

## Resource drilling commences at Alvarrões

- **New drill program commences at the Alvarrões Lepidolite Mine aimed at infilling and extending the existing Inferred Mineral Resource**
- **Scout drilling intersected a new lepidolite rich pegmatite sill within the mining lease area**
- **Follow-up drilling at the Youanmi Lepidolite Project commenced targeting pegmatites at two prospects**

Lepidico Ltd (ASX:LPD) ("Lepidico" or "Company") is pleased to announce that it has commenced two drilling programs targeting lepidolite mineralisation within pegmatites, in both Portugal and in Western Australia.

### **Alvarrões**

A diamond drill core Mineral Resource infill program is being implemented at the Alvarrões Lepidolite Mine, located near the city of Guarda in NE Portugal. The planned program of 25 holes for approximately 2,000 m of HQ core drilling is aimed at increasing data density to allow for conversion of parts of the current Inferred Resource of 1.5 Mt @1.1% Li<sub>2</sub>O<sup>1</sup> into Measured and Indicated categories. The program is also designed to evaluate potential extensions of the Mineral Resource to the northeast within the current mine footprint.

It is expected that this work will enable the estimation of an inaugural Ore Reserve to support the Phase 1 L-Max<sup>®</sup> Plant Feasibility Study.

Two diamond rigs are on site to expedite the program prior to the onset of the wet winter season. Continuity of the mineralised sills is visually confirmed by the results to date, as predicted by the geological model. Assay results will be available in batches as drilling progresses (Figures 1 and 2).

A reverse circulation scout drilling program was completed earlier in November on previously untested pegmatite outcrops within the mine area. Notably, this work intersected a 2m-thick pegmatite sill carrying 10% to 40% lepidolite. This sill has so far been identified over a strike of approximately 200 m. Assay results are expected in late November. A follow-up program of diamond core drilling into this pegmatite is planned on completion of drilling at the Alvarrões open pits.

### **Youanmi**

Following encouraging results from the initial drilling program at the Youanmi Lepidolite Project<sup>2</sup> a follow-up reverse circulation program of a nominal 1,000 m is underway to provide more information on the continuity and geometry of the lepidolite-bearing pegmatites at two

<sup>1</sup> ASX release dated 7 December 2017: Inaugural Alvarrões Mineral Resource Estimate

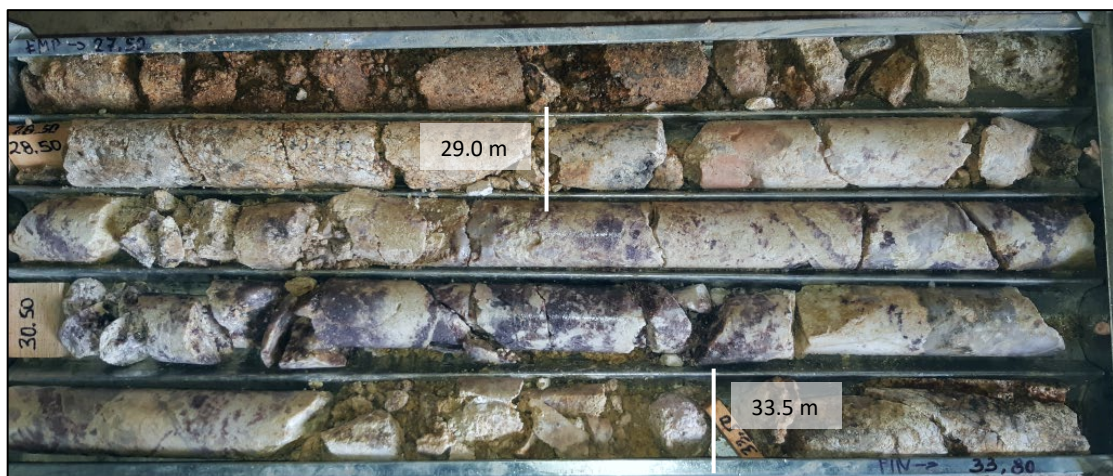
<sup>2</sup> ASX release dated 30 October 2018: Assay results confirm lithium mineralisation at Youanmi

prospects. This work is scheduled to complete in November, with assay results expected 2-3 weeks later.

A JORC Code (2012) Table 1 Report pertaining to the 30 October 2018 Youanmi drilling results announcement is appended to this release.



**Figure 1.** Track-mounted diamond core drill rig at Block 1, Alvarrões Lepidolite Mine, Portugal.



**Figure 2.** Alvarrões diamond core hole ALVD024, showing lepidolite-bearing pegmatite in 'Sill N' from 29 m to approximately 33.5 m (interval imprecise due to core loss from 31.8m).



