210% increase in contained lithium at Alvarrões

- **Global Mineral Resource estimate of 5.87 Mt @ 0.87% Li_2O in Indicated and Inferred categories, an increase of 210% in contained lithium versus previous estimate**
- **Pegmatite only Mineral Resource estimate of 3.9 Mt @ 1.16% Li_2O (Indicated and Inferred)**
- **Lithium pegmatites remain open in all directions**

Lepidico Ltd (ASX:LPD) ("Lepidico" or "Company") is pleased to announce an updated Mineral Resource estimate ("MRE") for the Alvarrões Lepidolite Project in Portugal. Global Mineral Resource tonnes have increased by 290% and contained lithium within the estimate has risen by approximately 210%, versus the December 2017 estimate. While the average grade has reduced as a result of the inclusion of mineralised halo material, the aggregate grade of the pegmatite mineralised units has risen modestly.

The MRE was completed by Snowden Mining Industry Consultants Pty Ltd ("Snowden") and is based on the infill and extensional resource diamond drilling program at Alvarrões completed in December 2018, which comprised 25 holes for 1,677 m of core (351 m PQ and 1326 m HQ)[1].

The Mineral Resource estimate for Alvarrões is classified as a combination of Indicated and Inferred Resources for a combined total of **5.87 Mt @ 0.87% Li_2O**, reported above a 0.2% Li_2O cut-off grade. The Mineral Resources have been classified and reported in accordance with the JORC Code (JORC Code Table 1 and summary appended). Mineralisation comprises lithium-bearing minerals within five pegmatite sills along with a 0.5 m mineralised halo within the granite host rock (Table 1).

Excluding the mineralised halo, the pegmatites contain Indicated and Inferred Resources of **3.9 Mt @ 1.16% Li_2O**, with the flat-lying Alvarrões pegmatite system remaining open in all directions.

Lepidico Managing Director, Joe Walsh said, "*This significant increase in the lithium Mineral Resource confirms Alvarrões as a considerable deposit of Li-mica mineralisation. Mining studies have commenced with the objective of delineating the project's first Ore Reserve estimate later this quarter, which will contemplate the expansion of the mine and development of a small scale mineral concentrator within the Alvarrões mining lease area. This work will feed into the current Feasibility Study for a 5,000 tpa Phase 1 Plant in Sudbury, Canada that employs Lepidico's proprietary technologies to produce lithium hydroxide plus by-products.*"

[1] ASX announcement 8 March 2019: Alvarrões assays indicate larger lithium Resource

Table 1. Alvarroes Mineral Resource estimate by category (0.20% Li_2O cut-off)

	Pegmatite	**Li_2O%**	**0.5 m Halo**	**Li_2O%**	**Total**
Indicated	**1.84 Mt**	**1.12**	0.76 Mt	0.26	**2.60 Mt @ 0.87% Li_2O**
Inferred	2.06 Mt	1.20	1.21 Mt	0.31	3.27 Mt @ 0.87% Li_2O
Total	**3.90 Mt**	**1.16**	1.97 Mt	0.30	**5.87 Mt @ 0.87% Li_2O**

The updated Mineral Resource includes an **Indicated Resource** of **2.60 Mt @ 0.87% Li_2O,** which will support a mining study for Alvarrões, with the results to be integrated with the Phase 1 Plant Project Feasibility Study. The MRE is derived from five flat-lying pegmatite sills, including the newly defined Sill P, namely Sills L, M, N, O (+O1) and P. The deepest sill, Sill P, sits on average 50 m below surface (ranging from 30 m to 80 m). The mineralised halo is derived from the host rock granite in which biotite has been altered to zinnwaldite through the pneumatolytic addition of lithium from the pegmatite melt.

Lithium mineralisation in the pegmatites (avg 1.16% Li_2O) is dominated by lepidolite, a lithium-rich mica, which comprises approximately 10% - 15% of the pegmatites. Minor amounts of amblygonite (0-5%; up to 10%), a lithium-phosphate mineral, are also present. The mineralisation within the 0.5 m halo (averaging 0.30% Li_2O) above and below the pegmatites, is dominantly zinnwaldite, another lithium-mica mineral. Detailed mineralogical quantification studies will be undertaken as part of the Phase 1 Plant Feasibility Study.

The three dominant lithium mineral species, lepidolite, zinnwaldite and amblygonite, are suited to processing by Lepidico's proprietary L-Max® process technology.

Further Information

For further information, please contact

Joe Walsh
Managing Director
Lepidico Ltd
+1 647 272 5347

Tom Dukovcic
Director Exploration
Lepidico Ltd
+61 (0)8 9363 7800

The information in this report that relates to the Alvarrões Mineral Resource estimate is based on information compiled by John Graindorge who is a Chartered Professional (Geology) and a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity to which 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". John Graindorge is a full-time employee of Snowden Mining Industry Consultants Pty Ltd and consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

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 chemicals. 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 carbonate supply from alternative sources. More recently Lepidico has added LOH-Max™ to its technology base, which produces lithium hydroxide from lithium sulphate without by-produce sodium sulphate. The Company is currently conducting a Feasibility Study for a 5,000 tonne per annum Phase 1 lithium chemical plant, targeting commercial production for late 2020. Work is currently being undertaken to evaluate the incorporation of LOH-Max™ into the Phase 1 Plant Project flow sheet. Feed to the 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 delineated an inaugural JORC Code-compliant Inferred Mineral Resource estimate at Alvarrões of 1.5 Mt grading 1.1% Li_2O (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 also has 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.

Level 6, 130 Stirling Street, Perth
WA, 6000, AUSTRALIA
Telephone +61 8 9213 9213
perth@snowdengroup.com
www.snowdengroup.com

Perth, Brisbane, Johannesburg

11 April 2019

Tom Dukovcic
Lepidico Ltd
23 Belmont Avenue
Belmont WA 6104

Via email: tom.dukovcic@lepidico.com

Dear Tom

RE: Alvarroes Lepidolite Deposit Mineral Resource Estimate, April 2019

1 Introduction

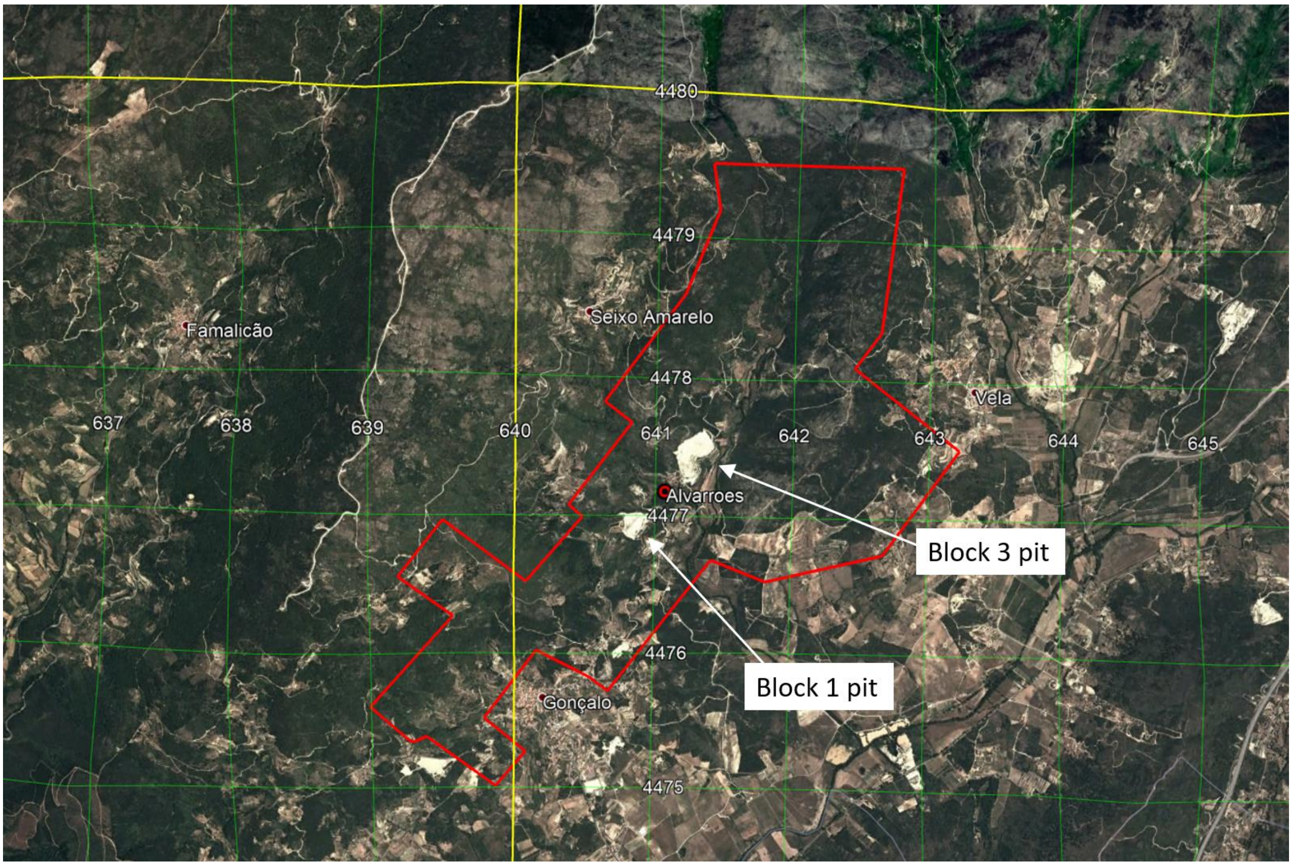
Snowden Mining Industry Consultants (Snowden) was retained by Lepidico Limited (Lepidico) to generate a Mineral Resource estimate (MRE) for the Alvarrões lithium (Li) deposit, following exploration drilling at the project in 2017 and 2018. A maiden MRE was completed by AMC Consultants Pty Ltd (AMC) in December 2017.

The Alvarrões Project is located approximately 12.5 km south-southeast of the regional centre of Guarda in north-eastern Portugal covering an area of approximately 7.5 km^2. Grupo Mota currently mines the Alvarrões deposit, producing approximately 20 kt per annum of pegmatite material, which is predominantly exploited for the feldspar and lepidolite content for use in the ceramics industry. The current mining operation is split into two pits – Block 1, which occurs in the southeast of the resource area and Block 3, which is across a small valley and to the northeast of Block 1 (Figure 1.1).

Snowden Principal Consultant, John Graindorge, visited the Alvarrões Project in December 2018, observing the local geology, open-pit mining and the general site layout, along with the diamond drilling (DD).

The following is a brief summary of the resource estimation work that was undertaken by Snowden during March and April 2019 for the Alvarrões Project. The resource model comprises six lepidolite-bearing pegmatite sills, encompassing a strike length of approximately 1 km.

