20 June 2019

# Lithium pegmatites identified at Dudley prospect, Kangaroo Island, South Australia

#### HIGHLIGHTS

- Lithium and tantalum pegmatite dykes identified.
- Pegmatites cover greater than 5 km strike, with individual dykes up to 80 m thick.
- Rock-chip samples return assays up to 0.43% Li<sub>2</sub>O lithium, 770 ppm tantalum, 460 ppm niobium and 1,600 ppm rubidium, despite strong weathering.
- Tantalum values significant, as grades above 200 ppm considered economic.
- Lithium minerals include elbaite tourmaline, lithium micas and petalite.

Lithium Australia NL (ASX: LIT) recently identified lithium-anomalous pegmatite dykes at its Dudley prospect at the Kangaroo Island Project (Figure 1). Despite strong weathering of outcrops and exposures in shallow historical tourmaline and tin-mine workings, the host pegmatites exhibit local, anomalous lithium, rubidium and tantalum. Lithium Australia considers this significant, as lithium, which is very mobile, is usually leached from weathered rocks. The Dudley pegmatites intrude the Cambrian metasediment Tapanappa Formation and are variably exposed at surface. Currently, lithium pegmatites in Australia are attracting investment from some of the world's largest lithium companies.

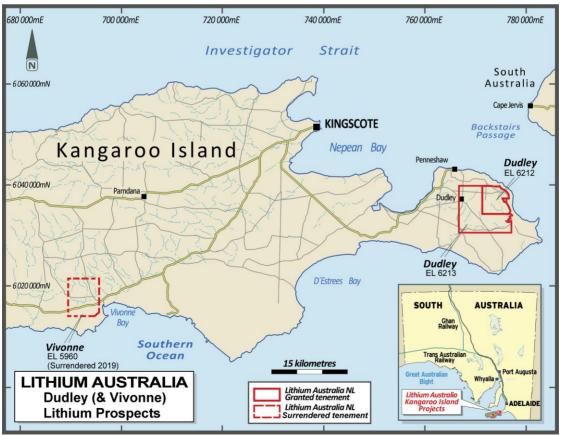


Figure 1. Location of Kangaroo Island Dudley (and Vivonne) lithium prospects.



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

Reconnaissance exploration was undertaken at Dudley in October 2018 and March 2019. The area had not previously been explored for lithium or tantalum. In all, 66 rock-chip samples were collected from outcrops and another 35 samples from float material, with assays now been received for all samples.

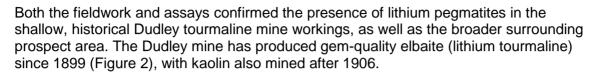




Figure 2. Gem-quality elbaite (lithium tourmaline) from the Dudley mine.

At Dudley, lithium-mineralised pegmatites outcrop intermittently with weathered exposures outcropping through younger limestones, laterite/ferricrete and alluvial cover. Mineralised float is abundant. The mineralised zone lies within a broader pegmatite field that appears to extend over a strike of 5 km from coastal exposures to the northeast to patchy outcrops in the southwest of EL 6212.

The pegmatite dykes, which vary from tourmaline-rich aplites in the west to coarsegrained pegmatites in the east, are hosted by the Cambrian Tapanappa Group rocks (Figure 3). The central portion is very coarse-grained, with blocky, variably perthitic microcline feldspar, large muscovite 'books', milky quartz and green elbaite; it contains mariolitic cavities and shows intense kaolinisation. The main known Dudley pegmatite trend strikes northeast-southwest in line with regional foliation, and consists of approximately 30 dykes ranging up to 80 m thick and a strike estimated to be more than 450 m. Also observed was a new cross-cutting northwest-southeast striking trend of pegmatite dykes up to ~ 40 m thick, which correlates with trends in geophysics images. This contrasting trend extends about 1 km southeast into LIT's adjacent tenement, EL 6213, where pegmatites were unknown until now. A previously unreported 'Black Spider' tin mine (name supplied by elderly local farmer) with shallow workings over pegmatites in EL 6213 was also sampled (tin mineralisation is common in lithium-mineralised pegmatites such as the Greenbushes mine in Western Australia). The two pegmatite trends appear to intersect at the broader Dudley mine area, where variably anomalous chip assays were returned from the LIT samples.



