

28 January 2020

## 2020 EXPLORATION BEGINS WITH MORE STRONG RESULTS

### New electromagnetic (EM) conductors identified at Fish Hook Prospect by moving loop electromagnetic (MLEM) survey:

- High temperature SQUID MLEM survey has resumed after the Christmas break and identified two high priority EM anomalies at the Fish Hook Prospect
- Both EM anomalies are coincident with magnetic anomalies and interpreted to be bedrock conductors with potential to represent nickel-copper sulphide mineralisation
- The largest of the two conductors is seen over 3 survey lines (at 200m spacing) and has a strike length of more than 500m

### Multi-rig drilling programmes planned for 2020:

- Resource definition of the shallow high-grade deposits at the Cathedrals Belt will begin with reverse circulation (RC) drilling
- Diamond drilling will continue to be used for testing of new EM conductors and deeper nickel-copper sulphide targets
- Drill rigs will arrive at site shortly once new Programmes of Work are approved by the Department of Mines and modelling of the new EM conductors is completed

### Metallurgical testwork underway:

- Test work on massive and disseminated nickel-copper sulphides from metallurgical hole MAD177 is underway
- Focus on producing separate nickel and copper concentrates *plus* maximising the recovery of gold and PGEs – with palladium around 80% of PGEs assayed to date

***Right:*** Photograph of drill core for MAD177, which intersected 6.15m of massive nickel-copper sulphides from 184.75m downhole with average XRF values of 8.1% Ni, 2.69% Cu (XRF values are preliminary and metal values are to be confirmed by laboratory assays).



Growth-focused Western Australian nickel company St George Mining Limited (ASX: **SGQ**) (“**St George**” or “**the Company**”) is pleased to announce further strong exploration results from ongoing work at its flagship Mt Alexander nickel-copper sulphide project, located in the north-eastern Goldfields.

**John Prineas, St George Mining’s Executive Chairman,** said:

“Initial results from the EM survey at the unexplored Fish Hook Prospect are extremely encouraging with new conductors identified in a prospective geological setting.

“This is a great start to the 2020 field season and we are excited at the potential for more exploration success as the work programmes progress.

“Drill hole MAD177 is a reminder of the remarkable mineralisation at the Cathedrals Belt with high grades of nickel, copper, cobalt and platinum group metals – predominantly palladium.

“We are keenly awaiting the report on the latest metallurgical test work, which we believe will further confirm the exceptional value of our mineralisation and its potential to be commercialised.

“We believe the discoveries to date may only be a fraction of the mineralisation in the high-grade mineral system at Mt Alexander. We will continue our systematic exploration in 2020 to test the potential for more deposits down-plunge of the shallow mineralisation and also along strike to the east and west.”

## MLEM SURVEY – HIGH PRIORITY EM TARGETS IDENTIFIED

The MLEM survey over key target areas across the Cathedrals Belt resumed this month. The survey over the Fish Hook Prospect has just been completed, with two high priority EM anomalies identified.

Figure 1 shows the location of the two new EM anomalies. Both anomalies are coincident with magnetic anomalies that, in other parts of the Cathedrals Belt, have been confirmed by drilling to be intrusive mafic/ultramafic units. Fish Hook is situated within a tenement owned 100% by St George.

