

# QUARTERLY ACTIVITIES REPORT For the quarter ended 31 December 2024

# Highlights

- During the quarter, assay results were received for a targeted 15-hole (~1,950 m) reverse circulation (RC) drilling campaign completed at GSN's 100% owned Duketon Gold Project in Western Australia. Significant results included:
  - 4 m at 5.64 g/t Au from 63 m, including 2 m at 9.89 g/t Au in hole 24GBRC0005
  - 2 m at 7.01 g/t Au from 18 m, including 1 m at 12.45 g/t Au in hole 21GBRC0007
  - o 2 m at 3.44 g/t Au from 141 m in hole 24GBRC0001
- Drilling successfully extended the higher-grade mineralised zone at Golden Boulder by 85 m to 370 m total strike and **gold anomalism now extends over 2.3 km** with very sparse drilling. A further 1.4 km of prospective strike remains untested to the south.
- Three of the first four holes ever drilled at the Boundary Prospect, also within the Duketon Project, all intercepted grades greater than one gram per tonne
- At the Edinburgh Park Project in Queensland, joint venture partner G Ex Australia Pty Ltd, a whollyowned subsidiary of Gold Fields Ltd, identified a large (>2 km wide) induced polarisation (IP) anomaly
  - The anomaly is **interpreted to be a porphyry system**, which could be host to a large-scale intrusive related gold-copper and/or epithermal gold deposit
  - The anomaly sits below a gold, silver, copper and molybdenum geochemical anomaly and is partly overlain by a large area (4 km long by 1km wide) of mapped quartz-pyrite stockwork veining
- An Early Works Agreement was finalised with the Juru People, the recognised traditional owner over the northern tenements of Edinburgh Park. This agreement incorporates heritage protection and facilitates all exploration activities including drilling, which is planned to commence in the June Quarter 2025
- Soil geochemical surveys were completed at the Mon Ami Gold Project in Western Australia, highlighting a **new gold anomaly** to the northwest of the current Mineral Resource
- Soil geochemical surveys also continued at the Duketon Gold Project. Several new gold anomalies have been defined on Exploration License E38/3518, proximal to the Golden Boulder and Amy Clarke prospects
- **Post-quarter, drilling has recommenced at the Duketon Gold Project**, initially focussing on extensional and infill holes at the Golden Boulder prospect (refer ASX announcement 28 January 2025)
- In November 2024, **the Company completed a \$2.4 million share placement** with directors to contribute a further A\$152,000 (subject to shareholder approval anticipated in March 2025).

Suite 4, 213 Balcatta Road, Balcatta, WA 6021 Australia

www.gsml.com.au

ACN: 148 168 825 ABN: 37 148 168 825

T (08) 9240 4111 E admin@gsml.com.au



# Duketon Gold Project, Western Australia (100% GSN)

Great Southern Mining holds Exploration Licences totalling 389 km<sup>2</sup> in the Duketon Greenstone Belt, located to the north of the town of Laverton in Western Australia. The Company shares the belt with gold producer Regis Resources Limited (ASX:RRL), which has been successful in the identification of +10Moz of gold mineral resources (refer to RRL website). It is interpreted that the three primary mineralised corridors in the belt continue into GSN's tenure, incorporating ~8km of the Erlistoun Trend, ~7km of the Garden Well Trend and ~11km of the Rosemont to Ben Hur Trend. The Company is exploring primarily for gold with three advanced exploration areas including Southern Star, Amy Clarke and Golden Boulder (Figure 1).

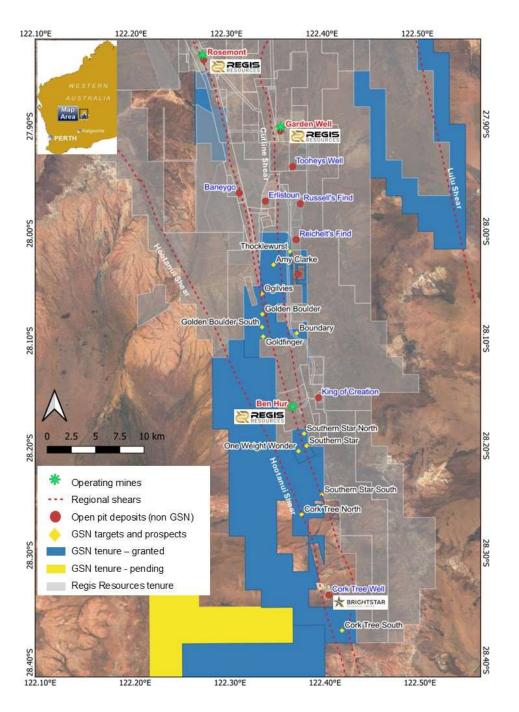


Figure 1 – Location map showing GSN tenure, neighbouring tenure, gold deposits, and key prospects and targets within the Duketon Gold Project.



#### Shallow, high-grade intercepts at Golden Boulder

Golden Boulder sits on a prominent north-south structural trend that is host to multiple gold deposits, including Rosemont (>2 Moz), Baneygo (~380 Koz) and Ben Hur (~390 Koz). The Golden Boulder area has over 50 historical workings over a three-kilometre stretch, with historical production (1900 to 1955) recorded at 1,915 tonnes at 28.6 g/t Au for 1,761 ounces of gold (see WAMEX report A85278).

Historical drilling at Golden Boulder is sparse and shallow, with very few holes penetrating beyond 40 m depth. Prior to GSN's first program in 2021, virtually no drilling was conducted in this area since 1995.

Mineralisation has been delineated along three parallel trends, denoted as the Main line, East line and Ogilvies.

