

7 April 2021

## **EXPLORATION UPDATE – MT ALEXANDER NICKEL-COPPER SULPHIDE PROJECT**

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### **24/7 DIAMOND DRILLING OF ELECTROMAGNETIC (EM) CONDUCTORS CONTINUES:**

- New off-hole electromagnetic (EM) conductors have been identified by downhole EM (DHEM) surveys in MAD195 and MAD196
- Three strong EM conductors were identified from MAD195 with modelled conductivity of 19,320 Siemens, 22,950 Siemens and 16,850 Siemens, respectively
- Three strong EM conductors were identified from MAD196 with modelled conductivity of 69,926 Siemens, 27,000 Siemens and 32,235 Siemens, respectively
- New off-hole EM conductors are located down-dip of previous drill targets, a highly prospective location for the extension of nickel-copper sulphide mineralisation at depth
- Drilling of MAD199 – targeting the strong 19,320 Siemens conductor at 350m downhole depth – is underway with drilling at 64.2m downhole as of yesterday

### **DRILLING AT WEST END CONFIRMS FAVOURABLE INTRUSIVE HOST ROCKS AT DEPTH:**

- MAD197 was completed in an unexplored area of the West End Prospect to test for the presence of intrusive-style rocks that have the potential to host nickel-copper sulphides
- Thick 18.7m intrusive unit intersected from 493.9m downhole, confirming the western extension of the intrusive unit of the Cathedral Belt a further 200m to the west
- DHEM survey of MAD197 scheduled for next week to search for conductive material around the hole that may represent massive nickel-copper sulphides

### **STRONG MAGNETIC ANOMALIES IDENTIFIED BY AIRBORNE MAGNETIC SURVEY ON E29/972 and E29/1041:**

- New airborne magnetic survey has identified a series of strong linear magnetic features on E29/1041 that may represent an intrusive unit similar to that present in the nickel-copper sulphide bearing Cathedrals Belt
- Discrete magnetic anomaly identified on E29/972 that may represent an intrusive body similar to the intrusive rocks that host nickel-copper sulphides elsewhere in the Mt Alexander project area
- Drilling of these new targets is being prioritised and will be scheduled once a Programme of Works is approved

Growth-focused Western Australian nickel company St George Mining Limited (ASX: **SGQ**) (“**St George**” or “**the Company**”) is pleased to provide an update on results from ongoing field programmes at its flagship high-grade Mt Alexander Project, located in the north-eastern Goldfields.

## **24/7 DRILLING OF NEW EM CONDUCTORS**

MAD199 is currently being drilled to test the new 19,320 Siemens conductor identified from the DHEM survey in MAD195. The diamond drill rig is operating with two crews, allowing for drilling 24/7.

Drilling of MAD199 is at 64.2m downhole with the EM plate predicted to be intersected at 350m downhole.

The targeted EM plate is modelled north-east from MAD195, within the down-dip extension of the intrusive unit. This is an ideal location for the potential extension of nickel-copper sulphides at depth.

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

“The science continues to support the potential for further significant mineralisation to be present in the large intrusive mineral system at the Cathedrals Belt.

“The recent petrographic analysis indicated that the nickel-copper sulphides in the Cathedrals Belt are likely to have been associated with a large igneous event and the product of multiple magma pulses – factors that support the potential for a large mineral deposit in the Cathedrals Belt and elsewhere in the wider project area.

“It is very pleasing to therefore see the latest downhole EM survey data at Investigators and West End identify larger and more powerful EM plates than previous analysis had recognised.

“Some of the new EM plates are located down-dip of known mineralisation at a depth that ground-based EM surveys are unlikely to have screened effectively. With very little drilling in this area, the new EM conductors are excellent targets for the potential discovery of nickel-copper sulphides at depth.

“We are also excited by the results of the new magnetic survey conducted over two of our 100%-owned tenements E29/972 and E29/1041. The strong features identified are similar to the magnetic signature of the highly mineralised Cathedrals Belt, giving encouragement that these new targets have potential to represent intrusive rocks with mineralisation. These targets will be drilled as soon as practicable.

“The deep exploratory hole drilled at West End has intersected intrusive style rocks on the same horizon and setting as the intrusive unit identified by drilling along other sections of the Cathedrals Belt. This latest hole was completed 200m to the west of previous drilling at West End. The result has extended the strike of the intrusive unit to more than 6.5km and confirmed the western flank of West End – as the Cathedrals Belt approaches the Ida Fault – as a prospective area for nickel-copper sulphide mineralisation.

“Our field work continues in full-swing and we look forward to reporting more exploration results as we continue to scope out the full high-grade mineral potential at Mt Alexander.”

