



# *'2014 Nickel Sulphide Drilling Campaign: High Impact Drilling Recommendations'*

10 September 2014



# Strong Platform for Discovery

## Advanced Exploration Project

- High impact drilling of multiple nickel sulphide targets

## Exploration Model Focused on Large Discoveries

- Potential recognised by major company interest

## Tight Capital Structure

- High leverage for shareholders to drilling success

# Corporate Overview

# Corporate Snapshot

## Board - *Skills to deliver exploration success and company growth*

**John PRINEAS** – Chairman with over 25 years experience in the banking and legal sectors, including the head of a financial institution in Australia, with a focus on financing and corporate advice to mining companies

**Tim HRONSKY** – Technical Director with 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

**Marcus MICHAEL** – Chartered Accountant with over 23 years of providing advice across a range of industries including mining, engineering and healthcare. Also a director of Argent Minerals (ASX: ARD), Cardinal Resources (ASX: CDV) and Beacon Minerals (ASX: BCN)

## Business Model - *Exploration Focus*

- Target projects that are prospective for world class deposits
- Create value through innovative exploration and discovery
- Maintain very low admin/corporate costs to maximise returns for shareholders; money goes into the ground



# Highly Qualified Technical Team

## Technical Team – *Successful Track Record in Nickel Sulphide Discovery*

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

**Dr Martin GOLE** – Consultant geologist, widely recognised as a leading expert in nickel sulphide deposits. The author and co-author of numerous papers on Archean nickel sulphide deposits, including the world-class Perseverance and Mt Keith nickel deposits in the Leinster nickel field.

**Travis KERSLAKE** - Senior geologist with a strong background in nickel, gold and copper exploration. Was on the team at WMC Resources that discovered the world class Nebo-Babel Ni-Cu-PGE deposit in the Western Musgraves, and recently worked with Rox Resources Ltd (ASX: RXL) on the discovery drilling for the Camelwood nickel sulphide deposit in Western Australia.

**Matthew McCARTHY** – Consultant geologist formerly with 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. 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.

# Capital Structure

Share Capital	
Listed Shares (ASX: SGQ)	92,326,251
Listed Options (ASX: SGQO)	48,508,000
Market cap (@12c)	\$11m
Top 20	55%
Top 3	36%
Management	18%

*Listed Options (SGQO): Exercise price of 20 cents, expiring on 28 November 2014.*

*Unlisted Options: 750,000 options with 25 cents exercise expiring 28 November 2014; 1,000,000 options with 40 cents exercise expiring 28 November 2015; 979,525 options with 30 cents exercise expiring 30 June 2016.*

*Performance Shares: 100 Performance Shares expiring 16 November 2015.*

# **East Laverton Property: An Emerging Nickel Field**

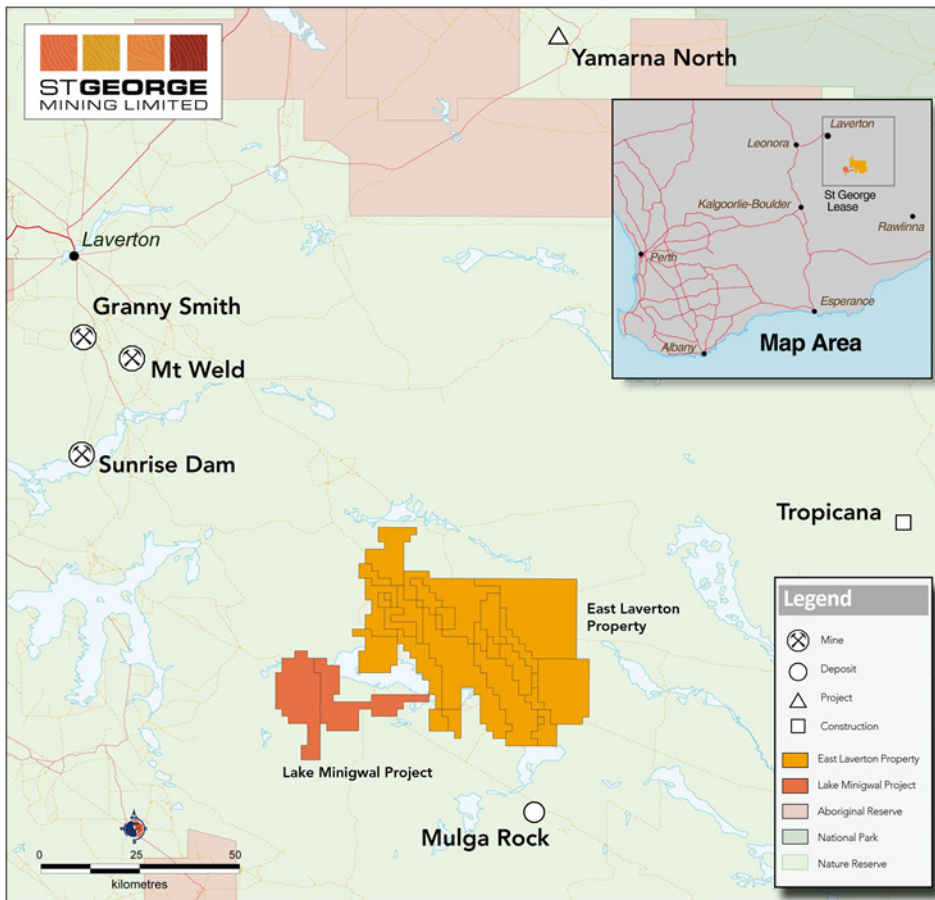
# A Rare and Significant Nickel Project



## Frontier Location

- 2,000 sq. km contiguous and dominant landholding
- Under-explored
- Geological setting favours nickel sulphide discoveries
- No native title – no nature reserves
- Safe jurisdiction - WA

# Highly Prospective for Nickel Sulphides



## Major Nickel Potential

- 3 extensive ultramafic belts (total strike length +130km)
- An emerging nickel province
- Prospectivity recognised by BHP Billiton Nickel West farm-in (now concluded)
- High MgO komatiites confirmed by drilling



