AUSTRALASIAN GOLD

ASX Announcement | ASX: A8G | 25 August 2021

Tenement application lodged in the Mt Peake pegmatite district in Northern Territory

Highlights

- Exploration License Application (ELA32830) has been lodged to Northern Territory Department of Industry, Tourism and Trade
- ELA32830 covers over 640Km^2 area with potential to host lithium mineralisation in a known Lithium-Caesium-Titanium pegmatite district, bordering Core Lithium Limited's (ASX: CXO) Anningie lithium project
- Highly fractionated pegmatite has been mapped in the surface and documented in government report in this region
- Field mapping planned to commence in the next few weeks

Australasian Gold Limited (**ASX: A8G**, **Australasian** or the **Company**) is pleased to advise that the Company has applied for an exploration license in the Anningie pegmatite province (ELA32830). ELA32830 is located in Mt Peake area of the Anningie Tin-Tantalum-Pegmatite fields in the north Arunta Region of the NT. The area is considered highly prospective for hard rock lithium mineralization. ELA32830 covers over 640km^2 and shares a boundary with Core Lithium Limited's (ASX:CXO) Anningie lithium project.

There are two major pegmatite districts in Northern Territory: the first, in the north of the territory is called Pine Creek pegmatite province, while the Northern Arunta pegmatite province is ~200km north of Alice Springs (**Figure 1**).

Australasian Gold Managing Director Dr Qingtao Zeng said: *"I have been involved in lithium trading since 2016 and I know this space very well. There is great demand for spodumene concentrate and there are currently limited producers in the pipeline. Spodumene concentrate price opens up a new space for Li-bearing pegmatite exploration. That is where we see the opportunities. The Company is fortunate to be able to peg free land in the Northern Territory to conduct exploration for lithium."*

"We are in the LCT pegmatite area and previous exploration and government mapping work focused on non-lithium commodities. Given the vast land holding we have and preliminary lithium mineralization indication in the area, we are extremely excited about the forthcoming field mapping campaign."

"In the lithium 1.0 boom, we saw new discoveries like Pilgangoora, Mt Hodland and Finniss lithium projects. Now we are in the era of Lithium 2.0; it is most likely that more discoveries will be made through exploration works in recognised pegmatite districts."