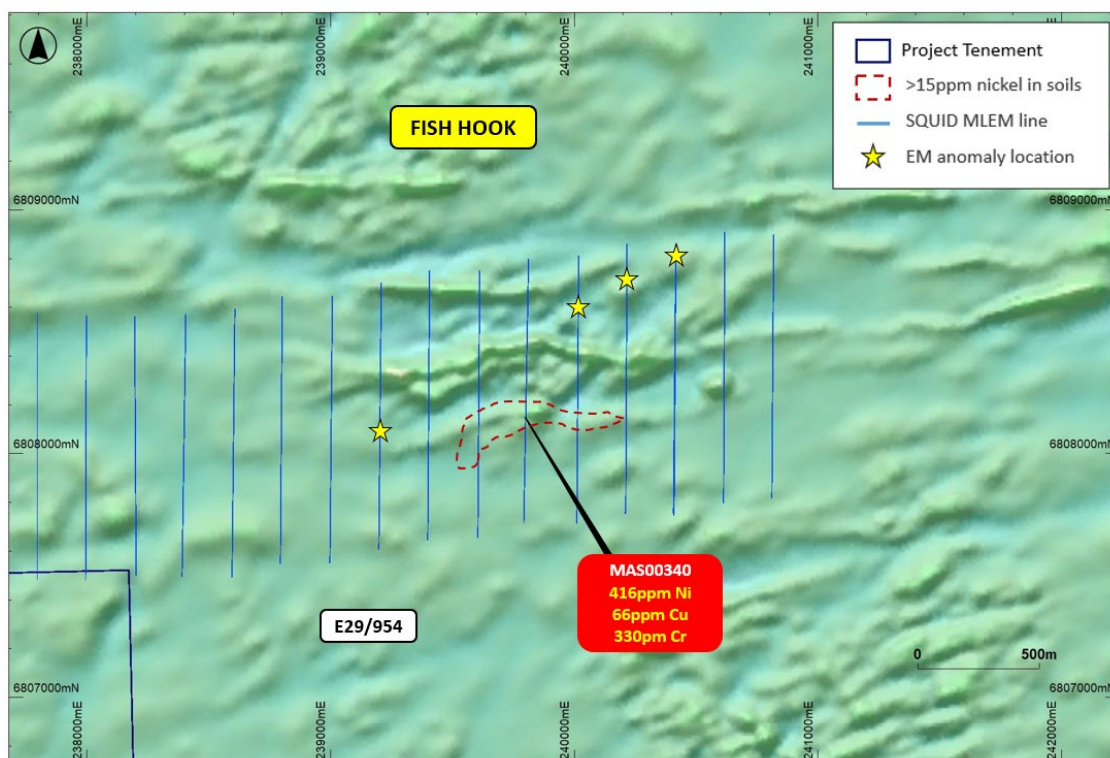


Figure 1 – map of the Fish Hook Prospect showing location of new EM anomalies and survey lines, as well as the location of the large nickel soil anomaly, overlaying magnetic (RTP 1VD)

The new EM anomalies are also proximal to the large, high-order nickel and copper soil anomaly identified at Fish Hook. These soil samples lie along the interpreted trend of the Cathedrals mineralised horizon, and strongly support the presence of nickel-copper sulphide mineralisation.

The EM anomaly in the north-east of the survey area is seen over three survey lines (at 200m spacing) giving a strike length of more than 500m. Infill EM surveys will be completed at this target shortly in order to finalise modelling of the conductor and optimise the drill testing.

Figure 2 shows the other areas being covered by the MLEM survey, which is using a high temperature SQUID (superconducting quantum interference device) sensor that serves to minimise noise levels from conductive cover. The survey is also utilising both traditional in-loop and Slingram configurations – the latter uses a sensor outside of the survey loop, which further minimises any interference from conductive cover.

The MLEM survey is now underway at the West End Prospect where we believe there is potential to also identify additional priority targets for nickel-copper sulphides.

