Alligator Energy

QUARTERLY REPORT

FOR THE PERIOD ENDING

31 December 2023

ASX: AGE

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Quarter Highlights

Alligator Energy Limited ("Alligator", "AGE" or the "Company") is pleased to release the 31 December 2023 Quarterly Activities Report.

Uranium - *Samphire Project*

- Resource infill drilling was completed in early October, with 117 holes for 10,062 m drilled in total for the 2023 calendar year.
- The infill drilling was successful in converting a further portion of the Inferred Category of the JORC Blackbush Mineral Resource to Indicated:
  - The **Indicated Mineral Resource increased by 21% to 12.9Mlbs** at an average grade of 754ppm U_3O_8 – a 115% increase since commencement of resource drilling in 2022.
  - 2.2Mlbs U_3O_8 was converted to Indicated Resource, with a corresponding drop in Inferred resource of 2.9Mlbs.
  - 74% of the metal in the total MRE is now classified as Indicated.
- At 250ppm cut-off grade the Blackbush Mineral Resource Estimate[1] (MRE) now stands at an Indicated Mineral Resource of 12.9Mlbs at 754ppm and an Inferred Mineral Resource of 4.6Mlbs at 447ppm, **totalling 17.5Mlbs at 640ppm U_3O_8.**
- An increase in the confidence level of the MRE for Blackbush supported an update to the initial[2] Scoping Study in December incorporating a lift in the annualised in-situ recovery (ISR) Production Target from 1Mlbs pa to 1.2Mlbs pa, and an increased price assumption to US$75 / lb. Key highlights from the updated study include:
  - 69% increase to the post-tax NPV8 to A$257M.
  - Reduction in payback period by 30% to 2.45 years.
  - Net project cashflow (post Capex and tax) increase of 52% to A$467M.
  - 20% step-up in the steady state annual Production with only a minor 2% increase in capital expenditure forecast to A$131M.
  - Favourable average cash operating costs (C1) of A$22.94/lb U3O8 (US$16.06/lb U3O8) with a range of A$21.79/lb - A$24.09/lb and AISC of A$47.58/lb U3O8 (US$33.31/lb U3O8) with range of A$45.20/lb to A$49.96/lb.
- An **Exploration Target Range estimate of 14Mlbs to 75Mlbs** of contained eU_3O_8 (using 250 ppm eU_3O_8 cut-off) was established during the quarter for areas **outside of the Blackbush MRE envelope** comprising extensions to Blackbush mineralisation, the Plumbush Prospect as well as other areas of known mineralisation:
  - In calculating the Exploration Target Range results show that with 64 kms of interpreted host palaeochannel strike length, only 10% of the prospective system (Blackbush Deposit and portion of Plumbush Prospect) has been well explored, with a further 30% partly drill tested, and
  - 58% (over 37 kms) of the prospective areas of the palaeochannel system remain completely untested, indicating the significant potential for new discoveries in the Project area.
- AGE's Retention Lease Application (RLA) to conduct its Field Recovery Trial (FRT) progressed with formal feedback received from the Department for Energy & Mining (DEM) on 20 December 2023 regarding the public consultation and the various SA Government Department's submissions. Drafting of AGE's formal responses to the submissions is currently in progress.

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[1] *AGE ASX Release 7 December 2023; 02751141.pdf (weblink.com.au)*

[2] *AGE ASX Release 14 March 2023, https://wcsecure.weblink.com.au/pdf/AGE/02643151.pdf*

- Off-site fabrication of the Field Recovery Trial pilot plant by Adelaide Control Engineering (ACE) is nearing completion and transport of the pilot plant to AGE's Whyalla storage facility will occur late February/early March after initial wet commissioning and acceptance testing has been completed.

Big Lake Project

- A cultural heritage survey of proposed 2024 drill lines was undertaken in November by the Yandruwandha Yawarrawarrka Traditional Landowners. Subject to receipt of final report and finalisation of drilling contract, the 5,600 m stratigraphic, concept-testing drill program will commence in March 2024.

Nabarlek North Project

- All 2023 exploration and rehabilitation work was completed during the quarter. This included a nine-hole reverse circulation drilling program of 1,398 m, with hole NNRC23-008 returning a significant intercept of 3m at 0.12% U_3O_8 along trend from the U40 Prospect (refer ASX release of 18 December 2023).

Energy Minerals - *Piedmont Project (Ni Cu Co)*

- Based on the technical review and recommendations of the previous quarter, renewal of the principal tenement of Alpe Laghetto was initiated. A proposed works program was compiled and presented to the Turin Region Mines Department as part of the renewal process.

Corporate

- Cash balance at quarter end of $36.6M.
- In October 2023, the Company successfully completed a share purchase plan (SPP) offer raising $3.26M before costs, at an issue price of $0.052 per share.
- The Company held its 2023 AGM on 24 November 2023.
- In late November 2023, the Company issued 273,961,390 premium priced options under the terms of both the Placement completed in September 2023 and the SPP outlined above. The options are exercisable at $0.078 each at any time before 28 November 2025. AGE successfully applied for quotation of the Options with ASX which now trade under the code AGEOC.
- In December 2023, the Company completed terms for an initial investment commitment of $900k in EnviroCopper Ltd (ECL), an unlisted company undertaking early-stage copper ISR test work and trials on two oxide copper projects in South Australia. Alligator has the sole funding right to optional future investments in ECL up to 50.1%.

Plans for the forthcoming quarter:

- ***Samphire***
  - Exploration and resource extension drill testing commencing late January 2024 to advance toward extending the life of mine, with a drill rig secured for year-round drilling in 2024. All land access and other approvals in place for this work.
  - Progression of the RLA to approval via submission of AGE's formal responses the public/SA Government consultation on the application and submission of a Program for Environmental Protection and Rehabilitation (PEPR). The approval of the latter is required prior to commencement of FRT operations.
  - Transport of FRT infrastructure to Whyalla in readiness for on-site construction (post receipt of lease and PEPR approvals).
  - Initiation of optimisation studies (water, power, transport, logistics etc.) required to be concluded prior to commencement of a feasibility study. In addition, AGE is looking for ways to develop a low emission, low environmental and social impact operation and will commence early work on these evaluations and extend this in parallel to the feasibility study.

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- ***Big Lake*** – A 40-to-45-hole drilling program (circa 5,600m) is planned for commencement late in the forthcoming quarter. The program is the first step as 'proof of concept' for suitable host / concentration mechanisms for uranium bearing mineralisation in the formations overlying the Cooper Basin.
- ***Nabarlek North*** – Review and integration of all 2023 exploration data (geochemistry, IP, surface mapping and drill hole data), leading to refinement of target areas and exploration proposals for the 2024 field season. This includes looking at further potential along trend from the U40 Prospect following the significant uranium intercept from RC drilling in 2023.
- ***Piedmont*** – Subject to securing tenure renewal approval, planning to be progressed for reconnaissance geochemistry and geological mapping work across the district for May/June 2024.

Uranium Market

- Spot uranium price increased from US$73.50 / lb at end of September to US$100 / lb at end December 2023 – an increase of 36% in three months.
- Long term market pricing increased from US$62 / lb to US$68 / lb.
- At COP28 nuclear energy was formally included in the final COP agreement, and 22 countries committed to a tripling of nuclear power capacity by 2050.
- A "Prohibiting Russian Uranium Imports Act" Bill was passed through the US House of Representatives and is awaiting approval in the Senate.
- Uranium volumes contracted in the Term market topped 160 M lbs for 2023, compared with around 120 M lbs in 2022. This increased volume is still less than the replacement rate for uranium burn-up in the existing reactor fleet.
- During January, Kazatomprom made a brief statement that 2024 and 2025 uranium production would likely be impacted by ongoing acid supply shortages. This news had a significant impact on spot uranium prices, lifting this to over US$100 / lb.

