

1 December 2021

# SEISMIC RESULTS UNLOCK STAND-OUT TARGETS AT MT ALEXANDER PROJECT

#### **HIGHLIGHTS**

- Seismic survey has identified a large target down-dip of the shallow high-grade nickelcopper sulphide mineralisation discovered at the Investigators Prospect
- The geophysical signature recorded in the seismic survey for the new large target is the same as recorded for the massive nickel-copper sulphides intersected at shallow depths
- New large target has a dip-extent of more than 450m, representing a priority target for the potential discovery of a large-scale Ni-Cu-PGE deposit
- The seismic data has mapped the down-dip continuation of the complex intrusive and fault structures across the survey area, providing valuable data for exploration targeting at deeper levels of the large, high-grade mineral system at Mt Alexander
- Modelling and interpretation of the seismic survey data is ongoing with a number of additional targets being assessed

Growth-focused Western Australian nickel company St George Mining Limited (ASX: **SGQ**) ("**St George**" or "**the Company**") is pleased to announce significant results from the seismic survey recently completed at its flagship high-grade Mt Alexander Project, located in the north-eastern Goldfields.

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

"We are delighted with the results of the first-ever seismic survey at Mt Alexander which has delivered not only a breakthrough in our understanding of the complex intrusive system at Mt Alexander but also an outstanding new target for a potential massive sulphide deposit.

"Our systematic exploration over the past year has been primarily focused on testing the deeper areas at Mt Alexander to build on the four shallow high-grade nickel-copper sulphide discoveries already made across more than a 5.5km east-west strike length of the Cathedrals Belt. The geological thinking is that if the system is that long, it must also be deeper than the shallow mineralisation identified.

"The mineralisation we have at Mt Alexander is unique – the rare combination of high-grade nickel, copper, cobalt and platinum group metals is not seen anywhere else in Australia. Our challenge is to discover a large deposit of this kind of mineralisation.

"Accordingly, we are very excited with the new, large target identified by the seismic data. The new target is located down-dip from the shallow massive sulphides drilled at Investigators, and has seismic properties consistent with those shallow massive sulphides.

"This is an absolutely compelling target for a potential major discovery."

#### SEISMIC SURVEY - EXPLORATION POTENTIAL AT DEPTH IS CONFIRMED

The first-ever seismic survey at the Cathedrals Belt was carried out during September. Three north-south orientated 2D seismic lines approximately 1km apart were completed over a section of the West End and Investigators Prospects.



#### Breakthrough results with a new priority target:

The seismic survey has successfully mapped the complex intrusive structures at Mt Alexander in all three lines. The main Cathedrals Belt structure is clearly seen in the data as continuing down-dip to the north.

This is consistent with our geological model, which interprets this structure – already confirmed by drilling as being highly mineralised at shallow depths – as dipping to the north-northwest with potential for massive sulphides to be present down-dip of the shallow nickel-copper sulphides already discovered.

Modelling and interpretation of the new seismic data have identified a large target along the down-dip continuation of the Cathedrals structure at depths yet to be explored. The target has the same reflective properties as the known shallow massive sulphides.

Significantly, there are no other rocks known to be present in the Cathedrals Belt that could record a similar seismic recording to massive sulphides.

The target is modelled in 2D with a dip-extent of more than 450m. The east-west strike length and thickness cannot yet be modelled due to the 2D nature of the survey.

The target dips to the north-northwest, consistent with the dip of the host structure, and lies within Exploration Licence E29/548 (100% St George). The target is located approximately 800m below surface, see Figure 1.