## **MAD195 – DHEM Results:**

MAD195 was completed to a downhole depth of 369.8m to test an EM plate modelled with conductivity of 33,100 Siemens. The hole intersected an intrusive unit comprising gabbronorite from 331.6m to 343.25m downhole. Finely disseminated sulphides were observed in this unit though the drill hole did not intersect any conductive material that would account for the very strong EM conductor.

The subsequent DHEM survey of MAD195 identified three new and strong off-hole conductors that are interpreted to have a massive sulphide source.

One of the new conductors is located approximately 20m down-dip of MAD195 and modelled with conductivity of 19,320 Siemens. Interestingly, this anomaly is located near two historical DHEM anomalies that were identified to the north in MAD189. While the MAD189 anomalies were modelled as being relatively weak, they may represent the margins and down-dip extension of the much more conductive anomalies identified in MAD195.

The other two conductors are located 10m to 15m away from MAD195 and have been modelled with conductivity of 22,950 Siemens and 16,850 Siemens, respectively. The first of these intersects the abovementioned 19,320 Siemens conductor and likely represents a change in orientation or more complex geometry to the conductive body.

**MAD196 – DHEM Results:**

MAD196 was completed to a downhole depth of 553m to test an EM plate modelled with conductivity of 55,550 Siemens. The hole intersected an intrusive unit comprising leuconorite-gabbronorite from 469m to 496.5m downhole. Minor disseminated sulphides were observed in this unit though there was no conductive material to account for the very strong EM conductor.

The DHEM survey of MAD196 identified three strong off-hole conductors that are interpreted to have a massive sulphide source. Two of these anomalies were seen by the DHEM survey of MAD192 and have been remodelled with the new information. These have been modelled with conductivity of 69,926 Siemens and 27,000 Siemens, respectively.

The third conductor is new, located down-dip of MAD196 and modelled with conductivity of 32,235 Siemens.

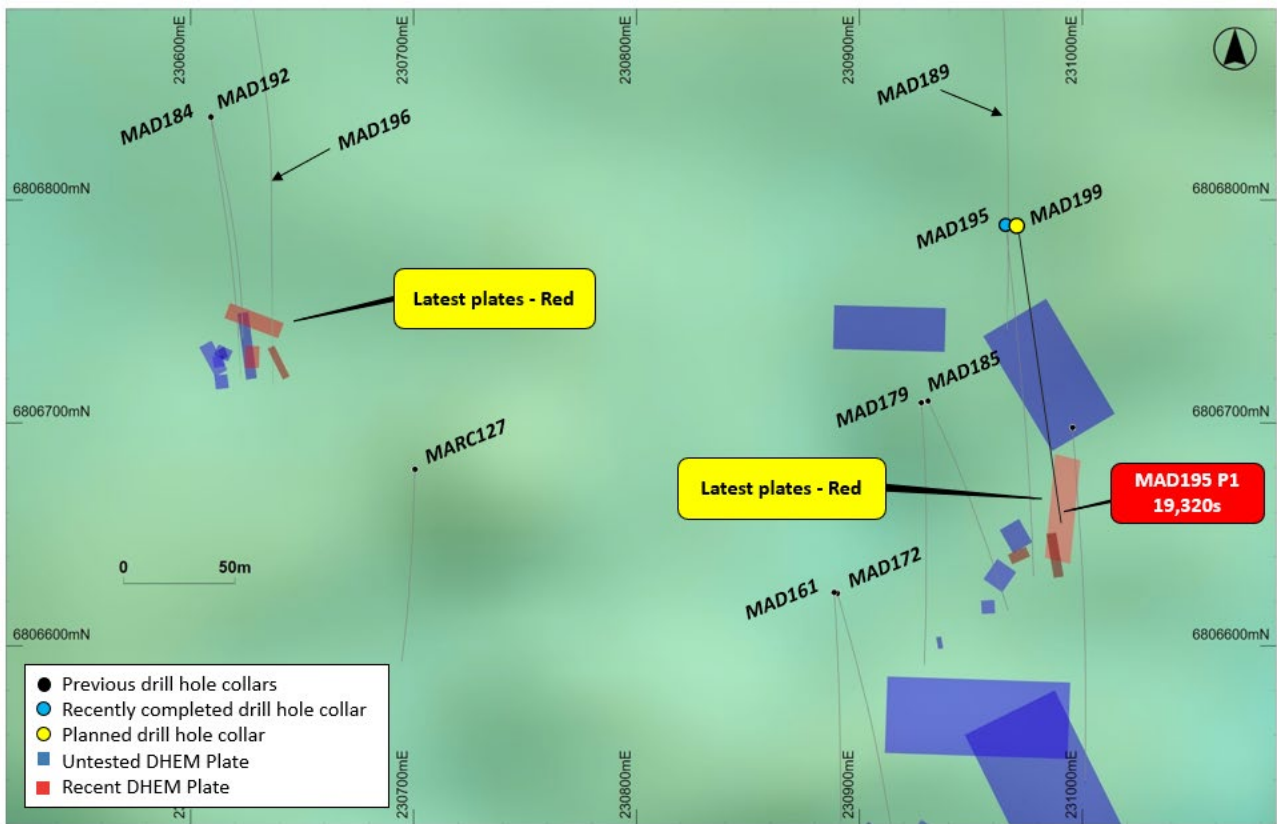


Figure 1 – Plan view of recently completed drill holes MAD195 and MAD196 showing drill traces and DHEM plates (against magnetic RTP 1VD data).

