

Lepidico Drilling Update: lithium pegmatites

intersected in each of three programs

- Exploration drilling within the Alvarrões mining lease area identifies additional lepidolite pegmatites
- Resource drilling at Alvarrões identifies additional lepidolite pegmatites below the previously identified mine sill sequence
- Follow up exploration drilling at Youanmi extends pegmatite mineralisation at depth

Lepidico Ltd (ASX:LPD) ("Lepidico" or "Company") is pleased to provide an update on three drilling campaigns, two at Alvarrões in Portugal and one at Youanmi in Western Australia. In each case, positive results have been received with the identification of further lepidolitebearing pegmatites at Alvarrões and confirmation of continuity of mineralisation at Youanmi.

## **Alvarrões Exploration Drilling**

An initial program of reverse circulation ("RC") drilling was conducted approximately 350 metres east of the Alvarrões lepidolite mine area. This program has identified multiple subhorizontal lepidolite-bearing pegmatites including intercepts of 4 m @ 0.86% Li<sub>2</sub>O and 3 m @ 0.85% Li<sub>2</sub>O from what is provisionally designated as "Sill E." Particularly encouraging is that each of the 14 holes intersected anomalous lithium mineralisation, as shown in Table 1. The program comprised 14 RC holes for a total of 929 metres (Table 2). In all, 254 samples of pegmatite and proximal granite wall rock were collected and submitted for assay. Positive initial indications have provided the confidence to extend the exploration drill program to explore the core area of Sill E with four diamond holes, to obtain more accurate data on position, thickness and mineralogy of the pegmatite sills.

#### **Alvarroes Resource Drilling**

On 7 December 2017<sup>1</sup> the Company announced a maiden JORC Code-compliant Inferred Mineral Resource at the Alvarrões Lepidolite Mine of 1.5 Mt @ 1.1% Li<sub>2</sub>O. A Resource infill diamond drilling program comprising approximately 25 holes for 1,600 m of HQ core over parts of the Block 1-2 and Block 3 areas of the mine is in the final stages of completion (Figure 1).

The aim of the program is to generate higher density drill data over the near-surface portions of the deposit to enable the estimation of JORC Code-compliant Mineral Resources in the Indicated and/or Measured categories which, in turn, are required to estimate Ore Reserves as a feed source for the Phase 1 L-Max® Plant, planned to be built in Sudbury, Canada. Drilling is being undertaken by two track-mounted rigs that have achieved a joint production rate of 50m-70m per day. Drilling is on a nominal 50 m x 50 m grid to provide spatial consistency of data. The program is scheduled for completion by 24 December 2018.

<sup>&</sup>lt;sup>1</sup> ASX Announcement 7 December 2017: Inaugural Alvarrões Mineral Resource Estimate



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T: +61 8 9363 7800 West Leederville, WA 6901 | E: info@lepidico.com The drilling continues to intercept multiple sills of lepidolite-bearing pegmatite, with the closer drill hole spacing identifying variations in sill thickness, position (depth) and lepidolite content. The overall average lepidolite content is expected to remain around 15% - 20%, or approximately 1.0% Li<sub>2</sub>O (Figure 2).

An additional thick, lepidolite-rich sill, "Sill P", has been identified at a depth of 15m-20m beneath Sill O, the lowest of only three sills used in the initial Mineral Resource estimate. Sill P is 3m - 5m thick and carries 10%-30% lepidolite. Assay results expected in February 2019.

### Youanmi Exploration Drilling

A follow-up RC drilling program was implemented at Youanmi to gain better definition and understanding of the extent and geometry of the lithium pegmatites at the northern Target 1 and central Target 2 areas. The program completed in late November 2018 with samples submitted for assay in early December 2018. Assay results are expected in early January 2019.

This second round of RC drilling at Youanmi confirmed the down-dip continuity of the main pegmatite at Target 1, but additional drilling through the complex array of pegmatites at the central Target 2 zone did not clarify the orientation or continuity of the individual pegmatites in this area. Future work will be dependent on the full interpretation of results pending receipt of assays.

