

27 January 2021

## **DRILLING AT HIGH-GRADE MT ALEXANDER PROJECT STARTS THIS WEEK TO LAUNCH MAJOR 2021 NICKEL-COPPER SULPHIDE EXPLORATION CAMPAIGN**

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### **DIAMOND DRILLING TO COMMENCE THIS WEEK:**

- +4,000m diamond drill programme to start this week at Mt Alexander
- Multiple new electromagnetic (EM) conductors that were identified from recent downhole EM (DHEM) surveys to be drilled
- High-priority targets for massive nickel-copper sulphides include:
  - two conductors modelled with conductivity of 55,550 Siemens and 26,000 Siemens, respectively, identified from the DHEM survey in MAD192
  - two conductors modelled with conductivity of 33,100 Siemens and 14,225 Siemens, respectively, identified from the DHEM survey in MAD185

### **GROUND EM SURVEY TO TEST FOR POTENTIAL NORTHERN REPETITION OF THE CATHEDRALS BELT:**

- Moving loop EM (MLEM) survey to be rolled out across the deep conductive structures identified on exploration licence E29/548 by the 2020 magnetotelluric (MT) survey
- These conductive structures trend east-west and are parallel to the highly mineralised Cathedrals Belt
- MLEM survey will search for discrete conductive bodies that may represent massive nickel-copper sulphides

### **PETROGRAPHIC ANALYSIS OF DRILL CORE IDENTIFIES INTRUSIVE ROCKS VERY FAVOURABLE FOR HOSTING NICKEL-COPPER SULPHIDES:**

- Petrographic analysis has been completed on sections of drill core from MAD181 which was drilled at Investigators and intersected a 49.45m thick mafic-ultramafic intrusive unit
- Rock types identified as leuconorite and gabbronorite – intrusive-style rocks that are rare in the Yilgarn Craton but where present in other parts of Western Australia, are associated with significant intrusive nickel-copper sulphide deposits including Nova-Bollinger, Savannah and Nebo-Babel
- Petrographic results confirm the intrusive nature of the rocks and provide further support for the discovery of more significant nickel-copper sulphide mineralisation across the Cathedrals Belt – already identified along a strike of more than 5.5km and open laterally and at depth

## AIRBORNE MAGNETIC SURVEY PLANNED FOR EXPLORATION LICENCES E29/972 and E29/1041:

- **New airborne magnetic survey to be completed over these two recently acquired licences and will complement the 2016 magnetic survey carried out by St George over the then existing project area**
- **New survey will search for linear magnetic features that may represent ultramafic belts similar to the nickel-copper sulphide bearing Cathedrals Belt**

## SOIL SURVEY PLANNED FOR E29/1041:

- **Rock chip samples from E29/1041 returned elevated readings for nickel and copper supporting the potential for nickel-copper sulphide mineralisation within the area**
- **Geochemical soil survey to be completed over a broad area of the tenement to test for the presence of mineralised ultramafics**

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Growth-focused Western Australian nickel company St George Mining Limited (ASX: **SGQ**) (“**St George**” or “**the Company**”) is pleased to announce that drilling will start this week with the launch of a multi-faceted exploration campaign 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 very excited to be resuming diamond drilling at Mt Alexander this week. The very strong EM conductors that will be drilled are outstanding targets for massive sulphide mineralisation.

“We have never had a false positive EM reading at the Cathedrals Belt with all conductors of this kind drilled being confirmed as nickel-copper sulphides.

“The new conductors are located approximately 500m to 800m north-west of known massive sulphides in the Cathedrals Belt and are the deepest conductors identified in the Belt.

“The discovery of new nickel-copper sulphide deposits in these locations would be a major success in our ongoing exploration at Mt Alexander and significantly expand the potential footprint of high-grade mineralisation at the Project.

“We are also excited about activities planned across the wider tenement package at Mt Alexander. These areas are either underexplored or unexplored and offer an excellent opportunity to add to the exploration success we have already achieved at the Cathedrals Belt.

“As the nickel price reaches a 10-year high, St George is well positioned to deliver significant shareholder value through its ongoing exploration and development programmes at Mt Alexander.

“With high-grade nickel-copper-cobalt-PGEs at Mt Alexander commencing 30m from surface, a large underexplored mineral system and a location in an established mining region of Western Australia – in the backyard of major mining companies – our Project commands unique attention amongst its peers.”

## DIAMOND DRILLING OF STRONG EM CONDUCTORS

DHEM surveys on the deeper drill holes completed last year identified 11 off-hole EM anomalies.

The highest priority targets were identified from DHEM surveys in MAD185 and MAD192. Each of these holes intersected thick mafic-ultramafic units with disseminated nickel-copper sulphides – indicative of a fertile intrusive structure with prospectivity for higher grade mineralisation proximal to the hole.

Five off-hole EM anomalies were identified from the DHEM survey in MAD185. Two of these are modelled with EM plates that have very strong conductivity of 33,100 Siemens and 14,225 Siemens, respectively.

The DHEM survey in MAD192 identified two off-hole anomalies that have been modelled as EM plates with very strong conductivity of 55,550 Siemens and 26,000 Siemens, respectively.

These powerful off-hole conductors are interpreted to have a massive sulphide source and will be the first conductors to be drilled in this year’s exploration campaign. For further details of the new EM conductors, see our ASX Release dated 3 December 2020 ‘Multiple New EM Conductors at Mt Alexander’.

## MLEM SURVEY FOR E29/548

The MT survey completed at Mt Alexander in 2020 identified deep conductive features along the Cathedrals Belt. Deep drilling of these features confirmed the presence of thick intrusive-style rocks with potential to host significant nickel-copper sulphide mineralisation.

The MT survey also identified a series of similar deep conductive features about 2km north of the Cathedrals Belt. These features are located on E29/548 (100% St George) and are parallel to the Cathedrals Belt.

Figure 1 shows MT and Audio-magnetotelluric (AMT) data along a section centred on the Investigators Prospect. The shallow nickel-copper sulphides already discovered at Investigators have recorded strong yellow (conductive) responses in the data. Similar conductive responses were recorded on E29/548, which are shown as extending from surface to depths beyond 1km from surface.

