



# SANDFIRE RESOURCES NL

ASX Code: SFR



**A premier high grade copper-gold producer for global investors**

## March 2014 Global Investor Presentation

**Karl Simich, Managing Director & CEO**

# Investment Highlights

A premier high-grade, high margin Australian copper-gold producer

- Strong track record of discovery, development and consistent operations
- Discovered, financed, developed and commissioned the \$400M DeGrussa Copper-Gold Mine in under three years
- Ramp-up complete – profitable and generating strong operating cash flows
  - Over 100,000t of copper and 60,000oz of gold produced to date
- Low gearing as a result of aggressive debt reduction
- On track to achieve production guidance for FY2014
  - Around 70,000t copper, 35,000oz gold
  - C1 cash costs: around US\$1.15/lb
- Dominant strategic position in emerging VMS copper-gold province: outstanding organic growth potential
- Extensive growth pipeline including portfolio of exploration joint ventures
- Strong focus on maximising shareholder returns



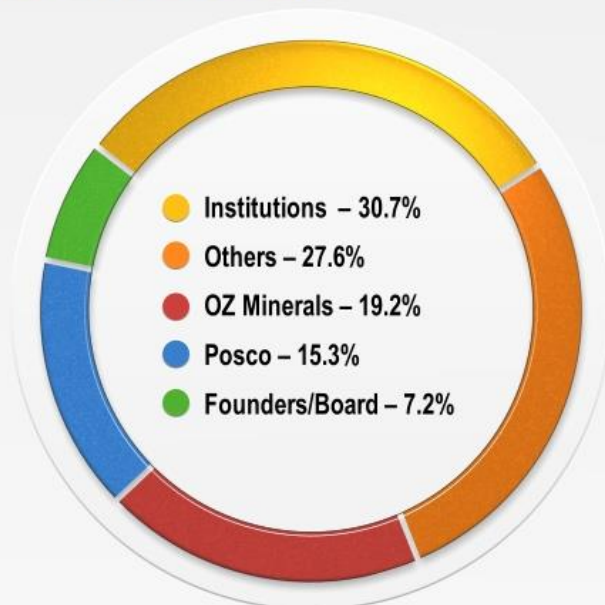


# Corporate Snapshot

A premier high-grade, high margin Australian copper-gold producer



## OUR KEY SHAREHOLDERS



## COVERAGE BY MAJOR BROKERS AND INVESTMENT BANKS

Bell Potter	CIMB Morgans
Commonwealth Bank	Credit Suisse
Deutsche Bank	Euroz
Goldman Sachs	JP Morgan
Macquarie	Morgan Stanley
Patersons	UBS



## KEY DATA

### Issued Capital

155.6  
MILLION

Shares – 8.1M Options

### Stock Market Index

S&P  
ASX

200

### Market Capitalisation

~ \$900  
MILLION

(at \$5.60)

### Cash and Deposits

\$75  
MILLION

(at 31 Dec 2013)

### Debt

\$230  
MILLION

(Project Finance Facility  
balance at 31 December 2013)





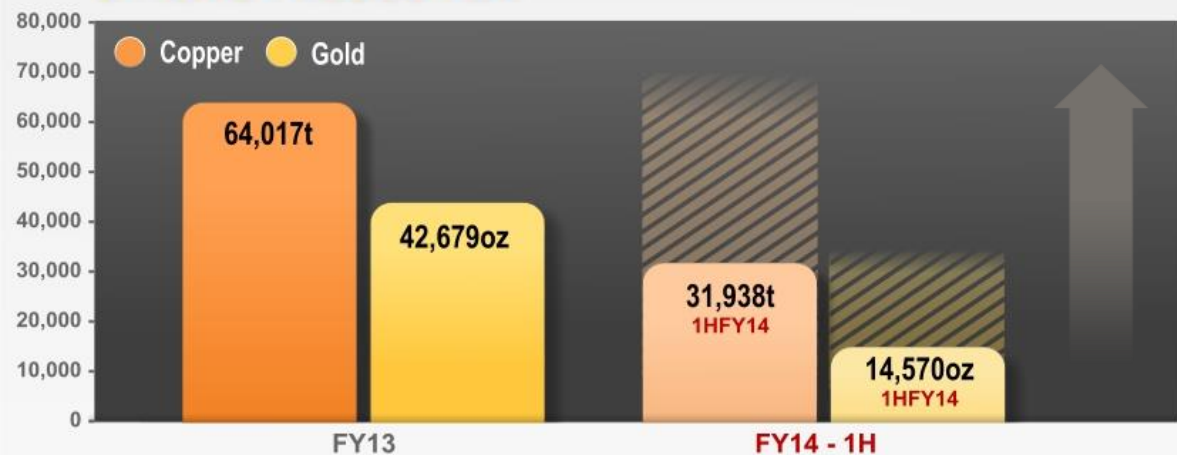
 DeGrussa Copper Mine



# Strong Production, Revenue and Cash Flow

Key production and financial metrics

## STRONG PRODUCTION



## SALES REVENUE



## OPERATING CASHFLOW



## NET DEBT



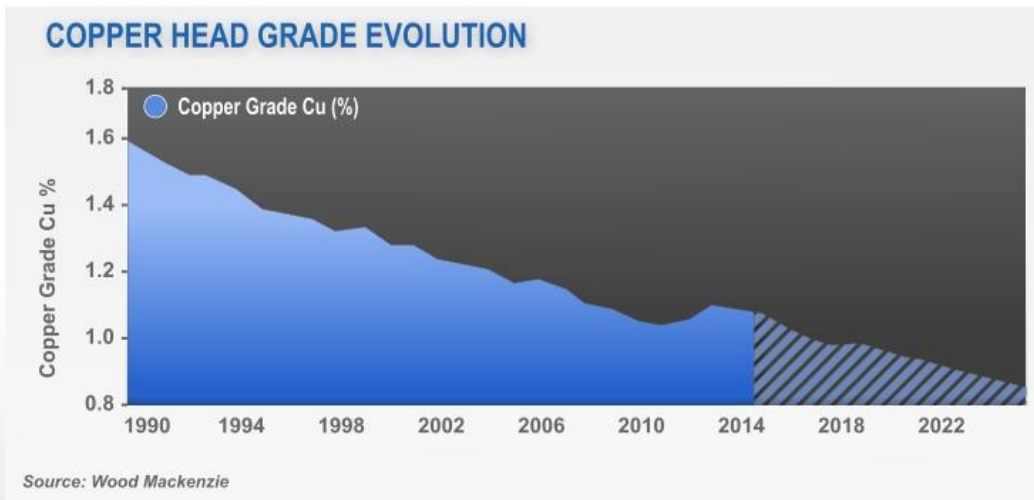
DeGrussa is a high-margin operation with cash margins of ~50%

# Copper: A Commodity with Strong Market Fundamentals

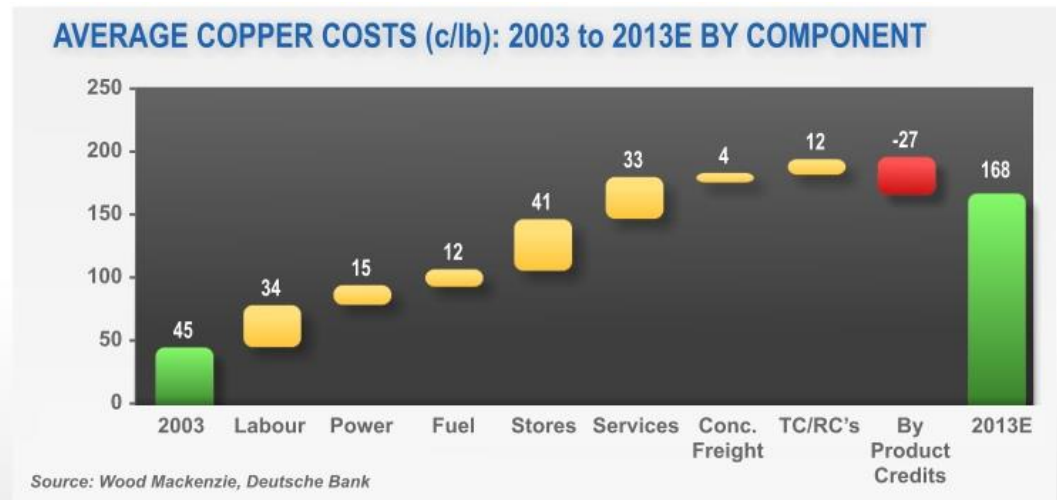
Strong demand, falling mine grades and rising costs mean that low-cost producers are in a very strong position