Despite the strong weathering of material sampled by LIT, the outcrop rock-chip assays included results up to 0.43% Li<sub>2</sub>O, 1,600 ppm rubidium, 770 ppm tantalum, 460 ppm niobium (0.046% assay) and 180 ppm caesium; float samples returned assays up to 0.11% Li<sub>2</sub>O, 1,100 ppm rubidium and 560 ppm caesium (rounded). The tantalum values in the outcrop rock chips are also highly significant, as values above 200 ppm are considered economic grades. Outcrop and float sample results are displayed with SA State 1:100,000 scale GSSA geology in Figure 3. Lithium minerals in the outcrops and float included variably weathered lithium tourmaline (indicolite and rubellite varieties of elbaite), lithium micas (possible poly/trilithionite) and petalite. As mentioned previously, lithium is extremely soluble during weathering, so highly anomalous results from very weathered samples are uncommon and indicate the potential for high grades in the unweathered bedrock.

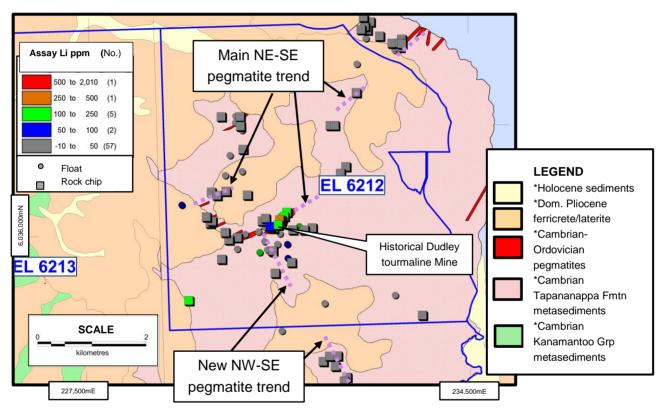


Figure 3. Dudley prospect geology and sample locations.

The lithium mica lepidolite, which was previously reported from marialitic cavities within the pegmatites (Mindat and specimens in the Sorrell collection), was not observed during the fieldwork programmes. Data suggest that the workings and outcrops only expose the upper extremities of the pegmatite system, indicating the potential for spodumene mineralisation at depth.





All data from this programme indicate that the Dudley prospect has the potential to host a lithium deposit in a location not previously identified for its lithium potential. The following factors indicate the potential to delineate a substantial lithium-caesiumtantalum (LCT) pegmatite system (LCT pegmatites host almost all of the world's hardrock lithium mines):

- strongly anomalous assays (despite strong weathering and kaolinisation);
- abundant lithium and pathfinder minerals and elements;
- multiple dykes with widths up to 80 m occurring over a substantial strike, and
- relatively shallow cover.

In light of these significant results, LIT is planning a geochemical soil-sampling programme over the Dudley prospect and surrounding areas where anomalous lithium values were obtained from pegmatite float. Results will assist in locating additional LCT pegmatite dykes under cover and further determining the extent of lithium and tantalum mineralisation of the Dudley and broader area. Close-spaced costeans in the vicinity of the Dudley mine will improve the geological interpretation. Detailed geological mapping is also required to investigate the nature of the two identified trends, as shown in Figure 3. Petrological examination and XRD analyses of rock samples are also being considered. The follow-up work programme at Dudley will commence in the fourth quarter of 2019.

LIT has not renewed the nearby Vivonne lease, EL 5960, in the central portion of Kangaroo Island as its potential was considered low.

