

# ASX ANNOUNCEMENT

8 October 2024

ASX: GSN



## DRILLING RETURNS INTERCEPTS UP TO 12.5 G/T GOLD AT GOLDEN BOULDER PROSPECT – UPDATED

Great Southern Mining Limited (**ASX: GSN**) ("**GSN**" or the "**Company**") wishes to advise a minor update to the drilling result announcement referred to above and released 8 October 2024.

For clarification, no technical information has changed. The only change has been the removal of a now obsolete image, being Figure 2.

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This announcement was authorised for release to the ASX by the Managing Director of the Company.

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## DRILLING RETURNS INTERCEPTS UP TO 12.5 G/T GOLD AT GOLDEN BOULDER PROSPECT - UPDATED

### Highlights

- Assays received for targeted 15-hole (~1,950 m) reverse circulation (RC) drilling campaign at GSN's 100% owned Duketon Gold Project in Western Australia
- Shallow high-grade gold was intercepted in step-out drilling at the Golden Boulder prospect, with significant results including:
  - 4 m at 5.64 g/t Au from 63 m, including 2 m at 9.89 g/t Au in hole 24GBRC0005
  - 3 m at 4.80 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 24GBRC0001
- The limited hole program has successfully extended the higher-grade mineralised zone at Golden Boulder by 85 m to 370 m total 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.
- Highly encouraging results from GSN's first drilling campaign at the Boundary prospect with three of the four holes drilled returning intercepts greater than 1.0 g/t gold
- Given the scale and high prospectivity of targets defined at the Duketon Gold Project, GSN now plans to embark upon a multi-phase drill-out program

Great Southern Mining Limited (ASX: GSN) ("GSN" or the "Company") has completed a targeted 15-hole (1,946 m) RC drilling program at its 100% owned Duketon Gold Project ("Duketon" or the "Project"), located in the Eastern Goldfields of Western Australia. Drilling primarily focused on the Golden Boulder prospect, testing for depth and strike extensions, before moving on to the newly identified Boundary and Southern Star North targets (Figure 1).

### GSN's Managing Director, Matthew Keane, commented:

*"Golden Boulder continues to return shallow high-grade intercepts. Following several low-metreage targeted drilling programs, we believe this prospect now warrants a significant drill-out to test the 3.7 km prospective trend. Our geological team have proven that mineralised trends are relatively predictable, with step-out hole 24GBRC0005 intercepting mineralisation within 10 m of the modelled target some 85 m south of the previous intercept.*

*We are also highly encouraged by the early success at the Boundary prospect. We believe this area holds significant potential for gold discoveries given its location along a major structural zone, which lays host to Regis Resources' +5 Moz Garden Well deposit located 20 km to the north".*

GSN welcomes comments and queries relating to this announcement on our Investor Hub site, where Company management can answer your questions directly ([GSN Investor Hub link](#)).

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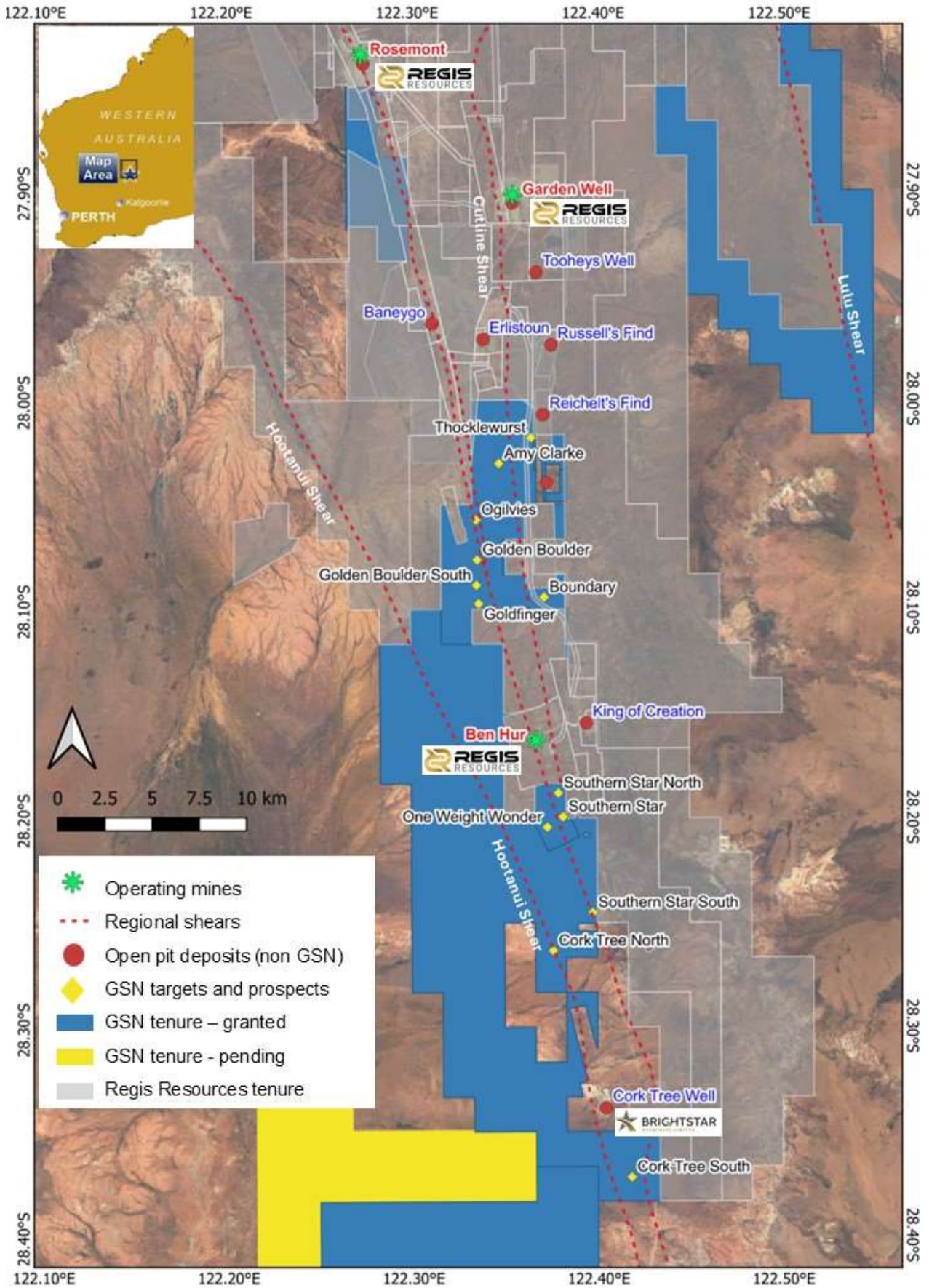


