

## QUARTERLY ACTIVITIES REPORT

for the period ending 30 September 2022

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(All figures are unaudited and in A\$ unless stated otherwise)

### Key Points

#### Development

- Strategic Metallurgy completed all planned pilot trial works and associated reports including lithium hydroxide refining and by-product manufacture that confirm Phase 1 design parameters with nominal battery grade lithium hydroxide recovered using LOH-Max<sup>®</sup>
- Third-party crystalliser vendor advised following test-work on pilot trial feed material; lithium hydroxide “crystals are much more pure than that produced from the [conventional] sodium sulfate route”
- Independent Engineer review of final pilot trial reports underway; completion of this technical due diligence is a key gating item for securing Phase 1 Project debt
- Chemical plant FEED scheduled to complete in November following procurement optimisation and design refinements; concentrator FEED successfully completed in the prior quarter
- By-product pilot trials result in, “excellent separation of potassium sulfate from impurities” and “high recovery of caesium”
- Request for quotations issued to shortlisted UAE chemical plant main construction contractors
- Further impressive drill results from Helikon 4 that include 34.8 m @ 1.25% Li<sub>2</sub>O from 22 m extend the zone of mineralisation down dip and along strike to the east
- Upgraded Karibib Measured & Indicated Mineral Resources – from previous Inferred estimates – well advanced, with the objective of extending Phase 1 operating life to 20 years
- Further drilling imminent at Helikon 2 and 3 to follow up on these excellent Helikon 4 results

#### Products & Marketing

- Commercial terms agreed with Tier 1 consumers for supply of all Phase 1 lithium hydroxide under the binding agreement with Traxys; full supply agreements now being progressed
- Caesium and rubidium supply negotiations advancing well with growing interest for compounds of both metals, which are both categorised as Critical Minerals
- Negotiation of supply agreements for bulk by-products with UAE customers started; LOIs in place for 100% of Phase 1 amorphous silica, Sulphate of Potash (SOP) and gypsum residue

#### Corporate and Finance

- Entitlements Offer to raise \$11.7 million closed 28 October 2022 with final acceptances to be announced on 3 November 2022 and proceeds due on 4 November 2022
- Cash and equivalents at 30 September 2022 of \$2.8 million and no debt, with a pro-forma cash (before expenses) of \$16.3 million including exercise of options, utilisation of the CPA facility and assuming the Entitlement Offer is fully subscribed

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## OVERVIEW & OUTLOOK

Lepidico has a zero-harm track record since health and safety incident reporting began in September 2016. Dedicated commercial office space is being evaluated in Perth and Toronto, with flexible work plans supported in all business locations. Virtual meetings continue to be favoured versus business travel due to the high cost and limited availability of flight options.

The Executive team continued to expand during the quarter with the on-boarding of both the Phase 1 Project Director and General Manager Operations Namibia. Lycopodium Minerals Pty Ltd (Lycopodium) continued work under the two Engineering Procurement & Construction Management (EPCM) contracts, for the Namibia concentrator and Abu Dhabi chemical conversion plant. Chemical plant Front-End Engineering and Design (FEED) was extended by two months to November 2022 to optimise procurement based on increased local UAE sourcing and further refine the design. Limited Stage 2 implementation works for the concentrator concluded in September, with works planned to resume in the March 2023 quarter. Lithium chemical supply-demand fundamentals remain strong, with the market continuing to be in fundamental deficit and predictions of sustained deficits throughout this decade gaining traction. Benchmark Mineral Intelligence (BMI) reported that lithium prices in China hit an all-time high mid-October of over \$74,000/t Lithium Carbonate Equivalent (LCE) as, “battery manufacturers scramble to secure supply amid booming demand from the electric car market.” BMI pointed out that lithium prices have now trended upwards for 24 straight months as the Electric Vehicle (EV) market continues to expand with global annual EV sales reaching one million for the first time in September 2022. Contract prices have also continued to close the gap with spot.

- Chemical plant FEED is now scheduled to complete in November 2022, incorporating regionally sourced materials and equipment via a main contractor, as well as further design refinements.
- Requests for quotations issued to prospective chemical plant main construction contractors in the UAE, which will inform the control estimate and schedule.
- Funding secured for November via a strongly supported entitlements offer that will allow critical path Phase 1 implementation works to start following review of the control estimate and schedule.
- The Karibib mine and concentrator development is fully permitted, and FEED is complete.
- Demonstration plant pilot operations and third-party crystalliser test-work successfully completed in the quarter with excellent results received. Of particular note, the quality of lithium hydroxide was advised to be superior to that produced from the sodium sulfate route.
- Strategic Metallurgy completed the last of four pilot operations reports mid-October – following receipt of all assays and third-party data – which are now the subject of lender due diligence.
- Considerable progress made with regards to options for a complete financing solution for the Phase 1 Project. Credit approvals expected to be sought by all lenders during the March 2023 quarter.
- Strategic equity options continue to advance well, which along with debt are intended to provide full funding for the Phase 1 developments.
- Term sheets have been negotiated for supply of lithium hydroxide to consumers in the EV supply-chain, under the binding Lepidico-Traxys offtake agreement signed in December 2021 for 100% of annual production over the first 7 years. Full supply agreements are now being progressed.
- Caesium chemical supply negotiations advanced albeit more slowly over the northern summer.
- Multiple opportunities for supply of material quantities of rubidium identified with product specifications identified and test-work being undertaken.
- Mineral Resource development drilling completed at Helikon 4 with updated Measured and Indicated estimates now well advanced, with the objective of extending Phase 1 operating life to 20 years. A revised Ore Reserve estimate is scheduled for November 2022.

