

# First Drill Hole intercepts a combined 12.35 metres of visible Spodumene Bearing Pegmatite at the Company's Acadia High Grade Lithium Project

## Highlights

- Drill hole ACD001 intercepts a number of visibly identified spodumene bearing pegmatites as follows:
  - o 1.25m Upper spodumene bearing pegmatite from 10.64m-11.65m
  - 8.24m Main Zone spodumene bearing pegmatite from 25.40-33.64m
  - o **2.65m L1 Zone spodumene bearing pegmatite** from 36.60m-39.25m
  - **0.21m L2 Zone spodumene bearing pegmatite** from 41.60m-41.81m
  - o 0.57m L3 Zone pegmatite from 48.48m to 49.05m
  - Open at depth at 67.1m at end of hole
- First drill hole adjacent to the historic main pit confirms continuity of spodumene bearing pegmatites down dip from historic workings.
- Drilling results in line with expectations from historic data
- Core to be split and samples prepared prior to being lodged for multi element ICP and over limits on lithium analysed by LiOG63 analysis
- First drill programme consists of some 30 holes to average depths of 50m
- Second drill rig able to be deployed as programme ramps up

### Arcadia Lithium Deposit Summary:

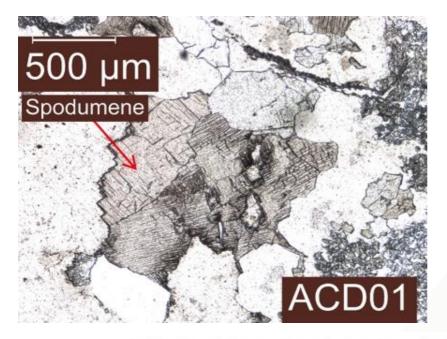
- Deposit lies within one of the three well known lithium camps, approx. 35kms north east of Harare.
- Initial Exploration Target of 15-18Mt at 3-5% Li<sub>2</sub>O.<sup>+</sup>
- Intermittent production from 1954 to 1972, produced over 15,000 tonnes of mixed lithium ore.
- Two rounds of historical drilling in 1969 and 1981, confirmed that the pegmatite extends at least 1,500m along strike, and very high grades (ranging from 3.5% 5.5% LiO<sub>2</sub>).

Note<sup>+</sup> The Arcadia Lithium Deposit has been the subject of historic drilling, exploration and production. The Exploration Target is based on previously published data, all of which predates JORC 2012 and the Company's current exploration programme. The potential quantities and grades are conceptual in nature because there has been insufficient exploration to date to define a Mineral Resource. It is not certain that further exploration will result in the determination of a Mineral Resource under the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, the JORC Code" (JORC 2012).

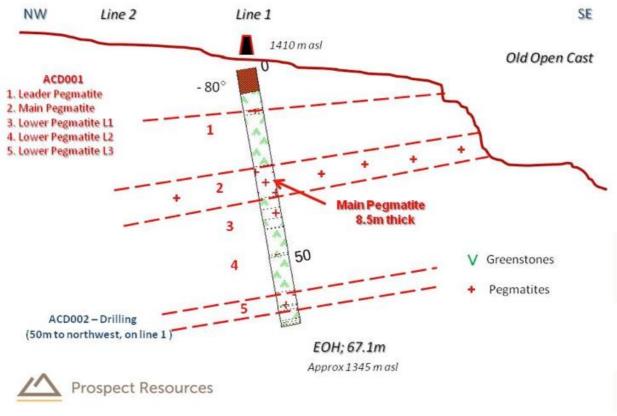
# ASX ANNOUNCEMENT



## Thin Section Analysis (Slide ACD01) confirms spodumene within grab sample



ACD001 – Schematic Drill Section – looking NE



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#### The Arcadia Lithium Deposit

The pegmatite is exposed in a 150m long pit on a steep hill slope and has 3 to 10 metre thickness; it is flat dipping at 3°-5°NW and significantly is known to extend for at least 1,500m along strike.

