

DRILLING RECOMMENCES AT DUKETON GOLD PROJECT

Aircore drilling targeting high priority targets at Golden Boulder

HIGHLIGHTS

- Aircore (AC) drilling has commenced at the Golden Boulder prospect, part of Great Southern Mining's 100% owned Duketon Gold Project in Western Australia
- Previous drilling in this area returned intercepts including:
 - 5m @ 3.3 g/t Au from 49m, including 1m @ 12.3 g/t Au in 21GBRC0001
 - 5m @ 1.2 g/t Au from 103m, including 1m @ 4.1 g/t Au in 21GBRC0007
 - 4m @ 2.0 g/t Au from 16m and 3m @ 1.1 g/t Au from 67m in 21GBRC0002
- Historical gold workings in the Golden Boulder region consist of over 50 shafts on three lines of strike over ~3km with reported gold production of 1,761 ounces of gold grading 28.6g/t Au
- This program marks the first of several reverse circulation (RC) and AC programs planned on multiple prospects within Duketon Project, including extension drilling to the advanced Southern Star prospect.

Great Southern Mining Limited (ASX: GSN) ("**GSN**" or the "**Company**") advises that drilling has recommenced at the Company's 100% owned Duketon Gold Project in Western Australia. The first phase will comprise of ~4,000m AC drilling at the Golden Boulder prospect (Figure 1), situated on a prolific gold bearing trend incorporating Regis Resources' (ASX:RRL) Rosemont (~1.06Moz Au), Baneygo (380koz) and Ben Hur (~390koz Au) deposits, as well as GSN's Southern Star prospect (Figure 2).

GSN's Managing Director, Matthew Keane, commented:

"It is exciting to be back on the ground and drilling at the Duketon Gold Project. We have a number of advanced prospects and newly identified high priority targets to follow-up this year, including Southern Star, Amy Clarke and Golden Boulder.

The Company's first program will start at the Golden Boulder prospect where previous drilling and historic mining has shown a propensity for high grade gold mineralisation.

We aim to test the potential scale and continuity of this system, which is strategically located adjacent to the main north-south access road from the town of Laverton".