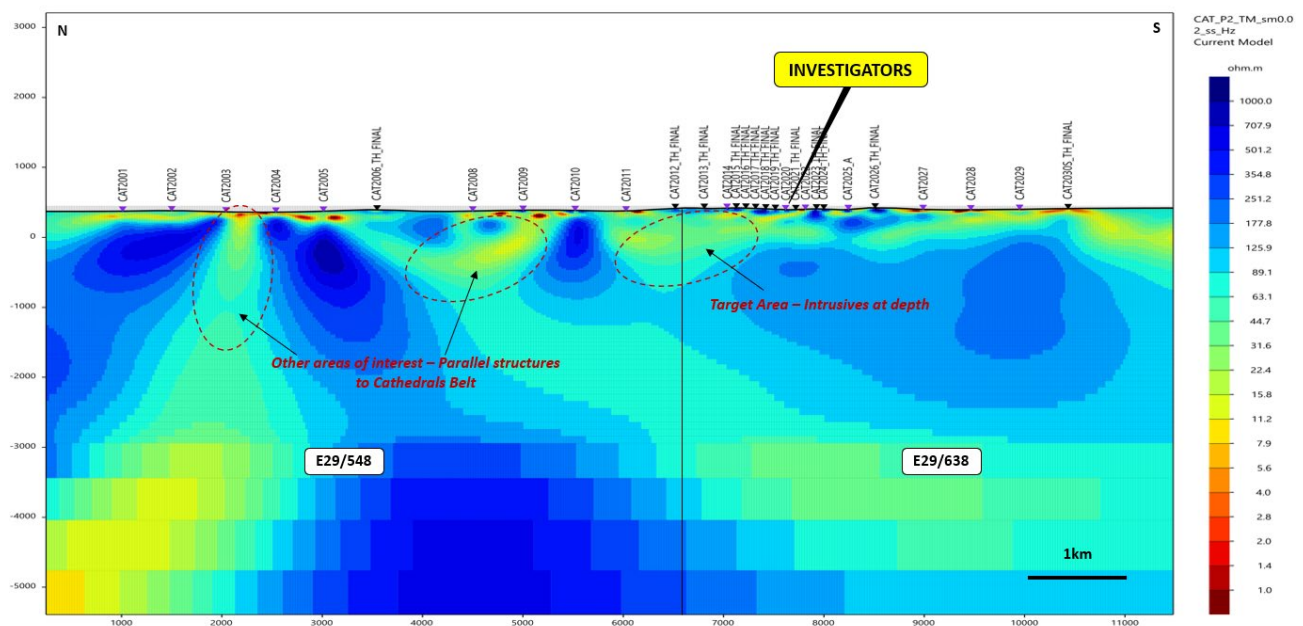


Figure 1 – north-south cross section of the Cathedrals Belt (looking east) showing MT 2D conductivity data. The section is centred on the Investigators Prospect and extends to E29/548 to the north. Areas of yellow and green are indicative of prospective structures and stratigraphy.

An aeromagnetic survey completed over E29/548 in 2016 by St George also recognised numerous east-west trending structures to the north of the Cathedrals Belt.

A number of these features are coincident with the MT anomalies and may indicate deep seated structures. These are shown in Figure 2.

Drill holes MAD180 and MAD181 were designed to test the deep Investigators MT anomaly, which dips to the north-northwest, and the holes were therefore located to the north of the previous drilling; see Figure 3.

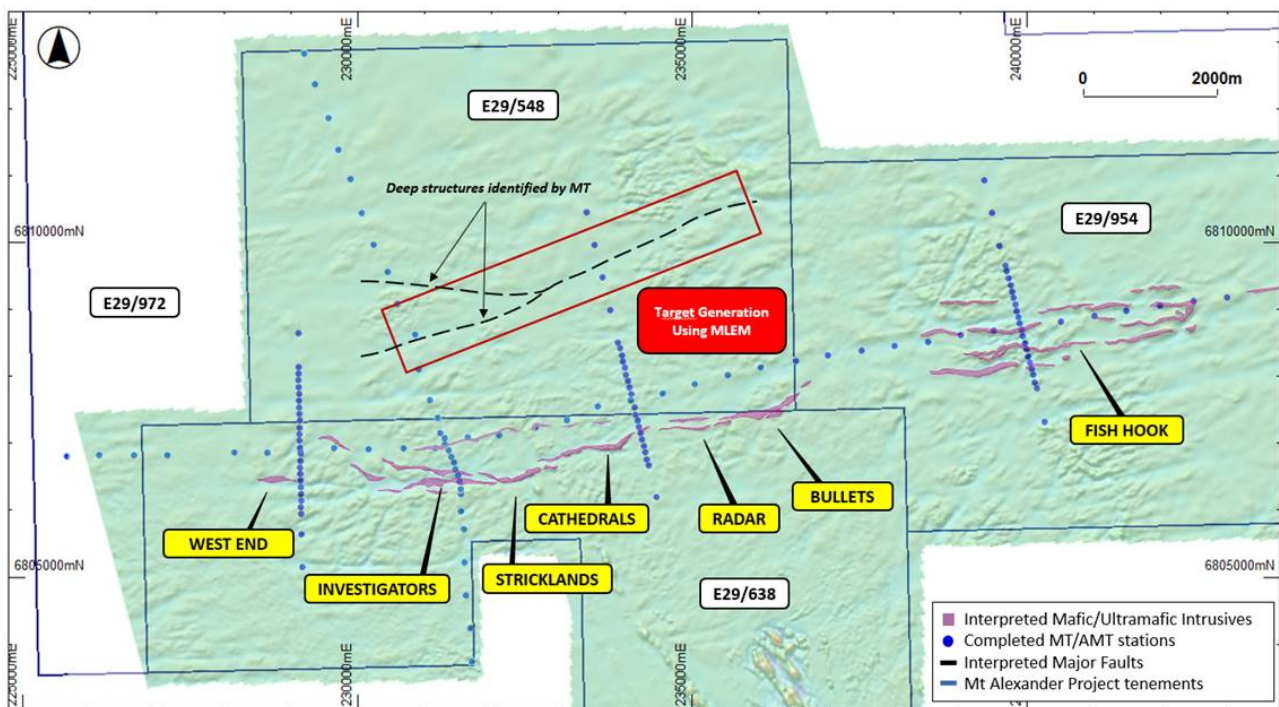
Both drill holes intersected mineralised ultramafic rocks approximately 500m to the north of Investigators.

This supports the potential for other similar MT survey structures to host intrusive mafic-ultramafic units that are prospective for massive nickel-copper sulphide mineralisation.

A MLEM survey – a ground-based EM survey – is planned for Q1 2021 over a priority area of E29/548 where deep structures were identified by the MT survey.

The MLEM survey will search for conductive bodies at depth that may represent nickel-copper sulphides. This is the first EM survey that has been specially designed to investigate the east-west structures on E29/548.

A drill programme for E29/548 will then be prioritised subject to a review of the survey results.



