

QUARTERLY ACTIVITIES REPORT: 31 DECEMBER 2021

- ₭ Completed 100 holes for 3,094 m of drilling at Port Gregory Garnet Project (E70/5160)
- H Increased area under mining licence application in Mozambique to 213.88 km²
- H JORC Mineral Resource at Inhambane Heavy Mineral Sands Project increased to 90 Mt @ 3.0% THM
- ₭ Completed Seismic Survey at Port Gregory Project underlying 3.5-4.5 Mt Exploration Target (E70/5160)
- → Additional 45.52 km² of tenure bordering GMA's mining lease and HVY's tenure secured (E70/5934). HVY
 is now the largest tenement holder in the Port Gregory Region targeting Garnet mineralisation
- ₭ JORC Mineral Resource for Port Gregory Project on track for release in late Q1 2022

Heavy Minerals Limited (ACN 647 831 833) ("**HVY**" or the "**Company**") is pleased to announce since listing on the ASX September 14th, 2021, that it has moved rapidly to define a potential resource at its Port Gregory Garnet Project located in the mining friendly jurisdiction of Western Australia. In parallel with the work conducted on the Company's Australian Port Gregory Project, HVY has also increased the tenure under mining licence application in Mozambique which has resulted in an increase for the Inferred Mineral Resource to 90 MT @ 3.0% THM, a 59% increase in contained total heavy mineral.

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

"Post listing the Company on the 14th September 2021, HVY has committed to and worked on our Projects in earnest. I am firmly of the belief that we have the right team, the right ground, and the right plan with which to build a successful company and generate substantial shareholder wealth.

Key takeaways from the work completed to date, are that the Port Gregory Project is now better understood from a geological perspective, and that significant progress has been made towards defining a Maiden JORC Mineral Resource, which is on target for release in the latter part of Q1 2022. With our newfound understanding of the project, 2022 is shaping up to be transformative year for HVY".



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Port Gregory Garnet Project

The Port Gregory Garnet Project consists of 6 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).

Summary of Exploration Target ⁽¹⁾					HM Assemblage ⁽²⁾				
Classification	Material (Mt)	In Situ HM (Mt)	In Situ Garnet (Mt)	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

Table 1: E70/5160 Tenement - Exploration Target

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.

2021 Drilling Campaign

HVY has to date moved rapidly to define a potential resource at its 100% owned Port Gregory Project (Figure 2). The primary focus for HVY in the December quarter was twofold. The primary objective was to drill the Exploration Target area in tenement E70/5160, where a total of 100 holes for 3,094 m was completed prior to breaking for Christmas on the 19th December. Subsequent to the end of the quarter, Bostech Drilling remobilised to site on the 7th January 2022 to continue and finalise the program by extending the mineralised footprint beyond the initial target area (secondary objective).

A JORC 2012 Mineral Resource is still on track to be delivered in the first quarter of 2022, as planned.

Drilling successfully intersected mineralisation from surface with several intercepts exceeding 5% THM. In addition, the drilling campaign intersected thick mineralised zones more than 30 m thick (often from surface). Assay results were in-line with those returned from adjacent GMA historical drilling, with visual estimates of the garnet proportion of the THM approximating or greater than those previously recorded by GMA, further strengthening the validity of HVY's Exploration Target.

- ₭ Notable intersections at a cut-off grade of 1% THM (see HVY.ASX announcement 24/11/2021) include:
 - o 4.0% HM over 31.5 m from surface (PG0001)
 - o 2.9% HM over 37.5 m from surface (PG0002)
 - o 4.5% HM over 11.9 m from surface (PG0010)
 - o 3.0% HM over 18 m from surface (PG0015)



Passive Seismic Survey

A Passive Seismic Survey was completed across the entire Exploration Target area in the early part of the December quarter. Results from the survey were encouraging, validating the use of this technique. Passive Seismic appeared to define both basement depth and potential mineralised sand packages beneath the limestone basement. This basement depth estimate was utilised in the drilling program to guide maximum drilling depths. Furthermore, the data was able to identify potential locations where the limestone basement could be drilled through to sample sub-basement sand packages.

A composite of the seismic lines is presented below with the basement clearly demarcated.

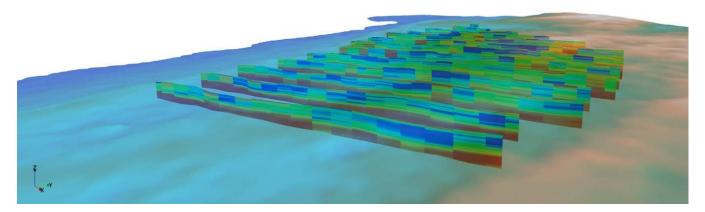


Figure 1: Passive Seismic results highlighting the basement (in red) under the project area.



