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ASX ANNOUNCEMENT

UPDATE OF FIELD WORK AT YOUANMI WESTERN AUSTRALIA

BACKGROUND

As announced on 2 October 2018, Lithium Australia NL (ASX: LIT) signed an option to acquire the prospective Youanmi lithium and vanadium project ('the Project'), located in the Murchison District in Western Australia.

The Project, consisting of three exploration licences in the Archean Yilgarn Block, is approximately 450 kilometres ('km') northeast of Perth. It hosts abundant lithium pegmatites intruding layered mafic rocks, with the latter also hosting vanadium-rich magnetite horizons.

The pegmatites are strongly fractioned with the dominant lithium mineral being lepidolite (a lithium mica).

Initial work on the Project has revealed occurrences of lepidolite-bearing pegmatites in a belt over a strike length of almost 3 km and a width of at least 200 metres ('m'). Rock sampling has confirmed lithium values of up to 4.2% Li_2O, anomalous caesium and tantalum values.

MAPPING AND FIELD OBSERVATIONS

Recent field reconnaissance and detailed mapping by Lithium Australia have so far confirmed the presence of lepidolite-bearing pegmatites at surface over a strike length of 2.5 km. The pegmatites occur as clusters, with individual pegmatite outcrops up to 400 m long and 50 m wide on surface.

Outcropping pegmatites in the south occur in a north-south trending hill 900 m long and 500 m wide, situated 700 m northwest of West Bore. That hill is a sequence of layered mafic rocks intruded by pegmatite dykes forming a complex anastomosing array. Orientation of the pegmatites varies from shallow to steeply east dipping.

Adjacent to the hill on its northern side, a lepidolite-bearing pegmatite occurs over a strike length of at least 300 m, with a surface outcrop width of at least 25 m. The pegmatite has a generally north-south trend, with dipping moderate to steep towards the east. About 1 km further north, another cluster of lepidolite-bearing pegmatites outcrops within a sheetwash plain. The outcrops occur over a strike length of 600 m and a width of 200 m.

Figure 1 shows the extent of the lepidolite-bearing pegmatites discovered and mapped so far. Detailed mapping of the pegmatites and pegmatite dykes was carried out on a scale of 1:1000. The pegmatites consist of quartz-feldspar-mica and range from fine-grained to very coarse. While lepidolite is common in the pegmatites, field observations indicating that it ranges between ~5% and 35% in certain zones (see Figure 2). *(NB: the lepidolite content is a visual estimate and does not necessarily indicate high lithium values.)*

Since much of the area surrounding the known pegmatite locations is covered by sheetwash, it is likely that the occurrence of lithium pegmatites is far more extensive that the few outcrops currently mapped. Information acquired during Lithium Australia's recently completed high-resolution aerial geophysical survey (see ASX announcement dated 13 February 2019) will be used, in conjunction with the detailed mapping and previous geochemical results, to define drill targets for lithium mineralisation (modelling of the aerial geophysical data should be completed within the next two weeks).

