

ASX ANNOUNCEMENT

# Liontown enters into agreement for the acquisition of highly prospective WA lithium-tantalum project from Ramelius Resources

Kathleen Valley Project contains an extensive spodumene-bearing pegmatite field and immediate drill targets, further expanding Liontown's Australian lithium portfolio

### <u>Highlights</u>

- Extensive spodumene-bearing pegmatite swarm defined by previous geological mapping.
- Multiple +1.5% Li<sub>2</sub>O values (up to 3.9% Li<sub>2</sub>O) recorded from reconnaissance rock chip sampling.
- High grade  $Ta_2O_5$  values (up to 493ppm  $Ta_2O$ ) associated with lithium mineralisation.
- Individual pegmatites >700m long and up to 26m wide at surface.
- Mineralised trend open to north, where it is obscured by transported cover.
- Liontown will have 100% of rare metal (including lithium and tantalum) rights for the Project.
- No previous drill testing of prospective pegmatites.

Liontown Resources Limited **(ASX: LTR)** is pleased to advise that it has entered into a binding, conditional agreement to acquire 100% of the rare metal rights (including lithium, tantalum and associated elements) for the **Kathleen Valley Project** ("**the Project**"), located approximately 680km northeast of Perth, Western Australia (*Figure 1*).

The Kathleen Valley Project is currently held by Ramelius Resources Limited, which is conducting gold mining operations which are expected to conclude later this year. The project contains a spodumene-bearing pegmatite swarm extending over an area of 3.5km by 1km and represents an outstanding, advanced lithium exploration opportunity with walk-up drilling targets.

Liontown's initial focus will be the Mt Mann area (*Figure 1*), where a publicly available report and previous mapping has documented a swarm of spodumene-bearing pegmatites (*Figures 2*) and where reconnaissance rock sampling by the Company has recorded multiple high-grade lithium and tantalum values, including:

- Sample 160014\_4 1.5% Li\_2O and 493ppm Ta\_2O\_5
- Sample 160014\_10 2.6% Li<sub>2</sub>O and 249ppm Ta<sub>2</sub>O<sub>5</sub>
- Sample 160014\_11 2.1% Li<sub>2</sub>O and 295ppm Ta<sub>2</sub>O<sub>5</sub>
- Sample 160014\_14A 2.2% Li<sub>2</sub>O and 233ppm Ta<sub>2</sub>O<sub>5</sub>
- Sample 160014\_18 2.4% Li<sub>2</sub>O and 134ppm Ta<sub>2</sub>O<sub>5</sub>
- Sample 160014\_34A 3.9% Li<sub>2</sub>O and 381ppm Ta<sub>2</sub>O<sub>5</sub>

(A full listing of statistics for Liontown's rock chip sampling is provided in *Appendix* 1.)

The anomalous rock chips are part of a north-south trending, 3.5km x 1km pegmatite swarm (*Figure 2*) which is largely unexplored for lithium and tantalum. While previous workers recorded anomalous lithium and spodumene from the swarm, which is obscured to the north by transported cover, there has been no drill testing.

Under terms of the conditional binding term sheet, Liontown will from completion acquire all of the Kathleen Valley Mining Leases (**"Mining Leases"**) by issuing 25 million fully-paid shares to Ramelius, which will retain the gold rights and uninhibited access for ongoing gold mining-related activities. The Mining Leases are also subject to a Nickel Off-take and Claw-back Agreement with Xstrata Nickel in the event of a significant nickel discovery at the Project.

Further details of the binding term sheet are documented below.

The Kathleen Valley Project comprises 15 granted Mining Leases (currently in the name of Ramelius Resources) and one Exploration Licence Application (ELA36/879), recently lodged by Liontown, covering a total area of 75km<sup>2</sup> and located ~45km NNW of Leinster, in close proximity to good transport and energy infrastructure.

