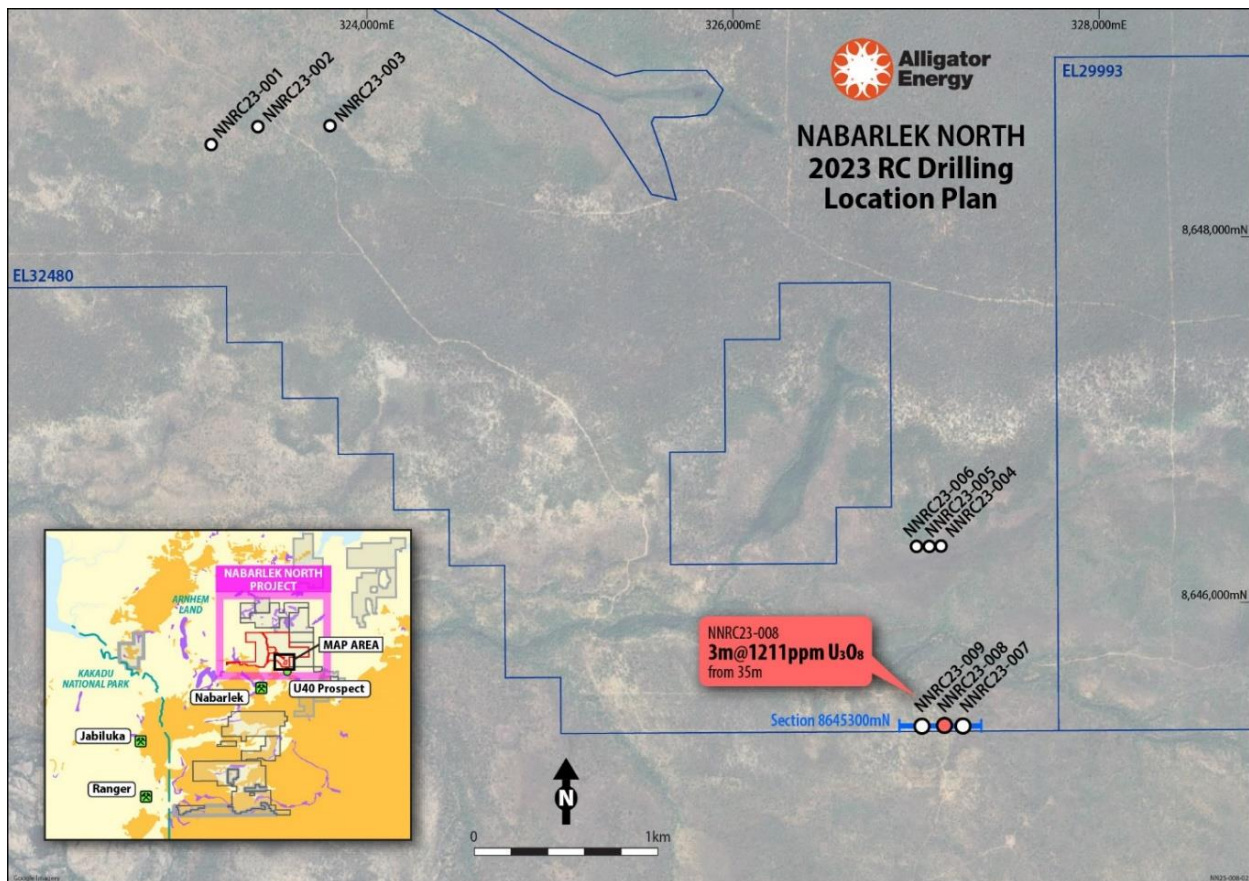
**Table 1.** Uranium intercepts from AGE Nabarlek North RC drilling program, October 2023. U<sub>3</sub>O<sub>8</sub> concentrations as determined from assays on 1 m bulk samples. Minimum threshold of 200 ppm U<sub>3</sub>O<sub>8</sub> used for reporting purposes.

Hole ID	Easting	Northing	RL(m)	Depth (m)	Dip	Azimuth	From (m)	Interval (m)	U <sub>3</sub> O <sub>8</sub> (%)
NNRC23-007	327257	8645303	63	150	-60	90	No Significant Intercept		
NNRC23-008	327156	8645306	64	198	-60	90	35	3	0.12
NNRC23-009	327033	8645302	65	150	-60	90	No Significant Intercept		



**Figure 1.** Section view of the southern fence line. U40 Prospect extensions are less than 200 m to the south of the section (fault zone projected into section). Note: drillholes in grey show historical drilling in or near the plane of the section.

