

ASX: LPD

QUARTERLY ACTIVITIES REPORT

for the period ending 30 June 2022

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

Key Points

Development

- Karibib Phase 1 concentrator Front End Engineering and Design (FEED) revisions completed that support both improved operability and a capital efficient doubling in throughput, with inputs established for the Phase 2 Scoping Study
- Phase 1 chemical plant Process Design Criteria (PDC) finalised, which incorporates design
 improvements based on operating data from demonstration plant pilot campaigns, engineering
 risk assessments and third-party major mechanical equipment vendor testwork; control estimate
 well advanced and targeted for mid-August with FEED complete September
- LOH-Max® raw lithium hydroxide and by-product pilot campaigns completed; final stage lithium hydroxide refining to complete imminently
- Non-process infrastructure development at KIZAD chemical plant site well advanced; architectural design of non-process buildings has started, design of the process buildings to start on completion of FEED
- Major supply and construction contracts, which are not on the critical path are advancing as per schedule; commercial green hydrogen supply now expected in 2025-'26 at KIZAD
- Helikon 4 infill drilling returns broad intercepts of lepidolite mineralisation, including 40 m @ 1.08% Li₂O and 20 m @ 1.16% Li₂O; weighted average intercept grade of 0.60% Li₂O from new drilling versus the Helikon 4 Inferred Resource grade of 0.38% Li₂O; revised Mineral Resource estimate due September 2022 to inform Phase 2 Scoping Study
- Further drilling planned at Helikon 2, 3 and 4 to follow up on these excellent results

Products & Marketing

- Commercial negotiations well advanced with Tier 1 consumers for lithium hydroxide supply under the binding Traxys agreement for 100% of annual Phase 1 production for seven years
- Caesium supply negotiations well advanced with growing interest for both sulphate and hydroxide
- LOIs signed with UAE customers for 100% of annual production of all Phase 1 bulk products: amorphous silica, Sulphate of Potash (SOP) and gypsum residue; for zero solid process waste

Corporate and Finance

- Well-funded with cash and equivalents as at 30 June 2022 of \$8.0 million and no debt
- Executive team expanded with General Manager Sustainability & Country Affairs Namibia starting during the quarter; recruitment of two General Manager Operations, one for Namibia and the other for the UAE, and Project Director completed with all positions due to commence during the September quarter
- Updated Letter of Interest and term sheet from U.S. International Development Finance Corp. (DFC) provided with legal due diligence to commence incorporating commercial lender input

OVERVIEW & OUTLOOK

Lepidico has a zero-harm track record since health and safety incident reporting began in September 2016. COVID-19 restrictions have been lifted across the Group with local protocols being followed in all jurisdictions. Dedicated commercial offices space is now being sought in Perth and Toronto, with flexible work plans supported in all business locations. Normal business travel has resumed.

Recruitment of three high-calibre Executives during the quarter will see Lepidico's leadership team double in size by September from the beginning of the year. Key functions of General Manager (GM) Sustainability & Country Affairs and GM Operations UAE have been on-boarded. On-boarding of the Project Director has started for full time appointment 1 September 2022. On-boarding of the GM Operations Namibia will start 1 August 2022. Lycopodium Minerals Pty Ltd (Lycopodium) has made considerable progress under the two EPCM contracts for the Namibia concentrator and Abu Dhabi chemical conversion plant, with limited Stage 2 implementation works started for the concentrator and chemical plant FEED close to completion. Lithium chemical supply-demand fundamentals remain strong, with several commentators including U.S. Government Departments¹ forecasting demand to exceed 3.0 million tonnes LCE (Lithium Carbonate Equivalent) by 2030. Lithium chemical prices have also remained buoyant at US\$60,000-65,000/t.

- Select revisions to Karibib concentrator FEED completed in parallel with Board approved limited Stage 2 EPCM works, which includes completion of the HAZOP. Control estimate to be finalised on completion of chemical plant estimate scheduled for mid-August 2022.
- Chemical plant PDC updated to incorporate major equipment vendor testwork results. No further
 material revisions are expected with the control estimate and schedule now due mid-August. A
 Final Investment Decision (FID) continues to be targeted for September.
- Letter of support received from the Ministry of Agriculture, Water & Land Reform for ongoing Phase 1 Karibib exploration and development works; formal land lease agreement pending.
- Negotiations well advanced for supply of Phase 1 lithium hydroxide to EV supply-chain end consumers, under the binding Lepidico-Traxys offtake agreement signed in December 2021 for 100% of annual production over the first 7 years. Customers are awaiting demo-plant samples.
- Caesium chemical supply negotiations advancing well with customer demand exceeding annual Phase 1 production, ahead of an envisaged significant supply deficit emerging later this year.
- Offtake LOIs signed with local UAE groups that exceed annual Phase 1 production for amorphous silica, SOP fertilizer and gypsum. Size samples of all products have been provided for customer testing and supply agreement negotiations have commenced. The silica and gypsum products are being evaluated for both construction and agricultural applications.
- Demonstration plant pilot operations continued through the quarter, with bulk by-product manufacture completed in June. Use of a contaminated reagent delayed bulk lithium hydroxide refining which resumed in July, with new samples being manufactured at the time of writing. Raw caesium sulphate production complete. The caesium refining pilot circuit is now being constructed for operation in August. Two of four final campaign reports have been provided to lenders.
- Updated Letter of Interest received from DFC with technical due diligence scheduled to conclude following review of demo-plant pilot reports and control estimates. Engagement with commercial lenders continues with the objective of a September 2022 FID.
- Highly capital efficient expansion of the Karibib concentrator has been identified under the Phase 2 Project Scoping Study, with capital estimate due in August.
- Phase 2 now contemplates lithium mica concentrates sourced from third-party deposits as well as Karibib, following unsolicited inbound enquiry from the operators of four lepidolite rich assets.
- Lepidico working collaboratively with third-parties to fast-track studies via sharing of concentrator design, with the objective of developing a global market for lithium mica concentrates.