- Improvement in physical market balance in 2013 despite 8% drop in average price
- Supply/demand fundamentals remain robust: global consumption increasing at 3.5% per annum
- Supply side disruptions and mine delays likely to limit surpluses over the next few years
- Global copper mine head grades forecast to fall by a further 11% over the next four years
- Average C1 cash costs have risen by 270% in the past 10 years (post by-product credits) to ~US\$1.68/lb:
- **Low-cost, high-margin producers like DeGrussa with low cash costs of around ~US\$1.15/lb for FY2014 are in a strong position**

Average global mined head grades continue to fall



Cash operating costs continue to rise across the industry

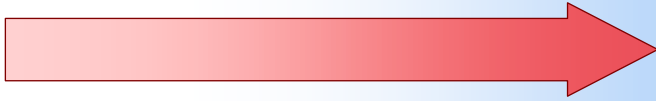


# Key Pillars for Growth

Strong production and cash flow: outstanding organic growth opportunity in emerging VMS field



## Strong Operations – Low Cost, High Margin



- 100%-owned DeGrussa Copper-Gold Mine
- 1.5Mtpa underground Mine and Concentrator

## Outstanding Organic Growth Potential



- Highly prospective VMS mine corridor – 65km strike length
- 725km<sup>2</sup> Greater Doolgunna Project including 100%-owned Doolgunna Project (400km<sup>2</sup>) and Joint Venture with Talisman Mining (earning 70% of Springfield/Halloween Projects – 324km<sup>2</sup>)
- JV with Ventnor Resources (Thaduna/Green Dragon Project)

## Business Development

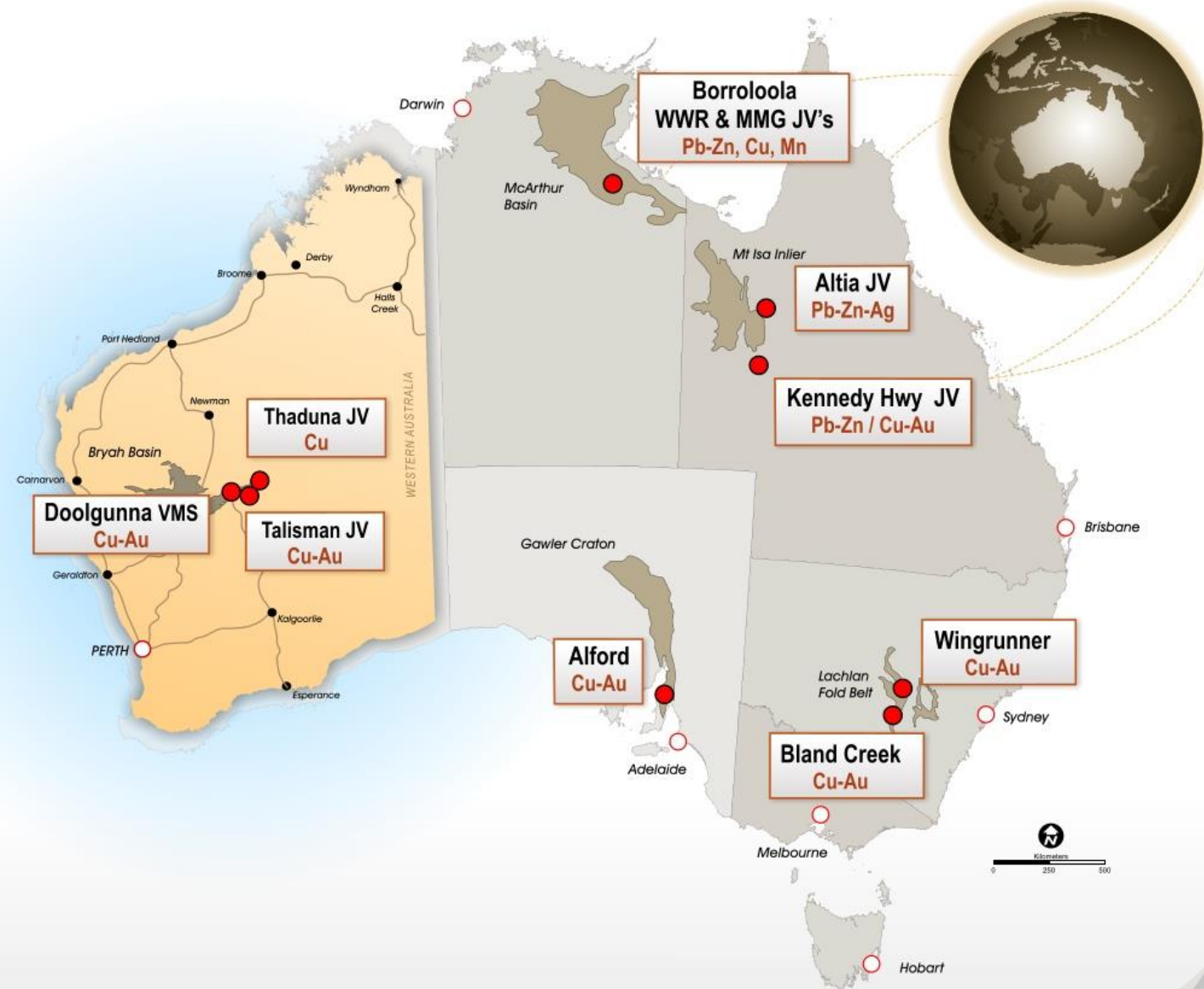


- Portfolio of farm-in joint ventures around Australia
- Focus on prospective mineral provinces with potential for world-class discoveries
- Active business development program targeting quality assets globally

# Overview of Key Assets

Exposure to prospective mineral provinces: focus on Tier One project opportunities

