

23 February 2021

## DRILLING MOVES FROM STRICKLANDS TO TESTING NEW EM CONDUCTORS AT MT ALEXANDER NICKEL-COPPER SULPHIDE PROJECT

### DIAMOND DRILLING OF STRONG ELECTROMAGNETIC (EM) CONDUCTORS HAS STARTED:

- Drilling of new EM conductors commenced yesterday
- First target being drilled is a strong 33,100 Siemens off-hole conductor identified from the downhole EM (DHEM) survey in MAD185
- Drilling of additional new EM conductors is planned including two conductors modelled with conductivity of 55,550 Siemens and 26,000 Siemens, respectively, identified from the DHEM survey in MAD192

### DRILLING OF METALLURGICAL HOLES AT STRICKLANDS HAS BEEN COMPLETED:

- Seven diamond core holes drilled for use in metallurgical test work underway in Canada
- Abundant nickel-copper sulphides intersected within the Stricklands resource envelope
- Approximately 200kg of core samples being prepared for air freight to Canada

*On right:* Photo of drill core (PQ-size) from drill hole STD014 at Stricklands which intersected **14.1m of sulphide mineralisation from 36.5m downhole** (true width and based on geological logging).

The photo shows core with massive nickel-copper sulphides at approximately 50.2m downhole. Assays are pending and required to confirm the metal values intersected by STD014.



Growth-focused Western Australian nickel company St George Mining Limited (ASX: **SGQ**) (“**St George**” or “**the Company**”) is pleased to announce that drilling of multiple strong EM conductors has commenced at its flagship high-grade Mt Alexander Project, located in the north-eastern Goldfields.

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

“Geological and geophysical interpretation supports the new conductors at Investigators and West End having a massive sulphide source.

“We are excited to start drilling of these powerful conductors and look forward to reporting results as drilling progresses.

“The metallurgical drilling at Stricklands has successfully concluded with high-grade samples now being prepared for transport to Canada.

“The thick nickel-copper sulphides at shallow depths intersected by the met holes is a reminder of the excellent high-grade mineralisation at Stricklands and its potential to support a robust starter mine.

“Our regional exploration is also progressing well, with potential for this work to deliver new nickel-copper sulphide targets across the broader tenement package.

“With the nickel price continuing to rise, nickel demand for the EV market growing and a dearth of high-grade nickel sulphide exploration success across Australia, Mt Alexander is well positioned to attract attention from investors looking for significant new high-grade nickel sulphide discoveries.”

## **DRILLING OF NEW EM CONDUCTORS**

Diamond drilling of new, strong EM conductors at the Investigators and West End Prospects has commenced.

Drilling is underway to test the strongest of five off-hole EM anomalies identified from the DHEM survey in MAD185. This target is modelled with conductivity of 33,100 Siemens and predicted to be intersected at 340m downhole.

The second target to be drilled will be the strongest of the two off-hole anomalies identified from the DHEM survey in MAD192. That conductor is modelled with conductivity of 55,550 Siemens and predicted to be intersected at 505m downhole.

These conductors have an electrical signature consistent with massive sulphides. Each of MAD185 and MAD192 intersected thick mafic-ultramafic units with disseminated nickel-copper sulphides – indicative of a fertile intrusive with prospectivity for higher grade mineralisation proximal to the hole.

COVID-19 travel and movement restrictions introduced in Western Australia on 31 January 2021 have significantly impacted the availability of drill crews.

A replacement crew was unable to travel to Mt Alexander for the scheduled shift change on 9 February 2021, and drilling has continued with a single shift since that date. A second drill crew is expected to arrive at Mt Alexander soon to allow drilling to resume 24/7.

For further details of the new EM conductors, see our ASX Release dated 3 December 2020 ‘*Multiple New EM Conductors at Mt Alexander*’.





Figure 1 – diamond drilling underway at Mt Alexander.

**STRICKLANDS METALLURGICAL HOLES COMPLETED**

Seven diamond core (PQ-size) holes have been drilled at the Stricklands Prospect to provide samples of mineralisation for test work currently underway with XPS in Canada. A total of 483.2m was drilled for these metallurgical holes – STD009, STD010, STD011, STD012, STD013, STD014 and STD015.

All drill holes were located within the existing resource envelope for Stricklands with abundant nickel-copper sulphides intersected for the required test work. Deeper drilling at Stricklands is also planned to test for potential extensions of the mineralisation down-plunge and below the existing resource envelope.

