ASX ANNOUNCEMENT

14 November 2023

ASX: GSN



DRILLING UNDERWAY AT SOUTHERN STAR

Highlights

- Drilling has recommenced within the Southern Star area, part of the Company's 100% owned
 Duketon Gold Project, in Western Australia
- Drilling will test for extensions to the main zone of mineralisation at Southern Star, where previous intercepts have included:
 - 68m @ 1.9g/t Au from 61m, incl. 4m @ 15.3g/t Au
 - 69m @ 1.1 g/t Au from 39m, incl. 10m @ 3.5g/t Au
 - o 59m @ 2.1g/t Au from 53m, incl. 9m @ 4.5g/t Au
 - o 17m @ 7.0g/t Au from 11m, incl. 1m @ 109.0g/t Au
- Drilling will also test selected areas within the newly identified 7-kilometre-long western geochemical gold anomaly

Great Southern Mining Limited (ASX: GSN) ("GSN" or the "Company") announces that drilling has recommenced within the Southern Star area (Figure 1, part of the Duketon Gold Project, in the Laverton district of Western Australia (Figure 2).

The main zone of mineralisation at the Southern Star prospect has been defined over a ~700 metre strike and to a depth of ~140 metres below surface and remains open in nearly every direction (Figure 2). The controls on mineralisation at depth are not well understood, which is why the upcoming drilling aims to test several geological theories relating to dip and plunge orientations.

A recent geochemical program identified a ~7-kilometre-long gold-in-soil anomaly directly west and parallel to Southern Star. GSN interprets this anomaly to be along the same stratigraphic trend that hosts Regis Resources' ~390 Koz Ben Hur gold deposit, located approximately three kilometres to the north (refer to GSN ASX announcement dated 9 November 2023).

The current program will comprise 3,000 to 4,000 metres of reverse circulation (RC) drilling targeting several zones of interest, including (see Figure 3):

- 1) Down dip extensions to the main zone of mineralisation at Southern Star prospect.
- 2) Down plunge extensions to the main zone of mineralisation at Southern Star prospect.
- 3) A protentional fault offset of Southern Star to the north.
- 4) Geological contacts and interpreted structures along the newly identified 7-kilometre-long western geochemical anomaly; and
- 5) Infill drilling on the One Weight Wonder prospect, located further west again of Southern Star, which was last drilled by GSN in 2021.

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).





Figure 1. Orlando Drilling reverse circulation rig commencing drilling at the Southern Star prospect.

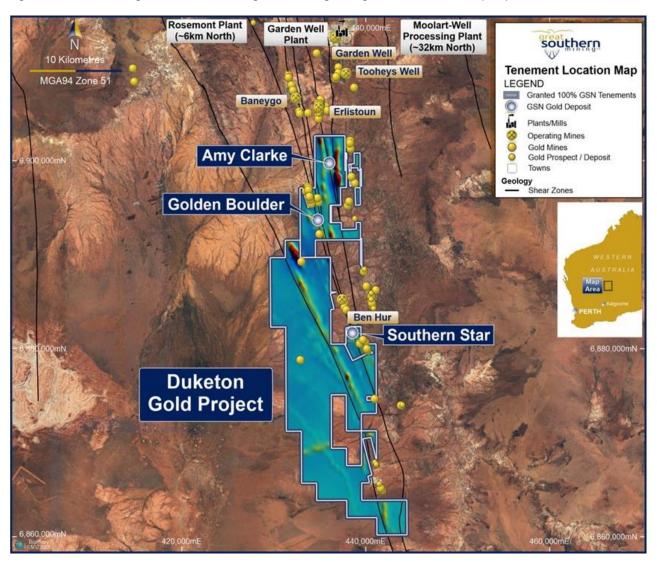


Figure 2. Plan view of GSN's tenement holding in the Duketon Gold Belt highlighting the locations of prospects and proximity to Regis' Garden Well, Rosemont and Moolart Well mills. Mineralised gold trends are in delineated in yellow.



