

25 February 2020

### MORE EM TARGETS EMERGE FOR NICKEL-COPPER SULPHIDE DRILLING AT MT ALEXANDER

### West End Prospect lights up with moving loop electromagnetic (MLEM) survey:

- Multiple EM anomalies identified at West End Prospect by high temperature SQUID MLEM survey
- These new EM anomalies are located to the north-northwest of the high-grade nickelcopper sulphide discoveries at the Investigators Prospect and are coincident with the western extension of the Cathedrals mineralised trend

### Downhole electromagnetic (DHEM) surveys at Investigators record multiple new EM anomalies:

- Multiple off-hole EM anomalies identified in several of the deeper drill holes completed at Investigators in late 2019
- New EM anomalies are excellent targets for further down-plunge extensions of the shallow deposits at Investigators

### Magnetotelluric (MT) survey to commence shortly at Mt Alexander:

- MT survey is an electromagnetic geophysical survey that records the Earth's electric and magnetic fields, resulting in the identification and mapping of geological structures and stratigraphy to very significant depths
- The MT survey at Mt Alexander is designed to map the structures and ultramafic intrusives at the Cathedrals Belt to a potential depth of 5km and will also identify any repetitions of similar structures and ultramafic stratigraphy in the underexplored tenements adjacent to the Cathedrals Belt
- Data from the MT survey will assist in planning deeper drilling at the Cathedrals Belt to further investigate the down-plunge extensions of the shallow nickel-copper sulphide deposits in the Belt

### Multi-rig drill programme to test large number of EM targets:

- A combined reverse circulation (RC) and diamond drill programme will commence shortly to test a large number of EM targets in the Cathedrals Belt and to complete resource definition at the Stricklands Prospect
- In addition to the new West End EM anomalies and deep DHEM anomalies at Investigators, drilling will test new EM anomalies at the Fish Hook Prospect and over 30 EM anomalies at the Investigators Prospect that were identified in 2019 and remain untested by drilling



 With all EM conductors tested in the Cathedrals Belt to date confirmed as nickel-copper sulphides, the upcoming drilling has the potential to significantly increase the volume of high-grade mineralisation at Mt Alexander

### Metallurgical testwork continues:

- Testwork in progress on sulphides from metallurgical hole MAD177 to optimise recoveries of nickel, copper, cobalt and PGEs
- Preliminary test work produced a nickel concentrate that included 13.5g/t PGEs, including 9g/t Palladium and 1.2g/t Rhodium
- Both of these precious metals are trading at or about record highs with Palladium at more than USD2,600/oz and Rhodium at more than USD11,000/oz

Growth focused Western Australian nickel company St George Mining Limited (ASX: **SGQ**) ("**St George**" or "**the Company**") is pleased to report further outstanding 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:

"EM surveys are the 'go to' targeting tool for nickel sulphide exploration – and these surveys have worked brilliantly at the Cathedrals Belt with all conductors drilled to date confirmed as nickel-copper sulphides.

"Our 2020 exploration programme commenced with further EM surveys at Mt Alexander. We have methodically completed a new surface-based SQUID MLEM survey as well as DHEM surveys in recently drilled deeper holes.

"The results are highly encouraging with new EM anomalies identified at the unexplored Fish Hook and West End Prospects, and new DHEM anomalies identified from the deeper holes at the highly mineralised Investigators Prospect.

"The quantity of EM targets and their position in prospective geological locations provides confidence that ongoing drilling will deliver more discoveries of nickel-copper sulphides in the Cathedrals Belt.

"We are also continuing the scoping study for a potential mining operation at Mt Alexander and are very pleased to be commencing resource definition drilling at Stricklands.

"Metallurgical test work with industry leading metallurgical advisers is also progressing and we are keenly awaiting results on how to optimise the commercialisation of our high grades of nickel, copper, cobalt and platinum group metals – mineralisation which we believe is unparalleled amongst nickel developers.

"Our 2020 work programmes for Mt Alexander are gaining momentum and we look forward to a very exciting year for St George shareholders."

