

9 September 2020

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

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

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

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

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

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

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

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

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

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

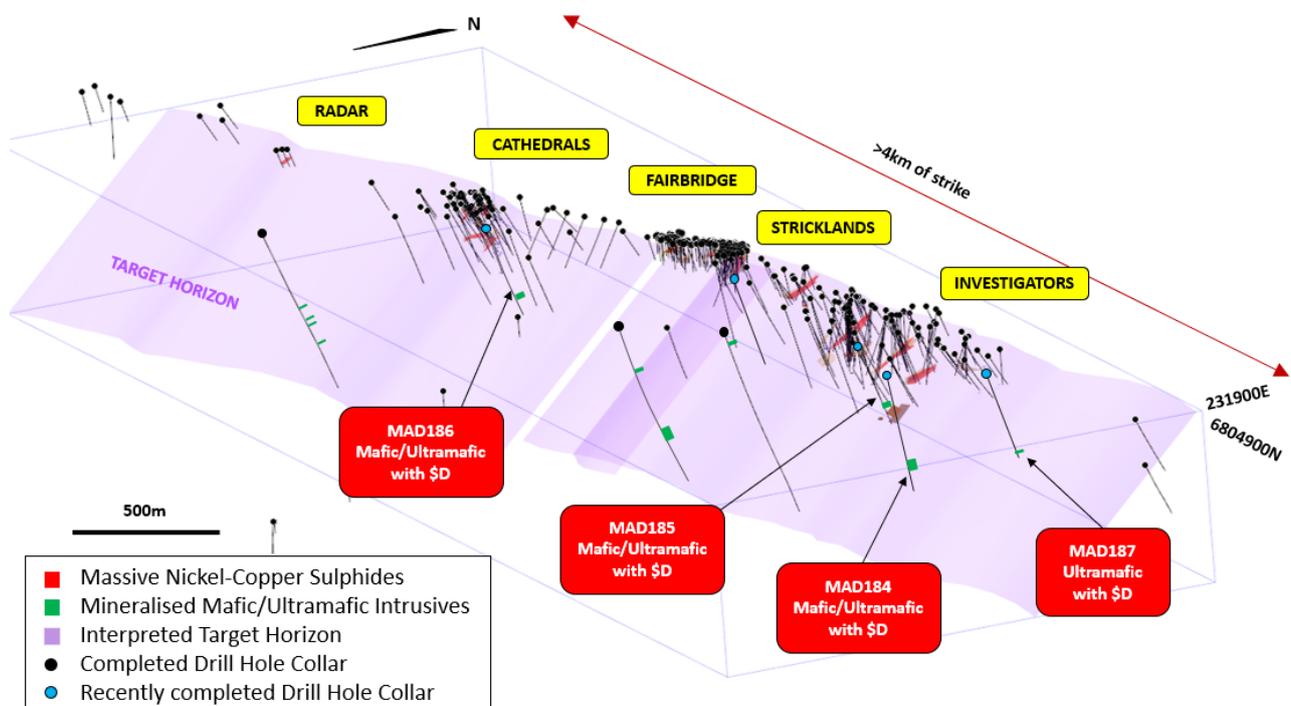
“We are encouraged and excited by the geological potential at the Cathedrals Belt that continues to grow as results from our methodical exploration come in.”

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

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

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

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



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

**MAD185:**

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

Geological logging of the drill hole is set out below.

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

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



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

**MAD184:**

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

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

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

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

**MAD186:**

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

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

Geological logging for MAD186 is set out below.

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

**MAD187:**

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

Geological logging is set out below.

