

## Quarterly Activities Report and Appendix 5B

### September 2023 Quarter

## HIGHLIGHTS

Peak Rare Earths Limited (ASX:PEK) (“**Peak**” or the “**Company**”) continues to progress towards the development of its Ngualla Rare Earth Project (“**Ngualla Project**”) with the following recent milestones and events occurring:

- Execution of binding offtake agreement
- Signing of a non-binding funding and EPC MOU
- Advancement of FEED and other technical workstreams
- Progress on project funding
- An initiation research report by MST Access
- Progress on critical minerals exploration programme at Ngualla
- Expansion of Board Committees
- Rapid growth in Electric Vehicle production
- Re-bound in rare earth prices

### Execution of a Binding Offtake Agreement

During the quarter, Peak executed a binding Offtake Agreement with Shenghe Resources (Singapore) Pte. Ltd. (“Shenghe Singapore”), which has a 19.8% shareholding in Peak, and is a wholly owned subsidiary of Shenghe Resources Holding Co., Ltd. (“Shenghe”).

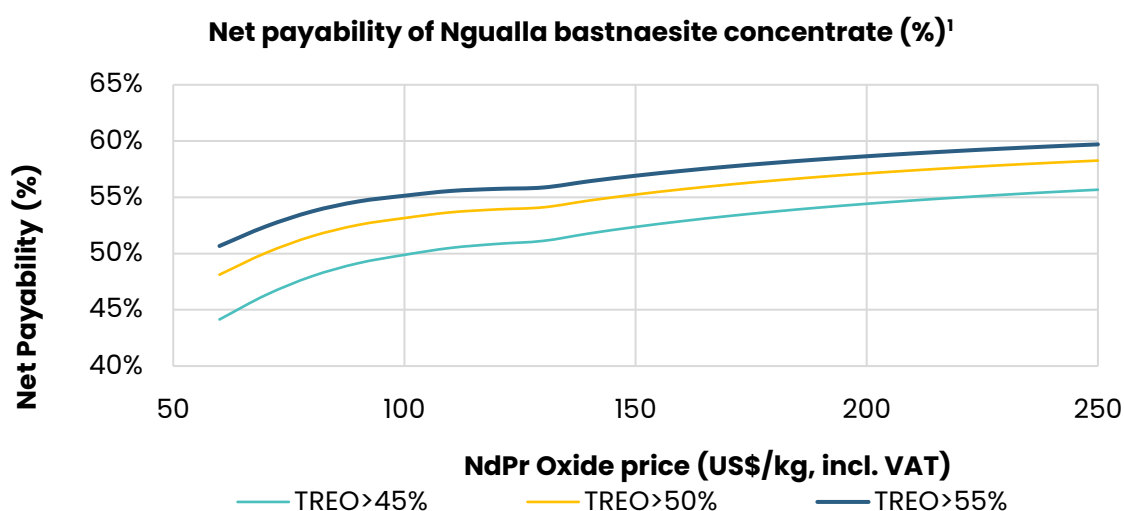
Shenghe is a major Chinese rare earth company listed on the Shanghai Stock Exchange (SSE: 600392.SS) and has a market capitalisation of approximately US\$4.0 billion. Shenghe is the largest importer of rare earth concentrate into China and its operations span rare earth mining, beneficiation, refining, trading and alloy and metals production. Shenghe also holds an approximate 7.75% interest in MP Materials Corp (NYSE:MP) which operates the Mountain Pass Rare Earths Project in California. MP Materials has a market capitalisation of approximately US\$2.9 billion and Shenghe has been a supportive major shareholder through long-term offtake, technical and funding cooperation.

Peak’s agreement with Shenghe is a significant de-risking milestone for Ngualla Project and positions Peak as one of only a few rare earth development companies globally with a complete offtake solution and a well credentialed and capitalised strategic partner.

Key terms of the binding offtake agreement between Peak and Shenghe include the following:

- **Products** – 100% of rare earth concentrate and, subject to entering into subsequent binding offtake agreements, a minimum of 50% of any intermediate rare earth products (such as a future Mixed Rare Earth Carbonate) or final separated rare earth oxides;
- **Take-or-Pay** – Shenghe is obligated to pay for and take delivery of all agreed products;
- **Pricing** – market-based pricing formula based on the value of contained rare earth oxides (as quoted by Asianmetal.com) within the product less deductions relating to VAT, trading fees as well as refining recoveries, charges and margins;
- **Term** – an initial period of 7 years which may be extended further by mutual agreement;
- **Conditions precedents** – the agreement is conditional upon Peak shareholder approval, the approval of the board and/or shareholders of Shenghe, the approval of the Board of Directors of Mamba Minerals Corporation Limited and Mamba Refinery Corporation Limited and the subsequent novation of the Offtake Agreement to Mamba Minerals Corporation Limited, the provision of a parent performance guarantee by Shenghe, the achievement of Financial Close with respect to project funding and approval by the Tanzanian Mining Commission; and
- **Termination** – termination rights where an event of default is not remedied within 30 days or Financial Close on a project funding solution has not been achieved within 6 months from the finalisation of a Front-End Engineering and Design (“FEED”) study.