# Nickel Project Location Plan



## Legend

- Nickel Mine
- Nickel Deposit
- Nickel Project
- Nickel Closed Mine

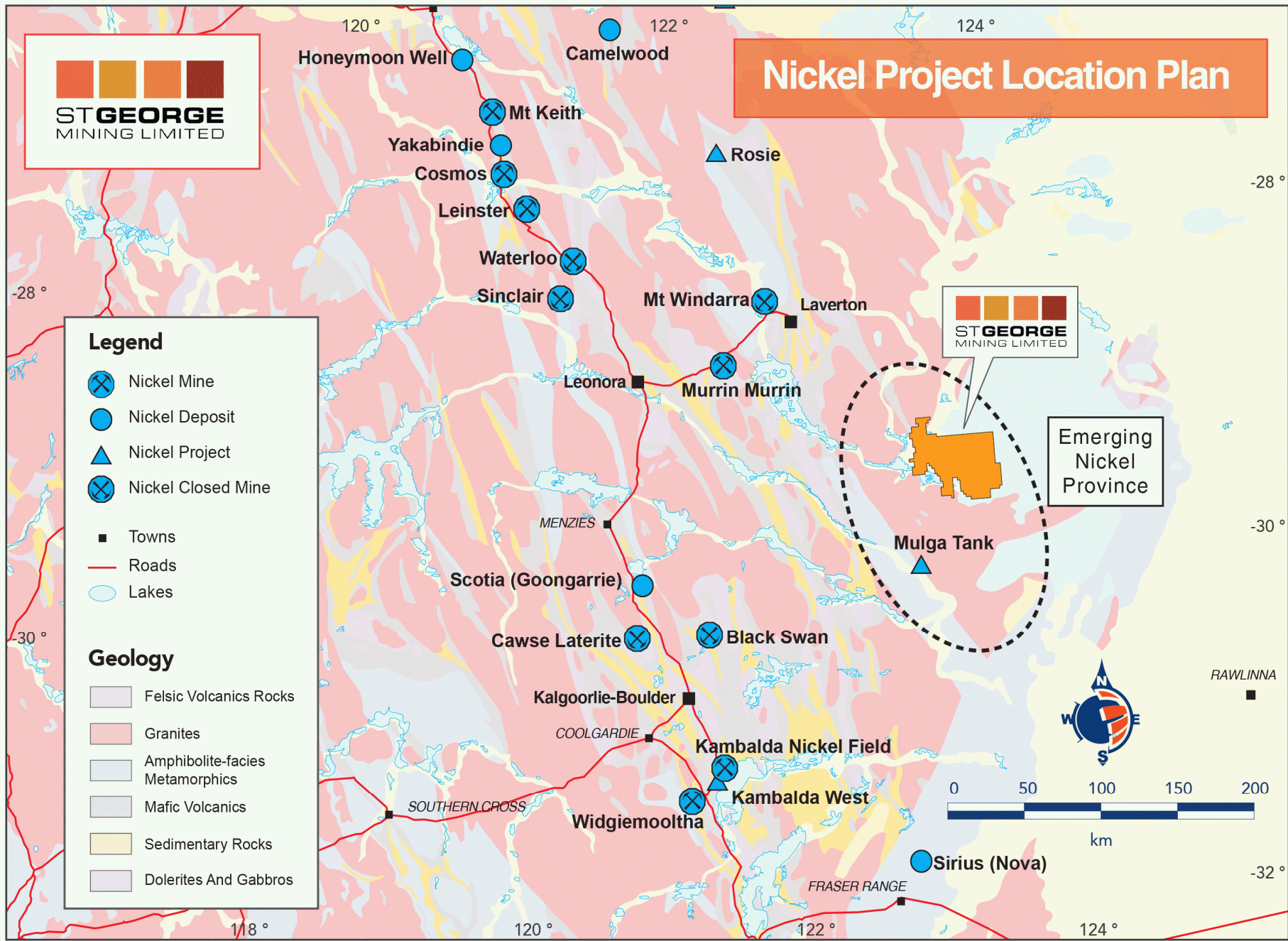
- Towns
- Roads
- Lakes

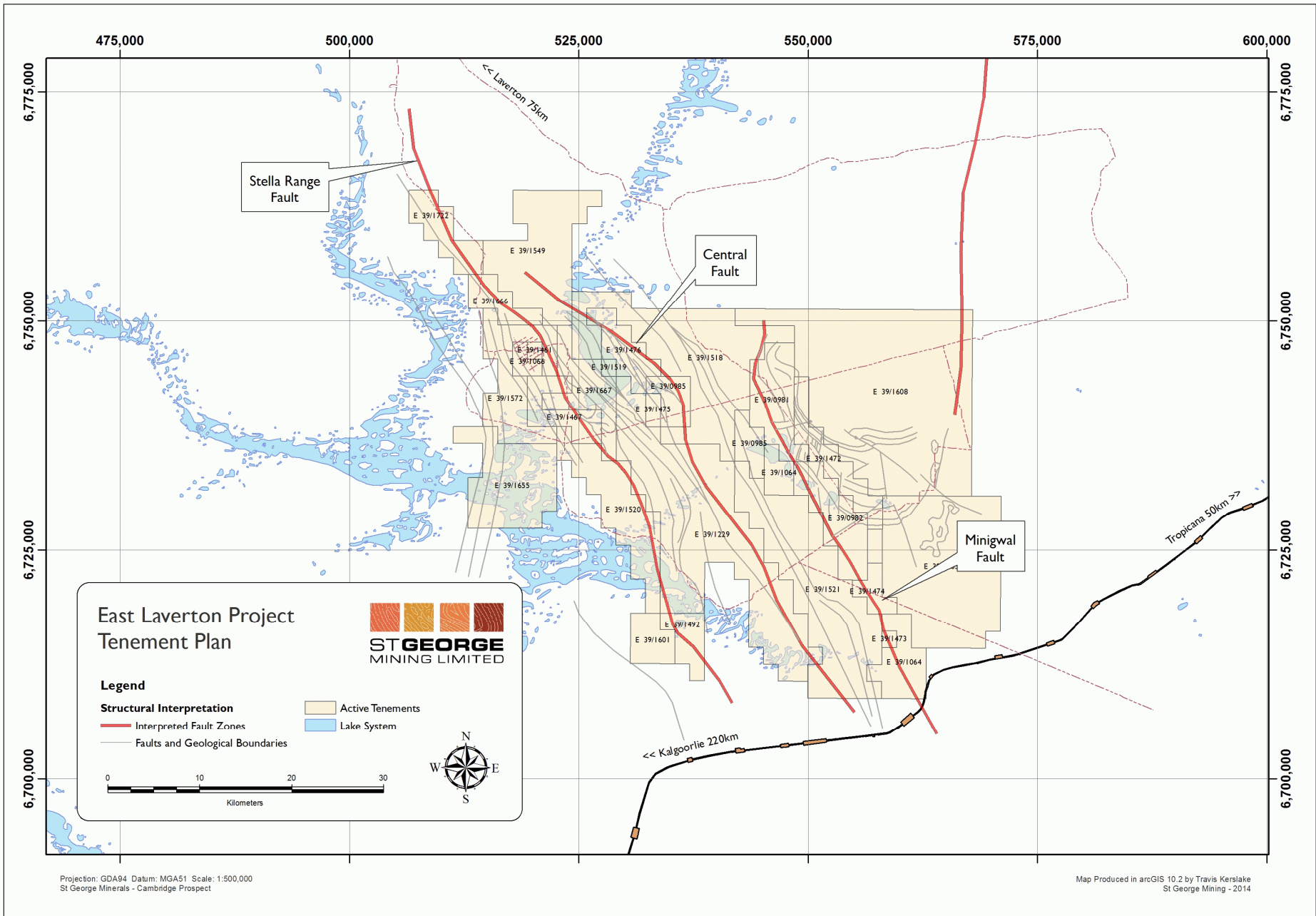
## Geology

- Felsic Volcanics Rocks
- Granites
- Amphibolite-facies Metamorphics
- Mafic Volcanics
- Sedimentary Rocks
- Dolerites And Gabbros



Emerging Nickel Province







# **Nickel Market: Macro Factors Improving**



# Market Cycle in Upward Turn

## Key market drivers:

- Indonesia (28% of world nickel) bans export of unprocessed ore in 2014
- Russia/Ukraine (10% of world nickel) political issues cast doubts on supply
- Philippines (10% world nickel) proposing to ban export of unprocessed ore
- Global demand for nickel rising with greater production of stainless steel

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### **“Indonesia export ban turns nickel into a star”:**

Financial Times, 20 March 2014

### **“Vale Sees Nickel Over \$20,000 a Ton on Indonesia Ban”:**

Bloomberg 25 February 2014

### **“Nickel Rises to 14-Month High on Indonesia Ban, Ukraine”:** Bloomberg 14 April 2014

**“The global surplus will narrow to 41,000 tons this year from an estimated 181,000 tons in 2013. There’ll be a 36,000 ton deficit in 2015, the first time since 2010 that demand exceeds supply”.**

Barclays Bank, 13 January 2014