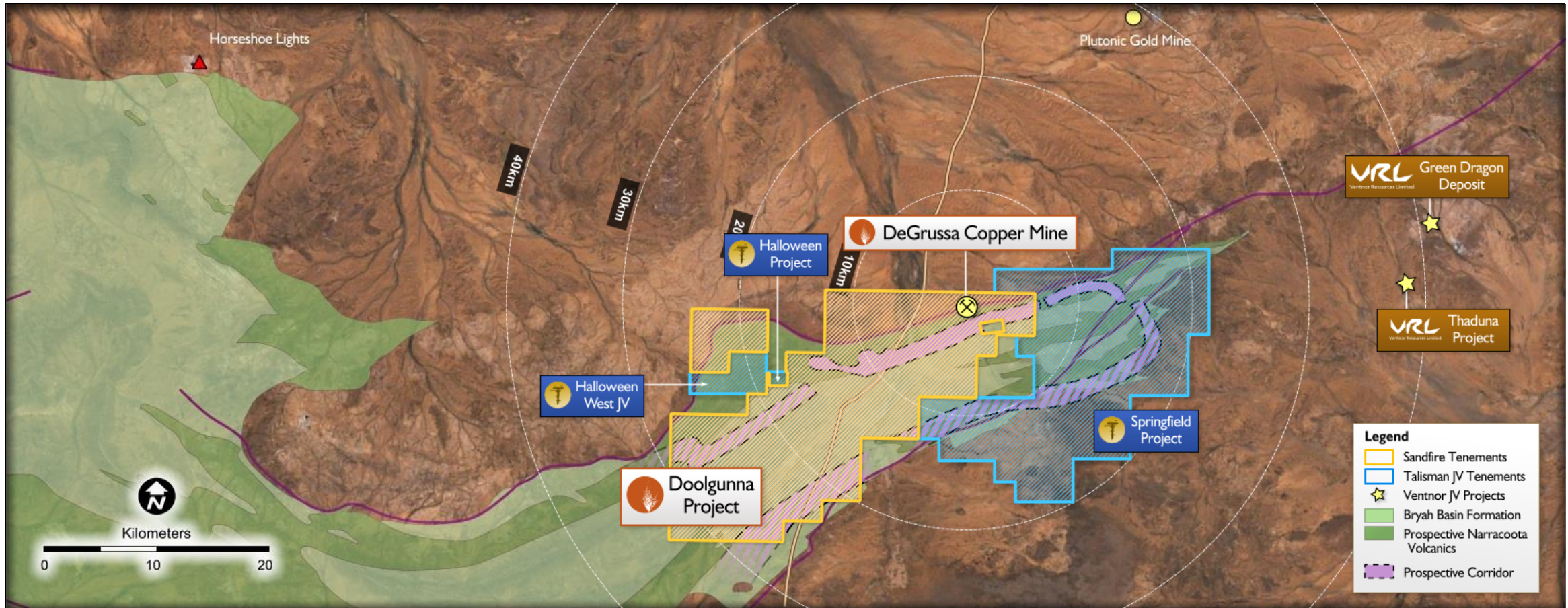
- Focus on high-grade, high margin resource assets
- Strong skill-set and capabilities in open pit and underground operations
- Dominant strategic position in WA's Bryah Basin – emerging VMS province
- Portfolio of high-leverage exploration joint ventures in Australia's major mineral provinces:
  - Gawler Craton (South Australia)
  - Lachlan Fold Belt (NSW)
  - McArthur Basin (NT)
  - Mt Isa-Cloncurry region (North Qld)





# Sandfire – Dominant Position in an Emerging VMS Province

Consolidating a strong position in Western Australia's emerging Bryah Basin VMS copper-gold province



- Only operating base metals processing plant in the region (1.5Mtpa DeGrussa Concentrator)
- Outstanding organic growth potential – extensive 65km strike length of prospective VMS horizon
- Recently expanded strategic footprint via Talisman and Ventnor Joint Ventures



# Sandfire – DeGrussa Copper Mine

A premier copper-gold mine producing strong and consistent operating cash flows



## DeGrussa Project – Key Facts:

### Mining:

Underground mine (long-hole open stoping)

### Underground mine plan:

10.5Mt @ 4.9% Cu and 1.8g/t Au for 512,000t Cu, 597,000oz gold as at 31 March 2013

### Mine Life:

~7 years

### Processing:

1.5Mtpa concentrator

### Product:

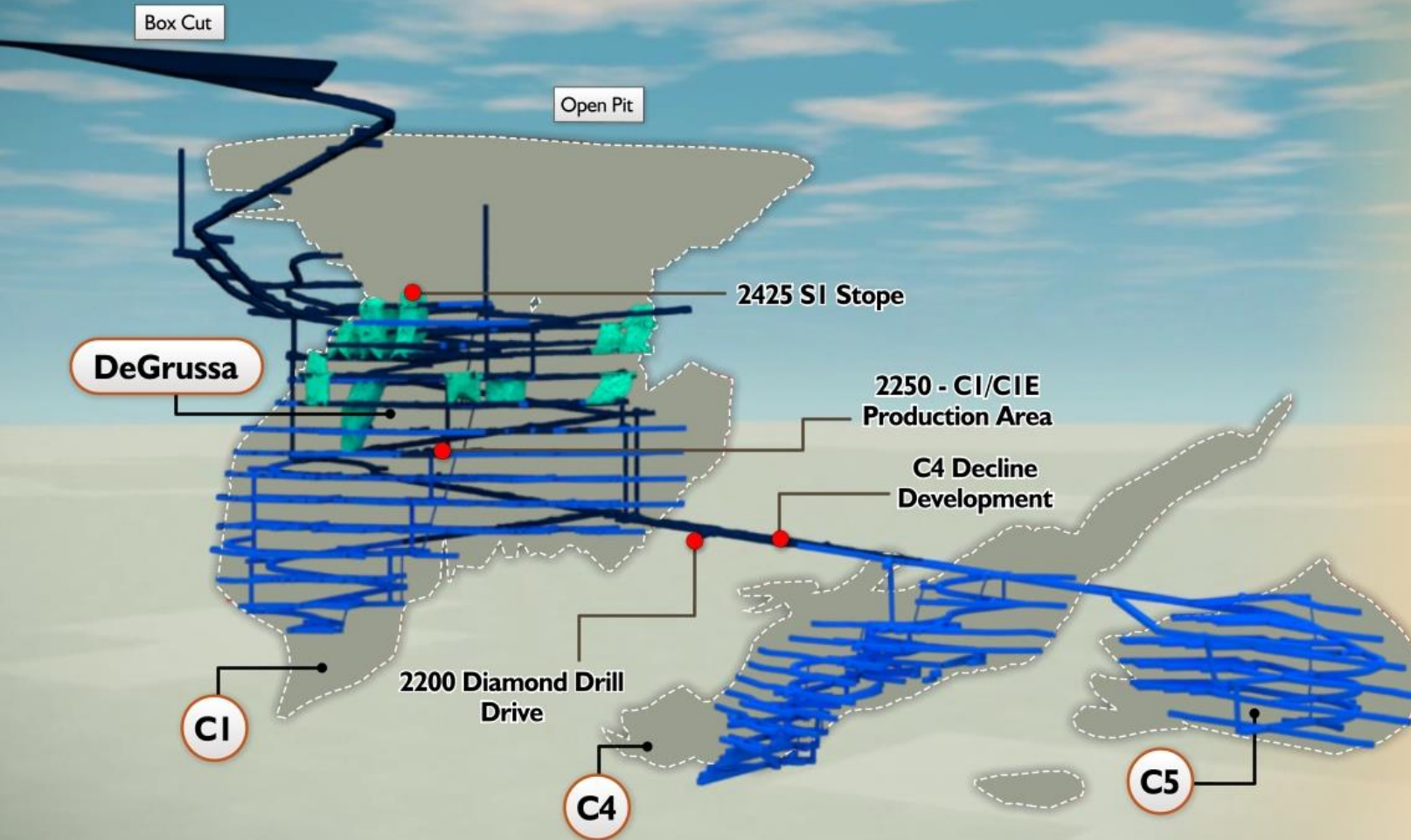
High quality concentrate grading 25% Cu

**Typical shipment of copper concentrate = 10,000t grading 25% Cu, worth ~A\$19M**



# The Engine Room – DeGrussa Underground Mine

Efficient underground mining operation delivering ~1.5Mtpa of high-grade sulphide ore



- Steady-state 1.5Mtpa mining rate – long-hole open stoping with paste-fill
- +17km of underground development completed to date
- New C1 and C4 declines advanced +360m from Evans Decline
- Provides access to C4 and C5 orebodies to ensure stable, long-term production
- New underground drill drives established to facilitate exploration for extensions and repeats



# Processing and Production

DeGrussa Concentrator operating well with optimisation programs continuing



- Copper recoveries currently averaging 91.5% and head grade in 5.0-5.5% Cu range
- Optimisation underway to further boost copper recovery
- Advanced control systems being implemented – throughput and recoveries being increased
- Reviewing opportunities to increase processing capacity and reduce operating costs

