

21 May 2018

## NICKEL-COPPER SULPHIDE MINERALISATION CONTINUES TO GROW WITH FURTHER SIGNIFICANT INTERSECTIONS

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### HIGHLIGHTS:

- **Drill programme at Mt Alexander intersects further thick zones of nickel-copper sulphide mineralisation across the 4.5km strike of the Cathedrals Belt**
- **Downhole electromagnetic (DHEM) surveys of completed drill holes have identified multiple off-hole EM conductors at Stricklands and Investigators for follow-up testing**
- **Drilling of new DHEM conductors at Stricklands has confirmed further massive nickel-copper sulphides**

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Emerging West Australian nickel company St George Mining Limited (ASX: **SGQ**) (“**St George**” or “**the Company**”) is pleased to announce that drilling at the Mt Alexander Project, located near Leonora in the north-eastern Goldfields of Western Australia, has continued to intersect nickel-copper sulphides across the 4.5km strike of the Cathedrals Belt.

Further drilling has been completed at each of the three prospect areas on the Cathedrals Belt – Stricklands, Investigators and Cathedrals – with additional high-grade nickel-copper sulphides intersected.

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

“The drilling results at Mt Alexander are very exciting. Our high success rate in testing EM targets along the Cathedrals Belt has continued with all EM targets drilled being confirmed as nickel-copper sulphides.

“Perhaps more significantly, we have also intersected additional thick massive sulphides at Stricklands in an area where previous ground-based EM surveys did not identify any conductors. This provides encouragement that the extent of mineralisation at Stricklands could be greater than indicated by the surface EM surveys.

“At Investigators, the first deep drilling of additional SAMSON EM anomalies has resulted in several strong off-hole DHEM conductors being detected for follow-up testing.

“These targets include a very strong conductor modelled with conductivity of 67,000 Siemens and located down-dip from the best intersection to date of massive nickel-copper sulphides at Investigators.”

### **Stricklands Prospect:**

At the Stricklands Prospect, drilling is focused on identifying the extent of mineralisation along the Stricklands ultramafic, which is interpreted to have a strike of approximately 400m in an east-northeast orientation. Drilling in late 2017 confirmed the presence of thick nickel-copper sulphides at Stricklands with MAD71 intersecting **17.45m @ 3.01% Ni, 1.31% Cu, 0.13% Co and 1.68g/t total PGEs from 37.45m.**

Drill hole MAD96 was completed earlier in the current drill programme about 220m north-east of MAD71. MAD96 did not intersect any sulphide mineralisation. However, a DHEM survey in MAD96 identified a strong off-hole EM conductor approximately 20m to the south-west of MAD96.

MAD104 was designed to test the off-hole EM conductor with modelling predicting that the conductor would be intersected 70m downhole. MAD104 was completed to a downhole depth of 91m and successfully intersected 6.25m of sulphide mineralisation comprising the following intervals:

- 67.2m to 68.14m: *0.94m of matrix and some semi-massive sulphides*
- 68.14m to 68.9m: *0.76m of moderate-strong disseminated and some matrix sulphides*
- 68.9m to 70.11m: *1.21m of matrix and semi-massive sulphides*
- 70.11m to 73.45m: **3.34m of massive sulphide (average XRF of 5.5%Ni, 1.7%Cu)**

The results for MAD104 are very significant for exploration at Stricklands as the massive sulphides intersected in MAD104 were not identified by the ground-based EM surveys completed at Stricklands - including the ground-based SAMSON and moving loop EM (MLEM) surveys undertaken by St George in 2016 and the SQUID high temperature fixed loop EM (FLEM) survey completed by BHP in 2010.

The massive sulphides intersected in MAD104 are interpreted to be relatively flat-lying and occur at a shallow depth 60m (vertically) below surface, both favourable features for detection by previous ground-based EM surveys.

The implication is that there is potential for further sulphide mineralisation to be present along the Stricklands ultramafic (and potentially at the other prospects along the Cathedrals Belt) that has not been detected by surface EM surveys. With mineralisation at Stricklands open to the west, north and east – and areas with minimal drilling and DHEM surveys completed – there is potential for further significant mineralisation to be discovered.



Figure 1 – drill core from MAD104. On left: massive sulphides from 70.1 to 73.44m. On right: matrix sulphides from 67.2m to 70.1m.

### **Investigators Prospect:**

Drilling just completed at Investigators focused on the first deep drilling of additional SAMSON EM targets.

Drilling across Investigators to date has delivered 15 intersections of massive nickel-copper sulphides (see Figure 2) but the large surface EM signature at Investigators is not fully accounted for by these drill results.

