

# QUARTERLY ACTIVITIES REPORT

FOR QUARTER ENDED 30 June 2019

## Highlights

Alligator Energy Limited (Alligator, AGE or the Company) is pleased to release the 30 June 2019 Quarterly Report.

### Uranium

- Discussions with potential strategic partners continue
- Ongoing trials of techniques to model the underlying structural and lithological settings on the ARUP tenements
- Nabarlek North application progressed and final TO meetings expected soon

### Energy Minerals

- Technical output from the two nickel geology expert reviews consolidated and a 'next steps' work plan developed including drilling plans
- Expert reports completed to progress the drill permit application process for Piedmont, with permits anticipated in Q3
- Invitations to open discussions with potential strategic partners commenced shortly after quarter end, with quick response and interest from a range of groups

### Corporate

- Evaluation of a range of additional uranium and energy mineral opportunities is underway
- Junior Minerals Exploration Incentive credits (FY20) available for eligible greenfield exploration expenditure incurred during 2018/19

### Plans for the forthcoming quarter

- Advance discussions and proposed terms with a preferred strategic partner for both the ARUP and Piedmont projects
- Advance the Nabarlek North application with the NLC and TO groups, with meetings planned during Q3
- Investigate, progress and add additional suitable projects and strategic opportunities

Alligator Energy

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ASX Code: AGE

Number of Shares:

1023M Ord Shares  
310.4M Listed Options  
22.1M Unlisted Options

Board of Directors:

Mr Paul Dickson  
(Non Exec. Chairman)

Mr Peter McIntyre  
(Non Exec. Director)

Mr Andrew Vigar  
(Non Exec. Director)

Mr Greg Hall  
(CEO & Exec. Director)

## Exploration

### Alligator River Uranium Province (ARUP)

#### Exploration and Evaluation Activity during the Quarter

Alligator has been conducting a comprehensive re-evaluation of the regional and local geology for West Arnhem. In early June, this was presented at the AusIMM International Uranium Conference in Adelaide. Refer to “AGE AusIMM Uranium Conference Presentation 4<sup>th</sup> June 2019” release on the Alligator Energy website.

From this work, AGE has determined that understanding the stratigraphy and structural relationships is key to knowing where large deposits are likely to occur within the ARUP. The work evaluation process consisted of:

- Clean slate approach – working up the stratigraphy incorporating known geology (Figure 1)
  - add Basement Archean domes
  - add Lower Cahill (Ranger LMS)
  - add Upper/Undifferentiated Cahill
  - add Nourlangie Schist
- Investigate coincident structural zones with interpreted Archean contacts. (Figure 2)

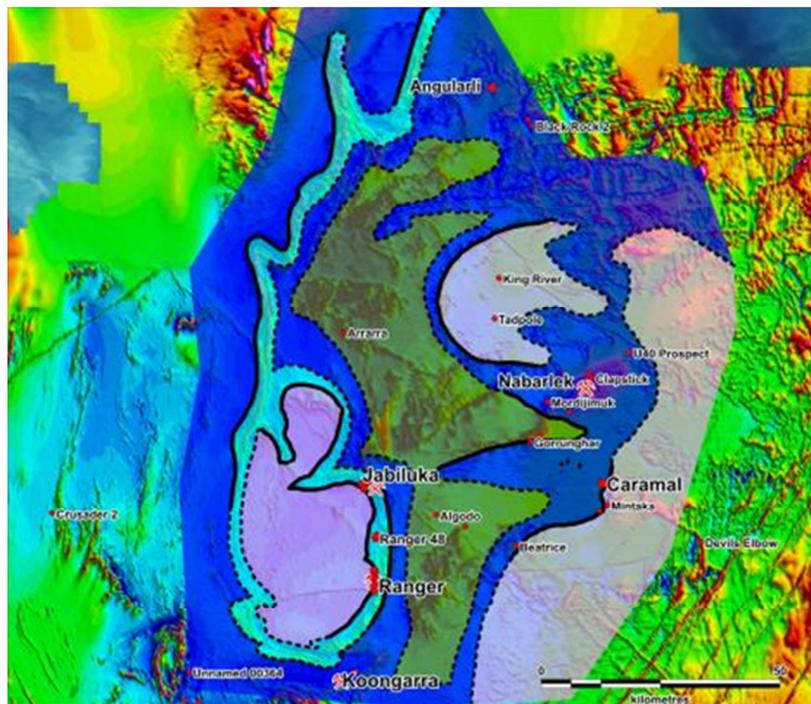


Figure 1 – Simple diagram of worked up stratigraphy and known geology

Conclusions for discovery included:

- Identify location of the Archean/Lower Cahill contacts across tenure (Refer Figure 2)
- Need to determine how to identify these under cover – investigate techniques
- A combination of techniques must be used as targeting vectors. Varying Geophysics, Geochemistry including isotope analysis and geological targeting (conjugation of structure and stratigraphy).
- Most importantly further understand how to identify old basement structures – pre-setting of

mineral systems

- A trial is currently being conducted using an advanced data re-processing technique to 3D model the underlying structural and lithological settings on part of the TCC project.
- Other processes and techniques will continue to be evaluated

This study highlighted a broad prospective zone running from the western Beatrice project, through the eastern portion of the Tin Camp Creek project and into the Nabarlek North Application area as high priority for further work. Along this trend, 8 areas for immediate assessment were highlighted.

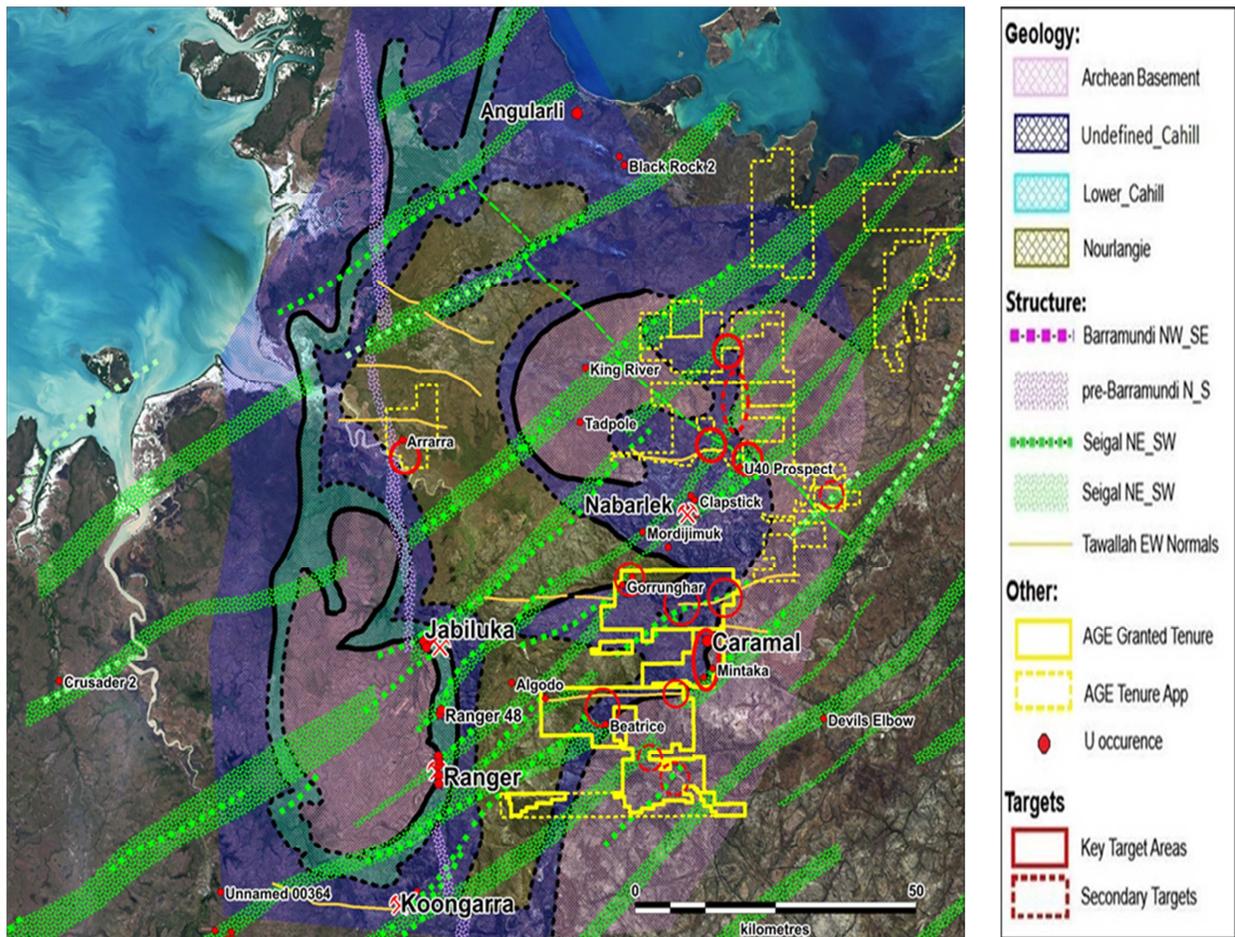


Figure 2 – Worked up diagram of stratigraphy showing coincident targets with structural zones