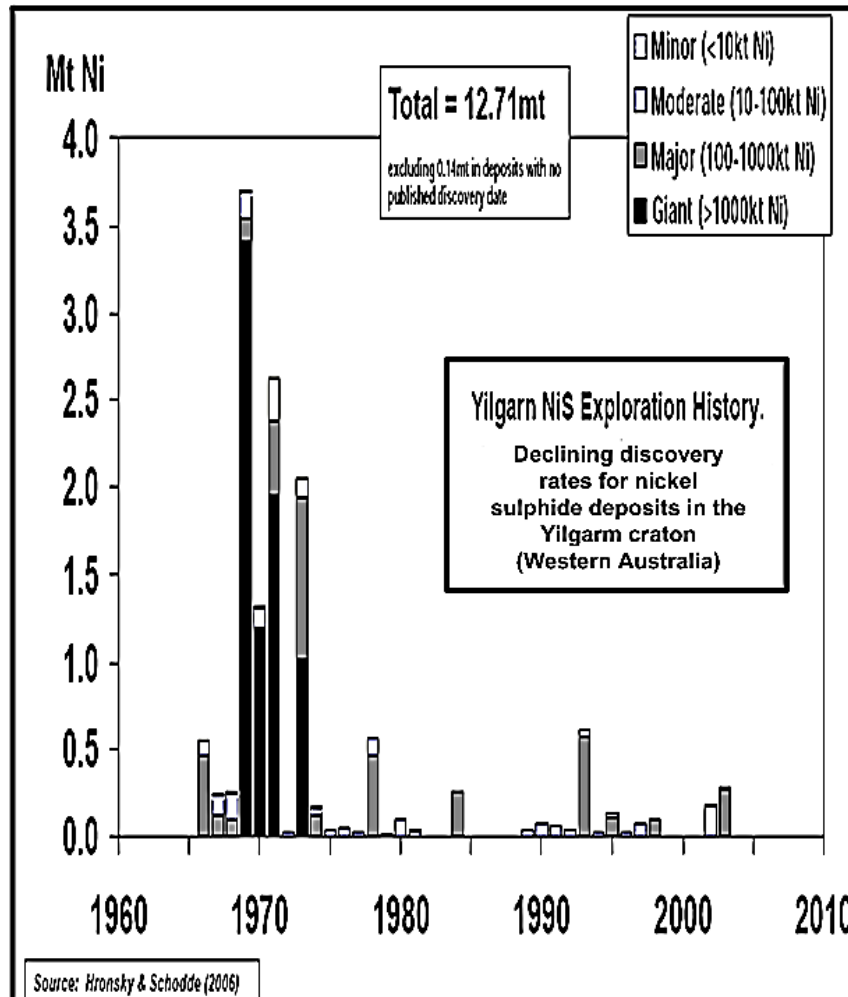
# Nickel Price Surges: +30% YTD



“Nickel prices are soaring amid growing concern about the availability of supply from Indonesia and Russia, the top two producers of the metal. The price of the industrial metal, which is used to make steel stronger and more resistant to corrosion and extreme temperatures, **hit a 14-month high on Thursday, bringing year-to-date gains to 29%.**”

*The Wall Street Journal, 18 April 2014*

# Nickel Discovery – It’s Time



## NiS Discoveries are Rare

- Most major discoveries were circa. early 1970’s
- Existing NiS mines are mature with declining resources
- A major discovery sets off a ‘nickel boom’
- Big discoveries more likely in frontier locations e.g. Nova

# Nickel at East Laverton

# Nickel Potential Confirmed in 2012

## ✓ Nickel Sulphides Already Discovered

- Two holes intersected disseminated nickel sulphides on Stella Range belt
- Multiple occurrences of magmatic and PGE sulphides on all 3 belts

## ✓ Extensive Reconnaissance Drilling: 35 RC holes for 8,560 metres

- 28 drill holes identified komatiite ultramafics
- 7 nickel sulphide targets established