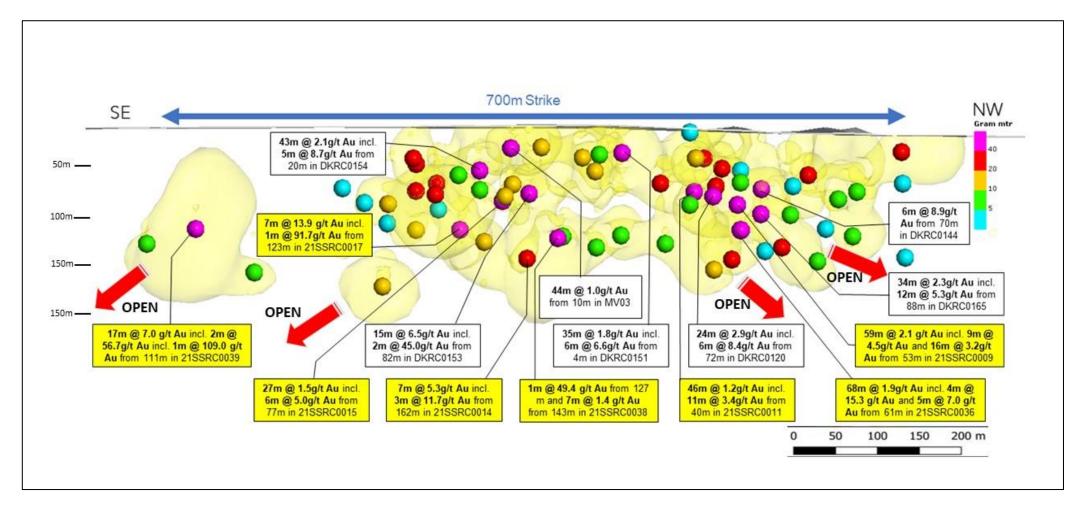


Figure 3. Long Section of the Southern Star mineralisation showing selected gold intercepts. Mineralisation remains open in nearly every direction including down-plunge, down-dip and along strike to the north and south.



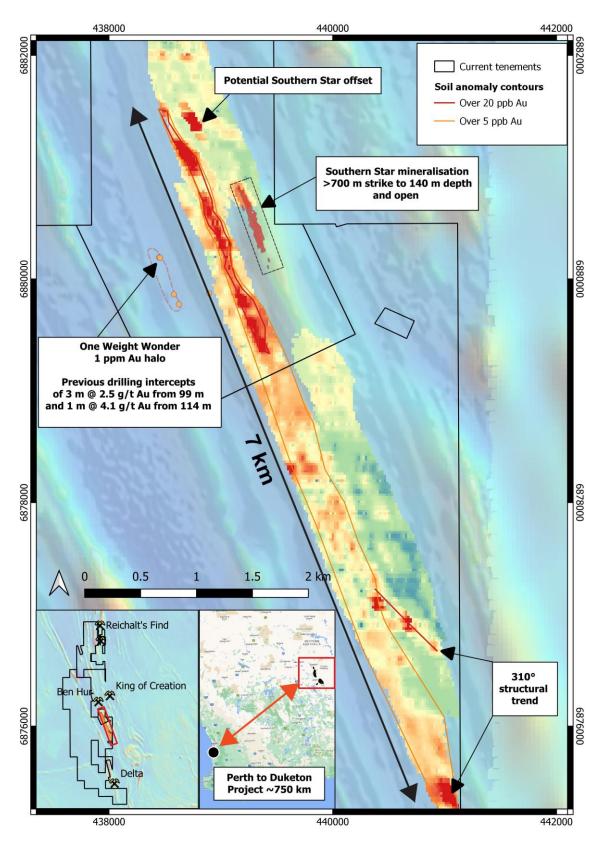


Figure 4. Geochemical heat map showing gold anomalism from a recent soil survey underlain by aeromagnetic imagery. Results of the recent survey, conducted along a stratigraphic trend west of the main Southern Star prospect, have been merged with previous geochemical surveys in the area, showing a distinct 7 km anomalous trend. The image also shows the One Weight Wonder prospect and another geochemical gold anomaly to the north of Southern Star, which may be a fault offset of the main Southern Star mineralisation.



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

Phone: +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 mining districts of Laverton in Western Australia (Figure 2) and Mt Carlton in north Queensland, all projects are located within 40km of operating mills and major operations.

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.