During the quarter the Company also progressed discussions with the NLC and Traditional Owner representatives on an Exploration Agreement which underpins the application for an exploration licence over the Nabarlek North tenement area. The project is deemed an exciting prospective addition to Alligator’s uranium exploration portfolio, with the results from the regional interpretation providing reinforcement to the value of this application package.

#### Proposed Work Program over the coming quarter

Continue work plans to advance the 8 target areas highlighted within the prospective eastern flank of the project areas

Assess progress of the various geophysical processing techniques currently under review including the merits of expanding the study area to a regional scale

Advance the Nabarlek North application, complete an agreed Exploration Agreement draft and present

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this to the key Traditional Owner groups through planned NLC coordinated meetings.

Progress our strategic partnering discussions with the objective of then being able to progress the above exploration plans.

## Piedmont

### Exploration and Evaluation Activity during the Quarter

AGE is farming into, and has direct lease applications, in an historic Ni Co Cu mining area in the Piedmont region, northwest Italy. The Company has access to multiple exploration permits over a 30km mineralised strike length, across which there has been minimal modern exploration.

During the March and June quarters Alligator conducted a compilation exercise for all work program and historical data relating to the re-discovered Piedmont Ni Co Cu province in northwest Italy.

Confirmatory sampling and ground truthing undertaken during 2018 has shown excellent nickel and cobalt tenor within and along strike of existing historical workings. Within the Company's database, 17 locations with >0.5% nickel have been identified – an unusually large number of Ni Co occurrences which is similar in characteristics to other significant Ni endowed global regions.

During the ground truthing and sampling work undertaken by AGE last year, assays from the first batch of samples had a range of significant metal grades **0.19 to 2.48% Ni, 0.02 to 0.17% Co and 0.07 to 0.98% Cu**; ([Refer ASX release 26 July 2018](#)). Assays from the second batch of samples had a range of significant metal grades **0.49 to 2.24% Ni, 0.02 to 0.19% Co, 0.12 to 6.38% Cu and 0.6 to 60.8g/t Au**; ([Refer ASX release 14 Sept 2018](#))

Two nickel geology experts were engaged to assess and confirm the potential within the region. The output from the data compilation and nickel geology experts' review was summarised in a presentation released to the market on 9 July 2019 – "*Piedmont Project – Re-Discovered Ni Co Province*". Their recommendations have been incorporated into the 'next steps' work program. Refer to the technical summary points below for key highlights from this presentation.

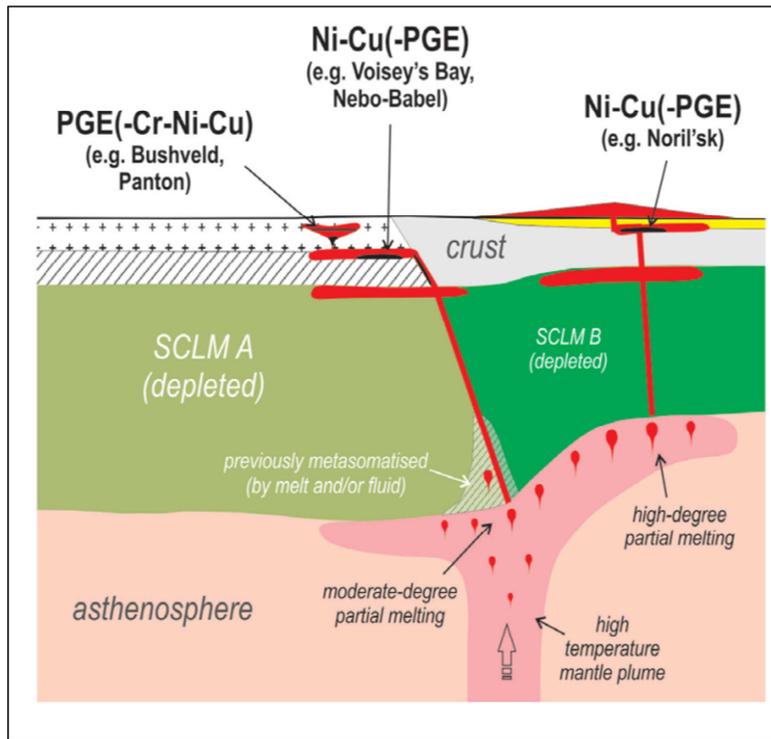
Drilling permitting is currently being completed (anticipated during the September 19 quarter) for drill ready targets adjacent to historic mines, along with deeper holes. Ground-based and down-hole EM to delineate geometry and depth potential of mineral occurrences is also planned.

