

# **March 2023 Quarterly Activities Report**

# Highlights:

- Updated Mineral Resource Estimate (MRE) announced for the Três Estados project (Figure 1).
   The MRE contains a total of 725,230 ounces of 5E<sup>1</sup> precious metals (platinum, palladium, iridium, rhodium, and gold).
- Excellent results from initial pilot plant testing of Três Estados drill core show a recovered grade of 3.00 g/t 5E precious metals (0.45 g/t Au, 1.76 g/t Pd, 0.55 g/t Pt, 0.03 g/t Ir and 0.21 g/t Rh).
- Pilot plant metal recoveries contain significantly more Au, Pd, and Rh in the final product than the previously reported assays for the same drill hole interval.
- Mr. Greg Van Staveren appointed as a Non-Executive Director.
- Investment of \$3M by Lind Global Fund II LP, an entity managed by The Lind Partners ("Lind").
- Permitting activities for Três Estados commenced.
- Convertible loan facility with Drake extended.

BBX Minerals Limited (ASX: BBX) ("BBX" or the "Company") is pleased to provide details of its activities during the quarter ended March 2023.

# **Updated Mineral Resource Estimate, Três Estados project**

On 25 January, the Company announced an updated Mineral Resource Estimate for the Três Estados project, including a maiden resource estimate for the Tabocal prospect located 2.5km east of the Adelar prospect, forming part of the company's 100% owned Três Estados project, Apui, Amazonas, Brazil.

#### January 2023 Inferred MRE –Três Estados project<sup>2</sup>

Zone	Class	Tonnes	Pt	Ir	Pd	Au	Rh	5E PGM	5E PGM
		Mt	g/t	g/t	g/t	g/t	g/t	g/t	koz
Oxide		5.63	0.973	0.094	0.015	0.016	0.015	1.113	203.7
Fresh	Inferred	14.02	0.937	0.157	0.010	0.040	0.017	1.161	521.5
Total		19.65	0.947	0.144	0.012	0.033	0.016	1.152	725.2

# Highlights:

- The inclusion of the Tabocal target increased the Mineral Resource by 73,520 ounces of 5E PGMs, comprising platinum and iridium.
- The Adelar estimate was revised applying the same economic parameters as those utilised for Tabocal to generate the constraining open pits at both prospects. As a result, the Adelar MRE increased by 10.5% from 590,300 ounces 5E PGMs to 651,710 5E PGMs.

<sup>&</sup>lt;sup>1</sup> 5E PGM refers to the sum of platinum (Pt), palladium (Pd), iridium (Ir), rhodium (Rh) and gold (Au) expressed in units of g/t.

<sup>&</sup>lt;sup>2</sup> The Adelar Inferred MRE announced on 25 October has been revised applying the same economic parameters as those utilised for Tabocal to generate the constraining open pits at both prospects.



- The Mineral Resource is located relatively close to the surface and would be mined in an open pit. It is limited to 100m below the surface based on the depth of the deepest mineralised intersection.
- The presence of iridium **contributes significantly** to the average weighted price per ounce of the Três Estados project.
- The next resource upgrade will target the addition of other prospects within the Três Estados project, plus infill drilling.

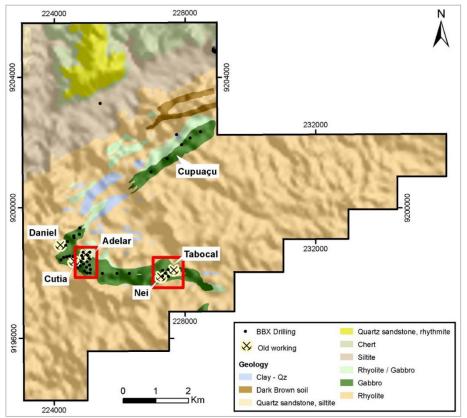


Figure 1: Três Estados Project

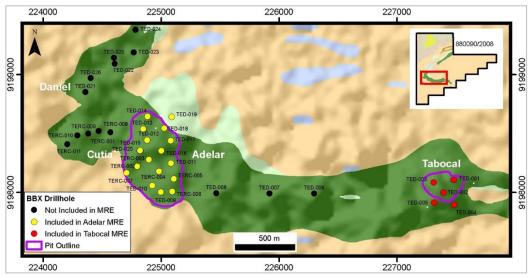


Figure 2: Adelar and Tabocal drill collar location



Refer to ASX release below for relevant announcement.

