ASX : LTR

ASX ANNOUNCEMENT

12th MARCH 2018

# Significant lithium mineralisation discovered at Buldania

***Multiple intercepts of strong spodumene-related mineralisation in the first two holes drilled into the main Anna prospect confirm potential for high lithium grades within numerous pegmatites***

**Highlights**

- **Maiden RC drilling program at the Buldania Lithium Project in WA delivers highly encouraging initial results with multiple ore-grade lithium intersections recorded in the first two holes from the Anna prospect.**
- **Better intersections include:**

  **BDRC0003**

  - ***16m @ 1.2% $Li_2O$ from 28m, including:***
    - ***2m @ 1.7% $Li_2O$ from 37m; and***
    - ***2m @ 1.5% $Li_2O$ from 41m***
  - ***3m @ 1.9% $Li_2O$ from 75m***
  - ***3m @ 1.8% $Li_2O$ from 97m (EoH), including:***
    - ***1m @ 3.4% $Li_2O$ from 99m (EoH)***

  **BDRC0004**

  - ***12m @ 1.2% $Li_2O$ from 70m, including:***
    - ***7m @ 1.7% $Li_2O$ from 72m***

  *(NB true widths approximately 70-80% of downhole widths listed above)*
- **Lithium is associated with spodumene mineralisation, hosted by multiple pegmatites contained within a 150m wide zone at the Anna prospect.**
- **Mapping and drilling indicates that the Anna prospect extends over a strike length of ~550m and is 50-150m wide.**
- **Assays are pending for a further 16 completed holes with 10-15 holes yet to be drilled as part of the current 3,000-3,500m Reverse Circulation drilling program.**

Liontown Resources Limited **(ASX: LTR)** is pleased to advise that its maiden drilling program at the Buldania Lithium Project, located 600km east of Perth, Western Australia, is off to a strong start with significant zones of lithium mineralisation intersected.

While exploration is still at an early stage, the initial results are highly encouraging and demonstrate the potential for high grades to occur within multiple pegmatites hosting significant widths of ore grade lithium mineralisation.

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The current 3,000 – 3,500m Reverse Circulation drilling program is designed to test beneath multiple targets where previous rock chip sampling had recorded fresh, high-grade (>1.5% $Li_2O$), spodumene-related mineralisation from a pegmatite swarm defined over an area of 1.3km x 2km.

Holes BDRC0003 and BDRC0004 were drilled into the Anna pegmatite (***Figure 1***) and are the only holes from the prospect for which assays have been received so far. (See Appendix 1 for listing of drill statistics).

Mapping combined with the latest drilling indicates that the Anna prospect comprises a 550m long, 60-150m wide, NW-SE trending zone containing numerous close-spaced, steep-to-moderately, south-west dipping pegmatites (***Figure 2***).

Importantly, the lithium values appear to be largely related to spodumene mineralisation with only minor lepidolite observed. Further work will be planned once the drilling program is completed and all assays have been received.

The **Buldania Project** is located 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 3***). 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 Buldania 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.

