



QUARTERLY ACTIVITIES REPORT

For the 3 months ending 30 September 2025

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- Independent testing by the University of New South Wales confirmed Very High Density (VHD) blocks exhibits a coefficient of thermal expansion approximately eight to twelve times superior to conventional materials.
 - Finite Element modelling demonstrated sector-leading heat sink performance, showing VHD heat sinks can accommodate 300–400W power loads at microchip operating temperatures of 70–85°C, significantly outperforming conventional materials.
 - Preliminary results indicated that VHD heat sinks can substantially lower operating temperatures of high-performance microchips or enable cooling of more powerful microchips.
 - Production scale-up progressed with successful manufacturing of VHD graphite blocks up to 60×100×60mm, with larger blocks up to 160mm thick and 200mm long under development to support global distribution.
 - Appointment of Mr Tony Allen as General Manager – Commercial to support growing customer engagement and commercialisation efforts.
 - Commercialisation activities continuing at pace and on target, including entry into the Korean market, planning for market entry into other Asian regions and partnering with market entry and market expansion experts.
 - GCM to pursue a US listing following the completion of an extensive six-month due diligence program.
 - Execution of a \$5.2 million Options Underwriting Agreement to support corporate and operational objectives.
 - Current cash balance of approximately A\$12 million (includes funds received from exercise of GCMO options and completion of Options Underwriting Agreement subsequent to Quarter end).

Green Critical Minerals Ltd ('GCM' or 'the Company') is pleased to provide an update on the activities conducted during the September 2025 Quarter ('the Quarter').



VHD Graphite Technology

Customer Engagement

GCM continued to make progress across customer engagement initiatives, with the potential of its VHD graphite technology increasingly recognised through direct customer advocacy. The Company's initial product testing program advanced well, generating positive feedback from potential domestic and international clients across multiple regions and sectors.

In line with its global distribution strategy, GCM, together with its Korean corporate advisory partner MGM O'Connor Corporate Advisory, actively advanced its market entry strategy in South Korea. GCM held introductory meetings with numerous parties, with positive initial feedback received, paving the way for ongoing partnership opportunities.

The progress made during the quarter at the production facility has given GCM the confidence to expand its market entry activities.

This quarter GCM initiated steps to expand its customer outreach and global market entry strategy, including investigating partnering opportunities with global experts in market entry and market expansion to build on and accelerate current marketing activities.

GCM also progressed engagement across international markets, issuing initial product samples to prospective customers in North America and Korea, with further shipments planned to support ongoing evaluation across a range of high-performance applications.

This work builds on the formal requests for product samples received from potential customers in Australia, Europe, and the United Kingdom, while early-stage engagement continued with prominent global semiconductor manufacturers.

Scale up of Production

Following successful commissioning of Module 1 at the Company's VHD Production Plant GCM moved into manufacturing, producing blocks of various shapes and sizes, up to 60x100x60mm.

In addition, the Company began building a diverse inventory of sample stock with a variety of product sizes and geometries manufactured, with blocks tailored to technology and electronics thermal management applications.

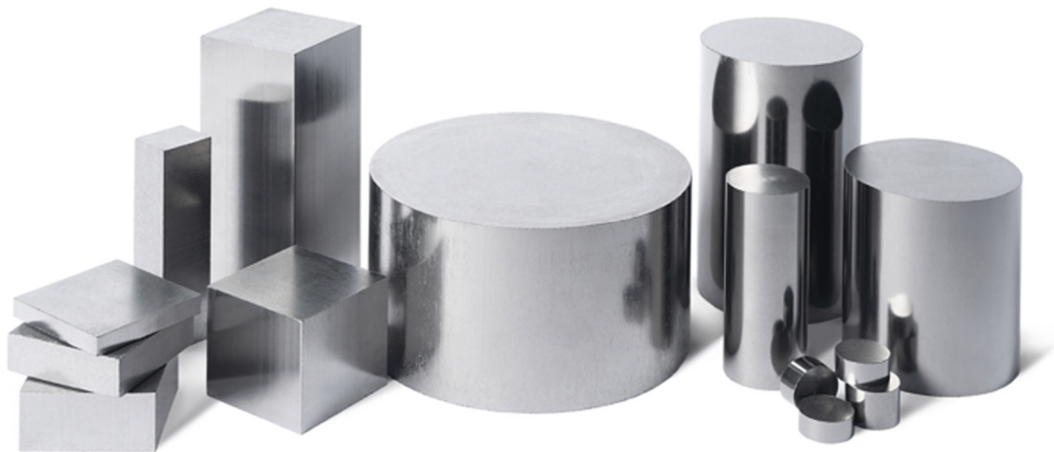


Figure 1: Selection of VHD Graphite Blocks at Various Production Stages



Figure 2: Selection of Coin Samples

Production capacity was further strengthened through the addition of two new furnaces. Complementing these upgrades, GCM implemented enhanced operational systems across warehousing, raw materials and inventory management, logistics, and quality assurance and control.