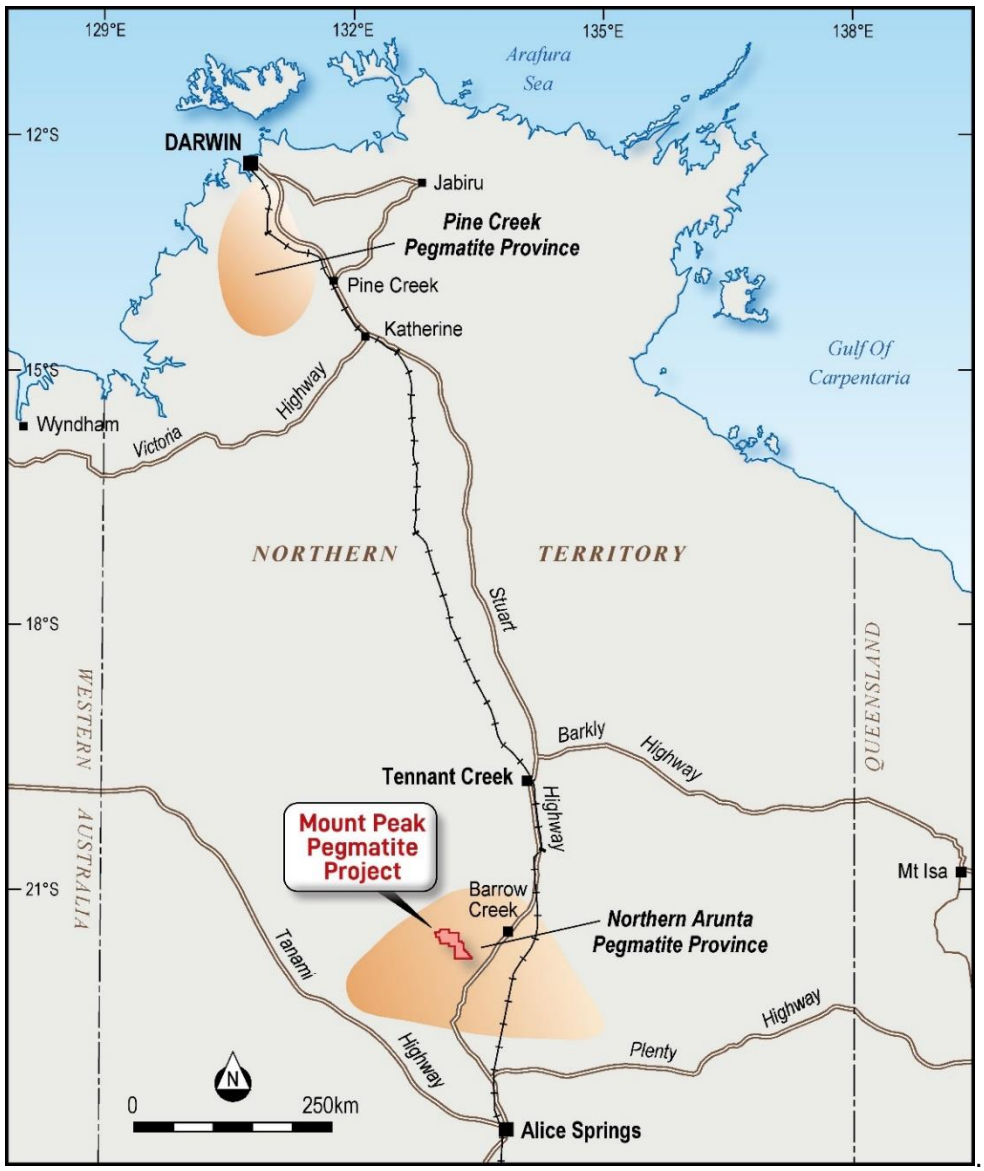

Figure 1: Project location in the Northern Arunta Pegmatite provinces of the Northern Territory (KM Frater, 2005)

Location

The Mount Peake Pegmatite 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.