**Figure 3.** Setting up to drill reverse circulation hole at Youanmi.

#### **Further Information**

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*The information in this report that relates to Exploration Results is based on information compiled by Mr Tom Dukovcic, who is an employee of the Company and a member of the Australian Institute of Geoscientists and who has sufficient experience relevant to the styles of mineralisation and the types of deposit under consideration, and to the activity that has been 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 Dukovcic consents to the inclusion in this report of information compiled by him in the form and context in which it appears.*

#### **About Lepidico Ltd**

Lepidico Ltd is an ASX-listed Company focused on exploration, development and production of lithium. Lepidico owns the technology to a metallurgical process that has successfully produced lithium carbonate from non-conventional sources, specifically lithium-rich mica minerals including lepidolite and zinnwaldite. The L-Max® Process has the potential to complement the lithium market by adding low-cost lithium supply from alternative sources. The Company is currently conducting a Feasibility Study for a Phase 1 L-Max® plant, targeting commercial production for 2020. Feed to the planned Phase 1 Plant is planned to be sourced from the Alvarrões Lepidolite Mine in Portugal under an ore access agreement with owner-operator Grupo Mota. Lepidico has delineated a JORC Code-compliant Inferred Mineral Resource estimate at Alvarrões of 1.5 Mt grading 1.1% Li<sub>2</sub>O (see ASX announcement of

7 December 2017). More recently Lepidico has added S-Max™ to its technology base, which can produce marketable quality amorphous silicas at low cost versus existing industry processes.

Lepidico's current exploration assets include a farm-in agreements with Venus Metals Corporation Limited (ASX:VMC) over the lithium mineral rights at the Youanmi Lithium Project in Western Australia. Lepidico has also entered into a Letter of Intent with TSX listed Avalon Advanced Materials Inc. for planned lithium mica concentrate supply from its Separation Rapids Project in Ontario, Canada.



**APPENDIX 1. JORC Code (2012) Table 1 Report: Reverse Circulation Drilling Assay Results, Youanmi Lepidolite Project, 30 October 2018.**

**Section 1: Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>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.</i>	Reverse Circulation (RC) percussion drill chips collected through a cyclone at 1m intervals down the hole and laid on ground. Scoop used to collect 1m samples through pegmatite intercepts, and selected samples of host rock, of 2kg - 3kg weight.
	<i>Include reference to measures taken to ensure sample representativeness and the appropriate calibration of any measurement tools or systems used.</i>	Samples were kept dry; when compositing, equal portions taken from each sample pile to produce representative composite sample.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>	Samples were sent to ALS laboratories in Perth for sample prep, with analysis for a multi-element suite by ALS method ME-MS89L (sodium peroxide fusion and ICP-MS finish).
	<i>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.</i>	The drilling program was designed to test a series of outcropping lepidolite-bearing pegmatites to gauge the presence and continuity of lepidolite mineralisation at depth.
Drilling techniques	<i>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).</i>	All holes were completed by the reverse circulation (RC) drilling method. A 4.5" face sampling hammer was used to a maximum depth of 54 m.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Samples were visually inspected for recovery with any sample differing from the norm noted in the logs.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Samples were kept dry.
	<i>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.</i>	Sample recovery was adequate for the drilling technique with no sample bias occurring.
Logging	<i>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.</i>	Chip samples were geologically logged on a 1m interval by the geologist on site overseeing the drill program. A small sample of each metre was washed, collected and archived in chip trays.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Logging recorded abundance and type of minerals, veining, alteration, mineralisation, colour, weathering and rock types using a standardised logging system.
	<i>The total length and percentage of the relevant intersections logged.</i>	All holes were logged over their entire length.
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	Not applicable, no core drilling was conducted.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	All chip samples were dry and collected using a scoop. Equal portions were taken from each sample pile to produce representative samples.

