

ASX ANNOUNCEMENT

5<sup>th</sup> DECEMBER 2017

## Mapping more than doubles area of spodumene-bearing pegmatite swarm at the Buldania Lithium Project, WA

### Highlights

- Multiple pegmatites now defined over a significantly larger area of 1.3km x 2km, compared with the original area of 0.7km x 1.5km indicated by historical mapping.
- Surface dimensions of individual pegmatites measure up to 400m long x 160m wide.
- Previously reported rock chip sampling indicates the presence of widespread spodumene-related lithium mineralization, with assay values of up to 4.6% Li<sub>2</sub>O.
- Initial 3,000-3,300m Reverse Circulation (RC) drill program planned for early 2018, subject to receipt of statutory clearances.

Liontown Resources Limited (ASX: LTR) is pleased to advise that recently completed geological mapping over its Buldania Lithium Project, located ~600km east of Perth in Western Australia, has defined pegmatites over a much larger area than previously indicated by historical exploration.

Multiple pegmatites have now been identified over an area of **1.3km x 2km area (2.6km<sup>2</sup>)**, more than double the previous mapped extent of 0.7km x 1.5km (1.1km<sup>2</sup>) as defined by historical mapping undertaken in the early 1970s.

Previously reported reconnaissance rock chip sampling by Liontown (see ASX release dated 30<sup>th</sup> October 2017) recorded widespread, high-grade spodumene-related lithium mineralisation (>1.5% Li<sub>2</sub>O/**Figure 1**), with better results including:

- |                 |                        |
|-----------------|------------------------|
| • Sample 202146 | 3.5% Li <sub>2</sub> O |
| • Sample 202148 | 2.8% Li <sub>2</sub> O |
| • Sample 202152 | 4.2% Li <sub>2</sub> O |
| • Sample 202159 | 4.6% Li <sub>2</sub> O |
| • Sample 202161 | 2.7% Li <sub>2</sub> O |

(See Table 1 for full listing of rock chip samples collected by Liontown)

Two main target areas have been identified – the **Anna** and **Conda** prospects (**Figure 1**).

The Anna prospect comprises a 550m long, NW-SE trending zone containing a large pegmatite 60-160m in width.

The Conda prospect comprises multiple stacked, SW-NE trending pegmatites up to 200m long and 60m wide at surface.

Limited outcrop exposure means that the true thicknesses of the pegmatites have not yet been determined. It is also possible that many of the pegmatites shown on **Figure 1** are contiguous beneath shallow cover that obscures bedrock.



A maiden 35-40 hole, RC drilling program totalling 3,000-3,300m has been designed to test the main targets as well as a number of thinner pegmatites (10-20m thick) located to the north and east (**Figure 1**). The drilling program is scheduled to commence in early 2018, subject to the receipt of statutory clearances.

The **Buldanía Project** is located approximately 600km east of Perth in the southern part of the Eastern Goldfields Province, a region well-known for hosting significant lithium deposits including Mt Marion and Bald Hill (**Figure 2**). The Project is also close to major road and rail infrastructure, with direct links to the Port of Esperance, critical to the mining and production of bulk commodities such as spodumene concentrates.

Liontown has entered into an Agreement with Avoca Resources Pty Ltd, a wholly-owned subsidiary of Westgold Resources Limited (ASX: WGX), whereby it has secured the rights to lithium and related metals (which include beryllium, caesium, niobium, rubidium, tantalum and tin) for the Buldanía Project while Avoca retains the right and priority access to all other metals. Avoca will be paid \$2 per tonne for any lithium ore mined and 1.5% of the gross sales receipts.

A handwritten signature in black ink that reads 'David Richards'.