¹ Benchmark Mineral Intelligence Battery Gigafactory Forum, Washington, 23-24 June 2022

DEVELOPMENT

Chemical Conversion Plant (100%), Abu Dhabi

In April, Hans Daniels was appointed as General Manager Operations UAE. He started with Lepidico in early July 2022. Hans brings a great breadth and depth of experience from his plus 30 years working in the chemicals industry, much of it in the UAE, where he has established and developed new chemicals businesses. As GM Operations for the region, Hans will lead the implementation and operation of Lepidico's Phase 1 chemicals process facility – which employs the Company's proprietary process technologies – being developed within the Khalifa Industrial Zone Abu Dhabi (KIZAD),

As previously advised, Lycopodium and Strategic Metallurgy collaborated on the chemical plant flowsheet which was finalised in April 2022 incorporating demonstration plant pilot campaign results and allowing a milestone version of the PDC to be developed. Further refinements were made to the PDC on receipt of critical mechanical equipment vendor development testwork in June, which allowed the specifications of the filters, crystallisers and regrind mill to be finalised. This in turn allowed Lycopodium to start work on the engineering and design for the installation of these units, with the draft control estimate and implementation schedule on track for mid-August 2022. Limited vendor testwork continues that is confirmatory (non-critical) and thereby not on the FEED critical path. The PDC will however, continue to be a live document throughout the detailed design phase and thereby take account of all confirmatory testwork.

The chemical plant site layout was completed last quarter (Figure 1). Subsequently Abu Dhabi Ports (ADP) has approved the pre-development plan, which includes the general site layout, land allocation, connections to utilities and traffic management. All utilities to the KIZAD site are planned to be available in the March 2023 quarter, aside from natural gas which is scheduled for late 2023. Early indications are that commercial green hydrogen will become available at KIZAD by 2026 and possibly as early as late 2024.



Figure 1: KIZAD chemical plant schematic based on latest FEED

Lycopodium is now well advanced in finalising the chemical plant layout detail in collaboration with the non-process infrastructure engineer, Bilfinger Tebodin, in Abu Dhabi. Architectural designs for the six

non-process buildings are advancing well, with layout and design complete for several structures. Designs for the six process buildings will start once the layout detail is locked down. Design of the gas regulation station is also underway as is the fire safety study, approval of which is on the implementation critical path.

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 ADP and the final staged deposit was paid during the quarter. The Musataha agreement secures the 57,000m² site for the Phase 1 chemical plant for an initial term of 25 years. The site is located within KIZAD, 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 KIZAD) 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

In April, Timotheus (Timo) Ipangelwa was appointed as GM Operations Namibia. He will start with Lepidico in early August. 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 two open pit mines at Rubicon and Helikon, as well as the implementation and operation of Lepidico's Phase 1 mineral concentrator for the Karibib Project.

A review of major equipment vendors led to a change in supplier being recommended for the flotation cells, which in turn necessitated some redesign works. Some modifications were also introduced into the crusher and concentrate bagging areas (Figure 2). The revised FEED was finalised in June with no material impact to the control estimate but an improved risk position for implementation and operations. The control schedule will be finalised in August along with that for the chemical plant.

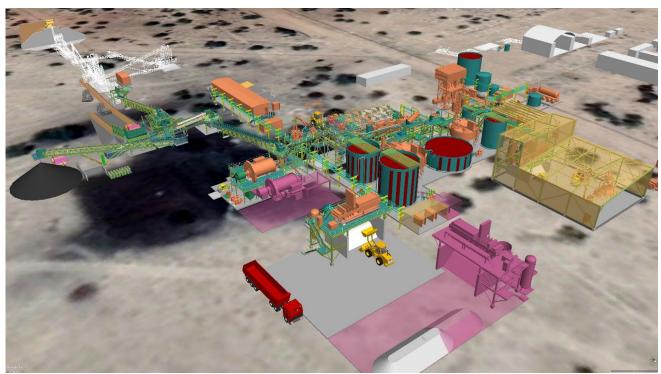


Figure 2: Karibib concentrator schematic based on latest FEED

Limited Stage 2 EPCM detailed design works progressed for most areas of the concentrator, as approved by the Lepidico Board in February.