The Company also continued progressing towards ISO 9001 Quality Management System certification, with accreditation targeted for Q4 2025.



Figure 3: Pressing Station



Figure 4: Furnace Room



Modelling and Results

GCM conducted Finite Element (FE) modelling on the VHD graphite heat sink, performed by the Center for Advanced Material Technology ('CAMT'), led by Professor Qing Li at the University of Sydney, using data from the Company's previously announced results.

The objective of the study was to assess the heat dissipation performance of the VHD heat sink in comparison with conventional materials, including aluminium, copper, and isotropic graphite. All simulations were conducted on heat sinks with consistent dimensions of 60 millimetres in length, 50 millimetres in width, and 60 millimetres in height, comprising a 10-millimetre base and 50-millimetre fins.

The preliminary results demonstrated the superior thermal performance of VHD heat sinks under equivalent conditions. At a microchip operating temperature range of 70 to 85 degrees Celsius, a VHD heat sink was capable of accommodating microchip power demands of between 300 and almost 400 watts. In contrast, heat sinks made from aluminium, copper, or isotropic graphite were only able to support power demands of 200 to 250 watts. These findings are particularly significant given that modern data centre microchips increasingly operate at power levels of 300 watts and above. The results indicated that VHD heat sinks can substantially reduce microchip operating temperatures or enable the effective cooling of more powerful microchips, addressing a critical challenge in the advancement of microchip performance.

