

31 January 2024

QUARTERLY ACTIVITIES REPORT Quarter Ended 31 December 2023

HIGHLIGHTS:

- Aircore drilling program completed at Roberts Hill; 174 holes totalling 13,475m
- Mt Berghaus Gold Exploration Licence E45/5899 granted
- 13,000m aircore drilling at Mt Berghaus planned for first half of 2024
- Mantle and De Grey signed access agreements at Roberts Hill and Mt Berghaus

Mantle Minerals Limited (**ASX:MTL**) ("Mantle") ("the Company") is pleased to provide the following report on its activities for the quarter ended 31 December 2023.

SUMMARY OF EXPLORATION ACTIVITIES

Gold Projects

Roberts Hill Tenement

In the last quarter, the Company completed an extensive aircore drilling program at the Roberts Hill tenement. Drilling commenced in October 2023, and the Company successfully completed 174 holes covering a total of 13,475 meters at an average hole depth of about 78m by December 2023.

The Company developed an exploration model and drilling program from an in-depth analysis of the geological, geochemical and geophysical data from Roberts Hill, Mt Berghaus and surrounding areas over the first half of 2023.

This program established that overlying sediments, which would conceal any potential mineralisation, were approximately 30m downhole. Accordingly, the drilling program tested an average 48m of basement rock, focusing on Hemi style mineralization. Geophysical data from the Roberts Hill area and adjacent tenements indicated that the stratigraphy of Roberts Hill area may be trending north-south, which could connect with the stratigraphy hosting the Hemi gold deposit. The aircore drilling program was designed to test this hypothesis and explore other possible structures related to Hemi style gold mineralization.

The Company plans to start reverse circulation drilling to follow up any significant intersections identified though aircore drilling at Roberts Hill and Mt Berghaus. This drilling is expected to commence around mid-2024.

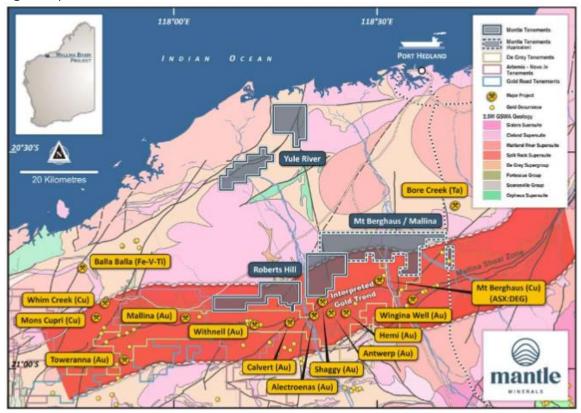


Figure 1: Project Location Map and Proximity to Hemi and the Interpreted Gold Trend



Figure 2: Aircore drill rig during the completed drill program

Mt Berghaus Tenement

On 7 November 2023, the Company announced the grant of Mt Berghaus exploration licence E45/5899, which covered an area of around 84km² immediately north of De Grey Mining's Hemi discovery. This brought the Company's granted tenements in the area to a total of approximately 399km².

Tenement E45/5899 is believed to be the most prospective of the three Mt Berghaus exploration licences. The Company has developed an exploration model and planned for approximately 13,000m of aircore drilling set to commence in the first half of 2024.

Environmental and aboriginal cultural heritage applications are currently underway.



Figure 3: Map of Mt Berghaus area showing the newly granted outlined in red.

Drilling by De Grey Mining Limited

In addition to the Mantle's ongoing drilling programs, the Company announced execution of access agreements with De Grey Mining Limited (ASX: DEG) ("De Grey") for various miscellaneous licence applications made by De Grey over the Company's Roberts Hill (E45/3846) and Mt Berghaus (E45/4531) exploration tenements in November 2023.

The agreements provide for De Grey to build infrastructure in accordance with five miscellaneous licence applications: L47/963, L47/966, L47/1069, L47/1047 and L47/1133. Furthermore, De Grey has agreed to drill at least 100 aircore holes on L47/1047 and L47/1069 following the grant of the miscellaneous licence applications, to test for mineralization before proceeding with the construction of site infrastructure.

