

# 'Exploring for Major Nickel Sulphide and Gold Deposits'

15 August 2016

St George Mining Limited | ACN 139 308 973

# **Overview of St George Mining**



### **High Quality Explorer**

### **ASX listed: SGQ**

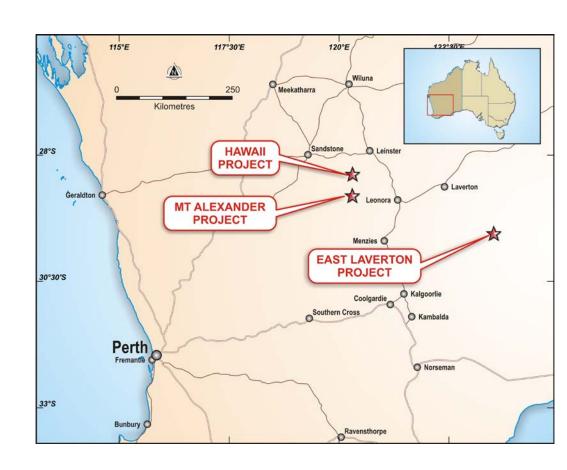
Based in Perth, WA

### Multiple exploration projects

- Nickel sulphide and gold
- Large scale potential
- Major mining company pedigree
- All in Yilgarn Craton, Western Australia

### **Creating shareholder wealth**

- Tight capital structure
- Targeting the discovery and development of world class deposits that deliver high multiplier returns on investment



# **Corporate Snapshot**



### Strong shareholder base and market support

#### **Capital Structure**

Listed shares (SGQ): 250,359,725 Listed options (SGQOA): 47,354,622 SGQOA have exercise price of 20c, expiring on 30 June 2017. \* Includes securities to be issued on 20 August 2016

**Market cap** (@16c): \$37m



#### **Share Ownership**

Top 10: 25% Top 20: 34% Directors: 6.5%

#### **Largest Shareholders**

Impulzive: 8%
John Prineas: 6%
Oceanic Capital: 4%

### **Other Major Shareholders**

City Natural Resources (UK)
Several Australian and other
overseas institutions
Western Areas
plus several high net worths

A\$6.47m raised in heavily oversubscribed Private Placement settling on 18/19 August 2016

# **Highly Qualified Team**

# ST**GEORGE**

### **Skills to Deliver Exploration Success**

### St George Management:

John PRINEAS, Executive Chairman - Founding shareholder with over 25 years experience in the banking and legal sectors, including the head of a financial institution in Australia, with a focus on providing finance and corporate advice to mining companies.

**Tim HRONSKY, Technical Director** – over 25 years as a geologist in the exploration and mining industry, including 15 years with Placer Dome Inc., where he was Exploration Manager for Asia.

**Sarah SHIPWAY, Non-executive Director/Company Secretary** - Chartered Accountant with extensive experience in providing advice to listed exploration companies.

Matthew McCARTHY, Exploration Manager - ex-BHP Billiton, where he was part of the team that discovered the Venus nickel sulphide deposit (+200,000 Ni) at Leinster. Prior to BHP, was on the team at AngloGold Ashanti that discovered the +8MoZAu Tropicana gold deposit

### **Key Consultants:**

**Newexco** - Leading geophysical consultants in nickel sulphide exploration. Advisers on Nova-Bollinger deposit for Sirius Resources NL, and the Spotted Quoll and Flying Fox deposits for Western Areas Limited (ASX: WSA).

**Dr Jon HRONSKY** - Consultant geologist, with industry leading credentials in exploration targeting. Previously, Manager-Strategy & Generative Services for BHP Billiton Mineral Exploration. Currently Chairman of the Centre for Exploration Targeting in WA.

**Dr Martin GOLE** – Consultant geologist, global expert and leading authority on magmatic nickel sulphide deposits. Author/co-author of several landmark research papers on major deposits in the Yilgarn, including the giant Perseverance and Mt Keith nickel sulphide deposits in the world class Agnew-Wiluna belt.