Significant sampling results are shown in Table 1 below. The full table of results is presented in Appendix 1.

Sample	zone	Easting	Northing	Sample type	Li <sub>2</sub> O%	Rb	Cs	Та	Nb
KID 022	54H	231099	6036301	Rock chip	0.03	257	12	773	460
KID 071	53H	771090	6035225	Rock chip	0.01	305	13	0.001	50
KID 072	54H	229380	6034780	Rock chip	0.02	629	49	0.003	80
KID 094	54H	231182	6036404	Rock chip	0.02	166	13	<0.001	40
KID 095	54H	231133	6036330	Rock chip	0.04	355	27	0.002	90
KID 096	54H	231086	6036256	Rock chip	0.43	1617	187	0.005	60
KID 097	54H	231050	6036266	Rock chip	0.07	606	47	0.002	40
KID 098	54H	231024	6036171	Rock chip	0.03	438	51	<0.001	40
KID 014	54H	231000	6035300	Float	0.01	409	20	15	na
KID 026	54H	231114	6036190	Float	0.02	205	9	2	10
KID 039	54H	230877	6035681	Float	0.11	919	484	6	na
KID 070	54H	229249	6036540	Float	0.01	353	24	0.001	40
KID 073	53H	769646	6034249	Float	0.01	324	6	0.001	20
KID 075	53H	768928	6034123	Float	0.01	505	30	0.001	40
KID 078	53H	768858	6034238	Float	0.01	613	136	0.003	20
KID 081	54H	230877	6035681	Float	0.11	1130	564	<0.001	50
KID 083	54H	231189	6035818	Float	0.01	191	9	<0.001	30
KID 085	54H	230877	6035681	Float	0.03	149	15	<0.001	30
KID 086	54H	231200	6035561	Float	0.01	263	9	<0.001	40
KID 089	54H	230889	6035650	Float	0.02	446	9	0.002	40
KID 091	54H	230680	6035668	Float	0.02	393	78	0.002	-10
KID 093	54H	231406	6036144	Float	0.02	371	38	<0.001	50

Table 1.	Best assays of	f samples from	pegmatite	outcrop/float	rock chips(Rb,	Cs,	Ta and Nb in ppm).
----------	----------------	----------------	-----------	---------------	----------------	-----	--------------------



#### Comment from LIT managing director, Adrian Griffin

"Early results from the Dudley prospect indicate good potential for a new LCT pegmatite field, and we look forward to extending our exploration coverage later in the year."

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

#### **About Lithium Australia NL**

Lithium Australia aspires to 'close the loop' on the energy-metal cycle in an ethical and sustainable manner. To that end, it has amassed a portfolio of projects and alliances and developed innovative extraction processes to convert *all* lithium silicates (including mine waste) to lithium chemicals. From these chemicals, the Company plans to produce advanced components for the lithium-ion battery industry. The final step for Lithium Australia involves the recycling of spent batteries and e-waste. By uniting resources and the best available technology, the Company aims to establish a vertically integrated lithium processing business.

#### **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 Persons' Statement:**

The information contained in the report that relates to Exploration Results, together with any related assessments and interpretations, is based on information compiled by Mr Rob Cameron on behalf of Mr Adrian Griffin, Managing Director of Lithium Australia NL. Mr Cameron 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 he has undertaken, to qualify as a Competent Person. Mr Griffin is a Member of the Australasian Institute of Mas sufficient experience relevant to the styles of mineralisation and to the activity being reported to qualify as a Competent Person as defined under the 2012 edition of the *Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.* Mr Griffin consents to the inclusion in the report of the matters based on Mr Cameron's data in the form and context in which they appear. 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 the Company's managing director, Mr Griffin.