Alligator believes there is potential for high grade mineralisation amenable to underground mining, and there has been no modern exploration to evaluate potential continuation of mineralisation at depth. Potential to develop the Project is further supported by excellent mineral tenors within known sampling. The Ni and Co are almost exclusively contained within pentlandite indicating excellent prospects for mineral recovery and marketable product.

Alligator has commenced a process to seek expressions of interest from potential strategic partners to directly invest into the Project and has been pleasantly surprised at the level of interest from potential partner groups. In particular there is interest from international groups for European located strategic mineral occurrences such as the Piedmont Ni and Co, and the Company is hopeful of identifying a partner, completing a favourable agreement to enable commencement of its exploration drilling into known mineralised areas as soon as possible.

**Key Technical summary points from recently released presentation on Piedmont Project**

**Piedmont Project – Exploration Rationale: Magmatic nickel-cobalt-copper deposits**



Piedmont nickel-cobalt-copper deposits were historically mined (1900s-1940s)

Mineralisation characteristics are consistent with other magmatic models (low PGE and magmatic sulphur)

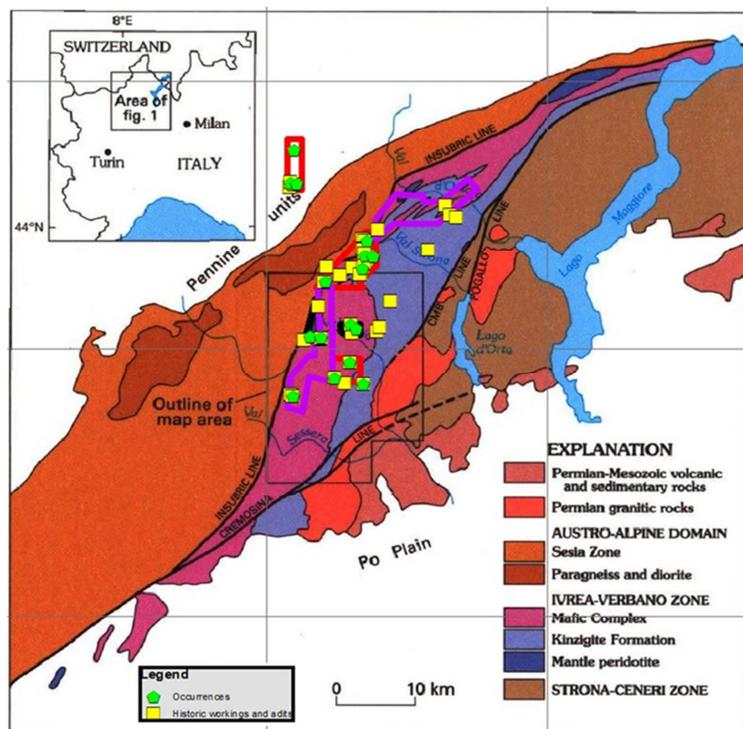
Deep crustal setting interpreted

No modern exploration and testing (drilling)

Structural overprint/remobilisation (rarely discussed in literature)

Source: Potential for intrusion-hosted Ni-Cu-PGE sulphide deposits in Australia: A continental-scale analysis of mineral system prospectivity. Record 2016/01. Geoscience Australia, Canberra

**Mineralisation Occurrences in region – Unusually larger number**



Unusually large number of Ni-Co-Cu sulphide occurrences directly related to small M-UM intrusions within Ivrea-Verbano window

