

# Very High Grade Assay Results from RC Drilling Extends Arcadia High Grade Lithium Project

Prospect Resources Ltd (ASX: PSC) ("Prospect" and "the Company") is pleased to report assay results from the first 3 RC drill holes at the Company's Arcadia high grade lithium project. This first RC drill programme is completed and the Company await assay results from a further 28 holes over the coming weeks.

Drilling to date has covered approx. 10% of the Company's exploration area. The drilled strike of the 14 stacked pegmatites now extends more than 1km SW-NE and some 350m down dip to NW. The Company's ground position now covers more than **600 hectares of mining licences**.

Assay results from the first 3 RC drill holes returned a peak grade of 4.37% Li<sub>2</sub>O. Significant intersections are summarised as:

- ACR003 peak grade 2.47% Li<sub>2</sub>O
  - 3m @ 3.05% Li<sub>2</sub>O from 19m
  - 17m @ 1.46% Li<sub>2</sub>O from 42m
  - 2m @ 2.07% Li<sub>2</sub>O from 64m
- ACR002 peak grade 4.35% Li<sub>2</sub>O
  - $\circ$  11m @ 2.03% Li<sub>2</sub>O from 24m
- ACR001 peak grade 2.51% Li<sub>2</sub>O
  - $\circ$  10m @ 1.5% Li<sub>2</sub>O from 19m

Two diamond rigs are now back on site drilling metallurgical test holes. RC drill rigs are scheduled to return to site in late September to carry out further resources definition holes.

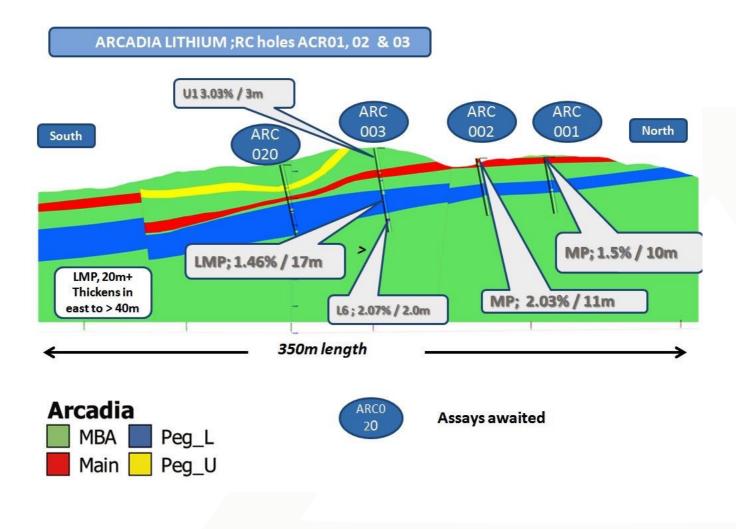
### **Development Timetable**

- First JORC reportable Mineral Resource is expected to be generated before the end of October
- Mine scoping study planned for completion prior to 31 December
- First ore production planned for pre 30 June 2017
- Off-take discussions underway with > 5 Asian lithium carbonate and lithium hydroxide producers and agreements are expected to be completed prior to 31 December

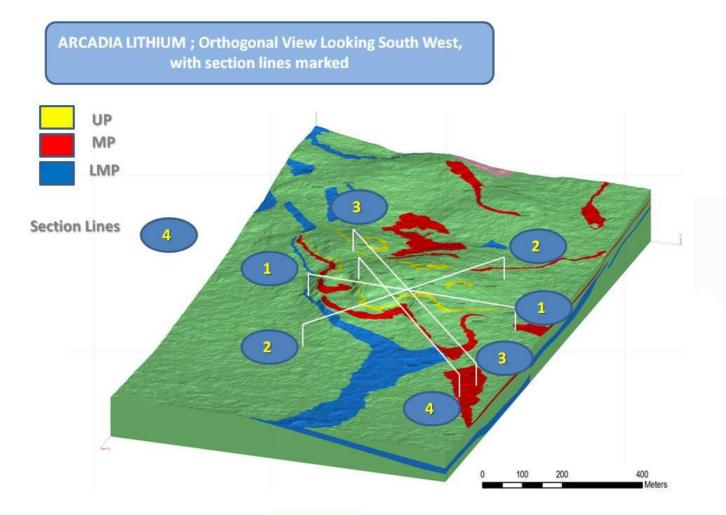
Please find below: cross sections; a summary of significant intercepts of the first 3 RC drill holes; and a plan map of the existing drill collars.



