

## Drilling High Impact Targets in 2023

RIU Explorers Conference • February 2023

ASX:GSN

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Deposit	Competent Person	Employer	Professional Institute
Duketon, East Laverton and Mon Ami Exploration Results and Geological Interpretation	Simon Buswell-Smith	Great Southern Mining Limited	MAIG
Mon Ami Mineral Resource	Dr Michael Cunningham	SRK Consulting (Australasia) Pty Ltd	MAusIMM, MAIG

#### **Competent Persons Statement**

The information in this report that relates Exploration Results and Mineral Resources is based on the information of the Competent Persons listed in the table above Each of the Competent Persons have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity they are undertaking to qualify as Competent Persons under the JORC Code 2012 For new information each consent to the inclusion in the report of the matters based on his information in the form and context in which they occur Previously announced information is cross referenced to the original announcements In these cases, the Company is not aware of any new information or data that materially affects the information presented and that the technical parameters underpinning the estimates continue to apply and have not materially changed The Company confirms that the form and context in which the Competent Persons findings are presented have not been materially modified from the original market announcements of (GSN 25/1/19, 12/8/20, 2/3/21, 14/4/21, 21/7/21, 21/9/21, 5/10/21, 11/10/21, 28/10/21, 13/12/21, 17/1/22, 9/3/22, 31/3/22, 15/6/22, 29/6/22, 5/7/22, 8/11/22 and 13/12/22. References to ASX RRL announcements of 18/1/11, 8/3/11, 6/4/21, 31/3/22 are noted in the presentation).

ASX announcements are available on the Company's website at www.gsml.com.au

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### Investment Highlights



High quality landholdings in established mining districts



Primed for major gold, nickel and copper discoveries



All projects located within 40km of hungry mills



Major exploration programs planned for 2023 – significant newsflow



Quality Board with skin in the game and an experienced exploration team



# Corporate Snapshot

**GSN** 

**ASX Code** 

\$15.2M

Market Cap (at \$0.023 per share)

663M

Shares on Issue

35.3M

Options (\$0.05-\$0.20 exercise price)



#### John Terpu

**Executive Chairman** 

Over 22 years' experience in the mining & exploration sector, through acquisition and investment in many projects. Founder of Conquest Mining which discovered the Mt Carlton mine and went on to become gold major Evolution Mining. As Chairman of Emerchants Ltd, drove the company's market cap from A\$1m to over A\$150m.

#### **Matt Keane**

Managing Director

Geologist with 25 years of experience in mining, exploration and financial markets, including 8 years as a Resources Analyst. Most recently CEO of S2 Resources focused on Australian and Finnish gold and nickel assets.

#### **Matthew Blake**

Non-Executive Director

Mr Blake has 25 years' experience in the financial services industry and with companies listed on the ASX. Executive Director of Javelin Minerals Limited and NED with Crowd Media Limited.

#### **Andrew Caruso**

Non-Executive Director

Mining executive with over 25 years' experience in the Australian and international mining industries, including significant corporate leadership and business development experience.

# Great Southern's Western Australia Projects

#### **DUKETON GOLD**

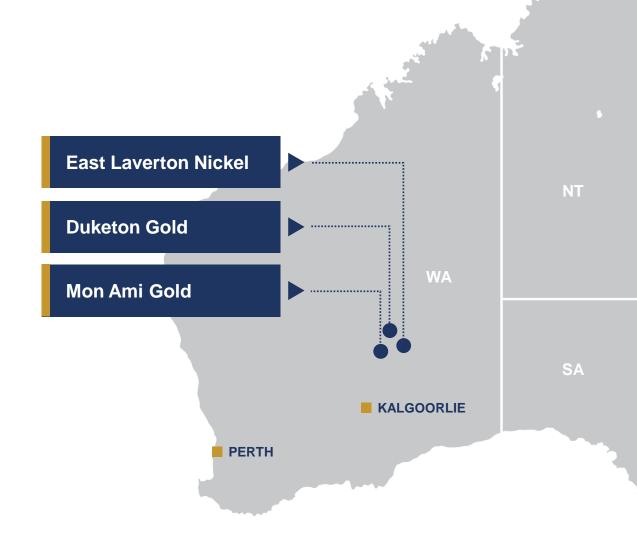
- Key prospects located on mineralised trends hosting Regis Resources gold mines to the north
- High impact drill programs planned for Southern Star, Golden Boulder and Amy Clarke in 2023

