

16 August 2012

## ST GEORGE IDENTIFIES SIGNIFICANT NEW NICKEL PROSPECT

### HIGHLIGHTS

- **Significant new nickel target identified on recently acquired tenements at the East Laverton Property**
- **Large ultramafic body (4,000 m x 1,500 m) has the potential to host nickel sulphide mineralisation**
- **Zone of secondary nickel enrichment near surface (incl. 24 m @ 0.54 % Ni) reflects high MgO (magnesium oxide) content of underlying fresh ultramafics**
- **Innovative geochemical soil sampling has facilitated the mapping of the basal contact**
- **The basal contact, on which nickel ore bodies are typically situated, has a coincident bedrock EM anomaly with a strike length over 1,000 m**
- **Drilling programme to be scheduled for this high priority target**

### CAMBRIDGE NICKEL PROSPECT

St George Mining Limited (ASX: **SGQ**) ('St George Mining' or 'the Company') is pleased to announce the identification of a significant nickel sulphide target at its 100% owned Cambridge Prospect at the Company's East Laverton Property in the NE Goldfields region of Western Australia (see Figure 1).

The Company has completed a detailed technical review of the nickel potential at the Cambridge Prospect. A multi-element MMI ("mobile metal ion") geochemical soil survey was undertaken by St George Mining at Cambridge earlier this year. The results from the soil survey were assessed in conjunction with data from historical exploration work which included a moving loop TEM (electromagnetic) survey and shallow air-core drilling.

**The technical review confirmed the Cambridge Prospect as an outstanding target for high grade nickel sulphides.**

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

"This new nickel prospect is another important development in the emerging nickel story of the NE Goldfields – which is highlighted by the excitement generated by Sirius Resources' recent Nova discovery to our south."

The findings of the review are summarised below.

1. A large ovoid ultramafic body (4,000 m x 1,500 m) lies within the Cambridge Prospect and appears to represent a large komatiite channel flow, the local control of nickel sulphide mineralisation. This ultramafic body was identified through a combination of magnetic geophysics, high nickel values (+2,000 to +8,000 ppbNi) in soil geochemistry and ground reconnaissance work.

2. The ultramafic body is a prominent magnetic target and this likely reflects the alteration of the high MgO minerals in the underlying fresh ultramafic rock. Limited shallow drilling by past explorers has identified relict mesocumulate and adcumulate olivine textures within the siliceous weathered horizon, a feature consistent with high MgO ultramafic rocks - an important criterion in nickel sulphide mineralisation.
3. A zone of secondary nickel enrichment appears to blanket the ultramafic body and has been previously confirmed by sparse vertical air-core drilling, including 24m @ 0.54% Ni, 18m @ 0.59% Ni, and 18m @ 0.54% Ni (see Table 1). These intersections provide further indication of high MgO underlying ultramafic rocks. Topographically, the ultramafic body presents an elongated silicified ridge covered by vegetation which is a typical surface characteristic of underlying ultramafic rocks throughout the Eastern Goldfields.
4. The basal contact of the ultramafic body appears to be on the eastern margin of the ultramafic body, where it has been mapped geochemically using the antipathetic relationship between nickel and cerium (Ni-Ce). The interface between high nickel and high cerium values often indicates the contact between the MgO-rich base of the ultramafic body with the underlying felsic basement (see Figure 2).
5. There is a strong coincidence between the inferred basal contact and the main electromagnetic anomaly (conductor) identified by the TEM moving loop geophysical survey. This is significant as nickel ore bodies, which are highly conductive, are typically situated on the basal contact (see Figure 3).

**Tim Hronsky, Technical Director of St George Mining, said:**

“We have a robust exploration target at Cambridge that is supported by geochemistry, geophysics and geology. Ahead of drilling, we will complete a higher resolution electromagnetic survey to more precisely map the main EM target and to further assess some of the other EM responses identified by the TEM survey at Cambridge.”

Hole ID	FROM (m)	TO (m)	WIDTH (m)	Ni %
SRAB-50	18	36	18	0.54
SRAB-51	12	30	18	0.59
incl.	12	24	12	0.68
SRAB-65	6	30	24	0.54
incl.	18	30	12	0.62

Table 1 – Shallow aircore drilling in weathered zone highlights significant intersections of secondary nickel enrichment

## **FURTHER EXPLORATION**

St George Mining will schedule a drilling programme for the Cambridge Prospect to test for massive and disseminated nickel sulphide mineralisation, as part of the continuing assessment of this priority nickel target.