Figure 1.1 Alvarroes tenement map



Grid lines are 1km UTM grid with truncated coordinates labelled

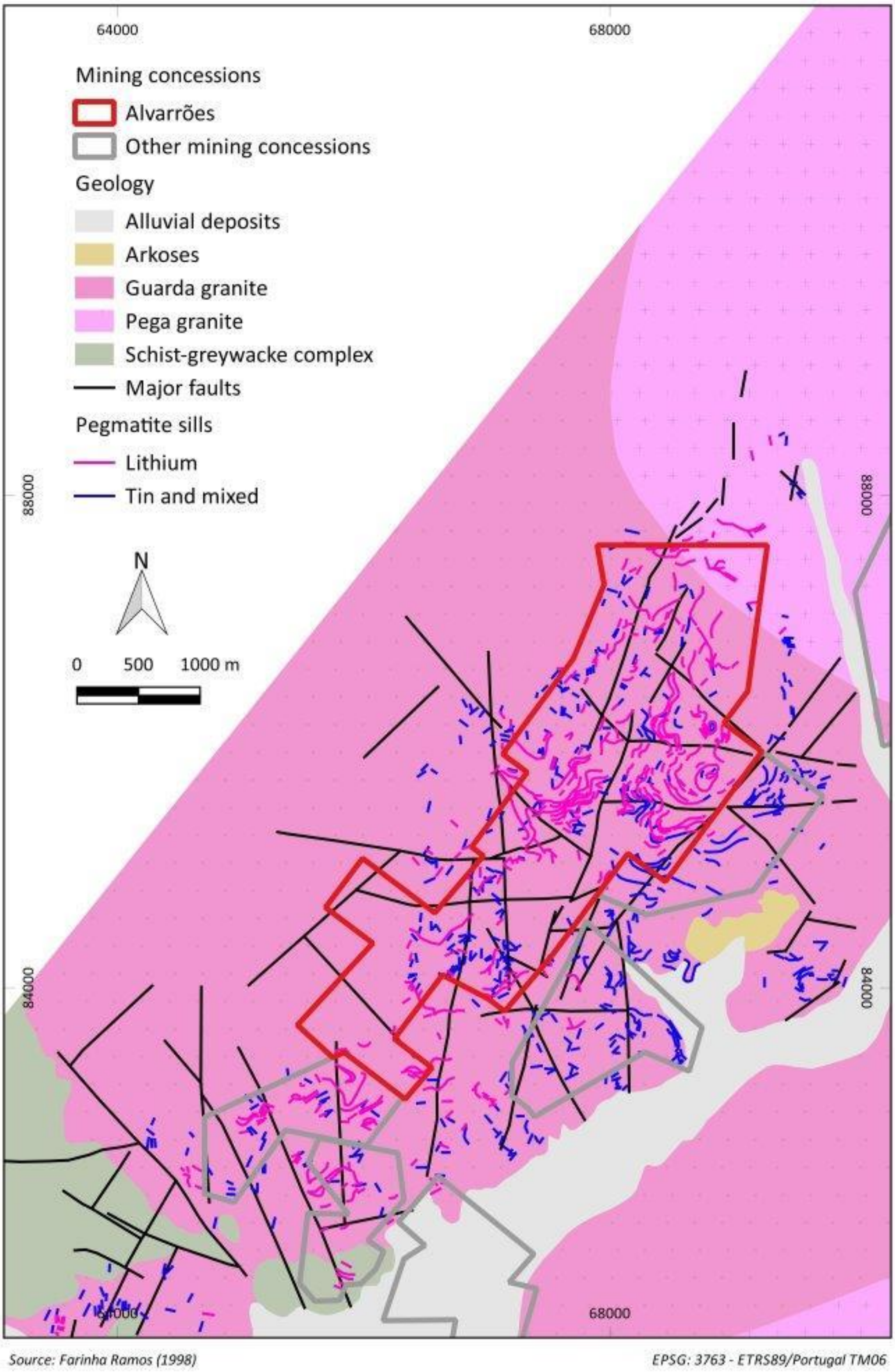
2 Geology and mineralisation

The Alvarrões Project is located within the Seixo Amarelo-Goncalo (SAG) rare element pegmatite district. The lithium-bearing pegmatite sills intrude into Hercynian S-Type granites, specifically the Guardia granite bordered to the north by the Pega granite and to the south by greywacke. The sills are mostly sub-horizontal, ranging from less than one metre to over 3.5 m in thickness. Figure 2.1 displays the local geology at Alvarrões and the interpreted faults in varying orientations, along with the mapped pegmatite outcrops. The impact on mineralisation continuity is likely minimal as exposures of the sills in the present open pits do not display significant displacements due to faulting.

There is a known presence of late-stage, steeply dipping dolerite dykes at Alvarrões which have not been individually interpreted as part of the modelling process. Drilling intersections are minimal and the impact on the volume of mineralisation is likely to be negligible.

The six pegmatite sills, from top to bottom, are labelled as “L”, “M”, “N”, “O”, “O1” and “P”. Figure 2.2 shows exposure of the pegmatite sills in the Block 3 pit, demonstrating the flat-lying orientation and the minimal off-set from minor faulting.

Figure 2.1 Local geology of the Alvarrões Project



Source: Lepidico

Figure 2.2 Pegmatite sills in the Block 3 pit, December 2018

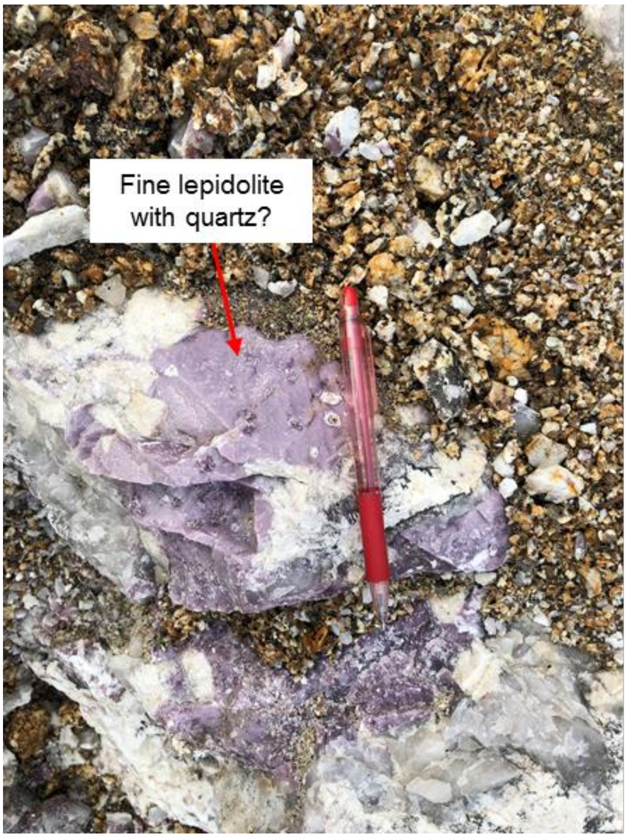
2.1 Mineralisation

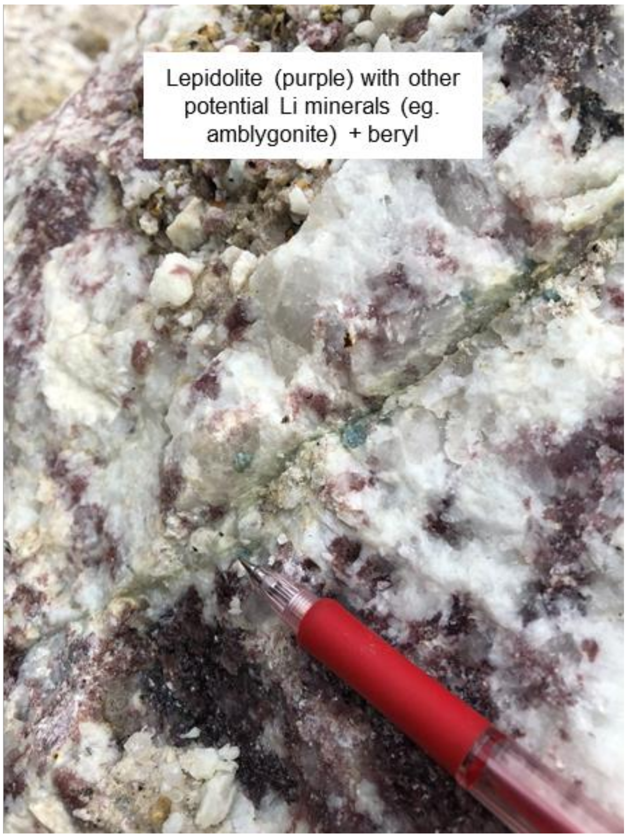
A pegmatitic and aplitic facies has been recognised at Alvarrões. The pegmatitic component is characterised by lepidolite (>500 µm), albite, Li-muscovite, quartz and K-feldspar as major minerals. Montebrasite, beryl, cassiterite and other minor minerals are also present. The aplitic component is very rich in fine-grained lepidolite and is accompanied by albite, montebrasite and quartz. In both the pegmatite and aplite, secondary phosphates from late alteration processes are also present. A contact metamorphic halo above and below most sills contains zinnwaldite resultant from the metasomatism and Li enrichment of biotite (Figure 2.3). The lepidolite is irregularly distributed within the pegmatite and potential zonal variations are difficult to delineate.

Figure 2.4 shows examples of varying lepidolite and mineralisation assemblages within the pegmatite. Further investigation of the Li-bearing mineralogy is recommended and Snowden recommends that Lepidico investigate the use of hyperspectral logging of the drillcore to provide quantitative mineralogical data which can be included in a geometallurgical resource model.

