ASX : LTR

ABN 39 118 153 825

ASX ANNOUNCEMENT

Large new pegmatite target identified at Bynoe

New target coincident with strong, 800m long lithium anomaly

Highlights

- **Several new priority targets identified for follow-up drilling at the Bynoe Lithium Project in the NT following a review of soil sampling data collected in late 2016.**
- **Large pegmatite defined at Hang Gong West coincident with strong lithium-in-soil anomalism.**
- **Shallow drilling by Greenbushes in 1987 for tin and tantalum intersected a moderately east-dipping pegmatite over more than 250m strike with a surface width >50m.**
- **Pegmatite remains open along strike with no previous drill testing at depth.**
- **Follow-up drilling scheduled for the second quarter of 2017 following northern Australian wet season.**

Liontown Resources Limited (ASX: LTR) is pleased to advise that an ongoing review of recent and historic exploration data from the 100%-owned **Bynoe Lithium Project** in the Northern Territory has delineated a number of large pegmatites for follow-up drilling.

Wide-spaced (400x100m) soil sampling across Liontown's Bynoe tenements in late 2016 defined a number of strong lithium anomalies (***Figure 1***) which historical data indicate are coincident with large pegmatite bodies including the previously unknown Hang Gong West pegmatite.

The Hang Gong West soil anomaly (***Figures 1 and 2***) is approximately **800m long and 400m wide with soil values >100ppm Li**.

Shallow (<30m), vertical drilling at Hang Gong West by Greenbushes in 1987 intersected a moderately east-dipping pegmatite over more than 250m strike with a surface width often exceeding 50m. Two other parallel pegmatites with widths of approximately 20m were also intersected adjacent to the main body. The Greenbushes drilling was not assayed for lithium and there has been no further work prior to Liontown acquiring the ground.

The Hang Gong West pegmatites are open along strike and in-fill (200x50m) soil sampling and geological mapping will be completed to optimise siting of initial Reverse Circulation (RC) drill testing, which is scheduled for the second quarter of 2017. Hang Gong West is located immediately north-west of the Hang Gong pit, which was mined by Greenbushes for tin and tantalum in the 1990s.

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In addition to the Hang Gong West target, a number of other pegmatites coincident with anomalous lithium-in-soil anomalies (***Figure 1***) have been identified for follow-up drilling, including the:

- **Carlton Pegmatite** – one of the largest pits mined in the Bynoe area with a strike of 200m and widths varying from 10-20m;

- **Rubiks Pegmatite** – previous mining and shallow drilling have defined a pegmatite with a minimum strike of 100m and widths up to 30m.

- **Bells Mona** – originally mined in 1907, this pegmatite has been exposed in pits and other workings over 300m strike with widths up to 20m.

The review of previous data is ongoing with numerous other pegmatites yet to be assessed and further targets warranting drill testing expected to be defined. Results are also awaited for a detailed, low-level aeromagnetic survey which is expected to define pegmatite targets obscured by barren cover.

The Bynoe Project is located <50km south of Darwin in close proximity to major transport (including shipping) and other infrastructure. The Hang Gong West prospect itself is located immediately adjacent to the sealed Cox Peninsula Road.

Drilling by Liontown and others in the Bynoe region in 2016 discovered a new spodumene-bearing pegmatite field with wide zones (>20m) of plus 1% Li_2O intersected at a number of prospects (***Figure 3***). The potential for the discovery of an economic lithium deposit is considered high.

DAVID RICHARDS
Managing Director

13th February 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.

