HIGH-GRADE GOLD INTERCEPTS CONTINUE AT DUKETON GOLD PROJECT

Highlights

- **Initial assay results received for reverse circulation (RC) drilling conducted in early 2025 at the Duketon Gold Project located in Western Australia**
- **Better results from shallow drill holes at the Golden Boulder prospect include:**
  - **5 m at 14.57 g/t Au from 41 m, including 1 m at 70.94 g/t Au in hole 25GBRC009**
  - **2 m at 12.56 g/t Au from 99 m, including 1 m at 18.21 g/t Au in hole 25GBRC007**
  - **8 m at 1.77 g/t Au from 27m, including 3 m at 2.36 g/t Au in hole 25GBRC0021**
  - **3 m at 2.85 g/t Au from 120m, including 1 m at 5.56 g/t in hole 25GBRC0011**
- **These intercepts complement previous drilling at Golden Boulder where 2021 to 2024 programs included intercepts of:**
  - **4 m at 5.64 g/t Au from 63 m, including 2 m at 9.89 g/t Au in RC hole 24GBRC0005**
  - **8 m at 3.90 g/t Au from 44 m, including 4 m at 6.80 g/t Au in aircore hole 23GBAC008**
  - **3 m at 4.80 g/t Au from 18 m, including 1 m at 12.45 g/t Au in RC hole 24GBRC0007**
- **Assays have been received for the first 18 complete holes of the program, with assays from 20 holes from Golden Boulder and regional gold targets still pending**

Great Southern Mining Limited (ASX: GSN) ("GSN" or the "Company") is pleased to report initial results from a 3,678 metre RC drilling program conducted at the Company's 100% owned Duketon Gold Project ("Duketon" or the "Project"), located in the Eastern Goldfields of Western Australia. All assay results received to date are from holes drilled on the Main line trend of the Golden Boulder prospect. Assays are pending for a further 18 holes drilled on the Main and Eastern lines at Golden Boulder and at two early-stage regional targets within the Duketon Project (Figure 1).

GSN's Managing Director, Matthew Keane, commented:

"This latest round of drilling at the Golden Boulder prospect continues to feature shallow gold mineralisation with a propensity for high-grade intervals. GSN's geological team are building confidence in their targeting in this region and are consistently hitting mineralised shears within close proximity to modelled locations. While this round of drilling primarily targeted shallow mineralisation, the team has a strong belief that what we are seeing at surface is the expression of a much larger gold system at depth. Golden Boulder sits along a prominent shear zone which hosts multiple gold deposits, including the Rosemont (>2 Moz), Baneygo (~380 Koz) and Ben Hur (~390 Koz) mines."

Suite 4, 213 Balcatta Road,
Balcatta, WA 6021 Australia
T (08) 9240 4111
E admin@gsml.com.au