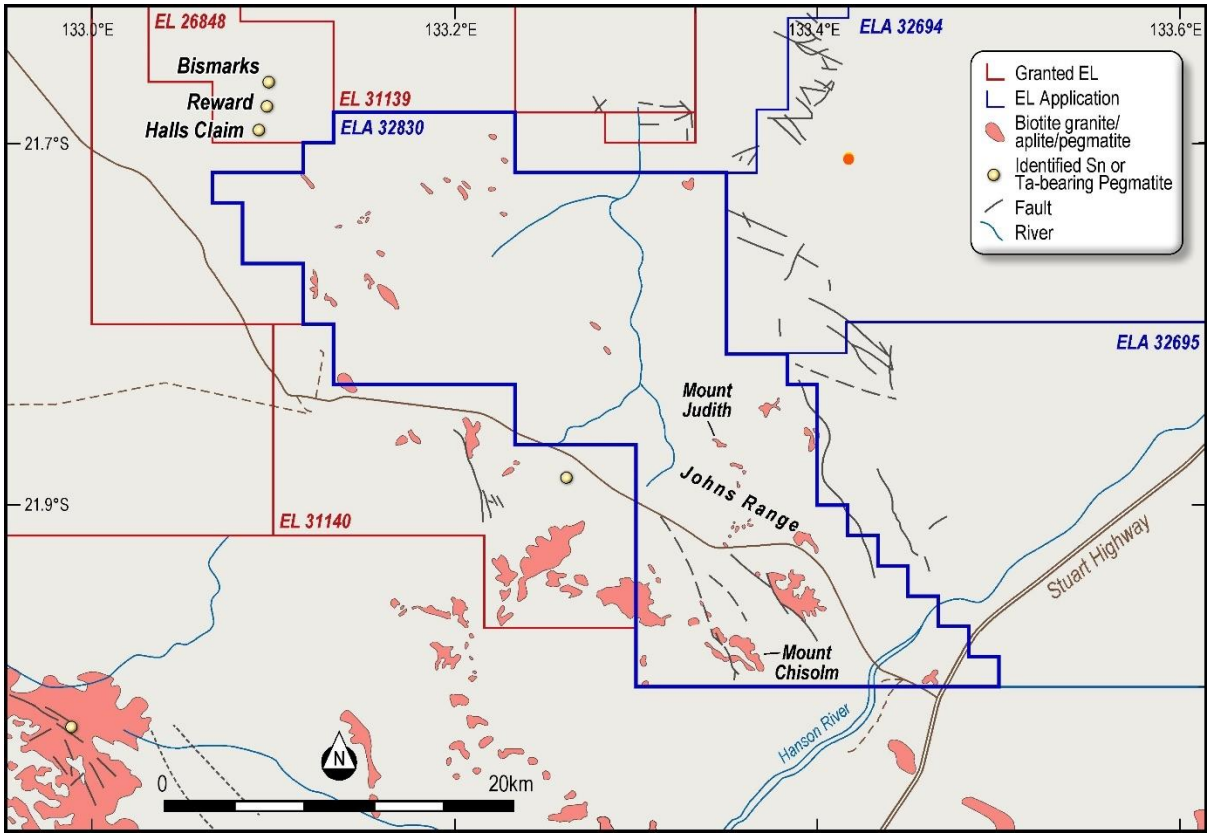

Figure 2: the location of ELA 32830. It shares a boundary with EL26848 and EL 31139 which are owned by Core Lithium Limited (ASX:CXO). This entire area is in the Anningie Sn-Ta Pegmatite field. Location of lepidolite and spodumene minerals have been identified in 1965 by Pontifex is marked with red dot.

There are several key features attracting our attention:

1) The project area is in the Anningie Sn- Ta pegmatite field which is a known LCT pegmatite district in Central Northern Territory.
2) The Esther granite contains biotite-muscovite granite, leucocratic, medium-grained, even-grained to porphytic, tourmaline bearing, pegmatite and aplite (Offe,1978). These mapping works were conducted through on vehicle and foot traverse

observations according to the 1: 250,000 scale geological map of Mt Peake (Donnellan, 2008).

3) There is Sn,Ta-bearing coarse-grained Paleoproterozic pegmatite identified in Reward Tin Prospect in the surface, 70 m long and 5-20 m wide, which is located 3 km to the north of the ELA 32830. According to the geochemical analysis by Frater (2005), three reward pegmatite samples were assayed with results of up to 747 ppm Li. Similar pegmatites have been identified across ELA32830.
4) Lepidolite (Li-bearing mica) and spodumene were identified in pegmatite sample by petrological examination in 1965 by Pontifex. The location of this sample is ~7 km east of ELA 32830, marked in **Figure 2**.
5) Tenement Application covers the Stuart Highway and 30 Km to the Central Australia Railway, which provides excellent logistic support for the project down the track.

Previous Exploration

The Anningie tin field, covering the Company's license application, has historically been explored for tin/tantalite since 1935. While regional mapping of the district has been carried out by the Northern Territory Geological Survey, the area covered by ELA32830 is essentially unexplored. In 1965, a mineralogy examination of a Li-bearing pegmatite in the Anningie Tin field was conducted, with lepidolite (Li-bearing mica) and spodumene identified in a thin section study (Pontifex, 1965).

The Anningie Tin field occurs within intrude mica schists and amphibolites of the Lander Rock beds in the foothills of uplands draining into Anningie Creek, a tributary of the Hanson River. Tin-tantalum-bearing pegmatites intrude mica schists and amphibolites of the Lander Rock beds in Mount Peake. In 1998，Adelaide Resources NL explored the area for Tennant Creek-style and Granites Tanami-style gold deposits (Howard, 1998). A total of 244 vacuum drilling holes were drilled using 1.6 km by 800 m spacing, totalling 1,220m, with some of the drilling carried out in the Company's application area. Granite, granite gneiss, schist and amphibolite were intersected, usually below think regolith development.