DAVID RICHARDS

Managing Director

5<sup>th</sup> December 2017

*The Information in this report that relates to Exploration Results is based on and fairly represents information and supporting documentation prepared by Mr David Richards, who is a Competent Person and a member of the Australasian Institute of Geoscientists (AIG). Mr Richards is a full-time employee of the company.*

*Mr Richards has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activities being undertaken 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 Richards consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

*This announcement contains forward-looking statements which involve a number of risks and uncertainties. These forward looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.*

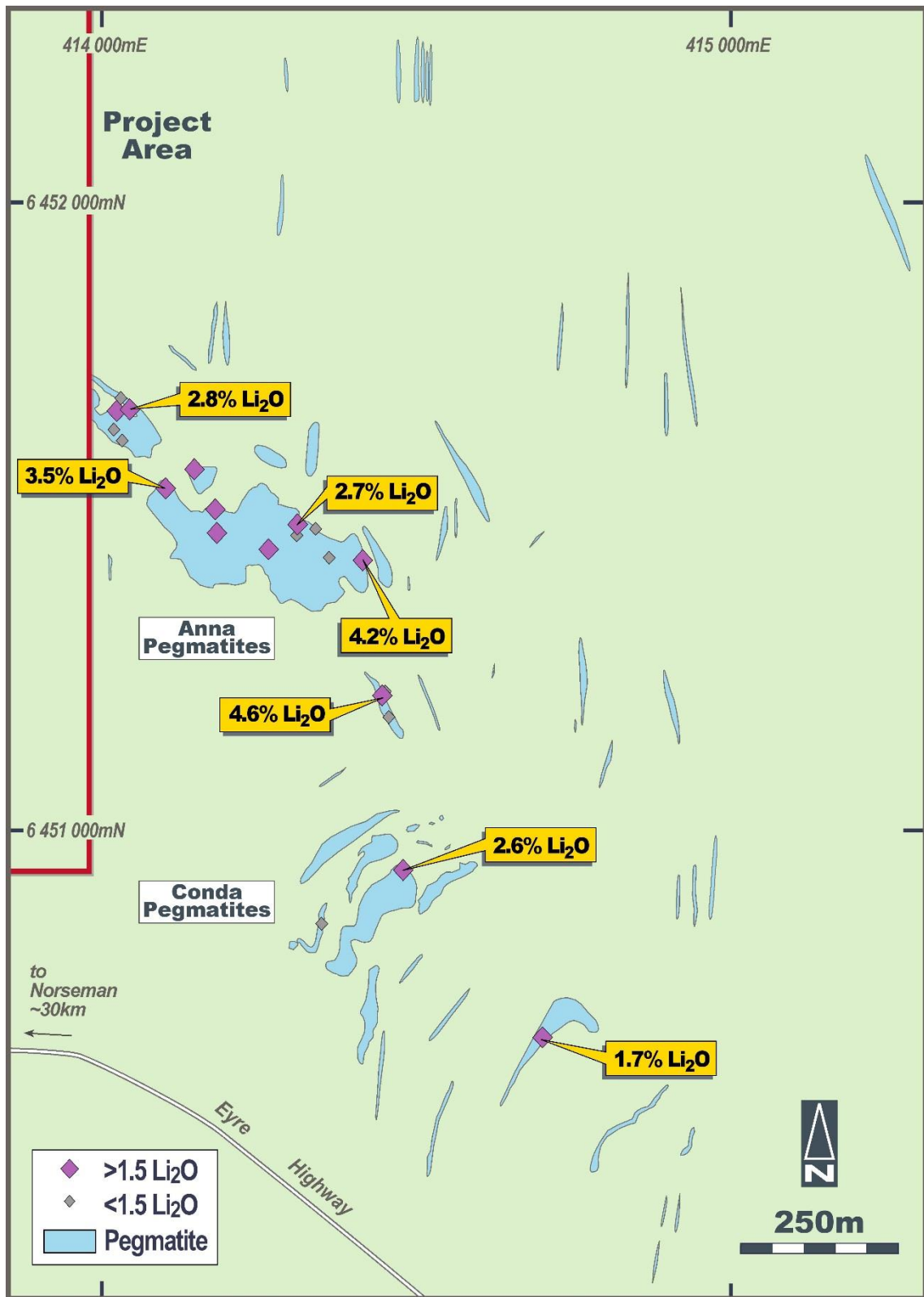


Figure 1: Buldania Project – Geological plan showing mapped pegmatites and Liantown rock chip samples