#### **EAST LAVERTON NICKEL**

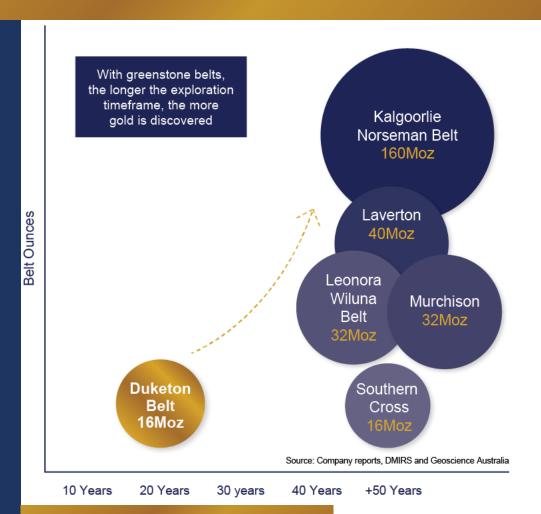
- Prospective for both intrusive Ni-Cu-PGE and komatiitic Ni deposits
- 14km of virtually unexplored ultramafic stratigraphy to be tested with EM in the first half of 2023

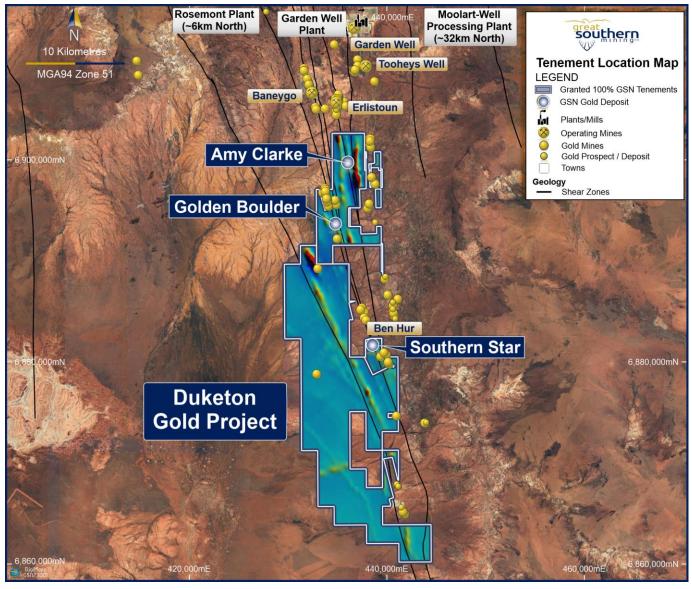
#### **MON AMI GOLD**

- Established 1.56Mt @ 1.11g/t Au for 55koz Mineral Resource (95% Indicated category)
- Granted Mining Licence with requisite mining studies complete Assessing monetisation opportunities



## Duketon Gold Underexplored greenstone belt

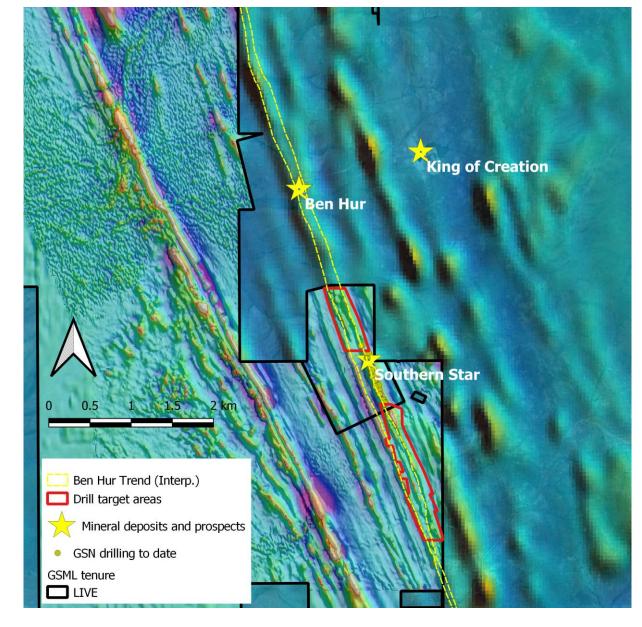




Map of GSN's 100% owned Duketon Gold Project and surrounding operating mills owned by Regis (ASX: RRL)