- The two other drill lines were positioned to test (i), interpreted structure north of the U40 Prospect with potential Cahill Formation below dolerite cover; and (ii), a series of geophysical features in a complex low-angled structural zone with some evidence of chlorite + hematite alteration (from recent traverse air-core drilling). While neither drill line appeared to intersect uranium mineralisation (*assays still pending as of 19/12/23*), they have provided invaluable data to aid in the overall regional interpretation and targeting approach.
- In addition to the significance of obtaining a uranium intercept along trend from known mineralisation, the program has also demonstrated that:
  - The alteration halo around mineralisation is narrow, possibly measured in metres.
  - Several alteration styles are present throughout the tenure with potential to provide both vectors to mineralisation and leading to false positives.
- While legacy drilling in the vicinity of the uranium intercept places some directional bounds on mineralisation, additional modelling and data integration will be conducted to test for further upside potential – including at depth, following recent deeper intercepts at U40<sup>(1)</sup>.



**Figure 2.** Plan view of AGE's RC drilling program, Nabarlek North Project. Nine holes drilled over three fences for a total of 1,398 m were completed in October 2023.

## Other 2024 Field Results and Exploration Implications

- In addition to the RC drilling program outlined above, AGE completed the following additional work program at Nabarlek North Project this field season:
  - Gradient induced polarisation geophysics (IP) covering 15km<sup>2</sup>,
  - Pole-dipole IP across 2 lines in follow-up features identified in the gradient IP outlined above,
  - Over 320 aircore/RAB holes with an average depth of 20m to test pre-Cretaceous geology,
  - Over 100 auger holes where transported and Cretaceous cover were projected to be shallower and near-outcropping, and
  - Field mapping in shallower cover areas.
- Designed to provide project-wide prospectivity mapping and geochemical target generation, the 2023 field program aims to confirm suitable wide-spread stratigraphy (Lower Cahill Formation), trap and reductive environments to host prospective uranium mineralisation.
- Our integrated, multi-technique approach to exploration will continue through 2024 testing targets generated from the 2023 program and expanding target generation over untested portions of the tenure with an increased focus on sections of Lower Cahill Formation interpreted from the magnetics and surface mapping where possible.
- In line with results so far, specific follow-up target testing will require several lines of drill holes even on first pass to target narrow structurally controlled mineralisation below cover. As such, a more comprehensive RC drilling program is being incorporated into 2024 planning.
- In addition to on-ground works, a work program meeting with Traditional Owners was undertaken across 2 days in October covering a range of exploration activities proposed for 2024 securing early approvals for anticipated works next year.

It is anticipated that all remaining assays and outstanding final data (including final IP products) will be received by end January 2024 such that priorities for next year's Nabarlek North exploration will be finalised by the end of the first quarter of 2024.



## Background

(modified from AGE 29 May 2023 announcement, see - <https://wcsecure.weblink.com.au/pdf/AGE/02670412.pdf>)

The Nabarlek North Project represents a highly prospective under-explored region within the ARUP (Fig 3), typified by the presence of an exhumed Proterozoic unconformity and enough cover sediments to mask bedrock radiometric signatures and discouraged past exploration. Alligator started 2022 not knowing if there were fertile geological formations present in the project area. Historical data has largely been ambivalent with regards to bedrock geology, and it has been widely assumed that the Project is underpinned by the barren Nimbuwah Complex granites and gneisses, rather than the fertile Cahill Formation that host most of the economic orebodies in the ARUP.

However, 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%<sup>(1)</sup>. The U40 Prospect, located 200m south of Alligator's southern tenement boundary, has historically reported grades of up to 6 m @ 7.6%  $U_3O_8$ <sup>(1)</sup> demonstrating high-grade occurrences proximal to the Nabarlek North Project.