## ✓ Favourable Geology

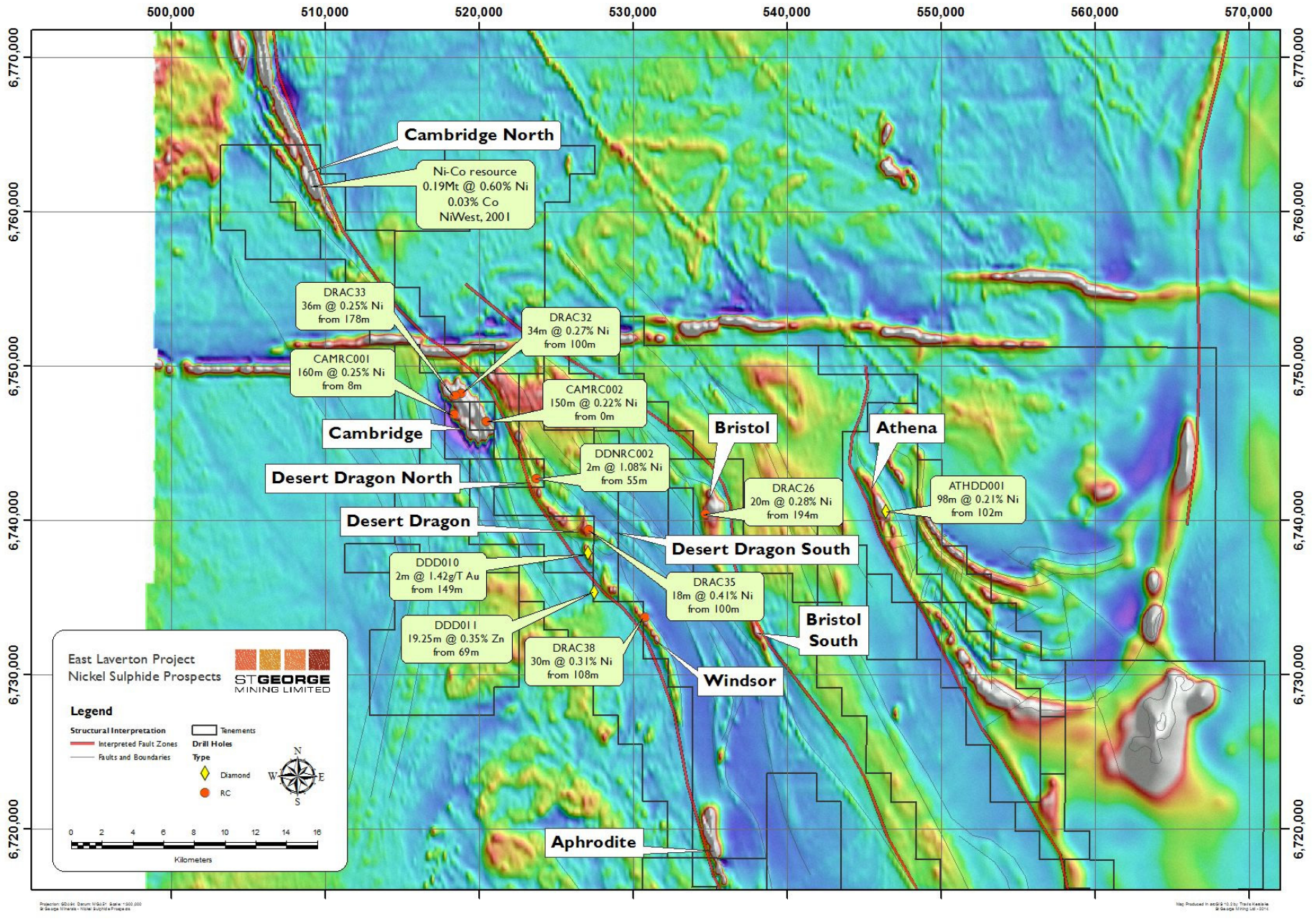
- Thick high MgO ultramafic sequences in contact with sulphur-rich sediments
- Compositionally similar to Agnew-Wiluna nickel belt

## ✓ Correct Environment for NiS Deposits

- 'Hot' komatiite magma rarely seen outside Agnew-Wiluna and Forrestania
- Abundant local source of sulphur essential for nickel sulphide formation

***“The presence of multiple occurrences of magmatic nickel and PGE sulphides over a very significant strike extent of the Stella Range ultramafic belt strongly supports the formation of large scale nickel sulphide mineralisation”***





Projection: GDA94, Datum: WGS84, Spheroid: Everest, Datum: GDA94, Units: Meters

Map Produced in accordance with the requirements of the Australian Mining Act 1975



# 100% St George

## St George has 100% ownership of all nickel rights at East Laverton

- Previous farm-in arrangement with BHP Billiton Nickel West
- Generated 7 nickel sulphide targets
- All nickel sulphide targets and \$3m data-set now owned and controlled 100% by St George as from October 2013



# High Impact Exploration



# Systematic Exploration

## Comprehensive Ground Electromagnetic Survey

- Large, regional MLEM survey; 80km coverage on Stella Range belt so far
- Modern, powerful EM techniques to 'see through' cover
- Newexco continues to identify high quality EM conductors

## Targeted Drilling

- Drilling of EM conductors
- Drilling of geological targets and follow-up of successful NiS intersections

