



## CARBINE RESOURCES LIMITED

ASX Announcement  
ASX: CRB

31 January 2024

# Quarterly Report to 31 December 2023

## Highlights

- ◆ **Muchea West Silica Sand Resource Upgrade to 110Mt at 99.65% SiO<sub>2</sub>**
- ◆ **Planning for upcoming infill auger drill program to be completed at Muchea within E70/4905**

Carbine Resources Limited (ASX: CRB) (the **Company** or **Carbine**) is pleased to provide shareholders with the quarterly activities and cash flow report for the three-month period ended 31 December 2023.

## Carbine Resources

Carbine Resources has positioned itself to be a leading producer of silica sand, targeting the high purity silica market with product destined for the glass industry.

At Muchea West, the Company has its flagship project that it is advancing towards decisions regarding development and production. The recent Mining Licence Application (MLA70/1422) is the end product of exploration and processing studies completed to demonstrate the potential within the Project.

The MLA, lodged in December 2022 and recommended for grant on April 18 2023, continues to progress through the approvals process on the path to a mining license being granted.

The Down South Silica project is located close to the Bunbury port and offers the Company an opportunity to continue exploration activities during the MLA approvals period.



Figure 1: Project locations

## Muchea West Silica Sand Project

The Muchea West Project is located approximately 40km north-northeast of Perth and approximately 500m to the west of Muchea. Covering a land area of 102km<sup>2</sup>, the Project consists of a granted exploration licence, E70/4905, and a Mining Licence Application, MLA70/1422. There is excellent access with the Tonkin Highway and the Moora-Kwinana Railway providing a direct connection with the Kwinana Bulk Terminal, key for bulk transport projects.

The Company was pleased to announce an upgraded resource of 110Mt at 99.65% Si<sub>2</sub>O during the quarter. The updated resource represents both a growth in the resource size as well as the levels of confidence with a portion of the resource now in the Measured category.



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The Company notes that the new Resource is in addition to the Exploration Target of 762 Mt to 938 Mt of Silica Sand at an average grade of 99.6% to 99.8% SiO<sub>2</sub><sup>1</sup>. The potential quantity and grade of the Exploration Target is conceptual in nature. There has been insufficient exploration to estimate further Mineral Resources and it is uncertain if further exploration will result in the estimation of additional Mineral Resources.

The resource expansion program was undertaken to upgrade the confidence in the Mineral Resource Estimate categories ahead of a Feasibility Study aimed at a 20 year production scenario. This Estimate combines the prior drilling from 2019 with Carbine's 2021 and 2023 drilling over an area of less than 20% of the landholding at Muchea West. 100% of that landholding is silica sand.

The high silica grade and the low levels of impurities of the raw, in situ, deposit places Carbine at the forefront of existing Australian silica sand projects. Preliminary process testwork has demonstrated that a simple process of wet attritioning alone can reduce the Muchea West Fe<sub>2</sub>O<sub>3</sub> content by 65% with similar reductions in the other deleterious elements for the Muchea West silica sand.