Drill holes MAD98, MAD99, MAD100 and MAD101 were recently completed at Investigators to test EM targets modelled from ground-based SAMSON EM data. These drill holes did not intersect sulphide mineralisation but the DHEM surveys in three of these holes (MAD98, MAD100 and MAD101) have identified strong off-hole EM conductors which have geophysical features consistent with massive sulphide mineralisation:

- MAD98 – strong off-hole anomaly (25x27m) approximately 200m below surface with a modelled conductivity of 67,000 Siemens
- MAD100 – three off-hole anomalies between 130-180m below surface ranging from 20x10m to 30x18m
- MAD101 – off-hole EM anomaly (20x30m) 100m below surface with modelled conductivity of 3,500 Siemens

The MAD98 EM anomaly is down-dip from the best ever intersection at Investigators – MAD60 which intersected **5.3m @ 4.95%Ni, 2.75%Cu, 0.16%Co, and 4.55g/t total PGEs from 157.9m.**

The surface projection of the plates modelled for these EM conductors is illustrated in the plan view map of Investigators shown in Figure 2.

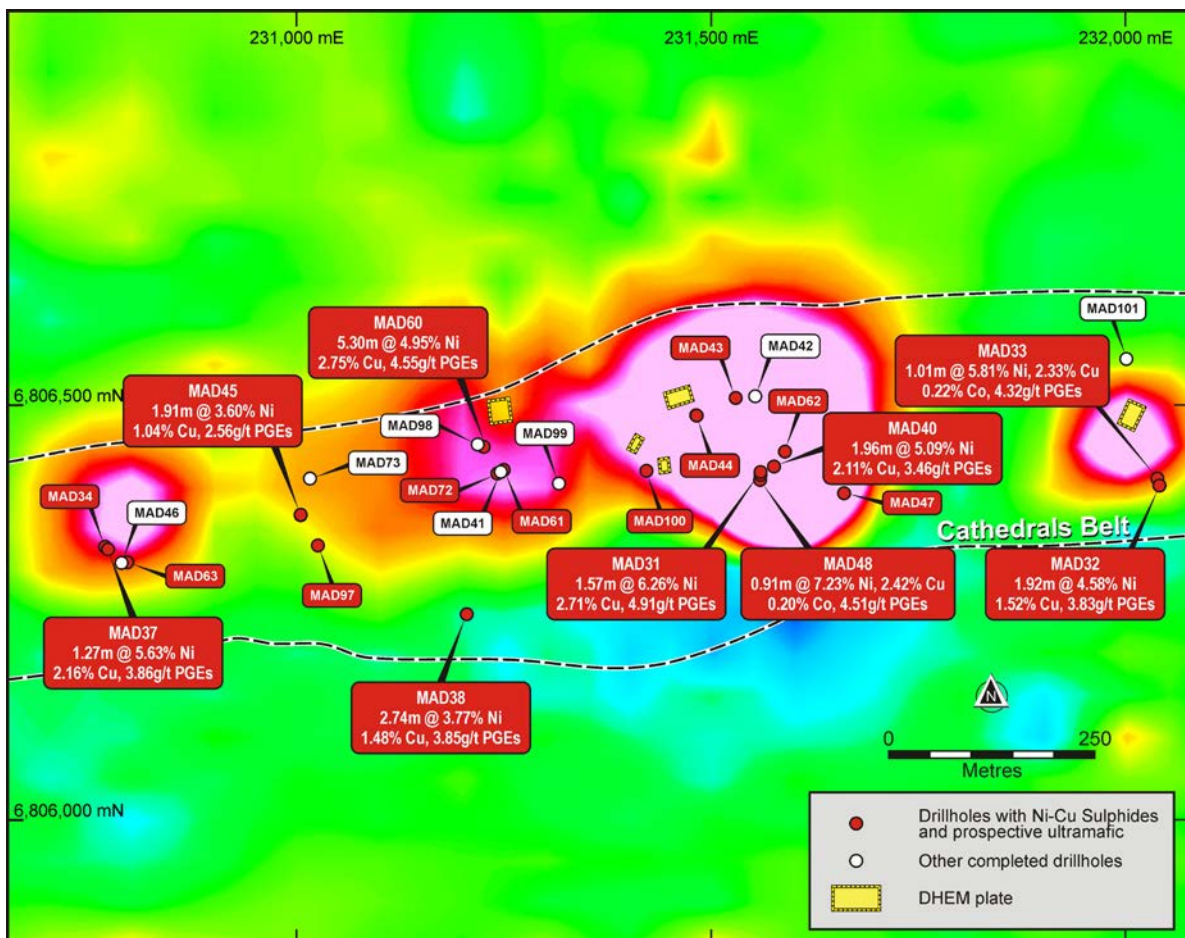


Figure 2 – plan view of Investigators Prospect with drill hole collar locations over the large SAMSON total field EM anomalies (red/pink colours). SAMSON EM image is shown in Channel 18 (44ms). The surface projection of the untested DHEM plates modelled from the latest drilling at Investigators is also shown. Assays for completed drill holes are contained in Table 2 below.

The other recently completed drill hole at Investigators – MAD97 – intersected a thick 13.98m of sulphide mineralisation.