Figure 1 - Location map showing GSN tenure, neighbouring tenure and deposits, and key prospects and targets within the Duketon Gold Project.

## 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. Significant intercepts included:

- 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
- **3 m at 4.80 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 24GBRC0001
- 1 m at 1.67 g/t Au from 21 m and 1 m @ 0.72 g/t Au from 70 m in hole 21GBRC0006
- 1 m at 1.24 g/t from 70 m in hole 21GBRC0008

### **Hole 24GBRC0005**

High grade mineralisation occurs within foliated fresh rock with increased quartz veining and pyrite. The drill hole targeted the Golden Boulder main line, 85 m along strike from previous intercepts; there is now 370 m of high-grade strike along this trend.

### **Hole 24GBRC0007**

24GBRC0007 was drilled on the Golden Boulder East line and targeted shallow oxide mineralisation. Despite its proximity to historical workings, there is very little drilling in this area. Mineralisation is associated with limonite-altered mafic schist with associated vuggy quartz veining.

### **Hole 24GBRC0001**

The mineralisation encountered in 24GBRC0001 gives proof of continuity into fresh, sheared dolerite, with 2 m at 3.44 g/t Au from 141 m from a composite sample. Analysis of the 1 m splits is pending for this intercept, but it has been noted in other intercepts from this round of drilling that the 1 m splits, taken directly from the rig's cyclone, have returned higher grades than their speared and composited counterparts, with good repeatability.

### **Hole 24GBRC0008**

Owing to excess water down hole, the hole was not drilled to its target depth. However, mineralisation was still encountered in the saprolitic sheared dolerite, and an increase in quartz veining was noted in the drill logs within this horizon. 24GBRC0008 represented a large step out of over 750 m within the oxide zone and 1.2 km within the fresh rock.

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 and Figure 3).

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 boundary in the north and south of 24GBRC0007 over an untested strike of approximately 2.5 km to the previously intercepted 8 m @ 3.90 g/t Au in 23GBAC008. Again, drilling in the region remains very 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.

Ogilvie 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 @ 2.1 g/t Au from 32 m in 21OGRC0006 and 8 m @ 1.1 g/t Au from 50 m in 21OGRC0009.