# **High Reward Projects**

### **Company Maker Strategy**

St George has dominant landholdings in under-explored and strategically important districts

### **Mt Alexander Project**

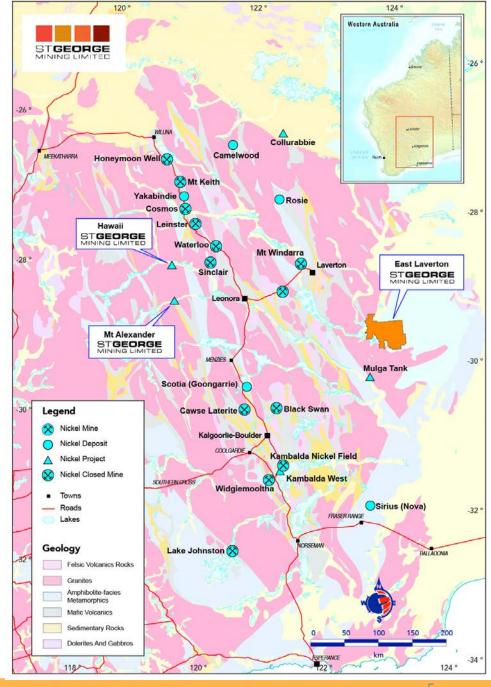
Significant high grade shallow Ni-Cu sulphide discoveries

### **East Laverton Project**

High priority targets for gold and nickel sulphide over three greenstone belts

### Hawaii Project

Early stage exploration at recently recognised unexplored greenstones



### **Underexplored Region**

### **Discovery by BHP Billiton**

Massive Ni-Cu sulphides first discovered in 2008 but project remained under-explored

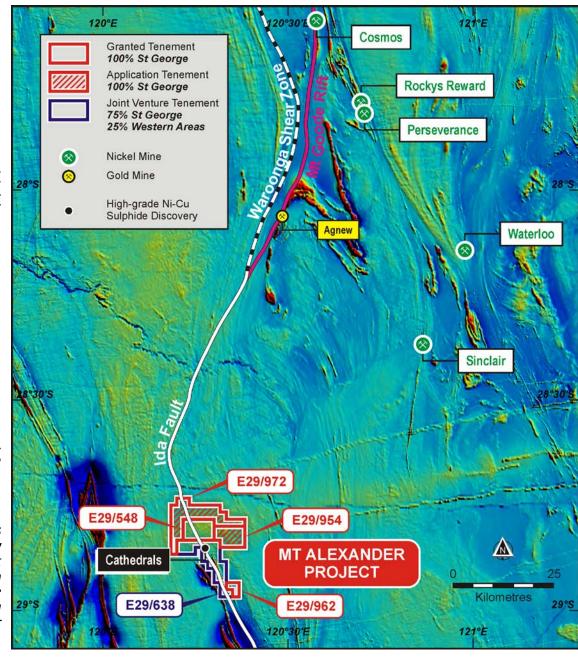
### **Acquisition by St George**

St George gains ownership and control in 2016 and consolidates a dominant tenement package

#### Access to Infrastructure

Favourable location south-west of world class nickel sulphide mines in the Agnew-Wiluna belt, with existing road access and infrastructure

The Cathedrals, Stricklands and Investigators Prospects are located on E29/638, which is held in joint venture by Western Areas Limited (25%) and St George (75%). 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. St George has 100% of all other tenements at Mt Alexander.



### **Pipeline of Targets**

#### **Cathedrals Belt**

High grade Ni-Cu sulphides discovered at:

- Cathedrals Prospect
- Stricklands Prospect
- Investigators Prospect

Several strong EM conductors still to be drill tested

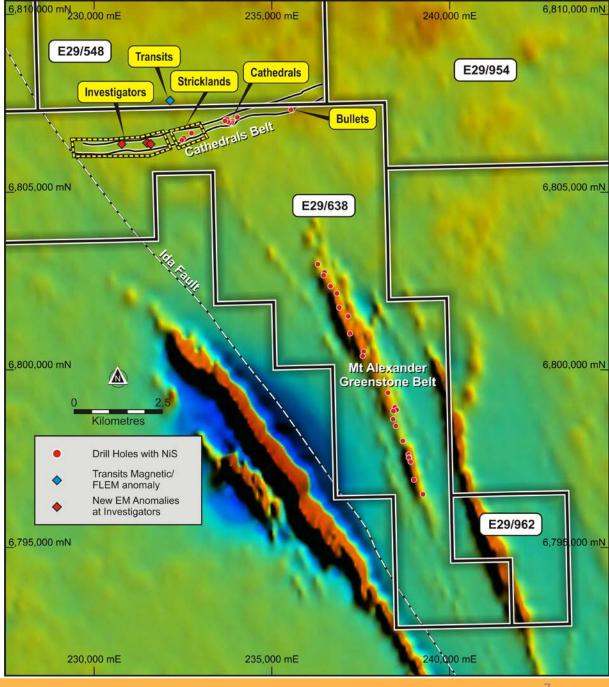
#### Mt Alexander Belt

Wide-spaced drilling by previous explorers with multiple intersections of massive Ni-Cu

