

ASX Announcement 31 January 2024

# **December 2023 Quarterly Activities Report**

Great Northern Minerals Limited ("GNM" or the "Company") (ASX: GNM) is pleased to provide shareholders its Quarterly Report for the three-month period ending 31 December 2023.

#### **HIGHLIGHTS:**

- Heads of Agreement signed for the sale of 90% of Golden Ant Mining Pty Ltd, owner of the Camel Creek and Golden Cup projects.
  - Agreement also includes the 50% joint venture interest in the Kangaroo Hills Project (EPM 26637).
  - Total staged cash consideration of \$3.325M for 90% equity ownership.
- Rock chip sampling at Kuusisuo returns early assay results of up to 0.32% Li<sub>2</sub>O in a new lithium mineralised area, now extending over 1.3km at surface.
- Kuusisuo Li<sub>2</sub>O grade and mineralogy confirmed to display similarities to giant Cinovec lithiumtin-tungsten deposit held by European Metals in Czech Republic and currently under development.
- Rock chip sampling programs at Sukula confirm presence of extensive highly fractionated pegmatites with the potential to host spodumene mineralisation.
  - Assays up to 0.1% Li<sub>2</sub>O, 408 ppm Ta2O5 and 368 ppm Cs2O at Sukula NW prospect.
- High prospectivity for spodumene pegmatites at Sukula have been confirmed with nearby recent drilling returning intersections of spodumene pegmatite (up to 29.5m @ 1.45% Li₂O) at United Lithium's Kietyönmäki Project.

Managing Director Cameron McLean commented on the quarter: "Great Northern has completed a significant quarter after commencing the first phase of methodical exploration of the new prospective tenements in Europe that are lithium endowed. So far the results have provided confidence to plan for further investigation. In addition, the sale of 90% of Golden Ant Mining ensures that the Company is well funded for the years' activities ahead."

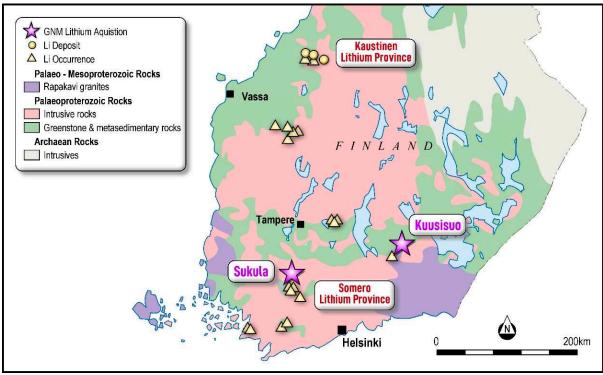


# 1. Finland Lithium Project

The Finland Lithium Project consists of two Reservation Permits over highly prospective terrain in southern Finland covering an area of 536.3km<sup>2</sup>.

The Sukula Project is 115km northeast of Helsinki and comprises 174.3km<sup>2</sup>. The project area comprises the northern portion of the well known Somero LCT pegmatite field with one of the highest densities of mapped rare metal pegmatites in Finland. The Kuusisuo Project is a large 362km<sup>2</sup> tenure located central to a very large Mesoproterozoic aged Rapakivi granite intrusive complex.

Figure 1 Simplified bedrock geology map of Finland showing the location of lithium occurrences and deposits in relation to the new GNM Kuusisou and Sukula projects.



## 1.1. Sukula Lithium Project

Since the acquisition of the Sukula Lithium Project in May 2023, GNM has completed three field reconnaissance rock sampling programs, with a total of 184 rock samples taken. The Sukula Project is located 115km northeast of Helsinki and comprises a 174.3km2 granted reservation. The project area is located in the northern portion of the well-known Somero Lithium-Caesium-Tantalum (LCT) pegmatite field which has one of the highest densities of mapped rare metal pegmatites in Finland.