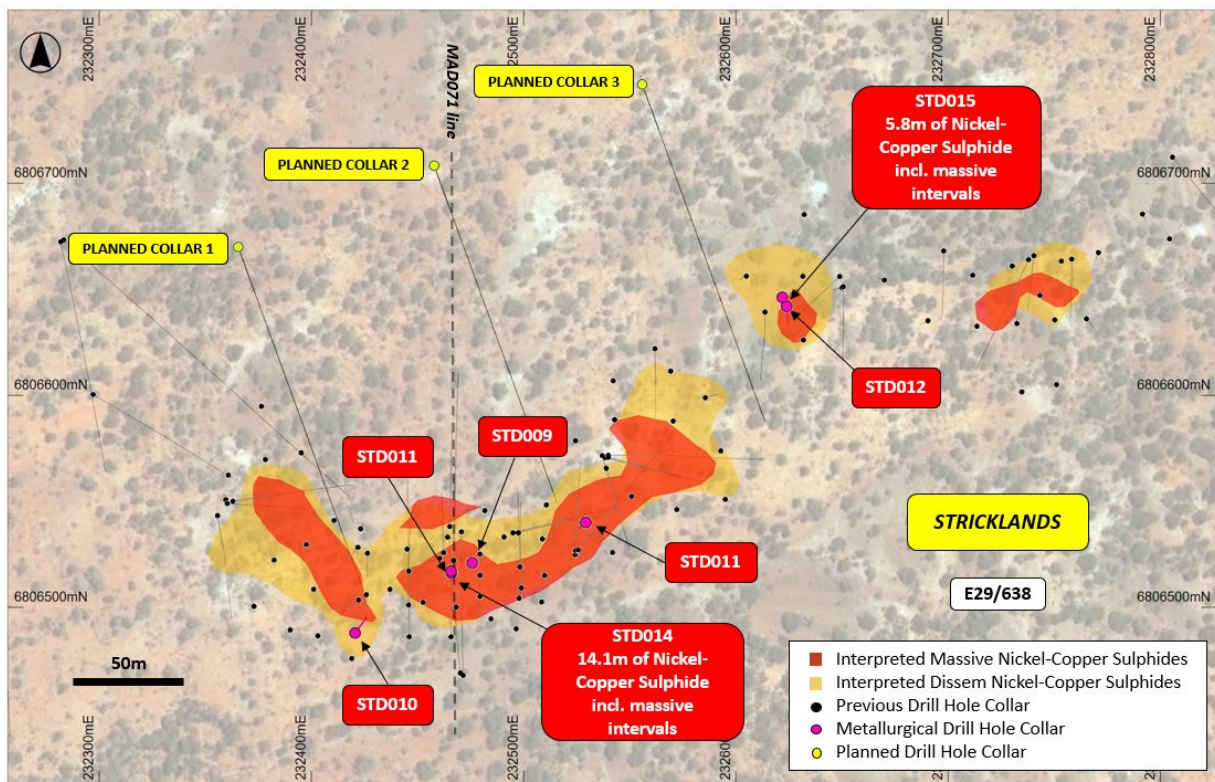


Figure 2 – map of Stricklands showing the mineralised envelope, the latest metallurgical holes and the planned deeper holes.

Geological logging of the metallurgical drill holes is set out below. Based on the intersection angle of the drilling with the modelled ultramafic unit, downhole widths are interpreted to be close to true widths.

**STD015:**

Drilled to 83.9m downhole and intersected significant mineralisation between 67.3m and 73.1m downhole, as noted in the geological logging below.

<b>STD015</b>	<b>Geological log of rock types</b>
<b>0 to 38.6m</b>	<i>Mafic basalt with intercalating pegmatites and granite.</i>
<b>38.6m to 52.3m</b>	<i>Large scale pegmatite cross-cutting vein.</i>
<b>52.3m to 67.3m</b>	<i>Mafic amphibolite with intercalating pegmatites. Trace sulphide mineralisation; &lt;1% sulphides comprising chalcopyrite (cp) and pyrite (py).</i>
<b>67.3m to 69m</b>	<b><i>Massive sulphide: 100% sulphide comprising pentlandite (pn), chalcopyrite (cp) and pyrrhotite (po).</i></b>
<b>69m to 70.4m</b>	<b><i>Ultramafic with heavy disseminated sulphides and blebby sulphides; approximately 40% sulphides comprising pn, cp and po.</i></b>
<b>70.4m to 73.1m</b>	<b><i>Massive sulphide: 100% sulphide comprising pentlandite (pn), chalcopyrite (cp) and pyrrhotite (po).</i></b>
<b>73.1m to 83.9m</b>	<i>Mafic intrusive with large granitic xenoliths.</i>



Figure 3 – 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, as noted in the geological logging below.