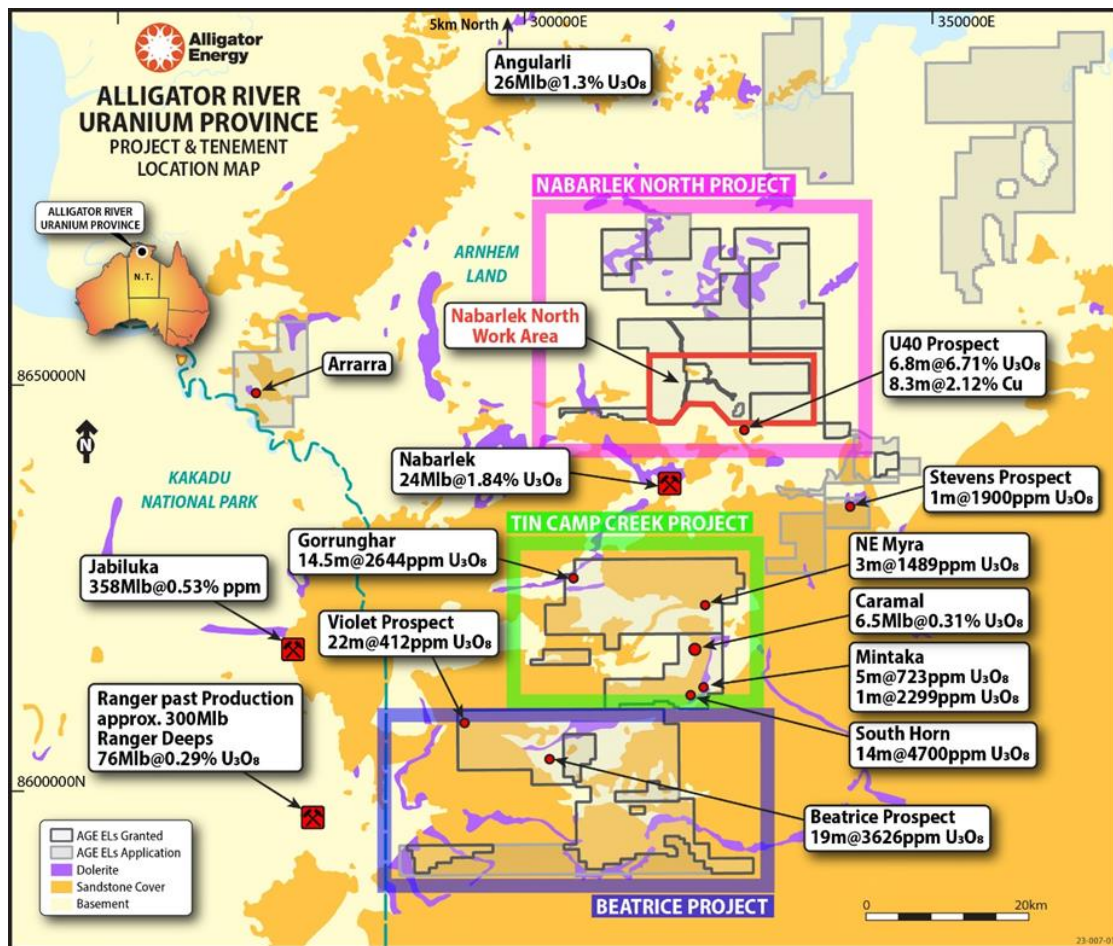


Figure 3: Location of the Nabarlek North work area and Alligators ARUP Project tenure in the NT

The work carried out in 2022 through to 2023 was the Company's first foray into this Project and was designed to establish in an inexpensive manner testing for fertile geological formations and structures under the thin cover.

The findings from 2022 show that previous interpretations are incorrect and that the fertile Cahill Formation is likely to be 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 unexplored cover.

**This announcement has been authorised for release by the Alligator Energy CEO.**

## Contacts

For more information, please contact:

**Mr Greg Hall**

*CEO & Director*

[gh@alligatorenergy.com.au](mailto:gh@alligatorenergy.com.au)

**Mr Mike Meintjes**

*CFO & Company Secretary*

[mm@alligatorenergy.com.au](mailto:mm@alligatorenergy.com.au)

For media enquiries, please contact:

**Alex Cowie**

*Media & Investor Relations*

[alex@nwrcommunications.com.au](mailto: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.