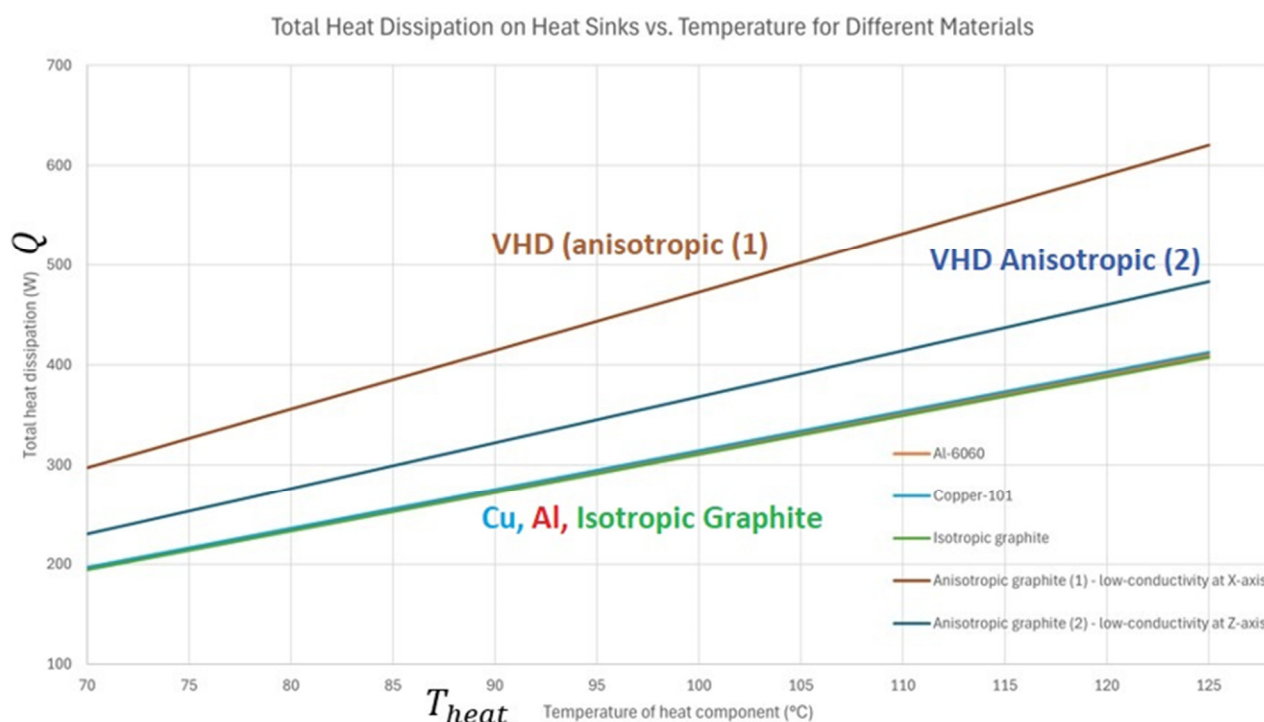


Figure 5: Total Heat Dissipation

The FE modelling also provided insights into the heat transfer profile and the optimal directional alignment of the VHD material. Heat maps generated from the modelling showed that optimally aligned VHD graphite (Anisotropic 1) exhibits exceptional thermal diffusivity. In these models, the 70-degree Celsius base temperature was minimally visible, with heat rapidly dissipating along the fins to the coolest regions. The relative performance rankings confirmed that VHD Anisotropic (1) provided the highest thermal performance, followed by VHD Anisotropic (2), copper, aluminium, and finally isotropic graphite.

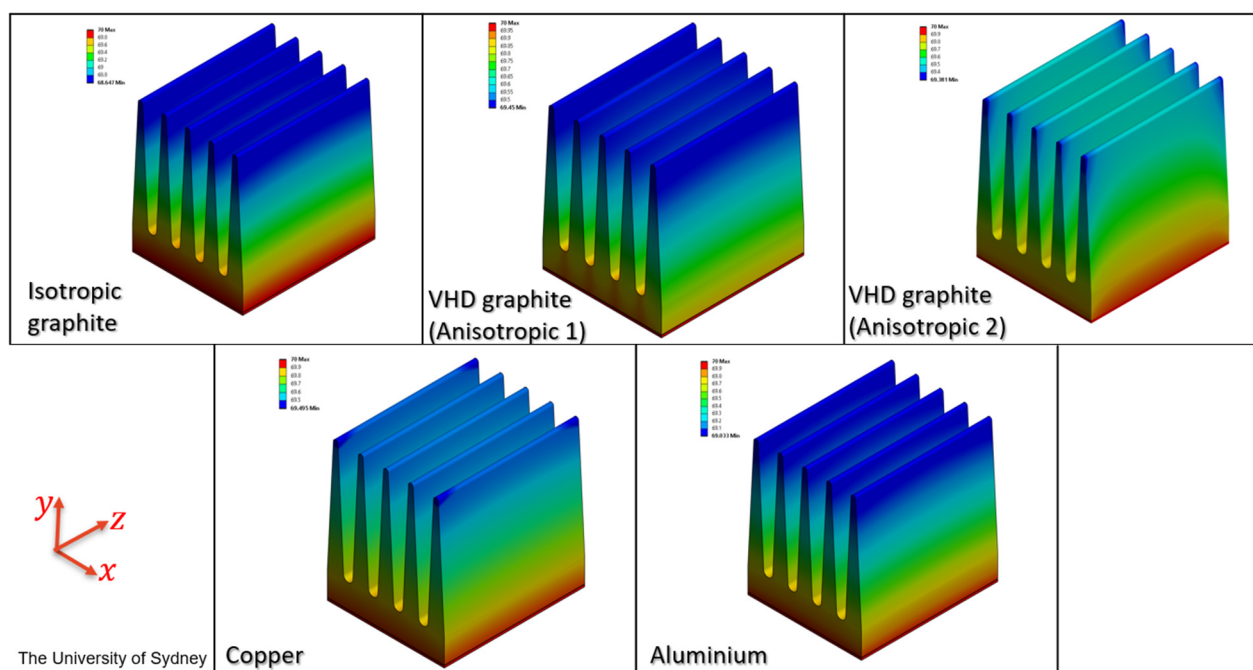


Figure 6: Heat Sink Temperature Distribution (Base temperature = 70°C)

Encouraged by these preliminary results, GCM validated the thermal performance of its VHD heat sinks and continued its progression of computational modelling tailored to specific CPU and GPU microchips.

In addition to the FE modelling, the Company commissioned independent testing by the University of New South Wales which confirmed that VHD graphite (in-plane) exhibited a coefficient of thermal expansion closely aligned with silicon, outperforming conventional metal heat spreaders by eight to twelve times in thermal stability. These results demonstrated substantial advantages in reducing thermal stress, enhancing operational reliability, and improving the longevity of high-performance microchips.