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

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

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

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

**DHEM SURVEYS FOR DEEP DRILL HOLES**

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

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

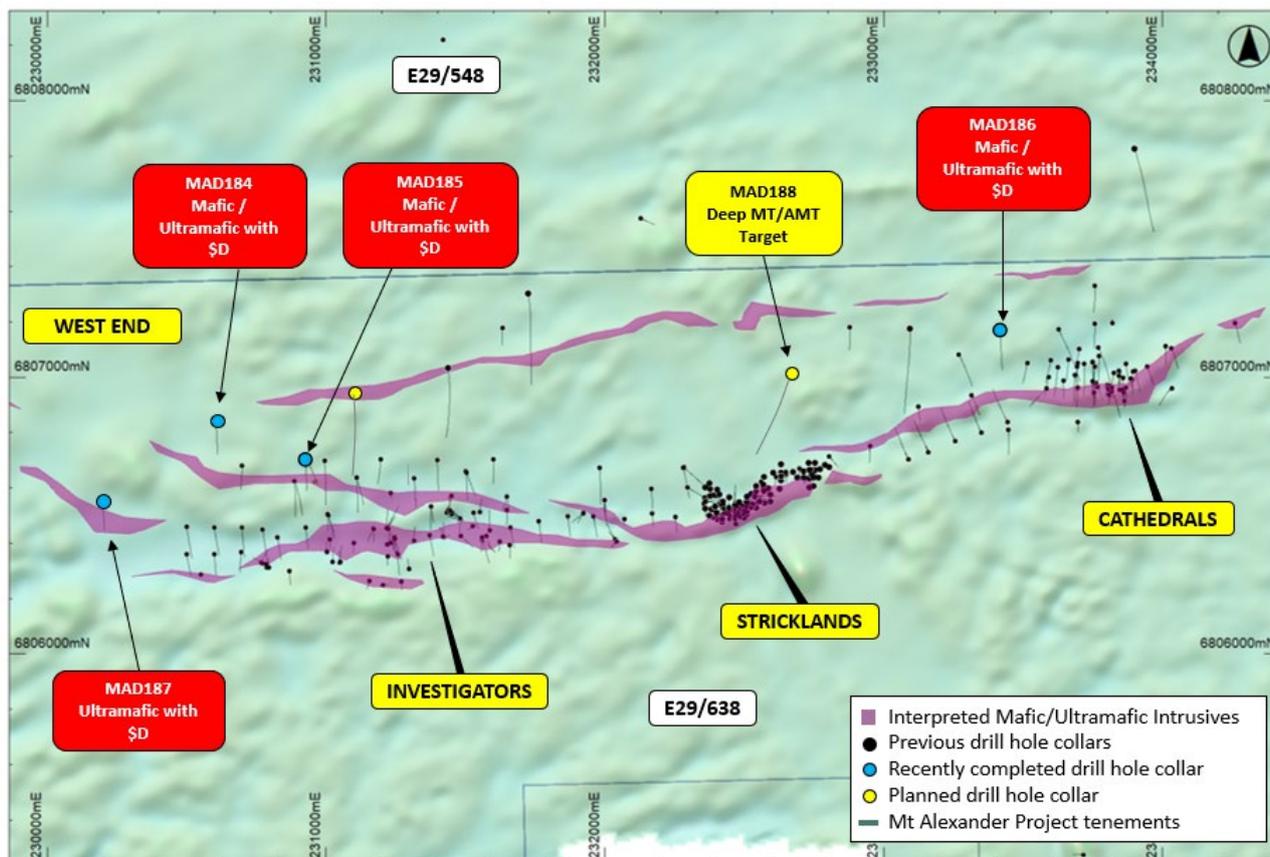


Figure 4 – Plan view of the Cathedrals Belt showing areas of completed and planned drilling, overlaying interpreted geology and magnetics (TMI RTP 1VD).

**DRILL PROGRAMME**

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

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

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

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

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

## **COVID-19:**

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

## **About the Mt Alexander Project:**

The Mt Alexander Project is located 120km south-southwest of the Agnew-Wiluna Belt, which hosts numerous world-class nickel deposits. The Project comprises six granted exploration licences – E29/638, E29/548, E29/962, E29/954, E29/972 and E29/1041.

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

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

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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.