



QUARTERLY ACTIVITIES REPORT: 31 MARCH 2022

- ✂ Maiden drilling program at Port Gregory Garnet Project completed: 187 AC holes for 5,653.5 metres covering 40% more ground than the original Exploration Target footprint
- ✂ Assay results for the entire drilling program returned with numerous high-grade and thick intercepts from both within and outside of the Exploration Target area
- ✂ Visual scanning of heavy mineral fraction showed garnet fraction between 65% - 75% (1.5 times that used in the Exploration Target model) with a modest ilmenite credit (not factored in original model)
- ✂ Port Gregory: 77 heavy mineral composites and a 1,500 kg bulk sample sent to Bureau Veritas and IHC mining respectively for mineralogical determination and metallurgical test work
- ✂ 500 kg of Inhambane mineral sands bulk sample sent to IHC Mining for metallurgy testing
- ✂ **JORC Mineral Resource for Port Gregory Project on track for release in April 2022**

Heavy Minerals Limited (ACN 647 831 833) (“**HVY**”, “**Heavy Minerals**” or the “**Company**”) is pleased to announce that the first quarter of 2022 saw continued drilling success at the Port Gregory Garnet Project, with the campaign completed on the 31st January. A preliminary resource model has been provided by IHC Mining (Figure 1), which once updated with the results from the XRF and QXRD test work, will be finalised and released to the market as the Maiden JORC Mineral Resource, expected in late April.

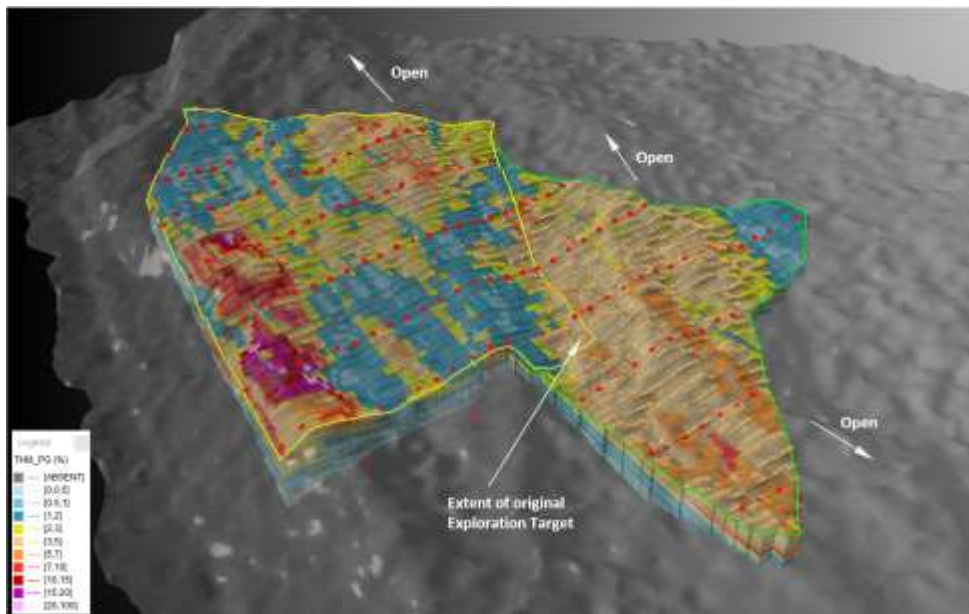


Figure 1: Preliminary block model provided by IHC Mining showing indicative THM grade distribution

Commentary from Executive Director & CEO, Mr. Nic Matich:

“2022 began with the same, focussed pace that we were achieving at the end of 2021. The field team completed the maiden drilling program at Port Gregory, allowing HVY to make significant progress towards developing the Project. The Maiden JORC Mineral Resource is planned for release prior to the end of April, which we anticipate will be transformative for the company.”



Port Gregory Garnet Project

The Port Gregory Garnet Project consists of six tenements totalling 227.28 km² located approximately 50 km North of Geraldton. The Port Gregory Project is the primary focus of the Company and is prospective for industrial minerals, in particular garnet, as shown by previous exploration activities carried out on the northern tenements (E70/5160 and E70/5314). The Port Gregory Project contains a defined Exploration Target of between 3.5Mt and 4.5 Mt In-Situ Garnet (with grade of between 3.5% and 4.5% heavy minerals).

