

16 October 2019
Corporate Update

Alligator Energy agrees farm in terms for South Australian In-situ Recovery Uranium Exploration project

Highlights

- Alligator Energy Ltd (**AGE or Alligator**) expands its uranium exploration portfolio with a farm in agreement for a South Australian exploration opportunity in the Cooper Basin;
- The project is amenable to rapid and low-cost exploration, exploring for the next South Australian In Situ Recovery (**ISR**) uranium mine;
- Exploration evaluation and geophysics to commence immediately, with initial drilling scheduled for Q2 2020;
- The project broadens Alligator's uranium exposure, complementing its existing uranium exploration portfolio of high-grade world-class unconformity related uranium assets in the Alligator Rivers, with a low cost ISR project in a favourable uranium mining jurisdiction;
- AGE has signed a Heads of Agreement with private group Big Lake Uranium Pty Ltd to acquire up to 100% interest in the underlying mineral title within two years; and
- AGE will continue to maintain its uranium projects in the Alligator Rivers Uranium Province (**ARUP**) in good standing and is progressing the Nabarlek North application.

Introduction

Alligator is pleased to announce the agreement of farm-in terms to acquire 100% interest in the Big Lake Uranium (**BLU**) opportunity in South Australia exploring for ISR uranium targets.

This opportunity represents AGE's first venture away from the Alligator Rivers for uranium exploration. The BLU project compliments Alligator's existing strategy in the exploration for economically viable uranium deposits in favourable jurisdictions for uranium mining. Both represent opportunities for uranium projects that can be profitable through low uranium price cycles.

The project has a definitive exploration pathway with a low cost strategy to test the uranium mineralisation model, with exploration work to commence immediately and first pass drilling expected for Q2 2020.

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ASX Code: AGE

Number of Shares:
1,023.7 M Ordinary
Shares
310.4 M Listed
Options
22.2 M 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)

Big Lake Uranium Opportunity

- **South Australian jurisdiction** – Existing uranium production, with strong Government and public familiarity, excellent regulator experience and uranium concentrate logistics
- **Shallow sandstone hosted deposits** - In Situ Recovery (ISR) – deposit style is amenable to rapid and low-cost exploration, and exploitation
- **Strong Uranium endowment in region** – crustal scale heat anomaly – uranium rich basements – uranium present within drainage channels – host to world class ISR deposits
- **Untested model of familiar mineralisation setting** – *Source*: U rich basement rocks – *transport*: systems allowing fluids from uranium bearing basement rocks into sandstone basins – *trap*: hydrocarbons (gas) providing reductant for uranium deposition. Similarities with the Kazakhstan, Texas and Wyoming uranium fields
- **Known uranium** – Oil and gas well gamma logging showing uranium – one previous explorer found anomalous uranium, but failed to test the palaeochannel model

Background

Big Lake Uranium Pty Ltd, a privately-owned company, is the 100% holder of Exploration Licence 6367 in the Cooper Basin South Australia which was granted on 23 July 2019 (“Big Lake Project”).