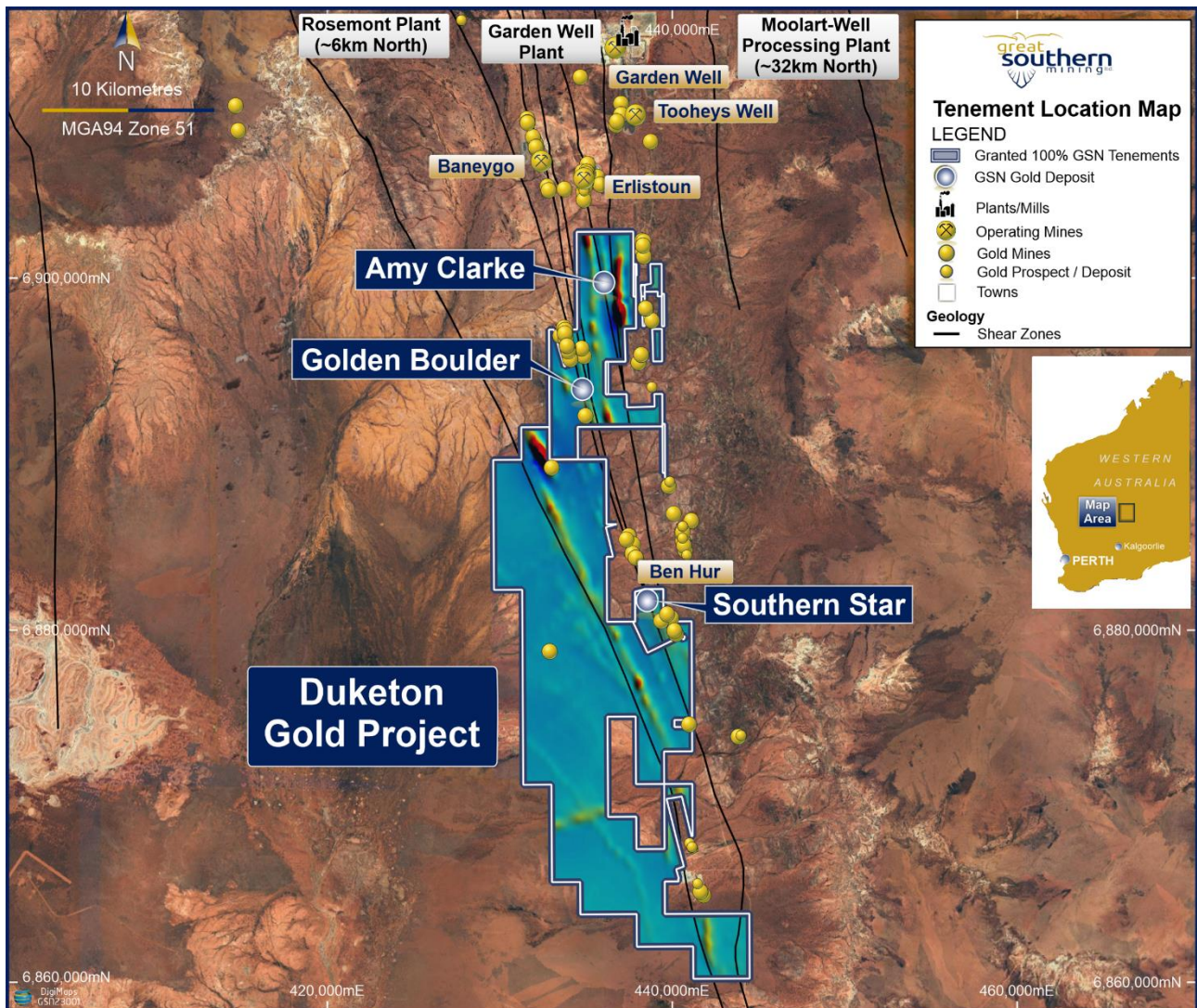


Figure 1. Map of GSN Duketon Gold Project showing existing prospects, including Golden Boulder and known gold occurrences, deposits and mines.

Golden Boulder – Limited drilling below 40m depth

The Golden Boulder prospect area has seen no systematic drilling to date, despite hosting up to three kilometres of historic workings. Historic production, recorded between 1901 and 1955, was 1,761 ounces at an average grade of 28.6g/t Au. Near surface high grade gold mineralisation is hosted in quartz veins within a chlorite altered sheared basalt.

The majority of drilling at Golden Boulder is limited to less than 40m below ground surface. In 2021, GSN conducted a limited nine-hole RC drilling program along the main Golden Boulder trend, with all holes recording gold intercepts in excess of 0.5g/t Au (refer to GSN ASX announcement dated 23 September 2023).

Better results from this program included:

- **5m @ 3.3 g/t Au** from 49m, including **1m @ 12.3 g/t Au** and **1m @ 1.2 g/t Au** from 73m in 21GBRC0001
- **4m @ 2.0 g/t Au** from 16m and **3m @ 1.1 g/t Au** from 67m, including **1m @ 2.5 g/t Au** in 21GBRC0002
- **8m @ 1.0 g/t Au** from 40m in 21GBRC0003
- **4m @ 1.8 g/t Au** from 32m in 21GBRC0005

More recent surface rock chip sampling has recorded grades up to **103g/t Au** (refer to GSN ASX announcement dated 18 January 2023).