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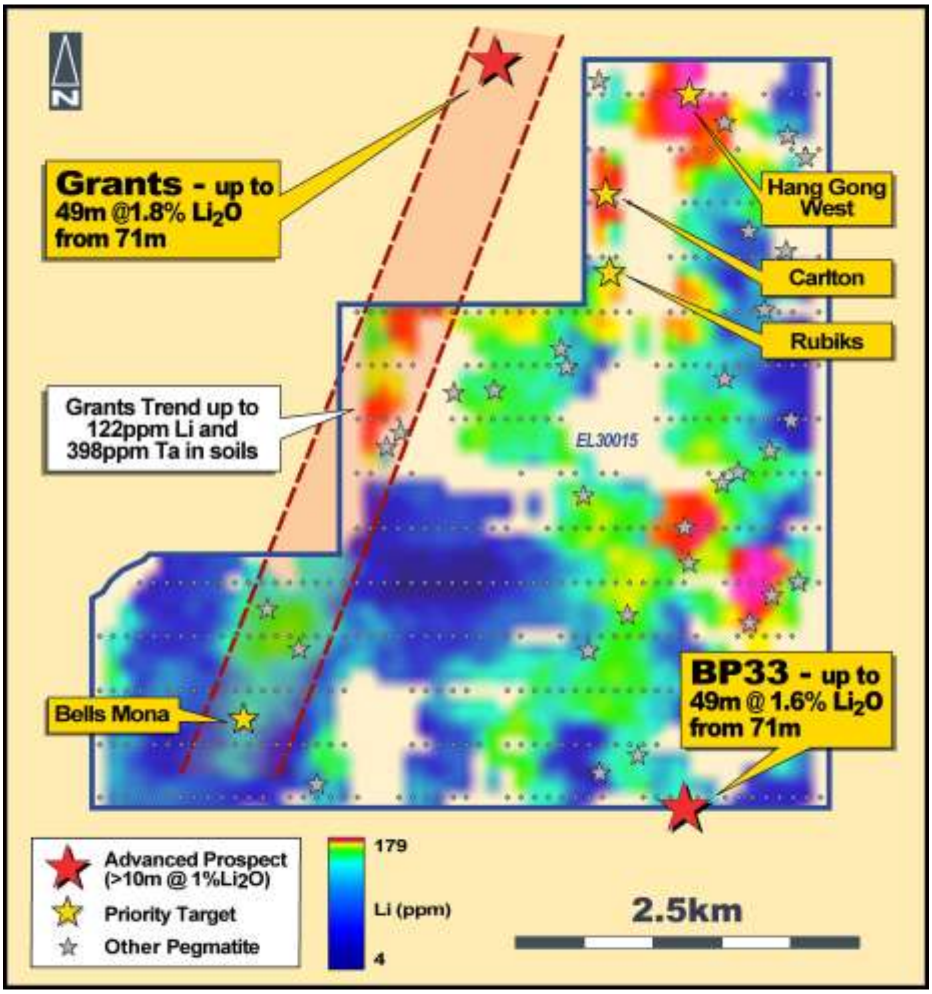

Figure 1: Bynoe Project – EL30015 soil image showing strong lithium anomalism and priority pegmatite targets

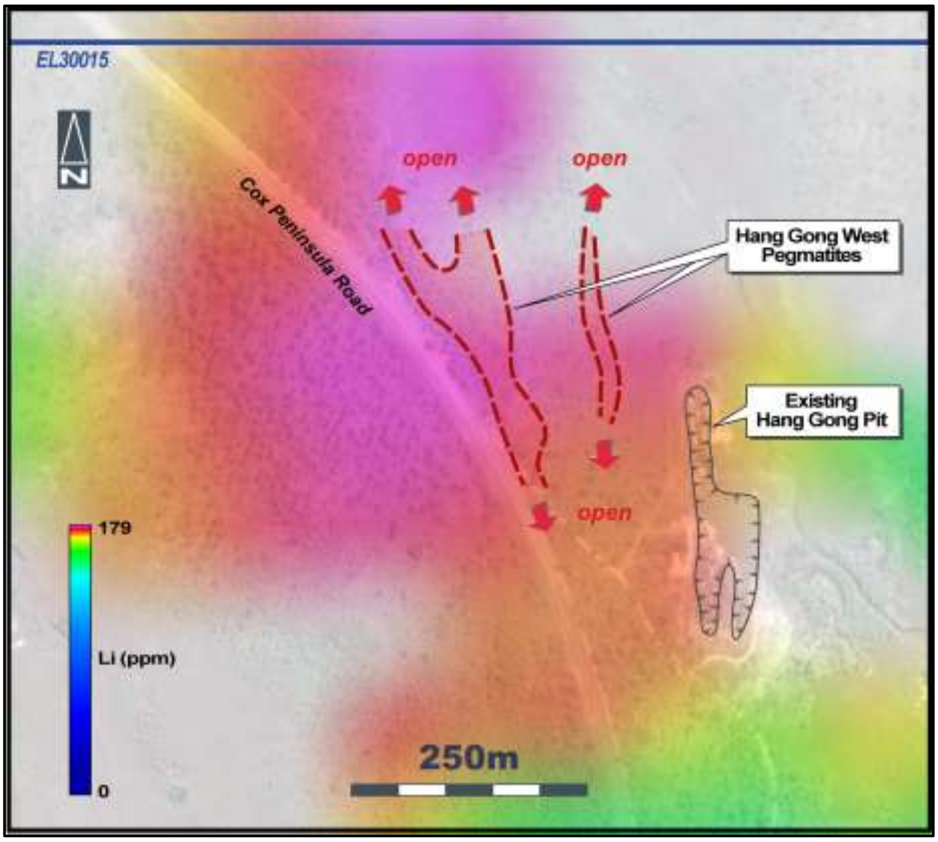

Figure 2: Bynoe Project – Hang Gong West area showing pegmatite outlines on enlarged Li-in-soil image