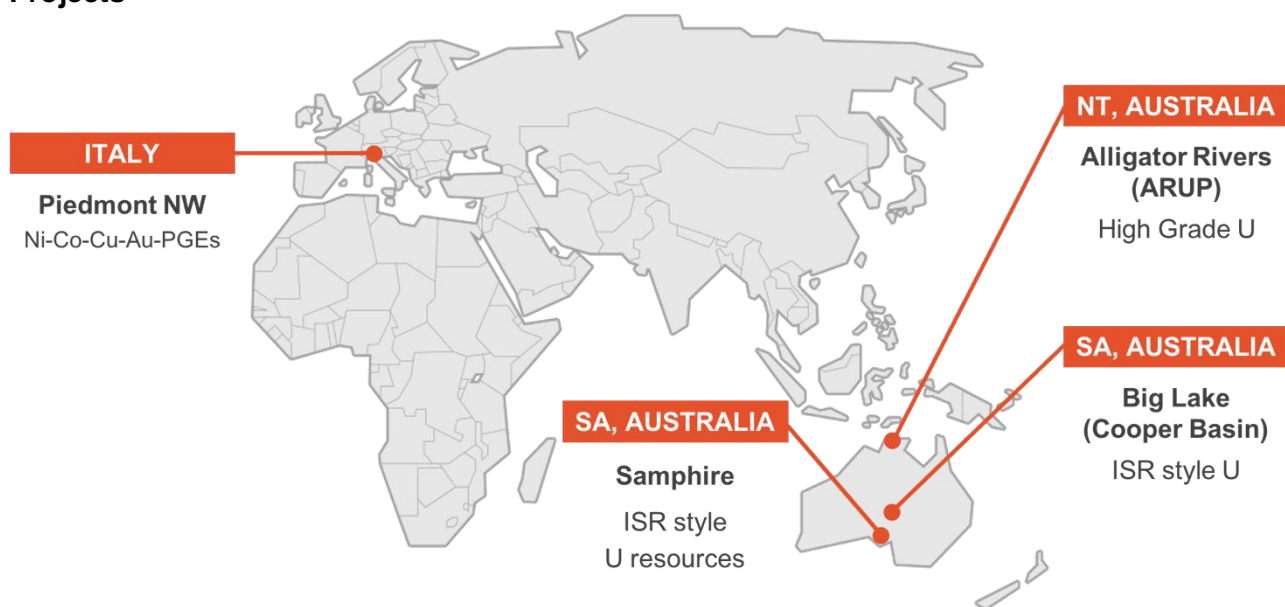
## Competent Person's Statement

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 21 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



## APPENDIX 1

### JORC Code, 2012 Edition – Table 1 (Sections 1 & 2)

#### Section 1 – Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> <li><i>Nature and quality of sampling (e.g. 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></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li><i>In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>Results reported in this announcement relate to reverse circulation (RC) drilling during the 2023 exploration program at the Nabarlek North Project in the Alligator Rivers Uranium Province ("ARUP"), Northern Territory. The program was a critical component of the integrated 2023 geophysical, geological mapping and air-core/auger surveying, and continues from 2022 program.</li> <li>Sampling of the RC drilling program involved the following components: <ul style="list-style-type: none"> <li>Drilling sample return is taken off the rig at 1 m intervals without any splitting. They are laid out in numerically ordered labelled bags to avoid any confusion over intervals.</li> <li>Following geological inspection, representative and non-composited 1-3 kg portions are taken from the 1 m samples (above) where there is: a change in geological horizon, mineralisation, alteration assemblages or any other zone of interest. Sampling is done on a maximum 10 m interval over the entire drill hole as part of the geochemical program.</li> <li>All samples are geologically logged, and natural gamma radioactivity level is measured with a RS-230 BGO Handheld Gamma-Ray Spectrometer</li> </ul> </li> <li>Samples for assaying across the entire RC drilling program were shipped to the same laboratory under one batch. Laboratory sample preparation is described in the 'quality of assay data' section.</li> </ul>
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <li><i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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></li> </ul>	<ul style="list-style-type: none"> <li>Drilling was contracted to Topdrill P.L. of Western Australia. Using a Schramm T685 rig for reverse circulation (RC), nine holes were completed, eight to 150m depth and one to 198m depth with a 5.5-inch diameter bit.</li> <li>Drill hole collar locations were positioned using a dual phase Garmin GPS with an approximate X-Y tolerance of 3 to 5 m.</li> <li>Holes were surveyed on completion of drilling with a Reflex SPRINT IQ gyroscopic compass. Survey interval was typically 10 m and TD.</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Sample recovery from the RC drilling is monitored during drilling with an assessment made on the volume and weight of material recovered relative to the drill interval. If RC sample recovery is poor, it is logged as such. This is systematically recorded in the logging database.</li> <li>Cross-interval contamination is assessed regularly but it is not possible to eliminate from the RC drilling process. No significant contamination issues have been encountered in this program.</li> <li>For this program no apparent relationship was observed between sample recovery and grade. No sample bias is expected.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li><i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>Standard sample logging procedures are utilised, including logging codes for lithology, minerals, colour, weathering etc.</li> <li>A chip tray for selected sample intervals is completed covering interesting lithologies and mineralisation. A sub-sample is sieved into chip trays to provide for further detailed logging once the assays have been received.</li> <li>All chip trays are photographed for digital archiving</li> <li>Average natural gamma ray activity is measured for each sample. The instrument is routinely calibrated</li> </ul>