Figure 2.3 Pegmatite sill with zinnwaldite-bearing halo

Figure 2.4 Varying lepidolite grainsizes and mineralisation assemblages



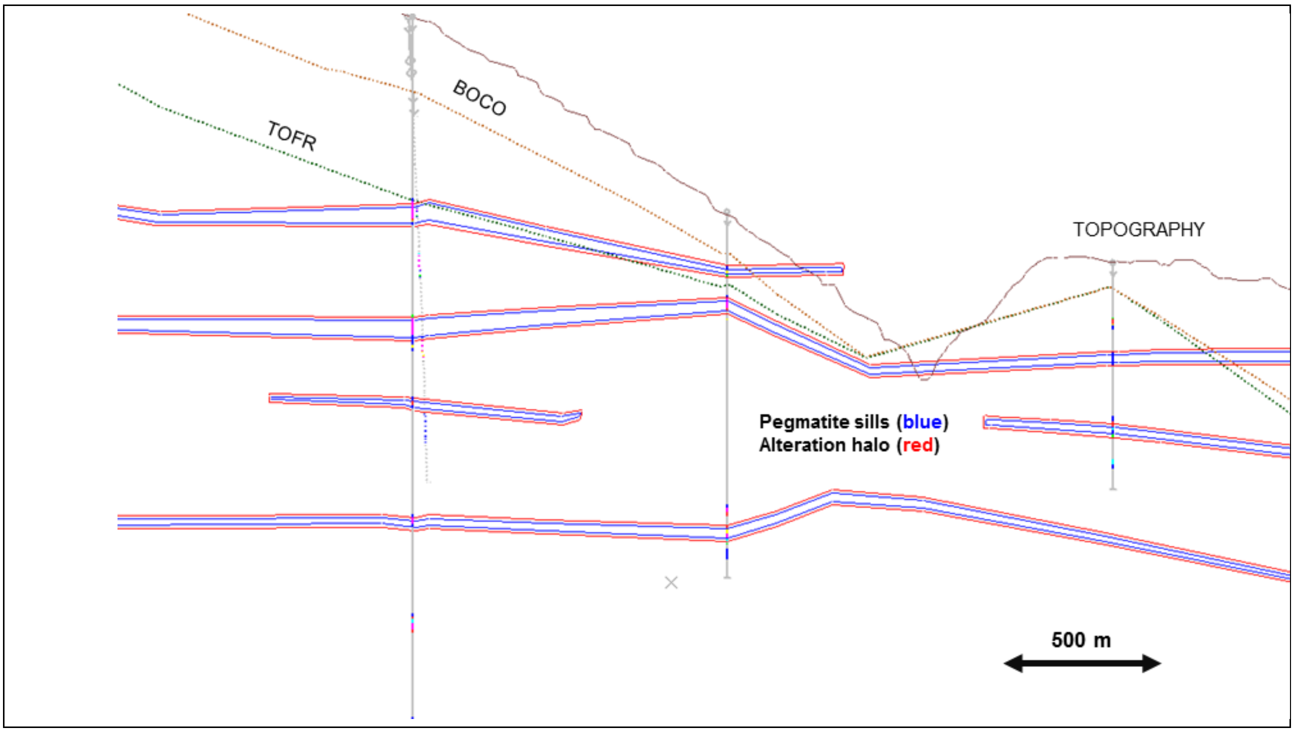


2.2 Geological interpretation

The pegmatite and alteration halo mineralisation and weathering surfaces were interpreted in section by Lepidico and subsequently reviewed by Snowden. The interpretation of the weathering surfaces was based largely on the geological logging. The alteration halo was interpreted as a nominal 0.5 m shell surrounding each individual pegmatite sill.

An example section is shown in Figure 2.5.

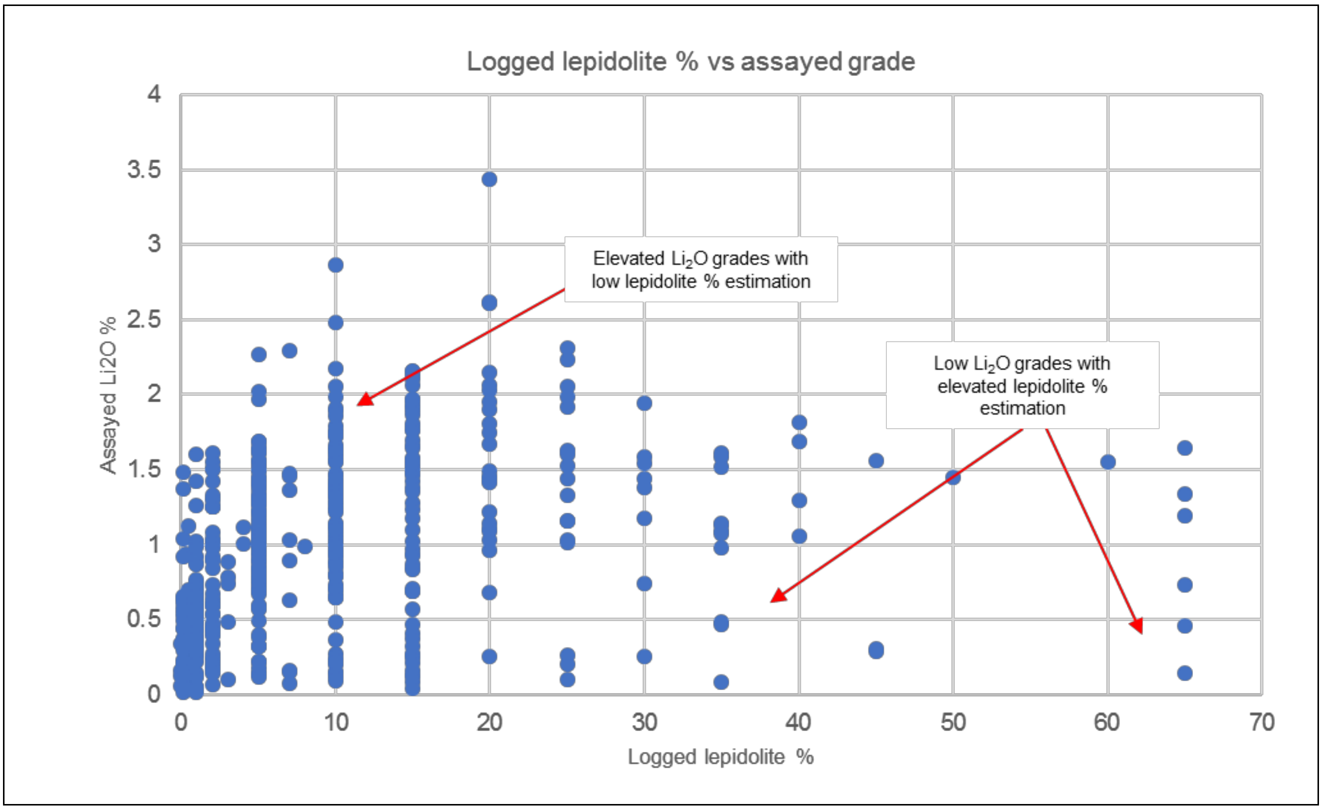
Figure 2.5 Example oblique section of pegmatite sills and halo – viewing looking NE



The pegmatite intrusions and halo are easily discernible during logging of the drillcore, therefore assaying was limited to the pegmatite sills along with 0.5 m either side. The percentage of the interpreted dominant Li mineral (lepidolite or zinnwaldite) was estimated visually and recorded as part of logging procedures. Analysis of the logged lepidolite content compared to the assayed Li_2O grade (Figure 2.6) shows significant differences between the visual logging and the assay grade.

In Snowden's opinion, the logged lepidolite content is not of sufficient quality to allow the estimation of lepidolite content within the resource model. It is recommended that Lepidico review the logging procedures with respect to estimating mineral content, with standardised mineral proportion charts utilised to ensure consistency with the logging. Re-logging the current drill core may be beneficial in quantifying the reliability of the use of estimated lepidolite as an indicator for Li_2O grade.

Figure 2.6 Li_2O% assays compared to visually estimated lepidolite content



3 Data

The data used to generate the grade estimates was supplied by Lepidico, and included the following information:

- Drillhole data in the form of comma delimited text files which were supplied on 8 March 2019. The supplied drillhole data contains collar, downhole surveys, lithological logging and assay information for all drilling completed in 2017 and 2018.
- Density measurements (Microsoft Excel spreadsheet) from diamond drill core from fourteen diamond core holes.
- Strings (DXF format) of the pegmatite sills and the associated halos and weathering surfaces.
- DXF format of a recently generated 2019 topographic surface.

The drillhole files provided by Lepidico were briefly checked by Snowden for errors; however, the data was largely accepted and used on an “as is” basis. No errors were identified.

All holes were drilled as PQ size diamond core from surface through to competent rock (4 to 30 m) and then HQ to end of hole. Holes were mostly 30 m to 60 m in depth with a maximum depth of 124.8 m. Snowden notes that all diamond core drilling utilised standard core barrels and that triple tube drilling was not used in the oxide zones. It is recommended that triple tube drilling be used for future diamond core drilling in the oxide zone to maximise recovery. The length weighted average core recovery for all diamond core drilling is 90%, while within the pegmatite, the core recovery averages 92% (median recovery is 97%).

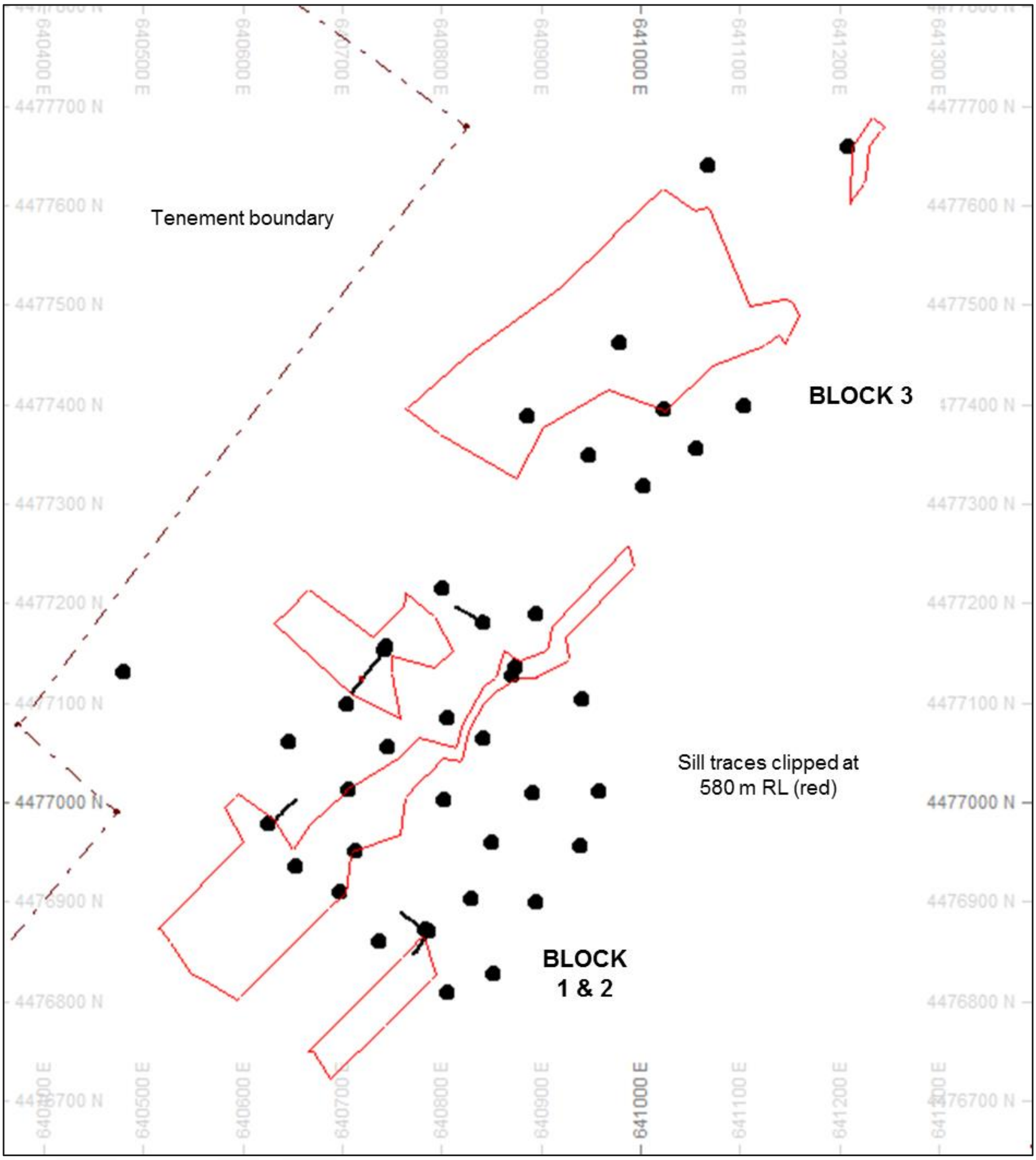
Diamond holes were drilled in the Block 1-2 and Block 3 areas at the existing mine on a nominal 75 m spacing. The drill hole spacing is variable as access to drilling locations is limited by steep surface topography, existing quarrying operations and roads/tracks.

