



## Quarterly Activities Report – December 2023

Heavy Minerals Limited (ASX: HVY) (“Heavy Minerals” or the “Company”) is pleased to present the December 2023 Quarterly Activities Report, the highlights for the period are as follows:

### Key Highlights:

- **Port Gregory Pre-Feasibility Study (PFS) Awarded:**
  - ✗ IHC Mining has been awarded the PFS for the Port Gregory Garnet Project (PGGP).
  - ✗ The PFS commenced in the first week of October, with completion expected in the second quarter of 2024.
  - ✗ The study follows the successful completion of the Port Gregory Scoping Study (PGSS) and Preliminary Economic Assessment (PEA) announced in September 2022.
- **PFS Scope and Objectives:**
  - ✗ The PFS will explore multiple development options to maximize the Net Present Value (NPV) of the project.
  - ✗ It will consider multiple production profiles and define bagging and concentrate production options.
  - ✗ The PFS will meet the standards of the JORC Code 2012 Edition, VALMIN Code 2015 Edition, and AusIMM guidelines.
- **Port Gregory Project Permitting Commenced:**
  - ✗ Permitting activities for the Port Gregory project have been initiated.
  - ✗ MBS Environmental has been engaged to oversee project permitting.
  - ✗ The initial phase is to evaluate project permitting requirements, aiming for a robust permitting strategy and tactical plan by Q1 2024.
- **Preparation of Mining lease application:**
  - ✗ Preparation of detailed documentation for Port Gregory Mining lease application.
  - ✗ Lodgement planned for Q1 2024.
- **Land access negotiations for new exploration opportunities:**
  - ✗ Negotiations for land access to a number of new exploration targets the company has identified were commenced during the quarter with freehold landowners.
  - ✗ Once access negotiations are completed the Company will finalise a program of works. This program of work is planned for Q2 2024.

Commentary from Non-Executive Chairman, Mr. Adam Schofield:

“We are pleased to present the content of this Quarterly Report which summarises the significant progress the Company has made towards making the Port Gregory Garnet Project a commercial reality. The award of the PFS and the ongoing progress towards permitting of the project instils enormous confidence within the Board, that 2024 will be a successful year for Heavy Minerals Limited and all our stakeholders.

We look forward to bringing further successes in our development pathway through 2024 as the PGGP advances through the next round of studies, funding, engineering and construction planning. I’ll also take this opportunity to wish all our shareholders all the very best for the year ahead and to thank them for their support in Heavy Minerals.”



### **Port Gregory Pre-Feasibility Study (PFS)**

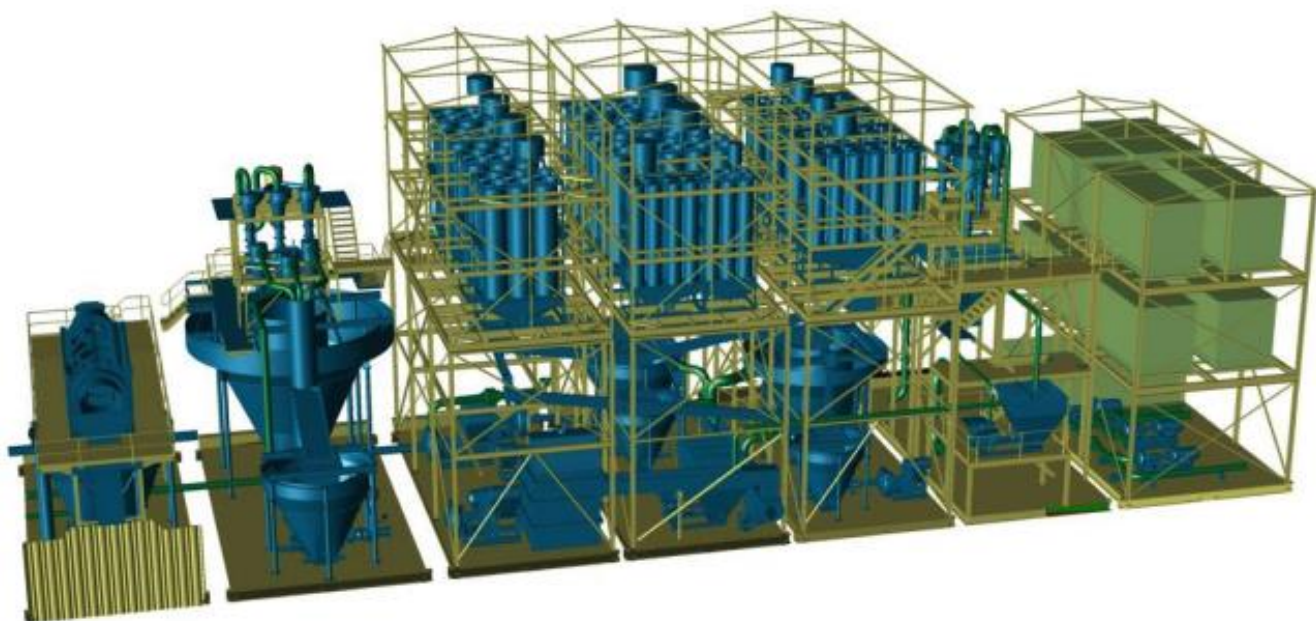
IHC Mining are an industry leading Mineral Sands Engineering Consultancy with over 100 years of global experience in the mining sector including mineral extraction from fine sand ores.

