

13 February 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% Li₂O, 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 over 17 years
- Total Ore Reserves stand at 9.4M t @ 0.43% Li₂O 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% Li₂O 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% Li₂O 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% Li₂O.

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."

Table 1. Karibib Project Ore Reserve Estimate

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 of reporting with other projects the Ore Reserve grades are presented in terms of Li₂O %. 1% Li₂O is equal to 4645 ppm Li.

Further Information

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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](http://www.lepidico.com).

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.



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

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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	LiO ₂ %	Rb ppm	Cs ppm	Ta ppm	K %
Rubicon Pit						
Proved	1.60	0.50	2576	312	44	2.15
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Pit Total	6.59	0.37	2038	230	34	2.14
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- 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 Li₂O %. 1% Li₂O 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 openpit 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.

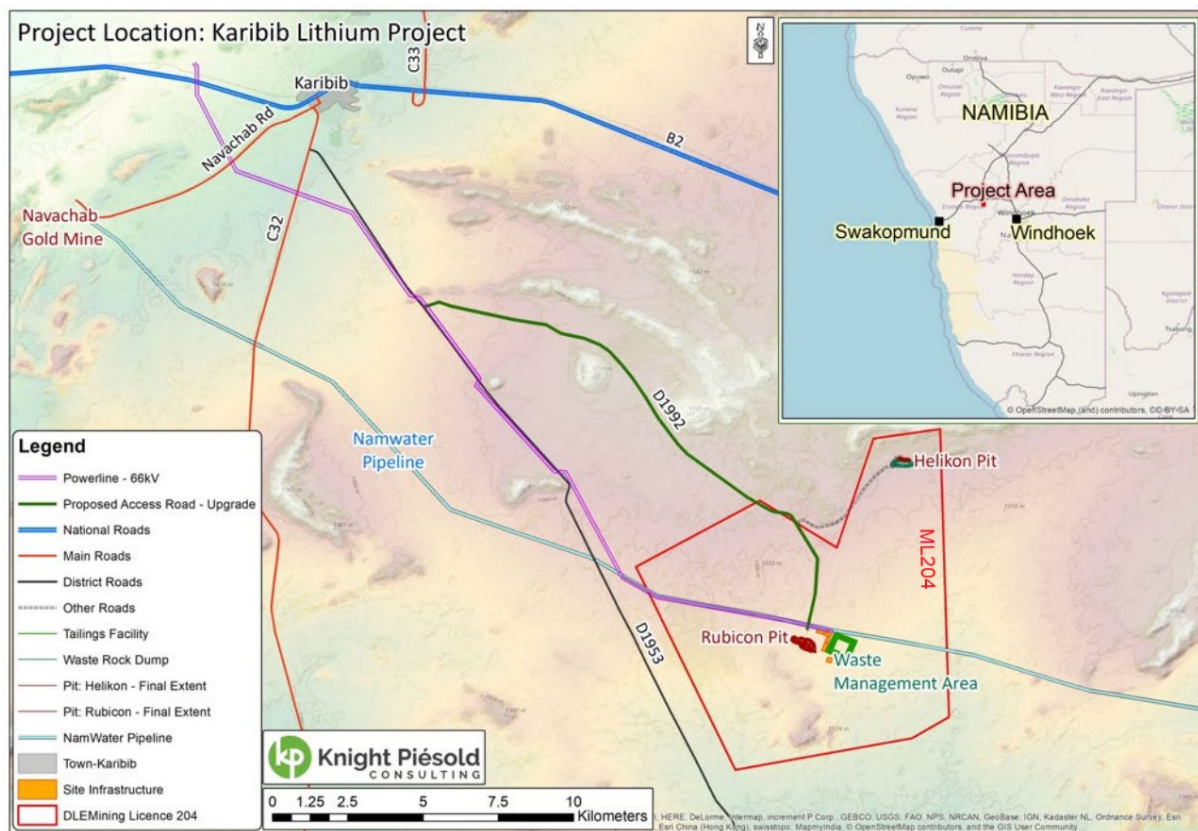
Lepidico Chemicals Namibia owns 100% of the Karibib Project. Lepidico Chemicals Namibia's ownership is 80% Lepidico Limited and 20% Huni-Urib Holdings (Pty) Ltd.

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.