*Figure 2 – map of the Cathedrals Belt and E29/548 (against magnetic RTP 1VD data) showing the area where the MT survey recognised deep conductive structures and which will now be tested by a new ground-based MLEM survey.*

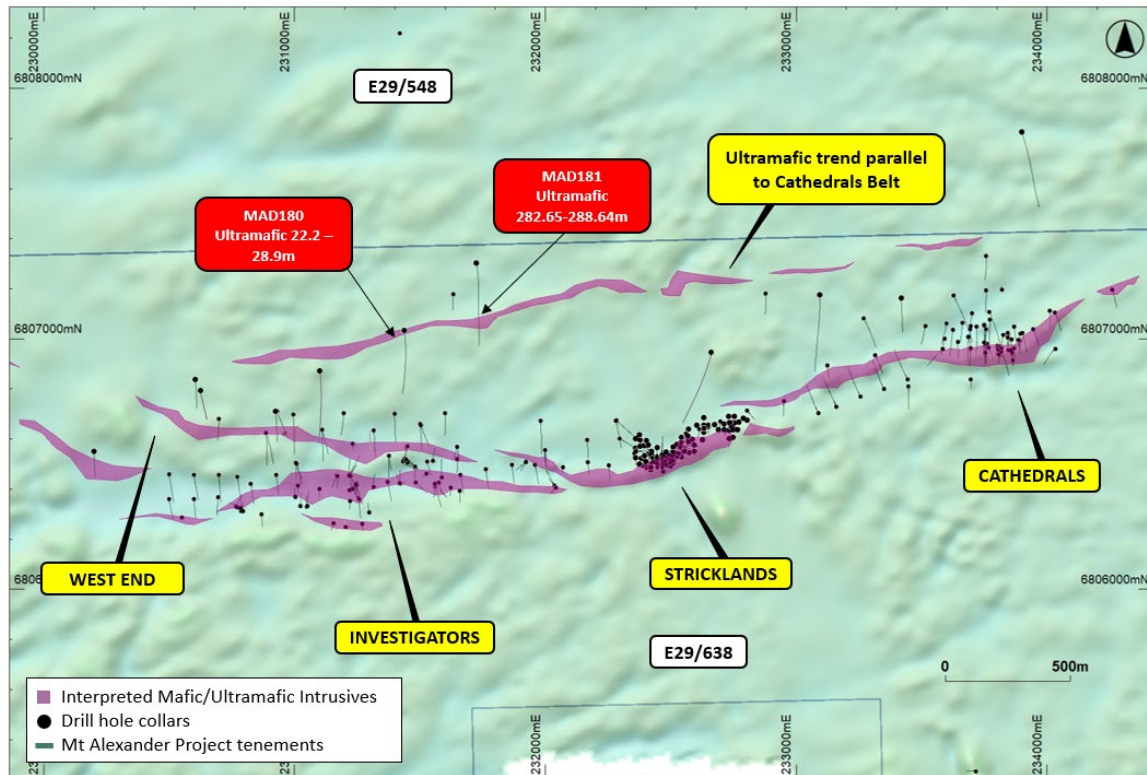


Figure 3 – map of the Cathedrals Belt (against magnetic RTP 1VD data) showing the location of the ultramafic unit intersected by MAD180 and MAD181 to the north of the Cathedrals Belt.

**PETROGRAPHIC ANALYSIS CONFIRMS FAVOURABLE INTRUSIVE ROCKS**

MAD181 was drilled at Investigators to a downhole depth of 794.5m to test a broad conductive feature identified by the MT survey.

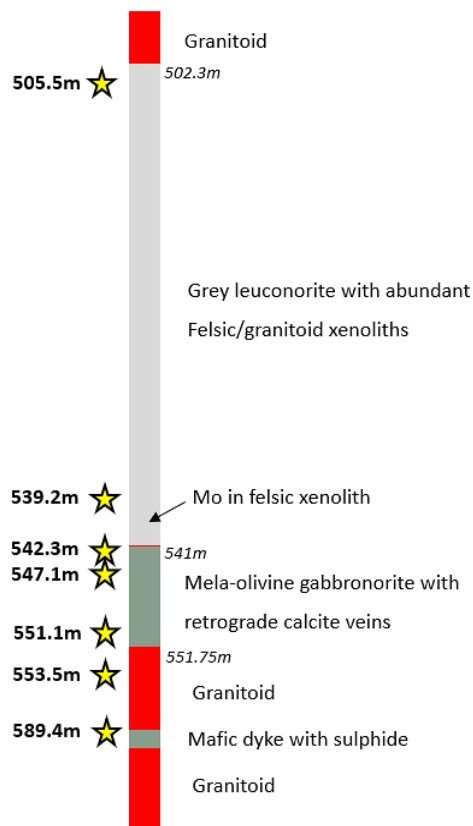
The hole intersected a 49.45m thick mafic-ultramafic unit from 502.3m downhole. Petrographic analysis was completed on 7 samples of drill core across the intrusive interval.

Polished thin sections of the core were examined using optical microscopy in transmitted and reflected light using an Olympus BH2 microscope. The petrography was completed by Dr Ben Grguric, principal of Mineralium Pty Ltd and a mineralogist with industry leading credentials particularly in the field of nickel sulphide systems.

The petrology has identified two main intrusive rocks, an upper leuconorite from 502.3m to 541m and a basal mela-olivine gabbronorite unit from 541m to 551.75m downhole. This is a suite of intrusive mafic and ultramafic rocks that is highly unusual in the Archean central Yilgarn where Mt Alexander is located.

The contact between the two units in MAD181 is sharp, which may represent separate injections from a deeper magmatic chamber, and abundant country rock xenoliths are present in the leuconorite, also suggesting a dynamic emplacement environment. The presence of small amounts of zinc-lead sulphides in addition to magmatic nickel-copper sulphides suggests contamination with sedimentary sulphides or volcanic massive sulphides (VMS) in the magmatic plumbing at depth.

The presence of norite and gabbronorite is typically associated with a large igneous event – the kind of geological event that is associated with the formation of very significant mineral deposits. In Western Australia, gabbronorite is known to be associated with significant nickel sulphide deposits at IGO’s Nova Bollinger (ASX: IGO), Panoramic’s Savannah (ASX: PAN) and Oz Mineral’s Nebo-Babel (ASX: OZL).



The petrographic analysis has confirmed that MAD181 has intersected a thick mafic-ultramafic intrusive body that has intruded granitoid country rock. Significantly, there was little evidence of structural deformation of the intrusive unit which supports the potential for any mineral deposit within the unit to be intact rather than structurally deformed.

Figure 4 – Schematic section of the logged intrusive geology in MAD181. Petrographic sample locations and depths are shown on the left (stars).

**NEW REGIONAL AEROMAGNETIC SURVEY OVER UNEXPLORED AREAS**

A new aeromagnetic survey will be completed in Q1 2021 over the recently acquired tenements of E29/972 and E29/1041 (both 100% St George). The high-resolution survey will be completed with 100m line spacing.