The initial results from the rock samples collected are highly encouraging (See GNM ASX 8 November). These rocks have yielded assays with lithium concentrations as high as 0.1% Li<sub>2</sub>O, accompanied by oregrade levels of tantalum up to 408 ppm Ta<sub>2</sub>O, and highly fractionated levels of caesium up to 368 ppm Cs<sub>2</sub>O. Four priority prospect areas for highly fractionated LCT pegmatites have now been identified:

- 1. Sukula NW assays up to 0.1% Li<sub>2</sub>O ppm, 408 ppm Ta<sub>2</sub>O5, 221 ppm Cs<sub>2</sub>O & K/Rb of 13.6
- 2. Sukula Central assays up to 0.05% Li<sub>2</sub>O ppm, 74 ppm Ta<sub>2</sub>O5, & K/Rb of 48
- 3. Sukula West assays up to 0.07% Li<sub>2</sub>O ppm (historical), 40 ppm Ta<sub>2</sub>O5, 75.9 ppm Cs<sub>2</sub>O & K/Rb of 27
- 4. Sukula North assays up to 96 ppm Ta<sub>2</sub>O5, 367 ppm Cs<sub>2</sub>O & K/Rb of 18

Notably, some samples exhibit remarkably low K/Rb ratios, with as many as 41 samples registering values below 50, indicating the presence of highly fractionated pegmatite Extensive work has been completed in the past on lithium-caesium-tantalum (LCT) pegmatites demonstrating the greatest economic potential for LCT mineralisation are characterized by their very low K/Rb and Nb/Ta ratios plus highly elevated tantalum and caesium. The rocks at Sukula were classified in terms of these industry standard classification systems leading to their classification into categories of low, moderate, and highly fractionated pegmatites (refer to GNM ASX announcement on 8 November 2023).

The work carried to date clearly defines four priority areas characterized by highly fractionated pegmatites with low level lithium, tantalum and caesium mineralisation forming clusters up to 2km long and 1km wide. Notably, all samples exhibiting elevated levels of Ta, Cs, and Li were found within these highly fractionated cluster areas. These areas are deemed high priority zones for further work.

Reconnaissance field sampling has yielded success in identifying four new target areas for highly fractionated lithium caesium tantalum (LCT) bearing pegmatites, which merit further investigation. The standout among these is Sukula NW, characterized by high grade tantalum-bearing mineralisation and significant caesium content, prominently featuring exceptionally fractionated outcrops. There is a strong likelihood that Sukula NW is in close proximity to the spodumene zone either at depth or along the strike, as suggested by United Lithium's ongoing exploration activities.

## 1.2. Kuusisuo Lithium Project

Since the Kuusisuo lithium project acquisition, GNM has undertaken two field reconnaissance rock sampling programs. GNM geologists took 49 rock chip samples and 34 biogeochemistry spruce bark samples which were submitted for assay. The spruce bark samples were taken across the area as a first pass orientation to assess the effectiveness of this technique over the deposit style. The aim of the surface geochemistry work is to better understand the distribution of lithium mineralisation and anomalism within the project area based on GNM field observations plus historical mapping and drill data where previous intersections of up to 17.35m at 0.35% Li2O from 7.9m downhole in R4 within a wider zone of 61.5m at 0.22% Li2O (refer to GNM announcement on 26 April 2023).

Renowned lithium consultant Peter Pollard, with extensive worldwide expertise in greisen-style tintungsten-lithium systems, was engaged to review the Kuusisuo data in order to establish the nature of mineralisation and lithium mineralogy in comparison to other world-class lithium deposits of similar style. Ultimately, this work aims to lead to identification of new drill targets to discover wider intersections and higher grade through developing an appropriate deposit model for the project.



