



AUSTRALASIAN METALS

ASX Announcement | ASX: A8G | 6 December 2021

Mt Peake Lithium project regional targeting progress update with CSIRO

Highlights

- High priority pegmatite targets with lithium mineralisation potential have been identified through a Kick-Start project between A8G and CSIRO in ELA32830
- Further sampling planned to extend the surface mineralisation discovered with Sample JC001 (1.61% Li₂O & 223 ppm Ta)
- ELA32830 application notice period will end on the 3rd of March, 2022, and the Company estimates that the license will be granted shortly afterwards

Australasian Metals Limited (**ASX: A8G, Australasian** or the **Company**) is pleased to advise that the Company and Australia's national science agency, CSIRO, have made substantial progress in regional targeting exercises in the Company's wholly owned Mt Peake Lithium project.

The Company and CSIRO team will investigate if the uranium/thorium ratio can be used as an indicator for the degree of granite fractionation in the area. They will ascertain if areas with relatively higher U/Th (deeper red colour) indicate a greater degree of fractionation of the granite/pegmatite exposed in outcrop and sub-crop. Fractionated granites have a greater chance to host lithium mineralisation (**Figure 1**). Furthermore the team will assess the ASTER AIOH group content map which highlights locations enriched in micas and clays highly likely to be associated with alteration or the presence of mica bearing pegmatites (**Figure 2**).

Highlighted by this work is a strong regional NW-SE trending structural framework. The Company's geologists believe that this trend is a major controlling factor for the emplacement of the intrusive bodies and the associated, later stage pegmatite dykes. Geological mapping conducted by the Company has also shown that there is a regional NW-SE structural trend that has influenced both the schists and the intrusives.

The Company's previous announcement of a high-grade rock chip sample (JC001 of 1.61% Li₂O & 223 ppm Ta) (16 November, 2021) shows that the chemistry is present for lithium



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mineralisation at ELA32830, and by combining this knowledge with the remote sensing work of the CSIRO we have been able to define high priority targets for further sampling, both in the northwest corner of the tenement and also in the southeasy of the tenement, following what is interpreted as a significant regional shear zone.