## DEVELOPMENT

### Chemical Conversion Plant (100%), Abu Dhabi

Roland (Roly) Wells joined Lepidico as Project Director for Phase 1 based in Brisbane on 1 September 2022 following a six week part time on-boarding. Roly brings a great breadth and depth of experience from his plus 30 years working in the mining, minerals and infrastructure industries. As Project Director Roly will lead all facets of the Phase 1 Project implementation in Namibia and Abu Dhabi through to advanced ramp-up of operations.

On handover to Roly, Peter Walker transitioned from GM Project to Technical Advisor (part time), a largely governance role. The Board and Management thank Peter for his exceptional leadership, skill and tenacity in progressing our Phase 1 Project – along with the proprietary process technologies it employs – from pre-feasibility in 2016 to advanced front-end engineering and design in mid-2022.

The Process Design Criteria (PDC) was finalised for FEED purposes in the June 2022 quarter following an extensive risk review phase. As previously advised, the PDC is a living data set. Relatively minor modifications were made during this last quarter, in large part associated with results received from third-party equipment vendor test-work that included crystallisers and the regrind mill. Further amendments are expected through the detailed design phase, as the more than one-hundred piping and instrumentation design drawings are reviewed and finalised.

The chemical plant layout has been substantially reworked to minimise piping and electrical runs, and improve both operability and maintainability (Figure 1). The layout is now substantially locked down, to allow building applications to be submitted that include foundation designs.

Phase 1 chemical plant FEED is scheduled to complete in November 2022. A control estimate and schedule review in August identified multiple opportunities to both optimise procurement based on local UAE sourcing and further refine the design. The Lepidico executive team is working collaboratively with Lycopodium to integrate these efficiencies and enhancements into the FEED.

The enormous oil, gas and petrochemicals industries in the UAE are supported by extensive local manufacturing and global sourcing capabilities, which are now being embedded into the Phase 1 chemical plant procurement strategy. Requests for quotations have been issued to prospective chemical plant main construction contractors, with responses received late October that will inform the control estimate and schedule. It is envisaged that favouring regionally sourced materials and equipment will lead to cost efficiencies, a tighter development schedule and reduced delivery risk than would otherwise be achieved. This strategy excludes the major process long-lead equipment.



**Figure 1:** KEZAD chemical plant schematic looking north based on latest FEED data

A hazard identification (HAZID) workshop involving Lycopodium, Strategic Metallurgy and Lepidico personnel has been completed and the risk register updated. This is a precursor to a hazard and operability study (HAZOP) that is scheduled to be undertaken during detailed design.

By way of background, the Phase 1 Chemical Conversion Plant is largely permitted with the key environmental approval to construct granted. The Musataha lease agreement was signed in October 2021 with Abu Dhabi Ports (ADP) and the final staged deposit was paid during the quarter. The Musataha agreement secures the 57,000m<sup>2</sup> site for the Phase 1 chemical plant for an initial term of 25 years. The site is located within the renamed Khalifa Economic Industrial Zone Abu Dhabi (KEZAD), a major industrial free zone, which allows full foreign business ownership as well as tax exemptions on imports and exports. Under the Musataha Agreement the off-site infrastructure is being delivered by ADP (the parent company of KEZAD) to the site boundary, which includes natural gas, 11kV power, potable water, sewer services, access roads and drainage. Khalifa Port, the deep-water container terminal where concentrate from Walvis Bay, Namibia will be imported is just 15km by road from the plant site.

Phase 1 represents a unique opportunity globally for production of the strategic metals: caesium and rubidium, for which the United States is 100% reliant on imports. Furthermore, lithium, caesium, and rubidium, the main Phase 1 products, are all on the U.S. Government list of Critical Minerals, making Lepidico's technologies and the Phase 1 chemical plant strategically significant.

### **Karibib Project (80%), Namibia**

Timotheus (Timo) Ipangelwa joined Lepidico on 1 August 2022 as GM Operations Namibia. Timo has 16 years' experience as a Mining Engineer working at both large and medium scale open pit operations. As GM Operations for Lepidico in Namibia, Timo will lead the re-development of the open pit mines at Rubicon and Helikon, as well as the implementation and operation of the mineral concentrator for the Karibib Project.

As previously advised concentrator FEED was finalised in June. The control estimate and schedule will be aligned with those for the chemical plant, planned for November 2022.

Limited Stage 2 EPCM detailed design works, as approved by the Lepidico Board in February, continued till September. Project implementation works are expected to resume once FEED is completed for the Abu Dhabi chemical plant.

Revised Ore Reserve for Rubicon and Helikon 1 were estimated by AMDAD in July. Integrated project inputs were updated including a first principles revision of operating costs, updated physicals and the BMI June 2022 lithium price forecast. A modest increase in life of mine ore tonnes at slightly lower grade is implied. It is envisaged that these estimates will be finalised once lender technical due diligence is completed, scheduled for November. The current Phase 1 economic assessment continues to demonstrate that the latest lithium price forecasts more than offset the effect of cost inflation on project economics.

Inaugural Ore Reserves are scheduled to be estimated for Helikon 4 and some of the Karibib surface stockpile material once revised Mineral Resource estimates are available (see Exploration & Resource Development below). A preliminary mine plan has been developed for Helikon 4 based on the infill and extensional drill results received to end September. The pit optimisation indicates a strip ratio of less than 2 to 1. A new Phase 1 Project mine plan and schedule will be generated that integrates Helikon 4 with Rubicon and Helikon 1, with the objective of developing a whole of Project economic update in November that will also include the FEED results for both the concentrator in Namibia and Abu Dhabi chemical plant.