The drilling is summarised in Table 3.1 and a collar location plan is provided in Figure 3.1.

Table 3.1 Alvarrões drilling summary, as at April 2018

Year	Hole type	No. of holes	Total length (m)	Comments
2017	DD	19	1245.0	Phase 1 - Blocks 1, 2 and 3
2018	DD	28	1503.2	Phase 2 - Blocks 1, 2 and 3
2018	RC	14	929.0	Phase 2 – Saint Giães prospect (700 m to east of Block 3; not used in MRE)
Total		**61**	**3,667.2**	

Figure 3.1 Drillhole collar location plan (as at March 2019), with pegmatite sills outlined at 580 mRL



4 Sampling and assaying methodology

4.1 Field sampling

Samples from the 2017 and 2018 diamond core drilling by Lepidico, which accounts for all of the drilled metres used for resource definition, were collected from selected pegmatite intervals and adjacent granitic wall rocks. Continuous half-core (HQ and/or PQ) samples were taken (cut using a saw) from mineralised sills thicker than 15 cm. Pegmatite intersections greater than 1 m were split into two or more samples, depending on the thickness. Where sampled pegmatites were thicker than 30 cm, a 0.5m sample from each of the hanging wall and foot wall was also taken.

4.2 Laboratory sample preparation and assaying

Half core samples for the 2017 and 2018 drilling were forwarded to the ALS laboratories in Seville, Spain for sample preparation. Analysis of Li_2O and a suite of 47 additional elements was completed at the ALS laboratory in Loughrea, Ireland using a four-acid digest with ICP-MS finish (method ME-MS61). Snowden understands that the Loughrea laboratory is ISO 17025 certified and the Seville laboratory is ISO 9001 certified.

4.2.1 Sample preparation

Samples were crushed to 70% passing 2 mm using a Boyd crusher and then split with a rotary splitter, if required, to produce a sample of approximately 1 kg for pulverising. The 1 kg splits were pulverised using an LM2 pulveriser to a nominal 85% passing 75 microns and sub-sampled using a 025 g aliquot for assaying. The pulps are sent to the ALS Loughrea laboratory in Ireland for analysis and the course rejects are stored at ALS in Seville.

4.2.2 Assaying

A four-acid digest with ICP-MS (inductively coupled plasma mass spectroscopy) finish was used for analysis. Assaying was undertaken for Li and a full suite of other elements, including K, Rb, Fe, P and Ca.

For the grade estimation, Li ppm values were converted to Li_2O % by multiplying by 2.153 and then dividing by 10,000.

5 Quality assurance and quality control

For the drilling conducted by Lepidico during 2017 and 2018, standards, certified blanks and field duplicates were inserted into the sample batches to monitor the analytical accuracy and precision of the sampling. QAQC samples were inserted for every drill hole intersecting mineralisation.

5.1 Standards

For the 2017 and 2018 drilling, three pulp standards (one low grade and two medium grade) were inserted by Lepidico into the sample batches, with the standards sourced from Geostats Pty Ltd. The standards used were GTA-02, GTA-03 and GTA-05, with a standard inserted for each hole, totalling 45 standard samples.

The results show acceptable analytical accuracy has been achieved, with twelve standard samples falling outside two standard deviations of the certified value and almost all results falling within three standard deviations. For the 2018 drilling, the assays of standard GTA-02 and GTA-03 are biased slightly high relative to the certified values, while results for standard GTA-05 are biased slightly low. Whilst the results overall are reasonable, Snowden recommends that Lepidico review the standard results regularly and ensure that the deviation does not increase.

5.2 Blanks

Lepidico sourced coarse blank material from a Felmica quarry in 2017; however, the material used was not a certified blank material with results from the 2017 drilling containing up to 180 ppm Li. The blanks material was changed in 2018 with volcanic slag sourced by Lepidico from the Azores Islands. Results from 2018 show much lower Li grades, with all values less than 20 ppm Li.

In Snowden's opinion, ideally a certified, coarse blank material should be used, however the material used for the 2018 drilling appears to be appropriate and reasonable.

5.3 Field duplicates

One field duplicate, comprising a quarter core sample, was collected for each drill hole within one of the pegmatite intersections. The duplicates range from approximately 1,000 ppm Li to 8,000 ppm Li.

The results of the field duplicates indicate an acceptable correlation for Li and all other elements, except where assays are near detection limit. The duplicates show some elevated variability, which is not surprising given the quarter core nature of the duplicates, along with the relatively coarse grainsize of the pegmatite and fact that the lepidolite tends to cluster somewhat (as opposed to being evenly disseminated).

6 Data analysis

The sample data was coded within the pegmatite and halo wireframes along with the oxidation surfaces. Compositing was completed within the geological domains based on a 1 m downhole compositing interval within the mineralised domains. Variable length compositing was used to ensure that no residuals were created. Within the halo, the composites are typically 0.5 m in length.

Variograms were generated to assess the spatial continuity of the various elements (Li, Cs, Fe, K, Na, P, Rb, Sn and Ta) and as inputs to the kriging algorithm used to interpolate grades. Snowden Supervisor software was used to generate and model the variograms for each element within each mineralised domain. The major direction (direction of maximum continuity) was oriented along strike with the intermediate (semi-major) direction oriented horizontally and the minor direction oriented orthogonal to the dip plane. The variograms for Li show nugget effects of approximately 16% to 25% of the total variance and ranges of 60 m to 80 m in the direction of maximum continuity (i.e. along strike), which essentially corresponds to the current drill spacing.

No top-cuts were used for the pegmatite sill domains. A top cut of 55 ppm Ta was applied for the halo mineralisation to minimise the impact of high-grade outliers on the local block estimates. No other top-cuts were required for the mineralised domains.

7 Bulk density

Bulk density measurements were completed onsite (at the core shed) by Lepidico in 2017. Measurements were collected using the Archimedes principle of weight in air vs weight in water. Lepidico indicated that wax-coating was not used for any samples. Whilst the fresh samples are likely to have negligible porosity (which means that wax-coating is not necessary), in Snowden's opinion the oxide samples should in-future be wax-coated to ensure that the density includes the porosity and is not biased high. A total of 104 samples were measured, of which 31 measurements were made in the pegmatite.

Densities measured within the pegmatite are relatively consistent, varying from 2.30 t/m^3 to 2.61 t/m^3. Based on the limited number of bulk density samples, the average for most pegmatite mineralisation is around 2.5 t/m^3. Whilst oxidation appears to have minimal impact on the density of the pegmatite (Figure 7.1), Snowden notes that no wax-coating was used for oxide samples which may result is density estimates being biased high for the oxidised material. Slight variations are shown for average bulk density when analysed by sill. Snowden applied default bulk densities to the block model based on the sill, as per Table 7.1.

Figure 7.1 Density vs downhole depth

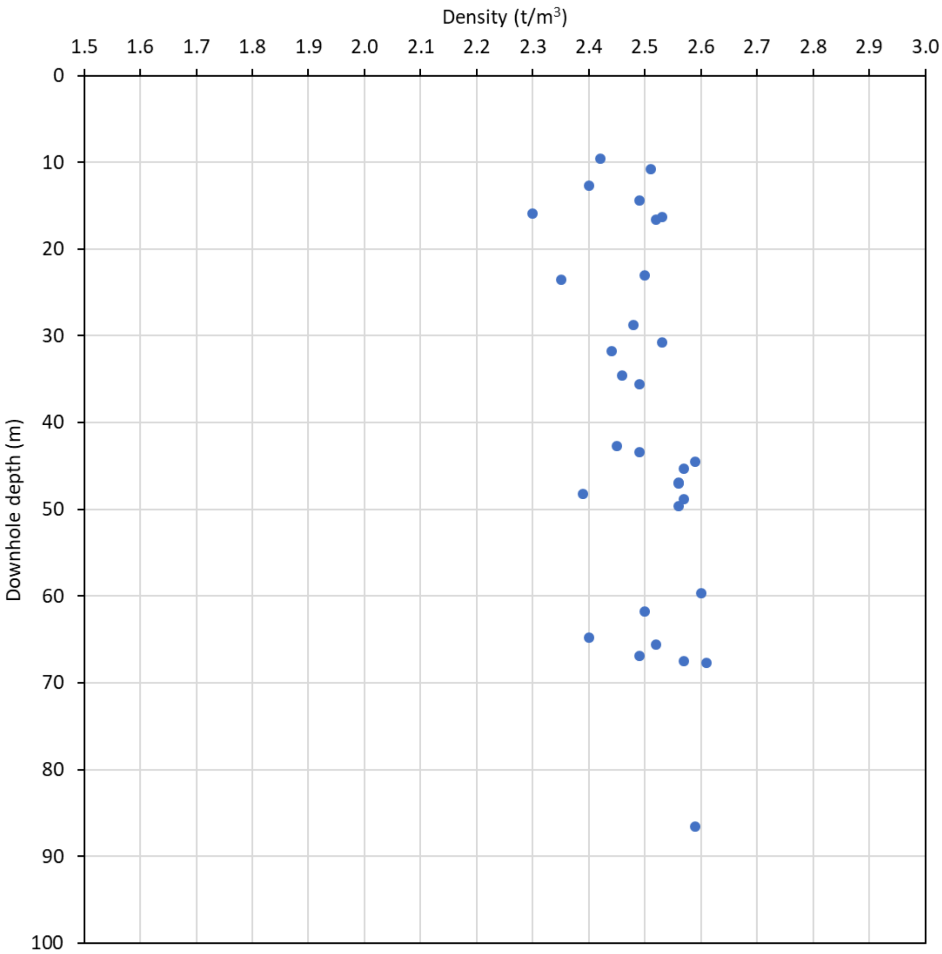


Table 7.1 Default bulk density values applied to model

Sill	Bulk density (t/m^3)
L	2.44
M	2.51
N	2.49
O	2.54
O1	2.54
P	2.50

8 Block model and grade estimation

A block model was constructed based on a parent block size of 50 mE by 25 mN by 2 mRL. A minimum sub-block size of 12.5 mE by 6.25 mN by 0.5 mRL was used to ensure adequate volume resolution. The parent block size is based on the nominal drillhole spacing along with consideration of the geometry of the mineralisation and the results of the grade continuity analysis. The block model was coded with the pegmatite sills and halo, mineralisation type and oxidation state. Waste dumps or mine fill identified by progressive topographic surfaces were coded as fill. Three topographic surfaces were supplied, with surfaces from 2019 and 2017 based on Lidar surveys and a pre-mining surface based on contour data from approximately 1980s. Mineralisation was constrained to in-situ rock only. These codes are summarised in Table 8.1.