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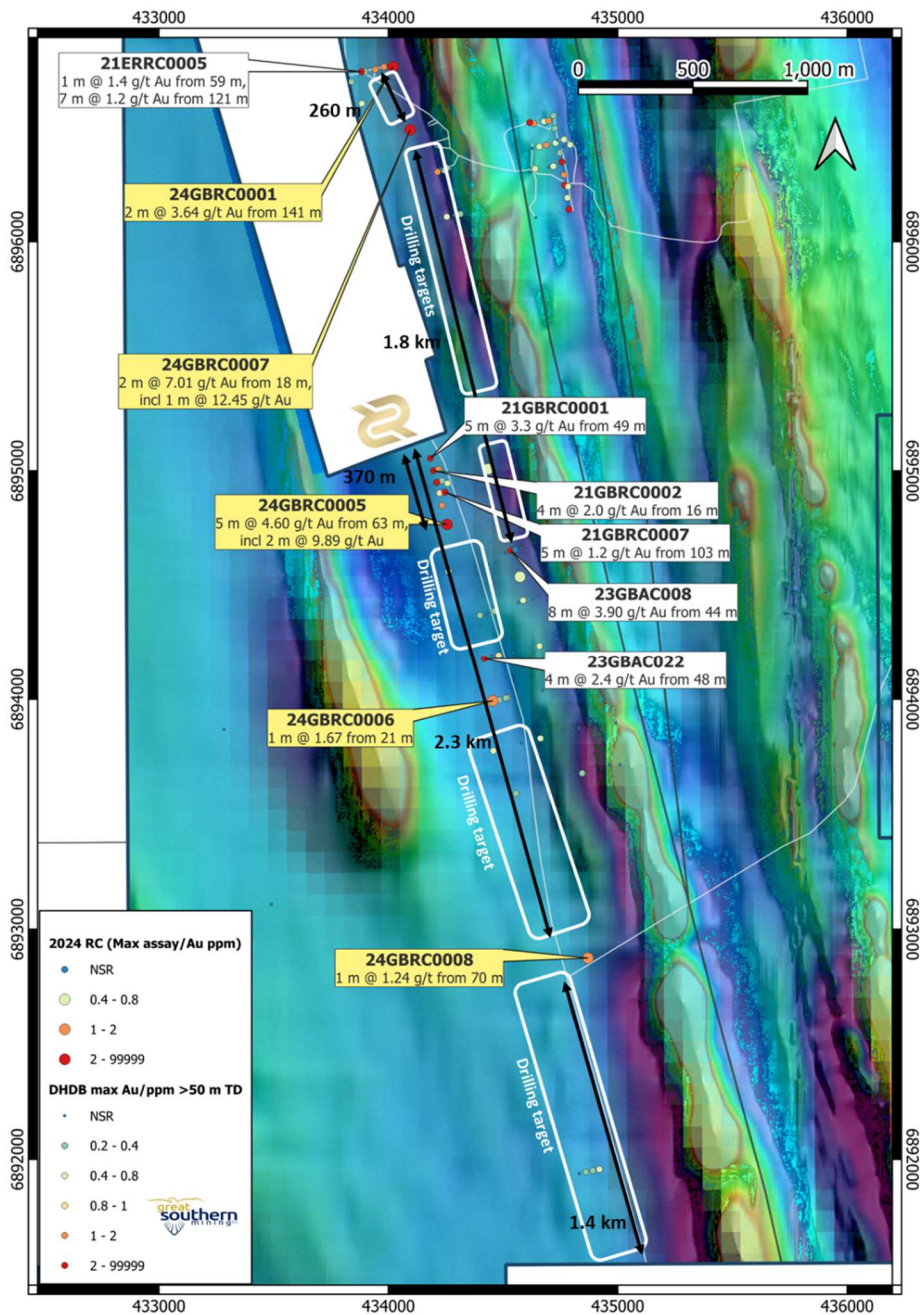


Figure 2 – Location of recent RC drilling at Golden Boulder showing recent and historical drill hole intercepts over aeromagnetic imagery

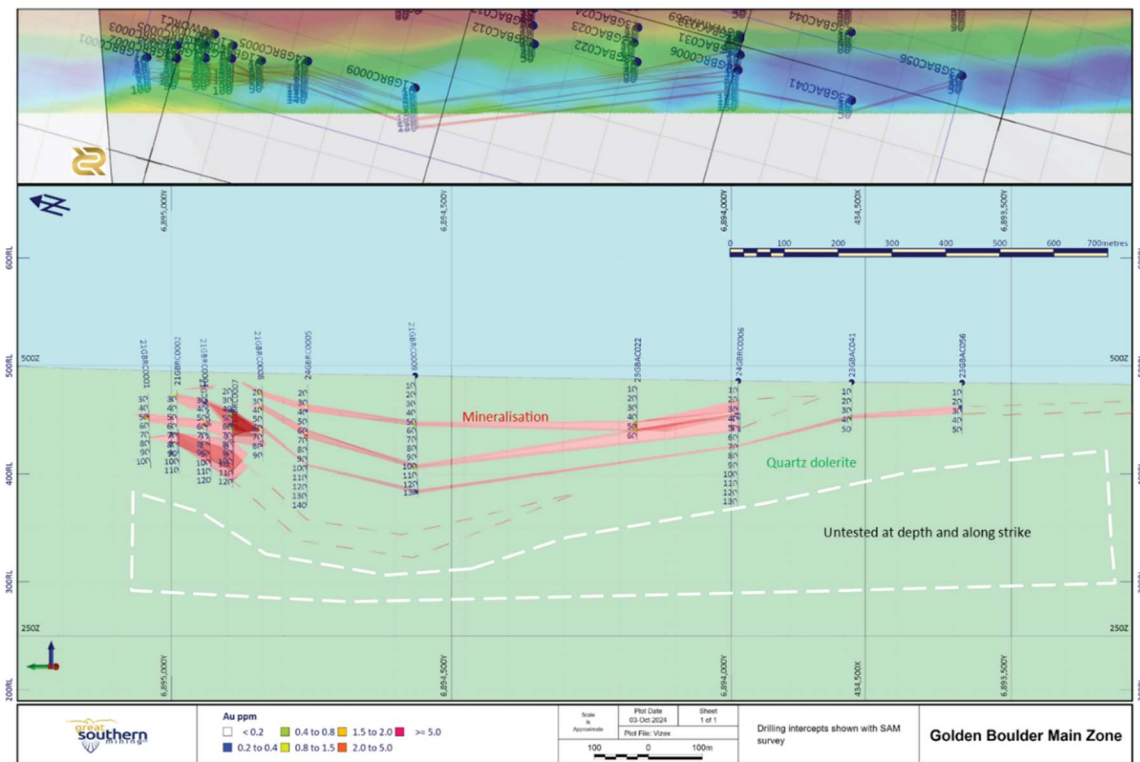


Figure 3 – Long section of RC drilling at Golden Boulder showing recent and historical drill hole intercepts over aeromagnetic imagery.