	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Samples were sent to ALS Minerals laboratories in Perth where the entire sample was crushed, >70% -6mm fraction, then pulverised to 85% passing 75 microns or better.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representativeness of samples.</i>	RC drilling; maximising sample size for each metre interval is considered appropriate for representativeness of samples.
	<i>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.</i>	Sampling technique and size is considered appropriate for this early stage drilling program.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The larger sample size of RC drilling is considered appropriate for the style of mineralisation and material being sampled.
<i>Quality of assay data and laboratory tests</i>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Samples were sent to ALS laboratories, with analysis of a multi-element suite (Ag, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Ho, In, K, La, Li, Lu, Mn, Mo, Nb, Nd, Ni, Pb, Pr, Rb, Re, Sb, Se, Sm, Sn, Sr, Ta, Tb, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn) by sodium peroxide fusion (ME-MS89L ICP-MS) through ALS laboratories in Vancouver, Canada. The method results in the total dissolution of the sample.
	<i>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.</i>	Not applicable, no instruments used.
	<i>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.</i>	No standards or field duplicates were used in this initial phase of drilling.
<i>Verification of sampling and assaying</i>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	A minimum of 2 company geologists have verified significant intersections.
	<i>The use of twinned holes.</i>	No twinned holes were drilled and are not considered necessary for this early stage if drilling.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Drill hole data and geological logs were recorded on paper in the field then entered into digital format before being uploaded to the company's server hosted database.
	<i>Discuss any adjustment to assay data.</i>	There has been no adjustment to assay data.
<i>Location of data points</i>	<i>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.</i>	Drill hole coordinates were determined using a handheld GPS.
	<i>Specification of the grid system used.</i>	MGA94 50S
	<i>Quality and adequacy of topographic control.</i>	RL determined using handheld GPS
<i>Data spacing and distribution</i>	<i>Data spacing for reporting of Exploration Results.</i>	Thirty-eight drill holes (YVC001-YVC038) were spaced on nominal 60 m sections and otherwise as determined by the site geologist.
	<i>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.</i>	The drilling is first-pass in nature and not at a stage where a Mineral Resource estimation is appropriate.
	<i>Whether sample compositing has been applied.</i>	One metre samples were collected though pegmatite intervals. The host rock was sampled as and when deemed anomalous by the site geologist.

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.	The holes were drilled on nominally N-S orientation and essentially perpendicular to the target anomalies. The drill orientation is considered appropriate for the early stage of drilling and the target type.
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No sampling bias is considered to have been introduced.
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	The samples were bagged and securely transported by company personnel to the ALS laboratory in Perth.
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	No audits or reviews were conducted for this sampling program.

## Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>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.</li> </ul>	Exploration is contained to E57/983 located in the Murchison District in Western Australia, approximately 20 km southwest of the historical Youanmi gold mine. The tenement is owned by Venus Metals Corporation Limited. Lepidico Ltd is earning an 80% interest in the lithium rights within the tenement, with Venus is free-carried to decision to mine. There is no Native Title claim over the area. A Program of Works was approved by DMIRS in August 2018.
	<ul style="list-style-type: none"> <li>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.</li> </ul>	Tenure is secure with no known impediments other than as detailed immediately above.
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	Exploration was conducted by Lepidico Ltd staff and contractors.
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	LCT-type pegmatites within Archean greenstones of the east Murchison district.
Drill hole Information	<ul style="list-style-type: none"> <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>	Refer to Table 1 of the report dated 11 September 2018.
	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> </ul> </li> </ul>	Refer to Table 1 of the report dated 11 September 2018.
	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul> </li> </ul>	Refer to Table 1 of the report dated 11 September 2018.
	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>dip and azimuth of the hole</li> </ul> </li> </ul>	Refer to Table 1 of the report dated 11 September 2018.
	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>down hole length and interception depth</li> </ul> </li> </ul>	Refer to Table 1 of the report dated 11 September 2018.
	<ul style="list-style-type: none"> <li> <ul style="list-style-type: none"> <li>hole length.</li> </ul> </li> </ul>	Refer to Table 1 of the report dated 11 September 2018.
	<ul style="list-style-type: none"> <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 clearly explain why this is the case.</li> </ul>	N/A

Data aggregation methods	<ul style="list-style-type: none"> <li>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.</li> </ul>	N/A
	<ul style="list-style-type: none"> <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>	N/A
	<ul style="list-style-type: none"> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	N/A
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> </ul>	Mineralised widths are approximately equal to downhole intercepts.
	<ul style="list-style-type: none"> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	Pegmatite orientations are mostly dipping towards drill holes at approximately 45 degrees and thus intercept widths are reasonably close to true widths.
	<ul style="list-style-type: none"> <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>	As above.
Diagrams	<ul style="list-style-type: none"> <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>	Refer to figures in the report dated 11 September 2018 and 30 October 2018.
Balanced reporting	<ul style="list-style-type: none"> <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>	Reporting is only of relevant pegmatite intercepts as logged by the site geologist. Wall rocks are not mineralised and are not of interest.
Other substantive exploration data	<ul style="list-style-type: none"> <li>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.</li> </ul>	Reporting is only of relevant pegmatite intercepts as logged by the site geologist. Wall rocks are not mineralised and are not of interest.
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> </ul>	Future work includes additional drilling, mapping, and geochemical survey of the balance of the area for additional LCT-type anomalism, and subsequent drilling of anomalies if warranted.
	<ul style="list-style-type: none"> <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>	N/A

The information in this report that relates to Exploration Results is based on information compiled by Mr Tom Dukovcic, who is an employee of the Company and a member of the Australian Institute of Geoscientists and who has sufficient experience relevant to the styles of mineralisation and the types of deposit under consideration, and to the activity that has been 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 Dukovcic consents to the inclusion in this report of information compiled by him in the form and context in which it appears.