

26 April 2023

# QUARTERLY ACTIVITIES REPORT QUARTER ENDING 31 MARCH 2023

Sarytogan Graphite Limited (ASX: SGA, "the Company" or "Sarytogan") is pleased to present the Quarterly Activity Report for the Quarter Ending 31 March 2023.

#### **Highlights**

- Upgraded Indicated and Inferred Mineral Resource of 229Mt @ 28.9% TGC.
- Commencement of bulk flotation test work.
- Selection of Pre-Feasibility Study (PFS) engineers.
- Pegging of New Kenesar Graphite Exploration Project.
- Signing of a Land Access Agreement for the Sarytogan Graphite Project.

Sarytogan Managing Director, Sean Gregory commented:

"The March 2023 quarter has marked the transition from the exploration phase to the development phase for the Sarytogan Graphite Deposit. An Indicated Mineral Resource has been declared, bulk test work is underway, and a PFS is now commencing. In parallel, the Company's in-country exploration expertise has been re-deployed to the newly pegged Kenesar Graphite Exploration Project."

#### **Mineral Resource Upgrade**

Following the successful 2022 drilling program where just over 3,000m of HQ diamond drilling was completed, the Sarytogan Mineral Resource Estimate was upgraded during the quarter as planned to 229Mt at 28.9% Total Graphitic Carbon (TGC; Table 1; refer ASX Announcement 27 March 2023). This represents a 10% increase in contained graphite from 60Mt in the 2019 estimate to 66Mt in the current 2023 estimate.

Most importantly, more than half of the Mineral Resource is now classified as Indicated. The Indicated classification is a recognition of the progress made on de-risking the modifying factors including the metallurgy and marketing. The Indicated Mineral Resource is the first step a major input into the PFS that Sarytogan is now commencing.

Table 1 - Sarytogan Graphite Deposit Mineral Resource (> 15% TGC).

Zone	Classification	In-Situ	Total Graphitic	Contained
	(JORC Code)	Tonnage (Mt)	Carbon (TGC %)	Graphite (Mt)
North	Indicated	87	29.1	25
	Inferred	81	29.6	24
	Total	168	29.3	49
Central	Indicated	39	28.1	11
	Inferred	21	26.9	6
	Total	60	27.7	17
Total	Indicated	126	28.8	36
	Inferred	103	29.1	30
	Total	229	28.9	66



#### Sarytogan Product Strategy

Graphite from the Sarytogan project presents as a premium micro-crystalline graphite which is well suited to a future-facing battery anode product strategy.

The first processing step is to concentrate the graphite using grinding and flotation to a graphite purity of around 84% TGC. This was first developed by Australian Laboratory Independent Metallurgical Operations Pty Ltd and has since been replicated by German graphite experts Pro-Graphite GmbH. The graphite concentrate was then purified by Pro-Graphite achieving the breakthrough graphite purity of 99.70% TGC using either alkaline roasting or chemical purification independently. Combining both purification methods in series achieved 99.87% TGC (refer ASX Announcement 6 March 2023).

Achieving these purity levels using industry standard methods has substantially increased the Company's confidence in its product strategy of breaking into the high-value battery anode market. A readily traded product known as Uncoated Spheroidized Graphite (USpG, Figure 1) is tracked by commodity price forecasters as trading around US\$3,000/t, a significant value-added premium on flake graphite products that trade between US\$600/t and US\$1,200/t (Benchmark Mineral Intelligence, September 2022). The spheroidization improves battery performance with low irreversible capacity loss and long service life. Due to the low tap density, high charging is achievable delivering higher energy density.

All the test work on graphite from the Sarytogan project to date has been undertaken on a bench scale beginning with sample masses of 0.5-1kg. At this scale, there is insufficient graphite concentrate for multiple rounds of purification or for the physical process of spheroidizing the graphite. One round of spheroidization optimisation requires approximately 5kg of graphite concentrate.

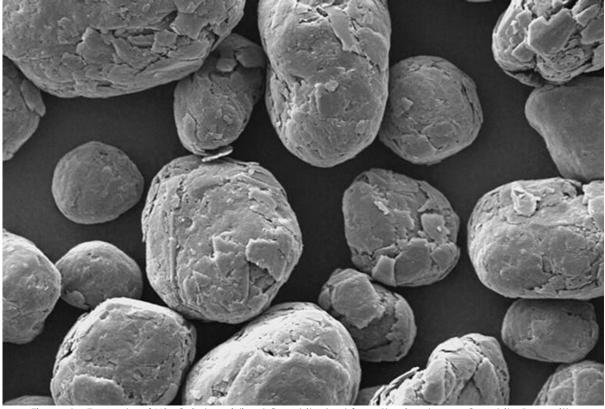


Figure 1 - Example of USpG Spheroidized Graphite (not from the Sarytogan Graphite Deposit).