MAD97 was completed to a downhole depth of 210.3m to test an off-hole EM anomaly modelled from drill hole MAD73. Sulphide mineralisation intersected comprised:

- 162.07m to 171.4m: *weak patchy disseminated sulphides*
- 171.4m to 175.24m: *moderate disseminated and some stringer sulphides*
- 175.24m to 175.79m: *strong disseminated sulphides*
- 175.79m to 176.05m: **massive sulphide (XRF 3%Ni, 5%Cu)**

A DHEM survey will be completed in MAD97 to assess if any further conductive material is around the drill hole. The interim results for MAD97 have extended the mineralised zone that also encompasses the high-grade intersection in MAD45.

### **Drill Programme:**

Table 1 lists all drill holes completed in the 2018 drill programme to date.

Further drill holes are being planned to test the DHEM conductors identified during this programme as well as to continue the definition drilling across the Cathedrals Belt.

In addition to the drill holes discussed on pages 1 and 2 of this ASX Release, the following drill holes were recently completed at Stricklands:

### **MAD105:**

MAD105 was drilled to a downhole depth of 69.8m to test a DHEM plate modelled from MAD95. Sulphide mineralisation was intersected by MAD105 as follows:

- 35.6m to 40.5m: *Vein, blebby, matrix and semi-massive sulphides (XRF 1.5%Ni, 0.5%Cu)*
- 40.5m to 42.55m: *Weak-moderate network sulphides*
- 42.55m to 50.75m: *Weak disseminated, blebby and veinlet sulphides*

### **MAD106:**

MAD106 was drilled to a downhole depth of 95.1m to test a DHEM plate modelled from MAD94. Sulphide mineralisation was intersected by MAD106 as follows:

- 57m to 61.9m: *Weak-trace sulphide veinlets*
- 61.9m to 63.13m: *Moderate blebby sulphides increasing with depth*
- 63.13m to 63.85m: *Strong blebby, veinlet and semi-massive sulphides*
- 63.85m to 64.73m: **Semi-massive to massive sulphides**
- 64.73m to 65.3m: **Massive sulphide**

XRF analysis for MAD106 has yet to be completed.

### **MAD107:**

MAD107 was drilled to a downhole depth of 108.9m to test south-east of the MAD71 drill section. The drill hole intersected ultramafic between 0-19.05m. There was no visible sulphide mineralisation in the largely oxidised ultramafic.