GSN completed eight RC drill holes in September 2024 aimed at testing down dip and along strike extensions. Assay results were received and announced on 8 October 2024 with significant results including:

- 1 m at 1.08 g/t Au from 36 m and **4 m at 5.64 g/t Au from 59 m**, including **2 m at 9.89 g/t Au** in hole 24GBRC0005
- 2 m at 7.01 g/t Au from 18 m, including 1 m at 12.45 g/t Au in hole 21GBRC0007
- 2 m at 3.44 g/t Au from 141 m in hole 24GBRC001

As a result of this drilling, a zone of shallow, contiguous higher-grade mineralisation along the main line has been extended by 85 m to a total strike length of 370 m. Mineralisation along this trend is predictable, with intercepts occurring within 10 metres of anticipated lode depths. Drill hole 24GBRC0008 (1 m at 1.24 g/t Au from 70 m) has extended known gold anomalism by 700 m to a 2.3 km strike, however drilling remains very sparse. A further 1.4 km of prospective strike to the southern tenement boundary remains untested (Figure 2).

Another zone of shallow high-grade mineralisation is developing in the north of the Golden Boulder East line and was intersected in 24GBRC0007 (3 m at 4.80 g/t Au from 18 m). This shallow, oxide mineralisation could extend to the tenement boundaries north of hole 24GBRC0007 over an untested strike of approximately 2.5 km to the previously intercepted 8 m at 3.90 g/t Au in 23GBAC008. Again, drilling in the region remains sparse. The Golden Boulder East trend follows a sheared sequence of sedimentary and ultramafic strata, which is intruded by a sheared dolerite and a felsic porphyry, with mineralisation occurring near the intruded contacts.

Ogilvies also has shallow +1 g/t mineralisation stretching consistently over 500 m. This mineralisation occurs within gold-bearing quartz veins in sheared mafic and high-magnesium basalt. Standout previous drill intersections include 8 m at 2.1 g/t Au from 32 m in 210GRC0006 and 8 m at 1.1 g/t Au from 50 m in 210GRC0009.



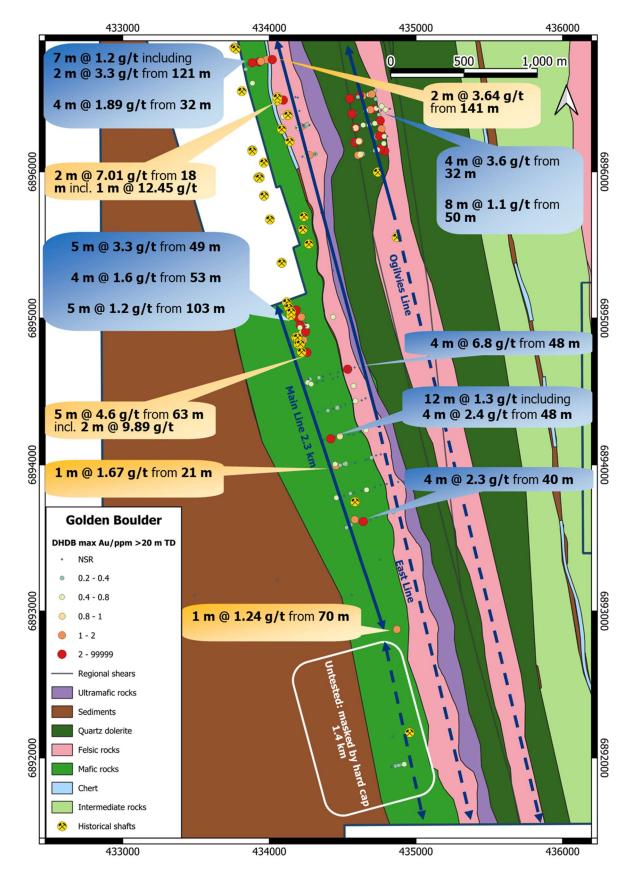


Figure 2 - Location of recent RC drilling at Golden Boulder showing recent and historical drill hole intercepts over interpreted geology.



#### Early success at Boundary Prospect

GSN commenced work on the Boundary prospect in 2024 after it was favoured as a high-ranking target by both incumbent and consultant geologists. Key attributes of the Boundary area include historical gold intercepts (including 2 m at 1.4 g/t Au from 14 m) from sparse shallow drilling, as well as observed and interpreted cross-cutting structures on the main Garden Well structural trend. Field mapping highlighted several ultramafic gossans and ironstones overlying sheared ultramafic olivine cumulate rocks with asymmetrical quartz boudins. Soil geochemical surveys completed in 2024 enhanced the prospectivity of the region with gold anomalism up to 10 times higher than other prospects where drilling has intercepted high-grade gold over geochemical targets.

Only four holes were drilled at the Boundary prospect with three intercepting greater than one gram per tonne gold mineralisation (Figure 3). Better intercepts included:

- 2 m at 1.33 g/t Au from 67 m in hole 24BORC0001
- 1 m @ 2.24 g/t Au from 94 m in hole 24BORC0003
- 2 m @ 1.12 g/t Au from 28 m and 10 m @ 0.32 g/t Au from 53 m in hole 24BORC0004.

Mineralisation occurs in broad zones of sheared sediments and ultramafics and is associated with quartz veining on these contacts. Three of the four RC holes drilled into the first two target zones encountered broad anomalous gold zones. Mineralisation in the remaining hole (24BORC0002), which was drilled beneath a soil anomaly of over 300 ppb Au, was conspicuous in its absence. It appears that this may have been offset by a cross-cutting structure, and GSN believes this location still holds the potential to yield gold mineralisation. Another western target, sitting adjacent to Regis Resources haul road, will be a key target in future drilling.