Drilling of the Cambridge Prospect will likely consist of deep RC drill holes (250 m to 300 m) to comprehensively test the EM anomaly. The near surface occurrence of this ultramafic body will maximise the value of this planned drilling.

Further focused geophysical and geochemical exploration work will be completed prior to the drilling programme in order to better define the main nickel sulphide target and to screen the lower priority EM responses.

A high resolution, wider and more deeply penetrating electromagnetic survey (e.g. a fixed loop EM survey) will be conducted to enhance the mapping of the basal contact of the ultramafic body. This will be supported by closed-spaced soil geochemistry over the target area.

## **NICKEL MINERALISATION AND EXPLORATION**

Nickel deposits were created as a consequence of ultramafic lavas (known as komatiites) forming extensive thin surface flows. These high temperature and MgO-rich lavas (komatiites) thermally scoured channels into the underlying felsic or mafic rocks providing a localised setting for the deposition of nickel sulphides at the base of the lava flow channel.

This basal contact in the channels, between the underlying rocks and the overlying komatiite lavas, is the preferred site for nickel sulphide mineralisation (see Figure 4).

The massive and disseminated nickel sulphide mineralisation that forms is highly conductive. Geophysical methods that involve electrical charges being passed into the ground to detect and measure conductive (sulphides) or resistive (high silica) responses are important tools in nickel exploration.

The Cambridge Prospect is a robust nickel exploration target with strong characteristics consistent with other settings where massive sulphide nickel deposits have been found elsewhere in the NE Goldfields.

The Cambridge Prospect is not part of the Company's Project Dragon nickel exploration joint venture. For details on Project Dragon see our website at [www.stgm.com.au/project-dragon](http://www.stgm.com.au/project-dragon).