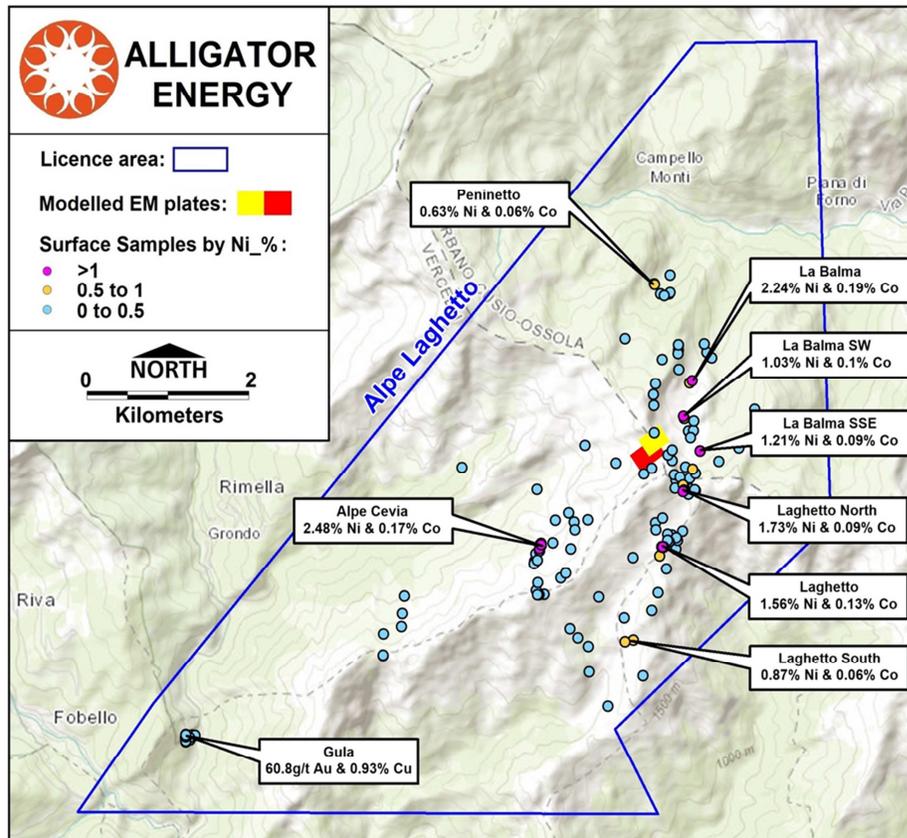
Licenses, geology and mineral occurrences within a >70km-long belt

Based on Ni assays in the database, 17 locations have >0.5%Ni

Many Ni regions are characterized by multiple near-surface mineral zones (Sudbury, Thompson, Raglan, Yilgarn), but a few are not (Voisey's Bay, Jinchuan). 17 occurrences is an unusually large number

A large number of Ni sulphide showings with significant Ni-Co grade

## Alpe Laghetto advanced prospects – Significant Ni Co sampling results in 2018



Sampling during 2018 highlighted mineralisation occurrences over a ~5km geological strike

[Refer ASX release 26 July 2018](#)

[Refer ASX release 14 Sept 2018](#)

### Proposed Work Program for the next quarter

Finalise drilling permits for Piedmont Project and establish initial drilling mobilisation plans.

Continue discussions with potential partners and investors to enable commencement of target drilling and ground based EM as soon as possible.

Continue to evaluate additional energy metals opportunities with the company's established team within the northern Italian region, and within Australia.

### Investigate, progress and add additional suitable projects and strategic opportunities

Alligator is continuing to evaluate additional exploration and project opportunities within the uranium and energy metals space. These will be targeted in regard to being complimentary to our skill set and strategy, allow year round exploration work, add to our existing small resource base, and further add value to Shareholders.

## Uranium Market

Post Quarter end on 12 July, the US President made a determination on a report submitted to him under section 232 of the Trade Expansion Act by the Secretary of Commerce entitled: "Investigation into the Effect of Uranium Imports on the National Security". This report was a result of a submission made by two US uranium producers, who were making a case that US nuclear utilities should purchase a set amount of uranium from US producers to support the industry in the interests of national security.

The US President determined not to impose new trade restrictions on imports of foreign uranium into

the US, nor set quotas. However he did announce the establishment of a United States Nuclear Fuel Working Group to further analyse the status of US nuclear fuel production and report back within 90 days.

This determination creates a little more certainty within the uranium market, in particular for imported uranium into the US. However the Working Group will now review the broader nuclear fuel industry in the US rather than just uranium, and hence may still create some ongoing uncertainty for US utilities.

