## **ASX ANNOUNCEMENT 13 November 2020**



# **Development Pathway for Mon Ami**

### Highlights:

- Upcoming drilling program at Laverton includes targets at both Mon Ami and Cox's Find
- Mon Ami targets include:
  - Near surface high-grade to improve open pit development potential; and
  - A deeper high-grade target analogous to the nearby Ida H high-grade underground mine
- Development pathway for a potential open pit mining operation at Mon Ami has been planned
  - Upgrade existing Inferred Mineral Resource of 1.1Mt @ 1.7g/t for 59,0000 ounces of gold
  - Technical studies and stakeholder engagement commenced
  - Target of securing a mining approval for Mon Ami during 2021

Chief Executive Officer of Great Southern Mining Limited (ASX:GSN) (GSN or the Company), Sean Gregory, commented:

"We are pleased to announce that our in-house preliminary economic review has identified a potential lowcost development pathway for an open pit mining operation at Mon Ami. The planned drilling program seeks to expand on this opportunity and test for higher grade extensions to the deposit at depth. Rapid development at Mon Ami has the potential to deliver a robust source of cash flow for GSN, allowing further acceleration of the aggressive exploration plans across our Australian gold portfolio."



Photo - Historical mining relics at Mon Ami, south of Laverton, WA

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### **Development Pathway**

GSN has completed an in-house preliminary economic evaluation of the potential for an open pit development at the Mon Ami deposit. The results are sufficiently positive for GSN to commence the full suite of requisite preliminary activities with the goal of obtaining a mining approval under the *Mining Act 1978 (WA)* during 2021. This progression towards development is expected to add significant underlying value to Mon Ami. Development of the deposit also offers a potential source of cash flow for ongoing funding of the Company's aggressive exploration plans across its gold portfolio - including Cox's Find, at depth at Mon Ami, and the Edinburgh Park Gold Project in North Queensland.

Mon Ami is located on a granted mining lease. An 8km haul road has been designed that links the deposit with the existing sealed Mt Weld road and a miscellaneous license application has been pegged over this route. GSN has established a relationship with the Nyalpa Pirniku Traditional Owners and a heritage survey team is presently on site this week surveying the complete mining lease and proposed haul road route.

Our environmental consultants have advised the Company that the optimum time to conduct biological baseline surveys in the Laverton district is 6-8 weeks after any significant summer rain events, noting that February is the wettest month on average, subject to significant seasonal and annual variation. Waste and soil characterisation studies are also planned.

Initial technical studies have been scoped to support a mining approval. This includes a review of the existing drill core and optical televiewer data by our geotechnical consultants to recommend the pit design parameters. A hydrogeological and hydrological study has been scoped.

The metallurgical characteristics of Mon Ami were tested in 2018 where the recoveries averaged 95% in the fresh and transitional rock<sup>1</sup>, which will be the focus of any open pit development.

The maiden Inferred Mineral Resource of 1.1Mt @ 1.7 g/t Au for 59,000 oz was estimated in 2018<sup>2</sup>. Since then 2,073m of Reverse Circulation (RC) drilling has been conducted and further drilling is planned. Following the coming drilling, GSN plans to have the Mineral Resource re-estimated targeting upgrades to Indicated classification based on the improved understanding of the deposit from the quality assured drilling and improved confidence around modifying factors.

The objective of these development activities is to have a "shovel ready" project to present to nearby mill owners as part of proposed commercial discussions. Numerous milling solutions exist within 150km of Mon Ami. One of these is the Granny Smith Mill, located only 10km away, which is presently operating at half of its installed capacity<sup>3</sup>. However, no substantial commercial discussions with mill owners are proposed until the development studies are further advanced to add value to the project.

<sup>&</sup>lt;sup>1</sup> Refer ASX Announcement 24/01/19 "Mon Ami Project – Metallurgical Testing Results"

<sup>&</sup>lt;sup>2</sup> Refer ASX Announcement 07/11/18 "Mon Ami Project – Maiden Mineral Resource Estimate"

<sup>&</sup>lt;sup>3</sup> Source: www.goldfields.com/australia-region.php "3.5Mt Capacity" vs June 2020 Half Yearly Report of 877kt processed at Granny Smith



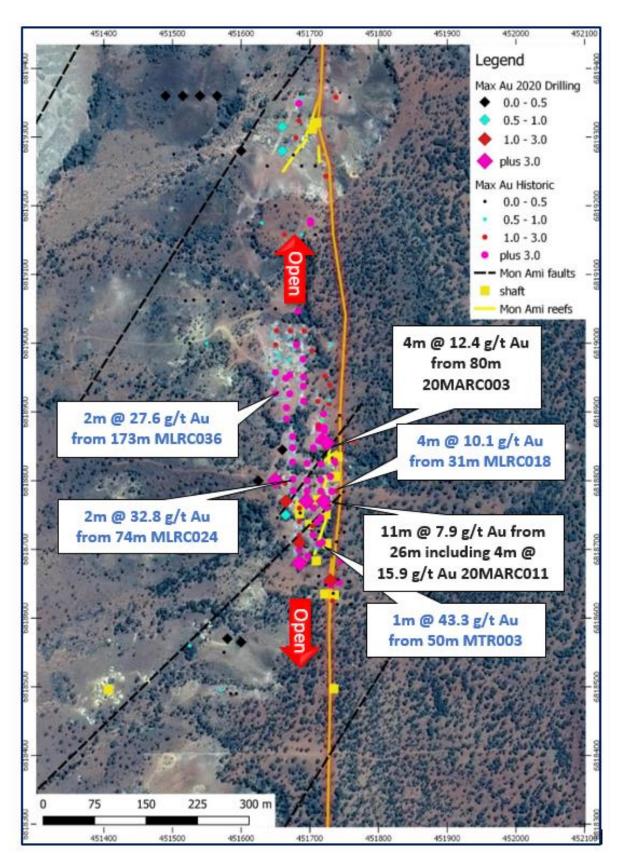


Figure 1: Plan view of the Mon Ami Project highlighting the location of high-grade intercepts