DAVID RICHARDS

Managing Director

12th March 2018

*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.*

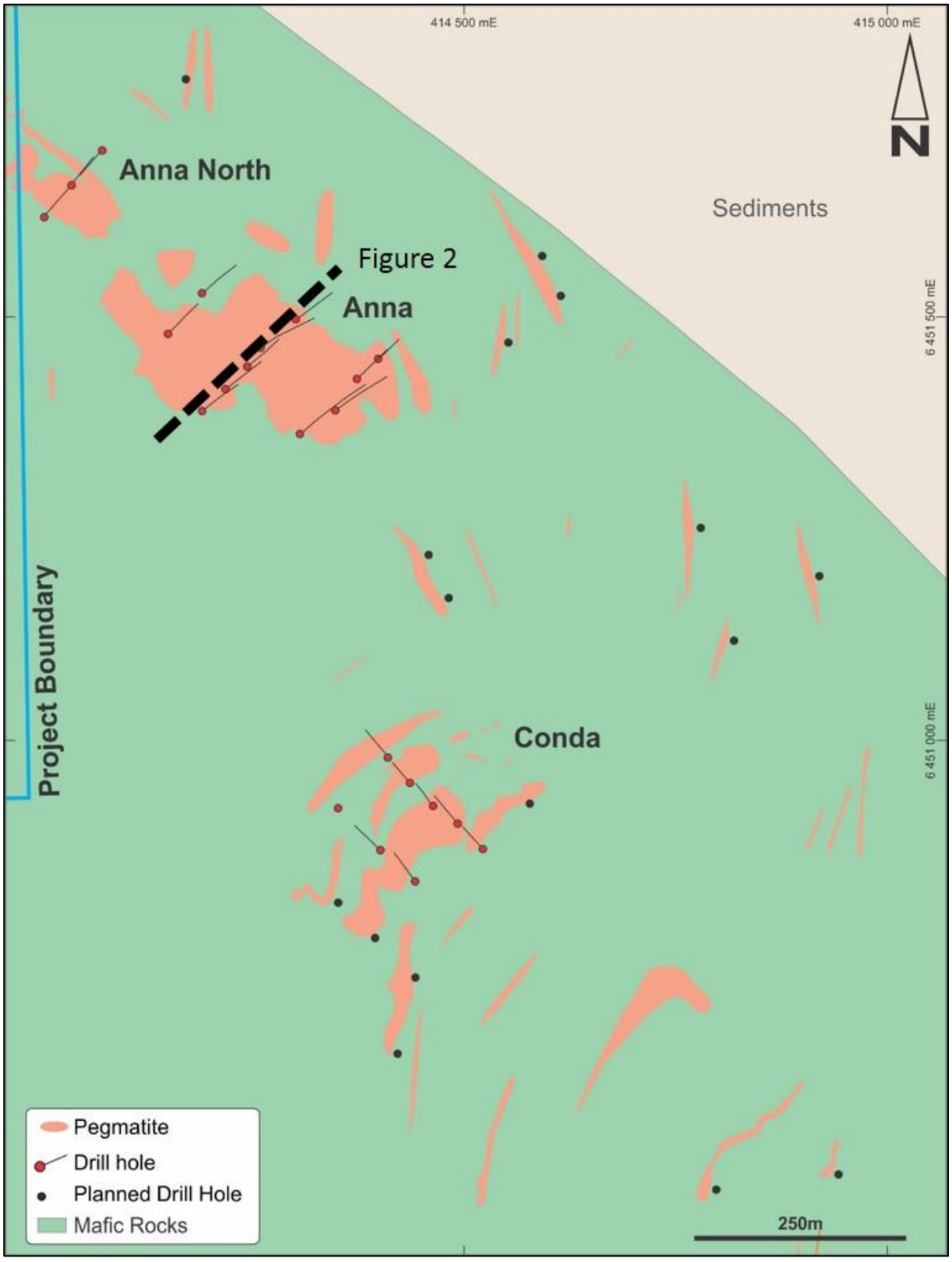


***Figure 1: Buldania – Drill hole and geology plan showing main prospects***

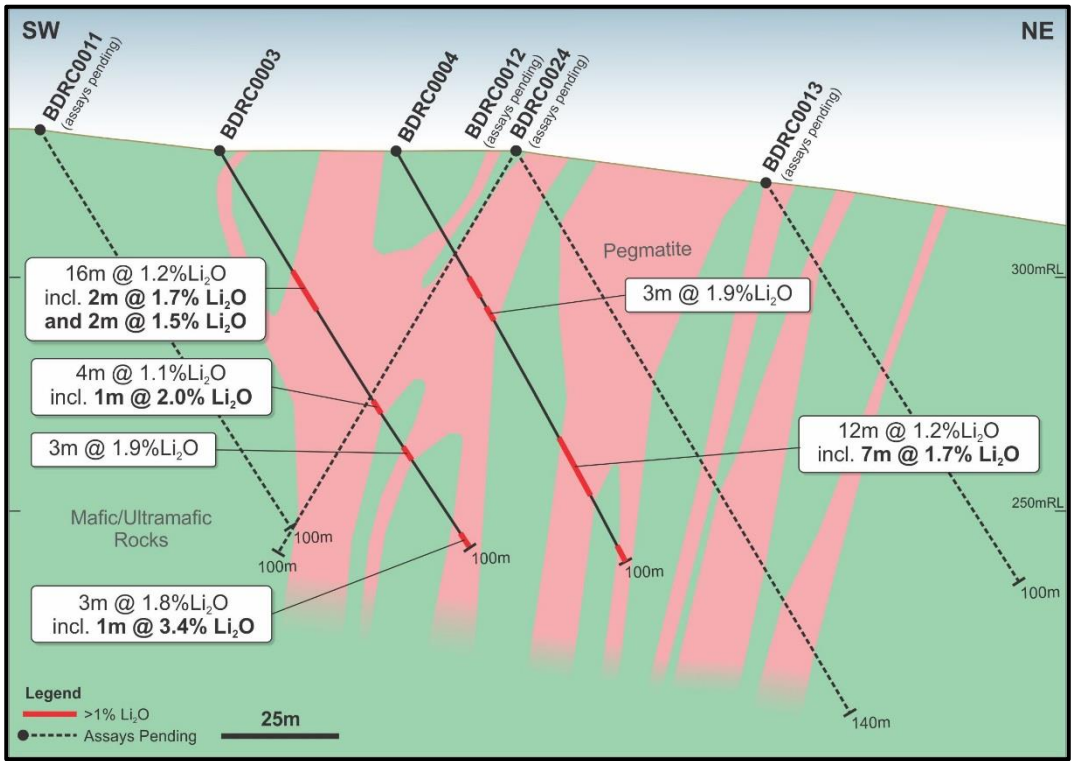


*Figure 2: Buldania Project – Drill section (Anna Prospect) – see Figure 1 for position.*
*(NB Assays pending for holes BDRC0011-0013 and BDRC0024)*