Samphire Uranium Project Development

Blackbush Mineral Resource

Resource drilling was completed for the 2023 calendar year in early October at the Blackbush Deposit with continued focus on increasing the confidence of the Mineral Resource Estimate (MRE) through conversion of the Inferred category to Indicated status. A total of 117 holes (for 10,062 m) were completed.

Drilling was carried out primarily in the northern Blackbush West area which historically had very little Prompt Fission Neutron (PFN) acquired grade data (pU_3O_8) required for conversion of the mineral resource to Indicated status. Several significant uranium intercepts were encountered (BBRM23-126, 128, 133, 136, 142 & 144) in addition to the southern area (BBRM23-121,122, 123, 124, 154, 161, 163, 171, 175 & 184) showing that high-grade mineralisation extends beyond the area of the current Indicated Resource (Figure 1). Mineralisation also remains open to the west which will be drilled at the recommencement of drilling in late January 2024.

AMC Consultants were provided with this additional drill data to update the Mineral Resource Estimate (MRE) which was completed and announced in December 2023[3]. An additional 2.2MLbs was converted to the Indicated Mineral Resource category, which increased from 10.7MLbs to 12.9Mlbs at an average grade of 754ppm U3O8. This is a 21% increase from the previous Indicated MRE with no change in cut-off grade which has remained at 250ppm U_3O_8.

Overall, 74% of the Blackbush Mineral Resource is now classified as Indicated; a notable improvement from 40% in AGE's initial MRE targeting In-Situ Recovery announced September 2022. In summary at 250ppm cut-off grade the Blackbush resource now stands at Indicated Mineral Resource of 12.9Mlbs at 754ppm, and an

[3] *AGE ASX Release 7 December 2023; 02751141.pdf (weblink.com.au)*

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Inferred Mineral Resource of 4.6Mlbs at 447ppm, totalling 17.5Mlbs at 640ppm U_3O_8 (refer Blackbush Mineral Resource Estimate Table at the back of this report).

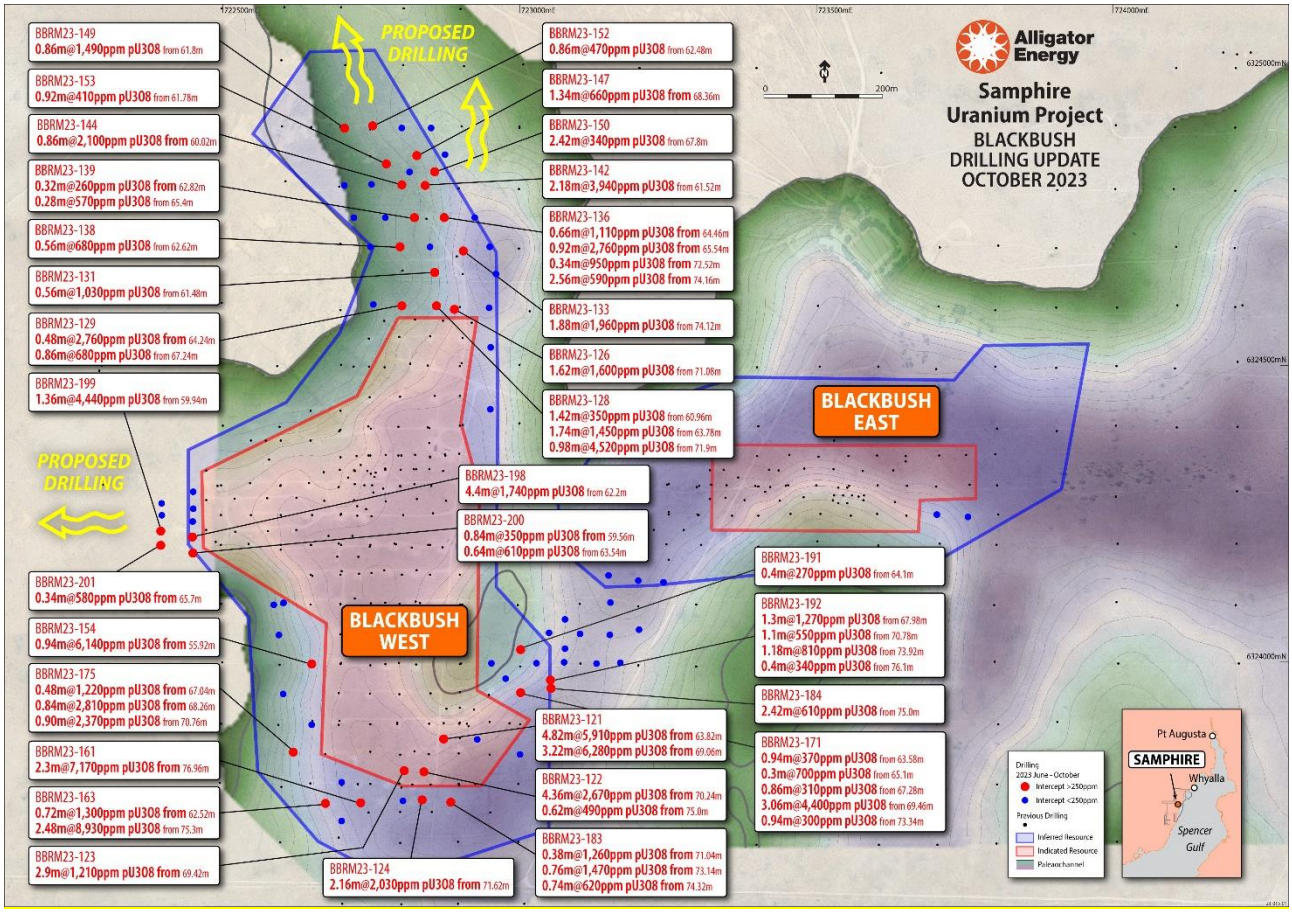

***Figure 1**: Current Inferred resource area outline (blue) and Indicated Resource area outline (red) showing AGE 2023 drilling focussed within the Inferred Resource envelope.*

Exploration Target Range

An Exploration Target Range was announced on 7 December 2023[4] and was estimated in accordance with JORC 2012 Clause 17 based on several factors including over 1,000 historical drillholes, statistical analysis of high and low range grade intercepts, thicknesses of target sand horizons (Kanaka Bed sands), palaeochannel strike length and the presence of underlying uraniferous granites combined with geophysical structural interpretations.

The Exploration Target Range is currently 16Mt to 37Mt at a grade between 390 and 903ppm eU_3O_8 for a range of 14Mlbs to 75Mlbs of contained eU_3O_8 at 250ppm cut-off. The range does not include the Blackbush Mineral Resource Estimate. The work identified 11 discrete palaeochannel areas, of which 5 were used in the above estimate (see Table 1 and Figure 2). Only Kanaka Bed sands that hosted areas amenable to In-Situ Recovery (ISR) were considered. Key advantages for AGE's Samphire exploration programs are:

- With 64 kms of interpreted palaeochannel strike length, only 10% of the prospective system (Blackbush Deposit and portion of Plumbush Prospect) has been well explored, with a further 30% partly drill tested.
- 58% (over 37 kms) of the prospective areas of the palaeochannel system remain completely untested, indicating the significant potential for new discoveries in the Project area.

