ASX / MEDIA ANNOUNCEMENT

7 March 2023

LEPIDICO

Replacement Announcement –
Helikon 4 maiden Ore Reserve extends Phase 1 life

On 13 February 2023**, Lepidico Ltd (ASX:LPD) ("Lepidico" or "Company")** lodged an announcement providing an update on its Ore Reserve estimate at its 80% owned Karibib Project in Namibia and entitled "*Helikon 4 maiden Ore Reserve extends Phase 1 life*". The Company is now lodging a replacement announcement (**Replacement Announcement**) that incorporates additional JORC-related disclosures in the announcement and annexure.

The Managing Director has authorised this announcement and the Replacement Announcement for release to the market.

Further Information

For further information, please contact

Joe Walsh	***David Waterhouse***
Managing Director	***Waterhouse IR***
Lepidico Ltd	
Tel: +1 647 272 5347	*Tel: +61(0)3 9670 5008*

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

ASX / MEDIA ANNOUNCEMENT

13 February 2023 (Replacement Announcement – 7 March 2023)

Helikon 4 maiden Ore Reserve extends Phase 1 life

- **Inaugural Ore Reserve estimates for Helikon 4 and lepidolite-rich surface stockpiles add 1.16M t at 0.62% Li_2O, 56% higher grade than the combined Rubicon and Helikon 1 estimate**
- **Total Phase 1 Project Ore Reserve tonnes increase by 14%, extending operating life to 19 years**
- **Total Ore Reserves stand at 9.4M t @ 0.43% Li_2O with a life of mine strip ratio of just 2.8 to 1**
- **Drilling over Helikon 2, 3 and 4 to start this month with the objective of extending operating life to over 20 years**

Lepidico Ltd (ASX:LPD) ("Lepidico" or "Company") is pleased to announce an update on its Ore Reserve estimate at its 80% owned Karibib Project in Namibia, which has added a further 1.16M t @ 0.62% Li_2O into Probable Reserves (Table 1)**.** The estimate was prepared by Australian Mine Design and Development Pty Ltd (AMDAD), as presented in Appendix 1. The estimation work is reported in accordance with the requirements of the JORC Code (2012).

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, as reported on 30 January 2023 ("Helikon 4 & Rubicon Stockpiles Upgrade to Mineral Resources").

Of the 1.31M t grading 0.46% Li_2O in Indicated Mineral Resource at Helikon 4 just over 62% of the tonnes fall within the current pit design and thereby convert into Probable Ore Reserves. The 2023 Resource development drilling program that is scheduled to start imminently will target down-dip extensions to the mineralisation and provide geotechnical data, with the objective of both expanding the Indicated Resource base and increasing conversion to Probable Reserves. The program will also include infill and extensional drilling at Helikon 2-3, which together host an Inferred Mineral Resource of 0.51M t grading 0.52% Li_2O.

Managing Director Joe Walsh said, "The Helikon 2-4 line of mineralisation will now be drill tested for both continuity along strike between the deposits and down dip to the south, with the objective of extending the Phase 1 operating life to well over 20 years. In addition, a new occurrence of lepidolite bearing pegmatites was identified last quarter within EPL5439, with intermittent outcrop and historical workings extending over a 1.5 km strike. Site access is being arranged to drill this priority new target."

LEPIDICO LTD
ABN 99 008 894 442

Suite 2, 680 Murray Street
West Perth WA 6005
PO Box 536
West Perth WA 6872
Phone: + 61 8 9363 7800
Email: info@lepidico.com

Table 1. Karibib Project Ore Reserve Estimate

Pit	Mt	Li2O %	Rb ppm	Cs ppm	Ta ppm	K %
Rubicon Pit						
Proved	1.60	0.50	2576	312	44	2.15
Probable	4.99	0.33	1866	204	31	2.13
Pit Total	6.59	0.37	2038	230	34	2.14
Waste	21.57					
Waste:Ore Ratio	3.3					
Helikon 1 Pit						
Proved	0.69	0.58	2234	458	54	1.73
Probable	0.99	0.46	2028	478	68	1.68
Pit Total	1.68	0.51	2113	470	62	1.70
Waste	2.22					
Waste:Ore Ratio	1.3					
Helikon 4 Pit						
Proved	0.00	0.00	0	0	0	0.00
Probable	0.82	0.51	2155	200	54	1.54
Pit Total	0.82	0.51	2155	200	54	1.54
Waste	3.06					
Waste:Ore Ratio	3.7					
Rubicon Stockpiles						
Proved	0.00	0.00	0	0	0	0.00
Probable	0.27	0.86	2863	415	63	2.29
Pit Total	0.27	0.86	2863	415	63	2.29
Waste	0.00					
Waste:Ore Ratio	0.0					
Rubicon Tailings						
Proved	0.00	0.00	0	0	0	0.00
Probable	0.07	0.99	4155	538	60	0.00
Pit Total	0.07	0.99	4155	538	60	0.00
Waste	0.00					
Waste:Ore Ratio	0.0					
Total Project						
Proved	2.29	0.52	2472	356	47	2.02
Probable	7.14	0.40	1982	253	40	1.99
Total Ore	9.43	0.43	2101	278	42	2.00
Waste	23.79					
Waste:Ore Ratio	2.5					

Notes:

1. The tonnes and grades shown in the totals rows are stated to a number of significant figures reflecting the confidence of the estimate. The table may nevertheless show apparent inconsistencies between the sum of components and the corresponding rounded totals.
2. The deposit has been assessed based on lithium grades in parts per million. For consistency of reporting with other projects the Ore Reserve grades are presented in terms of Li_2O %. 1% Li_2O is equal to 4645 ppm Li.

SUMMARY OF THE KARIBIB PROJECT ORE RESERVES ESTIMATE PARAMETERS

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

Mineral Resource estimate for conversion to Ore Reserves

The Mineral Resources Estimates were prepared by Snowden Mining Industry Consultants in January 2020 for the Rubicon and Helikon 1 deposits, by Cube Consulting Pty Ltd for the Helikon 4 deposit and surface stockpiles and by Resource Evaluation Services for the tailings. Details are as set out in the ASX Announcement, Helikon 4 and Rubicon Stockpiles upgrade to Mineral Resources dated 30 January 2022. The resource block models were used as the basis of the pit optimisation, pit design and production schedule. The Mineral Resources are inclusive of the Ore Reserves.

Classification

Only Measured or Indicated Mineral resources are considered in the Ore Reserve Estimate.

Proved Ore Reserves are derived only from Measured Mineral Resources. Probable Ore Reserves are derived only from Indicated Mineral Resources. No issues were identified to warrant classifying any of the Ore Reserves derived from Measured Mineral Resources as Probable.

In the opinion of the Competent Person when taken as a whole the modifying factors have been defined to a level of confidence commensurate with a Proved or Probable Ore Reserve. While further work during project development will continue to improve confidence there are no issues currently identified which are likely to have a material impact on the viability of the project and the Ore Reserves as stated.

Site visits

John Wyche visited the Karibib site on 9 and 10 August 2019. Areas inspected included the: existing pits at Rubicon, Helikon 1 and Helikon 4; accessible underground voids off Rubicon highwall; potential process plant, waste rock dump and tailings storage sites; and site access road from Karibib town. The visit confirmed that assumptions made for the mine design and operations are appropriate for the site logistics, geology and topography.

Study status

The Ore Reserves have been compiled on the basis of a Definitive Feasibility Study (FS) which covers all aspects of the project (see Lepidico ASX announcement 28 May 2020), which includes:

- Mineral resource estimation, as updated above
- Geotechnical assessment of pit wall slopes
- Process definition and test work for beneficiation of the lithium mineral lepidolite by flotation at Karibib
- Transportation of the lepidolite concentrate to the proposed lithium chemical plant in Abu Dhabi
- Process definition and test work for the L-Max® and LOH-Max® processes to produce battery grade lithium hydroxide or lithium carbonate and saleable by-products
- Opencut mine planning for two pits and the associated waste rock dumps
- Water and waste rock management for the Karibib site
- Marketing of the lithium battery products and by-products
- Operating and capital cost estimates
- Financial modelling
- Environmental impact assessment and permitting

Cut-off parameters

Cut-off grades are expressed in lithium parts per million (Li ppm). They are estimated on the basis of producing battery grade lithium hydroxide monohydrate ($LiOH.H_2O$) with by-products of amorphous silica and sulphate of potash (SOP).

The opencut cut mine uses a marginal cut-off grade which compares the cost of processing one tonne of material against the revenue derived after applying process recoveries. The costs are:

- Any additional costs of mining the material as ore instead of waste
- Beneficiation of the ore by flotation in the Karibib concentrator
- General and administration costs for the Karibib Project
- Transport of the lepidolite concentrate to Abu Dhabi
- Application of the L- Max® and LOH-Max® processes in Abu Dhabi
- Payment of a Namibian royalty on the lepidolite concentrate

Revenues are calculated using sale prices of:

- $LiOH.H_2O$ US$17,015 per tonne (long term)
- Amorphous silica US$50 per tonne
- SOP US$530 per tonne
- Caesium sulphate brine US$25,000 per tonne

$LiOH.H_2O$ per tonne of ore is dependent on the lithium head grade and the ore type. Amorphous silica and SOP are by-products of the L-Max® and LOH-Max® processes and are produced in fixed proportions to the $LiOH.H_2O$ production. Caesium brine production is dependent on the caesium head grade.

The marginal cut-off grade is the lithium ppm where the value of the final products equals the total of the costs above. The massive lepidolite, disseminated lepidolite and mica/pegmatite ore types have different recoveries to concentrate and different concentrate grades resulting in differing cut-off grades. Ore trucking distances from Helikon 1 and Helikon 4 pits are 7km and 7.8km respectively. The cost of this haulage is added to the Helikon 1 and 4 ore thereby raising their cut-off grades.

After including all the costs, recoveries and revenues the cut off grades across the deposits are:

		Massive Lepidolite	Disseminated Lepidolite	Mica / Pegmatite
Rubicon				
Head Grade	Li ppm	551	655	530
	Li_2O %	0.12%	0.14%	0.11%
Insitu Resource Grade	Li ppm	578	688	556
	Li_2O %	0.12%	0.15%	0.12%
Helikon 1 and 4				
Head Grade	Li ppm	573	681	563
	Li_2O %	0.12%	0.15%	0.12%
Insitu Resource Grade	Li ppm	601	715	591
	Li_2O %	0.13%	0.15%	0.13%

Cut-off grades for the Rubicon tailings and stockpiles are set at zero on the basis that the entire Indicated resources will be mined and processed.

Mining factors or assumptions

Opencut mining will be conventional methods using hydraulic excavators and mining trucks. All material mined from the pits will require blasting. There will be areas of narrow benches during the initial months of mining around the existing pits but wider benches will be available thereafter.

For the first half of the mine life the required mining rates are relatively low, allowing small sized excavators and trucks to be used. Small machines are well suited to the initial pit development work. Mining rates increase in the second half of the mine life as the final pushback is mined at Rubicon (as outlined in the table and charts below). This pushback will have broad benches many of which will be mostly waste rock. There will be a requirement for more or larger mining machines in this period.

Pit stage designs for Rubicon, Helikon 1 and Helikon 4 accommodate ramp access between stages.

Pit wall slopes for Rubicon and Helikon 1 are based on a Feasibility Study level geotechnical analysis by Pells Sullivan Meynink. Both pits tend to follow the orebody down dip so the highest walls are cut across the dip which will promote stability. No geotechnical assessment has been conducted for Helikon 4 so slopes from Helikon 1 were used. This is considered to be conservative because the Helikon 4 footwall is massive marble. Lepidico plan to conduct a geotechnical assessment of Helikon 4 to see if the pit slopes can be steepened.

Grade control will be by a combination of visual control during mining and assaying of blast hole samples. The high grade massive and disseminated lepidolite zones are visually identifiable from the lower grade pegmatite and the barren quartz core and the surrounding granite host rock. Lithium grades in the lower grade mica and pegmatite ore types are gradational within the sills and will require sampling and assaying to delineate cut-off grade boundaries. This is mainly required in the second half of the mine life when the massive and disseminated lepidolite is mostly depleted.

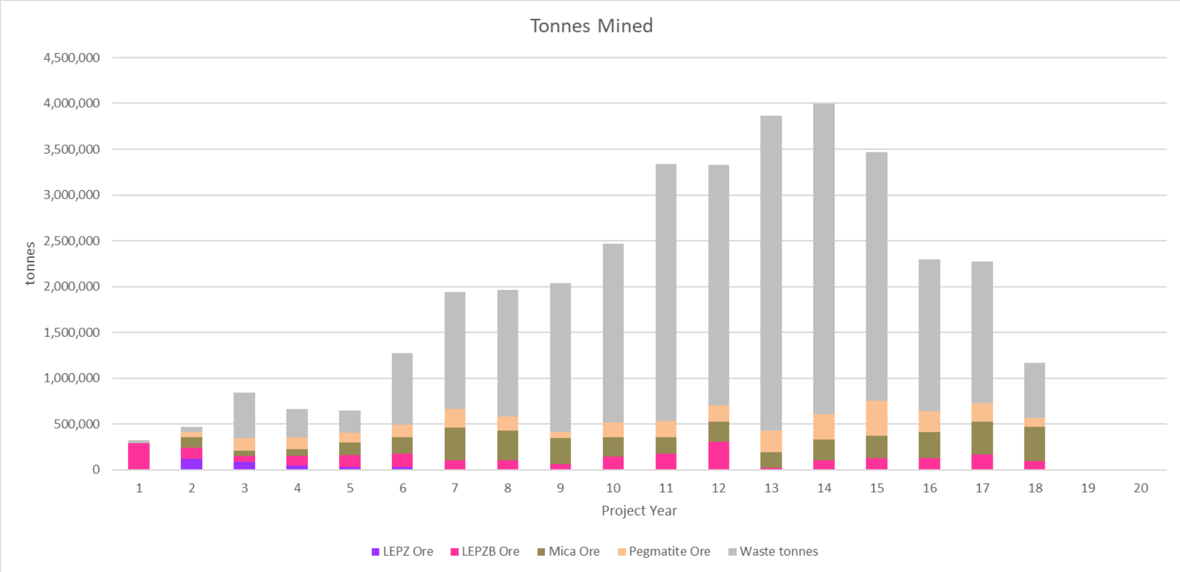
Mining loss and dilution are modelled by application of global factors of 95% recovery and 5% dilution at zero grade.

The Ore Reserves are derived entirely from Measured and Indicated Mineral Resources. Inferred Mineral Resources are treated as waste rock.