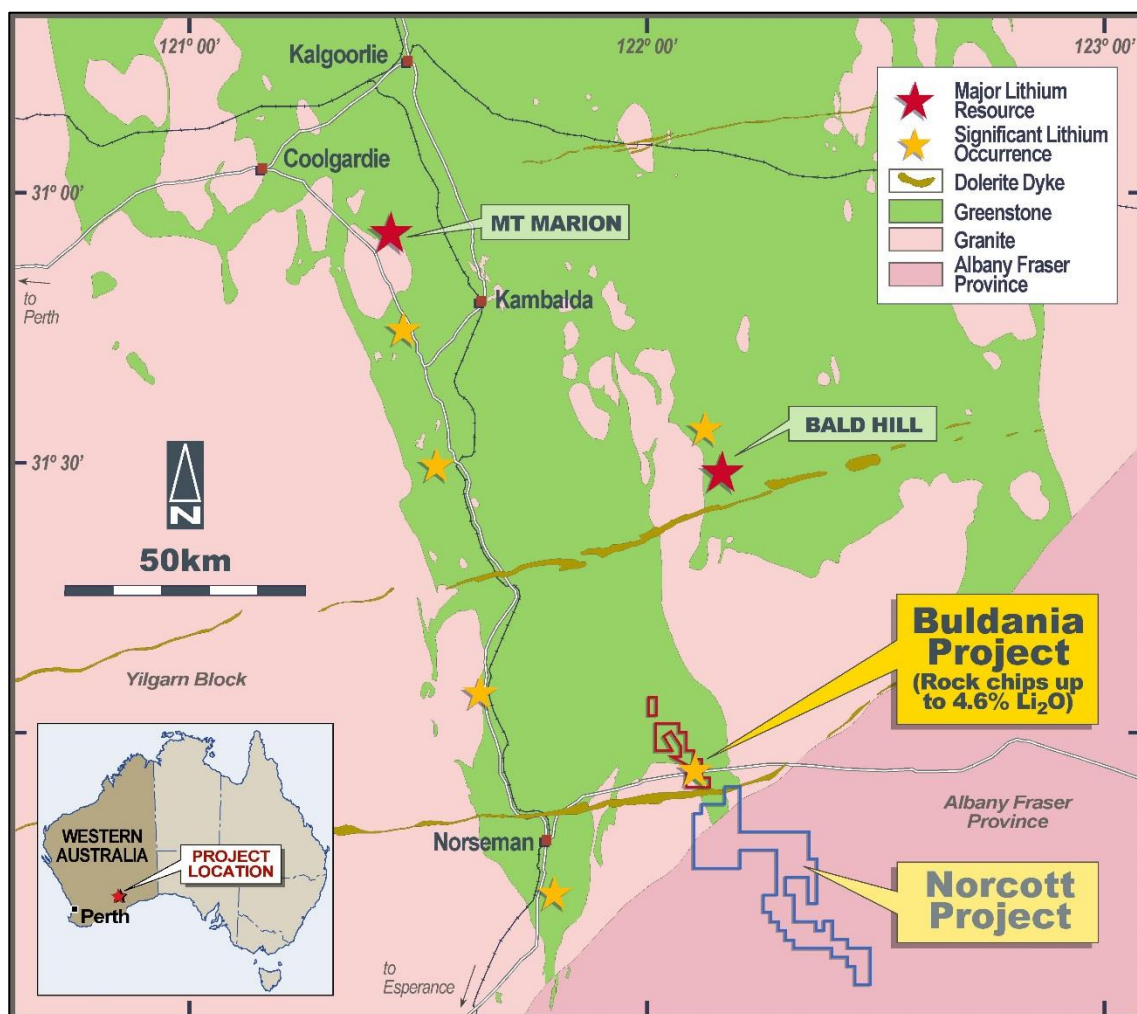


Figure 2: Plan showing regional geology, lithium occurrences and Liontown Projects in SE Goldfields

