

24 February 2014

# ST GEORGE IDENTIFIES EXCEPTIONAL EM CONDUCTOR AT DESERT DRAGON NORTH

#### **HIGHLIGHTS:**

- Moving loop electromagnetic (MLEM) survey identifies a Category One EM conductor at Desert Dragon North
- Potential for a massive sulphide deposit strongly supported by co-incident strong magnetic high and elevated Ni-Cu soil values
- EM anomaly situated proximal to hole DDNRC002, which intersected 2m @ 1.08% Ni with visible massive sulphide veinlets
- Ongoing interpretation and modelling of further data from the MLEM survey expected to provide more EM conductors for drill testing
- Nickel specialist joins St George exploration team from major mining company
- Drilling planned to recommence later in Q1 2014

#### **EM CONDUCTOR AT DESERT DRAGON NORTH**

St George Mining Limited (ASX: **SGQ**) ('St George Mining' or 'the Company') is pleased to announce that a high quality EM conductor has been identified at the Desert Dragon North nickel prospect. The EM anomaly was detected by the ongoing MLEM survey along the Stella Range ultramafic belt at the Company's 100% owned East Laverton Property in Western Australia.

The high amplitude late-time EM anomaly exhibits a time-constant in excess of 100 ms. Modelling based on the current data suggests a strike length of approximately 800 m. Fixed-loop EM follow-up will further constrain the source before drilling.

Newexco, the Company's geophysical advisers, have rated the anomaly as a Category One target: the source is discrete and directly coincident with a strong magnetic anomaly (see Figures 1 and 2). Such magnetic features typically represent thick ultramafic sequences at East Laverton, which are favourable locations for massive sulphide mineralisation.

Importantly, associated exploration data for Desert Dragon North provides strong independent validation of the quality of this EM conductor and its potential to represent a massive nickel sulphide body.

The conductor is centred at 523865 mE, 6741960 mN (see Figures 1 and 2) and is located approximately 500m south of the RC drill hole DDNRC002, drilled in November 2012. This hole intersected an interval of 2m @ 1.08% Ni with visible massive nickel sulphide veinlets.



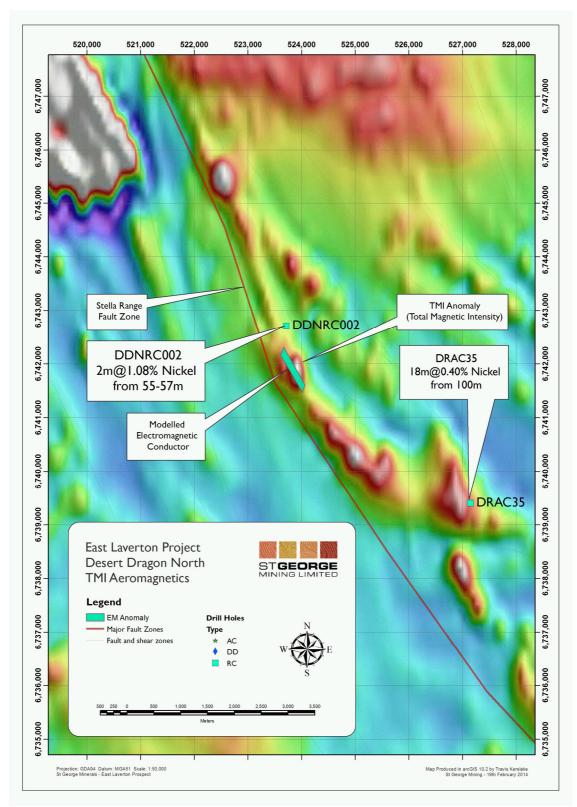


Figure 1 – TMI (Total Magnetic Intensity) RGB plan map of the Desert Dragon area with location of EM modelled plate and significant drill holes. The EM conductor is directly co-incident with a magnetic high anomaly.



The Company's regional soil geochemical survey completed in 2011 at the East Laverton Property identified anomalous Ni-Cu soil values within the Desert Dragon North prospect. The location of the EM conductor within this area of elevated Ni-Cu soil values provides further support for the nickel sulphide potential at Desert Dragon North.