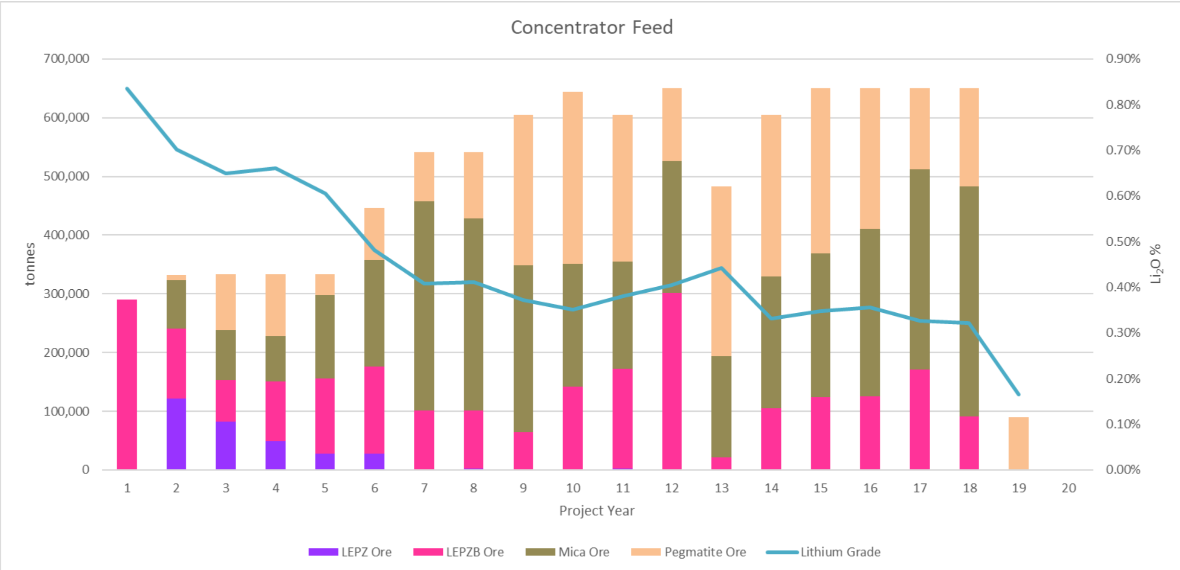
The Karibib Feasibility Study includes provision of diesel fuel supply, workshops, explosives storage and other facilities required to support the opencut mining operation. For the first nine years mining rates do not exceed 60,000bcm per month so the infrastructure to support the mining operation is minimal. Rates rise through Year 10 and 11 to a peak of 210,000bcm per month.

The Navachab Gold Mine has been operating in the area since 1989. This is a much larger mining operation than the Karibib Project so the supply chains, skills and resources to support mining are already well established.

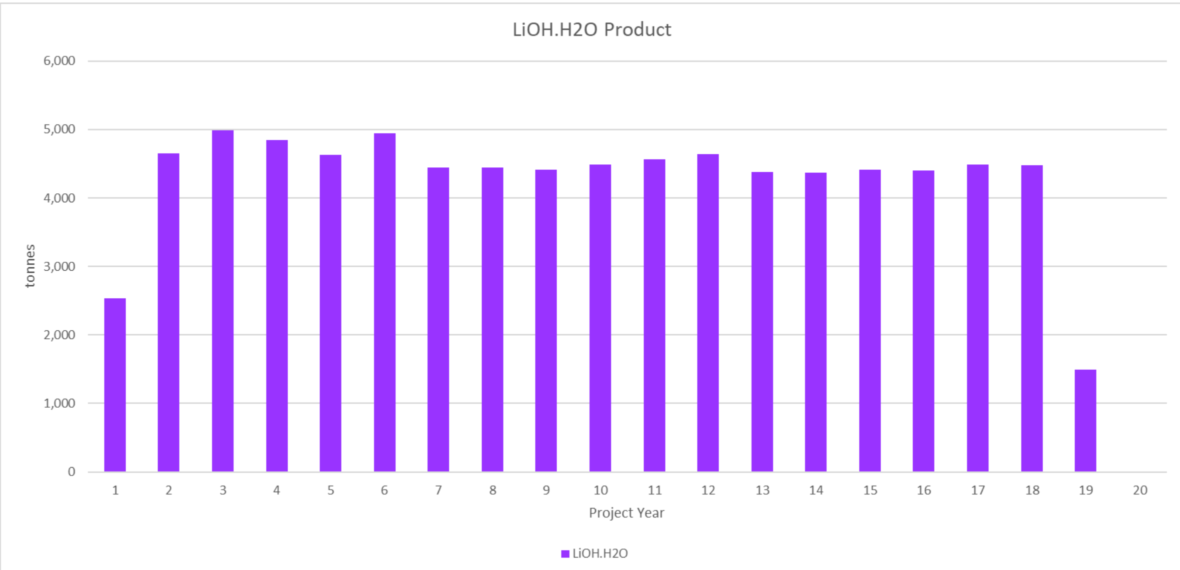
Project Year		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Total
Mining																					
Ore	Mt	0.3	0.4	0.3	0.4	0.4	0.5	0.7	0.6	0.4	0.5	0.5	0.7	0.4	0.6	0.8	0.6	0.7	0.6	0.0	9.4
Li_2O %	%	0.8	0.7	0.6	0.7	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.2	0.4
Waste	Mt	0.0	0.1	0.5	0.3	0.2	0.8	1.3	1.4	1.6	2.0	2.8	2.6	3.4	3.4	2.7	1.7	1.5	0.6	0.0	26.9
Concentrator (Karibib)																					
Ore Feed	Mt	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.5	0.6	0.7	0.7	0.7	0.7	0.1	9.4
Li_2O %	%	0.8	0.7	0.6	0.7	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.2	0.4
Concentrate	kt	71	61	56	58	57	61	65	65	66	67	68	77	63	59	67	68	63	62	4	1,160
Chemical Plant (Abu Dhabi)																					
Feed	kt	34	58	58	58	64	67	67	67	67	67	67	67	67	67	67	67	67	67	23	1,160
Product																					
$LiOH.H_2O$	kt	2.5	4.7	5.0	4.8	4.6	4.9	4.4	4.4	4.4	4.5	4.6	4.6	4.4	4.4	4.4	4.4	4.5	4.5	1.5	81.6
Amorphous Silica	kt	19.3	32.5	32.5	32.5	35.8	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	13.2	653.4
SOP	kt	5.3	9.0	9.0	9.0	9.9	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	10.4	3.6	180.7
Caesium sulphate brine	kt	0.1	0.2	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	4.0



Tonnes Mined
4,500,000
4,000,000
3,500,000
3,000,000
2,500,000
2,000,000
1,500,000
1,000,000
500,000
0
tonnes
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Project Year
LEPZ Ore
LEPZB Ore
Mica Ore
Pegmatite Ore
Waste tonnes



Concentrator Feed
700,000
600,000
500,000
400,000
300,000
200,000
100,000
0
tonnes
0.90%
0.80%
0.70%
0.60%
0.50%
0.40%
0.30%
0.20%
0.10%
0.00%
Li_2O %
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Project Year
LEPZ Ore
LEPZB Ore
Mica Ore
Pegmatite Ore
Lithium Grade



LiOH.H2O Product
6,000
5,000
4,000
3,000
2,000
1,000
0
tonnes
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20
Project Year
LiOH.H2O

Metallurgical factors or assumptions

The Ore Reserves are based on production of battery grade lithium hydroxide monohydrate ($LiOH.H_2O$) with by-products of amorphous silica, SOP and rubidium/caesium brine. The general processing path is:

- Beneficiation of the ROM ore by crushing, grinding and flotation in a concentrator at the Karibib mine site. The lepidolite concentrate will grade approximately:
  - 1.80% lithium from massive lepidolite
  - 1.36% lithium from disseminated lepidolite
  - 1.17% lithium from the mica/pegmatite ore types
- The lepidolite concentrate will be transported to a chemical plant to be constructed in Abu Dhabi, UAE
- The chemical plant will use Lepidico's patented L-Max® and LOH-Max® processes to produce all products as outlined above

The L-Max® was developed by Lepidico to extract lithium from lepidolite mica concentrates and then purify the leach solution for production of battery grade lithium chemicals. The LOH-Max® process was developed by Lepidico to produce battery grade $LiOH.H_2O$ directly from the intermediate lithium sulphate solution. It has never been applied on a commercial scale. The recoveries, consumables and costs in Lepidico's production and financial models are derived from extensive bench scale testing and continuous pilot plant operation processing. The products from the pilot plant have subsequently been tested to demonstrate by-products at marketable qualities and battery grade lithium chemicals.

Infrastructure

ADP Namibia Pty Ltd have completed front end engineering design (FEED) of the mineral processing plant and associated infrastructure including non-process buildings, effective September 2022. Water supply will be from an existing borefield.

Addiza Power Consultants have completed the design of the power supply overhead line to be connected to the national grid.

Knight Piesold have completed design of upgrades required to the existing local road infrastructure, design of the site bulk earthworks and Rubicon waste management area.

Lycopodium Minerals Pty Ltd completed the Feasibility Study of the Phase 1 Chemical Plant in May 2020 and completed the FEED in November 2022.

Costs

The opencut mining and concentrate transport costs have been estimated by Robert Harris of Project Definition Pty Ltd using local cost inputs and industry standards.

Lycopodium Minerals Pty Ltd/ADP Namibia have estimated the capital costs of the concentrator and facilities using quoted equipment prices, local installation rates and material take-off factoring.

Lepidico have estimated the operating costs for the concentrator and administration based on local unit rates.

Lycopodium Minerals Pty Ltd estimated the capital costs of the Phase 1 Chemical Plant under FEED works and subsequent to a Feasibility Study completed in May 2020, incorporating learnings from the Pilot Plant operations in 2019 and 2022, with the latter being on Karibib ore.

Lepidico have estimated the operating costs for the Phase 1 Chemical Plant and based on pilot plant testing using local UAE unit rates.

Revenue factors

Current basis of pricing for:

- Forecast pricing for lithium hydroxide has been provided by Benchmark Minerals Intelligence.
- By-product pricing in the UAE for amorphous silica is based on Lepidico marketing intelligence and SOP is based on Argus forecast estimates.
- The pricing for the caesium sulphate brine has been established by engagement with the principal end users.

Market assessment

Market assessment for lithium chemicals supply and demand projection has been provided by Benchmark Minerals Intelligence.

Market assessment in the UAE for amorphous silica is based on feedback from UAE consumers.

Market assessment for SOP is based on the Argus long term real price (2025 onwards) for crystalline grade product.

The market assessment for the caesium sulphate brine is based on negotiations with consumers.

Economic

A monthly life of mine schedule was prepared for the mining operation and used by Lepidico as the basis of the project financial model. The model version assumes that Karibib is the only feed source for the UAE Phase 1 lithium chemical plant so the net revenue generated from Karibib must cover the cost of developing the facilities in Namibia and the UAE.

The base case model returns a positive after tax NPV at an 8% discount rate. The project life is 16 years based on ore from Rubicon and Helikon 1 and the payback period is under 5 years. The project is most sensitive to the lithium hydroxide price. The next most sensitive item is the Phase 1 lithium chemical plant operating cost. It is not highly sensitive to the concentrator and mining costs at Karibib.

The Phase 1 chemical plant in the UAE will be designed to process mica concentrate from multiple feed sources. Additional longer life feed sources enhance the returns from the integrated project.

The Karibib model returns a positive value as a standalone project based on reasonable financial assumptions.

Helikon 4 Pit and the Rubicon tailings and stockpiles were not included in the financial model viewed by the Competent Person, Mr John Wyche, for this Ore Reserve Estimate. However, ore from each of them is well above the economic cut-off grade, Helikon 4 Pit is based on a pit optimisation and the tailings and stockpiles have no waste and are close to the concentrator. There is no reason to believe that they will not add further value to the 2022 financial model.

Environmental

The Karibib Project will be developed on an existing Mining License (ML204). An Environmental and Social Impact Assessment (ESIA) was completed in 2017 by Risk Based Solutions (RBS) and an Environmental Compliance Certificate (ECC) granted for a period of three years. This was renewed in October 2020.

The Namibian environmental permit was approved and granted in February 2021 and was renewed in February 2022. No acid forming or other deleterious waste rock products have been identified for the Karibib opencut mining operations.

In February 2021 the Environment Agency – Abu Dhabi approved the Preliminary Environmental Review for the chemical plant in Abu Dhabi.

Social

Lepidico has established stakeholder engagement at all levels of government in Namibia.

Lepidico has completed socio-economic surveys of four local communities in 2020. The results inform community and social support and communication strategy and programs.

Lepidico has received a no objection certificate to develop the project from the owner of the Okongava Farm, the location of the Karibib Project; the owner being the Ministry of Agriculture, Water and Land Reform.

Other

No audits of the Ore Reserves have been undertaken.

The Karibib Project has been defined at a Feasibility Level of confidence based on Measured and Indicated Mineral Resources. Ongoing work on the Namibian and UAE aspects of the project will continue to improve confidence. A large body of work has been done on processing aspects of lepidolite concentration and the Phase 1 lithium chemical plant which are common to all the potential lepidolite feed sources. The following issues specific to Karibib are noted for further definition to improve overall confidence:

- Some areas of the historical underground workings at Rubicon are flooded and were not included in the 2019 void survey. While these workings are not likely to be extensive and their positions are approximately known, care will be required during opencut mining to avoid bench floor failures.
- Some of the historical underground workings off the Rubicon highwall have substantial height and width and can be as close as 5 to 10 metres from surface. The target lepidolite zone is generally in the floor of these workings. Care will be required when collapsing the benches above the voids.
- The pit design for Helikon 4 excavates waste outside ML 204. The Ore Reserve Estimate assumes that an agreement will be negotiated with the adjoining tenement holder which is acceptable to the Namibian Government to excavate this ground. Alternatively, it is possible that the massive marble in the northern footwall of the Helikon 4 orebody may allow the wall to be mined much more steeply so the ore can be mined without incursion into the adjoining tenement. Lepidico is planning a geotechnical assessment to test this possibility.

Discussion of relative accuracy/confidence

Although historical mining has taken place at the Karibib Project the data available is inadequate to form meaningful reconciliations of production against the Mineral Resource model.

From a Mineral Resource perspective confidence is commensurate with Measured and Indicated Resources with respect to the lithium grade distribution, sill thickness and structure.

The proposed opencut mining method is conventional and well understood. Reliability of the mining models is mainly dependent on the Mineral Resource model. Required production rates are relatively small for the equipment proposed which should allow mine operators to adapt to actual conditions encountered.

While the processing methods are new, they have been extensively tested at bench and pilot scale.

Given the current status of the Mineral Resource model and operations plan the Ore Reserve should be a very good global estimate and a good local estimate in the areas of Measured Resources. Short term variations from the tonnes and grades predicted by the resource model are likely in any new mining operation, particularly as in areas of Indicated Resources but the given the small scale of the operation and well defined geology it is reasonable to expect that operating experience will assist rapid development of reliable short term plans.