[4] *AGE ASX Release 7 December 2023; 02751150.pdf (weblink.com.au)*

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Table 1: *Samphire Exploration Target Range including 5 out of 11 target areas within the Samphire Uranium Project Area.*

Target Area	Estimated Tonnage (Mt)		Estimated Grade (ppm U_3O_8)			Estimated Exploration Target Range (Mlb)	
	Min	Max	Min	Max	Average	Min	Max
Blackbush Extension 1	0.82	1.69	354	922	543	0.64	3.43
Blackbush Extension 2	2.09	4.94	382	697	487	1.76	7.59
North-eastern Channels	3.18	7.20	353	795	500	2.47	12.62
Eastern Channels	6.77	12.62	332	426	363	4.95	11.85
Plumbush	3.11	10.63	530	1676	912	3.63	39.28
Blackbush North	Not included in Target Range						
Central Channels	Not included in Target Range						
Western Channels	Not included in Target Range						
Plumbush Extended	Not included in Target Range						
Far North	Not included in Target Range						
Far South	Not included in Target Range						
					TOTAL	14	75

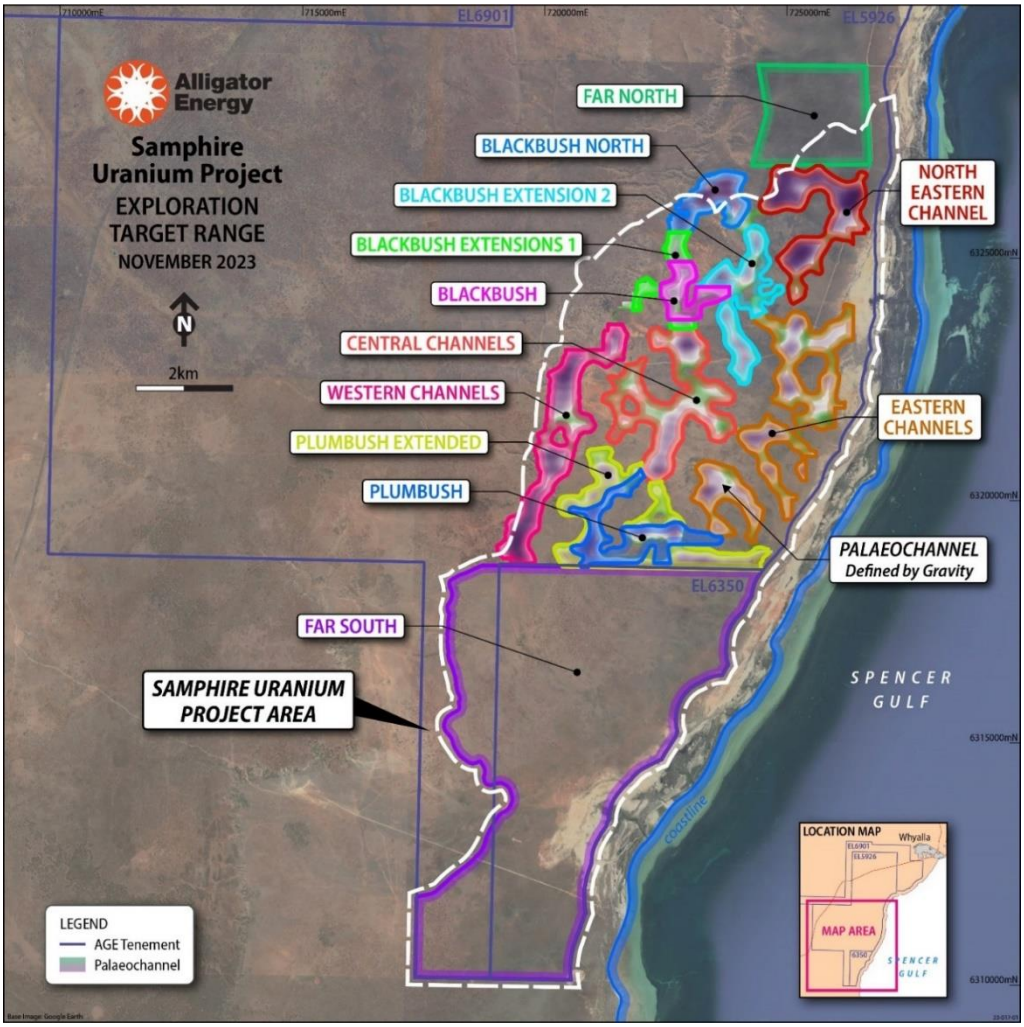

Figure 2: *Map highlighting the 11 target area locations within the Samphire Uranium Project Area.*

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Samphire Scoping Study Update

Adelaide-based Wallbridge Gilbert Aztec (WGA) consultants were engaged to update the initial Scoping Study[5] for Samphire targeting an increased production rate and an update of other key factors. The update was announced on 14 December 2023[6].

The Updated Scoping Study delivered a 69% increase to the post-tax NPV_8 to A$257M (A$244 M - A$270M) up from A$152M which was principally driven by:

- An increase in the annualised Production Target from 10.0 Mlbs U3O8 to 12.3 Mlbs pa over the same 12-year period which lifts revenues and free cashflows over a similar life-of-mine (LOM) assumption.
- Improved knowledge base and understanding through AGE progressing with the field recovery trial (FRT) planning, procurement, resource modelling and refinement of process design leading to some modifications to the original design criteria.
- Updating of other key inputs, principally commodity price and major component costs to reflect current market indicators.

Other key outcomes include:

- Enhanced Project economics at a forecast US$75/lb U3O8 realised sales price (previously US$65/lb) and an unchanged A$:US$ exchange rate of 70 cents.
- **Post-tax internal rate of return (IRR) of 42% (40.0% - 44.1%) up from 29%.**
- **Reduction in payback period by 30% to 2.45 years from start of production**.
- **Forecast net project cashflow (post Capex and tax) increase of 52% to A$467M (A$443M - A$490M).**
- Low initial capital expenditure forecast of A$131M (A$124M-A$138M) being an increase of 2% to achieve the 20% step-up in the steady state annual Production Target - including consistent application of contingency (30%) and a 5% escalation assumption (down from 10% previously due to improved ability to estimate costs).
- Favourable average cash operating costs (C1) of A$22.94/lb U3O8 (US$16.06/lb U3O8) with a range of A$21.79/lb - A$24.09/lb) and AISC (including transport, shipping, royalties and sustaining capital) of A$47.58/lb U3O8 (US$33.31/lb U3O8) with range of A$45.20/lb to A$49.96/lb when compared to other ISR operations and restart projects (Figure 3).

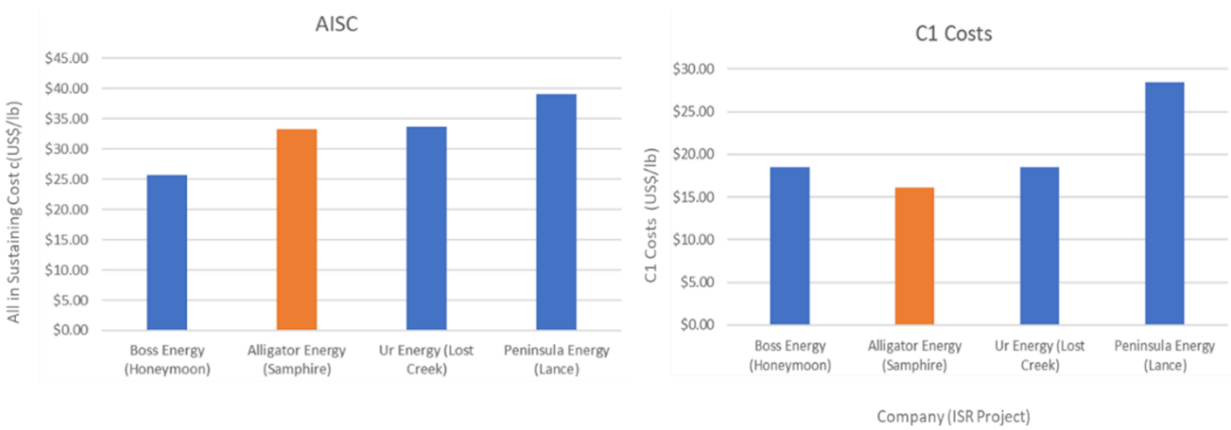

Figure 3: *Comparison of AISC and C1 Costs for ISR uranium mine development or restart projects (Data sourced from most recent published economics data by each Company).*

[5] *ASX Announcement 13 March 2023; Scoping Study – Samphire Uranium Project,* 45mmn6z3xk5r5p.pdf (asx.com.au)
[6] ASX Announcement 14 December 2023; Scoping Study Update– *Samphire Uranium Project* 02753924.pdf (weblink.com.au)

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Field Recovery Trial

In August 2023 AGE submitted its RLA to DEM to conduct a pilot ISR field trial. As part of the formal review and approval process, a public review and consultation period for this application concluded late September 2023 with formal feedback received from the Department for Energy & Mining (DEM) on 20 December 2023 regarding the public consultation and the various SA Government Department's submissions on the application. Drafting of AGE's formal responses to the submissions is currently in progress as the next step towards approval of the Lease.