John Prineas, Executive Chairman of St George Mining said it is very significant that the combination of available geochemical, geological and structural information for Desert Dragon North corroborates the geophysical interpretation of this EM conductor as a potential massive sulphide deposit.

#### John Prineas, said:

"The EM conductor at Desert Dragon North was initially recognised as an exciting target from just its electromagnetic signature. When you also see how the other geophysical and geological data supports our exploration model for massive nickel sulphides, this target is elevated to something that is quite exceptional."

The significant nickel intersection in DDNRC002 (see Table 1) is interpreted to potentially be hosted by a remnant of ultramafic rock that has been locally displaced from a larger mineralised ultramafic body by fault movement.

Litho-geochemical analysis of the drill hole data includes a mantle normalised Palladium to Iridium (Pd/Ir) ratio of less than 10 which is suggestive of mechanical remobilisation of magmatic nickel sulphides in the drill hole as opposed to hydrothermal remobilisation. In addition, the base of the drill hole encountered elevated sulphur levels together with a shift in the Palladium to Platinum ratio (Pd/Pt) from below one to greater than one. These geochemical indicators suggest the presence of magmatic sulphides which are associated with nickel sulphide mineralisation.

The proximal position of the new EM conductor to DDNRC002 is consistent with St George's exploration model for the potential presence of a larger mineralised body at Desert Dragon North.

HOLE ID	NORTHING (m)	EASTING (m)	DIP (deg)	AZM (deg)	DEPTH (m)	FROM (m)	TO (m)	WIDTH (m)	Ni (%)
DDNRC002	6742718	523717	-60	59	246	53	60	7	0.54
including						55	57	2	1.08

Table 1 – details of drill hole DDNRC002



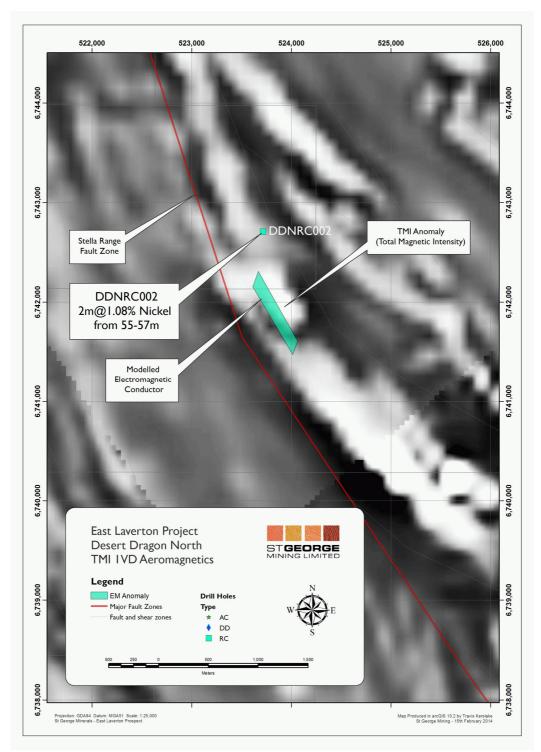


Figure 2 – TMI First Vertical Derivative (1VD) plan map with EM modelled plate and DDNRC002 drill hole illustrated

#### ADDITIONAL EM CONDUCTORS DISCOVERED

The first phase of the MLEM survey has covered the Cambridge, Desert Dragon North, Desert Dragon and Windsor nickel prospects along the Stella Range Belt (see Figure 3).



In addition to the EM conductor at Desert Dragon North, a number of other strong EM anomalies have been identified by this MLEM survey. The initial interpretation of these anomalies suggests they are consistent with bedrock conductors and are permissive of massive nickel sulphide nickel mineralisation.

The Company anticipates that further high quality EM conductors will be classified as high priority drill targets once the modelling of these anomalies is finalised.

The process of designing drill holes for the EM conductors is underway, and drilling of these targets is planned to commence later in this quarter.