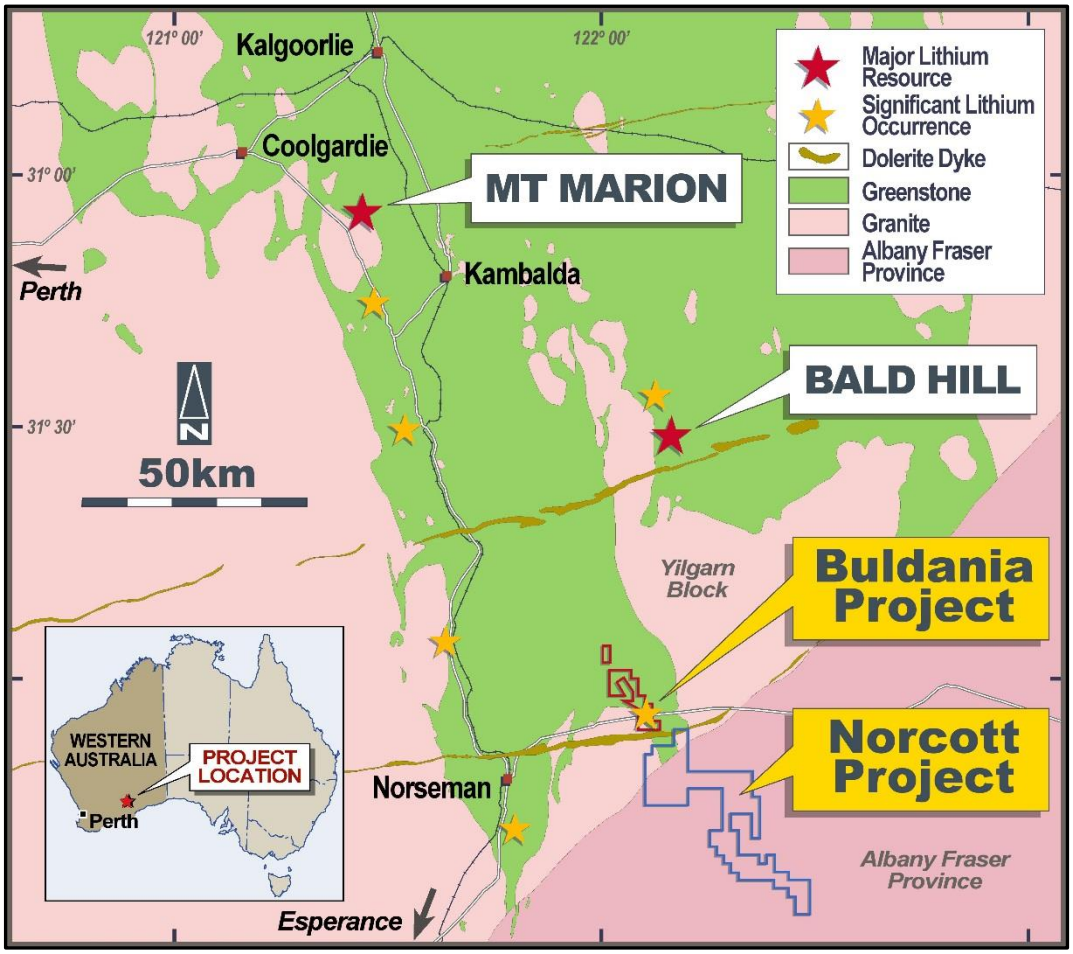


*Figure 3 Buldania Project – Regional location and geology*

## Appendix 1 – Buldania – Drill hole statistics

| Hole_ID | Prospect | East | North | RL | Dip | Azimuth | Depth | Significant Li2O (>0.4%) and Ta2O5 (>50ppm) results | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | From(m) | To(m) | Interval(m) | Li2O (%) | Ta2O5 (ppm) |
| BDRC0001 | Conda | 414492 | 6450902 | 337 | -60 | 320 | 82 | 25 | 26 | 1 | 0.5 | 1 |
| BDRC0002 | Conda | 414463 | 6450923 | 333 | -60 | 323 | 80 | 11 | 14 | 3 | 0.8 | 50 |
| BDRC0003 | Anna | 414218 | 6451415 | 327 | -59 | 52 | 100 | **28** | **44** | **16** | **1.2** | **81** |
| | | | | | | | | incl. 1m @ 1.9% Li2O and 148ppm Ta2O5 from 34m | | | | |
| | | | | | | | | incl. 2m @ 1.7% Li2O and 67ppm Ta2O5 from 37m | | | | |
| | | | | | | | | incl. 2m @ 1.5% Li2O and 40ppm Ta2O5 from 41m | | | | |
| | | | | | | | | 62 | 66 | 4 | 1.1 | 233 |
| | | | | | | | | incl. 1m @ 2% Li2O and 347ppm Ta2O5 from 63m | | | | |
| | | | | | | | | **75** | **78** | **3** | **1.9** | **132** |
| | | | | | | | | **97** | **100** | **3** | **1.8** | **82** |
| | | | | | | | | **incl. 1m @ 3.4% Li2O and 101ppm Ta2O5 from 99m (EoH)** | | | | |
| BDRC0004 | Anna | 414244 | 6451442 | 327 | -60 | 51 | 100 | 22 | 25 | 3 | 0.6 | 7 |
| | | | | | | | | 32 | 37 | 5 | 0.9 | 45 |
| | | | | | | | | 39 | 42 | 3 | 1.1 | 64 |
| | | | | | | | | **70** | **82** | **12** | **1.2** | **65** |