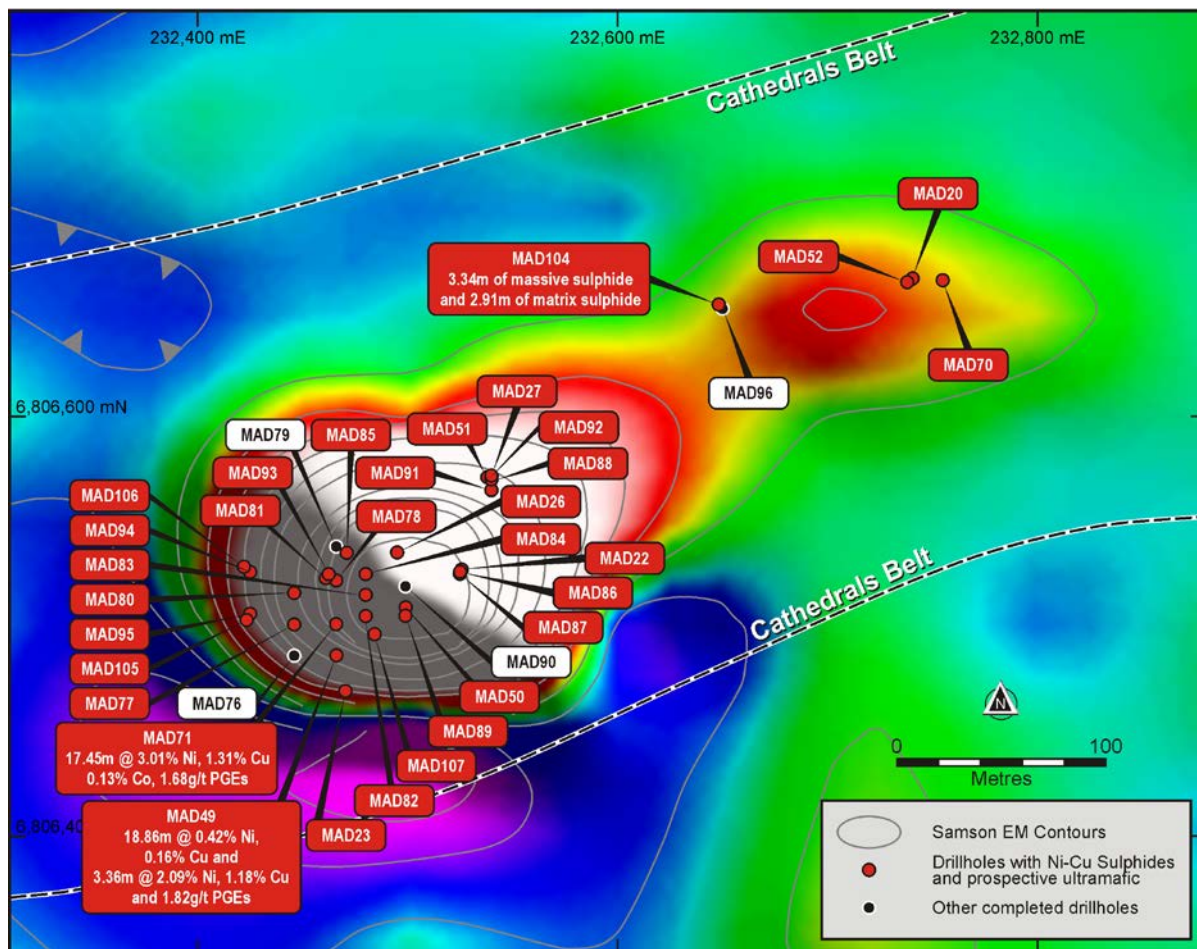


Figure 3 - a plan view of the Stricklands Prospect showing the large SAMSON total field EM anomaly (white/red colours). The SAMSON EM image is shown in Channel 18 (44ms). The contours shown are 0.05pT/A which highlight the stronger electromagnetic field over the Stricklands Prospect. For details of assays for completed drill holes, refer to Table 3 below.

Two drill holes were also completed at the Cathedrals Prospect:

**MAD102:**

MAD102 was drilled to a downhole depth of 232m to test for any extension of the Cathedrals ultramafic to the north and at depth. The drill hole intersected the Cathedrals ultramafic between 101.77-104.1m downhole and also high-magnesian Proterozoic dolerite between 206.54-209.45m downhole. However, no visible sulphides were observed in the drill core.

**MAD103:**

MAD103 was completed as a twin hole of MAD56 which was drilled in 2017 and intersected **7.5m @ 3.90%Ni, 1.74%Cu, 0.12%Co and 3.32g/t total PGEs from 57.8m.**

The drill core from MAD103 will be used to complete further metallurgical testing of the mineralisation at the Cathedrals Belt. MAD103 intersected a similar profile of sulphide mineralisation as in MAD56.

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

The XRF readings of nickel values shown above are based on portable XRF analysis. It is preliminary in nature and a conclusive determination of the nickel, copper, cobalt and PGE values of the sulphide mineralisation will be confirmed when laboratory assays are available.

Average XRF readings in the massive and semi-massive sulphide intervals are based on multiple readings per metre and are not length and density weighted. Metal content for intervals of disseminated sulphides are not accurately determined by portable XRF analysis.

HOLEID	Prospect	MGA East	MGA North	Depth(m)	Dip	Azimuth	Depth to Target
MARC71	E29/548	230200	6809500	140	-75	90	96
MARC72	E29/548	230620	6809580	180	-65	160	137
MAD85	Stricklands	232471	6806535	81	-75	180	40
MAD86	Stricklands	232525	6806525	80.3	-60	0	60
MAD87	Stricklands	232525	6806525	70.3	-87	0	50
MAD88	Stricklands	232540	6806570	84.2	-60	105	60
MAD89	Stricklands	232499	6806505	72.7	-85	0	35
MAD90	Stricklands	232499	6806519	70.1	-60	0	40
MAD91	Stricklands	232540	6806565	80.3	-60	165	60
MAD92	Stricklands	232540	6806572	80.5	-75	165	60
MAD93	Stricklands	232461	6806525	101.4	-74	0	70
MAD94	Stricklands	232425	6806525	69.5	-80	180	50
MAD95	Stricklands	232425	6806505	70	-80	180	50
MAD96	Stricklands	232650	6806651.36	99.6	-70	180	55
MAD97	Investigators	231026	6806332	210.3	-75	0	175
MAD98	Investigators	231218	6806453	250.24	-75	0	220
MAD99	Investigators	231316	6806405	200	-75	0	169
MAD100	Investigators	231422	6806421	200	-75	0	175
MAD101	Investigators	232000	6806555	135.8	-70	180	105
MAD102	Cathedrals	233700	6807100	232	-70	180	195
MAD103	Cathedrals	233801	6806970	75.8	-63	185	63
MAD104	Stricklands	232648	6806653	91	-71	228	70
MAD105	Stricklands	232423	6806503	69.8	-80	230	50
MAD106	Stricklands	232422	6806528	95.1	-80	220	62
MAD107	Stricklands	232484	6806496	108.9	-90	0	50

*Table 1 – Completed drill holes for Phase 1 2018 drill programme at Mt Alexander.*

**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 five granted exploration licences – E29/638, E29/548, E29/962, E29/954 and E29/972.

The Cathedrals, Stricklands and Investigators 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.