### 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 @ 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 plus one gram per tonne gold mineralisation (Figure 4). 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 zones (Figure 4). Mineralisation in the remaining hole (24BORC0002), which was drilled beneath a soil anomaly over 300 ppb Au, was conspicuous in its absence (Figure 4). 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, is yet to be drill tested.

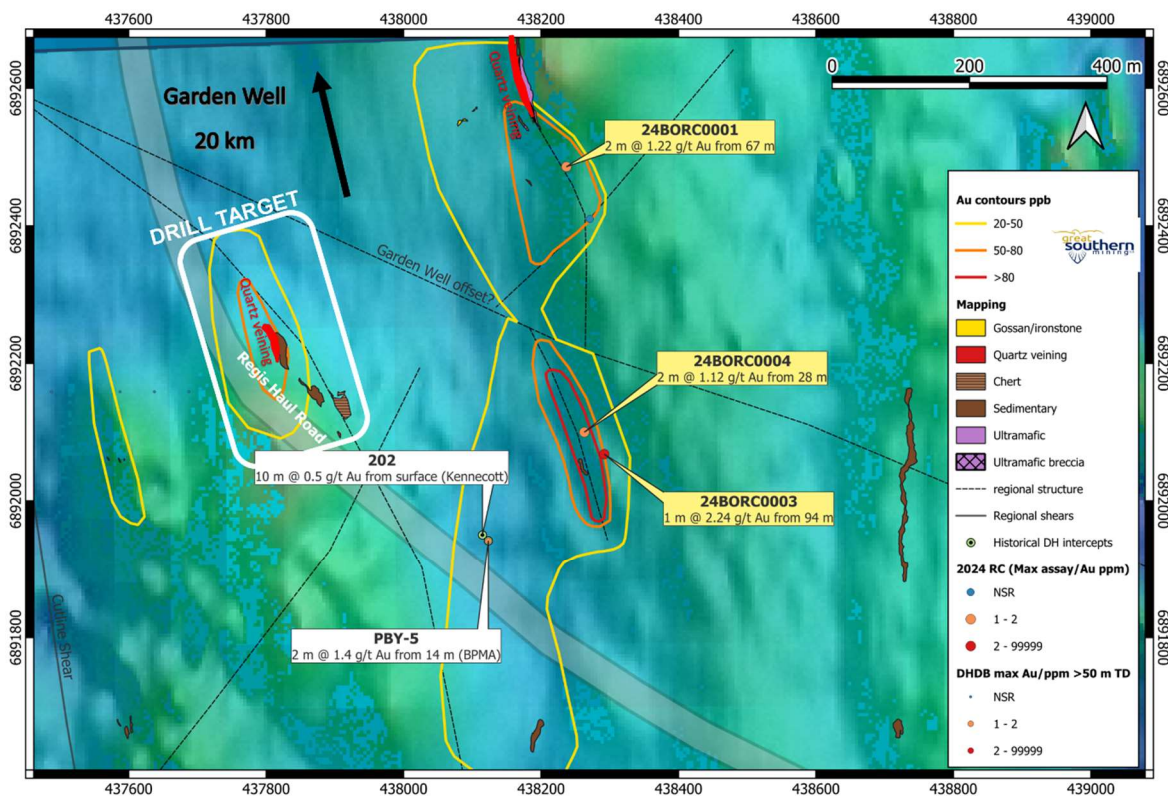


Figure 4 - Geological map of the Boundary Prospect over aeromagnetic imagery showing the location of 2024 RC drill holes and better intercepts

### Southern Star North

Three holes were drilled at the Southern Star North target, where 2023 RC drilling intercepted 13 m at 2.16 g/t Au from 57 m in hole 23SSRC010<sup>1</sup>. No significant gold mineralisation was intercepted in the three holes; however the target area remains largely untested with just five holes in total drilled to date. Hole 24SSRC0002, which was a 20 m step forward of hole 23SSRC010, contained substantially different geology, suggesting a fault offset between the two holes.

There is limited historical drilling along the 1.2 km prospective strike from Southern Star North to the Southern Star main zone mineralisation, with just three holes drilled beyond a depth of 100 m. This includes 2023 RC hole 23SSRC008<sup>2</sup> which intercepted 3 m at 4.33 g/t Au from 127 m, including 1 m at 9.94 g/t Au. This extensive target zone will be followed up future drill programs.