An Ore Reserve review was completed by AMDAD based on a first principles revision to operating costs for the integrated project, updated physicals that incorporates all process testwork since completion of the Definitive Feasibility Study (DFS) in May 2020 and Benchmark Mineral Intelligence latest lithium hydroxide price forecast. The re-optimisation confirmed the pit stages assumed in the DFS and therefore the pit designs remain in good standing. A modest increase in life of mine ore tonnes at slightly lower grade is implied, subject to further evaluation. This is consistent with the higher lithium price more than offsetting the effect of inflation on operating costs.

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.

Site works at Karibib are scheduled to start once finance is secured. A considerable tonnage of high-grade in-situ lepidolite mineralisation is exposed at surface at Rubicon with minimal requirement for mining of waste. As such ore mining is not on the critical path and will start just ahead of concentrator commissioning.

Sustainability

As previously advised, in April Benedicta Uris joined Lepidico as General Manager Sustainability & Country Affairs Namibia. A comprehensive mapping and gap assessment of IFC, World Bank, DFC and IRMA standards/requirements versus Phase 1 ESIAs and the Karibib ESMP (Environment and Social Management Plan) has been completed. The results have been shared with DFC and policy/standard development is well advanced to meet finance requirements, which includes an Environment and Social Action Plan.

Lepidico Chemicals Namibia is also well advanced on an updated stakeholder engagement plan, which is scheduled for completion in late July along with associated procedures.

Two notable corporate social responsibility initiatives were undertaken during the quarter. A business registration and entrepreneurship workshop for women and youth was held in the town of Otjimbingwe. The workshop was attended by recipients of existing Lepidico micro-finance projects as well as 23 women and youths who showed keen interest in starting micro-businesses. Secondly, supporting information has been received from the Ministry of Health and Social Services for a new maternity space at the Otjimbingwe clinic to allow a funding proposal to be completed, with implementation planned for the 2023 fiscal year.

Fire and water trailers have been acquired for the Karibib Operations to service the site and local farmer community, where there have been instances of scrub fires. In June a scrub fire was started just outside the Mining Lease and EPL area by a grader contracted by Lepidico to develop fire breaks along access roads to site. The fire was brought under control with no injury or impacts to local farmer livestock. The incident has been investigated and revisions to procedures implemented to prevent a recurrence. Scrub fires remain a significant risk during dry seasons that follow higher rainfall wet seasons such as occurred in 2021-'22.

Australian not for profit organisation, ellect², helps companies achieve diversity, equity and inclusion in their business as part of their ESG goals. ellect has completed gender equality ratings for all ASX listed companies, with Lepidico having a score in the top 5% based on its Board and key management composition.

² www.ellect.biz

Product Marketing

The Company entered into a binding offtake agreement in December 2021 for sales-marketing, logistics and trade finance with Traxys Europe S.A. ("Traxys") for 100% of the production of lithium hydroxide (5,000tpa) from the Company's planned Phase 1 Project 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.

A growing understanding across the industry of an impending acceleration in lithium demand growth coupled with limited new supply options means that Lepidico is well positioned to commit its lithium hydroxide with leading sustainability focused consumers within the electric vehicle supply chain. Negotiations are well advanced for binding supply agreements to be entered into with Lepidico-Traxys during the September 2022 quarter. Product samples continue to be manufactured by Strategic Metallurgy in Perth for prospective customers.

Similarly, caesium chemical supply negotiations continue to advance well with multiple size consumers. Interest is being driven by an emerging substantial supply deficit, as one of just two major producers of caesium chemicals ceases supply this year on depletion of its raw material source. The Phase 1 chemical plant represents the only advanced source of new supply outside of China.

Offtake letters of intent have now been signed with multiple local UAE groups for 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 also improves its compressive strength. Multiple uses have also 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.

As previously advised, more than 150% of annual Phase 1 SOP fertilizer manufacture is covered by letters of intent.

Binding term sheets are now being developed and negotiated with customers to be closely followed by supply agreements for all bulk-products.

Phase 2 Plant Scoping Study

Completion of FEED works for the Phase 1 concentrator has allowed a debottlenecking and expansion study to be undertaken. Existing water infrastructure and the planned power supply have capacity to support a doubling of the ore milling rate to 520,000tpa. The cyclones are also scaled for this throughput and allowance is made in the existing design for a second ball mill, to allow Phase 1 concentrate output of 60,000tpa to be maintained on lower grade, predominantly lithian-muscovite ores.

Preliminary results from the expansion review indicate that a doubling of throughput on higher grade lepidolite ore could support a doubling of concentrate output in an extremely capital efficient manner. Further details are planned to be available in August.

Positive exploration results at Helikon 3-4 and encouragement from regional exploration activities, coupled with unsolicited interest from owners of lithium mica assets has justified a review of Phase 2 development options. 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 project of similar scale to Phase 1. This scenario is supported by the Karibib exploration target for fiscal 2023, with a more ambitious target set for 2024.

However, additional sources of concentrate from third-party lithium mica mines could support a significantly larger chemical conversion plant and lead to the development of a global market for lithium mica concentrates.