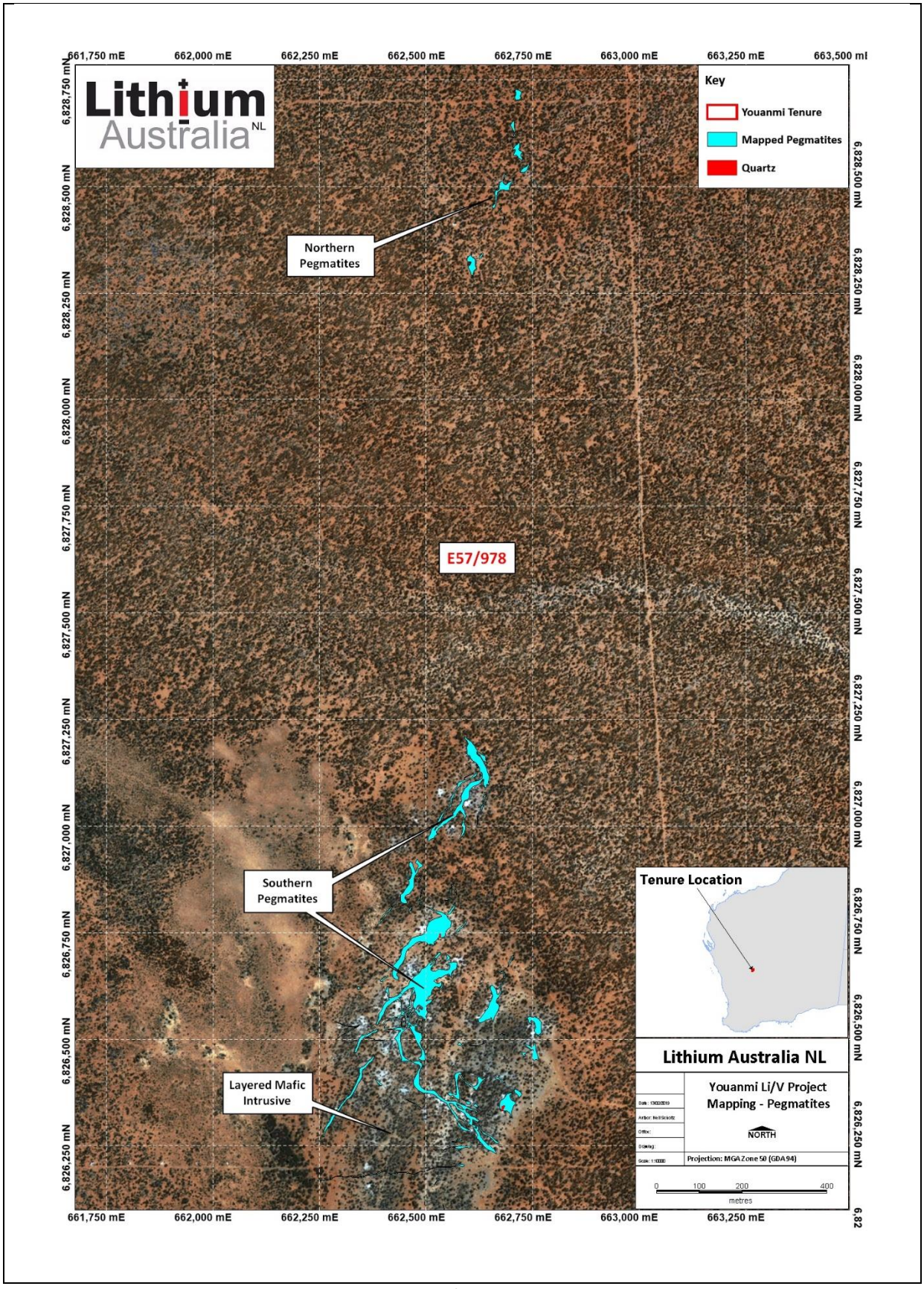

Figure 1. Mapped Youanmi pegmatites.