www.gsml.com.au
ACN: 148 168 825
ABN: 37 148 168 825

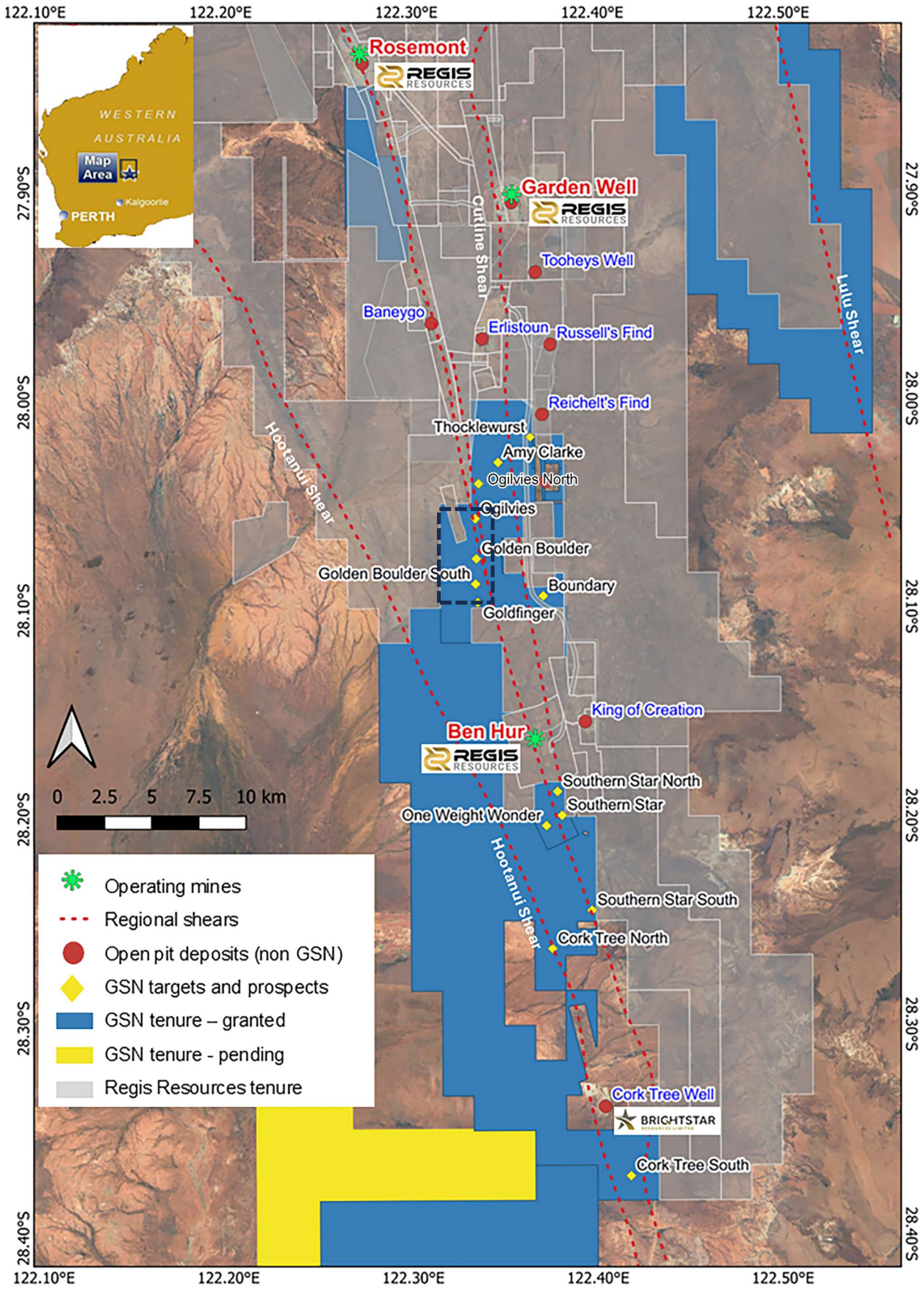

Figure 1 – Location map of Great Southern Mining's tenure in the Duketon Belt showing key prospects, regional mines and major gold-bearing structures. An insert for the Golden Boulder target is shown below in Figure 2 and highlighted in the black rectangle in Figure 1.

Initial RC drill results received for Golden Boulder

Great Southern Mining completed a 3,678 metre (38 hole) RC drilling program at the Duketon Gold Project in February 2025. The focus of this program was shallow gold mineralisation along the Main line and Eastern line trends within the Golden Boulder prospect area. Two early-stage targets at Ogilvies North and Boundary were also tested (Figure 1).

Assay results have been completely received for the first 18 RC holes of this program, 15 of which are located along the Main line trend within Golden Boulder. Of the 18 holes for which assays have been received, 15 have intercepts grading above 0.85 g/t gold. Key intercepts include:

- 4 m at 2.03 g/t Au from 24 m, including 2 m at 3.5 g/t Au and **5 m at 14.57 g/t Au from 41 m, including 1 m at 70.94 g/t Au** and 2 m at 2.15 g/t Au from 69 m in hole 25GBRC009
- **2 m at 12.56 g/t Au from 99 m, including 1 m at 18.21 g/t Au** and 1 m at 5.64 g/t Au from 105 m in hole 25GBRC007 (assay results pending for 0 to 84 m)
- **8 m at 1.77 g/t Au from 27 m**, including 3 m at 2.36 g/t Au and 1 m at 3.17 g/t Au in hole 25GBRC021
- 1 m at 3.90 g/t Au from 86 m and 3 m at 2.85 g/t Au from 120 m, including 1 m at 5.56 g/t Au in hole 25GBRC011
- **6 m at 1.19 g/t Au from 46 m**, including 1 m at 4.2 g/t Au and 5 m at 1.12 g/t Au from 55 m in hole 25GBRC008
- 3 m at 1.91 g/t Au from 30 m in hole 25GBRC015
- 1 m at 3.23 g/t Au from 24 m in hole 25GBRC002
- 2 m at 2.71 g/t Au from 23 m in hole 25GBRC003
- 2 m at 1.29 g/t Au from 33 m in hole 25GBRC004
- 2 m at 1.60 g/t Au from 27 m in hole 25GBRC017 (majority of assay results pending)
- 2 m at 1.31 g/t Au from 49 m in hole 25GBRC010
- 1 m at 1.39 g/t Au from 28 m in hole 25GBRC020