| | | | | | | | | **incl. 7m @ 1.7% Li2O and 56ppm Ta2O5 from 72m** | | | | |
| | | | | | | | | 98 | 99 | 1 | 1.4 | 48 |
| BDRC0005 | Conda | 414522 | 6450872 | 334 | -60 | 318 | 80 | 46 | 48 | 2 | 0.8 | 94 |
| BDRC0006 | Conda | 414410 | 6450980 | 338 | -59 | 322 | 80 | No significant assays | | | | |
| BDRC0007 | Conda | 414436 | 6450950 | 338 | -59 | 319 | 80 | Assays pending | | | | |
| BDRC0008 | Conda | 414442 | 6450834 | 338 | -59 | 323 | 80 | | | | | |
| BDRC0009 | Conda | 414401 | 6450871 | 339 | -59 | 313 | 80 | | | | | |
| BDRC0010 | Conda | 414351 | 6450920 | 340 | -59 | 323 | 50 | | | | | |
| BDRC0011 | Anna | 414190 | 6451389 | 331 | -58 | 52 | 100 | | | | | |
| BDRC0012 | Anna | 414259 | 6451464 | 327 | -59 | 57 | 140 | | | | | |
| BDRC0013 | Anna | 414301 | 6451497 | 320 | -58 | 54 | 100 | | | | | |
| BDRC0014 | Anna | 414306 | 6451362 | 329 | -58 | 50 | 166 | | | | | |
| BDRC0015 | Anna | 414347 | 6451390 | 329 | -58 | 56 | 130 | | | | | |
| BDRC0016 | Anna | 414373 | 6451427 | 322 | -58 | 47 | 104 | | | | | |
| BDRC0017 | Anna | 414398 | 6451451 | 322 | -59 | 47 | 70 | | | | | |
| BDRC0018 | Anna | 414150 | 6451480 | 320 | -60 | 44 | 100 | | | | | |
| BDRC0019 | Anna | 414190 | 6451528 | 320 | -59 | 49 | 100 | | | | | |
| BDRC0020 | Anna | 414005 | 6451623 | 330 | -55 | 49 | 100 | | | | | |
| BDRC0021 | Anna | 414035 | 6451658 | 329 | -53 | 230 | 70 | | | | | |
| BDRC0022 | Anna | 414074 | 6451708 | 323 | -53 | 230 | 117 | | | | | |