The results of the rock chip sampling are very encouraging and indicate the presence of extensive lithium-bearing veins with assays of **0.15% to 0.32% Li<sub>2</sub>O** and associated metals (Sn, W, Cu, Ag, F), which continue for at least 400m south of the previous drilling. Highlight rock chip samples returned up to **0.32% Li<sub>2</sub>O**, **0.23% SnO<sub>2</sub>**, **140 ppm W** and also returned the following material assays: **1,510 ppm Rb**, **1,500 ppm Cu**, **4.3% F and 13 g/t Ag** and in rock sample KUSGS-35 and KUSGS-34 (Refer to GNM ASX announcement on 2 November 2023).

As previously reported, the mineralised rock samples, rock outcrops and boulders were identified in the field with sheeted veins 1cm to 1m in thickness associated with fluorite, topaz and extensive quartz plus chalcopyrite, pyrite, and sphalerite sulphides (refer to GNM ASX announcement on 24 July 2023).

It is now known that these veins are enriched in lithium and that the handheld LIBS (Laser Induced Breakdown Spectroscopy) has confirmed that unknown dark brown, plate-like alteration minerals are hosting the lithium. In discussion with Peter Pollard (pers. comm., 2023) lithium-enriched minerals in deposits and prospects of this style are likely to be protolithionite and/or zinnwaldite.

# 2. Golden Ant Gold-Antimony Project

The Golden Ant Gold-Antimony Project is located approximately 200km northwest of Townsville in Northern Queensland. The project consists of the Amanda Bell Goldfield (Camel Creek and Golden Cup). The Big Rush gold project was sold to Great Eastern Gold earlier in the year.

Gold mineralisation occurs in quartz veins with variable contents of gold, pyrite, arsenopyrite and stibnite. The project has a current Mineral Resource of 2.7Mt @ 2.7 g/t Au (202koz) Au) plus significant antimony exposure – Camel Creek (9,000 tonnes contained Sb @ 0.4% Sb) plus multiple exploration targets.

Historic mining operations (1989 to 1994) consisting of open pit mining (oxide ore) with gold recovered by heap leaching. Mining activities ceased on depletion of oxide mineralisation – fresh (sulphide) mineralisation was exposed in all open pits.



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Table 1 Golden Ant Project Mineral Resource (0.5 g/t Gold cut off grade)

	Resource	Tonnes	Gold	Antimony	Contained Gold	Contained Antimony
	Classification	(kt)	(g/t)	(Sb %)	(koz)	(tonnes)
Camel Creek (1)	Indicated	1,440	2.7	0.4%	127	5,700
	Inferred	970	2.4	0.3%	75	3,300
	Sub Total	2,410	2.6	0.4%	202	9,000
Golden Cup <sup>(2)</sup>	Indicated	-	-	-	-	-
	Inferred	279	3.4	-	30	-
	Sub Total	279	3.4	-	30	-
Camel Creek		2,410	2.6	0.4%	202	9,000
Golden Cup		279	3.4	-	30	-
Golden Ant Project	Total	2,689	2.7	-	232	9,000

Tonnages and grades are rounded. Discrepancies in totals may exist due to rounding.

#### 3. Outlook

GNM is currently in the process of planning the next phase of exploration activities for the Finland lithium projects.

GNM will also be announcing the results of a vectoring and fertility study of the Douglas Creek project, undertaken by the University of Tasmania.

With the imminent sale of the Golden Ant projects, GNM is reviewing a number of acquisition opportunities targeting battery raw materials and critical mineral opportunities.

# 4. Corporate

# 4.1 Board Changes

During the quarter the Board of Great Northern Minerals announced the resignation of Mr Simon Coxhell as Non-Executive Director of GNM effective 31 December 2023. The Company thanks Mr Coxhell for his contributions to the Company.

# 4.2 Majority Sale of Golden Ant Mining

The Company signed a Heads of Agreement for the 90% sale of Golden Ant Mining Pty Ltd, owners of the Camel Creek and Golden Cup projects with Great Eastern Gold for a total consideration of \$3.325M over 4 earn-in stages. The agreement also includes the 50% joint venture interest in the Kangaroo Hills project (EPM 26637).