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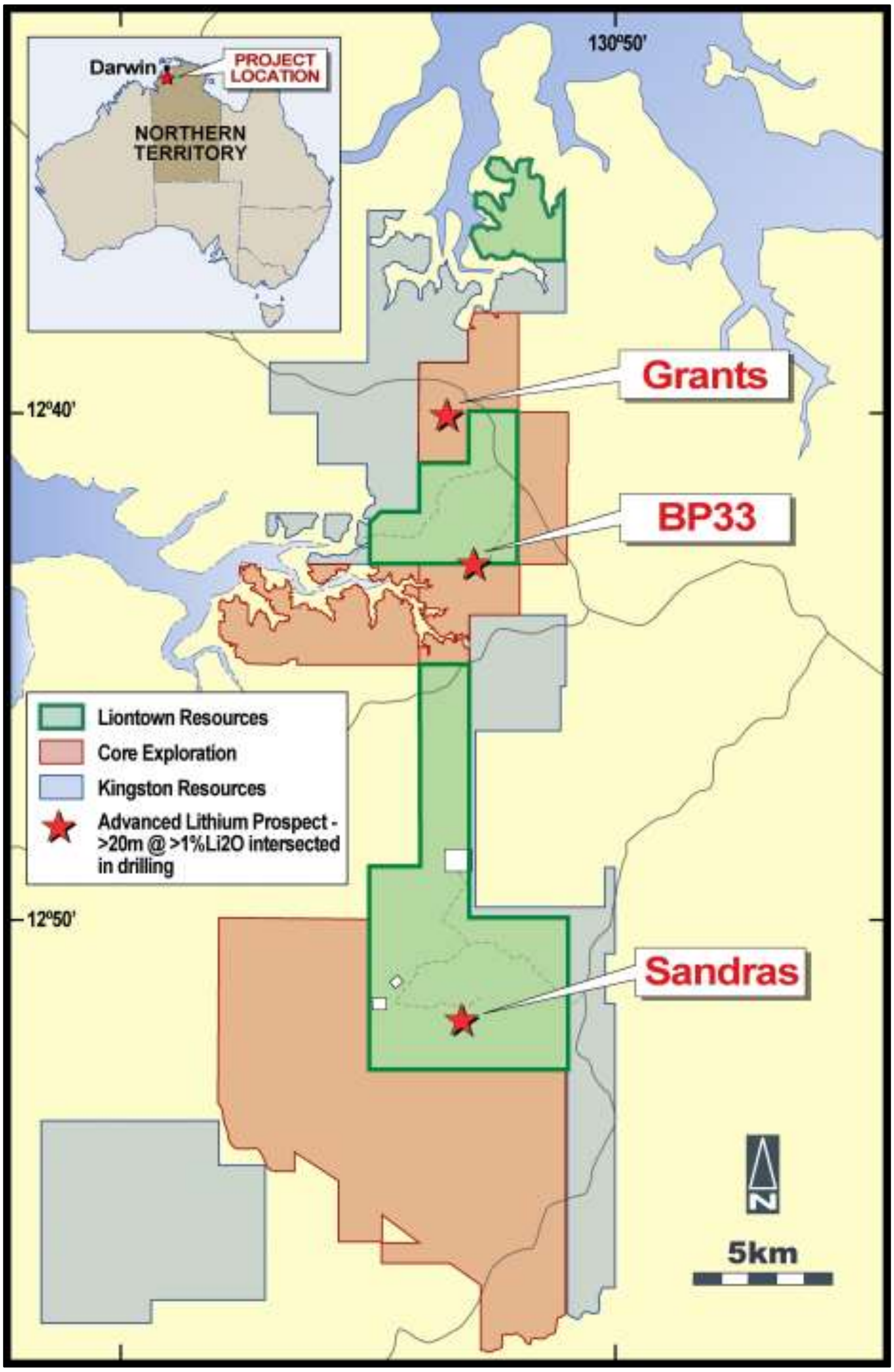

Figure 3: Bynoe Project – Regional location plan showing advanced lithium prospects

Liontown Lithium Portfolio

The Bynoe Project covers a total area of approximately 88km^2 and comprises tenements that are either wholly owned or subject to an Option Agreement giving Liontown the right to acquire 100%.