Criteria	JORC Code explanation	Commentary
		from counts to instrument-independent decay rate, taking into crystal volume, sensitivity, and dead-time.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality, and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>The RC drilling process does not generate core but chips of samples as returns</li> <li>The chips are recovered at one-meter intervals via the cyclone – wet or dry</li> <li>As per sampling section, ~ 1-3 kg samples are extracted from the one-meter interval 'bulk samples, for routine laboratory submission. Samples for assaying are selected on the basis of a change in geological horizon, mineralisation, alteration assemblages or any other zone of interest.</li> <li>Samples are taken by spear of the bulk to provide an unbiased split for analysis.</li> <li>To ensure laboratory reliability, a quality control (QC) sample was inserted in a maximum 1:40 ratio.</li> <li>Blanks and Standards pertinent to the type of mineralisation and grades anticipated, were also submitted with batches to verify laboratory sensitivity and thresholds</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Sample analysis occurs at Bureau Veritas, SA</li> <li>Samples were pulverized and then split to obtain separate aliquots: <ul style="list-style-type: none"> <li>0.2g aliquot dissolved in classic four acid mixture and assayed for minor elements (inc REEs) using ICP-MS and ICP-OES. Resistate minerals may not be dissolved in this method and as such certain elements can be considered minimum values (e.g., Zr, Ti).</li> <li>1g aliquot that has been fused with lithium metaborate and dissolved in nitric acid and assayed for major elements using ICP-OES. This is close to a full digestion of resistate minerals.</li> <li>40g aliquot used for classic Firing technique (ICP-OES) to determine Au, Pt and Pd (PGEs).</li> <li>Aliquot for gravimetric analysis (Loss on Ignition)</li> <li>0.2g aliquot dissolved in classic four acid mixture and assayed for lead and uranium isotopes using ICP-MS. Resistate minerals may not be dissolved in this method (e.g., Zircon), which is intentional, as the isotope values being sought are for remobilised materials that can provide evidence of alteration or pathways for mineralising fluids.</li> </ul> </li> <li>Bureau Veritas employs standard NATA procedures for internal standards and duplicates.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Alligator's project geologists are supervised by the Project Manager</li> <li>All field data is entered into excel spreadsheets (supported by look-up tables) at site and subsequently validated as it is imported into the centralized Access database.</li> <li>Hard copies of logging and sampling data are stored in the local office and electronic data is stored on the company server.</li> <li>As an early exploration / part stratigraphic drilling program, twinning of results is not required. However, all new data will be compared against legacy drill datasets, Alligator's current aircore and auger programs, geophysical coverage etc, to check for a consistent picture, possible discrepancies in new and old data and anomalies – leading to an enhanced picture of local prospectivity.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>All coordinate information was collected using hand held GPS utilizing GDA 94, Zone 53. While spatial location is expected to be recovered within 3 – 5 m, it is possible that the elevation can be as much as 10 m out with respect to the currently established geoid.</li> <li>All RC drillholes have been downhole surveyed at 5 m intervals, details provided earlier</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the</li> </ul>	<ul style="list-style-type: none"> <li>The three RC drill lines (or fences) of three drillholes were strategically placed within the Narbalek North project to: <ul style="list-style-type: none"> <li>Provide intercepts of a broad range of stratigraphy below cover</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></p> <ul style="list-style-type: none"> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>○ Provide partial tests of modelled low-dipping target stratigraphy and geophysical features</li> <li>○ Test northerly extensions to the U40 mineralisation on the tenure's southern boundary</li> <li>○ Test a weak zone of hematitic alteration identified through AGE's 2022 – 2023 aircore and auger mapping programs</li> <li>• Within each fence, the three drill holes have been positioned and angled to: <ul style="list-style-type: none"> <li>○ Cover as much stratigraphy as possible without complicating drilling (hence steeply angled across interpreted dip)</li> <li>○ Provide as far as possible complete section coverage with overlapping (or near-overlapping) collar to TD position from one hole to the next.</li> <li>○ Account for the relatively narrow footprint of U mineralisation systems anticipated where, mineralisation + alteration halo may be as narrow as sub 10 m. As such, fences of drillholes are often required to be spaced at close intervals even at an early exploration stage.</li> </ul> </li> <li>• Reported sample intervals have been composited based on a 200ppm U3O8 minimum cut off.</li> </ul>
<p><i>Orientation of data in relation to geological structure</i></p>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Drill traverses were generally designed to be orthogonal to the predicted strike of geology and structure, however, this is impractical in many cases owing to the access available and the uncertainty of the geological geometry at this early stage of exploration.</li> <li>• The steepness of dip in the bedrock geology was not evident in outcrop in the locations covered with RC fences. Consequently, it is possible that the angle of holes were not optimal to orthogonally cross-cut stratigraphy or mineralisation encountered.</li> </ul>
<p><i>Sample security</i></p>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Company geologists supervise all sampling and subsequent storage in field and transport to point of dispatch to the assay laboratory.</li> </ul>
<p><i>Audits or reviews</i></p>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Audits or reviews of the sampling techniques were not undertaken.</li> </ul>

