



AUSTRALASIAN GOLD

ASX Announcement | ASX: A8G | 6 October 2021

Australasian Gold to partner with CSIRO giving lithium exploration in the Mt Peake pegmatite field a technical boost

Highlights

- Australasian Gold has been awarded 50% co-funding from the CSIRO Kick-Start Program to undertake a research project with the national science agency, focused on Li exploration in the Mt Peake pegmatite field
- The program employs cutting edge Li exploration techniques developed by CSIRO and will commence immediately
- Field mapping program has already identified several pegmatite outcrops over 350m along strike, with follow-up work ongoing
- Major lithological units have been sampled and their spectral signatures will be examined and assayed to support the remote sensing interpretation conducted by CSIRO

Australasian Gold Limited (**ASX: A8G, Australasian** or the **Company**) is pleased to advise that the Company has applied for and been admitted to the CSIRO Kick-Start Program, to research the topic “Lithium (Li) Exploration in the Mt Peake Pegmatite Field” within our ELA/32830 in the Anningie pegmatite province. Through Australia’s national science agency, CSIRO, the Company will gain access to state-of-the-art optical, thermal and geophysical remote sensing data analysis and interpretation workflows, as well as instrumental equipment to identify potential key features of Li-bearing pegmatites.

CSIRO has previously researched the Greenbushes and Pilgangoora lithium mines in Western Australia and the Goulamina lithium project in Mali, with respect to spectral sensing data analysis, and will use this prior research and experience to assist Australasian to identify potential lithium bearing pegmatite outcrops at the Mt Peake Lithium project. Australasian will ground-truth any generated targets and provide feedback to the CSIRO who will in turn refine their analytical methods.

The recent field mapping program at Mt Peake has so far identified several major pegmatite outcrops in the northwest corner of the license which are characterised by coarse-to-medium grained, muscovite and tourmaline-rich white to grey pegmatite (**Figure 1**). These pegmatites



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have similar lithology with the pegmatite of Core Lithium's (ASX: CXO) Anningie lithium project. Reported grades from the Anningie lithium project include up to 4.63% Li_2O reading in rock chip sampling¹ (**Figure 3**). The follow up rock chip sampling program focusing on identified pegmatites will commence in late October – early November after the initial interpretation of CSIRO research.



Figure 1: Pegmatite outcrop in northwest corner of ELA32830, Mt Peake Lithium project

¹ Refer Todd River Resources (ASX: TRT) ASX announcement, 21 December 2017; Core Lithium (ASX: CXO) announcement 17 December, 2019)



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Australasian Gold Managing Director Dr Qingtao Zeng said: *“We are delighted to be able to team up with CSIRO to accelerate our lithium exploration program. CSIRO are true innovators with cutting-edge equipment and knowledge learned from previous lithium exploration research. We are very excited to put these techniques to the test at our Mt Peake Li pegmatite project and in return we will be assisting with the ongoing refinement of the CSIRO’s spectral sensing techniques used for future lithium exploration.”*

“CSIRO will be empowering us with the latest equipment capable of identifying most lithium bearing minerals in the field, and enables us to rapidly home in to the right area to explore. The recent field mapping work has identified several pegmatite outcrops, and with CSIRO’s equipment, we hope to be able to fast-track our efforts to identify the most prospective lithium-bearing zones.”

Mt Peake Lithium project

The Mount Peake Lithium project is located within the Northern Arunta pegmatite province, approximately 200km north of Alice Springs and 250km south of Tennant Creek along the Stuart Highway in the Northern Territory (**Figure 2**).