<b>STD014 Geological log of rock types</b>	
<b>0 to 33m</b>	<i>Predominantly mafic basalt with intercalating pegmatites and granite.</i>
<b>33m to 36.5m</b>	<i>Weathered ultramafic with trace sulphides (oxidised). &lt;5% sulphide content comprising violarite (vo) malachite (mc) and pyrite (py).</i>
<b>36.5m to 41.7m</b>	<i>Mineralised and weathered ultramafics. Vuggy and oxidised created by faulting. Heavily mineralised Intervals between 37.4m and 37.8m, from 38.3m and 38.9m, from 40.2m to 41.7m. Mainly matrix to massive sulphides (&gt;80% content) comprising pn, cp and po.</i>
<b>41.7m to 44.6m</b>	<i>Fault zone controlling repetition and thickening of mineralised zone above and below. Matrix sulphide &gt;60% sulphide content. Oxidised throughout.</i>
<b>44.6m to 50.6m</b>	<i>Fresh matrix to massive sulphide zone. Heavily mineralised interval from 46.8 to 50.6m (&gt;60% content) sulphide comprising pn, cp and po.</i>
<b>50.6m to 57.7m</b>	<i>Mafic intrusive with large granitic xenoliths.</i>



Figure 4 – drill core from STD014 showing massive sulphides intersected from 48.2m to 48.9m downhole. STD014 intersected a 14.1m thick interval of sulphide mineralisation from 36.5m downhole.

**STD013:**

Drilled to 59.1m downhole and intersected significant mineralisation between 30.9m and 50.6m downhole, as noted in the geological logging below.

STD013 Geological log of rock types	
0 to 30.9m	<i>Mafic basalt with intercalating pegmatites and granite.</i>
30.9m to 34.6m	<b><i>Weathered ultramafic with stringer and heavy disseminated sulphides; 10% to 20% sulphides comprising pn, cp and po.</i></b>
34.6m to 47.2m	<b><i>Ultramafic with disseminated sulphide mineralisation. &lt;10% sulphides comprising pn, cp and po.</i></b>
47.2m to 50.6m	<b><i>Massive sulphides (100% sulphide comprising pn, cp and po) and matrix sulphides (60% sulphides comprising pn, cp and po). (see Figure 4)</i></b>
50.6m to 59.1m	<i>Mafic intrusive with large granitic xenoliths.</i>



Figure 5 – core tray for STD013 showing mineralised interval with massive sulphides between 47.2m and 50.6m downhole.

**STD012:**

Drilled to 85m downhole and intersected significant mineralisation between 66.7m and 71.69m downhole, as noted in the geological logging below.

<b>STD012</b>	<b>Geological log of rock types</b>
0 to 40.45m	<i>Mafic basalt with intercalating pegmatites and granite</i>
40.45m to 51.75m	<i>Large scale granite intrusive</i>
51.75m to 66m	<i>Mafic basalt with intercalating pegmatites and granite</i>
66m to 70.25m	<b><i>Ultramafic with disseminated sulphide mineralisation. &lt;10% sulphides comprising pn, cp and po.</i></b>
70.25m to 71.69m	<b><i>Ultramafic with massive sulphides (100% sulphide comprising pn, cp and po) Massive intervals from 70.25 to 70.7m and 71.66 to 71.69m.</i></b>
71.69m to 85m	<i>Mafic intrusive with large granitic xenoliths.</i>

**STD011:**

Drilled to 60.6m downhole and intersected significant mineralisation between 33.5m and 48.7m downhole, as noted in the geological logging below.

<b>STD011</b>	<b>Geological log of rock types</b>
0 to 15.65m	<i>Mafic basalt with intercalating pegmatites and granite</i>
15.65m to 32.8m	<i>Large scale granite intrusive</i>
32.8m to 38m	<b><i>Ultramafic, weathered with oxidised sulphides. &lt;10% sulphides comprising pn, cp and po.</i></b>
38m to 48.7m	<b><i>Predominantly ultramafic with heavy disseminated sulphides and blebby sulphides: 10% to 20% sulphides comprising pn, cp and po.</i></b>
48.7m to 60.6m	<i>Mafic intrusive with large granitic xenoliths.</i>

**STD010:**

Drilled to 66.8m downhole. Intersected thick ultramafics with no significant mineralisation.

<b>STD010</b>	<b>Geological log of rock types</b>
0 to 21.9m	<i>Intercalating mafic basalt and granite intrusives.</i>
21.9m to 39.1m	<i>Ultramafic with weak sulphide mineralisation; &lt;5% sulphides.</i>
39.1m to 66.8m	<i>Mafic intrusive with large granitic xenoliths.</i>



## **STD009:**

Drilled to 70.1m downhole and intersected significant mineralisation between 42.85m and 50.75m downhole, as noted in the geological logging below.