The multiple, highly conductive anomalies identified by the DHEM surveys of MAD192 and MAD196 suggest two potential scenarios – the presence of a complex geological setting and/or that the EM anomalies represent vectors to more distant high-grade mineralisation.

A SQUID MLEM surface survey was completed over the MAD192/MAD196 area in 2019. The survey identified a broad, single-component EM anomaly in this location (Figure 2). Whilst the anomaly is not well defined in other component data, it may represent a broad signal of one or more strong conductors down-dip of the current drilling. This down-dip area is planned for drilling following completion of MAD199.

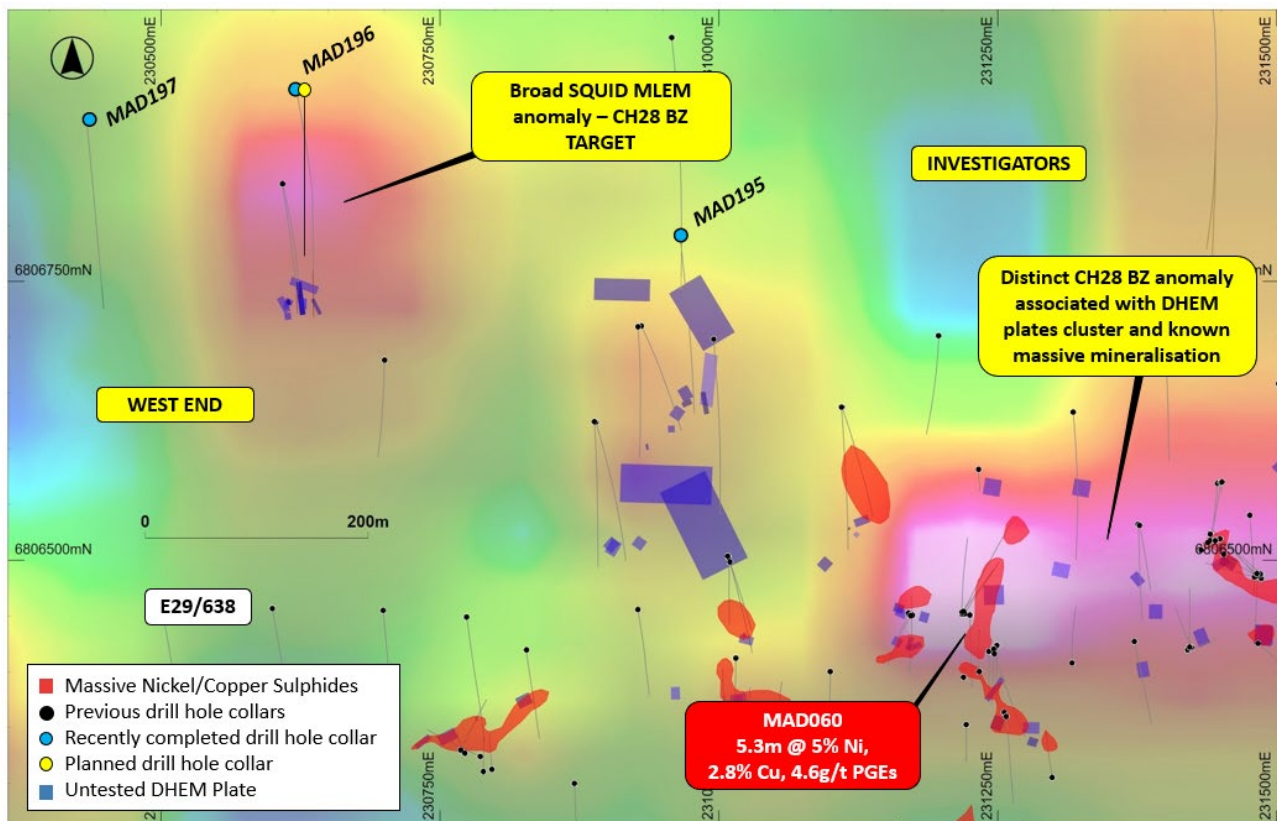


Figure 2 – map of Investigators and West End showing drilling, untested DHEM plates and known massive nickel-copper sulphide occurrences overlaying SQUID MLEM image (CH28 BZ)

### Technical commentary on DHEM modelling:

The modelled plates for the new anomalous EM responses are interpreted to represent the strongest part of the EM conductors and are a reliable targeting tool to test for the presence of massive sulphide mineralisation.