The mapped pegmatites are hosted by a package of mafic-ultramafic intrusions and mafic volcanic rocks, truncated to the east by a regional shear zone and associated sediments and felsic volcanic rocks. The Project is located within the Mt Keith- Perseverance Greenstone Belt near the western edge of the Norseman-Wiluna Belt which forms part of the Archaean Yilgarn Craton.

Historical mapping has outlined numerous pegmatites with the largest, Mt Mann (*Figures 2 and 3*), mapped over a 700m strike length and widths varying from 10-26m. One traverse of rock chip sampling (*see Appendix 1*) completed by Liontown across the Mt Mann pegmatite reported results of 3.9%, 1.5%, 1.8% and 1.2%  $Li_2O$  (for an average of 2.1%  $Li_2O$ ) and an average  $Ta_2O_5$  value of 195ppm.

To the north-east of Mt Mann, a cluster of closely spaced pegmatites has been defined containing up to 2.6%  $Li_2O$  and 431ppm  $Ta_2O_5$ .

Spodumene crystals (*Figure 4*) were observed in all sampled pegmatites with only minor lepidolite noted.

Liontown will commence work immediately on the Kathleen Valley Project with the following activities planned:

- Commence permitting for drilling at Mt Mann and the pegmatite cluster to the north-east;
- Systematic rock chip sampling across all pegmatites in the 3.5km x 1km swarm;
- Ranking of pegmatites according to size and grade potential; and
- Reverse Circulation drilling.

Ramelius' gold mining activities are unlikely to effect Liontown's planned exploration work.

The acquisition complements the Company's Bynoe and Lake Percy Lithium Projects, located in the Northern Territory and Western Australia respectively, and reinforces Liontown's strategy of diversification into the strategic metals sector.

### Acquisition Terms

The acquisition of the Kathleen Valley Mining Leases are subject to a binding term sheet with Ramelius Resources Limited (RMS). Principal terms include:

- LTR will issue 25 million fully paid shares to RMS to acquire the Mining Leases;
- LTR will pay RMS 1% of gross sales of resulting concentrate produced from pegmatite-hosted ores processed;
- LTR will also pay RMS \$0.50 per tonne of rare metal pegmatite-hosted ore mined and milled; and
- RMS will retain exclusive gold rights and uninhibited access for gold-mining related activities.

Completion of the transaction is conditional on:

• Consent of each counter party to the assignment or novation of certain third party agreements;

- Certain registered encumbrances against the Mining Leases being released;
- Ministerial consent to the transfer of the Mining Leases;
- RMS obtaining the consent of its financier to the transaction (if required).

Although the term sheet is binding, LTR and RMS have agreed to enter formal agreements to govern the acquisition within 30 days of the signing of the term sheet. If these formal agreements are not executed within this time frame, either party may terminate the binding term sheet by the provision of written notice.

Ramelius acquired 100% of the Kathleen Valley Project MLs in June 2014 from Xstrata Nickel Operations Pty Ltd (Xstrata). Xstrata retains rights to any significant nickel discovery over the land package via an Off-take and Claw-back Agreement.

Ramelius assumed Xstrata's obligations for one Access Agreement and three historical third party Royalty Agreements. These will be now be assumed by LTR.

The ELA is in the name of LTR with no third party obligations apart from statutory requirements.

The Project tenements are covered by the Tjiwarl Native Title Claim (WC11/7).

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DAVID RICHARDS Managing Director

#### 4 August 2016

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: Kathleen Valley Project – Location, tenure and regional geology plan



Figure 2: Kathleen Valley Project/Mt Mann Area – Interpreted bedrock geology, pegmatites and LTR rock chip sampling

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Figure 3: Kathleen Valley Project – Mt Mann pegmatite outcrop.



Figure 4: Kathleen Valley Project – Mt Mann pegmatite/close up showing large white spodumene crystals (Sample 160614\_14A).