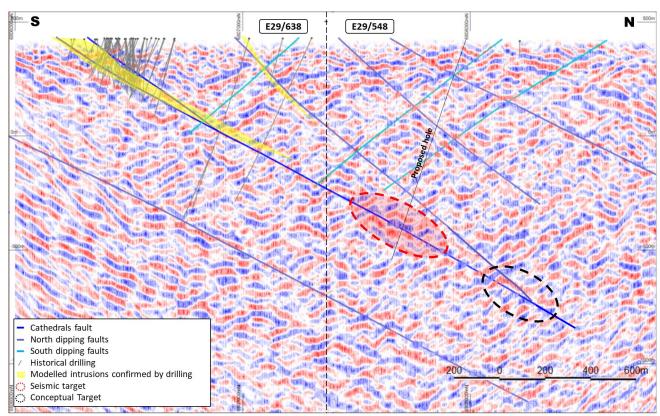


Figure 1 – cross section (looking west) showing the structures mapped by the most easterly line (Line 1) in the seismic survey. The previous shallow drilling at Investigators is shown with modelled intrusives (yellow) as well as the new target down-dip of the shallow massive sulphides at Investigators. The trace of the planned hole to test the seismic target is also shown.

Drill testing of this target has been prioritised for late next month, being the earliest opportunity to secure a drill rig. Logistical constraints mean there is insufficient time to drill this target prior to Christmas.



Additional structures parallel to the Cathedrals Belt have also been observed in the seismic data. Four north-northwest dipping structures are mapped – one to the south of the Cathedrals Belt and another three to the north.

The mapping of these structures is limited to the survey area only and further seismic surveys are being designed to cover the full extent of the east-west strike of the Cathedrals Belt.

Interestingly, another three structures dipping to the south have also been noted. The significance of these structures needs further investigation. The intersection of the south dipping structures with the north dipping structures could be a trap site for sulphide mineralisation. These conceptual targets are highlighted in Figure 1.

Interpretation of these additional structures is continuing and anticipated to define further targets for drill testing.

**Technical background on seismic:** A seismic survey uses sound waves to collect information about the location and characteristics of geological structures and rocks beneath the Earth's surface. The data collected is used to produce maps of structures that can assist in identifying areas where mineral deposits may be found.

The survey involves acoustic sound signals being transmitted into the Earth's surface, which reflect off the various geological structures and rock types. The returning sound waves are recorded by microphones at surface along a path referred to as a seismic line.

The reflective signals of sound waves vary between different rock types, as does the velocity of the sound waves through different rock types.

For example, the reflector signals of sulphides and associated greenstones – which are relatively dense rocks – are generally stronger than those in granite rocks, making seismic highly suitable for the Mt Alexander geology.

**Seismic at Mt Alexander:** The three seismic lines, for almost 12 lineal kilometres, completed at Mt Alexander have collected data up to 2,000m below surface across a 3km east-west strike.

The north-south lines commenced to the south of the east-west Cathedrals Belt and continued north into Exploration Licence 29/548 (100% St George) where underexplored structures that are oriented parallel to the Cathedrals Belt are situated.

The intrusive-host structure at the Cathedrals Belt is interpreted from drill hole data to dip to the north-northwest at 40 degrees.

The seismic data shows that the Cathedrals Belt structure continues in the down-dip direction into E29/548 (100% St George), with the new large target located within that tenement; see Figure 2.

Line 1 of the seismic survey was completed over an area with extensive drilling at Investigators. The type of rocks intersected included massive nickel-copper sulphides, mafic rocks and granite. The drill hole data for these various intersections provides a reference point for interpreting the seismic recordings.

Encouragingly, the reflective properties at the new target are consistent with the reflective properties of the known massive sulphides identified from existing drill core.



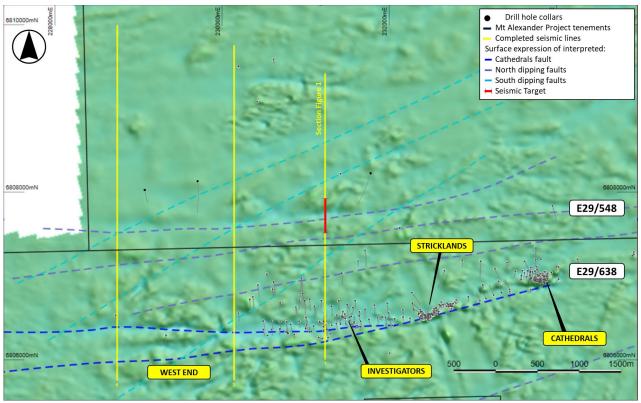


Figure 2 – map (against magnetic RTP 1VD) showing the completed seismic survey lines (yellow) as well as the structures delineated by the seismic survey and the new seismic target (interpreted position projected at surface).