### **Cross Section Orientation: South - North Cross Section**

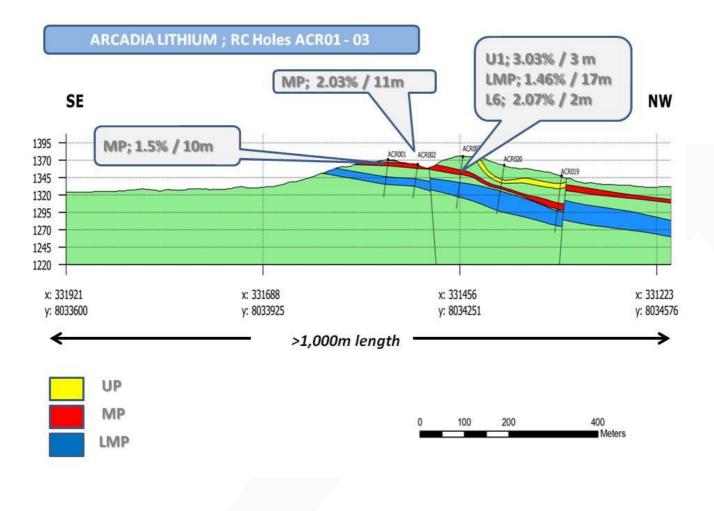








## Long Section Orientation: South/East – North/West

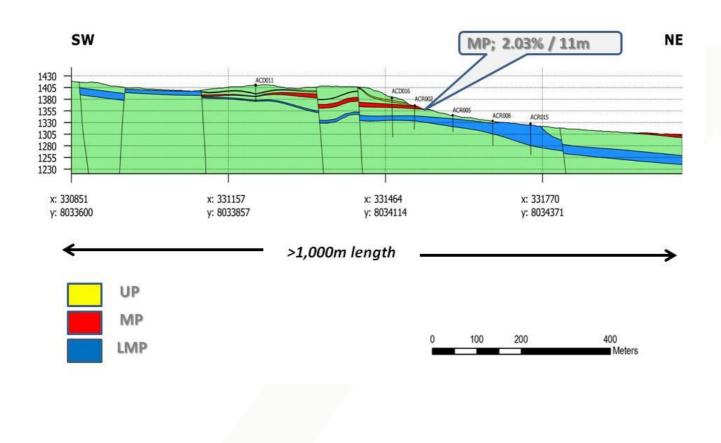






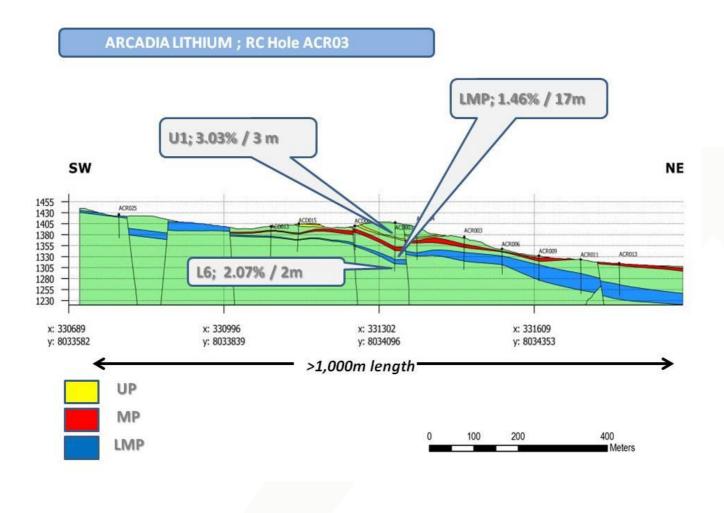
## Long Section Orientation: South/West – North/East