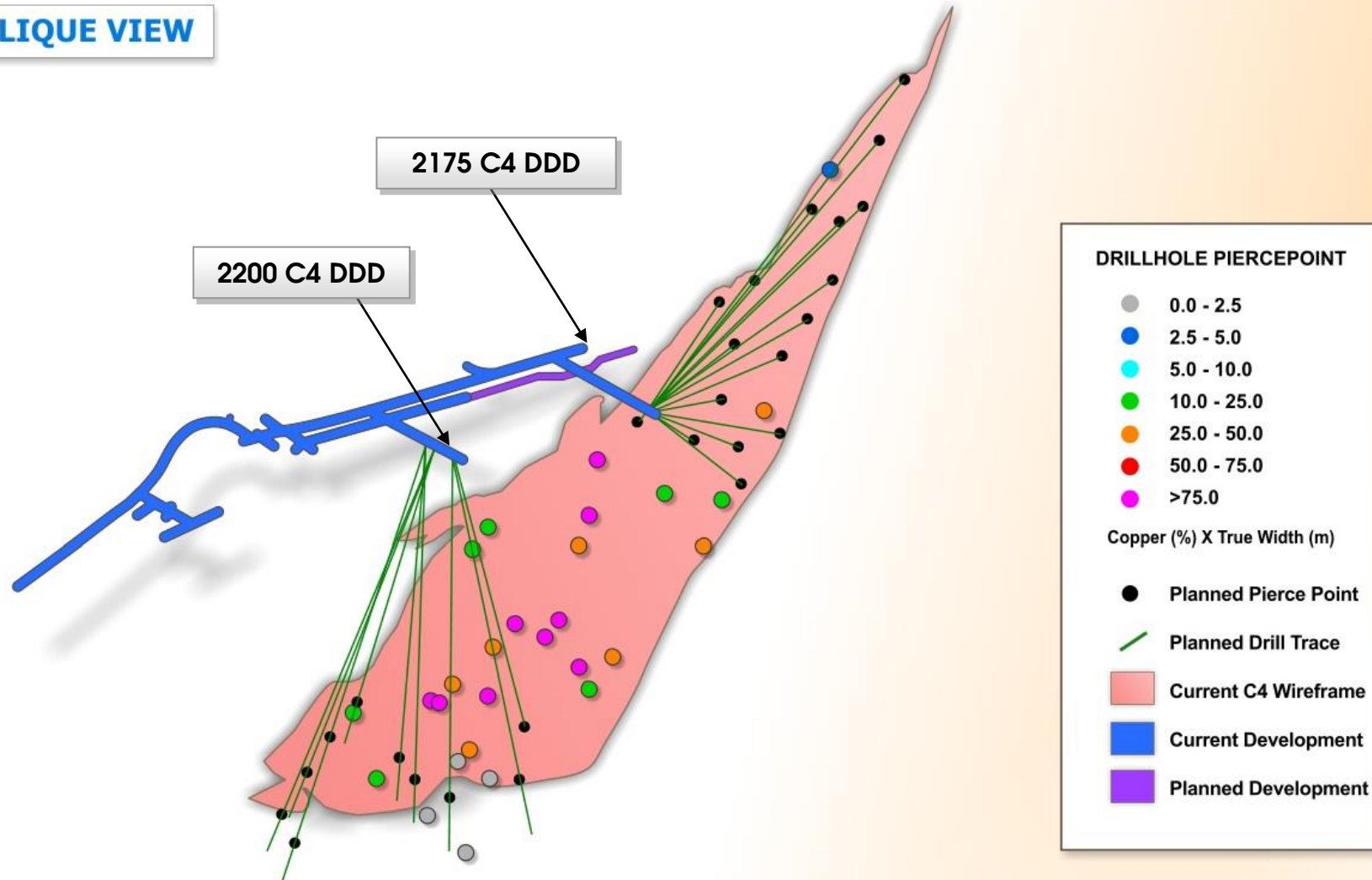


# Near-Mine Exploration: the Next Steps

Underground diamond drilling continuing throughout 2014 targeting resource additions and repeats



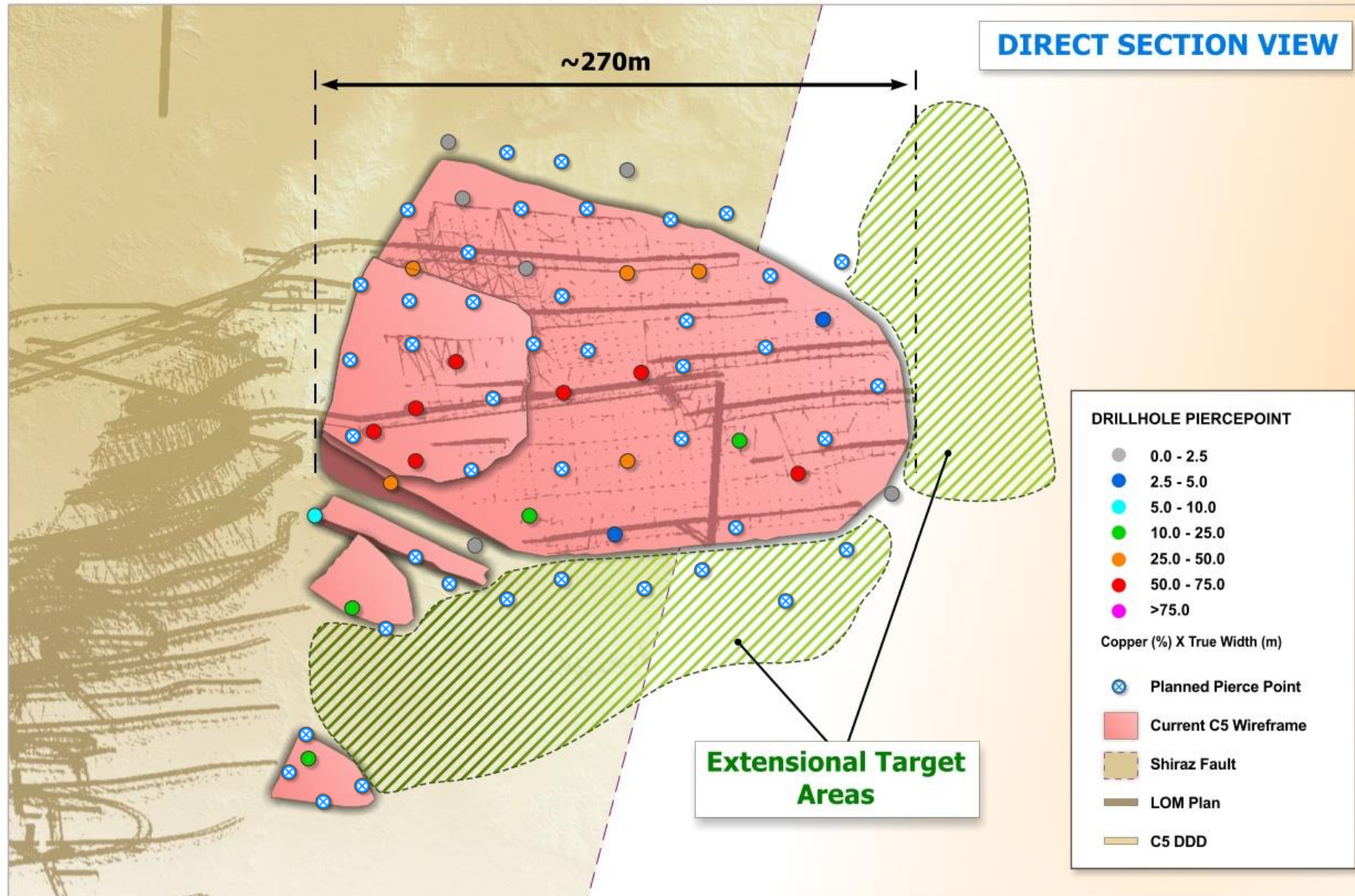
## OBLIQUE VIEW



- Down-plunge extensions of Conductor 4 drilled out from 2200 C4 diamond drill drive and being incorporated in 2014 Mineral Resource update
- Resource definition of eastern portion of Conductor 4 commencing from 2175 C4 diamond drill drive

# Near-Mine Exploration: the Next Steps

Underground diamond drilling continuing throughout 2014 targeting resource additions and repeats