Table 1: E70/5160 Tenement - Exploration Target

Classification	Material (Mt)	In Situ HM (Mt)	In Situ Garnet (Mt)	HM Assemblage ⁽²⁾					
				HM (%)	SL (%)	OS (%)	Garnet (%)	Ilmenite (%)	Non Valuable HM (%)
Exploration Target	170 - 250	7 - 9	3.5 - 4.5	3.5 - 4.5	10	20	46	1	53
Grand Total	170 - 250	7 - 9	3.5 - 4.5	3.5 - 4.5	10	20	46	1	53

Notes:

- (1) Exploration Target reported at an upper cut-off-grade of 2.5% HM and a lower cut-off grade of 1.5%.
- (2) Mineral assemblage is reported as a percentage of in situ HM content.

The potential quality and grade of the Exploration Target is conceptual in nature as there has been insufficient exploration to estimate a Mineral Resource for this target area and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

2022 Drilling Campaign

HVY's goal in the first half of the quarter was to finalise the drilling campaign and move the project along the development curve through to the "study stage". Bostech mobilised to site on the 7th January and completed an additional 87 holes for 2,559.5 m, finalising the "drill out" of the Exploration Target footprint and importantly covering an additional 40% more ground, extending the mineralised footprint substantially (Figure 1).

Assay results for the program were delivered during the quarter with key intercepts below:

- ✂ Notable intersections from the 2021 program at a cut-off grade of 2% THM include:
 - 17.9% THM over 13 m from surface (PGAC0025A)
 - 11.3% THM over 22.5 m from 12 m downhole (PGAC0067)
 - 13.3% THM over 12 m from surface (PGAC0088)
 - 12.9% THM over 14 m from surface (PGAC0089)
 - 39.5% THM over 3 m from surface (PGAC0026A)
- ✂ Notable intersections from the 2022 program at a cut-off grade of 2% THM include:
 - 9.3% THM over 12 m from surface (PGAC0165)
 - 7.7% THM over 15 m from surface (PGAC0169)
 - 5.7% THM over 27 m from 1m downhole (PGAC0154)
 - 5.7% THM over 19 m from surface (PGAC0167)



Figure 2: Notable intersections from the drilling campaign

Port Gregory Metallurgy Testing

At the end of March, 77 heavy mineral “sink” composites were sent to Bureau Veritas in Adelaide for QXR and XRF analysis. The purpose of the analysis is to determine the mineralogy or assemblage of the THM fraction as well as the chemical composition (critical for determining potential quality of the ilmenite fraction) within the composite samples. The analysis turnaround is expected to be approximately three weeks, with the results to be utilised in the Mineral Resource estimate expected to be released to the market prior to the end of April.

At the end of the quarter, 1,500 kg of raw material from a selection of drill samples was sent to the IHC Mining laboratory in Queensland for metallurgical testing. The testing aims to develop a process flowsheet and the expected mineral products from the project. The development of process flow sheets and preliminary mining studies will provide the groundwork for an engineering Scoping Study to develop CAPEX and OPEX outputs and deliver an understanding of potential pathways forward to commercial development. Metallurgical test work is scheduled to start in the first week of May with the results feeding into the Port Gregory Scoping Study.



Port Gregory Scoping Study (PGSS) and Preliminary Economic Assessment (PEA)

With the release of the Maiden JORC Mineral Resource imminent, the Port Gregory Garnet Project is at a maturity level where preliminary engineering works are required to progress the project forward. Prior to the end of the quarter a request for tender was sent to prospective consultants with expertise in minerals sands and garnet operations to undertake the PGSS & PEA. The awarding of the study is anticipated to be at the April Board Meeting on the 20th April.

The PGSS and PEA will provide valuable insight into the project both from a operational and economic perspective and should provide a springboard for HVY to progress the project potential development.

