

30 January 2023

Helikon 4 and Rubicon Stockpiles upgrade to Mineral Resources

- Updated Mineral Resource estimates completed for Helikon 4 and lepidolite-rich surface stockpiles at Rubicon, converting a further **1.58 Mt @ 0.54% Li₂O** into Indicated Resources
- Helikon 4 total Mineral Resources stand at **1.59 Mt @ 0.47% Li₂O**
- Helikon 4 shows a 30% increase in contained Li₂O since the previous resource estimate in 2018, with 82% of the Mineral Resources classified as Indicated
- Rubicon surface stockpiles upgraded to Indicated Resource category, totalling **0.27 Mt @ 0.86% Li₂O**
- Additional resource development drilling over Helikon 2 and Helikon 3 planned in the March quarter; site preparation underway

Lepidico Ltd (ASX:LPD) ("Lepidico" or "Company") is pleased to announce an update on its Mineral Resource development work at its 80% owned Karibib Project ("KP") in Namibia, which led to the upgrade of a further **1.58 Mt @ 0.54% Li₂O into Indicated Resources**, comprising 1.31 Mt @ 0.46% Li₂O at Helikon 4 and 0.27 Mt @ 0.86 % Li₂O from the Rubicon stockpiles (Tables 1 & 2).

Over the course of 2022 Lepidico completed a series of work programs at the Helikon 4 pegmatite and over the surface stockpiles at the historical Rubicon mine to enable the reclassification of Inferred Resources as Indicated Resources, which then allows estimation of Ore Reserves for inclusion in mine planning. These workstreams are well advanced and on track for reporting on this quarter.

Lepidico engaged Cube Consulting Pty Ltd ("Cube") to update the Mineral Resource estimate ("MRE") based on this work. The estimation work was reported in accordance with the requirements of the JORC Code (2012) and was completed between October 2022 and December 2022. The Mineral Resource Estimate Report prepared by Cube is dated 31 December 2022 and is an update to previous MRE work conducted in 2018 by the MSA Group of South Africa (Helikon 4) and in 2021 by Resource Evaluation Services (Rubicon stockpiles).

Table 1. Mineral Resource Estimate for Helikon 4 (0.15% Li₂O cut-off); effective date 31 December 2022

Category	Domain	Tonnes	Li ₂ O	Cs	K	Rb	Ta
		(Mt)	(%)	(ppm)	(%)	(ppm)	(ppm)
INDICATED	Main Pegmatite	1.06	0.35	145	1.31	1,469	42
	Lepidolite Zones	0.20	1.06	426	2.33	4,356	114
	HW Pegmatite	0.04	0.24	85	1.13	926	27
SUBTOTAL INDICATED		1.31	0.46	187	1.47	1,898	53
INFERRED	Main Pegmatite	0.20	0.37	128	1.51	1,570	35
	Lepidolite Zones	0.08	0.96	285	2.16	3,362	79
SUBTOTAL - INFERRED		0.28	0.54	174	1.70	2,087	48
TOTAL		1.59	0.47	184	1.51	1,932	52

Table 2. Rubicon Stockpiles Mineral Resource Estimate (0% Li₂O cut-off); effective date 31 December 2022

Stockpile	Category	Tonnes (Mt)	Li ₂ O (%)	Cs (ppm)	K (%)	Rb (ppm)	Ta (ppm)
Dump A (sorted reject; >60 mm)	IND	0.10	0.62	388	2.05	2,592	52
Dump B (screened undersize)	IND	0.07	0.90	491	2.19	2,484	61
Dumps C-T (screened undersize)	IND	0.08	0.96	371	2.18	2,548	66
Dumps 1-36 (sorted product; >60 mm)	IND	0.02	1.38	464	3.93	6,164	107
Total		0.27	0.86	415	2.29	2,863	63

SUMMARY OF HELIKON 4 AND RUBICON STOCKPILES MRE PARAMETERS

A summary of information material to the understanding of the MRE is provided below in compliance with the requirements of ASX listing rule 5.8.1.

HELIKON 4

Location, Geology and Mineralisation

Helikon 4 is part of the Helikon group of LCT-type lithium pegmatites, located in the northern portion of ML 204, that have been intruded into marbles and calc-silicate schists along two roughly east-west trending lines approximately 1 km apart. The Helikon 1 pegmatite occurs on the southern line. The Helikon 2 to Helikon 5 deposits occur on the northern line as part of a semi-continuous pegmatite over a 1,700 m strike length. Lithium mineralisation consists mainly of micas (lepidolite and lithium-bearing muscovite), with small amounts of amblygonite and petalite. The Helikon 4 deposit covers some 400 m of this strike. There is also a smaller undifferentiated pegmatite (referred to as the hangingwall or HW Pegmatite) immediately to the south of the main pegmatite body.

Geological Interpretation

Geological interpretation at Helikon 4 differentiated the pegmatite into a central but often poorly-developed, thin quartz core component, generally surrounded by a lepidolite-rich zone (Figure 1). In distinction to prior interpretation at the larger Rubicon and Helikon 1 deposits, domaining of the pegmatite was simplified into three zones, being, quartz core, lepidolite zone (including massive lepidolite and disseminated lepidolite) and undifferentiated pegmatite (which includes lower grade lithian muscovite).

Drilling

Resource interpretation is based on a total of 66 drill holes for 6,962 m of combined reverse circulation (“RC”) and diamond core drilling (Table 3 and Figure 2). Work completed by Lepidico consists of 37 RC holes (including 6 with NQ diamond tails) for 3,096 m of infill and extensional drilling.

