14 January 2016

ASX ANNOUNCEMENT

New work firms up significant potential for lithium micas at WA’s Pilgangoora “lithium hot spot”

- Areas prospective for lithium “micas” identified at Pilgangoora in addition to PLS’ existing spodumene-bearing pegmatite resource
- Major mica style anomaly discovered just to northwest and separate to PLS’ pegmatite zones
- Discovery of a major target for further evaluation
- New results follow Lithium Australia’s high resolution soil geochemical survey over project area under MOU with Pilgangoora owner, Pilbara Minerals
- Potential for lithium micas sees Lithium Australia and Pilbara Minerals renegotiating MOU terms aimed at expanding current evaluation work

New work has confirmed the significant potential for lithium “mica” styles to be added to Western Australia’s emerging Pilgangoora lithium district, south of Port Hedland and where lithium resources based around spodumene-bearing pegmatite mineralisation have already been proven. The new work has been undertaken by Lithium Australia Limited (ASX: “LIT”) under the Company’s 2014 Memorandum of Understanding (MOU) with Pilgangoora owner, ASX-listed Pilbara Minerals (ASX: “PLS”). It is a further boost for both developers in what they regard as Western Australia’s rapidly developing “lithium hot spot”.

Pilgangoora and its surrounding area already host Pilbara Minerals’ world-class spodumene resource (PLS ASX announcement 13 October 2015) and has attracted a number of other like participants, including Altura Mining Limited (ASX: “AJM”), Metalicity Limited (ASX: “MCT”) and Dakota Minerals Limited (ASX: “DKO”) as shown diagrammatically in Figure 1.

Figure 1. The Pilgangoora lithium hotspot is now host to a number of ASX-listed lithium explorers and substantial lithium resources. Lithium Australia is evaluating lithium mica mineralisation within the area subject of Pilbara Resources’ recently announced JORC Resources.
Background
Lithium Australia’s application of disruptive technology to the recovery of lithium from micas led to a MoU with PLS to examine the commercial potential of lithium micas on PLS’ Pilgangoora project (ASX announcements, 26 November 2014 and 19 June 2015).

As part of the evaluation, Lithium Australia undertook a high resolution soil geochemical survey targeting the pathfinder elements indicative of lithium micas or their derivatives, being present in the soil profile. A positive response is a high probability indicator of a nearby primary source of lithium mica. The data and interpretation generated from the survey is shown in Figure 2.

Principal survey outcomes
The geochemical techniques employed across Pilgangoora were successfully pioneered on other lithium mica projects within Lithium Australia’s project portfolio. The techniques use pathfinder elements as a proxy for lithium, primarily lithium derived from micas. In addition to field generated results, control samples were assayed for lithium to verify the veracity of the interpretation. The following observations have been made:

1. The elements used show an extremely strong correlation with lithium hosted by the pegmatite swarm, the subject of PLS’ current drilling and resource evaluation;
2. Lithium micas were observed in PLS’ drill chips, and are associated with the known spodumene mineralisation, albeit generally in low abundance;
3. The soil profile around the spodumene pegmatite swarms contains abundant lithium mica indicators;
4. A significant geochemical anomaly has been defined in the northwest of the project area, with a chemical signature typical of lithium micas, and separate to the spodumene-bearing lithium mineralisation;
5. The survey identified further prospective spodumene targets at Pilgangoora, providing upside for PLS.

Geochemical survey details
Lithium Australia’s detailed geochemical survey covered 70 km of traverse lines with samples taken on a 50mx200m grid. Samples were analysed using a Niton field-portable XRF with a number of samples submitted to commercial laboratories for checks, calibration and lithium analysis (lithium cannot be detected by field-portable XRF).

Along the main pegmatite swarm (Figure 2) which is the focus of PLS’ spodumene drilling and target of an updated resource statement (PLS ASX announcement 11 January 2016) all show a strong response. In the northwest of the Pilgangoora ground, there is a unique high response which is more indicative of lithium micas than the more generalised geochemical response over the main pegmatite zone. This is a major target for further evaluation.

In general, these occurrences are close to the lithium pegmatites and have resulted from weathering and dispersion in the soil profile. The mineralogy and extent of these deposits will be the focus of some of Lithium Australia’s future work in the area.
Figure 2 shows the outcropping pegmatites (blue) and their relationship with lithium mica geochemical pathfinders. The very large anomaly in the northwest is interpreted as a concealed greisenised granite, the geochemical signature of which separates it from the main pegmatite swarm.
Future objectives

Under the terms of the MoU between PLS and LIT, LIT was to provide PLS with a commercial development proposal by 30 December 2015. The parties recognise the very high potential now for lithium micas in the Pilgangoora area and are renegotiating the terms of the MoU to expand the evaluation for this potential additional lithium source.

Lithium Australia Managing Director, Mr Adrian Griffin:

“The Pilgangoora lithium district has become a very interesting place for LIT. We have discovered lithium in clays, and very large geochemical anomalies consistent with lithium mica mineralisation. Together with the lithium micas contained within the pegmatites, the circumstances are very favourable for further positive outcomes. Subject to our current MOU negotiations, we will progress our Pilgangoora mica work to ensure every value add opportunity is seized upon.”

“The latest results also add to a very strong development and market period for Lithium Australia where the Company closed 2015 on a high, having achieved significant increases in both market capitalisation and share price for the year (LIT was the 7th best performing stock on the ASX, a return to shareholders of 292%) despite the devastated junior mining sector.”

“We have this week announced a successful A$6.55 million capital raising (ASX release, 11 January 2016) on the back of the previously announced contributing share issue (ASX release, 7 January 2016) and are potentially well financed for the next two years.”

“These financial gains parallel our project gains which now see Lithium Australia involved in unique lithium mica developments in Australia, Mexico and Europe.”

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

About Lithium Australia NL:

LIT is a dedicated developer of disruptive lithium extraction technologies. LIT has strategic alliances with a number of companies, potentially providing access to a diversified lithium mineral inventory on three continents.

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

COMPETENT PERSONS STATEMENT

Competent Persons Statement:

The information contained in the report that relates to Exploration Results of projects owned by Lithium Australia NL and is based on information compiled or reviewed by Mr. Adrian Griffin, who is an employee of the Company and is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which is being undertaken to qualify as a Competent Person as defined in the 2004 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Mr. Griffin has given consent to the inclusion in the report of the matters based on his information in the form and context in which it appears.