#### Raw materials

# ASX ANNOUNCEMENT

# APPENDIX 1: Rock-chip/float assay results

Sample ID	Zone	Easting (mE)	Northing (mN)	Sample type	Li (ppm)	Rb (ppm)	Cs (ppm)	Ta (ppm)	Nb (ppm)
KID 001	54H	233172	6034882	Float	-10	207	11	9	no result
KID 002	54H	233674	6034511	Rock chip	-10	-1	-1	3	no result
KID 003	54H	230967	6035284	Rock chip	30	220	10	12	no result
KID 004	54H	229983	6035541	Rock chip	-10	172	4	4	no result
KID 005	54H	230267	6035731	Float	-10	286	9	8	no result
KID 006	54H	232410	6033116	Rock chip	10	208	11	17	no result
KID 007	54H	232286	6033372	Rock chip	20	499	62	17	no result
KID 008	54H	232237	6033303	Rock chip	10	343	8	16	no result
KID 009	54H	231876	6034731	Float	30	219	4	4	no result
KID 010	54H	232073	6033573	Rock chip	-10	226	2	9	no result
KID 011	54H	231851	6033663	Rock chip	-10	314	5	19	no result
KID 012	54H	231966	6033761	Rock chip	-10	39	1	2	no result
KID 013	54H	232113	6033764	Rock chip	-10	168	2	9	no result
KID 014	54H	231000	6035300	Float	60	409	20	15	no result
KID 015	54H	231090	6034225	Float	-10	269	17	10	no result
KID 016	54H	231649	6036118	Rock chip	10	214	7	9	20
KID 017	54H	230731	6036243	Rock chip	30	246	4	9	no result
KID 018	54H	230791	6036292	Rock chip	10	275	7	6	no result
KID 019	54H	230937	6036108	Rock chip	20	123	3	4	no result
KID 020	54H	230883	6036132	Rock chip	40	323	15	4	no result
KID 021	54H	230875	6036142	Rock chip	70	358	50	3	no result
KID 023	54H	230770	6035870	Float	20	347	28	11	no result
KID 024	54H	230779	6036132	Float	30	390	18	13	no result
KID 025	54H	231502	6036077	Rock chip	-10	237	4	3	no result
KID 026	54H	231114	6036190	Float	100	205	9	2	10
KID 027	54H	230416	6036002	Float	20	234	4	6	no result
KID 028	54H	230276	6035936	Rock chip	10	200	3	9	10
KID 029	54H	230118	6035896	Rock chip	10	167	3	5	10
KID 030	54H	230048	6036032	Rock chip	-10	174	4	6	no result
KID 031	54H	229773	6036202	Rock chip	-10	308	14	3	10
KID 032	54H	229807	6036239	Rock chip	40	281	11	4	no result
KID 033	54H	229702	6036317	Rock chip	20	194	5	5	no result
KID 034	54H	229794	6036773	Rock chip	20	273	5	5	20
KID 035	54H	229898	6036711	Rock chip	20	149	2	5	no result
KID 036	54H	230065	6036788	Rock chip	30	97	5	2	no result
KID 037	54H	230457	6036720	Rock chip	10	15	2	7	no result
KID 038	54H	231052	6036015	Float	-10	308	18	18	no result