De Grey will assume all operational and environmental responsibilities. The proposed work will not impede or affect Mantle's exploration programs. All data from the drilling program will be provided to Mantle. If a discovery is made, the Company will retain the right to develop any potential resources with 100% ownership and De Grey may continue searching alternative areas for infrastructure development.

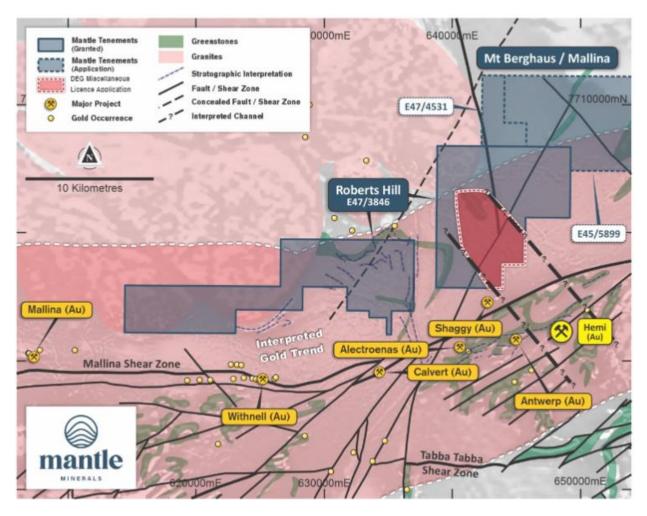


Figure 4: Map showing De Grey's Miscellaneous Licence Area (DEG Drilling Area) on Roberts Hill Tenement and Tenement E47/4531at Mt Berghaus, both subject to Access Agreements with De Grey

CORPORATE

Annual General Meeting

On 24 November 2023, the Company advised that all resolutions put at the Annual General Meeting held at Stantons, 40 Kings Park Road, West Perth WA 6005, were passed on a poll.

Additional ASX Information

Summary of Exploration Expenditure (ASX Listing Rule 5.3.1)

In accordance with Listing Rule 5.3.1, the Company advises the cash outflows on its mining exploration activities reported in 1.2(1) of its Appendix 5B for the December 2023 quarter and detailed above were, Pardoo \$65,580 and Mallina Basin \$201,076.

Mining Production and Development (ASX Listing Rule 5.3.2)

There were no substantive mining production and development activities during the quarter.

Payment to Related Parties (ASX Listing Rule 5.3.5)

The Company advises the payments in section 6.1 of Appendix 5B for the quarter related to director, company secretarial and accounting fees.

The mining tenement interests acquired or relinquished during the quarter and their location

Not applicable (the relinquishment of E45/5041 - Mt Berghaus, was replaced by existing company applications E45/5899, E45/6645 and E47/4531 covering identical tenure.

This announcement has been authorized for release by the Mantle Minerals Limited Board of Directors.

For Further Information, please contact:

Nick Poll

Executive Chairman +61 6102 2656

Johnathon Busing

Non-Executive Director/Company Secretary +61 8 6165 8858

Competent Person Statement

The information contained in this report on exploration results relates to information previously announced by the Company and the Company is not aware of any new information which materially affects the information included in those announcements. The information was compiled or reviewed by Mr Nick Poll. Mr Poll is the Company's Executive Chairman. Mr Poll has sufficient experience of relevance to the styles of mineralization and the types of deposits under investigation, and to the activities undertaken to qualify as a Competent Person as defined in the 2012 edition of the Joint Ore Reserve Committee (JORC) "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".

Forward-Looking Statement Disclaimer

This announcement contains forward-looking statements that involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions, or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions, and strategies described in this announcement. No obligation is assumed to update forward-looking statements if these beliefs, opinions, and estimates should change or to reflect other future developments.