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 an 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

Pit	July 2022		January 2023	
	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	

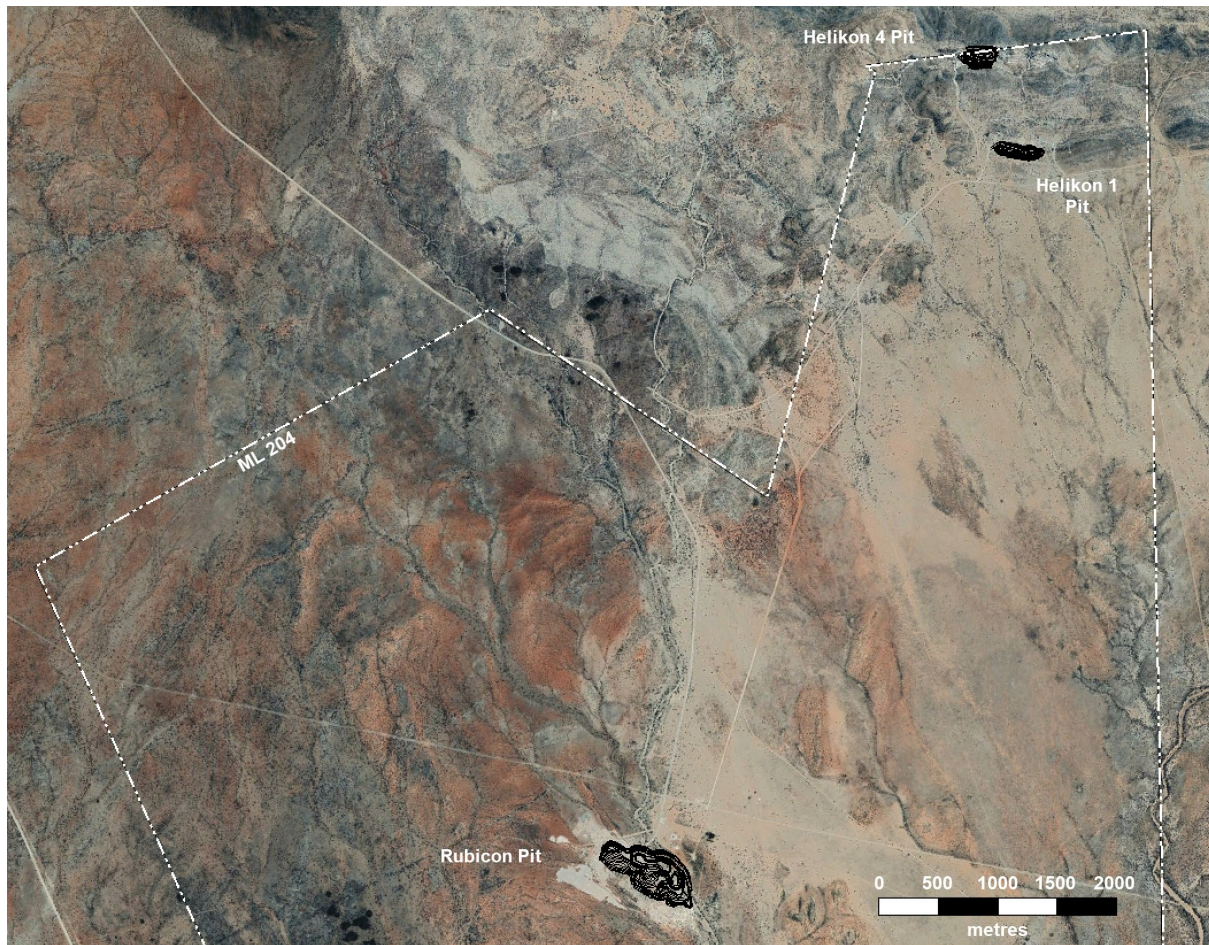


Figure 2 Mine Area



Figure 3 Rubicon Final Pit

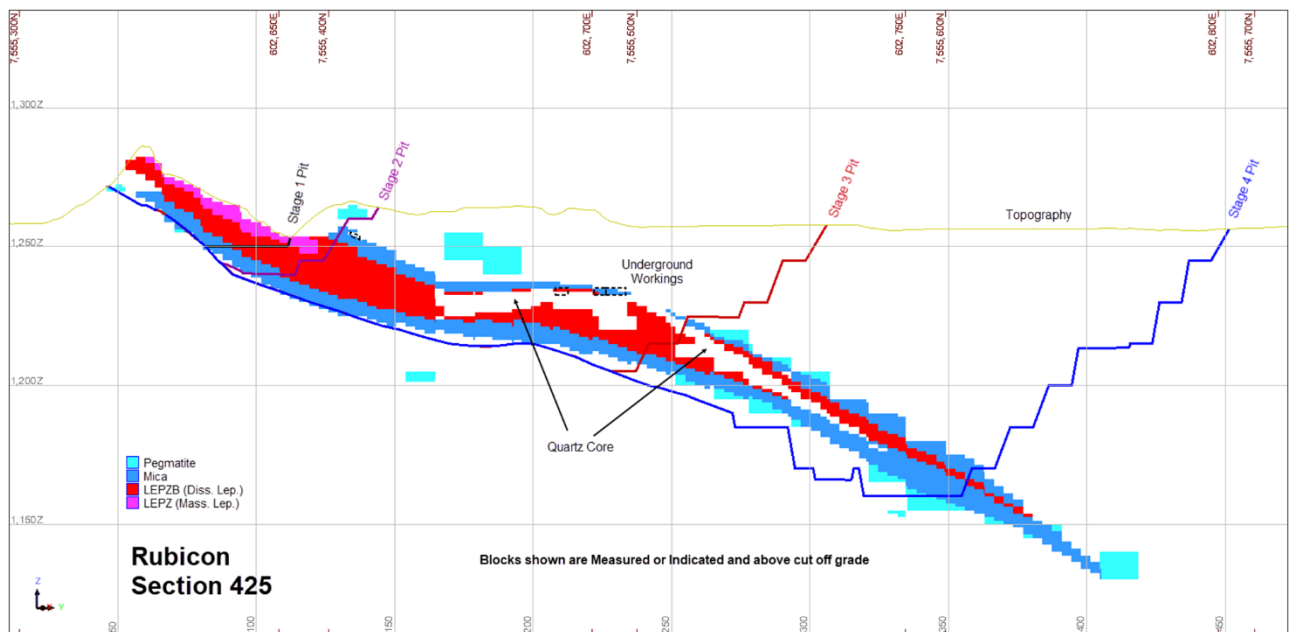


Figure 4 Rubicon Pit Cross Section

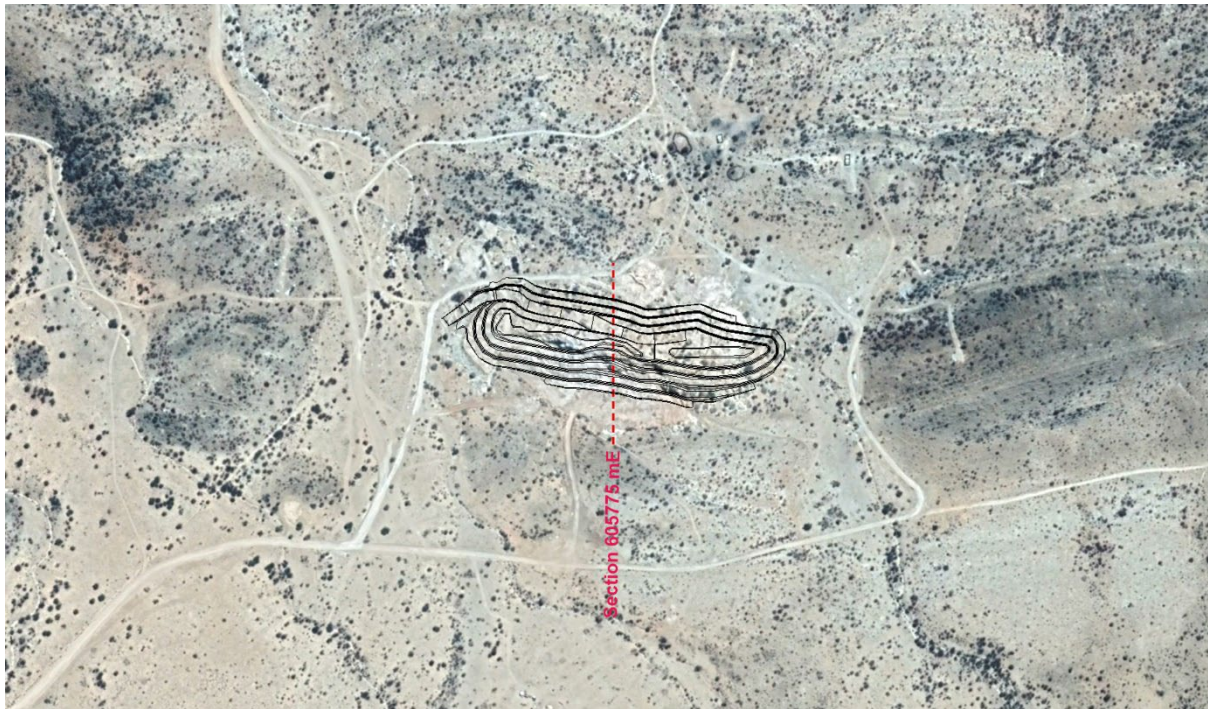


Figure 5 Helikon 1 Final Pit

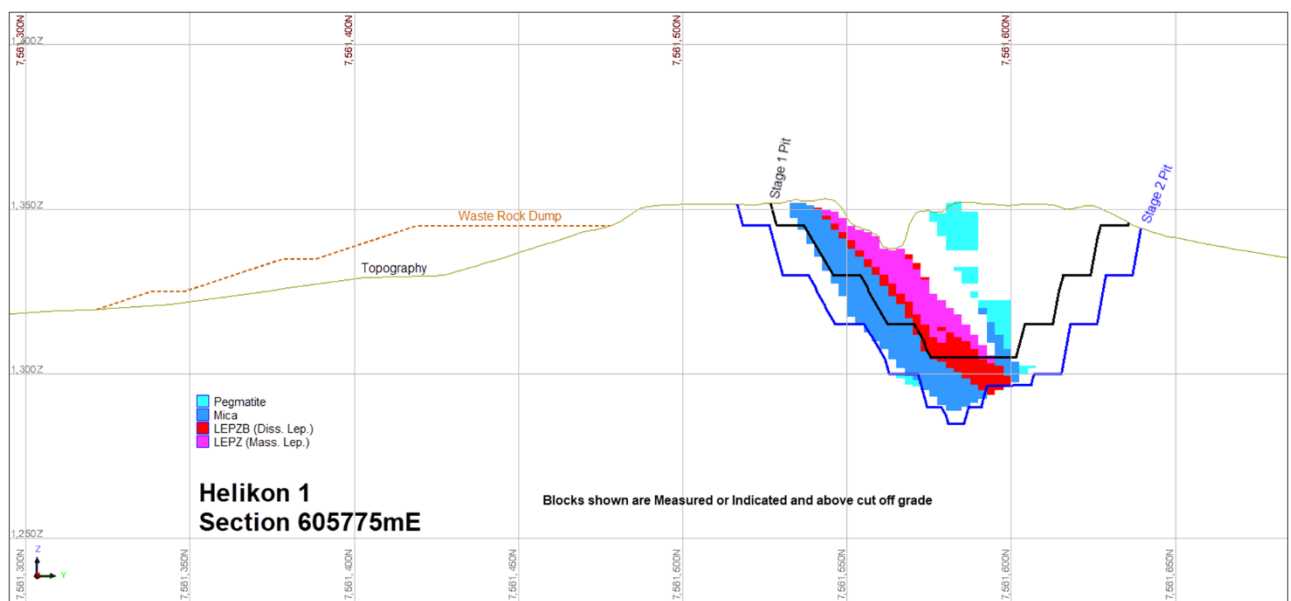


Figure 6 Helikon 1 Pit Cross Section



Figure 7 Helikon 4 Final Pit

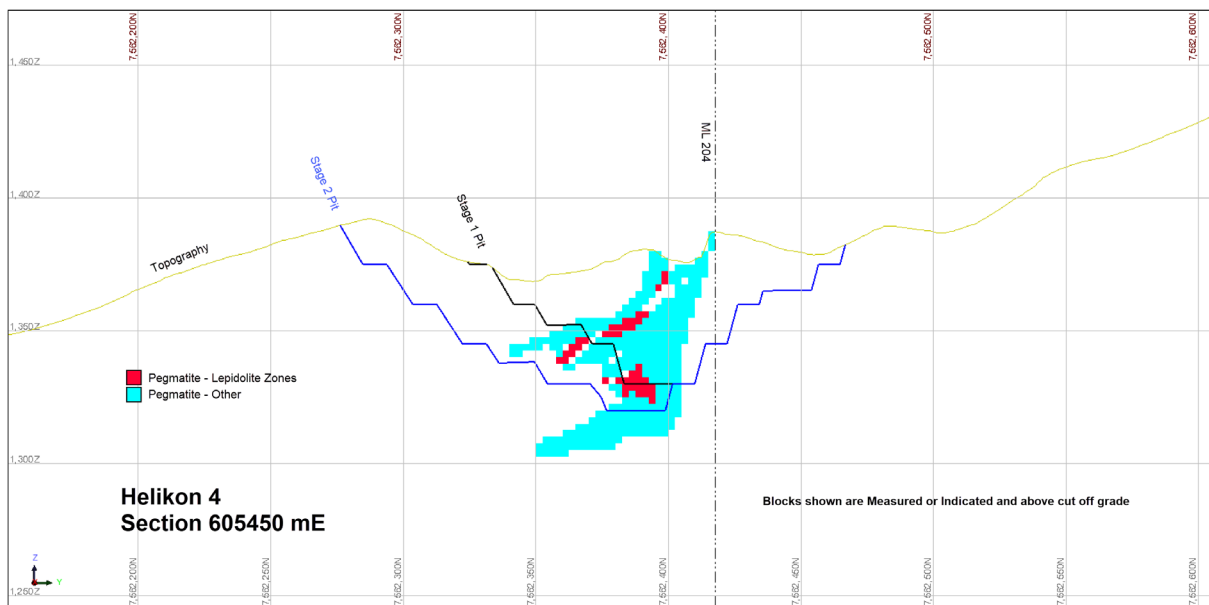


Figure 8 Helikon 4 Pit Cross Section

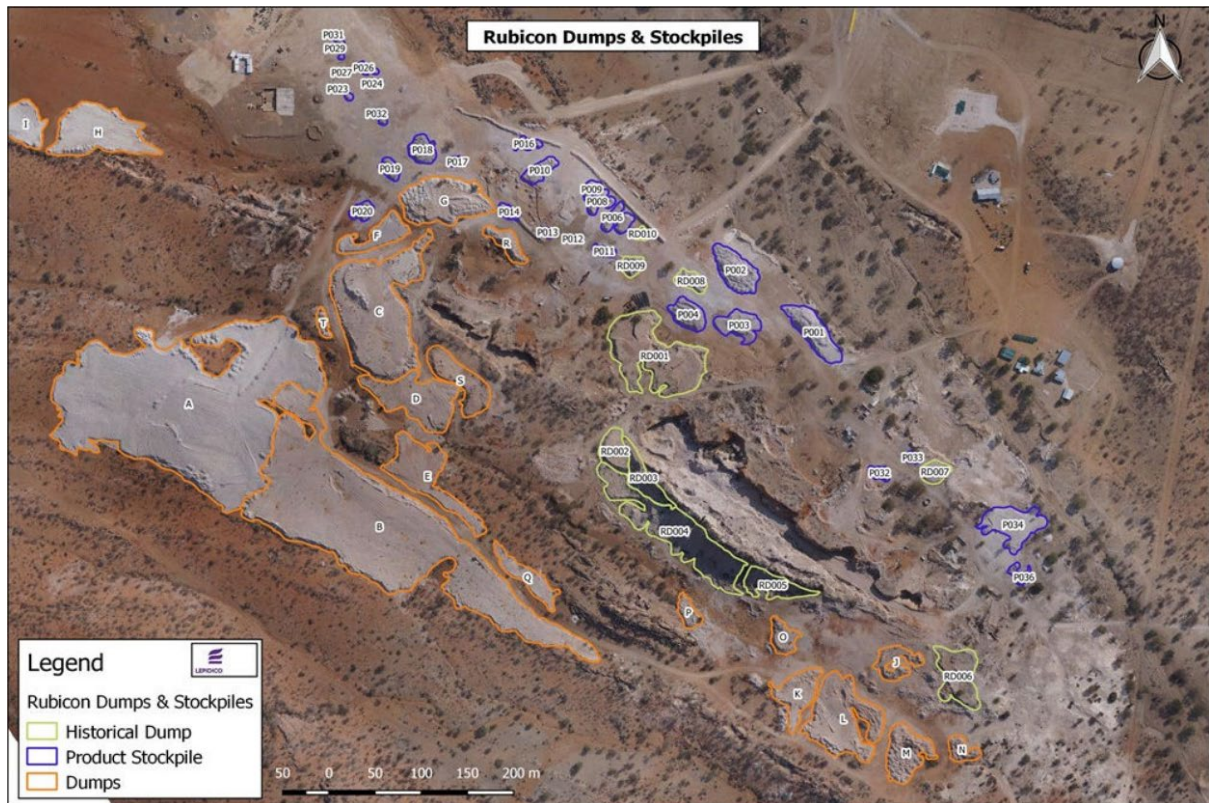


Figure 9 Rubicon Stockpiles



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

Sections 1, 2 and 3 of the following Table 1 relating to Rubicon and Helikon 1 are provided in 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 provided in 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 provided in 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 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