#### ONGOING MLEM SURVEY OF HIGH PRIORITY PROSPECTS

St George continues to systematically explore for nickel sulphide mineralisation across each of the three ultramafic belts at East Laverton, all of which are deemed to be prospective for nickel sulphide mineralisation.

The second phase of the MLEM survey will cover the Bristol nickel prospect on the Central belt and the Cambridge North and Aphrodite prospects on the Stella Range belt (see Figure 3).

It is expected that the already extensive pipeline of prospects from the three ultramafic belts will increase with ongoing exploration. This highlights the Company's view that the East Laverton Property has the potential to deliver multiple discoveries and to become a new nickel camp in Western Australia.

#### **EMERGING NICKEL PROVINCE**

Early exploration results at St George's nickel project have demonstrated compositional similarities between the East Laverton Property and the Agnew-Wiluna nickel belt. This is the most significant nickel belt in Western Australia and hosts a number of world class nickel sulphide deposits including Perseverance, Rocky's Reward, Mt Keith and the Cosmos nickel camp.

The ultramafic rocks at the Agnew-Wiluna belt are derived from a rare, magnesium-rich parental magma. Reconnaissance drilling at East Laverton has shown similar large scale occurrences of these thickened and highly favourable high-MgO ultramafic sequences.

The association with felsic volcanics, the proximity to major structures and the occurrence of sulphide-rich sediments that act as a local sulphur source, are other important features observed at East Laverton. The sulphide-rich sediments contain elevated zinc levels that suggest an exhalative environment.

The combination of these features with the widespread presence and multiple occurrences of magmatic nickel and PGE sulphides, emphasises the significance and rarity of St George's nickel project at East Laverton.

Figure 4 illustrates the location of this emerging nickel province in relation to the Agnew-Wiluna belt in the NE Goldfields.



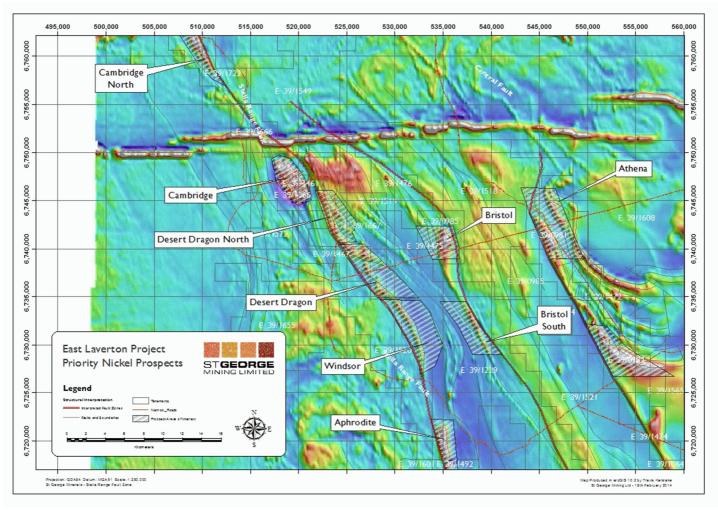


Figure 3 – this map illustrates the high priority nickel prospects being covered by the MLEM survey

#### **ADDITION TO EXPLORATION TEAM**

St George Mining is pleased to confirm that it has engaged the services of Mr Matthew McCarthy as a consulting geologist.

Mr McCarthy is a senior geologist with a strong background in komatiite-hosted nickel exploration in Western Australia. He joins us from BHP Billiton Nickel West, where he was part of the team that made the recent discovery of the significant Venus nickel sulphide deposit at Leinster.

Mr McCarthy also managed the exploration programme under the previous farm-in arrangement between St George Mining and BHP Billiton Nickel West, which discovered nickel sulphides at East Laverton in 2012.

#### John Prineas, Executive Chairman of St George Mining said:

"We are very pleased to have Matthew on our team. His specialist experience in successful nickel exploration at Leinster and East Laverton further strengthens our team as we move toward achieving a major discovery."