The Bynoe Project is part of a larger highly prospective lithium portfolio which includes two other active lithium projects in Australia:

- The wholly owned **Kathleen Valley Project**, located in the Eastern Goldfields of Western Australia 680km northeast of Perth, where mapping and sampling has defined a large spodumene-bearing pegmatite swarm with high grade lithium (>2% Li_2O) and tantalum (>250ppm Ta_2O_5) values recorded at surface. Individual pegmatite trends have been defined over 1.4km strike with widths up to 30m.

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A maiden 2,500-3,000m Reverse Circulation drill program to test the pegmatite swarm is scheduled to commence shortly.

- The **Lake Percy Project** is located in Western Australia approximately 430km east of Perth within the southern part of the Archaean Yilgarn Craton, which hosts a number of world-class and emerging hard rock lithium deposits. Liontown has entered into a joint venture agreement with White Cliff Minerals (ASX: WCN) whereby it may earn up to 70% equity through direct exploration expenditure.

  Previous exploration has defined very large pegmatites and the property is located north and along strike of a number of historical lithium occurrences. Geological mapping and soil sampling has defined a strongly anomalous, 2km long lithium trend coincident with the mapped pegmatites which locally exceed 100m true width.

  A maiden 2,000-3,000m Reverse Circulation drilling to test the lithium anomalies is scheduled to commence in mid-March 2017.

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APPENDIX 1 – BYNOE - 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). Drill holes are oriented perpendicular to the interpreted strike of the mineralised trend. Rock samples comprise multiple chips considered to be representative of the horizon or outcrop being sampled. Samples (excluding soils) submitted for assay typically weigh 2-3kg. Soil samples comprise whole, unseived material collected from a shallow hole. Large rocks and organic material are removed. Average sample weight is 350g. Historic sampling and drilling techniques not documented in detail.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. *Aspects of the determination of mineralisation that are Material to the Public Report.* *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 homogenised by riffle splitting prior to sampling and then assayed as 2m composites or individual 1m intervals with 2-3kg submitted for assay. If a composite sample returns a significant result (typically >0.5% Li_2O) then the individual metre intervals are collected and submitted for assay.
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 Bynoe comprise: • Reverse Circulation (RC)/5.5", face sampling hammer RC drilling techniques completed by Greenbushes in 1995 not documented in historic reports.
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: Recovery, quality (i.e. degree of contamination), wet/dry, hardness, colour, grainsize, texture, mineralogy, lithology, structure type and intensity, vein type and %, sulphide type 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.	All holes are logged from start to finish.
	If core, whether cut or sawn and whether quarter, half or all core taken.	Not applicable.

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Criteria	JORC Code explanation	Commentary
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	Non core samples are collected as 1 metre samples, riffle split and then composited by tube sampling the bags. 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. Oven drying, jaw crushing and pulverising so that 85% passes -75microns.
Sub-sampling techniques and sample preparation	*Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	Duplicates and blanks submitted approximately every 25 samples
	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: • regular cleaning of cyclones, splitters and sampling equipment to prevent contamination; • statistical comparison of duplicate samples; and statistical comparison of anomalous composite assays versus average of follow up 1m assays.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	To be determined; however, results to date appear valid
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.*	Assay and laboratory procedures have been selected following a review of techniques provided by internationally certified laboratories. The techniques used 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.*	None undertaken
	The use of twinned holes.	None undertaken
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	All field data is manually collected, entered into excel spreadsheets, validated and loaded into an Access database. Hard copies are stored in the local office and 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.
	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 initially located using a hand held GPS. All RC holes have been surveyed by a down hole camera.
	Specification of the grid system used	Recent data located using GDA94 Zone52 Historic data located using MGA84 Zone 52 and local grids.
	Quality and adequacy of topographic control.	Nominal RLs based on regional topographic datasets.
Data spacing and distribution	*Data spacing for reporting of Exploration Results.*	Varies from prospect to prospect.
	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.