<sup>1</sup> Refer to GSN ASX announcement dated 31 January 2024

<sup>2</sup> Refer to GSN ASX announcement dated 31 January 2024

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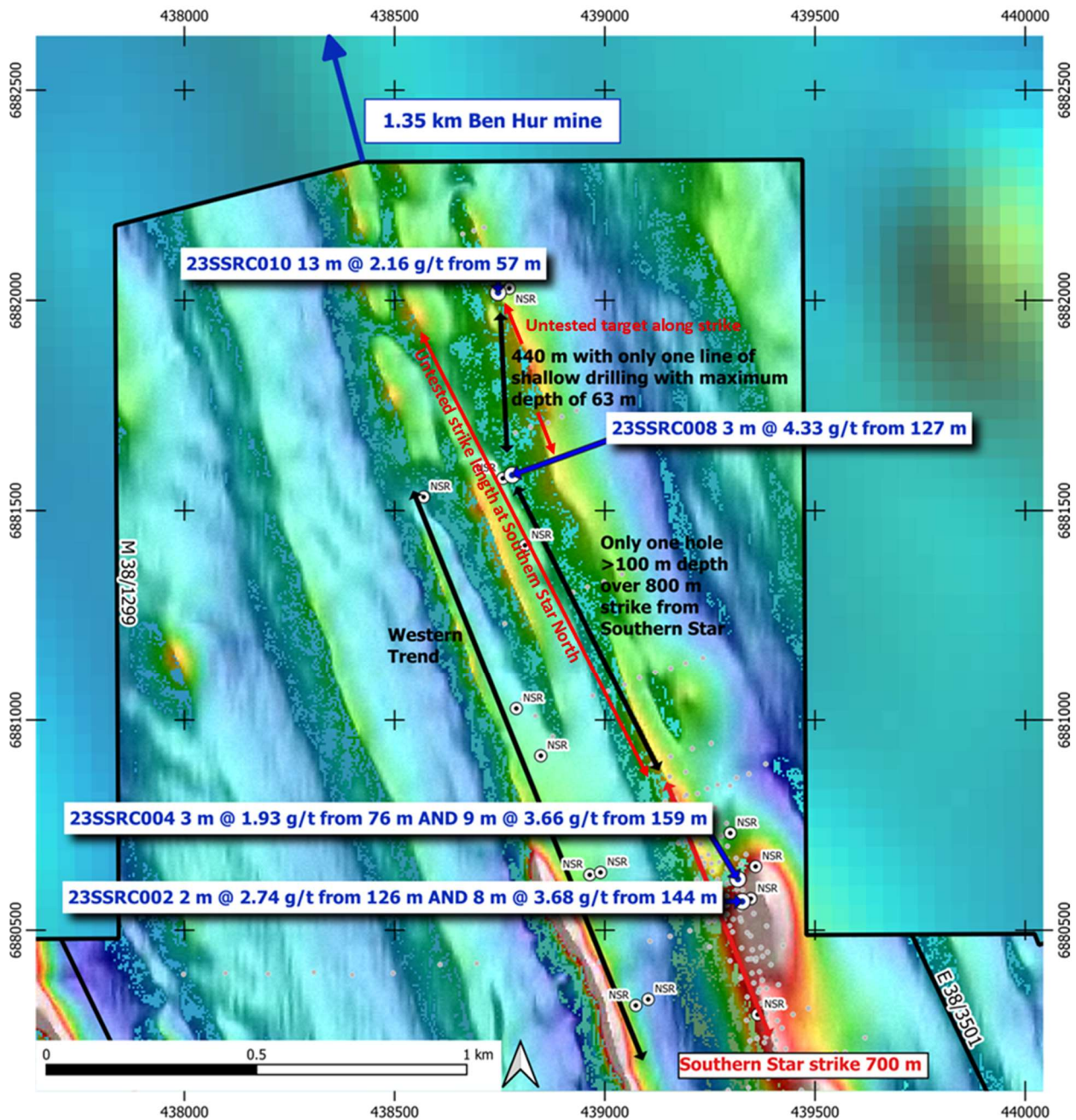


Figure 5 – Location map showing recent drilling at the Southern Star north target and untested areas

### Next steps

GSN has successfully delineated numerous targets within its Duketon Project, all of which contain shallow high-grade drill intercepts with gold anomalism over extensive strike lengths up to 5 km. Key targets are summarised below. The Company's short to medium-term strategy is to drill out key targets with the objective of delineating economic gold resources.

### Southern Star prospect

The main zone of Southern Star contains contiguous mineralisation over a 700 m strike and to a depth of 160 m with intercepts including 68 m at 1.9 g/t Au from 61 m in hole 21SSRC0036 and 59 m at 2.1 g/t Au from 53 m in hole 21SSRC0009. The greater Southern Star area contains over 7 km of prospective strike.



### **Golden Boulder prospect**

Golden Boulder has mineralised drill intercepts over a 2.3 km strike with a further 1.4 km of untested prospective strike.

### **Boundary Prospect**

The Boundary prospect covers an area of approximately 5 square km within a key structural corridor that hosts numerous gold deposits, including the +5 Moz Garden Well deposit, the largest in the Duketon Belt.

