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**SANDFIRE RESOURCES NL** ASX Code: SFR

***DeGrussa:  
Building a premier Australian copper-gold mine***

Global Investor Roadshow – June 2011

# Disclaimer and Forward-Looking Statements

## Forward-Looking Statements

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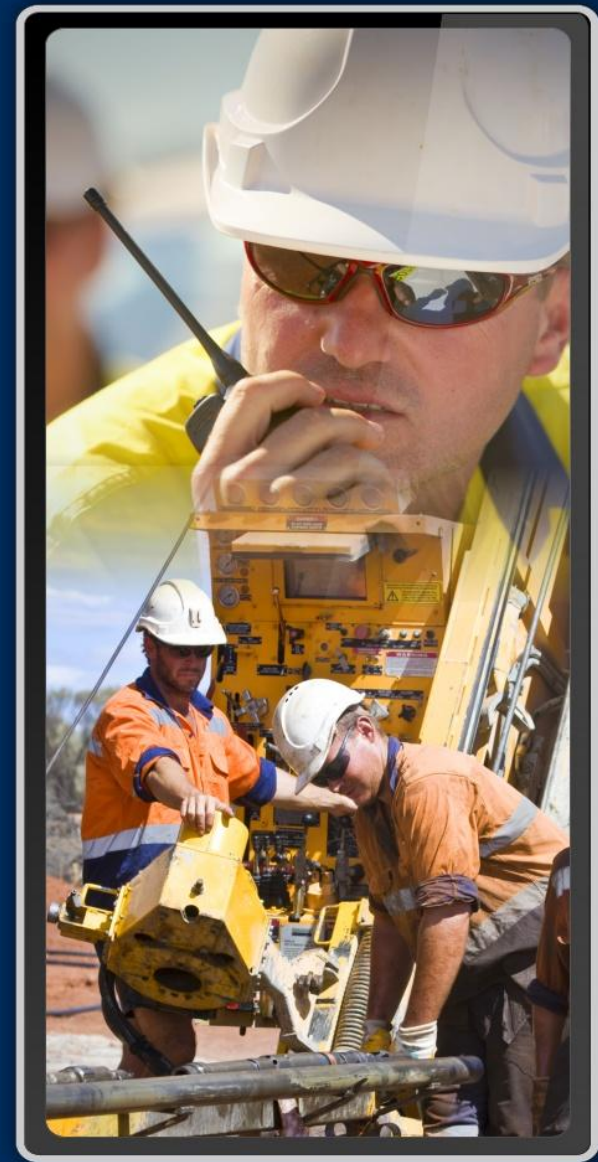
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# Our Vision

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- *To develop and operate our 100%-owned DeGrussa Project as a premier high-grade copper-gold mine*
- *To deliver outstanding returns to our shareholders*
- *To discover the next generation of VMS copper-gold deposits within the greater Doolgunna Project*
- *To unlock the value of our other gold, base metal, manganese and iron ore assets*
- *To maintain the highest standards of safety, integrity and quality at all times*
- *To build a premier Australian mining company*



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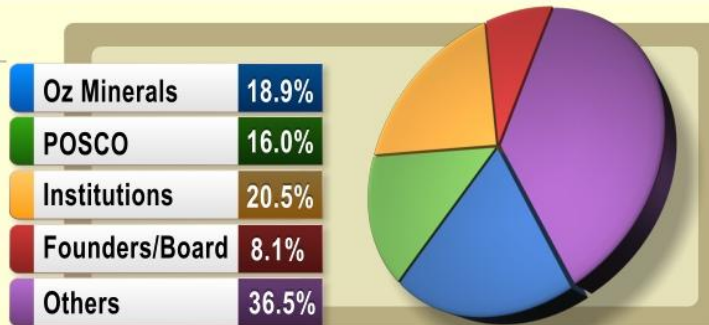


# Corporate Summary

Issued Capital: 148.4M ordinary shares  
11.9M options

Cash (31 May 2011): A\$83.0M

## Major Shareholders



Last Major Funding A\$6.60/A\$7.00 (November 2010)

Current Price A\$7.00

Market Capitalisation ~A\$1 Billion

## Board

**DEREK LA FERLA**

– *Non-executive Chairman*

**KARL SIMICH**

– *Managing Director/CEO*

**W. JOHN EVANS**

– *Executive Technical Director*

**JONGHUN JONG**

– *Non-executive Director*

**ROBERT SCOTT**

– *Non-executive Director*

## Management

**MARTIN REED**

– *Project Manager*

**MATT FITZGERALD**

– *Chief Financial Officer*

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# DeGrussa Project: Countdown to Production

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# From Concept to Cash...

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DeGrussa Copper-Gold Project	
<input type="checkbox"/> Discovered	April 2009
<input type="checkbox"/> Maiden Mineral Resource	February 2010
<input type="checkbox"/> Pre-Feasibility Study, Ore Reserve	March 2011
<input type="checkbox"/> Mine development commenced	April 2011
<input type="checkbox"/> Definitive Feasibility Study	June 2011

- Plant construction commencing shortly
- Project funding well advanced
- Key personnel recruited
- Long-lead items ordered and key contracts awarded