Date	Title
25 Jan 2023	Updated MRE at Tres Estados - 725,230 5E PGM Ounces

# Bioleaching pilot plant testing

On 27 February 2023, the Company announced results from initial pilot plant testing, utilising a 45 kg composite sample from drill hole TED-015, conducted by EcoBiome Metals, LLC (**EcoBiome**). TED-015 was incorporated in the Adelar prospect Mineral Resource Estimate, announced to the ASX on 25 October 2022 and updated on 25 January 2023. A 5 kg sample of TED-015 was also utilised for bioleaching test work conducted by EcoBiome in a controlled environment and announced on 19 December 2022.

Following the positive results obtained from the initial rounds of test work conducted and announced in November and December 2022, BBX's efforts moved to larger scale testing. A dedicated pilot plant was designed and commissioned by EcoBiome at its facility in The Woodlands, Texas, USA. The objective of this pilot plant test was to simulate a potential production circuit.

The 45 kg sample was taken from a homogenised 50.4 kg composite from TED-015, comprised of hematite altered mafic intrusive from 28 m to 64 m, typical of the altered gabbro within the Adelar MRE envelope (Figure 3 and Figure 4).

The 45 kg sample was reacted with the EcoBiome proprietary technology and EcoBiome Metals Cultured Platinum Group Metals (PGM) microbes. The material was then processed through a Knelson concentrator, followed by filtration and finally electrowinning. Samples were subsequently assayed for gold, platinum, palladium, iridium, and rhodium by ICP-MS by an independent analytical test laboratory in Arizona, USA.

The pilot plant was designed to operate continuously to simulate an industrial process, utilising five reactors in series.

The results are presented in Table 1.

Table 1: Pilot Plant Bioleaching Results

Test using composite DD core	g/t
Au assay Ni fusion	0.04
Au EcoBiome treated for 96 hours	0.45
Pd Ni fusion	0.04
Pd EcoBiome treated for 96 hours	1.76
Pt Ni fusion	0.71
Pt EcoBiome treated for 96 hours	0.55
Ir Ni fusion	0.54
Ir EcoBiome treated for 96 hours	0.03
Rh Ni fusion	0.01
Rh EcoBiome treated for 96 hours	0.21

This interval reported 1.34 g/t 5E PGM (0.04 g/t Au, 0.04 g/t Pd, 0.71 g/t Pt, 0.54 g/t Ir and 0.01 g/t Rh) using BBX's proprietary assay method (refer to announcement dated 26 May 2022).

The first pilot plant run yielded positive results, even though the test parameters were not optimised, and several operational issues were encountered. Expectations are that every successive run will be optimised to produce progressively better results.



Following a comprehensive review of this initial pilot plant run, BBX and EcoBiome jointly identified the following upgrades:

- Pumps have been upgraded to handle larger quantities of slurry.
- The next test will bypass the Knelson concentrator.
- Improvements to both size and varying micron ratings for the filters have been incorporated to enable higher recovery in the filtration step.
- Reactor vessels are being reconfigured so the material will transfer completely from vessel to vessel.

This was the first of many pilot plant tests, and BBX is working collaboratively with EcoBiome in incorporating the identified enhancements. The ultimate goal of these tests is to be able to design and build a much larger plant in Brazil.

These results are intended for pilot plant test work purposes only and may not be indicative of the overall MRE mineralisation. Additional work is required on composites from above and below this zone in TED-015 and subsequently on a representative composite sample from all holes incorporated in the Adelar MRE. Additional work is required to optimise the EcoBiome Metals microbial formulation, concentration, metal targeting and recovery process to achieve superior extraction and bio-recovery.

