



# **ASX ANNOUNCEMENT**

ASX: LTR 14 March 2019

# Liontown expands lithium footprint at Buldania in WA's South-Eastern Goldfields

New area identified by soil geochemistry includes multiple drill-ready, sub-cropping spodumene-bearing pegmatites

#### **KEY POINTS**

- Strong lithium-in-soil anomalism defined over area of 4.5km by 2.5km.
- New targets are in addition to the Anna lithium discovery, located 5-10km to the south-east where drilling has intersected ore grades and widths over a 1.3km strike length.
- 8,000-10,000m of RC drilling to commence at Anna in Q2 2019, along with initial drilling of the newly defined target area.

Liontown Resources Limited (ASX: LTR, "Liontown" or "Company") is pleased to advise that it has further expanded the potential of its **Buldania Lithium Project** in Western Australia's Eastern Goldfields after a successful program of soil geochemistry significantly increased the area of strong lithium anomalism.

The soil survey was completed over M63/647, which was recently incorporated into Liontown's Buldania Lithium Rights Agreement (BLRA) with Avoca Resources Pty Ltd ("Avoca"), a wholly-owned subsidiary of Westgold Resources Limited (ASX: WGX).

The latest geochemical survey is an extension of a previously reported program immediately to the west. As a result of the combined programs, strongly anomalous lithium-in-soils (>100ppm Li) have now been defined over an area of 4.5 by 2.5km (**Figure 1**).

The anomalism appears to be spatially associated with multiple sub-cropping, spodumene-bearing pegmatites (**Figure 2**) which have returned surface rock chip assays of up to 3% Li<sub>2</sub>O (**Appendix 1**).

Geological mapping is on-going to accurately delineate the new pegmatites prior to initial drill testing. Heritage surveys have been completed and initial drilling is scheduled for Q2 2019.

The new target area is located 5-10km north-west of the Anna Lithium Pegmatite discovered by Liontown in 2018, and is interpreted to be in the same prospective structural corridor. Drilling at Anna has intersected significant lithium over a strike length of 1.3km with the mineralisation remaining open to the south-east and at depth (**Figure 3**).

Further Reverse Circulation (RC) drilling comprising 8,000-10,000m is scheduled to commence in Q2 2019 at Anna to provide sufficient data for the preparation of a maiden Mineral Resource estimate.

The BLRA is one of a number of largely contiguous projects covering a total area of ~600km² that Liontown holds in the Norseman area (**Figure 4**) which are considered highly prospective for pegmatite-hosted lithium mineralisation.



The Projects are located in the southern part of the Eastern Goldfields Province – a region well-known for hosting large lithium deposits including the operating Mt Marion and Bald Hill mines.

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.

At Buldania, Liontown has entered into an Agreement with 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) while Westgold retains the right and priority access to all other metals. Westgold will be paid \$2 per tonne for any lithium ore mined and 1.5% of the gross sales receipts. The adjacent Killaloe and Norcott projects are wholly-owned by Liontown.

DAVID RICHARDS

Managing Director

Darof Hadrard

14 March 2019

The Information in this report that relates to soil and rock chip 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; and

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.

The Information in this report that relates to drilling Exploration Results for the Buldania Project is extracted from the ASX announcements entitled "More strong assays confirm significant lithium discovery at Buldania Project in WA", "Second significant lithium discovery in WA at Buldania" and "Outstanding new drilling results continue to expand lithium mineralisation at Buldania" released on the 26th March 2018, 19th September 2018 and 1st November 2018 respectively which are available on <a href="https://www.ltresources.com.au">www.ltresources.com.au</a>.