#### **Bulk Test Work Program**

240kg of Sarytogan Graphite has been delivered to UVR-FIA laboratory in Germany. UVR-FIA has homogenised the graphite and split into 4 equal portions of 60kg. This has been identified as the most economical scale to manufacture the required graphite concentrate. Approximately 27kg of graphite concentrate is expected from each batch. Initially one batch will be run, which will be more than sufficient for further chemical purification and physical spheroidization. Three subsequent batches may be called to meet ongoing growth in sample demands.

The bulk flotation program will run through quarter 2, 2023 to then feed into the spheroidization program in quarter 3, 2023 ahead of battery performance tests anticipated in quarter 4 2023.

#### **Study Strategy**

Demand for natural graphite is forecast to rapidly increase by 650% by 2035 (Benchmark Mineral Intelligence infographic "How many new mines do we need?"). There are insufficient new mines in the development pipeline to meet this demand. Macquarie Bank share this view and forecast key battery precursor, Uncoated Spherical Graphite (USpG), prices to increase from US\$3,400/t in 2021 to more than US\$5,000/t by 2026 (Macquarie Research, March 2023). Sarytogan is well positioned to meet this demand with its sheer scale and battery anode product strategy. To transform this vision into reality, the Sarytogan Graphite Project needs to progress through the necessary studies to demonstrate technical and economic feasibility.

For Sarytogan to publish any economic evaluation of the Sarytogan Graphite Project on the ASX, two key inputs are required. The first milestone was recently achieved with a Mineral Resource upgrade that includes a majority of Indicated classification (see ASX release dated 27 March 2023). The second milestone (important to claim the high-value revenue stream of USpG) is the metallurgical test work and battery performance testing scheduled to run throughout 2023, as outlined in the ASX announcement dated 27 February 2023.

The PFS Engineers will initially provide input into phase one of the PFS that will include critical data collection work such as the ongoing technical studies in metallurgy, geotechnical engineering and hydrogeology. The first phase will also include an internal conceptual study as a toll-gate for the Board's due diligence. Phase two will then involve the bulk of the detailed engineering, informed by the ongoing technical studies.

# **PFS Process Engineer**

GR Engineering has been selected as the PFS Process Engineer. GR Engineering is a leading engineering consulting and contracting company that specialises in providing high quality engineering design and construction services to the mining and mineral processing industries. Their services cover all aspects of the project life cycle from the initial evaluation and study phase through to design, construction, commissioning, and operational support.

GR Engineering is headquartered in Perth, Western Australia and will run the project through their subsidiary in the United Kingdom. They have extensive international experience including work in Kazakhstan and nearby countries. They are presently engaged by other ASX graphite companies on graphite feasibility studies, including the important aspects of downstream processing.



#### **PFS Mining Engineer**

Snowden Optiro has been appointed as the PFS Mining Engineer. Snowden Optiro is a global mining consultancy specialising in Mineral Resource and Ore Reserve estimation and optimisation. Snowden has completed several graphite feasibility studies for ASX graphite companies and has a global presence including an office through its parent company Datamine in Almaty, Kazakhstan that will incorporate the work of local Kazakh engineers.

Snowden Optiro's scope includes mining engineering, geotechnical engineering, and hydrogeology. This will include designing geotech and hydrogeology drill holes for the 2023 field season. The hydrogeology will be completed by Pennington Scott Pty Ltd.

Sarytogan will directly contract a tailings engineer. Preliminary Studies identifying potential tailings storage facility locations have already been completed by Knight Piesold Pty Ltd.

#### **Marketing Consultant**

Lone Star, located in Dallas, Texas USA, provides industrial minerals and graphite / carbon products consulting services focusing on all aspects of graphite and carbon products. The firm's owner and principal consultant, Mr Christopher Whiteley (MBA), has successfully implemented global marketing and sales initiatives for many international graphite and carbon companies for fuel cells, li-lon batteries, lead acid batteries, alkaline batteries, refractories, hot metal forming, engineering applications, pencil, ceramics, polymers and plastics, drilling fluids, automotive products, fire retardants, lubricants, dispersions, SiC, CGI, and geothermal applications.

Any future project development will not be limited by size of the giant and exceptionally high-grade Sarytogan Graphite Deposit, but rather the growth the graphite market and the segments penetrated. To this end the advice of our graphite marketing advisor will be invaluable.