#### **DRILLING PROGRAMME**

Table 1 shows details for drill holes completed or commenced in the current diamond drill programme.

Hole ID	Prospect	East	North	EOH Depth	Dip	AZI	Target/Comments
MAD203	Investigators	231052	6806719	350.3	-70	177	Step-out from MAD199 discovery
MAD204	West End	230377	6806746	512.3	-70	172	81,000 S conductor down dip of MAD202
MAD205	West End	230542	6807019	630*	-70	172	Large conductor down-dip of MAD200

Table 1 – details of drill holes for the deeper diamond drill programme (\* MAD205 is in progress).

*MAD203:* This hole was drilled halfway between MAD199 and MAD173, both of which intersected massive nickel-copper sulphides.

MAD203 was completed to downhole depth of 350.3m and intersected intrusive-style mafics from 277.35m to 278.1m downhole. The balance of the hole intersected granite rocks. It appears that a fault has disrupted the continuity of mineralisation between MAD199 and MAD173. A downhole EM (DHEM) survey will be completed in MAD203 to search for any conductive material around the hole.

*MAD204:* This hole targeted an area 50m down-dip of the 81,000 Siemens off-hole conductor identified from the DHEM survey in MAD202.



Initial attempts to drill this hole had to be abandoned when drill rods became stuck in the hole when it was at 86.5m downhole. The second attempt to drill the hole was successful with the hole completed to 512.3m downhole.

The hole intersected a thick section of the intrusive-host structure with 57.7m of intrusive-style maficultramafic from 425.1m to 482.8m. The balance of the hole intersected granite. No sulphide mineralisation was observed in the mafics.

A DHEM survey will be completed in MAD204 to search for conductive material around the hole. The DHEM survey is expected to look up-dip towards the 81,000 Siemens conductor and provide additional data to enhance modelling of this target.

**MAD205:** This hole is targeting a large 250m-strike off-hole conductor identified from the DHEM survey in MAD200. The conductor has low conductivity and is interpreted to potentially be a vector to nickel-copper sulphide deposits down-dip and down-plunge from MAD200.

The drill hole is currently approximately 390m downhole and expected to be completed before the pause for drilling over the Christmas break. MAD205 will be the final hole to be drilled in 2021.

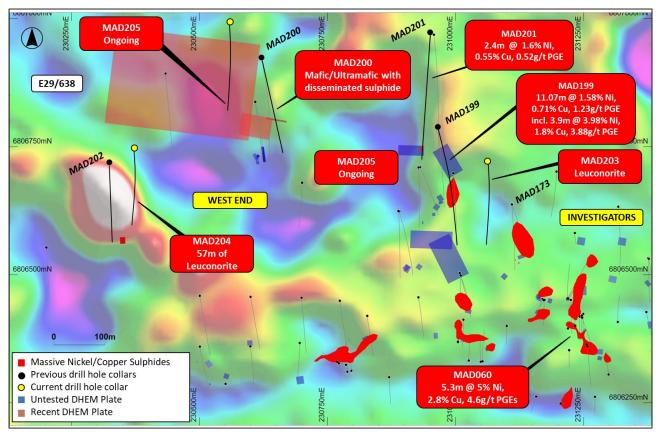


Figure 3 – plan view map of West End and Investigators (against gravity data) showing new DHEM conductors, current drill holes and prior drilling. Gravity highs are shown by warmer colours (white, red and yellow). High density massive sulphides and their host rocks will typically present as gravity highs. Less dense material or cover are represented by cooler colours (blues and purples).

Based on the intersection angle of the drilling with the modelled intrusive unit, downhole widths noted above are interpreted to be close to true widths.



Geological logging is based on visual interpretations. This is preliminary in nature and a conclusive determination of the rock types and any metal values will be confirmed when laboratory assays are available.

A DHEM survey crew is scheduled to arrive at site in the coming days to complete surveys in the abovementioned holes as well as a number of reverse circulation holes completed at regional targets – see our ASX Release dated 13 September 2021 *Drilling of New Targets at Mt Alexander* for further details of these targets.

