

9 September 2020

# DRILLING AT MT ALEXANDER DELIVERS MORE THICK INTERCEPTS OF MINERALISED MAFIC-ULTRAMAFIC UNITS

- Multiple intersections of mineralised mafic-ultramafic units across a 4km-long east-west strike of the Cathedrals Belt with a target horizon open to the east and west
- MAD185 at Investigators:
  - 25.4m thick mafic-ultramafic intersected from 300.6m downhole
  - ➤ Includes a 15m thick ultramafic with disseminated and blebby nickel-copper sulphides (<5% sulphides with pentlandite (pn), chalcopyrite (cp) and pyrrhotite (py)) from 311.3m downhole
- MAD184 at Investigators:
  - 23.2m thick mafic-ultramafic intersected from 444.5m downhole
  - ➤ Includes a 5m thick ultramafic with disseminated and blebby nickel-copper sulphides (<5% sulphides with pn, cp and py) from 462.7m downhole
- MAD186 at Cathedrals:
  - 57.9m thick mafic-ultramafic from 282.1m downhole
  - ➤ Includes a 2.1m thick ultramafic with disseminated and blebby nickel-copper sulphides (<5% sulphides with pn, cp and py) from 337.9m
- Outstanding potential for the discovery of further nickel-copper sulphide deposits along strike to the east and west of these drill holes as well as up-dip and down-dip of the mineralised intercepts

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

#### MORE INTERCEPTS OF MINERALISED MAFIC-ULTRAMAFIC INTRUSIVES

The latest drill holes completed at Mt Alexander continue to intersect mineralised mafic-ultramafic units across an east-west strike of the Cathedrals Belt that extends for more than 4km.

The mafic-ultramafic units are intrusive-style rocks that are known to host high-grade massive nickel-copper sulphides at shallow depths along the Cathedrals Belt.

The identification of further thick intrusive-style rocks with nickel-copper sulphide mineralisation at depth is strongly supportive of the potential for additional massive sulphide deposits to be present within the extensive Cathedrals Belt intrusive mineral system.

Drilling and down-hole electromagnetic (DHEM) surveys are continuing to test for further high-grade nickel-copper sulphide mineralisation along the Cathedrals Belt – both up-dip and down-dip from the mineralisation intersected in the latest drill holes and also along strike to the east and west of those holes.



## John Prineas, St George Mining's Executive Chairman, said:

"These results demonstrate continuity of the mineralised mafic-ultramafic units across the Cathedrals Belt over a very extensive strike length.

"This is further evidence of the large intrusive complex at the Cathedrals Belt and increases the prospectivity for significant nickel-copper sulphide deposits down-plunge of the known shallow massive sulphide deposits.

"We are encouraged and excited by the geological potential at the Cathedrals Belt that continues to grow as results from our methodical exploration come in."

The strong results in MAD184, MAD185 and MAD186 follow on from the successful results in MAD181 and MAD183 which also intersected thick mineralised mafic-ultramafic units – see our ASX Release dated 27 August 2020 *Thick Mineralised Unit Intersected at Investigators*.

The mineralised intrusive structure at the Cathedrals Belt has been confirmed by the latest drilling to extend for more than 4km in an east-west strike and remains open to the east and west.

The structure dips to the north-northwest at an angle of about 40 degrees with mineralisation intersected along this structure from near surface to about 600m down-dip – establishing a large target horizon for the presence of further nickel-copper sulphide mineralisation.

Figure 1 show the latest drilling along this large target horizon. There is strong potential for the discovery of further mineralisation along strike and also down-dip and up-dip from the latest mineralised intercepts.

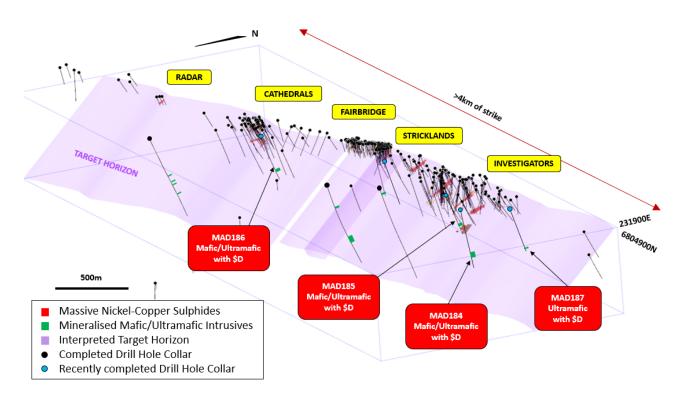


Figure 1 – Schematic orthographic view of the Cathedrals Belt showing the large interpreted target horizon, the new discoveries in MAD184, MAD185, MAD186 and MAD187 as well as existing drilling and known massive nickel-copper sulphides.



## MAD185:

MAD185 was drilled to a downhole depth of 361.2m to test an off-hole conductor identified from the DHEM survey in MAD179.

Geological logging of the drill hole is set out below.

