

ASX ANNOUNCEMENT

## Liontown secures lithium-tantalum exploration project in Tanzania, East Africa

*Prospective exploration opportunity with high-grade lithium values from recent sampling.*

### Highlights

- 177km<sup>2</sup> Mohanga Lithium-Tantalum Project secured in central Tanzania
- Analogous geological setting to world-class Greenbushes deposit in Western Australia
- Three lithium-bearing pegmatites confirmed with more indicated by historic mapping
- Grades up to 5.2% Li<sub>2</sub>O and 0.11% Ta<sub>2</sub>O<sub>5</sub> returned from recent reconnaissance sampling
- Planned exploration activities include mapping and trenching ahead of drilling.

Liontown Resources Limited (ASX: LTR) is pleased to advise that it has secured a highly prospective **lithium-tantalum** exploration project (“the Mohanga Project”) in central Tanzania, East Africa, providing an exciting new focus for its exploration team and a growth opportunity in a commodity with a strong market outlook.

The acquisition signals the start of a new phase of diversification for Liontown into the strategic metals sector, complementing its existing gold interests in Tanzania and Australia. Liontown is currently reviewing additional international growth opportunities in the lithium-tantalum sector.

Through a combination of tenement acquisitions and an option deal with a local company, Liontown has acquired a contiguous 177km<sup>2</sup> ground package, known as the **Mohanga Project**, where recent reconnaissance rock chip sampling has recorded high-grade lithium and tantalum values.

Better results from Liontown’s recent sampling include:

Sample 132428	2.95% Li <sub>2</sub> O and 0.12% Ta <sub>2</sub> O <sub>5</sub>
Sample 132432	3.79% Li <sub>2</sub> O and 0.11% Ta <sub>2</sub> O <sub>5</sub>
Sample 132436	2.76% Li <sub>2</sub> O and 0.11% Ta <sub>2</sub> O <sub>5</sub>
Sample 132439	5.15% Li <sub>2</sub> O and 0.07% Ta <sub>2</sub> O <sub>5</sub>

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

There has been no drilling or other modern exploration within the Mohanga Project area.

The Mohanga Project is located in central Tanzania approximately 40km NNE of the capital Dodoma and 400km WNW of Dar es Salaam (see **Figure 1**). Historic mapping has located a number of pegmatite-hosted lithium occurrences, the only reported for the country.

The Project is in the south eastern part of the Archaean Tanzanian Craton where it comprises a WNW-NW trending sequence of metasediments (quartzite, quartz-feldspar schist and graphitic schist), amphibolite schist and quartz-feldspar gneiss intruded by granite (**Figure 2**). The geological setting is considered analogous to the Greenbushes lithium deposit in southwest Western Australia, the world’s largest pegmatite-hosted deposit.

A number of lithium-bearing pegmatites have been recorded by government mapping and early reconnaissance rock chip sampling by Liontown geologists (**Appendix 1**) has returned multiple significant lithium (>1% Li<sub>2</sub>O) and tantalum (>0.05% Ta<sub>2</sub>O<sub>5</sub>) values (NB not all reported occurrences have been sampled).

Liontown will undertake geological mapping followed by systematic trenching to define targets for initial drill testing. Access preparation for this work has already commenced.

### **Land Status**

The Mohanga Project comprises three contiguous tenements covering a total combined area of approximately 177km<sup>2</sup> (**Figure 3**). Two of the tenements are held directly by Liontown Resources (Tanzania), with one being a granted prospecting licence (PL10724/2015) and the second being an application (No. 01458) that has been recommended for grant.

The third tenement (PL9067/2013) is subject to an Option Agreement with local company Central Mining Company which gives Liontown the right to acquire 100% of the PL. The main terms of the proposed Option Agreement between Liontown and Central Mining are:

- LTR to make initial cash payments totaling approximately US\$30,000;
- 4 year option period with annual payments (from first anniversary) of US\$15,000;
- Purchase price of US\$900,000 (plus 10% CGT) to acquire 100% of PL9067/2013; and
- 1%NSR on future production which can be purchased at any stage for US\$500,000.

Details of the Option Agreement are provided in **Appendix 2 (Section 2)**.

Liontown's Chairman, Mr Tim Goyder, said the acquisition of the Mohanga Project provided the Company with an outstanding early-stage growth opportunity in a commodity that is experiencing a significant level of global attention and investor interest.