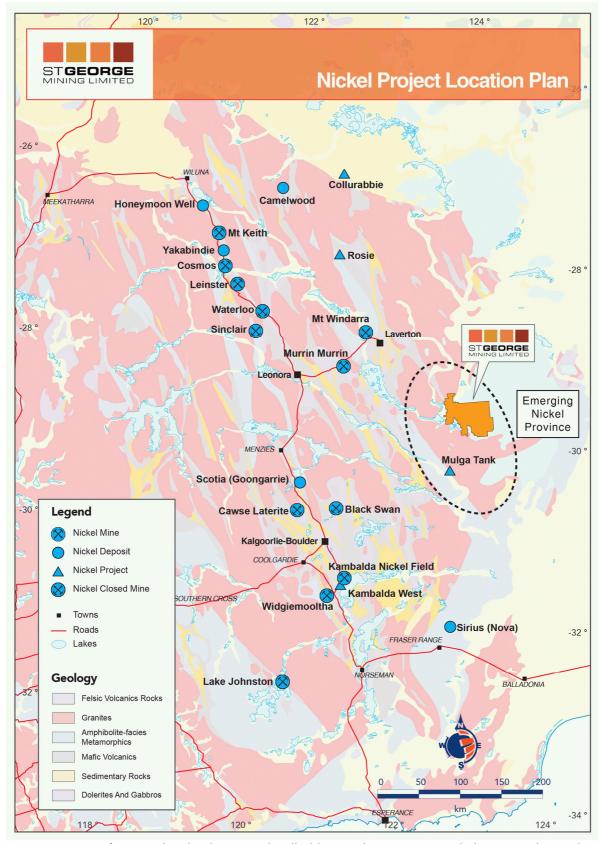


Figure 4 – St George's ground is the dominant landholding in the emerging nickel province located to the east of the Agnew-Wiluna belt



#### For further information, please contact:

John Prineas
Executive Chairman
St George Mining Limited
(+61) 411 421 253
John.prineas@stgm.com.au

Colin Hay
Professional Public Relations
(+61) 08 9388 0944 mob 0404 683 355
colin.hay@ppr.com.au

#### **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 Timothy Hronsky, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Hronsky is employed by Essential Risk Solutions Ltd which has been retained by St George Mining Limited to provide technical advice on mineral projects.

Mr Hronsky 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 Hronsky consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information included in any original market announcements referred to in this report, and that all material assumptions and technical parameters underpinning the announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

The information in this announcement that relates to Exploration Results and Mineral Resources as defined in the 2004 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' is based on information compiled by Mr Hronsky. Mr Hronsky is a member of the Australasian Institute of Mining and Metallurgy has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration and to the activity, which he is undertaking. This qualifies Mr Hronsky as a "Competent Person" as defined in the 2004 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Hronsky consents to the inclusion of information in this announcement 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		
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	This ASX Release reports on the interim results of a moving loop electromagnetic (MLEM) survey being carried out at the Company's East Laverton Property in the NE Goldfields. The ASX Release does not report any new drilling, assay or other sampling exploration work.		
		The MLEM survey is designed and managed by Newexco, with field work contracted to Bushgum Pty Ltd.		
		Key specifications of the MLEM survey are:		
		Stations Spacing:	100m	
		Loop:	400m, 200m	
		Line Spacing:	400m	
		Components:	x y z	
		Orientation:	X along line (local east - positive).	
		Line direction:	58.35, 90 degrees	
		Frequency:	0.5, 0.25 Hz	
		Channels:	SMARTem Standard.	
		Receiver:	Fluxgate	
		Number turns:	1	
		Current:	Typically 50 A.	
		Repeats:	Minimum 3 consistent readings per station.	
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	undertaken each d	of the survey instruments using standards is day. A minimum of 3 consistent readings per station re accuracy of data collected.	
	Aspects of the determination of mineralisation that are Material to the Public Report.	The ASX Release exploration.	does not report any drilling or assay sampling	
	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.			
Drilling techniques	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, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	The ASX Release exploration.	does not report any drilling or assay sampling	