RESEARCH & PRODUCT DEVELOPMENT

Collaboration between Lepidico, Lycopodium and Strategic Metallurgy in developing a revised PDC has resulted in a chemical plant flowsheet-layout that will ensure improved operability and maintainability, as well as reducing scale-up and ramp-up risks.

Strategic Metallurgy continued to conduct pilot operations through the demonstration scale facility in Perth. As advised, L-Max[®] operations concluded early in the June 2022 quarter. LOH-Max[®] lithium hydroxide refining from the inventory of raw product was delayed due to availability of plant operators and contamination from a purchased reagent that was substantially out of specification. All refining equipment has been dismantled, cleaned and reassembled. Refining operations recommenced in early July.

L-Max[®] and LOH-Max[®] pilot campaign reports have been drafted by Strategic Metallurgy and provided to the project lender's Independent Engineer, Behre Dolbear Australia Pty Ltd (BDA), for its review. A third report on by-product manufacture is in advanced draft, while the final lithium hydroxide refining report is pending completion of the campaign trial and receipt of assays.

Virtual demonstration plant tours have been run for both lenders and equity investors with further tours planned. Various demonstration plant product samples have been prepared and dispatched to customers for assessment. Further samples are scheduled for dispatch to customers once assays have been returned. Assay turnaround times continue to unpredictable due to high demand and staff availability.

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.

During the quarter drilling at Helikon 4 returned the broadest high grade lithium intercepts to date at the Karibib Project, while a new lepidolite bearing pegmatite was identified at Homestead with a strike of at least 250 m and downhole width of up to 31 m. In addition, trenching and sampling of lepidolite rich stockpiles at Rubicon was completed with a revised Mineral Resource Estimate (MRE) now in progress that is intended to upgrade the current high-grade Inferred material into Indicated category and thereby allow it to be included in the Phase 1 mine plan.

Two new land access agreements were entered into allowing exploration of priority targets to start within EPL5439, which is located immediately to the east the Phase 1 Mining Licence area (ML204). The Homestead target is situated within this EPL, 1.6 km along strike from the Helikon 2-5 line of lepidolite pegmatites. Preparation is also underway to start exploration activities in the east of EPL5439 on several priority lithium and gold targets.

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. These pegmatites were mined historically for petalite, a lithium mineral used mainly in ceramics and glass manufacture. Currently, Helikon 4 contains an Inferred Mineral Resource JORC Code (2012) of 1.51 Mt @ 0.38% Li₂O (0.20% Li₂O cut-off) based largely on diamond core drilling completed in 2017. A reverse circulation (RC) infill drilling program started in late January 2022, comprising 20 holes for 1,612 m, to provide additional data on the geometry of the pegmatite and

continuity of mineralisation, with the objective of upgrading the Resource into Measured and Indicated categories. Six of the holes from this RC program stopped short of their target depth due to heavy water flow. These holes were completed by a diamond rig with HQ core (see ASX announcement on 27 June 2022 for drill hole data). Assay results for the RC phase of this work have been received. Logging of the diamond core tails confirms the presence of lepidolite, with assay results pending.

All holes from the RC program intersected mineralised pegmatite and all but two holes intersected significant lepidolite mineralisation (Table 1).

Better results (before receipt of core assays) include:

- 40 m @ 1.08% Li₂O from massive and disseminated lepidolite in hole HRCH033
- 20 m @ 1.16% Li₂O from a zone of albite with disseminated lepidolite in hole HRCH039
- 6 m @ 2.15% Li₂O from a mica rich zone in hole HRCH030

Interpretation of geology and assays received to date is in progress to optimise the design of an additional phase of drilling to be implemented within the coming month (Figures 3-6). This next work phase will include step out drilling eastwards towards Helikon 3 and westwards where Helikon 4 remains open.

Table 1. Summary Li₂O intercepts, Helikon 4 RC/diamond drilling January-June 2022; excluding

diamond tails (assays pending)

