Lithium Australia NL
ACN: 126 129 413
ASX: LIT & LITCE

Level 1, 675 Murray St
West Perth WA 6005

PO Box 1088
West Perth WA 6872

25 July 2018

ASX ANNOUNCEMENT

LITHIUM AUSTRALIA TO PILOT-TEST MICA CONCENTRATES FROM WESTERN AUSTRALIA's 'LITHIUM-FIELDS'

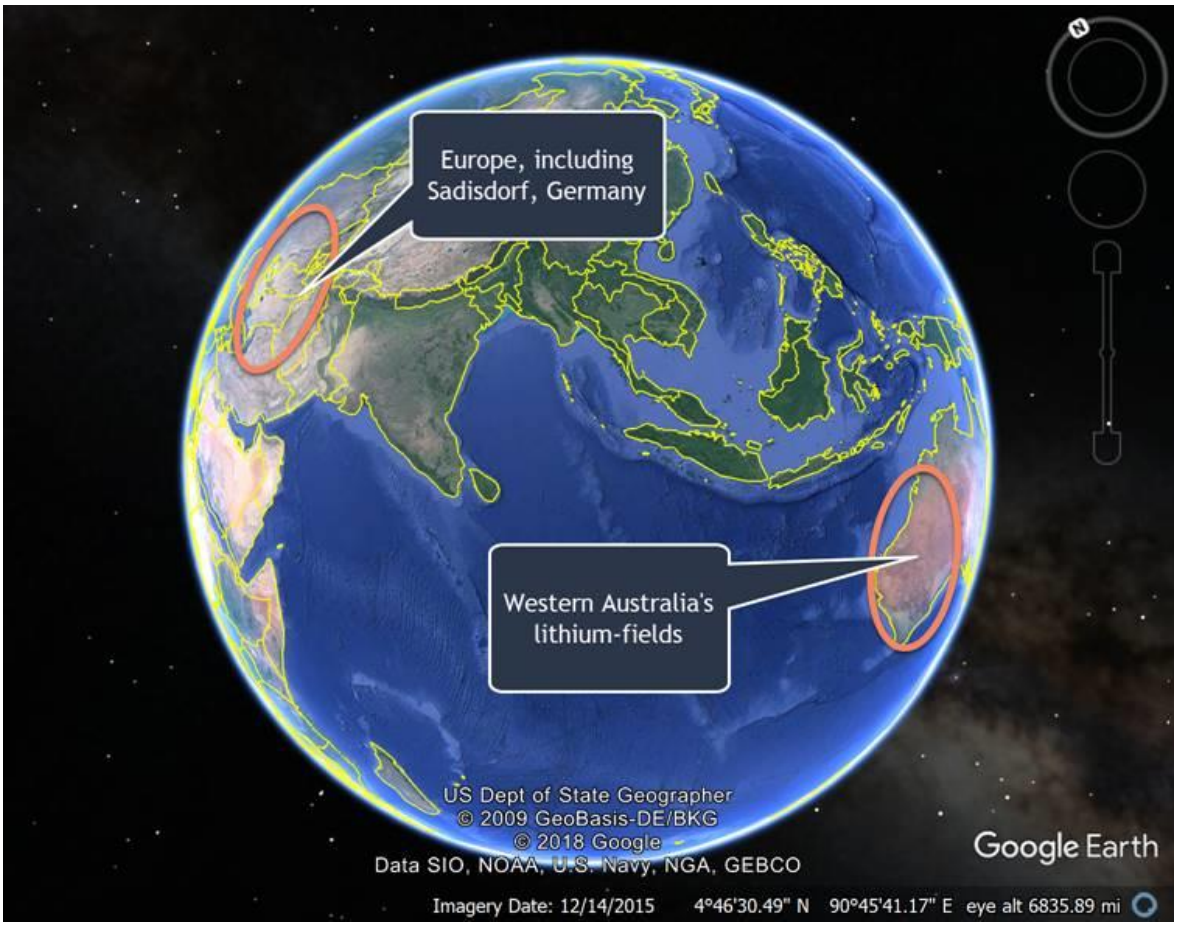
HIGHLIGHTS

- New potential for waste material to contribute to commercial lithium production
- Western Australian source selected for additional ANSTO pilot plant run
- August test schedule in Sydney, with results Q4 2018
- Multiple lithium mica feed sources identified for new large-scale pilot plant (LSPP)
- LSPP front-end engineering and design (FEED) study nearing completion