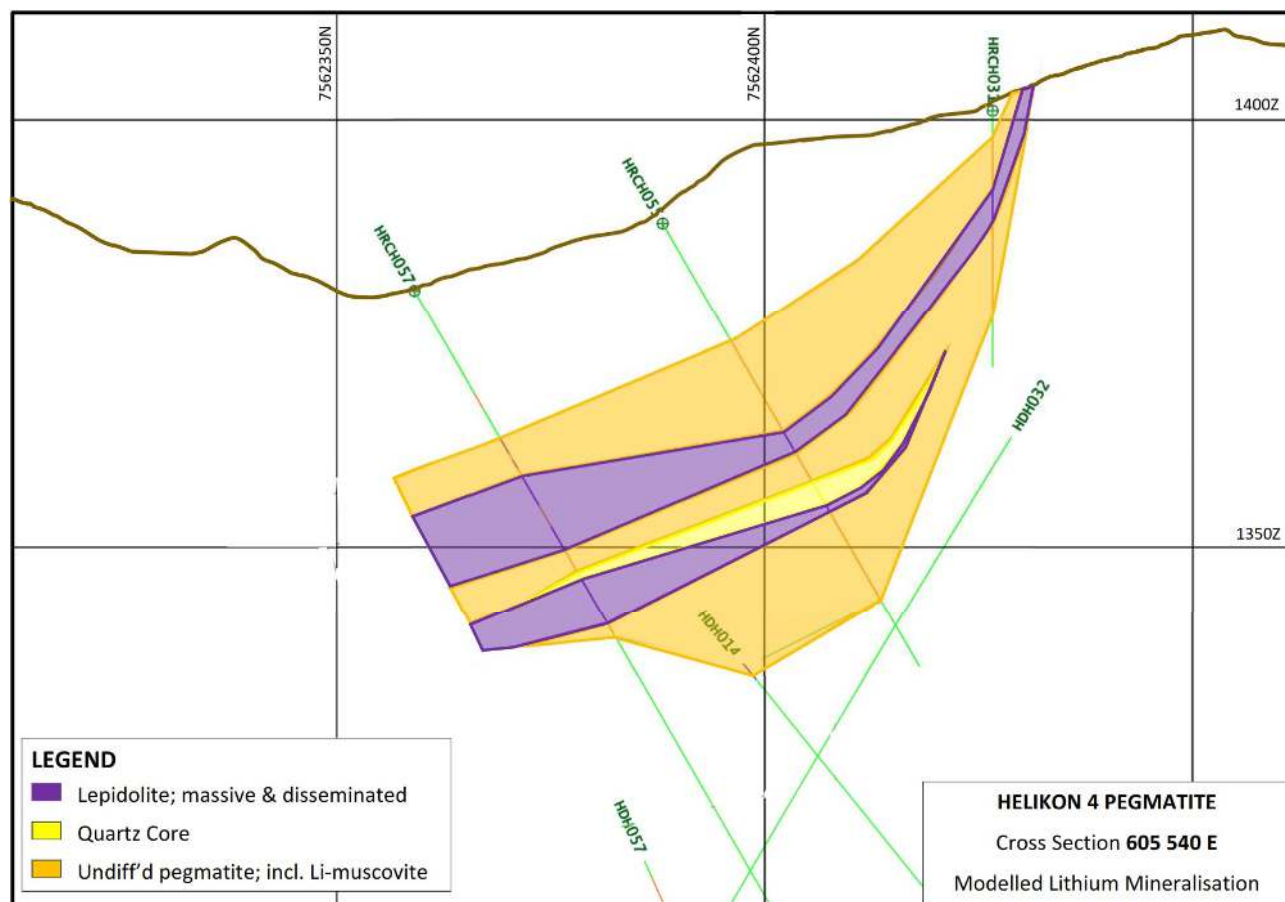


Figure 1. Helikon 4 cross-section at 605540E showing 20 m thick open-ended lepidolite mineralisation down dip.

Table 3. Summary listing of holes used for grade interpolation update at Helikon 4.

Drilling Date	Campaign	Company	Drill Type	No. Holes	Metres
2017		Desert Lion Energy	DD	15	1 856
2018			DD	14	2 010
2022		Lepidico	RC	31	2 361
			RCDD	6	735
			Total	66	6 962

Drill hole spacing is irregular due to constraints caused by topography and the presence of a historical pit. Section lines are generally spaced 15 m to 30 m apart, with most holes drilled from the southern hangingwall side and intersect the steep to moderately dipping pegmatite at a reasonable angle. For the 2017 and 2018 drilling downhole surveys were taken every 50 m for the deeper holes. The RC holes and diamond tails from 2022 were not surveyed.

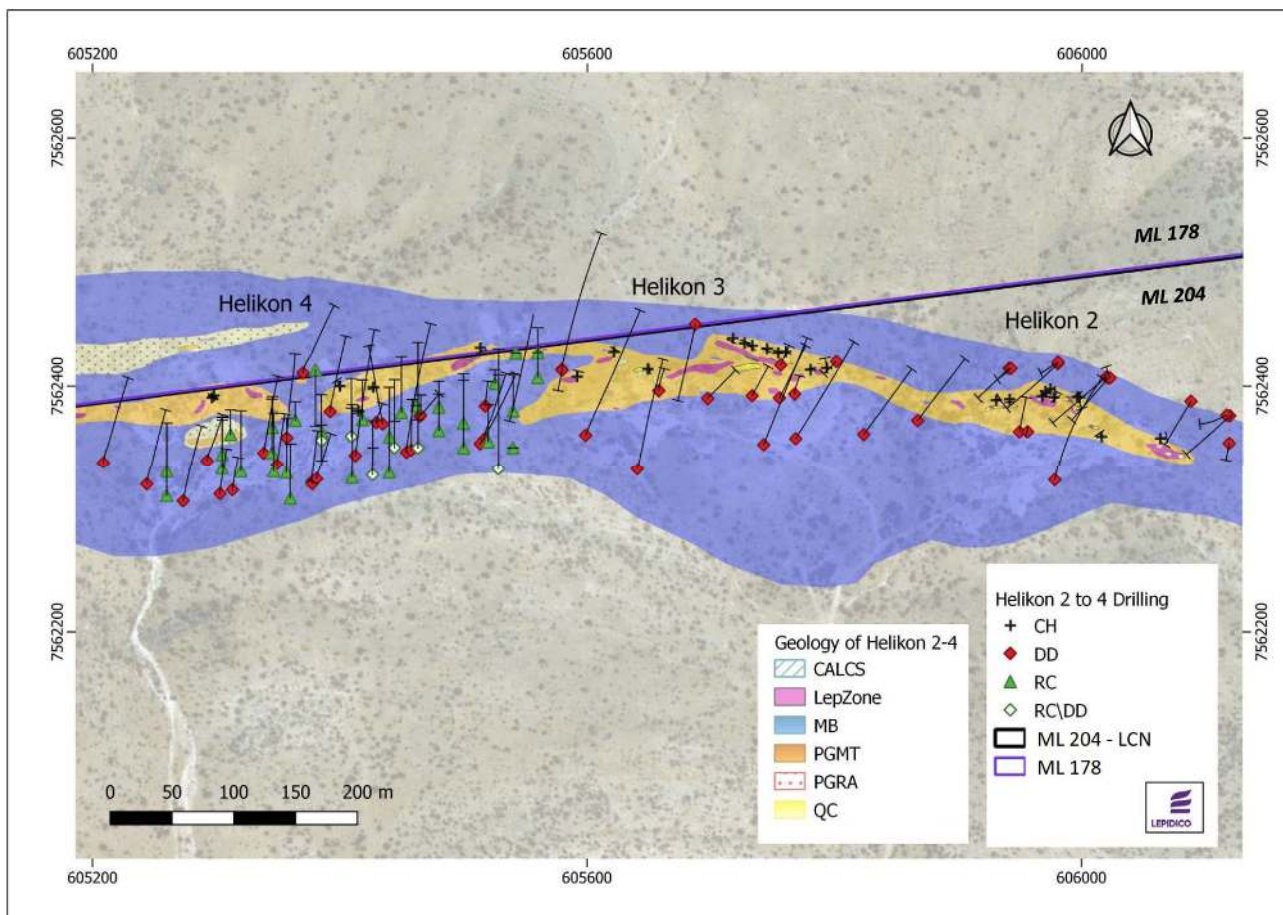


Figure 2. Drill hole location and type at Helikon 4. The Helikon 2 - Helikon 3 section (600 m strike) will be drilled in the March quarter. Site preparation is underway.

Sampling

Sampling of RC holes was at 1 m intervals through the pegmatite and into the immediate wall rock through a 75:25 riffle splitter. Diamond core samples were half-core, nominally at 1 m intervals and modified according to geological contacts through the pegmatite and the immediate wall rock. Samples were crushed (>70% passing -6 mm) and milled (85% passing 75 μ m) at the ALS Chemex sample preparation facility in Okahandja. An aliquot of the sample was submitted to ALS Chemex Johannesburg for analysis by method ME-MS61, a four-acid digest and ICP-MS finish for a suite of 48 elements (including Li, Cs, Rb, Ta, K).