## Long Section Orientation: South/West – North/East





Hole	Thickness of Pegmatite	From (m)	To (m)	Li₂O Grade	Total Depth of Hole	Assay Results or Geology/ Comments
ACR001	10	19	29	1.5%	51	Received
ACR002	11	24	35	2.03%	52	Received
ACR003	3	19	22	3.05%	76	Received
	5	23	28	1.11%		Received
	17	42	59	1.46%		Received
	2	64	66	2.07%		Received
ACR004	17	2	19	pending	37	Lower Main Pegmatite, spodumene
ACR005	18	5	23	pending	31	Lower Main Pegmatite, spodumene
ACR006	15	19	34	pending	55	Lower Main Pegmatite, spodumene & petalite
ACR007	13	2	15	pending	43	Lower Main Pegmatite, spodumene
ACR008	23	2	25	pending	50	Lower Main Pegmatite, spodumene
ACR009	34	17	51	pending	55	Lower Main Pegmatite, spodumene & petalite
ACR010	30	34	64	pending	70	Lower Main Pegmatite, spodumene & petalite
ACR011	29	41	70	pending	76	Lower Main Pegmatite, spodumene & petalite
ACR012	24	54	78	pending	81	Lower Main Pegmatite, spodumene & petalite
ACR013	30	51	81	pending	81	Lower Main Pegmatite, spodumene & petalite
ACR014	31	1	28	pending	82	Lower Main Pegmatite, spodumene
ACR015	39	0	39	pending	68	Lower Main Pegmatite, spodumene
ACR016	34	36	70	pending	76	Lower Main Pegmatite, petalite
ACR017				pending	53	Hole Abandoned in basalt- water fissures
ACR018	25	52	77	pending	82	Lower Main Pegmatite, spodumene & petalite
ACR019	37	48	69	pending	77	2 Bands Lower Main Pegmatite, spodumene & petalite

## Summary of Significant Intercepts – RC Holes

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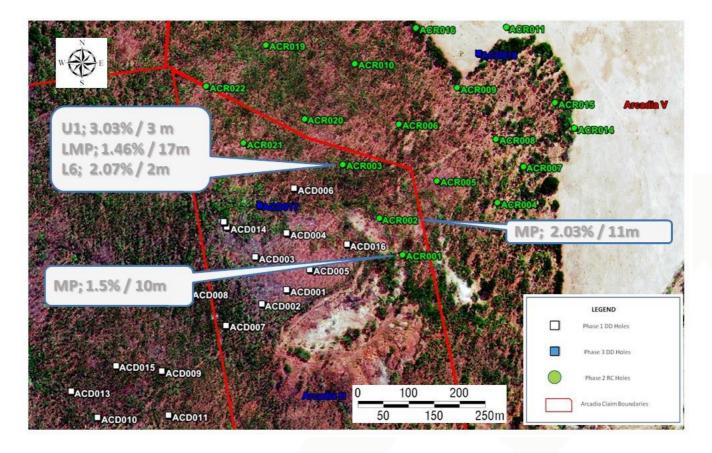


