

**31 March 2016**

## **ASX ANNOUNCEMENT**

### **LITHIUM AUSTRALIA IDENTIFIES ADDITIONAL LITHIUM SOURCES AT RAVENSTHORPE, WESTERN AUSTRALIA**

#### **HIGHLIGHTS:**

- **Exploration success adds to the significant potential of Ravensthorpe.**
- **Discovery of additional lithium pegmatites, including two spodumene pegmatites**
- **12 outcropping lithium pegmatites now identified with potential for further discoveries**
- **Definition of the Deep Purple Prospect and Phillips South Prospect, in addition to the previously defined Horseshoe Prospect**
- **The Deep Purple Prospect is comprised of a swarm of at least 5 lithium pegmatites, including two spodumene pegmatites similar in character to nearby Mt Cattlin**
- **The Phillips South Prospect is a large, under-explored area in which recent fieldwork demonstrated the presence of outcropping lithium mineralisation and very high potential for further discoveries undercover**
- **Additional fieldwork planned that will assist optimization of drilling programs**

#### **SUMMARY:**

Recent follow-up fieldwork at Lithium Australia's (ASX:LIT) Ravensthorpe Lithium Project has resulted in the discovery of several additional lithium pegmatites. It is now established that there are at least 12 lithium pegmatites present and the potential economic significance of the project has increased substantially.

The Ravensthorpe project area contains the Cocanarup Lithium Pegmatites, located only a few kilometres to the south-west of the Mt Cattlin lithium mine (Figure 1) operated by Galaxy Resources Limited (ASX:GXY) and General Mining Corporation Limited (ASX:GMM).

The project is well supported by established transport routes, nearby infrastructure and services at Ravensthorpe. The large, deep water port of Esperance is 185km east of Ravensthorpe.

Previous fieldwork led to definition of an exploration target\* at the “Horseshoe prospect” of 900,000 tonnes of lithium mineralisation at a minimum grade of 1% Li<sub>2</sub>O (with a size range from 525,00t to 1,281,000t and grade range of 0.8% - 1.2%).

\*Exploration Target: The potential quantities and grades are conceptual in nature and there has been insufficient exploration to-date to define a Mineral Resource. It is not certain that further exploration will result in the determination of a Mineral Resource under the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, the JORC Code” (JORC 2012). The Exploration Target is not being reported as part of any Mineral Resource or Ore Reserve.