î

Sample ID	zone	Easting (mE)	Northing (mN)	Sample type	Li (ppm)	Rb (ppm)	Cs (ppm)	Ta (ppm)	Nb (ppm)
KID 039	54H	230877	6035681	Float	520	919	484	6	no result
KID 040	54H	230049	6037082	Float	-10	244	4	9	20
KID 041	54H	230357	6037156	Float	-10	240	7	19	no result
KID 042	54H	229976	6038159	Rock chip	10	21	-1	4	no result
KID 043	54H	230240	6038172	Float	20	515	8	5	no result
KID 044	54H	230321	6038159	Rock chip	20	450	5	5	no result
KID 045	54H	230236	6038053	Float	-10	634	66	24	no result
KID 046	54H	230132	6037452	Float	-10	406	9	11	no result
KID 047	54H	230330	6037984	Rock chip	20	328	7	5	no result
KID 048	54H	230354	6037913	Float	10	407	8	13	no result
KID 049	54H	230375	6037560	Rock chip	30	136	2	8	no result
KID 050	54H	231978	6037997	Rock chip	-10	161	4	4	no result
KID 051	54H	232059	6037997	Rock chip	20	214	6	7	no result
KID 052	54H	232456	6038602	Rock chip	10	169	2	3	no result
KID 053	54H	232266	6037241	Rock chip	10	163	6	7	no result
KID 054	54H	232167	6037120	Rock chip	40	260	7	7	no result
KID 055	54H	233259	6039433	Rock chip	20	308	11	9	no result
KID 056	54H	233164	6039385	Float	20	216	2	2	no result
KID 057	54H	233114	6039510	Rock chip	20	307	6	7	no result
KID 058	54H	233291	6039584	Rock chip	20	280	3	5	no result
KID 059	54H	233252	6039515	Rock chip	30	268	3	5	no result
KID 060	54H	233298	6039497	Rock chip	20	446	36	6	no result
KID 061	54H	232885	6039640	Rock chip	20	315	3	15	no result
KID 062	54H	232659	6039753	Rock chip	-10	313	5	7	no result
KID 063	54H	232614	6039818	Rock chip	-10	341	2	6	no result
KID 064	54H	232714	6039903	Rock chip	10	321	2	2	no result
KID 065	54H	232589	6039989	Rock chip	20	378	6	8	no result
KID 066	54H	232546	6039759	Rock chip	-10	273	2	3	no result
KID 067	54H	232632	6039600	Float	30	398	5	16	no result
KID 068	54H	232465	6039130	Float	20	249	17	8	no result
KID 069	53H	770808	6036023	Float	-10	263	6	0.002	30
KID 070	54H	229249	6036540	Float	50	353	24	0.001	40
KID 071	53H	771090	6035225	Rock chip	60	305	13	0.001	50
KID 072	54H	229380	6034780	Rock chip	100	629	49	0.003	80
KID 073	53H	769646	6034249	Float	50	324	6	0.001	20
KID 074	53H	769625	6034366	Rock chip	40	416	30	0.002	50
KID 075	53H	768928	6034123	Float	60	505	30	0.001	40
KID 076	53H	768669	6033708	Rock chip	30	349	16	0.002	30
KID 077	53H	768778	6033678	Rock chip	40	400	12	0.003	30
KID 078	53H	768858	6034238	Float	60	613	136	0.003	20
KID 079	53H	768695	6033587	Rock chip	30	334	17	0.001	-10
KID 080	53H	768637	6033506	Rock chip	30	344	16	0.004	40
KID 081	54H	230877	6035681	Float	500	1130	564	-0	50





Sample ID	Zone	Easting (mE)	Northing (mN)	Sample type	Li (ppm)	Rb (ppm)	Cs (ppm)	Ta (ppm)	Nb (ppm)
KID 082	54H	230924	6035695	Rock chip	40	174	4	0.001	40
KID 083	54H	231189	6035818	Float	50	191	9	-0	30
KID 084	54H	231007	6035817	Float	30	300	11	0.001	30
KID 085	54H	230877	6035681	Float	140	149	15	-0	30
KID 086	54H	231200	6035561	Float	50	263	9	-0	40
KID 087	54H	231270	6035480	Rock chip	20	534	20	0.001	50
KID 088	54H	230660	6036046	Float	30	233	6	-0	-10
KID 089	54H	230889	6035650	Float	70	446	9	0.002	40
KID 090	54H	230824	6035716	Float	20	214	6	-0	50
KID 091	54H	230680	6035668	Float	100	393	78	0.002	-10
KID 092	54H	231293	6036080	Rock chip	30	159	3	0.001	20
KID 093	54H	231406	6036144	Float	100	371	38	-0	50
KID 094	54H	231182	6036404	Rock chip	100	166	13	-0	40
KID 095	54H	231133	6036330	Rock chip	180	355	27	0.002	90
KID 096	54H	231086	6036256	Rock chip	2010	1617	187	0.005	60
KID 097	54H	231050	6036266	Rock chip	320	606	47	0.002	40
KID 098	54H	231024	6036171	Rock chip	160	438	51	-0	40
KID 099	53H	768473	6033556	Rock chip	40	542	39	-0	50
KID 100	53H	768528	6033601	Rock chip	40	347	22	0.001	20
KID 101	53H	768165	6033429	Rock chip	40	101	2	0.002	10