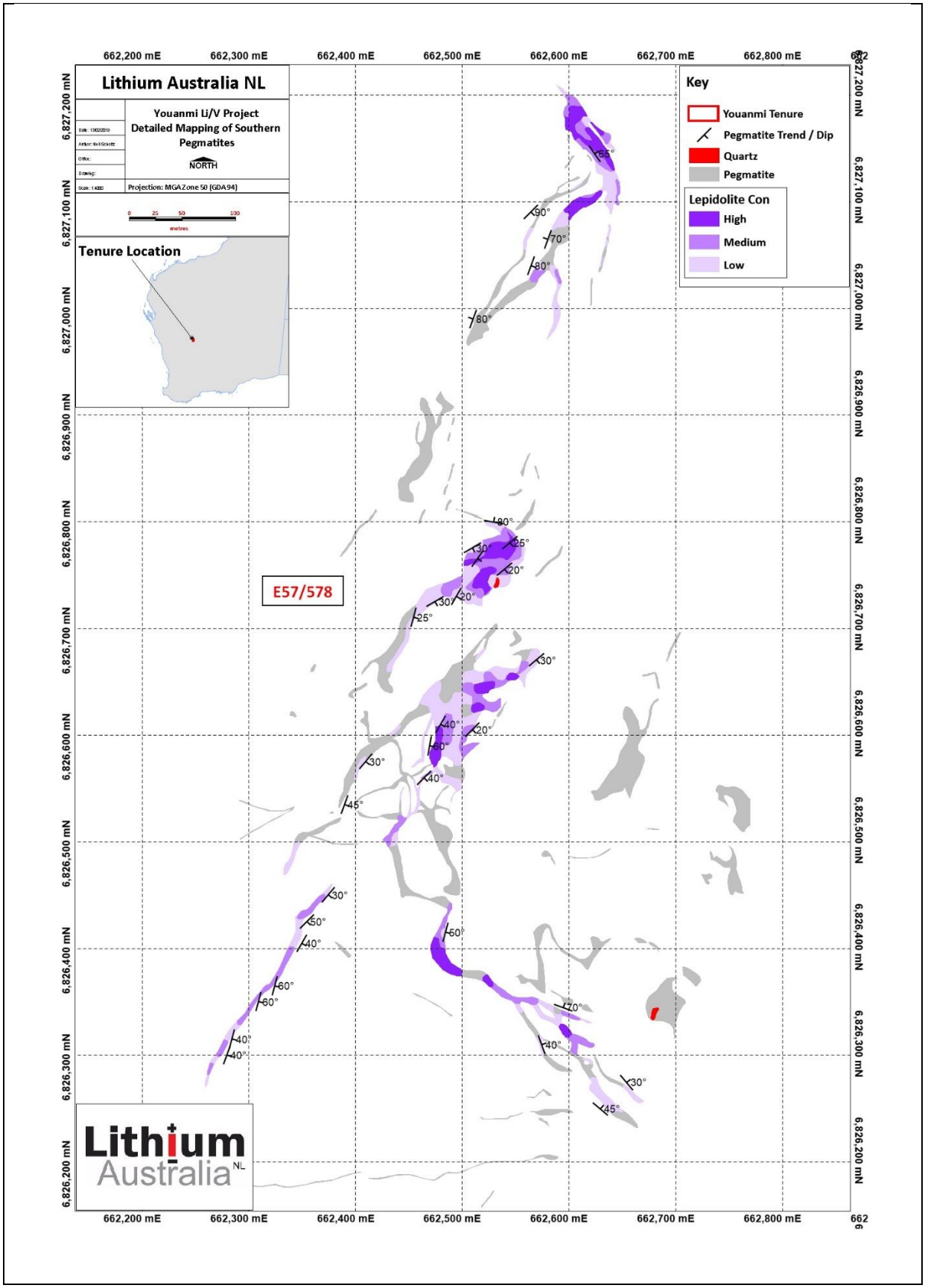

Figure 2. Detailed mapping of southern Youanmi pegmatites – lepidolite content was visually mapped and ranked as low, medium or high.

COMMENT FROM ADRIAN GRIFFIN, MANAGING DIRECTOR

"The widespread occurrence of lepidolite in a location of outstanding infrastructure augurs well for the future of the Youanmi project. Anomalous caesium may also be indicative of further potential this pegmatite suite may have, caesium being in short supply globally, and resource inventories at historically low levels. We are planning on drilling both the lithium and vanadium occurrences in the near future."

Adrian Griffin – **Managing Director**

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About Lithium Australia NL

Lithium Australia aspires to 'close the loop' on the energy-metal cycle in an ethical and sustainable manner. To that end, it has amassed a portfolio of projects and alliances and developed innovative extraction processes to convert *all* lithium silicates (including mine waste) to lithium chemicals. From these chemicals, the Company plans to produce advanced components for the lithium-ion battery industry. The final step for Lithium Australia involves the recycling of spent batteries and e-waste. By uniting resources and the best available technology, the Company aims to establish a vertically integrated lithium processing business.

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Competent Person's Statement – Lithium Mineral Resources – Australia

The information in this report that relates to exploration results, together with any related assessments and interpretations, is based on information compiled by Mr Adrian Griffin on behalf of Lithium Australia NL. Mr Griffin is a member of the Australasian Institute of Mining and Metallurgy and has sufficient experience relevant to the styles of mineralisation under consideration, and to the activity they have undertaken, to qualify as Competent Persons, as defined in the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2012 edition)*. Mr Griffin consents to the inclusion in the report of the matters based on their information in the form and context in which it appears. Lithium Australia is not aware of any new information or data that materially affects that contained herein.