### **Amy Clarke**

Multiple targets have been defined at the Amy Clarke prospect over a circa 5 km long strike which incorporates the Garden Well and Eristoun mineralised trends (Eristoun open pit - 320 Koz gold). Shallow air core drilling by GSN in 2021 intercepted 8 m at 6.7 g/t Au from 32 m in hole 21ACAC0147 and 4 m at 2.1 g/t Au from surface in hole 21ACAC038. A 2024 surface geochemical program conducted at Amy Clarke North defined a gold anomaly over an area of 0.5 square km (refer to GSN ASX announcement dated 22 July 2024). Further surface geochemical survey results are outstanding for the Amy Clarke South area (refer to Figure 1).

GSN plans to drill this highly prospective portion of the Duketon Belt and remains confident that exploration to date supports the Company's belief that its tenure could host the next major deposit in the region. Drilling remains focused on depth and strike extensions of known mineralisation, with first pass drilling of newly defined exploration prospects and development of its more advanced targets.

### **About Great Southern Mining**

Great Southern Mining Limited is a leading Australian listed exploration company. With significant land holdings in the world-renowned mining districts of Laverton in Western Australia (Figure 1) and Mt Carlton in north Queensland, all projects are located within 40 km of operating mills and major operations.

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**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

On Investor Hub: [GSN Investor Hub link](#)

Email: [admin@gsml.com.au](mailto:admin@gsml.com.au)

Phone: +61 8 9240 4111

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

*The information in this report that relates to exploration results at the Duketon Gold Project is based on, and fairly represents, information and supporting documentation compiled and/or reviewed by Ms Rachel Backus. Ms Backus is an employee and Senior Exploration Geologist 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.*

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Table 1 – Recent Drillhole locations at Duketon

Site ID	Easting (MGA94 z51)	Northing (MGA94 z51)	Dip	Azimuth	Max depth	Prospect
24BORC0001	438237	6892486	-60	260	159	Boundary
24BORC0002	438271	6892410	-60	260	150	Boundary
24BORC0003	438292	6892068	-60	250	126	Boundary
24BORC0004	438263	6892100	-60	250	150	Boundary
24GBRC0001	434020	6896763	-60	270	180	Golden Boulder
24GBRC0002	434554	6894656	-60	255	107	Golden Boulder
24GBRC0003	434574	6894538	-60	255	101	Golden Boulder
24GBRC0004	434435	6895008	-60	255	174	Golden Boulder
24GBRC0005	434256	6894766	-60	255	141	Golden Boulder
24GBRC0006	434455	6893993	-60	255	138	Golden Boulder
24GBRC0007	434095	6896488	-60	250	84	Golden Boulder
24GBRC0008	434870	6892875	-60	255	96	Golden Boulder
24SSRC0001	438340	6881973	-60	240	100	Southern Star North
24SSRC0002	438722	6882011	-60	240	144	Southern Star North
24SSRC0003	438407	6882095	-60	250	96	Southern Star North

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Significant Intersections for Duketon (Significant Intercepts are >1 m @ 0.4 g/t Au with a maximum internal dilution of 2-metre for intervals less than 30 m and a maximum 7 m internal dilution for intersections larger than 30 m. Intersections are downhole widths).

Prospect	Site ID	Sample type	From	To	Interval	Average Au g/t
<b>Boundary</b>	<b>24BORC0001</b>	<b>1 m split</b>	<b>99</b>	<b>100</b>	<b>1</b>	<b>1.06</b>
Boundary	24BORC0003	1 m split	44	48	4	0.58
Boundary	24BORC0003	1 m split	84	85	1	0.42
<b>Boundary</b>	<b>24BORC0003</b>	<b>1 m split</b>	<b>94</b>	<b>95</b>	<b>1</b>	<b>2.24</b>
<b>Boundary</b>	<b>24BORC0004</b>	<b>1 m split</b>	<b>28</b>	<b>30</b>	<b>2</b>	<b>1.12</b>
Boundary	24BORC0004	1 m split	53	54	1	0.50
Boundary	24BORC0004	1 m split	68	70	2	0.64
<b>Golden Boulder</b>	<b>24GBRC0001</b>	<b>Speared composite</b>	<b>141</b>	<b>143</b>	<b>2</b>	<b>3.64</b>
Golden Boulder	24GBRC0003	1 m split	36	37	1	0.49
Golden Boulder	24GBRC0004	Speared composite	47	48	1	0.52
Golden Boulder	24GBRC0005	1 m split	33	34	1	0.61
<b>Golden Boulder</b>	<b>24GBRC0005</b>	<b>1 m split</b>	<b>36</b>	<b>37</b>	<b>1</b>	<b>1.08</b>
<b>Golden Boulder</b>	<b>24GBRC0005</b>	<b>1 m split</b>	<b>63</b>	<b>68</b>	<b>5</b>	<b>4.60</b>
	<b>including</b>	<b>1 m split</b>	<b>64</b>	<b>66</b>	<b>2</b>	<b>9.89</b>
<b>Golden Boulder</b>	<b>24GBRC0006</b>	<b>1 m split</b>	<b>21</b>	<b>22</b>	<b>1</b>	<b>1.67</b>
Golden Boulder	24GBRC0006	1 m split	70	71	1	0.72
<b>Golden Boulder</b>	<b>24GBRC0007</b>	<b>1 m split</b>	<b>18</b>	<b>20</b>	<b>2</b>	<b>7.01</b>
	<b>including</b>	<b>1 m split</b>	<b>18</b>	<b>19</b>	<b>1</b>	<b>12.45</b>
Golden Boulder	24GBRC0007	1 m split	29	30	1	0.79
Golden Boulder	24GBRC0007	1 m split	43	44	1	0.60
<b>Golden Boulder</b>	<b>24GBRC0008</b>	<b>1 m split</b>	<b>70</b>	<b>71</b>	<b>1</b>	<b>1.24</b>
<b>Southern Star North</b>	<b>24SSRC0002</b>	<b>1 m split</b>	<b>22</b>	<b>23</b>	<b>1</b>	<b>1.02</b>
Southern Star North	24SSRC0002	1 m split	40	41	1	0.63
Southern Star North	24SSRC0002	1 m split	120	123	3	0.45
Southern Star North	24SSRC0002	1 m split	126	127	1	0.66