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 working 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 80 metres 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, Eastern line and Ogilvies. Main line gold mineralisation was extended to 1.5 kilometres strike by RC drilling in 2024, however, holes remain broadly spaced. The most recent drilling comprised infill and extensional holes along the Main and Eastern lines.

Main line mineralsiation is concentrated in quartz veins within steeply dipping, stacked shears hosted in dolerite geology. Mineralisation along this trend is predictable, with intercepts occurring within 10 metres of downhole modelled depths.

The Eastern 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.

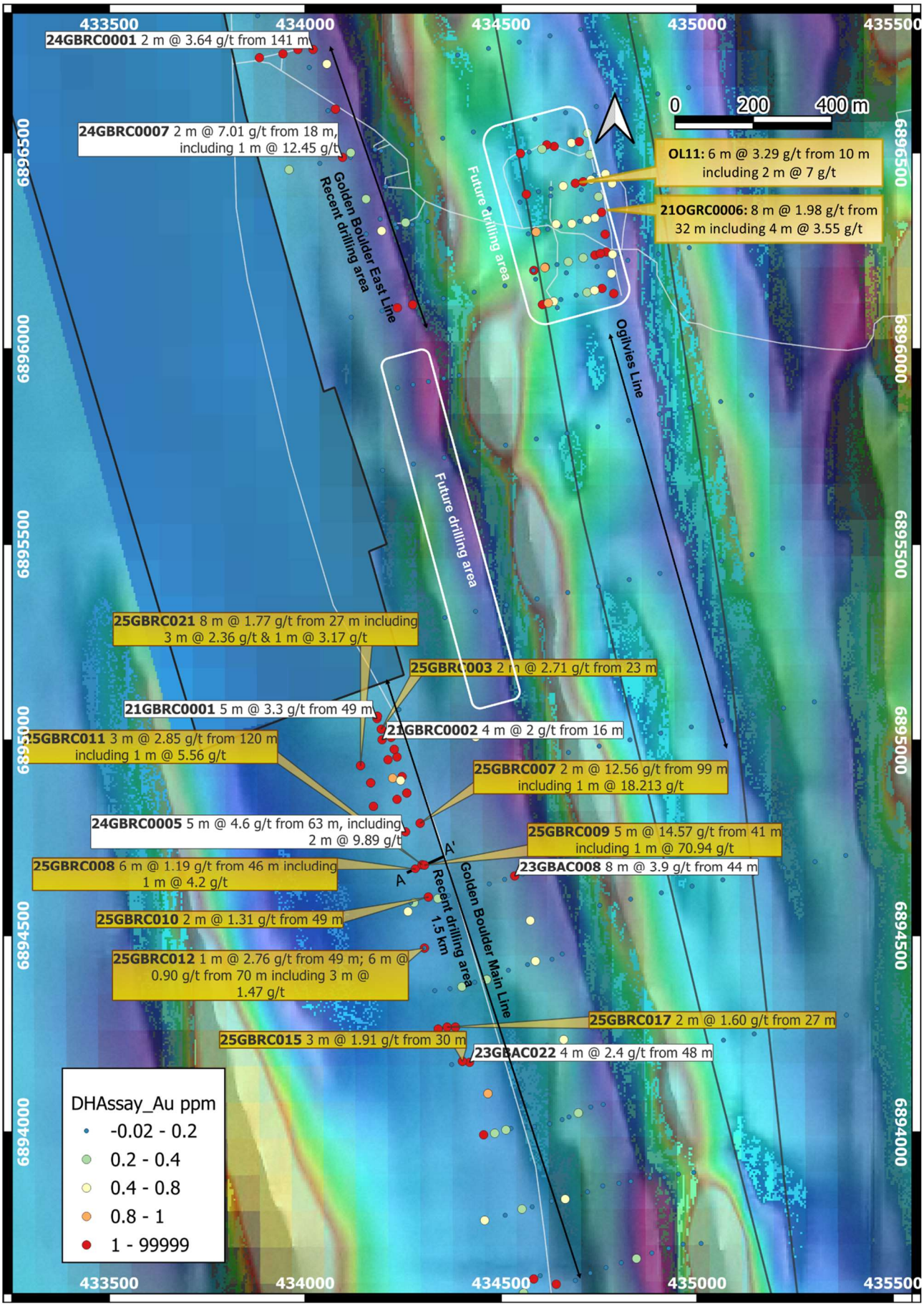