### NEW EM TARGETS SUPPORT POTENTIAL FOR FURTHER DISCOVERIES

The SQUID MLEM survey over key target areas of the Cathedrals Belt has been completed, and has successfully identified multiple new EM anomalies in a number of areas that are prospective for nickel-copper sulphides.



DHEM surveys have also been completed in the deeper holes drilled at Investigators in late 2019. Several off-hole EM anomalies were recorded, giving confidence for further down-plunge extensions of the shallow deposits at Investigators.

Modelling of the new EM targets is being finalised, with drilling scheduled to commence in early March 2020.

### West End Prospect:

The target zone for the potential discovery of further nickel-copper sulphides at West End is the western continuation of the Cathedrals ultramafic trend, which was successfully mapped by the 2019 SAM survey across the Cathedrals Belt.

This ultramafic trend hosts the known deposits of nickel-copper sulphides at Investigators, Stricklands, Cathedrals and Radar and has been shown by the 2019 SAM survey to extend into the West End Prospect for more than 3km. For further details of the SAM survey, see our ASX Release dated 4 June 2019 "*Nickel Sulphide Extension Targets at Mt Alexander*".

The recently completed SQUID MLEM survey over the West End Prospect has recorded a number of anomalous EM responses that are co-incident with the interpreted ultramafic trend; see Figure 1.



Figure 1 – SAM (MMC) image and drilling overlaying magnetics (TMI RTP 1VD). Red/purple colours map the ultramafic trend, with new EM anomalies situated within unexplored extensions of ultramafic.

Figure 2 shows the MLEM survey data for West End in a single component (Channel Z). The EM anomalies are situated to the north-northwest of the high-grade discoveries at Investigators where similar EM anomalies were recorded.



Whilst subtle and challenging to model given the interpreted deeper source and complex geometry, the coincidence of the new West End EM targets with the projected plunge direction of the Investigators mineralisation gives support to the potential that the new West End EM targets may represent the down-plunge continuation of the Investigators nickel-copper sulphide deposits.

Importantly, one of the off-hole EM anomalies detected in the DHEM surveys is broadly co-incident with a large EM anomaly identified in the surface MLEM data.

This adds weight to the potential of the new EM anomalies to represent the down-plunge continuation of the Investigators nickel-copper sulphide deposits.



Figure 2 – SQUID MLEM (CH28Z) image and drilling overlaying magnetics (TMI RTP 1VD)

### Fish Hook Prospect:

Figure 3 shows the location of the SQUID MLEM EM anomalies identified at Fish Hook.

The 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.

The new EM anomalies are also proximal to the large nickel and copper soil anomaly identified at Fish Hook. The soil anomaly strongly supports the presence of nickel-copper sulphides at Fish Hook.





Figure 3 – map of the Fish Hook Prospect showing SQUID MLEM (CH28Z), as well as the location of the large nickel soil anomaly, overlaying magnetic (RTP 1VD). The warmer colours (red, purple, yellow) reflect areas of high EM anomalism.

#### Investigators Prospect:

A number of deeper holes were completed at Investigators in late 2019, with all holes intersecting maficultramafic intrusives and/or nickel-copper sulphides.

DHEM surveys in two of the holes – MAD170 and MAD172 – have identified off-hole EM anomalies down plunge of the known mineralisation. One of the DHEM anomalies is also broadly coincident with an EM anomaly identified from the surface SQUID MLEM survey. These are shown in Figure 1 and 2 above.

The new DHEM anomalies represent excellent targets for additional nickel-copper sulphides down-plunge of the shallow deposits at Investigators.

In addition to the new EM targets, 30 of the EM anomalies identified at Investigators in 2019 remain untested and will be prioritised for drilling in the upcoming drill programme.

Many of these EM anomalies are situated between 50m to 100m from known occurrences of nickel-copper sulphides, and represent an excellent opportunity to add significant volumes of sulphides to the known mineralisation at Investigators.

#### **MAGNETOTELLURIC (MT) SURVEY**

A MT survey is scheduled to be completed prior to the start of drilling in early March 2020. The survey measures the electrical and magnetic fields in the Earth's sub-surface from which geological structures and rock types can be mapped.