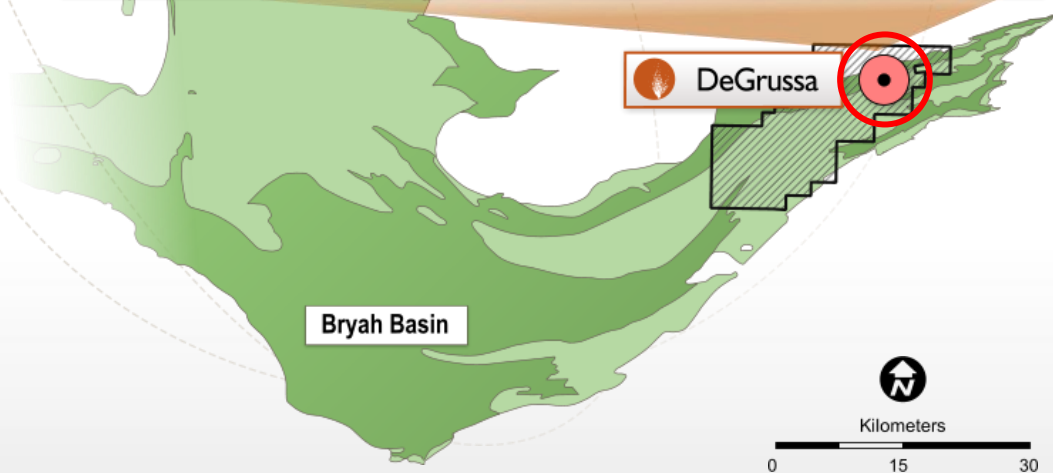
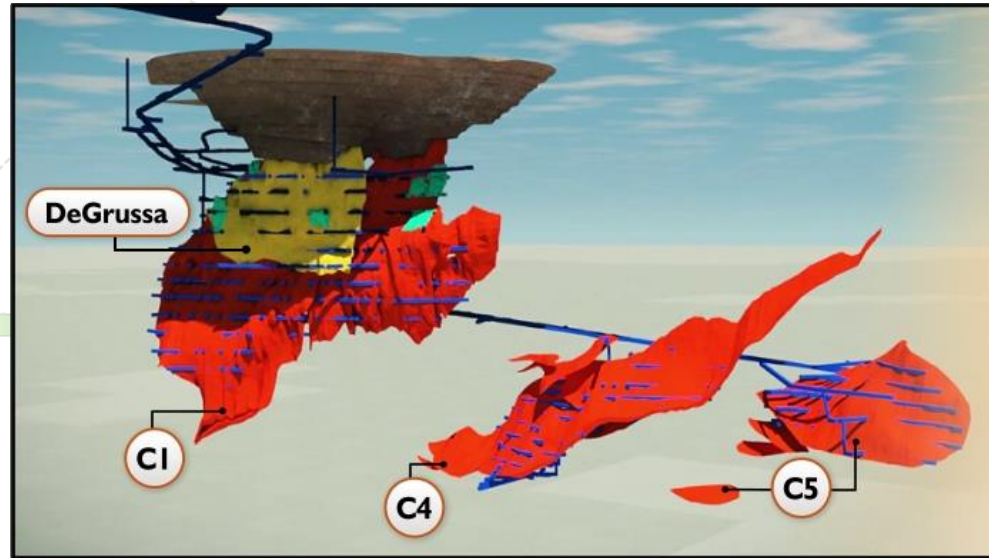


- Conductor 5 resource definition drilling program
- Conductor 5 exploration drilling program
- Drilling to commence in 2H CY2014 when Conductor 5 drill drive is complete



# DeGrussa is a VMS Project

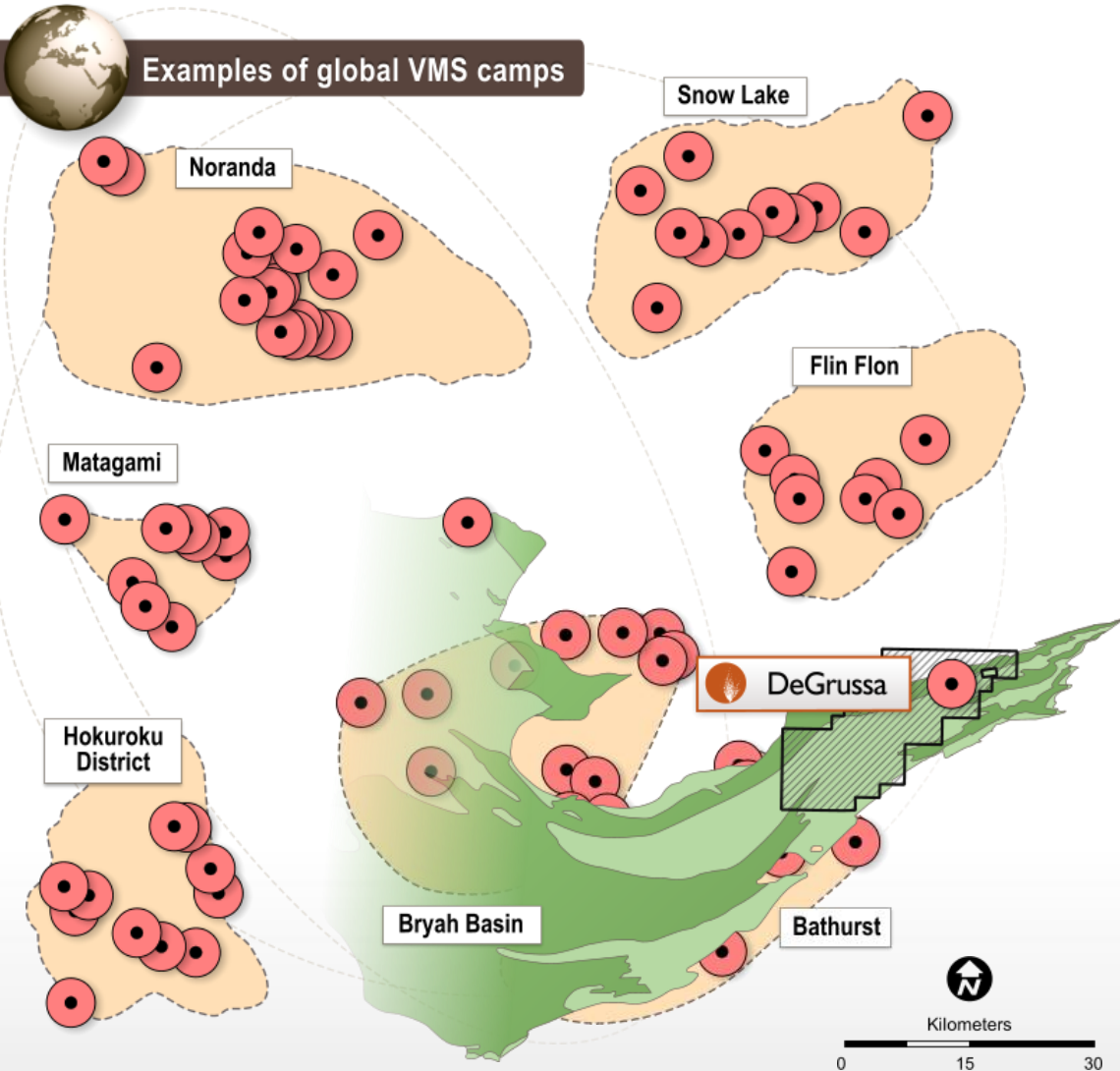
Four lenses of mineralization typical of a VMS deposit cluster



- Classic host sequence of intra-volcanic sediments
- Typical seafloor alteration with regionally extensive litho-geochemical signature
- Classic VMS sulphide textures, including remnant chimney structures, breccias, replacement textures and laminar bedded sulphides
- Sulphide mound structures with abrupt margins from sulphides to barren country rock
- Metal ratios and zonation representative of VMS deposits
- Strong VMS-style structural artefacts

# Global VMS Camps

Major resources of global base metal production, generally from multiple deposits