The company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

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



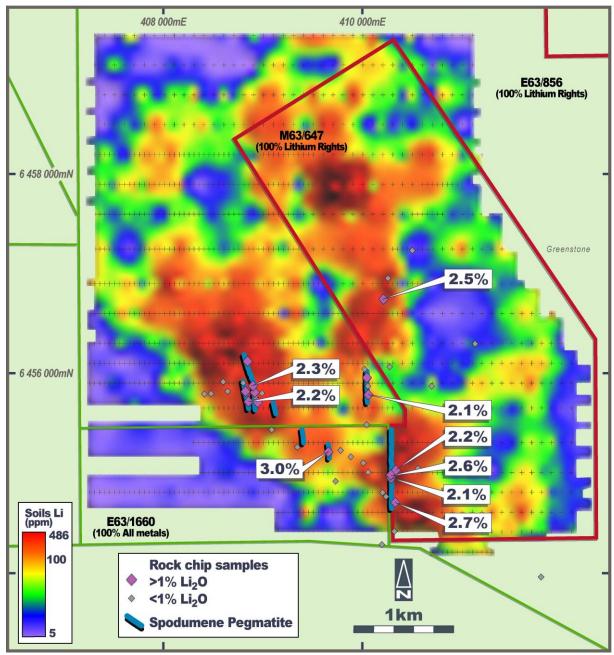


Figure 1: Buldania Project/NW Pegmatites – Lithium-in-soil image showing better rock chip assays.





Figure 2: Buldania Project/NW Pegmatites - Sub-cropping spodumene-bearing pegmatite.

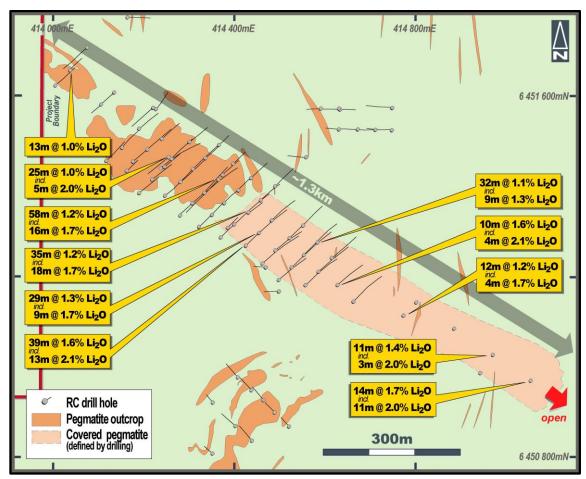


Figure 3: Buldania/Anna Prospect - Drill hole plan showing better lithium intersections.



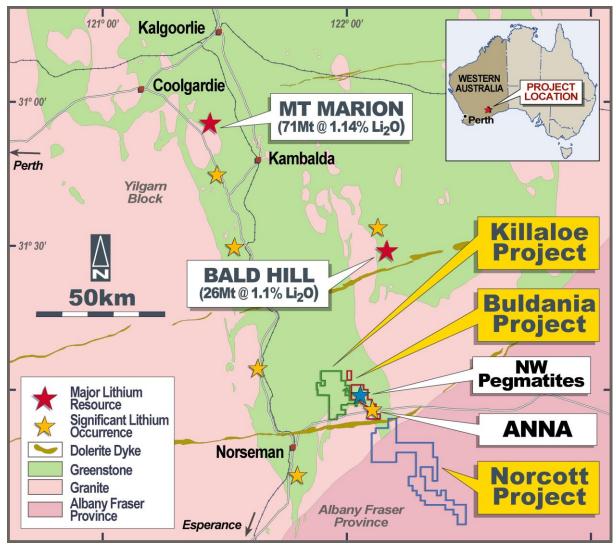


Figure 4: Location plan showing Liontown's projects in Norseman area and regional geology.