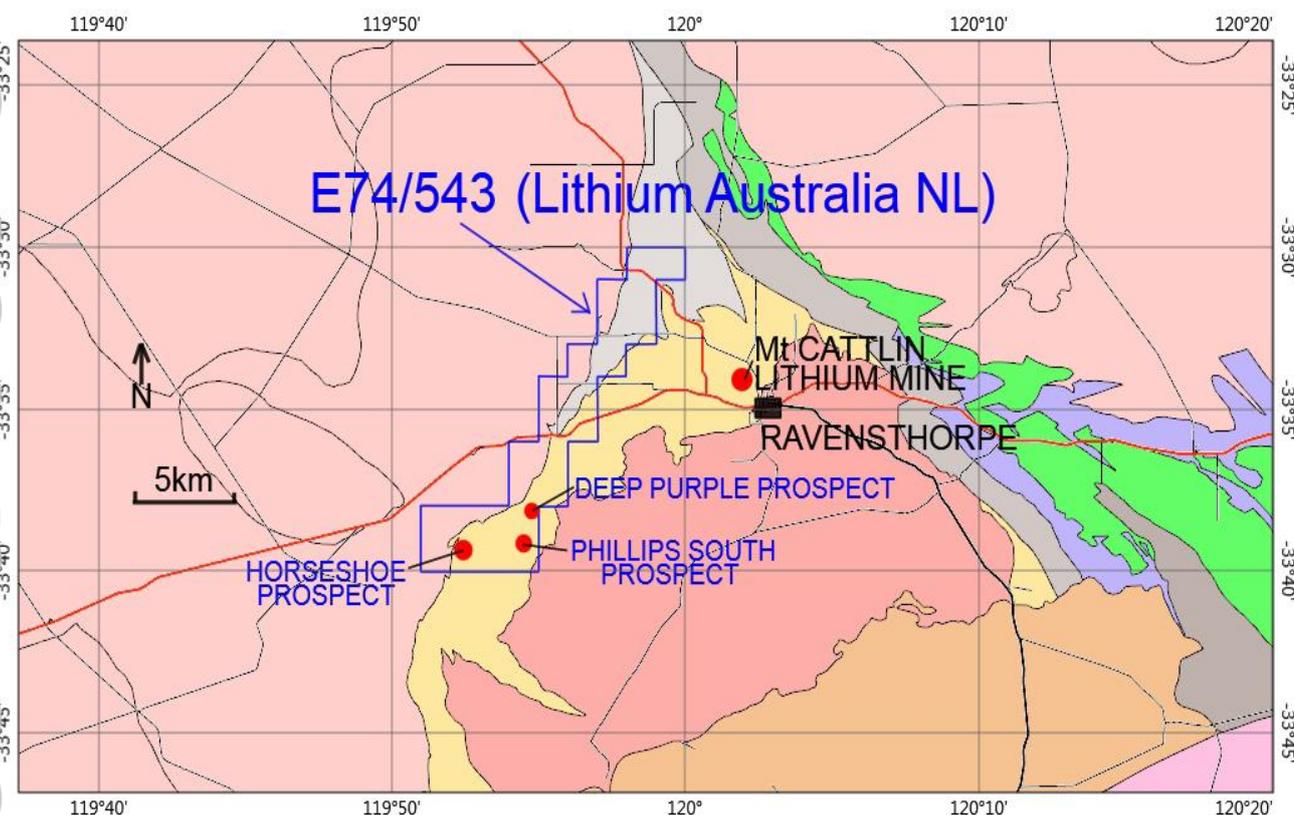


Figure 1: Ravensthorpe Lithium Project, including prospect locations.

### THE DEEP PURPLE PROSPECT

Previous fieldwork identified lepidolite pegmatites (LCT-complex, lepidolite sub-class). Furthermore the most recent fieldwork identified two spodumene pegmatites (LCT-complex, spodumene sub-class) at the Deep Purple Prospect, which are referred to as the Deep Purple Spodumene Pegmatite and the Creek Spodumene Pegmatite.

Unweathered spodumene from the Deep Purple Spodumene Pegmatite is white (Figure 2) but the exposed spodumene of the outcrop is weathered and has a pale brown surface.

Weathered spodumene was chipped from the outcrop as sample R025, which assayed 30650ppm Li, which equates to 6.60% Li<sub>2</sub>O. The spodumene observed in the Creek Spodumene Pegmatite is green (Figures 3 and 4).

Along with the two spodumene pegmatites, there are at least three lepidolite pegmatites at the Deep Purple Prospect. All the pegmatites of the prospect have a shallow dip towards the west and appear to be stacked as a pegmatite dyke-swarm which is a compelling drilling target.

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**SPODUMENE**

*Figure 2: Spodumene exposed in the outcrop of the Deep Purple Spodumene Pegmatite.*