The Study Team selected for the project is to be led by engineers that worked directly on the PGSS and PEA announced in September 2022. The learnings from this project and other mineral sand projects IHC Mining have undertaken will be applied to HVY's PFS providing HVY with a best-in-class outcome.

The PFS is a critical step following the PGSS and PEA, aimed at further defining the project's potential and paving the way for future development. The study team, comprising engineers with prior experience on the PGSS and PEA, brings valuable expertise and insights to the project.

The PFS aims to build on the findings of the previous Port Gregory Scoping Study (PGSS) and Preliminary Economic Assessment (PEA), deepening the understanding of the project's economic, technical, and environmental aspects.

**An example of an IHC Mining modular processing plant concept used for similar projects is shown in Figure 1.**



*Figure 1 - Minerals sands modular plant concept (IHC Mining)*

### **PFS Scope and Deliverables**

The PFS will adhere to the highest industry standards, including the JORC Code 2012 Edition, VALMIN Code 2015 Edition, and AusIMM Engineering Reporting Study Guidelines. This ensures that the study's findings are credible, reliable, and align with industry best practices.

The battery limits of the study are from mine production through to delivery of finished product to Port.

**Key deliverables of the study include:**

- ✂ Options analysis and selection
- ✂ Risk and opportunity register
- ✂ Site Layout and overall site 3D model
- ✂ Basis of design including Metallurgical Product Design Criteria
- ✂ Block Diagram (Plant Interaction) and Process Flow Diagram (PFD)
- ✂ Mass and Water Balance calculations
- ✂ Plant Design and Layout - 3D model and 2D drawings
- ✂ Equipment (process & mechanical) List
- ✂ Electrical load list and electrical equipment list
- ✂ Capital Cost Estimate (CAPEX) ( $\pm 25\%$  accuracy, AusIMM Class 4)
- ✂ Operating Cost Estimate (OPEX) ( $\pm 25\%$  accuracy, AusIMM Class 4)
- ✂ Final PFS Report
- ✂ Financial Model covering lifetime of the mine
- ✂ Recommendations for future work

Additional PFS workstreams will be undertaken directly by the Company.

**Port Gregory Project Permitting:**

The initiation of permitting activities is a key milestone towards achieving a Final Investment Decision for the Port Gregory project. MBS Environmental's expertise in mineral sands and their proven track record in similar projects will guide these efforts. The focus will be on a robust permitting strategy and plan, ensuring compliance and smooth progression of the project.

The commencement of permitting activities for the Port Gregory project is a critical phase in its development lifecycle. This process is vital for ensuring compliance with environmental regulations, land use policies, and other statutory requirements. The successful completion of this phase is essential for securing the legal and social license to operate, which is fundamental for the project's progression to the construction and operational stages.

In addition to the work MBS Environmental will undertake, HVY will also strengthen activity with regards to agency and stakeholder engagement. The initial phase of work to be performed by MBS Environmental is to evaluate the project permitting requirements at Port Gregory to allow development of a robust permitting strategy and tactical plan that will be concluded by Q1 2024.