# ASX / MEDIA RELEASE



Hole ID	GDA94 East	GDA94 North	Dip	Azimuth	Depth (m)	From (m)	To (m)	Width (m)	Ni%	Cu%	Co%	Total PGEs g/t	Au g/t	Ag g/t
MAD29	231559.5	6806419.6	-60	160	201.6	104.00	105	1	0.36	0.18	0.01	1.02	0.12	1.50
MAD31	231559.4	6806416.5	-63	133	160	108.00	111.67	3.67	0.56	0.28	0.02	1.22	0.16	1.98
MAD31						111.67	113.24	1.57	6.26	2.71	0.18	4.91	0.19	8.10
<i>Including</i>						112.08	113.09	1.01	7.98	3.13	0.22	5.90	0.14	9.06
MAD32	232040.2	6806403	-73	220	92.7	44	51.6	7.6	0.44	0.19	0.02	0.59	0.03	0.88
MAD32						51.6	53.52	1.92	4.58	1.52	0.14	3.83	0.12	4.43
<i>Including</i>						52.75	53.52	0.77	7.82	2.50	0.24	6.31	0.13	6.82
MAD33	232038.2	6806412	-57	330	129.7	87.45	96.48	9.03	0.43	0.14	0.02	0.44	0.03	1.08
MAD33						96.48	97.49	1.01	5.81	2.33	0.22	4.32	0.12	7.30
MAD34	230769	6806330	-70	25	152.5	94	96.1	2.1	0.52	0.25	0.02	0.57	0.07	2.04
MAD34						96.1	98.89	2.79	1.63	0.53	0.05	1.24	0.11	3.62
<i>Including</i>						98.7	98.89	0.19	7.34	1.53	0.22	3.27	0.05	24.00
MAD37	230772.7	6806327	-84	335	156	110	122	12	0.41	0.13	0.02	0.35	0.04	1.22
MAD37						122	123.27	1.27	5.63	2.16	0.17	3.86	0.10	6.83
<i>Including</i>						122.55	123.27	0.72	7.93	2.75	0.23	4.81	0.07	9.00
<i>And, Including</i>						123.27	123.6	0.33	0.81	0.69	0.03	2.33	0.14	2.50
MAD38	231205.1	6806248	-70	90	65.5	25.4	28.14	2.74	3.77	1.48	0.10	3.85	0.17	5.49
<i>Including</i>						26.3	26.4	0.1	12.80	5.54	0.25	11.52	0.38	36.50
<i>And, Including</i>						27.6	28.14	0.54	8.59	3.43	0.24	6.73	0.14	10.00
MAD40	231575.7	6806427	-68	160	142.3	105.35	106.79	1.44	0.46	0.16	0.02	0.60	0.07	1.32
MAD40						106.79	108.75	1.96	5.09	2.11	0.16	3.46	0.39	6.04
<i>Including</i>						107.75	108.75	1	7.88	3.11	0.24	5.04	0.53	8.00
MAD43	231528.9	6806508	-70	160	180	149.7	157.22	7.52	0.43	0.20	0.02	0.55	0.05	1.13
MAD43						157.22	157.9	0.68	7.09	2.73	0.23	3.54	0.14	9.50
MAD43						170.43	170.53	0.1	4.25	0.98	0.13	2.91	0.11	6.00
MAD43						171.1	171.25	0.15	1.88	1.27	0.06	1.65	0.11	6.50
MAD44	231482.4	6806488	-70	180	180	155.66	156.11	0.45	5.59	1.27	0.18	4.28	0.24	11.70
<i>Including</i>						155.84	156.11	0.27	8.49	1.67	0.27	5.24	0.20	16.50
MAD45	231004.9	6806368	-81	355	229	174	178.23	4.23	0.39	0.13	0.02	0.35	0.04	0.85
MAD45						178.23	180.14	1.91	3.60	1.04	0.11	2.56	0.19	2.71
<i>Including</i>						178.87	179.08	0.21	5.44	0.51	0.17	2.55	0.09	2.50
<i>And, Including</i>						179.76	180.14	0.38	7.10	2.84	0.21	5.42	0.21	7.00
MAD47	231659.8	6806394	-70	175	142.1	42.2	43	0.8	1.77	2.85	0.05	4.31	0.21	8.34
<i>Including</i>						42.2	42.35	0.15	0.92	6.85	0.02	5.35	0.24	21.00
<i>And, Including</i>						42.9	43	0.1	7.54	7.02	0.28	10.04	0.33	14.00
MAD47	231659.8	6806394	-70	175	142.1	43.95	44.2	0.25	1.65	0.74	0.03	2.71	0.13	2.50
MAD48	231559.7	6806410	-70	181	127.1	89.35	91.98	2.63	0.58	0.33	0.02	0.97	0.10	4.36
MAD48						91.98	92.89	0.91	7.23	2.42	0.20	4.51	0.18	8.00
MAD60	231225.2	6806451	-70	178	190	156	157.9	1.9	0.60	0.28	0.02	1.49	0.29	2.63
MAD60						157.9	163.2	5.3	4.95	2.75	0.16	4.55	0.25	8.95
<i>Including</i>						159.38	162.38	3	6.40	3.55	0.21	5.25	0.17	12.18
<i>And, Including</i>						162.9	163.2	0.3	5.93	3.54	0.20	4.36	0.12	11.00
MAD61	231249.4	6806423	-70	180	160.1	133	135.6	2.6	0.37	0.17	0.01	0.48	0.04	0.65