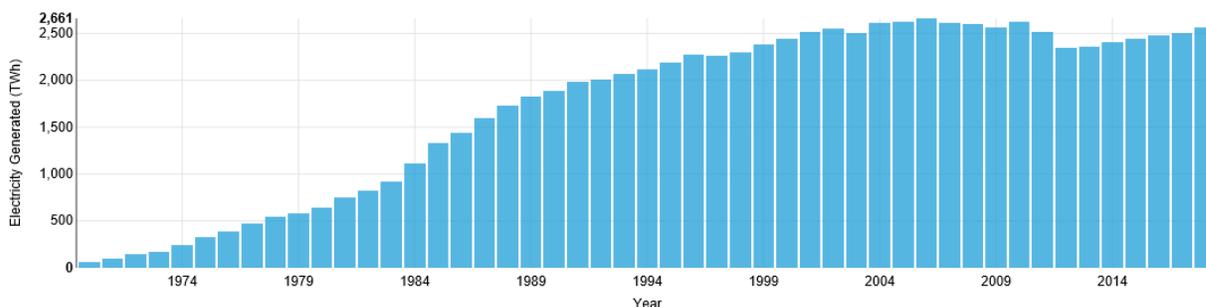
The uranium spot price ranged between US\$24.95 and US\$24.65 during the quarter, however post quarter end the price posted gains to US\$26.30 after the Section 232 announcement by the US President. It has since stabilised in the mid to high US\$25's. In the first half of this year, some uranium producers have reported mid-term contract prices as high as US\$44 per lb for multi year contracts – evidence that there is buying now occurring in the term market.

The new British Prime Minister expressed his “passionate” support for nuclear power when he made his first address to the House of Commons. The UK obtained 19% of its primary energy from low-carbon sources in 2018, with nearly 40% of this from eight operating nuclear power stations.

The global power generation from nuclear continues to climb post the Japan tsunami, with 10 new reactors connected to the grid in the last 12 months, and 53 reactors under construction. This is despite the shut-down of some German reactors, and the slow re-start of the anticipated 60 to 70% of original Japanese reactors back onto the grid.

### Global Nuclear Generation

2,563 TWh: global electricity generation from nuclear energy in 2018



Nickel prices have continued an upwards trend during the first six months of this year, supported by the increased demand for digital and energy storage uses and the lack of new mines commencing. Cobalt prices have returned to the long-term level, however the interest in secure future cobalt supply from “non-controversial” countries continues quite strongly.

**NICKEL PRICE**  
6.35 USD/LB  
25 JUL '19



**COBALT PRICE**  
12.93 USD/LB  
25 JUL '19



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## **Corporate**

### **Junior Minerals Exploration Incentive (JMEI) Credits**

The Company has applied for and has been successfully granted \$467,500 in credits for the 2019 income tax year. The determination of the extent to which credits will be available for distribution to subscribers to fresh equity issues between 15 June 2018 and 30 June 2019 will be based on eligible exploration expenditure incurred during the 2018/19 year. The maximum number of credits that can be distributed are limited to the lesser of:

- Actual greenfield exploration expenditure multiplied by the tax rate for the 2018/19 income year;
- Actual tax loss for the 2018/19 income year multiplied by the applicable tax rate; and
- The allocated JMEI credits of \$467,500.

The determination of the JMEI credits to be distributed in 1H of 2020 for that income tax year will be based on the finalised 2019 tax return.

#### **Competent Person's Statement - Uranium**

Information in this report is based on current and historic Exploration Results compiled by Mr Andrew Peter Moorhouse who is a Member of the Australasian Institute of Geoscientists. Mr Moorhouse is an employee of Alligator Energy Limited, and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Moorhouse consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.

#### **Competent Person's Statement – Nickel Cobalt**

Information in this report is based on current and historic Exploration Results compiled by Mr Andrew Vigar who is a Fellow of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Vigar is a non-executive director of Alligator Energy Limited, and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Vigar consents to the inclusion in this release of the matters based on his information in the form and context in which it appears.

## About Alligator Energy

Alligator Energy Ltd (Alligator or the Company) is an Australian, ASX-listed, exploration company focused on uranium and energy related minerals, principally cobalt-nickel.

Alligator's Directors have significant experience in the exploration, development and operations of both uranium and nickel projects (both laterites and sulphides)

### Uranium

The Company is primarily exploring for uranium in West Arnhem, utilising modern exploration techniques, combined with the best geological knowledge acquired by Alligator and consultant geologists, in search for uranium deposits of similar mineralisation style and tenure to that of the world class Alligator Rivers Uranium deposits of Jabiluka and Ranger, concealed beneath the covering sandstone. The Company's Tin Camp Creek and Beatrice tenements form the exploration focus but the Company also assesses other opportunities as they arise.