Karibib is fully permitted for the re-development of two open pit mines at Rubicon and Helikon 1, which will feed lithium mica ore to a central mineral concentrator adjacent to Rubicon that employs conventional flotation technology. Major awarded Project permits include the Mining Licence (ML204), water extraction permit, Environmental Compliance Certificate (ECC), Accessory Works Permit and a separate ECC awarded for the overhead power transmission line.

## **Sustainability**

Adherence to the International Finance Corporation (IFC), World Bank, Development Finance Corporation (DFC) and IRMA standards/requirements will be required to secure lending from DFC for the Phase 1 development at Karibib. To this end, a series of Group level Policies and Standards have been developed. The Board approved People, Climate Change and updated Human Rights Policies in September. Meanwhile Standards have been completed for Crisis Management, Fitness for Work, and Resettlement & Land-use. Further Standards are in advanced draft for completion in the December 2022 quarter.

Lepidico has continued to work closely with the DFC environment and social team to meet its requirements, which includes the Environment and Social Action Plan.

The fire and water trailers acquired in the June 2022 quarter for the Karibib Operations to service the site and local farmers have been used on several occasions to contain scrub fires in the community. These incidents were unrelated to Lepidico's activities.

## **Product Marketing**

The Company continues to work closely with Traxys Europe S.A. ("Traxys") to secure commitments for the majority of the lithium hydroxide produced from Phase 1 into the electric vehicle supply chain under the binding offtake agreement of December 2021 where Traxys provides sales-marketing, logistics and trade finance for 100% of lithium hydroxide manufactured during the first 7 years of operation or 35,000t in total. In addition, Traxys will act as agent for 100% of the production of caesium sulphate solution (c.400tpa) from the Chemical Plant.

Lithium supply discussions resumed in September following a seasonal two month Northern Hemisphere summer lull. Traxys is well advanced in negotiating commercial terms for supply of lithium hydroxide with multiple consumers. It is envisaged that full supply agreements will be executed within three months of signing term sheets.

Similarly, caesium chemical supply negotiations reinvigorated in September. Lepidico continues to work closely with consumers to meet their respective specification requirements. Recently, Strategic Metallurgy successfully manufactured caesium chemical samples of sufficient quality to allow the majority of Phase 1 caesium chemical production to be sold into long term supply contracts.

Lepidico is also collaborating with multiple third parties to convert both caesium and rubidium sulphate into other metal compounds to meet growing demand for these two Critical Minerals, the markets for which are entering a period of sustained structural supply deficit. Caesium, rubidium and lithium are all designated as Critical Minerals by the U.S. Government. Furthermore the U.S. is 100% import reliant for caesium and rubidium, and these the markets are dominated by a single manufacturer in Asia. Lepidico's Phase 1 chemical plant represents the only advanced source of new supply outside of China.

Negotiation of binding term sheets continue with customers in the UAE for supply of all bulk-products, with full supply agreements to follow. As previously advised, letters of intent have been signed with multiple local UAE groups for supply of all three Phase 1 bulk products following successful sample tests. There is strong demand for amorphous silica as a supplementary cementitious material for use in construction, as it both lowers the greenhouse gas emissions associated with concrete manufacture and improves its compressive strength. More than 150% of annual Phase 1 SOP fertilizer manufacture is also covered under letters of intent. Multiple uses have been identified for the Phase 1 gypsum residue that include construction materials, agricultural soil amendments and as a product employed in the rehabilitation of landfill sites. Lepidico's ambition for Phase 1 to have zero solid process waste is fast approaching a reality.

## Phase 2 Plant Scoping Study

The Karibib concentrator expansion review, to double throughput on higher grade lepidolite ore is planned to coincide with completion of Phase 1 FEED. Resource development activities are scheduled to start at Helikon 2 and 3 in November with the objective of extending and upgrading the Inferred category estimates for these deposits. Work has also started on several high priority regional targets (see Geology & Resource Development below).

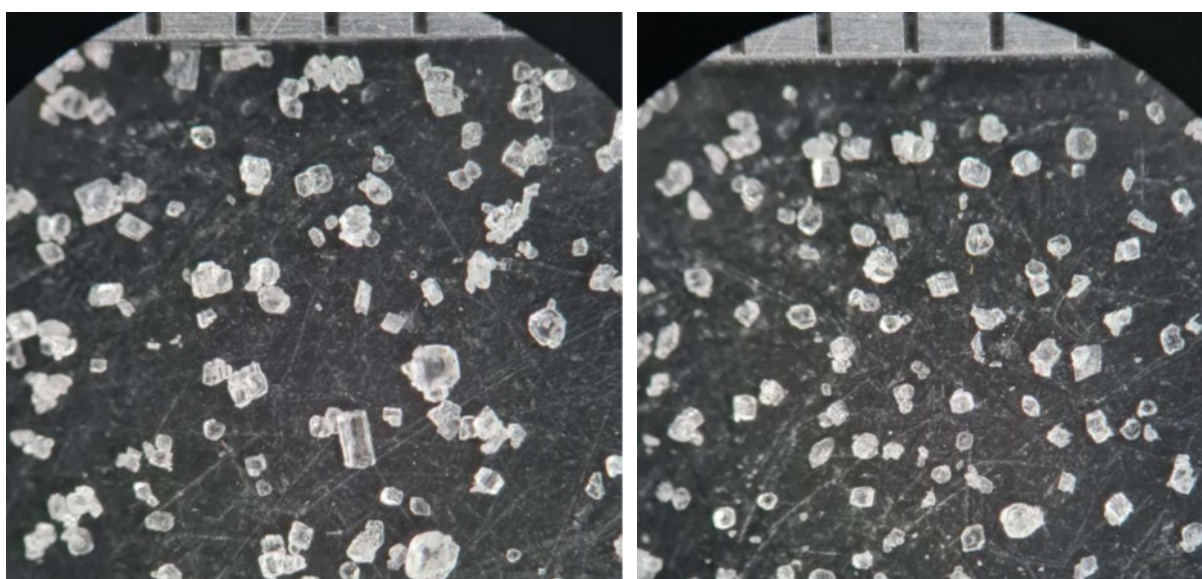
An additional 5-7 million tonnes of near surface Measured-Indicated Mineral Resources at Karibib of similar grade to Rubicon-Helikon 1 is sufficient to support a Pre-Feasibility Study on a Phase 2 chemical plant of similar scale to Phase 1. This scenario is supported by the Karibib exploration target for fiscal 2023.