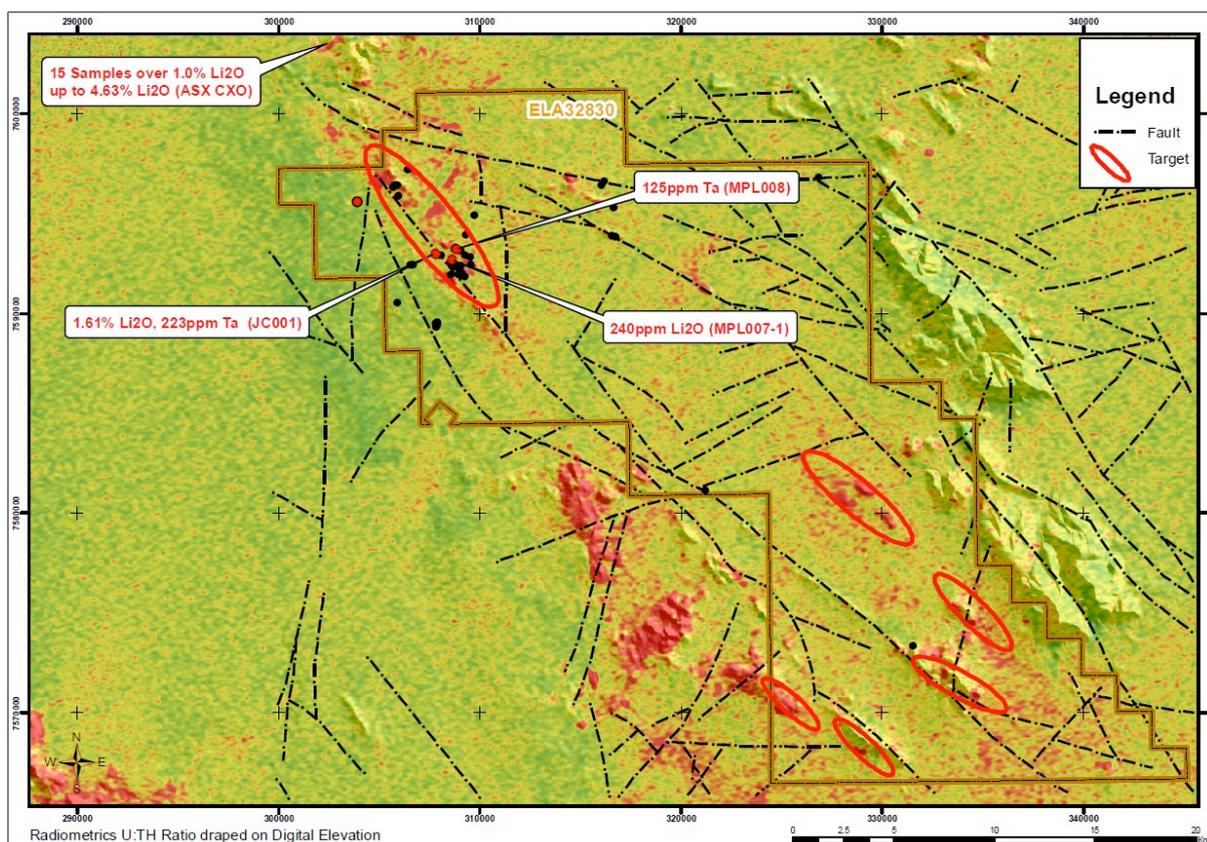


Figure 1: High priority pegmatite targets identified in ELA32830, Mt Peake Lithium project Northern Territory. The black dots are the sample locations of A8G, and Samples with elevated Li and Ta contents were highlighted in red dots. Note that the 15 samples over 1.0% Li₂O are located in Core Lithium Limited ground. A zoomed-in map on the northwest corner is presented in Figure 3.

The highlighted areas (**Figure 1**) are interpreted as expressions of elevated U/Th within the deformation zone of this shear that are also close to potential contacts of the intrusions with older metasedimentary units (predominantly schists). The Company believes that such areas have the potential to localise the emplacement of lithium bearing pegmatites. The Company is currently planning further fieldwork at the Mt Peake Lithium project, where we will conduct follow-up sampling in the area JC001 was discovered and also investigate these newly identified targets.



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The Company has been informed that EL 32830 application will exit the Northern Territory Notification period on the 3rd of March, 2022. We anticipate the license will be granted before the end of March 2022.

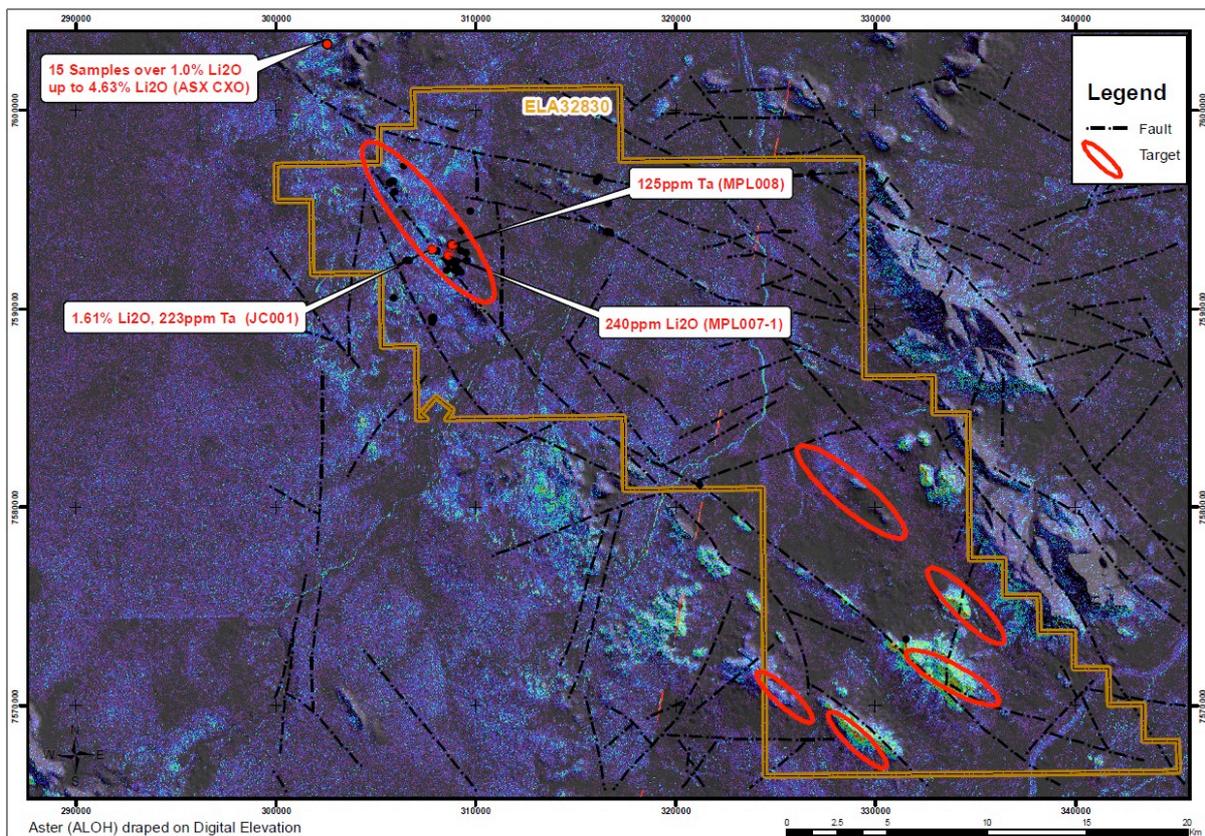


Figure 2: AIOH group content drapped on DEM data as the base map highlighting locations enriched in mica/clay.

Australasian Metals Managing Director Dr Qingtao Zeng said: “We are delighted to be able to identify more targets in our project with CSIRO’s support and appreciate the work by Dr Vaclav Metelka and Dr Carsten Laukamp. Our team has discovered one high-grade sample in the surface, which is just a start, and we are working closely with CSIRO to trace the fertile pegmatite aiming at defining a footprint of potential lithium mineralisation.