Port Gregory Upcoming News

- ✂ April 2022: Maiden JORC Mineral Resource
- ✂ April 2022: Award of Port Gregory Scoping Study (PGSS) and Preliminary Economic Assessment (PEA)
- ✂ May 2022: PGSS and PEA kick-off
- ✂ May 2022: Metallurgy Test work begins
- ✂ June 2022: Metallurgy results
- ✂ 3rd Quarter 2022: Scoping Study delivery

Inhambane Heavy Mineral Sands Project

The Inhambane Heavy Mineral Sands Project in Mozambique consists of a mining concession application (which was lodged on 11 March 2020). The Inhambane Project has a JORC (2012) Inferred Mineral Resource of 90 million tonnes @ 3.0% Total Heavy Mineral. The Company has a 70% direct interest in the Inhambane Project (via its wholly owned subsidiary, Mozmin Resources (Mauritius) Limited with the remaining 30% owned by Galilei LTDA (which will be free carried until a decision to mine is made by the Company). While the exploration licence preceding the mining concession application has expired, the grant of the Mining Concession supersedes this and is currently pending.

Access to the project has been impacted by COVID and all on ground activities have paused until access to the project is reliable and safe. Desktop studies and metallurgical characterisation work is currently being undertaken to add value to the project while site access is delayed.

The Mineral Resource at the Inhambane Heavy Mineral Sands Project is 90 Mt @ 3.0% THM with 2.7 Mt of contained THM. The Inferred Mineral Resource is highlighted in Table 2 and is ilmenite dominated with credits of zircon, rutile, and leucoxene.

Table 2: Inhambane Mineral Resource Summary

MINERAL RESOURCE SUMMARY FOR INHAMBANE PROJECT AS AT DECEMBER 2021

Mineral Resource Category	Summary of Mineral Resources ⁽¹⁾					HM Assemblage ⁽²⁾					
	Material (Mt)	In Situ THM (Mt)	THM (%)	SL (%)	OS (%)	Altered Ilmenite (%)	Primary Ilmenite (%)	Rutile (%)	Leucoxene (HiTi) (%)	Zircon (%)	Others (%)
Inferred	90	2.7	3.0	5	0	29	31	2	4	5	29
Grand Total⁽³⁾	90	2.7	3.0	5	0	29	31	2	4	5	29

Notes:

- (1) Mineral resources reported at a cut-off-grade of 1.7% HM.
- (2) Mineral assemblage is reported as a percentage of in situ HM content.
- (3) HVY has a 70% interest in the Inhambane heavy mineral sands project

Inhambane Metallurgical Testing

In mid-March, 500 kg of raw material from a selection of drill samples was sent to the IHC Mining laboratory in Queensland for metallurgical testing. The testing, as per the Port Gregory Project, aims to develop a process flowsheet and expected mineral products from the project. The development of process flow sheets and preliminary mining studies will provide the groundwork for an engineering Scoping Study to develop CAPEX and OPEX outputs and deliver an understanding of potential pathways forward to commercial development.

Preliminary results from the testwork have been highly encouraging and as a result, HVY have requested further tests be conducted. Due to lab congestion, it is now expected that the results for Inhambane will be delivered in mid to late May. Although the delay is regrettable the additional results from the work will provide greater insight to the projects potential.

Heavy Mineral Sands Market

Ilmenite and Zircon pricing has seen a significant uplift in the last 18 months with benchmark ilmenite pricing increasing by over 65% since October 2020, to US\$370 per ton¹. Zircon pricing has also seen benchmark pricing increases, with Zircon rallying to approximately US\$1,900 per ton, effective 1st Jan 2022.

Existing Heavy Minerals suppliers including Iluka and Image Resources have described the market thematic as being one of excess demand. Iluka Resources Zircon “customers” are on an allocation basis with multiple customers seeking volumes exceeding their allocation².



Figure 3: Source: Image Resources ASX release 30/01/2022

References

¹Image Resources ASX release 30/01/2022

²Iluka Presentation to Macquarie Western Australia Forum 2021



Financial Commentary

The Company closed the quarter with \$2.948M in cash, details are provided in the Appendix 5B report.