Figure 2 – Map of RC drilling target areas at Golden Boulder over aeromagnetic imagery. Drill intercepts from the latest round of drilling are highlighted in yellow. Selected intercepts from previous drilling and future target areas are also shown. Cross-section line A-A' is shown below in Figure 3.

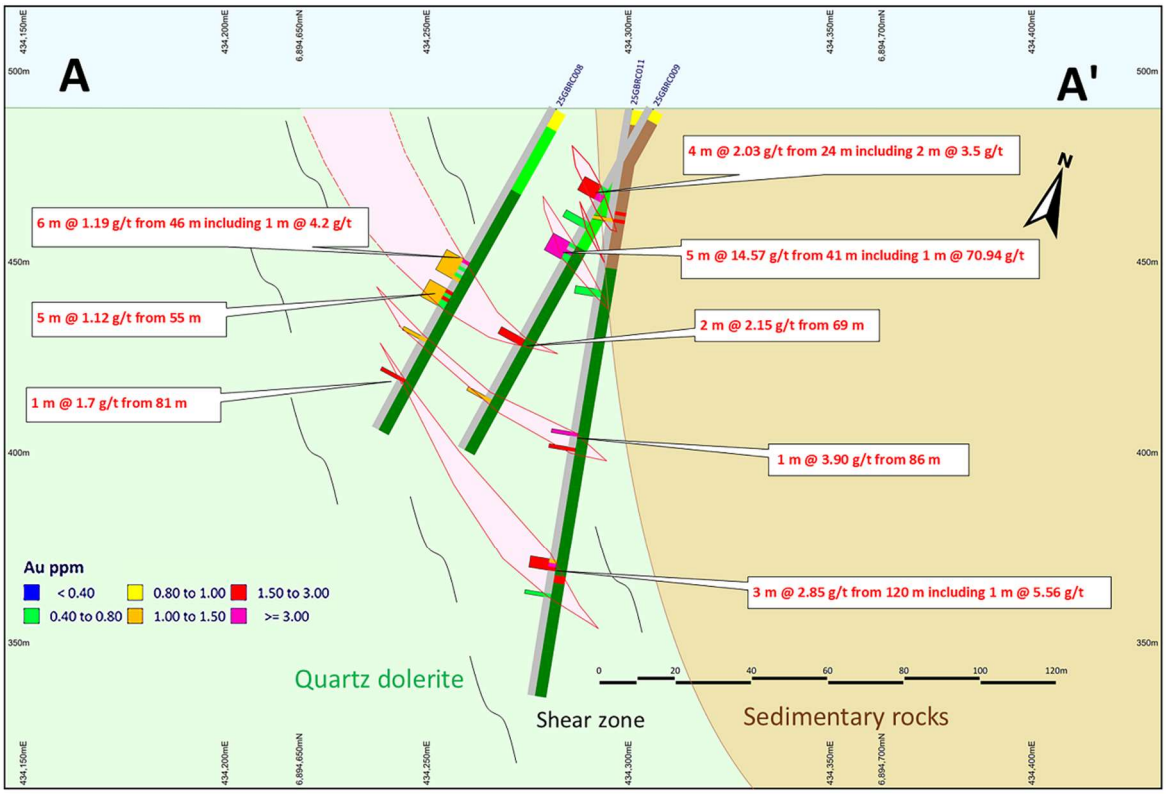

Figure 3 – Cross-section A-A' through the Golden Boulder Main line mineralisation.

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 and Mt Carlton in north Queensland, all projects are located within 40km of operating mills and major operations.

.....

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

Email: adminatgsml.com.au

Phone: +61 8 9240 4111

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.