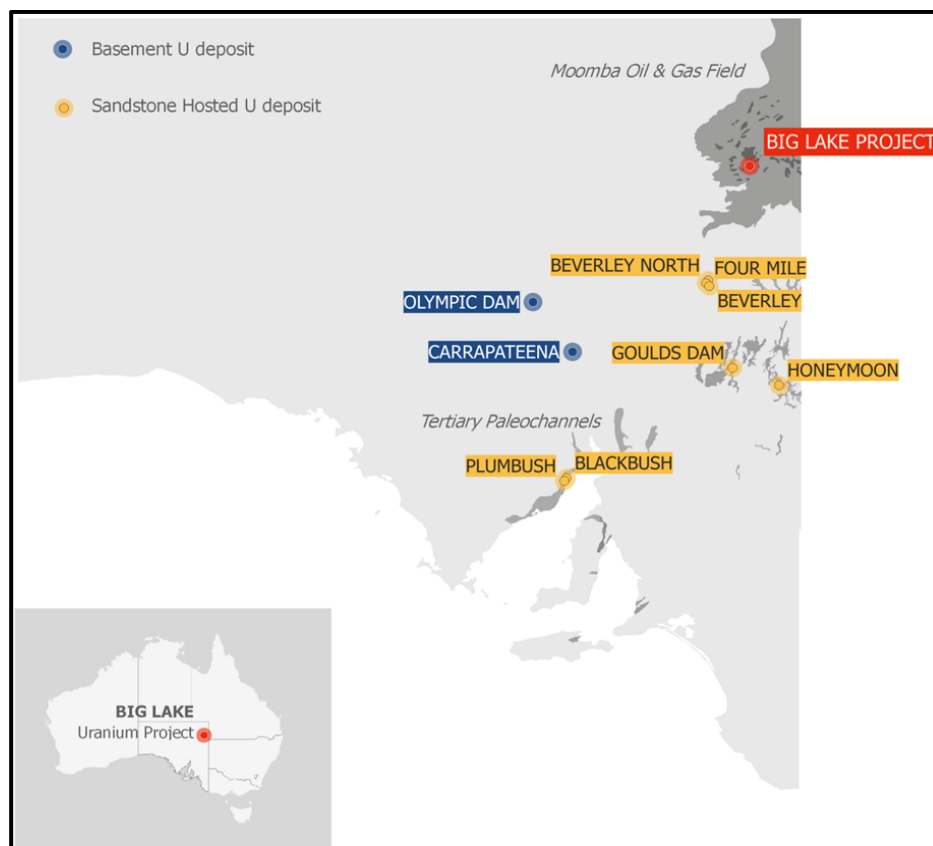


Figure 1. Location of BLU Project in South Australia and existing uranium deposits.

BLU is targeting sandstone hosted uranium in the Moomba Gas Fields, South Australia. Alligator have the opportunity to farm-in to the Big Lake Project with the right once the farm-in expenditure has been met to acquire all of the issued share capital in BLU from the current Shareholders for the consideration set out under the Heads of Agreement (refer below).

The Big Lake Project targets REDOX and roll front uranium mineralisation within palaeochannels of the Lake Eyre formation. The model is for uranium to be sourced from distal uranium rich basement rocks and transported as oxidised fluids through palaeochannels. The area is located on the margins of deep-seated dome structures associated with known gas reservoirs within the Moomba Gas Fields of South Australia.

Initial work completed by BLU included proprietary isopach modelling that identifies variations in basement lithology depths, the location of constraining ridge lines and hydrocarbon influenced domes. The modelling of basement topography has allowed interpretation of hydraulic pathways through potential palaeochannels as shown in figure 2. This formed the basis for the area selection within the Cooper Basin.