**Preparation of Mining lease application:**

Preparation of detailed documentation for the Port Gregory Mining lease application was commenced during the quarter with lodgement expected in Q1 2024. Once approved the term of the mining lease will be 21 years with the option to renew if required. The lessee of a mining lease may work and mine the land, take and remove minerals, and do all of the things necessary to effectually carry out mining operations in, on or under the land, subject to conditions of title.

**Land access negotiations for new exploration opportunities:**

Negotiations for land access to a number of new exploration targets the company has identified were commenced during the quarter. Once completed the Company anticipates commencing a low impact exploration program in Q2 2024 to validate potential targets identified during the quarter.

### **Investor Relations**

The Company participated in several Mining and Industry focused conferences during the quarter including the Noosa Mining conference and the TZMI mineral sands conference. The company is pursuing potential offtake partners at these events and discussions are continuing.

### **Financial Commentary**

The Company closed the quarter with \$0.159M in cash, details are provided in the Appendix 5B report. Payments totalling \$66K were made to Directors during the quarter for salaries, fees and superannuation.

### **Royalty Funding**

The Company received an additional \$250K during the quarter via its non-dilutive gross revenue royalty raising for the Port Gregory Project. The Company has successfully raised a total of \$750,000 (before costs, awaiting \$100,000 of funds) to date.

The funds being raised from the Royalty Funding are being used to fund the Company's pre-feasibility study (**PFS**) at its Port Gregory Project and for general working capital.

The Company continues to raise via the Royalty and has strong interest and anticipates signing a number of new subscribers in Q1 2024.

**This announcement has been authorised by the Board of Directors of the Company.**

**Ends**

**For further information, please contact:**

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### **Competent Persons Statement**

The information in this announcement that relates to Exploration Results, Exploration Targets and Mineral Resource estimates has been prepared, compiled and reviewed by Mr. Greg Jones (FAusIMM) who is a Non-Executive Director of the Company and a full time employee of IHC Mining.

Mr. Jones is a Fellow of the Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being reported on 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. Jones has reviewed this report and consents to the inclusion in the report of the matters in the form and context with which it appears.

### Cautionary Statement

Estimates by experienced, competent geoscientists are considered to be reliable and reproducible semi-quantitative estimates of the abundance of minerals present in a sample. Visual estimates of heavy mineral and mineral assemblage abundance should, however, never be considered a proxy or substitute for laboratory analyses where mineral concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding potential impurities or deleterious physical properties relevant to valuations of industrial minerals.

### Schedule of Tenements

Project	Tenement Number	Registered Holder	Status	Area (Ha)	Expiry Date	Interest Held @ 30 Sep 2023	Interest Held @ 31 Dec 2023
Port Gregory Red Hill	E66/102*	Mozmin Resources Pty Ltd	Granted	4,928.39	30-Oct-23	100%	100%
	E70/5130*	Mozmin Resources Pty Ltd	Granted	7,125.91	18-Nov-23	100%	100%
	E70/5160	Mozmin Resources Pty Ltd	Granted	1,403.23	07-Jan-24	100%	100%
	E70/5161	Mozmin Resources Pty Ltd	Granted	3,810.91	08-May-24	100%	100%
	E70/5314	Mozmin Resources Pty Ltd	Granted	885.21	01-Jan-25	100%	100%
	E70/5934	Mozmin Resources Pty Ltd	Granted	4,552.00	13-Dec-26	100%	100%
Inhambane	10255C	+258 Limitada	Pending	21,388.35	N/A	70%	70%

\* 5-year Exploration Licence renewal applications submitted to DEMIRS



## About Heavy Minerals Limited

Heavy Minerals Limited (ASX: HVY) is an Australian ASX listed industrial mineral exploration company.

The Company's projects are prospective for industrial minerals including but not limited to Garnet, Zircon, Rutile and Ilmenite. The Company's initial focus is the Port Gregory and Red Hill Garnet Projects in Western Australia with the Port Gregory project having a JORC (2012) Mineral Resource of 166 million tonnes @ 4.0% Total Heavy Minerals. This comprises a Measured Mineral Resource of 126 Mt @ 3.8% THM; an Indicated Mineral Resource of 20 Mt @ 6.5% THM; and an Inferred Mineral Resource of 20 Mt @ 2.9% THM. This includes 5.9 million tonnes of contained Garnet and 260 thousand tonnes of ilmenite<sup>4</sup>.