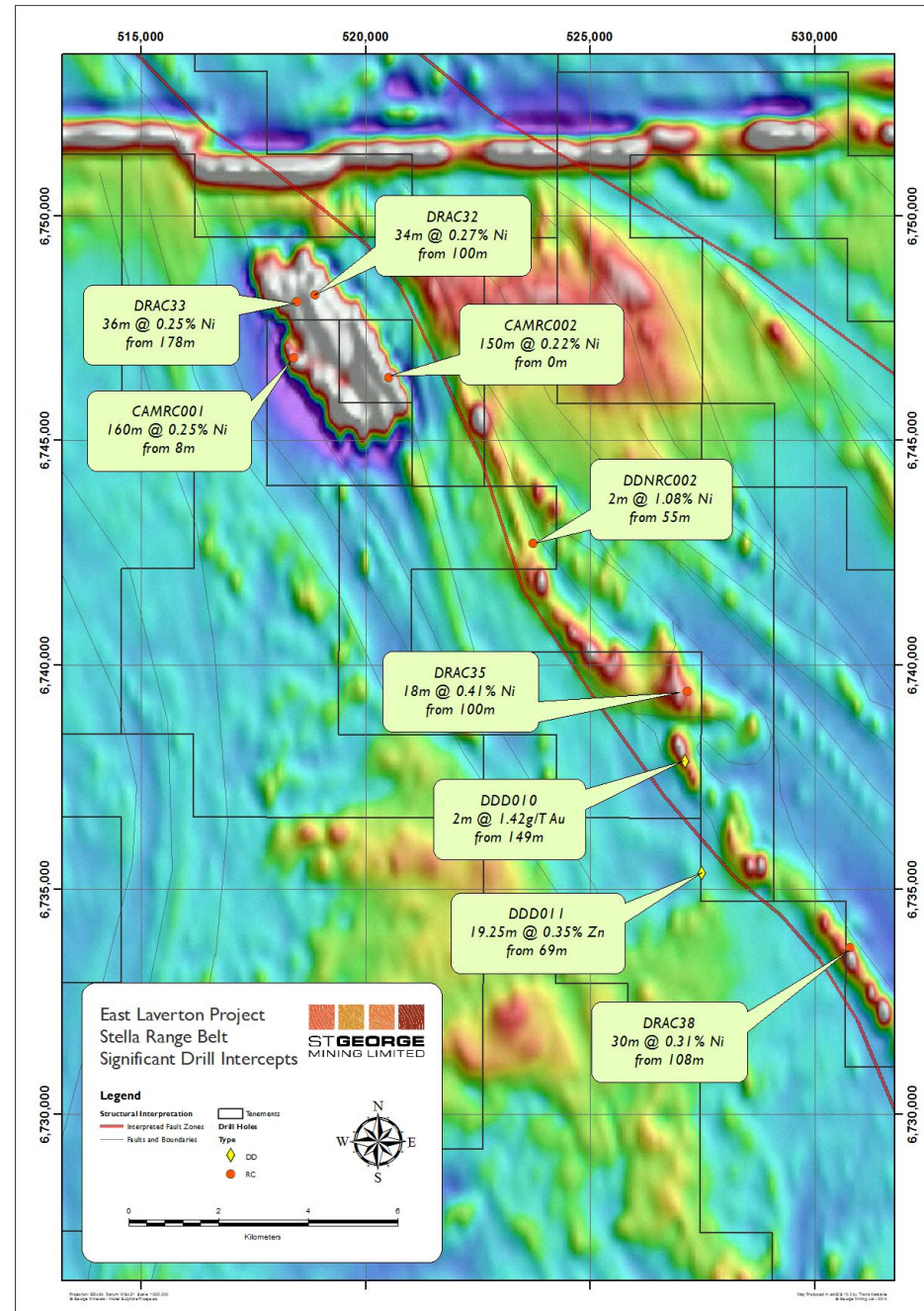
## Integration of Geology and Geophysics

- Geochemical analysis of komatiite channels intersected
- Down-hole EM surveys to test for 'blind' nickel deposits
- Drilling and EM surveys used concurrently

# Stella Range Belt

## Fertile high MgO Ultramafics

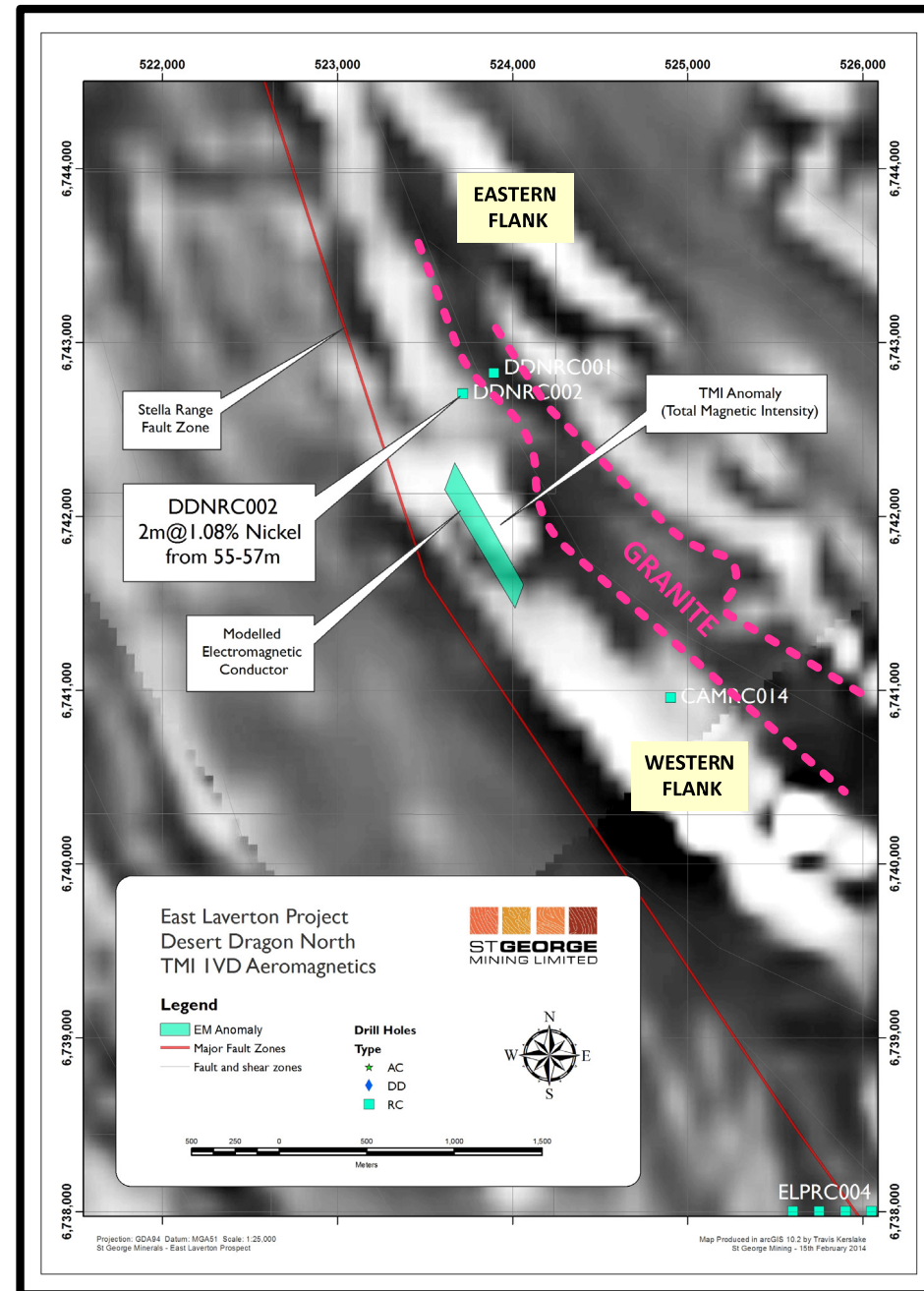
- Disseminated nickel sulphides discovered in 3 holes over 15 km strike length
  - 2 m @ 1.08% Ni (DDNRC02)
  - 18 m @ 0.40% Ni (DRAC35)
  - 2 m @ 0.62 % Ni (DRAC38)
- Likely to represent at least 2 mineralised nickel systems in this section of belt alone
- Huge exploration upside along +60km belt