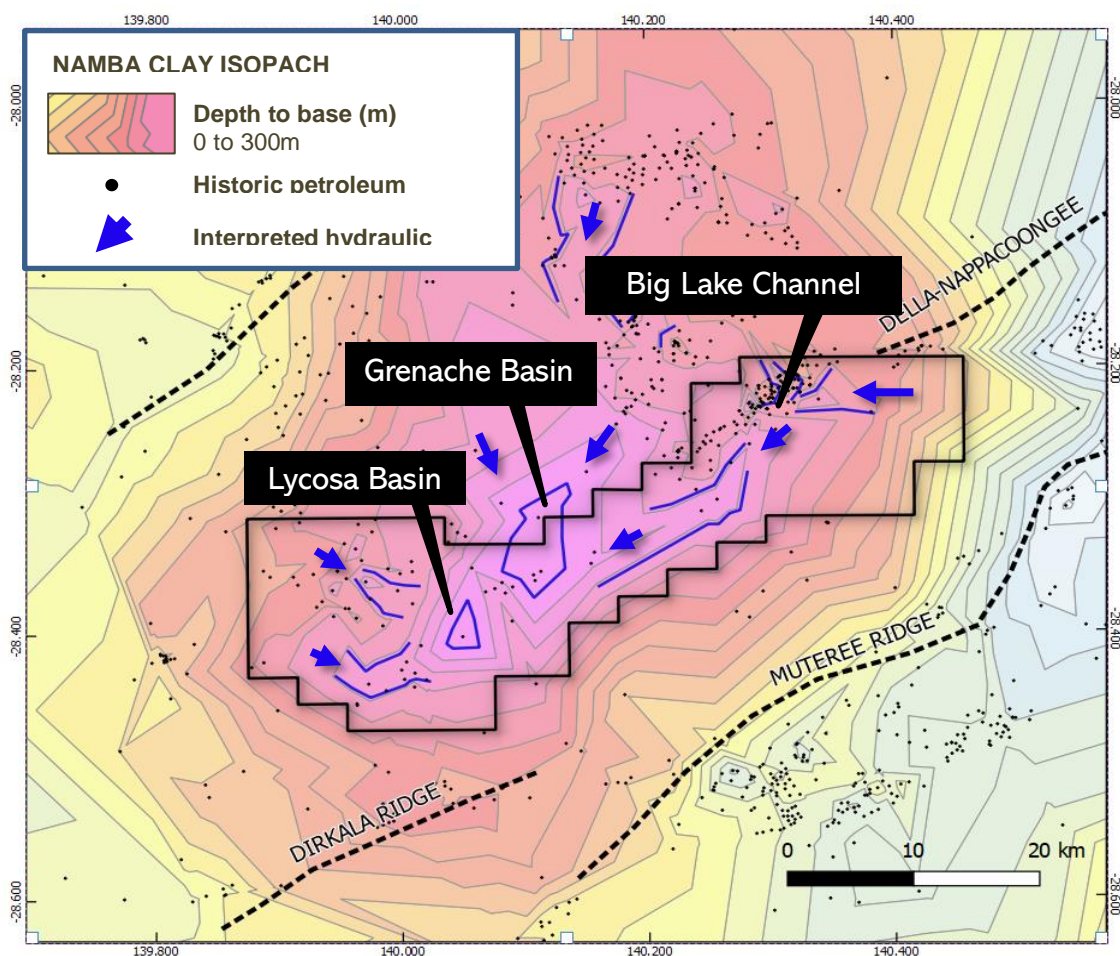


Figure 2. BLU proprietary isopach modelling and Hydraulic pathways

Previous one phase of uranium exploration has been conducted in the region. This program targeted known gamma anomalies identified in historic oil and gas wells. Anomalous uranium was intersected, however the program failed to test the palaeochannels along which uranium is believed to have been transported and deposited within roll-front and REDOX environments. The signature of these anomalies are deemed typical of oxidised tails, indicating future search would need to be down hydraulic gradient of these intercepts.

Strategy for the proposed work program

The BLU project represents a cost-effective exploration opportunity within an excellent jurisdiction. AGE intends to assess the opportunity through a prompt and practicable exploration work program consisting of:

1. The delineation of key target palaeochannels through:
 - Reprocessing open-file 3D seismic to determine best detail and location of palaeochannel (Q4 2019); and
 - Targeted airborne EM survey (Q1 2020)
2. Air core drilling of the defined channels, estimated 40 holes for 2500 metres (Q2 2020)

Additionally, initial enquiries indicate that the project may be a candidate for the recently announced South Australian Government Accelerated Discovery Incentive. Alligator will seek any opportunities available to assist with the exploration once full details of the scheme are announced.

The outcome of this work program will result in the testing of the BLU project to uranium discovery level.

Farm-in Agreement

AGE has signed a non-binding Heads of Agreement (HoA) with BLU on 14 October 2019 that allows it to earn a 100% interest in the Big Lake Project mineral title.

The principal terms of the agreement are:

- The AGE and BLU agree to use their best endeavours and negotiate on an exclusive basis and in good faith to enter into a Farm-in Agreement that is in a fuller form but consistent with this HoA before 25 November 2019 or such other agreed date;
- AGE to pay BLU \$10,000 once the signed Farm-in Agreement becomes unconditional and to issue 3 million fully paid ordinary shares to Taycol Nominees Pty Ltd (subject to Shareholder approval at the 2019 AGM) for introduction of the BLU opportunity (Facilitation Fee Shares) ;
- AGE to spend at least \$220,000 over the period to 21 July 2021 to progress assessment of the concept and to meet the minimum expenditure commitments for the exploration licence;

- On expending at least \$220,000 on exploration and evaluation during the farm-in period, AGE has the right to acquire a 100% interest in Big Lake Uranium Pty Ltd (a single purpose entity set up to acquire EL 6367) through the issue of 30 million fully paid ordinary shares in AGE (Acquisition Shares);
- BLU has agreed to a voluntary escrow period for the Acquisition Shares of six months (50%) and twelve months (50%) from the date of issue;
- If AGE withdraws from the farm-in arrangement or does not incur the minimum expenditure it will hold no interest and has no rights for reimbursement;
- If AGE discovers and defines a JORC compliant Inferred Resource of 25 million lbs U3O8 at 1,000ppm uranium or greater on the Project within eight (8) years, then Alligator agrees to issue a further 30 million fully paid ordinary shares in AGE to the BLU Shareholders or their nominees (Contingent Consideration Shares).