MAD61						135.94	136.18	0.24	0.73	0.61	0.02	1.64	0.14	2.50
MAD62	231587.4	6806445	-70	0	220	195.84	197.25	1.41	0.82	0.31	0.04	0.92	0.07	1.28
MAD62						197.25	197.56	0.31	6.07	2.81	0.23	2.94	0.03	6.50
MAD63	230796.9	6806312	-75	355	128.1	106	110.33	4.33	0.81	0.35	0.03	1.26	0.17	2.66
MAD63						110.33	110.62	0.29	7.73	2.57	0.24	3.26	0.04	5.50
MAD63						110.62	110.77	0.15	0.82	1.05	0.03	6.13	0.08	3.50
MAD72	231242.1	6806418	-75	180	154.7	131.3	135.79	4.49	0.38	0.09	0.02	0.28	0.02	0.55
MAD72						135.79	136	0.21	5.90	0.32	0.19	1.08	0.01	3.00
MAD72						136	136.71	0.71	0.53	0.15	0.02	0.40	0.03	7.00
MAD72						136.71	136.96	0.25	6.23	7.48	0.21	2.52	0.01	18.00

Table 2 - Significant assay intersections for the Investigators Prospect.

Hole ID	GDA94 East	GDA94 North	Dip	Azimuth	Depth (m)	From (m)	To (m)	Width (m)	Ni%	Cu%	Co%	Total PGEs g/t	Au g/t	Ag g/t
MAD20	232740.4	6806665.6	-75	185	100.1	44.20	53.5	9.32	0.29	0.12	0.02	0.27	0.03	0.29
MAD20						53.52	54.5	0.93	2.50	0.68	0.16	1.10	0.03	1.54
MAD22	232525.9	6806526.9	-60	40	138.9	41.9	49.9	7.95	0.55	0.30	0.02	0.58	0.06	1.48
MAD22						49.85	52.6	2.78	1.62	2.51	0.07	1.88	0.17	8.44
<i>Including</i>						52.4	52.6	0.23	0.90	13.10	0.04	3.94	0.16	43
MAD22	232525.9	6806526.9	-60	40	138.9	52.63	53.7	1.09	0.46	0.27	0.02	0.98	0.07	1
MAD23	232470.3	6806468.9	-60	355	124.3	53.7	57.5	3.75	0.81	0.36	0.04	0.73	0.03	1.35
<i>Including</i>						55.55	57.1	1.5	1.29	0.57	0.06	1.11	0.03	2
MAD23	232470.3	6806468.9	-60	355	124.3	57.45	57.7	0.25	4.18	3.40	0.18	4.29	0.11	9
MAD26	232495.1	6806535.0	-60	75	105.1	49.3	52.3	2.95	0.55	0.37	0.03	0.57	0.07	1.82
MAD26						53.9	58.2	4.3	4.26	2.02	0.19	3.21	0.10	6.11
MAD26						58.2	61	2.8	0.48	0.40	0.02	0.56	0.06	2.25
MAD27	232540.0	6806571.5	-60	90	148	59.9	60.1	0.2	0.14	0.40	NA	0.31	0.14	16
MAD27						60.1	71.3	11.15	0.52	0.63	0.03	1.69	0.21	5.37
MAD27						71.25	73.3	2	4.17	3.11	0.21	3.35	0.19	9.25
MAD49	232466.0	6806486.0	-65	0	85	31.8	50.7	18.86	0.42	0.16	0.02	0.36	0.03	0.75
MAD49						50.66	54	3.36	2.09	1.18	0.09	1.82	0.14	4.28
<i>Including</i>						52	52.2	0.23	4.37	2.40	0.17	3.31	0.13	12
<i>And, Including</i>						53.51	54	0.51	4.0	3.13	0.18	2.09	0.06	12
MAD50	232499.1	6806509.0	-70	0	117.7	32.4	34	1.6	0.50	0.45	0.02	0.69	0.09	2.38
MAD50						36	38	2	0.54	0.15	0.02	0.73	0.07	0.94
MAD52	232737.9	6806663.8	-65	203	140	55.12	58.2	3.04	1.54	0.65	0.11	0.77	0.04	2.49
MAD52						57.1	58.2	1.06	2.31	0.91	0.17	0.63	0.02	2.84
MAD70	232758.3	6806664	-72	180	87.8	53	54.1	1.08	0.68	0.58	0.05	0.61	0.04	2.44
MAD70						54.08	54.9	0.83	2.25	0.82	0.17	1.09	0.02	3.5
MAD71	232468.4	6806500	-65	0	250.2	37.45	54.9	17.45	3.01	1.31	0.13	1.68	0.06	3.86
MAD71						39.3	44.6	5.3	4.39	1.45	0.21	2.09	0.04	3.8
MAD71						50.6	52.6	2.02	5.05	2.01	0.21	3.31	0.07	6.99
MAD71						54.4	54.9	0.5	3.68	3.90	0.17	2.68	0.07	14.5
MAD77	232446	6806501	-70	0	110	36	43.2	7.2	0.32	0.21	0.02	0.43	0.06	1.46
MAD77						43.2	47.3	4.1	1.23	1.42	0.05	2.47	0.13	7.09
MAD78	232467.2	6806522	-70	0	121.1	65.6	71	5.4	1.46	0.91	0.06	1.55	0.14	3.77
MAD80	232446.1	6806517	-70	0	160	65.3	67.1	1.8	0.49	1.01	0.02	2.36	0.27	20.3
MAD81	232460.6	232460.6	-90	0	60.8	41.9	51.1	9.15	1.76	1.17	0.07	2.11	0.17	4.16
MAD81						47.55	48.8	1.29	2.79	1.30	0.12	2.37	0.08	4.58



