

ASX ANNOUNCEMENT

21 September 2020



ACN: 126 129 413
ASX: LIT

Level 1
675 Murray St
West Perth WA 6005

PO Box 1088
West Perth WA 6872
Phone +61 (0) 8 6145 0288
Fax +61 (0) 8 9475 0847

info@lithium-au.com
lithium-au.com

Lithium Australia NL – exploration milestones in Western Australia

HIGHLIGHTS

- Lithium evaluation to resume at Lake Johnston and Medcalf.
- Historical data supports exploration for nickel and platinum-group elements at the Coates Mafic Intrusive Complex.
- Metal Hawk acquires gold and nickel rights for Emu Lake.
- Lepidolite Hill transfer from Focus Minerals to Lithium Australia.

Collaborative exploration management strategy

The exploration strategy of Lithium Australia NL (ASX: LIT, ‘Lithium Australia’ or ‘the Company’) includes joint funding of its exploration portfolio, achieved through associations with well-funded and progressive explorers. To that end, Lithium Australia recently entered into agreements with Okapi Resources Ltd, Metal Hawk Ltd, Australian Vanadium Ltd and Mercator Metals Pty Ltd, thereby providing exposure to gold and base metals at little cost to the Company and preserving 100% of the lithium potential of the projects concerned.

Lake Johnston and Medcalf

These Company projects are located 470 kilometres ('km') east of Perth, Western Australia ('WA'). In conjunction with joint-venture partner Okapi Resources Ltd (ASX: OKR) – see OKR release dated 3 September 2020 – the Company will test lithium and gold targets within the Lake Johnston and Medcalf project areas during the December 2020 quarter.

Previously, the Company has employed reconnaissance geological mapping and geochemical sampling there, resulting in the discovery of a spodumene pegmatite cluster at Tamar Hill near Lake Medcalf.

Coates Mafic Intrusive Complex

On 27 May 2020, the Company announced its collaboration with Australian Vanadium Ltd (ASX: AVL, ‘Australian Vanadium’) and Mercator Metals Pty Ltd, to evaluate the Coates Mafic Intrusive Complex ('the Complex') located 50 km northeast of Perth in WA. That area lies approximately 29 km southeast of the recent nickel/copper/ platinum-group elements ('Ni/Cu/PGE') discovery by Chalice Gold Mines Ltd (ASX: CHN) at its Julimar project.

Following a detailed review of 1970s drilling, Australian Vanadium provided the market with a structural interpretation of the Complex, which is prospective for Ni/Cu/PGE mineralisation.

ASX ANNOUNCEMENT

In its review, Australian Vanadium detailed observations of core from two historical diamond drillholes, which included the results of micro-XRF scans of samples from hole CRD019 that indicated the presence of disseminated pyrrhotite and chalcopyrite¹ within a discrete pyroxenite phase of a magnetite gabbro layer (refer to AVL's announcement to the ASX dated 17 September 2020).

Planning for extensive geochemistry and geophysical surveys continues.

¹ *The presence of sulphides (pyrrhotite and chalcopyrite) in core does not necessarily imply the presence of economic mineralisation, or that there is sufficient quality or quantity to constitute a mineral resource. In accordance with ASX Listing Rules Guidance Note 8, the work completed to date on the sulphide in historical core at the Complex is based on initial visual and mineralogical inspections and addresses the identification but not quality (grade) or quantity (volume) of material present. The logged historical drill core, although assayed for vanadium, titanium, iron, tin, aluminium, calcium and loss of ignition, has not been assayed or assessed for base metals or PGE. Therefore, any understanding of the potential for base metals or PGE mineralised material will only be confirmed by future sampling programmes and assays. Australian Vanadium intends to complete a programme of sampling and assays to evaluate possible base-metal and PGE mineralisation.*

Emu Lake

The Company has partially divested its Emu Lake project (exploration licence E27/562, an area of approximately 44 km² situated 75 km northeast of Kalgoorlie, WA) to Metal Hawk Ltd ('Metal Hawk'), an unlisted public company. Lithium Australia retains 100% of the rights to lithium mineralisation at Emu Lake while entirely defraying tenement holding costs and expenditure commitments.

Originally, the Company targeted the tenement as having potential for lithium mineralisation, given that it is peripheral to a cluster of Kurnalpi Terrane granite intrusions (most lithium-bearing pegmatites occur within a 5 km halo around alkali metal-enriched granitic intrusions).