# From Concept to Cash...

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Sandfire - DeGrussa

**DeGrussa Copper-Gold Project**

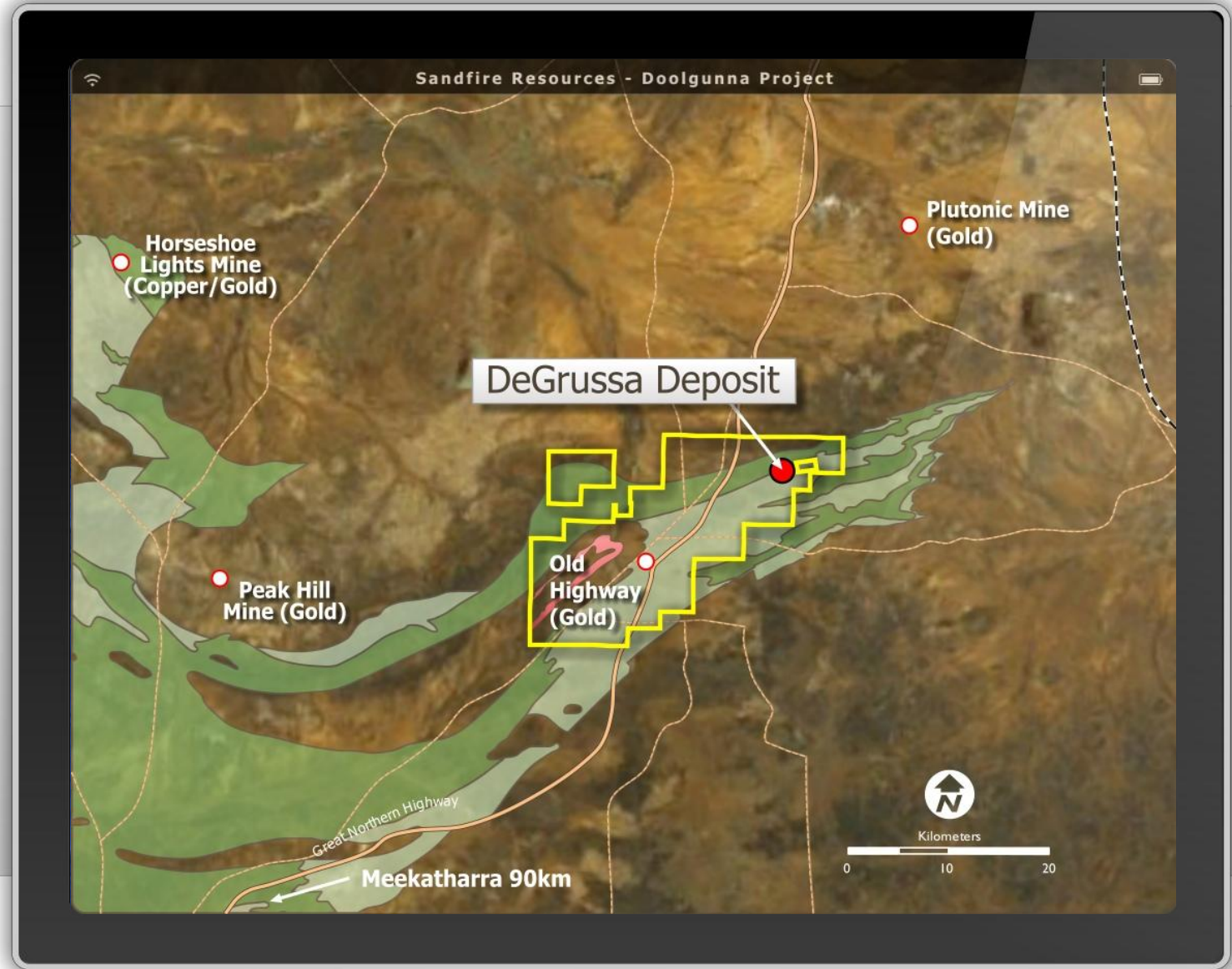
**DFS Outcomes**

<input type="checkbox"/> <b>First Production</b>	Q1 2012 (DSO), Q3 2012 (Conc.)
<input type="checkbox"/> <b>Life-of-mine extraction from Ore Reserves and Mineral Resources discovered to date</b>	10.72Mt @ 5.1% Cu, 1.7g/t Au (541,000t contained copper, 599,000oz contained gold)
	93% Mineral Resource to Ore Reserve conversion – contained metal
<input type="checkbox"/> <b>Production</b>	480,000t payable copper <i>(~77,000tpa in first 3 years)</i> 270,000oz payable gold <i>(36,000oz pa in first 3 years)</i>
<input type="checkbox"/> <b>C1 cash costs (life-of-mine)</b>	US\$1.02/lb
<input type="checkbox"/> <b>Project revenue</b>	A\$4.2 billion
<input type="checkbox"/> <b>Pre-tax project operating cash flow</b>	A\$2.4 billion



# DeGrussa Project – Overview

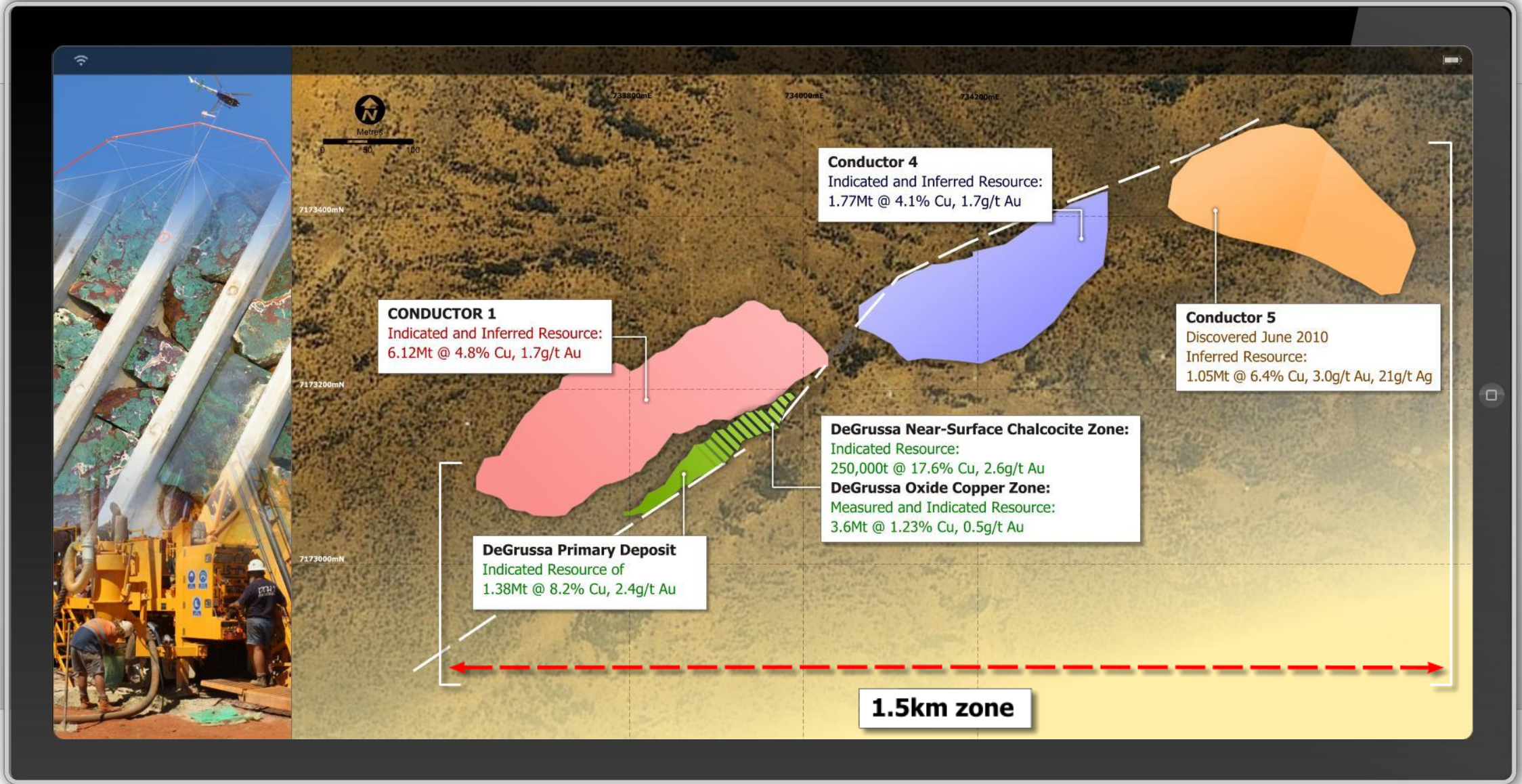
- Located within 400km<sup>2</sup> Doolgunna Project, 900km NE of Perth
- Established WA mining district
- +A\$90M invested to date on resource and project evaluation
- Indigenous access agreements signed and key approvals secured





# 2 Years, +200,000m of Drilling, Four Deposits

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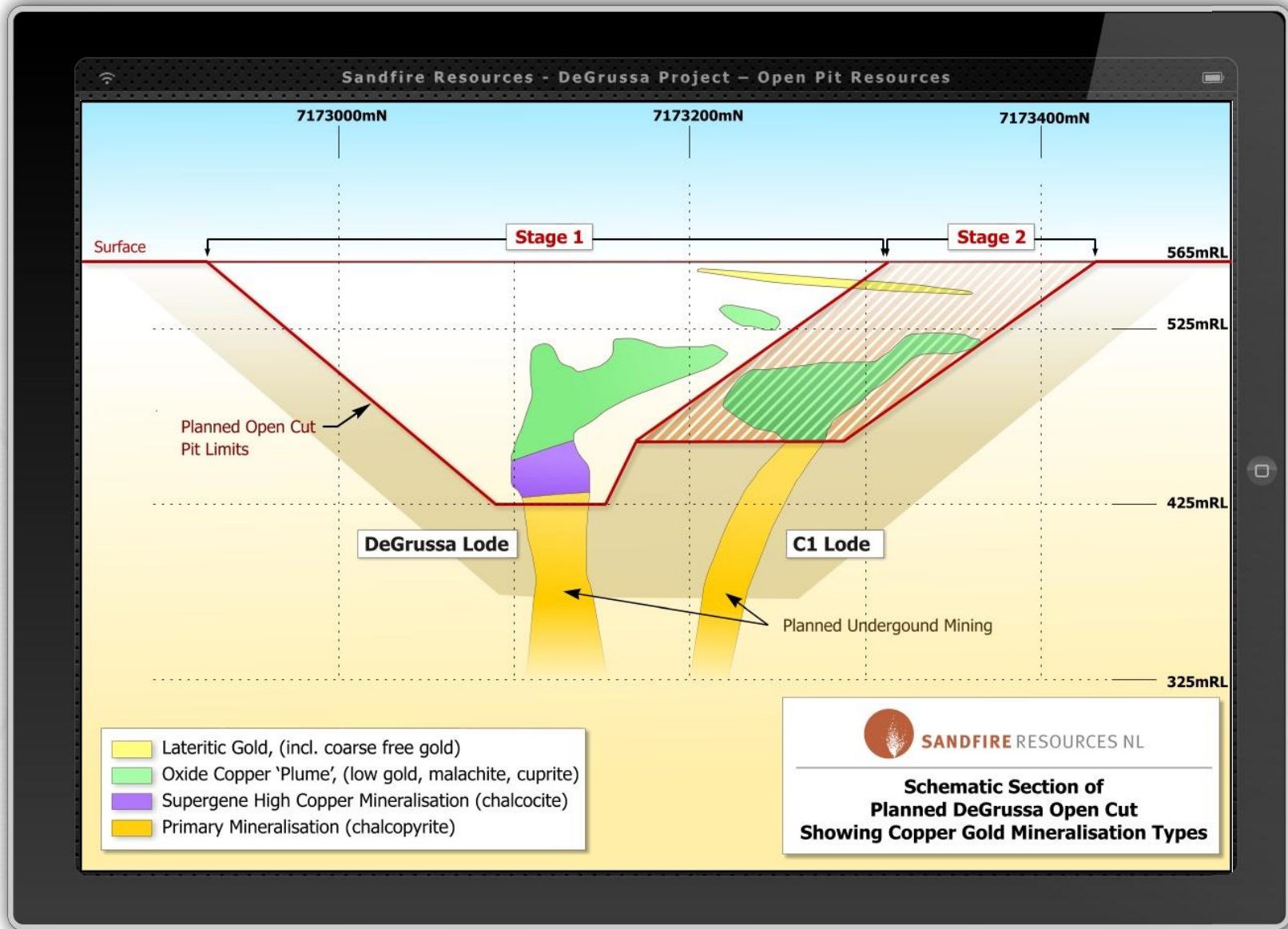
# DeGrussa Project – Open Pit Operations