**Table 1: Muchea West Silica Sand Project – Mineral Resource Estimate – All Drilling**

Material	Category	SiO <sub>2</sub> Cutoff %	Volume million m <sup>3</sup>	Tonnes million	Density t/m <sup>3</sup>	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	Fe <sub>2</sub> O <sub>3</sub> %	K <sub>2</sub> O %	TiO <sub>2</sub> %	LOI %
Main Sand	Measured	99.00	7.90	12.17	1.54	99.62	0.052	0.028	0.005	0.039	0.232
Main Sand	Indicated	99.00	24.80	38.20	1.54	99.67	0.047	0.026	0.004	0.052	0.176
Main Sand	Inferred	99.00	21.92	33.75	1.54	99.66	0.052	0.025	0.005	0.051	0.181
<b>Main Sand</b>	<b>Total</b>	<b>99.00</b>	<b>54.62</b>	<b>84.11</b>	<b>1.54</b>	<b>99.66</b>	<b>0.050</b>	<b>0.026</b>	<b>0.004</b>	<b>0.050</b>	<b>0.186</b>
Lower Sand	Inferred	99.00	17.30	26.64	1.54	99.62	0.074	0.029	0.006	0.056	0.191
<b>Lower Sand</b>	<b>Total</b>	<b>99.00</b>	<b>17.30</b>	<b>26.64</b>	<b>1.54</b>	<b>99.62</b>	<b>0.074</b>	<b>0.029</b>	<b>0.006</b>	<b>0.056</b>	<b>0.191</b>
Main + Lower	Measured	99.00	7.90	12.17	1.54	99.62	0.052	0.028	0.005	0.039	0.232
Main + Lower	Indicated	99.00	24.80	38.20	1.54	99.67	0.047	0.026	0.004	0.052	0.176
Main + Lower	Inferred	99.00	39.22	60.39	1.54	99.65	0.062	0.027	0.005	0.053	0.186
<b>Main + Lower</b>	<b>Total</b>	<b>99.00</b>	<b>71.92</b>	<b>110.75</b>	<b>1.54</b>	<b>99.65</b>	<b>0.056</b>	<b>0.027</b>	<b>0.005</b>	<b>0.051</b>	<b>0.187</b>

Full details of the upgraded resource are set out in the Company's announcement dated 30 October 2023.

During the quarter, the Company conducted a site visit to assist with finalising the design of a drill program to be completed during the current dry season within E70/4905. With the success of the hand auger program which constitutes low level activity and does not require a Program of Work to be submitted to the Department of Mining Industry Regulation and Safety, this method will be pursued. An environmental, dieback and UXO clearance will still be required. This drilling is planned to continue outside the MLA area.

A bulk sample, representative of the MLA area, will be compiled for a proposed Feasibility Study.

<sup>1</sup> ASX announcement 29 July 2021 "Maiden Exploration Target Estimated for Muchea West Silica Sand Project"



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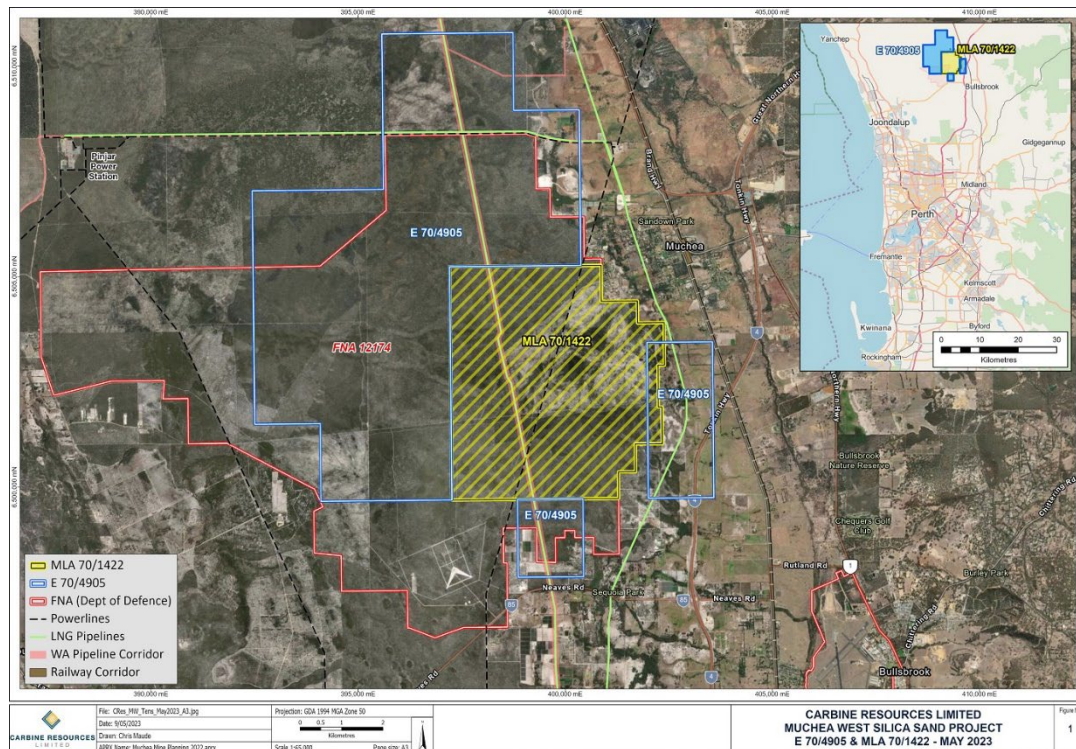