Section 2 – Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<p><i>Mineral tenement and land tenure status</i></p>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• Exploration reported herein covers the southern part of the Nabarlek North Project area on ELs 29993 and 31480, as shown in the figures in the report.</li> <li>• More broadly, the Nabarlek North project comprises Exploration Licences (ELs) 31480, 27252, 27253, 28389, 28390, 29991, 29992 &amp; 29993. The Nabarlek North licences were granted to Northern Prospector Pty Ltd, a wholly owned subsidiary of Alligator Energy Ltd on 20th April 2021.</li> <li>• The project lies within the Arnhem Land Aboriginal Reserve on Aboriginal Land Rights Act (ALRA) land, about 250km east of Darwin, NT.</li> <li>• Alligator has obtained consent under the ALRA and an exploration agreement is in place, enabling work programs to take place on the basis of annual approval by Traditional Owners and the Northern Land Council.</li> <li>• Sacred sites in the areas take the form of registered sites, which the company has full understanding of the location, and are excluded from exploration. Like any other jurisdiction, Alligator is required to protect heritage and archaeological sites via work area clearances on an as-needs basis.</li> <li>• Alligator operates under an approved authorisation (Mining Management Plan; MMP) with the NT Government.</li> </ul>
<p><i>Exploration done by other parties</i></p>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Modern exploration for uranium commenced in the region following regional airborne radiometric surveys over the Alligator Rivers Province by the BMR in 1969. The Nabarlek deposit, approximately 7km south of EL31480, was subsequently discovered by Queensland Mines Ltd (QML) following a regional fixed wing airborne radiometric survey. QML undertook follow up work consisting of radiometric surveys, regional stream sediments surveys, ground follow up and geological mapping. As a result of this work several prospects in proximity to the Nabarlek North packages were identified however modest Cenozoic and Lateritic cover obscure basement and potential radiometric anomalies through the licences and limited follow-up exploration has been conducted.</li> <li>• Exploration ceased in 1973 following the Federal Government decision to inhibit uranium mining in the Alligator Rivers region. No work was undertaken in the area between 1973 and 1987 due to an embargo on the grant of exploration licences in Arnhem Land.</li> <li>• Historically 9 licences have covered varying large and small parts of the Nabarlek North licences with ELs 734 and 5890 operated by Cameco and PNC, AP2543 operated by Union Carbide, EL22707 operated by Rio Tinto and EL24868 operated by UXA resources being the primary historic licences of note.</li> <li>• PNC/Cameco collected regional geophysical datasets and drilled sparse shallow RAB holes and collected soil samples in the northern and western part of the current work area. No anomalous uranium was encountered.</li> <li>• UXA collected AEM and Hyperspectral over a large part of the work area in 2011. This was followed by soil sampling in a similar area to Alligator's current work program area but was largely ineffectual due to transported cover. Radon cup and ground scintillometer surveys were also of mixed success. In 2011-2012, UXA drilled 48 RC holes for 4056 m in areas of elevated radioactivity, most of which lie on the southern boundary of the tenement package closer to the U40 Prospect (currently held by DevEx Resources Ltd). Holes were gamma logged but no significant mineralisation was encountered. A small ground gravity survey was undertaken, which has now provided Alligator with a comparative dataset for the airborne gravity (Falcon).</li> <li>• DevEX Resources Ltd have continued to drill-test the U40 Prospect on the southern edge of AGE's Nabarlek North. Details of results can be found in ASX announcements.</li> </ul>