Early extraction of DSO Ore Reserves:

- 0.14Mt @ 25.6% Cu, 2.5g/t Au
- 37,000t copper, 12,000oz gold (Contained)

Early sulphide copper ore for plant commissioning

Oxide copper resources to be stockpiled for proposed processing



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# DeGrussa Project – Key Parameters

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- Life-of-mine extraction of 10.72Mt @ 5% Cu, 1.7g/t Au (541,000t copper, 599,000oz gold – contained)
- Conventional open pit mining operation (~2 years) and long-term underground mine (initial 7+ year mine life)
- Conventional 1.5Mtpa on-site concentrator:
  - *Crushing, milling, flotation, de-watering and filtration*
  - *Metallurgical recovery 91%*
  - *15-month construction period from June 2011*
- Production of high-grade, high-quality copper concentrate grading 27% Cu:
  - *300,000tpa (FY 2013 – 2015)*
  - *220,000tpa (FY 2016 onwards)*
  - *480,000t of payable copper metal*
  - *270,000oz of payable gold*



# DeGrussa – Financial Evaluation and Price Assumptions

## Life-of-mine (LOM)

	A\$ Billion
Project revenue	4.2
Royalties (5% weighted average)	(0.2)
Operating costs and sustaining capital	(1.6)
<b>Project operating cash flow (pre-tax)</b>	<b>2.4</b>
Pre-production capital expenditure	(0.4)
<b>Project cash flow (pre-tax)</b>	<b>2.0</b>
Project NPV (8% discount rate)	1.3
Project IRR (%)	108

	2013	2014	2015	2016	2017	2018	2019
Copper price (US\$/tonne)	9,136	8,004	7,110	6,576	6,367	6,163	5,879
Copper price (US\$/lb)	4.15	3.63	3.23	2.98	2.89	2.80	2.67
Gold price (US\$/ounce)	1,294	1,252	1,307	1,273	1,166	1,166	1,166
<b>USD/AUD</b>	<b>0.91</b>	<b>0.87</b>	<b>0.84</b>	<b>0.82</b>	<b>0.81</b>	<b>0.81</b>	<b>0.81</b>

### Financial Evaluation

Revenue forecasts were based on a consensus of copper, gold price and foreign exchange forecasts from leading international broking firms, investment banks and leading independent commodity forecasters. The pricing applied in the model is presented in 30 June financial years.



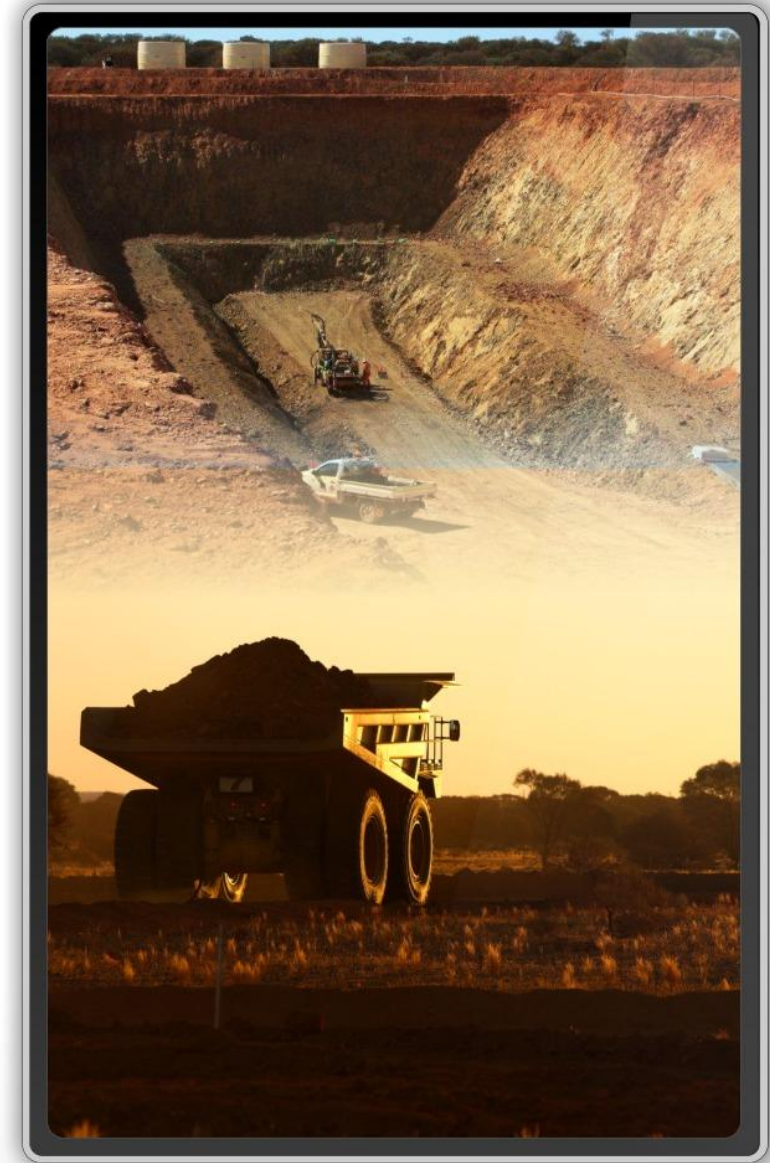
# DeGrussa – Capital and Operating Costs

## Capital Cost Breakdown

	A\$M
Construction (plant, equipment and infrastructure)	267
Open pit mining to access DSO	44
Underground mine development	56
Other pre-production	17
<b>Total pre-production capital</b>	<b>384</b>