Under the offtake agreement, the net payability for concentrate, being the price received for concentrate divided by the basket value of contained rare earth elements, will vary with the grade of Ngualla Project’s concentrate and the underlying price of rare earth elements. Net payabilities for different grades and prices are set out in the figure below.



1. Based on a LaCe Carbonate price of US\$0.5/kg and a SEG concentrate price of US\$33.43/kg. Assumes Ngualla concentrate specifications of 22.3% NdPr, 44.2% Ce, 30.1% La and 2.9% SEG Heavy (LOM averages). Payabilities are inclusive of a VAT deduction (e.g., based on a final price payable to Peak).

## Signing of Non-Binding Funding and EPC MOU

At the time of executing the Offtake Agreement with Shenghe Singapore, Peak also signed a non-binding Strategic EPC and Funding MOU with Shenghe.

The MOU sets out the basis upon which Peak and Shenghe will work together to assess co-operation from a development and funding perspective. Collectively, the Offtake Agreement and MOU deliver an integrated development solution for the Ngualla Project and ensure a strong alignment of interests between Peak and Shenghe in delivering an actionable project funding solution.

Key terms of the MOU include the following:

- **EPC development approach** – Shenghe to be appointed to arrange and deliver a fixed price and turnkey EPC solution for the Ngualla Project, with the potential for Beijing General Research Institute of Mining and Metallurgy (“BGRIMM”) to be engaged as an EPC sub-contractor;
- **Owner’s Team** – Peak in conjunction with its 84% owned subsidiary, Mamba Minerals, will appoint an Owner’s Team to oversee the delivery of the EPC contract;
- **Project funding** – Shenghe to source a funding solution for the Ngualla Project on terms mutually acceptable to Peak and Shenghe;
- **Project level investment** – as part of a complete funding solution for the Ngualla Project and to minimise any equity funding requirements for Peak, the parties will evaluate the potential for Shenghe to subscribe for a significant non-controlling interest in Ngualla Group UK Limited (the vehicle through which Peak holds its interests in Mamba Minerals and the Ngualla Project);
- **Standstill arrangements** – Shenghe to continue to be bound by its standstill restriction (which limit Shenghe to a maximum 19.9% interest in Peak) as per the terms of the Offtake and Strategic Co-operation MOU signed on 5th September 2022; and
- **Term** – unless extended by mutual agreement, the MOU will expire on 31 May 2024.

## Advancement of FEED and Other Technical Workstreams

Significant progress continues to be made across key Ngualla Project workstreams during the quarter.

Key highlights include the following:

**FEED progress**

A Front-End Engineering Design (“FEED”) study for the Ngualla Project continues to be advanced, building upon the Bankable Feasibility Study Update (“BFS Update”) completed in October 2022<sup>1</sup>. Key components of the FEED study include:

- An assessment of contract mining and surface mining options;
- An assessment of integrated logistics solutions for the project;
- An assessment of several flowsheet optimisation initiatives including desliming and Wet High Intensity Magnetic Separation (WHIMS);
- Updated cost estimates for the project; and
- Development of vendor packages.

Wood Group Plc is managing the delivery of the FEED study which is anticipated to be finalised by the end of November 2024.

**Assessment of an EPC delivery solution**

Peak continues to evaluate a turnkey fixed price Engineering, Procurement and Construction (“EPC”) solution for the Ngualla Project, which has the potential to deliver a material reduction in upfront capital costs. Following the signing of a non-binding Strategic EPC and Funding MOU with Shenghe, Peak has been engaging in discussions with BGRIMM and Shenghe around an EPC execution approach for the Ngualla Project.

**Progression of Enabling Works**

Enabling Works for the Ngualla Project continues to be advanced with key activities completed during the quarter including:

- Geotechnical drilling and test pits for the tailings facility, process plant, quarry and airstrip;
- Commencement of the production water bore field development;
- Expansion of the existing exploration camp from 20 personnel to 50 personnel to support increased enabling and early work activities; and
- Upgrade of the IT and communications systems at the Ngualla site.