Material	CTE value	Efficiency compared to VHD
VHD graphite	$\sim 2.0 \times 10^{-6}/K$ in plane and $\sim 15.2 \times 10^{-6}/K$ out of plane	N/A
Silicon (die)	$\sim 2.6 \times 10^{-6}/K$	Comparable
Copper	$\sim 16.6 \times 10^{-6}/K$	Expands ~ 8 times more than VHD graphite per $^{\circ}C$
Aluminium	$\sim 21-24 \times 10^{-6}/K$	Expands $\sim 10-12$ times more than VHD graphite per $^{\circ}C$

Table 1: Independent Thermal Expansion Testing Results Completed by UNSW

McIntosh Graphite Project

Following on from the successful Pre-Feasibility Study (PFS) for the McIntosh Graphite Project reported during the previous quarter (refer to ASX announcement 30 June 2025), work has continued on the next stages of the Project's development which includes a review of the environmental and other associated approvals for the Project area as well as further metallurgical text work. This work is expected to continue through 2025 and into 2026.

Torrington Minerals Project

No physical on-ground activities were undertaken at the Torrington Project during the September quarter.

Boulia Project

No physical on-ground activities were undertaken at the Boulia Project during the September quarter.

North Barkly Project

No physical on-ground activities were undertaken at the North Barkly Project during the September quarter.

Glencoe Project

No physical on-ground activities were undertaken at the Glencoe Project during the September quarter.

Red Fox Resources Pty Ltd Investment

Red Fox Resources Pty Ltd ('Red Fox') in which GCM holds a 30.4% interest, reported during the quarter, that it had continued follow up prospecting field activities at the Camel Dam prospect at the Selwyn Project.



Evolution Mining Ltd (ASX: EVN) ('EVN') has an 80% earn-in right to the Cloncurry North tenements held by Red Fox (refer to ASX announcement 17 January 2024). EVN announced that during the September quarter it had continued ongoing discovery drilling at the Cloncurry North JV Project (See ASX announcement September 2025 Quarterly Report 15 October 2025).

Corporate

Management

Mr Tony Allen was appointed as General Manager, Commercial effective August 2025.

US Listing

The Company announced its decision to pursue a US listing following the completion of an extensive six-month due diligence program, which evaluated the benefits of complementing GCM's existing ASX listing. The review included a thorough assessment of market opportunities across the United Kingdom, Europe and North America.

The program's findings indicated that, supported by its assets and led by its VHD Technology, and strong domestic and global market opportunities, trading GCM's securities in the US has the potential to generate significant value for the Company, its VHD Technology and expanding product portfolio.

North America presents a significant growth runway for GCM, driven by accelerating demand for advanced thermal management solutions across technology and electronics sectors including data centres, semiconductor manufacturing, high-performance computing and power electronics. Strategic entry into this market positions the Company to access a broad customer base, engage directly with leading technology manufacturers, tap into one of the world's deepest and most sophisticated capital markets, and unlock substantial commercial value through partnerships, distribution networks, and market share expansion.

GCM has already established a US-domiciled entity to support product registration requirements, streamline logistics, and enable direct engagement with North American customers, particularly those in the advanced electronics, semiconductor and infrastructure sectors.

Underwriting of Options

The Company entered into an option underwriting agreement ("Underwriting Agreement") with Aitken Mount Capital Partners Pty Limited and Canaccord Genuity (Australia) Limited (collectively the "Underwriters") to fully underwrite the exercise of all existing quoted options issued by the Company. The listed options were exercisable at \$0.022 each and expired at 5:00pm (AEST) on 12 October 2025 ("Expiry Date") (ASX:GCMO) ("Options").



Under the Underwriting Agreement, the Underwriters underwrote the exercise of 236,821,756 Options (“Underwritten Options”), representing an underwritten amount of \$5,210,078 (“Underwritten Amount”). This involved the Underwriters subscribing or procuring subscriptions for such number of shares as is equal to the number of Underwritten Options which were not exercised by the Expiry Date (such number of shares being the “Shortfall Shares”).

Legal

Stage 3 earn-in requirements were previously completed in relation to the McIntosh Graphite Project with the Company earning an 80% interest in the Project, having spent in excess of \$4,000,000 on exploration and development over a two-year period.