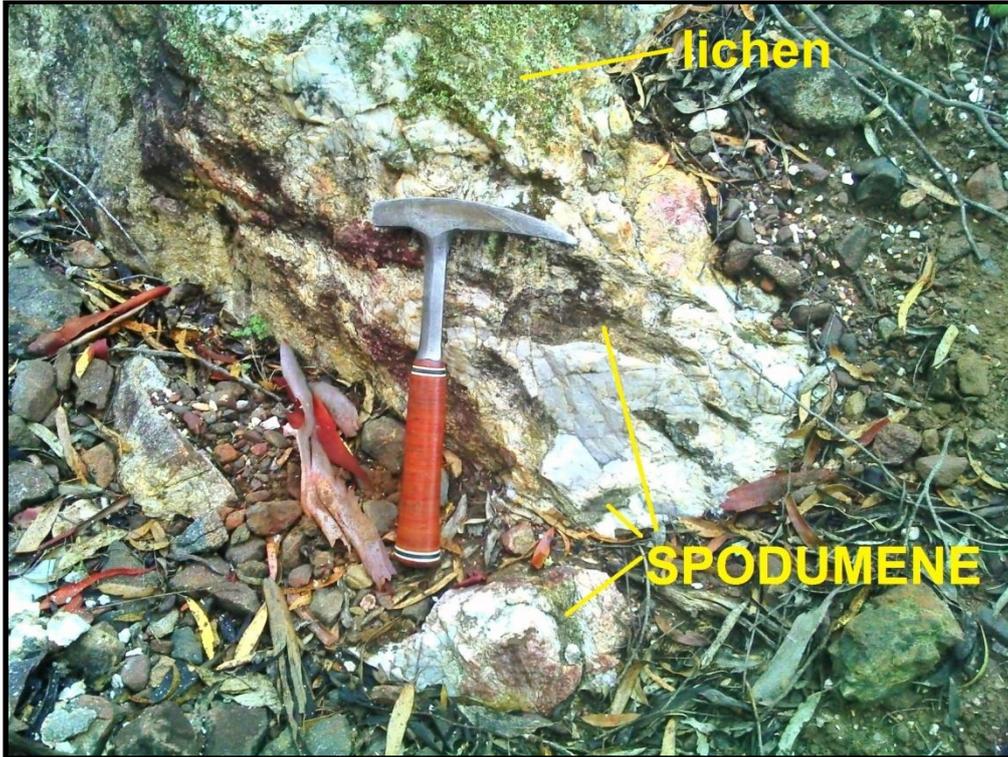


Figure 3: Outcrop of the Creek Spodumene Pegmatite

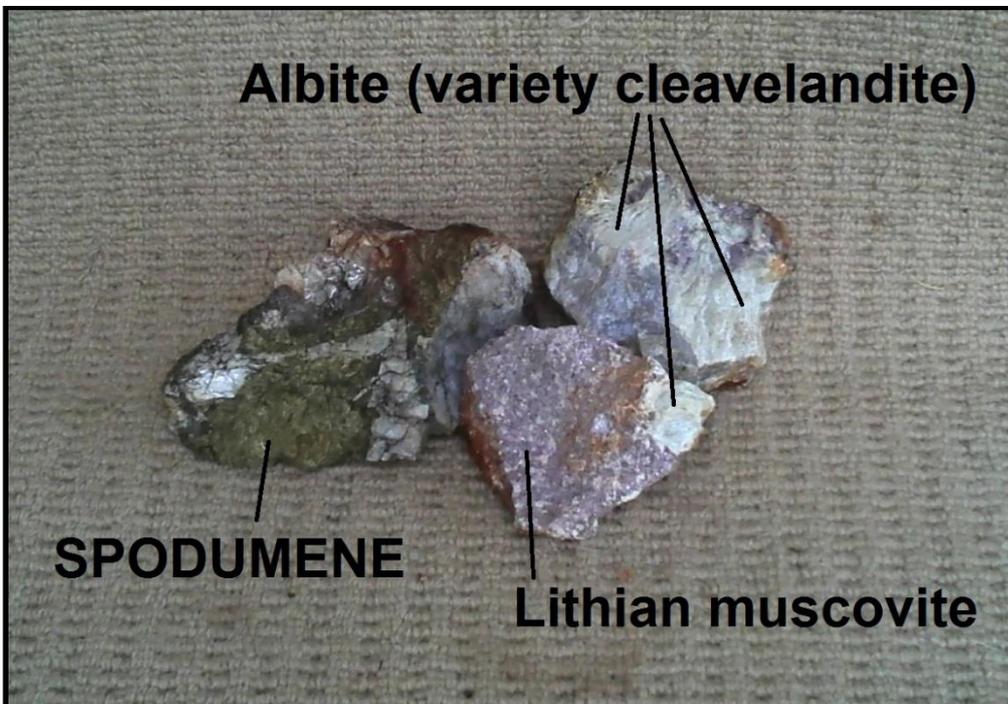


Figure 4: Green spodumene and associated minerals from the Creek Spodumene Pegmatite.

## THE PHILLIPS SOUTH PROSPECT

This prospect is comprised of several small outcrops of pegmatite that may be indicative of a single, large pegmatite more than 500m long. Lithium mineralisation has been sampled at one location (Figure 5).