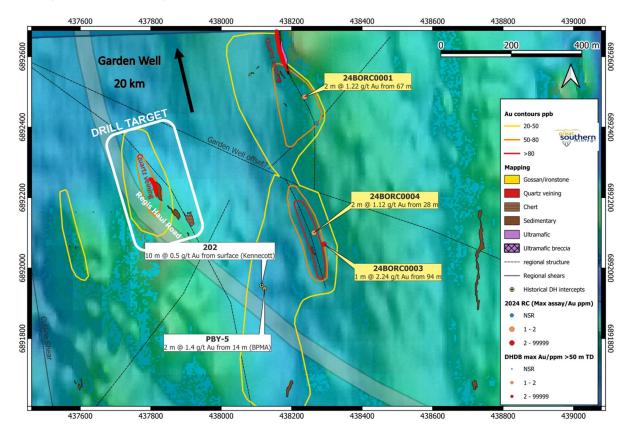


Figure 3 - Geological map of the Boundary Prospect over aeromagnetic imagery showing the location of 2024 RC drill holes and better intercepts



#### New Soil geochemical anomalies identified near Amy Clarke and Golden Boulder

Ongoing soil geochemical surveys have identified new gold anomalies proximal to the Amy Clarke and Golden Boulder prospects. Anomaly 1, depicted in Figure 4 below, returned anomalous samples up to ~360ppb Au along strike from the Ogilvies mineralised trend where GSN's 2021 RC drilling defined mineralisation over a 500 metres strike length with intercepts including<sup>1</sup>:

- 8m at 2.1 g/t Au from 32m, including 4m at 3.7 g/t Au in 21OGRC0006
- 8m at 1.1 g/t Au from 50m, including 1m at 2.0 g/t Au in 210GRC0009
- 8m at 1.0 g/t Au from 24m, including 4m at 1.7 g/t Au in 21OGRC0007
- 7m at 1.1 g/t Au from 101m, including 2m at 2.5 g/t Au in 21OGRC0012

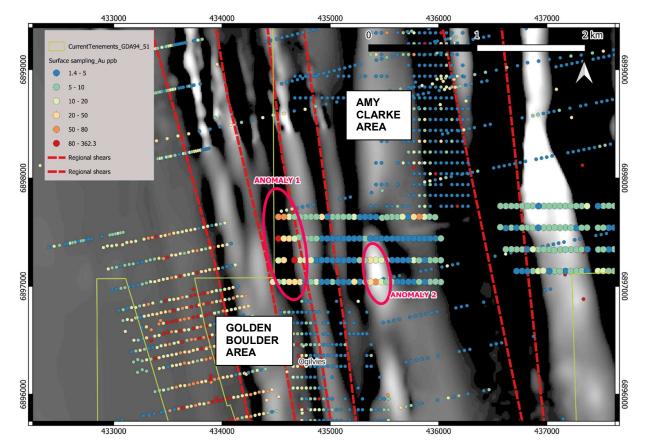


Figure 4 – New Soil geochemical anomalies identified on Exploration License E38/3518, proximal to the Golden Boulder and Amy Clarke prospects (circled as Anomaly 1 and Anomaly 2)

#### Drilling recommenced at the Duketon Gold Project

RC drilling recommenced at the Duketon Gold Project in January 2025. The current drilling campaign will comprise infill and extensional holes along the Main line and East line at the Golden Boulder prospect, before moving on to other highly prospective, newly defined targets within the greater project area<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> Refer to GSN ASX announcement dated 23 September 2021.

<sup>&</sup>lt;sup>2</sup> Refer to GSN ASX announcement date 28 January 2025.



### Edinburgh Park Project, Queensland (100% GSN, Gold Fields option to earn 75%)

The Edinburgh Park Project is a province-scale opportunity prospective for copper-gold porphyry systems, both high and low epithermal gold systems and intrusive related gold systems. The project is located approximately 100km southeast of Townsville in Queensland and encompasses an area of  $\sim$ 1,750 km2 surrounding the high sulphuration epithermal Mt Carlton gold-silver-copper mine (Figure 10).

In October 2023, the Company entered into a binding Option and Joint Venture Agreement with G Ex Australia Pty Ltd, a wholly-owned subsidiary of Gold Fields Ltd (Gold Fields), on the Edinburgh Park Project. Under the agreement, Gold Fields can sole fund up to A\$15 million exploration expenditure over a six-year period to earn a 75% interest in the project <sup>3</sup>.

In November 2024, GSN announced that a gradient array IP survey had delineated an extensive large-scale chargeability anomaly near the Leichhardt Creek target area within the Edinburgh Park Project (Figures 5 and 6)<sup>4</sup>. Preliminary processing of a pole-dipole gradient array section line across the gradient anomaly reveals an arcuate IP response, potentially indicating a sulphide halo around a preserved porphyry system (Figure 7). An alternative interpretation suggests the strong IP response to the east could directly correlate with an intrusion-related system, likened to the +3 Moz Mount Leyshon gold-silver mine, located ~120 km to the west.

Field mapping has confirmed the presence of sulphides (predominantly <1% pyrite) in sporadic outcropping geology over the several kilometres where sulphide minerals have not been completely oxidised. The anomaly is partly overlain by a previously mapped zone of outcropping sheeted and stockwork veining, filled with quartz, pyrite  $\pm$  specular hematite, covering an area approximately 4 km long by 1 km wide<sup>5</sup>.

High temperature potassic alteration has been mapped to the northeast of the IP anomaly with coincident elevated molybdenum in soils. Gold, silver and copper in soils become more elevated to the southwest of the IP anomaly (Figure 8). Surface base metal anomalism also shows a strong correlation to the newly identified IP target (Figure 9). Rock chip samples taken in the southwest contain stockwork veining grading up to 10.5 g/t gold<sup>6</sup>.

