

ASX ANNOUNCEMENT



19 March 2020

Lithium Australia – exploration progress

SUMMARY

- **Drilling planned for Metcalf spodumene deposit.**
- **Tenement acquisition completed for Mt Deans East – North Lode.**
- **Rehabilitation at Ravensthorpe completed.**
- **Spodumene samples for LieNA[®] CRC project now at ALS Metallurgy.**

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Lithium Australia NL (ASX: LIT, 'the Company') is pleased to provide investors with an update to its raw materials strategy for 2020 and beyond.

The Company's raw materials division is charged with establishing a quality lithium resource base, in order to provide options for feeding into downstream processing facilities that may include the Company's 100%-owned LieNA[®] process.

Lithium Australia is considering sourcing lithium minerals from mine-waste streams (historical dumps and tailings) or as discharge from currently operating mines; however, primary supply opportunities, which includes the Medcalf prospect, are also being evaluated.

Medcalf spodumene deposit – Western Australia

In April 2019, the Company announced that it had identified strongly mineralised lithium-bearing pegmatite swarms within its Medcalf prospect, near Lake Johnston. The dominant lithium mineral is spodumene (see [ASX announcement](#) dated 15 April 2019).

In the announcement, the Company noted that the Medcalf prospect provided the following.

- A cluster of stacked pegmatite dikes with abundant spodumene, outcropping over a strike length of 450 metres and a width of 100 metres.
- Subsequently, a lithium-in-soil geochemistry anomaly suggests possible extensions under cover.
- Spodumene samples returned very low levels of deleterious elements.

Prior to drilling, Lithium Australia requires the approval of the Department of Mines, Industry Regulation and Safety for a programme of work, as well as completion of a botanical study. Both are well in-train.

Subject to receiving the requisite approvals, the inaugural drilling programme will be completed during the second quarter of 2020 and will comprise approximately 12 reverse circulation drill holes for 2,500 metres. There will be provision for additional holes.

Previously, the Company issued an Exploration Target for the Medcalf prospect that was in the range of 5 million tonnes ('Mt') to 8 Mt at 0.8% lithium oxide ('Li₂O') to 1.2% Li₂O.

The Exploration Target is not a JORC compliant Mineral Resource – the potential quantity and grade are conceptual in nature, as exploration to date has been insufficient to determine a Mineral Resource and there is no certainty that further exploration work will result in the determination of a Mineral Resource.



ASX ANNOUNCEMENT

Mt Deans East lithium prospect – Norseman, Western Australia

Lithium Australia has concluded a transaction with Aruma Resources Limited (ASX: AAJ), following the grant of the Mt Deans East tenement (P63/2062, 'the Tenement') in September 2019. Under the terms of the agreement, the Company will:

- provide Aruma with \$15,000 and issue \$75,000 worth of fully paid ordinary ('FPO') shares in Lithium Australia and keep the Tenement in good standing for 9 months to earn a 50% Interest;
- subsequently issue a further \$50,000 worth of FPO shares and keep the Tenement in good standing for 18 months to earn a further 30% interest (total 80% Interest), and
- thereafter contribute to further exploration on a pro-rata basis.

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Overall, the Mt Deans area has been evaluated for lithium-caesium-tantalum pegmatites over many years, initially with tin and tantalum as the exploration focus. More recently, lithium mineralisation has been located and it was this that drew the Company's attention to the region.

The Mt Deans East prospect is strategically located, being adjacent to the Goldfield-Esperance Highway and within close proximity to other developing lithium projects, including the Buldania project of Liontown Resources Limited (ASX: LTR) and the Pioneer Dome project of Pioneer Resources Limited (ASX: PIO, 'Pioneer').

Rehabilitation – Ravensthorpe, Western Australia

Rehabilitation of worksites at the Company's Deep Purple and Horseshoe prospects, located near Ravensthorpe, has been completed in accordance with an updated rehabilitation plan agreed with DMIRS and monitoring continues.

Lithium Australia's LieNA[®] process

The Company continues to advance development of its 100%-owned LieNA[®] process, which represents an innovative and potentially more efficient treatment route for the lithium mineral spodumene. LieNA[®] replaces thermal conversion of spodumene with conversion at a lower temperature using caustic soda. The lithium is then selectively leached and recovered as tri-lithium phosphate.

On [13 February 2020](#), Lithium Australia announced it had been awarded a grant totalling \$1.3 million by the Australian federal government's Co-operative Research Centre Projects initiative, to support the next stage of the Company's \$3.6 million LieNA[®] research and development ('R&D') programme for the recovery of lithium from either fine spodumene or spodumene that cannot be upgraded to meet commercial concentrate specifications.

Leading researchers and companies participating in that R&D programme include ANSTO (the Australian Nuclear Science and Technology Organisation), Murdoch University, Curtin University, Pioneer, ALS Metallurgy Pty Ltd ('ALS'), Carnac Project Delivery Services Pty Ltd and Lithium Australia's 100%-owned subsidiary VSPC Limited.

Pioneer has provided Lithium Australia with a 5-tonne sample of spodumene ore grading approximately 1.2% Li₂O from its Cade and Davy deposits. That sample will be beneficiated to yield a concentrate then used by ANSTO to extract lithium using the Company's LieNA[®] process. .

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Authorised for release by the Board.

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About Lithium Australia NL

Lithium Australia aims to ensure an ethical and sustainable supply of energy metals to the battery industry (enhancing energy security in the process) by creating a circular battery economy. The recycling of old lithium-ion batteries to new is intrinsic to this plan. While rationalising its portfolio of lithium projects/alliances, the Company continues with R&D on its proprietary extraction processes for the conversion of *all* lithium silicates (including mine waste), and of unused fines from spodumene processing, to lithium chemicals. From those chemicals, Lithium Australia plans to produce advanced components for the battery industry globally, and for stationary energy-storage systems locally. By uniting resources and innovation, the Company seeks to vertically integrate lithium extraction, processing and recycling.

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Competent Person's Statement – Lithium Mineral Resources, Australia

The information in this report that relates to Australian Exploration Results, together with any related assessments and interpretations, is based on information compiled by Mr Adrian Griffin on behalf of Lithium Australia. 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 activities undertaken, to qualify as a Competent Person, as defined in the *JORC Code 2012*. Mr Griffin consents to the inclusion in the report of the matters based on the information in the form and context in which they appear. Lithium Australia is not aware of any new information or data that materially affects that contained herein.