Figure 2: Muechea West Project with MLA70/1422

### Down South Silica Sand Project

The Company holds 100% of the Bunbury Silica Sands Project which covers a land area of 5,800Ha consisting of three exploration licences, E70/5823, E70/6414 and E70/6415.

The Bunbury Silica Sands Project is located approximately 10km southeast of Bunbury in the Wellington Land Division of the Southwest Mineral Field (Figures 4) and within the shires of Capel (17.56096 BI) and Dardanup (2.43903 BI). The area can be located on the Collie (SI50 – 06) 1:250,000 map sheet and the Bunbury (2031) 1:100,000 map sheet.

The ground has been the subject of numerous drilling programs, predominantly for mineral sands, but at least three companies have explored for silica sands.

Work completed by Westralian Sands prior to 1970 identified a number of areas of interest (Areas A, B and C shown in Figure 4) and the culmination of this work led to a small mining operation to test the economics of a silica sand export project from their Area A location.

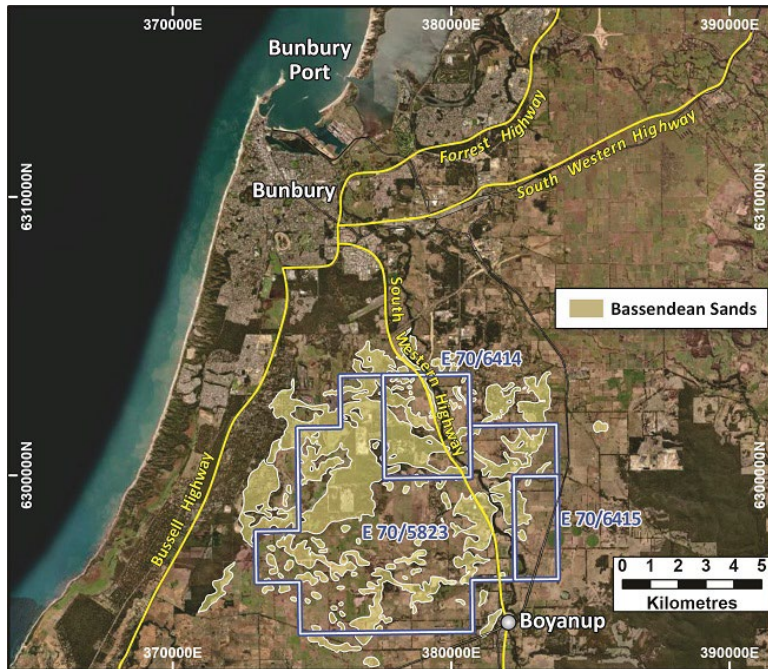
Later, Australian United Silica Corporation Pty Ltd (AUSCO) mapped surface expressions of white sand and produced an outline of areas of potential (1, 2 and 3 shown in Figure 4).

During the quarter, the Company continued a data review aimed at informing exploration planning activities for the Bunbury Silica Sands Project. Field based activities are planned to commence upon completion of the review and subject to access arrangements being agreed and access being granted to finalise the design of the planned activities.