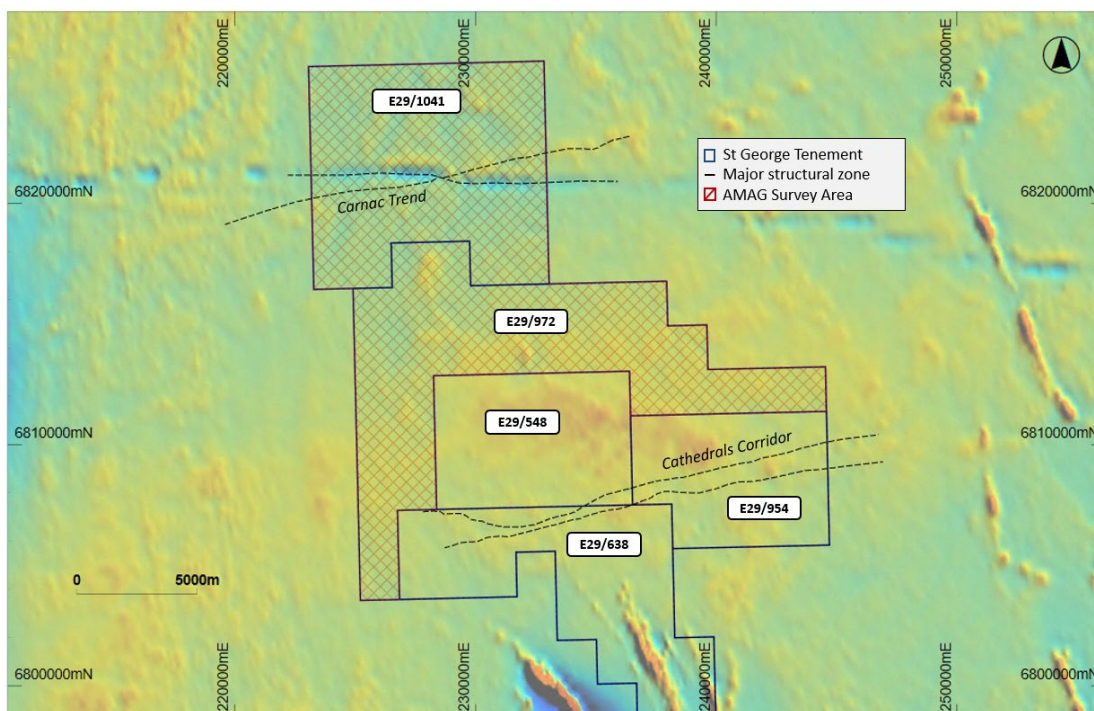


Figure 5 – map of the northern tenements of the Mt Alexander Project (against TMI magnetic data) showing the areas to be covered by the new aeromagnetic survey.

Of particular interest at E29/1041 are two interpreted structures over an 8km strike that cross-cut and present as distinct east-west orientated magnetic features in the regional Government magnetic survey. A similar combination of magnetic features defines the east-west Cathedrals Belt.

The new aeromagnetic survey is designed to better map the structures and ultramafic stratigraphy on the new tenements.

Further exploration on these tenements, to investigate if these structures may host further occurrences of nickel-copper sulphides, will be planned upon review of the survey results.

**SOIL SURVEY ON E29/1041**

Rock chip sampling and field mapping has recently been completed by St George over the interpreted structures on E29/1041 discussed above. Significantly, XRF analysis of rock chips from this area recorded metal values of up to 2,475ppm Ni and 105ppm Cu in the mafic rocks. These values are interpreted as being too elevated for barren Proterozoic dolerite dykes and are more indicative of potential intrusive ultramafic rocks.

In addition, field mapping in the area of the magnetic features has identified a number of mafic intrusive units at surface hosted within granite. Some of these are thought to be associated with a large Proterozoic dolerite dyke, which is commonly found trending in an east-west orientation across the Yilgarn Craton.

However, and importantly, some of the mafic units have been mapped cutting across the trend of the dyke suggesting they are not related – giving further support to the potential of these structures to represent mafic-ultramafic trends that are prospective for nickel-copper sulphides.

A soil geochemical survey will be completed over the area of interest at E29/1041 in Q1 2021. Due to the sub-crop and thin cover, the area is amenable to soil geochemistry. The aim of the soil survey is to confirm the presence of mafic-ultramafic units and or nickel-copper anomalism in the area.

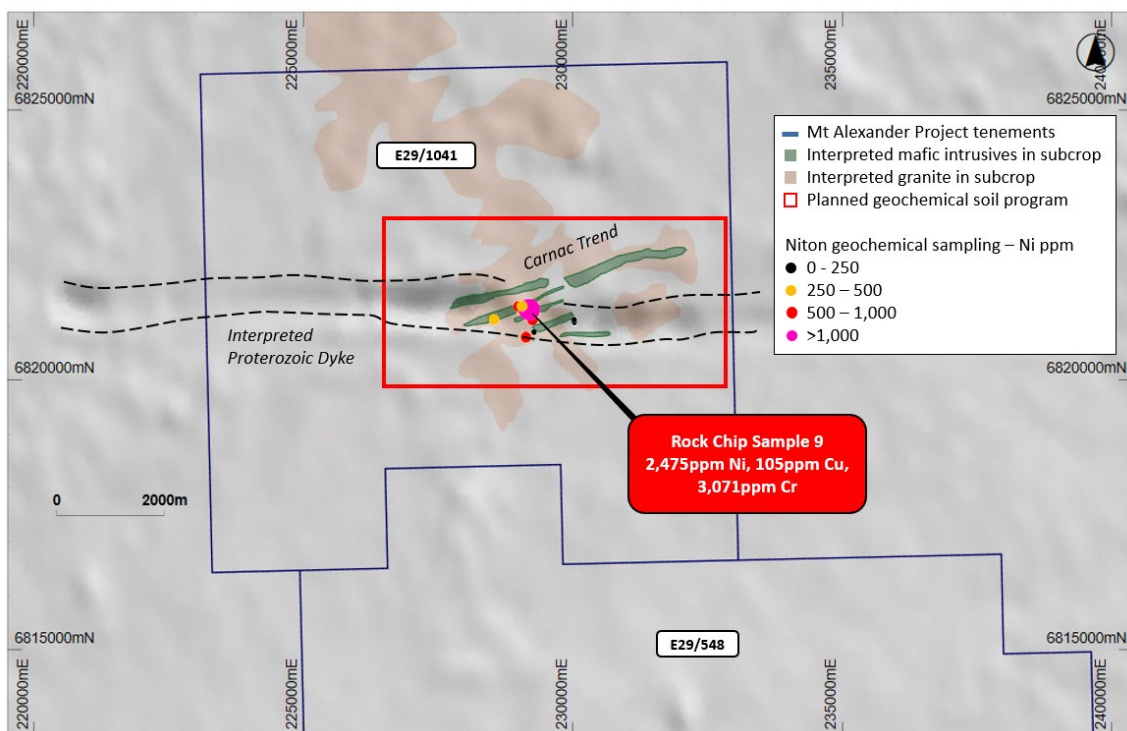


Figure 6 – map of E29/1041 (against TMI greyscale government magnetic data) showing the priority soil geochemistry survey area and mapped mafic units.