- Most significant VMS deposits occur in clusters that define major mining camps – major source of global copper, zinc, lead production, eg:
  - Bathurst (New Brunswick) – 229.8Mt @ 0.46% Cu, 7.66% Zn, 3.01% Pb, 91g/t Ag, 0.46g/t Au (camp discovered 1952)
  - Kidd Creek (Abitibi, Ontario) – 149.3Mt @ 2.89% Cu, 6.36% Zn, 0.22% Pb, 92g/t Ag, 0.05g/t Au (deposit discovered 1963)
  - Flin Flon (Manitoba) – 154Mt contained over 27 deposits, primarily copper, zinc and gold (camp discovered 1922)
  - Golden Grove (WA) – 65Mt @ 2% Cu, 3.5% Zn, 35g/t Ag, 0.7g/t Au (discovered 1971)
  - **DeGrussa (WA) – 14.33Mt @ 4.5% Cu, 1.6g/t Au (deposit discovered 2009)**
- No one finds a big VMS – they get big



# Potential of Global VMS Camps

<sup>1</sup> D. F. Sangster, Quantitative Characteristics of Volcanogenic Massive Sulphide Deposits, Geological Survey of Canada (Ottawa) (1980)



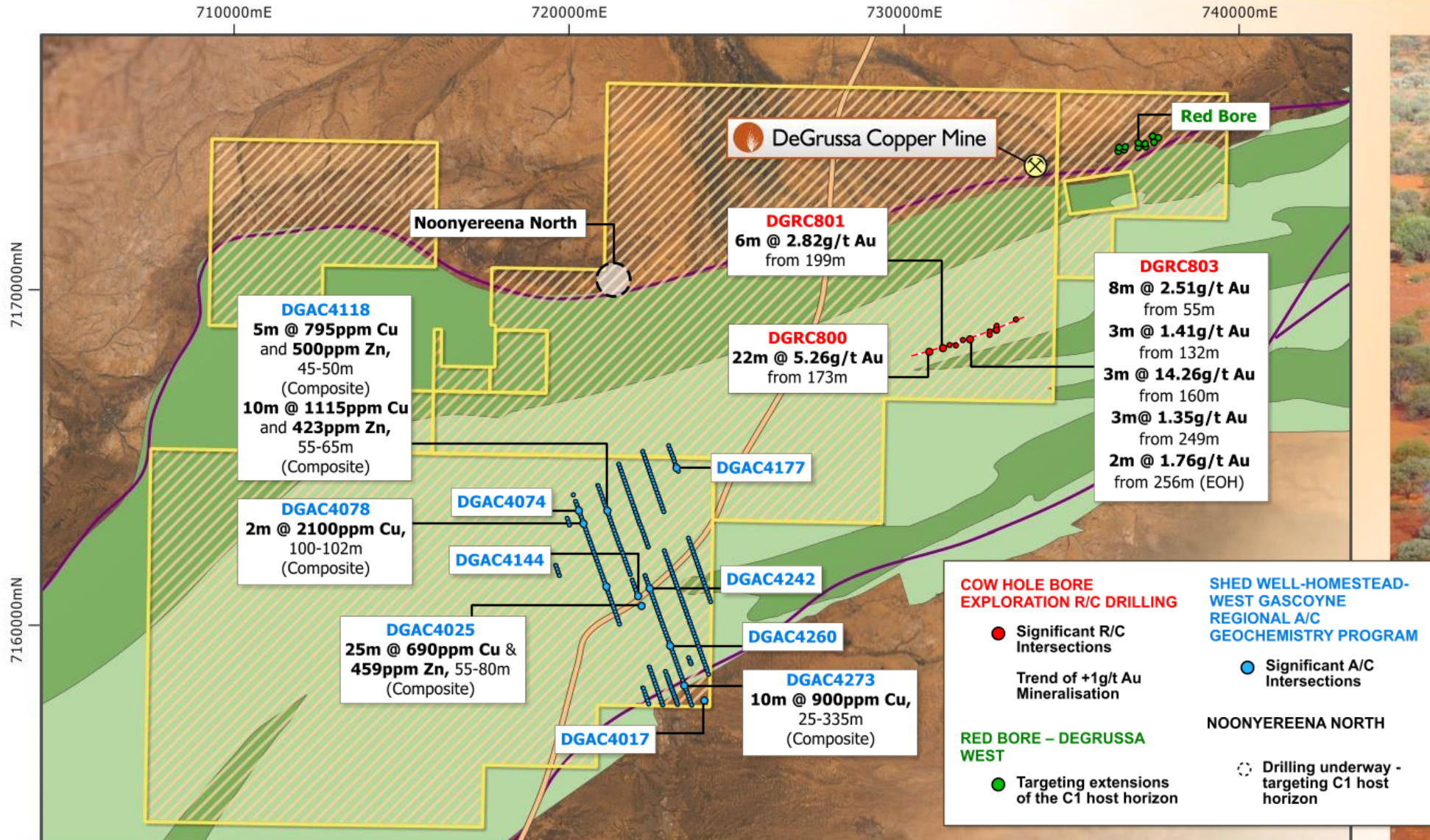
Volcanic District	No. of Deposits	Million Tonnes Ore	Million Tonnes Metal	Area of District (km <sup>2</sup> )
Hokuroku, Japan	18	90	6.2	720
Bathurst No1, Canada	12	180	15.1	880
Bathurst No2, Canada	15	98	5.8	1150
Flin Flon, Canada	10	65	4.3	560
Snow Lake, Canada	10	19	1.4	840
Noranda, Canada	20	204	4.7	1550
Matagami, Canada	8	34	3.0	230
Manitouwadge, Canada	4	56	30	-
Average of all Data	12	94	5.4	

- D. F. Sangster from the Geological Survey of Canada conducted a study on eight precedent VMS districts in Canada and Japan. His findings include<sup>1</sup>:
  - The VMS districts studied contain between 4 and 20 deposits, with an average of 12 deposits
  - The average total base metal content per district is 5.4 million tonnes
  - In order of size, the largest deposit in each district contains, on average, 65% of the total metal and the second largest about 13%



# Doolgunna VMS Field – The Growing Evidence

Anomalous aircore drilling results at Cow Hole Bore, Shed Well and Gascoyne West including RC drill locations