Additional sources of concentrate from third-party lithium mica mines continue to be monitored, which could support a significantly larger chemical conversion plant and lead to the development of a global market for lithium mica concentrates; Lepidico's ultimate objective.

## RESEARCH & PRODUCT DEVELOPMENT

The test-work associated with the demonstration and pilot scale trials that commenced in November 2021 has successfully completed during the quarter and reported on by Strategic Metallurgy. Strategic Metallurgy advised that the results confirm the Phase 1 L-Max<sup>®</sup> and LOH-Max<sup>®</sup> design. The two final reports, for lithium hydroxide refining and by-product manufacture have been reviewed by Lepidico and provided to Behre Dolbear Australia Pty Ltd (BDA), Independent Engineer to lender International Development Finance Corporation (DFC), along with the latest Karibib mine schedule, allowing it to complete its technical review of these most recent pilot trials.

A sample of crude lithium hydroxide generated from the pilot operation using the LOH-Max<sup>®</sup> process was provided to a leading crystalliser vendor to undertake confirmatory testwork using its own equipment. The vendor processed the crude product through dissolution, sulfate removal and recrystallisation under Phase 1 design conditions. The recovered product satisfies Livent<sup>1</sup> and Targray<sup>2</sup> battery grade specifications for lithium hydroxide monohydrate. Furthermore, Strategic Metallurgy has advised that, "the crystals produced are much more pure than that produced from the sodium sulfate route", Figure 2.



**Figure 2:** Large cubic shaped lithium hydroxide monohydrate crystals generated from two separate crops displaying a  $d_{50}$  of  $\sim 320 \mu\text{m}$

<sup>1</sup> <https://livent.com/wp-content/uploads/2018/09/QS-PDS-1021-r3.pdf>

<sup>2</sup> <https://www.targray.com/li-ion-battery/battery-grade-lithium/lithium-hydroxide>

The final phase of crystalliser vendor test-work started in early July 2022 and included trials on the potassium-caesium-rubidium by-product stream. This work, coupled with the extensive piloting at Strategic Metallurgy's facilities in Perth, Western Australia has successfully validated the Phase 1 by-product recovery circuit process design in continuous operation at pilot scale. Third-party crystalliser test-work produced a market specification sulfate of potash (SOP) with key impurities all below the required levels. SOP recoveries were lower than design due to the need for higher crystallisation evaporation rates, with losses reporting to the gypsum residue. Optimisation of this circuit will be undertaken once operational.

Excellent caesium recoveries were achieved to a raw sulfate. Strategic Metallurgy subsequently refined this in a new pilot circuit to remove rubidium, successfully producing a marketable specification product. As advised above under Product Marketing, further research and development work is planned to convert both caesium and rubidium into other commercial industrial compounds of these strategic metals, with this conversion expected to be undertaken by third parties.

## EXPLORATION & RESOURCE DEVELOPMENT

### Karibib Project (80%)

Lepidico is pursuing a strategy of maximising the value of its exploration properties by implementing programs targeted at a range of metals, which the Namibian properties are prospective for and include lithium, caesium, rubidium, tantalum, gold, copper and tungsten.

Drilling at Helikon 4 during the quarter continued to return impressive results and an upgraded Mineral Resource is planned for November. The new lepidolite bearing pegmatite identified at Homestead returned mixed results at depth and is no longer considered a priority target. However, reconnaissance work on one of the newly accessed farms within EPL5439 revealed a considerable amount of lepidolite float adjacent to an untested LCT pegmatite target.

#### Helikon 4 Mineral Resource infill drilling

Helikon 4 has the largest Inferred Mineral Resource on the 1.5 km long E-W line of pegmatites, Helikon 2 - Helikon 5, situated one kilometre north of Helikon 1 within a folded sequence of marbles and metasediments. Currently, Helikon 4 contains an Inferred Mineral Resource JORC Code (2012) of 1.51 Mt @ 0.38% Li<sub>2</sub>O (0.20% Li<sub>2</sub>O cut-off) based largely on diamond core drilling from 2017.

The objective of the Resource development program, which started in January 2022 is to extend Phase 1 Project operating life from the current 14 years to around 20 years, by upgrading higher-grade zones of Inferred Mineral Resources. The excellent results received led to a further program of 17 RC holes for 1,487 metres being undertaken at Helikon 4, which completed in August (Table 1 and Figure 3). Logging has revealed that the mineralisation, while attenuating to the west, importantly extends further to the east towards Helikon 3 and Helikon 2. Much of the Helikon line east of Helikon 4 has had only limited drilling due to steeper topography. An additional round of infill and closer-spaced drilling to test a further 500m of strike along the Helikon pegmatite system is now planned for November 2022.