Recognition of the Kurnalpi Terrane as a host for lithium mineralisation was further enhanced by the discovery by Breaker Resources NL (ASX: BRB) of the Manna spodumene pegmatites southeast of the Emu Lake project (refer to BRB release to the ASX dated 13 November 2018).

Metal Hawk considers the tenement is prospective for nickel and gold, walk-up targets having been identified by earlier explorers.

The title to E27/562 was transferred to Metal Hawk for a consideration of \$60,000, with Lithium Australia retaining 100% of the lithium rights there.

Greenbushes

The Greenbushes area – located 200 km south of Perth, WA – already hosts the world's largest lithium mine. The Company, together with subsidiary Stanifer Pty Ltd, has a significant exploration holding proximal to that mine, which is operated by Talison Lithium Pty Ltd, a joint venture between two of the world's largest lithium companies, Tianqi Lithium Corporation and Albemarle Corporation.

Lithium Australia's ground at Greenbushes is prospective for further lithium deposits and the Company is seeking expressions of interest to advance exploration in the area.

ASX ANNOUNCEMENT

Lepidolite Hill

The Company's Lepidolite Hill project is located 15 km south of Coolgardie in WA. Lithium Australia and Focus Minerals Ltd (ASX: FML, 'Focus') have agreed to terminate the Coolgardie Rare Metals Venture, which entitled the Company to earn an 80% interest in a number of tenements known as the Nepean Group.

A termination agreement replaces the previous joint venture by transferring 100% of certain titles to the Company in return for a royalty payable to Focus. The key terms of the termination agreement are as follows.

- The Coolgardie Rare Metals Venture is terminated, with the parties mutually releasing each other from any associated claims.
- Focus will transfer Lepidolite Hill tenements P15/5574, P15/5739 and P15/5575 to Lithium Australia.
- Lithium Australia will grant Focus a royalty equal to 20% of the statutory royalties payable to the State of Western Australia in relation to those tenements.

From spodumene to lithium-ion batteries

Lithium Australia is a leader in battery-material processing technologies. Its LieNA® and SiLeach® processes are designed to recover lithium from primary ore and waste materials. Company subsidiary Envirostream Australia Pty Ltd recycles energy metals from spent lithium-ion batteries ('LIBs'). Ultimately, Company subsidiary VSPC Ltd uses the lithium derived from each of these sources (as lithium phosphate) to produce advanced cathode powders for the creation of new lithium ferro phosphate (LFP) LIBs.

Designed to dovetail, the Company's technologies minimise the number of steps required in lithium's journey from mining through to battery production and the re-birthing of LIBs.

Comment from Lithium Australia MD Adrian Griffin

"Following its recent and very successful capital-raising initiative, Lithium Australia is well positioned to advance its vertically integrated strategy within the lithium battery industry. Most recently, the Company has been investigating waste streams as a potential supply of lithium raw material for treatment through its proprietary LieNA® process. However, internally sourced spodumene is also sought."

Authorised for release by the Board.

Adrian Griffin
Managing Director
Mobile +61 (0) 418 927 658
Adrian.Griffin@lithium-au.com

Barry Woodhouse
CFO and Company Secretary
Mobile +61 (0) 438 674 259
Barry.Woodhouse@lithium-au.com

ASX ANNOUNCEMENT



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 within Australia. By uniting resources and innovation, the Company seeks to vertically integrate lithium extraction, processing and recycling.

Media contacts

Adrian Griffin, Lithium Australia NL	08 6145 0288 +61 (0) 418 927 658
Kevin Skinner, Field Public Relations	08 8234 9555 +61 (0) 414 822 631

Competent person's statement – exploration strategy

Information in this statement that relates to exploration strategy is based on information provided to and compiled by consulting geologist David Crook BSc GAICD, who is a Member of The Australian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Crook provides the service of Manager – Raw Materials to Lithium Australia NL.

Comments about the Complex are paraphrased from, and should be read in conjunction with, an announcement by Australian Vanadium made to the ASX on 17 September 2020.

Mr Crook has sufficient experience relevant to the exploration processes as reported herein 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*.

Mr Crook consents to the inclusion in the report of the matters based on the information made available to him, in the form and context in which they appear.