## Southern Star Ben Hur Analogue

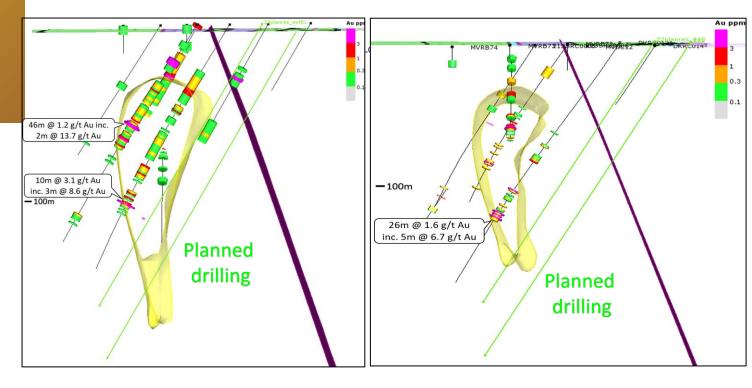
- Recent drilling and multielement analysis has confirmed Southern Star as a large mineralised gold system currently defined over ~700m
- Southern Star is an analogue to Regis Resources' Ben Hur, located just 4km to the north in same geological host
- Ben Hur 390koz @ 1.2g/t Au based on ~130,000m drilling,
- Southern Star only ~20,000m drilling to date (~10,000m by GSN) with limited drilling below 150m depth

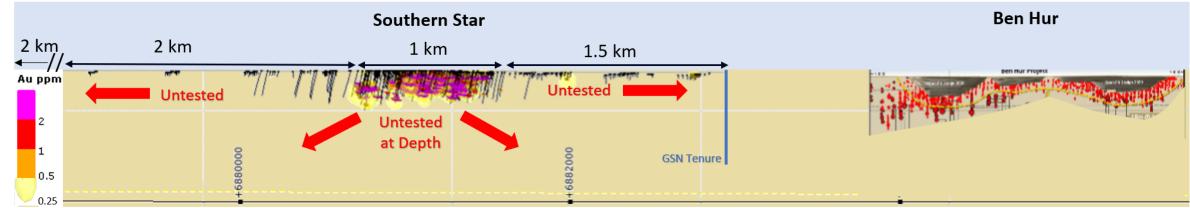


Magnetic image highlighting the Southern Star prospect along the interpreted Ben Hur trend.

### Southern Star

- Major drilling programs targeting strike and depth extensions at Southern Star and parallel 'Ben Hur' trend to the west.
- GSN has 6.7km to test along the interpreted Rosemont-Ben Hur trend at Southern Star
  - ~1.5km to the north of Southern Star and ~4km to the south
- Open in all directions with limited drilling along strike or at depth



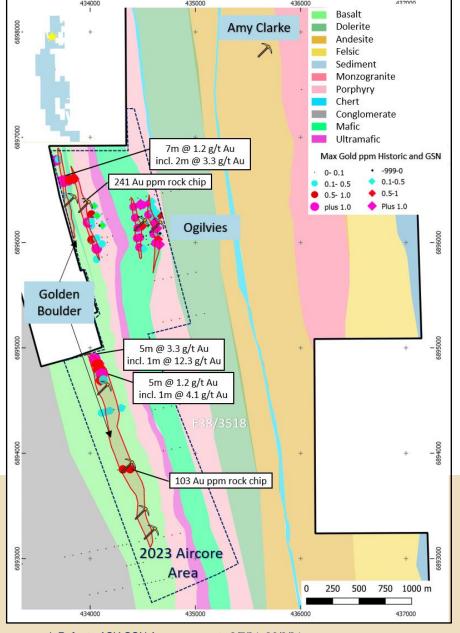


## Duketon Gold Golden Boulder Area

- Multiple stacked and parallel gold trends with numerous historic workings
- Historic drilling is sparce and shallow (average depth just 40m) and, in some areas, ineffective due to ferricrete crust
- RC drilling in 2021 returned 5m @ 3.3g/t Au from 49m, including 1m @ 12.3g/t Au and 8m @ 2.1g/t Au from 32m, including 4m @ 3.7g/t Au
- Presence of multiple parallel quartz lodes identified, with surface sampling returning results up to 241g/t Au and 103g/t Au
- Prospective for narrow, high-grade gold open pit and underground potential