The local geology consists of late-Permian to early-Triassic biotite granite and microgranite intrusives. Abundant granophyric and miarolitic textures indicate that the magmas were saturated with fluids during crystallisation. Several breccia pipes containing elevated gold and silver outcrop on the southwestern flank of the IP anomaly (Figure 6).

<sup>&</sup>lt;sup>3</sup> Refer to GSN ASX announcement dated 9 October 2023

<sup>&</sup>lt;sup>4</sup> Refer to GSN ASX announcement dated 24 November 2024

<sup>&</sup>lt;sup>5</sup> Pyrite, being an indicator mineral will not be assayed. Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates provide no information regarding impurities or deleterious physical properties relevant to valuations.

<sup>&</sup>lt;sup>6</sup> Refer to ASX announcement 14 February 2019





Figure 5 - Location map showing major intrusive related gold systems (IRGS) and their gold endowment proximal to Edinburgh Park.

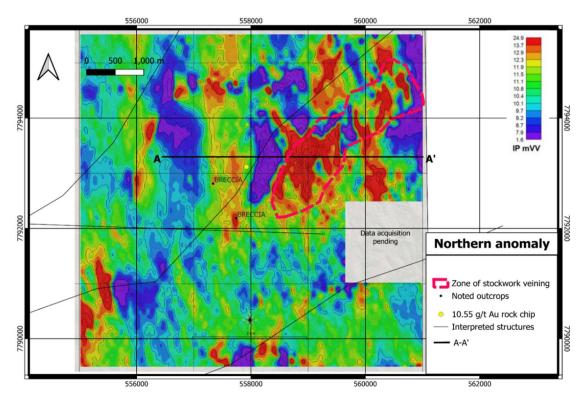


Figure 6 - Gradient array induced polarisation (IP) data anomaly showing a large chargeability anomaly in the northeast of the image (red colouration). An east-west pole-dipole section line A-A' is shown below in Figure 7.



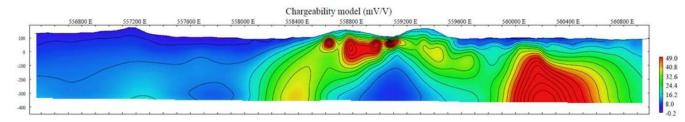


Figure 7 - Images of a preliminary pole-dipole (A-A') IP section response acquired across the extensive gradient array response shown in Figure 6. The A-A' section reveals an arcuate, multi-kilometre chargeability high (red-yellow), interpreted as the outer sulphide shell of a preserved porphyry system. Additionally, the several hundred-metre-wide chargeability high to the east may represent buried sulphide mineralisation, potentially analogous to an intrusion-related gold system like Mount Leyshon.

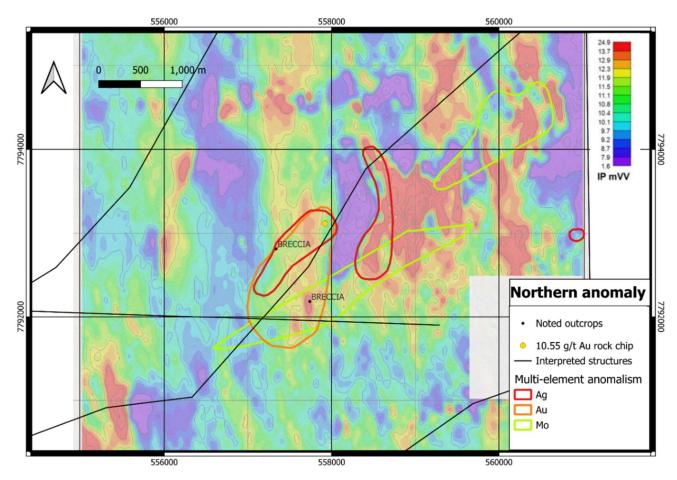


Figure 8 - Surface anomalism of precious metals over gradient array IP survey.



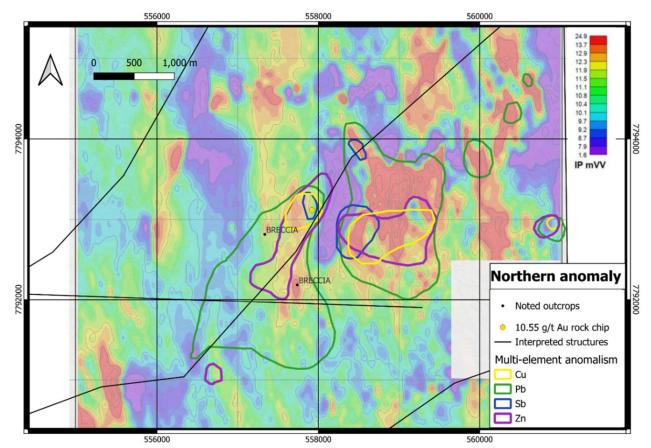


Figure 9 - Surface anomalism of base metals over gradient array IP survey.

#### Ongoing works at Edinburgh Park

Gradient Array IP surveys continued during the December Quarter, covering some exiting preestablished targets including the Mt Dillan – Molongle area to the southeast of Leichardt Creek (see Figure 10). Follow up 3D IP was also completed over the Leichardt Creek anomaly to vector in on areas of higher chargeability. Gold Fields geophysicists are currently processing IP surveys completed last year.

High resolution HeliMag magnetic surveys also commenced in the December Quarter over large areas in the northern tenements. These surveys are ongoing. Field mapping also continued with a team consisting of Gold Fields and consultant geologists, including highly regarded porphyry specialist geologist, Nick Tate.

#### Next steps for Edinburgh Park

Tendering for drilling contractors is underway with the aim to commence drilling in the first half of the June Quarter of 2025. Baseline environmental studies and heritage surveys will be conducted over drill areas ahead of drilling.