Bulk Density

Bulk density was determined by the Archimedes method from 107 readings taken from the six diamond tails from the 2022 program and recorded to four decimal places. These were compared against 393 readings from previous drilling (recorded to only one decimal place) to inform a strategy for a single density assignment for pegmatite of 2.65 g/cm³.

Metallurgy

Lepidico has performed a range of testwork designed to prove its proprietary technology (L-Max[®] and LOH-Max[®]) for the commercial extraction of lithium and other cations from micas (and amblygonite), culminating in the release of a Definitive Feasibility Study in 2020. This level of detail provides sufficient confidence that the Helikon 4 deposit and the Rubicon stockpiles satisfy the requirement of reasonable prospects for eventual economic extraction.

Estimation Methodology

One metre downhole composites were extracted from a coded database for the main mineralised domains as inputs to the geostatistical and variographic assessment. The estimation was undertaken using Ordinary Kriging of the downhole composited drilling data into a three-dimensional block model, with an estimation block size of 10 mE × 5 mN × 5 mRL. Estimation was undertaken for a range of elements, including lithium, caesium, potassium, rubidium and tantalum.

The estimation was modified in those areas where significant petalite mineralisation was recognised from logging. Petalite contains abundant lithium, but that lithium is not extractable by the specific methods that Lepidico is looking to employ for this project. Based on categorising the logging data, an indicator variable for petalite was coded into the database, and Ordinary Kriging of the indicator undertaken in a separate block model. A threshold figure for the petalite indicator of 0.45 was used as a proxy for the approximately 6% of the logging data where petalite was a major or secondary mineral. Element grades in the main block model were reset to zero in those areas above the petalite indicator threshold, which represented around 6% of the pegmatite by volume. This method effectively minimised the potential for bias in estimating 'extractable lithium.'

The block model was further depleted by some small open pit and underground workings and has been classified and reported in accordance with the JORC Code (2012) guidelines. The final classification was based on multiple criteria, including the consideration of an optimised Whittle shell generated at a revenue factor equivalent to a lithium hydroxide monohydrate price of \$25,500/tonne (which is approximately 50% higher than the forecast long-term price of \$17,015/tonne being used by Lepidico to support their current mining studies, and substantially below the current spot price).

The classified mineral resources for Helikon 4 are shown in Table 4, reported above a lithium lower grade cut off of 0.15% Li₂O. Compared to the previous MRE (1.51 Mt @0.38% Li₂O, all Inferred), the updated MRE represents a 30% increase in contained Li₂O, with 82% classified in the Indicated category.

Table 4. Helikon 4 Mineral Resource Estimate (as of 31 December 2022; Cube Consulting)

Category	Domain	Tonnes (Mt)	Li ₂ O (%)	Cs (ppm)	K (%)	Rb (ppm)	Ta (ppm)
INDICATED	Main Pegmatite	1.06	0.35	145	1.31	1,469	42
	Lepidolite Zones	0.20	1.06	426	2.33	4,356	114
	HW Pegmatite	0.04	0.24	85	1.13	926	27
SUBTOTAL INDICATED		1.31	0.46	187	1.47	1,898	53
INFERRED	Main Pegmatite	0.20	0.37	128	1.51	1,570	35
	Lepidolite Zones	0.08	0.96	285	2.16	3,362	79
SUBTOTAL - INFERRED		0.28	0.54	174	1.70	2,087	48
TOTAL		1.59	0.47	184	1.51	1,932	52

Notes:

- Effective date of 31st December 2022.
- Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
- Mineral Resources for hard rock deposits are reported at a block cut-off grade of ≥ 0.15% Li₂O for all oxidation types.
- The assumed mining method is by open cut.
- The pit optimisation shell used to inform the depth to report the Mineral Resource is based on:
 - Product prices of \$25,500/tonne of lithium hydroxide monohydrate (LiOH.H₂O)
 - Wall slope angles of 45° for all weathering types
 - Mining cost of \$5.29/tonne for ore and \$3.51/tonne for waste

- Overall Processing costs of \$25.01/tonne
- Recovery to initial concentrate of 75%-85%
- Royalties of 2% on concentrate production
- \$8.07/tonne General and Administration
- Bulk densities of 2.65 g.cm⁻³ (all Pegmatite phases) and 2.80 g.cm⁻³ (Marble).
- Figures may not add up due to rounding.

RUBICON STOCKPILES

Location and Description

The surface stockpiles at Rubicon comprise numerous residual dumps from historical mining (mainly petalite) situated at or near the historical Rubicon mine. A prior owner attempted to beneficiate some of the dumps with an X-ray sorter in an attempt to produce higher-grade material for direct shipping export. Consequently, the Rubicon stockpiles comprise four distinct material types, namely,

- i) Unsorted in-situ historical dumps;
- ii) Screened undersize material (<60 mm);
- iii) Sorted (>60 mm) 'product' (upgraded lepidolite-rich); and
- iv) Sorted (>60 mm) 'waste' (residue from 'product' production)

The in-situ historical dumps were not evaluated as part of this exercise as the extreme variation in particle size precludes requisite confidence to classify this material in the Indicated category.

Sampling

Lepidico undertook an extensive program of sampling on the sorted oversize (> 60 mm) and unsorted undersize (< 60 mm) dumps. On the < 60 mm dumps, this consisted of cutting a total of 45 trenches to the base of the dumps with the aid of an excavator and collecting 406 vertical 'channel' samples through the dump profile. On the large > 60 mm dump (Dump A), 25 large cone-shaped pits were excavated to the base, with multiple bulk samples (180-200 kg) collected as a means to generate a reasonably representative sample for each pit. Samples were crushed (>70% passing -6 mm) and milled (85% passing 75 µm) at the ALS Chemex sample preparation facility in Okahandja. An aliquot of the sample was submitted to ALS Chemex Johannesburg for analysis by method ME-MS61, a four-acid digest and ICP-MS finish for a suite of 48 elements (including Li, Cs, Rb, Ta, K).

Bulk Density

A total of 406 samples were collected from the trench walls using a 25 cm x 25 cm x 25 cm metal box, which was weighed to calculate density. Variation was noted with lower values recorded in dumps with a greater particle size distribution. Based on statistical analysis, a single density of 1.5g/cm³ was assigned for all the Rubicon dumps.

Resource Classification

The results of the sampling exercise, including the application of better topographic controls on the stockpile volumes, significant density sampling, and comparisons with the assay results from previous programs, were considered sufficiently robust to reclassify these dumps (and by corollary some associated small Product Stockpiles) to Indicated Resources, as summarised in Table 5.

Table 5. Rubicon Stockpiles MRE Summary (0% Li₂O cut-off¹; Cube Consulting, 2022)

Stockpile	Category	Tonnes (Mt)	Li ₂ O (%)	Cs (ppm)	K (%)	Rb (ppm)	Ta (ppm)
Dump A (sorted reject; >60 mm)	IND	0.10	0.62	388	2.05	2,592	52
Dump B (screened undersize)	IND	0.07	0.90	491	2.19	2,484	61
Dumps C-T (screened undersize)	IND	0.08	0.96	371	2.18	2,548	66
Dumps 1-36 (sorted product; >60 mm)	IND	0.02	1.38	464	3.93	6,164	107
Total		0.27	0.86	415	2.29	2,863	63

Note ¹: a cut-off of 0% Li₂O is used on the assumption that all stockpile material will be processed.