# Desert Dragon North

## Dome Structure

- Granite dome structure similar to Kambalda Dome
- 3-D inversion modelling underway to assist with drill targets at basal contact
- Fertile channel flow with nickel intersection: 2m @ 1.08% Ni (DDNRC02)
- Very limited drilling of basal contact to date

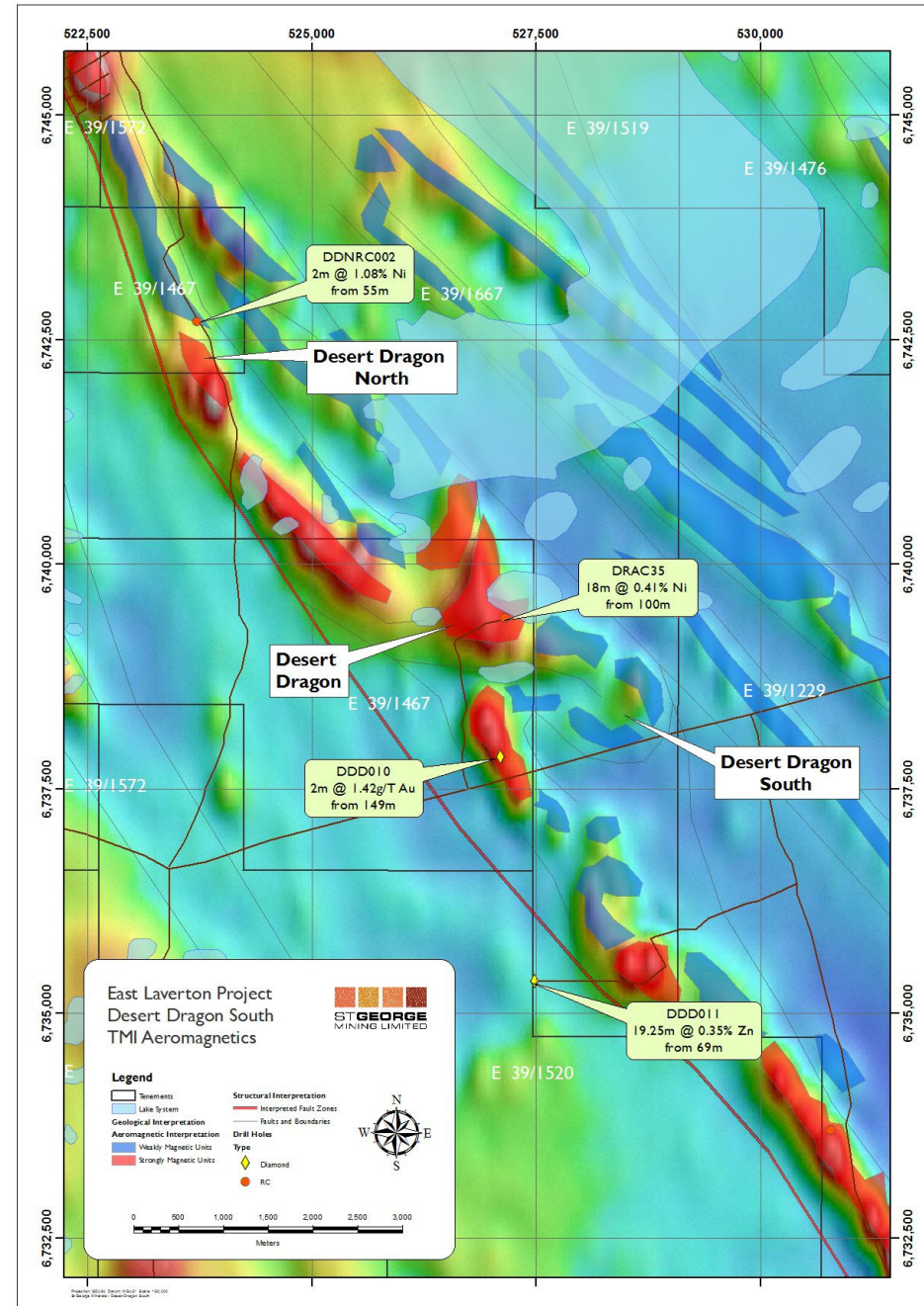




# Desert Dragon South

## Optimal Cross Structure

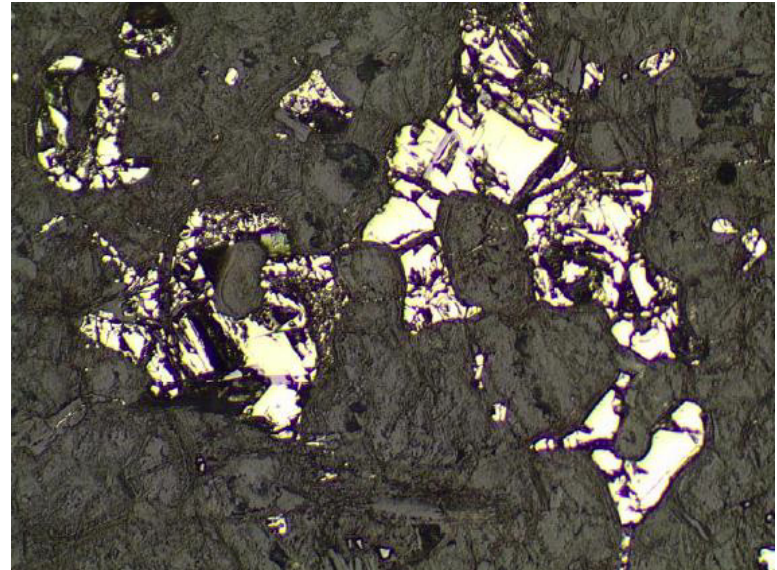
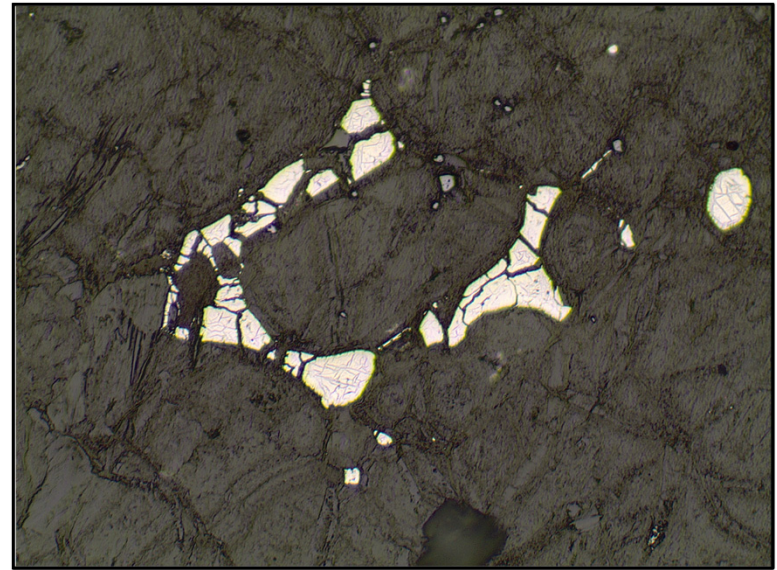
- Intersection of ultramafic belt with cross-rift structure
- Favourable setting for nickel sulphide formation
- On strike from channel flow intersected at DRAC35: 18m @ 0.41% Ni
- Large, strong EM response remains untested
- Strong gold potential: DDD010 – 2 m @ 1.42 g/t