Fabrication of the containerised FRT plant by Adelaide Control Engineering (ACE) continued during the quarter and is nearing completion with the current status as follows:

- Wellhouse module construction completed (Figure 4).
- Ion exchange (IX) columns were delivered on 15 December 2023, pipework fitting is in progress (Figure 5).
- Control system programming 70% complete.

Preparatory work such as planning for on-site assembly, civil design and ordering of supporting infrastructure (e.g. tanks, wellfield lines, office, ablutions, generators etc) for the FRT is in progress. Transport of the pilot plant to AGE's Whyalla storage facility will occur late February/early March after initial wet commissioning and acceptance testing has been completed.

***Figure 4**: Completed wellhouse module.*

***Figure 5**: Progress of ion exchange module fabrication*

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Big Lake Uranium (BLU) Project

Highlights for the quarter include:

- A Program for Environmental Protection and Rehabilitation (PEPR) for the proposed 2023 field exploration program was approved by the SA Department for Energy and Mining, subject to re-submittal / endorsement of a more comprehensive radiation management plan (RMP). The RMP has now been separately approved and an updated PEPR will be compiled.
- A formal clearance of drill lines with eight members of the Yandruwandha Yawarrawarrka Traditional Landowners Aboriginal Corporation (YYTLOAC) was carried out in November 2023. Based on initial feedback, Traditional Owners have no significant cultural issues with the drilling proposals. Now awaiting formal report from YYTLOAC prior to locking in drilling program for end of March 2024.
- Drilling proposals covering EL 6367 remain mostly unchanged from the previous quarter and are based around a series of drill lines or 'fences' to better understand the target stratigraphy in key areas across the Basin. In total 5,600 m of air-core drilling is planned over 40 – 45 holes, with average depths of 140m. Holes will be assayed to further assist with fine-tuning the seismic interpretation and data integration.
- First drilling program (principally stratigraphic and concept testing) expected to take four to six weeks, with plans already underway to organise follow-up, and more targeted, drilling before the end of 2024.

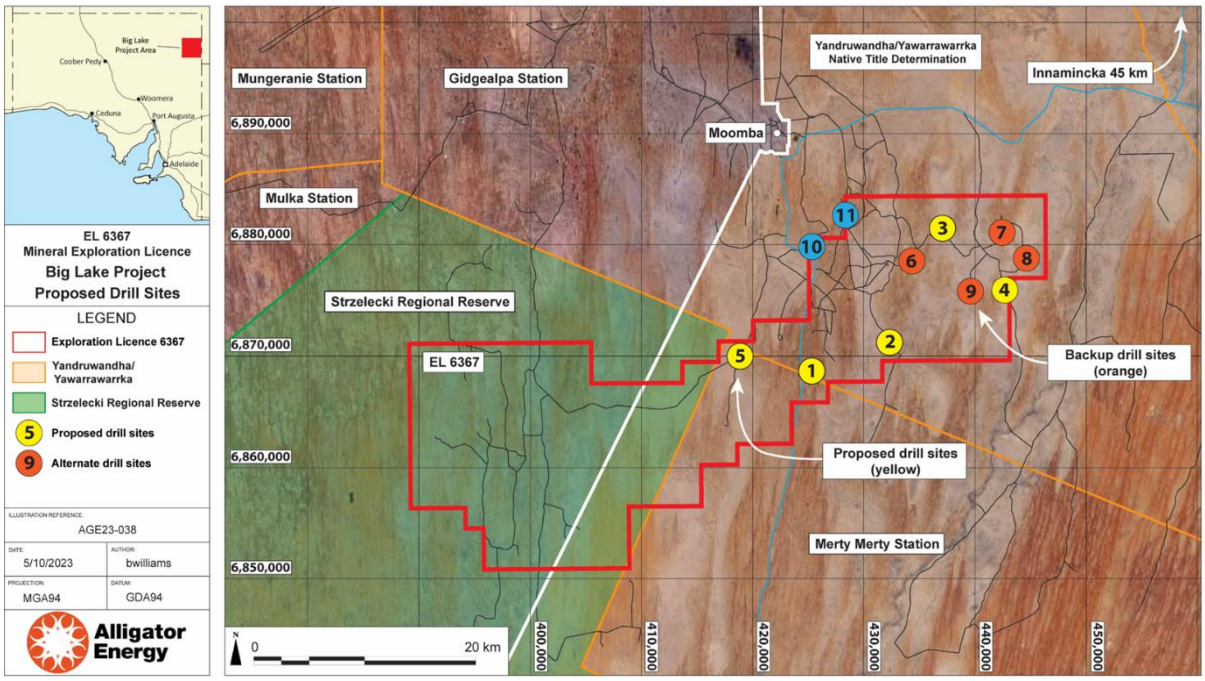

***Figure 6**: Big Lake Project. AGE Big Lake drilling proposals for March/April 2024 as a series of fences. Sites were inspected and cleared by traditional owners in November 2023 (final report pending).*

Alligator Rivers Uranium Province (ARUP)

- All exploration programs for 2023 were completed by November 2023. This included 15 km^2 of gradient IP, 3.4 km of dipole-dipole IP, over 320 air-core holes, 100 shallow auger holes and a 1,398 m RC drilling program (see details below).
- RC drilling comprised 9 holes forming a three-fence program (3 holes per fence). This drilling provided critical ties with recently completed geophysics, 2022 – 2023 geochemistry sampling and geological interpretations. As reported in ASX release of 19 December (https://wcsecure.weblink.com.au/pdf/AGE/02755611.pdf), significant uranium was intercepted in

NNRC23-008 returning 3m at 0.12% (1,211ppm) U_3O_8. This will form the basis of further investigations to understand the potential continuity of U40 prospect mineralisation into AGE's Nabarlek North (NN) project and aid with broader target generation (see Figure 7).

- Northern Territory DITT, Office of the Supervising Scientist and the Northen Land Council (NLC) undertook an audit of AGE's NN exploration activities in early October. Overall, findings were very positive with only minor recommendations now incorporated into the 2024 MMP planned for submission early Q1 24.
- Consultation meeting was held with Nabarlek North Traditional Owners and the NLC in mid-October to present 2024 work programs with current works well received and consent provided for all 2024 proposed works.
- Subject to delivery of remaining 2023 assay and geophysical data through January, planning for the forthcoming field season will commence immediately. This will include a greater emphasis on highlighted target zones, based primarily on key structures, sub-cover geochemistry and host rock mapping. Along with potentially more drilling on trend from the U40 prospect, the 2024 program will extend the current search space into northern portions of AGE's Nabarlek North project area for the first time.