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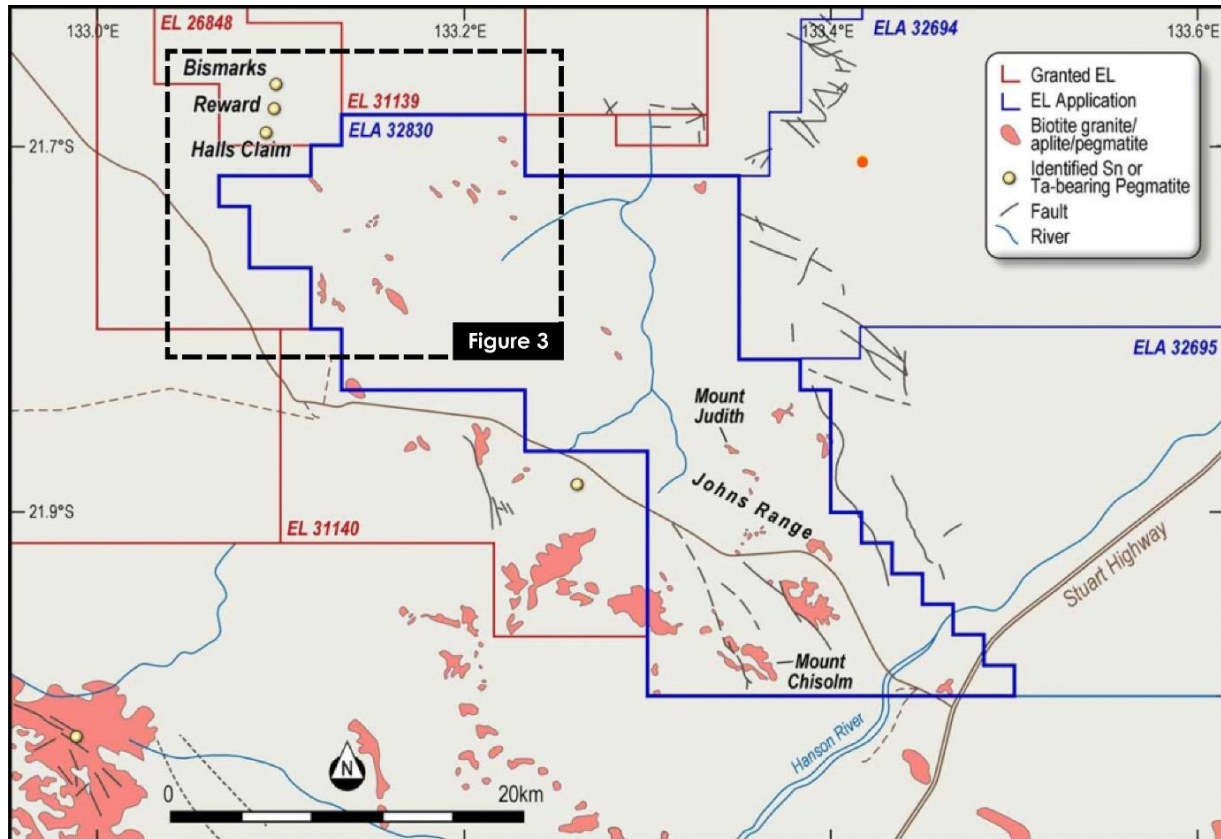


Figure 2: the location of ELA 32830. It shares a boundary with EL 26848 and EL 31139 which are owned by Core Lithium Limited (ASX:CXO). This entire area is in the Anningie Sn-Ta Pegmatite field. Location of lepidolite and spodumene minerals have been identified in 1965 by Pontifex and are marked with a red dot in the top right corner of the map.

The project area is in the Anningie Sn-Ta pegmatite field, which is a known Lithium-Caesium-Tantalum pegmatite district in the Northern Arunta pegmatite province, central Northern Territory. The Esther granite suite contains biotite-muscovite granites, and leucocratic, medium-grained, even-grained to porphyritic, tourmaline bearing, pegmatite and aplite (Offe, 1978). The 1: 250,000 scale geological map of Mt Peake in Figure 2 were mapped via vehicle and foot traverse (Donnellan, 2008). There is Sn-Ta-bearing coarse-grained Paleoproterozoic pegmatite identified at the Reward Tin prospect at surface, 70m long and 5-20m wide, which is located 3km to the north of ELA 32830.



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According to the geochemical analysis by Frater (2005), three reward pegmatite samples were assayed with results of up to 747ppm Li. Similar pegmatites have been identified across ELA 32830. Lepidolite (Li-bearing mica) and spodumene were identified in pegmatite samples by petrological examination in 1965 by Pontifex. The location of this sample is ~7 km east of the Company's Mt Peak tenement, marked in **Figure 1**. The tenement application covers the Stuart Highway and is 30km to the Central Australia Railway, which provides excellent logistic support for the project down the track.

Todd River Resources in 2017 discovered elevated lithium (spodumene) mineralisation at its Bismark prospect, Walabanba project in the Anningie Sn-Ta Pegmatite field, with 5 samples reporting over 1.0% Li_2O from rock chip sampling. Some of the samples contain 20-50% spodumene. Todd River announced on 21 December 2017 that "sampling of the numerous pegmatites mapped in the Bismark area has returned results with an outstanding maximum lithium grade of 4.63% Li_2O . The best grade is associated with spodumene-quartz pegmatite and albite-spodumene-quartz pegmatite, confirmed by XRD analysis". In 2019, Core Lithium Limited acquired the project from Todd River. The location of these samples is shown in **Figure 3**.