*"The lithium sector is currently enjoying a strong growth phase, with major analysts and investment banks highlighting a potential supply shortfall over the next 3-5 years as demand for the metal accelerates on the back of rapid forecast growth in the energy storage and lithium-ion battery sectors."*

*"We are delighted to have the opportunity to explore such a high potential project which bears geological similarities to the region which hosts the world-class Greenbushes lithium deposit in Western Australia."*

*"While there is much work to do to confirm the promising early potential we have seen at this project, the acquisition gives our shareholders immediate exposure to one of most promising growth sectors in the commodities market, and we look forward to commencing ground-based exploration in the near future."*



**DAVID RICHARDS**  
Managing Director

24 November 2015

*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: Tanzania – Regional location plan showing Liantown Projects

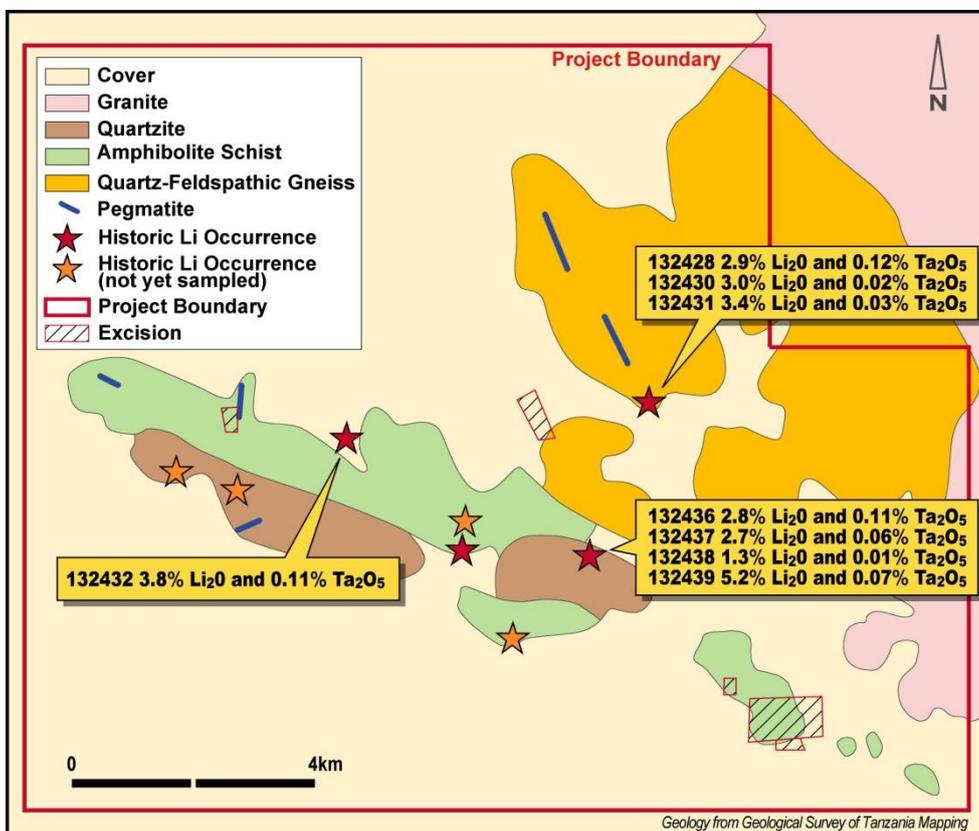


Figure 2: Mohanga Project – Geology and better rock chip sample results.