The terms of a formal Joint Venture Agreement between Green Critical and NH3 Clean Energy (ASX:NH3) (formerly Hexagon Energy Materials Limited) were not executed by reason of the ongoing legal proceedings in the Supreme Court of Western Australia. The Company continues to prosecute both its claim and defence to NH3’s counterclaim in the event a dispute cannot be resolved on a commercial basis.

Capital Structure and Financial Position

The Company’s summarised capital structure as at 30 September 2025 is as follows:

- Fully Paid Ordinary Shares – 2,626,867,197; and
- Cash at Bank – \$7.26 million.

On 6 August 2025, the Company issued 95,833,333 Tranche 2 Placement Shares at an issue price of A\$0.012 per share, as approved by shareholders at the General Meeting on 30 July 2025, raising \$1.15 million (before costs).

Subsequent to Quarter end, the Company received \$2,835,984 from the exercise of 128,908,394 GCMO options at an exercise price of \$0.022 each, ahead of their expiry on 12 October 2025. The Company also completed the Underwriting of Options and issued 107,913,362 Shortfall Shares at an issue price of \$0.022 per share, raising a total Underwritten Amount of \$2,374,093. Following this, the Company currently holds a cash balance of approximately A\$12 million.

Related Parties

The total amount paid to related parties was \$160K (as per Item 6.1 and 6.2 of the Appendix 5B). This represents payments to Directors including fees, salaries and superannuation paid during the quarter.



Listing Rule 5.3.1

Summary of Exploration Expenditure

Project	September 2025 Quarter (\$)
McIntosh Graphite Project	26,864
North Barkly Project	16,892
Glencoe Project	20,134
Boulia Project	19,455
Torrington Project	6,234
Total	89,579

Details of Exploration Expenditure - Listing Rule 5.3.1

Project	September 2025 Quarter (\$)
McIntosh Graphite Project:	
Geological Services	14,058
Metallurgy	1,184
Assays & Storage	11,623
Total – McIntosh Graphite Project	26,865
North Barkly Project:	
Geological Services	10,500
Exploration Administration	2,117
Government Rent	4,275
Total – North Barkly Project	16,892
Glencoe Project:	
Geological Services	16,375
Exploration Administration	3,759
Total – Glencoe Project	20,134
Boulia Project:	
Geological Services	18,125
Exploration Administration	1,330
Total – Boulia Project	19,455



Project	September 2025 Quarter (\$)
Torrington Project:	
Geological Services	5,250
Exploration Administration	984
Total – Torrington Project	6,234
Grand Total	89,580

ASX Announcements

This Quarterly Activities Report contains information extracted from ASX market announcements reported in accordance with 2012 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves” (2012 JORC Code). Further details (including 2012 JORC Code reporting tables where applicable) of exploration results referred to in this Quarterly Activities Report can be found in the following announcements lodged on the ASX:

Date	Title of Announcement
24 Sept 2025	\$5.2M Options Underwriting Agreement Executed
03 Sept 2025	VHD Graphite Proven Superior in Thermal Expansion Testing & Furthers Data Centre Collaboration
12 Aug 2025	GCM Scales up VHD Graphite Production Output to Support Global Distribution Strategy and Expected Demand
30 Jul 2025	GCM US Listing Scheduled for 2026
08 Jul 2025	VHD Heat Sink – Computational Modelling Confirms Exceptional, Sector-Leading Heat Sink Performance

These announcements are available for viewing on the Company’s website at <https://gcm minerals.com.au/>.

About GCM

Green Critical Minerals Limited (ASX:GCM) is an Australian technology company delivering cooling and thermal management solutions to the technology, electronics and industrial sectors.

GCM is achieving this goal through the commercialisation of its VHD technology, complementing its suite of critical mineral assets. GCM is rapidly developing its VHD technology and has commissioned the first module of a scalable production facility.

To learn more please visit www.gcm minerals.com.au.

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Authorisation

The provision of this announcement to the ASX has been authorised by the Board of Directors of Green Critical Minerals Limited.

Forward Looking Statements

This announcement contains general information about GCM's activities current as at the date of the announcement. The information is provided in summary form and does not purport to be complete.