<b>STD009</b>	<b>Geological log of rock types</b>
<b>0 to 33.8m</b>	<i>Mafic basalt with intercalating pegmatites and granite.</i>
<b>33.8m to 42.85m</b>	<i>Ultramafic. Moderately weathered and weakly mineralised unit.</i>
<b>42.85m to 50.75m</b>	<b><i>Ultramafic with sulphide mineralisation. Mainly stringer and blebby sulphides; 10% sulphides comprising pentlandite (pn), chalcopyrite (cp) and pyrrhotite (po). Massive sulphide (100% sulphide) between 47.74m and 47.84m, and from 50.52m and 50.57m.</i></b>
<b>50.75m to 70.1m</b>	<i>Mafic intrusive with large granitic xenoliths.</i>

The core from the latest metallurgical holes is currently being cut, following which selected samples will be prepared for air freighting to Canada.

St George is working closely with XPS to ensure further test work will be completed as soon as practicable. COVID-19 restrictions in Canada, including lockdown of certain areas, may impact on the timing for completion of the test work.

Geological observations of metals are 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.

## **MLEM SURVEY FOR E29/548**

A moving loop EM (MLEM) survey is scheduled in mid-March for areas of interest on exploration licence E29/548.

The survey will search for discrete conductive bodies that may represent mineralisation within the large conductive features identified by the magnetotelluric (MT) survey carried out in this area in 2020.

These conductive features trend east-west and are parallel to the highly mineralised Cathedrals Belt. Drilling of similar zones at the Cathedrals Belt confirmed the presence of thick intrusive-style rocks with potential to host significant nickel-copper sulphide mineralisation.

For further details on the prospective nature of E29/548 and the planned MLEM survey, see our ASX Release dated 27 January 2021 'Drilling to Resume at Mt Alexander'.

## **SOIL SURVEY UNDERWAY ON E29/1041**

A soil geochemical survey has commenced at the newly acquired exploration licence E29/1041. 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 soil survey will cover an area of approximately 20km<sup>2</sup>. The aim of the soil survey is to test for the presence of mafic-ultramafic units and or nickel-copper anomalism in the area.



For further details on the soil survey see our ASX Release dated 27 January 2021 'Drilling to Resume at Mt Alexander'.

Follow-up exploration will be planned for E29/1041 after a review of the soil survey results in conjunction with the new aeromagnetic data.

## NEW REGIONAL AEROMAGNETIC SURVEY OVER UNEXPLORED AREAS

A new aeromagnetic survey is scheduled to be carried out in April over the recently acquired tenements of E29/972 and E29/1041. The high-resolution survey will be completed with 100m line spacing.

For further details on the new survey see our ASX Release dated 27 January 2021 'Drilling to Resume at Mt Alexander'.

## 2021 DRILL PROGRAMME

Drill hole MAD194 was completed at Investigators at the commencement of the 2021 drill programme while earthworks were completed for the new holes planned at West End and Stricklands.

MAD194 was designed as an infill hole to test for mineralisation between known nickel-copper sulphides in MAD44 and MAD124.

The hole was completed to a downhole depth of 201.2m and successfully intersected a thick ultramafic package between 175.85m and 188.6m. Disseminated sulphides and blebby sulphides increasing with depth are observed in this interval; approximately 5% to 10% sulphides comprising pn, cp and po.

Hole ID	Prospect	East	North	RL	Depth	Azi	Dip
<b>MAD194</b>	Investigators	231475.7	6806540	423.6562	201.2	177	-70
<b>STD009</b>	Investigators	232476	6806521	442.793	70.1	360	-90
<b>STD010</b>	Investigators	232420.8	6806488	439.39	66.8	35	-78
<b>STD011</b>	Investigators	232529.4	6806540	445.52	60.6	229	-85
<b>STD012</b>	Cathedrals	232624.1	6806642	444.625	85	176	-84
<b>STD013</b>	Fairbridge	232466.1	6806516	443.33	59.1	179	-85
<b>STD014</b>	West End	232466	6806517	442.793	57.7	030	-86
<b>STD015</b>	Investigators	232622	6806646	445	83.9	130	-80

Table 1 – drill hole details for diamond holes completed 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.

The following section is provided for compliance with requirements for the reporting of exploration results under the JORC Code, 2012 Edition.

**Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i>	<p>Drilling programmes are completed by Reverse Circulation (RC) and Diamond Core drilling.</p> <p><i>Diamond Core Sampling:</i> The sections of the core that are selected for assaying are marked up and then recorded on a sample sheet for cutting and sampling at the certified assay laboratory. Samples of PQ, HQ or NQ2 core are cut just to the right of the orientation line where available using a diamond core saw, with half core sampled lengthways for assay.</p> <p><i>RC Sampling:</i> All samples from the RC drilling are taken as 1m samples for laboratory assay.</p> <p>Appropriate QAQC samples (standards, blanks and duplicates) are inserted into the sequences as per industry best practice. Samples are collected using cone or riffle splitter. Geological logging of RC chips is completed at site with representative chips being stored in drill chip trays.</p> <p>Metallurgical testing has been completed to a Scoping level [Class 5] on composited samples considered representative of the main model domains.</p>
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	<p><i>RC Sampling:</i> Samples are taken on a one metre basis and collected using uniquely numbered calico bags. The remaining material for that metre is collected and stored in a green plastic bag marked with that specific metre interval. The cyclone is cleaned with compressed air after each plastic and calico sample bag is removed. If wet sample or clays are encountered then the cyclone is opened and cleaned manually and with the aid of a compressed air gun. A blank sample is inserted at the beginning of each hole, and a duplicate sample is taken every 50<sup>th</sup> sample. A certified sample standard is also added according to geology, but at no more than 1:50 samples.</p> <p>Geological logging of RC chips is completed at site with representative chips being stored in drill chip trays. Downhole surveys of dip and azimuth are conducted using a single shot camera every 30m, and using a downhole Gyro when required, to detect deviations of the hole from the planned dip and azimuth. The drill-hole collar locations are recorded using a hand-held GPS, which has an accuracy of +/- 5m. All drill-hole collars will be surveyed to a greater degree of accuracy using a certified surveyor at a later date.</p> <p><i>Diamond Core Sampling:</i> For diamond core samples, certified sample standards were added as every 25<sup>th</sup> sample. Core recovery calculations are made through a reconciliation of the actual core and the driller's records. Downhole surveys of dip and azimuth were conducted using a single shot camera every 30m to detect deviations of the hole from the planned dip and azimuth. The drill-hole collar locations are recorded using a hand-held GPS, which has an accuracy of +/- 5m.</p> <p>PQ diameter drill holes were drilling primarily for metallurgical sampling with ¾ core used for creating representative composites for test work.</p>



Criteria	JORC Code explanation	Commentary
	<p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></p>	<p><i>RC Sampling:</i> A 1m composite sample is taken from the bulk sample of RC chips that may weigh in excess of 40 kg. Each sample collected for assay typically weighs 2-3kg, and once dried, is prepared for the laboratory as per the Diamond samples below.</p> <p><i>Diamond Core Sampling:</i> Diamond core is either half-core (NQ and HQ) or three quarter core (PQ) sampled to geological boundaries no more than 1.5m and no less than 10cm. Samples less than 3kg are crushed to 10mm, dried and then pulverised to 75µm. Samples greater than 3kg are first crushed to 10mm then finely crushed to 3mm and input into the rotary splitters to produce a consistent output weight for pulverisation.</p> <p>Pulverisation produces a 40g charge for fire assay. Elements determined from fire assay are gold (Au), platinum (Pt) and palladium (Pd) with a 1ppb detection limit. To determine other PGE concentrations (Rh, Ru, Os, Ir) a 25g charge for nickel sulphide collect fire assay is used with a 1ppb detection limit.</p> <p>Other elements will be analysed using an acid digest and an ICP finish. These elements are: Ag, Al, As, Bi, Ca, Cd, Co, Cr, Fe, K, Li, Mg, Mn, Mo, Nb, Ni, P, Pb, S, Sb, Sn, Te, Ti, V, W, Zn. The sample is digested with nitric, hydrochloric, hydrofluoric and perchloric acids to effect as near to total solubility of the sample as possible. The sample is then analysed using ICP-AES or ICP-MS.</p> <p>LOI (Loss on Ignition) will be completed on selected samples to determine the percentage of volatiles released during heating of samples to 1000°C.</p>
<b>Drilling techniques</b>	<p><i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></p>	<p><i>Diamond Core Sampling:</i> The collars of the diamond holes were drilled using RC drilling down through the regolith to the point of refusal or to a level considered geologically significant to change to core. The hole was then continued using HQ diamond core until the drillers determined that a change to NQ2 coring was required. PQ diameter core was used for Metallurgical sampling.</p> <p>The core is oriented and marked by the drillers. The core is oriented using ACT Mk II electric core orientation.</p> <p><i>RC Sampling:</i> The RC drilling uses a 140 mm diameter face hammer tool. High capacity air compressors on the drill rig are used to ensure a continuously sealed and high pressure system during drilling to maximise the recovery of the drill cuttings, and to ensure chips remain dry to the maximum extent possible.</p>
<b>Drill sample recovery</b>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p>	<p><i>Diamond Core Sampling:</i> Diamond core recoveries are recorded during drilling and reconciled during the core processing and geological logging. The core length recovered is measured for each run and recorded which is used to calculate core recovery as a percentage.</p> <p><i>RC Sampling:</i> RC samples are visually checked for recovery, moisture and contamination. Geological logging is completed at site with representative RC chips stored in chip trays.</p>
	<p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p>	<p><i>RC Sampling:</i> Samples are collected using cone or riffle splitter. Geological logging of RC chips is completed at site with representative chips being stored in drill chip trays.</p> <p><i>Diamond Core Sampling:</i> Measures taken to maximise core recovery include using appropriate core diameter and shorter barrel length through the weathered zone, which at Cathedrals and Investigators is mostly &lt;20m and Stricklands &lt;40m depth. Primary locations for core loss in fresh rock are on geological contacts and structural zones, and drill techniques are adjusted accordingly, and if possible these zones are predicted from the geological modelling.</p>