<i>Mineral Resource estimate for conversion to Ore Reserves</i>	<ul style="list-style-type: none"> <i>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</i> <i>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</i> 	<p>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.</p> <p>The resource block models <i>“rub_mod_2001v5.dm”</i>, <i>“hel_mod_2001v4.dm”</i> and <i>“helikon4_nov2022_draft_eng.mdl”</i> were used as the basis of the pit optimisation, pit design and production schedule.</p> <p>The Mineral Resources are inclusive of the Ore Reserves.</p>
<i>Site visits</i>	<ul style="list-style-type: none"> <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i> 	<p>John Wyche visited the Karibib site on 9 and 10 August 2019. Areas inspected included the:</p>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <i>If no site visits have been undertaken indicate why this is the case.</i> 	<ul style="list-style-type: none"> 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. <p>The visit confirmed that assumptions made for the mine design and operations are appropriate for the site logistics, geology and topography.</p>
Study status	<ul style="list-style-type: none"> <i>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</i> <i>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.</i> 	<p>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):</p> <ul style="list-style-type: none"> 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.
Cut-off parameters	<ul style="list-style-type: none"> <i>The basis of the cut-off grade(s) or quality parameters applied.</i> 	<p>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</p>



Criteria	JORC Code explanation	Commentary
		<p>hydrate ($\text{LiOH} \cdot \text{H}_2\text{O}$) with by-products of amorphous silica and sulphate of potash (SOP).</p> <p>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:</p> <ul style="list-style-type: none"> 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. <p>Revenues are calculated using sale prices of:</p> <ul style="list-style-type: none"> $\text{LiOH} \cdot \text{H}_2\text{O}$ 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. <p>$\text{LiOH} \cdot \text{H}_2\text{O}$ per tonne of ore is dependent on the lithium head grade and the ore type.</p> <p>Amorphous silica and SOP are by-products of the L-Max® and LOH-Max® processes and are produced in fixed proportions to the $\text{LiOH} \cdot \text{H}_2\text{O}$ production.