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## JORC Code 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

Criteria	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>RC drill cuttings were collected over 1 m intervals via cyclone into buckets and placed in piles on the floor (15-35 kg of sample material):               <ul style="list-style-type: none"> <li>For RC assay sampling, 1-3 kg of sample was split from each 1-metre sample length via a cone splitter. The cyclone was manually cleaned at the completion of each rod and thoroughly cleaned at the completion of each hole. The 1-3 kg samples were pulverised to produce 40 g charge for fire assay.</li> <li>Two-to-four-metre composites, based on logged domains, via spear method were taken for each hole. The anomalous composite samples were then assayed in 1 m intervals, except for 24GBRC0001 and 24GBRC0004, which are yet to be resampled.</li> </ul> </li> <li>RC samples were collected and submitted for analysis at Bureau Veritas in Perth for Fire assay analysis. Field QC procedures involved the use of Certified Reference Materials (CRMs) as assay standards, and blanks. 1 m splits were subsequently collected and submitted for analysis to ALS Perth and pulverised to a 30 g charge for fire assay finish.</li> </ul>
<b>Drilling techniques</b>	<p>The drilling operation was undertaken by experienced drilling contractor, Precision Exploration Drilling.</p> <ul style="list-style-type: none"> <li>Reverse Circulation (RC) drilling was conducted with a modern truck-mounted KWL350RC. RC samples were obtained utilizing high pressure and high-volume compressed air using RC 141 mm diameter face bit.</li> <li>Holes orientations were surveyed using a north-seeking gyro with both single shots and multi-shots at 30 m intervals.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>RC sample recoveries of less than approximately 100% are noted in the geological/sampling log with a visual estimate of the actual recovery. Very few samples were recorded with recoveries of less than 100%.</li> <li>Wet RC samples are recorded in logs with only a small portion detected.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>All RC drilling was logged at the rig by an experienced geologist.               <ul style="list-style-type: none"> <li>Lithology, veining, mineralisation, alteration, weathering and oxidation were recorded.</li> <li>Evidence for structural features is noted.</li> <li>RC logging is qualitative and descriptive in nature and representative portions of samples were retained in chip trays for future reference.</li> </ul> </li> </ul> <p>All data was recorded/logged in the field in MS Excel logging platform developed by Geobase Australia Pty Ltd and transferred to our database held by Geobase Australia Pty Ltd (now Core Geoscience.)</p>
<b>Sub-sampling techniques and sample preparation</b>	<p>RC samples (nominal 15-35 kg weight) were split through a cyclone splitter, and a 2-3 kg sub-sample submitted as the primary sample for assay.</p> <p>Two-to-four-metre composites were taken for the portions of the drilling. The anomalous composites were assayed in 1 m intervals, except for 24GBRC0001 and 24GBRC0004, which are yet to be resampled. All composite assays have been received to-date.</p> <p>Field duplicates were taken every 50 samples as a control on sample representivity.</p> <p>Sample size is regarded as appropriate</p>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>Assay technique is Fire assay and is regarded as total</li> <li>Assaying of the speared composite RC drilling samples are being conducted by Bureau Veritas, Perth. Assaying of the 1 m split samples was completed by ALS Perth using fire assay of a 30 g charge.</li> <li>Field QC procedures involved the use of Certified Reference Materials (CRMs) as assay standards, in conjunction with duplicates and blanks. The results of this analysis are reviewed when results are received.</li> <li>The fire assay gold analyses undertaken are considered a total assay method and is an appropriate assay method for the target-style mineralisation.</li> </ul>