Modelling cannot always accurately predict the geometry of any sulphide deposit that may be present, particularly with complex geometry, and the modelled plate is not a definitive measure of the scale of all potential mineralisation.

Forward modelling of the known high-grade mineralisation indicates that DHEM surveying may reliably see 50m to 75m around the hole, depending on the surrounding geology and whether any other conductive material is in range. The absence of an anomalous response in a DHEM survey does not preclude the presence of mineralisation around a hole, particularly outside the detection limit of the DHEM survey.

Where multiple anomalous EM responses are detected in close proximity, as occurred with MAD195 and MAD196, the modelling of the predicted location of the EM conductors can be difficult.

Details of the new modelled plates are set out in Table 1 below.

Plate Name	East	North	RL	Length	Depth Extent	Conductivity - Thickness
MAD195_p1	230990	6806639	97	12	45	19320
MAD195_p2	230986	6806640	97	20	5	22950
MAD195_p3	230971	6806643	95	9	6	16850
MAD196_p1	230625	6806729	-53	10	6	69926
MAD196_p2	230641	6806741	-68	7	26	27000
MAD196_p3	230636	6806734	-54	3	15	32235

*Table 1 – details of EM plates modelled from the DHEM surveys in MAD195 and MAD196.*

## DEEP DRILLING AT WEST END

MAD197 was completed as an exploratory hole at West End to test for the westerly continuation of the Cathedrals Belt. The hole was completed to a depth of 603.02m.

The drill hole successfully intersected an 18.7m thick leuco-norite intrusive unit from 493.9m downhole. The remainder of the hole intersected granitic host rocks.

Importantly, the intrusive rocks intersected in MAD197 match the interpreted position of the intrusive horizon intersected to the east of the hole, giving high confidence that the intrusive unit extends well into the West End area. The intrusive unit has now been drilled over a 6.5km strike in the Cathedrals Belt and remains open to the west, east and at depth.

A DHEM survey is scheduled to be completed in MAD197 next week to search for any conductive material around the drill hole.

Additional exploratory drill holes have been designed for West End, to the west of MAD197. This area has been surveyed by ground-based EM surveys which were interpreted to have been affected by conductive cover in this area. Accordingly, the area remains largely unexplored for nickel-copper sulphides and is a priority target area for further exploration.

## NEW REGIONAL AEROMAGNETIC AND RADIOMETRIC SURVEY OVER UNEXPLORED AREAS

A new aeromagnetic and radiometric survey has been completed over project tenements E29/972 and E29/1041, both 100%-owned by St George. The high-resolution survey was completed with 100m line spacing and has provided detailed magnetic data for these newly acquired tenements; see Figure 3.

Historical regional government magnetic data for E29/1041 shows two distinct anomalies with an east-west strike that are potentially analogous to the Cathedrals Belt. Field mapping and sampling by St George in this area subsequently confirmed the presence of mafic rocks and nickel-copper anomalism in a small rock chip and soil sampling programme.