Criteria	JORC Code explanation	Commentary		
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	The ASX Release does not report any drilling or assay sampling exploration.		
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	The ASX Release does not report any drilling or assay sampling exploration.		
	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.	The ASX Release does not report any drilling or assay sampling exploration.		
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	The ASX Release does not report any drilling or assay sampling exploration.		
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	The ASX Release does not report any drilling or assay sampling exploration.		
	The total length and percentage of the relevant intersections logged.	The ASX Release does not report any drilling or assay sampling exploration.		
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	The ASX Release does not report any drilling or assay sampling exploration.		
<b>, , , , , , , , , , , , , , , , , , , </b>	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	The ASX Release does not report any drilling or assay sampling exploration.		
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	The ASX Release does not report any drilling or assay sampling exploration.		
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	The ASX Release does not report any drilling or assay sampling exploration.		
	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.	The ASX Release does not report any drilling or assay sampling exploration.		
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The ASX Release does not report any drilling or assay sampling exploration.		

JORC Code explanation	Commentary		
The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	The ASX Release does not report any drilling or assay sampling exploration.		
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.	Specifications for the MLEM survey are noted above. Digital data was supplied by Bushgum. The recorded response ( $\mu V$ ) was normalised by transmitter current (A) by the SMARTem. B-field data were converted from $\mu V/A$ into pT/A by a multiplication factor of 0.35.		
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.	A minimum of 3 consistent readings per station are taken to ensure accuracy of data collected. Field data was inspected for repeatability and consistent decays. Where multiple recordings were made and differed significantly, the outlying record was deleted using Agent 99 and other proprietary software.		
The verification of significant intersections by either independent or alternative company personnel.	The ASX Release does not report any drilling or other sampling exploration work.		
The use of twinned holes.	The ASX Release does not report any drilling or assay sampling exploration.		
Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	The ASX Release does not report any drilling or assay sampling exploration.		
Discuss any adjustment to assay data.	The ASX Release does not report any drilling or assay sampling exploration.		
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.	The ASX Release does not report any drilling or assay sampling exploration.		
Specification of the grid system used.	Each station for the MLEM survey was located using the GDA94, MGA Zone 51 coordinate system with a GPS programmed with this datum (+/- 5m). Stations were located with minimal flagging.		
Quality and adequacy of topographic control.	See above.		
Data spacing for reporting of Exploration Results.	Data readings were taken at stations spaced 100m apart with 400m loops. Where required, infill readings were taken to enhance data collection.		
Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The ASX Release does not report any drilling or assay sampling exploration.		
Whether sample compositing has been applied.	The ASX Release does not report any drilling or assay sampling exploration.		
Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The ASX Release does not report any drilling or assay sampling exploration.		
•	assaying and laboratory procedures used and whether the technique is considered partial or total.  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.  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.  The verification of significant intersections by either independent or alternative company personnel.  The use of twinned holes.  Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.  Discuss any adjustment to assay data.  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.  Specification of the grid system used.  Quality and adequacy of topographic control.  Data spacing for reporting of Exploration Results.  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.  Whether sample compositing has been applied.  Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering		

Criteria	JORC Code explanation	Commentary
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	The ASX Release does not report any drilling or assay sampling exploration.
Sample security	The measures taken to ensure sample security.	The ASX Release does not report any drilling or assay sampling exploration.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No detailed audits or reviews have been conducted at this stage.