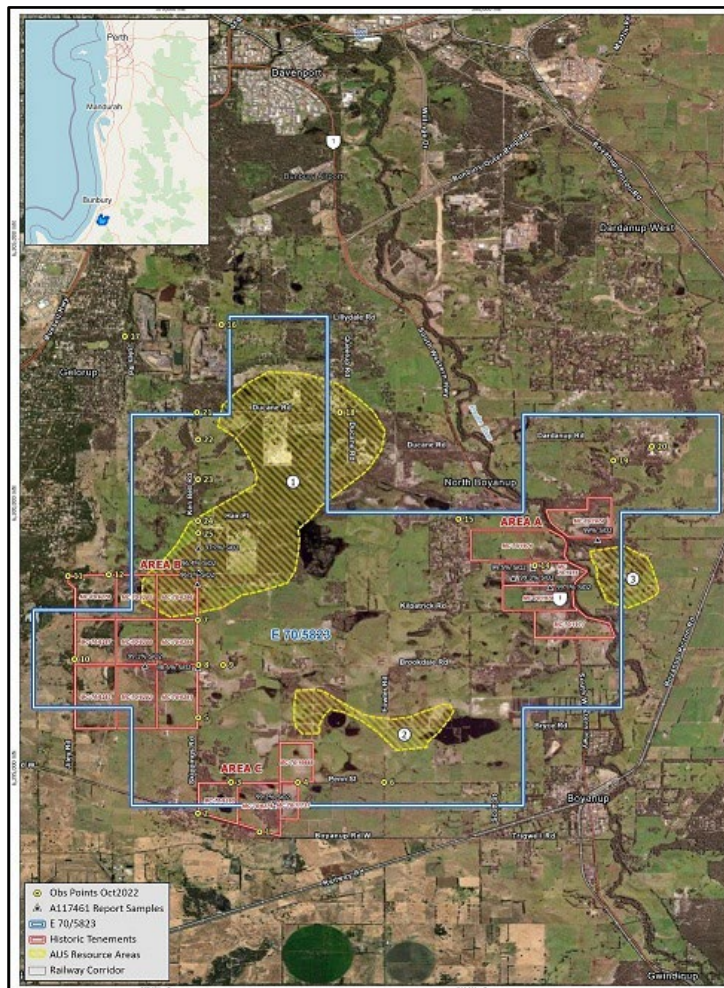




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**Figure 3: Bunbury Silica Sands Tenement Locations**



**Figure 4: Areas of Interest at Bunbury Silica Sands Project**



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### **Corporate**

During the quarter, the Company announced that Non-Executive Director Peter Batten has stepped down from the Board. Peter has conducted a handover of his technical responsibilities. Gary Powell, an experienced exploration geologist with +35 years of local and international experience, has been appointed as Exploration Manager and will guide the Company through the next phase exploration activities at its Muchea and Bunbury Silica Sand Projects.

This announcement has been authorised for release by the Board of Carbine Resources Ltd.

#### **For further information, please contact:**

James Pearse – Non-executive Director	+61 (8) 6142 0986
Glenn Whiddon – Non-executive Director	+61 (8) 6142 0986
Brett Grosvenor – Non-executive Director	+61 (8) 6142 0986

### **COMPETENT PERSON'S STATEMENT**

The mineral resource estimate in this announcement was reported by the Company in accordance with listing rule 5.8 on 30 October 2023. The Company confirms it is not aware of any new information or data that materially affects the information included in the previous announcement and that all material assumptions and technical parameters underpinning the estimate in the previous announcement continue to apply and have not materially changed.

The information in this report that relates to technical assessment of the Exploration Target for the Muchea West Silica Sand Project is based on, and fairly represents, information and supporting documentation prepared by Mr Lynn Widenbar BSc(Hons), MSc, DIC, a Competent Person who is a member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Widenbar is an employee of Widenbar and Associates Pty Ltd. Mr Widenbar has sufficient experience that is relevant to the technical assessment of the mineral assets under consideration, the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The Exploration Target was first reported by the Company on 29 July 2021 and subsequently revised on 4 July 2022 with the estimation of the maiden resource at Muchea West. There has been no change to the Exploration Target with the updated resource estimation on 30 October 2023.