Port Gregory Tenure

HVY applied for tenement E70/5934 on the 15th October 2021 with the tenement granted on the 15th December 2021. The ground was applied for after encouraging visual panning results from the Eastern border of E70/5160. A Yamatji Proponent Standard Heritage Agreement (YPSHA) with the Yamatji Southern Regional Corporation (YSRC) was entered into as a condition of being granted the tenure. HVY is now the largest tenement holder in the Port Gregory Region targeting Garnet mineralisation.

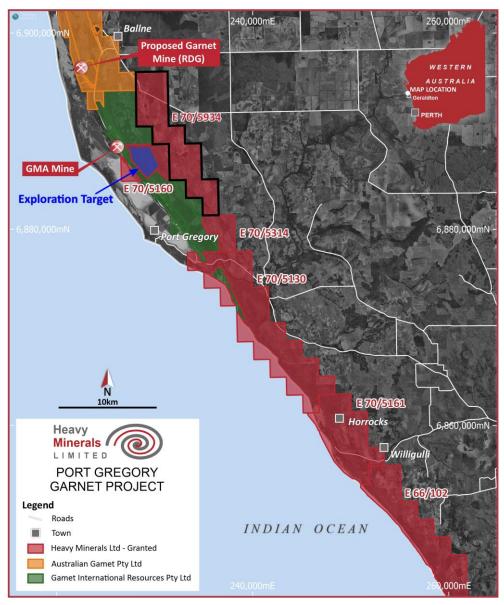


Figure 2: Port Gregory Project Tenure as at 31/12/2021



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.

JORC Resource Increased

As announced to the ASX on the 6th December 2021, HVY increased the area under mining application on the 1st December 2021 by 30.3368 km². This increased application area included Mineral Resources defined in HVY's 2014 drilling campaign. The updated Mineral Resource at the Inhambane Heavy Mineral Sands Project subsequently increased by 59% to 90 Mt @ 3.0% THM with 2.7 Mt of contained THM (previously 1.7 Mt). The updated Inferred Mineral Resource is highlighted in Table 2 and is ilmenite dominated with credits of zircon, rutile and leucoxene. Based on increased ilmenite and zircon benchmark pricing, the company reduced the cut-off grade for reporting from a historical 2% THM to 1.7% THM.

Mineral sands have seen substantial pricing increases over the past 12-18 months with benchmark Ilmenite pricing increasing approximately 60% since October 2020 to US\$350 per tonne. Zircon pricing has also seen significant appreciation with Zircon commanding US\$1,500 a tonne.

Summary of M Mineral	ineral Resou	rces ⁽¹⁾			HM Assemblage ⁽²⁾						
Resource Category	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

Table 2: Inhambane Mineral Resource Summary

MINERAL RESOURCE SUMMARY FOR INHAMBANE PROJECT AS AT DECEMBER 2021

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



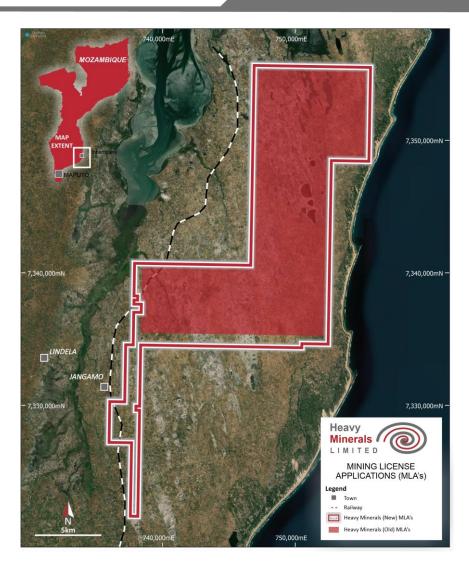


Figure 3: Updated MLA relative to previous MLA

Inhambane Metallurgical Testing

HVY is undertaking an audit of the stored samples from the 2014 drilling campaign and intends to supply sufficient material quantities to conduct Scoping Study level testwork to develop a process flowsheet and expected mineral products. The development of process flow sheets will provide the groundwork for an engineering Scoping Study to develop CAPEX and OPEX and deliver an understanding of the pathway forward to commercial development.

At the end of the quarter HVY was waiting on a comparative quotation / proposal to undertake the work. Subsequent to the end of the quarter, HVY awarded the tender to IHC Mining and is now awaiting the results which are due in March 2022.



Heavy Mineral Sands Market

Ilmenite and Zircon pricing has seen a significant uplift in the last 12 to 18 months with benchmark ilmenite pricing increasing 60% since October 2020, to US\$350 per ton¹. Zircon pricing has also seen benchmark pricing increases, with the Iluka Zircon price set at approximately US\$1,500 per ton, effective 1st October 2021.

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.