### **Regional Exploration**

Tenement package over 200 sq km remains largely unexplored

**Emerging Nickel Sulphide Camp** 



### **High Grade Mineralisation**

MAD12: **3.95m** @ **5.05%Ni, 1.55%Cu, 0.11%Co and 4.44g/t total PGEs** from 91.4m

MAD13: **2.05m @ 5.78%Ni, 2.33%Cu, 0.18%Co** and **3.93g/t total PGEs** from 56.3m

MAD15: **1.17m @ 8.75%Ni**, **3.34%Cu**, **0.24%Co** and **6.16g/t** total PGEs from 30.17m (photo on the right shows MAD15 drill core)

MARC49: **6m @ 3.33%Ni, 1.53%Cu, 0.12%Co and 1.83g/t total PGEs** from 60m

### Clean and High Value Concentrate Likely:

- High tenor of nickel
- High Cu, Co and PGEs

#### **Shallow Mineralisation:**

- Low cost exploration
- Supports favourable project economics



### **More Discoveries Being Made**

Very high success rate in testing EM conductors with new discoveries in July/Aug 2016 (assays pending):

<u>MAD26:</u> 4m of massive nickel-copper sulphide mineralisation from 53.9m including 2.7m with 7.5%Ni and 2.3%Cu from 55.2m (average XRF values)

<u>MAD27:</u> 10m of ultramafic with disseminated and blebby mineralisation from 61.25m and 2m of massive sulphides with 4.2%Ni and 2.2%Cu from 71.25m (average XRF values)

<u>MAD31:</u> 15m of ultramafic with disseminated and blebby mineralisation from 97m and 1.03m of massive sulphides with 7%Ni and 2.5%Cu from 112.5m (average XRF values) including a pentlandite vein with 28%Ni (photo on right shows the coarse grain pentlandite)

<u>MAD32:</u> 12.5m of ultramafic with disseminated and blebby mineralisation from 42m and **0.77m of massive sulphides with 8%Ni and 2%Cu from 52.76m** (average XRF values)

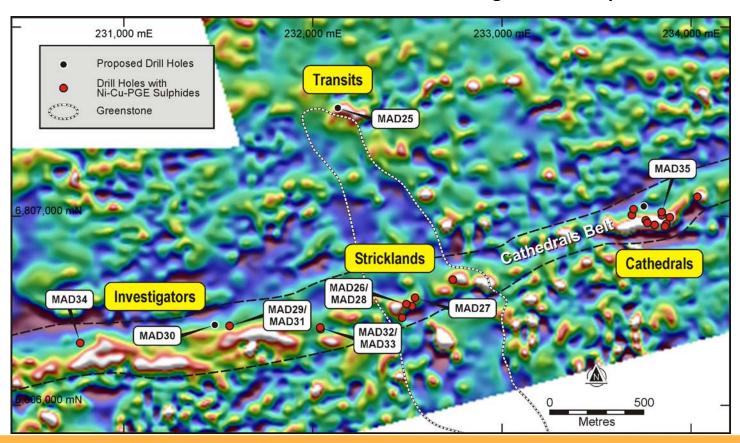




### **Nickel-Copper Sulphide Belt is Growing**

Since acquiring the Project this year, St George has <u>quickly added value</u> – we have:

- Extended the strike length of recurrent mineralisation in the Cathedrals Belt from 400m to 3.5km
- Increased the number of drill holes that have intersected nickel-copper sulphide mineralisation in the Cathedrals Belt from 6 to 20 with 15 of these intersecting massive sulphides



### **Near Term Value Drivers**



#### **Drilling Now:**

Diamond drilling to test EM conductors in prospective geological positions is underway

#### **DHEM:**

Downhole EM surveys of completed drill holes is also underway and could identify further mineralisation

### More Drilling:

Follow-up drill programme to be planned once assays and downhole EM surveys are reviewed and 3D modelling is updated

### Regional Exploration:

New targets being identified including structures that may parallel the Cathedrals Belt