î

### JORC Code, 2012 Edition – Table 1 report template

#### Section 1 Sampling Techniques and Data

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



(Criteria in this s	ection apply to all succeeding sections.)	
Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li><u>Specimen rock-chip</u> <u>samples</u>. Samples collected were around 1-3 kg of rock from pegmatite outcrops and float.</li> <li>Samples were selected in order to ascertain the degree of lithium enrichment in the different pegmatites. For pegmatites lacking obvious lithium minerals, samples of microcline were collected so that the degree of Rb enrichment could be ascertained. For those pegmatites in which lithium minerals were recognisable, samples of the rock unit containing the lithium minerals were collected. These samples are representative of the lithium mineralisation within the lithium-rich zones of the pegmatites.</li> <li>In all, 101 samples were collected by LIT's experienced consultant geologist and sent to Nagrom Laboratories (Perth) for analyses. Nagrom Laboratory QAQC duplicates and blanks were not inserted in the batch of preliminary rock-chip samples.</li> <li>1 x sample was repeated as part of internal laboratory QAQC (i.e. a second assay from the same pulverised sample).</li> </ul>



Drilling techniques	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.).	Not applicable
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	• Not applicable
Logging	<ul> <li>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.</li> <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>	<ul> <li>Rock-chip samples are not logged; however, basic topography, environment, sample nature and geological, mineralogical and petrographic details are recorded.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <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> <li>Not applicable, no drill core.</li> <li>All rock-chip and soil samples were dry.</li> <li>Laboratory standards, splits and repeats were used for quality control. No Certified Reference Material standards were submitted as part of the sample batch, as the samples are preliminary reconnaissance in nature.</li> <li>The sample type and method were of an acceptable standard for first-pass pegmatite mapping and represents standard industry practice at this stage of investigation.</li> </ul>



Quality of	Image: The nature, quality and appropriateness of the assaying and	•	Sample preparation is		
assay data and laboratory	laboratory procedures used and whether the technique is considered partial or total.		integral to the analysis process, as it ensures a		
tests	Performance 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.		representative sample is presented for assay. The preparation process includes sorting, drying,		
	Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	•	crushing, splitting and pulverising. Rock-chip and soil samples were assayed by Nagrom Laboratories for multi- elements using Peroxide Fusion and ICP analyses for Li, Rb, Cs, Be, and Ta, with XRF Bi analyses for Al, As, Ba, Ca, Cl, Co, Cr, Cu, Fe, K, Mg, Mn, Na, Ni, P, Pb, Sb, Si, Sn, S, Sr, Ti, V, Zn and Zr. Laboratory standards, splits and repeats were used for quality control.		
Verification of	Image: The verification of significant intersections by either independent or	•	Sample results were		
sampling and	alternative company personnel.		checked by company		
assaying	The use of twinned holes.		personnel (the senior geologist) and a consultant		
	Documentation of primary data, data entry procedures, data		geologist.		
	verification, data storage (physical and electronic) protocols.	•	Assays to be reported as		
	Discuss any adjustment to assay data.		Excel xls files and secure pdf files.		
		•	Data entry carried out by field personnel, thereby minimising transcription or other errors. Careful field documentation procedures and rigorous database validation ensured that field and assay data are merged accurately. Li (ppm) converted to Li <sub>2</sub> O, Nb (%) converted to Nb (ppm).		