Nickel and copper values referred to above are based on spot values recorded by portable XRF analysis. The portable XRF equipment is useful for mapping geology and is also considered suitable for rock chip sampling for the purpose of providing a reliable estimate of the metal content of rocks.

Samples from the planned geochemical soil survey will be submitted for laboratory assay, which will provide a more conclusive determination of the metal values in the soil samples being tested.

Further exploration will be planned for E29/1041 following a review of the soil survey results in conjunction with the new aeromagnetic data.

## 2021 DRILL PROGRAMME

### ***Diamond drilling:***

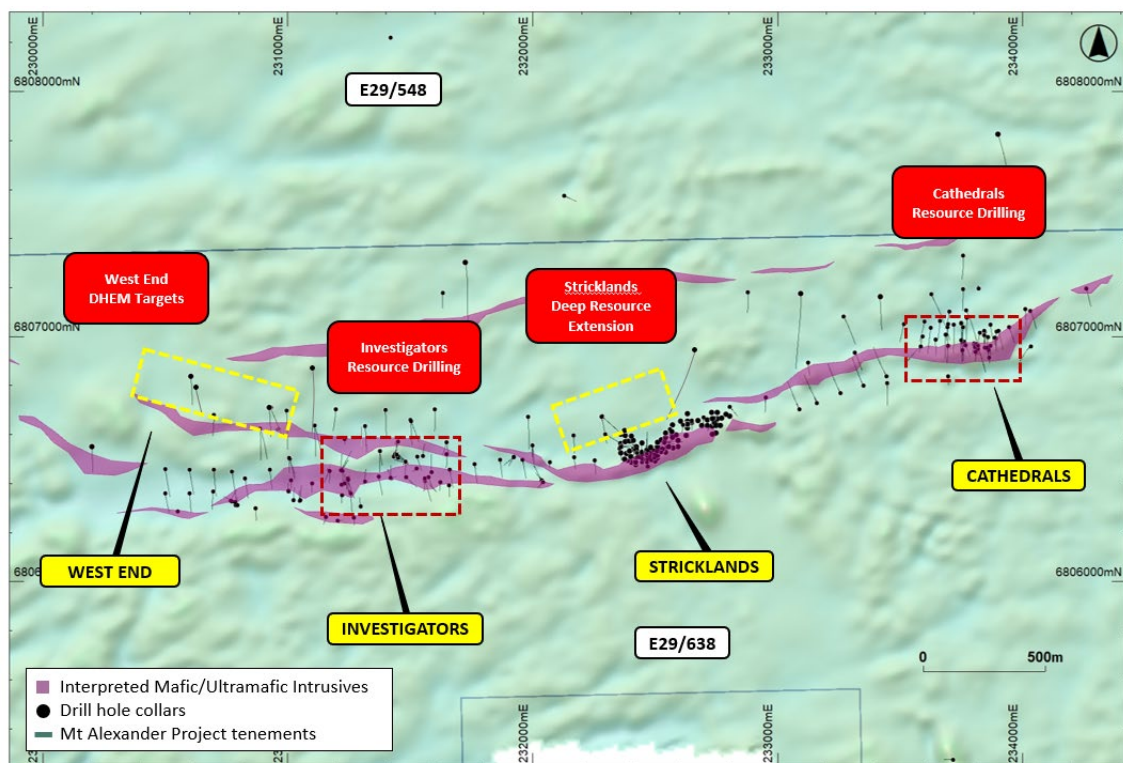
A diamond drill rig is scheduled to arrive at site on Friday. The rig will operate with two crews, on a 24/7 basis.

In recognition of the lead time for completion of metallurgical test work in Canada, drilling will initially focus on completing 5 metallurgical holes at the Stricklands Prospect. These are shallow holes with a total of 450m planned over 5 to 7 days. Samples from the Stricklands holes will be air-freighted to XPS in Canada for completion of the metallurgical test work in progress there.

After Stricklands, the rig will drill the high priority powerful EM conductors at Investigators and West End.

Further drilling, including a number of stratigraphic holes, is also planned to investigate the geology in the western part of the Cathedrals Belt where paleochannel cover is believed to have limited the effectiveness of surface EM surveys.

The drill targets will be adjusted and prioritised based on new drill results and new DHEM survey data.



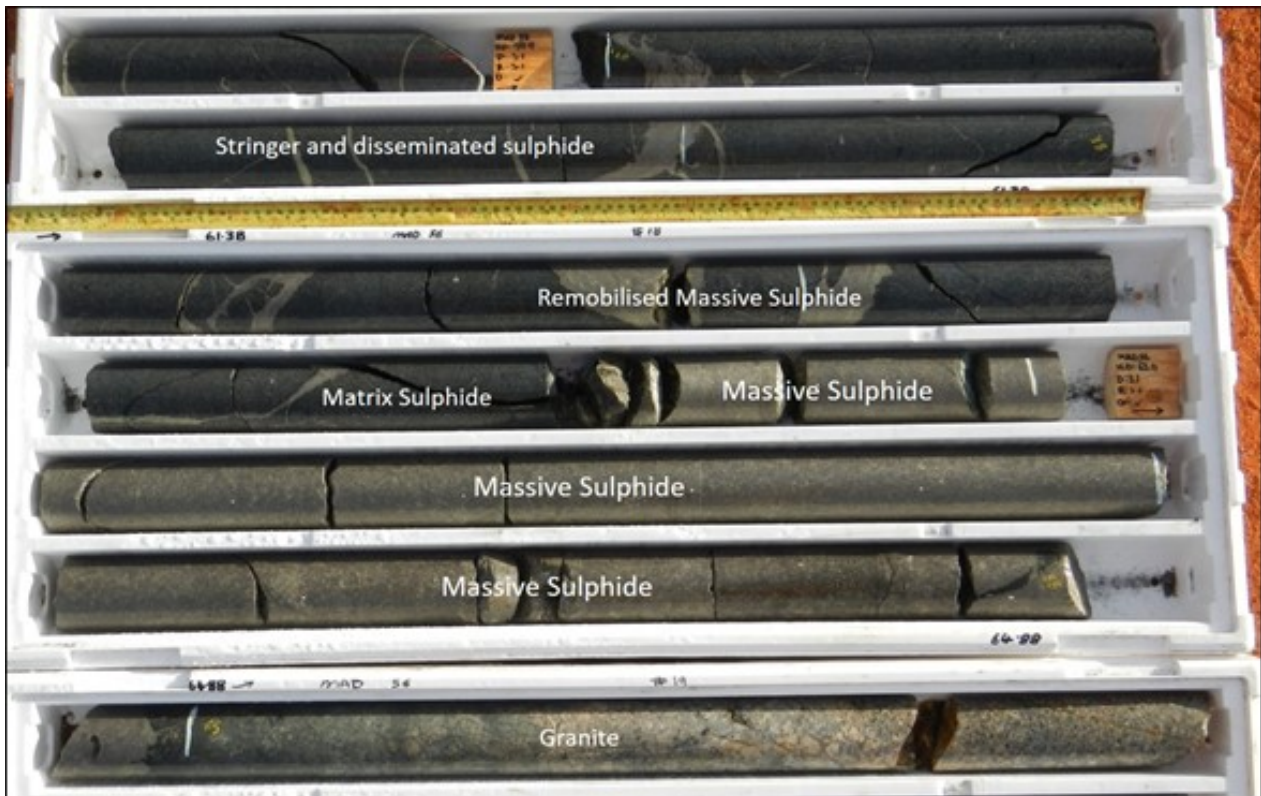
*Figure 7 – planned drilling and target areas at Investigators and West End with the new EM conductors (against magnetic RTP 1VD data).*