CORPORATE INFORMATION

Board

Nick Poll Executive Chairman

David Greenwood Non-Executive Director

Johnathon Busing Non-Executive Director / Joint Company Secretary

Robert Mosig Non-Executive Director Kieran Witt Joint Company Secretary

Registered Office and Principal Place of Business

Ground Floor 168 Stirling Highway Nedlands WA 6009

Telephone: +61 8 6102 2656

Forward Shareholder Enquiries to

Advanced Share Registry Pty Ltd 110 Stirling Highway, Nedlands WA 6009

Telephone: +61 8 9389 8033

Issued Share Capital

As at the date of this report, the total fully paid ordinary shares on issue were 6,197,445,834.

TENEMENT INFORMATION (ASX Listing Rule 5.3.3)

The table below shows the interest in tenements held by Mantle Minerals Ltd and its wholly owned subsidiaries and is provided in accordance with ASX Listing Rule 5.3.3.

No Mining Tenements were acquired or disposed during the quarter.

AUSTRALIAN TENEMENTS

Location	Project Name	Tenement	Ownership	Titleholder
Western Australia	Pardoo	E45/5827	100%	Port Exploration Pty Ltd
Western Australia	Pardoo	E45/4671	100%	Arrow (Pardoo) Pty Ltd
Western Australia	Roberts Hill	E47/3846	100%	Mt Roe Mining Pty Ltd
Western Australia	Mt Berghaus	E45/5802	100%	Mt Roe Mining Pty Ltd
Western Australia	Yule River	E47/3857	100%	Blue Ribbon Mines Pilbara Pty Ltd
Western Australia	Mt Berghaus	E45/5899	100%	Mt Roe Mining Pty Ltd
Western Australia	Mt Berghaus	E45/4531	100%	Mt Roe Mining Pty Ltd (in application)
Western Australia	Mt Berghaus	E45/6645	100%	Mt Roe Mining Pty Ltd (in application)

STATE OF NEVADA, UNITED STATES OF AMERICA TENEMENTS

Location	Project Name	Claim	Ownership	Titleholder
Nevada, USA	Columbus Marsh	CSM32	Refer to Note 1 below	Gold Exploration Management Inc.
Nevada, USA	Columbus Marsh	CSM33	Refer to Note 1 below	Gold Exploration Management Inc.
Nevada, USA	Columbus Marsh	CSM34	Refer to Note 1 below	Gold Exploration Management Inc.
Nevada, USA	Columbus Marsh	CSM36	Refer to Note 1 below	Gold Exploration Management Inc.
Nevada, USA	Columbus Marsh	CSME1	Refer to Note 1 below	Gold Exploration Management Inc.
Nevada, USA	Columbus Marsh	CSME2	Refer to Note 1 below	Gold Exploration Management Inc.
Nevada, USA	Columbus Marsh	CSME3	Refer to Note 1 below	Gold Exploration Management Inc.
Nevada, USA	Columbus Marsh	CSM1	Refer to Note 1 below	Gold Exploration Management Inc.
Nevada, USA	Columbus Marsh	CSM2	Refer to Note 1 below	Gold Exploration Management Inc.
Nevada, USA	Columbus Marsh	CSM4	Refer to Note 1 below	Gold Exploration Management Inc.
Nevada, USA	Columbus Marsh	CSM5	Refer to Note 1 below	Gold Exploration Management Inc.
Nevada, USA	Columbus Marsh	CSM1W	Refer to Note 1 below	Gold Exploration Management Inc.
Nevada, USA	Columbus Marsh	CSM5W	Refer to Note 1 below	Gold Exploration Management Inc.
Nevada, USA	Columbus Marsh	CSM23	Refer to Note 1 below	Gold Exploration Management Inc.
Nevada, USA	Columbus Marsh	CSM27	Refer to Note 1 below	Gold Exploration Management Inc.
Nevada, USA	Columbus Marsh	CSM29	Refer to Note 1 below	Gold Exploration Management Inc.
Nevada, USA	Columbus Marsh	CSM30	Refer to Note 1	Gold Exploration Management Inc.
Nevada, USA	Columbus Marsh	CSM31	Refer to Note 1	Gold Exploration Management Inc.
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Note 1: ATC Resources Pty Ltd ("ATC Resources") has entered into the assignments of binding Options Agreements to acquire 100% of Columbus Marsh from Gold Exploration Management Inc. ATC Resources is a wholly owned subsidiary of Mantle Minerals Ltd.