# Windsor

## High Tenor Nickel Sulphides

- DRAC38: 30m @ 0.31% Ni incl.  
6m @ 0.48% Ni , 2m @ 0.62% Ni
- Pentlandite – high tenor NiS confirmed by petrography
- Unexplored high MgO komatiite channel
- Very limited drilling to date



# Pipeline of Nickel Prospects

## More Prospects

**Cambridge North:** high MgO ultramafic with Ni-Cu GSWA anomaly

**Athena:** very thick high-MgO ultramafic (+250m)

**Bristol:** ultramafic with very high magnetic anomaly (TMI)

**Aphrodite:** very strong TMI within untested area

**Cambridge:** high MgO ultramafic body with magmatic sulphides

## Multiple EM Conductors

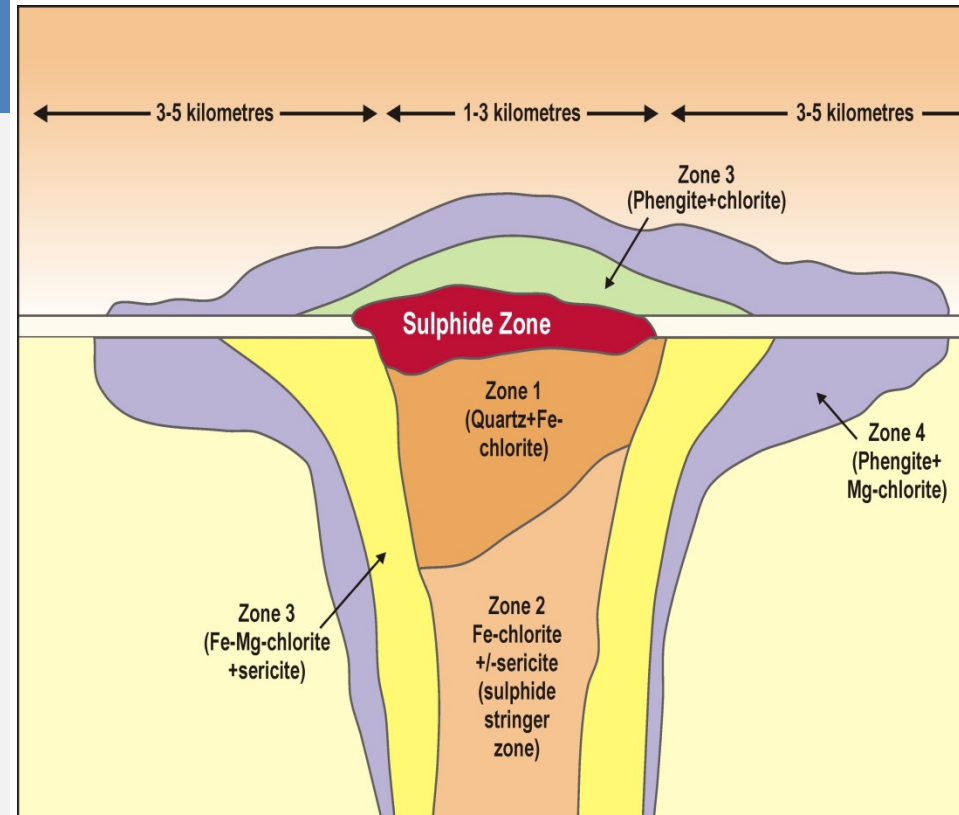
- Regional MLEM survey identifies multiple EM anomalies
- Category 1 targets prioritised for drilling
- Category 2 and 3 targets further reviewed and interpreted
- Explore with drilling and/or concurrent DHEM survey



# VMS Prospect

## VMS Potential

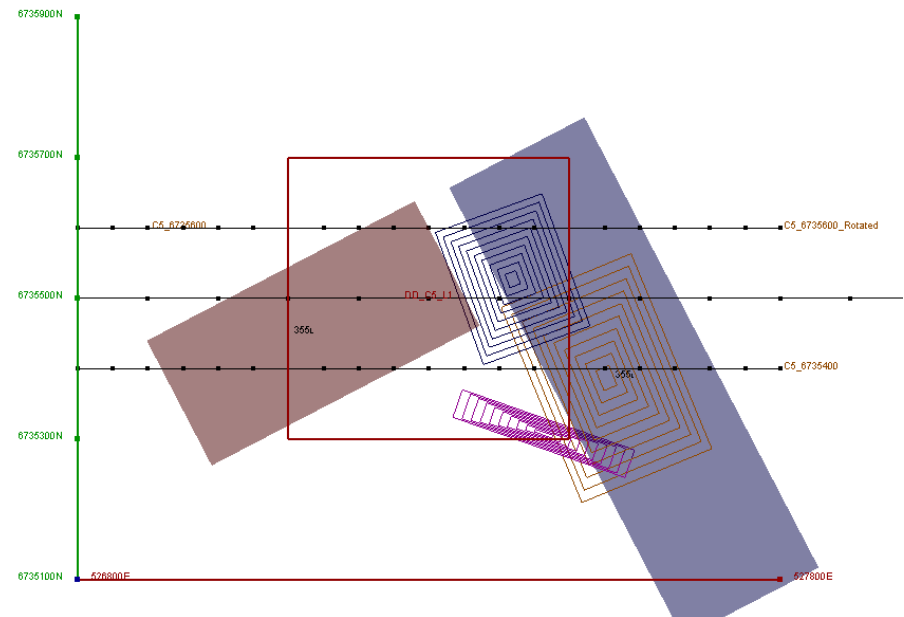
- Potential initially recognised in drilling by BHP Nickel West
- Intersected up to 90m metal-rich sulphide units with Zn up to 4460ppm and Cu up to 1400ppm
- VMS mineralisation and massive nickel sulphides are genetically and spatially associated
- Zn-Cu interval in DDD011 may represent the margin of a VMS deposit