| Hole No | From | To | Intercept | Summary geology |
|-----------|------|-----|---------------------------|---|
| 110.0 110 | (m) | (m) | (m @ %Li ₂ O)¹ | |
| HRCH021 | 15 | 36 | 21 m @ 0.35 | q-alb-mu pegmatite with disseminated lepidolite |
| including | 24 | 31 | 7 m @ 0.79 | |
| HRCH022 | 33 | 45 | nsi ² | 12 m @ 0.15 % Li₂O; mineralised pegmatite |
| HRCH023 | 13 | 25 | 12 m @ 0.71 | albite with disseminated lepidolite |
| including | 15 | 20 | 5 m @ 1.40 | · |
| HRCH024 | 41 | 51 | 10 m @ 0.30 | pegmatite with albite with disseminated lepidolite |
| and | 75 | 91 | 16 m @ 0.47 | albite with disseminated lepidolite |
| HRCH025 | 28 | 42 | 13 m @ 0.51 | q-alb-mu pegmatite with disseminated lepidolite |
| and | 55 | 67 | 12 m @ 0.32 | albite with disseminated lepidolite |
| HRCH026 | 7 | 22 | 15 m @ 0.64 | pegmatite with albite with disseminated lepidolite |
| including | 13 | 18 | 5 m @ 1.02 | albite with disseminated lepidolite |
| HRCH027 | 2 | 7 | 5 m @ 0.38 | mineralised pegmatite |
| and | 26 | 30 | 4 m @ 0.24 | mineralised pegmatite |
| HRCH028 | 31 | 40 | 9 m @ 0.51 | mica zone with disseminated lepidolite |
| HRCH029 | 45 | 76 | 31 m @ 0.34 | mica zone |
| HRCH030 | 16 | 22 | 6 m @ 2.15 | mica rich pegmatite |
| HRCH031 | 5 | 24 | 19 m @ 0.73 | q-alb-mu pegmatite with disseminated lepidolite |
| including | 8 | 15 | 7 m @ 1.42 | albite with disseminated lepidolite |
| HRCHD032 | 66 | 69 | 3 m @ 0.37 | q-alb-mu pegmatite |
| and | 92 | 98 | 6 m @ 0.35 | q-alb-mu pegmatite; awaiting diamond tail assays |
| HRCH033 | 21 | 61 | 40 m @ 1.08 | massive and disseminated lepidolite |
| including | 24 | 39 | 15 m @ 1.62 | |
| and | 66 | 67 | 2 m @ 0.51 | q-alb-mu pegmatite |
| and | 70 | 74 | 4 m @ 0.37 | q-alb-mu pegmatite, separated from the above by marble |
| HRCHD034 | | | RC: nsi | target not reached by RC; awaiting diamond tail assays |
| HRCHD035 | 19 | 21 | 3 m @ 0.50 | 50 m pegmatite intercept; awaiting diamond tail assays |
| HRCHD036 | 18 | 33 | 15 m @ 0.37 | awaiting diamond tail assays |
| HRCHD037 | 24 | 38 | 14 m @ 0.46 | awaiting diamond tail assays |
| including | 29 | 32 | 3 m @ 1.15 | |
| HRCHD038 | 20 | 34 | 14 m @ 0.51 | albite with disseminated lepidolite |
| and | 42 | 46 | 4 m @ 1.91 | massive lepidolite at end of RC; core tail assays awaited |
| HRCH039 | 13 | 46 | 33 m @ 0.87 | albite with disseminated lepidolite |
| including | 21 | 41 | 20 m @ 1.16 | |
| HRCH040 | 22 | 70 | 48 m @ 0.33 | q-alb-mu pegmatite with lepidolite and mica-rich zones |
| including | 22 | 32 | 10 m @ 0.67 | pegmatite with lepidolite |

Notes: 10.20% Li₂O cut off, maximum 2 m internal dilution; down-hole intercepts approximate true widths ²nsi = no significant intercept > 0.20% Li₂O

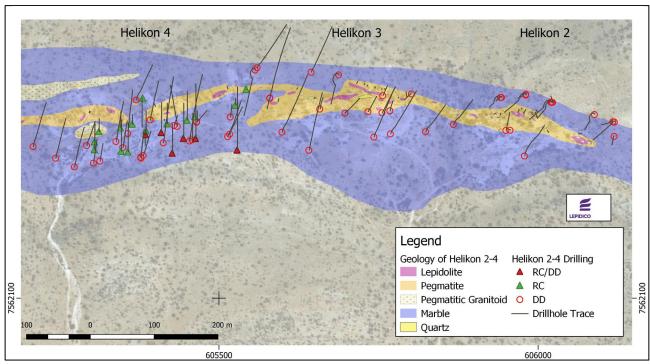


Figure 3. Helikon 2 to Helikon 4 pegmatite system showing solid geology and drill hole location plan.

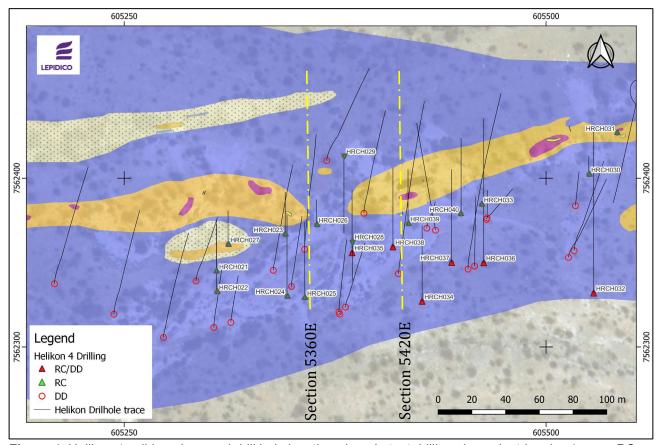


Figure 4. Helikon 4 solid geology and drill hole location plan. Latest drilling shown by triangles (green, RC only; red, RC with diamond tail). Sections 5360E and 5420E shown in Figures 3 and 4.