**Appendix 1: Rock Chip Statistics** 

Sample_ID	Easting	Northing	Cs_ppm	Li2O_pct	Nb_ppm	Rb_ppm	Sn_ppm	Ta2O5_ppm
211511	410030	6455480	91	0.04	48	2590	34	15
211512	410050	6455000	90	0.01	48	1495	43	200
211513	410290	6454960	70	2.56	63	1355	24	41
214401	410690	6455856	5	0.00	5	7	1	5
214402	408964	6455795	86	0.00	40	1743	3	122
214403	408881	6455851	83	2.27	80	1270	34	87
214404	408887	6455798	81	1.15	75	1457	34	73
214405	408898	6455762	270	0.05	65	3886	90	156
214406	408918	6455702	105	1.78	70	1235	168	147
214407	408833	6455716	67	2.21	110	1019	34	74
214408	408802	6455800	76	1.07	65	1211	42	87
214409	408650	6455809	28	0.01	45	291	70	193
214410	408470	6455791	94	0.01	45	1021	26	167
214411	408408	6455787	81	0.01	50	1260	6	124
214413	408777	6455901	117	0.24	85	1172	56	146
214414	408593	6455910	90	0.02	60	1218	106	108
216001	410001	6455094	1	0.00	3	2	1	1
216002	409876	6455153	34	0.01	75	950	1	91
216003	409778	6455220	59	0.02	70	1081	56	29
216004	409632	6455202	49	2.97	75	525	60	94
216005	409324	6455252	68	0.03	70	728	45	130
216006	409725	6454910	137	0.01	35	1924	34	80
216007	410233	6454761	23	0.02	30	245	55	60
216008	410209	6454791	56	0.02	65	911	40	82
216009	410288	6454934	49	2.10	80	702	27	43
216010	410289	6454972	43	2.18	95	536	25	62
216011	410031	6455854	42	0.12	125	470	37	66
216012	410037	6455784	40	2.14	30	440	96	14
216013	410020	6455944	138	1.14	65	1737	78	28
216014	409998	6456031	95	0.02	65	1783	56	52
216015	409065	6455426	14	0.01	45	193	9	100
216016	408820	6456111	53	1.62	65	659	18	59
216017	410191	6454278	65	0.05	45	1379	75	110
TSL030021	410327	6454693	39	2.71	89	660	74	66
TSL030023	410555	6455034	200	0.30	66	3423	45	51
TSL030024	410327	6455019	68	2.20	58	1257	39	45
TSL030026	410269	6456055	187	0.02	58	1673	48	24
TSL030028	410321	6454404	42	0.02	78	862	45	182
TSL030029	411128	6456293	1	0.02	5	8	1	0
TSL030032	410203	6456736	135	2.45	70	1119	73	48
TSL030033	410203	6456736	141	1.72	62	1370	72	42
TSL030035	410249	6456953	411	0.04	64	3528	37	21
TSL030036	410500	6457223	262	0.24	63	1710	55	28



## Appendix 2: Buldania - JORC Code 2012 Table 1 Criteria

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.	<ul> <li>Soil samples comprise ~500g of -2mm sieved material collected from point locations on regular grid spacing.</li> <li>Rock chip comprise representative 1-3kg chip samples collected across zone being sampled.</li> <li>Sub-surface samples have been collected by reverse circulation (RC) and diamond core drilling techniques (see below).</li> <li>Drill holes are oriented perpendicular to the interpreted strike of the mineralised trend except in rare occasions where limited access necessitates otherwise.</li> </ul>
	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.	<ul> <li>RC samples are collected by the metre from the drill rig cyclone as two 1 m cone split samples in calico bags and a bulk sample in plastic mining bags.</li> <li>The 1 m samples from the cyclone are retained for check analysis. Only samples of pegmatite and adjacent wall rock (~4 m) are collected for assay.</li> <li>HQ diamond core has been sampled in intervals of ~1 m where possible, otherwise intervals less than 1 m have been selected based on geological boundaries. Geological boundaries have not been crossed by sample intervals.</li> </ul>
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).	<ul> <li>Drilling techniques used comprise:         <ul> <li>Reverse Circulation (RC/5.5") with a face sampling hammer</li> <li>HQ Diamond Core, standard tube to a depth of ~200-250 m.</li> <li>HQ core was drilled directly from surface for all holes. Core orientation was provided by an ACT REFLEX (ACT II RD) tool.</li> </ul> </li> </ul>
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.  Measures taken to maximise sample recovery and ensure representative nature of the samples.	<ul> <li>Sample recoveries are estimated for RC by correlating sample heights in the green mining bag to estimate a recovery for each metre.</li> <li>For diamond core the recovery is measured and recorded for every metre.</li> <li>RC 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.</li> <li>For diamond core loss, core blocks have been inserted in sections where core loss has occurred. This has then been written on the block and recorded during the logging process and with</li> </ul>
Logging	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.  Whether core and chip samples have been	detailed photography of dry and wet core.  It has been demonstrated that no relationship exists between sample recovery and grade. No grade bias was observed with sample size variation.  All RC drillholes are logged on 1 m intervals and
Logying	geologically and geotechnically logged to a level of	the following observations recorded:



Criteria	JORC Code explanation	Commentary
	detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	<ul> <li>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, UV fluorescence.</li> <li>Diamond core is logged in its entirety as per detailed geological description listed above. Geotechnical logging has been completed for the entire hole.</li> </ul>
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	<ul> <li>Logging is quantitative, based on visual field estimates.</li> <li>Diamond core is photographed post metre marking, for the entire length of the hole, two trays at a time, wet and dry.</li> </ul>
	The total length and percentage of the relevant intersections logged.	Holes are logged in their entirety.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	<ul> <li>The core has been cut in half and then quartered for sample purposes. Half core has been retained and the second quarter will be used for metallurgical studies.</li> <li>Density measurements have been taken on all quarter core samples using the Archimedes method.</li> </ul>
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	RC samples are collected as rotary split samples.     Samples are typically dry.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	<ul> <li>Sample preparation follows industry best practice standards and is conducted by internationally recognised laboratories; i.e.</li> <li>Oven drying, jaw crushing and pulverising so that 80% passes -75 microns.</li> </ul>
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	<ul> <li>Duplicates and blanks submitted approximately every 1/20 samples.</li> <li>Standards are submitted every 20 samples or at least once per hole.</li> <li>Cross laboratory checks and blind checks have been used at a rate of 5%.</li> </ul>
	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.	<ul> <li>Measures taken include:         <ul> <li>regular cleaning of cyclones and sampling equipment to prevent contamination</li> <li>industry standard insertion of standards, blanks and duplicate samples</li> </ul> </li> <li>Analysis of duplicates (field, laboratory and umpire) was completed and no issues identified with sampling representatively.</li> <li>Analysis of results from blanks and standards indicates no issues with contamination (or sample mix-ups) and a high level of accuracy.</li> </ul>
	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.	<ul> <li>Assaying (2018) completed by Nagrom laboratories Perth.</li> <li>Nagrom uses industry standard procedures for rare metals such as Li and Ta. Analytical techniques are total.</li> </ul>
iesis	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.