Criteria	JORC Code explanation	Commentary
Geology	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>The projects area is located within the eastern margin of the Pine Creek Orogen (PCO) and lies on the eastern boundary of the Nimbuwah structural domain (Needham 1988).</li> <li>The Nabarlek North licences represent a region with poor sub-surface geological understanding and limited historic exploration and subsequent interpretation. The majority of the licences are covered by undifferentiated Cretaceous and Cenozoic sediments and lateritic cover with limited basement exposure. A central sandstone stack (Nimbuwah Rock) within the licences and minor, thin Kombolgie sandstone cover in the southeast indicate stratigraphy throughout the licences is close to the main basal Kombolgie unconformity level.</li> <li>NT department datasets, neighbouring exploration licence interpretations and historic works have identified an Archean dome encroaching the western sides of EL31480. This Archean dome has recently been re-classified from Nimbuwah Complex within NTGS datasets to Arrarra Gneiss, a lateral equivalent of the Nanambu Complex proximal to the Ranger and Jabiluka Uranium deposits (Ahmad et al, 2013). With the identification of this Archean unit, it is inferred that Proterozoic units of the Lower Cahill, Upper Cahill and Nourlangie Schist are likely present under cover sequences throughout the Nabarlek North licences.</li> <li>Extensive work has been undertaken just south of EL31480 at the U40 prospect where a small high grade Uranium occurrence resides in a regional NNW orientated structure known as the Quarry Fault (DevEx Resources Ltd). This interpreted structural zone extends through the Nabarlek North licences and has associated Uranium, Copper, Gold and Platinum group mineralisation know to the south of the Nabarlek North licences. From drilling and geophysical interpretation at the U40 prospect (DevEx Annual Report, 2019) the Quarry Fault is highlighted by a conductive anomaly from IP geophysics and has a downthrown western side. The western margin of the Quarry Fault at U40 has shallow Kombolgie cover with underlying Cahill Formation to depth whilst the hanging eastern wall has Cahill Formation to approximately 120m depth overlying basement gneiss. Several other major structures are evident in existing airborne geophysics at varying orientations with little understanding and often hosting younger dolerite intrusions.</li> <li>The exploration model for uranium in the ARUP is based on the Ranger, Ranger 3-deeps and Jabiluka deposits. These are often referred to as “unconformity style” uranium deposits with key structural controls. It is generally believed that oxidised fluids circulating in the Kombolgie sandstones corroded various uranium-bearing mineral phases and this fluid was able to interact with the underlying reduced basement rocks along low-angle structures. Uranium mineralisation took place at or near that unconformity by Redox processes. The host rock is typically Mg or Fe bearing altered carboniferous lithologies of the Lower Cahill formation. The ideal formation for these attributes is the Cahill Formation, which host all of the main deposits in the region. Alligator believes that this formation is also present in the Nabarlek North Project under only thin cover, and this has encouraged the company to explore the area rather than areas with thick sandstone cover.</li> </ul>