Sample_ID	East	North	Li_pct	Li20_pct	Ta_ppm	Ta2O5	Cs_ppm	Nb_ppm	Rb_ppm	Sn_ppm
160614_01a	258766	6959242	0.72	1.55	353	431	102	77	2210	37
160614_01b	258766	6959242	0.37	0.80	156	190	121	69	3980	36
160614_04	258804	6959190	0.7	1.51	404	493	139	56	2360	43
160614_10	258807	6959205	1.2	2.58	204	249	73.6	54	1945	51
160614_11	258803	6959221	0.98	2.11	242	295	88.2	46	1910	49
160614_14A	258632	6959390	1.01	2.17	191	233	39.3	61	1080	53
160614_14B	258634	6959390	0.83	1.78	22.4	27	7.2	-5	93.2	38
160614_14C	258634	6959390	-0.01	-0.02	271	331	53.6	44	1035	24
160614_18	258577	6959315	1.12	2.41	109.5	134	235	52	1690	48
160614_21	258644	6959213	0.87	1.87	229	279	113	66	2380	40
160614_27	258691	6958309	0.66	1.42	90.2	110	199	17	4180	36
160614_32	258605	6958431	0.16	0.34	161.5	197	222	53	5600	74
160614_33	258639	6958438	-0.01	-0.02	3.5	4	6.1	-5	49.2	-5
160614_34A	258588	6958418	1.8	3.87	312	381	286	49	2130	63
160614_34B	258591	6958418	0.71	1.53	95.6	117	304	24	4280	47
160614_34C	258593	6958418	0.85	1.83	130.5	159	321	52	5070	50
160614_34D	258595	6958418	0.57	1.23	103	126	130	18	3020	42

APPENDIX 1 - KATHLEEN VALLEY PROJECT/MT MANN AREA - LIONTOWN ROCK CHIP SAMPLES

## **APPENDIX 2 – KATHLEEN VALLEY PROJECT - JORC TABLE 1**

Criteria	Section 1 Sampling Techn JORC Code explanation	Commentary		
Sampling	Nature and quality of campling (or out channels			
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under	Liontown rock chips - representative 1-3kg chip samples collected across zone being sampled.		
	investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of	Historic sampling techniques not well documented.		
	sampling.			
	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	Not applicable.		
	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.			
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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).	No drilling completed.		
<b>N</b> 111 1	· ·			
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Not applicable.		
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Not applicable.		
	Whether a relationship exists between sample			
	recovery and grade and whether sample bias may have occurred due to preferential loss/gain of	Not applicable.		
	fine/coarse material.			
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.	Not applicable.		
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Not applicable.		
	The total length and percentage of the relevant intersections logged.	Not applicable.		
Sub-sampling techniques and	If core, whether cut or sawn and whether quarter, half or all core taken.	Not applicable.		
sample preparation	If non-core, whether riffled, tube sampled, rotary split,	Entire rock chip sample crushed to >70% passing 6mm;		
	etc and whether sampled wet or dry.	Pulverised to 85% passing 75 micron;		
		Li by Peroxide Fusion ICP-AES finish;		
		Ta, Nb, Sn by Peroxide Fusion ICP-MS finish.		
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The sample preparation is considered appropriate for the stage of exploration.		
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	See below.		
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field	Multiple rock chips systematically collected across entire zone being sampled		

including for instance results for field

Criteria	JORC Code explanation	Commentary
	duplicate/second-half sampling.	
	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.	Assays completed by ALS 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	Only reconnaissance rock chip sampling completed - no standards or blanks used; however, ALS inserted accredited standards and blanks as per their normal procedures. Future sampling will incorporate use of independent LTR standards, blanks and duplicates
Verification of sampling and	The verification of significant intersections by either independent or alternative company personnel.	Not applicable
assaying	The use of twinned holes.	Not applicable
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Logged on paper and entered manually into electronic spreadsheets. Data then entered into Access Database and validated before being processed by industry standard software packages such as MapInfo and Micromine.
	Discuss any adjustment to assay data.	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
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.	Sample locations recorded using handheld GPS
	Specification of the grid system used	GDA 94 Zone 51
	Quality and adequacy of topographic control.	None used
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Not applicable due to reconnaissance nature of sampling.
ustrouton	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 applicable.
	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.	Where outcrop exposure is adequate, rock chip samples collected perpendicular to strike.
	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.	Not applicable.
Sample security	The measures taken to ensure sample security.	Samples delivered to laboratory by Liontown contractors.
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	The Kathleen Valley Project is located ~680km NE of Perth and ~45km NNW of Leinster in Western Australia. The Project comprises 15 granted mining leases (MLs 36/162, 176, 264-266, 328, 342, 365, 375-376, 441, 459-460, 603 and 660) and 1