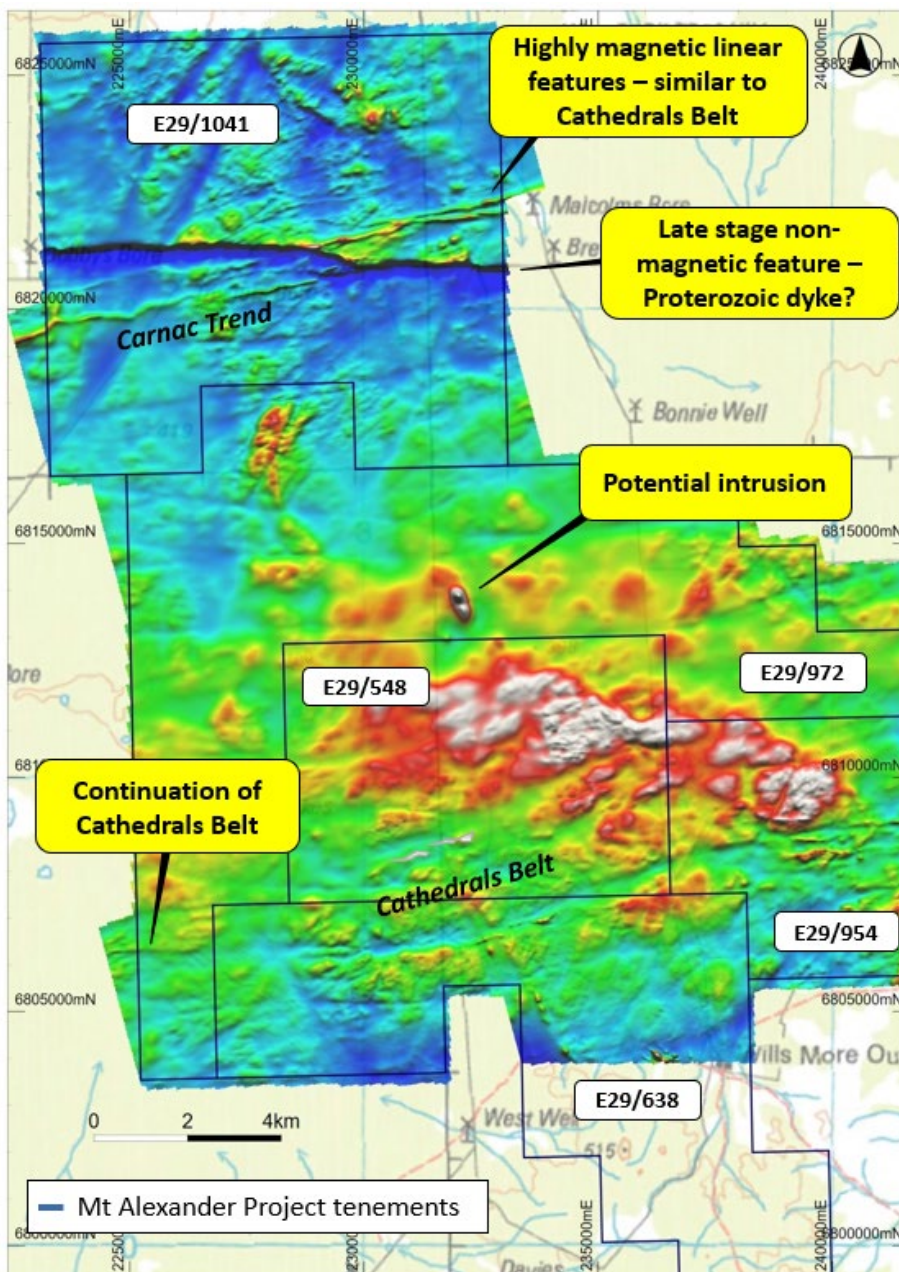
An expanded soil programme is currently underway and nearing completion. This survey covers the bulk of the two magnetic features.

The new high-resolution magnetic data confirms the presence of two distinct magnetic trends that cut across each other. The main east-northeast trend shows a series of strong, linear magnetic features – with the same orientation as the Cathedrals Belt. The features within E29/1041 appear to have a stronger magnetic response than at the Cathedral Belt and may represent a series of intrusive dyke-like units. If they are analogous to the Cathedrals Belt then they also have the potential to host nickel-copper mineralisation.

The other interpreted east-west feature appears in the new data as a strongly non-magnetic feature, suggesting that it is a Proterozoic dyke or major structure, and potentially less likely to host nickel-copper sulphide mineralisation.

To the south of E29/1041 and within E29/972, the new magnetic data has also highlighted a very strong magnetic feature with a north-northwest orientation and with a strike length of approximately 800m and a width of 250m. The shape of the feature is unusual for the area and notably different to the largely granitic rocks in the vicinity of the anomaly. These features may suggest the potential for an intrusion of unknown origin.

Drilling of these exciting features has been planned to confirm the type of rocks that they represent and whether they have the potential to host nickel-copper mineralisation. Drilling will be scheduled as soon as practicable once a Programme of Works is approved by the Department of Mines, Industry Regulation and Safety.



*Figure 3 – New magnetic data image (1VD) for E29/1041 and E29/972 showing a number of prominent features that warrant priority follow-up testing for potential mineralised intrusive units.*

**2021 DRILL PROGRAMME**

Table 2 shows details for drill holes completed or commenced in the 2021 diamond drill programme. Additional holes will be prioritised following review of ongoing drill results.

**MAD198:**

MAD198 was completed at Stricklands to a downhole depth of 415.1m to test for the potential presence of intrusive rocks and/or mineralisation down-dip from the high-grade nickel-copper sulphide deposit at Stricklands.

The hole intersected intercalating mafic and granitoid rocks from surface to 160.13m downhole, then mainly granitoids from 160.13m to 415.1m downhole. No significant sulphides were observed.

A DHEM survey of MAD198 is scheduled to be completed next week to investigate the potential for any conductive material around the hole that may represent sulphide mineralisation. Further deep drilling will be planned for Stricklands after the results of the DHEM survey are reviewed.