### **Near Surface High Grade**

The drill results at Mon Ami reported to the ASX in August 2020 included several near surface high-grade hits including 11m @ 7.9 g/t gold from 26m including 4m @ 15.9g/t gold in 20MARC011 and 4m @ 12.4 g/t gold from 80m in 20MARC003 (4m composite sample)<sup>4</sup>. These high-grade results are interpreted to be localised at the intersection of cross-cutting splays along the regional shear with drilling (Figure 1). Interpretation of the results has identified opportunities to extend these high-grade zones with shallow RC drilling which is expected to further improve the economics of a potential open pit development.

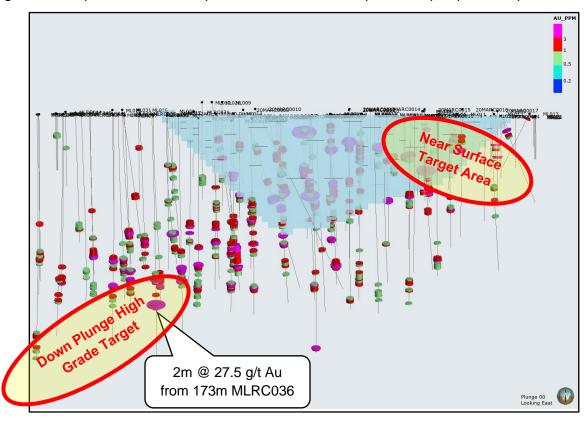


Figure 2: Long Section highlighting the 2 target areas at Mon Ami for planned drill testing

### **Depth Extensions**

The long section of the Mon Ami deposit (Figure 2) reveals a dominant northerly plunge to the mineralisation including a **2m** @ **27.5 g/t Au** intersection from 173m in MLRC036. There is no drilling directly down plunge along this trend.

GSN believes that this high grade could extend to depth in analogous fashion to the Ida H deposit located 14km to the north of Mon Ami along the same regional shear zone, the Barnicoat Shear. At Ida H, a rich underground gold deposit was hidden under a similar small open pit (Figure 3). Historical underground production at Ida H was 176koz @ 22.8 g/t Au.

<sup>&</sup>lt;sup>4</sup>Refer ASX Announcement 12/8/20 – "Significant Shallow High-Grade Gold at the Mon Ami Gold Project"



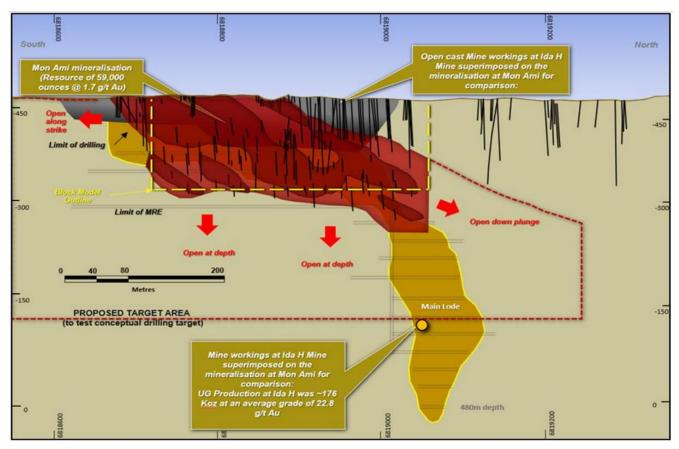


Figure 3: Long Section of Ida H superimposed over Mon Ami for comparison purposes

### **Drill Rig Secured**

GSN has again secured the services of its preferred RC drilling contractor to resume drilling operations at Laverton from the first week of December 2020.

Drilling will test these targets at Mon Ami as well as the targets at Cox's Find announced in GSN ASX release dated 11 November 2020.

This announcement is authorised by the Board of GSN.

### **About Great Southern Mining**

Great Southern Mining Limited is a leading Australian listed gold exploration company. With significant land holdings in the world-renowned gold districts of Laverton in Western Australia and Mt Carlton in North Queensland, all projects are located within 25km of operating gold mills and major operations.

The Company's focus is on creating and capturing shareholder wealth through efficient exploration programs and strategic acquisitions of projects that complement the Company's existing portfolio of quality assets.

For further information regarding Great Southern Mining Limited please visit the ASX platform (ASX:GSN) or the Company's website <a href="https://www.gsml.com.au">www.gsml.com.au</a>.



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

Deposit	Competent Person	Employer	Professional Institute
Mon Ami 2020 Exploration Results	Simon Buswell- Smith	Great Southern Mining Ltd	MAIG
Mon Ami 2019 Exploration Results incl. metallurgy	Dr Bryce Healy	Noventum Group Pty Ltd	MAIG
Mon Ami Mineral Resource	Dr Michael Cunningham	SRK Consulting (Australasia) Pty Ltd	MAusIMM, MAIG

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.

#### **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.