Hole ID	GDA94 East	GDA94 North	Dip	Azimuth	Depth (m)	From (m)	To (m)	Width (m)	Ni%	Cu%	Co%	Total PGEs g/t	Au g/t	Ag g/t
MAD81						50.49	51.1	0.56	4.38	1.89	0.21	1.82	0.32	7.5
MAD82	232479.6	6806505	-85	0	61.3	52.27	52.5	0.25	3.78	1.25	0.18	2.68	0.09	5.5
MAD83	232479.6	6806515	-85	0	63	36	41.3	5.31	0.43	0.24	0.02	0.38	0.04	1
MAD83						41.31	41.4	0.11	4.22	2.03	0.15	7.68	0.47	10
MAD83						42	43.7	1.73	0.46	0.22	0.02	0.41	0.04	0.5
MAD83						50.5	52.3	1.84	0.54	0.30	0.03	0.46	0.04	1
MAD83						52.34	52.6	0.26	3.76	2.05	0.18	2.31	0.11	7
MAD84	232479.6	6806525	-85	0	62.5	38.63	38.8	0.2	4.57	0.67	0.18	2.51	0.05	4
MAD84						49.6	51.2	1.64	0.46	0.21	0.02	0.39	0.06	1.01
MAD84						51.24	51.5	0.25	4.3	1.42	0.19	2.66	0.15	5

Table 3 - Significant assay intersections for the Stricklands Prospect.

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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 Matthew McCarthy, a Competent Person who is a Member of The Australian Institute of Geoscientists. Mr McCarthy is employed by St George Mining Limited.

Mr McCarthy 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 Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr McCarthy 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 sections are 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>	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.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Wherever possible the same side of the drill core is sampled to ensure sample is representative. Appropriate QAQC samples are inserted into the sequences as per industry best practice.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report.</i>  <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>	Diamond core (both HQ and NQ2) is half-core sampled to geological boundaries no more than 1.5m and no less than 10cm. Samples less than 3kg are crushed to 10mm, dried and then pulverised to 75µm. Samples greater than 3kg are first crushed to 10mm then finely crushed to 3mm and input into the rotary splitters to produce a consistent output weight for pulverisation.  Pulverisation produces a 40g charge for fire assay. Elements determined from fire assay are gold (Au), platinum (Pt) and palladium (Pd) with a 1ppb detection limit. To determine other PGE concentrations (Rh, Ru, Os, Ir) a 25g charge for nickel sulphide collect fire assay is used with a 1ppb detection limit.  Other elements will be analysed using an acid digest and an ICP finish. These elements are: Ag, Al, As, Bi, Ca, Cd, Co, Cr, Fe, K, Li, Mg, Mn, Mo, Nb, Ni, P, Pb, S, Sb, Sn, Te, Ti, V, W, Zn. The sample is digested with nitric, hydrochloric, hydrofluoric and perchloric acids to effect as near to total solubility of the sample as possible. The sample is then analysed using ICP-AES or ICP-MS.  LOI (Loss on Ignition) will be completed on selected samples to determine the percentage of volatiles released during heating of samples to 1000°C.
<b>Drilling techniques</b>	<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>	Diamond drilling is completed using HQ sized coring equipment through the weathered zone (mostly saprock) with 3m barrels, and then HQ or NQ2 in fresh rock with 3m or 6m barrels as required. The core is oriented using ACT II electric core orientation.
<b>Drill sample recovery</b>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</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.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</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 <20m and Stricklands <40m depth. Primary locations for core loss in fresh rock are on geological contacts and structural zones, and drill techniques are adjusted accordingly, and if possible these zones are predicted from the geological modelling.