The HoA and Farm-in Agreement is conditional on:

- AGE applying for and receiving an ASX 'in-principle' determination that the transactions contemplated under the HoA (including without limitation the issue of the Acquisition Shares and Contingent Consideration Shares) comply with the ASX Listing Rules on terms satisfactory to ASX Listing Rules;
- AGE securing Shareholder approval for the proposed issue of the Acquisition Shares, Contingent Consideration Shares and the Facilitation Fee Shares at the Alligator AGM to be held in late November 2019; and
- AGE finalising its legal and technical due diligence.

Uranium Market and ARUP Uranium Projects:

Uranium Market

The most recent World Nuclear Association (WNA) supply demand report (September 2019) has shown a marked increase in uranium demand due to new reactor construction. During the five years between 2016 and 2020 there have been / are due to be 46 new reactors coming online, with these built in 11 countries. **In total these 46 new modern, safer reactors add 15% to global nuclear capacity. Calendar year 2018 was the sixth successive year of nuclear power generation growth (Figure 3).**

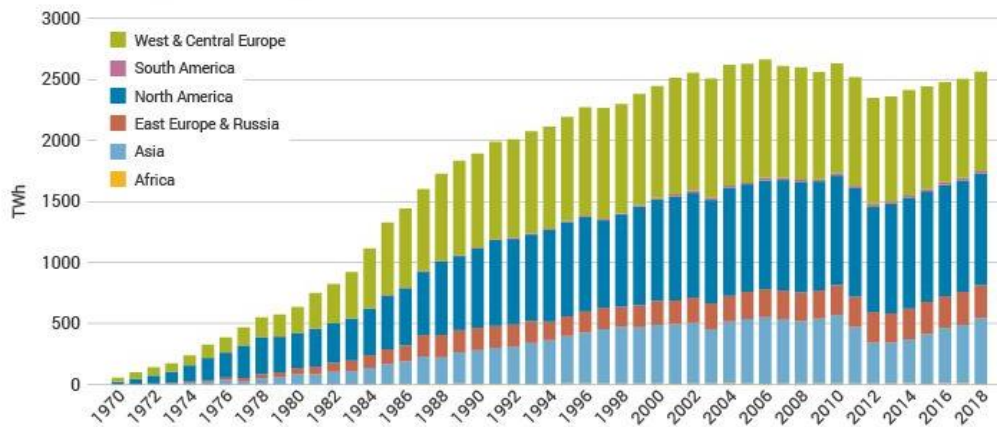


Figure 3 – Global nuclear power generation – source: WNA

Global uranium production continues to be significantly below global demand, with this ratio declining rapidly as uranium producers around the world refuse to deplete their resources at such low prices. Cameco Inc has elected to maintain the McArthur River Uranium mine, the largest producing mine in the world, on care and maintenance, and has indicated that with the extended shutdown it will take even longer to bring this back into production when supportive prices return.

The largest global uranium players have acquired or have indicated they are searching for / interested in new ISR uranium regions.

Over 50% of the worlds uranium production is from ISR operations – they continue to be profitable through low uranium price cycles.

In 2018 production was as follows:

Method	tonnes U	%
In situ leach (ISL)	29,248	55%
Underground & open pit (except Olympic Dam)	20,745	39%
By-product	3505	7%

Figure 4 – Global uranium production by extraction method in 2018 – source: WNA

ARUP Projects

AGE continues to retain its uranium mineral titles in the ARUP in good standing and with all compliance submitted and accepted for 2019.

After a substantial internal and external review of the new information obtained from its 2018 drilling combined with historical results, Alligator is firmly of the belief that it has the right regional address for large high grade uranium deposits. We now have a reinforced model in particular of the highly prospective Lower Cahill-Archean gneiss contact (deemed the favourable setting for potential large-scale mineralisation) within our key project areas and new applications. This model extends from Alligator's Beatrice project tenements in the south west, through the TCC tenements, and into the prospective Nabarlek North applications.