Geophysical surveys, mapping and geochemical surveys over multiple target areas are also ongoing.



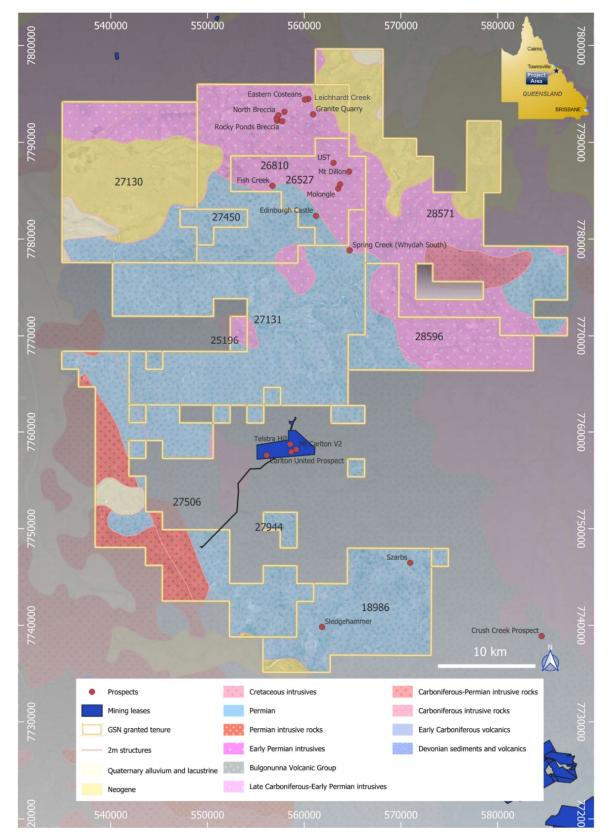


Figure 10 - Tenure map and location of the Edinburgh Park Project over interpreted Geological Survey of Queensland basement geology showing key target areas and the Mt Carlton mine (Evolution Mining)



## Mon Ami Gold Project, Western Australia (100% GSN)

The advanced Mon Ami Gold Project incorporates five licences centred by a permitted Mining Licence containing a JORC (2012) Mineral Resource of 1.56Mt at 1.11 g/t Au for 55.5 koz<sup>7</sup> contained gold. Aboriginal heritage and flora and fauna surveys have been completed over the Mining Licence. The project is strategically positioned in the centre of at least three gold processing facilities in the Laverton region.

Assay results were received for a soil geochemical survey in the northwest area of Exploration Licence E38/2829 at Mon Ami. Two anomalous trends, with up to 100ppb Au, have been interpreted in positions roughly parallel and northwest of the existing Mon Ami JORC Resource (1.56Mt at 1.11 g/t for 55.5koz contained gold) (Figure 11). These anomalies present exciting drill targets to expand the Mon Ami Resource.

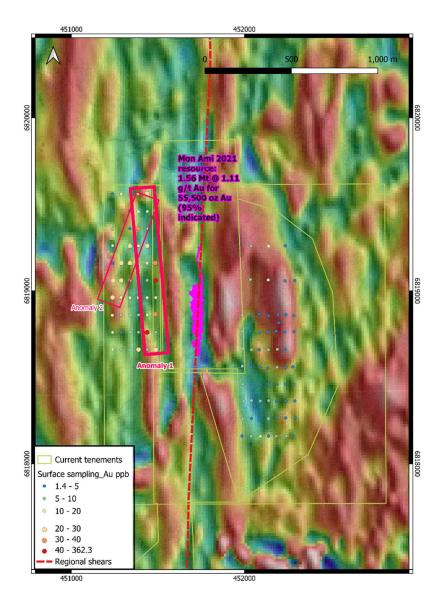


Figure 11 – Mon Ami Project showing the current Mineral Resource in pink and the location of recent soil geochemical surveys over magnetic data, highlighting gold anomalies in the northwest of GSN's tenure (red rectangle areas).

<sup>&</sup>lt;sup>7</sup> Refer to GSN announcement ASX announcement dated 21 June 2021



## East Laverton Nickel-Gold Project, Western Australia (100% GSN)

The East Laverton Nickel-Gold Project comprises four granted exploration licences covering an area of 405 km2, located approximately 35km from the town of Laverton (Figure 12). The Diorite Hill layered magmatic intrusion (Diorite Hill) is a prominent geological feature in the region covering an area of 110 km2 and comprising ~7,000m of cumulate mafic and ultramafic intrusive rocks. It is considered prospective for intrusive-style nickel-copper-PGE mineralisation.

In addition, the Company's tenure incorporates over 20 kilometres of interpreted ultramafic stratigraphy within the Granite Well, Rotorua and Curara trends. These trends are considered prospective for Kambalda style komatiitic nickel mineralisation. East Laverton is also prospective for orogenic gold, with intercepts such as 9m @ 2.4 g/t Au, including 5m @ 4.2 g/t from 48m reported from historic drilling (hole EIC001, WAMEX A48007).

During the quarter, field reconnaissance and mapping activities were conducted over areas considered prospective for gold mineralisation.

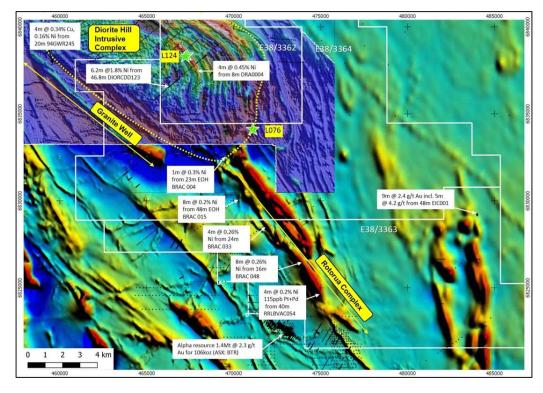


Figure 12 – East Laverton Nickel Project incorporating the Diorite Hill intrusive complex, the Granite Well Ultramafic Trend and the Rotorua Ultramafic Trend. Historic drill results from previous tenement holders highlight areas of nickel anomalism both within the Diorite Hill Complex and adjacent to the Rotorua Trend. Green stars represent electromagnetic targets drilled in early 2022.