Table 8.1 Block model codes

Field	Code	Description
SILL	1000	L
	2000	M
	3000	N
	4000	O
	5000	O1
	6000	P
OXIDE	10	Oxide
	20	Transitional
	30	Fresh
MINTYPE	100	Pegmatite (lepidolite)
	200	Halo (zinnwaldite)
FILL	0	In-situ rock
	1	Waste dump
	2	Mine fill

Snowden estimated Li, Cs, Fe, K, Na, P, Rb, Sn and Ta grades using ordinary block kriging (parent cell estimates) using Datamine Studio 3 software. The main strike of the pegmatites with a horizontal orientation was used for the search direction for each pegmatite, with each sill treated as a separate domain for estimation. The initial search ellipse of 120 m along strike by 175 m down dip by 2 m across strike was defined based on the results of the variography and assessment of the data coverage. A minimum of four and maximum of 18 composites was used for the initial search pass. Given the narrow nature of the sills, no limit was applied to the number of composites per drillhole. The second search pass utilised double the search ellipse radii (i.e. 240 m by 250 m by 4 m) with a minimum of two and a maximum of 18 composites. For the third search pass, the search ellipse radii were tripled (i.e. 360 m by 425 m by 6 m) and the minimum number of composites reduced to one. Over 85% of blocks were estimated during the first two search passes. Blocks not estimated after the third search pass were assigned the mean grade of the domain.

9 Model validation

The block grade estimates were validated using:

- Visual comparison of block grade estimates and the input drillhole composites
- Global comparison of the average composite (naïve and de-clustered) and estimated block grades
- Moving window averages comparing the mean block grades to the composites.

The conclusions from the model validation work are as follows:

- Visual comparison of the model grades and the corresponding drillhole grades shows a good correlation and trends observed in the drilling are honoured in the block estimates
- A comparison of the global drillhole mean grades with the mean grade of the block model estimate (for each domain) shows that the difference is typically below 5% for the majority of elements when analysed by mineralisation type, which is a good outcome
- With the exception of extrapolated regions with minimal informing composites, the grade trend plots show a reasonable correlation between the patterns in the block model grades compared with the drillhole grades.

10 Mineral Resource classification and reporting

The April 2019 Alvarrões Mineral Resource estimate was classified and reported in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2012).

The Mineral Resource has been classified as a combination of Indicated and Inferred Resources. The classification was developed based on an assessment of the following criteria:

- Nature and quality of the drilling and sampling methods
- Drill spacing and orientation
- Confidence in the understanding of the underlying geological and grade continuity
- Analysis of the QAQC data
- A review of the drillhole database and the company's sampling and logging protocols
- Confidence in the estimate of the mineralised volume
- The results of the model validation.

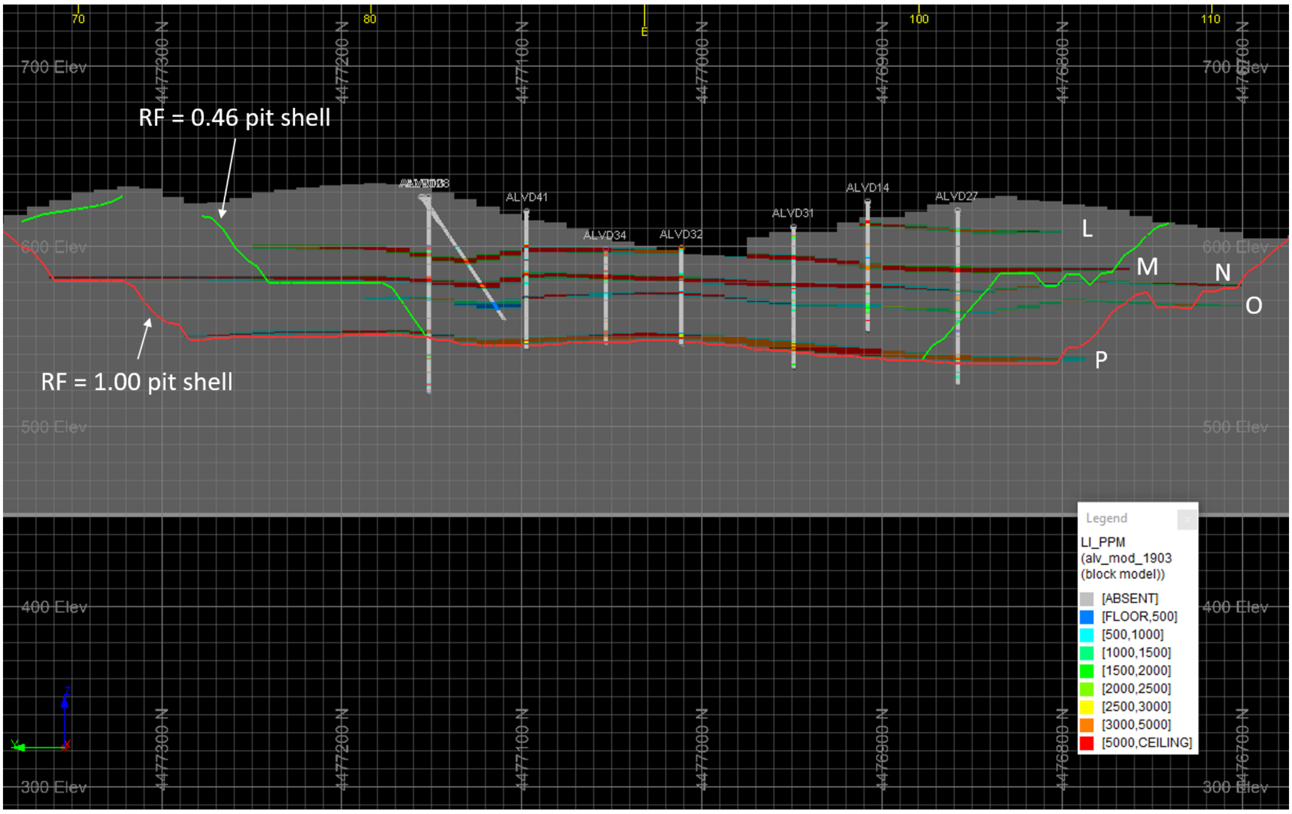
The resource classification scheme adopted by Snowden for the Alvarroes Mineral Resource estimate is outlined as follows:

- Where the drill spacing is approximately 70 m along strike x 50 m across strike (or less), the pegmatites and surrounding halo was classified as an Indicated Resource.
- All other areas are classified as Inferred Resources.

Preliminary pit optimisation was completed by Australian Mine Design and Development Pty Ltd (AMDAD) at the request of Lepidico. The optimisation used a total LiChem price (including provision for by-products from the L-Max® process) based on forecasting from Benchmark Mineral Intelligence (published in May 2018), and shows potential for open-pit mining for the vast majority of the currently modelled pegmatite sills.

Snowden notes that the optimisation parameters used are indicative estimates only to assess reasonable prospects for eventual economic extraction and does not imply that an Ore Reserve can be defined. An example cross-section showing the results of the optimisation is shown in Figure 10.1.

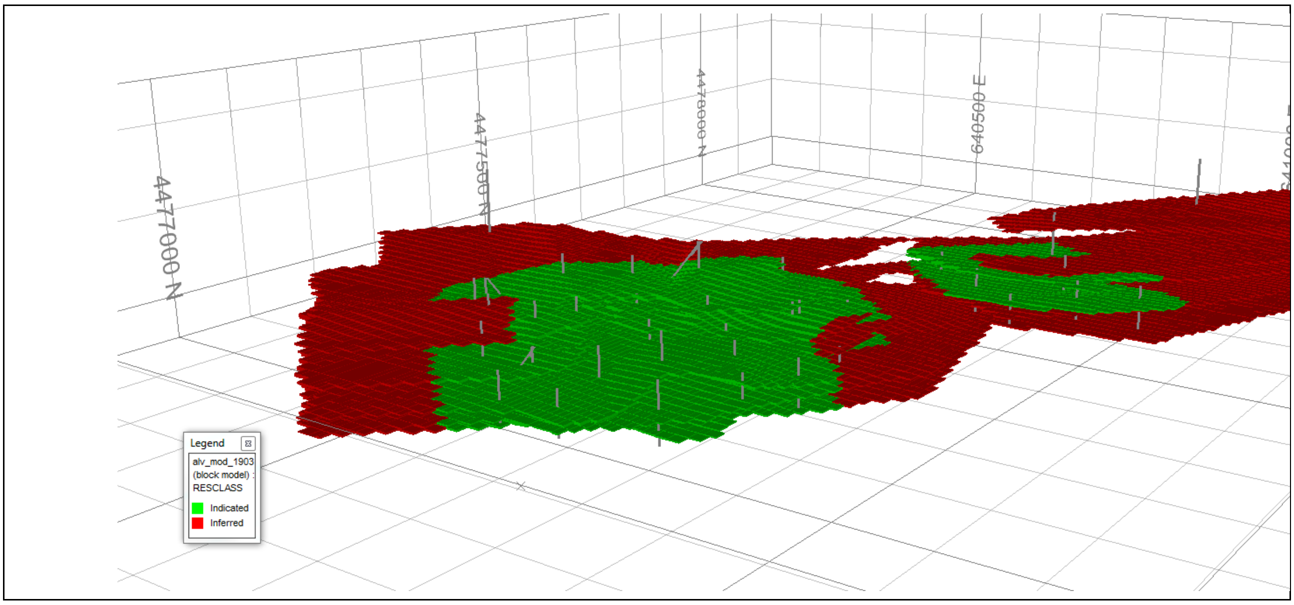
Figure 10.1 Example cross-section showing results of resource pit optimisation



RF = revenue factor

The resource classification scheme for the April 2019 Alvarrões Mineral Resource estimate is shown in Figure 10.2. Snowden's assessment of the JORC Table 1 assessment criteria is presented in Appendix B.

Figure 10.2 Mineral Resource classification scheme



Green = Indicated Resource; Red = Inferred Resource

10.1 Metallurgical considerations

Metallurgical testwork was completed by Lepidico in 2018[1] by Strategic Metallurgy Pty Ltd. Variability sample composites were selected over the deposit based on the 2017 Mineral Resource estimate and associated pit optimisations and designs. The mineral processing flowsheet developed utilises conventional crushing and grinding, desliming, froth flotation recovery of lithium bearing minerals and feldspar into separate concentrates which are dewatered for transport.

Lepidico indicated that the felspar concentrate will be sold locally. The current design proposes that process plant tailings be dewatered into a filter cake and comingled with mine waste in a single waste containment area.