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<sup>1</sup> See Compliance Statement at page 9

### **New office in Dar es Salaam**

During the quarter, Peak's 84% owned Tanzanian subsidiary, Mamba Minerals Corporation Limited ("Mamba Minerals"), established a new corporate office in Dar es Salaam. The office will support in-country activities relating to the development the Ngualla Project and cater for the ongoing expansion of the Mamba Minerals team.

#### **Location of Mamba Minerals Corporate Office in Dar es Salaam**



### **Project Funding**

Peak continues to advance its project financing workstream for the Ngualla Project ahead of a targeted Final Investment Decision in May 2024. During the quarter, Peak progressed non-binding indicative term-sheets with several African focused development banks and continued dialogue with a range of commercial banks, development institutions and export credit agencies.

### **Critical Minerals Exploration Programme**

The critical minerals exploration programme at Ngualla was significantly progressed during the quarter. This programme is focused on two highly prospective areas within the Ngualla Deposit, the Northern Zone and Breccia Zone, which are prospective for a range of critical commodities including monazite-hosted rare earths, niobium, phosphate and fluor spar.

Following the completion of a competitive tender process, Coreworthy Drilling was appointed as the exploration drilling contractor. Coreworthy has subsequently completed

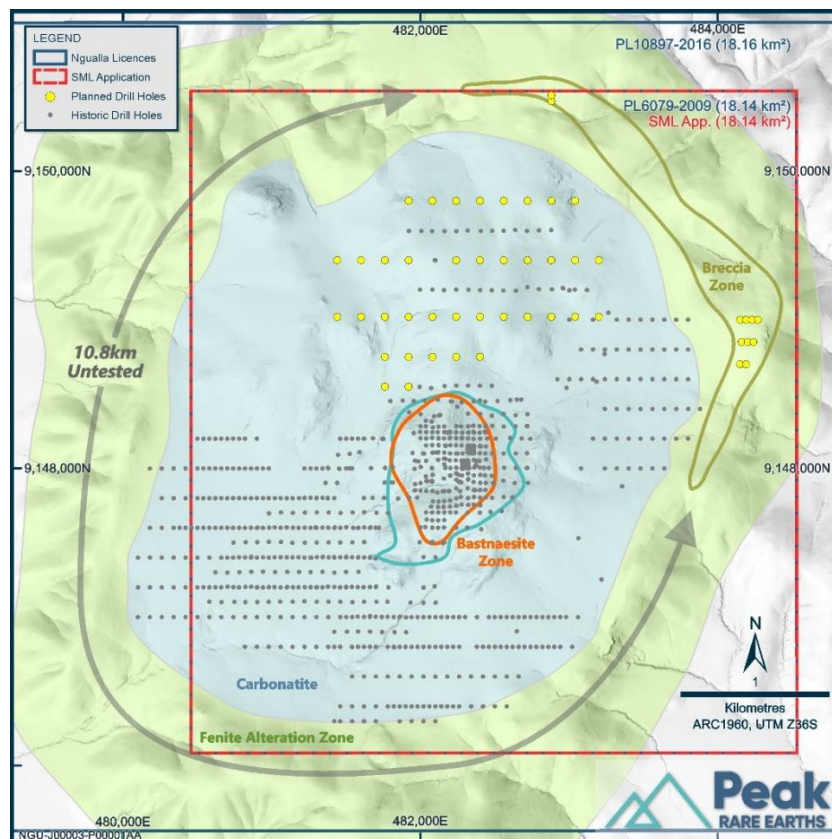


27 RC drill holes and ~2,045m of drilling. The first batch of RC core samples have been prepared for analysis within Tanzania and are in transit to Perth for assaying. Trench samples from the Breccia Zone as well as several phosphate composite samples from the Northern Zone have also been dispatched to Perth for further analysis.

During the quarter, SRK completed the development of a conceptual geological model for the Northern Zone, which has assisted in refining drilling targets within this area.

Peak is evaluating low-cost development options for the broader commodity suite within the deposit to complement the delivery of the Ngualla Project, which remains its primary focus.

### Exploration programme drill targets



### RC drilling underway at Nguala



### Investor Relations

During the quarter, Peak participated in a number of conferences and investor relations initiatives including:

- The 121 Mining Conferences in Singapore and Hong Kong;
- The Rare Earth Conference in San Antonio; and
- a Crux Investor 'Pitch Perfect' interview (which has been posted on Peak's website).

MST Access published a research initiation report on Peak in September. A copy of the research report can be found on Peak's website.

### Board Committees

During the quarter, the Peak Board expanded its governance committees with the following appointments:

- Audit & Risk Committee – Ian Chambers (Chair), Dr Russell Scrimshaw and Hannah Badenach; and
- Nominations and Remuneration Committee – Nick Bowen (Chair), Dr Russell Scrimshaw and Ian Chambers.