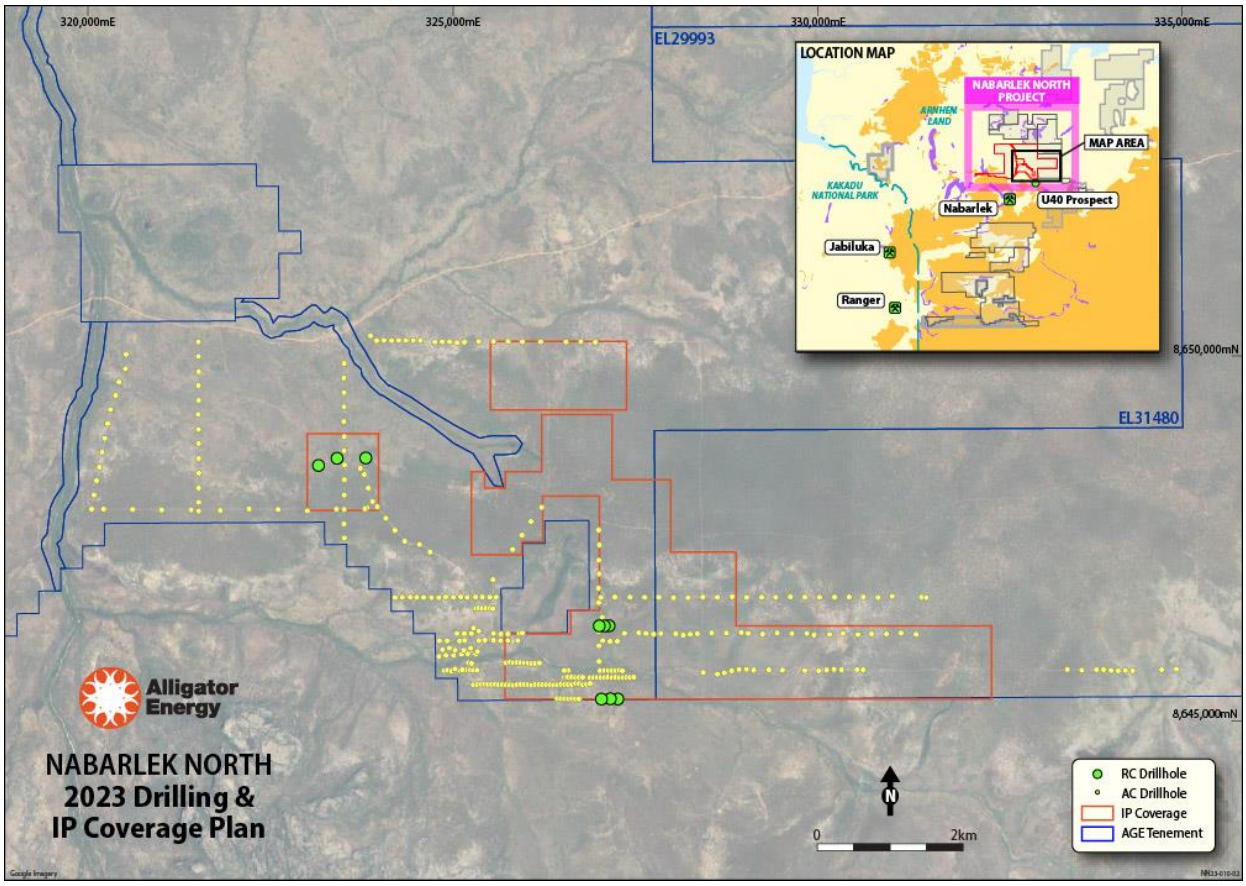

***Figure 7**. AGE Nabarlek North Project and tenure showing locations of 2023 RC drilling (green circles), AC drilling (yellow circles) and area of coverage with IP geophysics (both gradient and dipole dipole – brown polygon)*

Piedmont Nickel Cobalt Project - NW Italy

- Arrangements were made to renew Piedmont tenure licences stemming from the technical recommendations of the previous quarter. All required paperwork was submitted prior to the expiry date for a renewal extension related to the Alpe Laghetto licence.
- As part of the license renewal, a technical report was submitted to the Italian mining authorities covering all exploration work undertaken by the AGE and its joint venture partner. The submission

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included relinquishment of 13.9 km^2 of the Alpe Laghetto licence, representing 47% of the original area (29.48 km2), based on suitability of Ni-Cu-Co target host rock (Figure 8). Recommendations were also made for future exploration including:

- Regional chemical mapping based on a key suite of metals.
- A structural interpretation.
- Field mapping in key areas identified from above.
- Consideration given for another airborne EM survey but to cover the entire belt
- A heli-supported drilling program in 2025, should suitable targets be identified from the above work programs.

- JV meeting held on 18 December to discuss and agree on the program going forward. Initial planning, subject to obtaining the necessary renewals is underway in preparation of reconnaissance work across the entire district in Q2 2024.

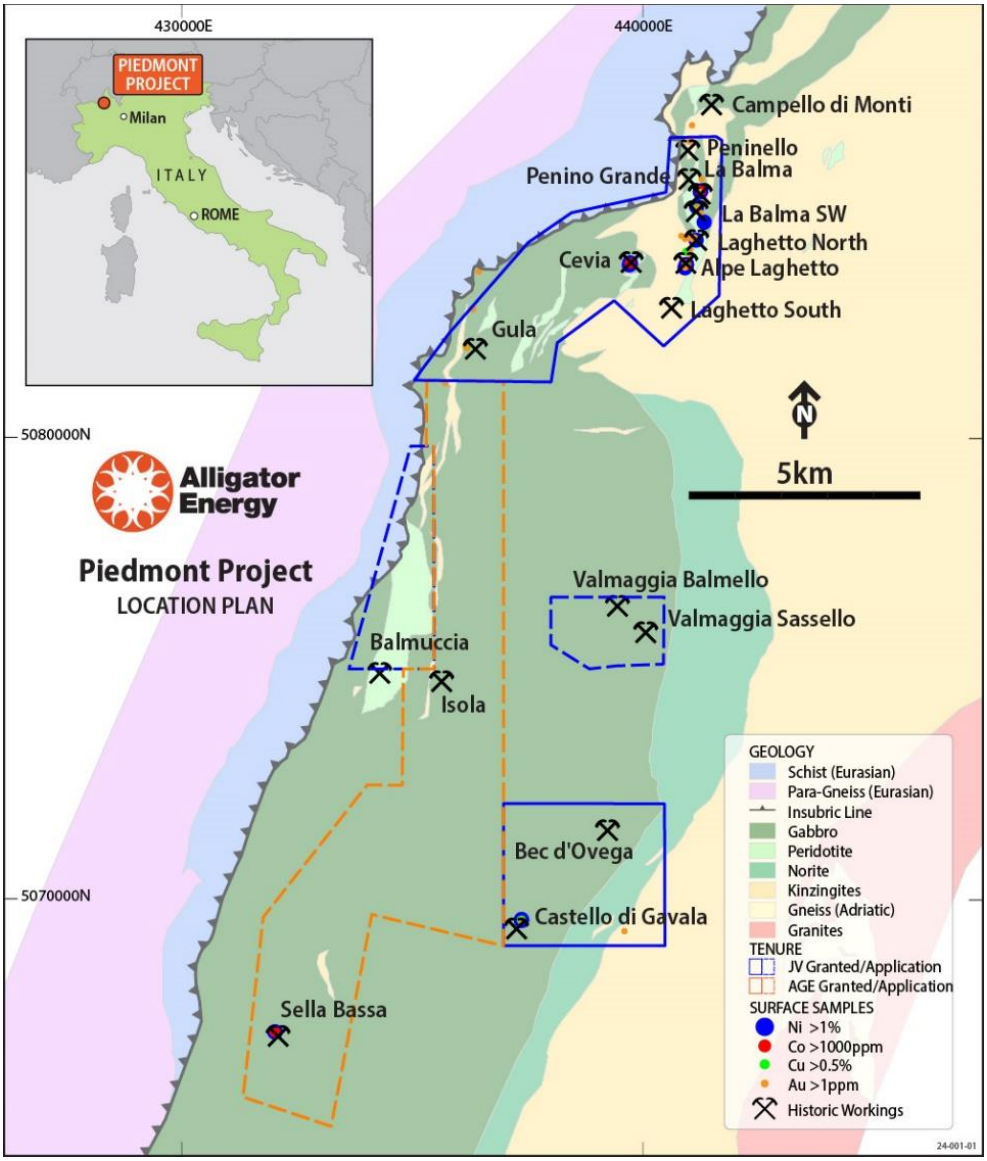

***Figure 8**. Piedmont project area. While the La Balma and Alpe Laghetto prospects have been the focus of recent work, the entire district is prospective for Ni-Cu-Co deposits and has seen limited modern systematic exploration.*

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Market Update

The spot uranium price increased from US$73.50 / lb at end September 2023 to reach US$100 / lb by the end of the quarter. The spot price reached a high of US$106 / lb in mid-January. Long term market price indicators (based on fixed price escalated contracts) increased from US$62 / lb to US$68 / lb by quarter end.