The Arcadia claims pegmatite is of the Na-Li (sodium – lithium) group, is zoned and is mainly mineralised in spodumene, eucryptite, petalite and amblygonite. Spodumene is abundant in the east and petalite constitutes 10% to 50% of the pegmatite in the west. Petalite is an important lithium ore and is mined commercially. It is similar to spodumene but has a lower maximum grade. Eucryptite also occurs in the deposit and is very similar to spodumene, except it has a higher maximum lithium grade. This may explain why the deposit exhibits grades significantly higher than most lithium deposits in Australia.

**Composite grade of the Arcadia claim is reportedly around 5% Li<sub>2</sub>O**. The high grades and large tonnage potential, given the known strike length, make this a significant project.

#### Location

The Arcadia Camp is situated some 35km northeast of Harare, Zimbabwe close to the Arcturus Gold mine. It is the most easterly of three well known pegmatite camps in the area that are mineralised in lithium, beryllium, tantalum and caesium.

#### **Historical Mineral Production**

Zimbabwe has always been recognised as a global player in the production of lithium with the bulk of the production having come from the Bikita Mine. At its peak production, Zimbabwe has been the 5th largest lithium producer in the world.

### Previous Exploration.

Two drilling programmes have been undertaken in the claims area, with one campaign done in the late 1960s and a more recent one done in 1981.

#### Late 1960s drilling

Three EX-size drill holes were drilled in the pit to expose the pegmatite extent to the north, with a further two holes sunk in the quarry floor in the footwall of the main pegmatite and one hole sunk in the western strike extension. Core recovery was reportedly poor at 50%.

Conclusions from 1961 drilling:

- . The fine grained greisen beneath the main quarry contains up to 1.61% Li<sub>2</sub>O
- . The coarse grained pegmatite yielded up to 3.77% Li<sub>2</sub>O
- . There occurs a second lithium bearing pegmatite below the quarry and in fine greisen footwall.



### Drilling Campaign done in 1981 & Exploration Target

An extensive drilling programme was referred to in Geological Survey Bulletin No.94 in 1991 including the publication of a reserve (non JORC compliant). Based on the Company's review of existing publicly available information (including historic exploration, past drilling and production history), Prospect believes that the potential exists for an Exploration Target of 15-18 million tonnes with grades ranging from 3-5% Li<sub>2</sub>O.\*

Note\* The Arcadia Lithium Deposit has been the subject of historic drilling, exploration and production. The Exploration Target is based on previously published data, all of which predates JORC 2012 and the Company's current exploration programme. The potential quantities and grades are conceptual in nature and there has been insufficient exploration to date to define a Mineral Resource. It is not certain that further exploration will result in the determination of a Mineral Resource under the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, the JORC Code" (JORC 2012).

### 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 collibration of any measurement tools appropriate and the appropriate on the sure taken and the appropriate collibration.</li> </ul>	<ul> <li>At the Arcadia Project, diamond drilling was undertaken with the current drill holes being collared with HQ size single tube core (63.5mm). Core will be split with a rock saw. The drill core sampling intervals were lithologically controlled, the maximum sampling interval was 1m and the minimum sampling interval was 0.25m.</li> </ul>
	Aspects of the determination of mineralisation that are Material to the sample shipmer     Rublic Report	<ul> <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 Zimlebe leberatory where they will be</li> </ul>
	<ul> <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>Samples will be shipped to Zimlabs laboratory where they will be crushed and 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, after peroxide fusion.</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>Single tube Diamond Drill Core. Initially HQ3 to account for weathered nature of the country rock.</li> </ul>
<ul> <li>Drill sample recovery</li> <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>Downhole distances provided by the driller were correlated with measured lengths of the core provided.</li> </ul>
	representative nature of the samples.	<ul> <li>RQD, core loss or gain was measured and recorded by summing of the lengths of the core recovered, measuring only those pieces of core that are 10cm or more in length.</li> </ul>
	<ul> <li>Sample recovery in diamond drill holes was very good, with the exception of core from the top 3m weathered metabasalts. Prospect utilized HQ drilling to minimize the core loss in the weathered zones</li> </ul>	