<sup>(1)</sup> Widenbar & Associates 3 March 2022

<sup>(2)</sup> Great Northern Minerals ASX release dated 9 December 2019



# 4.3 Cashflows for the Quarter

Attached to this report is the Appendix 5B containing Company's cash flow statement for the quarter. During the quarter the Company expended \$247k on exploration and evaluation expenditure (quarter ending 30 September 2023: \$296k) which was primarily associated with exploration activities in Finland.

The Company's corporate and other expenditure costs totalled \$208k for the quarter (quarter ending 30 September 2023: \$241k). Related payments made to the related parties and their associates during the quarter totalled \$101k, also noted under item 6.1 of Appendix 5B, which includes the payments for salary, director's fees, consulting fees and superannuation paid during the quarter.

As at 31 December 2023, the Company held cash reserves of \$276k.

#### Q2 FY2024 ASX Releases

This Quarterly Activities Report contains information extracted from ASX market announcements reported in accordance with the 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 and mineral resource estimates referred to in this Quarterly Activities Report can be found in the following announcements lodged on the ASX:

Date	Announcement
26 April 2023	GNM to Acquire Lithium Projects in Finland and Capital Raise
24 July 2023	Large Scale Fertile LCT-Pegmatites Identified at Sukula
2 November 2023	Lithium Trend defined at Kuusisuo Finland
8 November 2023	GNM Advances Sukula Lithium Project
22 November 2023	GNM Agrees Sale of Majority Interest in QLD Gold Projects
8 December 2023	GNM Non-Executive Director Resignation

These announcements are available for viewing on the Company's website <a href="https://www.greatnorthernminerals.com.au">www.greatnorthernminerals.com.au</a> under the Investor Centre tab. Great Northern Minerals confirms that it is not aware of any new information or data that materially affects the information included in any original ASX announcement.

\*\*\*ENDS\*\*\*



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This announcement has been authorised by the Board of Great Northern Minerals Limited.

## For more information please contact:

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### **About Great Northern Minerals Limited**

Great Northern Minerals Limited is an ASX-listed mineral explorer and developer with projects in Australia and Finland.

The Company's Golden Ant Project is located in Far North Queensland and includes the Amanda Bell Goldfield. Total gold production from the Amanda Bell Goldfield was approximately 95,000 oz Au (57,000 oz from Camel Creek and 14,000 oz from Camel Creek satellite deposits plus 18,000 oz from Golden Cup and 6,000 oz from Golden Cup satellite deposits). Two heap leach gold mines were operated (Camel Creek & Golden Cup). Mining activities commenced in 1989 and ceased in 1998 with the depletion of oxide gold mineralisation. Great Northern Minerals aims to develop a new gold camp in North Queensland based on the Golden Ant Project.

GNM also has also acquired two highly prospective lithium projects at Sukula and Kuusisuo in southern Finland covering an area of 536.3km². The Sukula project area comprises the northern portion of the well-known Somero LCT pegmatite field with one of the highest densities of mapped rare metal pegmatites in Finland. The Kuusisuo project is a large 362 km² tenure located 163km northeast of Helsinki which consists of the historical Kuusisuo lithium occurrence located central to a very large Mesoproterozoic aged Rapakivi granite intrusive complex.

# **Competent Person Statement**

This report's information related to Historical Exploration Results is based on information and data compiled or reviewed by Mr Leo Horn. Mr Horn is a consultant for the Company. Mr Horn is a Member of the Australasian Institute of Geologists (AIG).

Mr Horn has sufficient experience relevant to the style of mineralisation under consideration and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Accordingly, Mr Horn consents to the inclusion of the matters based on the information compiled by him, in the form and context it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information in the relevant ASX releases. The form and context of the announcement have not materially changed.