ACR020	16	44	60	pending	69	3 Bands Lower Main Pegmatite, spodumene & petalite
ACR021	26	57	78	pending	85	2 Bands Lower Main Pegmatite, spodumene & petalite
ACR022	26	47	73	pending	82.5	3 Bands Lower Main Pegmatite, spodumene & petalite
ACR023	22	0	22	pending	89	Lower Main Pegmatite, spodumene & petalite
ACR024	22	0	22	pending	55	Lower Main Pegmatite, spodumene & petalite
ACR025	3	2	5	pending	55	Main Pegmatite
ACR026	5	51	56	pending	60	Lower Main Pegmatite, spodumene
ACR027	0	-	-	pending	74	Lower Main Pegmatite, spodumene
ACR028	3	55	58	pending	70	Lower Main Pegmatite, spodumene
ACR029	4	33	34	pending	70	No Lower Main Pegmatite
ACR030	1	50	51	pending	53	No Lower Main Pegmatite
ACR031	5	0	5	pending	61	Main Pegmatite
ACR032	0	-	-	pending	24	Main Pegmatite
ACR033	0	-	-	No Assays	24	No intersections



### Map of the Completed Diamond drill collars (white) and RC drill holes (green)

### ARCADIA LITHIUM – First RC Results ; September 15th



#### For further information, please contact:

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#### **Competent Person's Statement**

The information in this announcement that relates to Exploration Targets, Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by Mr Roger Tyler, a Competent Person who is a member of The Australasian Institute of Mining and Metallurgy and The South African Institute of Mining and Metallurgy. Mr Tyler is the Company's Senior Geologist. Mr Tyler has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking 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 Tyler consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

# JORC Code, 2012 Edition – Table 1 report template

## Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>At the Arcadia Project, the samples were percussion chips generated from a Smith Capital rig, using a double tube reverse circulation technique.</li> <li>3kg Samples were collected every metre in triplicate, in addition to a smaller sample retained for reference and logging.</li> <li>Standards, blanks and field duplicates will be inserted into the sample shipment (5% of total sample number)</li> <li>Samples will be shipped to Zimlabs laboratory where they will be pulverized to produce a 30g charge and then dispatched by courier to ALS Johannesburg. All samples will be analysed by multi-element ICP (ME-MS61). Overlimits on lithium analysed by LiOG63 method,</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).	• Double tube, 5" reverse circulation. A trailer mounted Smith Capital double tube RC rig was used with a 25 bar (Inergsoll Rand) 2013 compressor. 3m rods were used, and the hole air blasted to allow sample recovery via a cyclone every 1m.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Chip samples were bagged directly from the cyclone, and immediately weighed, then riffle split.</li> <li>Material seems largely homogenous, and no relationship has been detected between grain size and assayed grade.</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate</li> </ul>	Chip samples have been geologically logged at 1 m intervals, with data

Criteria	JORC Code explanation	Commentary
	<ul> <li>Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>recorded in spreadsheet format using standardized codes. Sample weight, moisture content, lithologies, texture, structure, induration, alteration, oxidation and minerlisation were recorded.</li> <li>The work is undertaken according to Prospect Resources' standard procedures and practices, overseen by the CP. Prospect Resources believes that the level of detail and quality of the work is appropriate to support the current and any future exploration.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Samples were bagged straight from the cyclone. Typically 12 – 18 kg of sample were produced per metre.</li> <li>The dry samples were split using a 3-stage riffle splitter. With three, 3kg samples being collected per 1m interval. Excess material was dumped in a landfill,</li> <li>Field duplicates were produced every 20<sup>th</sup> sample.</li> <li>The 3kg samples were crushed and milled (90%, pass-75u) at the Farvic Laboratory. Lab duplicates, blanks and standard material (produced and AMIS) were inserted in identical packets to the samples, one per 20 normal samples. This was done under the supervision of a qualified geologist.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>All samples will be analysed by multi-element ICP (ME-MS61). Overlimits on lithium analysed by LiOG63 method, after four acid disolution, at ALS</li> </ul>
Verification of sampling and	• The verification of significant intersections by either independent or alternative company personnel.	<ul> <li>Prospect Resources' Chief geologist has almost 30 years experience and was on site during most of the drilling and sample pre-</li> </ul>