The Company commenced earlier this year a search for a strategic partner to support a planned work program within the ARUP, and is continuing these discussions.

In addition, the Company continues to advance the Nabarlek North application less than 10km north of the Nabarlek Mine and 300m from the high grade U40 prospect. This project is deemed an exciting prospective addition to Alligator's uranium exploration portfolio, with the results from the regional interpretation conducting in Q1 of 2019 (see ASX Announcement: 4 April 2019) providing reinforcement to the value of this application package

An Exploration Agreement is in the final stages of drafting and is scheduled to be presented to key Traditional Owner groups through planned Northern Land Council coordinated meetings in November 2020.

Development of R&D techniques is continuing in conjunction with target development across AGE's active projects and newly sourced and digitised data from the Nabarlek North package.

Summary:

AGE has entered into a farm-in agreement with a low-cost entry on a project that broadens its exposure to uranium exploration.

The project is amenable to rapid exploration, searching for a deposit style that is a proven counter cyclical uranium producer. Preparations for on ground field work will commence immediately, along with phase one of the planned exploration program.

Whilst AGE is committed to continuing to maintain and advance its uranium assets located in the ARUP, and nickel cobalt assets located in Northern Italy, the diversification of uranium exploration strategy obtained through this agreement is deemed important to the long term value adding strategy of the overall company.

AGE is excited at the opportunity and the potential upside available to the company provided by the project, and is pleased it has secured this opportunity for its shareholders.

Greg Hall

CEO & Director

Alligator Energy Limited

FOR FURTHER INFORMATION, PLEASE CONTACT

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Competent Person's Statement

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

About Alligator Energy

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

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

Uranium

The Company 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.

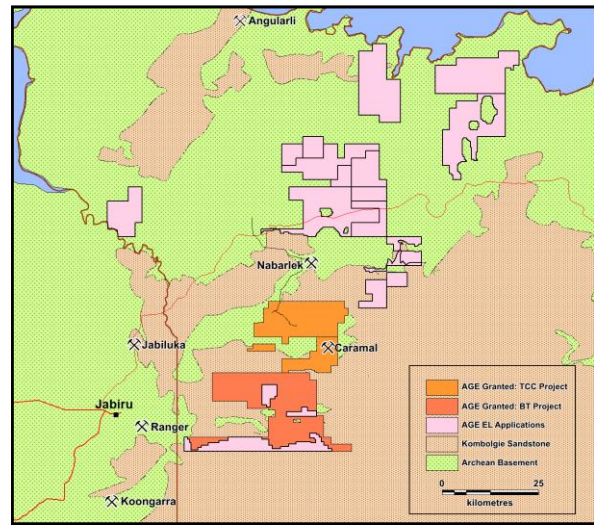
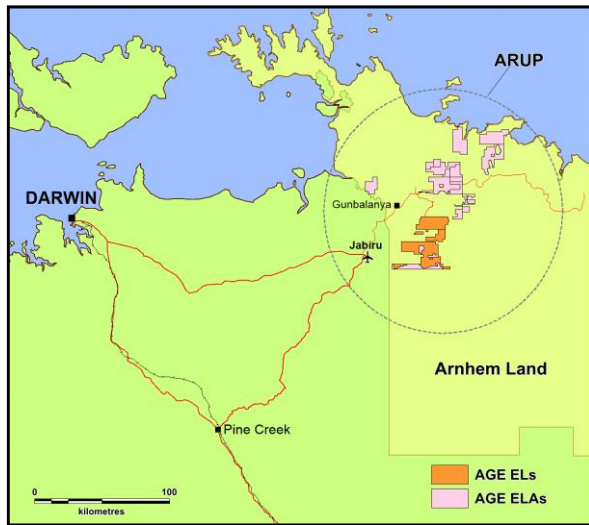
The Company also has in excess of 1000km² of Exploration Licence applications awaiting grant within the Alligator Rivers Uranium Province.