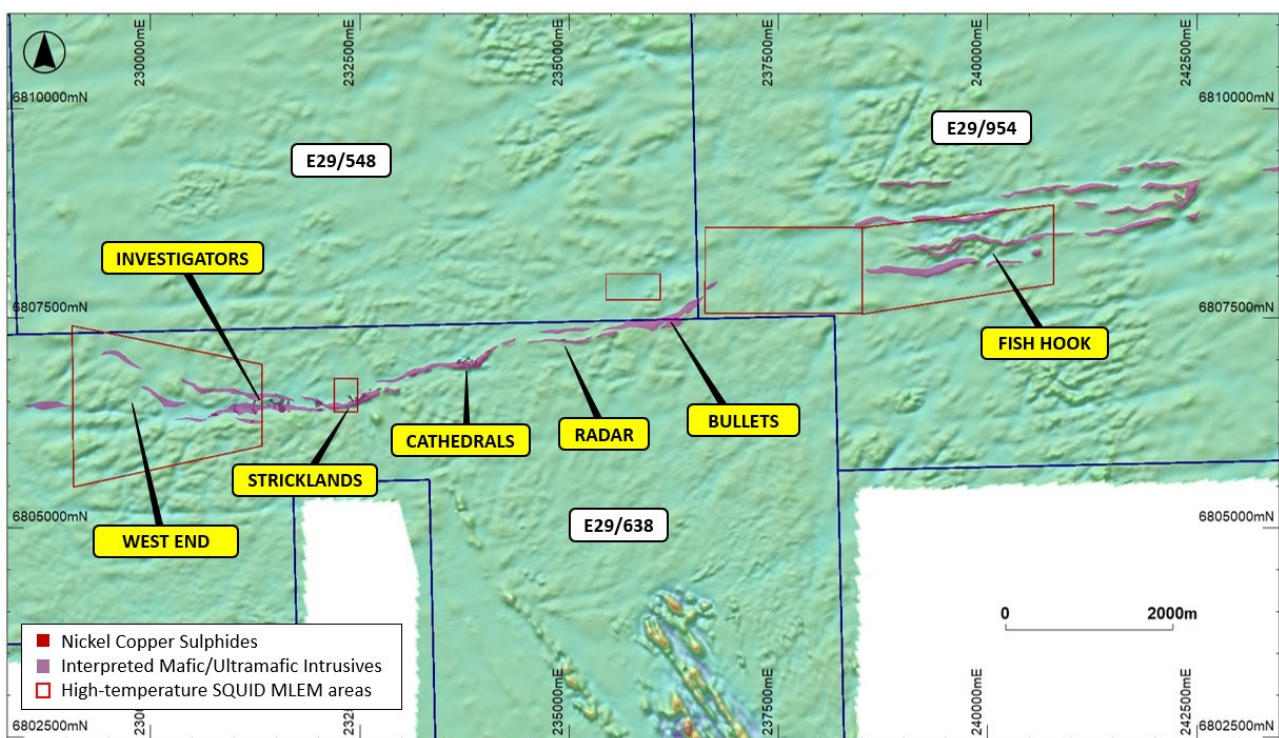


Figure 2 – map of the Cathedrals Belt (against RTP 1VD magnetic data) showing the key prospects and the areas planned for SQUID MLEM surveys.

## 2020 DRILLING PROGRAMMES

Initial drilling programmes for 2020 are due to commence shortly and will concentrate on resource definition as well as continued exploration for additional deposits.

Resource definition drilling will focus on the shallow deposits at the Stricklands, Cathedrals and Investigators Prospects. Nickel-copper sulphide mineralisation at these Prospects commences from 30m below surface, making the deposits potentially attractive for an open-pit mining operation.

The resource definition drill-out will be completed mainly with RC drilling and forms part of the scoping studies underway to consider the feasibility of a mining operation at Mt Alexander.

The first Prospect to be drilled will be Stricklands.

Diamond drilling will also commence shortly at Mt Alexander. The main focus of the diamond drilling will continue to be the testing of EM conductors and the completion of deeper holes (typically beyond 250m).

Further details of the deeper holes, which will focus on targets located down-plunge of the shallow deposits and underneath the gossans identified at Fairbridge, will be announced soon. RC pre-collars will be used for these deeper holes where suitable.

A number of metallurgical, geotechnical and hydrological diamond drill holes will also be completed in support of the scoping studies for the shallow deposits at the Cathedrals Belt.

### **METALLURGICAL TESTWORK PROGRESSES**

Drill hole MAD177 was drilled to provide samples for metallurgical characterisation of the mineralisation at the Investigators Prospect. Both massive and disseminated sulphide mineralisation from MAD177 will be included in the testwork with the aim of assessing the metallurgical performance of both ore types.

Preliminary metallurgical testwork completed in October 2016 with Strategic Metallurgy in Perth confirmed that the mineralisation tested was amenable to flotation processes with separate nickel and copper concentrates produced (for details on this earlier testwork, see our ASX Release dated 20 October 2016 *'Strong Results Continue at Mt Alexander'*).

The new testwork will aim to repeat these excellent results as well as to maximise the recovery of gold and platinum group elements. Assays of Mt Alexander mineralisation have shown that palladium comprises about 80% of the platinum group elements, creating potential for very significant payabilities given the current record price of palladium.

The first results from the testwork are expected in approximately eight weeks.



*Figure 3 – a photo of drill core with massive nickel-copper sulphides from MAD177. Coarse grained pentlandite and chalcopyrite are clearly observed.*

### **About the Mt Alexander Project:**

The Mt Alexander Project is located 120km south-southwest of the Agnew-Wiluna Belt, which hosts numerous world-class nickel deposits. The Project comprises five granted exploration licences – E29/638, E29/548, E29/962, E29/954 and E29/972.

The Cathedrals, Stricklands and Investigators nickel-copper-cobalt-PGE discoveries are located on E29/638, which is held in joint venture by St George Mining Limited (75%) and Western Areas Limited (25%). St George is the Manager of the Project, with Western Areas retaining a 25% non-contributing interest in the Project (in regard to E29/638 only) until there is a decision to mine.

**For further information, please contact:**

**John Prineas**

Executive Chairman

St George Mining Limited

+61 (0) 411 421 253

[John.prineas@stgm.com.au](mailto:John.prineas@stgm.com.au)

**Peter Klinger**

Media and Investor Relations

Cannings Purple

+61 (0) 411 251 540

[pklinger@canningspurple.com.au](mailto:pklinger@canningspurple.com.au)

**Competent Person Statement:**

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Dave O'Neill, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr O'Neill is employed by St George Mining Limited to provide technical advice on mineral projects, and he holds performance rights issued by the Company.

Mr O'Neill has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr O'Neill consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.