Introduction

Western Australia's goldfields rank **second** behind China in global gold production. By way of contrast, Western Australia is now **the world's largest lithium producer** – from the state's 'Lithium-fields'. These host abundant pegmatites, many of which contain lithium micas. The latter have long been considered waste by the mining industry. This premier locale is also home to Lithium Australia NL (ASX: LIT), which is developing disruptive technologies for the sustainable and ethical production of battery materials.

Lithium Australia specialises in the process development of waste materials, including lithium micas. While the company considers the Lithium-fields 'rich pickings', it has also identified prospective regions in Europe. Indeed, Lithium Australia's maiden resource in terms of lithium micas is located in Germany.



FEED study

Lithium Australia, in conjunction with CPC Project Design Pty Ltd and ANSTO Minerals (a division of the Australian Nuclear Science and Technology Organisation), anticipates completion of the FEED study in the September 2018 quarter. Location trade-off evaluations are being undertaken in conjunction with this study.

LSPP feed source

Lithium Australia has identified a number of lithium mica occurrences as potential feed sources for the LSPP. These include lithium mica deposits in France and Germany, and two deposits located in the eastern Goldfields region of Western Australia.

Western Australian LSPP feed

Substantial bench-scale and pilot plant trial test work has been undertaken on the Lepidolite Hill deposit (80% Lithium Australia, 20% Focus Minerals). To date, however, far less test work has been undertaken at a second deposit designated Waste2. Laboratory tests have shown that the metallurgical characteristics of concentrates produced from Waste2 vary from those of other micas tested. That variation is a consequence of the Waste2 concentrates having a higher ratio of muscovite (a common mica devoid of lithium) and lepidolite (a common lithium-rich mica).

Data acquired during the test run will be used to finalise FEED) criteria. The Waste2 concentrate has the following chemical composition, expressed as a weight %.

Al	Cs	Fe	K	Li*	Mg	Mn	Na	Rb	Si	F
14.47	0.51	0.09	7.14	1.70	0.06	0.43	0.74	1.50	23.87	4.29

* 1.7%Li = 3.7%Li_2O

Pilot plant test at ANSTO Minerals

The concentrates generated from Waste2 will be tested in a SiLeach® pilot plant located within the ANSTO Minerals facilities at Lucas Heights in New South Wales. The pilot plant is configured for operating conditions that reflect those of the latest SiLeach® process, which includes recovery of lithium by way of phosphate precipitation.

The pilot plant run is due to commence in early August. The aim is to produce lithium products to commercial specifications, with the data acquired during the test run used to finalise FEED design criteria.

Says Lithium Australia managing director Adrian Griffin:

"Lithium Australia continues its war on waste. In processing the Waste2 material, we will clearly demonstrate that we can take the particular waste provided, run it through the SiLeach® pilot plant and create a commercial lithium chemical. But that's only step 2 in ascending the value chain. Subsequently, the lithium chemical will be sent from Lucas Heights to our VSPC Brisbane plant for processing into battery cathode material. The cathode powder will then be tested at VSPC's in-house battery testing facility. We hope to report on its performance with respect to battery applications in coming months."

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

About Lithium Australia

Lithium Australia aspires to 'close the loop' on the energy-metal cycle. Its disruptive technologies are designed to furnish the lithium battery industry with ethical and sustainable supply solutions. Lithium Australia's technology comprises the SiLeach® and LieNA® lithium extraction processes, along with superior cathode material production courtesy of VSPC Ltd (a wholly owned subsidiary of Lithium Australia) and enhanced recycling techniques for battery materials. By uniting resources and the best available technology, Lithium Australia seeks to establish a vertically integrated lithium processing business.

For more information visit:
www.lithium-au.com www.vspc.com

MEDIA CONTACTS

Adrian Griffin	**Lithium Australia**	**08 6145 0288 | 0418 927 658**
Kevin Skinner	**Field Public Relations**	**08 8234 9555 | 0414 822 631**