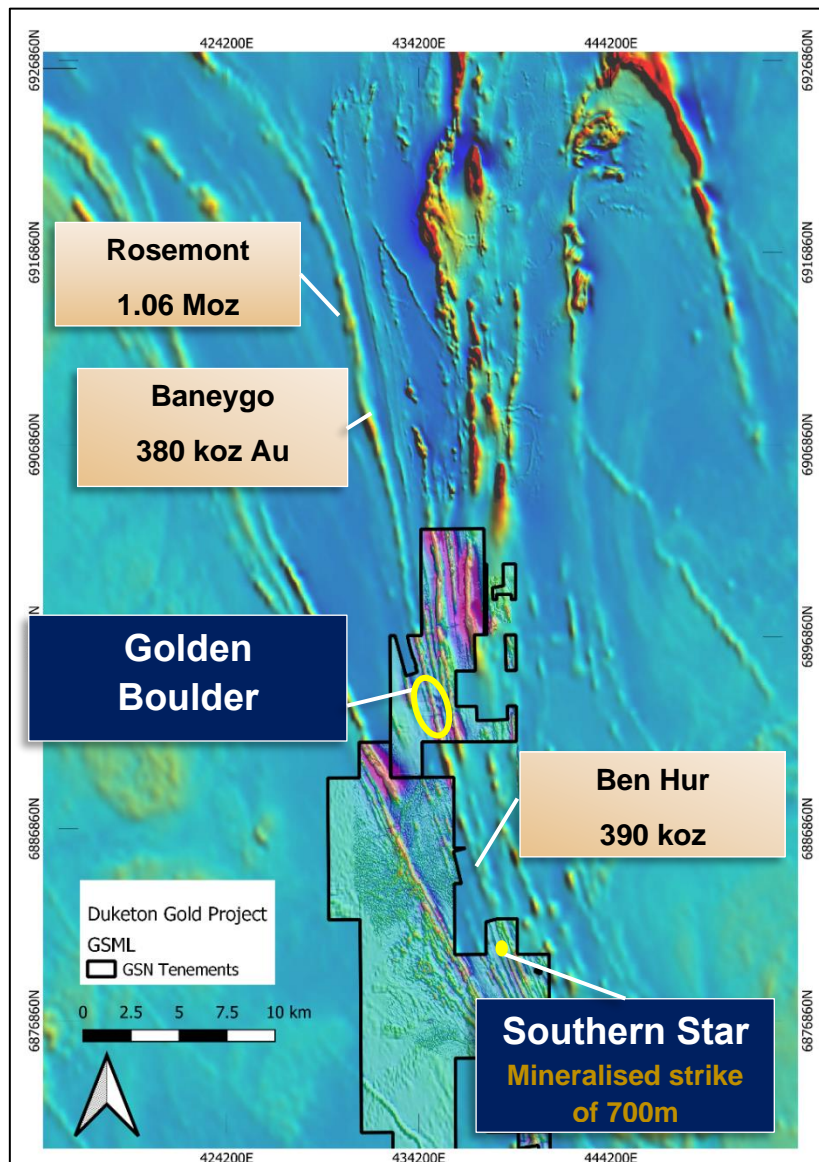


Figure 2. Map of Duketon Gold Project showing key deposits along the interpreted Rosemont to Ben Hur gold trend and highlighting the location of the Golden Boulder prospect (underlain by TMI aeromagnetic imagery).

The current AC program will cover 1,300m of the Golden Boulder strike on 200m line spacing for ~4,000 drill metres. The aim of this program is to vector in on zones of higher grade and grade continuity, and to test for a larger gold system beyond the extent of surface workings. Any success from this AC program will be followed up with RC and diamond drilling later in the year. Notably, historic workings continue further south of the current AC program, and these southernmost workings are believed to cease only due to a lack of outcrop, rather than prospective geology. Further drilling to the south will require an extension to the current heritage survey area.

Next Steps

Further RC and AC drilling programs have been planned for the Southern Star, Amy Clarke and greater Golder Boulder prospects in 2023.

Southern Star Prospect

Gold mineralisation at the Southern Star prospect has been defined over a 700m to 800m strike extent and remains open in nearly every direction. GSN plans to expand upon current mineralisation by testing four key areas including (Figure 3):

- Depth extensions to known mineralisation below intercepts, such as **10m @ 3.1 g/t Au**, including **3m @ 8.6 g/t Au** in hole 21SSRC0012.
- Directly north of the main mineralisation zone where geochemical surveys have delineated four gold anomalies.
- A 700m long geochemical anomaly to the south of the current mineralisation zone.
- A parallel trend to the west, which GSN interprets to be the trend hosting Regis Resources' Ben Hur deposit just 3km to the north.

