

ASX ANNOUCEMENT 18 July 2019

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GREAT SOUTHERN MINING EXPANDS EXPLORATION FOOTPRINT IN NORTH QUEENSLAND

HIGHLIGHTS

- Acquisition of 360 sq km of exploration tenure in the Hodgkinson Province in North Queensland.
- Application area is located in a known gold-copper district with high prospectivity for lode and placer-style gold and VMS-style copper deposits such as the high-grade Dianne Copper Mine.
- Detailed reconnaissance exploration will commence upon grant of the tenements.

Great Southern Mining Limited (ASX Code: GSN) is pleased to advise that two (2) applications for Exploration Permits for Minerals (EPM's) have been submitted, covering an area of 360 sq kms in the Hodgkinson Province in North Queensland (Figure 1).

EPM 27291 and EPM 27305 applications were pegged in response to a highlevel due diligence review of copper and gold occurrences in the region and are considered to hold potential for Volcanic Massive Sulphide (VMS) copper and hard rock and associated placer gold mineralisation.

The area has not been subject to a significant degree of modern exploration techniques providing GSN with exceptional exploration upside.

GSN's Executive Chairman, John Terpu, commented:

"There are a number of historical references to VMS prospects within the application area where noted mineralisation is similar to the geology of the incredibly high-grade Dianne Copper Mine deposit.

This provides the Company an immediate focus area to undertake detailed exploration activities to potentially identify similar style high-grade copper deposits for follow up drill programs.

Once granted, these permits will add to GSN's already significant presence in North Queensland with our Edinburgh Park Project and underpins our belief that the historically underexplored region provides considerable exploration upside for gold, copper and base metal deposits."





Figure 1: Location of EPM 27305 and 27291, the Palmer River Project.



Background

Geologically the EPM's sit within the Silurian to Late Devonian age metasedimentary Hodgkinson Province – a deformed elongate, deformed flysch terrane which comprises terrigenous clastic-volcanic-limestone sequences (turbidite facies). Structurally the project area covers major fault systems trending north west to north-north west. The Hodgkinson Formation is host to widespread mineralisation of copper and gold, in particular the Palmer goldfields.

Volcanic Massive Sulphide Copper potential

Volcanic-associated massive sulphide deposits (e.g., the Deborah prospect (at Mt Bennett) and the Dianne Copper Mine – refer Figure 1) occur in the Hodgkinson Formation where these deposits comprise predominantly strataform chert/quartzite beds associated with basic volcanic sills or flows and disseminated copper mineralisation in basic volcanics of the Hodgkinson Formation (e.g., Little Palmer River, Glenroy and St George prospects).

The tabular-shaped bodies are >100m long and capped by ferruginous gossans. The sulphide zones contain pyrite bands replaced by chalcopyrite, sphalerite and galena, where past mining has targeted secondary enrichment (supergene) carbonate zones grading **20 – 25% Cu**.

The Dianne Copper Mine is the most significant deposit and was in production from 1979 to 1983 producing **69,820 t** of direct shipping grade ore assaying between **18%** and **26% Cu** and **359 g/t Ag** (Wallis, 1993).

The Company has moved to secure ground which it believes has potential for further high-grade massive sulphide copper deposits at depth below numerous prospects typified by lenses of pyritic (gold-bearing) quartzite with gossanous expressions and anomalous copper that could be exhalative in origin and represent the fringes of larger VMS deposits. The literature notes that these prospects bear geological similarities with the geology of the Dianne Copper Mine.

Hard rock and placer gold potential

Large tonnages of gold (>1.3Moz) has been won from the lode and placer deposits of the Hodgkinson Province through small-scale to artisanal mining for over a century. Hard rock gold mineralisation within the Hodgkinson Province generally occurs as epigenetic gold-quartz veins 'slate-belt style' associated with chert/quartzite lenses and is characterised by narrow quartz lodes grading 30 to 60 g/t (1 to 2 ounces per tonne) in dilational settings. The gold-quartz vein deposits are generally hosted within small fissures or larger reverse faults, stockworks or breccia lodes.

There is potential for the province to host large bulk tonnage resources of gold (e.g., Ravenwood).

Erosion of the hard rock gold mineralisation has developed widespread Mesozoic and Tertiary palaeochannel (deap lead) and recent alluvial and eluvial placer gold deposits that were the primary focus of the original Palmer River / Maytown gold rush which produced over 1 million ounces of alluvial gold in the late 1800's.



Competent Person's Statement

The information in this report that relates to exploration targets and exploration results on EPM 27291 and EPM 27305 is based on, and fairly represents, information and supporting documentation compiled by Dr Bryce Healy. Dr Healy is an employee of Noventum Group Pty Ltd (ACN 624 875 323) and has been engaged by Great Southern Mining Limited as Head of Exploration. He has sufficient experience relevant to the style of mineralisation and type of deposit under consideration. Dr Healy 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). Dr Healy consents to the inclusion in the report of the matters based on his information in the form and context in which they occur.

Tenements in Application

EPM 27291 and EPM 27305 are currently in application with the Queensland Department of Mines. Grant is anticipated in the coming months. There is nothing to suggest the tenements will not be granted to GSN.

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 contemplate.