For personal use only

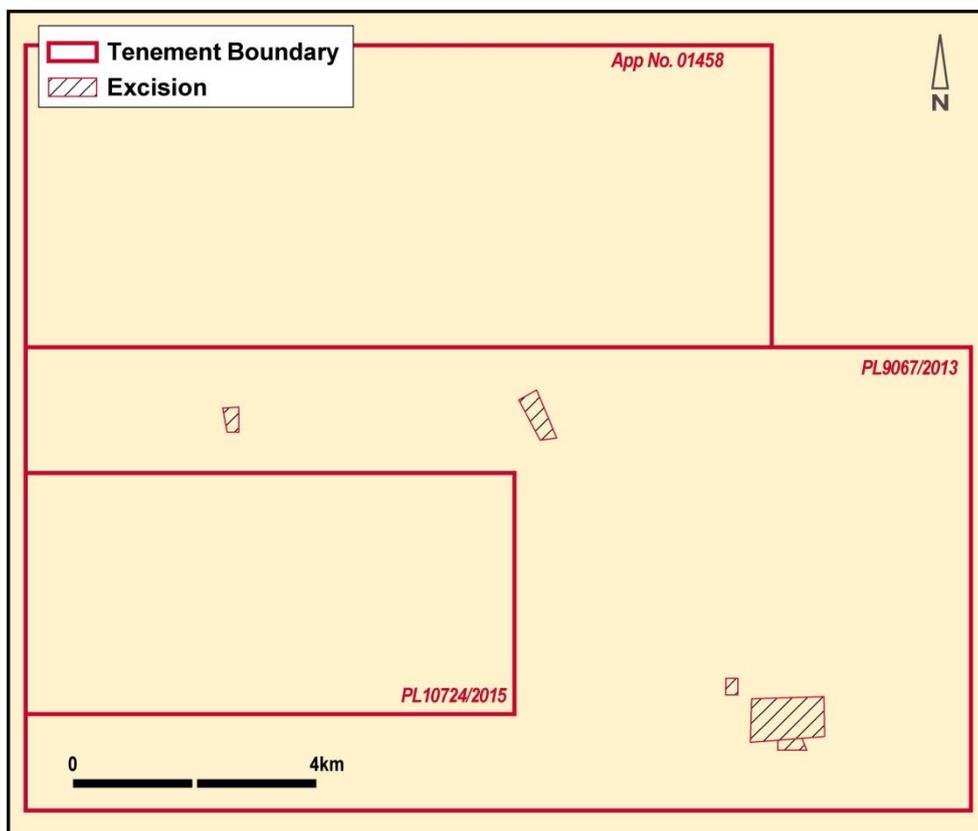


Figure 3: Mohanga Project – Tenure

**APPENDIX 1: Mohanga Project – Liontown Rock Chip Results**

Sample ID	East	North	Survey Method	Lithology	Cs_ppm	Li2O_pct	Nb_ppm	Rb_ppm	Ta2O5_ppm
132426	11407	8430	GPS	Pegmatite	4300	2.65	11.3	7390	85
132427	11407	8430	GPS	Pegmatite	21.1	0.03	1.08	117.5	0.01
132428	8992	14671	GPS	Pegmatite	4600	2.95	20.6	13000	1184
132429	8992	14671	GPS	Pegmatite	69.2	0.06	3.22	346	0.07
132430	9001	14702	GPS	Pegmatite	6100	2.99	13.55	16400	195
132431	8991	14746	GPS	Pegmatite	6500	3.44	10.7	17700	281
132432	4017	13544	GPS	Pegmatite	6200	3.79	9.33	23800	1062
132434	1424	13022	GPS	Chert	14.55	0.01	1.61	83.1	0.05
132435	7230	13677	GPS	BIF	10.6	0.01	0.55	39.4	0.01
132436	8275	11690	GPS	Pegmatite	6600	2.76	30.4	36000	1148
132437	8275	11690	GPS	Pegmatite	9300	2.65	45.5	37200	635
132438	8275	11690	GPS	Pegmatite	2600	1.27	41.8	15300	147
132439	8260	11711	GPS	Pegmatite	9400	5.15	53	43300	720
132440	7390	10650	GPS	QV	7.47	0.00	0.3	44	0.44
132441	5880	11932	GPS	Pegmatite	66.6	0.04	23.9	640	14.53
132442	5885	11923	GPS	Pegmatite	5.43	0.00	18.1	342	5.79
132443	5914	11852	GPS	Pegmatite	7.07	0.01	18.3	254	3.11
132444	5922	11806	GPS	Pegmatite	22.6	0.01	24.1	510	7.33

## APPENDIX 2 - MOHANGA - 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>	Only reconnaissance rock chip samples collected to date. Rock samples comprise multiple chips considered to be representative of the horizon or outcrop being sampled. Samples submitted for assay typically weigh 2-3kg.
	<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>	Not applicable.
<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 drilling completed.
<b>Drill sample recovery</b>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Not applicable.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Not applicable.
	<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>	Not applicable.
<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>	Not applicable.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Not applicable.
	<i>The total length and percentage of the relevant intersections logged.</i>	Not applicable.
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Not applicable.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	Not applicable.
	<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>	Only 18 rock samples submitted for assay in 2 batches. Each batch contained validated blanks or standards to ensure la precision and accuracy