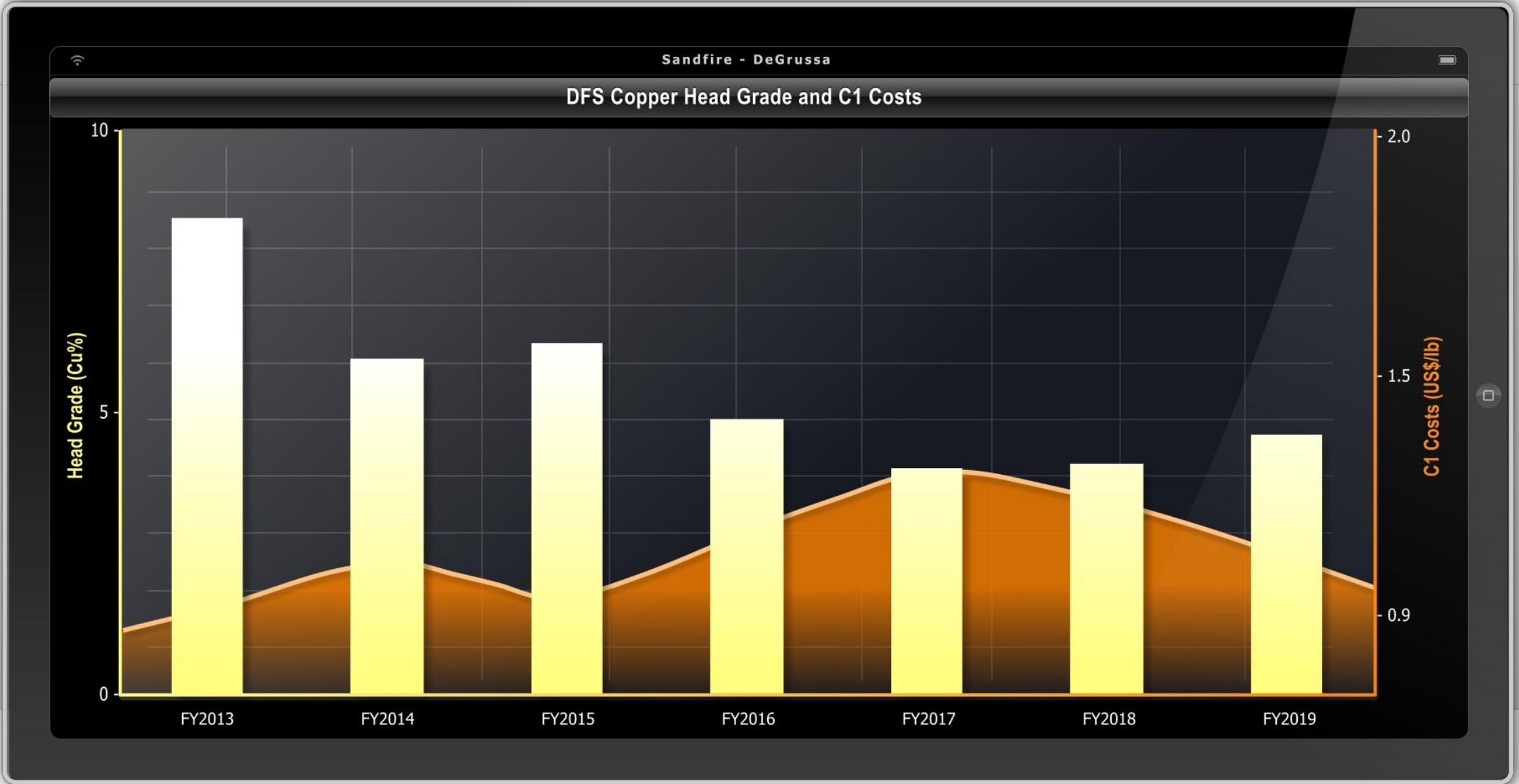
## Life-of-Mine Operating Cost Estimates

	Payable Copper (US\$/lb)
Mining	0.48
Processing and maintenance	0.35
Administration	0.06
Transport	0.28
Treatment and refining	0.18
By-product credits	(0.33)
<b>Total C1 cash costs</b>	<b>1.02</b>



# DeGrussa – Annual Grade and C1 Cost Profile

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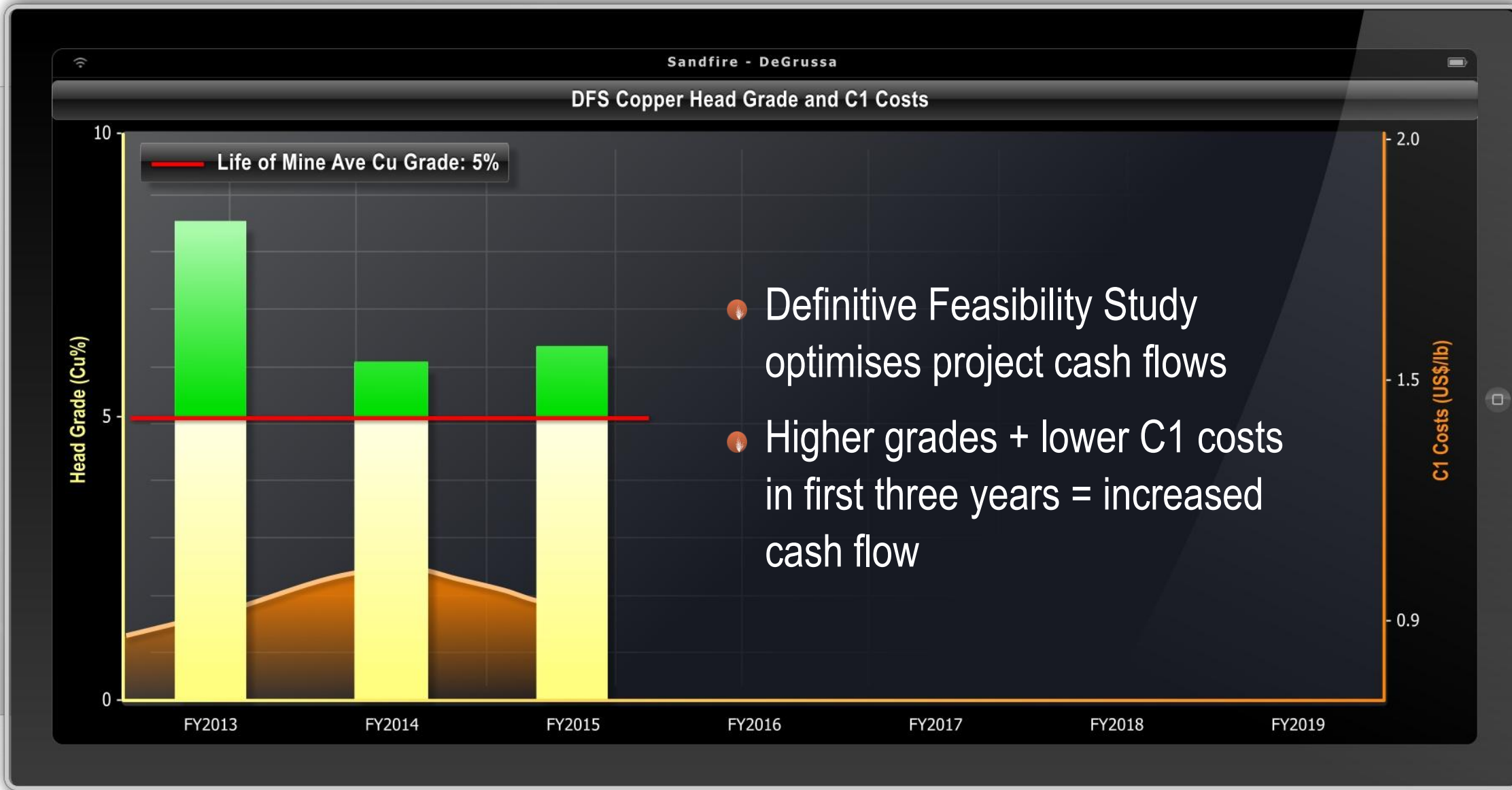
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# DeGrussa – Annual Grade and C1 Cost Profile

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# DeGrussa Project – Development Underway