# Tenement information as required by Listing Rule 5.3.3.

GNM Tenement Interests (as at 31 December 2023)

PROJECT	TENEMENT NUMBER	LOCATION OF TENEMENT	STATUS	CHANGE IN INTEREST	CURRENT INTEREST
Golden Ant – Golden Cup	ML4536	QLD, Australia	Granted	-	100%
Golden Ant – Camel Creek	ML4522	QLD, Australia	Granted	-	100%
Golden Ant – Camel Creek	ML4523	QLD, Australia	Granted	-	100%
Golden Ant – Camel Creek	ML4524	QLD, Australia	Granted	-	100%
Golden Ant – Camel Creek	ML4525	QLD, Australia	Granted	-	100%
Golden Ant – Camel Creek	ML4534	QLD, Australia	Granted	-	100%
Golden Ant – Camel Creek	ML4540	QLD, Australia	Granted	-	100%
Golden Ant – Camel Creek	ML6952	QLD, Australia	Granted	-	100%
Black Mountain	EPM27522	QLD, Australia	Granted	-	100%
Black Mountain II	EPM28598	QLD, Australia	Application	-	Application only
Kangaroo Hills	EPM26637*	QLD, Australia	Granted	-	100%
Red Mountain	EPM28249	QLD, Australia	Granted	-	100%
Amanda Bell Extensions	EPM28301	QLD, Australia	Granted	-	100%
Mudgee	EL9519	NSW, Australia	Granted	-	100%
Kuusisuo	VA2023:0010	Finland	Application	-	Application only
Ojankylä	VA2023:0011	Finland	Application	-	Application only

# Notes:

<sup>\*</sup>Part of Joint Venture with NorthX Pty Ltd.

# Appendix 5B

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

Name	of ei	ntity
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Great Northern Minerals Limited and its Controlled Entities					
ABN	Quarter ended ("current quarter")				
22 000 002 111	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	(0.47)	(5.42)
	(a) exploration & evaluation (if expensed)	(247)	(543)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	-	-
	(e) administration and corporate costs	(208)	(449)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	4	13
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)	4	8
1.9	Net cash from / (used in) operating activities	(447)	(971)

2.	Ca	sh flows from investing activities		
2.1	Pa	yments to acquire:		
	(a)	entities	-	-
	(b)	tenements	(3)	(3)
	(c)	property, plant and equipment	-	(3)
	(d)	exploration & evaluation (if capitalised)	-	(6)
	(e)	investments	-	-
	(f)	other non-current assets	-	-

ASX Listing Rules Appendix 5B (01/12/19)

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	28	28
	(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	25	(16)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	-	2
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 – Repayment of lease liabilities	-	-
3.10	Net cash from / (used in) financing activities	-	2

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	698	1,229
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(447)	(971)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	25	16
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	2

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Consolidated statement of cash flows		Current quarter \$A'000	Year to date (6 months) \$A'000
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	276	276

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	266	655
5.2	Call deposits	10	43
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)	276	698

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	101
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-

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 in item 6.1 relate to payments made to Directors, including salary, non-executive fees and superannuation paid during the quarter.

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, 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)	(447)
8.2	Capitalised exploration & evaluation (Item 2.1(d))	-
8.3	Total relevant outgoings (Item 8.1 + Item 8.2)	(447)
8.4	Cash and cash equivalents at quarter end (Item 4.6)	276
8.5	Unused finance facilities available at quarter end (Item 7.5)	-
8.6	Total available funding (Item 8.4 + Item 8.5)	276
8.7	Estimated quarters of funding available (Item 8.6 divided by Item 8.3)	(0.62)

- 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: Yes, the Company is expected to have negative operating cash flows whilst reviewing further exploration commitments on all projects.

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: The Company is due the first instalment for the partial sale of Golden Ant Mining Pty Ltd payment and therefore has sufficient funds for the immediate future. The Company does have the ability to raise further funds if required.

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: Yes, for the reasons described in 8.8.2. With the sale of Golden Ant Mining Pty Ltd the Company is progressing the Douglas Creek project whilst defining the follow up programs for the Finland Lithium projects.

# **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: 31 January 2024

Authorised by: By the Board of Great Northern Minerals Limited (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.