Table 1 – Recent Drillhole locations at Golden Boulder (main line) with results returned

Drillhole	Easting (MGA94 z51)	Northing (MGA94 z51)	Dip	Azimuth	Max depth
25GBRC001	434239	6895078	-60	250	90
25GBRC002	434184	6895061	-90	250	70
25GBRC003	434194	6895028	-60	250	90
25GBRC004	434227	6894977	-60	250	102
25GBRC005	434243	6894897	-60	250	102
25GBRC007	434293	6894788	-60	250	108
25GBRC008	434280.6	6894671	-60	250	96
25GBRC009	434304	6894681	-60	250	102
25GBRC010	434314	6894598	-60	250	72
25GBRC011	434298	6894682	-80	250	156
25GBRC012	434304	6894468	-90	250	78
25GBRC013	434304	6894468	-60	250	54
25GBRC014	434466	6894098	-60	250	72
25GBRC015	434401	6894180	-60	250	54
25GBRC017	434362	6894267	-60	250	42
25GBRC019	434174	6894831	-90	250	78
25GBRC020	434167	6894891	-90	250	72
25GBRC021	434141	6894935	-90	250	60

Significant Intercepts (>1 m @ 0.4 g/t Au with a maximum internal dilution of 2-metres).

SiteID	Sample type	From	To	Interval	Average Au g/t
25GBRC002	RC	24	25	1	3.23
25GBRC003	RC	23	25	2	2.71
25GBRC004	RC	33	35	2	1.29
25GBRC007	**RC**	**99**	**101**	**2**	**12.56**
	Including			**1**	**18.213**
25GBRC007	RC	105	106	1	5.64
25GBRC008	**RC**	**46**	**52**	**6**	**1.19**
	Including			**1**	**4.2**
25GBRC008	RC	55	60	5	1.12
25GBRC009	RC	24	28	4	2.03
	including			2	3.5
25GBRC009	**RC**	**41**	**46**	**5**	**14.57**
	including			**1**	**70.94**
25GBRC009	RC	69	71	2	2.15
25GBRC010	RC	49	51	2	1.31
25GBRC011	RC	86	87	1	3.9
25GBRC011	RC	120	123	3	2.85
	including			1	5.56
25GBRC012	RC	49	50	1	2.76
25GBRC012	RC	70	76	6	0.9
	including			3	1.47
25GBRC015	RC	30	33	3	1.91
25GBRC017 (most assays pending)	RC	27	29	2	1.6
25GBRC020	RC	28	29	1	1.39
25GBRC021	**RC**	**27**	**35**	**8**	**1.77**
	Including			**3**	**2.36**
	Including			**1**	**3.17**

JORC Code 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

Criteria	Commentary

Sampling techniques	• Duplicate RC drill cuttings were collected over 1 m intervals via cyclone into buckets and placed in piles on the ground (15-35 kg of sample material):
	  ○ For RC assay sampling, 1-3 kg of sample was split from each 1-metre sample length via the rig's inbuilt cyclone and splitter system. 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 50 g charge for fire assay.
	  ○ Of each duplicate one-to-two-metre composites, based on logged domains, were submitted in their entirety. Where there was too much material to submit in 10'X14' fine calico bag, a two-metre composites were split through a three-tier, twelve slot riffle splitter until an appropriate sample size was obtained. All equipment was cleaned thoroughly after each use.
	• RC samples were collected and submitted for analysis at Intertek in Maddington, Perth for Fire assay analysis. Additionally, ten percent of sample were submitted for photon analysis. For photon analysis, the sample was crushed to 2 mm and split into two jars. Results from the photon analysis were consistently higher than the results of the fire assay, showing the fire assays produce a minimum grade. Only fire assay results have been used as priority 1 samples in the database and for reporting. Photon results are not included and are for verification purposes only. Field QC procedures involved the use of Certified Reference Materials (CRMs) as assay standards, and blanks.

Drilling techniques	The drilling operation was undertaken by experienced drilling contractor, Precision Exploration Drilling. • Reverse Circulation (RC) drilling was conducted with a modern truck-mounted RIG (pxd Rig 8). RC samples were obtained utilizing high pressure and high-volume compressed air using RC 141 mm diameter face bit. • Holes orientations were surveyed using a north-seeking gyro with both single shots and multi-shots at 30 m intervals.
Drill sample recovery	• 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%. • Wet RC samples are recorded in logs with only a small portion detected.

Logging	• All RC drilling was logged at the rig by an experienced geologist.
	  ○ Lithology, veining, mineralisation, alteration, weathering and oxidation were recorded;
	  ○ Evidence for structural features is noted.
	  ○ RC logging is qualitative and descriptive in nature and representative portions of samples were retained in chip trays for future reference.
	
	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.)