CONSOLIDATED MINERAL RESOURCE STATEMENT

The Company's overall Karibib Project Mineral Resource statement as of 31 December 2022 is detailed in the following table.

Description	Category	Report	CP	Effective	Cutoff	Tonnes	Li ₂ O	Cs	K	Rb	Ta
				Date	Li ₂ O (%)	(Mt)	%	ppm	%	ppm	ppm
Rubicon Deposit	Measured	Snowden 2020	O'Toole	28-Jan-20	0.15	1.56	0.53	335	2.24	2,750	47
	Indicated	Snowden 2020	O'Toole	28-Jan-20	0.15	5.72	0.36	232	2.11	1,980	37
Helikon 1	Measured	Snowden 2020	O'Toole	28-Jan-20	0.15	0.64	0.65	520	1.90	2,483	61
	Indicated	Snowden 2020	O'Toole	28-Jan-20	0.15	0.94	0.50	531	1.81	2,213	74
	Inferred	Snowden 2020	O'Toole	28-Jan-20	0.15	0.17	0.70	1,100	2.18	2,906	150
Helikon 2	Inferred	MSA 2019	Whitley	18-Oct-18	0.20	0.22	0.56				180
Helikon 3	Inferred	MSA 2019	Whitley	18-Oct-18	0.20	0.29	0.48				75
Helikon 4	Indicated	Cube 2022	Bampton	31-Dec-22	0.15	1.31	0.46	187	1.47	1,898	53
	Inferred	Cube 2022	Bampton	31-Dec-22	0.15	0.28	0.54	174	1.70	2,087	48
Helikon 5	Inferred	MSA 2019	Whitley	18-Oct-18	0.20	0.18	0.31				44
SUB-TOTAL HARD ROCK						11.31	0.44				51
Rubicon - A Dump (Reject Oversize)	Indicated	Cube 2022	Bampton	31-Dec-22	0.00	0.10	0.62	388	2.05	2,592	52
Rubicon - B Dump (Reject Undersize)	Indicated	Cube 2022	Bampton	31-Dec-22	0.00	0.07	0.90	462	2.19	2,484	61
Rubicon - C-T Dumps	Indicated	Cube 2022	Bampton	31-Dec-22	0.00	0.08	0.96	395	2.18	2,549	66
Rubicon - 001-036 (Product Stockpiles)	Indicated	Cube 2022	Bampton	31-Dec-22	0.00	0.02	1.38	464	3.93	6,164	107
Rubicon - RD001-004 (Historical Dumps)	Inferred	RES 2021	Godfrey	10-Mar-21	0.00	0.05	0.68				
Helikon 1 Dumps	Inferred	RES 2021	Godfrey	21-Feb-21	0.00	0.11	0.54	502	1.24	1,932	102
Helikon 2 Dumps	Inferred	RES 2021	Godfrey	21-Feb-21	0.00	0.02	1.01	599		3,221	78
Helikon 3 Dumps	Inferred	RES 2021	Godfrey	21-Feb-21	0.00	0.02	0.83	627		3,338	277
SUB-TOTAL STOCKPILES						0.47	0.77				
Rubicon - Tailings	Indicated	RES 2021	Godfrey	29-Jan-21	0.00	0.07	0.99	538		4,155	60
KARIBIB PROJECT TOTAL						11.85	0.46				

Notes:

- Multiple effective dates, reflecting work on various hard rock deposits and stockpiles over a four year period by multiple consulting groups.
- Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.
- Mineral Resources for hard rock deposits are reported at a block cut-off grade of $\geq 0.15\%$ or 0.20% Li₂O for all oxidation types.
- Mineral Resources for stockpiles, dumps and tailings are reported at a 0.0% Li₂O cut-off grade.
- The analysis suite across the deposits and stockpiles was inconsistent and hence average element reporting across all deposits and stockpiles cannot be completed.
- Different components of the Karibib Project have been reported at different times through different consultancy groups, using different Competent Persons.
- The assumed mining method is by open cut.
- Cost, bulk density and recovery inputs used to report the Mineral Resource have varied over time, and relate to the different effective dates for those individual resources.
- Figures may not add up due to rounding.

This Announcement has been authorised for release to the market by the Managing Director.

Further Information

For further information, please contact

Joe Walsh
Managing Director
Lepidico Ltd
Tel: +1 647 272 5347

David Waterhouse
Waterhouse IR
Tel: +61(0)3 9670 5008

Email: info@lepidico.com
Website: www.lepidico.com

About Lepidico Ltd

Lepidico is an innovative developer of sustainable lithium hydroxide and other critical minerals, and a global leader in lithium mica processing.

With a tech-focused, ESG-led business model that is pilot-driven, our first lithium production – from far less contested mineral sources – is due in 2025. The Phase 1 Project will provide a meaningful contribution to decarbonisation of the world's alkali metals supply chains. We are also working to grow our business with our second project, Phase 2. Other businesses have already begun to licence our patent-protected L-Max® and LOH-Max® technologies providing an avenue for royalty revenues.

More information is available on our website: www.lepidico.com

Compliance Statement

The information in this report that relates to the Helikon 4 and Rubicon Stockpiles Mineral Resource estimates is based on information compiled by Matt Bampton of Cube Consulting Pty Ltd, who is a Member of the Australian Institute of Geoscientists, and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being 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. Bampton consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the Helikon 2, Helikon 3 and Helikon 5 Mineral Resource estimates is extracted from an ASX Announcement dated 16 July 2019 ("Drilling starts at the Karibib Lithium Project"). The Mineral Resource estimates were completed by Jeremy Whitley of the MSA Group (Pty) Ltd in accordance with the guidelines of the JORC Code (2012). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the Mineral Resource estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are represented have not been materially modified from the original market announcement.

The information in this report that relates to the Rubicon and Helikon 1 Mineral Resource estimates is extracted from an ASX Announcement dated 30 January 2020 ("Updated Mineral Resource Estimates for Helikon 1 and Rubicon"). The Mineral Resource estimates were completed by Vanessa O'Toole of Snowden Mining Consultants Pty Ltd in accordance with the guidelines of the JORC Code (2012). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the Mineral Resource estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are represented have not been materially modified from the original market announcement.

The information in this report that relates to the Mineral Resource estimates for the Rubicon Tailings and the surface stockpiles at Helikon 1, Helikon 2 and Helikon 3 is extracted from an ASX Announcement dated 12 March 2021 ("Karibib Mineral Resource Expanded"). The Mineral Resource estimates were completed by Stephen Godfrey of Resource

Evaluation Services in accordance with the guidelines of the JORC Code (2012). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the Mineral Resource estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are represented have not been materially modified from the original market announcement.

Previously Reported Results

Reference in this report to metallurgical studies is based on the Company's ASX announcement dated 28 May 2020 ("Definitive Feasibility Study Delivers Compelling Phase 1 Project Results") and 22 November 2022 ("Phase 1 Economics Updated & Improved"). Other than as disclosed in those announcements, the Company confirms it is not aware of any new metallurgical information or data that materially affect the information in those announcements.