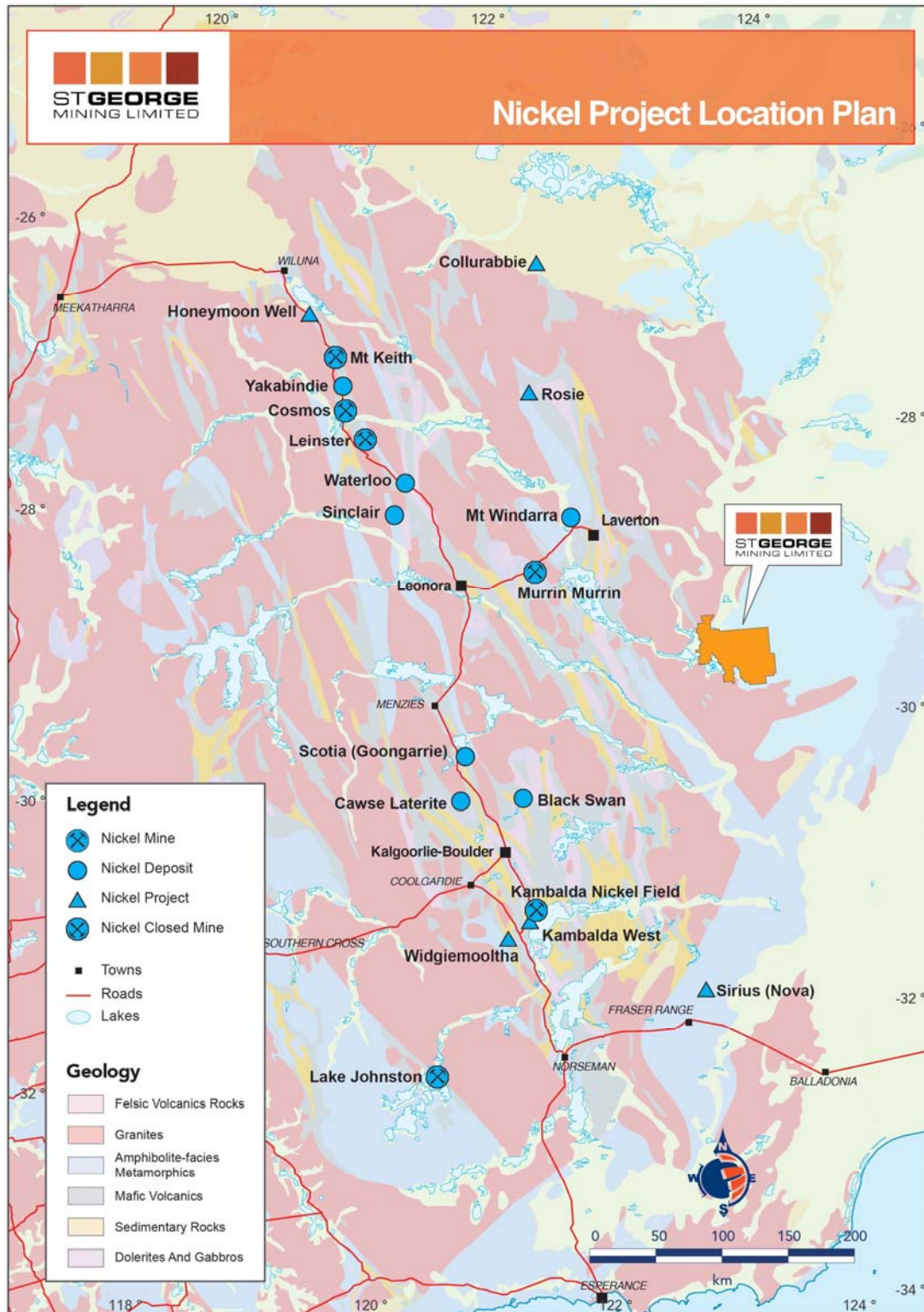


Figure 1 – this regional map of the NE Goldfields highlights the East Laverton Property of St George Mining and other nickel projects in the region. The Cambridge Prospect is situated in the north-east corner of the East Laverton Property.

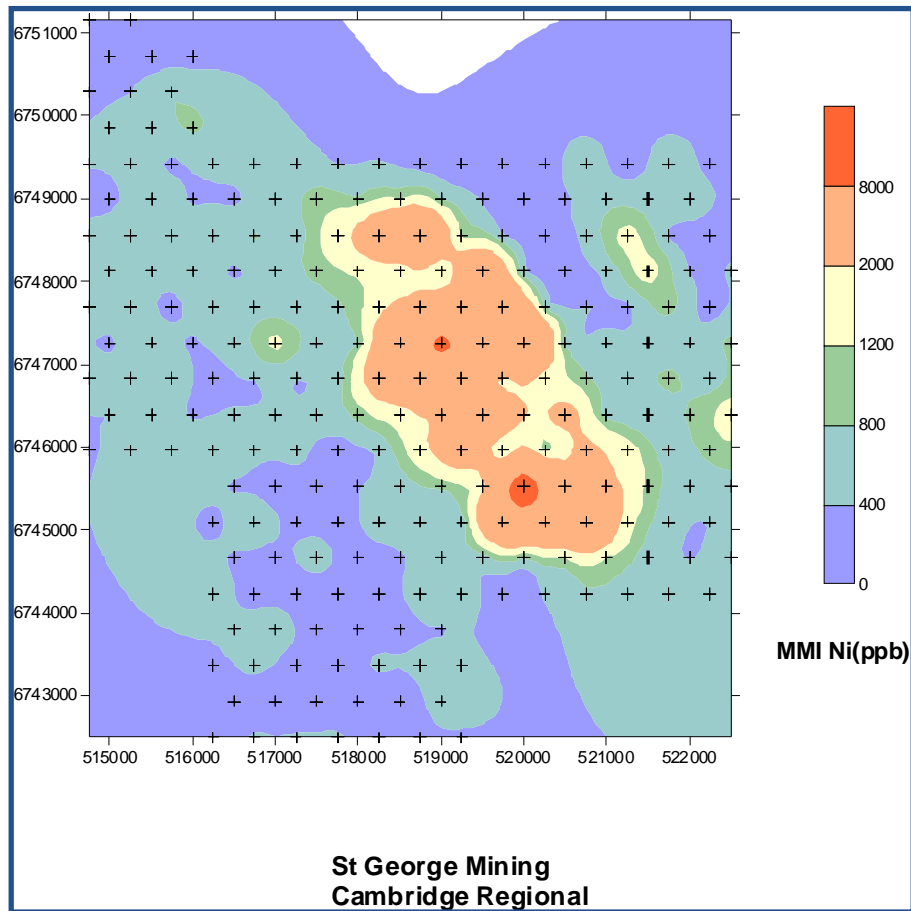


Figure 2 – This figure maps the nickel values detected by the Company's 2012 MMI soil sampling survey.