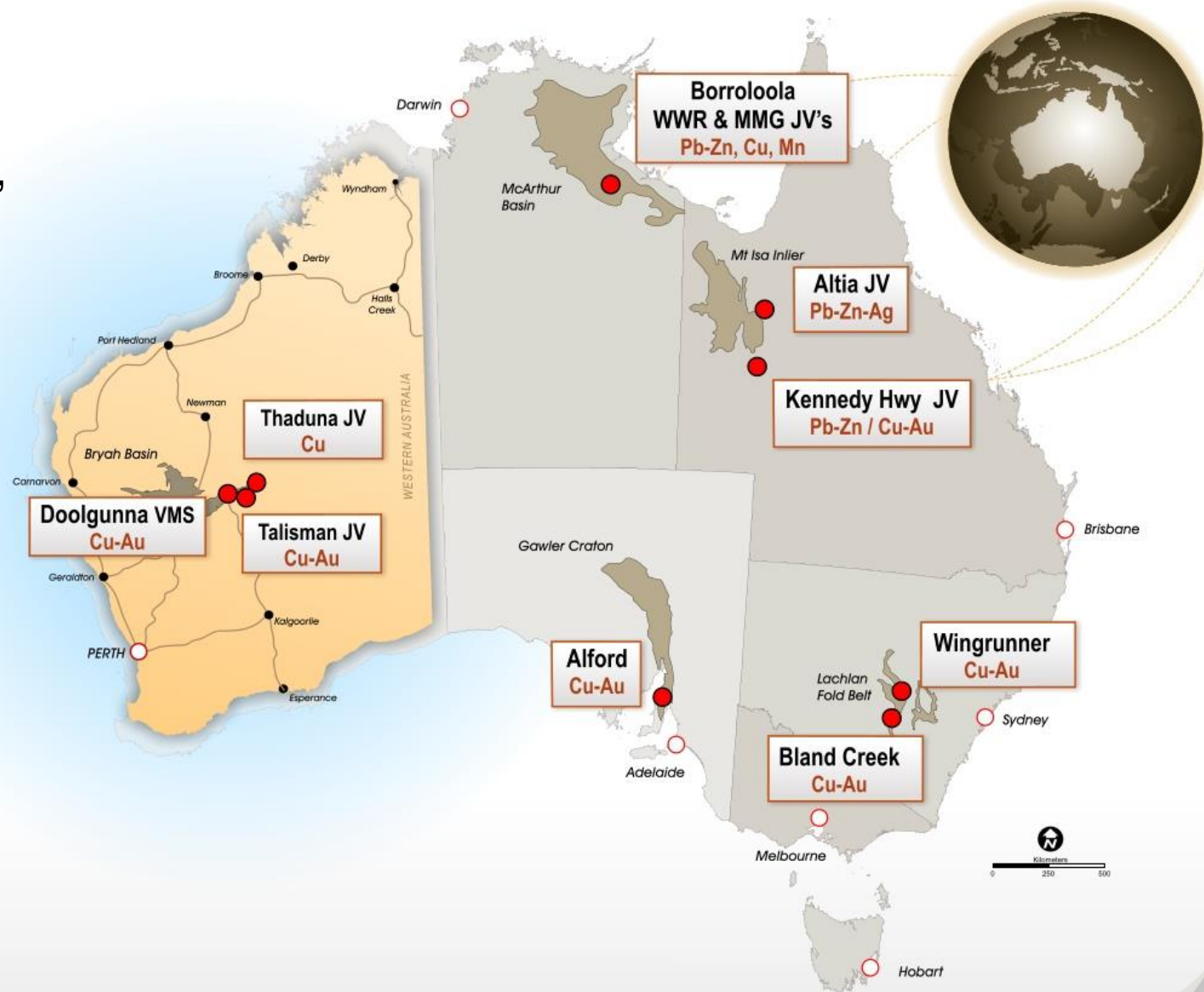
Intercepts as announced in Sandfire's December 2013 Quarterly Activities Report, dated 21 January 2014.



# Australian Regional Exploration

Extensive portfolio with a focus on discovering Tier One deposits

- Reviewing high-quality, asset-driven exploration opportunities in Australia
- Focus outside Doolgunna is on IOCG copper-gold, porphyry-style copper-gold and lead-zinc-silver
- \$10M annual exploration budget Australia-wide
- Current activities:
  - **Kennedy Highway JV** (Queensland) – targeting structurally controlled IOCG copper-gold
  - **Altia JV** (Queensland) – targeting world-class lead-zinc-silver and copper-gold deposits
  - **Bland Creek JV** (NSW) – targeting porphyry copper-gold
  - **Alford JV** (SA) – targeting Prominent Hill-style copper-gold
  - **Borroloola** (NT) – targeting Sedex Pb-Zn-Ag, iron ore and manganese, JV's with Cliffs Natural Resources, MMG Exploration



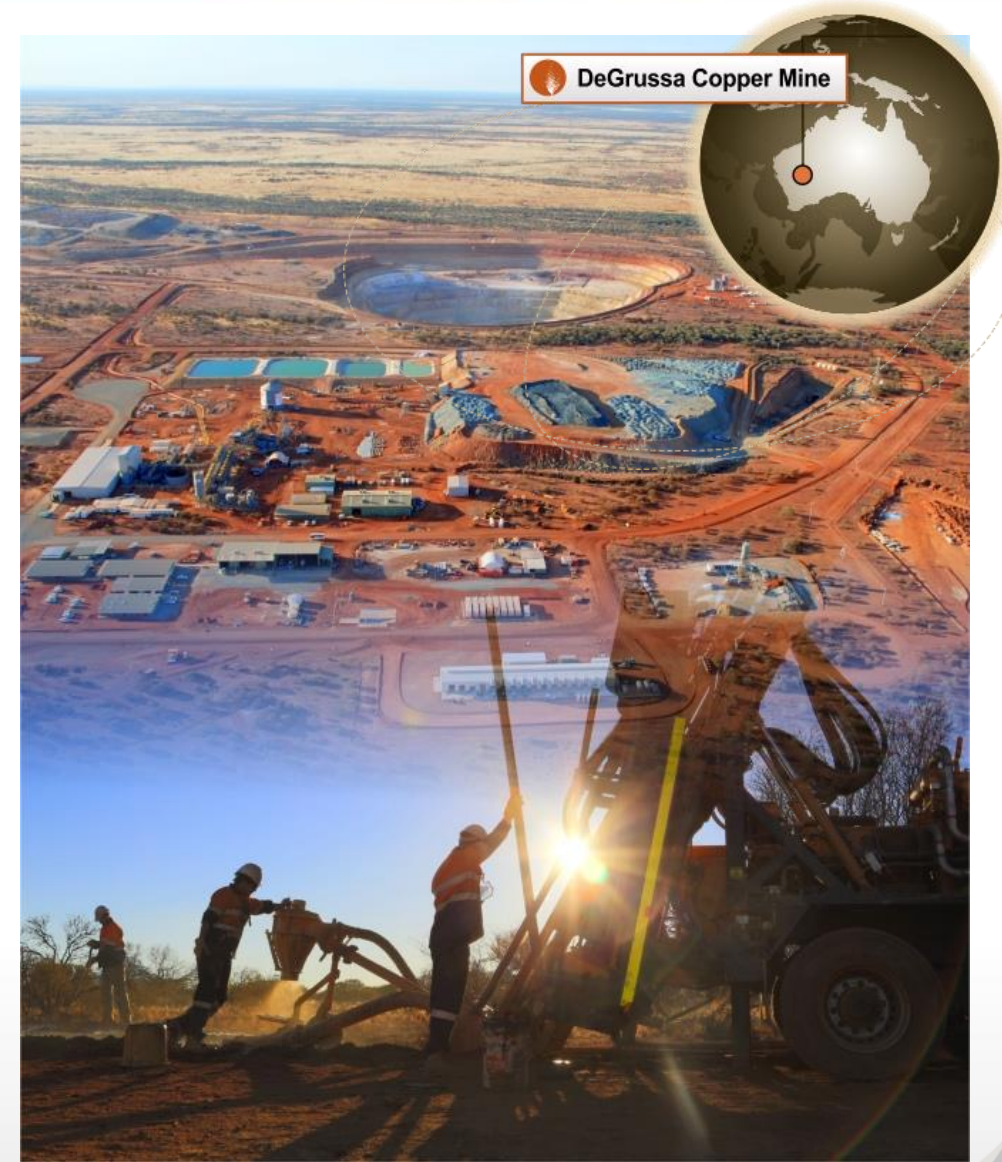
# Summary

A quality Australian mining company focused on shareholder returns

- A focused copper-gold company with a proven track record
- Low-cost, high margin production and cash flow
- Rapidly repaying debt: strong surplus operating cash flows
- Outstanding organic growth potential
- Potential game-changers from near-mine and regional exploration
- Strong portfolio of exploration projects



**A premier Australian copper-gold producer**







# SANDFIRE RESOURCES NL

ASX Code: SFR



A premier high grade copper-gold producer for global investors

## March 2014 Global Investor Presentation

Karl Simich, Managing Director & CEO

# Appendix 1: Life-of-Mine Plan

Mine Plan, Mineral Resource and Ore Reserve



As at 31 March 2013	Mine Plan	Mineral Resource	Ore Reserve
<b>Tonnes (Mt)</b>	<b>10.5</b>	<b>10.2</b>	<b>7.9</b>
- DeGrussa	1.6	1.4	1.6
- Conductor 1	5.5	5.2	5.3
- Conductor 4	1.9	2.1	1.0
- Conductor 5	1.5	1.4	-
<b>Cu grade (%)</b>	<b>4.9</b>	<b>5.7</b>	<b>5.0</b>
<b>Gold grade (g/t)</b>	<b>1.8</b>	<b>2.1</b>	<b>1.7</b>
<b>Contained copper (t)</b>	<b>512,000</b>	<b>586,000</b>	<b>393,000</b>
<b>Contained gold (oz)</b>	<b>597,000</b>	<b>688,000</b>	<b>434,000</b>