Appendix 1 - Sections 1, 2 and 3 of JORC Code (2012) Table 1

JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> <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> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <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> 	<ul style="list-style-type: none"> For Helikon 4, the main sampling for the pegmatite was from diamond drilling (DD), drilled in 2017-18 by the predecessor company Desert Lion Energy. Infill Reverse Circulation (RC) drilling was undertaken in 2022 by Lepidico, using a 127 mm or 140 mm face sampling hammer; Six of these drill holes were extended as diamond tails Some channel samples were taken. These were used to assist in the geological model but were not used in the estimate. For both DD and RC, the entire width of the pegmatite was sampled, along with selected samples of the marble which it intrudes. Diamond drilling core samples were cut longitudinally in half. Intervals submitted for assay were determined according to geological boundaries or at nominal 1 m intervals. Minimum sample length was between 0.3 m and 0.5 m. The submitted half-core samples typically have a mass of between 1 kg and 4 kg. The samples collected from the RC drilling were split using a riffle splitter mounted under the cyclone at a 90:10 split to obtain two samples. The smaller subsample, of between 2 kg and 5 kg, was

Criteria	JORC Code explanation	Commentary
		<p>submitted for assay. A reference sample of each of the samples submitted was kept on site.</p> <ul style="list-style-type: none"> Sampling of the Rubicon Dumps in 2022 was from excavated trenches for the large stockpiles/dumps that contained <60 mm material ('undersize'). The trenches (at 20 m and 40 m spacing) were dug by an excavator down to the natural surface. Grab samples were generally taken as 1 m vertical channels every 10 m along the trench. Each sample weighed 3-5 kg. This sampling supplemented the previous sampling programs in 2020, where for the larger stockpiles/dumps samples were collected from small pits dug 0.15-0.55 m deep and spaced at a nominal 40 m × 40 m grid, and smaller dumps/stockpiles had representative grab samples collected from them. For the >60 mm material ('oversize') in the Dump A, pits were excavated to a depth of between 1.12 m and 3.5 m depth, on a nominal 40 m pattern spacing, broadly infilling in between the grab samples collected in the previous sampling programs in 2020. Bulk samples of between 180 kg and 200 kg were collected from the excavated stockpiles by multiple spearing of each pile with a shovel at approximately hip-height.
Drilling techniques	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	<ul style="list-style-type: none"> The diamond core drilling was a combination of HQ (63 mm) at the top of the drill holes and NQ (48 mm) diameter once more competent rock was encountered. The RC drilling was 127–140 mm in diameter In 2017-18, 29 DD holes were drilled, for a total of 3,866 m. In 2022 at Helikon 4, 31 RC holes were drilled for 2,361 m, and six RC/DD holes (RC pre-collars with DD tails) for 735 m. For the 2017-2018 drilling a Reflex EZ-Trac survey was performed at 50 m downhole for DD holes. The RC holes were not surveyed. For the 2022 drilling program of RC and diamond tails, no downhole

Criteria	JORC Code explanation	Commentary
		<p>surveys were undertaken.</p> <ul style="list-style-type: none"> DD holes were not orientated.
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> For drillcore, sample recovery approached 100% throughout all holes, except for some near surface material where the holes were collared in marble. The samples taken for assay are considered representative of the mineralisation present. Due to the generally high core recovery, no additional methods to improve the sample recovery were implemented. For RC, reject bag weights and sample weights were collected, and considered to be acceptable. A comparison of the assay results of the RC with the drill core samples within the mineralised zones is inconclusive with respect to bias; no firm conclusions can be made whether the RC sampling is representative of the mineralisation present.
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Pre-2018 drill hole cores were logged by qualified geologists on paper logs that were then captured into validated Microsoft Excel spreadsheets and then uploaded into a Maxwell™ Datashed database. From March 2018, logging was directly input to Maxwell™ Logchief using tablet computers which were synchronised daily with the main Maxwell™ Datashed database. The cores were logged for geology (lithology, oxidation, colour and mineralogy) and geotechnical properties (core recoveries, rock quality designation (RQD), structural orientations relative to the core axis). The core was not oriented. The parameters recorded in the logging are adequate to support appropriate Mineral Resource estimation. All core was photographed both in dry and wet states, before and after sampling. The entire length of all drill holes was logged for geological,

Criteria	JORC Code explanation	Commentary
		<p>mineralogical and geotechnical data.</p> <ul style="list-style-type: none"> A sample of the RC chips was washed and retained in a chip tray. Chip samples have been geologically logged at 1 m intervals with data recorded as per diamond drilling. Sample weight, lithologies, texture, structure, alteration, oxidation and mineralisation were recorded, but sample weights were not supplied in the database. Trench and grab samples from dumps/stockpiles were described, with the main features noted being for major mineralogy (including for petalite), and particle size distribution.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <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> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> The samples collected from the RC drilling were split using a riffle splitter mounted under the cyclone at a 90:10 split to obtain two samples. The smaller sample of between 3-5 kg was submitted for assay. A reference sample of each of the samples submitted was kept on site. Cores were cut longitudinally in half and the half from the same side was consistently sampled at a nominal 1 m length or respecting lithological boundaries. The other half of the core was retained for reference purposes. The workflow for sample preparation has varied over time. Pre-2022: Sample preparation has been at a combination of the ALS-Chemex preparation facility at Swakopmund, ACT Laboratories in Windhoek, and a small subset from an on-site SGS facility that were sent to SetPoint Laboratories in Johannesburg for analysis. ALS-Chemex used the PREP-31 method. Any moist samples were dried and then crushed to 70% passing 2 mm using jaw crushers. The crushed material was split using a riffle splitter to obtain a 250 g subsample. The subsamples were then pulverised using a two-component ring mill (ring and puck mill) or a single component ring

Criteria	JORC Code explanation	Commentary
		<p>mill (flying disk mill) to 85% passing 200 mesh ($\sim 75 \mu\text{m}$). An aliquot of the pulverised sample was put into an envelope and sealed and submitted to ALS-Chemex Vancouver for analysis.</p> <ul style="list-style-type: none"> • ACT Laboratories used method RX1, where the sample was crushed to 90% passing through 2 mm (10 mesh size); thereafter a 250 g was split with riffle splitters and pulverised with mild steel ball to >95% passing through 105 μm. An aliquot of the pulverised sample was put into an envelope and sealed and submitted to either Scientific Services (Cape Town) or ACT (Canada) for analysis. • A coarse crush duplicate was inserted into a prelabelled sample bag by the preparation laboratory for every 25 to 30 samples. Analysis of the results of these samples vs the primary sample from which they were split shows acceptable reproducibility across the grade range. • 2022 Programs: The RC and DD samples were crushed (>70% passing - 6mm) and milled (85%, passing 75 μm) at the ALS-Chemex preparation facility at Okahandja; an aliquot of the pulverised sample was put into an envelope and sealed and submitted to ALS-Chemex Johannesburg for analysis. • Field duplicates and CRMs (sourced from OREAS and AMIS) were inserted into the sample stream at around one per 20. This was done under the supervision of a qualified geologist. • The size of the samples (both RC and DD) are considered appropriate for the mineralisation style.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> • 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 (eg standards, blanks, 	<ul style="list-style-type: none"> • The workflow for sample analysis has varied over time. • Pre-2022: Sample analysis has been at a combination of the ALS-Chemex laboratory in Vancouver, Scientific Services (Cape Town), ACT Laboratories in Canada and SetPoint Laboratories in Johannesburg • Samples sent to ALS-Chemex Vancouver were analysed by method

