

8 March 2021

MET TEST HOLES SUCCESSFUL AS FOCUS TURNS TO HIGH-IMPACT DRILLING AT MT ALEXANDER NICKEL-COPPER SULPHIDE PROJECT

24/7 DIAMOND DRILLING OF ELECTROMAGNETIC (EM) CONDUCTORS IN PROGRESS:

- Drilling of MAD195 – targeting a strong 33,100 Siemens conductor at 340m downhole depth – is underway with drilling at 315.4m downhole as of yesterday
- Drilling of MAD196 – targeting a strong 55,550 Siemens conductor at 505m downhole depth – is underway with drilling at 118.1m downhole as of yesterday

HIGH-GRADE XRF RESULTS FOR METALLURGICAL DRILL HOLES AT STRICKLANDS:

- Drill core for Stricklands metallurgical holes has been cut and massive sulphide intervals have been tested with portable XRF analyser, recording the following average XRF values (** XRF results are preliminary in nature and laboratory assays are required to confirm the metal content of the drill core; matrix and disseminated sulphides were not included in the XRF analysis*):
 - **STD015:**
 - 3.84% Ni and 0.61% Cu from 67.3m to 69m, and
 - 3.00% Ni and 1.6% Cu from 70.4m to 73.1m
 - **STD014:**
 - 6.86% Ni and 0.61% Cu from 40.2m to 41.7m, and
 - 4.92% Ni and 5.4% Cu from 48.2m to 48.9m
 - **STD013:**
 - 2.6% Ni and 0.9% Cu from 47.2m to 50.6m
- Samples have been sent for laboratory assaying which will provide a definitive account of the metal values in the sulphide intersections of the Stricklands drill holes
- Approximately 300kg of drill core samples are in transit to Canada for completion of metallurgical test work and flowsheet design

PETROGRAPHIC ANALYSIS OF SHALLOW MINERALISATION CONFIRMS SAME FAVOURABLE INTRUSIVE HOST ROCKS THAT ARE FOUND AT DEPTH:

- Petrographic analysis has been completed on sections of drill core from MAD31 at Investigators which intersected high-grade nickel-copper sulphides at 111m downhole
- Intrusive host rock identified as leuconorite, lherzolite and gabbronorite, similar to the intrusive rocks that petrology identified in MAD181 at up to 550m downhole depth
- Findings support the interpretation that the host intrusive unit at the Cathedrals Belt starts near surface and dips to the north-northwest

- Host intrusive unit has been identified by drilling along a strike of more than 5.5km and is open laterally and at depth, providing a large target horizon for the discovery of further nickel-copper sulphides

SOIL SURVEY CONTINUING AT E29/1041:

- Geochemical soil survey underway over broad area of interest at E29/1041 with laboratory assays pending
- Soil survey is testing an area where rock chip samples returned elevated readings for nickel and copper supporting the presence of mineralised intrusive rocks
- The survey covers an area that may be a geological analogue of the Cathedrals Belt

CSIRO TO PROBE THE UNIQUE INTRUSIVE-STYLE NICKEL-COPPER SULPHIDE MINERALISATION AT MT ALEXANDER:

- CSIRO has world-leading expertise in producing ore genesis models for nickel sulphide deposits
- Objective is to characterise the Mt Alexander mineralisation to aid in the understanding of the formation and emplacement of ore bodies, and to develop further exploration vectoring techniques

Growth-focused Western Australian nickel company St George Mining Limited (ASX: **SGQ**) (“**St George**” or “**the Company**”) is pleased to announce more strong exploration results at its flagship high-grade Mt Alexander Project, located in the north-eastern Goldfields.

24/7 DRILLING OF NEW EM CONDUCTORS

Drilling of MAD195 is continuing on a single-shift basis. Drilling is at 315.4m downhole with the modelled EM plate predicted to be intersected at 340m downhole.

MAD195 is targeting the 33,100 Siemens conductor identified from the DHEM survey in MAD185. A second crew for this rig is expected at site later this week, which will allow for drilling 24/7.

The second rig at site is already operating with two crews, with drilling of MAD196 continuing 24/7. Drilling is at 118.1m downhole with the modelled EM plate predicted to be intersected at 505m downhole. This hole is targeting the 55,550 Siemens conductor identified from the DHEM survey in MAD192.