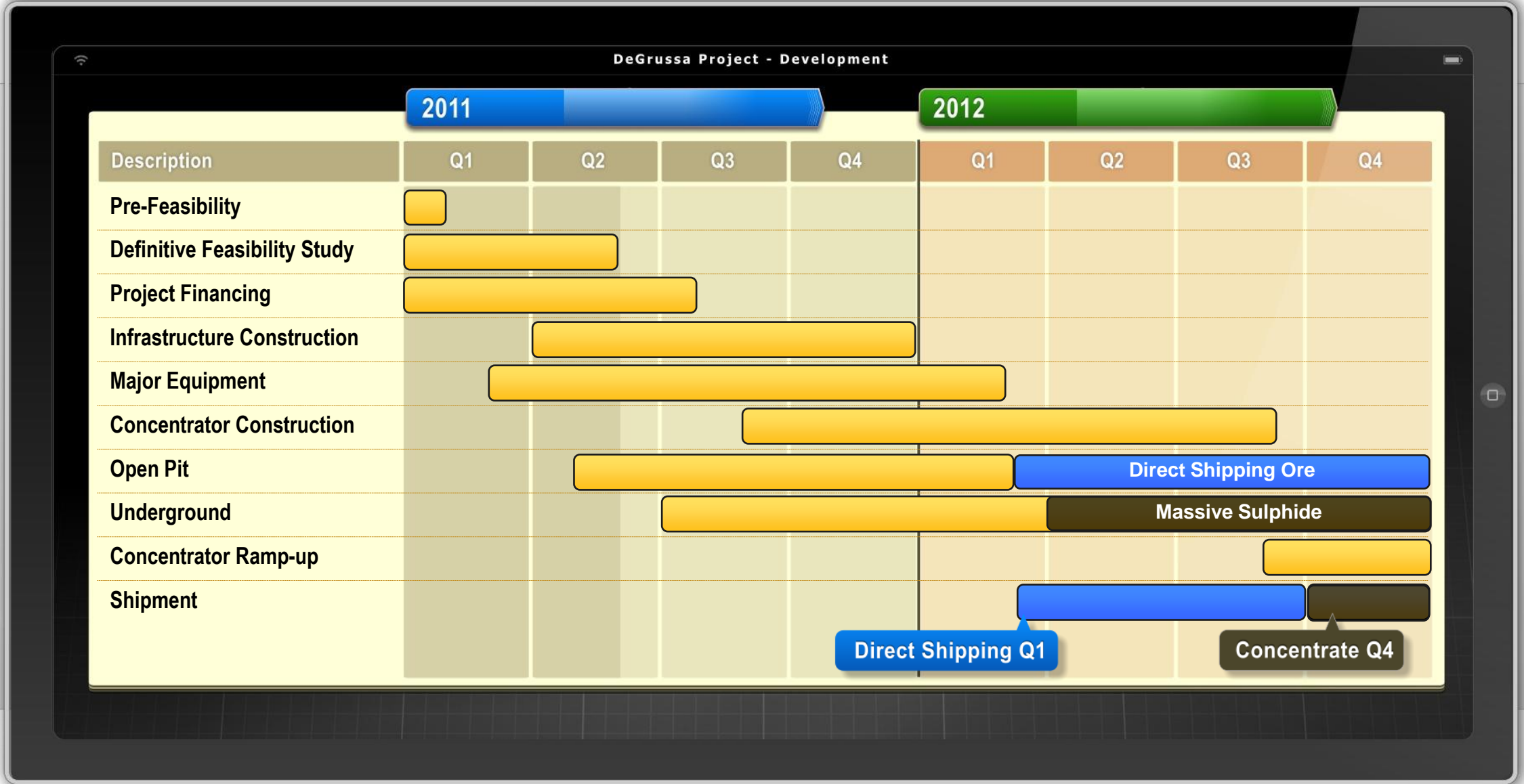
- Box-cut excavation completed – development of Evans Decline to commence shortly
- Pre-strip of open pit commenced April 2011 – two years from discovery
- Bulk earthworks underway for plant construction
- +200 people on site
- All major long-lead time equipment ordered
- Open pit, underground and EPC contracts awarded, infrastructure contracts being finalised





# DeGrussa Project – Development

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# Copper Market Outlook

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- Strong copper prices driven by continued global demand and tight supply
- Market deficit forecast as supply falls short of demand
- Declining mine head grades, limited new discoveries and long lead-times on new projects constraining supply
- General consensus that strong copper prices are expected to continue



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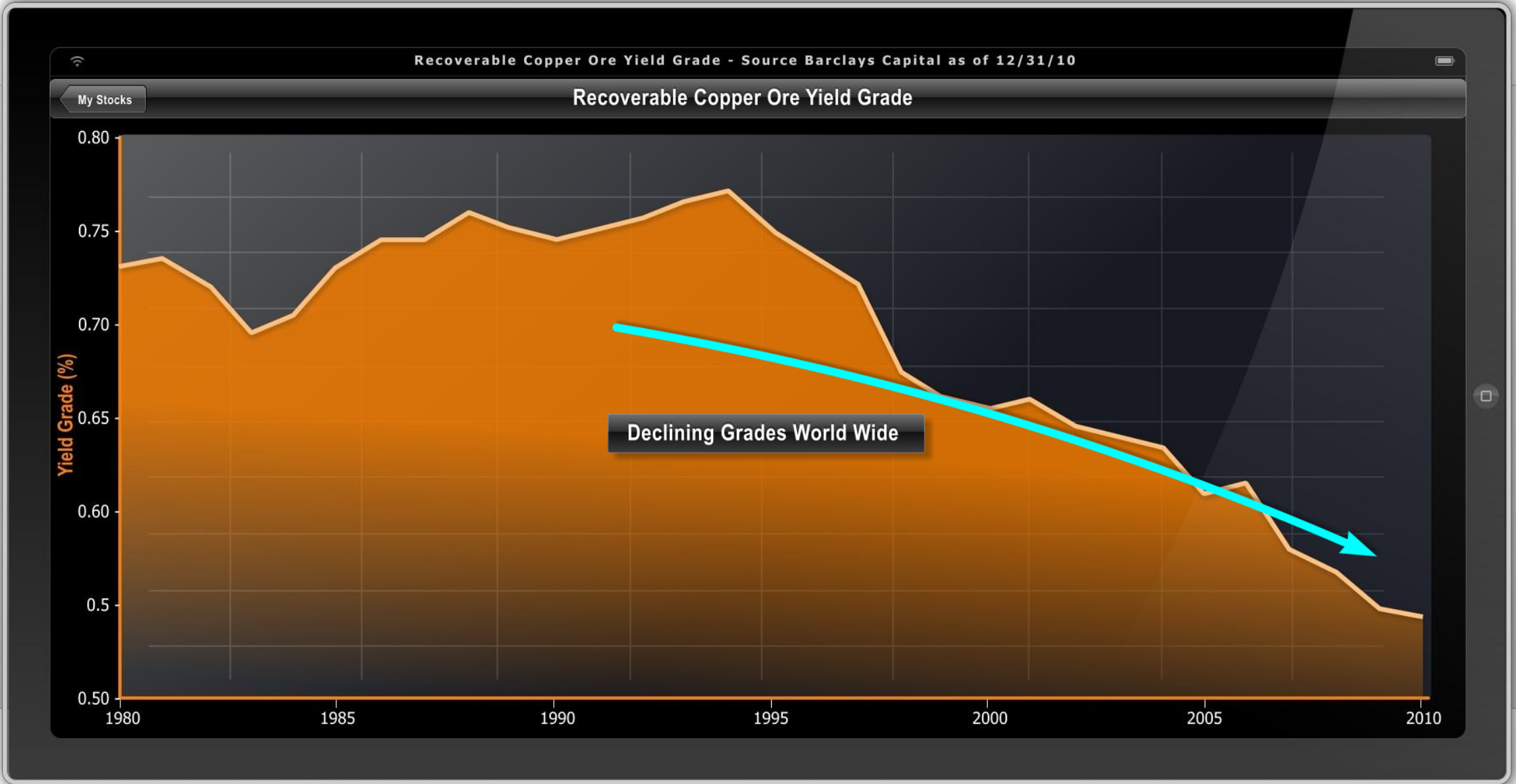
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# Copper Market Outlook