True widths estimated to be 70-80% of downhole intersections

## Appendix 2 – BULDANIA PROJECT - JORC Table 1

### Section 1 Sampling Techniques and Data

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Sampling techniques*** | *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.* | Sub surface chip samples have been collected by reverse circulation (RC) drilling techniques (see below).<br><br>Where access permits, drill holes are oriented perpendicular to the interpreted strike of the mineralised trend.<br><br>Liontown rock chips - representative 1-3kg chip samples collected across zone being sampled.<br><br>Historic sampling techniques not well documented. |
| | *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br><br>*Aspects of the determination of mineralisation that are Material to the Public Report.*<br><br>*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.* | RC samples are collected by the metre from the drill rig cyclone as two 1m split samples in calico bags and a bulk sample in a plastic mining bags.<br><br>The 1m samples from the cyclone are retained for check assaying.<br><br>Only samples of pegmatite and adjacent wall rock are collected for assay, approximately 4m either side of the pegmatite for each interval. |
| ***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).* | Drilling techniques used at Buldania Project comprise:<br>• Reverse Circulation (RC/5.5") with a face sampling hammer |
| ***Drill sample recovery*** | *Method of recording and assessing core and chip sample recoveries and results assessed.* | Sample recoveries are visually estimated and recorded for each metre. To date sample recoveries have averaged >95%. |
| | *Measures taken to maximise sample recovery and ensure representative nature of the samples.* | Drill collars are sealed to prevent sample loss and holes are normally drilled dry to prevent poor recoveries and contamination caused by water ingress. Wet intervals are noted in case of unusual results. |
| | *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.* | None noted as yet. |
| ***Logging*** | *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.* | All drill holes are logged on 1 m intervals and the following observations recorded:<br><br>Recovery, quality (i.e. degree of contamination), wet/dry, hardness, colour, grainsize, texture, mineralogy, lithology, structure type and intensity, pegmatite and vein type and %, lithium mineralogy and %, alteration assemblage and magnetic susceptibility. |
| | *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* | Logging is quantitative, based on visual field estimates. |
| | *The total length and percentage of the relevant intersections logged.* | Holes are logged from start to finish. |
| ***Sub-sampling techniques and*** | *If core, whether cut or sawn and whether quarter, half or all core taken.* | No core holes drilled. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***sample preparation*** | *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* | RC samples are initially collected as rotary split samples. Samples are typically dry. |
| | *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* | Sample preparation follows industry best practice standards and is conducted by internationally recognised laboratories; i.e.<br>Oven drying, jaw crushing and pulverising so that 85% passes -75microns. |
| | *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* | Duplicates and blanks submitted approximately every 25 samples.<br>Standards are submitted every 25 samples or at least once per hole. |
| | *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.* | Measures taken include:<br>• regular cleaning of cyclones and sampling equipment to prevent contamination;<br>• statistical comparison of duplicates, blanks and standards. |
| | *Whether sample sizes are appropriate to the grain size of the material being sampled.* | Sample size is considered appropriate for the stage of exploration |
| ***Quality of assay data and laboratory tests*** | *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* | Assaying completed by NAGROM Laboratories Perth, using industry standard procedures for rare metals such as Li and Ta. Analytical techniques are total. |
| | *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.* | None used |
| | *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* | See above. |
| ***Verification of sampling and assaying*** | *The verification of significant intersections by either independent or alternative company personnel.* | Internal review by alternate company personnel. |
| | *The use of twinned holes.* | None undertaken |
| | *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* | Drill data entered directly into excel spreadsheets onsite while drilling is ongoing. Data then entered into Access Database and validated before being processed by industry standard software packages such as MapInfo and Micromine.<br>Representative chip samples are collected for later reference. |
| | *Discuss any adjustment to assay data.* | Li% converted to $Li_2O$% by multiplying by 2.15, Ta ppm converted to $Ta_2O_5$ ppm by multiplying by 1.22 |
| ***Location of data points*** | *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.* | All drill holes and geochemical samples are located using a hand held GPS.<br>All RC holes have been surveyed by a digital down hole camera provided by drill contractor. |
| | *Specification of the grid system used* | GDA 94 Zone 51 |
| | *Quality and adequacy of topographic control.* | Nominal RLs based on regional topographic dataset and GPS. |
| ***Data spacing and distribution*** | *Data spacing for reporting of Exploration Results.* | Varies due to initial drill program largely designed to test geometry and distribution of mineralised outcrops. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *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.* | Not yet. |
| | *Whether sample compositing has been applied.* | None undertaken. |
| ***Orientation of data in relation to geological structure*** | *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* | Drilling is typically oriented perpendicular to the interpreted strike of mineralisation. |
| | *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.* | No bias observed; however, estimates of true width provided in attached drill hole statistic appendix. |
| ***Sample security*** | *The measures taken to ensure sample security.* | Company geologist supervises all sampling and subsequent storage in field. Same geologist arranges delivery of samples to NAGROM Perth via courier. |
| ***Audits or reviews*** | *The results of any audits or reviews of sampling techniques and data.* | None completed. |