Cobalt- Nickel

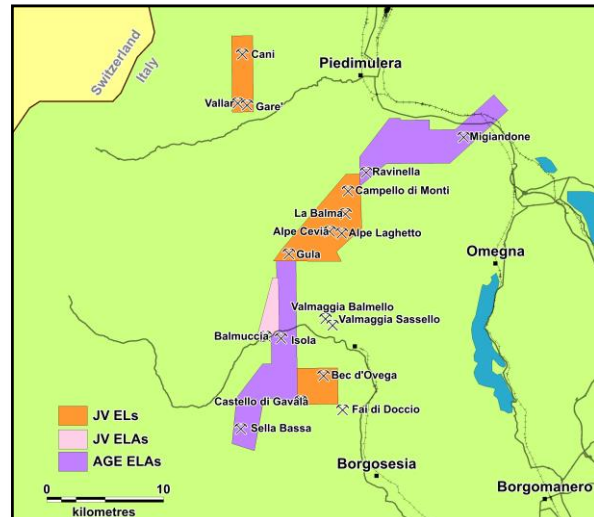
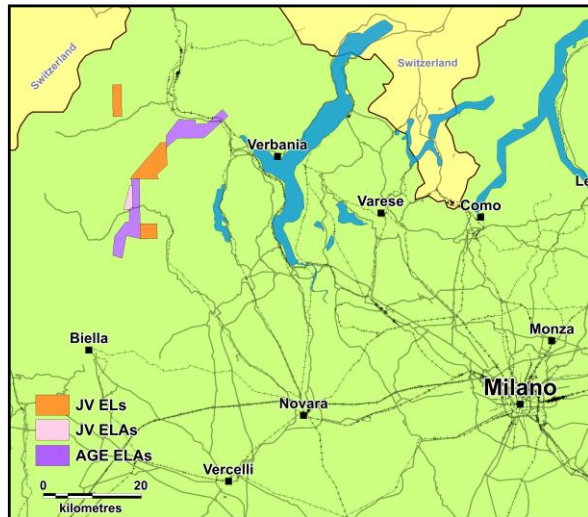
Alligator signed a binding Heads of Agreement with Chris Reindler and Partners (CRP) in January 2018 to earn up to 70% interest in the Piedmont sulphide cobalt – nickel project in Northern Italy.

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

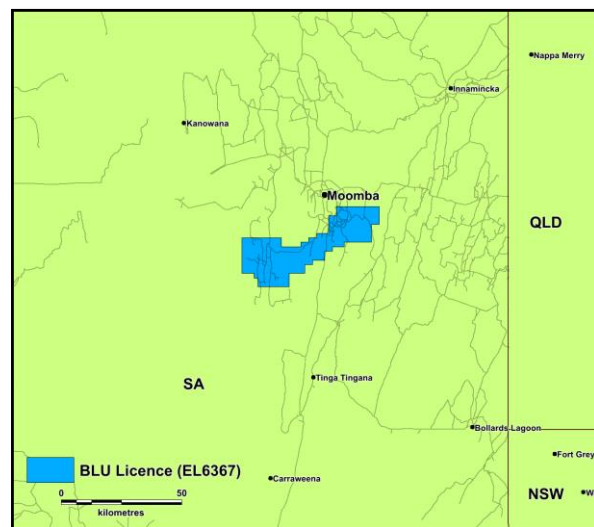
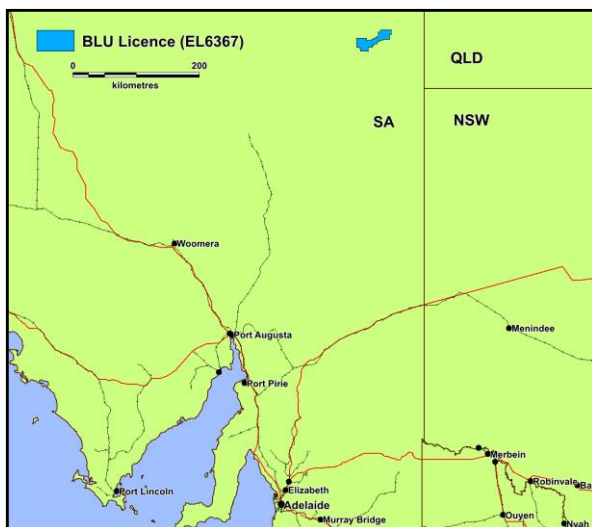
NT Australia – ARUP U:



Northwest Italy – Piedmont Ni-Co:



SA Australia – Big Lake U:



Project Location Diagrams