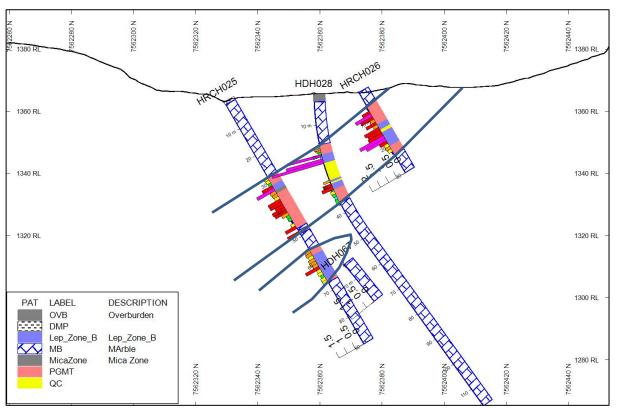


Figure 5. Cross-section through 605360E, Helikon 4. Holes HRCH025 and HRCH026 are RC holes from latest program, HDH028 is a diamond hole drilled in 2017. Lep_Zone_B = albite-lepidolite; QC = quartz core.



Figure 6. Cross-section through 605420E, Helikon 4. Holes HRCH038 and HRCH039 are RC holes from latest program, HDH070 is a diamond hole drilled in 2017. Lep_Zone = massive lepidolite; Lep_Zone_B = albite-lepidolite; QC = quartz core.

Homestead Pegmatite

A maiden drilling program started at the Homestead prospect in May 2022. This target is marked by a small outcrop of lepidolite-bearing pegmatite. Drilling to date has confirmed the presence of a mineralised pegmatite at depth. Hole HRC009 intersected 31 metres of zoned LCT-type pegmatite

with bands of lepidolite, green (possibly lithian) muscovite and petalite, confirming the prospectivity of this pegmatite. The pegmatite appears to plunge to the SW, with drilling now chasing the mineralised zone (Figure 7). This first phase of drilling is now complete, with assay results pending.

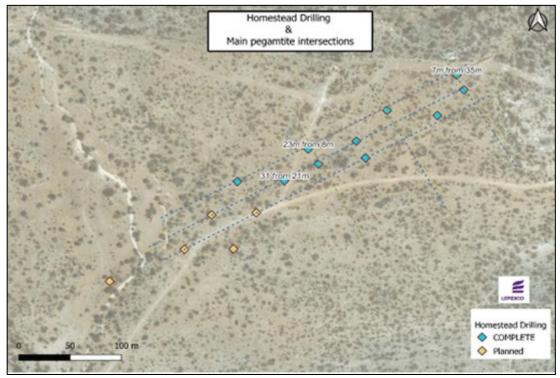


Figure 7. Location of drill holes at the Homestead prospect showing notable pegmatite intercepts.

Rubicon Stockpiles

The Rubicon surface stockpiles currently comprise an Inferred Mineral Resource JORC Code (2012) of 414,506t @ 0.84% Li₂O. An extensive sampling program was recently completed, aimed at increasing the confidence in lithium distribution within and between the various stockpiles to aid in the potential upgrade of most of this Mineral Resource into the Indicated category.

A total of 44 trenches were excavated over various fine (< 60 mm) dumps (Figure 8). Trench spacing was nominally 20 m on the larger dumps and 10 m on smaller dumps. Trenches were sampled from top to base by vertical channels cut into one side of the trench, with a total of 406 samples collected.

The coarser (> 60 mm) Dump A was sampled by a grid of 25 pits excavated to colluvium at the base of the dump (Figure 9). One bulk sample of c.200 kg was collected from around the spoil at each pit.

In addition, 424 bulk density determinations were taken from across the stockpiles. All trenches and stockpiles were surveyed by differential GPS, including the top and base (colluvium) in each case.

Assay results are pending. Work on a revised Mineral Resource estimate for the Rubicon stockpiles will start once the assays are received.



Figure 8. Location of excavated trenches through Undersize (< 60 mm) finer-grained unsorted dumps.

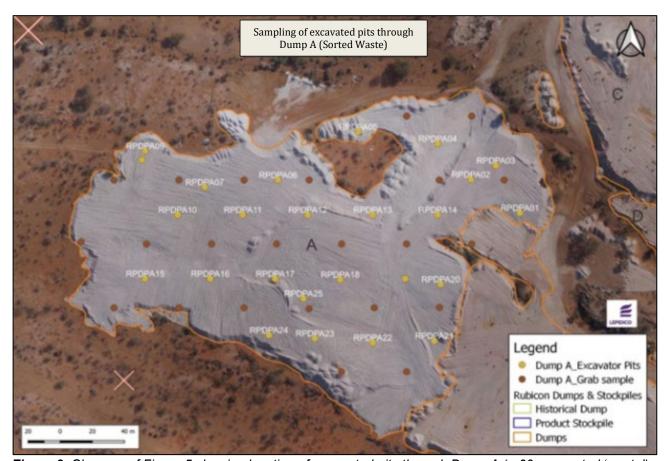


Figure 9. Close-up of Figure 5 showing location of excavated pits through Dump A (> 60 mm sorted 'waste').

Regional Exploration and Scout Drilling

Drilling has commenced over conceptual LCT-type pegmatite regional targets (RT targets) generated by an algorithm developed in house. Targets are initially ground truthed and verified by soil sampling on a nominal 100 m x 50 m grid, with the soils subjected to analysis by portable hand-held XRF to determine the Rb content. Rubidium is used as a proxy for lepidolite-bearing pegmatites as lithium, with an atomic number of only 3, cannot be detected by XRF.