# **Kenesar Graphite Exploration Project**

Kenesar is located in Akmola Province, northern Kazakhstan (Figure 5). The region has well-developed infrastructure of highway roads, railways and high-voltage powerlines. The Kenesar area is connected by highway to Kazakhstan's capital Astana (270km) and is 40km away from regional centre Kokshetau city (population 170,000). The nearest railway station is 15km away by bitumen road. The distance by highway from the Sarytogan Graphite Project to the Kenesar Exploration Project is 660km.

Sarytogan Graphite Limited's 100% owned subsidiary company Ushtogan LLP has now been granted an exploration licence to explore 150 graticular blocks (309 km²) for minerals.

The geology at Kenesar consists of Pre-Cambrian strata-formations controlled by NW-striking regional structures of the Kokshetau Shield. The Pre-Cambrian formations are represented by a variety of regionally metamorphosed rocks: quartz-muscovite schists, gneisses, chlorite-biotite-and garnet-sillimanite schists. The strata-formations are intensively folded and overprinted by predominately NW-trending regional faults. The strata-bound graphite mineralization occurs in



quartzites and various schists as bands, lenses and disseminated crystals. The extension of the graphite-bearing formations within Kenesar tenement is 30km by width 3 to 8km.

According to historic mineralogical studies, the concentration of the graphite varies in thin sections from 5% to 25%. Crystals of graphite have also been observed in thin sections of rocks sampled from Kenesar by Sarytogan's geological team (Figure 2). Visual estimates of mineral abundance should, however, never be considered a proxy or substitute for laboratory analyses where metal concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding potential impurities or deleterious physical properties relevant to valuations of some mineral commodities such as graphite and many industrial minerals.

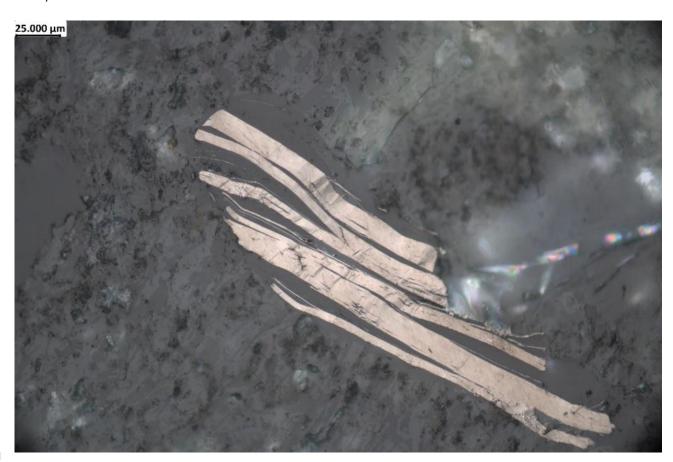


Figure 2 - Thin section of graphitic schist from Kenesar

The Pre-Cambrian graphitic schists at Kenesar are prospective for graphite mineralisation. In contrast to the Sarytogan Graphite Deposit, which was formed by contact metamorphism, the rocks at Kenesar have been subject to regional metamorphism. This geology is known to host flake graphite deposits elsewhere globally. Any economic graphite mineralisation discovered at Kenesar could be complementary to the premium micro-crystalline graphite at Sarytogan's flagship Sarytogan Graphite Deposit.



While graphitic schists are observed in outcrop in many areas (Figure 3), much of the prospective formation is obscured by shallow Quaternary sediments. To identify the higher-grade and shallower graphitic mineralisation, Sarytogan has planned an Electromagnetic (EM) survey over the project. Exploration drilling is planned for the highest priority targets identified by the EM survey during the 2023 field season. Regular exploration results are expected to flow throughout the year.



Figure 3 - Outcropping graphitic schist at Kenesar.

#### **Land Access Agreement**

Subsequent to the quarter end, on 17 April 2023, the Company announced a land access agreement with the local Farm and Land User at the Sarytogan Graphite Project (Figure 4).

The land access agreement provides for a USD \$10,000 pre-payment and a lump-sum compensation payment of USD \$240,000 upon the grant of the mining licence. The Company may unilaterally withdraw at any time. The Farm and Land User will do all things necessary to allow the grant of the mining licence, including surrendering the part of their land plot coincident with the proposed mining lease.





Figure 4 - Sarytogan Technical Director Dr Waldemar Mueller congratulates the local land user on the signing of the land access agreement.

# Corporate

As at quarter end on 31 March 2023, the Company had \$4.2 M in cash reserves.