Table 1. Exploration RC Drilling Significant Intercepts (>1000 ppm Li; >0.2153 %Li₂O)

Hole	From (m)	To (m)	Interval (m)	Li (ppm)	Li (%)	Li₂O (%)	Intercept	Sill
AGC001	18	19	1	2640	0.26	0.57	1m @ 0.57 %	
AGC001	31	33	2	1525	0.15	0.33	2m @ 0.33 %	
AGC001	48	49	1	3230	0.32	0.70	1m @ 0.70 %	
AGC002	22	24	2	1915	0.19	0.41	2m @ 0.41 %	
AGC002	29	30	1	1420	0.14	0.31	1m @ 0.31 %	
AGC003	10	13	3	3940	0.39	0.85	3m @ 0.85 %	E
AGC003	54	58	4	1267.5	0.13	0.27	4m @ 0.27 %	ı
AGC004	6	7	1	3170	0.32	0.68	1m @ 0.68 %	
AGC004	13	14	1	5950	0.60	1.28	1m @ 1.28 %	D
AGC004	39	40	1	2810	0.28	0.60	1m @ 0.6 %	E
AGC004	42	46	4	3977.5	0.40	0.86	4m @ 0.86 %	Ε
AGC004	72	73	1	1440	0.14	0.31	1m @ 0.31 %	Н
AGC004	84	86	2	1995	0.20	0.43	2m @ 0.43 %	1
AGC005	0	4	4	475	0.05	0.10	4m @ 0.10 %	
AGC005	4	5	1	1370	0.14	0.29	1m @ 0.29 %	
AGC005	17	18	1	1300	0.13	0.28	1m @ 0.28 %	
AGC005	33	34	1	3390	0.34	0.73	1m @ 0.73 %	
AGC006	20	22	2	2730	0.27	0.59	2m @ 0.59 %	E
AGC006	35	36	1	2810	0.28	0.60	1m @ 0.60 %	F
AGC007	0	2	2	1775	0.18	0.38	2m @ 0.38 %	D
AGC007	9	11	2	4250	0.43	0.92	2m @ 0.92 %	E

Hole	From (m)	To (m)	Interval (m)	Li (ppm)	Li (%)	Li₂O (%)	Intercept	Sill
AGC007	14	15	1	1890	0.19	0.41	1m @ 0.41 %	F
AGC007	44	46	2	4240	0.42	0.91	2m @ 0.91 %	ı
AGC008	22	25	3	2926.67	0.29	0.63	3m @ 0.63 %	
AGC008	47	48	1	1280	0.13	0.28	1m @ 0.28 %	
AGC008	50	51	1	2780	0.28	0.60	1m @ 0.60 %	
AGC008	77	78	1	1300	0.13	0.28	1m @ 0.28 %	
AGC009	9	12	3	2226.67	0.22	0.48	3m @ 0.48 %	
AGC009	48	50	2	1615	0.16	0.35	2m @ 0.35 %	
AGC010	12	13	1	1980	0.20	0.43	1m @ 0.43 %	
AGC010	18	19	1	2340	0.23	0.50	1m @ 0.50 %	
AGC010	30	31	1	2000	0.20	0.43	1m @ 0.43 %	
AGC010	35	36	1	2670	0.27	0.57	1m @ 0.57 %	
AGC011	8	10	2	3565	0.36	0.77	2m @ 0.77 %	
AGC011	11	12	1	1010	0.10	0.22	1m @ 0.22 %	
AGC011	33	36	3	2656.67	0.27	0.57	3m @ 0.57 %	
AGC011	74	75	1	1980	0.20	0.43	1m @ 0.43 %	
AGC012	0	2	2	1235	0.12	0.27	2m @ 0.27 %	E
AGC013	0	1	1	1480	0.15	0.32	1m @ 0.32 %	
AGC013	45	48	3	3476.67	0.35	0.75	3m @ 0.75 %	F
AGC013	54	56	2	3375	0.34	0.73	2m @ 0.73 %	G
AGC013	57	59	2	2915	0.29	0.63	2m @ 0.63 %	G
AGC014	49	50	1	1620	0.16	0.35	1m @ 0.35 %	E
AGC014	52	54	2	3205	0.32	0.69	2m @ 0.69 %	F
AGC014	63	66	3	3750	0.38	0.81	3m @ 0.81 %	G
AGC014	67	68	1	2520	0.25	0.54	1m @ 0.54 %	

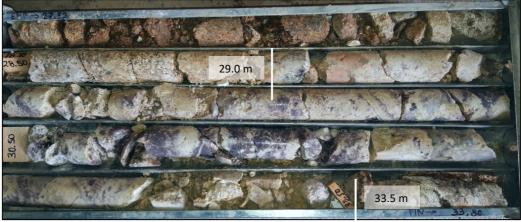
Table 2. Exploration Reverse Circulation Drill Hole Survey Data, Alvarrões, Portugal