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# Copper Market Outlook

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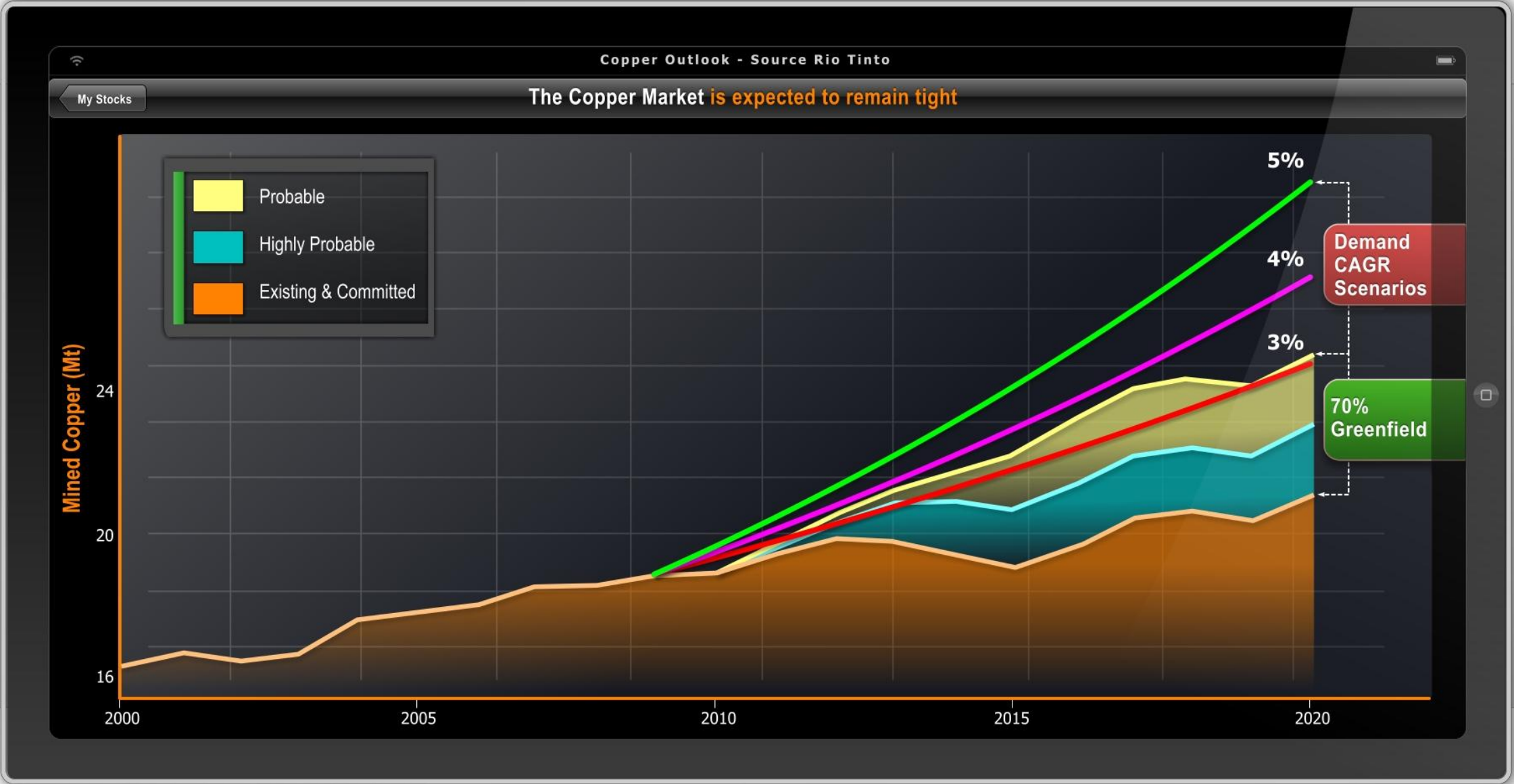
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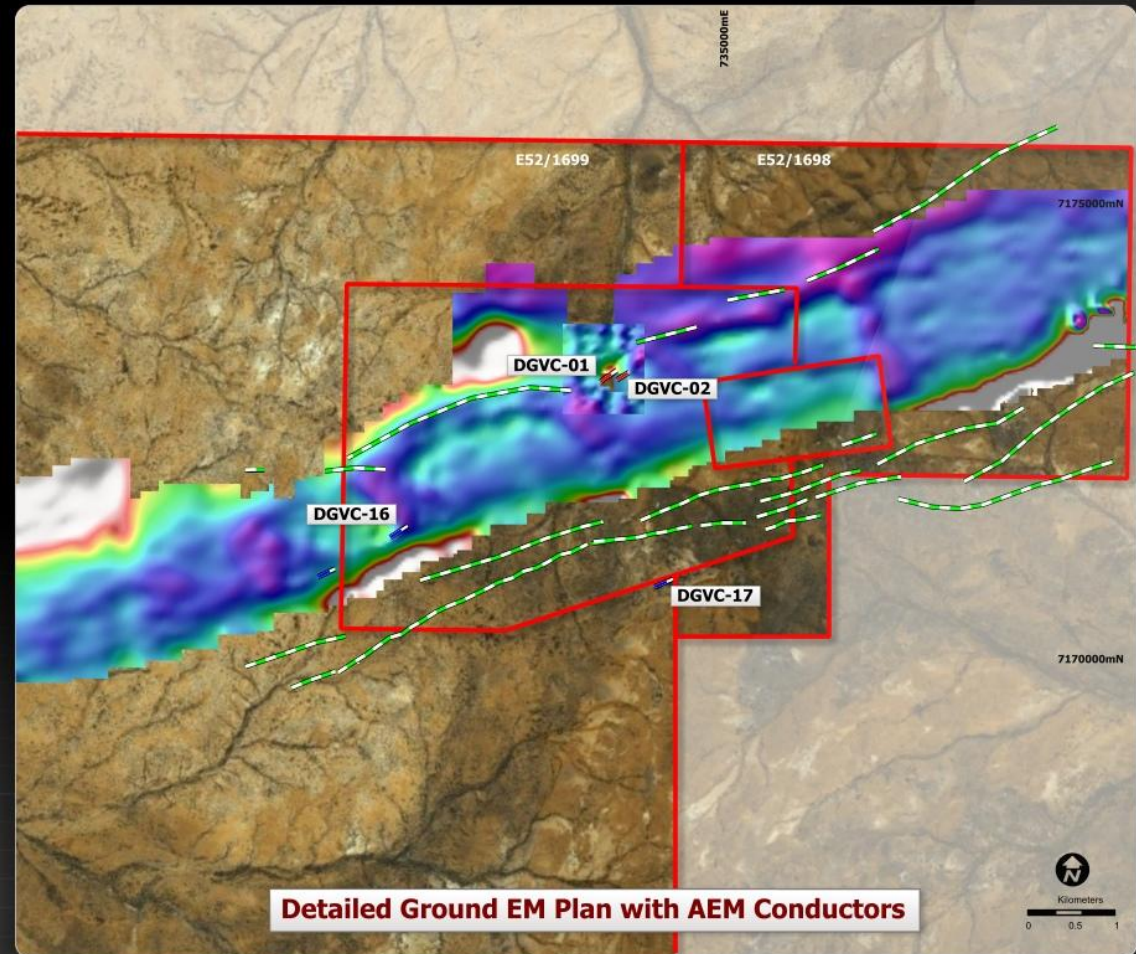
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# Major Exploration Push

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- Developing regional geology model from:
  - *Deep drilling*
  - *Sterilisation & pre-development drilling*
  - *Mapping & geophysical interpretation*
- Priority VMS corridor extended from 6km to 10km with transported copper mineralisation
- Lithogeochemistry program underway to aid target vectoring
- Intensive exploration campaign – A\$20-30M budget