An Exploration Target has been defined for Red Hill using cut-off grades for reporting of 3% THM and 1% THM and ranging from 90 to 150 Mt of material @ 5.4% to 4.1% THM. The Exploration Target also contains between 5 and 6 Mt of THM and 3.8 and 4.5 Mt of garnet<sup>5</sup>. The potential quality and grade of the Exploration Target is conceptual in nature and there has been insufficient exploration activity to determine a Mineral Resource estimate and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

The Company's other project is the Inhambane Heavy Mineral Project in Mozambique which contains an ilmenite dominated JORC (2012) Inferred Mineral Resource of 90 million tonnes @ 3.0% Total Heavy Mineral<sup>6</sup>.

To learn more please visit: [www.heavyminerals.com](http://www.heavyminerals.com)

<sup>4</sup> [https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02685080-6A1157738?access\\_token=83ff96335c2d45a094df02a206a39ff4](https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02685080-6A1157738?access_token=83ff96335c2d45a094df02a206a39ff4)

<sup>5</sup> [https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02661758-6A1148442?access\\_token=83ff96335c2d45a094df02a206a39ff4](https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02661758-6A1148442?access_token=83ff96335c2d45a094df02a206a39ff4)

<sup>6</sup> [https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02462745-6A1067130?access\\_token=83ff96335c2d45a094df02a206a39ff4](https://cdn-api.markitdigital.com/apiman-gateway/ASX/asx-research/1.0/file/2924-02462745-6A1067130?access_token=83ff96335c2d45a094df02a206a39ff4)