- DeGrussa Ore Reserve updated based on depletion to date, but excluding additional Inferred Mineral Resources in Conductor 4 and 5 (incorporated in Mine Plan due to geological continuity and high-grade nature of deposits)
- Development of Conductor 4/5 Decline underway: new drilling positions to facilitate upgrading these Inferred Resources to Indicated category for conversion to Ore Reserves



# Appendix 2: DeGrussa Ore Reserves and Mineral Resource



DeGrussa Mine – Underground As at March 2013		Ore Reserve					Mineral Resource					
Deposit	Reserve Category	Tonnes (Mt)	Grade (% Cu)	Grade (g/t Au)	Contained Copper (t)	Contained Gold (oz)	Reserve Category	Tonnes (Mt)	Grade (% Cu)	Grade (g/t Au)	Contained Copper (t)	Contained Gold (oz)
DeGrussa	Proved	1.2	5.7	1.8	67,000	66,000	Measured	1.0	7.4	2.3	73,000	72,000
	Probable	0.4	8.2	2.1	32,000	26,000	Indicated	0.4	9.4	2.4	34,000	28,000
Conductor 1	Proved	1.4	5.4	1.8	76,000	82,000	Measured	1.3	6.5	2.2	86,000	92,000
	Probable	3.9	4.4	1.7	174,000	210,000	Indicated	3.7	5.1	1.9	190,000	123,000
							Inferred	0.2	4.6	1.8	11,000	14,000
Conductor 4	Probable	1.0	4.3	1.5	43,000	47,000	Indicated	1.0	5.3	1.8	54,000	59,000
							Inferred	1.1	4.4	1.7	48,000	60,000
Conductor 4	Probable	-	-	-	-	-	Inferred	1.4	6.2	2.8	88,000	129,000
Stockpiles	Proved	<0.1	7.9	3.0	2,000	3,000	Measured	<0.1	7.9	3.0	2,000	3,000
	Proved	2.6	5.6	1.8	145,000	151,000	Measured	2.3	6.9	2.2	161,000	167,000
	Probable	5.3	4.7	1.7	248,000	282,000	Indicated	5.1	5.4	1.9	278,000	318,000
							Inferred	2.8	5.3	2.3	147,000	203,000
TOTAL		7.9	5.0	1.7	393,000	434,000	TOTAL	10.2	5.7	2.1	586,000	688,000

DeGrussa Mine – Open Pit As at March 2013		Ore Reserve					Mineral Resource					
Conductor 1	Probable	-	-	-	-	-	Indicated	0.1	3.9	1.8	2,000	3,000
Stockpiles	Proved	3.1	1.5	1.1	45,000	104,000	Measured	3.1	1.5	1.1	45,000	104,000
	Proved	3.1	1.5	1.1	45,000	104,000	Measured	3.1	1.5	1.1	45,000	104,000
	Probable	-	-	-	-	-	Indicated	-	-	-	-	-
							Inferred	-	-	-	-	-
TOTAL		3.1	1.5	1.1	45,000	104,000	TOTAL	3.1	1.5	1.1	48,000	108,000

# Appendix 2: DeGrussa Ore Reserves and Mineral Resource (continued.....)



DeGrussa Mine – TOTAL As at March 2013												
Deposit	Reserve Category	Tonnes (Mt)	Grade (% Cu)	Ore Reserve			Reserve Category	Tonnes (Mt)	Grade (% Cu)	Mineral Resource		
				Grade (g/t Au)	Contained Copper (t)	Contained Gold (oz)				Grade (g/t Au)	Contained Copper (t)	Contained Gold (oz)
DeGrussa	Proved	1.2	5.7	1.8	67,000	66,000	Measured	1.0	7.4	2.3	74,000	72,000
	Probable	0.4	8.2	2.1	32,000	26,000	Indicated	0.4	9.4	2.4	34,000	28,000
Conductor 1	Proved	1.4	5.4	1.8	76,000	82,000	Measured	1.3	6.5	2.2	86,000	92,000
	Probable	3.9	4.4	1.7	174,000	210,000	Indicated	3.8	5.1	1.9	192,000	234,000
							Inferred	0.3	4.6	1.8	12,000	15,000
Conductor 4	Probable	1.0	4.3	1.5	43,000	47,000	Indicated	1.0	5.3	1.8	54,000	59,000
							Inferred	1.1	4.4	1.7	48,000	60,000
Conductor 4		-	-	-	-	-	Inferred	1.4	6.2	2.8	88,000	129,000
Stockpiles	Proved	3.1	1.5	1.1	47,000	107,000	Measured	3.1	1.5	1.1	47,000	107,000
	Proved	5.7	3.4	1.4	190,000	256,000	Measured	5.4	3.8	1.6	206,000	271,000
	Probable	5.3	4.7	1.7	248,000	282,000	Indicated	5.2	5.4	1.9	280,000	321,000
							Inferred	2.8	5.3	2.3	148,000	203,000
TOTAL		11.0	4.0	1.5	439,000	538,000	TOTAL	13.4	4.7	1.9	634,000	795,000

Note: DeGrussa Resources and Reserves as announced in Sandfire's ASX Announcement – “DeGrussa Mine Life Extension and Ore Reserve Update”, 18 July 2013



# Appendix: Competent Person's Statements



## Competent Person's Statement – Mineral Resources and Open Pit Ore Reserves

- The information in this report that relates to Mineral Resources and Open Pit Ore Reserves is based on information compiled by Mr. Ekow Taylor who is a Member of The Australasian Institute of Mining and Metallurgy. Mr. Taylor is a permanent employee of Sandfire Resources and has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Taylor consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## Competent Person's Statement – Underground Ore Reserves

- The information in this report that relates to Underground Ore Resources is based on information compiled by Mr Shane McLeay who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr. McLeay is a permanent employee of Entech Pty Ltd and has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr McLeay consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## Competent Person's Statement – Exploration Results

- The information in this report that relates to Exploration Results is based on information compiled by Mr. Shannan Bamforth who is a Member of The Australasian Institute of Mining and Metallurgy. Mr. Bamforth is a permanent employee of Sandfire Resources and has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Bamforth consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## Forward-Looking Statements

- Certain statements made during or in connection with this statement contain or comprise certain forward-looking statements regarding Sandfire's Mineral Resources and Reserves, exploration operations, project development operations, production rates, life of mine, projected cash flow, capital expenditure, operating costs and other economic performance and financial condition as well as general market outlook. Although Sandfire believes that the expectations reflected in such forward-looking statements are reasonable, such expectations are only predictions and are subject to inherent risks and uncertainties which could cause actual values, results, performance or achievements to differ materially from those expressed, implied or projected in any forward looking statements and no assurance can be given that such expectations will prove to have been correct. Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in economic and market conditions, delays or changes in project development, success of business and operating initiatives, changes in the regulatory environment and other government actions, fluctuations in metals prices and exchange rates and business and operational risk management. Except for statutory liability which cannot be excluded, each of Sandfire, its officers, employees and advisors expressly disclaim any responsibility for the accuracy or completeness of the material contained in this statement and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this statement or any error or omission. Sandfire undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events other than required by the Corporations Act and ASX Listing Rules. Accordingly you should not place undue reliance on any forward looking statement.

## Exploration and Resource Targets

- Any discussion in relation to the potential quantity and grade of Exploration Targets is only conceptual in nature. While Sandfire is confident that it will report additional JORC compliant resources for the DeGrussa Project, there has been insufficient exploration to define mineral resources in addition to the current JORC compliant Mineral Resource inventory and it is uncertain if further exploration will result in the determination of additional JORC compliant Mineral Resources.