#### Next Steps

A geophysical targeting study was initiated in the March Quarter 2025 over the Diorite Hill layered intrusive complex. This study will culminate data from a regional government seismic line (sourced from the Geological Survey of Western Australia) and all available regional magnetic surveys. The study aims to define conceptual targets by delineating prospective stratigraphic horizons within the intrusion and by mapping deep-seated regional faults. GSN is currently reviewing both the base metal (Cu-PGE-Ni) and gold prospectivity on this large tenement holding.



## Corporate

At 31 December 2024, Great Southern Mining Limited ("GSN" or "the Company") had A\$2.55 million in cash and held 1.7 million Revolver Resources Holdings Limited (ASX:RRR) shares valued at approximately A\$52,000.

In December 2024, the Company completed a Placement ("Placement") of 141,238,240 new shares at \$0.017 per share, raising \$2.4 million (before costs). Further to the Placement, certain Directors of the Company will seek participation in the placement on the same terms and conditions, subject to shareholder approval at a general meeting to be held on or around 5 March 2025. Subject to shareholder approval being obtained, a further \$0.15 million will be received.

Following the Placement, the Company has a total of 987,821,938 shares on issue.

As part of the Placement, the Company agreed to issue 23,529,441 Unlisted Options to the lead brokers of the Placement. The Unlisted Options were issued on 8 January 2025 and have an exercise price of \$0.04 each, with an expiration date of 8 January 2027.

Following the expiration during the quarter of 1,000,000 Unlisted Options, exercisable at \$0.10 each, the Company has a total of 81,279,411 Unlisted Options on issue.

A total of 15,000,000 Performance Rights expired on 14 October 2024. Following their expiration, no Performance Rights were on issue at the date of this report.

During the quarter, the Company also completed an Unmarketable Parcel Sale Facility (Facility) for holders with ordinary fully paid shares in the Company ("Share") valued at less than A\$500. The Facility closed on 19 December 2024 with 4,712,722 Unmarketable Parcel available for purchase. The results of the Facility were announced to the market on 23 December 2024 with sale proceeds to be remitted to participating shareholders as soon as practicable following the sale of the Shares.

It should be noted, item 6.1 of the accompanying Appendix 5B cash flow report includes payments of Director fees and superannuation. The amount also includes payments made to a Director related entity for the lease of the Company's corporate head office.

Included in item 6.2 of the accompanying Appendix 5B cash flow report are salary fees paid to a Director of the Company, which have been reallocated to exploration expenditure based on directly attributable exploration activities.

#### Additional disclosures pursuant to Listing Rule 5.3.3

Project Summary: refer to Table 2 below.

#### Mining tenements acquired/disposed of during the quarter:

A number of tenements were applied for during the quarter and are subject to grant at the date of this release. The tenements are highlighted in the Table 2. A number of tenements that were in application but had yet to be granted to the Company were relinquished during this quarter. These include E38/3967.

Beneficial percentage interests held in farm-in or farm-out agreements at the end of the quarter: Refer disclosure below.

**Beneficial percentage interests held in farm-in or farm-out agreements acquired or disposed during the quarter:** Nil – however note the disclosure above regarding the Earn-in agreement entered with a subsidiary of Gold Fields Ltd on the Edinburgh Park Project in Queensland.



#### **Table 2: GSN Tenement Details**

Project	Tenement	% Interest	Grant date	Expiry date	Tenement Area km²
WESTERN AUSTRALIA					
	M38/1256	100%	03/09/12	02/09/33	0.6
	E38/2829	100%	23/12/13	21/12/25	1
	E38/3982	100%		Pending gr	ant
Mon Ami	G38/38	100%	01/07/21	08/07/42	0.1
	L38/349	100%	19/04/21	18/04/42	0.2
	L38/328	100%	18/11/20	17/11/41	0.04
Couthows Stor	E38/3501	100%	17/02/21	16/02/26	210
Southern Star	M38/1299	100%	11/04/22	10/04/43	0.6
	E38/3476*	100%	10/09/20	09/09/25	1
	P38/4523*	100%	04/03/21	03/03/25	1
	P38/4524*	100%	23/02/21	22/02/25	1
	P38/4525*	100%	04/03/21	03/03/25	1
	E38/3723	100%	29/11/24	28/11/29	1
	P38/4542*	100%		Pending gr	ant
	E38/3825*	100%	04/10/23	03/10/28	24
Duketon Project	E38/3826*	100%	04/10/23	03/10/28	96
-	E38/3827*	100%	17/10/24	16/10/29	84
	E38/3840*	100%		Pending gr	ant
	E38/3940***	100%		Pending gr	ant
	E38/3958***	100%	Pending grant		
	E38/3939***	100%	Pending grant		
	E38/3964***	100%		Pending gr	ant
	E38/3518*	100%	17/02/21	16/02/26	54
	E38/3362	100%	28/04/21	28/04/26	60
	E38/3363	100%	03/07/19	02/07/24	135
East Laverton	E38/3364	100%	28/04/21	28/04/26	210
	E38/3662	100%	12/04/22	11/04/27	2
	E38/3801	100%		Pending gr	ant
	E38/3926	100%		Pending gr	
QUEENSLAND	Tenement	% Interest	Grant date	Expiry date	Tenement Area km²
Edinburgh Park Project					
Johnnycake	EPM 18986**	100%	13/12/12	11/12/27	150
Mc Area	EPM 25196**	100%	03/03/14	01/03/26	9
Johnnycake North	EPM 26527**	100%	23/08/17	21/08/27	89
Beaks Mountain	EPM 26810**	100%	17/07/18	15/07/23	185
Reedy Range	EPM 27130**	100%	24/09/19	22/09/24	227
Stretchable	EPM 27131**	100%	24/09/19	22/09/24	317
King Creek	EPM 27506**	100%	30/11/20	28/11/25	233
Bogie Range	EPM 27450**	100%	03/06/21	01/06/26	121
Strathalbyn South	EPM 27944**	100%	06/04/22	05/04/27	25
Mt Abbot	EPM 28571	100%	27/11/23	27/11/28	282
Abbott Creek	EPM 28596	100%	22/04/24	21/04/29	108
Tablelands Project					
Driscolls Hill	EPM 27460**	100%	30/09/20	28/09/25	320
			00/00/20	20,00,20	520