Upcoming Exploration

At the Mount Peake pegmatite field, the Company will shortly conduct field reconnaissance and geological mapping using the 1:250,000 scale Mt Peake geological map. In the meantime, the Company is exploring innovative techniques, like remote sensing interpretation, to narrow down pegmatite outcrop which could be potential hosts of lithium mineralisation.

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 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.

Reference

1. Černý P, 1993. Rare element granitic pegmatites. Part I: Anatomy and internal evolution of pegmatite deposits: in Sheahan PA and Cherry ME (editors) 'Ore deposit models, volume II.' Geoscience Canada Reprint Series 6, 29–47.
2. J.P. Howard. Report No AR1998/5. Open file CR19980568. 1-82
3. Donnellan N, 2008. Mount Peake and Lander River, Northern Territory. 1:250 000 geological map series explanatory notes, SF 53-05, SF 53-01. Northern Territory Geological Survey, Darwin.
4. Frater KM, 2005. Tin-tantalum pegmatite mineralisation of the Northern Territory. Northern Territory Geological Survey, Report 16.
5. Offe LA, 1978. Mount Peake, Northern Territory. 1:250 000 geological map series explanatory notes, SF 53-05. Northern Territory Geological Survey, Darwin and Alice Springs.
6. I.R. Pontifex. 1965. A mineralogical examination of a Lithium-bearing pegmatite, Anningie Tin Field, N.T. File No. 65/6859. Report No. 89

Section 1 Sampling Techniques and Data – (Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
Sampling techniques	• Only rock chip sampling was discussed in this announcement Sample techniques were disclosed in the published report of Frater, 2005.
Drilling techniques	• No drilling data applicable
Drill sample recovery	• Not applicable
Logging	• Sample were described in Frater, 2005
Sub-sampling techniques and sample preparation	• Not applicable
Quality of assay data and laboratory tests	• Industry standard assay techniques were used for lithium.
Verification of sampling and assaying	• The verification work is ongoing. • No significant adjustments to the assay data have been required.
Location of data points	• The location for Reward Tin Prospect samples is accessible in NT Strike online database; • The location of the Li-bearing pegmatite was recorded in Military Grid system: 642000, 2298000 in the open file report 89, Pontifex, 1965
Data spacing and distribution	• Rock chip sample in the surface, not applicable
Orientation of data in relation to geological structure	• Sampling was conducted to test the Sn and Ta mineralization in Reward Tin Prospect from a pegmatite outcrop. No geological structure was described.
Sample security	• There are no reports available relating to sample security
Audits or reviews	• There has been no review of the sampling techniques and data.