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 the global leader in lithium mica processing.

With a tech-focused, ESG-led business model that is pilot-proven, our first lithium production – from far less contested mineral sources – are due in 2025. The Phase 1 Project will provide a meaningful contribution to decarbonisation 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 patented-protected L-Max® and LOH-Max® technologies providing an avenue for royalty revenues.

For more information, please visit our website.

Compliance Statement

The information in this report that relates to the Helikon 4 and Rubicon Stockpiles Mineral Resource estimates is extracted from an ASX Announcement dated 30 January 2023 ("Helikon 4 & Rubicon Stockpiles Upgrade to Mineral Resources"). The Mineral Resource estimates were completed by Matt Bampton of Cube Consulting 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 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.

The information in this report that relates to the Rubicon, Helikon 1 Helikon 4, Rubicon Tailings and Rubicon Stockpiles Ore Reserves estimates is based on information compiled by John Wyche of Australian Mine Design and Development Pty Ltd, who is a Fellow of the Australian Institute of Mining and Metallurgy, 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 Wyche 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 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.

APPENDIX – Ore Reserve Statement, Karibib Project, Namibia, 2 February 2023

Ore Reserves Statement

Karibib Project

Namibia

As at 2 February 2023

Prepared by Australian Mine Design and Development Pty Ltd

for

Lepidico Limited

Authors: John Wyche - AMDAD

Effective Date: 2 February 2023
Submitted Date: 2 February 2023

Office:	*Brisbane*		
Address:	*PO Box 15366 City East QLD 4002*	*Level 4 46 Edward Street Brisbane QLD 4000*	
Telephone:	*61 7 3012 9256*		*61 419 299323*
Facsimile:	*61 7 3012 9284*		
Email:	*Chris.desoe@amdad.com.au*		*John.wyche@amdad.com.au*

1 ORE RESERVES STATEMENT

1.1 SCOPE

The February 2023 Ore Reserves Estimate was prepared for Lepidico Limited by Australian Mine Design and Development Pty Ltd (AMDAD). It deals with the Mineral Resource for the Karibib deposit in Namibia as at 2nd February 2023. It is an update of the July 2022 Ore Reserve Estimate.

The Ore Reserves are based on extraction by open pit mining and reclamation of existing tailings and stockpiles. Ore will be beneficiated on site to produce a lithium rich concentrate consisting mainly of the lithium bearing mineral lepidolite. The lepidolite concentrate will be transported to the United Arab Emirates to be treated in Lepidico's patented LOH-Max®, L-Max® and S-Max® processes to produce battery grade lithium hydroxide or lithium carbonate and saleable by-products including amorphous silica and sulphate of potash. The Feasibility Study for the chemical processing facility and the integrated Phase 1 Project inclusive of the Karibib Project was completed in May 2020.

The Ore Reserve Estimate is based on the following Mineral Resource Estimates:

- Snowden Mining Industry Consultants. (2020). *Rubicon and Helikon 1 Mineral Resource Estimate, Project Number (AU10317), January 2020*. (Lepidico ASX release 30 January 2020).
- Resource Evaluation Services. (2021). *Rubicon Tailings Slimes Dumps Resource, January 2021*. (Lepidico ASX release 12 March 2021).
- Cube Consulting. (2023). *Helikon 4 and Rubicon Stockpiles Upgrade to Mineral Resources, January 2023.* (Lepidico ASX release 30 January 2023).

Changes to the July 2022 Ore Reserves Estimate are due to addition of Helikon 4 Pit, the Rubicon Tailings and the Rubicon Stockpiles.

No mining has been undertaken since July 2022 so there is no depletion of the Mineral Resource.

The Ore Reserves include pits on three deposits named Rubicon, Helikon 1 and Helikon 4. The two Helikon pits are approximately 6.5km north of Rubicon Pit. Small scale historical mining has been conducted on all three deposits. The target mineral was mainly petalite which is associated with the lepidolite but tends to occur separately in the pegmatites leaving most of the lepidolite, which is the target mineral for the current project, in place. At Rubicon there is a shallow opencut with shallow underground workings mined off the highwall. At Helikon 1 there is a shallow opencut. At Helikon 4 there is a shallow opencut with shallow underground workings mined off the pit base.

The Rubicon Tailings were left by the former petalite mining operation.

The Rubicon Stockpiles were formed by an ore sorting beneficiation trial by a former owner of the project.

1.2 CONTRIBUTING PERSONS

The May 2020 and July 2022 Ore Reserve Statements prepared by AMDAD were supported by contributions from the persons listed in Table 4. Their contributions are still relied on. There have been no changes to the estimated process recoveries, operating costs or product pricing since July 2022.

1.3 ACCORD WITH JORC CODE

This Ore Reserves Statement has been prepared in accordance with the guidelines of the Australasian Code for the Reporting of Resources and Reserves 2012 Edition (the JORC Code 2012).

The Competent Person signing off on the overall Ore Reserves Estimate is Mr John Wyche, of Australian Mine Design and Development Pty Ltd, who is a Fellow of the Australasian Institute of Mining and Metallurgy and who has 33 years of relevant experience in operations and consulting for open pit industrial minerals and metalliferous mines.

1.4 ORE RESERVES SUMMARY

The Ore Reserve Estimate is summarised in Table 1.

Table 1 Karibib Lithium Project Ore Reserves

Pit	Mt	LiO2 %	Rb ppm	Cs ppm	Ta ppm	K %
Rubicon Pit						
Proved	1.60	0.50	2576	312	44	2.15
Probable	4.99	0.33	1866	204	31	2.13
Pit Total	6.59	0.37	2038	230	34	2.14
Waste	21.57					
Waste:Ore Ratio	3.3					
Helikon 1 Pit						
Proved	0.69	0.58	2234	458	54	1.73
Probable	0.99	0.46	2028	478	68	1.68
Pit Total	1.68	0.51	2113	470	62	1.70
Waste	2.22					
Waste:Ore Ratio	1.3					
Helikon 4 Pit						
Proved	0.00	0.00	0	0	0	0.00
Probable	0.82	0.51	2155	200	54	1.54
Pit Total	0.82	0.51	2155	200	54	1.54
Waste	3.06					
Waste:Ore Ratio	3.7					
Rubicon Stockpiles						
Proved	0.00	0.00	0	0	0	0.00
Probable	0.27	0.86	2863	415	63	2.29
Pit Total	0.27	0.86	2863	415	63	2.29
Waste	0.00					
Waste:Ore Ratio	0.0					
Rubicon Tailings						
Proved	0.00	0.00	0	0	0	0.00
Probable	0.07	0.99	4155	538	60	0.00
Pit Total	0.07	0.99	4155	538	60	0.00
Waste	0.00					
Waste:Ore Ratio	0.0					
Total Project						
Proved	2.29	0.52	2472	356	47	2.02
Probable	7.14	0.40	1982	253	40	1.99
Total Ore	9.43	0.43	2101	278	42	2.00
Waste	23.79					
Waste:Ore Ratio	2.5					

Notes:

1. The tonnes and grades shown in the totals rows are stated to a number of significant figures reflecting the confidence of the estimate. The table may nevertheless show apparent inconsistencies between the sum of components and the corresponding rounded totals.
2. The deposit has been assessed based on lithium grades in parts per million. For consistency with of reporting with other projects the Ore Reserve grades are presented in terms of Li_2O %. 1% Li_2O is equal to 4645 ppm Li.

1.5 SUMMARY OF MINE PLAN

Opencut Mining

The opencut target ore zones are within pegmatite sills formed in granite host rock. Dimensions and orientations of the orebodies are as follows:

Table 2 Karibib Pit Dimensions

Pit	Orebody Dip	Orebody True Width (m)	Strike Length Mined (m)	Maximum Depth (m)
Rubicon Pit	20° to 30° NE	5 to 15	750	98
Helikon 1 Pit	50° to 60° NNE	5 to 20	360	65
Helikon 4 Pit	50° to 70° S	8 to 35	300	78

Most of the target lithium mineralisation occurs as lepidolite which is contained entirely within the sills. Recoverable lithium is also present in associated micaceous lithium bearing minerals such as zinnwaldite. Four ore types are defined based on the occurrence and abundance of lithium mica minerals, principally lepidolite:

- Massive lepidolite,
- Disseminated lepidolite,
- Mica, and
- Pegmatite.

Flotation test work has demonstrated that acceptable lepidolite concentrate grades can be achieved from all four ore types down to relatively low lithium head grades.

Mining will be by a conventional excavator and truck operation with most of the ore and waste requiring drilling and blasting.

Tailings

During 2020 and 2021 tailings from the former small scale petalite mine at Rubicon were sampled by drilling and test pitting, the volume was estimated from the drilling and surface surveys and dry bulk density determinations were made. Processing to recover the petalite left the tailings with lithium grades above the current economic cut off. In March 2021 the tailings were classified as an Indicated Mineral Resource (ASX announcement dated 12 March 2021: *Karibib Mineral Resource Expanded*).

The tailings are included in the Ore Reserve at a zero cut off grade on the basis that the entire volume is above the economic cut off grade and will all be processed.

Stockpiles

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 have extreme variation in particle size which precludes requisite confidence to classify this material in the Indicated category. However, the 'product' stockpiles are consistent enough to allow reliable sampling, assaying, volume and tonnage estimation. In January 2023 these stockpiles were classified as an Indicated Mineral Resource (ASX announcement dated 30 January 2023: *Helikon 4 and Rubicon Stockpiles upgrade to Mineral Resources*).

The product stockpiles are included in the Ore Reserve at a zero cut off grade on the basis that the entire volume is above the economic cut off grade and will all be processed.

Mining Sequence

Ore from the pits, tailings and stockpiles will be beneficiated by flotation on site to produce a lepidolite concentrate. The concentrate will be transported from Karibib to Lepidico's proposed Phase 1 Lithium Chemical Plant at in the United Arab Emirates (UAE). The Ore Reserve is based on use of the LOH-Max® process at the chemical plant to produce battery grade lithium hydroxide monohydrate and saleable by-products including amorphous silica and sulphate of potash.

Mining rates are based on the tonnage and grade of concentrate produced by flotation as feed stock for the chemical plant. For the first four years mining focuses on high grade massive and disseminated lepidolite with target concentrate production of 57,671 tpa. Shallow high grade ore tonnes allow this to be achieved at low total mining rates of 600 to 800 ktpa ore and waste. The concentrator feed rate is 333 ktpa.

After Year 5 most of the high grade ore is depleted and the proportion of low grade mica and pegmatite increases. These ore types produce a lower lithium grade concentrate at a lower mass recovery. The chemical plant concentrate target feed rate increases to 66,577 tpa. The concentrator target feed rate to produce this increases to 541 ktpa in Years 5 to 7 then to 650 ktpa from Year 8. Deeper pits and increasing ore tonnes increase the total mining rates to 1.0 to 1.6 Mtpa in Years 5 to 9. When the final Rubicon pit pushback is commenced in Year 10 the mining rate peaks at over 4.3 to 6.6 Mtpa in Year 10 to 12 before gradually reducing from Year 13 to the completion of mining in Year 16.

The life of mine production schedule is currently based on Rubicon and Helikon 1 Pits. Ore from Helikon 4 and the Rubicon tailings and stockpiles will be used to supplement the opencut ore to maintain continuity of feed to the concentrator over the project life.

1.6 MINERAL PROCESSING

The Ore Reserves are based on production of battery grade lithium hydroxide monohydrate (LiOH.H2O) with by-products of amorphous silica, sulphate of potash (SOP) and rubidium/caesium brine. The general processing path is:

- Beneficiation of the ROM ore by crushing, grinding and flotation in a concentrator at the Karibib mine site. The lepidolite concentrate will grade approximately:
  - 1.80% lithium from massive lepidolite
  - 1.36% lithium from disseminated lepidolite
  - 1.17% lithium from the mica/pegmatite ore types.

- The lepidolite concentrate will be transported to a chemical plant to be constructed in the UAE.
- The chemical plant will use Lepidico's patented L-Max®, LOH-Max® and S-Max® processes to produce battery grade LiOH.H2O with by-products of amorphous silica, sulphate of potash and caesium brine.

The L-Max® process was developed by Lepidico to extract lithium from lepidolite mica concentrates and then purify the leach solution for production of battery grade lithium chemicals. The LOH-Max® process was developed by Lepidico to produce battery grade LiOH.H2O from the purified leach solution. It has never been applied on a commercial scale. The recoveries, consumables and costs in Lepidico's production and financial models are derived from extensive bench scale testing and continuous pilot plant operation processing. The products from the pilot plant have subsequently been tested to demonstrate by-products at marketable qualities and battery grade lithium chemicals.

1.7 PROJECT OWNERSHIP

Lepidico Limited attained an 80% interest in the Karibib Project by acquiring Desert Lion Energy (Pty) Ltd through a plan of arrangement in July 2019. In January 2020 the Namibian entity's name was changed from Desert Lion Energy to Lepidico Chemicals Namibia (Pty) Ltd.

Lepidico Chemicals Namibia owns 100% of the Karibib Project. Lepidico Chemicals Namibia's ownership is 80% Lepidico Limited and 20% Huni-Urib Holdings (Pty) Ltd.

1.8 TENURE AND PERMITTING

Mining and processing activities for Rubicon, Helikon 1, the tailings and stockpiles relevant to this Ore Reserves Statement are within Namibian Mining Lease ML 204.

The northern margin of the Helikon 4 Mineral Resource runs along part of the northern boundary of ML 204. Using the same geotechnical wall slope criteria as Helikon 1 it is necessary for the northern wall of Helikon 4 pit to cut into the adjoining tenement which is held by others. Excavation outside ML 204 is almost entirely waste.

The Ore Reserve Estimate assumes that an agreement will be negotiated with the adjoining tenement holder which is acceptable to the Namibian Government to excavate this ground. Alternatively, it is possible that the massive marble in the northern footwall of the Helikon 4 orebody may allow the wall to be mined much more steeply so the ore can be mined without incursion into the adjoining tenement. Lepidico is planning a geotechnical assessment to test this possibility.