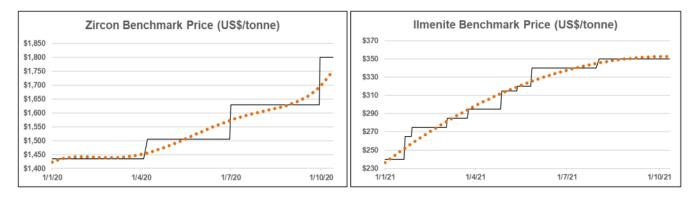
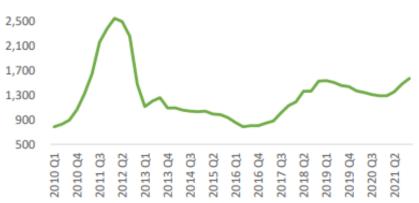


Figure 4: Source: Image Resources ASX release 27/10/2021



Iluka zircon sand net realised FOB price USD/t

Figure 5: Source: Iluka Presentation to 22nd Annual Mineral Sands Conference 16/11/2021

References

¹Image Resources ASX release 18/10/2021

²Iluka Presentation to Macquarie Western Australia Forum 2021



Financial Commentary

The Company closed the quarter with \$3.605M 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 (6 months) [inclusive of GST] \$'000	Variance \$'000	Explanation
Exploration expenditure: Port Gregory	2,430	602	(1,828)	Forecast based on 8 quarters whereas actual based on only 2 quarters
Exploration expenditure: Inhambane	358	4	(354)	Forecast based on 8 quarters whereas actual based on only 2 quarters
Directors' fees	763	385	(378)	Forecast based on 8 quarters whereas actual based on only 3 & ^{2/3} quarters, lower amount expected in future quarters
Vendor payment	50	15	(35)	Lower than forecast
General administration fees & working capital	756	556	(200)	Forecast based on 8 quarters whereas actual based on only 3 & ^{2/3} quarters, lower amount expected in future quarters
Future acquisition costs	596	12	(584)	Forecast based on 8 quarters whereas actual based on only 2 quarters
Estimated expenses of the offer	547	486	(61)	Lower than forecast.
Total	5,500	2,060	(3,440)	

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

Ends

For further information, please contact: Heavy Minerals Limited Nic Matich, Executive Director & CEO Ph: +61 (08) 9481 0389 E: <u>info@heavyminerals.com</u>

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About Heavy Minerals Limited

Heavy Minerals Limited (ASX:HVY) 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 @ 30-Sep-21	Interest Held @ 31-Dec-21
	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%
regory	E70/5160	Mozmin Resources Pty Ltd	Granted	1,403.23	07-Jan-24	100%	100%
Port Gregory	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	0%	100%
Inhambane	10255C	+258 Limitada	Pending	18,350.00	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	Quarter ended ("current quarter")
26 647 831 883	31 December 2021

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 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	(102)	(385)
	(e) administration and corporate costs	(233)	(566)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	1	1
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	(334)	(950)

2.	Ca	sh flows from investing activities		
2.1	2.1 Payments to acquire or for:			
	(a)	entities	-	-
	(b)	tenements	-	-
	(c)	property, plant and equipment	(1)	(3)
	(d)	exploration & evaluation	(449)	(621)
	(e)	investments	-	-
	(f)	other non-current assets	-	-

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 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	(450)	(624)

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	(2)	(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	(2)	5,144

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	4,391	35
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(334)	(950)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(450)	(624)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(2)	5,144

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	Cash and cash equivalents at end of period	3,605	3,605	

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	1,105	4,391
5.2	Call deposits	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)	3,605	4,391

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	163
6.2	Aggregate amount of payments to related parties and their associates included in item 2	5
	if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must incluentation for, such payments.	de a description of, and an

Includes Directors' salaries and fees (inclusive of GST), bonus and superannuation.

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	-	-	
7.3	Other (please specify)	-	-	
7.4	Total financing facilities	-	-	
7.5	Unused financing facilities available at qu	larter 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.			
	N/A			

8.	Estim	nated cash available for future operating activities	\$A'000	
8.1	Net cash from / (used in) operating activities (item 1.9)		(334)	
8.2		ents for exploration & evaluation classified as investing es) (item 2.1(d))	(449)	
8.3	Total r	elevant outgoings (item 8.1 + item 8.2)	(783)	
8.4	Cash and cash equivalents at quarter end (item 4.6)		3,605	
8.5	Unused finance facilities available at quarter end (item 7.5)		-	
8.6	Total a	available funding (item 8.4 + item 8.5)	3,605	
8.7	Estim item 8	ated quarters of funding available (item 8.6 divided by 8.3)	4.6	
	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:			
	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 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: <u>18 January 2022</u>

Authorised by: <u>By the Board of Heavy Minerals Limited</u> (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.