Criteria	JORC Code explanation	Commentary
	<i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	To date, no sample recovery issues have yet been identified that would impact on potential sample bias in the competent fresh rocks that host the mineralised sulphide intervals.
<b>Logging</b>	<i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i>	Geological logging is carried out on all drill holes with lithology, alteration, mineralisation, structure and veining recorded.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Logging of diamond core and RC samples records lithology, mineralogy, mineralisation, structures (core only), weathering, colour and other noticeable features. Core was photographed in both dry and wet form.
	<i>The total length and percentage of the relevant intersections logged.</i>	All drill holes are geologically logged in full and detailed litho-geochemical information is collected by the field XRF unit. The data relating to the elements analysed is used to determine further information regarding the detailed rock composition.
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	<i>Diamond Core Sampling:</i> Diamond core was drilled with PQ, HQ and NQ2 size and sampled as complete half core to produce a bulk sample for analysis. Intervals selected varied from 0.3 – 1m (maximum) The HQ and NQ2 core is cut in half length ways just to the right of the orientation line where available using a diamond core saw. All samples are collected from the same side of the core where practicable.  Assay preparation procedures ensure the entire sample is pulverised to 75 microns before the sub-sample is taken. This removes the potential for the significant sub-sampling bias that can be introduced at this stage.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	RC samples are collected in dry form. Samples are collected using cone or riffle splitter when available. Geological logging of RC chips is completed at site with representative chips being stored in drill chip trays.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	<i>RC Sampling:</i> The entire sample is pulverised to 75µm using LM5 pulverising mills. Samples are dried, crushed and pulverized to produce a homogenous representative sub-sample for analysis. A grind quality target of 90% passing 75µm is used.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Quality control procedures include submission of Certified Reference Materials (standards), duplicates and blanks with each sample batch. QAQC results are routinely reviewed to identify and resolve any issues.  <i>RC Sampling:</i> Field QC procedures maximise representivity of RC samples and involve the use of certified reference material as assay standards, along with blanks, duplicates and barren washes.  <i>Diamond Core Sampling:</i> Drill core is cut in half lengthways and the total half-core submitted as the sample. This meets industry standards where 50% of the total sample taken from the diamond core is submitted.
	<i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i>	Duplicate samples are selected during sampling. Samples comprise two quarter core samples for Diamond Core. Duplicate RC samples are captured using two separate sampling apertures on the splitter.