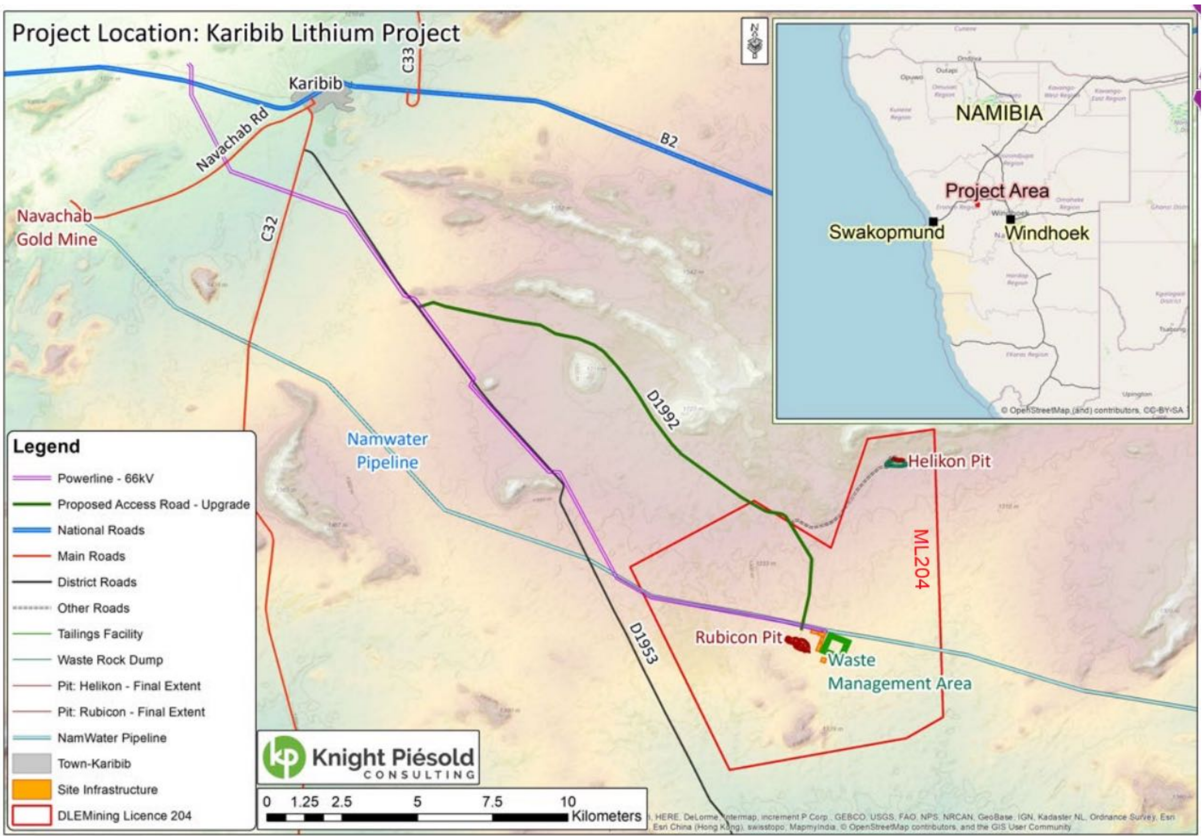


Figure 1 Mining Lease ML 204

ML 204 was granted to Desert Lion Energy by the Namibian Ministry of Mines and Energy on 19 June 2018 and remains current in the name of Lepidico Chemicals Namibia until 18 June 2028.

The conditions and obligations of ML 204 are consistent with requirements to carry out opencut mining and process the ore to a concentrate for export.

Key permits, such as water extraction and discharge are in place. Other permits, such as for explosives use, will be applied for closer to commencement of mining.

In March 2022 and Accessory Works Permit was approved for ML 204 allowing work on activities such as site access and power supply.

The project will be conducted on Farm Okongava 72 which is owned by the Namibian Government. Desert Lion Energy negotiated an agreement with the Government to conduct operations on the land. Lepidico Chemicals Namibia is currently updating this agreement to accord with the proposed mine plan.

The Namibian Government requires value adding within Namibia where it is commercially and technically acceptable. Lepidico Chemicals Namibia has demonstrated to the Namibian Government that for the first phase of the project refining the concentrate in Namibia adversely impacts the project economics. As such it is necessary to export the concentrate for refining in Abu Dhabi. Lepidico Chemicals Namibia remains open to assessing refining in Namibia for future expansions of the project. Lepidico Chemicals Namibia sees no likely impediment to Mineral Export Permits for the concentrate.

1.9 ENVIRONMENTAL AND SOCIAL

Operations on ML 204 will be conducted under an Environmental Compliance Certificate (ECC) which was renewed by Lepidico Chemical Namibia in October 2020 for three years to October 2023. Renewal of the ECC was done in conjunction with an Environmental and Social Impact Assessment (ESIA) which included, among other things, an extensive public consultation period.

An Environmental Management Plan (EMP) covering operations on ML 204 has been prepared. The Obligations Register for the EMP is consistent with the ECC, ESIA and lease conditions for ML 204.

An Environmental Permit for the chemical plant in Abu Dhabi has been approved.

1.10 CHANGES FROM JULY 2022 ORE RESERVE ESTIMATE

There have been no changes to the Ore Reserves inputs from July 2022 to January 2023. These inputs are shown in Table 2.

Changes to the Ore Reserves Estimate from July 2022 to January 2023 are shown in Table 3. They are entirely due to the addition of Helikon 4 Pit, the Rubicon Tailings and the Rubicon Stockpiles.

Table 3 Recovery Revenue and Cost Inputs

Inputs		January 2023		
Ore Type		**Lep Z**	**Lep Z B**	**Mica**
Maximum Concentrator Feed Rate	ktpa	330	330	330
OPERATING COSTS				
Mining				
Mining - waste Rubicon	$/t	3.51	3.51	3.51
Mining - waste Helikon 1	$/t	3.19	3.19	3.19
Mining - waste Helikon 4	$/t	3.51	3.51	3.51
Mining - ore Rubicon to ROM Pad	$/t	3.96	3.96	3.96
Mining - ore Helikon 1 to ROM Pad	$/t	5.02	5.02	5.02
Mining - ore Helikon 4 to ROM Pad	$/t	5.29	5.29	5.29
ROM ore rehandle	$/t	1.22	1.22	1.22
Site Costs - Karibib				
Mica Concentrator	$/t ore	25.01	25.01	16.16
Administration - personnel	$/t ore	5.47	5.47	5.47
Administration - other	$/t ore	2.60	2.60	2.60
Logistics freight				
Mica conc FOB component	$/t conc.	53.00		
Mica conc from FOB to destination	$/t conc.	71.95		
Phase 1 Chemical Plant	$/t conc.	434.00		
PRODUCTION				
Mica concentrate				
Recovery - Li	%	88.40%	85.60%	74.60%
Concentrate grade - Li	%Li	1.80%	1.36%	1.17%
Recovery - Cs	%	88.80%	79.50%	78.60%
Chemical Plant				
LiOH monohydrate recovery	%	89.40%	89.40%	89.40%
LiOH monohydrate grade	%LiOH.H2O	99.00%	99.00%	99.00%
Cs recovery to Cs sulphate brine	%	83.00%	83.00%	83.00%
Cs grade in Cs sulphate brine	%	43.32%	43.32%	43.32%
Final Products				
LiOH.H2O productions rate	tpa	5,680		
Amorphous silica (pure basis)	tpa	32,493		
SOP Product	tpa	8,987		
Rb/Cs formate brine	tpa	316		
Rb sulphate brine	tpa	1,375		
Gypsum rich residue	tpa	136,523		
Residue moisture	%	26.00%		
REVENUES				
Lithium hydroxide	$/t	17,015		
Amorphous silica	$/t	50		
Sulphate of Potash	$/t	530		
Rb/Cs formate brine	$/t	25,000		

Note: January 2023 Inputs are unchanged from July 2022 Ore Reserve

Table 4 Changes to Ore Reserves July 2022 to January 2023

	July 2022		January 2023	
Pit	**Mt**	**LiO2 %**	**Mt**	**LiO2 %**
Rubicon Pit				
Proved	1.60	0.50	1.60	0.50
Probable	4.99	0.33	4.99	0.33
Pit Total	6.59	0.37	6.59	0.37
Waste	21.57		21.57	
Waste:Ore Ratio	3.3		3.3	
Helikon 1 Pit				
Proved	0.69	0.58	0.69	0.58
Probable	0.99	0.46	0.99	0.46
Pit Total	1.68	0.51	1.68	0.51
Waste	2.22		2.22	
Waste:Ore Ratio	1.3		1.3	
Helikon 4 Pit				
Proved			0.00	0.00
Probable			0.82	0.51
Pit Total			0.82	0.51
Waste			3.06	
Waste:Ore Ratio			3.7	
Rubicon Stockpiles				
Proved			0.00	0.00
Probable			0.27	0.86
Total Stockpiles			0.27	0.86
Waste			0.00	
Waste:Ore Ratio			0.0	
Rubicon Tailings				
Proved			0.00	0.00
Probable			0.07	0.99
Pit Tailings			0.07	0.99
Waste			0.00	
Waste:Ore Ratio			0.0	
Total Project				
Proved	2.29	0.52	2.29	0.52
Probable	5.98	0.35	7.14	0.40
Total Ore	8.27	0.40	9.43	0.43
Waste	23.79		26.85	
Waste:Ore Ratio	2.9		2.8	