There was a continued significant resurgence of interest in, and commitment to the ongoing use and growth of nuclear power to support global efforts to reduce greenhouse gas emissions.

The September World Nuclear Association annual symposium recognised a critical need for expansion of nuclear power, with many presentations on the consequent pressure on the nuclear fuel cycle – i.e. supply of uranium, conversion and enrichment.

At COP28, held during the quarter nuclear energy was formally included in the COP agreement. At this event, 22 countries committed to a tripling of nuclear power capacity by 2050, in conjunction with other sustainable and renewable energy sources, to enable continued emission reduction targets to be met globally.

A "Prohibiting Russian Uranium Imports Act" Bill was passed through the US House of Representatives, and is awaiting approval in the Senate. This Bill would establish annual caps on the amount of low enriched uranium that may be imported into the US through to the end of 2027.

The US is also supporting domestic enrichment capability, with the White House recently requesting $2.2 B from Congress to boost U.S. enrichment capacity. Along with this, the US House of Res recently passed the RELEIVE Act which includes $2.7 B in funding for the "expenses necessary for at least two competitive awards for the acquisition and distribution" of LEU and HALEU.

The USA, Canada, France, Japan, and the UK announced plans at COP28 for government-led investments in uranium enrichment/conversion in the next 3-years.

The UK Government announced an investment of £300 million to support future domestic production of High Assay Low Enriched Uranium (HALEU) nuclear fuel, which would support the next generation of Small Modular Reactors.

The USA also announced it was seeking bids from contractors to establish a domestic HALEU production facility, allocating US$500 million for this.

Uranium volumes contracted in the Term market topped 160 M lbs for 2023, compared with around 120 M lbs in 2022. This increased volume is still less than the replacement rate for uranium burn-up in the existing reactor fleet.

During January, Kazatomprom made a brief statement that 2024 and 2025 uranium production would likely be impacted by ongoing acid supply shortages. This news had a significant impact on spot uranium prices, lifting this to over US$100 / lb.

Other significant nuclear industry news included:

- Sweden removes cap which previously limited the number of reactors to 10. Recall Sweden is looking to have 10 operating rectors (incl. SMRs) by 2045, up from 6 today.
- Ontario Power Generation to cooperate with EDF (France) and Westinghouse on potential new reactors in Canada (currently, all reactors in Canada are CANDU).
- Uzbekistan in talks with several parties (incl. Russia) to build its potential first reactor.
- Belgium Govt and its utility agree on 10-year extensions for its 2 remaining reactors (PM calls for an additional 10-years). Belgium was previously to shutdown all its reactors by 2025.

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- Poland's first reactor gets government approval (targeting operating in 2035).
- EDF to build at least 1 reactor (EPR2) per year starting in the 2030s. France has initial plans for 6 new reactors, plus the potential for another 8.
- EDF submits offer to build new reactors in Slovenia (two smaller or one larger reactor).
- Two Holtec 300 MW SMRs to be built at Palisades in Michigan by mid 2030s.

Corporate

In October 2023, the Company successfully completed a share purchase plan (SPP) offer raising $3.26M, before costs, at an issue price of $0.052 per share. The funds raised under the SPP are planned to be used for:

- Samphire - Feasibility study and mining lease application
- Samphire - Ongoing resource drilling and geophysics program
- Exploration on targets Nabarlek North (ARUP) and follow up drilling at Big Lake
- Business development opportunities and
- Corporate costs and general working capital.

In late November 2023, the Company, after obtaining Shareholder approval at the 2023 AGM, issued 273,961,390 premium priced options under the terms of both the Placement completed in September 2023 and the SPP outlined above. The options are exercisable at $0.078 each at any time before 28 November 2025. AGE successfully applied for quotation of the Options with ASX which now trade under the code AGEOC.

In December 2023, the Company completed terms for an initial investment commitment of $900k in EnviroCopper Ltd (ECL) an unlisted company undertaking early stage ISR test work and trials on two oxide copper projects in South Australia. The transaction also involves Alligator and ECL entering into a Shareholder's Agreement providing Alligator with an exclusive option to sole fund ECL's activities and increase its equity ownership in ECL to 50.1% over the next ~4 years. Optional future investment in ECL will be on the following basis:

- Stage 1 Investment: Following the Initial Investment, in mid-2024, Alligator may elect to invest a further ~$1.1 million to increase its interest in ECL to 15.6%. Should Alligator elect not to make the Stage 1 Investment, it will offer a 6-month working capital facility to ECL up to a maximum of A$450,000 to allow for alternative funding sources to be pursued.
- Stage 2A Investment: Following the Stage 1 Investment outcomes and upon receipt of a satisfactory Stage 2A budget programme from ECL, Alligator may elect to invest a further ~$2.0 million to increase its interest in ECL to 26.7%.
- Stage 2B & 2C Investment: Following the Stage 2A Investment outcomes and upon receipt of satisfactory Stage 2B & 2C budget programmes from ECL, Alligator may elect to invest between A$7.0 million and $8.6 million across two equal tranches (Alligator not obligated to fund both tranches) to increase its interest in ECL to 50.1%.

The Subscription Agreement for the initial $900k investment and Shareholders' Agreement covering the sole funding rights are cross conditional on each other as well as well as completion of ECL's Alford West consolidation transaction with Andromeda Metals Limited. Completion of that transaction is conditional on a deed of assignment and assumption being entered into in relation to the Moonta Porphyry Joint Venture which covers a portion of the tenement area. Completion of the transaction occurred on 25 January 2024.

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Capital Structure and Listing Rule 5 disclosures

At 31 December 2023, the Company had the following capital structure and cash balances:

As at 31 December 2023	
Cash Balance	A$36.6M
Ordinary Fully Paid Ordinary Shares (AGE)	3,862.3M
Listed Options 7.8c (Exp 28/11/25) (AGEOC)	273.9M
Unlisted Options 8.1c (Exp 01/12/25)	132.0M
Unlisted Employee Incentive Performance Options	28.9M
Big Lake Performance Shares (Exp 10/12/24) (see Appendix 1)	30.0M

In mid-December 2023 the Company issued 15,508,669 zero strike priced options (split between short and long term) to employees and contractors under the Performance Incentive Plan for the 2023/24 financial year.

Expenditure on exploration and evaluation activities during the December quarter totalled $3,106k (previous quarter - $3,232k) and related principally to advancing the Samphire and Nabarlek North Projects.

Payments to related parties including non-executive director fees and the salary of the CEO and Managing Director for the March quarter totalled $130k (previous quarter $118k).

This announcement has been authorised for release by the Board.

Contacts:

For more information, please contact:

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CEO & Director

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Mr. Mike Meintjes

CFO & Company Secretary

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Alex Cowie

Media & Investor Relations

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Competent Person's Statement

Uranium

The information in this announcement that relates drillhole data, QAQC and geology aspects related to the project is based on and fairly represents information provided 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.