Hole	Easting (m)	Northing (m) RL (masl)		Depth (m)	Dip	Azimuth
AGC001	642010.69	4477253.94	648.4	60	90	000
AGC002	642072.92	4477301.65	648.1	60	90	000
AGC003	642175.98	4477446.53	689.5	60	90	000
AGC004	642230.00	4477497.19	704.0	87	90	000
AGC005	642274.07	4477544.66	715.9	70	90	000
AGC006	642078.01	4477561.38	689.5	55	90	000
AGC007	642124.29	4477456.20	683.7	60	59	266
AGC008	641861.89	4477131.20	619.0	84	90	000
AGC009	641807.97	4477227.45	605.7	66	90	000

Hole	Easting (m)	Northing (m)	RL (masl)	Depth (m)	Dip	Azimuth
AGC010	641806.48	4477467.39	595.5	60	90	000
AGC011	641858.17	4477659.26	621.8	81	90	000
AGC012	642241.91	4477459.99	692.4	42	90	000
AGC013	642177.26	4477513.07	700.7	66	90	000
AGC014	642178.10	4477545.17	701.2	78	90	000



**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).

#### Background

On 9 March 2017 Lepidico announced that it had entered into an agreement with Mota Ceramic Solutions (MCS), owner and operator of the Alvarrões lepidolite mine, located near the city of Guarda in northeast Portugal. A summary of terms between Lepidico and MCS are outlined below, along with the current status of any commitments.

- 1. Lepidico paid MCS €10,000 within 5 days of execution of the Term Sheet.
- Lepidico undertook Development Expenditure of at least €250,000 in success-based stages over an 18-month exclusive period on the Alvarrões Project with the goal of defining a Mineral Resource (compliant with the JORC Code, or similar) of more than 1 million tonnes grading 1.5% Li<sub>2</sub>O. Activities commenced following the securing of funds and the funding commitment met.
- 3. All data remains the property of MCS if Lepidico does not proceed with development.
- 4. Lepidico continues to hold an exclusive / pre-emptive right until 7 March 2020 to effect a commercial relationship with MCS with regards to ore supply from Alvarrões including sale of ore or concentrate by MCS to Lepidico, and / or the right for Lepidico to develop and operate a lithium mica mining and concentration project at Alvarrões. MCS and Lepidico are well advanced in agreeing commercial terms and under certain circumstances it is envisaged that these terms will convert to a joint venture arrangement. The final arrangements including commercial terms are subject to Board approval by Lepidico and MCS.
- 5. Under item 4. above, if requested, Lepidico will make available an agreed tonnage of lepidolite feed to MCS to allow continuation of the established MCS operations using lepidolite.
- 6. The Term Sheet is conditional on Lepidico due diligence on mining tenure, which is well advanced.

### **Further Information**

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# **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 competitive cost lithium supply from alternative sources. Lepidico is currently building a L-Max® Pilot Plant using small scale industrial equipment that is on schedule for commissioning in April 2019. The Company is also conducting a Feasibility Study for its larger Phase 1 L-Max® Plant Project, targeting commissioning in late 2020. Feed to both the Pilot Plant and Phase 1 Plant is planned to be sourced from the Alvarrões Lepidolite Mine in Portugal under an ore access agreement with owner-operator Mota Ceramic Solutions. 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).

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.

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.

The information in this report that relates to Mineral Resources is based on information compiled by Mr Dean Carville, a full-time employee of AMC Consultants Pty Ltd. Mr Carville is a Member of the Australasian Institute of Mining and Metallurgy and 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 Carville consents to the inclusion in this report of information compiled by him in the form and context in which it appears.

#### **Forward-looking Statements**

All statements other than statements of historical fact included in this release including, without limitation, statements regarding future plans and objectives of Lepidico, are forward-looking statements. Forward-looking statements can be identified by words such as "anticipate", "believe", "could", "estimate", "expect", "future", "intend", "may", "opportunity", "plan", "potential", "project", "seek", "will" and other similar words that involve risks and uncertainties. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that are expected to take place. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, its directors and management of Lepidico that could cause Lepidico's actual results to differ materially from the results expressed or anticipated in these statements.

The Company cannot and does not give any assurance that the results, performance, commercial negotiations or achievements expressed or implied by the forward-looking statements contained in this release will actually occur and investors are cautioned not to place any reliance on these forward-looking statements. Lepidico does not undertake to update or revise forward-looking statements, or to publish prospective financial information in the future, regardless of whether new information, future events or any other factors affect the information contained in this release, except where required by applicable law and stock exchange listing requirements.