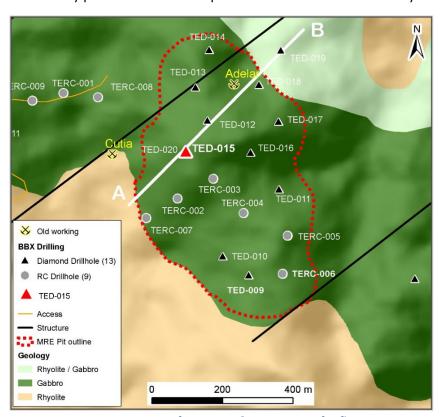


Figure 3: Location of TED-015 & MRE area of influence



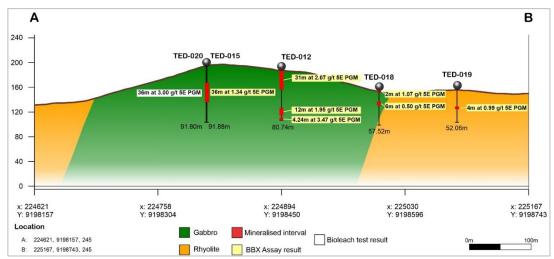


Figure 4: Cross section showing TED-015

Table 2: TED-015 Drillhole Location

Hole ID	East	North	RL (m)	Azimuth	DIP	Depth (m)	Tenement	Method
TED-015	224818.0	9198356.0	191.00	0	-90	91.88	880.080/2008	DD

Refer to ASX release below for relevant announcement.

Date	Title
27 Feb 2023	Excellent results from initial pilot plant testing

#### **Laboratory enhancements**

The Company's laboratory in Catalão continues to operate efficiently, without any lost time incidents throughout the quarter. The Company recently acquired an Inductively Coupled Plasma Optical Emission spectroscopy (ICP-OES) for the chemical analysis of acidic solutions, which is currently undergoing testing and calibration.

The laboratory team is actively engaged in negotiations to secure additional space within the same industrial complex for the installation of a bioleaching pilot plant. Planning for the development of the said plant is presently underway, with the design phase in its final stages.

# **Exploration**

Exploration activities on site remain at a minimum. Both the exploration office and two field camps remain on care and maintenance, reducing the Company's cash burn in line with recent quarters.

With no drilling occurring during the quarter and in line with the previous quarter, the following exploration related activities took place:

- Final exploration report for Três Estados project has been lodged, along with a three-year licence extension request.
- Ongoing discussions with relevant authorities to advance trial mining licence. The goal is to obtain
  a licence which allows the Company to extract and transport material as needed for metallurgical
  test work.
- Planning of drilling campaign at Três Estados.



# **Permitting**

The Company has initiated the environmental work necessary to obtain an operating licence for the Três Estados project. The process of selecting a company to conduct an Environmental Impact Study and prepare an Environmental Impact report is currently in progress, with proposals having been received from various parties.

# Financial position and funding

#### Financial position

The Company ended the quarter with a cash balance of \$47k. On 31 March, the Company announced that it had secured a \$3 million investment. Funds were received after 31 March 2023.

#### Drake convertible loan

On 11 January 2023, the Company announced that the loan facility entered into on 19 December 2019 with Drake Special Situations LLC (Drake) has been extended for a further period to 17 December 2024.

Further variations to the facility, which are subject to shareholder approval, are as follows:

- Advance of \$600,000 drawn in the December quarter 2022 with further advances of up to \$4,500,000.
- Conversion Price is the lower of:
  - a 10% discount to the Recent Raising Price;
  - ii. a 10% discount to the 5-day VWAP for the trading of Shares on ASX ending on the day prior to a Conversion Election; and
  - iii. 7.00 cents

Except for the abovementioned variations, the terms of the facility remain the same.

The Company will seek shareholder approval at a General Meeting or at the next Annual General Meeting of Shareholders. In the event that shareholder approval is not granted, the parties acknowledge and agree that the Conversion Price remains unchanged.

Refer to ASX release below for relevant announcement.