Mr Widenbar consents to the inclusion of the matters based on his information in the form and context in which it appears in this Presentation and has not withdrawn his consent before lodgement of this report.



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## Appendix 1: Carbine's Tenement Interests

The following information is provided pursuant to Listing Rule 5.3.3 for the quarter ended 31 December 2023:

Project	Tenement Number	Status	Beneficial Ownership
Muchea West Silica Sands Project	E70/4905	Granted	100%
Muchea West Silica Sands Project	MLA70/1422	Pending	100%
Muchea West Silica Sands Project	E70/6450*	Pending	100%
Muchea West Silica Sands Project	E70/6451*	Pending	100%
Muchea West Silica Sands Project	E70/6452*	Pending	100%
Muchea West Silica Sands Project	E70/6453*	Pending	100%
Down South Silica Project	E70/5823	Granted	100%
Down South Silica Project	E70/6414	Granted	100%
Down South Silica Project	E70/6415	Granted	100%

The Company has a 100% beneficial interest in the tenement applications marked with \* above following an agreement with NXT1 Pty Ltd (refer to ASX Announcement 14 September 2023 for further details).

No interests were acquired or disposed of during the quarter.

## Appendix 2: Exploration Expenditure & Related Party Payments

In line with its obligations under ASX Listing Rules 5.3.1 and 5.3.5, Carbine Resources Limited notes the following in relation to the period ended 31 December 2023 as advised in the Appendix 5B:

- expenditure incurred on exploration and evaluation during the quarter related primarily to resource estimation and continuing study works at Muchea West Project; and
- payments to related parties of the Company pertain to fees payable to directors and the company secretary.

## Appendix 5B

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

Name of entity

**CARBINE RESOURCES LIMITED**

ABN

**81 122 976 818**

Quarter ended ("current quarter")

**31 DECEMBER 2023**

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	(38)	(338)
(b) development	-	-
(c) production	-	-
(d) staff costs	(47)	(289)
(e) administration and corporate costs	(96)	(508)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	17	60
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Government grants and tax incentives	-	-
1.8 Other	-	-
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(164)</b>	<b>(1,075)</b>
<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire or for:		
(a) entities	-	-
(b) tenements	-	-
(c) property, plant and equipment	-	-
(d) exploration & evaluation	-	-
(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 (12 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	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	-	-

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

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	1,432	2,343
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(164)	(1,075)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-



## 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 (12 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	1,268	1,268

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	268	432
5.2	Call deposits	1,000	1,000
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)	1,268	1,432

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	78
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
<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>		

*Amounts shown at item 6.1 comprise of payments to related parties (or their associates) relating to director fees and company secretarial fees paid during the quarter.*

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

7.	<b>Financing facilities</b> <i>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.</i>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
7.1	Loan facilities	-	-
7.2	Credit standby arrangements	-	-
7.3	Other (please specify)	-	-
7.4	<b>Total financing facilities</b>	-	-
7.5	<b>Unused financing facilities available at quarter end</b>		-
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		

8.	<b>Estimated cash available for future operating activities</b>	<b>\$A'000</b>
8.1	Net cash from / (used in) operating activities (item 1.9)	(164)
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)	(164)
8.4	Cash and cash equivalents at quarter end (item 4.6)	1,268
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	1,268
8.7	<b>Estimated quarters of funding available (item 8.6 divided by item 8.3)</b>	7.7
<i>Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.</i>		
8.8	If item 8.7 is less than 2 quarters, please provide answers to the following questions:	
8.8.1	Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?	
Answer: 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		
<i>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.</i>		

## Compliance statement

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

Date: **31 January 2024**

Authorised by: **By the Board**

## 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.