Section 2 Reporting of Exploration Results – (Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
Mineral tenement and land tenure status	• **Mt Peake Li Pegmatite Project** The Mt Peake Li pegmatite Project currently comprises one exploration licence application covering 207 blocks, over 640 km^2. The tenement application is held 100% by Pure Mining Pty Ltd, which is a fully owned subsidiary of Australian Gold Limited. No aboriginal sites or places have been declared or recorded in areas where Australasian intend exploring. There are no national parks over the license area. Before substantial exploration can proceed, a survey will be required to ensure there are no aboriginal sites are located in areas where Australasian intend exploring. • Australasia have engaged UTM Global Pty Ltd to manage the EL application and the Company was noticed that the tenements application is in good shape with no known impediments.
Exploration done by other parties	• Limited exploration on Lithium in this region. No drilling for lithium has not been previously reported compliant with the JORC Code (2012) for reporting exploration results and Mineral Resources.
Geology	• The Arunta Region is a large multi-deformed and variably metamorphosed terrane on the southern margin of the North Australian Craton (NAC) with variable deformation, episodes of multiple magmatic activity and metamorphic overprint. Magmatic activity in the Palaeoproterozoic was extensive and in some areas, repetitive. Both syn- and post-magmatic activity resulted in pulses of felsic and mafic magmatism that extended over long periods. At any one time, deep-level granite emplacement, deformation, volcanism and sedimentation commonly occurred in different areas of the Arunta Region. • The known tin-tantalum and potentially lithium pegmatite fields are on northern margin of the Arunta Region. Their location on craton margins is typical of Proterozoic terranes • The Sn-Ta mineralised pegmatites at Mt Peake pegmatite area typically occur in linear swarms and range in size from a few metres long and less than a metre wide up to hundreds of metres long and tens of metres wide. Their shape is typically tabular or pod-like and their orientation is steep to sub-horizontal. Although the pegmatites are commonly parallel to the regional fabric, in detail, they transgress both bedding and foliation. Structural evidence suggests that the pegmatites are late- to post-tectonic, with emplacement being relatively passive. A highly variable and frequently non-penetrative brittle-ductile style of deformation is evident, with zones of well-developed brittle-ductile deformation commonly bounding windows of undeformed or mildly deformed pegmatite. • The bulk mineralogy of surface pegmatites is typically quartz, muscovite, kaolinite, cassiterite, tantalite and columbite. Beryl, spodumene and amblygonite may occur, but are not common. • Most pegmatites display some degree of zoning; in most this consists of a narrow border zone (<1 cm), of fine-grained quartz and muscovite, adjacent to a wall zone (<30 cm wide), which consists of comb-textured quartz and muscovite oriented perpendicular to the wall of the pegmatite. The wall zone passes into a feldspar-

Criteria	Commentary
	dominant intermediate zone. A core zone of massive quartz may be present in larger bodies, although rarely as a symmetrical central core. Narrow, steeply dipping greisen zones and veins bearing cassiterite and tantalite are a common feature of mineralised pegmatites. Tourmaline and garnets are relatively rare in the pegmatites, but tourmaline is very common in country rock at the pegmatite contact. Tourmaline saturation at the contact is interpreted as being due to the escape of volatiles from the pegmatite walls. Geochemical analyses indicate that boron and fluorine are typically removed from pegmatite and are dispersed in country rock adjacent to the contact. • The Esther Granite, which is located in the north part of the ELA 32830, is a grey, biotite granite and typically has a K-feldspar megacrystic texture. A number of textural variants have been identified and mapped. This broad textural zoning may reflect multiphase emplacement, and a greater or less degree of intermingling. • Feldspar textural characteristics in the Esther Granite are consistent with slow cooling and deuteric alteration. Ordering of feldspars suggests that late-stage fluids were not peraluminous although the granite compositions themselves are peraluminous. • Frater (2005) concluded that the tin at Anningie is associated with pegmatites of LCT lithium-caesium-tantalum) type (see Černý's 1993), as is typical of tantalum, niobium and tin mineralisation throughout the Northern Territory. These pegmatites are in turn associated with peraluminous granites, in which tantalum, niobium and tin are thought to substitute as oxides for (TiO4)4-. Both granite and pegmatite are pervasively greisenised by a late-stage, aqueous-rich, magmatic-pneumatolytic fluid. • Mineralisation occurs in local pods within the typically barren granite, in pegmatitic phases within the granite and in highly fractionated pegmatites surrounding the granite. • Mineralogical details, complex zoning and textural features of the pegmatites were described by Frater (2005) who recognised at least three generations of feldspar, the first of which is coarse grained and deformed (strained and fractured), in common with the associated quartz. It is these early formed minerals that are interlocked with fractured tantalite and cassiterite.
Drill hole Information	• Not applicable
Data aggregation methods	• Not applicable
Relationship between mineralisation widths and intercept lengths	• Not applicable
Diagrams	• Please refer to Figures in body of text. Only parts of the drilling photo are presented here.
Balanced reporting	• All results reported are exploration results in nature. No representative significance were applied
Other substantive exploration data	• Assessment of other substantive exploration data is not yet complete however considered immaterial at this stage.
Further work	• Follow up work programmes will be subject to interpretation of recent and historic results which is ongoing.