Date	Title
11 Jan 2023	Convertible Loan Facility Extended

# **Lind Share Subscription Agreement**

On 31 March the Company announced that it had entered into a Share Subscription Agreement with Lind. The investment of up to A\$9M by Lind is via an initial A\$3m prepayment of cash for placements of ordinary fully paid shares in the capital of the Company, along with an additional, optional A\$6M of cash funding subject to mutual agreement between the Company and Lind.

Securing funding, which addresses BBX's short and medium-term funding requirements enables BBX to execute near-term work on its mining and processing assets, supporting the opportunities to significantly improve Company value. The Company reviewed a range of funding alternatives and consider the terms proposed by Lind under the Agreement to be the most favourable outcome to enable it to execute its near-term strategy.



Refer to ASX release below for relevant announcement.

Date	Title
31 Mar 2023	BBX Secures Investment of \$3 Million

# Corporate

#### **Board Changes**

On 6 February 2023 the Company announced the appointment of Mr. Greg Van Staveren as a Non-Executive Director. For the last 20 years, Mr. Van Staveren has provided business advisory services to and sat on the Board of several publicly traded companies. He has significant experience in corporate governance and audit processes for Company Boards, particularly in the mining sector.

Previously, he was a partner at KPMG within the mining services group, where he provided accounting and advisory services. Mr. Van Staveren is a CPA in Canada and the USA and holds a Bachelor of Math (Honours) degree from the University of Waterloo (Canada).

# **Subsequent events**

#### **Issue of securities**

On 6 April 2023, the Company issued 15,000,000 fully paid ordinary shares and 7,142,857 listed options. These securities were issued pursuant to the terms of the Share Subscription Agreement announced to the market on 31 March 2023.

## **Shareholder Information**

The Company's capital structure as of 31 March 2023 was as follows:

Capital Structure	Number
Fully paid ordinary shares (BBX)	490,721,475
Listed options (Dec 2025, \$0.12)	41,000,000
Unlisted options (Jun 2023, \$0.15)	9,195,000
Unlisted performance rights (various terms)	10,700,000
Top 20 Shareholders (31 Dec 2022)	72.3%

# **Listing Rule 5.3 Information**

- 1. ASX Listing Rule 5.3.1: Exploration and Evaluation Expenditure during the Quarter was \$308k. This amount was expensed.
- 2. ASX Listing Rule 5.3.2: There were no mining production and development activities during the Quarter.
- 3. ASX Listing Rule 5.3.5: Payments to related parties of the Company and their associates during the Quarter totalled \$148k. These payments relate to directors' fees and salaries.



# Additional Information required by Listing Rule 5.3.3

Tenements held at the end of the quarter	Area (Ha)	Percentage ownership
DNPM Permit Number 880.107/08 Location Brazil (Ema)	9,839.91	100% Exploration Licence
DNPM Permit 880.184/16 Location Brazil (Ema)	9,034.00	100% Exploration Licence
DNPM Permit Number 880.090.08 Location Brazil (Três Estados)	8,172.25	100% Exploration Licence

The Activity Report for the March quarter 2023 has been authorized for release by the Board of Directors.

For more information:

#### André Douchane

Chief Executive Officer adouchane@bbxminerals.com

# **Competent Person Statement**

The information in this announcement relates to an update on the Inferred MRE for the Adelar target previously reported by the Company to ASX on 25 October 2022 based on exploration results for the Adelar target, Três Estados project, released by the Company to ASX on 26 May 2022, 1 June 2022, 9 June 2022, 5 July 2022, 7 July 2022, 14 July 2022, 21 July, 29 July 2022 and 5 August 2022 and for a maiden Inferred MRE for the Tabocal target, Três Estados based on exploration results released by the Company to ASX on 30 May 2022, 19 August 2022, 23 September 2022 and 14 October 2022 and the total Inferred MRE for the Três Estados Project. The Company confirms that is not aware of any new information or data that materially affects the information included in the above-mentioned releases.