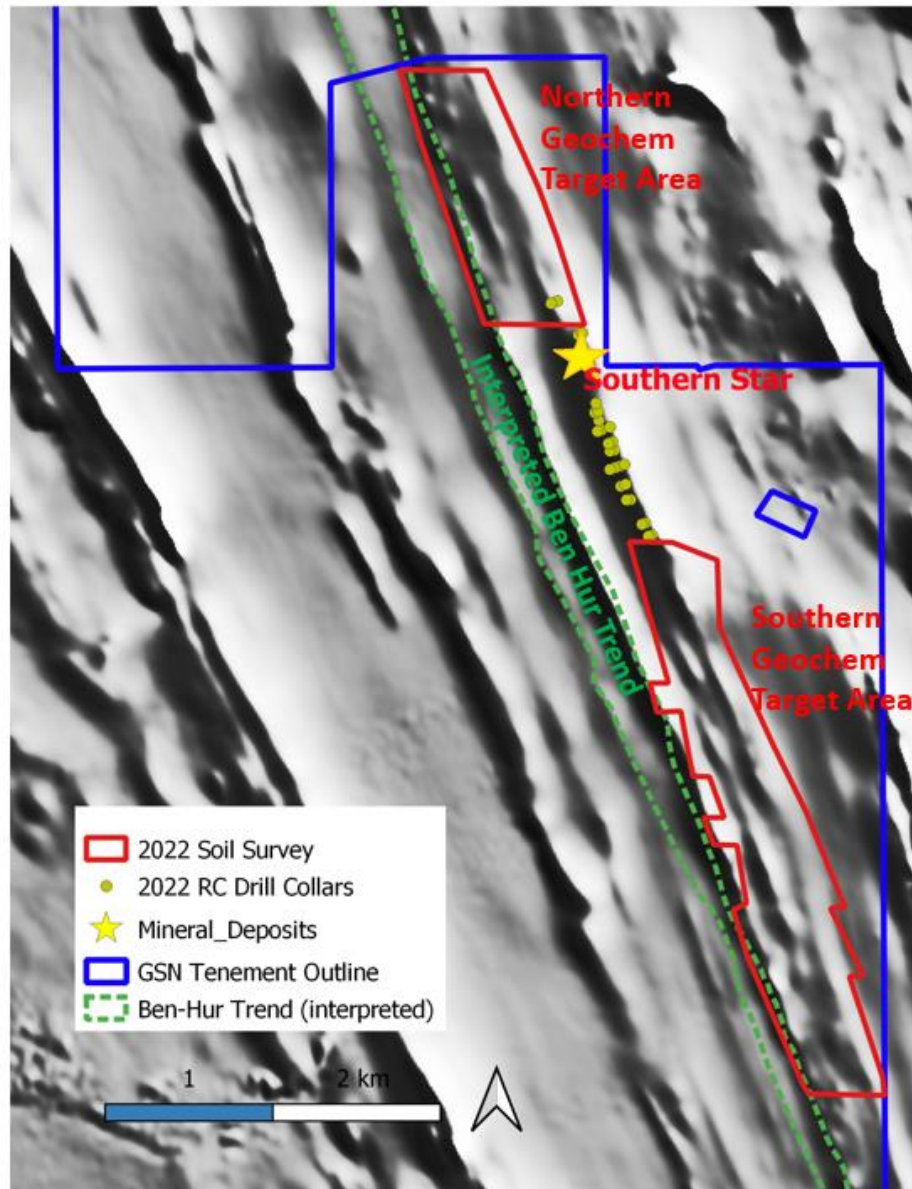


Figure 3. Drill target areas to the north, south and on a parallel trend to the existing Southern Star gold mineralisation.

Amy Clarke Prospect

A maiden aircore drill program was completed in early 2022, which included a best intercept of **5m @ 8.2 g/t Au**, including **4m @ 12.5 g/t Au** from 33m in hole 21ACAC147 (refer to GSN ASX announcement dated 13 April 2022). This program, along with geochemical soil surveys has defined a 5km long gold anomaly. Follow-up RC drilling has been planned around zones of higher grade (including proximal to hole 21ACAC147) to gain a better understanding on the controls on gold mineralisation. Further AC drilling has also been planned over the 1.4km southern extension to the gold and pathfinder element anomaly resulting from a geochemical soil survey in 2022 (refer to GSN ASX announcement dated 8 November 2022) (see Figure 4).