“The permit application is in good shape, and the timing is perfect that we can take full advantage of the period to fine-tune the drilling target in early next year.”



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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 3**). The project area is in the Anningie Sn-Ta pegmatite field, a known Lithium-Caesium-Tantalum pegmatite district in the Northern Arunta pegmatite province, central Northern Territory. The Esther Granite Suite contains biotite-muscovite granites, 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 3** were mapped via vehicle and foot traverse (Donnellan, 2008). An Sn-Ta-bearing coarse-grained Paleoproterozoic pegmatite was identified at the Reward Tin prospect, 70m long and 5-20m wide, located 3km to the north of ELA32830.

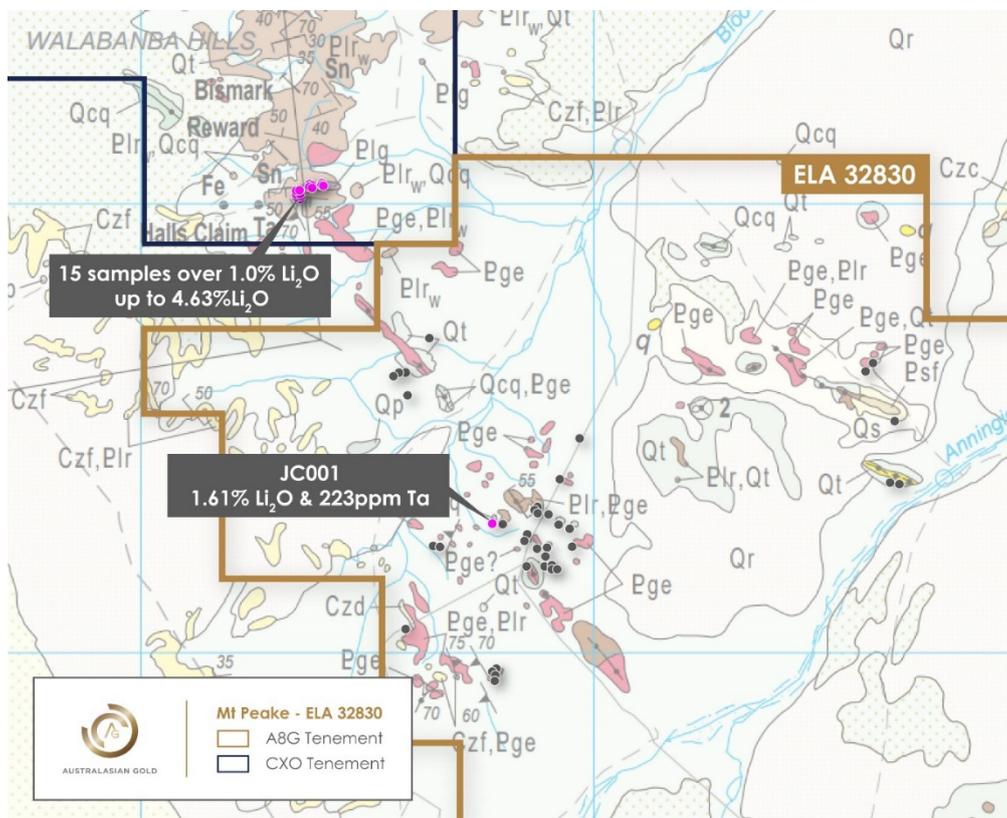


Figure 3: Location of Todd River Resources sampling and A8G sample JC001 in the tenement map. Both EL26848 (ASX: CXO) and ELA32830 are shown on the 1: 250,000 Mt Peake Geological map. Pge: Esther Granite, biotite granite, aplite and pegmatite, locally phyllonitic or mylonitic. Plr: Quartz-mica schist. Psf: Quartz arenite and siltstone. Qcq, Quartz-rich colluvium and scree. The black dots are the sample locations of A8G and JC001 is highlighted in pink



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The CSIRO Kick-Start Program

This project was made possible by the CSIRO Kick-Start Program. CSIRO Kick-Start helps Australian start-ups and small businesses access dollar-matched funding and facilitation to undertake research and development activities with CSIRO. 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 is using this prior research and experience to assist Australasian in identifying 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.

We want to acknowledge the pre-competitive data provided by the Northern Territory Geological Survey. The high-resolution geophysical imagery was acquired through GEMIS: <https://geoscience.nt.gov.au/gemis/ntgsjspui/handle/1/89885>.

The remote sensing data, including the AIOH map, were collected by the ASTER satellite sensor and reprocessed by CSIRO during the course of this research project using the standard CSIRO processing: <https://www.csiro.au/en/research/technology-space/astronomy-space/aster-map>. The mineral maps for all of Northern Territory are also available through NTGS and GEMIS: <https://geoscience.nt.gov.au/gemis/ntgsjspui/handle/1/82535>.

This announcement is approved for release by the Board of Directors

ENDS

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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 Metals 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 Metals 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.