Criteria	JORC Code explanation	Commentary
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The sample sizes are considered to be appropriate to correctly represent base metal sulphide mineralisation and associated geology based on: the style of mineralisation (massive and disseminated sulphides), the thickness and consistency of the intersections and the sampling methodology.
<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	<p>For RC sampling, a 30 gram sample will be fire assayed for gold, platinum and palladium. The detection range for gold is 1 – 2000 ppbAu, and 0.5 – 2000 ppb for platinum and palladium. This is believed to be an appropriate detection level for the levels of these elements within this specific mineral environment. However, should Au, Pt or Pd levels reported exceed these levels; an alternative assay method will be selected.</p> <p>All other metals will be analysed using an acid digest and an ICP finish. The sample is digested with nitric, hydrochloric, hydrofluoric and perchloric acids to effect as near to total solubility of the sample as possible. The solution containing samples of interest, including those that need further review, will then be presented to an ICP-OES for the further quantification of the selected elements.</p> <p>Diamond core samples are analysed for Au, Pt and Pd using a 40g lead collection fire assay; for Rh, Ru, Os, Ir using a 25g nickel sulphide collection fire assay; and for Ag, Al, As, Bi, Ca, Cd, Co, Cr, Fe, K, Li, Mg, Mn, Mo, Nb, Ni, P, Pb, S, Sb, Sn, Te, Ti, V, W, Zn using a four acid digest and ICP-AES or MS finish. The assay method and detection limits are appropriate for analysis of the elements required.</p> <p>It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous.</p>
	<i>For geophysical tools, spectrometres, handheld XRF instruments, etc, the parametres used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	<p>MT/AMT: The surveys were conducted using the Phoenix MTU system and Metronix ADU07e system. The sensors were recorded at 500m intervals with 100m infill over the Investigators Prospect.</p> <p>XRF: A handheld XRF instrument (Olympus Innov-X Spectrum Analyser) is used to systematically analyse the drill core and RC sample piles onsite. One reading is taken per metre, however for any core samples with matrix or massive sulphide mineralisation then multiple samples are taken at set intervals per metre. The instruments are serviced and calibrated at least once a year. Field calibration of the XRF instrument using standards is periodically performed (usually daily).</p> <p>The handheld XRF results are only used for preliminary assessment and reporting of element compositions, prior to the receipt of assay results from the certified laboratory.</p>
	<i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i>	<p>Laboratory QAQC involves the use of internal lab standards using certified reference material (CRMs), blanks and pulp duplicates as part of in-house procedures. The Company also submits a suite of CRMs, blanks and selects appropriate samples for duplicates.</p> <p>Sample preparation checks for fineness are performed by the laboratory to ensure the grind size of 90% passing 75µm is being attained.</p>



Criteria	JORC Code explanation	Commentary
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Significant intersections are verified by the Company's technical staff.
	<i>The use of twinned holes.</i>	No twinned holes have been planned for the current drill programme.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Primary data is captured onto a laptop using acQuire software and includes geological logging, sample data and QA/QC information. This data, together with the assay data, is entered into the St George Mining central SQL database which is managed by external consultants.
	<i>Discuss any adjustment to assay data.</i>	No adjustments or calibrations will be made to any primary assay data collected for the purpose of reporting assay grades and mineralised intervals. For the geological analysis, standards and recognised factors may be used to calculate the oxide form assayed elements, or to calculate volatile free mineral levels in rocks.
<b>Location of data points</b>	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	Drill holes have been located and pegged using a DGPS system with an expected accuracy of +/-5m for easting, northing and elevation.  Downhole surveys are conducted using a single shot camera approximately every 30m or downhole Gyro during drilling to record and monitor deviations of the hole from the planned dip and azimuth. Post-drilling downhole gyroscopic surveys will be conducted, which provide more accurate survey results.
	<i>Specification of the grid system used.</i>	The grid system used is GDA94, MGA Zone 51.
	<i>Quality and adequacy of topographic control.</i>	Elevation data has been acquired using DGPS surveying at individual collar locations and entered into the central database. A topographic surface has been created using this elevation data.
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	The spacing and distribution of holes is not relevant to the drilling programs which are at the exploration stage rather than definition drilling.  Metallurgical testing has been completed to a Scoping level [Class 5] on composited samples considered representative of the main model domains.
	<i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>	The completed drilling at the Project is not sufficient to establish the degree of geological and grade continuity to support the definition of Mineral Resource and Reserves and the classifications applied under the 2012 JORC code.
	<i>Whether sample compositing has been applied.</i>	No compositing has been applied to the exploration results. Metallurgical compositing has been used.
<b>Orientation of data in relation to geological structure</b>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	The drill holes are drilled to intersect the modelled mineralised zones at a near perpendicular orientation (unless otherwise stated). However, the orientation of key structures may be locally variable and any relationship to mineralisation has yet to be identified.
	<i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	No orientation based sampling bias has been identified in the data to date.

Criteria	JORC Code explanation	Commentary
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	Chain of Custody is managed by the Company until samples pass to a duly certified assay laboratory for subsampling and assaying. The RC sample bags are stored on secure sites and delivered to the assay laboratory by the Company or a competent agent. When in transit, they are kept in locked premises. Transport logs have been set up to track the progress of samples.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	Sampling techniques and procedures are regularly reviewed internally, as is data. To date, no external audits have been completed on the drilling programme.