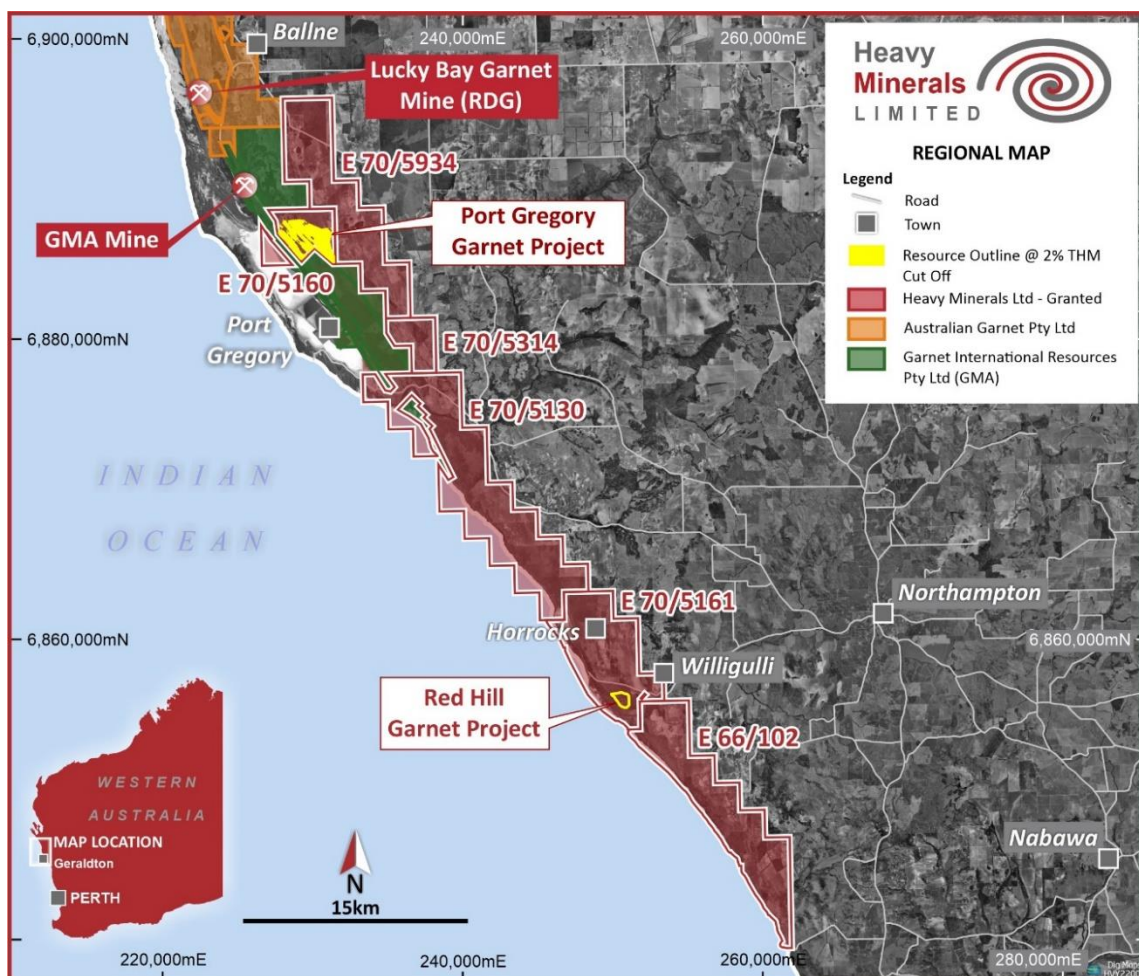


Figure 2: Project Locations - Port Gregory and Red Hill

## Appendix 5B

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

Name of entity

Heavy Minerals Limited

ABN

26 647 831 883

Quarter ended ("current quarter")

31 December 2023

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 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	-	-
	(c) production	-	-
	(d) staff costs	(54)	(80)
	(e) administration and corporate costs	(157)	(269)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	-	-
1.5	Interest and other costs of finance paid	(3)	(5)
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (provide details if material)	-	-
<b>1.9</b>	<b>Net cash from / (used in) operating activities</b>	<b>(214)</b>	<b>(354)</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	(6)	(6)
	(d) exploration & evaluation	(298)	(417)
	(e) investments	-	-
	(f) other non-current assets	-	-

<b>Consolidated statement of cash flows</b>		<b>Current quarter \$A'000</b>	<b>Year to date (6 months) \$A'000</b>
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>(304)</b>	<b>(423)</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	(12)	(20)
3.7	Transaction costs related to loans and borrowings	(14)	(14)
3.8	Dividends paid	-	-
3.9	Other (royalty funding)	450	650
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>424</b>	<b>616</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	253	320
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(214)	(354)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(304)	(423)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	424	616



## 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 (6 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>159</b>	<b>159</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	159	253
5.2	Call deposits	-	-
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>159</b>	<b>253</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	46
6.2	Aggregate amount of payments to related parties and their associates included in item 2	20
<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>		

Includes Directors' salaries, fees and superannuation.

<b>7.</b>	<b>Financing facilities</b> <i>Note: the term "facility" includes all forms of financing arrangements available to the entity.</i> <i>Add notes as necessary for an understanding of the sources of finance available to the entity.</i>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	<b>Total financing facilities</b>	-	-
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.		
	N/A		

<b>8.</b>	<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)	(214)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(298)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(512)
8.4	Cash and cash equivalents at quarter end (item 4.6)	159
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	159
8.7	<b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	0.3
	<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: HVY expects that it will continue to have negative operating cash flows. While the Company is progressing and intends to continue to progress its pre-feasibility study at its Port Gregory project, it expects its development expenditure and net operating cash flows to be curtailed in line with available funding over the coming quarter. The Company is currently considering other cost saving measures while it secures its funding position.	

- 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. The Company is raising capital on an ongoing basis via a project level royalty raising as first disclosed on 29 September 2023 (**Royalty Raising**). The Company has a significant number of interested parties in the Royalty Raising, with new agreements planned to be executed during the quarter. Funds will be received once executed. The Company has raised \$750K (with \$100K yet to be received) to date via the Royalty Raising, including \$250K received in December 2023.

The Board is confident it will be able to raise further funding via the Royalty Raising, however, in the event it is not able to obtain funds from the Royalty Raising in a timely manner it will assess other forms of funding over the quarter to supplement funds from the Royalty Raising, including further equity raises.

- 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, while the Company may curtail its spending over the quarter to ensure that it is sufficiently capitalised, it expects that based on funding options currently being advanced it will have sufficient funds to continue to progress its pre-feasibility study at Port Gregory.

*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 January 2024

Authorised by: By the Board of Heavy Minerals Limited  
(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".

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

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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.