#### **Next steps:**

Pattern aircore drilling planned within ~3km of prospective strike to vector in on zones of high grade and continuity

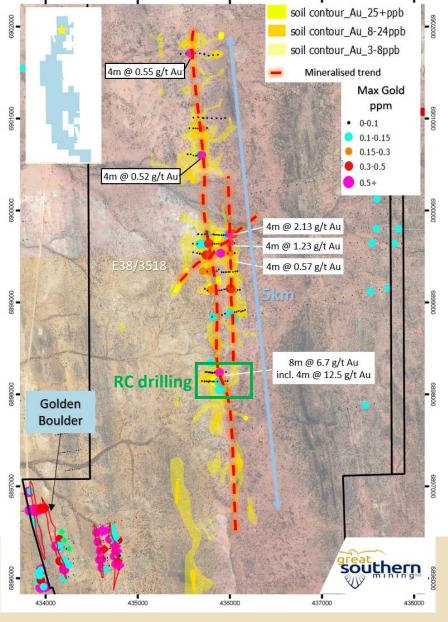


<sup>1</sup> Refer to ASX:GSN Announcements 8/7/21, 23/9/21

## Duketon Gold Amy Clarke

- Tenement acquired in late-2020 with little historical exploration undertaken
- 8km from Garden Well processing facility
- 5km gold anomaly identified in shallow aircore drilling and soil geochemistry
- Similar grade and tenor to Regis' Garden Well anomaly prior to the 2.1 Moz @ 1.4 g/t Au gold discovery¹
- Main anomalism sits along strike (less than 3.5km) from Regis' Erlistoun pit with 320koz @ 1.9 g/t Au<sup>1</sup>
- Recent GSN drilling confirmed two significant mineralised trends including an intercept of:
  - 8m @ 6.7g/t Au from 33m, including 4m @ 12.5g/t Au²

**Next steps:** Follow up RC drilling to previous high grade intercepts. Extensional aircore drilling over new southern extension geochemical anomaly