Comparison of Forecast to Actual Use of Funds Statement from Prospectus¹ [as required under ASX LR 5.3.4]:

Expenditure Item	Forecast (2 years) \$'000	Actual (9 months) [inclusive of GST] \$'000	Variance \$'000	Explanation
Exploration expenditure: Port Gregory	2,430	1,044	(1,386)	Forecast based on 8 quarters whereas actual based on only 3 quarters
Exploration expenditure: Inhambane	358	42	(316)	Forecast based on 8 quarters whereas actual based on only 3 quarters
Directors' fees	763	563	(200)	Forecast based on 8 quarters whereas actual based on only 4 & ² / ₃ quarters, lower amount expected in future quarters
Vendor payment	50	15	(35)	Lower than forecast
General administration fees & working capital	756	555	(201)	Forecast based on 8 quarters whereas actual based on only 4 & ² / ₃ quarters, lower amount expected in future quarters
Future acquisition costs	596	13	(583)	Forecast based on 8 quarters whereas actual based on only 3 quarters
Estimated expenses of the offer	547	486	(61)	Lower than forecast.
Total	5,500	2,718	(2,782)	

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

Ends

For further information, please contact:

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¹ Dated 26 July 2021.

About Heavy Minerals Limited

Heavy Minerals Limited (ASX:HVV) is an Australian listed industrial mineral exploration company. Our projects are prospective for industrial minerals including but not limited to Garnet, Zircon, Rutile and Ilmenite. Our primary focus is the Port Gregory Garnet Project which has an Exploration Target of between 3.5Mt and 4.5Mt contained Garnet. Heavy Minerals Limited other project is the Inhambane Heavy Mineral Sands Project in Mozambique which contains a JORC (2012) Inferred Mineral Resource of 90 million tonnes @ 3.0% Total Heavy Mineral.

Competent Person Statement

The information in this announcement that relates to Exploration Targets is based on and fairly represents information and supporting documentation prepared by Mr. Greg Jones (FAusIMM) who is a Non-Executive Director of Heavy Minerals Limited. 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.

The Mineral Resource estimates referred to in this announcement were first reported in accordance with ASX Listing Rule 5.7 in the Company's prospectus dated 27 July 2021 and released on the ASX market announcements platform on 10 September 2021. The JORC Mineral Resource report that supports this original Mineral Resource estimate is hosted on the company website at the following link:

<https://www.heavyminerals.com/technical-reports/>

The Company is releasing updated information that confirms an increase in the Mineral Resource estimate that was reported in the prospectus by way of changing the reporting THM cut-off grade and the expansion of tenure that increases the extent of the Mineral Resource to the south.



Schedule of Tenements

Project	Tenement / Concession Licence	Registered Holder	Status	Area (Ha)	Expiry Date	Interest Held @ 31-Dec-21	Interest Held @ 31-Mar-22
Port Gregory	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%

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 March 2022

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	-	-
(b) development	-	-
(c) production	-	-
(d) staff costs	(171)	(556)
(e) administration and corporate costs	(10)	(573)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	1	2
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other (provide details if material)	-	-
1.9 Net cash from / (used in) operating activities	(180)	(1,127)
2. Cash flows from investing activities		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	-	(3)
(d) exploration & evaluation	(477)	(1,101)
(e) investments	-	-
(f) other non-current assets	-	-

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

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(477)	(1,104)
3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	5,650
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	-	(486)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	(20)
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	-	5,144
4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	3,605	35
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(180)	(1,127)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(477)	(1,104)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	5,144

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 (9 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	2,948	2,948

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	448	1,105
5.2	Call deposits	2,500	2,500
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)	2,948	3,605

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	167
6.2	Aggregate amount of payments to related parties and their associates included in item 2	12
<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 and fees (inclusive of GST) and superannuation.

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

7. Financing facilities	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
<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>		
7.1 Loan facilities	-	-
7.2 Credit standby arrangements	-	-
7.3 Other (please specify)	-	-
7.4 Total financing facilities	-	-
7.5 Unused financing facilities available at quarter end		-
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.	<div style="border: 1px solid black; padding: 5px; min-height: 100px;"> <p>N/A</p> </div>	

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from / (used in) operating activities (item 1.9)	(180)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(477)
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(657)
8.4 Cash and cash equivalents at quarter end (item 4.6)	2,948
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	2,948
8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)	4.5
<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?	
<p>Answer: N/A</p>	
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?	
<p>Answer: N/A</p>	

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: N/A

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: 21 April 2022

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".
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.