\* Granted tenement/tenement application in the name of East Laverton Exploration Pty Ltd.

\*\* Granted tenement/tenement application in the name of Conquest Exploration Pty Ltd.

\*\*\* Granted tenement/tenement application in the name of Duketon Gold Project Pty Ltd.

All of which are 100% wholly owned subsidiaries of Great Southern Mining Limited.



The release of this ASX announcement was authorised by the Managing Director on behalf of the Board of Directors of the Company.

For Further Information Contact: Matthew Keane Managing Director admin@gsml.com.au +61 8 9240 4111

#### About Great Southern Mining

Great Southern Mining Limited is a leading Australian listed exploration company with significant land holdings in the world-renowned districts of Laverton in Western Australia and Mt Carlton in North Queensland. All projects are located within 40km of operating mills and/or major mining operations.

#### **Competent Person's Statement**

The information in this report that relates to exploration results at the East Laverton Nickel Project, Duketon Gold Project, Southern Star and Edinburgh Park Project is based on, and fairly represents, information and supporting documentation reviewed by Ms Rachel Backus. Ms Backus is an employee and Senior Exploration Geologists of Resourceful Exploration Services Pty Ltd (ABN 29 661 905 193) and has been engaged by Great Southern Mining Limited. She has sufficient experience relevant to the assessment and of this style of mineralisation to qualify as a Competent Person as defined by the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves – The JORC Code (2012)". Ms Backus consents to the inclusion in this report of the matters based on the information in the form and context in which they appear.

### **Forward Looking Statements**

Forward- looking statements are only predictions and are not guaranteed. They are subject to known and unknown risks, uncertainties and assumptions, some of which are outside the control of the Company. Past performance is not necessarily a guide to future performance and no representation or warranty is made as to the likelihood of achievement or reasonableness of any forward-looking statements or other forecast. The occurrence of events in the future are subject to risks, uncertainties and other factors that may cause the Company's actual results, performance or achievements to differ from those referred to in this announcement. Given these uncertainties, recipients are cautioned not to place reliance on forward looking statements. Any forward-looking statements in this announcement speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law and the ASX Listing Rules, the Company, its directors, officers, employees and agents do not give any assurance or guarantee that the occurrence of the events referred to in this announcement will occur as contemplated.



# JORC Code 2012 Edition – Table 1

# Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	The recent soil program was undertaken at the Amy Clarke, Golden Boulder and Mon Ami prospects. Samples were taken from the B-horizon below the organic layer (~10cm to 30cm below surface) on 100m wide line spacing 50m apart (Mon Ami) and 200m wide line spacing 50m apart (Amy Clarke and Golden Boulder). The field sampling procedure followed the CSIRO UFF+ recommended procedure with soils sieved in the field to 1.6mm and minimum 200g sample then sent to the Labwest laboratory in Perth where the >200g sample is added to deionised water to which sodium hexametaphosphate is added as a dispersant. The sample is rolled for 24 hrs, followed by up to 4hrs settling. A solution containing the 2-micron particle size is drawn from the solution, 0.2g of the 2-micron fraction is analysed for gold and multi-elements using microwave assisted aqua regia digest. Analysis is completed by ICP-MS/OES. The newly acquired data was then merged with soil data from previous sampling campaigns.
Drilling techniques	No drilling was conducted as part of the soil sampling programme.
Drill sample recovery	Not applicable.
Logging	Soil sample site sites are described noting regolith regime and sample depth. Rock descriptions are also taken in hand-written logs.
Sub- sampling techniques and sample preparation	No sub sampling was completed as part of the programme.
Quality of assay data and laboratory tests	Recent soil samples were submitted to LabWest for processing and analysis with standards being inserted by the company in-house. LabWest is a commercial independent certified laboratory in Perth, Western Australia. The -2 µm fraction of the soil samples were analysed for Ag, Al, As, Au, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Fe, Ga, Ge, Hf, Hg, In, K, La, Li, <g, mn,="" mo,="" nb,="" ni,="" pb,="" pt,="" rb,="" re,="" s,="" sb,="" sc,="" se,="" sn,="" sr,="" ta,<br="">Te, Th, Ti, Tl, U, V, W, Y, Zn, and Zr via LabWest's Ultrafine + microwave digest with an ICP OES/MS finish. Quality control procedures for the soil analyses include the insertion of laboratory in-house controls, blanks and duplicates. Results from the company and laboratory QAQC samples show the level of accuracy and precision of the assaying is acceptable. The assaying techniques and quality control protocols used are considered appropriate for the data to be used for reporting exploration soil geochemistry results.</g,>
Verification of sampling and assaying	Samples were collected by experienced GSN employees and contractors. Data was collected in the field using a Toughbook running QField, before being uploaded to an MS SQL database via Geobase external database management. No adjustments have been made to any of the sampling data.
Location of data points	New soil samples were recorded in MGA94 – Zone 51 grid coordinates using a hand-held GPS +/- 3m. Topographic control in nominal.
Data spacing and distribution	New soil samples were generally taken on a 100m wide line spacing 50m apart (Mon Ami) and 200m wide line spacing 50m apart (Amy Clarke and Golden Boulder).
Orientation of data in relation to	No bias due to the orientation of samples has been identified at this stage. The orientation of the data is sufficient to establish the presence of surface geochemical anomalies as part of an early stage exploration programme.