So far, priority targets RT01 and RT18 located within ML204 have been tested by scout lines of RC holes drilled across the strongest parts of associated surface Rb anomalies. Fractionated pegmatitic granite was intersected in both cases similar to that seen proximal to the Rubicon deposit, with several pegmatite lenses also identified at RT18. Assay results are pending.

Regional exploration of other LCT pegmatite and gold targets withing EPL5439 using portable XRF is ongoing. The method provides a quick first-pass assessment of targets which allows certain works to continue while assays are awaited. In recent times, assay turnaround has exceeded three months and currently remain in excess of two months.

Additional work is also being undertaken at the Marble Hill pegmatite prospect where old surface scratchings and limited prior drilling has identified an LCT-type pegmatite over a c.700 m strike. To date, only 200 m of this strike has been effectively tested with drilling, identifying sporadic lepidolite mineralisation.

EPL5439 was recently renewed till June 2024. Work undertaken to date allowed this EPL area to be reduced by 25% to 165km² with no loss in prospectivity. EPL5718 was relinquished during the quarter as no meaningful results were returned from scout exploration works over recent years.

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. Precautions associated with the COVID-19 were further eased during the quarter with normal business travel re-instated including Investor Relations and Marketing activities. Working from home and adherence to local safety protocols remain in place in the jurisdictions in which we operate.

Cash

As at 30 June 2022, the Company held \$8.0 million in cash and cash equivalents.

Options

On 18 May 2022, the LPDOC options with an exercise price of \$0.02 per option expired. Significant option holder support was received with over 95% of all LPDOC options exercised. The remaining 14,718,406 LPDOC options expired unexercised.

On 5 June 2022, 189,140,022 LPDOB options with an exercise price of \$0.05 per option expired.

Project Finance

The Company continues to make good progress in assembling a debt financing package with proceeds used for the development of the integrated Phase 1 Project, supported by debt advisor Lions Head Global Partners (Lions Head).

During the quarter, DFC provided an updated Letter of Interest as it continued its detailed due diligence on the Project under its formal Mandate Agreement (October 2020), with a view to providing the necessary debt financing for the Namibian portion. BDA, the independent engineer appointed by DFC to undertake Phase 1 technical due diligence completed its report on the Definitive Feasibility Study earlier in the year. This work is being augmented by a review of demonstration plant pilot operations reports and control estimates from EPCM Stage 1 works, due in August 2022. In addition,

BDA completed the Environmental and Social Due Diligence Review Report in the March 2022 quarter. DFC has provided a short list for legal counsel to undertake legal due diligence and facilities documentation following confirmation of the commercial lenders.

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.

Patents & Licences

At 30 June 2022, the Company held granted patents for its L-Max[®] 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 continue during calendar year 2022. 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® under PCT/AU2020/050090. The S-Max® 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 beyond 2022.

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 1 October 2021 a provisional patent application was filed for the preparation of Cs-Rb-K alkali salt solutions from lithium mica mineral source material. This refining process has application in tailoring ternary materials for industrial catalyst applications.

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

Board & Management

Gary Johnson Non-Executive Chairman
Joe Walsh Managing Director
Mark Rodda Non-Executive Director
Cynthia Thomas Non-Executive Director

Benedicta Uris GM Sustainability & Country Affairs

Tom Dukovcic GM Geology

Peter Walker GM Project Development

Shontel Norgate CFO & Joint Company Secretary

Alex Neuling Joint Company Secretary

Registered & Principal Office

23 Belmont Avenue, Belmont, WA 6104, Australia

Stock Exchange Listings

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

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

Telephone: 1300 288 664 (within Australia)

+61 (0) 2 9698 5414

Email: hello@automicgroup.com.au Website: www.automicgroup.com.au

Issued Share Capital

As at 30 June 2022, issued capital was 6,507,171,533. As at 25 July 2022, issued capital was 6,507,171,533.

Quarterly Share Price Activity

High Low Close April – June 2022 4.2c 2.4c 2.6c

Authorised for release by the Managing Director.

Further Information

For further information, please contact

Joe Walsh Managing Director Lepidico Ltd David Waterhouse Waterhouse IR

Tel: +1 647 272 5347 Tel: +61(0)3 9670 5008

Email: <u>info@lepidico.com</u> Website: <u>www.lepidico.com</u>

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 |
|-------------|--------------------------------------|----------------------|-------------|---------------------|
| ML 204 | Lepidico Chemicals Namibia (Pty) Ltd | 80% | 18/06/2028 | 69 km ² |
| EPL 5439 | Lepidico Chemicals Namibia (Pty) Ltd | 80% | 09/06/2024 | 165 km ² |

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 \$781,000:

| | \$'000 |
|---|--------|
| Remuneration | 103 |
| Directors Fees | 72 |
| Payments to Director Related Entities (Development) | 606 |
| Total included in 6.1 | 781 |