# VMS Exploration

## High Value Drill Target

- DDD011 intersects banded Zn-Cu sulphide mineralisation (19.25m @ 0.35% Zn & 0.10% Cu) in Dragon 2 conductor
- Adjacent strong EM conductor (Dragon 3) yet to be tested
- Conductors are in a typical location for a VMS deposit - offset from the ultramafic belt
- Drilling of Dragon 3 in Oct 2014

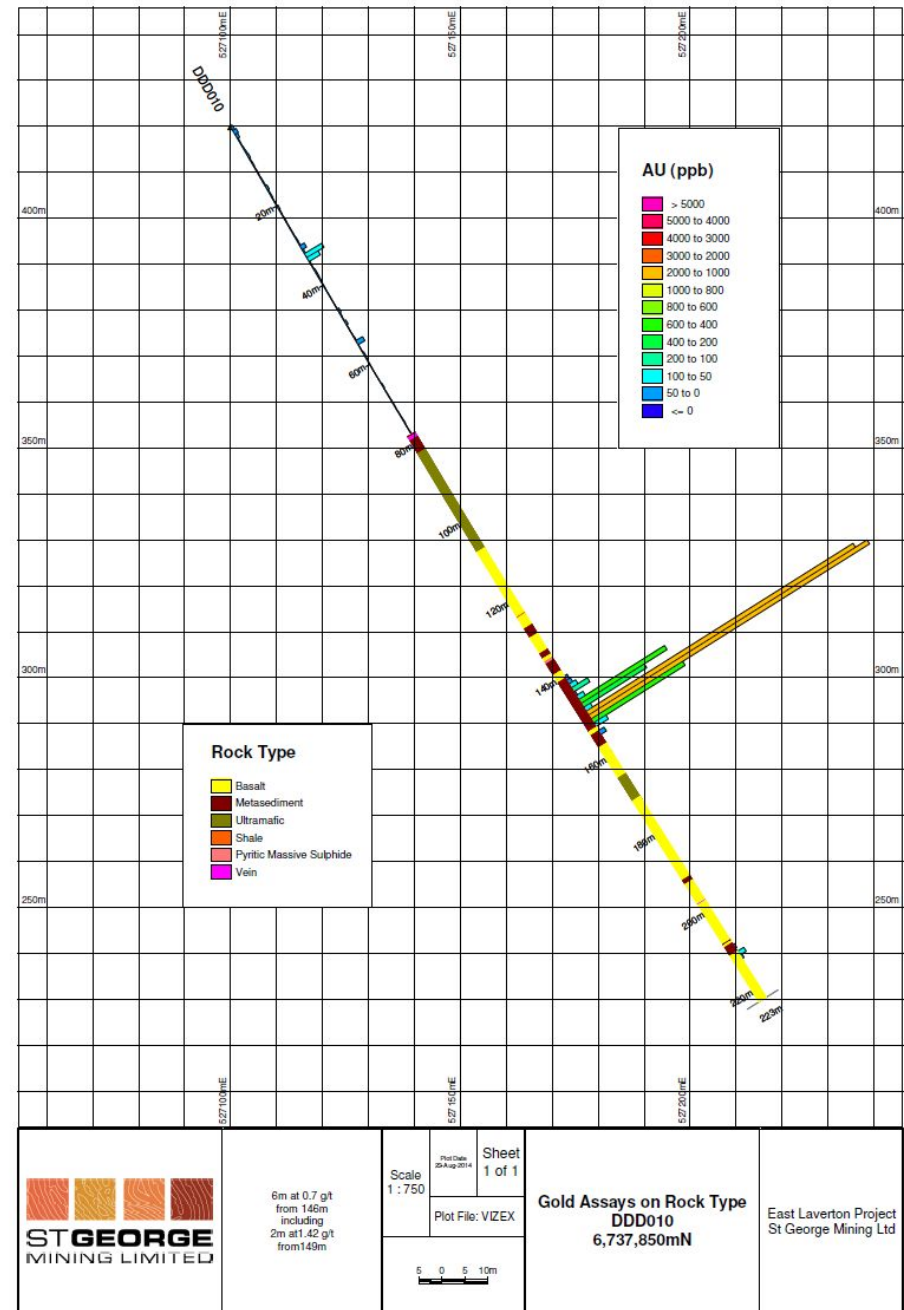




# Gold Prospect

## Attractive Gold Address

- Bounded by 3 major goldfields with landmark deposits:
  - Tropicana (+7MozAu)
  - Sunrise Dam (+10MozAu)
  - Gruyere (+3.8MozAu)
- Important gold structures in place – 3 NW shears cross-cut by interpreted fault system
- DDD010 intersects primary gold mineralisation; large soil anomaly
- Hydrothermal alteration widely encountered in drilling



# Phase 2 of 2014 Drilling Campaign

## Phase 2 of the 2014 drilling campaign starts in Oct 2014

- Drilling of EM conductors
- Follow-up drilling of nickel and VMS intersections
- Drilling and EM surveys to be used concurrently
- Multiple targets increases discovery potential
- +4,000m drilling programme



# Leverage to Exploration Success

# Rising Valuation

## Unique regional exploration play

- Emerging nickel field
- Dominant landholding
- Big company interest

## Systematic exploration using modern techniques

- Strong technical team
- Creating exploration upside
- Pipeline of prospects

## Share price highly leveraged to exploration success

- Low market cap
- Tight share register

# Nickel Discovery: History of Booms

Nickel explorers gain remarkable share price increases on the back of exploration success

Western Areas (ASX: WSA) – market cap at IPO of \$7.4m, now \$1.2 billion

Jubilee Mines – market cap of \$20m at discovery, taken over for \$3.1 billion

Sirius Resources (ASX: SIR) – market cap of \$8m at discovery, now \$1.6 billion



Sirius (ASX: SIR) 3 yr price chart

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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.

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