The ultramafic body can be clearly mapped by nickel values in soil exceeding 2,000 ppbNi. Peak nickel values in the soil are very high, at +8,000 ppbNi.

There is a strong co-incidence between the mapping of the ultramafic body by the soil survey and the outline of the magnetic anomaly detected by the TEM survey – see Figure 3.

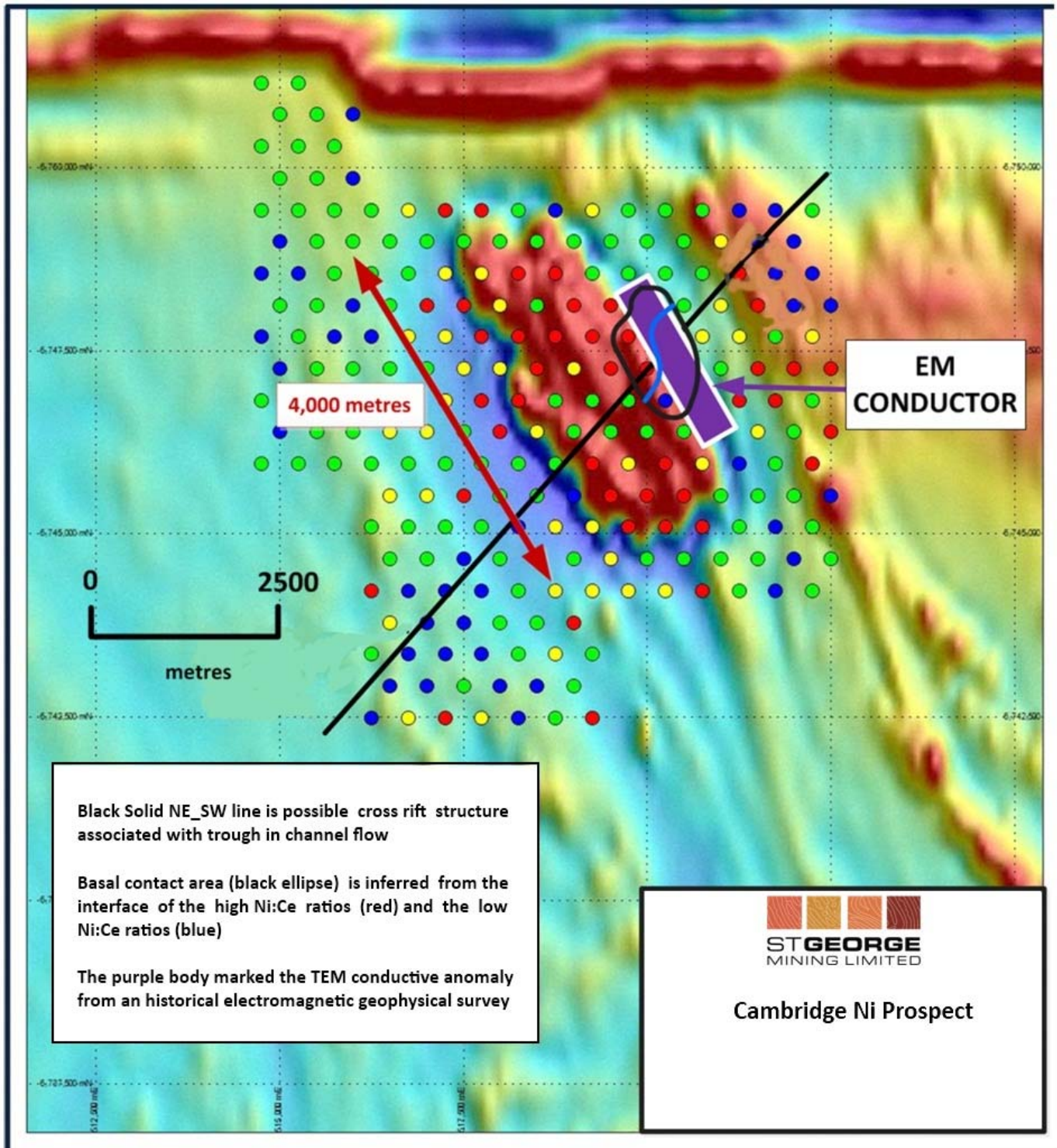


Figure 3 - Interpretation of the Cambridge Nickel Prospect

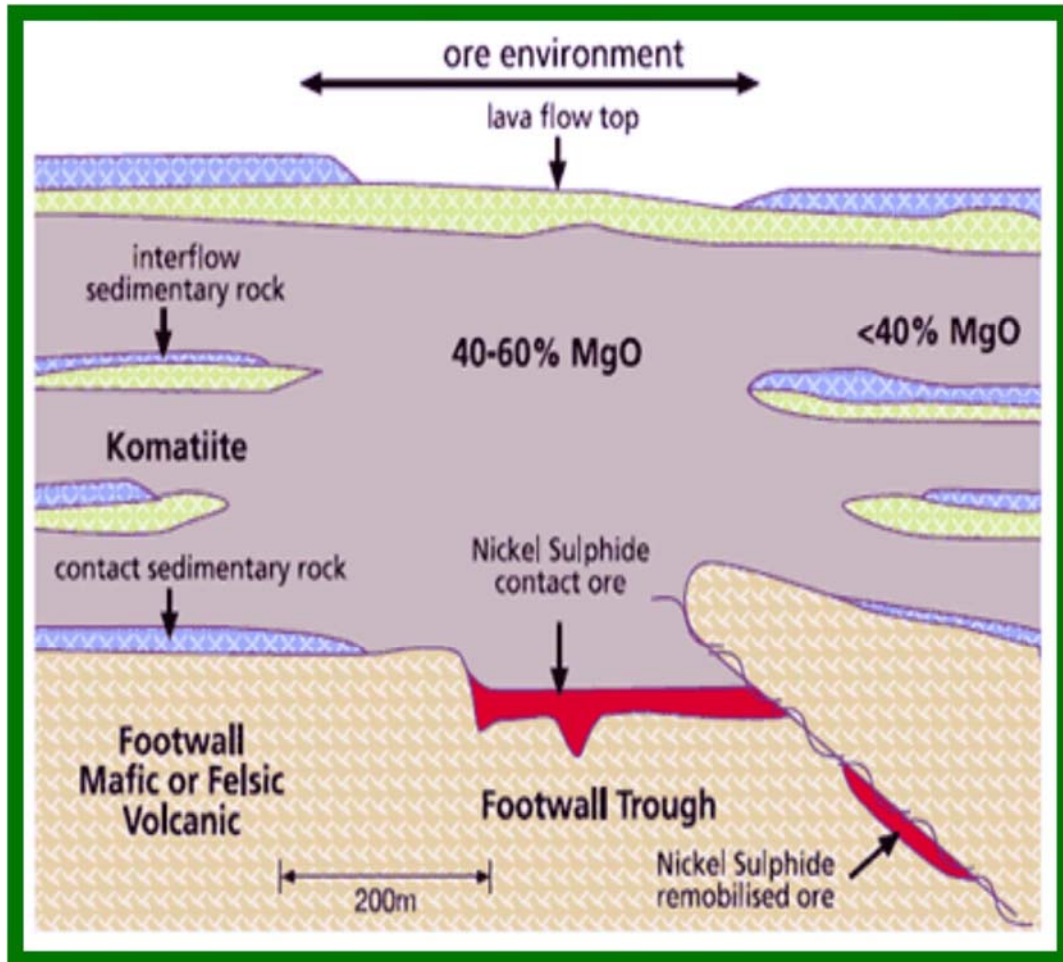


Figure 4 – an illustration of the formation of nickel sulphides, which highlights the factors targeted in nickel exploration

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**COMPETENT PERSON STATEMENT:**

The information in this announcement that relates to Exploration Results and Mineral Resources is based on information compiled by Andrew Hawker of Hawker Geological Services Pty Ltd. Mr Hawker 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 Hawker 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 Hawker consents to the inclusion of information in this announcement in the form and context in which it appears.

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