For personal use only

Criteria	JORC Code explanation	Commentary
	<i>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.</i>	Measures taken include: <ul style="list-style-type: none"> <li>• Systematic sampling across whole outcrop;</li> <li>• Comparison of actual assays for blanks and standards with theoretical values</li> </ul>
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Sample size accepted as general industry standard.
<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>	Assay and laboratory procedures have been selected following a review of techniques provided by internationally certified laboratories. In addition, the sample prep laboratory in Mwanza is regularly visited to ensure high standards are being maintained.  Samples were initially submitted for multi-element analyses by ALS techniques ME-MS41 (51 elements/aqua-regia digest) and ME-MS61 (48 elements/4 acid digest). Where results exceeded upper detection limits for Li and/or Ta, samples were re-assayed by ALS techniques ME-ICP81X (sodium peroxide fusion) for Li and ME-XRF15B (lithium borate fusion) for Ta and Rb.  The final techniques used 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>	Multiple certified standards with varying element contents have been purchased. Different ones are selected randomly and submitted with each batch. For large sample batches, standards are submitted every 33 samples.  Barren granitic material from a road quarry is submitted every 50 samples.  Duplicates are collected every 20 samples and assayed.  Comparison of results indicates good levels of accuracy and precision. No external laboratory checks have been used.
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Not applicable
	<i>The use of twinned holes.</i>	Not applicable
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	All field data is manually collected, entered into excel spreadsheets, validated and loaded into an Access database  Electronic data is stored on the Perth server. Data is exported from Access for processing by a number of different software packages.  All electronic data is routinely backed up.  No hard copy data is retained.
	<i>Discuss any adjustment to assay data.</i>	None required
<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 initially located using a hand held GPS.
	<i>Specification of the grid system used</i>	The grid system used is ARC1960 Zone 36S; however, for reporting purposes, and to maintain confidentiality, local coordinates are sometimes used.
	<i>Quality and adequacy of topographic control.</i>	Nominal RLs based on regional topographic datasets are used initially; however, these are updated if DGPS coordinates are collected.
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	Only reconnaissance sampling completed – sample spacing variable and based on outcrop location and degree of exposure.
	<i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade</i>	Not applicable.

Criteria	JORC Code explanation	Commentary
	<i>continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>	
	<i>Whether sample compositing has been applied.</i>	Not applicable.
<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>	Sampling completed at right angles to interpreted trend of pegmatite units.
	<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 applicable.
<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 delivers samples to ALS lab in Mwanza and receives an official receipt of delivery.  ALS Mwanza organises transport to ALS in Brisbane.
<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>	The Mohanga Project comprises 2 granted prospecting licences (PL9067/2013 and PL10724/2015) and one exclusive PL application (App. No. 01458) which has been recommended for grant. The tenement package forms a contiguous, 177km <sup>2</sup> area located ~400km WNW of Dar es Salaam, Tanzania.  PL10724/2015 and App. No. 01458 are wholly owned by Liontown Resources (Tanzania) Limited.  PL9067/2013 is subject to a 4 year option agreement with local Tanzanian company Central Mining Company Limited (CMC). Liontown may earn 100% equity in the tenement by: <ul style="list-style-type: none"> <li>• Paying overdue rents and penalties (~US13,000);</li> <li>• Paying future rents (~US\$8,500pa)</li> <li>• Paying US\$11,600 to cover taxes and fees related to tenement being transferred back to CMC from previous JV Agreement (see comment below).</li> <li>• Paying US\$6,400 to vendors on Agreement execution;</li> <li>• Paying US\$15,000pa from first anniversary to keep the option alive;</li> <li>• Paying US\$900,000 (plus CGT) anytime within 4 year option period; and</li> <li>• Paying vendor 1%NSR on future production (purchasable anytime for US\$500,000)</li> </ul> On mining, royalties are also payable to the Tanzanian government (4% NSR).  There are no other material issues affecting the tenements
	<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>	No modern exploration has been recorded for the area.  Government mapping (1962-1963) records multiple lithium bearing pegmatites within the project area but no other data is available.
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	The Mohanga Project is located in the SE part of the Archaean Tanzanian Craton where it comprises a WNW-NW trending sequence of metasediments (quartzite, quartz-feldspar schist and

For personal use only

Criteria	JORC Code explanation	Commentary
		graphitic schist), amphibolite schist and quartz-feldspar gneiss intruded by syn-orogenic granite. A number of large pegmatites and small ultramafic intrusions have also been mapped.  The Archaean lithologies form high ridges separated by broad soil covered plains.  A number of lithium- bearing pegmatites have been recorded by government reports and rock chip sampling by LTR geologists have returned up to 5.2% Li <sub>2</sub> O (NB not all reported occurrences have been sampled). Lepidolite (Li mica) is common and petrologic analysis is required to determine the levels of spodumene which is the main hard rock lithium ore mineral. A number of the Li occurrences have coincident colonial workings
<b>Drill hole Information</b>	<p>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:</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>	Not applicable
<b>Data aggregation methods</b>	<p>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.</p>	Not applicable.
	<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>	Not applicable.
	<p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	None reported
<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>	Not applicable.
<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>	Results for all rock chip sampling completed are listed in Appendix attached to body of report.
<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

For personal use only

Criteria	JORC Code explanation	Commentary
<b>Further work</b>	<i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i>	<ul style="list-style-type: none"><li>• Geological mapping to define limits of prospective pegmatites;</li><li>• Trenching to delineate zones which warrant drill testing; and</li><li>• Petrology to identify main lithium and tantalum minerals.</li></ul>