Table 1: Buldania Project – Liontown Rock Chip Sampling

SampleID	GDA94_East	GDA94_North	Li2O_pct	Ta2O5_ppm	Cs_ppm	Nb_ppm	Rb_ppm	Sn_ppm
202133	414031	6451617	0.15	456	162	145	2370	90
202134	414019	6451638	0.09	96	123	68	1330	34
202135	414017	6451664	0.55	134	289	82	4960	34
202136	414030	6451686	0.01	249	55	81	1790	33
202143	414349	6450853	0.11	38	108	43	1760	66
202146	414098	6451544	3.53	52	45	59	845	126
202147	414025	6451667	2.08	67	92	55	3400	94
202148	414043	6451674	2.76	161	38	30	716	159
202149	414146	6451576	2.16	43	73	55	2020	110
202150	414179	6451511	1.62	42	44	42	1650	72
202151	414181	6451474	2.55	90	14	77	51.6	154
202153	414263	6451447	1.91	237	83	72	1585	98
202154	414414	6451428	4.17	34	24	47	686	107
202155	414479	6450937	2.56	42	24	41	544	69
202156	414701	6450669	1.71	105	31	79	638	50
202157	414456	6451180	0.02	84	19	80	104	22
202158	414449	6451217	0.01	56	1	50	10	79
202159	414445	6451212	4.56	9	36	-10	72	14
202160	414362	6451436	0.04	99	28	30	938	59
202161	414309	6451487	2.69	55	70	80	1560	61
202162	414309	6451472	0.07	127	42	80	884	52
202163	414336	6451481	0.10	314	68	100	2340	1060

## Appendix 1 – Buldania Project - JORC Table 1

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<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>	Liontown rock chips - representative 1-3kg chip samples collected across zone being sampled.  No previous drilling for lithium or associated metals.  No historic assaying for lithium or related metals.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>	
	<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>	No previous drilling for lithium or associated metals
<b>Drilling techniques</b>	<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>	No previous drilling for lithium or associated metals
<b>Drill sample recovery</b>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	No previous drilling for lithium or associated metals
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	No previous drilling for lithium or associated metals
	<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>	No previous drilling for lithium or associated metals
<b>Logging</b>	<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>	No previous drilling for lithium or associated metals
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	No previous drilling for lithium or associated metals
	<i>The total length and percentage of the relevant intersections logged.</i>	No previous drilling for lithium or associated metals
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	No previous drilling for lithium or associated metals
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	No previous drilling for lithium or associated metals
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Sample preparation follows industry best practice standards and is conducted by internationally recognised laboratories; i.e. Oven drying, jaw crushing and pulverising so that 85% passes - 75microns.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Duplicates and blanks submitted approximately every 25-50 samples  Standards are submitted every 30-50 samples or at least once per batch.
	<i>Measures taken to ensure that the sampling is representative of the in situ material collected, including</i>	Measures taken include: <ul style="list-style-type: none"> <li>regular cleaning of sampling equipment (including</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>for instance results for field duplicate/second-half sampling.</i>	<ul style="list-style-type: none"> <li>cyclones if relevant) to prevent contamination; statistical comparison of duplicates, blanks and standards.</li> </ul>
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Sample size is considered appropriate for the stage of exploration
<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Assays completed by ALS Laboratories Perth using industry standard procedures for rare metals such as Li and Ta. Analytical techniques are total.
	<i>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.</i>	None used
	<i>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</i>	See above.
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	No previous drilling for lithium or associated metals
	<i>The use of twinned holes.</i>	No previous drilling for lithium or associated metals
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Data entered directly into excel spreadsheets either during or immediately following sampling. Data then entered into Access Database and validated before being processed by industry standard software packages such as MapInfo and Micromine. Representative chip samples are collected for later reference.
	<i>Discuss any adjustment to assay data.</i>	Li% converted to Li <sub>2</sub> O% by multiplying by 2.15, Ta ppm converted to Ta <sub>2</sub> O <sub>5</sub> ppm by multiplying by 1.22
<b>Location of data points</b>	<i>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.</i>	All geochemical samples are located using a hand held GPS.
	<i>Specification of the grid system used</i>	GDA 94 Zone 51
	<i>Quality and adequacy of topographic control.</i>	Nominal RLs based on regional topographic dataset.
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	Only reconnaissance sampling completed on irregular spacing related to location of outcrops
	<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>	No previous drilling for lithium or associated metals
	<i>Whether sample compositing has been applied.</i>	None undertaken.
<b>Orientation of data in relation to geological structure</b>	<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>	Geochemical sampling completed perpendicular to strike of interpreted mineralised trends where known.
	<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>	No previous drilling for lithium or associated metals
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	Company geologist supervises all sampling and subsequent storage in field. Same geologist arranges delivery of samples to ALS Perth via courier.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	None completed.