The company is researching and developing novel uranium decay isotope geochemical techniques and has modified and is applying airborne geophysical techniques with the objective of detecting such concealed targets. The Company's high priority drill target is TCC4 on the Tin Camp Project. The previously drilled Caramal and Beatrice deposits represent eroded remnants of once much larger deposits.

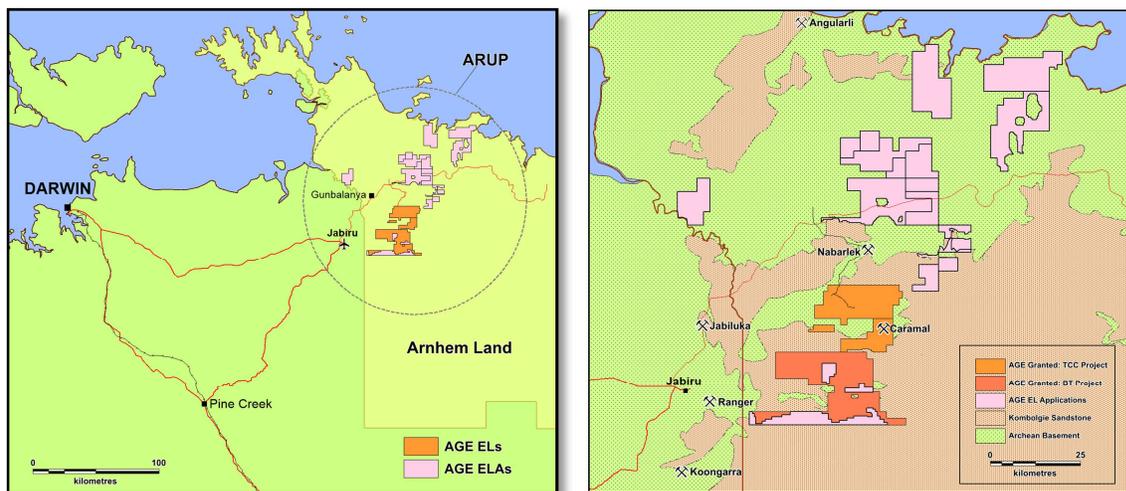
The Company also has in excess of 1000km<sup>2</sup> of Exploration Licence applications awaiting grant within the Alligator Rivers Uranium Province.

### Nickel Cobalt Copper

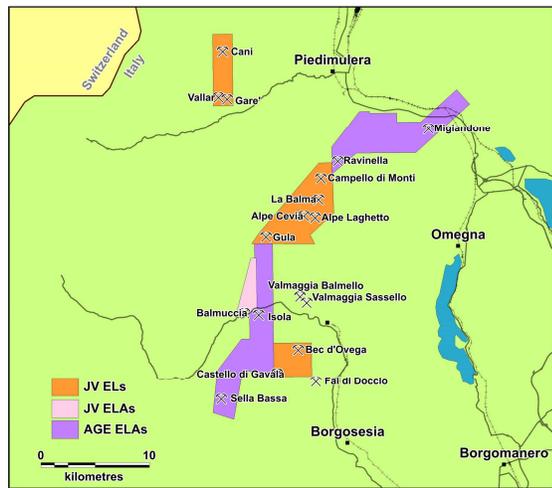
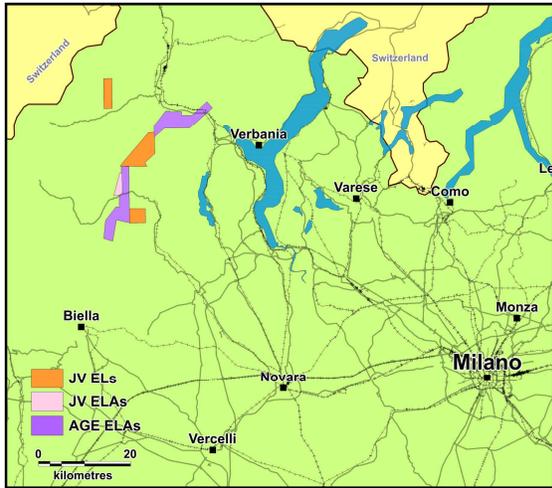
Alligator signed a Farm -in Agreement with Ivrea Minerals Pty Ltd and KEC Exploration Pty Ltd (collectively Chris Reindler and Partners) in November 2018 to earn up to a 70% interest in the Piedmont sulphide cobalt – nickel project in Northern Italy.