Criteria	JORC Code explanation	Commentary
	<i>duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i>	<p>ME-MS89L. This involved a sodium peroxide fusion of the charge, followed by digestion of a prill using dilute HCl, followed by determination by ICP-MS for a suite of 50 elements (including 5 of the 8 elements investigated in this study: Li, Cs, Fe, Rb, Ta). The analytical range for lithium was 2–25,000 ppm. Over-limit lithium assays were analysed by method Li-OG63 using HF-HNO₃-HClO₄ digestion and HCl leach, which has an analytical range of up to 100,000 ppm Li.</p> <ul style="list-style-type: none"> • Samples sent to Scientific Services used method ME-42, involving a four-acid microwave digest, followed by determination by ICP-OES for a suite of 45 elements (including the 8 elements investigated in this study: Li, Cs, Fe, K, Na, P, Rb, Ta). The analytical range for lithium was 5–25,000 ppm. • Samples sent to ACT Laboratories used method UT-7, involving a sodium peroxide fusion, followed by determination by ICP-MS for a suite of 55 elements (including the 8 elements investigated in this study: Li, Cs, Fe, K, Na, P, Rb, Ta). The analytical range for lithium was 3–10,000 ppm. Over-limit lithium assays were analysed by method UT-8 using a peroxide fusion, followed by ICP-OES. • Samples sent to Set Point Laboratories used method M448 using a sodium peroxide fusion followed by determination by ICP-MS for nine elements (Li, Fe, K, Rb, Ta - investigated in this study – plus Be, Nb, Ga, Sn). The analytical range for lithium was 10-50,000 ppm Li. • A total of 397 samples with over-limit Cs (>500 ppm) and/or Rb (>10,000 ppm) were re-assayed through ALS-Chemex laboratories in Perth by method ME-MS91 (sodium peroxide fusion-ICP MS analysis). • Internal QAQC protocol comprised the insertion of certified reference materials (CRMs), blanks and course crush duplicates on a systematic basis amongst the samples shipped to the analytical laboratories. These were inserted at a frequency of one blank, one CRM and one duplicate for every 25 to 30 samples (giving an average of

Criteria	JORC Code explanation	Commentary
		<p>approximately 12%).</p> <ul style="list-style-type: none"> The following CRMs were used during the various phases of drilling: AMIS0338; AMIS0339, OREAS 147; OREAS 148 and OREAS 149. The blank materials used were AMIS0484, AMIS0439 and blank quartz material sourced from Rubicon. The blank material sourced from Rubicon was only used for a short period at the start of the drilling program and was discontinued and replaced by AMIS0484 and AMIS0439. 2022 Programs: Samples sent to ALS-Chemex Johannesburg were analysed by method ME-MS61, a four-acid digest and ICP-MS finish for a suite of 48 elements (including the 8 elements investigated in this study: Li, Cs, Fe, K, Na, P, Rb, Ta). The method results in the near total dissolution of the sample. Rare earth elements may not be totally soluble in this method (but this is not considered important for this deposit). The Competent Person considers the sample preparation and analytical procedures used appropriate for the style of mineralisation and the accuracy and precision of the assay results acceptable.
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Hard copy data was manually verified by company geologists after entry into Maxwell™ Logchief, before being synchronized/uploaded to the main SQL database managed by MaxGeo in Johannesburg. For the Helikon 4 deposit, no formal verification of hard copy logs or assay certificates against the supplied database was carried out. No twin holes have been drilled at Helikon 4.
Location of data points	<ul style="list-style-type: none"> 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. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Pre-2022, the diamond drill holes were downhole surveyed using a Reflex EZ-Trac survey at least at 50 m intervals or at the end of the hole. The RC drill holes drilled in 2022 (and their associated diamond tails) were not surveyed.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> The grid system used is UTM 33S/WGS84. The collar positions of all drill holes were surveyed by C.G. Pieterse Professional Land Surveyors, a registered land surveying company based in Swakopmund, using a differential GPS. A high-resolution aerial drone survey was conducted by C.G. Pieterse Professional Land Surveyors in April 2018 and in July 2019 over Helikon, Rubicon and surrounds by C.G. Pieterse to obtain updated imagery and a digital terrain model. The data is of suitable accuracy and detail for use in the MRE.
Data spacing and distribution	<ul style="list-style-type: none"> <i>Data spacing for reporting of Exploration Results.</i> <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> <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> At Helikon 4 holes are spaced on approximately 15-30 m east-west spaced sections, with holes spaced at 20-40 m along north-south lines. A significant portion of the drilling is at a 20 m × 20m spacing, but due to constraints for pad locations from topography and open pit voids, pattern spacing is irregular. Minor cavities and collapsed ground were encountered from the drilling activities; these were cross-referenced against the surveyed underground workings and their locations incorporated into a new interpretation of the extent of the underground voids. Sample lengths were composited to 1 m. The drilling is considered acceptable to establish confidence in the geological and grade continuity consistent with Indicated and Inferred Mineral Resources.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> <i>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.</i> 	<ul style="list-style-type: none"> At Helikon 4 holes were drilled on nominally N-S orientation, and often oblique to the dip of the pegmatite, which is variable but generally in the range of -45° to -75° dipping to the south. For the Rubicon Dumps, based on the current sampling programs they are considered to be relatively homogenous. For the larger and higher dumps, vertical sampling took place to consider any stratification that

Criteria	JORC Code explanation	Commentary
		may be present.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> The RC samples were collected and sealed in pre-labelled plastic bags at the drill rig. The samples were stored on-site until enough samples were prepared to make up a batch for dispatch to the laboratory. The bagged individual samples were put into large rice bags containing several samples and were sealed. The dispatch forms were prepared on-site. One copy was inserted with the shipment, one copy sent by email to the analytical laboratory, and one copy was kept for reference purposes. The samples were transported directly to the relevant laboratory by either by Company employees or by commercial courier. The laboratories reconciled the received samples with the dispatch documentation, and any discrepancies were flagged. Each sample shipment was verified, and confirmation of shipment receipt and content was emailed to the site-based Exploration Manager. The prepared samples from the in-country preparation laboratory were sealed in boxes, before dispatch to the analytical laboratory by commercial courier.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> As part of previous MRE work undertaken by the MSA Group and Snowden Mining Industry Consultants, site visits have been conducted on at least four occasions, to review mapping, drill core quality, logging quality, location of drill hole collars, logging and sampling techniques for RC drilling and channel sampling, density methods, data handling procedures and sample preparation. Inspections of sample preparation facilities and laboratories were also conducted. Cube Consulting Competent Person (Matt Bampton) visited site from 2 – 4 May 2022. Activities were mainly restricted to reviewing Rubicon