The information in this announcement that relates to the Blackbush Mineral Resource estimate (uranium) is based on and fairly represents information compiled by and generated by Mr Ingvar Kirchner, AMC Geology Manager (Perth) and a full-time employee of AMC Consultants. Mr Kirchner is a Fellow of the Australasian Institute of Mining and Metallurgy (the AusIMM) and a Member of the Australian Institute of Geoscientists (the AIG). Mr Kirchner has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which is being undertaken to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code).

Nickel Cobalt

Information in this report is based on current and historic Exploration Results compiled by Mr Geoffrey Chapman who is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM). Mr Chapman is a Consultant Geologist with 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 Chapman consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.

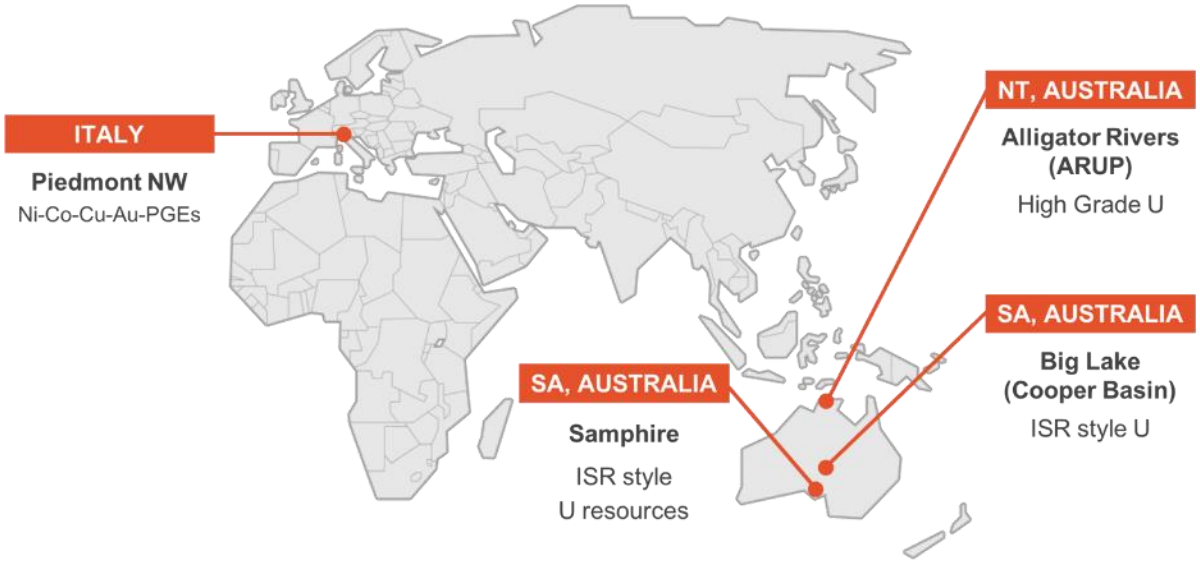
Forward Looking Statement

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.

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



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Alligator Group Tenure Holdings at Quarter End:

The following information is provided pursuant to Listing Rule 5.3.3 for the quarter ended 31 December 2023.

ARUP (NT) Uranium						
Licence Number	**Tenement Name**	**Ownership**	**Interest**	**Area (km²)**	**State**	**Status**
EL24921	Tin Camp Creek	TCC Project P/L	98	76.79	NT	Granted
EL24922	Tin Camp Creek	TCC Project P/L	98	194.59	NT	Granted
EL25002	Tin Camp Creek	TCC Project P/L	100	11.55	NT	Granted
EL24291	Beatrice	Alligator Energy Ltd	100	337.21	NT	Granted
EL26796	Beatrice	Alligator Energy Ltd	100	19.77	NT	Granted
EL27252	Stevens	Northern Prospector P/L	100	6.75	NT	Granted
EL27253	Stevens	Northern Prospector P/L	100	5.61	NT	Granted
EL28389	Nabarlek North	Northern Prospector P/L	100	110.83	NT	Granted
EL28390	Nabarlek North	Northern Prospector P/L	100	33.58	NT	Granted
EL29991	Nabarlek North	Northern Prospector P/L	100	26.87	NT	Granted
EL29992	Nabarlek North	Northern Prospector P/L	100	63.81	NT	Granted
EL29993	Nabarlek North	Northern Prospector P/L	100	57.06	NT	Granted
EL31480	Nabarlek North	Northern Prospector P/L	100	188.44	NT	Granted
EL26793, EL26794, EL26795	Beatrice	Alligator Energy Ltd	100	123.88	NT	Application
EL27777, EL27778, EL28176, EL28293, EL28315, EL28863, EL28864, EL28865, EL28950, EL31452, EL31453, EL31454, EL32075, EL32389, EL32390, EL32391	Various	Northern Prospector P/L	100	907.44	NT	Applications
Eyre Peninsula (SA) Uranium						
EL5926	Samphire	S Uranium Pty Ltd	100	332	SA	Granted
EL6350	Samphire	S Uranium Pty Ltd	100	38	SA	Granted
EL6835	Samphire	S Uranium Pty Ltd	100	61	SA	Granted
EL6901	Samphire	S Uranium Pty Ltd	100	119	SA	Granted
Cooper Basin (SA) Uranium						
EL6367	Big Lake	Big Lake Uranium Pty Ltd	100	818	SA	Granted
EL6847	Big Lake	Big Lake Uranium Pty Ltd	100	841	SA	Granted
EL6848	Big Lake	Big Lake Uranium Pty Ltd	100	877	SA	Granted
EL6849	Big Lake	Big Lake Uranium Pty Ltd	100	978	SA	Granted
EL6902	Big Lake	Big Lake Uranium Pty Ltd	100	939	SA	Granted
EL6903	Big Lake	Big Lake Uranium Pty Ltd	100	994	SA	Granted
EL6904	Big Lake	Big Lake Uranium Pty Ltd	100	975	SA	Granted
Piedmont (NW Italy) Ni-Co – JV						
P38V	Laghetto	Ivrea Minerals Pty Ltd	51*	29.48	PIE (Italy)	Reapplication
P39V	Gavala	KEC Exploration Pty ltd	51*	10.82	PIE (Italy)	Granted
P29V	Galerno	KEC Exploration Pty ltd	51*	5.66	PIE (Italy)	Reapplication
P0044V	Valmaggia	AGE EV Minerale SrL	51*	3.48	PIE (Italy)	Application
Piedmont (NW Italy) Ni-Co – AGE						
P0042V	Sella Bassa	AGE EV Minerale SrL	100	36.72	PIE (Italy)	Application

*- subject to a Joint Venture Agreement with Chris Reindler and Partners in NW Italy

Blackbush Mineral Resource Estimate reported above a 250ppm U_3O_8 cut-off.

JORC Category	Mt	Grade (U_3O_8 ppm)	U_3O_8 Metal (Mlbs)
Indicated	7.8	754	12.9
Inferred	4.6	447	4.6
Total	12.4	640	17.5

The model is reported unconstrained and above a 250 ppm U_3O_8 lower cut-off grade for all zones in consideration of potential for recovery by in situ leach processes.
Estimation is by ordinary kriging for all mineralised zones.
Density is assigned as 2.05 t/m^3 based on limited test work.
The model assumes agglomeration of 12.5mE x 12.5mN x [variable]mRL panels for definition of well fields for production.
The model does not account for dilution, ore loss or recovery issues. These parameters should be considered during the mining study as being dependent on the treatment process.
Classification is according to JORC Code Mineral Resource categories.
Totals may vary due to rounded figures

The mineral resource estimate in this announcement were reported by the Company in accordance with listing rule 5.8 on 7 December 2023. The Company confirms it is not aware of any new information or data that materially affects the information included in the previous announcement and that all material assumptions and technical parameters underpinning the estimates in the previous announcement continue to apply and have not materially changed.