</p> <p>Caesium brine production is dependent on the caesium head grade.</p> <p>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</p>



Criteria	JORC Code explanation	Commentary																																																			
		<p>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.</p> <p>After including all the costs, recoveries and revenues the cut off grades across the deposits are:</p> <table><tr><th></th><th></th><th>Massive Lepidolite</th><th>Disseminate d Lepidolite</th><th>Mica / Pegmatite</th></tr><tr><td colspan="5">Rubicon</td></tr><tr><td rowspan="2">Head Grade</td><td>Li ppm</td><td>551</td><td>655</td><td>530</td></tr><tr><td>Li2O %</td><td>0.12%</td><td>0.14%</td><td>0.11%</td></tr><tr><td rowspan="2">Insitu Resource Grade</td><td>Li ppm</td><td>578</td><td>688</td><td>556</td></tr><tr><td>Li2O %</td><td>0.12%</td><td>0.15%</td><td>0.12%</td></tr><tr><td colspan="5">Helikon 1 and 4</td></tr><tr><td rowspan="2">Head Grade</td><td>Li ppm</td><td>573</td><td>681</td><td>563</td></tr><tr><td>Li2O %</td><td>0.12%</td><td>0.15%</td><td>0.12%</td></tr><tr><td rowspan="2">Insitu Resource Grade</td><td>Li ppm</td><td>601</td><td>715</td><td>591</td></tr><tr><td>Li2O %</td><td>0.13%</td><td>0.15%</td><td>0.13%</td></tr></table>			Massive Lepidolite	Disseminate d 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%
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	Li2O %	0.13%	0.15%	0.13%																																																	
		<p>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.</p>																																																			
Mining factors or assumptions	<ul style="list-style-type: none">• 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 slopes, stope sizes, etc), grade control and pre-production drilling.• The major assumptions made, and Mineral Resource model used for	<p>Opencut Mining</p> <p>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.</p> <p>For the first half of the mine life required mining rates are relatively low so small sized excavators and trucks can be used. Small machines are well suited to the initial pit development work. Mining rates increase in the</p>																																																			