MT surveys are relatively very low cost compared to seismic surveys, and can provide similar data at this stage of exploration. The seismic survey proposed for Mt Alexander will be deferred until after the results of the MT survey are assessed.

The data acquired by the MT survey at Mt Alexander is expected to show the orientation of the intrusive stratigraphy and host structures at depth, and whether these continue uniformly at depth or are folded, stacked or otherwise disrupted. This will assist in designing drill holes to investigate the potential for deeper nickel-copper sulphide deposits.

The MT survey will encompass approximately 15km of the east-west strike of the Cathedrals Belt and will also cover the entire area of the Exploration Licences adjacent to the Cathedrals Belt. The MT survey will be designed to see upto 5km below the Earth's surface.

The airborne magnetic survey completed by St George on the tenement to the north of the Cathedrals Belt (E29/548) highlighted several east-west structures that may represent repetitions of the Cathedrals Belt.

The MT survey will assist to map these structures in greater detail to allow further targeted exploration. For details of the airborne magnetic survey, see our ASX Release dated 7 December 2016 *"Further Nickel-Copper Sulphide Targets"*.

### **2020 DRILLING PROGRAMMES**

St George Mining is excited to be commencing its 2020 drill programmes shortly.

Compilation of results from the exploration activities to date has identified numerous high-quality targets that have the potential to significantly increase the volume of high-grade mineralisation at Mt Alexander.

Final drill targets for the 2020 drill programmes will be announced soon. Initial drilling is envisaged to encompass:

- 1. *Fish Hook* drilling of EM anomalies and geological/geochemical targets.
- 2. West End drilling of EM anomalies and geological targets.
- 3. *Fairbridge* deep drilling underneath the numerous surface gossans.
- 4. Radar drilling of EM anomalies and geological targets.
- 5. *Investigators* drilling of EM anomalies and deeper geological targets.
- 6. *Stricklands* resource definition drilling as well as metallurgical and geotechnical holes.

A reverse circulation (RC) rig is scheduled to arrive at site in early March 2020. The rig will initially complete pre-collars for the deep diamond drill holes, and will then focus on drilling shallow EM targets and the resource definition drill-out of Stricklands.

A diamond rig is scheduled to also arrive at site in March 2020 to commence drilling of deeper EM and geological targets. Diamond drilling of deeper targets is preferred at the Cathedrals Belt as the hard, granite terrain is challenging for the percussion-drilling of the RC rig.

#### **METALLURGICAL TESTING – PGEs STANDOUT**

We are also excited to be continuing the metallurgical testwork on the Mt Alexander mineralisation. The preliminary testwork from 2016 identified high values of Palladium and Rhodium within the PGEs reporting to the nickel concentrate.

The testwork will further investigate the potential to commercialise these highly valuable metals within our mineralisation. For further information on the metallurgical testwork underway, see our ASX Release dated 28 January 2020 *"2020 Begins with More Strong Results"*.



#### 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.

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

For further information, please contact:		
John Prineas	Peter Klinger	
Executive Chairman	Media and Investor Relations	
St George Mining Limited	Cannings Purple	
+61 (0) 411 421 253	+61 (0) 411 251 540	
John.prineas@stgm.com.au	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.

# 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
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the	completed by GEM geophysics.
	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.	Diamond Core Sampling: 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 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.
		<i>RC Sampling:</i> All samples from the RC drilling are taken as 1m samples for laboratory assay.
		<i>EM Surveying:</i> All data is collected in a Moving Loop (MLEM) survey configuration using a Zonge ZT-30 transmitter, Supracon Jessy DEEP HT SQUID sensor and SMARTem 24 receiver.
Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	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.	
		Onsite XRF analysis is conducted on the fines from RC chips using a hand-held Olympus Innov-X Spectrum Analyser. These results are used for onsite interpretation and preliminary assessment subject to final geochemical analysis by laboratory assays.
	<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.	
		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.
		<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. All drill-hole collars will be surveyed to a greater degree of accuracy using a certified surveyor at a later date.