Criteria	JORC Code explanation	Commentary
assaying	<ul> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>preparation. The significant intersections were also shown Geological Survey staff.</li> <li>All hard copies of data are retained at the Prospect Resource Exploration offices, attached to the Farvic Mine. All electronic data resides in Excel format on the office desktop, with back-ups retained on hard-drives in a safe.</li> <li>No holes have been twinned to date. Though twinning is taking place on historically drilled holes (from 1970s)</li> <li>Logging and assay data captured electronically on excel spreadsheet, and subsequently Access database.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>No Mineral Resource estimate has been carried out.</li> <li>The first drill hole was completed with down-hole surveyed using a Azimuth Point System (APS) Single Shot survey method down-hole instrument at a minimum of every 50m and measured relative to magnetic North. These measurements have been converted from magnetic to UTM Zone 35 South values. No significant hole deviation is evident in plan or section</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drill holes are planned to be drilled at an average of 50m intervals along strike. This is sufficient to establish geological and grade continuity, Further infill drilling is planned to take place as a second campaign to infill this to 25m</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>Mineralised structures are flat lying pegmatites and drilling was planned in a straightforward manner to intersect these structures without bias.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Samples will be placed in sealed bags to prevent movement and mixing. Minimal preparation was done on site.</li> </ul>

Criteria	JORC Code explanation	Commentary
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	To be advised.

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	J	ORC Code explanation	Commenta	ıry					
Criteria Mineral tenement and land tenure status Exploration done by other	•	ORC Code explanation 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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Arcadia</li> <li>No envir</li> <li>Rural fa</li> <li>Two rou</li> </ul>	V claim, held conmental or l rmland - fallov unds of histor	ical drilling we	s. ere done	. Three EX		
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> <li>Iithologies observed are consistent with that Resources' drilling. The sites of at least 10 NQ si also been identified in the field. The detaile programme have been lost. But the work done recorded by the Geological Survey in their 19 historical estimates of 18mt at up to 5% Li were re</li> <li>Na-Li pegmatite, with spodumene, eucryptite, peta</li> </ul>		that seen NQ sized bo detailed reo done in the eir 1989 bo ere recorder e, petalite ar	by Pl orehole cords e 1970 ulletin, d.	rospect es have of this )'s was				
Drill hole			,,,	_	on to dissemin			-	
Information	•	<ul> <li>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:</li> </ul>	Bhs	Eastings	Northings	RL	Azimuth	Dip	Depth
			ACR001	331,538	8,034,130	1,367	130	-79	51
		<ul> <li>easting and northing of the drill hole collar</li> </ul>	ACR002	331,505	8,034,181	1,366	151	-81	52
		<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>		-					
		<ul> <li>dip and azimuth of the hole</li> </ul>	ACR003	331,454	8,034,257	1,375	144	-80	76
		<ul> <li>down hole length and interception depth</li> </ul>							
		$\circ$ hole length.							

Criteria	JORC Code explanation	Commentary
	• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum e truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Borehole intersections were reported using downhole weighted averaging methods. No maximum or minimum grade truncations were used. The mineralisation is well constrained in pegmatites and quartz veins.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>The first drilled to intersect the shallow dipping pegmatite veins. All drill holes were drilled with an azimuth of 135°. The dip of all the holes is -80°.</li> <li>The first hole intersected the main pegmatite as planned.</li> </ul>
Diagrams	<ul> <li>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.</li> </ul>	<ul> <li>Maps are attached and cross sections are being created</li> </ul>
Balanced reporting	<ul> <li>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.</li> </ul>	<ul> <li>The Company believes that all results have been reported and comply with balanced reporting.</li> </ul>
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	<ul> <li>Channel sampling also carried out at the adjacent dormant pit, that was mined in the '70s. Geological mapping and grab sampling was undertaken on a surveyed grid, down-dip and along strike of the pit.</li> </ul>

Criteria	JORC Code explanation	Commentary
	deleterious or contaminating substances.	
Further work	• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	Infill and extension drilling is being planned for Q3 2016
	<ul> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	