### **Strong Gold Potential**

### **Important Regional Location**

Near the two most recent world class gold discoveries in WA – Tropicana +8MozAu and Gruyere +6MozAu

### **Underexplored for Gold**

Shallow drilling has identified widespread anomalous gold confirming prospectivity

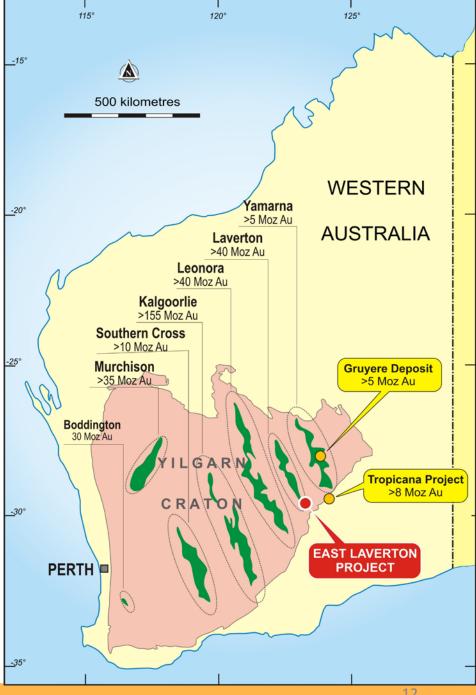
### **Pipeline of Targets**

The highest priority gold targets are now being tested with first pass drilling

#### **Favourable Structural Features**

Fundamental structures/faults that control gold mineralisation are prominent, suggesting large scale gold potential

Gold Drilling is Underway



### **Ascalon - Priority Gold Target**



### **Minigwal Greenstone Belt**

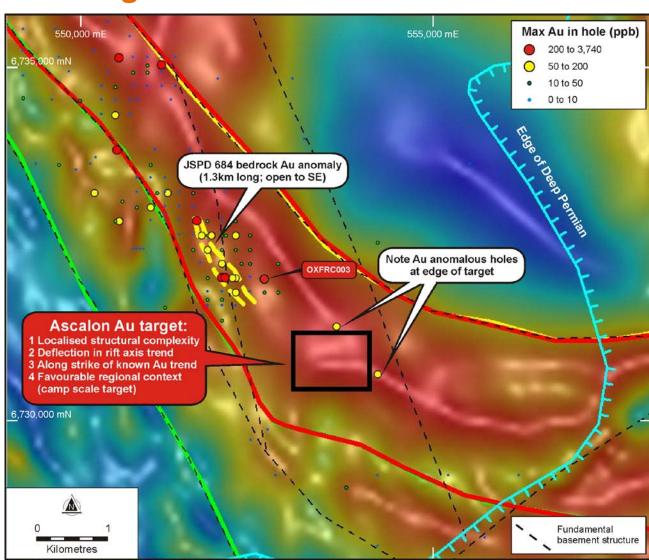
A deep structure that provides a pathway for the mantle-derived gold-rich hydrothermal fluids essential for large gold deposits

### **Ascalon Target**

Situated in the thickest part of the Minigwal belt; a prominent deflection in the belt is a favourable structural setting for gold (gravity data has mapped this feature, pictured on the right)

# **Strong Alteration Signature**Drilling has identified anomalous gold and copper to

the NW of Ascalon that is consistent with the alteration signature on the periphery of a large ore body



### **Bristol - Priority Gold Target**



### **Large Gold Anomaly**

Historical drilling has established an anomalous gold zone with a 1km strike length

### Underexplored

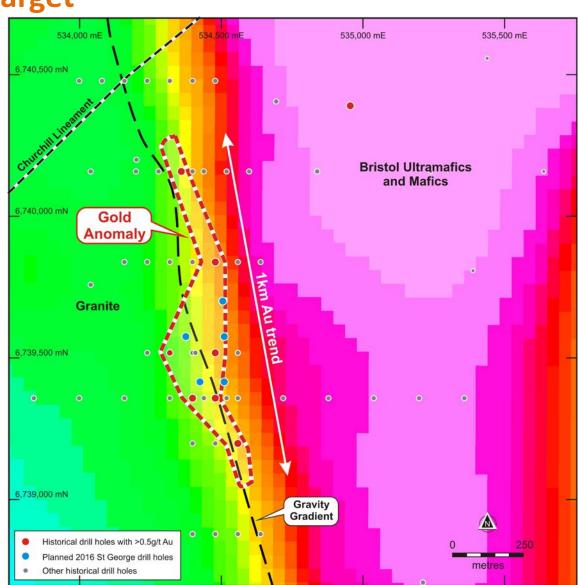
Historical drilling was shallow (average 40m) with most holes having gold anomalism at end of hole