Criteria	JORC Code explanation	Commentary
		dump sampling methodologies, however there was also observation diamond drill core from current programs at Helikon 4, sampling and sample preparation procedures for drillcore, and inspection of the sample preparation laboratory in Okahandja.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> The Rubicon and Helikon deposits are contained within Mining Licence ML204, covering an area of 68.68 km². ML204 is held by Lepidico Chemicals Namibia (Pty) Ltd and is within the Namibian Government-owned farm, Okangava Ost 72. Lepidico Ltd owns 80% of Lepidico Chemicals Namibia (Pty) Ltd. The remaining 20% is held by Nigerian company !Huni/-Urib Holdings (Pty) Ltd. Tenure is secure with no known impediments other than as detailed immediately above.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> The pegmatites of the region (including Rubicon and Helikon) have been the subject of several geological surveys and research investigations. Initial exploration during the late 1920s and 1930s focused on beryl with Rubicon being proclaimed a mining area in 1951, with mining continuing sporadically until 1994. Airborne magnetics and radiometric survey were flown over the area in 1994 as part of the SYSMIN program commissioned by the Namibian Government.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> Historical exploration includes: <ul style="list-style-type: none"> -The drilling of six DD holes by Anglo American in 1968 to the northeast of the main Rubicon pit. -The drilling of 11 underground DD holes by Namibian Lithium in 1997. -Sampling (rock chip) and drilling (diamond drilling) by Black Fire Minerals (Pty) Ltd in 2009 and in 2010 51 rock chip samples from Rubicon, 36 rock chip samples from Helikon and 34 further rock chip samples from the immediate area and 12 DD holes at Rubicon and one at Helikon. -Exploration by LiCore Mining (Pty) Ltd between 2013 and 2015 including: 40 in situ rock chip samples and samples from the dumps; a ground electromagnetic survey utilising a Magneto- Telluric Stratagem EH4 System. Rubicon was selectively mined from three pits and by room and pillar stoping from the associated underground workings (Rubicon I, Rubicon II and Rubicon III) for petalite, amblygonite, lepidolite, beryl, quartz and accessory pollucite and bismuth and its oxidation products. Mining commenced in the 1950s; however, no information on production prior to 1980 is available. Between 1980 and 1994, approximately 14,700 t petalite, 880 t amblygonite, 2,000 t lepidolite and 15 t beryl were produced from Rubicon.
Geology	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> ML204 is located in the southern Central Zone of the Damara Belt. Many of the economic mineral deposits (gold, base metal and pegmatite hosted rare metal deposits) of the Damara Belt occur within the Central and Northern zones. Lithium-caesium-tantalite (LCT) family pegmatites of the Karibib Pegmatite Belt, which contain deposits of lithium, beryllium, tin and tourmaline, have been intruded into the tightly folded supracrustal rocks of the Damara Supergroup. The pegmatites are classified as LCT Complex lepidolite-petalite

Criteria	JORC Code explanation	Commentary
		<p>pegmatites (with minor amblygonite).</p> <ul style="list-style-type: none"> In broad terms, the Rubicon and Helikon 1 pegmatites are highly fractionated quartz-feldspar-muscovite pegmatites, that typically develop a central lithium-mineralised zone. Lithium mineralisation has been reinterpreted by Lepidico from the perspective of the proposed treatment route, through L-Max®-amendable lepidolite and/or lithium-mica. Three zones of lithium mineralisation are identified, generally surrounding a central barren quartz core, namely, Lep Z (high- grade “massive” lepidolite), Lep Z B (low-grade disseminated lepidolite dominated by pale albite) and Mica Z (often broad zones of coarse-grained quartz-albite pegmatite (marked by distinct clusters of dark lithium-bearing mica). All drilling for Helikon 4 was logged or re-logged based on this classification scheme.
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole 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. 	<ul style="list-style-type: none"> Exploration results are not being reported. The attached MRE report contains collar locations for Helikon 4 drill holes.
Data aggregation methods	<ul style="list-style-type: none"> 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. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such 	<ul style="list-style-type: none"> Exploration results are not being reported; therefore no data was aggregated for reporting purposes. No equivalent values used or reported.

Criteria	JORC Code explanation	Commentary
	<p><i>aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></p> <ul style="list-style-type: none"> <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i> 	
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <i>These relationships are particularly important in the reporting of Exploration Results.</i> <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i> <i>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').</i> 	<ul style="list-style-type: none"> Exploration results are not being reported. There is no relationship between mineralisation, width and grade. Drilling intersects the pegmatite at angles generally between 40° and 75°; however, the pegmatite is not of uniform thickness nor orientation. Consequently, most drilling intersections do not represent the true thickness of the intersected pegmatite.
<i>Diagrams</i>	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Exploration results are not being reported. Drill hole locations are presented in the attached MRE report.
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Exploration results are not being reported.
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Quantitative XRD analysis from Helikon 4 has shown the major minerals (or mineral groups) within the pegmatite to be albite (34%), quartz (31%), lepidolite and lithian mica (30%), with minor amounts (2% or less) of microcline, clinochlore, amblygonite and petalite. Of the subset of the minerals containing lithium, 93% of these are lepidolite or lithian mica, with a further 5% as amblygonite, and 2% as petalite.
<i>Further work</i>	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> Near-mine exploration will focus on the unexplored strike extensions of the Rubicon pegmatite to the west-northwest, and on structural studies aimed at deciphering the possible continuation of the Helikon 1 deposit below the truncating fault. Near-mine exploration will focus on closer-spaced and infill drilling to the east of Helikon 4 (in the Helikon 2 and Helikon 3 deposits) to test a

Criteria	JORC Code explanation	Commentary
		further 500 m along strike of the semi-continuous pegmatite.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
<i>Database integrity</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The drill hole data is currently stored by Lepidico in a SQL database that is managed by MaxGeo through Datashed. For the 2022 MRE, Cube Consulting carried out further database validation. A few issues were noted, but these were resolved before the estimation commenced.
<i>Site visits</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> In May 2022, Mr. Matt Bampton visited the site, the Helikon 4 deposit, core logging facilities and processes, and inspected the location and sampling of the Rubicon Dumps.
<i>Geological interpretation</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> For the 2022 Helikon 4 MRE, the mineralisation zones were initially interpreted in section by Lepidico and subsequently modified by Cube Consulting. The mineralised zones are all subsets of two modelled pegmatite intrusions, so alternative interpretations are unlikely to have a material impact on the global resource volumes.
<i>Dimensions</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The Helikon 2 to 5 deposits occur along a 1.7 km semi-continuous line of pegmatites, approximately 1 km to the north of the Helikon 1 pegmatite. The main pegmatite at Helikon 4 is of variable thickness (generally 10-50 m), intruded into a sequence of largely marbles and occasional calc-silicates. The main pegmatite extends for 340 m along strike, and to a depth of up to 120 m from surface. The pegmatite dips to the