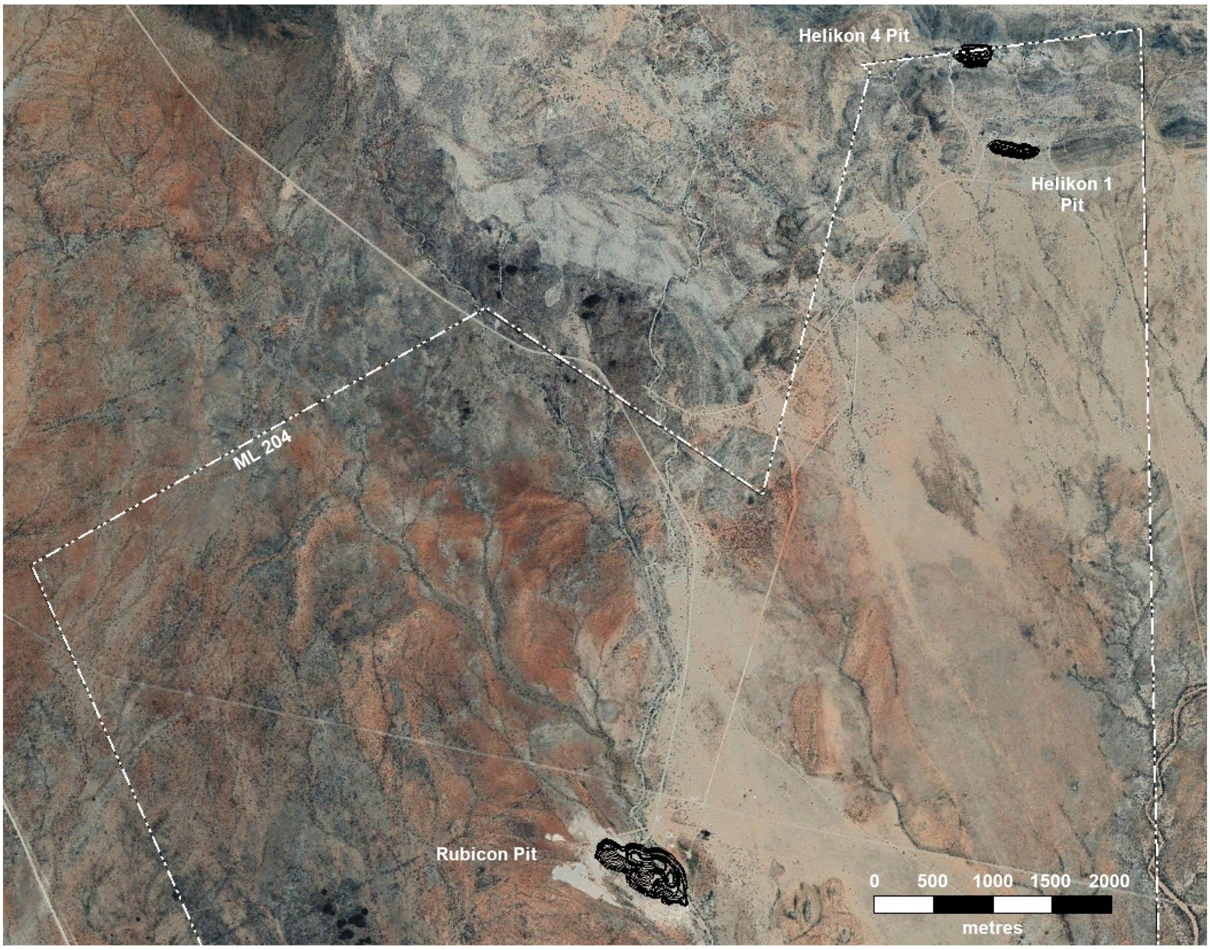


Figure 2 Mine Area

Figure 3 Rubicon Final Pit

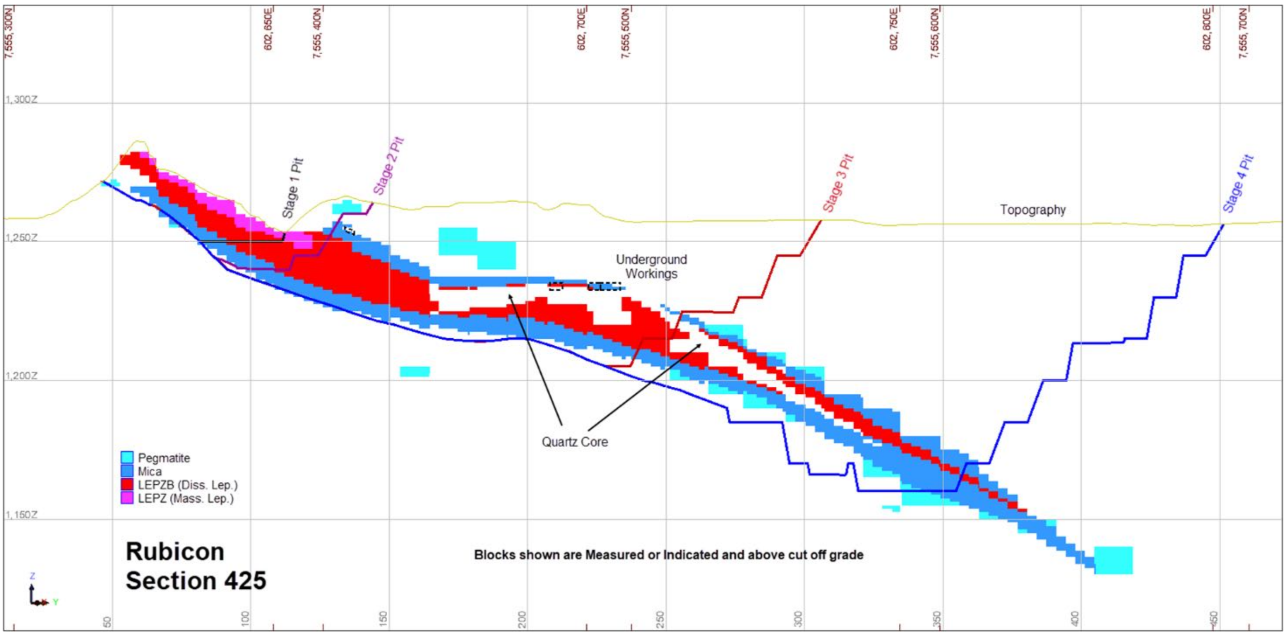


Figure 4 Rubicon Pit Cross Section

Figure 5 Helikon 1 Final Pit

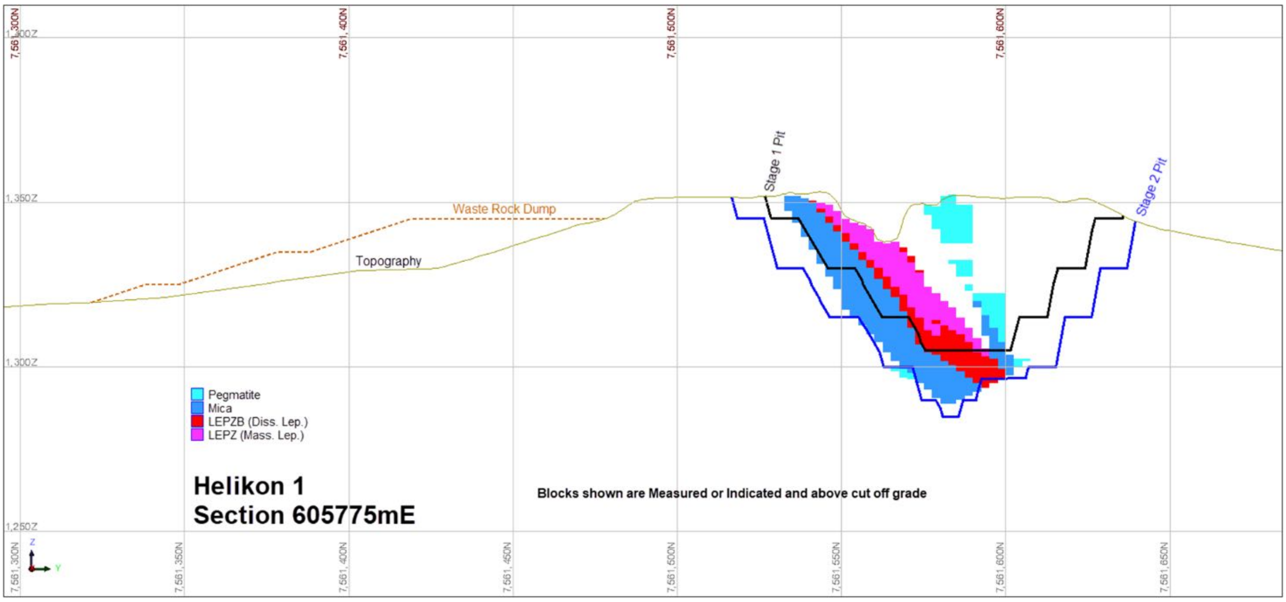


Figure 6 Helikon 1 Pit Cross Section

Figure 7 Helikon 4 Final Pit

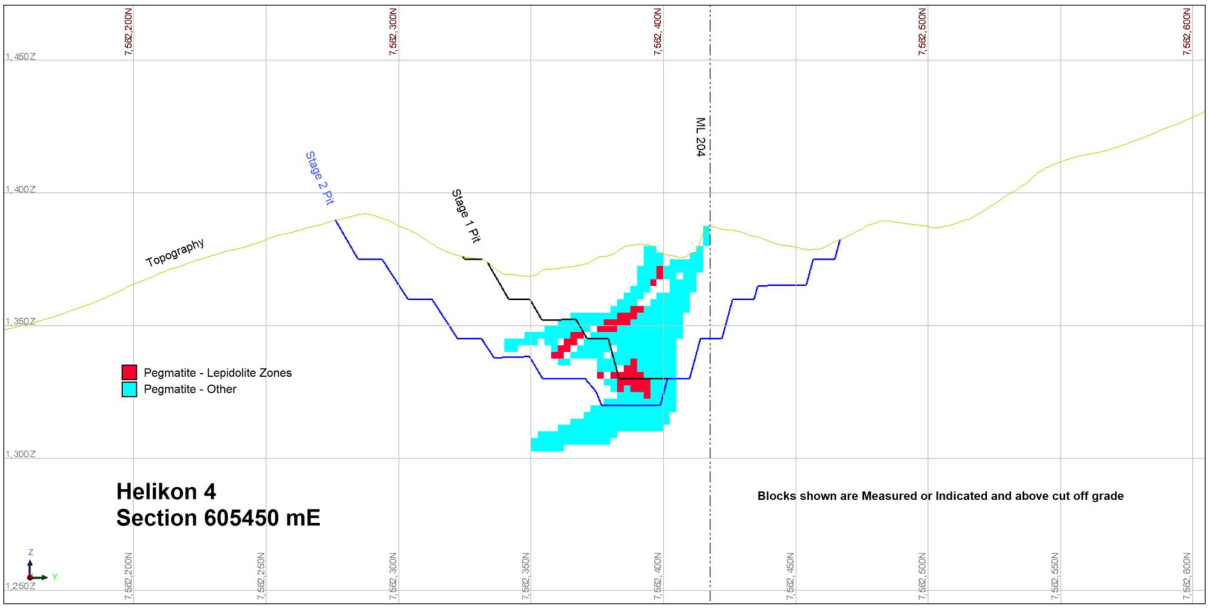


Figure 8 Helikon 4 Pit Cross Section

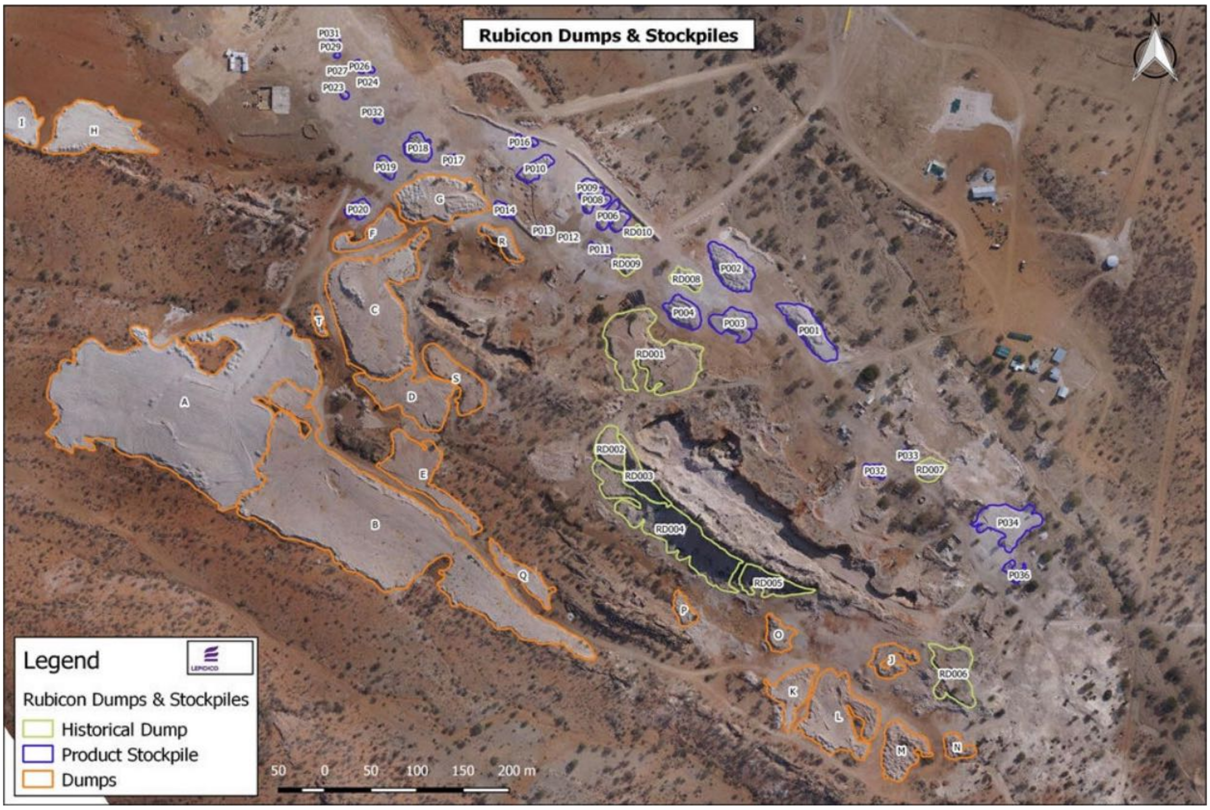


Figure 9 Rubicon Stockpiles

Table 4 Contributing Experts

Expert Person/Company	Area of Expertise	References / Information Supplied
Andrew Scogings Snowden Mining Industry Consultants	Mineral resource estimation	Karibib Lepidolite Deposit Mineral Resource Estimate, January 2020 (Rubicon and Helikon 1)
Stephen Godfrey Resource Evaluation Services	Mineral resource estimation	Rubicon Tailings Slimes Dump Resource, January 2021
Mathew Bampton Cube Consulting	Mineral resource estimation	Mineral Resource Estimates for Helikon 4 and the Rubicon Beneficated Stockpiles, January 2023
Guy Grocott Pells Sullivan Meynink Pty Ltd	Geotechnical engineering	Karibib Lithium Project, Stage 2 Open Pit Geotechnical Feasibility Assessment, PSM3930-002R, 19 March 2020
Robert Harris Project Definition Pty Ltd	Opencut mining costs Lepidolite concentrate transport costs	Opencut mining costs per tonne for ore and waste. Concentrate transport logistics and costs from Karibib to the UAE.
Peter Walker Lepidico Limited	Metallurgy	Summary of metallurgical studies and test work. L-Max® Phase 1 (Flotation) Variability Testwork report, Strategic Metallurgy, November 2018 L-Max® Pilot Plant report, Strategic Metallurgy, September 2019, (RP_ALV_L-Max Pilot_Rev_01) and subsequent progress reports to produce by-products and battery grade lithium chemicals using the LOH-Max®, L-Max® and S-Max® processes.
Peter Walker Lepidico Limited	Environmental	Summary of Karibib water and waste rock management studies by Knight Piesold. Existing Environment Impact Assessments and Environmental Management Plans Risk Based Solutions CC
Peter Walker Lepidico Limited	Karibib Project and UAE process and infrastructure engineering and operating and capital cost estimation	Karibib Mineral Concentrator Feasibility Study 2020, Lycopodium Minerals PL Concentrator and administration costs prepared by Lepidico Ltd
Peter Walker Lepidico Limited	Commercial	Lithium hydroxide, lithium carbonate and by-product price forecast. Project financial model.
John Wyche AMDAD Pty Ltd	Mining Engineering	Pit optimisation. Opencut mine design. Detailed production scheduling. Competent Person for Ore Reserves.

1.11 ORE RESERVE ASSESSMENT

Table 5 JORC Table 1 Section 4, Estimation and Reporting Ore Reserves

This Ore Reserve includes maiden Statements for the Helikon 4 Pit, the Rubicon Tailings and the Rubicon Stockpiles which are all part of the Karibib Project along with Rubicon Pit and and Helikon 1 Pit. Sections 1, 2 and 3 of Table 1 from the JORC Code 2012 are included here to provide clarity on the bases of the Mineral Resources underpinning the Ore Reserves.

Sections 1, 2 and 3 of the following Table 1 relating to Rubicon and Helikon 1 are based on the report "*Rubicon and Helikon 1 Mineral Resource Estimate, Project Number AU10317, January 2020*" by Snowden Mining Industry Consultants (Lepidico ASX release 30 January 2020).

Sections 1, 2 and 3 of the following Table 1 relating to the Rubicon Tailings are based on the report "*Rubicon Tailings Slimes Dumps Resource, January 2021*" by Resource Evaluation Services (Lepidico ASX release 12 March 2021).

Sections 1, 2 and 3 of the following Table 1 relating to the Helikon 4 and the Rubicon Stockpiles are based on the ASX release "*Helikon 4 and Rubicon Stockpiles upgrade to Mineral Resources, January 2023*" with resource estimation and reporting by Cube Consulting (Lepidico ASX release 30 January 2023).

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• For Rubicon and Helikon 1, a combination of predominantly diamond drilling (DD), producing core and reverse circulation (RC) drilling, producing rock chips, has been utilised to sample the pegmatite. • The entire width of the pegmatite, including un-mineralised zones, was sampled. Any unsampled pegmatite from prior drilling phases was re-sampled. In the 2019 phase of drilling, the

Criteria	JORC Code explanation	Commentary
	• *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 (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.*	footwall and hanging wall host rock was not sampled, and quartz core greater than 3 m thick was not sampled. • Diamond drilling core samples were cut longitudinally in half. Intervals submitted for assay were determined according to geological boundaries. Samples were taken at nominal 1 m intervals with a nominal minimum sample length of 0.5 m while honouring geological contacts. • 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 submitted for assay. A reference sample of each of the samples submitted was kept on site. The non-pegmatite material was discarded. • Channel samples were collected from two diamond saw cut channels, typically 2–5 cm deep and 4–5 cm in width. Channel sampling was also conducted on exposed lepidolite mineralisation in the historical open pits. Sample lengths varied from 0.1 m to 2.0 m and samples were chipped out using a hammer and chisel. • Sampling of the Rubicon dumps was undertaken in various stages and using different methodologies. This included: - Historical dumps were sampled in 2017 (Benzu Minerals) by collecting 0.5-1.0 m channel samples every 2-5 m within trenches. - In 2017 some historical dumps were drilled by RC on a nominal 10 m × 10 m grid, with samples taken every meter.