MAD185	Geological log of rock types	
0 to 49m	Cover and granite saprolite	
40.5m to 271.3m	<b>Granites including with cross-cutting pegmatites.</b> Strong potassic alteration.	
271.3 to 303.9m	<b>Granites with increasing structural complexity</b> . Increasing epidote alteration from intruding mafic-ultramafic dykes at base.	
303.9m to 311.3m	Mafic intrusive with large granitic xenoliths. <40mm granite xenoliths within upper mafic unit. Gradational contact with below ultramafic.	
311.3m to 319m	<b>Serpentinised Ultramafic.</b> <2% sulphides comprising pentlandite (pn), chalcopyrite (cp) and pyrrhotite (po).	
319m to 326m	<b>Ultramafic with increasing sulphides.</b> <5% blebby and disseminated sulphides comprising pentlandite (pn), chalcopyrite (cp) and pyrrhotite (po).	
326m to 361.2m	<b>Pegmatites.</b> predominantly thought to be intruding Grano-diorite host rock.	

Disseminated and blebby sulphides of the kind intersected in MAD185 can represent the halo around proximal massive sulphide mineralisation. Accordingly, the thick mineralised ultramafic unit intersected in MAD185 is supportive of the potential for the presence of higher-grade mineralisation nearby.



Figure 2 - Photo of drill core from MAD185 showing disseminated and blebby sulphides at about 310m downhole.



### MAD184:

MAD184 was completed to a downhole depth of 497.8m at Investigators to test a broad EM anomaly identified by the SQUID MLEM survey completed earlier this year. Geological logging is set out below.

MAD184	Geological log of rock types
0 to 93.6m	Cover and granite saprolite
93.6m to 154m	Granites. Strong potassic alteration
154m to 280m	Grano-diorite, minor cross-cutting pegmatites.
280m to 330m	Syeno-Granite with cross-cutting pegmatites.
330m to 444.5m	<b>Predominantly pegmatites cross-cutting granite.</b> Likely indicating structural preexisting structural corridor.
444.5m to 462.7m	Mafic intrusive with large granitic xenoliths. <40mm granite xenoliths within upper mafic unit. Gradational contact with below ultramafic.
462.7m to 466.7m	<b>Ultramafic intrusive with disseminated sulphides.</b> <5% sulphides comprising pentlandite (pn), chalcopyrite (cp) and pyrrhotite (po) increasing in abundance towards basal contact.
466.7m to 466.9m	Fault Zone at basal contact of ultramafic.
466.9m to 467.2m	Granodiorite. Potentially rafted into ultramafic by fault.
467.2m to 467.7m	<b>Ultramafic intrusive with disseminated sulphides.</b> <5% sulphides comprising pentlandite (pn), chalcopyrite (cp) and pyrrhotite (po)
467.7m to 497.8m	Granodiorite, minor cross-cutting pegmatites.

The thick intrusive-style rocks intersected in MAD184 are further evidence of the extensive intrusive mineral system at depth which has the potential to host high-grade mineralisation.

Importantly, this drill hole confirms the continuation of the prospective horizon to the west of Investigators, and into the West End area – see also comments on MAD187 below.

#### MAD186:

MAD186 was completed to a downhole depth of 399.6m at the Cathedrals Prospect to test the continuation of the Cathedrals ultramafics in a zone with strong MT/AMT conductance.

The very thick intersection of mafic-ultramafic rocks in MAD186 has confirmed the continuation of the intrusive rocks in a previously untested area, increasing the potential for the presence of nickel-copper sulphides. Further exploration of this area is strongly warranted.

Geological logging for MAD186 is set out below.



MAD186	Geological log of rock types	
0 to 14m	Cover and granite saprolite	
14m to 250.6m	Granites including cross-cutting pegmatites	
250.6m to 282.1m	<b>Predominantly pegmatites cross-cutting granite.</b> Likely indicating structural pre-existing structural corridor.	
282.1m to 337.9m	Mafic intrusive with large granitic xenoliths. <40mm granite xenoliths within upper mafic unit. Gradational contact with below ultramafic.	
337.9m to 340m	Ultramafic intrusive unit. Trace sulphides comprising pentlandite (pn), chalcopyrite (cp) and pyrrhotite (po) observed.	
340m to 399.6m	Granites including cross-cutting pegmatites.	

#### **MAD187**:

MAD187 was completed to a downhole depth of 253m at the West End Prospect to test a strong, single component (BZ) EM anomaly identified by the SQUID MLEM survey completed earlier this year.

Geological logging is set out below.

MAD187 0 to 52.5m	Geological log of rock types Shallow cover and granite saprolite	
52.5m to 240.1m	<b>Granites including cross-cutting pegmatites.</b> Strong potassic alteration throughout.	
240.1m to 242.2m	Ultramafic intrusive unit. Trace sulphides comprising pentlandite (pn), chalcopyrite (cp) and pyrrhotite (po) observed.	
242.2m to 253m	Granite. Strong potassic alteration.	

Like MAD185, MAD187 was drilled to the west of the Investigators Prospect and intersected the same intrusive-style rocks identified in other parts of the Cathedrals Belt. The MLEM anomaly is located along a separate geological unit and approximately 350m to the south of MAD184.