Criteria	JORC Code explanation	Commentary
	<p><i>pit and stope optimisation (if appropriate).</i></p> <ul style="list-style-type: none"> <i>The mining dilution factors used.</i> <i>The mining recovery factors used.</i> <i>Any minimum mining widths used.</i> <i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i> <i>The infrastructure requirements of the selected mining methods.</i> 	<p>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.</p> <p>Pit stage designs for Rubicon, Helikon 1 and Helikon 4 accommodate ramp access between stages.</p> <p>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.</p> <p>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.</p> <p>Mining loss and dilution are modelled by application of global factors of 95% recovery and 5% dilution at zero grade.</p> <p>The Ore Reserves are derived entirely from Measured and Indicated Mineral Resources. Inferred Mineral Resources are treated as waste rock.</p> <p>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 kbcm per month so the infrastructure to support the mining</p>



Criteria	JORC Code explanation	Commentary
		<p>operation is minimal. Rates rise through Year 10 and 11 to a peak of 210 kbcm per month.</p> <p>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.</p>
<p><i>Metallurgical factors or assumptions</i></p>	<ul style="list-style-type: none"> <i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i> <i>Whether the metallurgical process is well-tested technology or novel in nature.</i> <i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i> <i>Any assumptions or allowances made for deleterious elements.</i> <i>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.</i> <i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i> 	<p>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:</p> <ul style="list-style-type: none"> Beneficiation of the ROM ore by crushing, grinding and flotation in a concentrator at the Karibib mine site. The lepidolite concentrate will grade approximately: <ul style="list-style-type: none"> 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. <p>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.H₂O from the 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</p>



Criteria	JORC Code explanation	Commentary
		operation processing. The products from the pilot plant have subsequently being tested to demonstrate by-products at marketable qualities and battery grade lithium chemicals.
<i>Environmental</i>	<ul style="list-style-type: none"> <i>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.</i> 	<p>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.</p> <p>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.</p> <p>In February 2021 the Environment Agency – Abu Dhabi approved the Preliminary Environmental Review for the chemical plant in Abu Dhabi.</p>
<i>Infrastructure</i>	<ul style="list-style-type: none"> <i>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.</i> 	<p>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.</p> <p>Addiza Power Consultants have completed the design of the power supply overhead line to be connected to the national grid.</p> <p>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.</p> <p>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.</p>
<i>Costs</i>	<ul style="list-style-type: none"> <i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i> <i>The methodology used to estimate operating costs.</i> 	<p>The opencut mining costs have been estimated by Robert Harris of Project Definition Pty Ltd using local cost inputs and industry standards.</p> <p>Lycopodium Minerals Pty Ltd/ADP Namibia have estimated the capital</p>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <i>Allowances made for the content of deleterious elements.</i> <i>The source of exchange rates used in the study.</i> <i>Derivation of transportation charges.</i> <i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i> <i>The allowances made for royalties payable, both Government and private.</i> 	<p>costs of the process plant and facilities using quoted equipment prices, local installation rates and material take-off factoring.</p> <p>Lepidico have estimated the operating costs for the process plant and administration based on local unit rates.</p> <p>Concentrate transport costs were estimated by Robert Harris.</p> <p>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.</p> <p>Lepidico have estimated the operating costs for the Phase 1 Chemical Plant and based on pilot plant testing using local UAE unit rates.</p>
Revenue factors	<ul style="list-style-type: none"> <i>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.</i> <i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i> 	<p>Current basis of pricing for:</p> <ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i> <i>A customer and competitor analysis along with the identification of likely market windows for the product.</i> <i>Price and volume forecasts and the basis for these forecasts.</i> <i>For industrial minerals the customer specification, testing and</i> 	<p>Market assessment for lithium chemicals supply and demand projection has been provided by Benchmark Minerals Intelligence.</p> <p>Market assessment in the UAE for amorphous silica is based on feedback from potential UAE customers.</p> <p>Market assessment for SOP is based on the Argus long term real price</p>