Work is now well advanced on new Mineral Resource estimates (MRE) for Helikon 4 and surface stockpiles at Rubicon that incorporate all drilling and sampling undertaken since February 2022. This work is intended to upgrade the current Inferred JORC Code (2012) estimates to predominately Measured and Indicated categories. The new estimates are due to be completed in November. Consistent with previous advice, the weighted average intercept grade from all the new 2022 drilling at Helikon 4 is over 0.60% Li<sub>2</sub>O versus the Inferred Resource grade of 0.38% Li<sub>2</sub>O, which bodes well for the new MRE.

**Table 1.** Summary of new Li<sub>2</sub>O intercepts from Helikon 4 (JORC Code Table 1 from ASX announcement “Helikon 4 shaping up to materially extend Phase 1 life” of 23 September 2022 applies)

Hole No	From (m)	To (m)	Intercept (m @ % Li <sub>2</sub> O) <sup>1,2,3</sup>	Summary geology
<b>A. Results from six diamond tails, 1<sup>st</sup> round RC drilling<sup>4</sup></b>				
HRCHD032	157.92	160.92	2 m @ 0.23	Undifferentiated pegmatite
HRCHD034	66.57	72.16	6 m @ 0.76	Mica Zone
HRCHD035	23.26	63.49	40 m @ 1.15	Lepidolite, lepidolite-albite, mica zone
HRCHD036	47.5	53.5	6 m @ 0.54	Mica Zone, undifferentiated pegmatite
HRCHD037	54.5	59.91	4 m @ 0.28	Undifferentiated pegmatite
HRCHD038	44.46	70.0	26 m @ 0.53	Lepidolite-albite, mica zone, pegmatite
<b>B. Results from 2<sup>nd</sup> round of RC drilling (holes HRCH041-057)</b>				
HRCH041	17	20	3 m @ 0.32	Qtz-alb-musc pegmatite
HRCH042	51	57	6 m @ 0.34	Qtz-alb-musc pegmatite
HRCH043	36	40	4 m @ 0.36	Lepidolite-albite, qtz-alb-musc pegmatite
“	43	52	9 m @ 0.42	Lepidolite-albite, qtz-alb-musc pegmatite
“	60	70	10 m @ 0.48	Lep-alb, quartz core, qtz-alb-musc pegmatite
HRCH044	23	26	3 m @ 1.63	Lep-alb-qtz, qtz-petalite
“	47	52	5 m @ 0.26	Lep-alb-qtz, qtz-alb-musc pegmatite
HRCH045	76	84	8 m @ 0.36	qtz-alb-musc pegmatite
HRCH046	21	27	6 m @ 0.40	qtz-lep, qtz-alb-musc pegmatite
“	36	69	33 m @ 0.56	Lep, lep-albite, mica zone, qtz-alb-musc pegmatite
<i>including</i>	47	52	7 m @ 1.08	Lepidolite-albite
HRCH047	21	26	5 m @ 0.53	qtz-alb-musc pegmatite
“	35	66	31 m @ 0.56	Lep-alb, mica zone, qtz-alb-musc pegmatite
HRCH048	28	56	28 m @ 0.64	Qtz-alb-musc pegmatite, petalite, lep-alb, mica zone
<i>including</i>	48	56	8 m @ 0.97	Lep-alb-qtz, mica zone
HRCH049	45	59	14 m @ 0.90	qtz-alb-musc pegmatite
HRCH050	73	85	12 m @ 0.27	qtz-alb-musc pegmatite, mica zone
HRCH051	73	78	5 m @ 0.45	qtz-alb-musc pegmatite
HRCH052	14	18	4 m @ 0.42	qtz-alb-musc(-petalite) pegmatite
HRCH053	0	9	9 m @ 0.32	qtz-alb-musc pegmatite
HRCH054	5	20	15 m @ 0.87	qtz-qlb-lep-musc pegmatite
HRCH055	24	27	3 m @ 0.59	qtz-alb-musc pegmatite
and	34	52	18 m @ 0.67	qtz-qlb-lep-musc pegmatite
HRCH056	22	25	3 m @ 0.46	qtz-qlb-lep-musc pegmatite
and	29	39	10 m @ 0.29	qtz-qlb-musc pegmatite
and	45	50	5 m @ 0.34	qtz-qlb-lep-musc pegmatite
HRCH057	20	36	16 m @ 0.63	Lep-alb-perth(-petalite)-qtz pegmatite
and	39	47	8 m @ 0.84	Lep-alb-qtz pegmatite