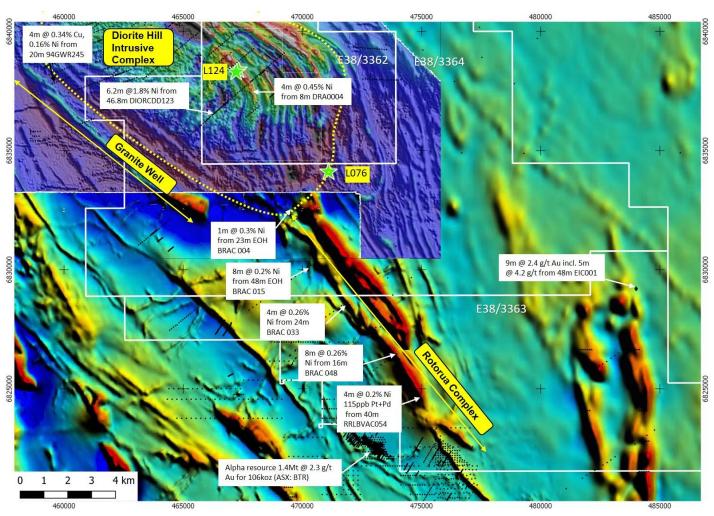


<sup>&</sup>lt;sup>1</sup> Source: ASX:RRL announcements 8/3/11, 18/1/11

<sup>&</sup>lt;sup>2</sup> Refer ASX announcement 17/1/22

### **East Laverton Nickel**

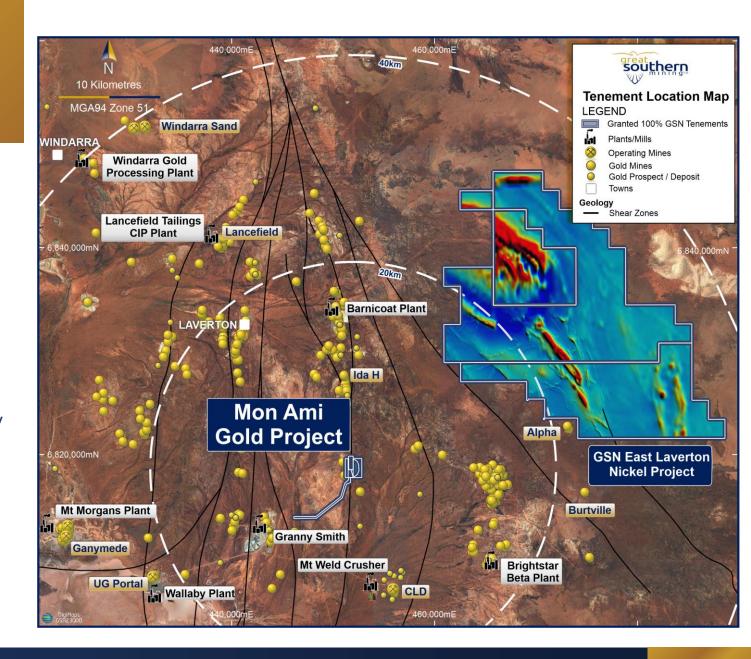
- Project area of 405km<sup>2</sup>
- Prospective for both intrusive magmatic and komatiitic nickel—copper-PGE mineralisation
- 3 conceptual target areas:
  - Diorite Hill layered intrusive
  - Rotorua Komatiite trend
  - Granite Well Komatiite trend
- 3-hole Diorite Hill drilling program in late-2022 proved the right geology – follow up exploration required
- 14km of komatiite trends to be tested with EM in 2023
- Gold potential still to be tested proximal to Brightstar's Alpha gold deposit



Magnetic image highlighting the Rotorua and Granite Well targets with drillhole database displaying Newmont significant intersections along the edge Rotorua complex. Refer to Brightstar Resources (BTR) 2021 Annual Report for Alpha Gold Resource.

### Mon Ami Gold

- Established 1.56Mt @ 1.11g/t Au for 55koz Mineral Resource
- Shovel ready on a granted Mining License with requisite mining and environmental studies complete
- Permitted haul access route to nearest major highway
- In November 2022, Dacian Gold requested expressions of interest for ore feed for its Mt Morgans processing plant. Mon Ami is 43km by road to this plant.
- In December 2022, Brightstar Resources and Kingwest Resources announced a merger

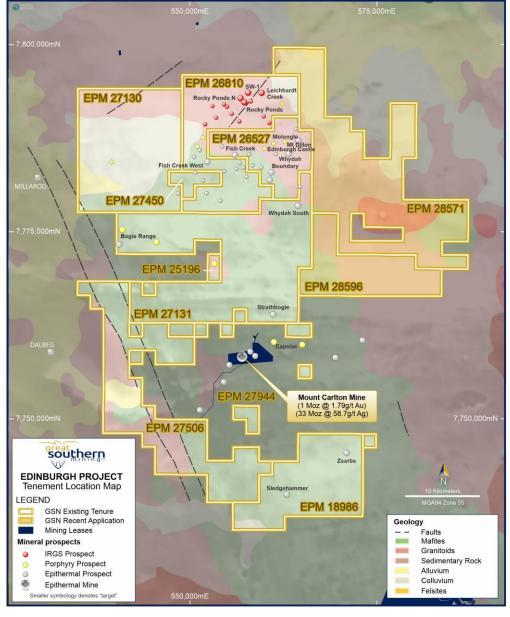


# Great Southern's Queensland Projects



## Edinburgh Park Targets Identified – Time to Drill

- Belt scale play with ~1,750km<sup>2</sup> tenure surrounding 1.7Moz Au Eq Mt Carlton Mine
- Prospective for high and low sulphidation mineralisation of the Mt Carlton type, as well as potential for high level Cu-Au porphyry deposits
- 29 epithermal and porphyry targets identified from structural and geochemical studies and field mapping
- High priority targets confirmed at Molongle, Mt Dillion, Fish Creek and Edinburgh Castle
- Drilling to commence in March/April following wet season
- Partnering opportunities being explored



GSN's Edinburgh Park Project highlighting proximity to Mt Carlton Mine.





### Contact Us

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