### **Favourable Structural Setting**

Gold anomaly is situated on the contact between greenstones and granites

### St George to Drill Deeper

Drill programme by St George will test for gold mineralisation in fresh rock with deeper drilling



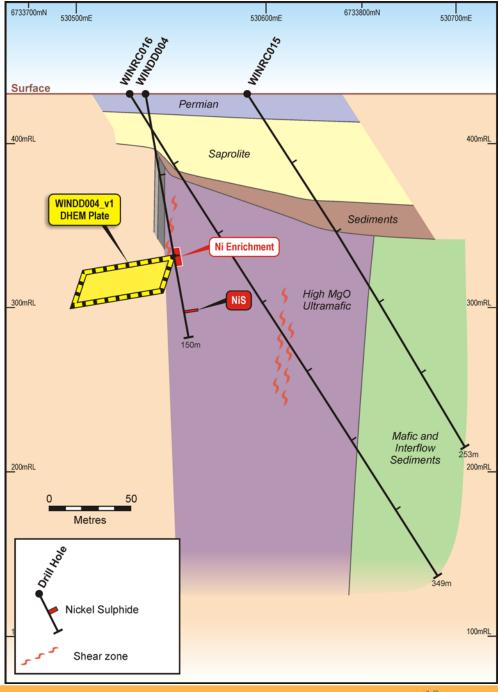
### **Nickel Sulphide Drilling**

BHP Discovers Nickel Sulphides
Previous farm-in with BHP
discovered NiS in 2012

St George Continues Exploration
Systematic exploration by St
George of EM and geological
targets is ongoing

High Priority Target at Windsor Current drilling is focused on a powerful EM conductor at Windsor (+200,000 Siemens) where nearby drilling has intersected upto 1.05%Ni (pictured on the right is a cross section of Windsor)

**Drilling to Commence Soon** 



# St George Mining: creating shareholder wealth through exploration success





<u>Above</u>: drill core from MAD26 which recorded spot XRF readings of 8.7%Ni and 2.5%Cu (part of the 2.7m massive sulphide section from 55.2m); <u>Right</u>: drill core from MAD22 with massive chalcopyrite (yellow-green) in contact with ultramafic (dark grey). Assays returned 13.1%Cu and 43g/tAg.



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-may include, among other things, statements regarding targets, estimates and assumptions in respect of mineral reserves and mineral resources and anticipated grades and recovery rates, production and prices, recovery costs and results, capital expenditures, and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions;

-are necessarily based upon a number of estimates and assumptions that, while considered reasonable by St George Mining, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies; and

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

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves regarding the Hawaii and Mt Alexander North Projects is based on information compiled by Mr Matthew McCarthy, a Competent Person who is a Member of The Australasian Institute of Geoscientists. Mr McCarthy is employed by St George Mining Limited.

This ASX announcement contains information extracted from the following reports which are available on the Company's website at <a href="https://www.stgm.com.au">www.stgm.com.au</a>:

- 10 February 2016 Gold Targets at East Laverton
- 11 February 2016 Nickel Sulphide Drilling at East Laverton
- 17 February 2016 Massive Nickel-Copper Sulphide Targets at Mt Alexander
- 8 March 2016 More Massive Nickel Sulphide targets at Mt Alexander
- 30 March 2016 Large Gold Zone at East Laverton
- 27 April 2016 High Grade Nickel-Copper Sulphides at Mt Alexander
- 11 May 2016 Massive Nickel-Copper Sulphides at Stricklands
- 25 May 2016 Gold Drill Programme at East Laverton
- 16 June 2016 Assays Confirm High Grade Mineralisation at Mt Alexander
- 29 June 2016 Nickel-Copper Sulphide Discovery at Stricklands
- 11 July 2016 Drill Programme for Mt Alexander Project
- 1 August 2016 Nickel-Copper Sulphides Discovered at Investigators
- 8 August 2016 Drilling Extends Nickel-Copper Sulphide Belt

The Company confirms that it is not aware of any new information or data that materially affects the exploration results included in any original market announcements referred to in this report and that no material change in the results has occurred. 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.