The project covers four titles containing ultramafic-hosted cobalt-nickel sulphide deposits that were mined between the 1860's and the end of World War II. Sulphides in pipe-like intrusive bodies and massive sulphide accumulations at the base of large, layered ultramafic intrusions were mined. The cobalt to nickel ratio was high in these deposits. Airborne surveys obtained by CRP have defined a number of conductors potentially indicative of massive sulphides as well as a number of magnetic features which may represent the responses from intrusive bodies hosting disseminated sulphides. These represent very attractive targets in an area with clear cobalt-nickel pedigree untouched by modern exploration techniques.

## Northern Territory, Australia – Alligator Rivers Uranium Province (ARUP):



**Northwest Italy – Piedmont Ni-Co:**



**FOR FURTHER INFORMATION, PLEASE CONTACT**

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 Alligator Energy Ltd  
 Email: [gh@alligatorenergy.com.au](mailto:gh@alligatorenergy.com.au)

Mr Mike Meintjes  
 Company Secretary  
 Alligator Energy Ltd  
 Email: [mm@alligatorenergy.com.au](mailto:mm@alligatorenergy.com.au)

## Appendix 5B

# Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

**Name of entity**

Alligator Energy Limited

**ABN**

79 140 575 604

**Quarter ended ("current quarter")**

30 June 2019

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date (12 months) \$A'000</b>
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	(171)	(1,647)
(b) development	-	-
(c) production	-	-
(d) staff costs	(55)	(203)
(e) administration and corporate costs	(75)	(416)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	3	18
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Research and development refunds (net)	-	52
1.8 Other (provide details if material)	-	-
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(298)</b>	<b>(2,196)</b>

<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) property, plant and equipment	-	(30)
(b) tenements (see item 10)	-	-
(c) investments	-	-
(d) other non-current assets	-	-

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (12 months) \$A'000</b>
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	20	20
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (tenement security (bonds)/refunds)	-	(35)
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>20</b>	<b>(45)</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of shares	-	1,750
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares, convertible notes or options	-	(145)
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 (provide details if material)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>-</b>	<b>1,605</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	1,041	1,399
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(298)	(2,196)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	20	(45)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	1,605
4.5	Effect of movement in exchange rates on cash held	-	-
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>763</b>	<b>763</b>

5. <b>Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1 Bank balances	205	136
5.2 Call deposits	558	905
5.3 Bank overdrafts	-	-
5.4 Other (provide details)	-	-
<b>5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>763</b>	<b>1,041</b>

6. <b>Payments to directors of the entity and their associates</b>	Current quarter \$A'000
6.1 Aggregate amount of payments to these parties included in item 1.2	53
6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	-
6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2	

6.1 explanation - Director fees and CEO remuneration and superannuation contributions

7. <b>Payments to related entities of the entity and their associates</b>	Current quarter \$A'000
7.1 Aggregate amount of payments to these parties included in item 1.2	-
7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3	-
7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2	

N/A

## Mining exploration entity and oil and gas exploration entity quarterly report

<b>8. Financing facilities available</b> <i>Add notes as necessary for an understanding of the position</i>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
8.1 Loan facilities	-	-
8.2 Credit standby arrangements	-	-
8.3 Other (please specify)	-	-
8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.		

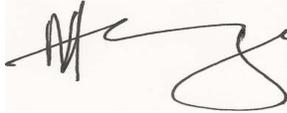
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<b>9. Estimated cash outflows for next quarter</b>	<b>\$A'000</b>
9.1 Exploration and evaluation	(168)
9.2 Development	-
9.3 Production	-
9.4 Staff costs	(45)
9.5 Administration and corporate costs	(117)
9.6 Other (provide details if material)	-
<b>9.7 Total estimated cash outflows</b>	<b>(330)</b>

<b>10. Changes in tenements (items 2.1(b) and 2.2(b) above)</b>	<b>Tenement reference and location</b>	<b>Nature of interest</b>	<b>Interest at beginning of quarter</b>	<b>Interest at end of quarter</b>
10.1 Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	-	-	-	-
10.2 Interests in mining tenements and petroleum tenements acquired or increased	-	-	-	-

**Compliance statement**

- 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.



Sign here:

(Company Secretary)

Date: 30 July 2019

Print name: M C Meintjes

**Notes**

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly 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 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.