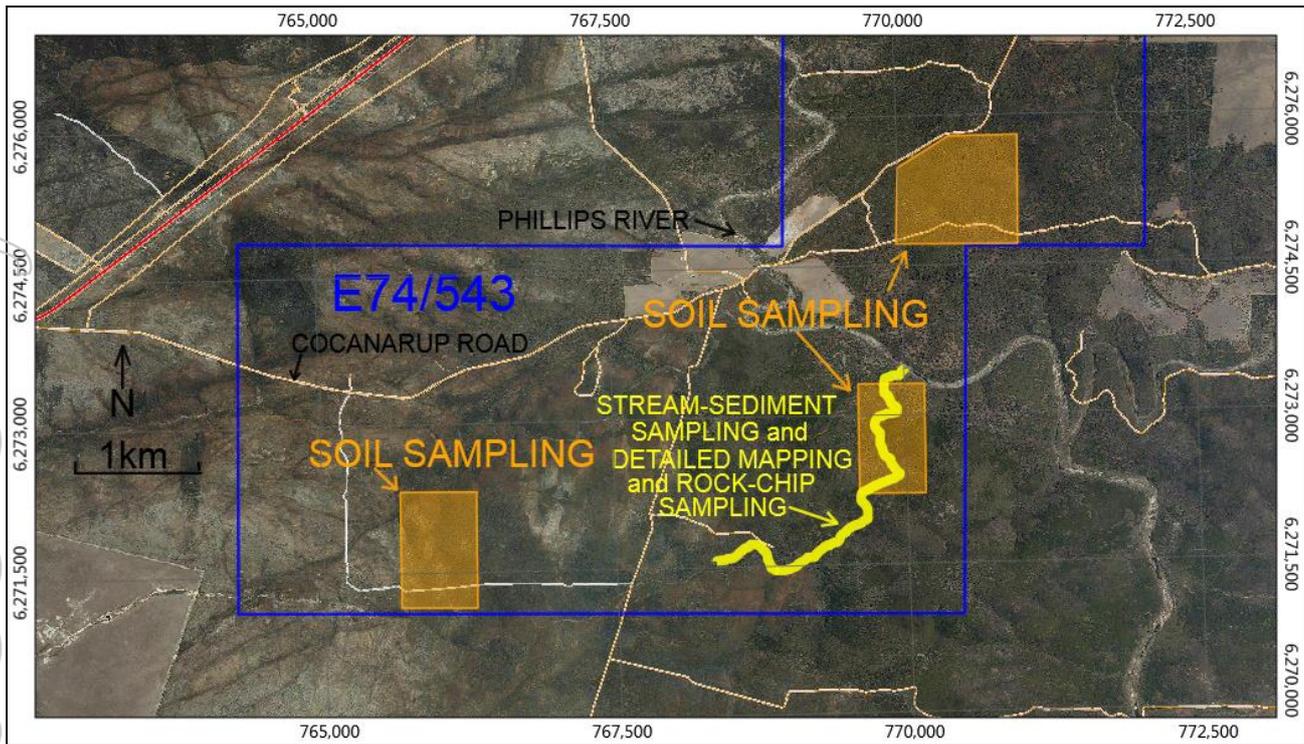
**Figure 5: Lepidolite in pegmatite at the Phillips South Prospect.**

The sample (R022) assayed 9630ppm Li (equivalent to 2.07%  $\text{Li}_2\text{O}$ ), along with 15159ppm Rb (rubidium) and 1954ppm Cs (Caesium). Rubidium and caesium are potentially significant by-products of lithium derived from lepidolite.

## THE NEXT PHASE OF EXPLORATION

A programme of additional mapping and rock-chip sampling, accompanied by stream-sediment sampling is planned for the Phillips South Prospect. Soil sampling will also be completed at the Phillips South Prospect and also at, and north of, the Deep Purple Prospect, as well as soil sampling about 1km west of the Horseshoe Prospect (Figure 6).

While the Deep Purple Prospect is already considered a definite drilling target, the results of the soil sampling will assist optimisation of a drilling program. Information to-date suggests that drilling is likely to be required to adequately test the Phillips South Prospect but the planned work will ensure that the best drilling locations are selected.



**Figure 6: Location of the next phase of exploration.**

**Lithium Australia Managing Director Mr Adrian Griffin:**

“It is not surprising that we are finding abundant lithium pegmatites in the Ravensthorpe area. It has been long-known for its spodumene which is the focus of the nearby Mt Cattlin mining operations. We see the area as an important part of our thrust to develop a local lithium chemical industry. With the application of our 100% owned Sileach™ process, we have the ability to handle both the lepidolite and spodumene to produce lithium carbonate or hydroxide – critical inputs to the insatiable lithium battery industry.”