This release contains estimates and information concerning our industry and our business, including estimated market size and projected growth rates of the markets for our products. Unless otherwise expressly stated, we obtained this industry, business, market, and other information from reports, research surveys, studies and similar data prepared by third parties, industry, and general publications, government data and similar sources. This announcement also includes certain information and data that is derived from internal research. While we believe that our internal research is reliable, such research has not been verified by any third party. Estimates and information concerning our industry and our business involve a number of assumptions and limitations. Although we are responsible for all of the disclosure contained in this announcement and we believe the third-party market position, market opportunity and market size data included in this announcement are reliable, we have not independently verified the accuracy or completeness of this third-party data. Information that is based on projections, assumptions and estimates of our future performance and the future performance of the industry in which we operate is necessarily subject to a high degree of uncertainty and risk due to a variety of factors, which could cause results to differ materially from those expressed in these publications and reports.



ANNEXURE A: MINERAL TENEMENT LIST - ALL IN AUSTRALIA

The table below sets out the Company's interest in Exploration Tenements as at 30 September 2025. As per Listing Rule 5.3.3 the Company confirms that it was not granted any additional exploration tenements/leases during the quarter. EL 8258 was granted renewal on 16 July 2025 for a period of two years.

The Company has not disposed of any mining tenements or entered into any farm-in or farm-out agreements.

The Company currently holds an 80% earn-in stake for the McIntosh Project area in Western Australia for tenements held by Hexagon Energy Materials Limited and its subsidiaries.

Project	Tenement. No.	% Interest	Expires	Location
Torrington 1	EL 8258	100%	16/04/2027	NSW
Torrington 2	EL 8355	100%	18/03/2026	NSW
Mallapunyah	EL 33128	100%	22/08/2028	NT
Wallhallow	EL 33129	100%	22/08/2028	NT
Backblocks	EL 33130	100%	23/08/2028	NT
Backblocks North	EL 33467	100%	27/11/2029	NT
Glencoe	EPM 28434	100%	07/09/2025	QLD
Canary	EPM 28251	100%	19/02/2026	QLD
Prickly Bush	EPM 28253	100%	12/02/2026	QLD
Kildare	EPM 28612	100%	28/05/2027	QLD
Lone Pine	EPM 28666	100%	30/05/2027	QLD
Borania	EPM 28618	100%	15/10/2027	QLD
West Glencoe	EPM 28716	100%	15/10/2027	QLD
Elrose	EPM 28948	100%	14/10/2029	QLD
Paton Downs	EPM 28950	100%	14/10/2029	QLD
Canary North	EPM 28982	100%	21/02/2030	QLD

Appendix 5B

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

Name of entity

GREEN CRITICAL MINERALS LIMITED

ABN

12 118 788 846

Quarter ended ("current quarter")

30 September 2025

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation (if expensed)	-	-
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	-	-
	(e) administration and corporate costs	(651)	(651)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	47	47
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) – VHD Technology expenditure	(391)	(391)
1.9	Net cash from / (used in) operating activities	(995)	(995)
2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	(12)	(12)
	(d) exploration & evaluation (if capitalised)	(90)	(90)
	(e) investments	-	-
	(f) other non-current assets	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 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	(102)	(102)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	1,150	1,150
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	1,385	1,385
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(76)	(76)
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 lease repayment	(23)	(23)
3.10	Net cash from / (used in) financing activities	2,436	2,436

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	5,920	5,920
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(995)	(995)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(102)	(102)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	2,436	2,436

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	Cash and cash equivalents at end of period	7,259	7,259

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	3,259	2,895
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details) – Term Deposits	4,000	3,025
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	7,259	5,920

6. Payments to related parties of the entity and their associates

- 6.1 Aggregate amount of payments to related parties and their associates included in item 1
- 6.2 Aggregate amount of payments to related parties and their associates included in item 2

Current quarter \$A'000
151
9

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.

The amounts reported at item 6.1 and 6.2 relate to payments to directors including fees, salaries and superannuation paid during the quarter.

7.	Financing facilities <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>	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	-	-
7.4	Total financing facilities	-	-

7.5 Unused financing facilities available at quarter end	-
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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.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (Item 1.9)	(995)
8.2	Capitalised exploration & evaluation (Item 2.1(d))	(90)
8.3	Total relevant outgoings (Item 8.1 + Item 8.2)	(1,085)
8.4	Cash and cash equivalents at quarter end (Item 4.6)	7,259
8.5	Unused finance facilities available at quarter end (Item 7.5)	-
8.6	Total available funding (Item 8.4 + Item 8.5)	7,259
8.7	Estimated quarters of funding available (Item 8.6 divided by Item 8.3)	6.69

8.8 If Item 8.7 is less than 2 quarters, please provide answers to the following questions:

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
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
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

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: 29 October 2025

Authorised by: By the Board
(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.