Sub-sampling techniques and sample preparation	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. Two-metre composites were taken for the portions of the drilling. Only initial results returned with several batches outstanding. Field duplicates were taken every 50 samples as a control on sample representivity. Sample size is regarded as appropriate
Quality of assay data and laboratory tests	• Assay technique is Fire assay and is regarded as total • Assaying of one-metre and two-metre composite RC drilling samples are being conducted by Intertek, Perth, using a 50 g charge. Additionally, an additional 10% of the samples also had initial two-jar photon analysis of 2 mm material, prior to preparation for fire assay. Assaying of the 1 m split samples is yet to be completed. • 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

Criteria	Commentary
	reviewed when results are received. • The fire assay gold analyses undertaken are considered a total assay method and is an appropriate assay method for the target-style mineralisation. Standard lab QC was also implemented as part of the geochemical testing protocol. No geophysical tools have been applied to the samples, or down hole, at this stage.
Verification of sampling and assaying	Results are verified by the geologist before importing into our externally-managed database. No twin holes have been drilled. Data is collected by tablet in the field and is imported into our externally-managed database (Core Geoscience Australia). RC Field QC procedures involved the use of Certified Reference Materials (CRMs) as assay standards and blanks. Field duplicates were collected also undertaken. Assay data is reviewed prior to imported directly into the database and no adjustments are made to raw assay files.
Location of data points	• All data location points referred to in this report are in: • Datum: Geodetic Datum of Australia 94 (GDA94) Projection: Map Grid of Australia (MGA) • Zone: Zone 51 • All collar surveys were completed using handheld GPS (+/- 5m accuracy). • Drill rig alignment was attained using a handheld compass and verified with mast shots and downhole surveys collected near-surface followed by approximately every 30 m. • Downhole surveys were routinely carried out, generally on continuous measure, conducted using north-seeking gyro with wither single or multi-shot. • The 3D location of individual samples is considered to be adequately established and in line with industry standards for this stage of exploration. • Topography is nominal at this stage holes will be picked up using a DGPS in the future.
Data spacing and distribution	• 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. • The RC drill holes were planned to test the early stage exploration targets or step-backs or along-strike extensions of known mineralisation. • Other RC drilling holes were designed over areas of interest from surface geochemistry and geophysical interpretation. • Sampling of RC cuttings was undertaken at 1-2 m intervals. One-metre splits of high grade composites are yet to be submitted as not all initial assays have been returned yet. • The current drill hole spacing and distribution is may be sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure and classification. • Two-metre sampling compositing – depending on geological intervals, has been applied to areas of less interest and for regional exploration holes.
Orientation of data in relation to geological structure	• The drill holes have been designed to cross-cut the main lithology approximately 250° to maximise structural, geotechnical and geological data. • No drilling orientation and/or sampling bias has been recognised at this time.
Sample security	• Logging has been carried out by GSN and contract personal who were always on-site during drilling. • No third parties have been allowed access to the samples. • Samples were shipped directly from site to a secure stored site in Laverton to undergo evaluation. • Select samples for geochemical analysis were transported from Laverton to Intertek in Perth where upon receipt the samples are officially checked in and appropriate chain of custody documentation received. 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.
Audits or reviews	No audits or reviews have been conducted.

Section 2 Reporting of Exploration Results

Criteria	Commentary
Mineral tenement and land tenure status	The tenement E38/3518 is in good standing and was granted on February 17th, 2021. Great Southern Mining Ltd is the holder.
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 Greenstone Belt is comprised of mafic and ultramafic rocks, felsic volcanic and volcaniclastic 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.
Drill hole Information	All the drill holes reported in this report are summarized in in the report. Easting and northing are given in MGA94 – Zone 51 coordinates. RL is AHD Dip is the inclination of the hole from the horizontal. Azimuth is reported in magnetic degrees as the direction the hole is drilled. 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. Hole length is the distance from the surface to the end of the hole measured along the drill hole trace.
Data aggregation methods	Significant assay intervals are recorded above 0.4 g/t Au with a maximum internal dilution of 2 m. no top cuts applied. A breakdown of the high-grade intervals is shown in the body of the report.
Relationship between mineralisation widths and intercept lengths	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, although some holes are vertical or sub-vertical to reduce the environmental impact of drill pad construction. 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.
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 includes assessment of recent drill results. Mineralisation is open along strike and at depth. Diagrams highlight potential area of interest for follow up work.