**Adrian Griffin**

Managing Director

Mobile +61 (0) 418 927 658 and email [Adrian.Griffin@lithium-au.com](mailto:Adrian.Griffin@lithium-au.com)

**About Lithium Australia NL**

LIT is a dedicated developer of disruptive lithium extraction technologies including the versatile Sileach™ process which is capable of recovering lithium from any silicate minerals. 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 Person Statement

The information in this report that relates to Exploration Results together with any related assessments and interpretations is based on information compiled by Mr Peter Spitalny on behalf of Mr Adrian Griffin, Managing Director of Lithium Australia NL. Mr Spitalny 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 which he has undertaken to qualify as a Competent Person.

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 being reported 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 Peter Spitalny consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. The Company is not aware of any new information or data that materially affects the information in this report and such information is based on the information compiled on behalf of company Managing Director Mr Adrian Griffin.

### Appendix 1: Assay Results

PEGMATITE	Material sampled	SAMPLE I.D.	Li (ppm) ltd 10ppm	Li2O (%)*	Classification of material sampled
Phillips South	Li Mica	RO22	9630	2.07	impure lepidolite
DP North	Li Mica	RO23	14150	3.05	impure lepidolite
DP North	Li Mica	RO24	13890	2.99	impure lepidolite
DP Spodumene	Spodumene	RO25	30650	6.60	Spodumene
DP Spodumene	Li Mica	RO26	10360	2.23	impure lepidolite
Creek Spodumene	Li Mica	RO27	5670	1.22	Lithian Muscovite
Garnet	Li Mica	RO28	10620	2.29	impure lepidolite
Horseshoe #1	Li Mica	RO29	10480	2.26	impure lepidolite
Horseshoe #1	Li Mica	RO30	13230	2.85	impure lepidolite
Horseshoe #1	Li Mica	RO31	11850	2.55	impure lepidolite

\* Calculated from stated assay results.

## JORC Code, 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>• <i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li>• <i>In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Specimen rock-chip samples. Samples collected were around 3-5kg and of lepidolite-rich, lithian muscovite-rich, or spodumene mica-rich rock from pegmatite outcrops.</li> <li>• Samples were selected in order to ascertain the degree of lithium enrichment in the different pegmatites and enable geochemical characterisation of individual pegmatites. As such, the samples are representative of the lithium mineralisation within the lithium-rich zones of the pegmatites but do not represent the composition of the entire pegmatite.</li> </ul> <p>The distribution of lithium minerals in pegmatites is typically within distinct zones which are treated selectively. As such, it is appropriate to assess the lithium content of the lithium zones in isolation of the remainder of the pegmatite.</p> <ul style="list-style-type: none"> <li>• A total of 10 samples were collected by LIT’s experienced consultant geologist and sent to Nagrom Laboratories (Perth) for analyses. Laboratory QAQC duplicates and blanks were inserted.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>• <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>• <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>• <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>• <i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>
Logging	<ul style="list-style-type: none"> <li>• <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Rock-chip samples are not logged, however basic topography, environment, sample nature and</li> </ul>

	<ul style="list-style-type: none"> <li>• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>• The total length and percentage of the relevant intersections logged.</li> </ul>	<p>geological, mineralogical and petrographic details are recorded.</p>
<p>Sub-sampling techniques and sample preparation</p>	<ul style="list-style-type: none"> <li>• If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>• For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>• Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>• Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable, no drill core.</li> <li>• All samples dry.</li> <li>• Laboratory standards, splits and repeats were used for quality control.</li> <li>• The sample type and method was of acceptable standard for first pass pegmatite mapping and represents standard industry practice at this stage of investigation..</li> </ul>
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>• For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>• Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>• Sample preparation is integral to the analysis process as it ensures a representative sample is presented for assay. The preparation process includes sorting, drying, crushing, splitting and pulverising.</li> <li>• Rock Chip samples were assayed by Nagrom Laboratories for multi-elements using Peroxide Fusion and ICP analyses for Li, Rb, Cs and Ta and XRF analyses for Al, As, Ba, Ca, Cl, Co, Cr, Cu, Fe, K, Mg, Mn, Na, Ni, P, Pb, S, Sb, Si, Sn, Sr, Ti, V, Zn and Zr.</li> <li>• Laboratory standards, splits and repeats were used for quality control.</li> </ul>
<p>Verification of sampling and assaying</p>	<ul style="list-style-type: none"> <li>• The verification of significant intersections by either independent or alternative company personnel.</li> <li>• The use of twinned holes.</li> <li>• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>• Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>• Sample results have been checked by company personnel (Senior Geologist) and a consultant geologist.</li> <li>• Assays to be reported as Excel xls files and secure pdf files.</li> <li>• Data entry carried out by field personnel thus minimizing transcription or other errors. Careful field documentation procedures and rigorous database validation ensure that field and assay data are merged accurately.</li> <li>• No adjustments are made to assay data.</li> </ul>
<p>Location of data points</p>	<ul style="list-style-type: none"> <li>• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> </ul>	<ul style="list-style-type: none"> <li>• Sample locations picked up with hand held Garmin GPSmap 62s Approximately 3-5m accuracy. (sufficient for initial field work).</li> </ul>