**2022** *Drilling:* A diamond drill rig has been secured for the 2022 drill programme that will focus initially on testing the new high-priority seismic targets.

The rig from DDH1 Drilling is scheduled to arrive at Mt Alexander in late January 2022.

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

St George continues to manage its operations in compliance with COVID-19 regulations issued by State and Commonwealth authorities. We 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 for the Mt Alexander Project 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.	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.
		RC Sampling: All samples from the RC drilling are taken as 1m samples for laboratory assay. 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.
		DHEM Surveying: The surveys were conducted using the DigiAtlantis system and VTX-100 transmitter. The readings were recorded at 5m intervals with 1m infill down hole. The surveys used 400 x 400m loops orientated to magnetic north.
		Gravity Surveying: A ground gravity survey was completed by Atlas Geophysics. The following primary instrumentation was used for acquisition of the data;
		<ul> <li>Scintrex CG-5 Autograv Gravity Meter (accuracy &lt;0.02 mGal)</li> <li>CHC Nav i70+ GNSS Rover Receiver</li> <li>CHC Nav i70+ GNSS Base Receiver</li> <li>Garmin GPS receivers for navigation</li> </ul>
		Gravity surveys are used to detect density contrasts which may be related to the underlying lithology and rock types, alteration of minerals or mineralisation.
		Seismic: The surveys were conducted using the Aram Aries 1 instrument with an accelerated weight drop and picked up by the sercel SM-24 Geophone sensors.
	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

Criteria	JORC Code explanation	Commentary
		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.
	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 (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.	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.  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
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-	samples to 1000°C.  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
	sampling bit or other type, whether core is oriented and if so, by what method, etc).	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 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.
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.
		<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.	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

Criteria	JORC Code explanation	Commentary
		drill techniques are adjusted accordingly, and if possible, these zones are predicted from the geological modelling.
	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	RC Sampling: Sample preparation for RC chips follows a standard protocol.
	technique.	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	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or	A 25-50gram sample will be fire assayed for gold, platinum and palladium, using a minimum detection value of 1ppb for gold is 1ppb and 0.5ppb for platinum and palladium.
tests	total.	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.	DHEM: The surveys were conducted using the DigiAtlantis system and VTX-100 transmitter. The readings were recorded at 5m intervals with 1m infill down hole. The transmitter produced 96amps and recorded at a frequency of 0.5Hz.
		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.
		Gravity: A Scintrex CG-5 Autograv Gravity Meter was used for data acquisition which has an accuracy of <0.02 mGal
		Elevation information was captured using CHC Nav i70+ GNSS receivers with an accuracy of <2m.
	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.

Criteria	JORC Code explanation	Commentary
	The use of twinned holes.	No twinned holes have been planned for the current drill programme.
	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.
		The Gravity data was positioned using CHCi70+ DGPS receivers operating in kinematic mode.
		Seismic survey: all stations were located using NAVCOM DGPS survey equipment. Vibration source points readings were taken every 10m along the lines, with receiver nodes at 5m spacing along the lines for 1,944 data collection points and a total of 12 lineal km were traversed to collect the 2D Seismic data set
	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.
		The gravity data was collected at 25m station spacings.
	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.
		Seismic: Three north-south oriented lines approximately perpendicular to the strike of known host structures of the Cathedrals belt were completed. Lines were spaced an average of 1.2km apart. The length of lines were designed to allow imaging of deep structures to approximately 1.5km depths.

Criteria	JORC Code explanation	Commentary
	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 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.
		Results of the Seismic dataset was processed and interpretated by Rock Solid Seismic Pty Ltd with assistance from SGQ geologists.

# 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 six granted Exploration Licences (E29/638, E29/548, E29/954, E29/962, E29/972 and E29/1041). 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 focused on the discovery of komatiite-hosted nickel sulphides within 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.
		Mafic-Ultramafic intrusion related 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 and East-West orientated 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 interpreted 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 nickel-mineralisation (both komatiite and mafic-ultramafic intrusive hosted) and also precious metal mineralisation (i.e. orogenic gold) that is typified elsewhere in the Yilgarn Craton.

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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%.
	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.
	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="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.

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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.