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

“Field work is in full swing at Mt Alexander with two diamond core rigs drilling, a soil survey in progress and preparations underway for aeromagnetic and moving loop ground EM surveys.

“We are very pleased with the latest petrographic analysis, which has again identified intrusive rocks that are not typically seen in the Yilgarn but are known to host significant nickel sulphide deposits in other parts of Western Australia.

“We will also commence a project with CSIRO for sophisticated scientific investigation of the unique Mt Alexander mineralisation. This project could provide important insights into the most prospective areas in the Mt Alexander tenure for further nickel sulphide discoveries.

“In the meantime, we are excited to be drilling two powerful EM conductors that are interpreted to have a massive sulphide source. We look forward to reporting results shortly.”

HIGH-GRADE XRF RESULTS AT STRICKLANDS

Seven metallurgical drill holes were completed at Stricklands last month, as reported in our ASX Release dated 23 February 2021 ‘*Drilling Update at Mt Alexander*’. These holes were drilled into the known Stricklands mineralised envelope to provide samples for use in metallurgical test work underway in Canada.

The drill core from these new metallurgical holes has now been cut and sampled. Approximately 300kg of core is now in transit to XPS (Expert Process Solutions) in Canada. XPS has industry leading credentials in the metallurgical analysis of polymetallic nickel sulphides, a style of mineralisation that is rare in Australia.

The new metallurgical samples will be used by XPS to create a new master composite sample that will represent the actual Life of Mine (LOM) feed for a potential mining operation at Stricklands. This will allow for a robust and reliable flowsheet to be developed.

The massive sulphide intervals in the cut core have been tested by portable XRF analyser which has identified high grades of nickel and copper. The XRF analysis is preliminary in nature and a conclusive determination of the nickel, copper, cobalt and PGE values of the sulphide mineralisation will be confirmed when laboratory assays are available.

Average XRF readings in massive sulphide intervals are based on multiple readings per interval and are not density weighted. Metal content for intervals of matrix, blebby and disseminated sulphides are not accurately determined by portable XRF analysis.

STD015:

STD015 was drilled to 83.9m downhole and intersected significant sulphide mineralisation between 67.3m and 73.1m downhole. The massive sulphide intervals within the broader mineralised intersection recorded the following average XRF values:

- **3.84% Ni and 0.61% Cu from 67.3m to 69m, and**
- **3.00% Ni and 1.6% Cu from 70.4m to 73.1m**



Figure 1 – drill core tray for STD015 showing massive sulphides intersected from 67.3m downhole.

STD014:

Drilled to 57.7m downhole and intersected significant mineralisation between 36.5m and 50.6m downhole. Massive sulphide intervals within this thick mineralised intersection recorded the following average XRF values:

- **6.86% Ni and 0.61% Cu from 40.2m to 41.7m, and**
- **4.92% Ni and 5.4% Cu from 48.2m to 48.9m**

*Figure 2 – drill core from STD014 showing massive sulphides intersected from 48.2m to 48.9m downhole. This interval recorded a very high **5.4% Cu** average XRF value.*

In total, STD014 intersected a 14.1m thick interval of sulphide mineralisation from 36.5m downhole.



STD013:

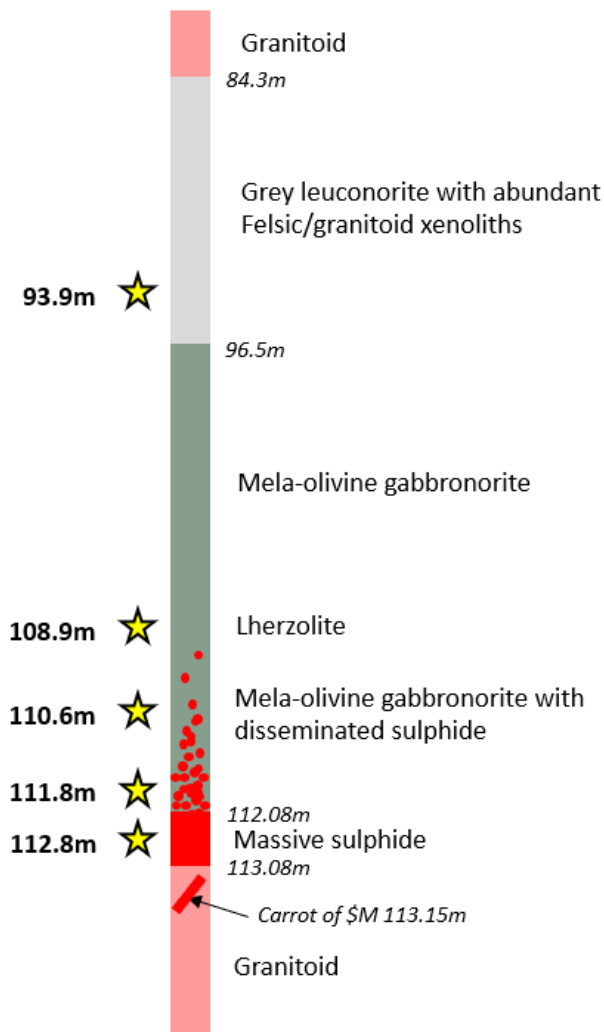
Drilled to 59.1m downhole and intersected significant sulphide mineralisation between 30.9m and 50.6m downhole. The massive sulphide intervals within this intersection recorded average XRF values of **2.6% Ni and 0.9% Cu from 47.2m to 50.6m.**

FURTHER PETROGRAPHIC ANALYSIS CONFIRMS LARGE INTRUSIVE UNIT AS HOST TO MINERALISATION

Petrographic analysis was completed on MAD31, to follow-up on the important findings from the petrographic analysis of MAD181.

MAD31 was drilled at Investigators to a downhole depth of 160m and intersected more than 5m of nickel-copper sulphide mineralisation *including* the high-grade interval:

- **1.57m @ 6.26%Ni, 2.71%Cu, 0.18%Co and 4.91g/t total PGEs from 111.67m**



Above left: Figure 3 – Schematic section of the logged intrusive geology in MA31. Petrographic sample locations are noted on the left (stars).

Above right: Figure 4 – photograph of drill core from MAD31 at 112m downhole. Coarse grained pentlandite is evident as well as a distinct pentlandite vein (outlined and labelled Pn).

The petrography was completed by Dr Ben Grguric, principal of Mineralium Pty Ltd and a mineralogist with industry leading credentials particularly in the field of nickel sulphide systems.

Similar analysis was completed on each of MAD31 and MAD181, the latter reported in our ASX Release dated 27 January 2021 'Drilling to Resume at Mt Alexander', with the significant difference being that samples from MAD31 were around 110m downhole whereas samples from MAD181 were from approximately 550m downhole.

The intervals examined in MAD31 are comparable to those in MAD181 in that they represent a mafic-ultramafic intrusive body which has invaded granitoid country rock and subsequently been altered.

The geology in MAD31 consists of an intrusion with an upper felsic xenolith-rich, medium-grained mafic to leucomafic lithology, underlain by a thinner, medium-grained, dark ultramafic unit with the classic disseminated to matrix downward profile of increasing sulphide abundance, finishing in a body of massive sulphide. The entire package appears to have intruded a red medium to coarse-grained granitoid body which may have been the source of the abundant xenoliths present in the mafic unit.

The intrusive geology identified in MAD31 was confirmed as the same as recognised in MAD181. This is consistent with St George's interpretation that the intrusive host unit commences near surface at the Cathedrals Belt and dips to the north-northwest.

The unit has been identified by drilling along an east-west strike of more than 5.5km and down-dip to 600m. The unit is open laterally and at depth. There is potential for additional nickel-copper sulphides to be present across this large target horizon, both up-dip and down-dip from known nickel-copper sulphides.

As with MAD181, the petrography determined that the nickel-copper sulphide mineralisation was hosted in a suite of intrusive mafic and ultramafic rocks – including mela-olivine gabbro-norite – that is highly unusual in the Archean central Yilgarn where Mt Alexander is located.

These types of mafic-ultramafic intrusive rocks are known to be associated with significant nickel sulphide deposits in Western Australia such as IGO's Nova Bollinger (ASX: IGO), Panoramic's Savannah (ASX: PAN) and Oz Mineral's Nebo-Babel (ASX: OZL).