### Electric Vehicle Sales

Global adoption of Electric Vehicles ("EV") continued to accelerate through the quarter. Adamas Intelligence estimates that between August 2023 and the corresponding month in 2022 that global passenger EV sales increased by 40%, global motor power deployed in all

newly sold passenger EVs increased by 59% and NdFeB consumption in passenger EV traction motors and generators increased by around 57%.

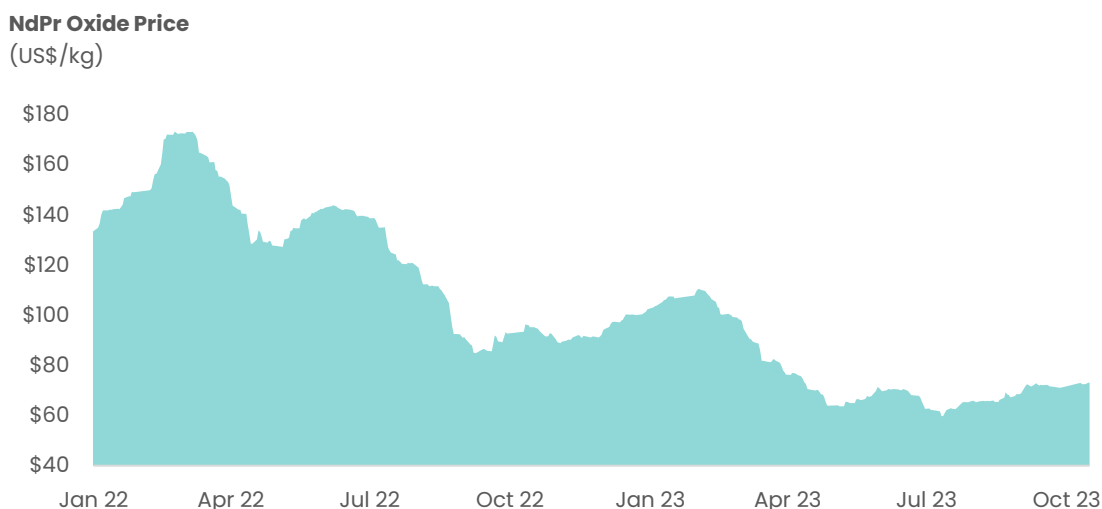
During the quarter, the U.S Department of Energy announced a US\$15.5billion funding package to accelerate the country's transition to electric vehicles, while the Abu Dhabi Government also completed an investment of approximately US\$1billion into Chinese EV manufacturer NIO as part of its targeted diversification into green energy industries.

**Each NEV unit represents an additional +1kg of incremental demand for NdPr Oxide.  
Peak's proposition is well positioned to help meet this increasing demand**

## Pricing Update

Rare earth prices rebounded during the quarter as the market continues to recover from temporary weakness in the Chinese manufacturing sector and COVID related impacts. NdPr Oxide prices increased over the June quarter finishing the quarter at US\$71.2/kg having started the period at US\$62.8/kg. Prices as at 30 October 2023 were at US\$71.3/kg.

**NdPr Oxide Prices China in US\$/kg through to 30 October 2023**



*Source: Asian Metal (China Domestic)*



## Forward-Looking Statement

This announcement contains forward-looking information and prospective financial material, which is predictive in nature and may be affected by inaccurate assumptions or by known or unknown risks and uncertainties and may differ materially from results ultimately achieved. Such forward-looking statements, including those with respect to permitting and development timetables, mineral grades, metallurgical recoveries, and potential production reflect the current internal projections, expectations or beliefs of the Company based on information currently available to it. All references to future production, production targets and resource targets and infrastructure access are subject to the completion of all necessary permitting, construction, financing arrangements and infrastructure-related agreements. Where such a reference is made, it should be read subject to this cautionary statement.

## Compliance Statement

The Company's Bankable Feasibility Study Update announced on 24 October 2022 is referenced in this Quarterly Activities Report. The ASX announcement is available to view on <https://www.peakrareearth.com/asx-announcements/>. The Company confirms that at this time it is not aware of any confirmed new information or data that materially affects the information included in the relevant announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant announcement continue to apply and have not materially changed. The Company further advises that there are various workstreams being undertaken, including Front End Engineering and Design ("FEED"), a dual-track assessment of Engineering, Procurement, Construction and Management ("EPCM") and Engineering, Procurement and Construction ("EPC") execution models and further optimisation of the project flow sheet, the outcomes of which may change the information included in the relevant announcement.