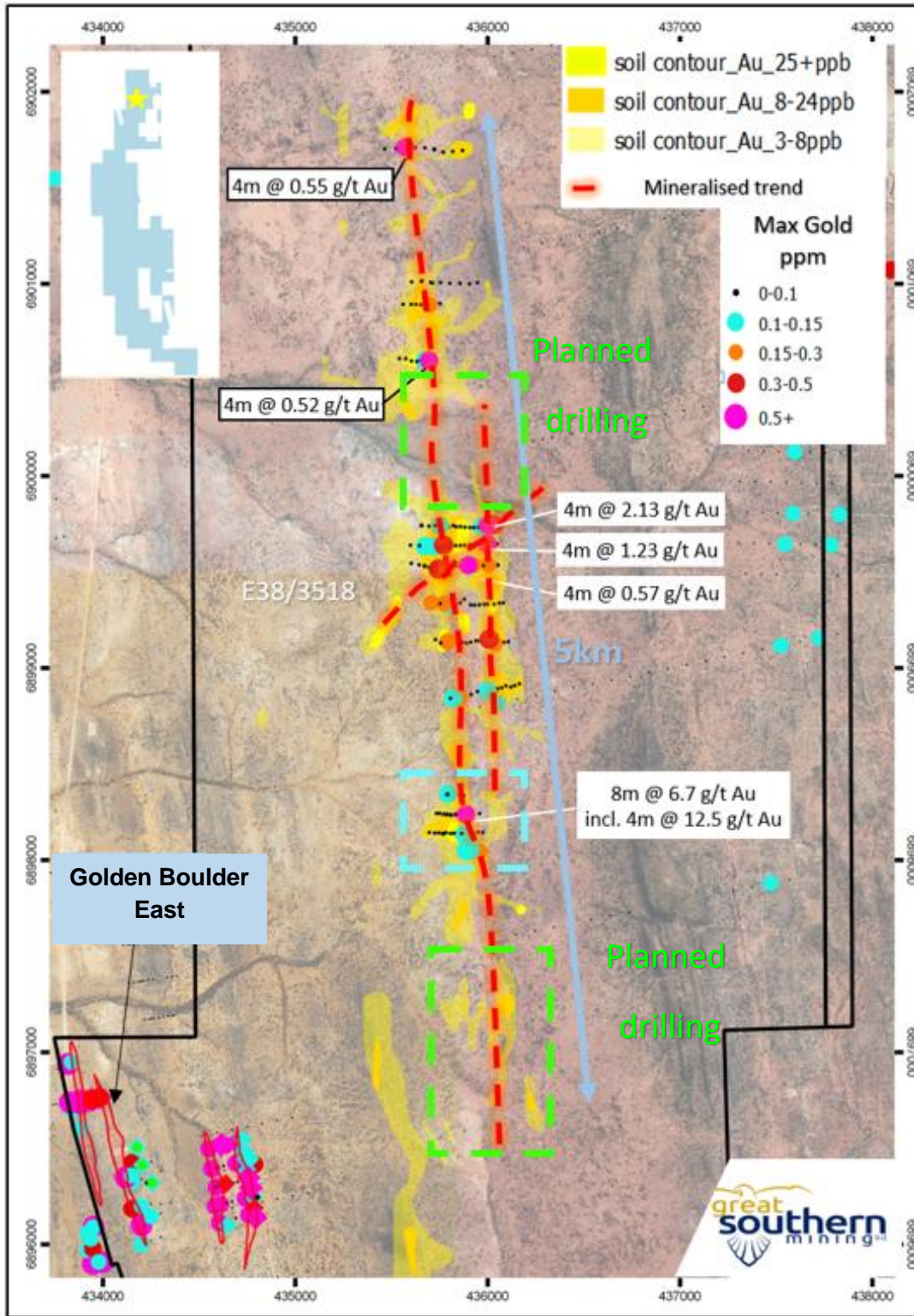


Figure 4. Amy Clarke area showing previous aircore drill intercepts, RC drill target area (dashed blue) and aircore drill target areas (dashed green).

Golden Boulder area

In addition to any follow-up drilling to the current program, GSN has further AC and RC drilling planned for the Golden Boulder area, including along the Golden Boulder East and Ogilvies trends (Figure 5).