**Reverse circulation (RC) drilling:**

RC drilling is planned at both the Investigators and Cathedrals Prospects to drill-out the shallow high-grade mineralisation that has already been discovered there.

An example of the shallow high-grade mineralisation at Cathedrals is shown in Figure 8 – this is a photograph of drill core from MAD56 that intersected **7.5m @ 3.90% Ni, 1.74% Cu, 0.12% Co and 3.32g/t total PGEs from 57.8m including 3.15m @ 6.36% Ni, 2.92% Cu, 0.20% Co and 5.03g/t total PGEs from 61.81m.**



*Figure 8 – drill core tray from MAD56 at the Cathedrals Prospect showing core between 59.6m to 65.8m including massive, remobilised massive and matrix nickel-copper sulphides.*

Programmes of Works have been approved by the Department of Mines, Industry Regulation and Safety (DMIRS) for the drill-out with 5,000m of drilling planned at Investigators and 6,000m of drilling planned at Cathedrals.

Further RC drilling will also be planned to follow-up targets generated from the regional exploration mentioned above.

The precise availability of the RC rig has yet to be confirmed by our drilling contractor, but we expect the rig to be available by March.

**COVID-19:**

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

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

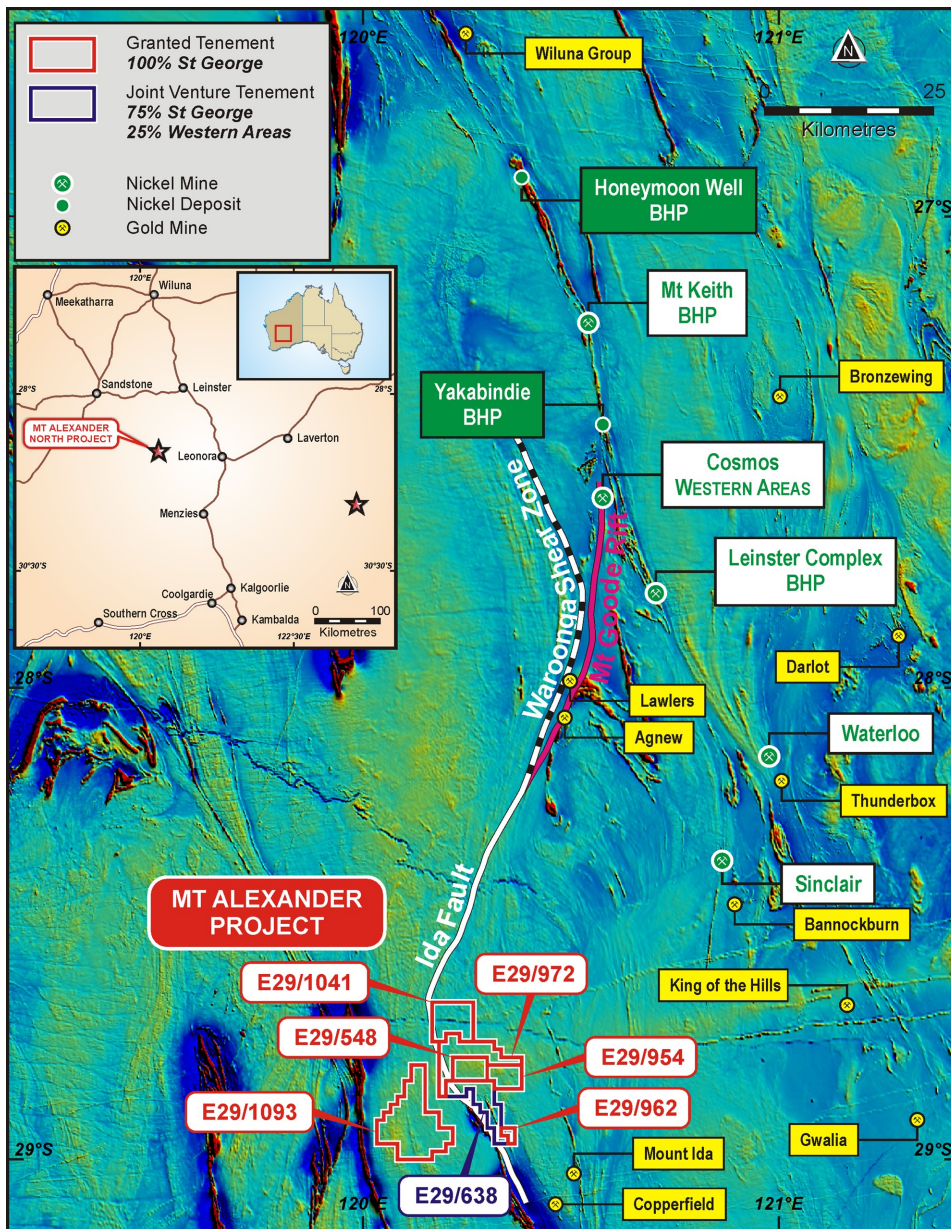


Figure 9 – regional map (over TMI magnetics) showing the location of the Mt Alexander Project to the south-west of major nickel projects in the Agnew-Wiluna Belt – a globally significant region for nickel sulphide production.

**About the Mt Alexander Project:**

The Mt Alexander Project is located 120km south-southwest of the Agnew-Wiluna Belt, which hosts numerous world-class nickel deposits. The Project comprises six granted exploration licences – E29/638, E29/548, E29/962, E29/954, E29/972 and E29/1041 – which are a contiguous package. A seventh granted exploration licence – E29/1093 – is located to the south-east of the core tenement package.