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	Whether sample compositing has been applied.	RC drill samples from the maiden drill program were collected as 2 m intervals which have been composited from 1 m intervals. 1 m samples from this program have been submitted where the composite value return >0.5% Li_2O. 1m sample intervals have been submitted for assay for all subsequent drill programs.
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 and no bias is envisaged.
	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 orientation based sampling bias has been recognised.
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 ALS 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 Bynoe Project comprises 3 separate, granted exploration licences (EL29699, EL30012 and EL30015) and 2 smaller tenements (MLN16 and EMP28651) which are located entirely within EL30015. The combined tenement package covers a total area of ~88km^2 area and is located 20-50km SSW of Darwin in the Northern Territory. EL30012 and 30015 are subject to an Option Agreement with private company Orema Pty Ltd. Liontown may earn 100% equity in the tenements by: • Paying A$10,000 cash on signing of the Agreement (completed); • Paying A$100,000 anytime within 19months of the execution date of the Agreement MLN16, EMP28651 and EL29699 are wholly owned by LRL (Aust) Pty Ltd a wholly owned subsidiary of Liontown Resources Limited. There are no other material issues affecting the tenements
	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.*	There has been multiple, sporadic but intensive periods of prospecting, exploration and small scale mining within the Bynoe Project area since the late 1880s. All previous work has focussed on tin and tantalum with no systematic assaying for lithium. Modern exploration and/or small scale mining has been carried out by Greenbushes Tin (1979 -1996), North Queensland Resources (1989-1990), Australian Coal and Gold Holdings (1982-1987), Julia Corporation (2000), Talison Minerals (2004-2008) and Arnhem Resources Pty Ltd (2005-2008/EL246390). Exploration work completed included compilation of historical data; acquisition of landsat imagery, aerial photography and digital topography; soil and rock chip geochemistry; geological mapping; trenching; surveying, shallow RAB/auger drilling and limited RC drilling. In 1987, Greenbushes constructed a pilot plant to treat Sn/Ta ore from several sources but this shut down soon after due to decreasing commodity prices. A number of other parties trialled small scale mining without success.

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Criteria	JORC Code explanation	Commentary
		Approximately 63 Sn/Ta bearing pegmatites have been defined; however, it is possible that some of these pegmatites represent separate outcrops of the same body exposed sporadically along and across strike. All previous work has focussed on either alluvial/elluvial material or the upper, weathered portion of the bedrock which would be suitable for free digging. Depth of weathering is approximately 20m depth and any spodumene would be totally altered to kaolinite with the lithium completely depleted. Historic exploration reports have been reviewed and results summarised. Digital capture and compilation of historic data has been completed where possible.
Geology	*Deposit type, geological setting and style of mineralisation.*	The Bynoe Project is located in the western part of the early Proterozoic Pine Creek Geosyncline where it comprises a sequence of greenschist metamorphic grade sandstones and siltstones with occasional lenses of conglomerate. Multiple tin and tantalum-bearing pegmatites have been emplaced into the sediments within the contact aureole of the Two Sisters Granite (located to the south and west), a paleoproterozoic intrusion which is interpreted to be the source of the rare metals. The pegmatites typically comprise a border zone of fine grained muscovite and quartz followed inward by a wall zone of coarse grained muscovite and quartz which is in turn followed by an intermediate zone of quartz-feldspar-muscovite. A core zone of massive quartz occurs locally. The intermediate zone contains the bulk of the tin and tantalite mineralisation and is also where the lithium is expected to be hosted. The pegmatites are located in a north trending, 15km wide belt. The pegmatites are strongly weathered to 10-20m depth and often poorly exposed with feldspar (and spodumene if present) completely altered to kaolinite. Dimensions of the pegmatites vary in scale from narrow fracture fillings to massive bodies up to 50m wide and >200m long.
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:* • *easting and northing of the drill hole collar* • *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* • *dip and azimuth of the hole* • *down hole length and interception depth* • *hole length.*	See appendices attached to ASX releases.
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 appendices attached to ASX releases.
	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.	See appendices attached to ASX releases.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not applicable.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*	See Appendix attached to ASX release.

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	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').	
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 characteristics; potential deleterious or contaminating substances.*	All meaningful and material data reported
Further work	*The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	• Interpretation of aeromagnetic survey in progress. • Infill soil sampling to optimize siting of follow-up drilling. • Reverse circulation drill testing of targets defined by above.

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