Criteria	JORC Code explanation	Commentary
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eq	<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.
	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.	Diamond Core Sampling: Diamond core (both HQ and NQ2) is half- core 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.
		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.
		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.
		LOI (Loss on Ignition) will be completed on selected samples to determine the percentage of volatiles released during heating of samples to $1000^{\circ}$ C.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diametre, 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).	Diamond Core Sampling: 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.
		The core is oriented and marked by the drillers. The core is oriented using ACT Mk II electric core orientation.
		<i>RC Sampling:</i> The RC drilling uses a 140 mm diametre 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.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	<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.
		<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.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	<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.
		Diamond Core Sampling: 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 <20m and Stricklands <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.

Criteria	JORC Code explanation	Commentary
	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.	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.
Logging	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.	Geological logging is carried out on all drill holes with lithology, alteration, mineralisation, structure and veining recorded.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	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.
	The total length and percentage of the relevant intersections logged.	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.
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	Diamond Core Sampling: Diamond core was drilled with 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.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	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.
	For all sample types, the nature, quality and appropriateness of the sample preparation	<i>RC Sampling</i> : Sample preparation for RC chips follows a standard protocol.
	technique.	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.
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	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.

Criteria	JORC Code explanation	Commentary
	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.	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.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	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.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	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.
		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.
		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.
	For geophysical tools, spectrometres, handheld XRF instruments, etc, the parametres used in determining the analysis including instrument make and model, reading times, calibrations	MLEM: 200m x 200m loops with 50-100m stations were used for the MLEM surveys. The MLEM Zonge ZT-30 HPM transmitter uses a base frequency of 0.25 or 0.5Hz and 80amps. The SMARTem 24 is a fluxgate receiver.
	factors applied and their derivation, etc.	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).
		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.
	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	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.
	have been established.	Sample preparation checks for fineness are performed by the laboratory to ensure the grind size of 90% passing 75 $\mu$ m is being attained.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections are verified by the Company's technical staff.
	The use of twinned holes.	No twinned holes have been planned for the current drill programme., other than MAD177 referred to in the ASX Release.

Criteria	JORC Code explanation	Commentary
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	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.
	Discuss any adjustment to assay data.	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.
Location of data points	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.	Drill holes and EM stations 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.
	Specification of the grid system used.	The grid system used is GDA94, MGA Zone 51.
	Quality and adequacy of topographic control.	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.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The spacing and distribution of holes is not relevant to the drilling programs which are at the exploration stage rather than definition drilling.
	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.	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.
	Whether sample compositing has been applied.	No compositing has been applied to the exploration results.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	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.
	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.	No orientation based sampling bias has been identified in the data to date.
Sample security	The measures taken to ensure sample security.	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.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	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 Resu	ts (Criteria listed in section 1 will also apply to this section where relevant)
---	--

Criteria	JORC Code explanation	Commentary
Mineral Tenement and Land Status	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.	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).
	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.	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.
Exploration Done by Other Parties	Acknowledgment and appraisal of exploration by other parties.	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.
Geology	Deposit type, geological setting and style of mineralisation	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.
Drill hole information	A summary of all information material to the understanding of the exploration results including tabulation of the following information for all Material drill holes: • Easting and northing of the drill hole collar • Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar • Dip and azimuth of the hole • Down hole length and interception depth • Hole length	Drill hole collar locations are shown in the maps and tables included in the body of the relevant ASX releases.
Data aggregation methods	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.	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%.

Criteria	JORC Code explanation	Commentary
	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.	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.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalent values are used for reporting exploration results.
Relationship between mineralisation widths and intercept lengths	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.	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.
iagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plane view of drill hole collar locations and appropriate sectional views.	A prospect location map, cross section and long section are shown in the body of relevant ASX Releases.
Balanced Reporting	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.	Reports on recent exploration can be found in ASX Releases that are available on our website at <u>www.stgm.com.au</u> : The exploration results reported are representative of the mineralisation style with grades and/or widths reported in a consistent manner.
Other substantive exploration data	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.	All material or meaningful data collected has been reported.
Further Work	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.	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.