**Drilling rates and drill rigs:**

Daily drilling rates can vary significantly depending on the type of rocks being drilled, the competency of the rocks, weather conditions and rig maintenance. Drilling of MAD197 experienced significant delays due to the loss of drill rods in the hole at approximately 351m downhole. A diversion hole was established at 240m downhole with drilling resuming successfully to end-of-hole.

One diamond drill rig is currently operating at site. A second rig may become available again in the coming days.

A reverse circulation (RC) rig is expected at site in late April/early May 2021.

<i>Hole ID</i>	<i>Prospect</i>	<i>East</i>	<i>North</i>	<i>RL</i>	<i>Depth</i>	<i>Azi</i>	<i>Dip</i>
<b>MAD194</b>	Investigators	231475.7	6806540	423.6562	201.2	177	-70
<b>STD009</b>	Stricklands	232476	6806521	442.793	70.1	360	-90
<b>STD010</b>	Stricklands	232420.8	6806488	439.39	66.8	35	-78
<b>STD011</b>	Stricklands	232529.4	6806540	445.52	60.6	229	-85
<b>STD012</b>	Stricklands	232624.1	6806642	444.625	85	176	-84
<b>STD013</b>	Stricklands	232466.1	6806516	443.33	59.1	179	-85
<b>STD014</b>	Stricklands	232466	6806517	442.793	57.7	030	-86
<b>STD015</b>	Stricklands	232622	6806646	445	83.9	130	-80
<b>MAD195</b>	Investigators	230966	6806783	420	370	176	-68
<b>MAD196</b>	West End	230623	6806922	415	550	175	-68
<b>MAD197</b>	West End	230434.3	6806892.3	413.6	603.02	180	-70
<b>MAD198</b>	Stricklands	232276.3	6806799.0	447.8	415.10	145	-65
<b>MAD199</b>	Investigators	230966.0	6806788.0	416.0	n/a	165	-66