The froth flotation process recovers the minerals amblygonite, lepidolite and zinnwaldite into a combined concentrate, which is dewatered to a filter cake, then bagged and containerised for export for downstream chemical process. The downstream process will utilise Lepidico's L-Max® leaching to produce lithium chemicals at battery quality, along with by-products of amorphous silica and sulphate of potash (fertiliser). Lepidico indicated that the L-Max® process has been extensively tested on Alvarroes concentrates and achieved recoveries of over 90%.

10.2 Mineral Resource statement

The total Mineral Resource for the Alvarrões deposit, reported above a 0.2% Li_2O cut-off grade, is estimated to be 5.9 million tonnes (Mt) grading at 0.87% Li_2O (Table 10.1). The Mineral Resource includes both the pegmatite sills and halo and has been depleted for mining to end February 2019.

The cut-off grade applied for the reporting is based on the pit optimisation carried out for Lepidico by AMDAD. At higher cut-offs the zinnwaldite halo, which has a global average grade of approximately 0.23% Li_2O, is increasingly excluded. Given the thickness of the sills, it is likely that the halo material will be mined with the sills and hence using the lower cut-off is, in Snowden's opinion justified. Snowden notes that for the pegmatite sills (i.e. excluding the halo), the sensitivity of the Mineral Resource to the reporting cut-off grade is minimal at cut-offs between 0.2% and 0.4% Li_2O.

Grade-tonnage reporting of the Alvarrões Mineral Resource at cut-off grades from 0% Li_2O up to 1% Li_2O, in steps of 0.05 is provided in Appendix A.

[1] Strategic Metallurgy, 2018. *L-Max® Phase 1 Variability Testwork Report*, unpublished internal report prepared by Strategic Metallurgy Pty Ltd for Lepidico Ltd, dated November 2018.

Table 10.1 Alvarrões Indicated and Inferred Lithium Mineral Resource as at April 2019, reported above 0.2 % Li_2O

Sill	Classification	Tonnes Mt	Li_2O %	Cs ppm	Fe %	K %	Na %	P ppm	Rb ppm	Sn ppm	Ta ppm
L	Inferred	0.28	0.69	212	1.17	3.25	2.69	2,801	1,268	49	25
	Total	**0.28**	**0.69**	**212**	**1.17**	**3.25**	**2.69**	**2,801**	**1,268**	**49**	**25**
M	Indicated	0.48	0.96	292	0.94	2.96	2.90	3,241	1,666	59	42
	Inferred	0.83	0.85	281	1.09	3.12	2.71	2,923	1,481	53	38
	Total	**1.31**	**0.89**	**285**	**1.04**	**3.06**	**2.78**	**3,039**	**1,549**	**55**	**40**
N	Indicated	0.84	0.98	291	0.80	2.82	2.86	3,093	1,661	57	42
	Inferred	0.79	1.06	323	0.79	2.83	2.95	3,583	1,736	59	42
	Total	**1.64**	**1.02**	**307**	**0.80**	**2.82**	**2.91**	**3,331**	**1,697**	**58**	**42**
O	Indicated	0.62	0.74	227	1.09	3.11	2.67	3,108	1,328	51	32
	Inferred	0.56	0.79	193	0.99	2.93	2.79	3,354	1,369	52	27
	Total	**1.18**	**0.77**	**211**	**1.04**	**3.02**	**2.72**	**3,225**	**1,348**	**52**	**30**
O1	Inferred	0.03	1.28	356	0.32	2.51	3.18	3,630	2,092	61	69
	Total	**0.03**	**1.28**	**356**	**0.32**	**2.51**	**3.18**	**3,630**	**2,092**	**61**	**69**
P	Indicated	0.66	0.80	178	0.85	3.12	2.98	3,194	1,448	53	33
	Inferred	0.77	0.76	175	0.96	2.99	2.91	3,984	1,315	49	28
	Total	**1.44**	**0.78**	**176**	**0.91**	**3.05**	**2.94**	**3,619**	**1,376**	**51**	**31**
Grand Total		**5.87**	**0.87**	**246**	**0.94**	**2.99**	**2.84**	**3,291**	**1,497**	**54**	**36**

Note: Small discrepancies may occur due to rounding

While exercising all reasonable due diligence in checking and confirming the data validity, Snowden has relied largely on the data as supplied by Lepidico to estimate and classify the Alvarrões Mineral Resource. As such, Snowden accepts responsibility for the resource modelling and classification while Lepidico has assumed responsibility for the accuracy and quality of the underlying drilling data.

Competent Person’s Statement – Mineral Resources

The information in this report that relates to the Alvarrões Mineral Resource estimate is based on information compiled by John Graindorge who is a Chartered Professional (Geology) and a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity to which 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”. John Graindorge is a full-time employee of Snowden Mining Industry Consultants Pty Ltd and consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

Kind Regards

[signed]

John Graindorge
Principal Consultant - Resources
Snowden Mining Industry Consultants Pty Ltd
Email: john.graindorge@snowdengroup.com
Ph:+61 8 9213 9213

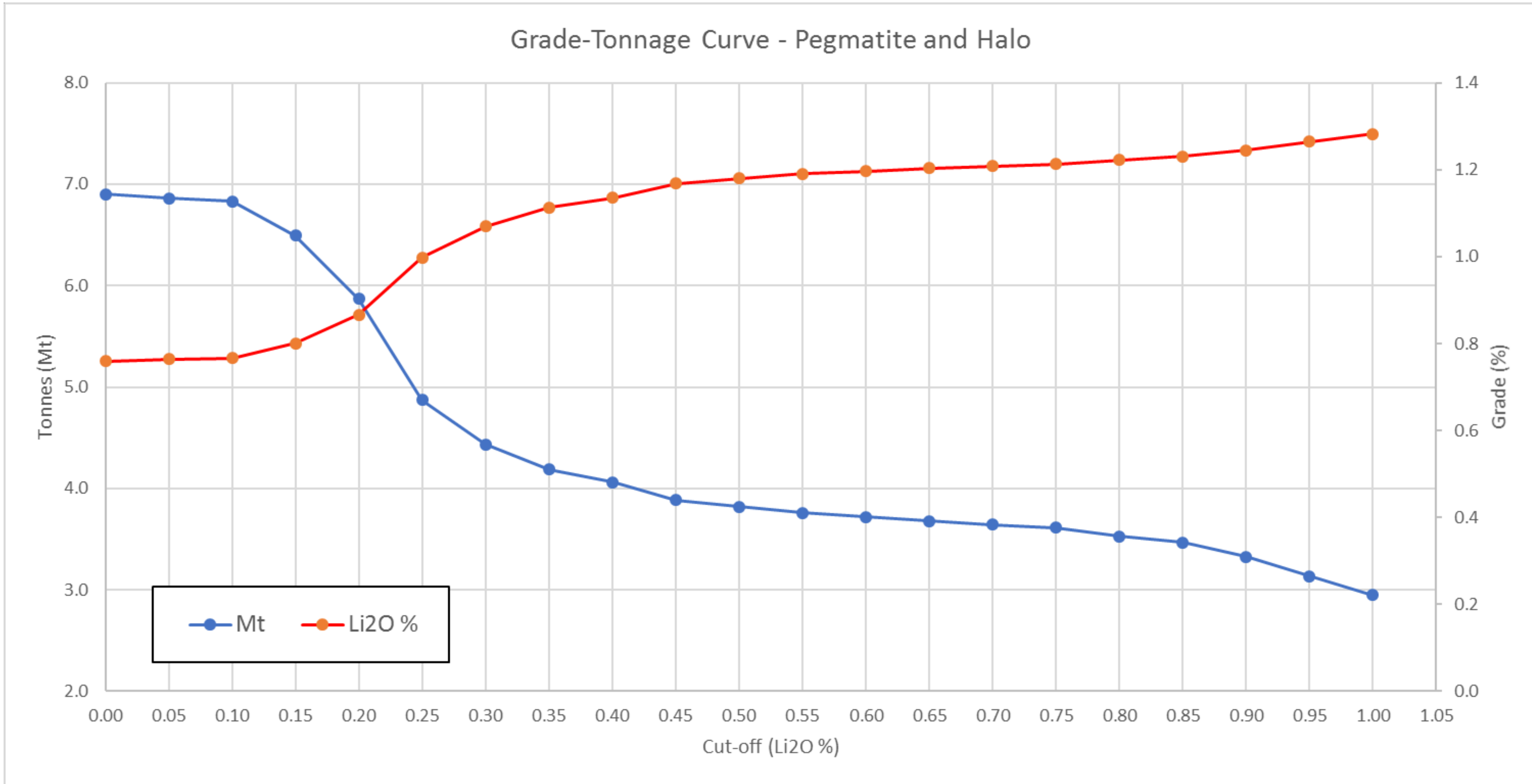
Appendix A Grade-tonnage reporting at various cut-offs

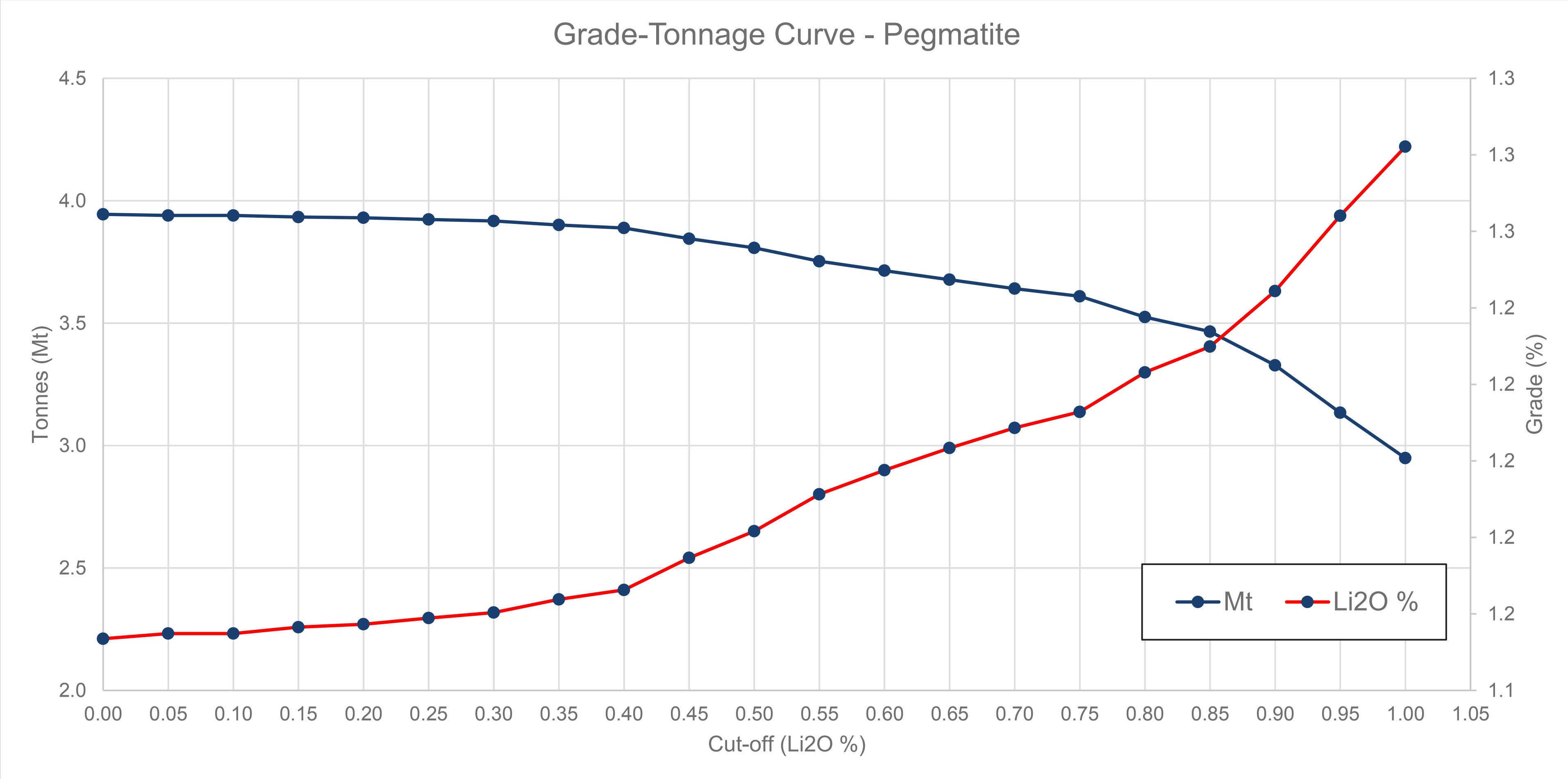
Alvarrões April 2019 – All Indicated and Inferred Resources – pegmatite and halo