Criteria	JORC Code explanation	Commentary
		<p>south, with dips of approximately 65° near surface and flattening to around 40° at depth.</p> <ul style="list-style-type: none"> • A much smaller pegmatite lode occurs in the west of the deposit in the hangingwall to the main pegmatite, extends for 120 m along strike, and to a depth of up to 40 m from surface. More minor pegmatite dykes exist but were not modelled. • At its thicker portions the pegmatite is moderately but not consistently fractionated, with higher-grade lepidolite rich bands and ellipsoidal shapes developed around generally thin and discontinuous quartz cores. • The lithium mineralogy is largely as lithium-bearing muscovite mica, plus lepidolite mica, with lesser petalite and minor amblygonite. The petalite, which often occurs adjacent to quartz cores (if developed), was the focus of previous open pit mining and underground mining.
Estimation and modelling techniques	<ul style="list-style-type: none"> • <i>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.</i> • <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i> • <i>The assumptions made regarding recovery of by-products.</i> • <i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i> • <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i> • <i>Any assumptions behind modelling of selective mining units.</i> • <i>Any assumptions about correlation between variables.</i> • <i>Description of how the geological interpretation was used to control the resource estimates.</i> 	<ul style="list-style-type: none"> • 1 m downhole composites were extracted from a coded database for the main mineralized domains, and subject to geostatistical and variographic assessment. • Minor top-cutting and distance-limiting criteria were considered warranted for Cs and Li in some domains. • The Helikon 4 block model was constructed based on a parent block size of 10 m(E) by 5 m(N) by 5 m(RL). A minimum sub-block size of 2.5 m(E) by 2.5 m(N) by 2.5 m(RL) was used to ensure adequate volume resolution. • The parent block size is based on the nominal drill hole 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 mineralisation zones, lithological domains, surface topography, and depletions from open pit and underground mining.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> • <i>Discussion of basis for using or not using grade cutting or capping.</i> • <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i> 	<ul style="list-style-type: none"> • Li, Cs, Fe, K, Na, P, Rb and Ta grades were estimated using ordinary block kriging (parent cell estimates) using Surpac software. • Dynamic anisotropy was used to locally adjust the orientation of the search ellipse and variogram models due to variations in the dip and strike of the mineralised zone. The primary search ellipse ranges were defined based on the results of the variography, drill hole density and grade variability. • All domain boundaries were treated as hard boundaries for estimation purposes. • The base case search ellipse for lithium in the main pegmatite domain, of 79 m along strike and down dip by 12 m across strike was defined based on the results of the variography and assessment of the data coverage. • A minimum of 5 and maximum of 15 composites was used for the initial search pass and limited to a maximum of 5 composites per drill hole. • Zones where relatively high petalite was logged had grades reset to zero, to minimize the potential for bias in estimating lithium which might be from minerals that are not extractable like the micas or amblygonite. • Estimation was as Li in ppm, converted to Li₂O % for reporting by dividing by 4645. • Grade estimates were validated against the input drill hole composites (globally and using grade trend plots) and show a reasonable comparison. • No reconciliation data is available. Previous activities have been small-scale and targeted the discrete petalite component of the pegmatite only.
Moisture	<ul style="list-style-type: none"> • <i>Whether the tonnages are estimated on a dry basis or with natural</i> 	<ul style="list-style-type: none"> • All tonnages have been estimated as dry tonnages.

Criteria	JORC Code explanation	Commentary
	<i>moisture, and the method of determination of the moisture content.</i>	
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> The Mineral Resources for Helikon 4 have been reported above a 0.15% Li₂O 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 using Whittle mining software, with current and forecast cost and revenue inputs, and understanding of the likely performance of the mica concentrator The Mineral Resources for the Rubicon Dumps have been reported above a 0% Li₂O cut-off grade, based on the assumption that will be mined as a whole, with no grade selectivity being feasible.
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Mining of the deposit is assumed to use conventional drill and blast open cut mining. An optimisation shell was completed using Whittle mining software to assist limiting the resource, and this was based at a revenue factor some 50% higher than Lepidico's assumed long-term forecast price for their final lithium product (\$17,015/tonne of LiOH.H₂O), which price is being used for current project economics, and is currently lower than the current spot price.
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The Project is targeted as a vertically integrated development of mine, concentrator and downstream small commercial scale L-Max® and LOH-Max® chemical plant. L-Max® is a hydro-metallurgical process involving saturation sulphuric acid leach of a lithium mica slurry at atmospheric pressure and modest temperature, followed by a series of impurity removal steps at progressively higher pH levels and the subsequent precipitation and extraction through LOH-Max® of lithium hydroxide monohydrate and other products. The process has been extensively tested by Lepidico with recoveries of around 90% from the mica concentrate

Criteria	JORC Code explanation	Commentary
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> There are currently open pit quarries with associated waste dumps and stockpiles in the area. Waste products from further treatment to produce a mica concentrate at the minesite are expected to be benign. Waste products from further downstream treatment to produce a lithium hydroxide monohydrate product (and other saleable by-products) in Abu Dhabi are expected to be benign.
<i>Bulk density</i>	<ul style="list-style-type: none"> 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 (vugs, 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. 	<ul style="list-style-type: none"> Bulk density measurements on diamond core were made onsite by Lepidico as part of drill programs completed in 2017 and 2018. A total of 393 samples were measured at Helikon 4, of which 228 measurements were made in pegmatite lithologies. Measurements were collected using the Archimedes principle of weight in air vs weight in water, but only sampled or recorded to one decimal place precision which is considered inadequate for MRE. A further 107 bulk density measurements on diamond core were made onsite by Lepidico in 2022, with high precision scales measuring to four decimal places. Lepidico indicated that wax coating was not used for any samples which was considered appropriate given the absence of a defined weathering profile. The estimate used a single density assignment of 2.65 g.cm⁻³ in the absence of sufficient high-quality density measurements. Density sampling for the Rubicon Dumps (undersize dumps B-T) was undertaken in 2022 in association with the trench sampling program. A 25 cm × 25 cm × 25 cm steel box was filled with material and either weighed at the trench site or at the core shed A total of 406 samples were measured Lower values were often obtained in dumps with a different particle

Criteria	JORC Code explanation	Commentary
		<p>size distribution (including larger particle size components), reflecting proportionally more voids when the small container is filled with such material</p> <ul style="list-style-type: none"> Based on some statistical analysis, the estimate used a single density assignment of 1.5 g.cm⁻³ for all the Rubicon Dumps
Classification	<ul style="list-style-type: none"> <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i> <i>Whether appropriate account has been taken of all relevant factors (ie 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).</i> <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> 	<ul style="list-style-type: none"> The Mineral Resource for Helikon 4 has been classified as a combination of Indicated and Inferred Mineral Resources. The classification was developed based on an assessment of the following criteria: <ul style="list-style-type: none"> Nature and quality of the drilling and methods Drill spacing and orientation Confidence in the understanding of underlying geological and grade continuity Analysis of the QAQC and Density data A review of the drill hole database and the company's sampling and logging protocols Exposure of mineralisation within existing pit walls Confidence in the estimate of the mineralised volume The results of the model validation. The differentiation between Indicated and Inferred for the main domains is in part a function of drilling density, especially on the hill to the east of the open pit workings, where it is significantly harder to construct appropriately located pads for drilling The Mineral Resource for the Rubicon Dumps has been classified as Indicated. The classification was developed based on an assessment of the following criteria: <ul style="list-style-type: none"> Nature, quality and representivity of the sampling Confidence in the volume estimate from the high-resolution

Criteria	JORC Code explanation	Commentary
		<p>topography pickups</p> <ul style="list-style-type: none"> ○ The degree of correlation of assays between the recent programs and historic ones. • The Mineral Resource classification appropriately reflects the view of the Competent Person
Audits or reviews	<ul style="list-style-type: none"> • The results of any audits or reviews of Mineral Resource estimates. 	<ul style="list-style-type: none"> • The Helikon 4 MRE has been reviewed internally by Cube by another Principal Resource Geologist. • No external reviews have taken place.
Discussion of relative accuracy/confidence	<ul style="list-style-type: none"> • 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 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. 	<ul style="list-style-type: none"> • The Helikon 4 MRE has been validated both globally and locally by the means of: <ul style="list-style-type: none"> ○ Visual checks between the drill hole composites and the block grades. ○ Composite statistics compared to block grades. ○ Composite grades versus block grades swath plots, in both eastings and elevation. ○ Volume comparisons between wireframes and flagged blocks. • Whilst the small-scale mining assisted in the geological interpretation, no production data is available to quantify the relative accuracy of the MRE.