The information in this announcement that relates to the Adelar target Mineral Resource update and to the Tabocal target Mineral Resource is based on and fairly represents information compiled by Mr. Antonio de Castro (acts as BBX's Senior Consulting Geologist through the consultancy firm, ADC Geologia Ltda) and Mr. Leonardo Soares, (employee of GE21 Consultoria Mineral Ltda). Mr. de Castro is a member of the Australasian Institute of Mining and Metallurgy, and Mr. Soares is a member of Australasian Institute of Geoscientists. Both have sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to activities undertaken to qualify as Competent Persons 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. Specially, Mr. de Castro is the Competent Person for the database (including all drilling information), the geological and mineralisation model plus completed the site visits with Mr. Soares. Mr. Soares is the Competent Person for the construction of the 3D geology/mineralisation model plus the estimation. Mr. de Castro and Mr. Soares consent to the inclusion in this report of the matters on their information in the form and context in which they appear.



#### **About BBX Minerals Ltd**

BBX Minerals Limited is a unique mineral exploration and mineral processing technology company listed on the Australian Securities Exchange.

Its major exploration focus is Brazil, mainly in the southern Amazon, a region BBX believes is vastly underexplored with high potential for the discovery of world class gold and precious metal deposits. BBX's key assets are the Três Estados and Ema Gold Projects. The company has 270.5km² of exploration tenements within the Colider Group, a prospective geological environment for gold, PGM and base metal deposits.

BBX is also developing an environment compatible and sustainable beneficiation process that extracts precious metals using a unique bio leach process. This leading-edge process, that extracts precious metals naturally, is being developed initially for the primary purpose of economically extracting Platinum Group metals from the Tres Estados mineral deposit. It is expected that such technology will be transferable and relevant to many other PGM projects. BBX believes that this processing technology is critical in the environmentally timely PGM space and supports a societal need to move toward a carbon neutral economy.

# +Appendix 5B

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

Name	of	entity

BBX MINERALS LIMITED		
ABN	Quarter ended ("current quarter")	
82 089 221 634	31 MARCH 2023	

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (9 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(308)	(1,138)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(148)	(414)
	(e) administration and corporate costs	(213)	(679)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	•	3
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Government grants and tax incentives	-	-
1.8	Other (Project Royalty)	-	(687)
1.9	Net cash from / (used in) operating activities	(669)	(2,915)

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	(21)	(45)
	(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 (9 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(21)	(45)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	2,132
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	(20)	(172)
3.5	Proceeds from borrowings	150	750
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	130	2,710

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	641	354
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(669)	(2,915)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(21)	(45)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	130	2,710

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 (9 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	(34)	(57)
4.6	Cash and cash equivalents at end of period	47	47

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	47	641
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)	47	641

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	(148)
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
	if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must includation for, such payments.	de a description of, and an

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	40	-
7.2	Credit standby arrangements	6,000	2,250
7.3	Other (please specify)	8,000	2,594
7.4	Total financing facilities	14,040	4,844
7.5	Unused financing facilities available at qu	uarter end	9,196

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.

#### Drake Facility

Converting loan Facility of up to \$6m with Drake Special Solutions LLC at 8%. The facility is repayable by cash or via issue of fully paid ordinary shares subject to shareholder approval. The facility was extended to 17 December 2024.

#### **LDA Facility**

Stand by Equity Put Option facility with LDA Capital LLC totalling \$8m over 3 years priced at 90% of the higher of:

- VWAP of the Company's shares during the pricing period, adjusted for an adjustment event and
- a minimum price set by the Company (MAP)

8.	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(669)
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)	(669)
8.4	Cash and cash equivalents at quarter end (item 4.6)	47
8.5	Unused finance facilities available at quarter end (item 7.5)	9,196
8.6	Total available funding (item 8.4 + item 8.5)	9,243
8.7	Estimated quarters of funding available (item 8.6 divided by	13.8
•	item 8.3)	13.0
	Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3 Otherwise, a figure for the estimated quarters of funding available must be included in ite	

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

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**

- 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: 28 April 2023

Authorised by: The Board of Directors

(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.
- 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.