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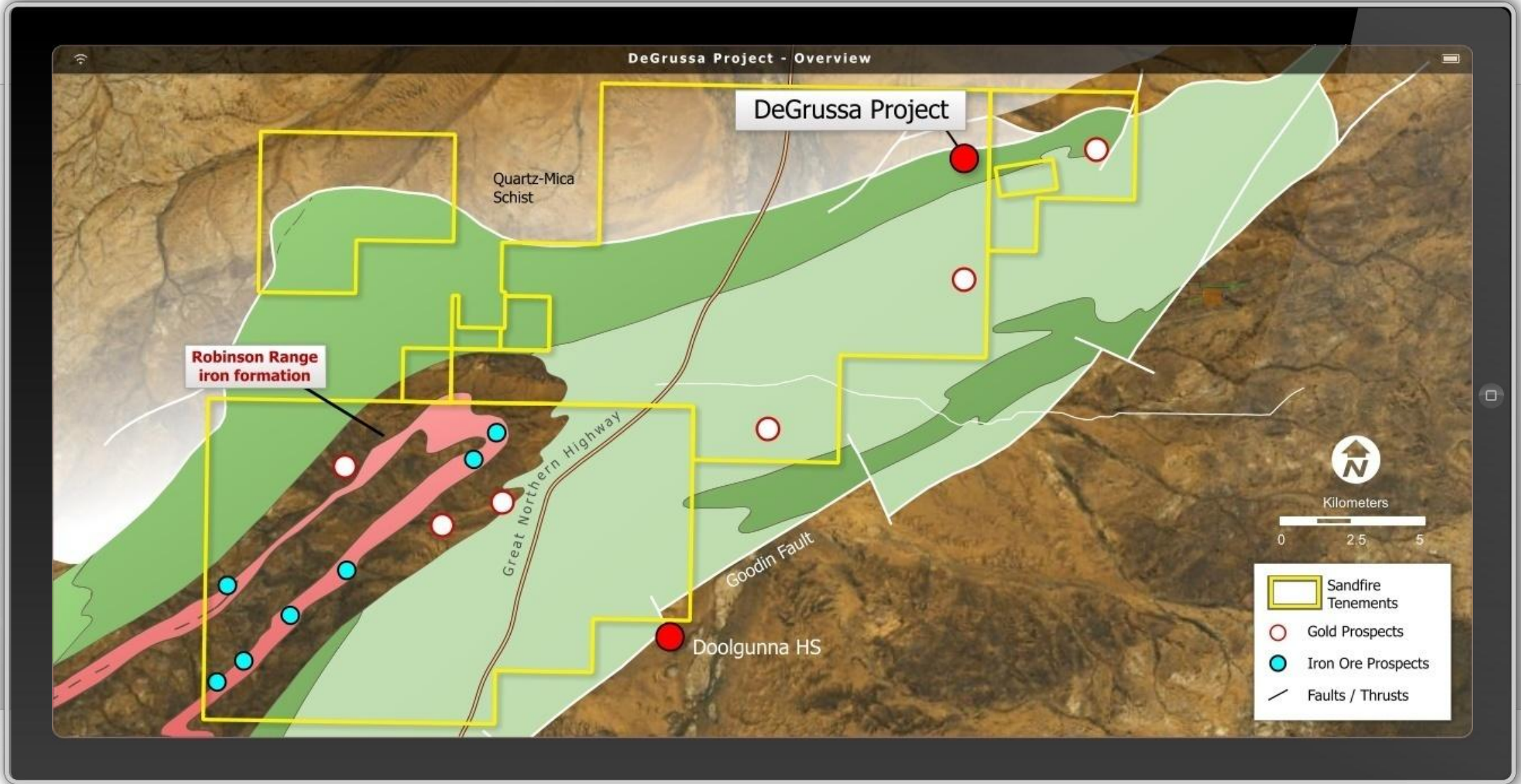
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# DeGrussa Mineral Field – Regional Exploration

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# Northern Territory Mineral Projects

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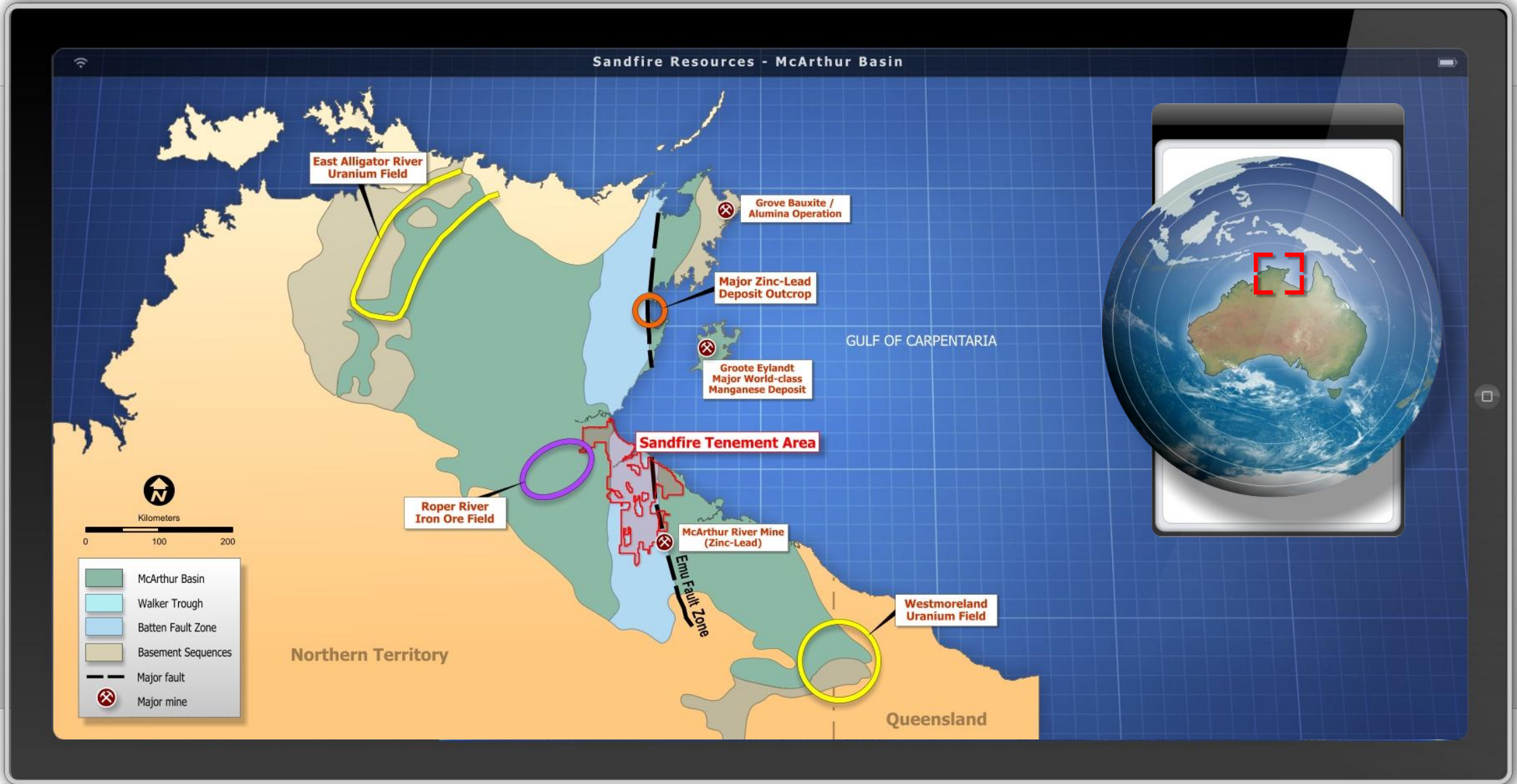
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# McArthur Basin – A World-Class Mineral Province