## CORPORATE

### Cash at Hand and Securities Information as at 30 September 2023

**ASX:** PEK

**Cash at hand:** \$21.1 million

**Ordinary Shares on Issue:** 264.6 million

**52-week range:** \$0.345 – \$0.740\*

**Unlisted Performance Rights  
outstanding:** 7.8 million<sup>#</sup>

**Market Cap:** \$99.2m (at \$0.375/share)

**Liquidity:** 251k shares per trading day  
(average over 3 months\*\*)

\* From 1 October 2022 to 30 September 2023 on ASX \*\*Average from 1 July 2023 to 30 September 2023 on ASX.

<sup>#</sup> Some subject to milestone and continuing service vesting criteria <sup>#</sup>subject to performance vesting criteria

### Additional Financial Commentary

The Quarterly Cashflow Report (Appendix 5B) attached for the period ending 30 September 2023 provides details of the Company's financial activities.

The quarterly operating expenditure included \$0.088 million to related parties, being executive and non-executive directors' remuneration.

The exploration, evaluation or development expenditure during the quarter totalled \$1.829 million predominantly incurred on the FEED study, Ngualla early works, testwork and exploration activities.

The closing cash and cash equivalents balance as at 30 September 2023 was \$21.1 million.

## Summary of Mining Tenements and Areas of Interest

As at 31 October 2023.

Project	Tenement	End of Jun 2023 Quarter	End of Sept 2023 Quarter	Status	Arrangements / Details
Ngualla	SML 693/2023	100%	100%	Granted	Held by 84% Tanzanian subsidiary company, Mamba Minerals Corporation Ltd
Mlingi	PL 10897/2016	100%	100%	Granted	Held by 100% Tanzanian subsidiary company PR NG Minerals Ltd

*\*All tenements held are located in the Songwe Region of the United Republic of Tanzania.*



This announcement has been authorised for release by the Chief Executive Officer.

**DIRECTORS****Executive Chairman – Russell Scrimshaw****Non-Executive Director – Hon. Abdullah Mwinyi****Non-Executive Director – Shasha Lu****Non-Executive Director – Ian Chambers****Non-Executive Director – Nick Bowen****Non-Executive Director – Hannah Badenach****Company Secretary / Chief Financial Officer – Philip Rundell****SENIOR MANAGEMENT****Chief Executive Officer – Bardin Davis****ASX:PEK****Peak Rare Earths Limited**

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## Appendix 5B

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

Name of entity

PEAK RARE EARTHS LIMITED

ABN

72 112 546 700

Quarter ended ("current quarter")

SEPTEMBER 2023

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
<b>1.</b>	<b>Cash flows from operating activities</b>		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	-	-
	(b) development	(1,829)	(1,829)
	(c) production	-	-
	(d) staff costs	(1,099)	(1,099)
	(e) administration and corporate costs	(1,721)	(1,721)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	249	249
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (GST/VAT and other taxes)	(55)	(55)
<b>1.9</b>	<b>Net cash from / (used in) operating activities</b>	<b>(4,455)</b>	<b>(4,455)</b>

<b>2.</b>	<b>Cash flows from investing activities</b>		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	(250)	(250)
	(d) exploration & evaluation	-	-
	(e) investments	-	-
	(f) other non-current assets	-	-



<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (3 months) \$A'000</b>
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	1	1
	(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>(249)</b>	<b>(249)</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	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
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>-</b>	<b>-</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	25,852	25,852
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(4,455)	(4,455)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(249)	(249)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-

## 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
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	<b>Cash and cash equivalents at end of period</b>	<b>21,148</b>	<b>21,148</b>

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	5,148	2,352
5.2	Call deposits	16,000	23,500
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>21,148</b>	<b>25,852</b>

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	88
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>		

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

7.	<b>Financing facilities</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>	<b>Total facility amount at quarter end</b>	<b>Amount drawn at quarter end</b>
		<b>\$A'000</b>	<b>\$A'000</b>
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other – Bank Guarantee (Office Lease)	64	64
7.4	<b>Total financing facilities</b>	64	64
7.5	<b>Unused financing facilities available at quarter end</b>		-
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.		

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)	(4,455)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(4,455)
8.4	Cash and cash equivalents at quarter end (item 4.6)	21,148
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	21,148
8.7	<b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	4.75
	<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>	
8.8	If item 8.7 is less than 2 quarters, please provide answers to the following questions:	
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:	
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:	

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

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:

*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.

Sign here: 

Print Name: Phil Rundell  
Company Secretary

Date: 31 October 2023

Authorised by: the Audit & Risk Committee  
(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.
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.