*Table 2 – drill hole details for diamond holes completed or commenced in 2021.*

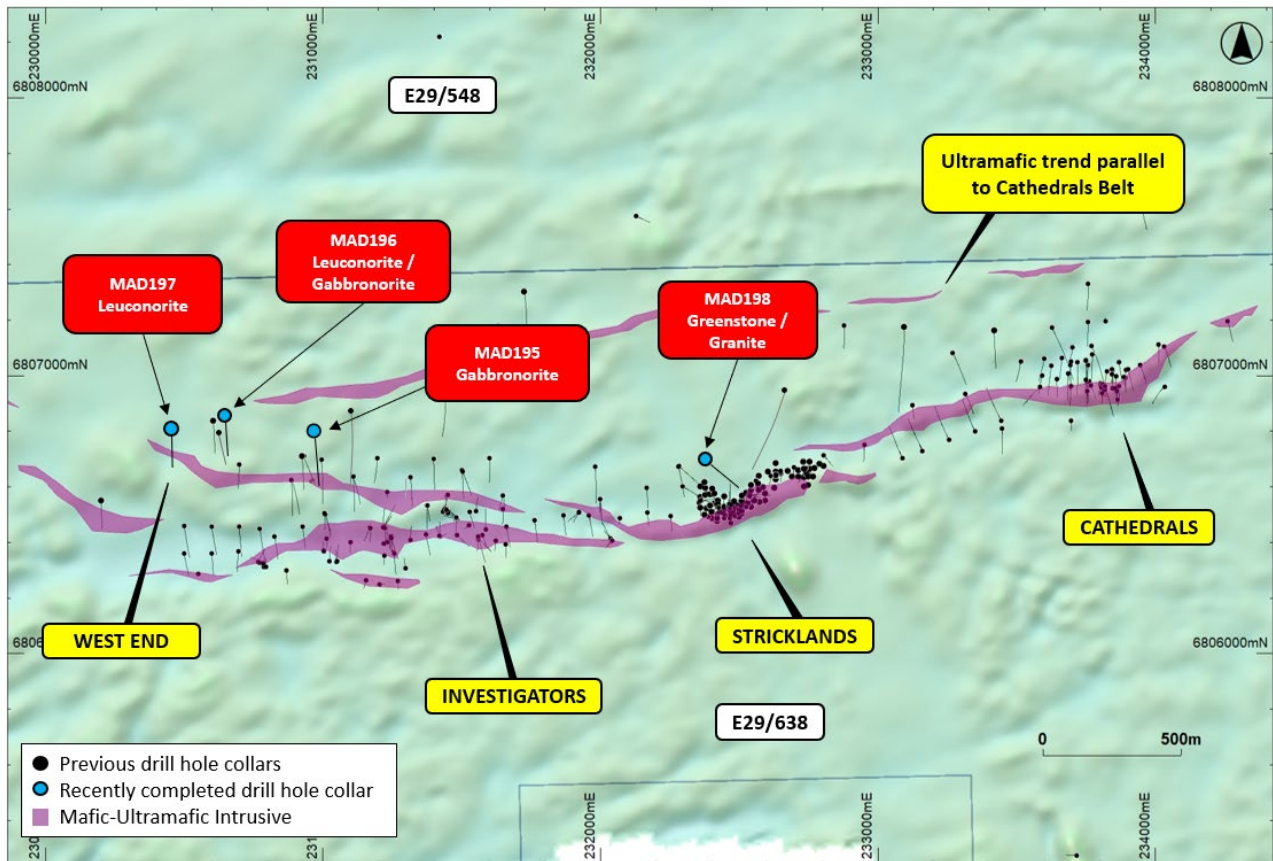


Figure 4 – map (against magnetic RTP 1VD data) showing drilling along the Cathedrals Belt and highlighting the most recently completed drill holes.

**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 has been constraining the availability of drill rigs. St George is in close contact with its drilling contractors to best manage access and continuity to drilling services.

**About the Mt Alexander Project:**

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

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

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





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**Competent Person Statement:**

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

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

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

**Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i>	<p><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. 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>DHEM Surveying:</i> 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.</p> <p><i>Airborne Magnetics and Radiometrics:</i> The Airborne Magnetic (AMAG) survey was completed by MagSpec Airborne Surveys. The data was collected at a 100m line spacing on a 090/270 magnetic orientation. Tie lines were completed 180/360 magnetic orientation. The Magnetic Gradiometer G-823a sensor recorded at 20Hz and 3.5m interval.</p>
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	<p><i>RC Sampling:</i> Samples are taken on a one metre basis and collected using uniquely numbered calico bags. The remaining material for that metre is collected and stored in a green plastic bag marked with that specific metre interval. The cyclone is cleaned with compressed air after each plastic and calico sample bag is removed. If wet sample or clays are encountered then the cyclone is opened and cleaned manually and with the aid of a compressed air gun. A blank sample is inserted at the beginning of each hole, and a duplicate sample is taken every 50<sup>th</sup> sample. A certified sample standard is also added according to geology, but at no more than 1:50 samples.</p> <p>Geological logging of RC chips is completed at site with representative chips being stored in drill chip trays. Downhole surveys of dip and azimuth are conducted using a single shot camera every 30m, and using a downhole Gyro when required, to detect deviations of the hole from the planned dip and azimuth. The drill-hole collar locations are recorded using a hand-held GPS, which has an accuracy of +/- 5m. All drill-hole collars will be surveyed to a greater degree of accuracy using a certified surveyor at a later date.</p> <p><i>Diamond Core Sampling:</i> For diamond core samples, certified sample standards were added as every 25<sup>th</sup> sample. Core recovery calculations are made through a reconciliation of the actual core and the driller's records. Downhole surveys of dip and azimuth were conducted using a single shot camera every 30m to detect deviations of the hole from the planned dip and azimuth. The drill-hole collar locations are recorded using a hand-held GPS, which has an accuracy of +/- 5m.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></p> <p><i>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i></p>	<p><i>RC Sampling:</i> A 1m composite sample is taken from the bulk sample of RC chips that may weigh in excess of 40 kg. Each sample collected for assay typically weighs 2-3kg, and once dried, is prepared for the laboratory as per the Diamond samples below.</p> <p><i>Diamond Core Sampling:</i> Diamond core (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>Diamond Core Sampling:</i> Diamond core recoveries are recorded during drilling and reconciled during the core processing and geological logging. The core length recovered is measured for each run and recorded which is used to calculate core recovery as a percentage.</p> <p><i>RC Sampling:</i> RC samples are visually checked for recovery, moisture and contamination. Geological logging is completed at site with representative RC chips stored in chip trays.</p>
	<p><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></p>	<p><i>RC Sampling:</i> Samples are collected using cone or riffle splitter. Geological logging of RC chips is completed at site with representative chips being stored in drill chip trays.</p> <p><i>Diamond Core Sampling:</i> Measures taken to maximise core recovery include using appropriate core diameter and shorter barrel length through the weathered zone, which at Cathedrals and Investigators is mostly &lt;20m and Stricklands &lt;40m depth. Primary locations for core loss in fresh rock are on geological contacts and structural zones, and drill techniques are adjusted accordingly, and if possible, these zones are predicted from the geological modelling.</p>