Criteria	JORC Code explanation	Commentary
		- In 2020 smaller dumps/stockpiles had representative grab samples collected from them. Larger stockpiles/dump sampling was undertaken by collecting samples from small pits dug 0.15-0.55 m deep and spaced at a nominal 40 m × 40 m grid. - The Rubicon tailings were sampled by RC and pitting. RC drilling was conducted on a 25 m × 25 m grid with samples collected every meter. Pit samples were collected from pits dug 0.2-4.5 m deep. Samples were collected from the walls of the pits at 1 m spacings with sample lengths ranging from 0.4-1.5 m in length. • Sampling of the Helikon dumps was undertaken by Desert Lion Energy in 2017 by: - RC drilling: 1m samples were collected from holes drilled at a nominal 10 m × 10 m grid, - Pitting: 1.5 m square pits were dug 0.7-1.8m deep with one sample taken per pit. • 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 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

Criteria	JORC Code explanation	Commentary
		geological boundaries or at nominal 1 m intervals. The 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 submitted for assay. A reference sample of each of the samples submitted was kept on site. • 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 the 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

Criteria	JORC Code explanation	Commentary
		shovel at approximately hip-height.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• The diamond core drilling was a combination of HQ (63 mm) at the top of the drillholes and NQ (48 mm) diameter once more competent rock was encountered. The RC drilling was 140 mm diameter drillholes. • At Rubicon, drillholes are generally spaced 50 m apart, while at Helikon 1 drillholes are generally spaced 20 m apart, with azimuths ranging between 217° and 243° (averaging 229°) and inclinations at between -50° and -73° in order to intersect the pegmatites as close to perpendicular to strike and dip as possible. A number of vertical drillholes were also drilled. Due to access restrictions at Rubicon a number of low-angle (15–40°) holes were drilled from the footwall side, and therefore semi down-dip, to obtain drill data through the elevated remnant footwall mineralisation. The deepest DD hole was drilled to a depth of 203 m and the deepest RC hole was drilled to a depth of 126 m. • Five phases of drilling were completed: in 2017, 2018, 2019 and 2022. • In 2017, 29 DD holes for 2,376.7 m were completed. • 35 channels (65.36 m) were also cut and sampled. • The drilling from mid-2017 to mid-2018 included 28 DD holes (3,234.40 m); five RC holes (398.00 m) and eight RC/DD holes (949.84 m). • In 2019, 90 DD holes were drilled, for a total of 5,164 m. • For the 2017, 2018 and 2019 drilling a Reflex EZ-Trac survey was performed at 50 m downhole for DD holes. The RC holes were not surveyed.

Criteria	JORC Code explanation	Commentary
		• All RC holes drilled into stockpiles and Rubicon tailings were vertical and were drilled with a 140 mm diameter face sampling hammer. • 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 2022 drilling program of RC and diamond tails, no downhole surveys were undertaken. • DD holes were not orientated.
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.*	• For Rubicon and Helikon 1, core recoveries for the DD holes were >95% according to core recovery logs. 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. • RC drilling recorded recoveries averaged 70 % (using a specific gravity of 2.6 and RC hole diameter of 140 mm). • A comparison of the assay results of the RC with the drill core samples within the mineralised zones shows no bias and indicates that the RC sampling is representative of the mineralisation present. • RC drilling of Rubicon dumps/stockpiles recorded recoveries of around 30%. RC samples were not used to estimate the grades of the dumps/stockpiles. • RC drilling of the Rubicon tails recorded recoveries of <20% and hence these samples were not used for the grade estimation. • For Helikon 4, the drillcore sample recovery approached 100% throughout all holes, except for some near surface material

Criteria	JORC Code explanation	Commentary
		where the holes were collared in marble. The samples taken for assay are considered representative of the mineralisation present. • For RC, no overall bag weights or sample weights were recorded in the database. • 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	• *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.*	• Pre-2018 drillhole 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 (rock quality designation (RQD), structure orientations and structure count). 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, with the photographs stored in the database. • The entire length of all drillholes was logged for geological, mineralogical and geotechnical data. • A sample of the RC chips was washed and retained in a chip tray. Chip samples have been geologically logged at 1 m

Criteria	JORC Code explanation	Commentary
		intervals with data recorded as per diamond drilling. Sample weight, moisture content, lithologies, texture, structure, alteration, oxidation and mineralisation were recorded. • 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	• *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 sub-sampling 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.*	• For Rubicon and Helikon 1, 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. The non-pegmatite material was discarded. • 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)

Criteria	JORC Code explanation	Commentary
		or a single component ring mill (flying disk mill) to 85% passing 200 mesh (-75 µm). An aliquot of the pulverised sample was put into an envelope and sealed and submitted to ALS-Chemex Vancouver for analysis. • 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	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered*	• The workflow for sample analysis has varied over time.

Criteria	JORC Code explanation	Commentary
laboratory tests	*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, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• **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 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-HNO_3-$HClO_4$ digestion and HCl leach, which has an analytical range of up to 100,000 ppm Li. • 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

Criteria	JORC Code explanation	Commentary
		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 approximately 12%). • 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. • 181 samples originally analysed by Set Point were sent to ALS-Chemex (Canada) for external laboratory checks. A comparison of the results showed acceptable correlation. • Lepidico implemented an internal QAQC protocol comprising the insertion of CRMs, blanks and coarse crush duplicates on a systematic basis amongst the samples shipped to ALS. 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
		approximately 12%). • The following CRMs were used during this phase of drilling: AMIS0338; AMIS0339, OREAS147; OREAS148 and OREAS149. • QC results were reviewed by the Exploration Manager on a batch-by-batch basis with results being uploaded to the Maxwell™ Datashed database. • **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 for Helikon 4 considered 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	• *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.*	• Prior to 2019, The MSA Group (MSA) consultants observed the mineralisation in a selection of cores on-site, although no check assaying was completed by MSA. Checks of the logging of the drillholes observed were carried out and subsequent checks of the logs against the core photographs were also completed off-site. • Drilling data were stored on-site as both hard and soft copies. Drilling data were validated on-site before being sent to data management at MSA where the data were further validated.

Criteria	JORC Code explanation	Commentary
		When results were received, they were loaded to the central database and shared with various stakeholders via email. QC results were reviewed by on-site personnel. Hard copies of assay certificates were stored digitally by the exploration manager. • Black Fire Minerals (who previously held the Exploration Licence) drilled 12 drillholes in 2010. In 2018, the collar positions were located in the field and surveyed using differential global positioning system (GPS). The cores were stored at the Ministry of Mines and Energy's core storage facility in Windhoek and two of the drillholes were relogged to check against the historical data. • Verification sampling of selected mineralised intervals (using quarter core) from two of the drillholes was conducted and the samples were assayed by ALS-Chemex. A comparison of the results showed an acceptable correlation for inclusion of the data into the database used for the Mineral Resource estimate (MRE). • On receipt of assay data, elemental Li values, reported in ppm, are converted to a percent (%) and then to the oxide Li_2O by using a multiplication factor of 2.153. • 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.

Criteria	JORC Code explanation	Commentary
		• No twin holes have been drilled at Helikon 4.
Location of data points	• *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.*	• Pre-2022 diamond drillholes were downhole surveyed using a Reflex EZ-Trac survey at least at 50 m intervals or at the end of the hole. The RC drillholes and any diamond drillholes shorter than 50 m were not surveyed. • The grid system used is UTM 33S/WGS84. • The collar positions of all drillholes 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 in order to obtain updated imagery and a digital terrain model. The data is of suitable accuracy and detail for use in the MRE. • The RC drill holes drilled in 2022 (and their associated diamond tails) were not downhole surveyed.
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.*	• For Rubicon and Helikon 1, drillholes are mostly spaced at between 20 m and 50 m, and up to 100 m apart along northeast-southwest orientated fence lines spaced approximately 50 m apart at Rubicon and 20 m apart at Helikon 1 over a strike length of approximately 1,200 m at Rubicon and 500 m at Helikon 1. These spacings are considered sufficient to provide a confident understanding of the mineralisation • Mineralisation at Rubicon appears to be open at depth to beyond 400 m down dip, with most of the deepest drillholes intersecting mineralisation. Several holes intersected historical underground

Criteria	JORC Code explanation	Commentary
		workings at Rubicon. The historical workings created an open stope cavity underground that is accessible from the pit floor. Underground plans from the mid-1990s were used in conjunction with a survey completed in 2019 to largely determine the extents of the cavity, the information which was used to deplete the extent of the mineralisation. Several holes were drilled from surface into remnant pillars to provide data on position and continuity of the mineralisation • Sample lengths were composited to 1 m. • The drilling is considered acceptable to establish confidence in the geological and grade continuity consistent with Measured, Indicated and Inferred Mineral Resources. • 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	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• For Rubicon and Helikon 1, the majority of drillholes were inclined at between -50° and -73° to the southwest in order to

Criteria	JORC Code explanation	Commentary
to geological structure	• *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.*	intersect the pegmatite as close to normal to dip and strike as possible. A number of vertical drillholes were also drilled, as well as reverse holes drilled in the opposite direction where access was limited. The deepest DD hole was drilled to a depth of 203 m below surface and the deepest RC hole was drilled to a depth of 126 m below surface. The true thickness will be between 3% and 10% less than the drilled intersection for the vertical drillholes. • Channel samples were taken at a spacing of between 10 m and 50 m and were selectively taken in mineralised zones within the Rubicon Main pit and at Helikon 1. The selectivity has been dealt with appropriately in the MRE by applying appropriate parameters for block model definitions and estimation methodologies. • 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 may be present.
Sample security	• *The measures taken to ensure sample security.*	• 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

Criteria	JORC Code explanation	Commentary
		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 a 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	• *The results of any audits or reviews of sampling techniques and data.*	• A consultant from Snowden Mining Industry Consultants Pty Ltd visited the site and the ALS sample preparation laboratory in 2019, inspecting the geology at Rubicon and Helikon; verification was made of data and procedures: several drill collar and channel sample positions, logging, sampling, density methods, data handling procedures and sample preparation. • The Competent Person for Rubicon and Helikon 1 considered that the exploration work conducted by Lepidico was carried out using appropriate techniques for the style of mineralisation at Rubicon and Helikon 1, and that the resulting database is suitable for Mineral Resource estimation. • The Competent Person for Helikon 4 and the Rubicon Dumps visited the site in 2022. Activities included reviewing Rubicon dump sampling methodologies, observation of diamond drill core from programs at Helikon 4, sampling and sample preparation

Criteria	JORC Code explanation	Commentary
		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
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 Rubicon and Helikon deposits are contained within Mining Licence ML 204, covering an area of 68.68 km^2. • ML 204 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.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• 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. • Historical exploration includes:

Criteria	JORC Code explanation	Commentary
		-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	• *Deposit type, geological setting and style of mineralisation.*	• ML 204 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.

Criteria	JORC Code explanation	Commentary
		• The pegmatites are classified as LCT Complex lepidolite-petalite pegmatites (with minor amblygonite). • 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	• *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:*
	  ○ *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.*
		• Exploration results are not being reported.
		• The attached MRE report contains collar locations for Helikon 4 drill holes.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	• *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 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.*	• Exploration results are not being reported; therefore no data was aggregated for reporting purposes. • No equivalent values used or 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 drill hole angle is known, its nature should be reported.* • *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').*	• Exploration results are not being reported. • There is no relationship between mineralisation, width and grade. • For Rubicon and Helikon 1, drilling intersects the pegmatite at approximately 90°; however, the pegmatite is not of uniform thickness nor orientation. Consequently, most drilling intersections do not represent the exact true thickness of the intersected pegmatite. The true thickness will be between 3% and 10% less than the drilled intersection for the vertical drillholes. • For Helikon 4, 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.
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.*	• Exploration results are not being reported. • Drill hole locations are presented in the attached MRE report.

Criteria	JORC Code explanation	Commentary
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.*	• Exploration results are not being reported.
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.*	• Mineralogical investigations at Rubicon (of 121 drill core samples) have identified the main lithium minerals present as lithium micas (comprising mainly of lepidolite) with lesser petalite and cookeite, which is present as an alteration product of the petalite. • The lithium minerals identified by 303 XRD analyses (151 from Rubicon; 152 from Helikon 1) are (in order of approximate average abundance) lepidolite (95% to 100%), petalite (0% to 5%), amblygonite (0% to 5%) and cookeite (0% to 1%). The cookeite is only present in samples containing petalite and its content is directly proportional to the petalite content and has been interpreted to be an alteration product of the petalite. • The proportion of lepidolite relative to other lithium minerals increases with Li_2O content. • 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 amount s (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.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	• Near-mine exploration will focus on the unexplored strike extensions of the Rubicon pegmatite to the west-northwest, and

Criteria	JORC Code explanation	Commentary
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	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 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
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 a SQL database that is managed by MaxGeo through Datashed. • For the 2020 MRE the data was validated briefly by Snowden during importation of the drillhole data for the resource estimate. No errors were identified during importation and de-surveying. • For the 2022 MRE, Cube Consulting carried out further database validation. A few issues were noted, but these were resolved before the estimation commenced.
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.*	• A consultant from Snowden Mining Industry Consultants Pty Ltd visited the site and the ALS sample preparation laboratory in 2019, inspecting the geology at Rubicon and Helikon; verification was made of data and procedures: several drill collar and channel sample positions, logging, sampling, density methods, data handling procedures and sample preparation. • In 2022, the Competent Person Helikon 4 and the Rubicon

Criteria	JORC Code explanation	Commentary
		Dumps visited the site, including the Helikon 4 deposit, the Rubicon Open Pit, core logging facilities and processes, and inspected the location and sampling methodologies for the Rubicon Dumps.
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.*	• For Rubicon and Helikon 1, the mineralisation zones were interpreted in section by Lepidico and subsequently reviewed by Snowden. The interpretation of the mineralisation was based on geological logging, mineralisation styles and mapping. There is no defined weathering profile at Rubicon or Helikon 1, with any oxidation likely the result of fracturing. As such, all in-situ rock was defined as fresh material. At Helikon 1, a known fault terminates mineralisation at depth. • The orientation of the mineralisation zones is evident in exposures within the current open pits. • Alternative interpretations are unlikely to have a material impact on the global resource volumes. • 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.
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.*	• At Rubicon, a series of stacked sub-parallel pegmatites of variable thickness are intruded into a sequence of diorites and pegmatitic granite. The Rubicon pegmatite is the largest of these and forms a prominent ridge that strikes for approximately 1,200 m in a west-northwest direction. The pegmatite dips to the northeast, with dips of approximately 45° near surface and flattening to between 18° and 25° at depth. Rubicon is a quartz-

Criteria	JORC Code explanation	Commentary
		feldspar-muscovite pegmatite that is up to 70 m thick and extends down dip for more than 400 m. At its thicker portions the pegmatite is well fractionated, forming ellipsoidal, well zoned, lithium-mineralised bodies developed around central quartz cores. The mineralised zones are 10–30 m thick and extend for most of the length of the pegmatite. At Rubicon, the lithium mineral is lepidolite with lesser petalite and minor amblygonite. Cookeite occurs as an alteration product of petalite. The petalite, which occurs adjacent to the quartz core, was the focus of historical mining (open pit and underground) and is now essentially depleted. Very little petalite is noted in recent drilling. • The historical Helikon workings expose a series of LCT type pegmatites (Helikon 1 to 5) that have been intruded along two east-west lines into marbles and calc-silicate schists of the Karibib Formation. Helikon 1, the largest of these five pegmatites, occurs on the southern line. The other four notable pegmatites (Helikon 2 to 5) occur 1 km to the north along a 1.7 km semi-continuous line of pegmatites. The Helikon group pegmatites have been exploited historically by open pit mining for lithium-bearing minerals (petalite, lepidolite and amblygonite), tantalite and beryl. • The Helikon 1 pegmatite has a strike length of 400 m and an average thickness of 65 m, dipping 70° to the north. The pegmatite is strongly fractionated and exhibits distinct mineralogical zonation particularly around a central quartz core that develops in the ticker part of the pegmatite. Helikon 1 is truncated at approximately 60 m depth by a low-angle fault dipping 30° south.