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Appendix 1

Performance Shares on Issue

A Listing Rule 6.1 waiver was granted in relation to the Performance Shares issued under the terms of the Big Lake Uranium Farm-in and Share Sale Agreement. The waiver granted by the ASX included the following disclosure requirements in each Quarterly, Half Year and Annual Report:

1. Number of Performance Shares on issue at Quarter end: 30,000,000
2. Summary of the terms and conditions of the Performance Shares: See details below
3. Performance Shares converted or cancelled during the Quarter: NIL
4. Performance Share milestones met during the Quarter: NIL

Summary of terms and conditions attaching to the Big Lake Uranium Performance Shares (as amended)

Rights attaching to Performance Shares

(a) Each Performance Share is a share in the capital of Alligator Energy Limited (**AGE** or the **Company**) (**Performance Share**).

(b) A Performance Share shall confer on the holder (**Holder**) the right to receive notices of general meetings, financial reports and accounts of the Company that are circulated to shareholders of the Company (**Shareholders**).

(c) The Holder has the right to attend general meetings of Shareholders (**General Meeting**). A Performance Share does not entitle the Holder to vote on any resolutions proposed at a General Meeting.

(d) A Performance Share does not entitle the Holder to any dividends.

(e) The Holder of a Performance Share is not entitled to participate in the surplus profits or assets of the Company upon the winding up of the Company.

(f) The Holder of a Performance Share is not entitled to a return of capital upon a reduction of capital or otherwise.

(g) A Performance Share is not transferable, except as otherwise contemplated by these terms.

(h) The Holder of a Performance Share will not be entitled to participate in new issues of capital offered to holders of shares such as bonus issues and entitlement issues.

(i) A Performance Share gives the Holder no rights other than those expressly provided by these terms and those provided at law where such rights at law cannot be excluded by these terms.

(j) The Performance Shares will not be quoted on ASX. However, upon conversion of the Performance Shares into Shares, the Shares will (as and from allotment) rank equally with and confer rights identical with all other Shares then on issues and the Company must within two (2) Business Days after the conversion, apply for official quotation of the Shares arising from the conversion on ASX.

(k) Shares issued on conversion of the Performance Shares must be free from all encumbrances, securities and third-party interests. The Company must ensure that Shares issued on conversion of the Performance Shares are freely tradeable, without being subject to on-sale restrictions under section 707 of the Corporations Act, on and from their date of issue.

(l) The terms of the Performance Shares may be amended as required from time to time in order to comply with the ASX Listing Rules or a direction of the ASX regarding the terms.

(m) If the Company is listed on the ASX and undertakes a reconstruction or reorganisation of its issued capital, all rights of a Holder of Performance Shares will be changed to the extent necessary to comply with the ASX Listing Rules at the time of the reconstruction or reorganisation.

(n) The Performance Shares give the holder no other rights save for those expressly set out in these terms and any other rights provided by law which cannot be excluded by these terms.

Conversion of Performance Shares – Performance Milestones

(a) Subject to the below clauses, a Performance Share will convert into one (1) fully paid ordinary share in AGE (**Share**), subject to satisfaction of the milestone set out below applicable to the relevant tranche of Performance Shares (collectively, the **Milestones,** each a **Milestone**), on the date specified in the Milestone applicable to the relevant Performance Share:

(1) For the Acquisition Performance Shares: AGE, on completion of the farm-in work program, expending at least $220,000, electing to acquire all of the shares in Big Lake Uranium Pty Ltd (**BLU**) before 31 December 2021 [**SATISFIED AND CONVERTED**];

(2) For the Contingent Consideration/Discovery Performance Shares: on discovery and definition of a JORC compliant Inferred Resource of 25 million lbs U3O8 at 1,000ppm uranium or greater on the Big Lake Uranium Project within five (5) years of issue being 10 December 2024;

(b) The Company will issue the Holder with a new Share certificate for the Shares as soon as practicable following the conversion of a Performance Share into a Share.

(c) The Milestones must be achieved before the date presented in each Milestone (**Expiry Date**).

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(d) For a class of Performance Shares if a Milestone is not achieved before the Expiry Date, then all of the Holders' Performance Shares of that class will automatically consolidate into one (1) Share only (**Automatic Conversion**).

(e) Notwithstanding anything else in these terms, the conversion of a Performance Share is subject to compliance at all times with the Corporations Act and the ASX Listing Rules.

(f) The Shares into which Performance Shares will convert will rank pari passu in all respects with existing Shares and will confer rights identical with all other Shares then on issue.

(g) The Milestones may only be amended with approval of Shareholders in General Meeting and a voting exclusion statement applies in relation to any holder of Performance Shares.

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Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity	
Alligator Energy Limited	
ABN	**Quarter ended ("current quarter")**
140 575 604	31 December 2023

		Current quarter $A'000	Year to date (6 months) $A'000
1.	**Cash flows from operating activities**		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	-	-
	(b) development	-	-
	(c) production	-	-
	(d) staff costs (**incl FY23 payroll tax - $144k**)	(395)	(862)
	(e) administration and corporate costs	(286)	(589)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	257	374
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (annual insurances)	-	(85)
1.9	**Net cash from / (used in) operating activities**	**(424)**	**(1,162)**

2.	**Cash flows from investing activities**		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment (**incl FRT construction**)	(901)	(1,457)

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		Current quarter $A'000	Year to date (6 months) $A'000
	(d) exploration & evaluation	(3,106)	(6,338)
	(e) investments	-	-
	(f) other non-current assets	-	-
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (property and tenement bonds)	(35)	(35)
2.6	**Net cash from / (used in) investing activities**	**(4,042)**	**(7,830)**

3.	**Cash flows from financing activities**		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	3,260	28,792
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(139)	(1,728)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (lease payments)	(19)	(38)
3.10	**Net cash from / (used in) financing activities**	**3,102**	**27,026**

4.	**Net increase / (decrease) in cash and cash equivalents for the period**		
4.1	Cash and cash equivalents at beginning of period	37,878	18,480
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(424)	(1,162)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(4,042)	(7,830)

		Current quarter $A'000	Year to date (6 months) $A'000
4.4	Net cash from / (used in) financing activities (item 3.10 above)	3,102	27,026
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	**Cash and cash equivalents at end of period**	**36,514**	**36,514**

5.		**Current quarter $A'000**	**Previous quarter $A'000**
5.1	Bank balances	5,514	6,878
5.2	Call deposits	31,000	31,000
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	**Cash and cash equivalents at end of quarter (should equal item 4.6 above)**	**36,514**	**37,878**

6.		**Current quarter $A'000**
6.1	Aggregate amount of payments to related parties and their associates included in item 1	(130)
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.

NOTE: The payment amounts disclosed in 6.1 above relate to director fees for Non-Executive Directors together with the salary for the CEO and Managing Director

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7.		Total facility amount at quarter end $A'000	Amount drawn at quarter end $A'000
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	**Total financing facilities**	-	-
7.5	**Unused financing facilities available at quarter end**		-

7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.

8.		$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(424)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(3,106)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(3,530)
8.4	Cash and cash equivalents at quarter end (item 4.6)	36,514
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	36,514
8.7	**Estimated quarters of funding available (item 8.6 divided by item 8.3)**	10.3

Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: N/A

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: N/A

8.8.3	Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?
Answer: N/A	
Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.	

1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.

2 This statement gives a true and fair view of the matters disclosed.

Date: .....30 January 2024.....

Authorised by: .....Greg Hall – CEO and MD.....

(Name of body or officer authorising release – see note 4)

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.

2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.

3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [*name of board committee – eg Audit and Risk Committee*]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".

5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.

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