Criteria	JORC Code explanation	Commentary
	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.	<ul> <li>Duplicates and blanks submitted approximately every 20 samples.</li> <li>Standards are submitted every 20 samples or at least once per hole.</li> <li>Cross laboratory checks and blind checks have been used at a rate of 5%.</li> <li>Analysis of reference blanks, standards and duplicate samples show the data to be of acceptable accuracy and precision for the Mineral Resource estimation and classification applied.</li> </ul>
Verification of	The verification of significant intersections by either	Internal review by alternate company personnel.
sampling and assaying	independent or alternative company personnel.  The use of twinned holes.	Three diamond holes are twins of existing RC drill holes. Assays are pending but visually the holes compare well with the adjacent RC drill holes.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	<ul> <li>Drilling and logging data is entered directly into Microsoft Excel spreadsheets onsite while drilling is ongoing. Data is then entered into Access Database and validated before being processed by industry standard software packages such as MapInfo and Micromine.</li> <li>Representative chip samples are collected for later reference.</li> </ul>
	Discuss any adjustment to assay data.	<ul> <li>Li% is converted to Li₂O% by multiplying by 2.15,         Ta ppm is converted to Ta₂O₅ ppm by multiplying by 1.22.     </li> </ul>
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.	<ul> <li>All drillholes and geochemical samples are initially located using a handheld GPS</li> <li>Drill collars are subsequently surveyed with DGPS.</li> <li>All RC drillholes have been surveyed by a multishot digital downhole camera provided by the drilling contractor.</li> <li>All diamond drillholes have been surveyed with a REFLEX EZI-SHOT (1001) magnetic single shot camera.</li> </ul>
	Specification of the grid system used.	GDA 94 Zone 51
	Quality and adequacy of topographic control.	<ul> <li>Initial collar elevations are based on regional topographic dataset and GPS.</li> <li>Drill hole collars are surveyed post drilling with DGPS.</li> </ul>
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Varies due to initial drill programmes largely designed to test the strike and dip potential of mineralised outcrops. The drill section spacing is 50m to 100m and on-section spacing is generally 40 to 50m.
	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.	Geological modelling in progress to determine whether drill hole spacing and distribution is adequate for Mineral Resource estimation.
Outsucts ::	Whether sample compositing has been applied.	None undertaken.
Orientation of data in relation to	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.
geological structure	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.	<ul> <li>Drilling orientation intersects the mineralisation at appropriate angles so as to be mostly unbiased and suitable for resource estimation of the major pegmatite bodies.</li> </ul>



Criteria	JORC Code explanation	Commentary
Sample security	The measures taken to ensure sample security.	<ul> <li>Sample security is not considered to be a significant risk given the location of the deposit and bulk-nature of mineralisation.</li> <li>Nevertheless, the use of recognised transport providers, sample dispatch procedures directly from the field to the laboratory, and the large number of samples are considered sufficient to ensure appropriate sample security.</li> <li>Company geologist supervises all sampling and subsequent storage in field. The same geologist arranges delivery of samples to Nagrom laboratories in Perth via courier.</li> </ul>
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 ~67km² and comprises 1 granted exploration licence (EL 63/856), 1 granted prospecting license (PL63/1977) and 1 granted mining lease (M63/647) – the "Tenements".
		The Tenements are held by Avoca Resources Pty Ltd which is a wholly owned subsidiary of Westgold Resources Ltd.
		Liontown Resources Limited through its wholly owned subsidiary, LRL (Aust) Pty Ltd, has acquired the lithium and related metal rights for the Buldania Project by:
		Issuing 10,000,000 Liontown shares to     Westgold or its nominee;
		<ul> <li>paying ongoing statutory rents and rates for the Tenements while the Agreement is current; and</li> </ul>
		<ul> <li>paying Avoca \$2 per tonne of ore mined and 1.5% of the gross sales receipts in respect to any lithium or related metals extracted from the Tenements.</li> </ul>
		Avoca retains the rights to all other metals (excluding lithium and related metals) and has priority access for exploration.
		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.
		There has no previous exploration for lithium and



Criteria	JORC Code explanation	Commentary
		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.
		The pegmatites are interpreted to be LCT type lithium bearing-pegmatites.
Drillhole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:  • easting and northing of the drillhole collar  • elevation or RL (elevation above sea level in metres) of the drillhole collar  • dip and azimuth of the hole  • down hole length and interception depth  • hole length.	See Appendix in accompanying report.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	Li <sub>2</sub> O intercepts calculated using 0.4% cut off with a maximum 2m internal dilution. Higher grade intervals calculated using 1.0% cut off. No upper cuts applied.
		$Ta_2O_5$ values only quoted when lithium intersections reported.
Relationship between mineralisation widths and intercept lengths	If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.  If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	True widths interpreted to be 80-100% down hole 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 accompanying 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 (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	<ul> <li>Initial drill testing of new targets; and</li> <li>Further resource definition drilling at the Anna pegmatite.</li> </ul>