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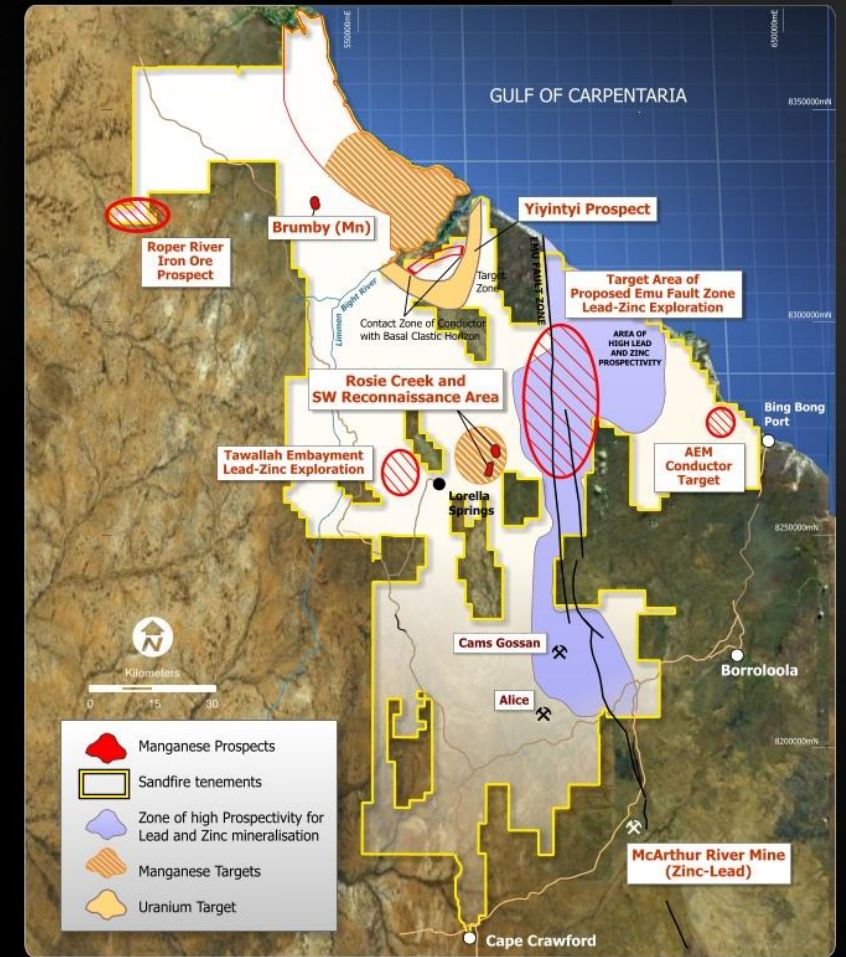




# Borrooloola Project

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- +10,000sq km tenement position in world-class NT mineral province
- Prospective for zinc-lead-silver deposits (McArthur River-style), manganese (Groote Eylandt-style), iron ore and uranium
- Visible oxide copper mineralisation intersected at Tawallah 1 prospect – further exploration planned in 2011
- Iron ore mineralisation confirmed adjacent to Western Desert Resources' (ASX: WDR) Roper Bar Project



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# Summary and Outlook

- Development of DeGrussa Project underway
- On track to produce first copper next year:
  - *First DSO ore from open pit due Q1 2012*
  - *First underground ore expected Q3 2012*
- High-margin production profile – positioned to take advantage of strong copper market
- Regional exploration objective to establish a VMS copper-gold camp
- Strong and supportive major shareholders
- Quality project pipeline
- Experienced Board and Management



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# Appendix – DeGrussa: Mineral Resources

Table 2: DeGrussa Copper-Gold Project – March 2011 JORC Resource Statement

Zone	Resource Category	Location	Tonnes (Mt)	Copper (%)	Gold (g/t)	Contained Copper (t)	Contained Gold (oz)	Competent Person
Gold	Measured	Open Pit	0.14	-	1.5	-	7,000	1
Laterite								
Copper	Measured	Open Pit	2.17	1.1	0.5	24,000	37,000	1
Oxides	Indicated	Open Pit	1.41	1.4	0.4	20,000	19,000	1
Supergene	Indicated	Open Pit	0.25	17.6	2.6	43,000	20,000	2
Chalcocite	Inferred	Open Pit	0.19	4.4	1.2	8,000	7,000	1
Primary	Indicated	O/Pit /	7.80	5.8	2.0	456,000	502,000	1
Massive		U/Ground						
Sulphides	Inferred	Underground	2.32	4.3	2.0	100,000	149,000	1
<b>Total</b>			<b>14.33</b>	<b>4.6</b>	<b>1.6</b>	<b>652,000</b>	<b>742,000</b>	

Note: Refer to the Competent Person's Statements – Mineral Resources

1. Competent Person for these zones of resource was Diederik Speijers of McDonald Spielers
2. Competent Person for these zones of resource was David Slater of Coffey Mining



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# Appendix – DeGrussa: Ore Reserves

Table 1: DeGrussa Copper-Gold Project – March 2011 Ore Reserve Statement

Deposit	Reserve Category	Mining Method	Tonnes (Mt)	Copper (%)	Gold (g/t)	Contained Copper (t)	Contained Gold (oz)
DeGrussa	Probable	Open Pit - DSO	0.14	25.6	2.5	37,000	12,000
DeGrussa/C1/Chalcocite	Probable	Open Pit	0.23	6.1	2.4	14,000	17,000
DeGrussa	Probable	Underground	1.50	6.6	1.9	99,000	90,000
Conductor 1	Probable	Underground	5.76	4.9	1.8	283,000	337,000
Conductor 4	Probable	Underground	0.76	4.4	1.2	33,000	30,000
<b>Total</b>	<b>Probable</b>		<b>8.39</b>	<b>5.6</b>	<b>1.80</b>	<b>465,000</b>	<b>485,000</b>

**Note 1:** An open pit cut-off grade of 8.5% Cu is applied on the Chalcocite to provide a targeted 26% Cu direct sale product (Achieved 25.6% Cu after dilution). All other material within the defined deposit boundaries has been included in the reporting of Ore Reserves with any sub-economic grade material being treated as internal dilutents. These Ore Reserves include an overall assumption of 2-5% mining dilution at nil grade for all grade categories along with an assumed 2.5% mining loss of ore tonnes when mined. Calculations rounded to the nearest 10,000 tonnes; 0.1% Cu grade, 0.1 g/t Au grade; 1,000 tonnes Cu metal and 1,000 ounces Au metal. Errors of rounding may occur. These Ore Reserves occur within an open pit design containing 26Mt of total material, resulting in a waste to ore strip ratio of 70:1.

**Note 2:** Underground mining recovery factor of 95% applied to diluted stoping blocks, with cut-off grade of 1.5% Cu and minimum stope size of 2,000t. Calculations rounded to the nearest 1,000t, 0.1%, 0.1g/t and 1,000 ounces; errors of rounding may occur; assumes commodity prices of US\$7,673/t for copper and US\$1,300/oz for gold with a USD/AUD exchange rate of \$0.86; assumes 91% metallurgical recovery rate. Note: Refer to the Competent Person's Statement – Ore Reserves at the end of this release.

Resource zones still to be converted to Ore Reserve status:

- Open pit oxide copper resources of 3.58Mt @ 1.2% Cu and 0.5g/t Au (44kt contained copper, 56koz contained gold)
- 2.32Mt of Inferred Massive Sulphide resources @ 4.3% Cu, 2.0g/t Au (100kt contained copper, 149koz contained gold)



# Appendix: Competent Person's Statements

## Competent Person's Statement – Mineral Resources

- The information in this report that relates to Mineral Resources (except the Indicated Resource of Supergene Chalcocite) is based on information compiled by Diederik Speijers who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Speijers is a permanent employee of McDonald Speijers and 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 to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Speijers 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 – Mineral Resources

- The information in this report that relates to the Indicated Resource of Supergene Chalcocite is based on information compiled by David Slater who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Slater is a permanent employee of Coffey Mining and 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 to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Slater 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 – Ore Reserves

- The information in this report that relates to Ore Reserves is based on information compiled by Shane McLeay of Entech Pty Ltd, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr McLeay 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 to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code of 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 – Open Pit Ore Reserves

- The information in this report that relates to Open Pit Ore Reserves is based on information compiled by Quinton de Klerk of Cube Consulting, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr de Klerk has sufficient experience which is relevant to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the Australasian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr de Klerk consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## Exploration and Resource Targets

- Any discussion in relation to the potential quantity and grade of Exploration Targets for the DeGrussa Project 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 resource inventory and it is uncertain if further exploration will result in the determination of additional JORC compliant Mineral Resources.