Subsequent to quarter end, (5<sup>th</sup> April 2023), the company announced a placement for 15,151,515 ordinary fully paid shares at 33 cents each to raise A\$5,000,000 (before expenses of the offer) from sophisticated investors pursuant to s708 Corporations Act (cwth) 2001 ("Placement").

The Placement was jointly led by Inyati Capital and RM Corporate Finance who have been paid a 6% fee and have been issued a total of 1,515,151 unlisted options exercisable at 49.5c and expiring 14 April 2023. The Placement shares and the Broker options were issued pursuant to the Company's 15% placement capacity pursuant to ASX LR 7.1.

The cash balance immediately after the Placement stood at \$8.9M.

The funds will be used for the ongoing development programs at the Sarytogan Graphite Deposit, including the PFS, as well as exploration at Kenesar, and general working capital.

The Company provides the following information pursuant to ASX Listing Rule requirements:



- 1. ASX Listing Rule 5.3.1: Exploration and Evaluation Expenditure spend during the quarter was \$413,000 materially comprising assay and metallurgical expenses together with the new Kenesar tenement environmental insurance as set out in this report.
- 2. ASX Listing Rule 5.3.2: There were no substantive mining production and development activities during the quarter.
- 3. ASX Listing Rule 5.3.3:
  - a. The Sarytogan Graphite Deposit exploration licence 1139-R-TPI (1139-P-ΤΠИ) was issued to Ushtogan LLP on 14/08/2018 and confirmed by 5406-TPI (5406-ΤΠИ) contract on 26/10/2018. The contract was extended in June 2022 for a further 3 year to June 2025. The exploration concession covers 70 km². There was no change to the Company's 100% interest in the licence since the last quarter.
  - b. The Kenesar Graphite Exploration Project exploration licence 1968-EL was issued to Ushtogan LLP on 28/02/2023 for a period of six years to February 2029. The exploration concession covers 150 graticular blocks or 309km2.
- 4. ASX Listing Rule 5.3.4: the progress towards spending the funds relative to the proposed use of funds (ie. what is set out in Section 6(e) of the SGA supplementary prospectus and any material variance between anticipated expenditure and actual expenditure is set out in Table 2.
- 5. ASX Listing Rule 5.3.5: Payment to related parties of the Company and their associates during the quarter as set out in Section 6.1 of the attached Appendix 5B relate to director salaries and fees in the quarter.

Table 2 - Reconciliation of expenditure to date vs that projected in the Company's Supplementary Prospectus.

IPO allocation of funds	Projected Amount (A\$)	Actual expenditure to date (A\$)
Drilling	2,200,000	717,565
Assays	550,000	290,262
Metallurgical Testwork	500,000	154,083
Consulting Fees	550,000	47,353
Scoping, Pre-Feasibility Studies	450,000	99,976
Environmental Studies	150,000	21,210
Transportation	175,000	109,815
Equipment	150,000	84,502
Working Capital & Wages	1,354,627	1,048,961
Accommodation and Storage	250,000	33,552
Administration	450,000	385,614
New tenement (Kenesar)	0	126,245
Taxes	300,000	99,146
Working Capital Loan Repayment	839,187	836,995
Brokerage	519,572	536,754
Accrued administration costs (unpaid	317,008	290,548
director fees)		
Expenses of the Offer	75,000	90,000
Total	8,830,394	4,972,582



This announcement is authorised by the Board of Directors of the Company.

#### **Sean Gregory**

#### **Managing Director**

admin@sarytogangraphite.com

### **About Sarytogan**

The Sarytogan Graphite Deposit is in the Karaganda region of Central Kazakhstan. It is 190km by highway from the industrial city of Karaganda, the 4th largest city in Kazakhstan (Figure 5).



Figure 5 - Sarytogan Graphite Deposit and Kenesar Graphite Exploration Project locations.



The Sarytogan Graphite Deposit was first explored during the Soviet era in the 1980s with sampling by trenching and diamond drilling. Sarytogan's 100% owned subsidiary Ushtogan LLP resumed exploration in 2018. An Indicated and Inferred Mineral Resource has recently been estimated for the project by AMC Consultants totalling 229Mt @ 28.9% TGC (Table 1, refer ASX Announcement 27 March 2023). Sarytogan has upgraded the mineralisation to 99.87% purity by flotation, alkali roasting, and chemical purification (refer ASX Announcement 6 December 2022) and has commenced a PFS as part of its strategy to supply high-quality anode pre-cursor material for the rapidly growing electric vehicle battery market.

The Company is also exploring the recently pegged and highly prospective 309 km2 Kenesar Graphite Exploration Project in northern Kazakhstan (Figure 5).