Appendix 5B

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

Name of entity

| Lepidico Ltd | |
|----------------|-----------------------------------|
| ABN | Quarter ended ("current quarter") |
| 99 008 894 442 | 30 June 2022 |

| Con | solidated statement of cash flows | Current quarter \$A'000 | Year to date (12 months) \$A'000 | |
|-----|--|----------------------------|--|--|
| 1. | Cash flows from operating activities | | | |
| 1.1 | Receipts from customers | - | - | |
| 1.2 | Payments for | | | |
| | (a) exploration & evaluation (expensed) | - | - | |
| | (b) development | (1,162) | (5,447) | |
| | (c) production | - | - | |
| | (d) staff costs | (428) | (1,970) | |
| | (e) administration and corporate costs | (940) | (2,993) | |
| 1.3 | Dividends received (see note 3) | - | - | |
| 1.4 | Interest received | - | - | |
| 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) | - | - | |
| 1.9 | Net cash from / (used in) operating activities | (2,530) | (10,410) | |

| 2. | Ca | sh flows from investing activities | | |
|-----|-----|--|-------|---------|
| 2.1 | Pay | yments to acquire or for: | | |
| | (a) | entities | - | - |
| | (b) | tenements | - | - |
| | (c) | property, plant and equipment | (39) | (694) |
| | (d) | exploration & evaluation (capitalised) | (803) | (3,019) |
| | (e) | investments | - | - |
| | (f) | other non-current assets | - | - |

ASX Listing Rules Appendix 5B (17/07/20)

| Con | solidated statement of cash flows | Current quarter \$A'000 | Year to date (12 months) \$A'000 | |
|-----|--|----------------------------|--|--|
| 2.2 | Proceeds from the disposal of: | | | |
| | (a) entities | - | - | |
| | (b) tenements | - | - | |
| | (c) property, plant and equipment | - | 10 | |
| | (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) | - | - | |
| 2.6 | Net cash from / (used in) investing activities | (842) | (3,703) | |

| 3. | Cash flows from financing activities | | |
|------|---|-------|-------|
| 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 | 4,156 | 7,452 |
| 3.4 | Transaction costs related to issues of equity securities or convertible debt securities | - | (19) |
| 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) | - | - |
| 3.10 | Net cash from / (used in) financing activities | 4,156 | 7,433 |

| 4. | Net increase / (decrease) in cash and cash equivalents for the period | | |
|-----|---|---------|----------|
| 4.1 | Cash and cash equivalents at beginning of period | 7,337 | 14,738 |
| 4.2 | Net cash from / (used in) operating activities (item 1.9 above) | (2,530) | (10,410) |
| 4.3 | Net cash from / (used in) investing activities (item 2.6 above) | (842) | (3,703) |
| 4.4 | Net cash from / (used in) financing activities (item 3.10 above) | 4,156 | 7,433 |

| Con | solidated statement of cash flows | Current quarter \$A'000 | Year to date (12 months) \$A'000 |
|-----|---|----------------------------|--|
| 4.5 | Effect of movement in exchange rates on cash held | (80) | (17) |
| 4.6 | Cash and cash equivalents at end of period | 8,041 | 8,041 |

| 5. | Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts | Current quarter \$A'000 | Previous quarter \$A'000 |
|-----|---|----------------------------|-----------------------------|
| 5.1 | Bank balances | 8,041 | 7,337 |
| 5.2 | Call deposits | - | - |
| 5.3 | Bank overdrafts | - | - |
| 5.4 | Other (provide details) | - | - |
| 5.5 | Cash and cash equivalents at end of quarter (should equal item 4.6 above) | 8,041 | 7,337 |

| | Current \$A' | of the entity and their | Payments to related parties o associates | 6. |
|-----|---------------------|---------------------------|---|-----|
| 781 | | related parties and their | Aggregate amount of payments to associates included in item 1 | 6.1 |
| - | | related parties and their | Aggregate amount of payments to associates included in item 2 | 6.2 |
| | a description of, a | • | | |

explanation for, such payments.

| 7. | Financing facilities 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. | Total facility amount at quarter end \$A'000 | Amount drawn at quarter end \$A'000 |
|-----|---|---|---|
| 7.1 | Loan facilities | | |
| 7.2 | Credit standby arrangements ** | Up to 7,500 | 2,925 |
| 7.3 | Other | - | - |
| 7.4 | Total financing facilities ** | Up to 7,500 | 2,925 |
| 7.5 | Unused financing facilities available at quarter end | | 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.

** 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).

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.

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.

| 8. | Estimated cash available for future operating activities | \$A'000 |
|-----|--|------------------------------|
| 8.1 | Net cash from / (used in) operating activities (item 1.9) | (2,530) |
| 8.2 | (Payments for exploration & evaluation classified as investing activities) (item 2.1(d)) | (803) |
| 8.3 | Total relevant outgoings (item 8.1 + item 8.2) | (3,333) |
| 8.4 | Cash and cash equivalents at quarter end (item 4.6) | 8,041 |
| 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) | 12,616 |
| 8.7 | Estimated quarters of funding available (item 8.6 divided by item 8.3) | 3.8 |
| | 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.

| 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: N/A

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: N/A

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: N/A

Note: where item 8.7 is less than 2 guarters, 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: | 25 July 2022 |
|----------------|--|
| Authorised by: | By the Board(Name of body or officer authorising release – see note 4) |

Notes

- 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.
- 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.
- 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.