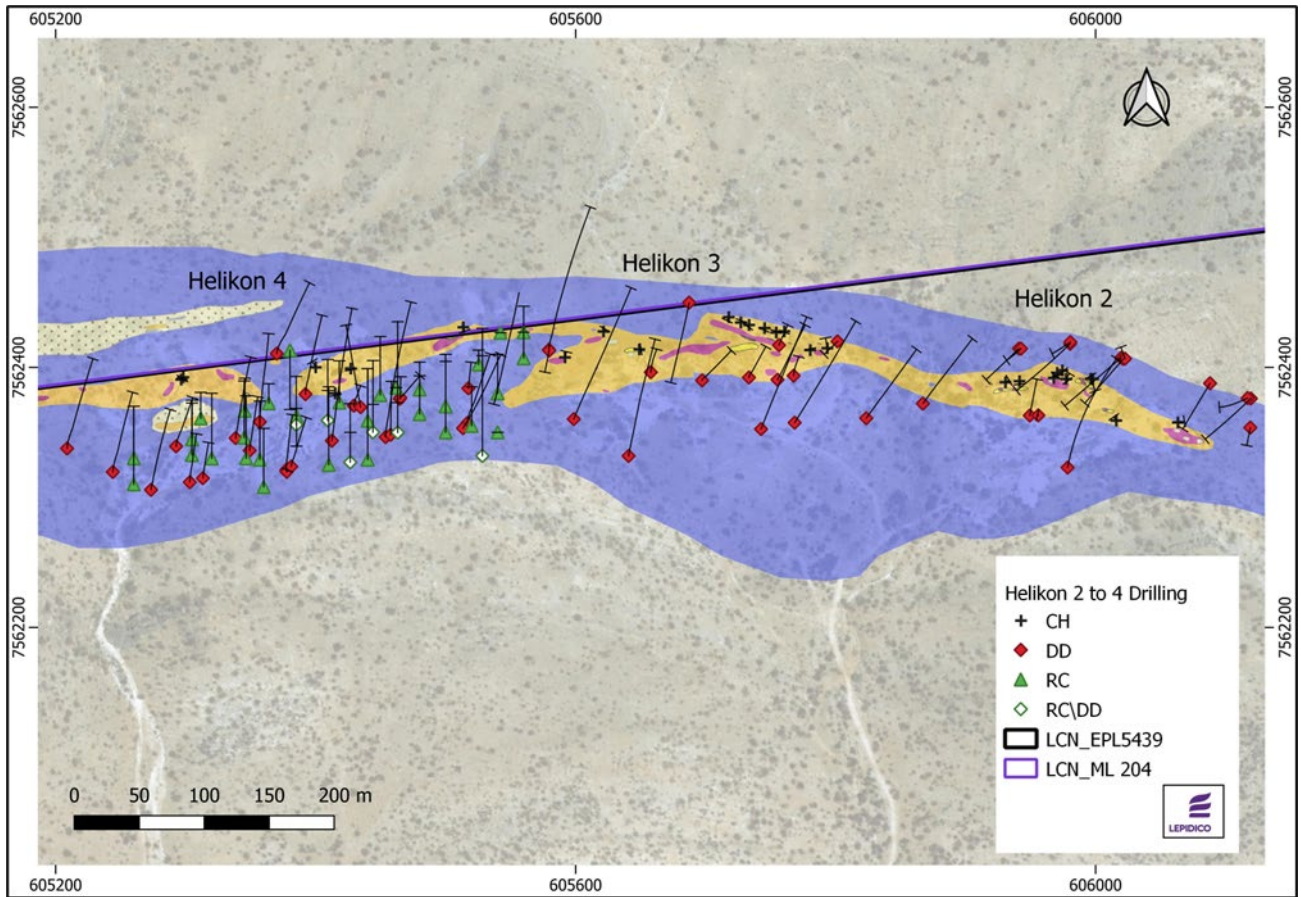
Notes: <sup>1</sup>0.2% Li<sub>2</sub>O cut-off, maximum 2 m internal dilution; down-hole intercepts approximate to true widths

<sup>2</sup>nsi = no significant intercept > 0.20% Li<sub>2</sub>O

<sup>3</sup>petalite is generally minor, but where it is the dominant Li-mineral >1m that interval is excluded from table

<sup>4</sup>diamond tail results are in addition to RC results from the upper part of the hole, as previously reported to ASX on 27 June 2022: “Excellent drilling results from Helikon 4”





**Figure 3.** The Helikon pegmatite from Helikon 2 (east) to Helikon 4 (west), showing recent drilling (green triangles and white diamonds) to upgrade the current Inferred Resource to Measured and Indicated levels.

#### Regional Exploration and Scout Drilling

Assays from scout drilling at Homestead revealed low levels of lithium mineralisation albeit within some broad pegmatite intercepts. A follow up program is not planned at this time.

Reconnaissance work on multiple targets within two of the EPL5439 farms have yielded some early encouragement. Soil sampling has started over one target with the program due to complete in late October. Systematic sampling has yet to start at another priority target, however, considerable quantities of lepidolite surface float have been encountered (Figure 4).



**Figure 4:** Lepidolite-rich surface float from a priority target within EPL5439.

## **CORPORATE**

The health, safety and wellbeing of our people, staff and contractors remain of paramount importance. All active staff in Australia, Canada, Namibia and the UK are fully immunised against COVID-19. Working from home and adherence to local safety protocols remain in place in the jurisdictions in which we operate.

### **Cash**

As at 30 September 2022, the Company held \$2.8 million in cash and cash equivalents, with a pro-forma cash (before expenses) of \$16.3 million following the capital raising initiatives outlined below.

### **Entitlement Offer**

On 28 October 2022 the Renounceable Entitlements Offer, previously announced on 10 October 2022 (the “Offer”), closed following strong support by the Company’s eligible directors, shareholders and new investors.

The Offer is expected to raise \$11.7 million (before costs) with the final results to be announced on 3 November 2022 with the new shares and new options to be issued on 4 November 2022. Mahe Capital acted as Lead Manager and Underwriter.

## Utilisation of Controlled Placement Agreement

Subsequent to quarter end, Lepidico successfully raised A\$600,000 (after costs) through the set-off of 23,100,000 collateral shares (Set-off Shares) previously issued to Acuity Capital under the Controlled Placement Agreement (CPA) - see announcements on 23 December 2019, 19 April 2021 and 27 January 2022. The Set-Off Shares reduces the total collateral shares to 72,900,000 which Acuity Capital is otherwise required to return to the Company upon termination of the CPA. The Set-Off Shares have a deemed price of \$0.026.

## Options

On 11 October 2022, 75,000,000 unlisted options were exercised with a strike price of \$0.016 raising \$1,200,000 in additional capital.

## Project Finance

Considerable progress was made during the quarter on options for a complete financing solution for the integrated Phase 1 Project, supported by debt advisor Lions Head Global Partners (Lions Head).