The Cathedrals, Stricklands, Investigators and Radar nickel-copper-cobalt-PGE discoveries are located on E29/638, which is held in joint venture by St George (75%) and Western Areas Limited (25%). St George is the Manager of the Project, with Western Areas retaining a 25% non-contributing interest in the Project (in regard to E29/638 only) until there is a decision to mine. All other Project tenements are owned 100% by St George.

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

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**Competent Person Statement:**

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Dave O'Neill, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr O'Neill is employed by St George Mining Limited to provide technical advice on mineral projects, and he holds performance rights issued by the Company.

Mr O'Neill has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr O'Neill consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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

**Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections)

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

Criteria	JORC Code explanation	Commentary
	<p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></p>	<p>A handheld XRF instrument (Olympus Innov-X Spectrum Analyser) is used to systematically analyse the drill core, RC sample piles and rock chips. 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. For rock chip sampling and mapping, one or multiple readings are taken to aid in rock identification or to give indications of anomalous metals.</p> <p><i>RC Sampling:</i> A 1m composite sample is taken from the bulk sample of RC chips that may weigh in excess of 40 kg. Each sample collected for assay typically weighs 2-3kg, and once dried, is prepared for the laboratory as per the Diamond samples below.</p> <p><i>Diamond Core Sampling:</i> Diamond core (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.</p> <p>Pulverisation produces a 40g charge for fire assay. Elements determined from fire assay are gold (Au), platinum (Pt) and palladium (Pd) with a 1ppb detection limit. To determine other PGE concentrations (Rh, Ru, Os, Ir) a 25g charge for nickel sulphide collect fire assay is used with a 1ppb detection limit.</p> <p>Other elements will be analysed using an acid digest and an ICP finish. These elements are: Ag, Al, As, Bi, Ca, Cd, Co, Cr, Fe, K, Li, Mg, Mn, Mo, Nb, Ni, P, Pb, S, Sb, Sn, Te, Ti, V, W, Zn. The sample is digested with nitric, hydrochloric, hydrofluoric and perchloric acids to effect as near to total solubility of the sample as possible. The sample is then analysed using ICP-AES or ICP-MS.</p> <p>LOI (Loss on Ignition) will be completed on selected samples to determine the percentage of volatiles released during heating of samples to 1000°C.</p>
<p><b>Drilling techniques</b></p>	<p><i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></p>	<p><i>Diamond Core Sampling:</i> The collars of the diamond holes were drilled using RC drilling down through the regolith to the point of refusal or to a level considered geologically significant to change to core. The hole was then continued using HQ diamond core until the drillers determined that a change to NQ2 coring was required.</p> <p>The core is oriented and marked by the drillers. The core is oriented using ACT Mk II electric core orientation.</p> <p><i>RC Sampling:</i> The RC drilling uses a 140 mm diameter face hammer tool. High capacity air compressors on the drill rig are used to ensure a continuously sealed and high-pressure system during drilling to maximise the recovery of the drill cuttings, and to ensure chips remain dry to the maximum extent possible.</p>
<p><b>Drill sample recovery</b></p>	<p><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></p> <p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p>	<p><i>Diamond Core Sampling:</i> Diamond core recoveries are recorded during drilling and reconciled during the core processing and geological logging. The core length recovered is measured for each run and recorded which is used to calculate core recovery as a percentage.</p> <p><i>RC Sampling:</i> RC samples are visually checked for recovery, moisture and contamination. Geological logging is completed at site with representative RC chips stored in chip trays.</p> <p><i>RC Sampling:</i> Samples are collected using cone or riffle splitter. Geological logging of RC chips is completed at site with representative chips being stored in drill chip trays.</p> <p><i>Diamond Core Sampling:</i> Measures taken to maximise core recovery include using appropriate core diameter and shorter barrel length</p>

Criteria	JORC Code explanation	Commentary
		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.
	<i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	To date, no sample recovery issues have yet been identified that would impact on potential sample bias in the competent fresh rocks that host the mineralised sulphide intervals.
<b>Logging</b>	<i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i>	Geological logging is carried out on all drill holes with lithology, alteration, mineralisation, structure and veining recorded.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	Logging of diamond core and RC samples records lithology, mineralogy, mineralisation, structures (core only), weathering, colour and other noticeable features. Core was photographed in both dry and wet form.
	<i>The total length and percentage of the relevant intersections logged.</i>	All drill holes are geologically logged in full and detailed litho-geochemical information is collected by the field XRF unit. The data relating to the elements analysed is used to determine further information regarding the detailed rock composition.
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	<b>Diamond Core Sampling:</b> 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.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	RC samples are collected in dry form. Samples are collected using cone or riffle splitter when available. Geological logging of RC chips is completed at site with representative chips being stored in drill chip trays.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	<b>RC Sampling:</b> Sample preparation for RC chips follows a standard protocol.  The entire sample is pulverised to 75µm using LM5 pulverising mills. Samples are dried, crushed and pulverized to produce a homogenous representative sub-sample for analysis. A grind quality target of 90% passing 75µm is used.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Quality control procedures include submission of Certified Reference Materials (standards), duplicates and blanks with each sample batch. QAQC results are routinely reviewed to identify and resolve any issues.  <b>RC Sampling:</b> 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.  <b>Diamond Core Sampling:</b> Drill core is cut in half lengthways and the total half-core submitted as the sample. This meets industry