Criteria	JORC Code explanation	Commentary
Logging	<ul> <li>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.</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>Core was marked and logged in detail with records kept of the total length and of any core loss.</li> <li>Standard Prospect Resources geological codes were used for detailed geological logging, using different logging parameters for texture, structures, alteration, mineralisation, lithology and weathering. Core was photographed (wet and dry) in natural light and each photo run labeled.</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>The drill core will be first cut into half along the cutting line, and then the lower half of the core will be cut into two quarters. One quarter core will be submitted for laboratory analysis and the other quarter retained for polished thin section production and the half drill core retained for possible met test work and reference.</li> <li>Quality control will be provided by insertion of standards, duplicates and blanks. (5% of total)</li> <li>The laboratory undertake repeat analysis.</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 peroxide fusion.</li> <li>To be advised</li> </ul>
Verification of sampling and	• The verification of significant intersections by either independent or alternative company personnel.	Core inspected by more than one staff member, and external parties, including Geological Survey, and independent

Criteria	JORC Code explanation	Commentary
assaying	The use of twinned holes.	consultants.
	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul> <li>No holes have been twinned to date. Though twinning is taking place on historically drilled holes (from 1970s)</li> </ul>
	Discuss any adjustment to assay data.	Logging and assay data captured electronically on excel spreadsheet
Location of	<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> </ul>	No Mineral Resource estimate has been carried out.
data points		• The first drill hole was completed with down-hole surveyed using a Azimuth Point System (APS) Single Shot survey method down-hole
	Specification of the grid system used.	instrument at a minimum of every 50m and measured relative to
	Quality and adequacy of topographic control.	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
Data spacing	Data spacing for reporting of Exploration Results.	Drill holes are planned to be drilled at an average of 50m intervals
and distribution	<ul> <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> </ul>	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 where possible using RC drilling.
	Whether sample compositing has been applied.	
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.	<ul> <li>Mineralised structures are flat lying pegmatites and drilling was planned in a straightforward manner to intersect these structures without bias.</li> </ul>
	<ul> <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>	•
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>
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	JORC Code explanation	Commentary
Mineral tenement and land tenure	· ) · · · · · · · · · · · · · · · · · ·	Arcadia V claim, held by JV partner Paul Chimbodza.
		No environmental or land title issues.
		Rural farmland - fallow
	• The security of the tenure held at the time of reporting along with an known impediments to obtaining a licence to operate in the area.	ny
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Two rounds of historical drilling were done. Three EXT holes were drilled in 1969 at site of current pit. These logs are available, and the lithologies observed are consistent with that seen by Prospect Resources' drilling. The sites of at least 10 NQ sized boreholes have also been identified in the field. The detailed records of this programme have been lost. But the work done in the 1970's was recorded by the Geological Survey in their 1989 bulletin, where historical estimates of 18mt at up to 5% Li were recorded.</li> </ul>
Geology	• Deposit type, geological setting and style of mineralisation.	<ul> <li>Na-Li pegmatite, with spodumene, eucryptite, petalite and amblygonite. In addition to disseminated tantalite and beryl.</li> </ul>
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:	n BH_ID UTM_East UTM_North RL Azimuth Dip Depth
	<ul> <li>easting and northing of the drill hole collar</li> </ul>	ACD001 331,335 8,034,080 1410m 135 80 67m
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>	ACD002 331,340 8,034,065 1415m 135 80 Drilling
	<ul> <li>dip and azimuth of the hole</li> </ul>	
	<ul> <li>down hole length and interception depth</li> </ul>	
	◦ hole length.	
	<ul> <li>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 clear</li> </ul>	

Criteria	JORC Code explanation	Commentary
	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> </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 quart.</li> </ul>
	<ul> <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> </ul>	veins.
	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
Relationship between mineralisation	These relationships are particularly important in the reporting of Exploration Results.	• 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
widths and intercept	<ul> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	<ul><li>is -80°.</li><li>The first hole intersected the main pegmatite as planned.</li></ul>
lengths	<ul> <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>	
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.	
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.	<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 deleterious or contaminating substances.	<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>
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>Infill and extension drilling is being planned for Q3 2016</li> </ul>

Criteria	JORC Code explanation	Commentary
	<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>	