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Criteria	Commentary
	<p>Standard lab QC was also implemented as part of the geochemical testing protocol.</p> <p>No geophysical tools have been applied to the samples, or down hole, at this stage.</p>
<b>Verification of sampling and assaying</b>	<p>Results are verified by the geologist before importing into our externally managed database.</p> <p>No twin holes have been drilled.</p> <p>Data is collected by tablet in the field and is imported into our externally managed database (Geobase Australia Pty Ltd).</p> <p>RC Field QC procedures involved the use of Certified Reference Materials (CRMs) as assay standards and blanks. Field duplicates were collected also undertaken.</p> <p>Assay data is reviewed prior to imported directly into the database and no adjustments are made to raw assay files.</p>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• All data location points referred to in this report are in:</li> <li>• Datum: Geodetic Datum of Australia 94 (GDA94) Projection: Map Grid of Australia (MGA)</li> <li>• Zone: Zone 51</li> <li>• All collar surveys were completed using handheld GPS (+/- 5m accuracy).</li> <li>• Drill rig alignment was attained using a handheld compass and verified with an azimuth aligner and downhole surveys collected near-surface followed by approximately every 30 m.</li> <li>• Downhole surveys were routinely carried out, generally on continuous measure, conducted using north-seeking gyro with wither single or multi-shot.</li> <li>• The 3D location of individual samples is considered to be adequately established and in line with industry standards for this stage of exploration.</li> <li>• Topography is nominal at this stage holes will be picked up using a DGPS in the future.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• The drill hole spacing ranges is not systematic; however, most holes are drilled at around 250° across the regional strike. Drill hole collar positions are based solely on the drilling of specific exploration targets.</li> <li>• The RC drill holes were planned to test the early-stage exploration targets or step-backs or along-strike extensions of known mineralisation.</li> <li>• Other RC drilling holes were designed over areas of interest from surface geochemistry and geophysical interpretation.</li> <li>• Sampling of RC cuttings was undertaken at 1 m intervals, with appropriate high-grade mineralisation, with 1 m samples submitted for assay where composites were returned showing significant intercepts.</li> <li>• The current drill hole spacing, and distribution is not sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure and classification.</li> <li>• Two-to-four-metre sampling compositing – depending on geological intervals, has been applied to areas of less interest and for regional exploration holes.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• The drill holes have been designed to crosscut the main lithology approximately 250° to maximise structural, geotechnical and geological data.</li> <li>• No drilling orientation and/or sampling bias has been recognised at this time.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• Logging has been carried out by GSN and contract personal who were always on-site during drilling.</li> <li>• No third parties have been allowed access to the samples.</li> <li>• Samples were shipped directly from site to a secure stored site in Laverton to undergo evaluation.</li> <li>• Select samples for geochemical analysis were transported from Laverton to Bureau Veritas or ALS in Perth where upon receipt the samples are officially checked in and appropriate chain of custody documentation received.</li> </ul> <p>All sample information is kept in paper and digital form. Digital data is backed up onto the Company server regularly and then externally backed up daily.</p>
<b>Audits or reviews</b>	No audits or reviews have been conducted.

## Section 2 Reporting of Exploration Results

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	The tenement M38/1299 is in good standing and was granted on April 11 <sup>th</sup> , 2022. The tenement E38/3518 is in good standing and was granted on February 17 <sup>th</sup> , 2021. Great Southern Mining Ltd is the holder.
<b>Exploration done by other parties</b>	Relevant exploration done by other parties are outlined in the body of this report or previous GSN ASX announcements.
<b>Geology</b>	<p>The Duketon Greenstone Belt is comprised of mafic and ultramafic rocks, felsic volcanic and volcanoclastic rocks, and associated clastic sedimentary rocks. The contacts with bounding granitic rocks are typically intensely deformed. Axial surfaces of folds typically trend north-northwest with limbs commonly sheared by major structures. The major regional scale structures are a key element for large scale gold deposition and three of these mineralised structures strike through the new tenements under application and are highly prospective areas for gold accumulation.</p> <p>Mineralisation at Golden Star occurs as several stacked lenses within a sequence of foliated sheet-like gabbroic intrusive units and is associated with quartz veining and sulphide alteration between two strike parallel shear zones. The deposit is hosted in a fractionated dolerite sill, overturned and younging to the west that is over 100 m wide in areas. Within this dolerite sill the most fractionated part, a quartz-magnetite rich unit up to 80 m wide, appears to be the preferential host of the gold mineralisation.</p>
<b>Drill hole Information</b>	<p>All the drill holes reported in this report are summarized in in the report.</p> <p>Easting and northing are given in MGA94 – Zone 51 coordinates.</p> <p>RL is AHD</p> <p>Dip is the inclination of the hole from the horizontal. Azimuth is reported in magnetic degrees as the direction the hole is drilled.</p> <p>Down hole length is the distance measured along the drill hole trace. Intersection length is the thickness of an anomalous gold intersection measured along the drill hole trace.</p> <p>Hole length is the distance from the surface to the end of the hole measured along the drill hole trace.</p>
<b>Data aggregation methods</b>	<p>Significant assay intervals are recorded above 0.4 g/t Au with a maximum internal dilution of 2 m. no top cuts applied.</p> <p>A breakdown of the high-grade Interval is shown in the body of the report.</p>
<b>Relationship between mineralisation widths and intercept lengths</b>	<p>All significant intersections are quoted as downhole widths. The mineralisation has a near vertical orientation most holes are drilled at a -60-degree dip which is industry standard.</p> <p>All lengths are reported as downhole and the section in the body of the report displays the relationship between drill hole angle and mineralisation interpretation.</p>
<b>Diagrams</b>	Relevant Diagrams are included in the body of this report.
<b>Balanced reporting</b>	All matters of importance have been included.
<b>Other substantive exploration data</b>	All relevant information has been included.
<b>Further work</b>	Future exploration includes assessment of recent drill results. Mineralisation is open along strike and at depth. Diagrams highlight potential area of interest for follow up work.