Criteria	JORC Code explanation	Commentary
		standards where 50% of the total sample taken from the diamond core is submitted.
	<i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i>	Duplicate samples are selected during sampling. Samples comprise two quarter core samples for Diamond Core. Duplicate RC samples are captured using two separate sampling apertures on the splitter.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The sample sizes are considered to be appropriate to correctly represent base metal sulphide mineralisation and associated geology based on: the style of mineralisation (massive and disseminated sulphides), the thickness and consistency of the intersections and the sampling methodology.
<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	<p>For RC sampling, a 30 gram sample will be fire assayed for gold, platinum and palladium. The detection range for gold is 1 – 2000 ppbAu, and 0.5 – 2000 ppb for platinum and palladium. This is believed to be an appropriate detection level for the levels of these elements within this specific mineral environment. However, should Au, Pt or Pd levels reported exceed these levels; an alternative assay method will be selected.</p> <p>All other metals will be analysed using an acid digest and an ICP finish. The sample is digested with nitric, hydrochloric, hydrofluoric and perchloric acids to effect as near to total solubility of the sample as possible. The solution containing samples of interest, including those that need further review, will then be presented to an ICP-OES for the further quantification of the selected elements.</p> <p>Diamond core samples are analysed for Au, Pt and Pd using a 40g lead collection fire assay; for Rh, Ru, Os, Ir using a 25g nickel sulphide collection fire assay; and for Ag, Al, As, Bi, Ca, Cd, Co, Cr, Fe, K, Li, Mg, Mn, Mo, Nb, Ni, P, Pb, S, Sb, Sn, Te, Ti, V, W, Zn using a four acid digest and ICP-AES or MS finish. The assay method and detection limits are appropriate for analysis of the elements required.</p>
	<i>For geophysical tools, spectrometres, handheld XRF instruments, etc, the parametres used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	<p>XRF: A handheld XRF instrument (Olympus Innov-X Spectrum Analyser) is used to systematically analyse the drill core, RC sample piles and rock chips. 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. For rock chip sampling and mapping, one or multiple readings are taken to aid in rock identification or to give indications of anomalous metals.</p> <p>The handheld XRF results are only used for preliminary assessment and reporting of element compositions, prior to the receipt of assay results from the certified laboratory.</p>
	<i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i>	<p>Laboratory QAQC involves the use of internal lab standards using certified reference material (CRMs), blanks and pulp duplicates as part of in-house procedures. The Company also submits a suite of CRMs, blanks and selects appropriate samples for duplicates.</p> <p>Sample preparation checks for fineness are performed by the laboratory to ensure the grind size of 90% passing 75µm is being attained.</p> <p>The XRF instruments are serviced and bench calibrated at least once a year. Field calibration of the XRF instrument using standards is periodically performed (usually daily).</p>
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Significant intersections are verified by the Company's technical staff.

Criteria	JORC Code explanation	Commentary
	<i>The use of twinned holes.</i>	No twinned holes have been planned for the current drill programme.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Primary data is captured onto a laptop using acQuire software and includes geological logging, sample data and QA/QC information. This data, together with the assay data, is entered into the St George Mining central SQL database which is managed by external consultants.
	<i>Discuss any adjustment to assay data.</i>	No adjustments or calibrations will be made to any primary assay data collected for the purpose of reporting assay grades and mineralised intervals. For the geological analysis, standards and recognised factors may be used to calculate the oxide form assayed elements, or to calculate volatile free mineral levels in rocks.
<b>Location of data points</b>	<i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	Drill holes, sample and mapping locations have been located and pegged using a DGPS system with an expected accuracy of +/-5m for easting, northing and elevation.  Downhole surveys are conducted using a single shot camera approximately every 30m or downhole Gyro during drilling to record and monitor deviations of the hole from the planned dip and azimuth. Post-drilling downhole gyroscopic surveys will be conducted, which provide more accurate survey results.
	<i>Specification of the grid system used.</i>	The grid system used is GDA94, MGA Zone 51.
	<i>Quality and adequacy of topographic control.</i>	Elevation data has been acquired using DGPS surveying at individual collar locations and entered into the central database. A topographic surface has been created using this elevation data.
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	The spacing and distribution of holes is not relevant to the drilling programs which are at the exploration stage rather than definition drilling.
	<i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>	The completed drilling at the Project is not sufficient to establish the degree of geological and grade continuity to support the definition of Mineral Resource and Reserves and the classifications applied under the 2012 JORC code.
	<i>Whether sample compositing has been applied.</i>	No compositing has been applied to the exploration results.
<b>Orientation of data in relation to geological structure</b>	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	The drill holes are drilled to intersect the modelled mineralised zones at a near perpendicular orientation (unless otherwise stated). However, the orientation of key structures may be locally variable and any relationship to mineralisation has yet to be identified.
	<i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	No orientation based sampling bias has been identified in the data to date.
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	Chain of Custody is managed by the Company until samples pass to a duly certified assay laboratory for subsampling and assaying. The RC sample bags are stored on secure sites and delivered to the assay laboratory by the Company or a competent agent. When in transit, they are kept in locked premises. Transport logs have been set up to track the progress of samples.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	Sampling techniques and procedures are regularly reviewed internally, as is data. To date, no external audits have been completed on the drilling programme.



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

Criteria	JORC Code explanation	Commentary
<b>Mineral Tenement and Land Status</b>	<p>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.</p> <p>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.</p>	<p>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).</p> <p>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 six tenements are in good standing with no known impediments.</p>
<b>Exploration Done by Other Parties</b>	<p>Acknowledgment and appraisal of exploration by other parties.</p>	<p>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.</p> <p>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.</p>
<b>Geology</b>	<p>Deposit type, geological setting and style of mineralisation</p>	<p>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.</p> <p>The Mt Alexander Project contains and is prospective for further high-grade komatiite-hosted, and mafic-ultramafic intrusive hosted nickel-copper-PGE mineralisation. The project is also prospective for precious metal mineralisation (i.e. orogenic gold) that is typified elsewhere in the Yilgarn Craton.</p>
<b>Drill hole information</b>	<p>A summary of all information material to the understanding of the exploration results including tabulation of the following information for all Material drill holes:</p> <ul style="list-style-type: none"> <li>• Easting and northing of the drill hole collar</li> <li>• Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>• Dip and azimuth of the hole</li> <li>• Down hole length and interception depth</li> <li>• Hole length</li> </ul>	<p>Drill hole collar locations are shown in the maps and tables included in the body of the relevant ASX releases.</p>
<b>Data aggregation methods</b>	<p>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.</p>	<p>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.</p> <p>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%.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>Where aggregated intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></p> <hr/> <p><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></p>	<p>Any high-grade sulphide intervals internal to broader zones of sulphide mineralisation are reported as included intervals.</p> <p>Any disseminated, matrix, brecciated or stringer sulphides with (usually) &gt;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.</p> <hr/> <p>No metal equivalent values are used for reporting exploration results.</p>
<b>Relationship between mineralisation widths and intercept lengths</b>	<p><i>These relationships are particularly important in the reporting of exploration results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect.</i></p>	<p>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.</p>
<b>Diagrams</b>	<p><i>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.</i></p>	<p>A prospect location map, cross section and long section are shown in the body of relevant ASX Releases.</p>
<b>Balanced Reporting</b>	<p><i>Where comprehensive reporting of all Exploration Results is not practical, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></p>	<p>Reports on recent exploration can be found in ASX Releases that are available on our website at <a href="http://www.stgm.com.au">www.stgm.com.au</a>:</p> <p>The exploration results reported are representative of the mineralisation style with grades and/or widths reported in a consistent manner.</p>
<b>Other substantive exploration data</b>	<p><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observation; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></p>	<p>All material or meaningful data collected has been reported.</p>
<b>Further Work</b>	<p><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large – scale step – out drilling).Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></p>	<p>A discussion of further exploration work underway is contained in the body of recent ASX Releases.</p> <p>Further exploration will be planned based on ongoing drill results, geophysical surveys and geological assessment of prospectivity.</p>