Criteria	JORC Code explanation	Commentary
	<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>	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 completed for all drill holes with lithology, alteration, mineralisation, structure and veining recorded. The logging is recorded digitally and imported in the St George Mining central database.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</i>	Logging is both qualitative and quantitative depending on the field being captured. Core is photographed with one tray per photo and stored digitally.
	<i>The total length and percentage of the relevant intersections logged.</i>	All drill holes are geologically logged in full.
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	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.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	Reverse circulation holes have been rotary cone split, and wetness recorded during drilling.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	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>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, or for RC comprise a one meter sample equally split into two bags and taken at set meter intervals.
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	The sample sizes are considered to be appropriate for base metal sulphide mineralisation and associated geology.
<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>	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.
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	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 meter, however for any core samples with matrix or massive sulphide mineralisation then multiple samples are taken at set intervals per meter. The instruments are serviced and calibrated at least once a year. Field calibration of the XRF instrument using standards is periodically performed (usually daily).  The handheld XRF results are only used for preliminary assessment and reporting of element compositions, prior to the receipt of assay results from the certified laboratory.

Criteria	JORC Code explanation	Commentary
	<i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	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.  Sample preparation checks for fineness are performed by the laboratory to ensure the grind size of 90% passing 75µm is being attained.
<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 Exploration Manager of St George Mining.
	<i>The use of twinned holes.</i>	One twin hole was drilled at Cathedrals in the recent drill program for metallurgical test work, and one scissor hole was drilled at Stricklands for the significant intersection in MAD71.
	<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 reported.
<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 have been located and pegged using a DGPS system with an expected accuracy of +/-0.05mmm for easting, northing and elevation.  Downhole surveys are conducted using a single shot camera approximately every 30m 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 at the Mt Alexander project 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 diamond drill program is testing modelled EM conductors and geological criteria for massive nickel-copper-PGE sulphide mineralisation. The spacing and distribution of the planned drill holes is appropriate to test the defined targets.
	<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 Cathedrals, Stricklands and Investigators 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>	Drill holes are planned as perpendicular as possible to the target EM plates and geological units to approximate true width. Most of the ultramafic units in the Cathedrals Belt dip shallow to the north (and occasionally south) and where possible drill holes are planned to

Criteria	JORC Code explanation	Commentary
		intersect perpendicular to this dip. The orientation of key structures may be locally variable.
	<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 St George Mining. Core samples are stored in the secure facilities at Bureau Veritas laboratory in Perth. Transportation of core is managed by St George contractors and Bureau Veritas and actively track monitored.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	No audits or reviews have been conducted at this stage.

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral Tenement and Land Status</b>	<i>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.</i>  <i>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.</i>	The Mt Alexander Project is comprised of five granted Exploration Licences (E29/638, E29/548, E29/954, E29/962 and E29/972). Tenement E29/638 is held in Joint Venture between St George (75% interest) and Western Areas (25% interest). E29/638 and E29/548 are also subject to a royalty in favour of a third party that is outlined in the ASX Release dated 17 December 2015 (as regards E29/638) and the ASX release dated 18 September 2015 (as regards E29/548).  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 four tenements are in good standing and no known impediments exist.
<b>Exploration Done by Other Parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	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 komatiite-hosted Ni-Cu sulphides in granite terrane. No historic exploration has been identified on E29/954 or E29/972.  The target lithological unit in the Mt Alexander Greenstone belt has historically been the Central Ultramafic Unit, which has been explored by a number of parties, most recently by Nickel West.  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.
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation</i>	The Mt Alexander Project is at the northern end of a western bifurcation of the Mt Ida Greenstones. The greenstones are bound to the west by the Ida Fault, a significant Craton-scale structure that marks the boundary between the Kalgoorlie Terrane (and Eastern Goldfields Superterrane) to the east and the Youanmi Terrane to the west.  The Mt Alexander Project is prospective for further high-grade komatiite-hosted nickel-copper-PGE mineralisation (both greenstone and granite hosted) and also precious metal mineralisation (i.e.

Criteria	JORC Code explanation	Commentary
		orogenic gold) that is typified elsewhere in the Yilgarn Craton.
<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 meters) 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>	Drill hole collar locations are shown in Figure 2, Figure 3 and Table 1 in the body of the ASX release.
<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>
	<p>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.</p>	<p>Any high-grade sulphide intervals internal to broader zones of sulphide mineralisation are reported as <i>included</i> 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 <i>including</i> intersection.</p>
	<p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	No metal equivalent values have yet been used for reporting exploration results.
<b>Relationship between mineralisation widths and intercept lengths</b>	<p>These relationships are particularly important in the reporting of exploration results.</p> <p>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 (e.g. down hole length, true width not known).</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.
<b>Diagrams</b>	<p>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.</p>	Relevant prospect location maps are shown in the body of the release.
<b>Balanced Reporting</b>	<p>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 Exploration Results.</p>	The exploration results reported are representative of the mineralisation style with grades and/or widths reported in a consistent manner.
<b>Other substantive exploration data</b>	<p>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.</p>	All material or meaningful data collected has been reported.

Criteria	JORC Code explanation	Commentary
<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).</i></p> <p><i>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>Further exploration in the Cathedrals Belt will be largely dependent on the results from the recent drill program. Further exploration is also warranted north of the Cathedrals Belt on E29/548, and also in the Mt Alexander greenstone belt to the south.</p>