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

Criteria	JORC Code explanation	Commentary
	<p><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></p>	<p>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.</p>
	<p><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></p>	<p>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.</p>
<p><b>Quality of assay data and laboratory tests</b></p>	<p><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></p>	<p>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.</p> <p>All other metals will be analysed using an acid digest and an ICP finish. The sample is digested with nitric, hydrochloric, hydrofluoric and perchloric acids to effect as near to total solubility of the sample as possible. The solution containing samples of interest, including those that need further review, will then be presented to an ICP-OES for the further quantification of the selected elements.</p> <p>Diamond core samples are analysed for Au, Pt and Pd using a 40g lead collection fire assay; for Rh, Ru, Os, Ir using a 25g nickel sulphide collection fire assay; and for Ag, Al, As, Bi, Ca, Cd, Co, Cr, Fe, K, Li, Mg, Mn, Mo, Nb, Ni, P, Pb, S, Sb, Sn, Te, Ti, V, W, Zn using a four acid digest and ICP-AES or MS finish. The assay method and detection limits are appropriate for analysis of the elements required.</p>
	<p><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>	<p><b>DHEM:</b> 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.</p> <p><b>XRF:</b> A handheld XRF instrument (Olympus Innov-X Spectrum Analyser) is used to systematically analyse the drill core and RC sample piles onsite. One reading is taken per metre, however for any core samples with matrix or massive sulphide mineralisation then multiple samples are taken at set intervals per metre. The instruments are serviced and calibrated at least once a year. Field calibration of the XRF instrument using standards is periodically performed (usually daily).</p> <p>The handheld XRF results are only used for preliminary assessment and reporting of element compositions, prior to the receipt of assay results from the certified laboratory.</p> <p><b>AMAG:</b> A G-823a magnetic gradiometer was used in stinger and wing tip configuration mounted on a Cessna 206. Height information was captured using a Bendix/King KRA405 radar altimeter.</p>
	<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>	<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><b>Verification of sampling and assaying</b></p>	<p><i>The verification of significant intersections by either independent or alternative company personnel.</i></p>	<p>Significant intersections are verified by the Company's technical staff.</p>
	<p><i>The use of twinned holes.</i></p>	<p>No twinned holes have been planned for the current drill programme.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <hr/> <p><i>Discuss any adjustment to assay data.</i></p>	<p>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.</p> <hr/> <p>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.</p>
<b>Location of data points</b>	<p><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></p> <hr/> <p><i>Specification of the grid system used.</i></p> <hr/> <p><i>Quality and adequacy of topographic control.</i></p>	<p>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.</p> <p>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.</p> <p>The AMAG data was positioned using a Novatel OEM719 DGPS.</p> <hr/> <p>The grid system used is GDA94, MGA Zone 51.</p> <hr/> <p>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.</p>
<b>Data spacing and distribution</b>	<p><i>Data spacing for reporting of Exploration Results.</i></p> <hr/> <p><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></p> <hr/> <p><i>Whether sample compositing has been applied.</i></p>	<p>The spacing and distribution of holes is not relevant to the drilling programs which are at the exploration stage rather than definition drilling.</p> <p>The AMAG data was collected at 100m line spacing and 40m flight height.</p> <hr/> <p>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.</p> <hr/> <p>No compositing has been applied to the exploration results.</p>
<b>Orientation of data in relation to geological structure</b>	<p><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></p> <hr/> <p><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></p>	<p>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.</p> <hr/> <p>No orientation based sampling bias has been identified in the data to date.</p>
<b>Sample security</b>	<p><i>The measures taken to ensure sample security.</i></p>	<p>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.</p>
<b>Audits or reviews</b>	<p><i>The results of any audits or reviews of sampling techniques and data.</i></p>	<p>Sampling techniques and procedures are regularly reviewed internally, as is data. To date, no external audits have been completed on the drilling programme.</p>

## 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 five 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 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.</p> <p>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.</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 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.</p> <p>The Mt Alexander Project is prospective for further high-grade komatiite-hosted nickel-copper-PGE mineralisation (both greenstone and granite hosted) and also precious metal mineralisation (i.e. orogenic gold) that is typified elsewhere in the Yilgarn Craton.</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.</p> <p>No metal equivalent values are used for reporting exploration results.</p>
<b>Relationship between mineralisation widths and intercept lengths</b>	<i>These relationships are particularly important in the reporting of exploration results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect.</i>	Assay intersections are reported as down hole lengths. Drill holes are planned as perpendicular as possible to intersect the target EM plates and geological targets so downhole lengths are usually interpreted to be near true width.
<b>Diagrams</b>	<i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for 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>	A prospect location map, cross section and long section are shown in the body of relevant ASX Releases.
<b>Balanced Reporting</b>	<i>Where comprehensive reporting of all Exploration Results is not practical, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i>	<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>	<i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observation; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i>	All material or meaningful data collected has been reported.
<b>Further Work</b>	<i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large – scale step – out drilling).Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i>	<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>