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Drill hole Information	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The RC drilling program entailed nine holes in total, drilled on 3 fences. The table below provided specific details:</li> </ul> <table border="1"> <thead> <tr> <th>Hole ID</th> <th>Fence</th> <th>Easting</th> <th>Northing</th> <th>RL (m)</th> <th>Azi</th> <th>Dip</th> <th>TD (m)</th> <th>Intercept</th> </tr> </thead> <tbody> <tr> <td>NNRC23-001</td> <td>3</td> <td>323149</td> <td>8648505</td> <td>68</td> <td>225</td> <td>-60</td> <td>150</td> <td></td> </tr> <tr> <td>NNRC23-002</td> <td>3</td> <td>323404</td> <td>8648603</td> <td>68</td> <td>225</td> <td>-60</td> <td>150</td> <td></td> </tr> <tr> <td>NNRC23-003</td> <td>3</td> <td>323798</td> <td>8648608</td> <td>68</td> <td>90</td> <td>-65</td> <td>150</td> <td></td> </tr> <tr> <td>NNRC23-004</td> <td>2</td> <td>327137</td> <td>8646307</td> <td>64</td> <td>90</td> <td>-60</td> <td>150</td> <td></td> </tr> <tr> <td>NNRC23-005</td> <td>2</td> <td>327073</td> <td>8646305</td> <td>64</td> <td>90</td> <td>-60</td> <td>150</td> <td></td> </tr> <tr> <td>NNRC23-006</td> <td>2</td> <td>327003</td> <td>8646305</td> <td>64</td> <td>90</td> <td>-60</td> <td>150</td> <td></td> </tr> <tr> <td>NNRC23-007</td> <td>1</td> <td>327257</td> <td>8645303</td> <td>63</td> <td>90</td> <td>-60</td> <td>150</td> <td></td> </tr> <tr> <td>NNRC23-008</td> <td>1</td> <td>327156</td> <td>8645306</td> <td>64</td> <td>90</td> <td>-60</td> <td>198</td> <td>U intercept between 35 - 38 m downhole</td> </tr> <tr> <td>NNRC23-009</td> <td>1</td> <td>327033</td> <td>8645302</td> <td>65</td> <td>90</td> <td>-60</td> <td>150</td> <td></td> </tr> </tbody> </table>	Hole ID	Fence	Easting	Northing	RL (m)	Azi	Dip	TD (m)	Intercept	NNRC23-001	3	323149	8648505	68	225	-60	150		NNRC23-002	3	323404	8648603	68	225	-60	150		NNRC23-003	3	323798	8648608	68	90	-65	150		NNRC23-004	2	327137	8646307	64	90	-60	150		NNRC23-005	2	327073	8646305	64	90	-60	150		NNRC23-006	2	327003	8646305	64	90	-60	150		NNRC23-007	1	327257	8645303	63	90	-60	150		NNRC23-008	1	327156	8645306	64	90	-60	198	U intercept between 35 - 38 m downhole	NNRC23-009	1	327033	8645302	65	90	-60	150	
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Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>No data has been aggregated.</li> <li>A 200ppm U3O8 minimum cut off has been used for reported intersects.</li> <li>U3O8 values are calculated using the metal to oxide formula: <math>U(\text{ppm}) \times 1.1792 = U3O8(\text{ppm})</math></li> </ul>																																																																																										
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>Uranium mineralisation was intersected over a narrow interval in one of nine holes.</li> <li>While it is possible that this intersection has some structural or geological association to the U40 prospect to the south, it cannot be assumed nor is there sufficient evidence to draw conclusions on true width or continuity.</li> </ul>																																																																																										



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Diagrams	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>See figures in release.</li> <li>Appropriate scales and orientations are applied to all diagrams.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are discussed in the report and shown in figures.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>See release details.</li> <li>All meaningful and material data reported.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>The RC drilling results as reported here were part of a comprehensive exploration program across the AGE Nabarlek North Project in 2023. Other works complementing the above included: <ul style="list-style-type: none"> <li>6,233 m of air-core drilling</li> <li>100 auger holes</li> <li>15 km<sup>2</sup> of gradient IP</li> <li>2 lines of pole dipole (follow-up to the above)</li> <li>Surface mapping</li> <li>A total of 1750 samples collected for full ICPMS and fire assays (to cover 61 elements, including some isotopes and rare-earth elements)</li> </ul> </li> <li>Once 2023 assays have been fully received (anticipated by February 2024), data integration and interpretation will begin. Nevertheless, it is expected that these very promising RC results confirming suitable host, trap and mineralisation will lead to: <ul style="list-style-type: none"> <li>Additional target areas for both U and rare earths throughout the tenure</li> <li>Support for further ground mapping</li> <li>Support for further fences of RC holes across specific features</li> <li>Potentially, further high-resolution geophysical surveying across the under-explored northern portion tenure of the tenure to accelerate focussed targeting</li> </ul> </li> </ul> <p>Final recommendations are expected to be made by March 2024, to be carried through to a field campaign from June – November 2024.</p>