Location of data points	<ul> <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> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	•	Sample locations picked up with handheld Garmin <i>GPS</i> <i>map 62sc,</i> with about 3-5 m accuracy, which is sufficient for first-pass pegmatite mapping. All locations recorded in MGA 94 Zone 54. Topographic locations interpreted from GPS pickups (barometric altimeter) and field observations – adequate for first-pass pegmatite mapping.
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	•	Rock-chip samples were selected by the geologist to assist with identification of the mineralisation present at each location. No set sample spacing was used and samples were taken based on geological variation at the location. Sample compositing was not applied.
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	-	Surface samples of 'points' only. Does not provide orientation/width information. Associated structural measurements and interpretation by a geologist can assist in understanding the geological context.
Sample security	The measures taken to ensure sample security.	•	Samples were securely packaged for transport to ensure their safe arrival at the assay facility.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	•	None necessary at this stage of exploration.



#### Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The results reported herein describe investigation of pegmatites within granted tenements EL 6212 &amp; EL 6213, 100% held by LIT.</li> <li>The Dudley lithium prospect is located about 35 km east of Kingscote on the north-easternmost part of Kangaroo Island in South Australia.</li> <li>Tenement EL 6212 is in good standing,</li> </ul>
Exploration done by other	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>with no known impediments.</li> <li>The Dudley mine was worked for gem</li> </ul>
parties		tourmaline from 1899, and kaolin from 1905-10. Jack, 1917 was the first to write a detailed geological report. In 1986 Roebuck Resources/SB Warne and Australian Emerald Company investigated the potential kaolin and gem tourmaline. Although the area was well-known for Li tourmaline in the LCT pegmatites, no previous explorers investigated the area for Li, Ta or associated minerals.

î

# **ASX ANNOUNCEMENT**

Raw material	S	
ASX ANN	OUNCEMENT	Reputation Licher Australia Australia
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Cambrian Ordovician aged pegmatites are emplaced within Cambrian Tapanappa Formation metasedimentary rocks.</li> <li>There are a large number of aplitic/coarse- grained pegmatites, of which the dips are as yet unknown, but strike in two trends NE-SW and NW-SE. They outcrop through laterite/ferricrete and limestone over ~ 7 km on the main trend and ~ 5.5 km in the NW-SE trend.</li> <li>Mineralisation appears to be of the LCT pegmatite style.</li> </ul>
Drill hole Information	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:	Not applicable.
	<ul> <li>o easting and northing of the drill hole collar</li> <li>o elevation or RL (Reduced Level – elevation above sea level in metres) of the</li> </ul>	┥ │
	drill hole collar	
	o dip and azimuth of the hole	
	o down hole length and interception depth	
	o hole length.	
	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.	



Data aggregation methods	<ul> <li>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.</li> <li>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</li> </ul>	•	Not applicable, rock chip sample results and soil sample results reported as individual surface samples.
	aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.	_	
Relationship between mineralisation widths and	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	•	Not applicable, rock-chip sample results and soil sample results
intercept lengths	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').		reported as individual surface samples
Diagrams	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.	•	Not applicable: not drilling results.
Balanced reporting	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.	•	Results of assays for Li, Rb, Cs, Ta and Nb of all samples reported in Appendix 1.
Other substantive exploration data	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.	•	All meaningful and material exploration data has been reported.



Further work	I The nature and scale of planned further work (eg tests for lateral	At the time of
	<ul> <li>International scale of planned further work (eg tests for fateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	reporting the results were still being evaluated but it is envisaged that in the short term, further mapping, soil rock chip/float and soil sampling and/or costeaning is warranted to investigate potential additional lithium pegmatites. In the longer term,
		RAB drilling to test
		true thicknesses,
		test extensions at
		depth and strike
		lengths will be
		required.