The mineralisation in MAD31 is more typical of a mafic-ultramafic system than a classic Archaean komatiitic system found in the Yilgarn on the basis of:

1. Higher Cu content, given Ni:Cu ratios of 2.5:1 to 3:1 in the Mt Alexander disseminated and massive sulphides, compared to Agnew-Wiluna komatiitic mineralisation that typically has a Ni:Cu ratio of 10:1 to 30:1.
2. High PGE content in the Mt Alexander massive sulphide – Pd + Pt of 4 to 6 g/t.

As with MAD181, the petrology identified small amounts of galena (Zn) in the massive sulphides pointing to potential contamination with sedimentary or VMS sulphides somewhere in the magmatic plumbing at depth.

Mineralisation sourced from deep magmatic structures is indicative of a large mineral system with potential to host significant volumes of mineralisation.

This further supports the prospectivity of the Cathedrals Belt for the discovery of larger nickel-copper sulphide deposits at depth or in other parts of the project tenure.

SOIL SURVEY CONTINUING ON E29/1041

A soil geochemical survey is underway at E29/1041 with 900 samples planned to be collected. The samples will be submitted for laboratory assaying.

Initial rock chip sampling by St George recorded elevated values of nickel and copper, indicating the potential for intrusive mafic-ultramafic stratigraphy in this area. The aim of the soil survey is to test for the presence of mafic-ultramafic units and/or nickel-copper mineralisation in the area.

CSIRO PROJECT – POTENTIAL SCIENTIFIC BREAKTHROUGH

CSIRO and St George have agreed to conduct a research project to characterise the unique nickel-copper sulphide mineralisation and intrusive geology in the Cathedrals Belt. The aim is to better understand the generation and emplacement mechanism behind the mineralised intrusive system, which may provide an insight into the most prospective areas in the region.

CSIRO has world-leading expertise in producing ore genesis models for nickel sulphide deposits, and world-class scientific facilities to carry out multiscale characterisation studies.

An application for co-funding of the research project has been made under the Commonwealth Government's Innovation Connections program which may provide funding for 50% of the project costs. The findings of the Project are expected late in H2 2021.

2021 DRILL PROGRAMME

Table 1 shows details for drill holes completed or commenced in the 2021 diamond drill programme. Additional holes will be prioritised following review of ongoing drill results.

Daily drilling rates can vary significantly depending on the type of rocks being drilled, the competency of the rocks, weather conditions and rig maintenance. In particular, drill rates in the past week at Mt Alexander have been reduced because of lightning storms. The second rig has also been affected by unscheduled maintenance.

Hole ID	Prospect	East	North	RL	Depth	Azi	Dip
MAD194	Investigators	231475.7	6806540	423.6562	201.2	177	-70
STD009	Stricklands	232476	6806521	442.793	70.1	360	-90
STD010	Stricklands	232420.8	6806488	439.39	66.8	35	-78
STD011	Stricklands	232529.4	6806540	445.52	60.6	229	-85
STD012	Stricklands	232624.1	6806642	444.625	85	176	-84
STD013	Stricklands	232466.1	6806516	443.33	59.1	179	-85
STD014	Stricklands	232466	6806517	442.793	57.7	030	-86
STD015	Stricklands	232622	6806646	445	83.9	130	-80
MAD195	Investigators	230966	6806783	420	370	176	-68
MAD196	West End	230623	6806922	415	550	175	-68

Table 1 – drill hole details for diamond holes completed or commenced in 2021.

COVID-19:

St George continues to manage its operations in compliance with COVID-19 regulations issued by State and Commonwealth authorities. We will continue to proactively manage drilling and other field programmes to protect the health and safety of our team and service providers.

Border restrictions in Western Australia and elsewhere have impacted on the movement of personnel for drill rig crews which is constraining the availability of drill rigs. St George is in close contact with its drilling contractors to best manage access and continuity to drilling services.

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 six granted exploration licences – E29/638, E29/548, E29/962, E29/954, E29/972 and E29/1041 – which are a contiguous package. A seventh granted exploration licence – E29/1093 – is located to the south-east of the core tenement package.

The Cathedrals, Stricklands, Investigators and Radar nickel-copper-cobalt-PGE discoveries are located on E29/638, which is held in joint venture by St George (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. All other Project tenements are owned 100% by St George.

Authorised for release by the Board of St George Mining Limited.

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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.