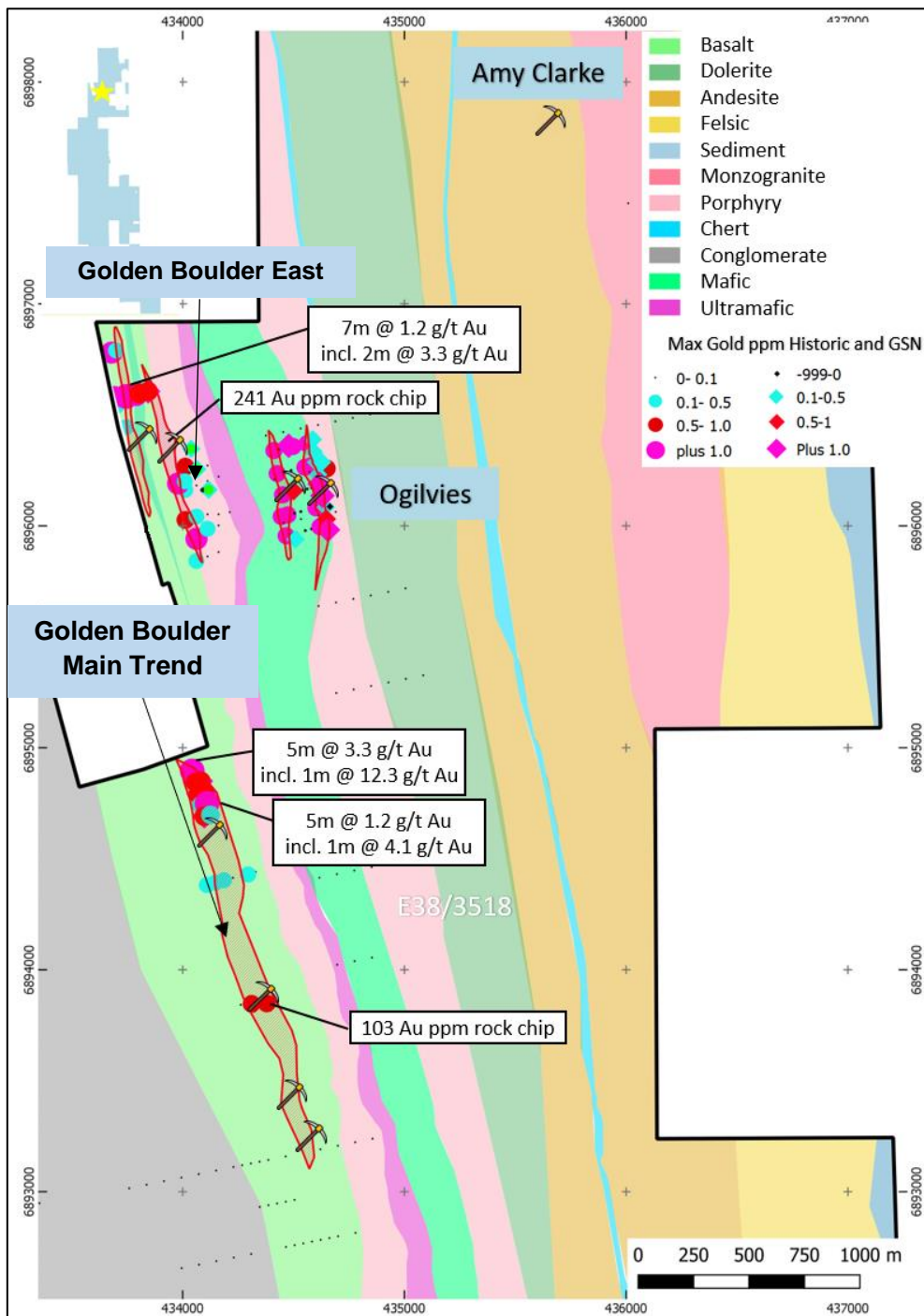


Figure 5. Golden Boulder East and Ogilvies trends.

The release of this ASX announcement was authorised by the Managing Director and Executive Chairman 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 major operations.

The East Laverton Nickel Project is located 15km east from the town of Laverton in Western Australia where GSN maintains an exploration base to service its significant exploration portfolio in the region, including the Southern Star Gold Deposit.

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 by Simon Buswell-Smith. Mr. Buswell-Smith is a full-time employee of Great Southern Mining Limited. He has sufficient experience relevant to the style of mineralization and type of deposit under consideration. Mr. Buswell-Smith is a Member of the Australian Institute of Geoscientists and as such, is a Competent Person for the Reporting of Exploration Results, Mineral Resources and Ore Reserves under the JORC Code (2012). Mr. Buswell-Smith consents to the inclusion in the report of the matters based on his information in the form and context in which they occur.

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.