Criteria	JORC Code explanation	Commentary
		• 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 south, with dips of approximately 65° near surface and flattening to around 40° at depth. • 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	• *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*	• The Rubicon block model was constructed based on a parent block size of 25 m(E) by 12.5 m(N) by 5 m(RL). A minimum sub-block size of 6.25 m(E) by 3.125 m(N) by 1.25 m(RL) 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

Criteria	JORC Code explanation	Commentary
	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 significance (eg 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.*	continuity analysis. The block model was coded with the mineralisation type and underground voids supplied as surveyed shapes from previous mining. • For Rubicon, 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, drillhole density and grade variability. All domain boundaries were treated as hard boundaries for estimation purposes except for the boundary between disseminated and massive lepidolite, which was treated as a soft boundary. The initial search ellipse of 75 m along strike by 37.5 m down dip by 5 m across strike was defined based on the results of the variography and assessment of the data coverage. A minimum of eight and maximum of 20 composites was used for the initial search pass and limited to a maximum of composites per drillhole. The second search pass utilised double the search ellipse radii (i.e. 150 m by 75 m by 10 m) with a minimum of eight and a maximum of 20 composites. For the third search pass, the search ellipse radii were tripled and the minimum number of composites reduced to four. • Li, Cs, Fe, K, Na, P, Rb and Ta grades were estimated using ordinary block kriging (parent cell estimates) using Datamine Studio RM software. • The Helikon 1 block model was constructed based on a parent block size of 10 m(E) by 10 m(N) by 2.5 m(RL). A minimum sub-block size of 2.5 m(E) by 2.5 m(N) by 0.625 m(RL) was used to ensure adequate volume resolution. The parent block size is

Criteria	JORC Code explanation	Commentary
		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 mineralisation zones; waste dumps or mine fill identified by progressive topographic surfaces were coded as fill. • For Helikon 1, the main strike of the mineralisation zones was used for the search direction for each domain. The primary search ellipse ranges were defined based on the results of the variography, drillhole density and grade variability. All domain boundaries were treated as hard boundaries for estimation purposes. The initial search ellipse of 37.5 m along strike by 37.5 m down dip by 5 m across strike was defined based on the results of the variography and assessment of the data coverage. A minimum of eight and maximum of 18 composites was used for the initial search pass and limited to a maximum of composites per drillhole. The second search pass utilised double the search ellipse radii (i.e. 75 m by 75 m by 10 m) with a minimum of eight and a maximum of 18 composites. For the third search pass, the search ellipse radii were tripled and the minimum number of composites reduced to four. Over 85% of blocks were estimated during the first two search passes. Blocks not estimated after the third search pass were assigned the median grade of the domain (less than 1% of grade blocks in all cases). • Li, Cs, Fe, K, Na, P, Rb and Ta grades were estimated using ordinary block kriging (parent cell estimates) using Datamine Studio RM software. • Li_2O % calculated by multiplying Li ppm by 2.153 and dividing by

Criteria	JORC Code explanation	Commentary
		10,000 for reporting. • Grade estimates were validated against the input drillhole composites (globally and using grade trend plots) and showed a reasonable comparison. • For Helikon 4, 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. • Li, Cs, Fe, K, Na, P, Rb and Ta grades were estimated using ordinary block kriging (parent cell estimates) including the use of dynamic anisotropy to locally adjust the orientation of the search ellipse and variogram models due to variations in the dip and strike of the mineralised zone. • All domain boundaries were treated as hard boundaries for estimation purposes. • Zones where relatively high petalite was logged had grades reset to zero, to minimize the potential for bias in estimating

Criteria	JORC Code explanation	Commentary
		lithium which might be from minerals that are not extractable like the micas or amblygonite. • Estimation was as Li in ppm, converted to Li_2O % 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 discreet petalite component of the pegmatites only.
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 Resources for Rubicon and Helikon 1 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 by AMDAD. • The Mineral Resources for Helikon 4 have been reported above a 0.15% 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 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% Li_2O cut-off grade, based on the assumption that will be mined as a whole, with no grade selectivity being feasible.

Criteria	JORC Code explanation	Commentary
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. • Pit optimisation was completed by AMDAD. • For Helikon 4, 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 $LiOH.H_2O$), which price is being used for current project economics, and is currently lower than the current spot price.
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.*	• The Project is targeted as a vertically integrated development of mine, concentrator and downstream small commercial scale L-Max® and LOH-Max® chemical plant. • Processing on-site will involve conventional comminution followed by froth flotation to recover lithium-bearing minerals into a mineral concentrate. • 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
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 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.
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 (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.*	• For Rubicon and Helikon 1, bulk density measurements were measured onsite by Lepidico as part of drill programs completed in 2019. 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 which is considered appropriate by Snowden given the absence of a defined weathering profile at both Rubicon and Helikon 1. • A total of 337 samples were measured at Helikon 1, of which 238 measurements were made in the mineralized zones. A total of 546 samples were measured at Rubicon, of which 391 measurements were made in the mineralised zones. Solid quartz core with assumed known bulk density was used to validate the procedures applied for bulk density measurements. • Bulk densities were applied to the block models based on different mineralisation zones, with values for Rubicon in the range 2.56–2.71 $t.m^{-3}$, and for Helikon 1 in the range 2.63–2.72 $t.m^{-3}$. • The Competent Person for Rubicon and Helikon 1 recommended further bulk density testwork such as external

Criteria	JORC Code explanation	Commentary
		laboratory testing or downhole geophysics to support the bulk density values applied. • For Helikon 4, 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 size distribution (including larger particle size components), reflecting proportionally more voids when the

Criteria	JORC Code explanation	Commentary
		small container is filled with such material. • Based on some statistical analysis, the estimate used a single density assignment of 1.5 g.cm^{-3} for all the Rubicon Dumps.

Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*
	• *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).*
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*
		• The Mineral Resource for Rubicon and Helikon1 has been classified as a combination of Measured, Indicated and Inferred Mineral 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 underlying geological and grade continuity
		  ○ Analysis of the QAQC data
		  ○ A review of the drillhole 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 resource classification scheme for Rubicon is outlined as follows:
		  ○ Where the drill spacing is approximately 50 m along strike by 50 m across strike (or less), the mineralisation was classified as an Indicated Mineral Resource.
		  ○ Where the mineralisation was exposed in previous workings and strongly defined mineralisation and waste boundaries combined with channel sampling and a drill spacing of 50 m by 50 m (or less), the mineralisation was classified as a Measured Mineral Resource.

Criteria	JORC Code explanation	Commentary
		○ The mineralisation is not closed off at depth (down-dip). ○ The Mineral Resource classification appropriately reflects the view of the Competent Person. • The resource classification scheme for Helikon 1 is outlined as follows: ○ Where the drill spacing is approximately 25 m along strike by 25 m across strike (or less), the mineralisation was classified as an Indicated Mineral Resource. ○ Where the mineralisation was exposed in previous workings and strongly defined mineralisation and waste boundaries combined with channel sampling and a drill spacing of 25 m by 25 m (or less), the mineralisation was classified as a Measured Mineral Resource. ○ The lateral extents with lower drill density are classified as Inferred Mineral Resources. ○ The Mineral Resource classification appropriately reflects the view of the Competent Person. • 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: ○ 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.

Criteria	JORC Code explanation	Commentary
		○ 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 classification appropriately reflects the view of the Competent Person. • The Mineral Resource for the Rubicon Dumps has been classified as Indicated. The classification was developed based on an assessment of the following criteria: ○ Nature, quality and representivity of the sampling ○ Confidence in the volume estimate from the high-resolution topography pickups. ○ 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	• *The results of any audits or reviews of Mineral Resource estimates.*	• For Rubicon and Helikon 1, the MRE has been peer reviewed as part of Snowden's standard internal peer review process. • The Helikon 4 MRE has been peer reviewed internally by Cube. • No external reviews have taken place.
Discussion of relative	• *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*	• For Rubicon and Helikon 1, the MRE has been validated both globally and locally against the composite data. • The Helikon 4 MRE has been validated both globally and locally

Criteria	JORC Code explanation	Commentary
accuracy/ confidence	*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.*	by the means of: ○ 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.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	The Mineral Resource Estimate was prepared by Snowden Mining Industry Consultants in January 2020. Details are as set out in Section 3 in the Mineral Resource Estimate attached as an addendum to this Ore Reserves Statement. The resource block models "*rub_mod_2001v5.dm*", "*hel_mod_2001v4.dm*" and "*helikon4_nov2022_draft_eng.mdl*" were used as the basis of the pit optimisation, pit design and production schedule. The Mineral Resources are inclusive of the Ore Reserves.

Criteria	JORC Code explanation	Commentary
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.*	John Wyche visited the Karibib site on 9 and 10 August 2019. Areas inspected included the: • Existing pits at Rubicon, Helikon 1 and Helikon 4, • Accessible underground voids off Rubicon highwall, • Potential process plant, waste rock dump and tailings storage sites, and • Site access road from Karibib town. The visit confirmed that assumptions made for the mine design and operations are appropriate for the site logistics, geology and topography.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	The Ore Reserves have been compiled on the basis of a Feasibility Study (FS) which covers all aspects of the project (see Lepidico ASX announcement 28 May 2020): • Mineral resource estimation, • Geotechnical assessment of pit wall slopes, • Process definition and test work for beneficiation of the lithium mineral lepidolite by flotation at Karibib, • Transportation of the lepidolite concentrate to the proposed lithium chemical plant in Abu Dhabi, • Process definition and test work for the LOH-Max®, L-Max® and S-Max® processes to produce battery grade lithium hydroxide or lithium carbonate and saleable by-products, • Opencut mine planning for two pits and the associated waste rock dumps, • Water and waste rock management for the Karibib site, • Marketing of the lithium battery products and by-products, • Operating and capital cost estimates, • Financial modelling, • Environmental impact assessment and permitting.

Criteria	JORC Code explanation	Commentary
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	Cut off grades are expressed in lithium parts per million (Li ppm). They are estimated on the basis of producing battery grade lithium hydroxide mono hydrate ($LiOH.H_2O$) with by-products of amorphous silica and sulphate of potash (SOP). The opencut cut mine uses a marginal cut off grade which compares the cost of processing 1 tonne of material against the revenue derived after applying process recoveries. The costs are: • Any additional costs of mining the material as ore instead of waste, • Beneficiation of the ore by flotation in the Karibib concentrator, • General and administration costs for the Karibib Project, • Transport of the lepidolite concentrate to Abu Dhabi, • Application of the LOH-Max® process in Abu Dhabi,and • Payment of a Namibian royalty on the lepidolite concentrate. Revenues are calculated using sale prices of: • $LiOH.H_2O$ US$17,015 per tonne (long term) • Amorphous silica US$50 per tonne • SOP US$530 per tonne, and • Caesium sulphate brine US$25,000 per tonne. $LiOH.H_2O$ per tonne of ore is dependent on the lithium head grade and the ore type. Amorphous silica and SOP are by-products of the L-Max® and LOH-Max® processes and are produced in fixed proportions to the $LiOH.H_2O$ production. Caesium brine production is dependent on the caesium head grade. The marginal cut-off grade is the lithium ppm where the value of the final products equals the total of the costs above. The massive lepidolite,

Criteria	JORC Code explanation	Commentary
		disseminated lepidolite and mica/pegmatite ore types have different recoveries to concentrate and different concentrate grades resulting in differing cut off grades. Ore trucking distances from Helikon 1 and Helikon 4 pits are 7km and 7.8km respectively. The cost of this haulage is added to the Helikon 1 and 4 ore thereby raising their cut off grades. After including all the costs, recoveries and revenues the cut off grades across the deposits are: (see table below) Cut off grades for the Rubicon tailings and stockpiles are set at zero on the basis that the entire Indicated resources will be mined and processed.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.* • *The assumptions made regarding geotechnical parameters (e.g. pit*	**Opencut Mining** Opencut mining will be conventional methods using hydraulic excavators and mining trucks. All material mined from the pits will require blasting. There will be areas of narrow benches during the initial months of mining around the existing pits but wider benches will be available after a few months. For the first half of the mine life required mining rates are relatively low so

		Massive Lepidolite	Disseminated Lepidolite	Mica / Pegmatite
Rubicon				
Head Grade	Li ppm	551	655	530
	Li2O %	0.12%	0.14%	0.11%
Insitu Resource Grade	Li ppm	578	688	556
	Li2O %	0.12%	0.15%	0.12%
Helikon 1 and 4				
Head Grade	Li ppm	573	681	563
	Li2O %	0.12%	0.15%	0.12%
Insitu Resource Grade	Li ppm	601	715	591
	Li2O %	0.13%	0.15%	0.13%

Criteria	JORC Code explanation	Commentary
	slopes, stope sizes, etc), grade control and pre-production drilling. • *The major assumptions made, and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • *The infrastructure requirements of the selected mining methods.*	small sized excavators and trucks can be used. Small machines are well suited to the initial pit development work. Mining rates increase in the second half of the mine life as the final pushback is mined. This pushback will have broad benches many of which will be mostly waste rock. There will be a requirement for more or larger mining machines in this period. Pit stage designs for Rubicon, Helikon 1 and Helikon 4 accommodate ramp access between stages. Pit wall slopes for Rubicon and Helikon 1 are based on a Feasibility Study level geotechnical analysis by Pells Sullivan Meynink. Both pits tend to follow the orebody down dip so the highest walls are cut across the dip which will promote stability. No geotechnical assessment has been conducted for Helikon 4 so slopes from Helikon 1 were used. This is considered to be conservative because the Helikon 4 footwall is massive marble. Lepidico plan to conduct a geotechnical assessment of Helikon 4 to see if the pit slopes can be steepened. Grade control will be by a combination of visual control during mining and assaying of blast hole samples. The high grade massive and disseminated lepidolite zones are visually identifiable from the lower grade pegmatite and the barren quartz core and the surrounding granite host rock. Lithium grades in the lower grade mica and pegmatite ore types are gradational within the sills and will require sampling and assaying to delineate cut off grade boundaries. This is mainly required in the second half of the mine life when the massive and disseminated lepidolite is mostly depleted. Mining loss and dilution are modelled by application of global factors of 95% recovery and 5% dilution at zero grade. The Ore Reserves are derived entirely from Measured and Indicated Mineral Resources. Inferred Mineral Resources are treated as waste rock. The Karibib Feasibility Study includes provision of diesel fuel supply, workshops, explosives storage and other facilities required to support the

Criteria	JORC Code explanation	Commentary
		opencut mining operation. For the first nine years mining rates do not exceed 60 kbcm per month so the infrastructure to support the mining operation is minimal. Rates rise through Year 10 and 11 to a peak of 210 kbcm per month. The Navachab Gold Mine has been operating in the area since 1989. This is a much larger mining operation than the Karibib Project so the supply chains, skills and resources to support mining are already well established.

Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.*
	• *Whether the metallurgical process is well-tested technology or novel in nature.*
	• *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.*
	• *Any assumptions or allowances made for deleterious elements.*
	• *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.*
	• *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*
		The Ore Reserves are based on production of battery grade lithium hydroxide monohydrate ($LiOH.H_2O$) with by-products of amorphous silica, sulphate of potash (SOP) and rubidium/caesium brine. The general processing path is:
		• Beneficiation of the ROM ore by crushing, grinding and flotation in a concentrator at the Karibib mine site. The lepidolite concentrate will grade approximately:
		  ○ 1.80% lithium from massive lepidolite
		  ○ 1.36% lithium from disseminated lepidolite
		  ○ 1.17% lithium from the mica/pegmatite ore types.
		• The lepidolite concentrate will be transported to a chemical plant to be constructed in the UAE.
		• The chemical plant will use Lepidico's patented L-Max®, LOH-Max® and S-Max® processes to produce battery grade $LiOH.H_2O$ with by-products of amorphous silica, sulphate of potash and caesium brine.
		
		The L-Max® was developed by Lepidico to extract lithium from lepidolite mica concentrates and then purify the leach solution for production of battery grade lithium chemicals. The LOH-Max® process was developed by Lepidico to produce battery grade $LiOH.H_2O$ from the the purified leach solution. It has never been applied on a commercial scale. The recoveries,

Criteria	JORC Code explanation	Commentary
		consumables and costs in Lepidico's production and financial models are derived from extensive bench scale testing and continuous pilot plant operation processing. The products from the pilot plant have subsequently being tested to demonstrate by-products at marketable qualities and battery grade lithium chemicals.
Environmen-tal	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	The Karibib Project will be developed on an existing Mining License (ML204). An Environmental Impact Assessment (EIA) was completed in 2017 by Risk Based Solutions (RBS) and an Environmental Compliance Certificate (ECC) granted for a period of three years. This was renewed in October 2020. The Namibian environmental permit was approved and granted in February 2021 and was renewed in February 2022. No acid forming or other deleterious waste rock products have been identified for the Karibib opencut mining operations. In February 2021 the Environment Agency – Abu Dhabi approved the Preliminary Environmental Review for the chemical plant in Abu Dhabi.
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided or accessed.*	ADP Namibia Pty Ltd have completed front end engineering design of the mineral processing plant and associated infrastructure including non-process buildings. Water supply will be from an existing borefield. Addiza Power Consultants have completed the design of the power supply overhead line to be connected to the national grid. Knight Piesold have completed design of upgrades required to the existing local road infrastructure, design of the site bulk earthworks and Rubicon waste management area. Lycopodium Minerals Pty Ltd completed the Feasibility Study of the Phase 1 Chemical Plant in May 2020 and will complete the front end engineering design in August 2022.
Costs	• *The derivation of, or assumptions made, regarding projected capital*	The opencut mining costs have been estimated by Robert Harris of Project

Criteria	JORC Code explanation	Commentary
	costs in the study. • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	Definition Pty Ltd using local cost inputs and industry standards. Lycopodium Minerals Pty Ltd/ADP Namibia have estimated the capital costs of the process plant and facilities using quoted equipment prices, local installation rates and material take-off factoring. Lepidico have estimated the operating costs for the process plant and administration based on local unit rates. Concentrate transport costs were estimated by Robert Harris. Lycopodium Minerals Pty Ltd estimated the capital costs of the Phase 1 Chemical Plant in a Feasibility Study completed in May 2020 incorporating learnings from the Pilot Plant operation in 2019. The front end engineering design completed in 2022 incorporates learnings from the pilot plant operation completed on Karibib ore in 2022. Lepidico have estimated the operating costs for the Phase 1 Chemical Plant and based on pilot plant testing using local UAE unit rates.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.* • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	Current basis of pricing for: • Forecast pricing for lithium hydroxide has been provided by Benchmark Minerals Intelligence. • By-product pricing in the UAE for amorphous silica is based on Lepidico marketing intelligence and SOP is based on Argus forecast estimates. • The pricing for the caesium sulphate brine has been established by engagement with the principal end users being chemical companies producing caesium doped catalysts.
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of*	Market assessment for lithium chemicals supply and demand projection has been provided by Benchmark Minerals Intelligence. Market assessment in the UAE for amorphous silica is based on feedback

Criteria	JORC Code explanation	Commentary
	likely market windows for the product. • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	from potential UAE customers. Market assessment for SOP is based on the Argus long term real price (2025 onwards) for crystalline grade product. The market assessment for the caesium sulphate brine is based on negotiations with catalyst manufacturers (Cs doped vanadium pentoxide).
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	A monthly life of mine schedule was prepared for the mining operation and used by Lepidico as the basis of the project financial model. The model version assumes that Karibib is the only feed source for the UAE Phase 1 Lithium Chemical Plant so the net revenue generated from Karibib must cover the cost of developing the facilities in Namibia and the UAE. The Base Case model returns a positive after tax NPV at an 8% discount rate. The project life is 16 years and the payback period is under 5 years. The project is most sensitive to the lithium hydroxide price. The next most sensitive item is the Phase 1 Lithium Chemical Plant operating cost. It is not highly sensitive to the concentrator and mining costs at Karibib. The Phase 1 Chemical Plant in the UAE will be designed to process mica concentrate from multiple feed sources. Additional longer life feed sources enhance the returns from the integrated project. The Karibib model returns a positive value as a standalone project based on reasonable financial assumptions. Helikon 4 Pit and the Rubicon Tailings and Stockpiles were not included in the financial model viewed by the Competent Person, Mr John Wyche, for this Ore Reserve Estimate. However, ore from each of them is well above the economic cut off grade, Helikon 4 Pit is based on a pit optimisation and the tailings and stockpiles have no waste and are close to the concentrator. There is no reason to believe that they will not add further value to the 2022 financial model.
Social	• *The status of agreements with key stakeholders and matters leading*	Lepidico has established stakeholder engagement at all levels of

Criteria	JORC Code explanation	Commentary
	to social licence to operate.	government in Namibia. Lepidico has completed socio-economic surveys of four local communities in 2020. The results will inform community and social support and communication strategy and programs. Lepidico has received a no objection certificate to develop the project from the owner of the Okongava Farm, the location of the Karibib Project; the owner being the Ministry of Agriculture, Water and Land Reform.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	The Karibib Project has been defined at a Feasibility Level of confidence based on Measured and Indicated Mineral Resources. Ongoing work on the Namibian and UAE aspects of the project will continue to improve confidence. A large body of work has been done on processing aspects of lepidolite concentration and the Phase 1 Lithium Chemical Plant which are common to all the potential lepidolite feed sources. The following issues specific to Karibib are noted for further definition to improve overall confidence: • Some areas of the historical underground workings at Rubicon are flooded and were not included in the 2019 void survey. While these workings are not likely to be extensive and their positions are approximately known, care will be required during opencut mining to avoid bench floor failures. • Some of the historical underground workings off the Rubicon highwall have substantial height and width and can be as close as 5 to 10 metres from surface. The target lepidolite zone is generally in the floor of these workings. Care will be required when collapsing the benches above the voids. • The pit design for Helikon 4 excavates waste outside ML 204. The Ore Reserve Estimate assumes that an agreement will be negotiated with the adjoining tenement holder which is acceptable to the Namibian Government to excavate this

Criteria	JORC Code explanation	Commentary
		ground. Alternatively, it is possible that the massive marble in the northern footwall of the Helikon 4 orebody may allow the wall to be mined much more steeply so the ore can be mined without incursion into the adjoining tenement. Lepidico is planning a geotechnical assessment to test this possibility.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	Only Measured or Indicated Mineral resources are considered in the Ore Reserve Estimate. Proved Ore Reserves are derived only from Measured Mineral Resources. Probable Ore Reserves are derived only from Indicated Mineral Resources. No issues were identified to warrant classifying any of the Ore Reserves derived from Measured Mineral Resources as Probable. In the opinion of the Competent Person when taken as a whole the modifying factors have been defined to a level of confidence commensurate with a Proved or Probable Ore Reserve. While further work during project development will continue to improve confidence there are no issues currently identified which are likely to have a material impact on the viability of the project and the Ore Reserves as stated.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	No audits of the Ore Reserves have been undertaken.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which 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*	Although historical mining has taken place at the Karibib Project the data available is inadequate to form meaningful reconciliations of production against the Mineral Resource model. From a Mineral Resource perspective confidence is commensurate with Measured and Indicated Resources with respect to the lithium grade distribution, sill thickness and structure. The proposed opencut mining method is conventional and well understood. Reliability of the mining models is mainly dependent on the Mineral Resource model. Required production rates are relatively small

Criteria	JORC Code explanation	Commentary
	relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.* • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	for the equipment proposed which should allow mine operators to adapt to actual conditions encountered. While the processing methods are new, they have been extensively tested at bench and pilot scale. Given the current status of the Mineral Resource model and operations plan the Ore Reserve should be a very good global estimate and a good local estimate in the areas of Measured Resources. Short term variations from the tonnes and grades predicted by the resource model are likely in any new mining operation, particularly as in areas of Indicated Resources but the given the small scale of the operation and well defined geology it is reasonable to expect that operating experience will assist rapid development of reliable short term plans.

1.12 RESOURCE AND RESERVE CATEGORIES – EXPLANATION

According to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code) 2012 Edition:-

A 'Mineral Resource' is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

An 'Inferred Mineral Resource' is that part of a Mineral Resource for which quantity and grade (or quality) are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade (or quality) continuity. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to an Ore Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

An 'Indicated Mineral Resource' is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.

Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to assume geological and grade (or quality) continuity between points of observation where data and samples are gathered.

An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Ore Reserve.

A 'Measured Mineral Resource' is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.

Geological evidence is derived from detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to confirm geological and grade (or quality) continuity between points of observation where data and samples are gathered.

A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Ore Reserve or under certain circumstances to a Probable Ore Reserve.

An 'Ore Reserve' is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.

The guidelines in the JORC Code state that the term 'economically mineable' implies that extraction of the Ore Reserves has been demonstrated to be viable under reasonable financial assumptions. This will vary with the type of deposit, the level of study that has been carried out and the financial criteria of the individual company. For this reason, there can be no fixed definition for the term 'economically mineable'.

A 'Probable Ore Reserve' is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Ore Reserve is lower than that applying to a Proved Ore Reserve.

A 'Proved Ore Reserve' is the economically mineable part of a Measured Mineral Resource. A Proved Ore Reserve implies a high degree of confidence in the Modifying Factors.

The guidelines provided in the JORC Code note that "A Proved Ore Reserve represents the highest confidence category of reserve estimate and implies a high degree of confidence in geological and grade continuity, and the consideration of the Modifying Factors. The style of mineralisation or other factors could mean that Proved Ore Reserves are not achievable in some deposits."

The following figure, from the JORC Code, sets out the framework for classifying tonnage and grade estimates to reflect different levels of geological confidence and different degrees of technical and economic evaluation.

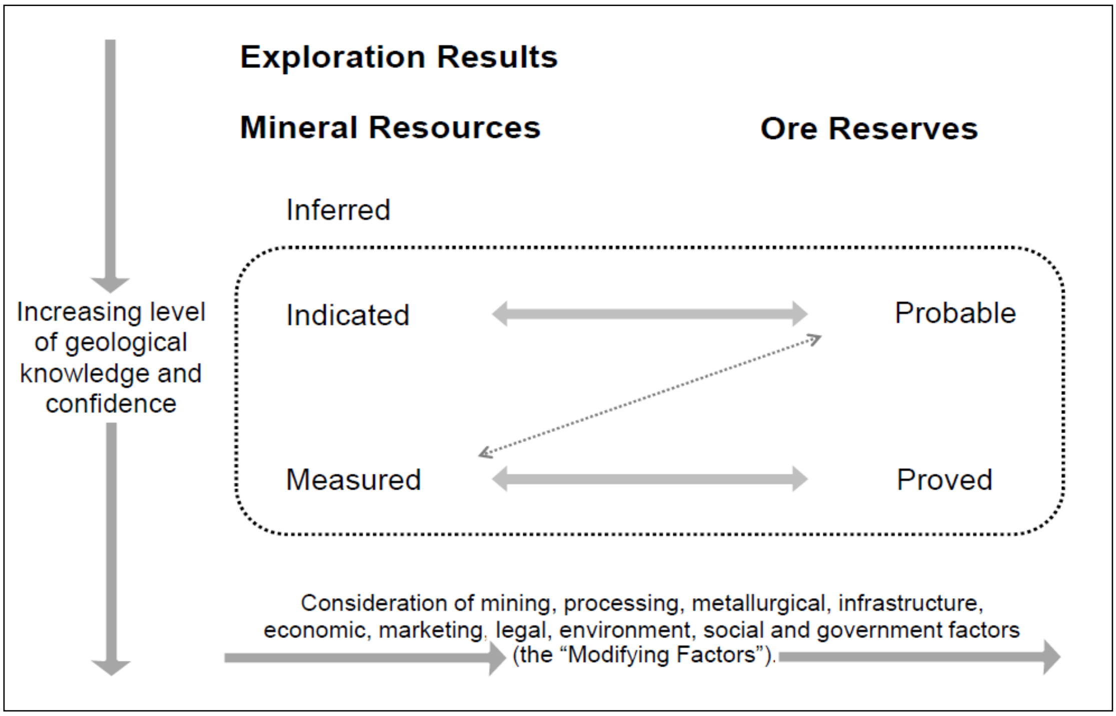


Figure 10 General relationship between Exploration Results, Mineral Resources and Ore Reserves, from 2012 JORC Code Figure 1

Mineral Resources can be estimated on the basis of geoscientific information with some input from other disciplines. Ore Reserves, which are a modified sub-set of the Indicated and Measured Mineral

Resources (shown within the dashed outline in the Figure above), require consideration of the Modifying Factors affecting extraction, and should in most instances be estimated with input from a range of disciplines.

Measured Mineral Resources may be converted to either Proved Ore Reserves or Probable Ore Reserves. The Competent Person may convert Measured Mineral Resources to Probable Ore Reserves because of uncertainties associated with some or all of the Modifying Factors which are taken into account in the conversion from Mineral Resources to Ore Reserves.

Inferred Resources cannot convert to Ore Reserves.