BDA, the independent engineer appointed by DFC has received all technical reports from the latest pilot trials in Perth for its review, which is pending. The only outstanding technical due diligence item for BDAs review are the Phase 1 control estimates and schedules from EPCM Stage 1 works, due in November 2022.

In parallel, Lions Head is advancing discussions with other Development Finance Institutions, as well as commercial lenders and export credit agencies for debt finance for the chemical plant development in Abu Dhabi, with credit approvals expected to be sought by lenders during the March 2023 quarter

Strategic equity options are also being advanced that collectively, along with debt are intended to provide full funding for Phase 1.

## Patents & Licences

At 30 September 2022, the Company held granted patents for its L-Max<sup>®</sup> technology in the United States, Europe, Japan and Australia, along with an Innovation Patent in Australia. National phase patent applications are well advanced in the other key jurisdictions, with these processes expected to be granted in 2023. The Company also has a patent granted for its process technology for lithium recovery from phosphate minerals (amblygonite) from the United States, Japan and Australia.

The national and regional phase of the patent application process is progressing for LOH-Max<sup>®</sup> under PCT/AU2020/050090. The S-Max<sup>®</sup> national phase patent applications are progressing under PCT/AU2019/050317 and PCT/AU2019/050318. In addition, the national and regional phase of the patent application process for the production of caesium, rubidium and potassium brines and other formates is continuing under PCT/AU2019/051024. The national and regional phase applications for the above processes are expected to continue into 2023.

On 1 April 2022, the Company progressed with an international application under the Patent Cooperation Treaty (PCT) and was allotted the number PCT/AU2022/050297 for the lithium carbonate recovery process from a raw lithium hydroxide material.

On 27 September 2022, the International PCT application was filed for the preparation of Cs-Rb-K alkali salt solutions from lithium mica mineral source material and allotted the number PCT/AU2022/051154. The refining process has application in tailoring ternary materials for industrial catalyst applications and the patent process is expected to continue into 2023.

### **Exploration and Resources**

The information in this report that relates to Exploration Results is based on information compiled by Mr Tom Dukovcic, who is a full-time employee of the Company and a member of the Australian Institute of Geoscientists and who has sufficient experience relevant to the styles of mineralisation and the types of deposit under consideration, and to the activity that has been undertaken, to qualify as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves." Mr Dukovcic consents to the inclusion in this report of information compiled by him in the form and context in which it appears.

The information in this report that relates to the Helikon 2 - Helikon 5 Mineral Resource estimates is extracted from an ASX Announcement dated 16 July 2019 ("Drilling Starts at the Karibib Lithium Project") and was completed 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 surface stockpiles Mineral Resource estimate is extracted from an ASX Announcement dated 12 March 2021 ("Karibib Mineral Resource Expanded") and was completed 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.

### **Forward-looking Statements**

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

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

## CORPORATE INFORMATION

### Directors

Gary Johnson (Non-Executive Chair)  
Joe Walsh (Managing Director)  
Mark Rodda (Non-Executive Director)  
Cynthia Thomas (Non-Executive Director)

### Registered & Principal Office

23 Belmont Avenue,  
Belmont, WA 6104,  
Australia

### Key Management

Benedicta Uris (GM Sustainability & Country Affairs)  
Timo Ipangelwa (GM Operations – Namibia)  
Hans Daniels (GM Operations – UAE)  
Roland Wells (Project Director)  
Tom Dukovic (GM Geology)  
Shontel Norgate (CFO & Joint Company Secretary)  
Alex Neuling (Joint Company Secretary)

### Forward Shareholder Enquiries to:

Automic Registry Services  
Level 5, 191 St Georges Terrace  
Perth WA 6000

All correspondence to:

GPO Box 5193  
Sydney NSW 2001

### Stock Exchange Listings

Australian Securities Exchange (Ticker LPD)  
Frankfurt Stock Exchange (Ticker AUB)

Ph: 1300 288 664 (within Australia)

Ph: +61 (0) 2 9698 5414

Email: [hello@automicgroup.com.au](mailto:hello@automicgroup.com.au)

Website: [www.automicgroup.com.au](http://www.automicgroup.com.au)

### Issued Share Capital

As at 30 September 2022, issued capital was 6,507,191,233.

As at 28 October 2022, issued capital was 6,582,216,233 (prior to issue of new shares under the Offer – refer Corporate section above).

### Quarterly Share Price Activity

	High	Low	Close
July - September 2022	3.35c	2.2c	2.2c

Authorised for release by the Managing Director.

### Further Information

For further information, please contact

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

**David Waterhouse**  
**Waterhouse IR**

Tel: +61(0)3 9670 5008

Email: [info@lepidico.com](mailto:info@lepidico.com)  
Website: [www.lepidico.com](http://www.lepidico.com)

## TENEMENT INFORMATION (Provided in accordance with ASX Listing Rule 5.3.3)

NAMIBIAN OPERATIONS, Karibib Project

### Karibib Project Tenement Schedule

Tenement ID	Registered Holder	Lepidico Interest	Expiry Date	Area
<b>ML 204</b>	Lepidico Chemicals Namibia (Pty) Ltd	80%	18/06/2028	69 km <sup>2</sup>
<b>EPL 5439</b>	Lepidico Chemicals Namibia (Pty) Ltd	80%	09/06/2024	165 km <sup>2</sup>

## PAYMENTS TO RELATED PARTIES OF THE ENTITY AND THEIR ASSOCIATES

Payments made during the quarter and included in Item 6.1 of the Appendix 5B – Mining Exploration Entity Quarterly Cash Flow Report, comprise the following:

Item 6.1: Aggregate amount of payments to related parties and their associates included in cashflows from operating activities is \$568,000:

	<b>\$'000</b>
Remuneration	105
Directors Fees	72
Payments to Director Related Entities (Development)	391
<b>Total included in 6.1</b>	<b><u>568</u></b>

## Appendix 5B

### Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Lepidico Ltd

ABN

99 008 894 442

Quarter ended ("current quarter")

30 September 2022

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation (expensed)	-	-
(b) development	(2,230)	(2,230)
(c) production	-	-
(d) staff costs	(758)	(758)
(e) administration and corporate costs	(907)	(907)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	11	11
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other (COVID-19 incentives)	-	-
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(3,884)</b>	<b>(3,884)</b>

<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	(13)	(13)
(d) exploration & evaluation (capitalised)	(1,313)	(1,313)
(e) investments	-	-
(f) other non-current assets	-	-

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>(1,326)</b>	<b>(1,326)</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	-
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	1	1
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings (convertible debt securities)	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>1</b>	<b>1</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	8,043	8,043
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(3,884)	(3,884)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(1,326)	(1,326)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	1	1



<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (3 months) \$A'000</b>
4.5	Effect of movement in exchange rates on cash held	(64)	(64)
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>2,770</b>	<b>2,770</b>

<b>5. Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter \$A'000</b>	<b>Previous quarter \$A'000</b>
5.1 Bank balances	2,770	8,041
5.2 Call deposits	-	-
5.3 Bank overdrafts	-	-
5.4 Other (provide details)	-	-
<b>5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>2,770<sup>1</sup></b>	<b>8,041</b>

<b>6. Payments to related parties of the entity and their associates</b>	<b>Current quarter \$A'000</b>
6.1 Aggregate amount of payments to related parties and their associates included in item 1	568
6.2 Aggregate amount of payments to related parties and their associates included in item 2	-
<i>Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.</i>	

<sup>1</sup> The Company's pro-forma cash at 30 September 2022 was \$16.3 million assuming the Company's Entitlement Offer is fully subscribed (refer Corporate section of the Company's Quarterly Activities Report for further details)

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

7.	<b>Financing facilities</b>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
	<i>Note: the term "facility" includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.</i>		
7.1	Loan facilities		
7.2	Credit standby arrangements **	Up to 7,500	2,925
7.3	Other	-	-
7.4	<b>Total financing facilities **</b>	Up to 7,500	2,925
7.5	<b>Unused financing facilities available at quarter end</b>		Up to 4,575
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		
	<p>** On 23 December 2019 the Company executed a Controlled Placement Agreement (CPA) with Acuity Capital to provide Lepidico with up to \$7.5 million of standby equity capital to February 2022. Under the CPA Lepidico sets a floor price and the final issue price will be calculated as the greater of that floor price and a 10% discount to a Volume Weighted Average Price (VWAP) over a period nominated by Lepidico. As collateral for the CPA, Lepidico issued 230,000,000 ordinary shares from its LR7.1 capacity, at nil consideration to Acuity Capital ("Collateral Shares") but may, at any time, cancel the CPA and buy back the Collateral Shares for no consideration (subject to shareholder approval).</p> <p>On 19 April 2021 the Company announced it had raised A\$2,925,000 (after costs) through the set-off of 134,000,000 collateral shares (Set-off Shares) previously issued to Acuity Capital under the Controlled Placement Agreement (CPA) as announced on 23 December 2019. The Set-Off Shares reduces the total collateral shares to 96,000,000 million, which Acuity Capital is otherwise required to return to the Company upon termination of the CPA. The unused facility reduced by \$2.925 million following the capital raise and cash increased by \$2.925 million.</p> <p>On 26 January 2022 the Company agreed with Acuity Capital to extend the expiry date of its Controlled Placement Agreement ("CPA") to 31 January 2024.</p>		

8.	<b>Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1	Net cash from / (used in) operating activities (item 1.9)	(3,884)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(1,313)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(5,197)
8.4	Cash and cash equivalents at quarter end (item 4.6)	2,770
8.5	Unused finance facilities available at quarter end (item 7.5)	Up to 4,575
8.6	Total available funding (item 8.4 + item 8.5)	7,345
8.7	<b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	1.4
	<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>	

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:  
Although the Company has positive relevant outgoings at Item 8.3 it provides the following information due to the nature of the cash from operating activities during the quarter.

8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: Yes.

8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: Yes.

Subsequent to the end of the quarter the Company undertook the following steps to raise additional capital:

1. On 28 October 2022 the Renounceable Entitlements Offer, previously announced on 10 October 2022, closed following strong support by the Company's eligible directors, shareholders and new investors and is expected to raise \$11.7 million (before costs);
2. On 11 October 2022, 75,000,000 unlisted options were exercised with a strike price of \$0.016 raising \$1,200,000 in additional capital; and
3. On 10 October 2022, Lepidico successfully raised A\$600,000 (after costs) through the set-off of 23,100,000 collateral shares previously issued to Acuity Capital under the Controlled Placement Agreement.

Based on the above, the Company's pro-forma cash at the end of September was \$16.3 million (before costs). Refer Corporate section of the Company's Quarterly Activities Report for further detail.

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: Yes. The Company's pro-forma cash at 30 September 2022 is \$16.3 million assuming the Company's Entitlement Offer is fully subscribed providing funding for an estimated 4.0 quarters as per the calculation at section 8.7.

*Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.*

## Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 31 October 2022.....

Authorised by: .....By the Board.....  
(Name of body or officer authorising release – see note 4)

## Notes

1. This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
2. If this quarterly cash flow report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 6: Exploration for and Evaluation of Mineral Resources* and *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly cash flow report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

**Mining exploration entity or oil and gas exploration entity quarterly cash flow report**

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4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [name of board committee – eg Audit and Risk Committee]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.