#### **Compliance Statement**

The information in this report that relates to Exploration Results was first reported in the Prospectus dated 23 February 2022 and published on ASX on 14 July 2022 and in ASX Announcements dated 15 August 2022, 19 September 2022, 12 October 2022, 8 November, 6 December 2022, 16 January 2023, and 29 March 2023. These reports are available at www.asx.com.au. The information in this report that relates to Sarytogan Mineral Resources was first reported in ASX announcement dated 27 March 2023.

The Company confirms that it is not aware of any new information or data that materially affects the information included in relevant market announcements and, in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcements.

#### Appendix 5B Mining exploration entity and oil and gas exploration entity quarterly report

	quarterly repo	rt	
Name of e			
ABN	SARYTOGAN GRAPHITE I	_IMITED Quarter ended ("curi	rent quarter")
	920 945	31/03/20	
Consolid	dated statement of cash flows	Current quarter \$A'000	Year to date (9 months) \$A'000
1.0	Cash flows from operating activities		,
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation (if expensed)	-	-
	(b) development	-	-
	(c) production	0	-
	(d) staff costs	(241)	(996)
	(f) administration and corporate costs	(222)	(931)
1.3	Dividends received (see note 3)		-
1.4	Interest received	29	48
1.5	Interest and other costs of finance paid	0	(37)
1.6	Income taxes paid		
1.7	Government grants and tax incentives		
1.8	Other (GST refund)	0	84
1.9	Net cash from / (used in) operating activities	(434)	(1,832)
2.0	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) entities		
	(b) tenements		
	(c) property, plant and equipment	0	0
	<ul><li>(d) exploration &amp; evaluation (if capitalised)</li></ul>	(413)	(1,697)
	(e) investments	0	0
	(f) other non-current assets		
2.2	Proceeds from 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	(442)	(4.607)
2.0	activities	(413)	(1,697)
3.0	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	0	8,660
3.2	Proceeds from issue of convertible debt securities		
3.3	Proceeds from exercise of options	0	23
3.4	Transaction costs related to issues of equity securities, convertible debt securities	0	-634
3.5	Proceeds from borrowings	0	0

3.6	Repayment of borrowings	0	-800
3.7	Transaction costs related to loans and borrowings	0	0
3.8	Dividends paid		
3.9	Other (provide details if material)		
3.10	Net cash from / (used in) financing activities	0	7,249
	Net increase / (decrease) in cash and		
4.0	cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of	5,022	481

4.0	Net increase / (decrease) in cash and		
4.0	cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	5,022	481
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(434)	(1,832)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(413)	(1,697)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	0	7,249
4.5	Effect of movement in exchange rates on cash held	39	14
4.6	Cash and cash equivalents at end of period	4,215	4,215

1

5.0	Reconciliation of cash and cash equivalents	Current quarter	Previous quarter
	at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	\$A'000	\$A'000
5.1	Bank balances	1,215	2,022
5.2	Call deposits	3,000	3,000
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)	4,215	5,022

6.0	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	179
6.2	Aggregate amount of payments to related parties and their associates included in item 2	0

Note: If any amounts are shown in items 6.1 and 6.2, your quarterly activity report must include a description of and an explanation for, such payments

7.0	Financing facilities available	Total facility amount at quarter end	Amount drawn at quarter end
	Note: the term 'facility' includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the position	\$A'000	\$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 quar	ter end	
7.6	Include in the below a description of each facili maturity date and whether it is secured or unse entered into or are proposed to be entered into details of those facilities as well.	ecured. If any additional fa	cilities have been

8.0	Estimated cash available for future operating activities	\$A'000
8.1	Net cash from / (used in) operating activities (item 1.9)	(434)
8.2	Capitalised exploration & evaluation (Item 2.1(d))	(413)
8.3	Total relevant outgoings (Item 8.1 + Item 8.2)	(847)
8.4	Cash and cash equivalents at quarter end (Item 4.6)	4,215
8.5	Unused finance facilities available at quarter end (Item 7.5)	0
8.6	Total available funding (Item 8.4 + Item 8.5)	4,215
8.7	Estimated quarters of funding available (Item 8.6 divided by Item 8.3)	5.0

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

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:			

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

Answer:			

#### **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:	26/04/2023	
Authorised by:	By the board	
	(Name of body or officer authorising release - see note 4)	

#### Notes

5

- The quarterly report and the accompanying activity report provides a basis for informing the market how 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 report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, *AASB 107: Statement of Cash Flows* apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standard applies to this report.
- 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.
- 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 her: "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".

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 Coucils 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 fows 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.