## **Section 2 Reporting of Exploration Results**

Criteria	JORC Code explanation	Commentary
Mineral Tenement and Land Status	Type, name/reference number, location and ownership including agreements or material issues with third parties including joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The moving loop electromagnetic (MLEM) survey discussed in this ASX Release has covered areas that are within Exploration Licences E39/1461, E39/1066, E39/1667, E39/1467, E39/1520 and E39/1229 which are part of the Company's East Laverton Property in the NE Goldfields. The EM conductor at Desert Dragon North discussed in this ASX Release is located on E39/1667.
	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.	Each tenement is 100% owned by Desert Fox Resources Pty Ltd, a wholly owned subsidiary of St George Mining. E39/1229 and E39/1467 are subject to a 2% Net Smelter Royalty in favour of a third party.
	occurring a neonice to open ate in and a cur-	None of the tenements are the subject of a native title claim. No environmentally sensitive sites have been identified at any of the tenements.
		The tenements are in good standing and no known impediments exist.
Exploration Done by Other Parties	Acknowledgment and appraisal of exploration by other parties.	In 2012, BHP Billiton Nickel West Pty Ltd (Nickel West) completed a reconnaissance RC (reverse circulation) drilling programme at certain tenements at the East Laverton Property as part of the Project Dragon farm-in arrangement between Nickel West and the Company. That farm-in arrangement has been terminated.
		The results from the Nickel West drilling programme were reported by the Company in its ASX Release dated 25 October 2012 "Drill Results at Project Dragon". Drilling intersected primary nickel sulphide mineralisation and established the presence of fertile, high MgO ultramafic sequences at the East Laverton Property.
		Prior to the Project Dragon drilling programme, there was no systematic exploration for nickel sulphides at the East Laverton Property. Historical exploration in the region was dominated by shallow RAB and aircore drilling, much of which had been incompletely sampled, assayed, and logged. This early work was focused on gold rather than nickel sulphide exploration.
Geology	Deposit type, geological setting and style of mineralisation	The East Laverton Property is located in the NE corner of the Eastern Goldfields Province of the Archean Yilgarn Craton of Western Australia.
		The project area is proximally located to the Burtville-Yarmana terrane boundary and the paleo-cratonic marginal setting is consistent with the extensive komatiites and carbonatite magmatism found on the property.

Criteria	JORC Code explanation	Commentary
		The area is largely covered by Permian glaciogene sediments (Patterson Formation), which is subsequently overlain by a thinner veneer of more recent sediments and aeolian sands. As a result the geological knowledge of the belt has previously been largely inferred from gravity and magnetic data and locally verified by drill-hole information and multi-element soil geochemical surveys.
		The drilling at the East Laverton Property has confirmed extensive strike lengths of high-MgO olivine-rich rocks across three major ultramafic belts. Ultramafic rocks of this composition are known to host high grade nickel sulphides.
Drill hole information	A summary of all information material to the understanding of the exploration results including tabulation of the following	This ASX Release relates to electromagnetic surveys currently underway at the East Laverton Property. There are no new drill holes to disclose.
	information for all Material drill holes:  • Easting and northing of the drill hole collar  • Elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar  • Dip and azimuth of the hole  • Down hole length and interception depth  • Hole length	Drill hole information on historical drill hole DDNRC002 is contained in the body of this ASX Release. Information regarding DDNRC002 is extracted from the Company's ASX Release dated 11 April 2013 "St George Provides Exploration Update" and which is available to view on www.stgm.com.au.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	The ASX Release does not report any drilling or assay sampling exploration.
	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.	The ASX Release does not report any drilling or assay sampling exploration.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	The ASX Release does not report any drilling or assay sampling exploration.
Relationship between	These relationships are particularly important in the reporting of exploration results.	The ASX Release does not report any drilling or assay sampling exploration.
mineralisation widths and intercept lengths	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).	
Diagrams	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.	Relevant maps are included in the body of the ASX Release.
Balanced Reporting	Where comprehensive reporting of all Exploration Results is not practical, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	The MLEM survey is ongoing and only interim results can be reported at this stage.

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observation; geophysical survey results; geochemical survey results; bulk samples — size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	The 2011 soil survey referred to in the ASX Release was a regional, partial-leach, soil geochemical survey completed on a staggered 500 m sample grid. Samples were assayed at the SGS laboratory in Perth using a weak leach and XRF analysis.  A regional geochemical survey conducted by the Geological Survey of Western Australia (GSWA) in the area also identified several highly anomalous and coincident nickel and copper soil values as reported by the Company in its ASX Release dated 27 September 2012 "St George Accelerates Cambridge Nickel Prospect Exploration" and which is available to view on www.stgm.com.au.
		All other meaningful and material information has been included in the body of the ASX Release.
Further Work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large – scale step – out drilling).  Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	The MLEM survey is ongoing. Drill targets will be selected once the survey is completed and EM anomalies are modelled. Further discussion on future exploration is included in the body of the ASX Release.