## Section 2 Reporting of Exploration Results

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| ***Mineral tenement and land tenure status*** | *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.* | The Buldania Project is located ~600km east of Perth and 30-40km ENE of Norseman in Western Australia. The Project area totals ~55km$^2$ and comprises 1 granted exploration licence (EL 63/856) and 1 granted prospecting license (PL63/1977) – the "Tenements".<br><br>The Tenements are held by Avoca Resources Pty Ltd which is a wholly owned subsidiary of Westgold Resources Ltd.<br><br>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:<br>• pay ongoing statutory rents and rates for the Tenements while the Agreement is current;<br>• 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<br>• 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.<br><br>Avoca retains the rights to all other metals (excluding lithium and related metals) and has priority access for exploration.<br><br>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. |
| | *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.* | All tenements are in good standing. |
| ***Exploration done by other parties*** | *Acknowledgment and appraisal of exploration by other parties.* | 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. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | 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. |
| ***Geology*** | *Deposit type, geological setting and style of mineralisation.* | 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.<br><br>The pegmatites are interpreted to be LCT type lithium bearing-pegmatites. |
| ***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:*<br>• *easting and northing of the drill hole collar*<br>• *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>• *dip and azimuth of the hole*<br>• *down hole length and interception depth*<br>• *hole length.* | See Appendix in attached ASX release. |
| ***Data aggregation methods*** | *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.* | See Appendix in attached ASX release |
| | *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.* | $Li_2O$ intercepts calculated using 0.4% cut off with a maximum 2m internal dilution. Higher grade intervals calculated using 1.5% cut off. No upper cuts applied.<br>$Ta_2O_5$ values only quoted when lithium intersections reported. |
| | *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | None used. |
| ***Relationship between mineralisation widths and intercept lengths*** | *These relationships are particularly important in the reporting of Exploration Results.*<br>*If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>*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').* | Still yet to be determined accurately but currently estimated that true widths are 70-80% of downhole widths. |
| ***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.* | See Figures in body of report. |
| ***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.* | All recent exploration results reported and tabulated. |
| ***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* | All meaningful and material data reported |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *characteristics; potential deleterious or contaminating substances.* | |
| ***Further work*** | *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* | Dependent on results of maiden 35-40 hole, 3,000-3,500m Reverse Circulation drilling program which is still in progress. |