Cut-off Li_2O %	Tonnes (Mt)	Li_2O %	Cs ppm	Fe %	K %	Na %	P ppm	Rb ppm	Sn ppm	Ta ppm
0.00	6.9	0.76	226	1.10	3.13	2.72	3,007	1,338	49	31
0.05	6.9	0.76	227	1.10	3.11	2.73	3,018	1,344	50	31
0.10	6.8	0.77	228	1.10	3.11	2.73	3,025	1,349	50	31
0.15	6.5	0.80	236	1.05	3.08	2.76	3,115	1,399	51	33
0.20	**5.9**	**0.87**	**246**	**0.94**	**2.99**	**2.84**	**3,291**	**1,497**	**54**	**36**
0.25	4.9	1.00	264	0.71	2.83	3.02	3,594	1,690	59	41
0.30	4.4	1.07	269	0.58	2.73	3.12	3,796	1,793	61	45
0.35	4.2	1.11	273	0.50	2.66	3.18	3,923	1,856	62	47
0.40	4.1	1.14	275	0.46	2.63	3.21	3,990	1,887	63	48
0.45	3.9	1.17	278	0.42	2.60	3.24	4,083	1,932	64	49
0.50	3.8	1.18	279	0.41	2.59	3.25	4,112	1,946	64	49
0.55	3.8	1.19	281	0.40	2.59	3.25	4,135	1,959	64	49
0.60	3.7	1.20	282	0.40	2.58	3.25	4,147	1,965	64	50
0.65	3.7	1.20	284	0.40	2.58	3.25	4,150	1,973	65	50
0.70	3.6	1.21	285	0.40	2.59	3.25	4,154	1,979	65	50
0.75	3.6	1.21	286	0.40	2.59	3.25	4,154	1,984	65	50
0.80	3.5	1.22	289	0.40	2.59	3.24	4,158	1,998	65	50
0.85	3.5	1.23	291	0.40	2.59	3.23	4,166	2,005	66	50
0.90	3.3	1.24	296	0.40	2.59	3.23	4,160	2,023	66	51
0.95	3.1	1.26	302	0.39	2.60	3.21	4,143	2,050	67	51
1.00	2.9	1.28	308	0.39	2.60	3.19	4,141	2,075	68	52

Alvarrões April 2019 – All Indicated and Inferred Resources – pegamatite only (halo excluded)

Cut-off Li_2O %	Tonnes (Mt)	Li_2O %	Cs ppm	Fe %	K %	Na %	P ppm	Rb ppm	Sn ppm	Ta ppm
0.00	3.9	1.15	273	0.41	2.59	3.26	4,067	1,918	63	49
0.05	3.9	1.15	274	0.41	2.59	3.26	4,071	1,920	63	49
0.10	3.9	1.15	274	0.41	2.59	3.26	4,071	1,920	63	49
0.15	3.9	1.16	274	0.41	2.59	3.26	4,075	1,921	63	49
0.20	3.9	1.16	274	0.41	2.59	3.26	4,077	1,922	63	49
0.25	3.9	1.16	275	0.41	2.59	3.26	4,081	1,923	63	49
0.30	3.9	1.16	275	0.41	2.59	3.26	4,085	1,925	63	49
0.35	3.9	1.16	275	0.41	2.59	3.26	4,093	1,929	64	49
0.40	3.9	1.17	276	0.40	2.59	3.26	4,099	1,931	64	49
0.45	3.8	1.17	278	0.40	2.59	3.25	4,108	1,941	64	49
0.50	3.8	1.18	279	0.40	2.59	3.25	4,120	1,949	64	49
0.55	3.8	1.19	281	0.40	2.59	3.25	4,140	1,960	64	50
0.60	3.7	1.20	282	0.40	2.59	3.25	4,151	1,967	64	50
0.65	3.7	1.20	284	0.40	2.59	3.25	4,152	1,974	65	50
0.70	3.6	1.21	285	0.40	2.59	3.25	4,155	1,980	65	50
0.75	3.6	1.21	286	0.40	2.59	3.25	4,155	1,985	65	50
0.80	3.5	1.22	289	0.40	2.59	3.24	4,160	1,998	65	50
0.85	3.5	1.23	291	0.40	2.59	3.23	4,166	2,005	66	50
0.90	3.3	1.24	296	0.40	2.59	3.23	4,160	2,023	66	51
0.95	3.1	1.26	302	0.39	2.60	3.21	4,143	2,050	67	51
1.00	2.9	1.28	308	0.39	2.60	3.19	4,141	2,075	68	52


Grade-Tonnage Curve - Pegmatite and Halo
Tonnes (Mt)
8.0
7.0
6.0
5.0
4.0
3.0
2.0
Grade (%)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
0.00 0.05 0.10 0.15 0.20 0.25 0.30 0.35 0.40 0.45 0.50 0.55 0.60 0.65 0.70 0.75 0.80 0.85 0.90 0.95 1.00 1.05
Cut-off (Li2O %)
Mt
Li2O %


Grade-Tonnage Curve - Pegmatite
Tonnes (Mt)
4.5
4.0
3.5
3.0
2.5
2.0
Grade (%)
1.3
1.3
1.3
1.2
1.2
1.2
1.2
1.2
1.1
0.00 0.05 0.10 0.15 0.20 0.25 0.30 0.35 0.40 0.45 0.50 0.55 0.60 0.65 0.70 0.75 0.80 0.85 0.90 0.95 1.00 1.05
Cut-off (Li2O %)
Mt
Li2O %

Appendix B JORC 2012 Table 1 assessment criteria

JORC Table 1 – Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.*	• Continuous half-core samples (cut by diamond saw) were taken from mineralised lepidolite-bearing pegmatites thicker than 15 cm. Pegmatites thicker than 1 m were split into two samples, or more if thicker than 2 m. Where sampled, pegmatites were thicker than 30 cm, a 0.5 m sample from each of the hanging wall and foot wall was also taken. • Samples were sent to ALS laboratories in Seville, Spain for sample preparation, with analysis for lithium and a suite of 47 additional elements through ALS laboratories in Loughrea, Ireland by method ME-MS61 (four acid digest and ICP-MS finish).
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).*	• All holes were drilled PQ core size (85 mm) from surface through to competent rock (4 m - 30 m) and then HQ (63.5 mm) to end of hole. All holes were drilled vertically into a series of essentially horizontal pegmatite sills intruding a granite host rock. Holes were mostly 30 m to 60 m in depth, with a maximum hole depth of 96.0 m. • Diamond drilling utilised standard core barrels. Triple-tube was not used in the oxide zones. • Core is not oriented as holes were drilled vertically.
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.* • *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.*	• Core recovery in the top oxidised zone (4 m - 30 m) was often poor through the granite host rock. Pegmatite sills are less prone to oxidation such that pegmatite recovery was generally good although sometimes difficult to assess true thickness in zones of oxidised granite. In the more competent rock core recovery was generally excellent. • The length weighted average core recovery for all diamond core drilling is 90%, while within the pegmatite, the core recovery averages 92% (median recovery is 97%) • PQ diameter core used in the oxide zone to ensure reasonable core recovery. Triple tube not used. • There is no known relationship between sample recovery and grade.

Criteria	JORC Code explanation	Commentary
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Detailed qualitative and semi-quantitative logs were taken, recording oxidation, rock type, mineralogy, veining, alteration and colour using a standardised logging system. • RQD was recorded in the initial diamond drilling program in 2017 and was not logged in 2018. • All core was photographed and logged.
Subsampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all subsampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Core was cut using a core saw. Half-core samples were taken, with half core retained. • Samples were sent to the ALS laboratory in Seville, Spain where the entire sample was crushed to 70% passing 2mm, then rotary split and pulverised to 85% passing 75 microns or better. • One duplicate was taken per hole. When taken, duplicates were quarter-core, with quarter core retained in the core tray. • The larger sample size provided by HQ core, vs NQ core, is considered more appropriate for the style of mineralisation and material being sampled, being irregular lepidolite mineralisation within coarse-grained pegmatite sills.
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.* • *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.* • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• Pulps samples were sent to the ALS laboratory in Loughrea, Ireland, with analysis of a multi-element suite (Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr) by four acid digest and ICP-MS finish (method: ME-MS61). All samples were assayed using a near-total dissolution method designed to measure the total amount of each element in the sample. • Each hole included one of three lithium standards (GTA-02, 1,715 ppm Li; GTA-03, 7,782 ppm Li; and GTA-05, 8,422 ppm Li), a quarter-core field duplicate, and a blank. The QAQC results are considered adequate to have confidence in the sampling used for resource estimation.