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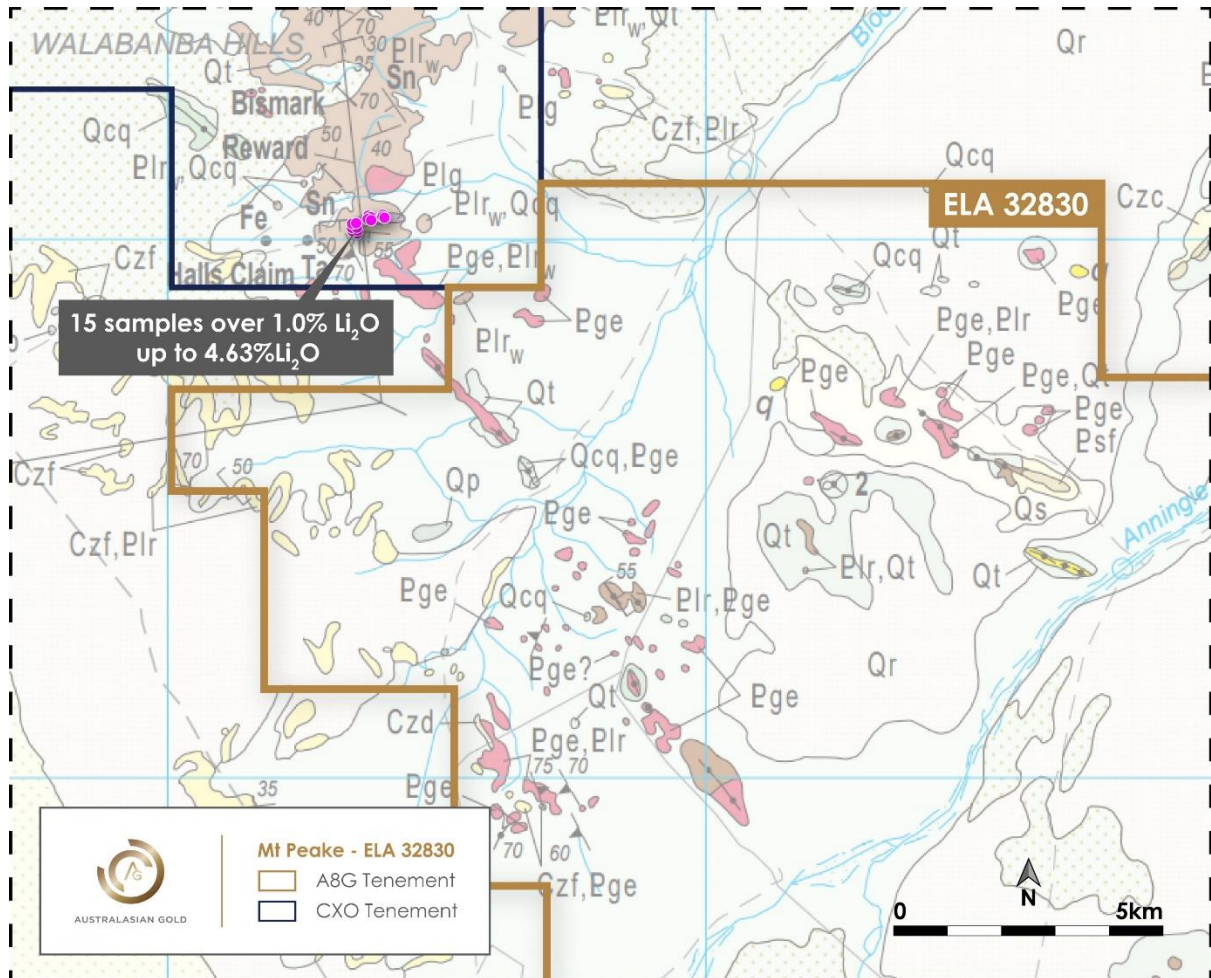


Figure 3: Location of the Todd River Resources sampling in the tenement map. Both EL26848 (ASX: CXO) and ELA32830 were shown with base map of 1: 250,000 Mt Peake Geological map. Pge: Esther Granite, biotite granite, aplite and pegmatite, locally phyllonitic or mylonitic. Plr: Quartz-mica schist. Psf: Quartz arenite and siltstone. Qcq, Quartz-rich colluvium and scree

The CSIRO Kick-Start Program

The CSIRO Kick-Start program helps Australian start-ups and small and medium-sized enterprises (SMEs) access to dollar-matched funding to undertake research and development activities with CSIRO. It is a targeted program, which forms part of CSIRO's strategic commitment to deepen its direct support for Australian technology start-ups and SMEs in areas of national growth priorities.



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The program forms part of the wider CSIRO SME Connect program, which provides facilitation and matched funding services to eligible SMEs with a turnover or expenditure of up to \$100 million. The initial Mt Peake program budget is \$100,000 and will co-funded by Australasian Gold and the CSIRO Kick-Start program.

This announcement is approved for release by the Board of Directors

ENDS

For Further Information

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Competent Person Statement

The information in this report that relates to Exploration Results is based on, and fairly represents, information and supporting documentation prepared by Dr Qingtao Zeng, Managing Director of Australasian Gold Limited. Dr Zeng is a member of the Australasian Institute of Mining and Metallurgy and he has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which has been undertaken 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 Zeng consents to the inclusion in this release of the matters based on the information in the form and context in which they appear. Dr Zeng is a shareholder of Australasian Gold Limited.

Australasian confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. Australasian confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.