Criteria	JORC Code explanation	Commentary		
	settings.	Exploration License application (ELA).		
		The mining leases (MLs) are subject to a Sale Agreement with Ramelius Resources Limited (RMS). Principal terms include:		
		<ul> <li>LTR will issue 25 million fully paid shares to RMS to acquire the MLs;</li> <li>LTR will pay RMS 1% of gross sales of resultin concentrate produced from pegmatite-hosted ore processed;</li> <li>LTR will also pay RMS \$0.50 per tonne of rare meta pegmatite-hosted ore mined and milled; and</li> <li>RMS will retain exclusive gold rights.</li> </ul>		
		Ramelius acquired 100% of the Kathleen Valley Project MLs i June 2014 from Xstrata Nickel Operations Pty Ltd (Xstrata Xstrata retains rights to any nickel discovered over the lan package via an Offtake and Clawback Agreement.		
		Ramelius assumed Xstrata's obligations for one Access Agreemen and three historical Royalty Agreements. These will be now be taken over by LTR and are listed below:		
		<ul> <li>No. 1.: Access Agreement (1997) over M36/603</li> <li>No. 2.: Sale Agreement (1998) \$0.10/tonne limited to \$40,000 over M36/603</li> <li>No. 3.: Sale Agreement (1999) \$10,000 payment on mining over M36/376</li> </ul>		
		<ul> <li>No. 4.: Bullion and Non-Bullion Royalty Agreement of a 2% Gross Production Royalty affecting M36/162, 176 264-266, 328 365, 376, 441 and 459-460.</li> </ul>		
		The ELA is in the name of LTR with no third party obligations apar from statutory requirements.		
		The tenements are covered by the Tjiwarl Native Title Claim (WC11/7).		
	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 nicke This has not been reviewed in detail due to other companie retaining the rights to these commodities and Liontown's focu on rare metal pegmatites.		
		There has been limited sporadic prospecting for Li, Ta and So principally by Jubilee Mines (subsequently taken over by Xstrata Work comprised 3 broad spaced soil sample lines and rock ch sampling of the pegmatites. No details of the methods an procedures used have been identified.		
		There has been no previous drill testing of the Li and T prospective pegmatites.		
Geology	Deposit type, geological setting and style of mineralisation.	The Kathleen Valley Project contains a series of quartz-feldsparative muscovite-spodumene pegmatites hosted in mafic rocks related the Kathleen Valley Gabbro or Mt Goode Basalts. The Project located on the western edge of the Norseman- Wiluna Belt with the Archaean Yilgarn Craton.		
		The pegmatites are LCT type lithium bearing-pegmatites wi typical textural zonation from margin to core; however reconnaissance sampling suggests the pegmatites are not strong chemically zoned.		
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	Not applicable.		

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Criteria	JORC Code explanation	Commentary
	<ul> <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>	
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.	Not applicable.
	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.	Not applicable.
	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.	All widths quoted are apparent based on surface exposures. Drilling is required to determine dips of pegmatites and true
	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').	thicknesses.
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 Liontown rock chip results are reported for the area described in text.
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).	<ul> <li>Geological mapping and target assessment; and</li> <li>Systematic rock chip sampling;</li> <li>Ranking of pegmatites according to size and grade potential; and</li> </ul>
		RC drilling to test fresh bedrock for spodumene mineralization