## Section 2 Reporting of Exploration Results (Criteria listed in section 1 will also apply to this section where relevant)

Criteria	JORC Code explanation	Commentary
<b>Mineral Tenement and Land Status</b>	<i>Type, name/reference number, location and ownership including agreements or material issues with third parties including joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i>  <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i>	The Mt Alexander Project is comprised of five granted Exploration Licences (E29/638, E29/548, E29/954, E29/962 and E29/972). Tenement E29/638 is held in Joint Venture between St George (75% interest) and Western Areas (25% interest). E29/638 and E29/548 are also subject to a royalty in favour of a third party that is outlined in the ASX Release dated 17 December 2015 (as regards E29/638) and the ASX release dated 18 September 2015 (as regards E29/548).  No environmentally sensitive sites have been identified on the tenements. A registered Heritage site known as Willsmore 1 (DAA identification 3087) straddles tenements E29/548 and E29/638. All five tenements are in good standing with no known impediments.
<b>Exploration Done by Other Parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	Exploration on tenements E29/638 and E29/962 has been largely for komatiite-hosted nickel sulphides in the Mt Alexander Greenstone Belt. Exploration in the northern section of E29/638 (Cathedrals Belt) and also limited exploration on E29/548 has been for mafic/ultramafic intrusion related Ni-Cu-PGE sulphides. No historic exploration has been identified on E29/954 or E29/972.  High grade nickel-copper-PGE sulphides were discovered at the Mt Alexander Project in 2008. Drilling was completed to test co-incident electromagnetic (EM) and magnetic anomalies associated with nickel-PGE enriched gossans in the northern section of current tenement E29/638. The drilling identified high grade nickel-copper mineralisation in granite-hosted ultramafic units and the discovery was named the Cathedrals Prospect.
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation</i>	The Mt Alexander Project is at the northern end of a western bifurcation of the Mt Ida Greenstones. The greenstones are bound to the west by the Ida Fault, a significant Craton-scale structure that marks the boundary between the Kalgoorlie Terrane (and Eastern Goldfields Superterrane) to the east and the Youanmi Terrane to the west.  The Mt Alexander Project is prospective for further high-grade komatiite-hosted nickel-copper-PGE mineralisation (both greenstone and granite hosted) and also precious metal mineralisation (i.e. orogenic gold) that is typified elsewhere in the Yilgarn Craton.
<b>Drill hole information</b>	<i>A summary of all information material to the understanding of the exploration results including tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <li>• Easting and northing of the drill hole collar</li> <li>• Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>• Dip and azimuth of the hole</li> <li>• Down hole length and interception depth</li> <li>• Hole length</li> </ul>	Drill hole collar locations are shown in the maps and tables included in the body of the relevant ASX releases.

Criteria	JORC Code explanation	Commentary
<b>Data aggregation methods</b>	<i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</i>	Reported assay intersections are length and density weighted. Significant intersections are determined using both qualitative (i.e. geological logging) and quantitative (i.e. lower cut-off) methods.  For massive sulphide intersections, the nominal lower cut-off is 2% for either nickel or copper. For disseminated, blebby and matrix sulphide intersections the nominal lower cut-off for nickel is 0.3%.
	<i>Where aggregated intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i>	Any high-grade sulphide intervals internal to broader zones of sulphide mineralisation are reported as included intervals.  Any disseminated, matrix, brecciated or stringer sulphides with (usually) >1% nickel or copper on contact with massive sulphide mineralisation are grouped with the massive sulphides for calculating significant intersections and the massive sulphide mineralisation is reported as an including intersection.
	<i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i>	No metal equivalent values are used for reporting exploration results.
<b>Relationship between mineralisation widths and intercept lengths</b>	<i>These relationships are particularly important in the reporting of exploration results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect.</i>	Assay intersections are reported as down hole lengths. Drill holes are planned as perpendicular as possible to intersect the target EM plates and geological targets so downhole lengths are usually interpreted to be near true width.
<b>Diagrams</b>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for an significant discovery being reported. These should include, but not be limited to a plane view of drill hole collar locations and appropriate sectional views.</i>	A prospect location map, cross section and long section are shown in the body of relevant ASX Releases.
<b>Balanced Reporting</b>	<i>Where comprehensive reporting of all Exploration Results is not practical, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	Reports on recent exploration can be found in ASX Releases that are available on our website at <a href="http://www.stgm.com.au">www.stgm.com.au</a> .  The exploration results reported are representative of the mineralisation style with grades and/or widths reported in a consistent manner.
<b>Other substantive exploration data</b>	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observation; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	All material or meaningful data collected has been reported.
<b>Further Work</b>	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large – scale step – out drilling).Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	A discussion of further exploration work underway is contained in the body of recent ASX Releases.  Further exploration will be planned based on ongoing drill results, geophysical surveys and geological assessment of prospectivity.