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<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>	<p>The Buldania Project is located ~600km east of Perth and 30-40km ENE of Norseman in Western Australia. The Project area totals ~55km<sup>2</sup> and comprises 1 granted exploration licence (EL 63/856) and 1 granted prospecting license (PL63/1977) – the “Tenements”.</p> <p>The Tenements are held by Avoca Resources Pty Ltd which is a wholly owned subsidiary of Westgold Resources Ltd.</p> <p>Liontown Resources Limited through its wholly owned subsidiary, LRL (Aust) Pty Ltd, will acquire the lithium and related metal rights for the Buldania Project by:</p> <ul style="list-style-type: none"> <li>• pay ongoing statutory rents and rates for the Tenements while the Agreement is current;</li> <li>• spending a minimum of \$100,000 on exploration or meeting the minimum statutory expenditure commitment (whichever is greater) on the Tenements within 12 months of the Execution date and before having the right to withdraw; and</li> <li>• paying Avoca \$2 per tonne of ore mined and 1.5% of the gross sales receipts in respect to any lithium or related metals extracted from the Tenements.</li> </ul> <p>Avoca retains the rights to all other metals (excluding lithium and related metals) and has priority access for exploration.</p> <p>The Tenements are covered by the Ngadju Determined Native Title Claim (WCD2014/004). Avoca has an Access Agreement with the Ngadju which will apply to Liontown’s exploration activities.</p>
	<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>	All tenements are in good standing.
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>Multiple phases of exploration completed for gold and nickel. This has not been reviewed in detail due to Liontown only having the rights to lithium and related metals.</p> <p>There has no previous exploration for lithium and related metals; however, past explorers have mapped large pegmatite bodies and recorded spodumene mineralisation in a number of places.</p>
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>The Buldania Project contains a series of quartz-feldspar-muscovite-spodumene pegmatites largely hosted in mafic rocks. The Project is located at the southern end of the Norseman-Wiluna Belt within the Archaean Yilgarn Craton close to the boundary with the Proterozoic Albany Fraser Province.</p> <p>The pegmatites are interpreted to be LCT type lithium bearing-pegmatites.</p>
<b>Drill hole Information</b>	<p><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></p> <ul style="list-style-type: none"> <li>• easting and northing of the drill hole collar</li> <li>• elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>• dip and azimuth of the hole</li> <li>• down hole length and interception depth</li> <li>• hole length.</li> </ul>	No previous drilling for lithium or associated metals
<b>Data aggregation methods</b>	<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>	None completed

Criteria	JORC Code explanation	Commentary
	<p>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.</p>	No previous drilling for lithium or associated metals
	<p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	None used
<b>Relationship between mineralisation widths and intercept lengths</b>	<p>These relationships are particularly important in the reporting of Exploration Results.</p> <p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>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').</p>	No previous drilling for lithium or associated metals
<b>Diagrams</b>	<p>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.</p>	See Figures in body of report
<b>Balanced reporting</b>	<p>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.</p>	All recent exploration results reported and tabulated.
<b>Other substantive exploration data</b>	<p>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.</p>	All meaningful and material data reported
<b>Further work</b>	<p>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</p>	Maiden 35-40 hole, 3,000-3,300m Reverse Circulation drilling program