Criteria	JORC Code explanation	Commentary
	<i>acceptance requirements prior to a supply contract.</i>	(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).
<i>Economic</i>	<ul style="list-style-type: none"> <i>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.</i> <i>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</i> 	<p>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.</p> <p>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.</p> <p>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.</p> <p>The Karibib model returns a positive value as a standalone project based on reasonable financial assumptions.</p> <p>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.</p>
<i>Social</i>	<ul style="list-style-type: none"> <i>The status of agreements with key stakeholders and matters leading to social licence to operate.</i> 	<p>Lepidico has established stakeholder engagement at all levels of government in Namibia.</p> <p>Lepidico has completed socio-economic surveys of four local communities</p>



Criteria	JORC Code explanation	Commentary
		<p>in 2020. The results will inform community and social support and communication strategy and programs.</p> <p>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.</p>
Other	<ul style="list-style-type: none"> <i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i> <i>Any identified material naturally occurring risks.</i> <i>The status of material legal agreements and marketing arrangements.</i> <i>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.</i> 	<p>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:</p> <ul style="list-style-type: none"> 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



Criteria	JORC Code explanation	Commentary
		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.
<i>Classification</i>	<ul style="list-style-type: none"> <i>The basis for the classification of the Ore Reserves into varying confidence categories.</i> <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> <i>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</i> 	<p>Only Measured or Indicated Mineral resources are considered in the Ore Reserve Estimate.</p> <p>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.</p> <p>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.</p>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <i>The results of any audits or reviews of Ore Reserve estimates.</i> 	No audits of the Ore Reserves have been undertaken.
<i>Discussion of relative accuracy/ confidence</i>	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> 	<p>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.</p> <p>From a Mineral Resource perspective confidence is commensurate with Measured and Indicated Resources with respect to the lithium grade distribution, sill thickness and structure.</p> <p>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.</p>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> 	<p>While the processing methods are new, they have been extensively tested at bench and pilot scale.</p> <p>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.</p>



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.

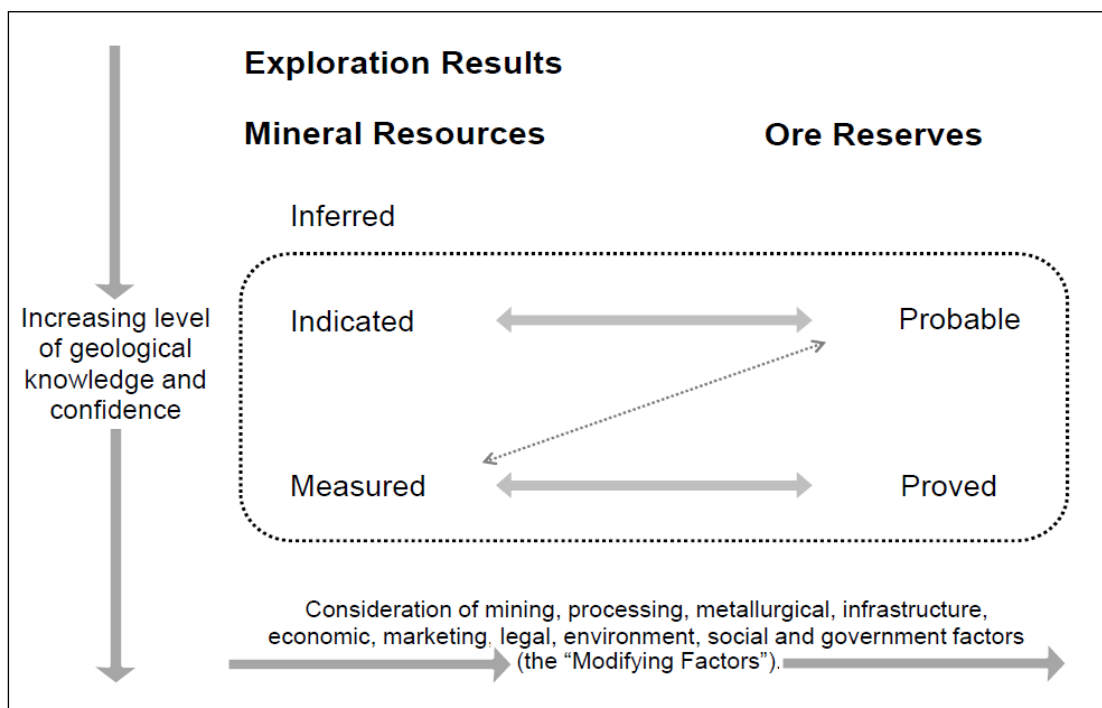


Figure 10 General relationship between Exploration Results, Mineral Resources and Ore Reserves, from 2012 JORC Code Figure 1

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.