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• A minimum of two company geologists have verified significant intersections. • No twinned holes were drilled; however, the drilling intersections match exposure of the pegmatite sills in the current pits. • 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 'Access' database. • There has been no adjustment to assay data. For public reporting purposes, elemental Li values reported in ppm were converted to a percent (%) and then to the oxide Li_2O by using a multiplication factor of 2.153
Location of data points	• *Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Drill hole coordinates were determined by a licenced surveyor using differential GPS. • The grid system used is UTM WGS84 29N. • Elevation (RL) determined using differential GPS by licenced surveyor. • The topographic surface was completed in 2019 and considered to be reasonable. The surface from 2017 allowed for the delineation of waste dumps, mine fill and other mining activities.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• Drill holes were drilled on nominal 75 m sections and 50 m centres over the Block 1-2 and Block 3 areas at the Alvarrões Lepidolite Mine, with a further three diamond drill holes (AGD01-ADG03) drilled on a hillside to the east of Block 3 at locations as afforded by existing tracks • The drilling is clustered in some areas due to mining activity and the hilly topography. • The drill hole spacing is considered sufficient to enable a Mineral Resource estimate on the basis of demonstrated lateral continuity of the pegmatite sills. • No sample compositing was 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.* • *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.*	• All holes were drilled vertically into a series of flat-lying pegmatite sills and essentially perpendicular to the target. There are six holes which intersect the pegmatite at 50° to 60º • Drilling is oriented approximately orthogonal to the mineralisation and as such, the relationship between the drilling orientation and the orientation of the mineralisation is not considered to have introduced any sampling bias.

Criteria	JORC Code explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	• The samples were bagged by company personnel and transported by commercial courier to the ALS laboratory in Seville, Spain. All core trays are stored inside a secure brick warehouse. • Lepidico has no reason to believe that sample security poses a material risk to the integrity of the assay data.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Prior to sampling, the sampling technique for the 2018 drilling was reviewed by Snowden Mining Consultants whose recommendations were adopted on sampling. • As part of the Mineral Resource estimate, Snowden reviewed the documented practices employed by Lepidico with respect to the RC drilling, sampling, assaying and QAQC, and believes that the processes are appropriate and that the data is of a good quality and suitable for use in Mineral Resource estimation.

JORC (2012) Table 1 – 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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Alvarrões Lepidolite Project, located near Guarda in Portugal, currently comprises mining concession MNC000008, owned by Sociedade Mineira Carolinas Ltda, which is majority owned by Portuguese private company Mota Ceramic Solutions ("Mota"). Lepidico has signed a binding term sheet with Mota governing a commercial relationship between the parties that includes the definition of a Mineral Resource at Alvarrões. • Tenure is secure with no known impediments other than as detailed immediately above.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Exploration was conducted by Lepidico Ltd staff and local contract geologists. No prior exploration work by parties other than Lepidico is known.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• LCT-type lepidolite pegmatite mineralisation within the Seixo Amarelo-Gonaclo pegmatite system intruded into the Guarda granite, Guarda area, Portugal. • A pegmatitic and aplitic facies has been recognised at Alvarrões. The pegmatitic component is characterised by lepidolite (>500 µm), albite, Li-muscovite, quartz and K-feldspar as major minerals. Montebrasite, topaz, cassiterite and other minor minerals are also present. The aplitic component is rich in fine-grained lepidolite and is accompanied by albite, montebrasite and quartz. In both the pegmatite and aplite secondary phosphates from late alteration processes are also present. A contact metamorphic halo above and below most sills contains zinnwaldite resultant from the metasomatism and Li enrichment of biotite.
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 (Reduced Level – elevation above sea level in metres) of the drillhole collar* – *dip and azimuth of the hole* – *downhole length and interception depth* – *hole length.* • *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.*	• No exploration results being reported. • A diagram showing the location of drillhole collars is included in the accompanying release.

Criteria	JORC Code explanation	Commentary
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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No exploration results being reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *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 downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').*	• No exploration results being reported. • Mineralised true widths are approximately equal to downhole intercepts.
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.*	• Refer to figures in main summary.
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.*	• No exploration results being reported. • Reporting is only of relevant pegmatite intercepts as logged by the site geologist. Wall rocks outside the halo zone are not mineralised and are not of interest
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.*	• No exploration results being reported. • Current exposure of the pegmatites in the quarry walls supports the orientation and relative distribution of the pegmatite sills.
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).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Infill drilling, including both along strike and across strike, across the defined Mineral Resource to upgrade classification. .

JORC (2012) Table 1 – Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• The drillhole data is currently stored by Lepidico in an Access database. • Logging and sample sheets are paper-based. These are then entered into Excel spreadsheets and then imported into the database. • The data was validated briefly by Snowden during importation of the drillhole data for the resource estimate. No errors were identified during importation and desurveying.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Snowden Principal Consultant, John Graindorge, visited the site in December 2018, observing the pegmatite sills in the quarry walls and general site layout, along with RC drilling procedures.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The pegmatite and alteration halo mineralisation and weathering surfaces were interpreted in section by Lepidico and subsequently reviewed by Snowden. The interpretation of the weathering surfaces was based largely on the geological logging. The alteration halo was interpreted as a nominal 0.5 m shell surrounding each individual pegmatite sill. • The pegmatite intrusions and halo are easily discernible during logging, with sampling and assaying limited to where pegmatite was identified. • The orientation of the pegmatite sills and presence of the zinnwaldite halo are evident in exposures within the current pits. • Alternative interpretations are unlikely to have a material impact on the global resource volumes.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Alvarrões mineralisation is sub-horizontal and occurs over a total strike length of around 1.1 km, striking broadly southwest to northeast. • The sills are sub-horizontal, ranging from less than one metre to over 3.5 m in thickness. A 0.5 m thick halo is interpreted surrounding each sill.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic*	• Block model constructed using a parent block size of 50 mE by 25 mN by 2 mRL. The block size is based on half the nominal drillhole spacing along with an assessment of the grade continuity. • Li, Cs, Fe, K, Na, P, Rb, Sn and Ta grades were estimated using ordinary block kriging (parent cell estimates) using Datamine Studio 3 software. • The main strike of the pegmatites with a horizontal orientation was used for the search direction for each pegmatite. The initial search ellipse of 120 m along strike by 175 m down dip by 2 m across strike was defined based on the results of the variography and assessment of the data coverage. A minimum of four and maximum of 18 composites was used for the initial search pass, with

Criteria	JORC Code explanation	Commentary
	significance (e.g. sulphur for acid mine drainage characterisation). • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	no limits to number of composites per drillhole. The second search pass utilised double the search ellipse radii (i.e. 240 m by 250 m by 4 m) with a minimum of two and a maximum of 18 composites. For the third search pass, the search ellipse radii were tripled (i.e. 360 m by 425 m by 6 m) and the minimum number of composites reduced to one. • Over 85% of blocks were estimated during the first two search passes. Blocks not estimated after the third search pass were assigned the mean grade of the domain. • Li_2O % by multiplying Li ppm by 2.153 and dividing by 10,000 for reporting. • Grade estimates were validated against the input drillhole composites (globally and using grade trend plots) and show a reasonable comparison. • There is a mine currently in operation however there is no evidence of reconciliation.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• All tonnages have been estimated as dry tonnages.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The Mineral Resource for Alvarrões has been reported above a 0.2 % Li_2O cut-off grade, based on the assumption that it will likely be mined using open-pit methods. • The cut-off grade applied for the reporting is based on pit optimisation carried out for Lepidico by AMDAD. At higher cut-offs the zinnwaldite halo, which has a global average grade of approximately 0.23% Li_2O, is increasingly excluded. Given the thickness of the sills, it is likely that the halo material will be mined with the sills and hence using the lower cut-off is, in Snowden's opinion justified. Snowden notes that for the pegmatite sills (i.e. excluding the halo), the sensitivity of the Mineral Resource to the reporting cut-off grade is minimal at cut-offs between 0.2% and 0.4% Li_2O.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• Mining of the deposit is assumed to use conventional drill and blast open cut mining methods. • Pit optimisation was completed by AMDAD, using a total LiChem price based on price forecasts from Benchmark Mineral Intelligence from May 2018. The total LiChem price used includes provision for amorphous silica and potassium sulphate by-products from the L-Max® process. • It is assumed that the entire thickness of each sill will be mined, with mining dilution of up to 0.5 m above and below the pegmatite, comprising of the mineralised zinnwaldite halo.

Criteria	JORC Code explanation	Commentary
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• Metallurgical testwork was completed in 2018 with variability samples selected spatially across the resource area. The flotation response was consistent and a fixed lithium recovery is assumed. The concentrate produced comprises primarily lepidolite with some amblygonite and zinnwaldite. Lepidico have indicated that all three minerals are suitable for the L-Max® process. • Processing will involve conventional comminution followed by froth flotation to recover lithium bearing minerals into a mineral concentrate for downstream chemical processing using Lepidico's L-Max® method to recover lithium chemicals and by-products. The process has been tested extensively by Lepidico on Alvarroes material, with recoveries over 90% achieved.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• There are currently two small-scale open pit quarries with associated waste dumps and stockpiles. • Preliminary mine studies were completed in 2018 to determine the likely mining method, mining sequence and location of waste storage areas. The mine will use conventional open pit diesel equipment. Environmental base lining of the site has been completed and impact assessments have commenced.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vughs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Bulk density measurements were completed onsite (at the core shed) by Lepidico in 2017. A total of 104 samples were measured, of which 31 measurements were made in the pegmatite. Measurements were collected using the Archimedes principle of weight in air vs weight in water. Lepidico indicated that wax-coating was not used for any samples. The porosity of fresh pegmatite is visually negligible and wax-coating is not considered necessary for fresh material. • Wax-coating was not used for oxide samples and as such there is a risk that density estimates of the oxide zone may be biased slightly high. • Densities measured within the pegmatite are relatively consistent, varying from 2.30 t/m3 to 2.61 t/m3. Based on the limited number of bulk density samples, the average for most pegmatite mineralisation is around 2.5 t/m3. Slight variations are shown for average bulk density when analysed by sill. Snowden applied default bulk densities to the block model based on the sill, as below. Sill: L — Bulk density (t/m3): 2.44

Criteria	JORC Code explanation	Commentary
		M 2.51 N 2.49 O 2.54 O1 2.54 P 2.50
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The Mineral Resource has been classified as a combination of Indicated and Inferred Resources. The classification was developed based on an assessment of the following criteria: – Nature and quality of the drilling and sampling methods – Drill spacing and orientation – Confidence in the understanding of the underlying geological and grade continuity – Analysis of the QAQC data – A review of the drillhole database and the company's sampling and logging protocols – Confidence in the estimate of the mineralised volume – The results of the model validation. • The resource classification scheme adopted by Snowden for the Alvarroes Mineral Resource estimate is outlined as follows: – Where the drill spacing is approximately 70 m along strike x 50 m across strike (or less), the pegmatite and surrounding halo is classified as an Indicated Resource. – All other areas are classified as Inferred Resources. • The Mineral Resource classification appropriately reflects the view of the Competent Person.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The Mineral Resource estimate has been peer reviewed as part of Snowden's standard internal peer review process. • Snowden is not aware of any external reviews of the Alvarrões Resource estimate.
Discussion of relative accuracy/	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of*	• The Mineral Resource has been validated both globally and locally against the input composite data. Closer spaced drilling is required to improve the confidence of the short-range grade continuity.

Criteria	JORC Code explanation	Commentary
confidence	*statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• Whilst the small-scale mining validates the geological interpretation and visual lepidolite content, no production data is available for comparison with the Mineral Resource estimate at this stage.