The presence of intrusive rocks in this location confirms the widespread nature of this large intrusive system. It also supports the potential continuity of mineralisation to the western extension of the Cathedrals Belt, including at the West End Prospect that lies next to the interpreted Ida Fault.

Further drilling will be designed to test this underexplored section of the Cathedrals Belt. Surface EM surveys completed in this area have not been effective because of conductive cover, and therefore drilling and DHEM surveys will be used concurrently to explore this area.

#### **DHEM SURVEYS FOR DEEP DRILL HOLES**

DHEM surveys have been completed in MAD183, MAD181 and MAD180. Survey data is being reviewed and assessed.

The survey crew have temporarily left site and are expected to return within the week to complete DHEM surveys on other completed drill holes.



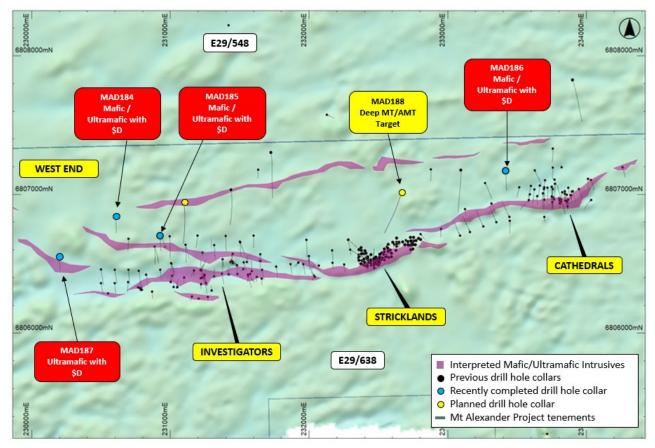


Figure 4 – Plan view of the Cathedrals Belt showing areas of completed and planned drilling, overlaying interpreted geology and magnetics (TMI RTP 1VD).

#### **DRILL PROGRAMME**

Drilling continues at Mt Alexander on a 24/7 basis.

MAD188 is currently being drilled to test a MT/AMT anomaly at Stricklands. The drill hole has been designed to a depth of 450m and is planned to test to the north and down dip of the known nickel-copper mineralisation.

Table 1 below contains drill hole details for the holes completed in the current campaign to test new targets.

Hole ID	Prospect	East	North	RL	Depth	Azi	Dip
MAD179	Investigators	230928	6806709	418	351.9	180	-70
MAD180	Investigators	231439	6807031	423	850	180	-70
MAD180W1	Investigators	231442.0	6806869.6	-71.6	877.4	180	-68
MAD181	Investigators	231726	6807301	425	800	180	-65
MAD182	Cathedrals	233960	6807824	412	750	170	-65
MAD183	Fairbridge	233095.0	6807173.3	415.0	750	180	-65
MAD184	Investigators	230606	6806836	415	497.8	180	-75
MAD185	Investigators	230930	6806710	418	361.2	154	-72
MAD186	Cathedrals	233418	6807161	425	399.6	180	-70
MAD187	West End	230201	6806550	414	253	180	-65

Table 1 – Drill hole details for diamond holes to test new targets.



#### **COVID-19**:

St George is managing 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.

#### **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.

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 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

Executive Chairman St George Mining Limited +61 411 421 253 john.prineas@stgm.com.au Peter Klinger
Media and Investor Relations
Cannings Purple
+61 411 251 540
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 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.	Drilling programmes are completed by Reverse Circulation (RC) and Diamond Core drilling. Surface MT/AMT surveys were completed by Moombarriga Geophysics.
		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.
		$\it RCSampling:$ All samples from the RC drilling are taken as 1m samples for laboratory assay.
		MT/AMT Surveying: 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.
		Two survey lines were recorded, one N-S and one E-W line. The N-S line was centred on the Investigators Prospect and included the 100m infill AMT stations, while the E-W line was completed approx. 500m to the north of the Cathedrals belt to image the stratigraphy down dip of the known nickel-copper deposits.
		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.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	RC Sampling: 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.
		Diamond Core Sampling: 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.

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	RC Sampling: 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	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 75 $\mu$ m. 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.
	mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	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 $1000^{\circ}\text{C}$ .
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.
		RC Sampling: 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.	Diamond Core Sampling: 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.
		RC Sampling: 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.	RC Sampling: 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 lithogeochemical 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 technique.	RC Sampling: Sample preparation for RC chips follows a standard protocol.
		The entire sample is pulverised to 75 $\mu$ m 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 75 $\mu$ m 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.
		RC Sampling: 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.
		Diamond Core Sampling: 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 factors applied and their derivation, etc.	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.  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.

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	Drill holes and MT/AMT stations have been located and pegged using a DGPS system with an expected accuracy of +/-5m for easting, northing and elevation.
	used in Mineral Resource estimation.	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 Results (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.	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.
	grades) and cut-off grades are usually Material and should be stated.	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
	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 <a href="https://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.
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.