Criteria	Commentary
geological structure	
Sample security	Soil samples are collected in individual paper geochemistry bags in the field which are sealed, placed into cardboard storage boxes are stored in a locked shed in the company's exploration laydown yard during the programme.
	Samples are delivered directly from site to the assay laboratories in Perth by a GSN employee.
Audits or reviews	No audits or reviews have been conducted.

# Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and	The Duketon tenement, E38/3518 and the Mon Ami tenement is E38/2829.
land tenure status	All tenements are in good standing and no known impediments to exploration exist.
	Great Southern Mining Ltd, or its wholly owned subsidiary, East Laverton Exploration Pty Ltd, are the tenement holders.
Exploration done by other parties	Relevant exploration done by other parties are outlined in the body of this report or previous GSN ASX announcements.
Geology The Duketon and Laverton Belts are greenstone belts comprised of mafic and ultramafi   felsic volcanic and volcaniclastic rocks, and associated clastic sedimentary rocks. The original with bounding granitic rocks are typically intensely deformed. Axial surfaces of folds type   trend north-northwest with limbs commonly sheared by major structures. The major reg   scale structures are a key element for large scale gold deposition with several of these   mineralised structures strike through the Duketon and Mon Ami tenements which are his   prospective areas for gold and are the focus of the company's exploration efforts.	
Drill hole Information No new drilling is reported.	
Data aggregation methods	No data aggregation has been undertaken. Metal equivalent values are not reported.
Relationship between mineralisation widths and intercept lengths	Not applicable for soil sampling data.
Diagrams	Relevant diagrams are included in the body of this report.
Balanced reporting	All matters of importance have been included.
Other substantive exploration data	All relevant information has been included.
Further work	Future exploration work will include drill target definition and then follow-up reverse circulation (RC) drilling to test for bedrock mineralisation in areas where geochemical anomalies have been identified. Figures showing target areas are included in the body of the report.

# **Appendix 5B**

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

Name of entity			
GREAT SOUTHERN MINING LIMITED			
ABN Quarter ended ("current quarter")			
37 148 168 825	31 December 2024		

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	-	-
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(30)	(67)
	(e) administration and corporate costs	(257)	(581)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	1	5
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)	-	-
1.9	Net cash from / (used in) operating activities	(286)	(643)

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	
	(b) tenements	-	
	(c) property, plant and equipment	-	
	(d) exploration & evaluation*	(303)	(67
	(e) investments	-	
	(f) other non-current assets	-	

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) investments	-	-
	(e) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Divestment of Cox's Find	-	-
2.6	Net cash from / (used in) investing activities	(303)	(679)

\* Included in exploration costs during the quarter is \$21,089 relating to staff costs directly attributable to exploration expenditure.

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	2,401	2,901
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	(137)	(137)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Director Loan	-	-
3.9	Interest on Director Loan	-	-
3.10	Net cash from / (used in) financing activities	2,264	2,764

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (6 months) \$A'000
4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	877	1,111
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(286)	(643)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(303)	(679)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	2,264	2,764
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	2,553	2,553

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	2,553	877
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)	2,553	877

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	(83)
6.2	Aggregate amount of payments to related parties and their associates included in item 2	(44)
	f any amounts are shown in items 6.1 or 6.2, your quarterly activity report must incluc ation for, such payments.	le a description of, and an

Item 6.1 includes payment of Director fees and superannuation and also includes payments made to a Director related entity for the lease of office premises.

Item 6.2 includes Director fees reallocated to exploration expenditure.

7.	<b>Financing facilities</b> 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	Director Loan Facility	-	-	
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)	(643)	
8.2	(Payments for exploration & evaluation classified as investing (67 activities) (item 2.1(d))		
8.3	Total relevant outgoings (item 8.1 + item 8.2) (1,32		
8.4	Cash and cash equivalents at quarter end (item 4.6) 2,5		
8.5	Unused finance facilities available at quarter end (item 7.5)		
8.6	Total available funding (item 8.4 + item 8.5)	2,553	
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	1.93	
	Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.		
8.8	If item 8.7 is less than 2 quarters, please provide answers to the following questions:		
	8.8.1 Does the entity expect that it will continue to have the current cash flows for the time being and, if not, why not?	level of net operating	
	Answer: No. During the quarter ended 31 December 2024, the Company raised \$2.2m (net of costs) with a further \$0.15m to be received in the next quarter, subject to a general meeting to be held in March 2025. Drilling programs are currently underway at the Duketon Gold Project, as announced 28 January 2025. The net operating cash flows are therefore not expected to be consistent with those of the previous quarter.		

	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:	In addition to the cash on hand at the date of this Appendix 5B, the Company maintains its placement capacity under Listing Rule 7.1/7.1A.	
	Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?	
Answer	er: Yes. Refer to commentary in 8.8.2 above.	
Note: whe	ere item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.	

#### **Compliance statement**

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

31 January 2025.

Date:

By the Board of Directors

Authorised by: (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.
- 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.