	<ul style="list-style-type: none"> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All locations recorded in MGA 94 Zone 50.</li> <li>• Topographic locations interpreted from GPS pickups (barometric altimeter) and field observations. Adequate for first pass pegmatite mapping.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Samples were selected by the geologist to assist with identification of the nature of the mineralisation present at each location. No set sample spacing was used and samples were taken based upon geological variation at the location.</li> <li>• Sample compositing was not applied.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Surface samples of “points” only. Does not provide orientation, width information. Associated structural measurements and interpretation by geologist can assist in understanding geological context.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Samples were securely packaged when transported to ensure safe arrival at assay facility.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• None necessary at this stage of the exploration.</li> </ul>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>• <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></li> <li>• <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Cocanarup Project reported in this announcement are entirely within E74/543 and 100% owned by Lithium Australia NL (LIT), located 18km SW of Ravensthorpe in WA.</li> <li>• The tenements are in good standing and no known impediments exist.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Prior Li/Ta exploration carried out by Amax Australia Ltd 1980-1994, Ucabs 1996-1999 and Galaxy Resources Ltd 2002-2012.</li> <li>• Exploration by Amax included rock-chip channel sampling over selected areas of pegmatite outcrop, geological mapping and 7 RC holes over the Quarry pegmatite.</li> <li>• Exploration by Galaxy included soil sampling, rock-chip sampling, geological mapping and airborne</li> </ul>

		aeromagnetics, radiometrics and DT surveys.
<i>Geology</i>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Pegmatite swarms intruded both the Annabelle Volcanics and Cocanarup greenstones. The pegmatite bodies are extensive and gently dipping, commonly dissected by recent gullying.</li> <li>• Pegmatites within the tenements include LCT-Complex pegmatites of the Lepidolite subclass, which commonly contain the Li-micas lepidolite and zinnwaldite in core-zones associated with quartz. Coloured Li-tourmaline (Elbaite), ranging from green to blue and pink occur adjacent to and with lepidolite.</li> <li>• LCT-Complex pegmatites of the Spodumene subclass have also been found, in which spodumene is associated with cleavelandite (albite), quartz and lepidolite or lithian muscovite.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>• <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <li>o <i>easting and northing of the drill hole collar</i></li> <li>o <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>o <i>dip and azimuth of the hole</i></li> <li>o <i>down hole length and interception depth</i></li> <li>o <i>hole length.</i></li> </ul> </li> <li>• <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>• <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li>• <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable, rock chip sample results reported as individual surface samples.</li> </ul>
<i>Relationship between</i>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> </ul>	

<p><i>mineralisation widths and intercept lengths</i></p>	<ul style="list-style-type: none"> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not applicable, rock chip sample results reported as individual surface samples.</li> </ul>
<p><i>Diagrams</i></p>	<ul style="list-style-type: none"> <li>• <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Not Applicable: not drilling results</li> </ul>
<p><i>Balanced reporting</i></p>	<ul style="list-style-type: none"> <li>• <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Results of assays for Li, Rb, Cs and Ta of all samples reported in Appendix 1</li> </ul>
<p><i>Other substantive exploration data</i></p>	<ul style="list-style-type: none"> <li>• <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All meaningful &amp; material exploration data has been reported</li> </ul>
<p><i>Further work</i></p>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li>• <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>• At the time of reporting, the results were still being evaluated but it is envisaged that in the short term further mapping and sampling is warranted to investigate potential additional lithium pegmatites. In the longer term, drilling to test extensions at depth will be required.</li> </ul>