Name de 110A	Discolor Manala	DM FF	Defents Note 2	Animana Lithiuma Callad
Nevada, USA	Rhodes Marsh	RM 57	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 58	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 59	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 60	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 61	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 62	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 63	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 64	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 65	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 66	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 67	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 68	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 69	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 70	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 71	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 72	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 73	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 74	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 75	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 76	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 77	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 78	Refer to Note 2	Arizona Lithium Co Ltd

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Nevada, USA	Rhodes Marsh	RM 79	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 80	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 81	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 82	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 83	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 84	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 85	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 86	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 87	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 88	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 89	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 90	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 91	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 92	Refer to Note 2 Below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 93	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 94	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 95	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 96	Refer to Note 2 below	Arizona Lithium Co Ltd
Nevada, USA	Rhodes Marsh	RM 97	Refer to Note 2 below	Arizona Lithium Co Ltd
	Rhodes Marsh	RM 98	Refer to Note 2	Arizona Lithium Co Ltd

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Nevada, USA	Rhodes Marsh	RM 99	Refer to Note 2	Arizona Lithium Co Ltd
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Nevada, USA	Rhodes Marsh	RM 101	Refer to Note 2	Arizona Lithium Co Ltd
			below	
Nevada, USA	Rhodes Marsh	RM 102	Refer to Note 2	Arizona Lithium Co Ltd
			below	

Note 2: Arizona Lithium Co owns the Rhodes Marsh placer claims on behalf of Mantle Minerals Ltd.

Appendix 5B

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

Name of entity

MANTLE MINERALS LTD	
ABN	Quarter ended ("current quarter")
42 082 593 235	31 December 2023

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	(293)	(514)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(90)	(186)
	(e) administration and corporate costs	(179)	(421)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	38	49
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (GST Refund)	30	54
1.9	Net cash from / (used in) operating activities	(494)	(1,018)

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	(10)	(10)
	(d) exploration & evaluation	-	-
	(e) investments	-	-
	(f) other non-current assets	-	-

ASX Listing Rules Appendix 5B (17/07/20)

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	(10)	(10)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	100	100
3.2	Proceeds from issue of convertible debt securities	-	-
3.3	Proceeds from exercise of options	-	-
3.4	Transaction costs related to issues of equity securities or convertible debt securities	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	100	100

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	2,386	2,910
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(494)	(1,018)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(10)	(10)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	100	100

ASX Listing Rules Appendix 5B (17/07/20) + See chapter 19 of the ASX Listing Rules for defined terms.

Con	solidated 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	1,982	1,982

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	1,982	2,386
5.2	Call deposits	-	-
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)	1,982	2,386

Payments to related parties of the entity and their associates	Current quarter \$A'000
Aggregate amount of payments to related parties and their associates included in item 1	136
Aggregate amount of payments to related parties and their associates included in item 2	-
	Aggregate amount of payments to related parties and their associates included in item 1 Aggregate amount of payments to related parties and their

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.

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 quarter end			
7.6	Include in the box below a description of each facility above, including the lender, rate, maturity date and whether it is secured or unsecured. If any additional finance facilities have been entered into or are proposed to be entered into after quarter expectation 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)	(494)	
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	-	
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(494)	
8.4	Cash and cash equivalents at quarter end (item 4.6)	1,982	
8.5	Unused finance facilities available at quarter end (item 7.5)	-	
8.6	Total available funding (item 8.4 + item 8.5)	1,982	
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	4.017	
	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:		

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?

8.8.3 Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer:

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Date: 31 January 2024

Authorised by: The Board of Mantle Minerals Limited

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.
- 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.