



# St Barbara LIMITED

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March 2011 Quarterly Report

## Gwalia Grade Lifts To > 7 grams per tonne of gold

### Overview

#### Production Summary

- Gold production of 61,453 ounces for the March 2011 quarter.
- Gold production of 185,614 ounces for the nine months ended 31 March 2011

#### Leonora Operations

- Gold production from the Gwalia mine was 34,067 ounces for the March 2011 quarter (up from 28,505 ounces for the previous quarter) at a cash operating cost of \$686 per ounce, including \$59 per ounce expensed due to rain events, (down from \$874 per ounce for the previous quarter).
- Improved production and lower costs reflected the increase in grade mined for the quarter to 7.9 grams per tonne of gold (g/t Au), up from 4.9 g/t Au for the previous quarter.
- King of the Hills underground mine development is on schedule to deliver the first gold production stope in June of this year. The first development ore has been mined and stockpiled.

#### Southern Cross Operations

- Gold production was 27,386 ounces for the March 2011 quarter at a cash operating cost of \$964 per ounce, in line with expectations, and based on lower grade ore sources.

#### Discovery and Growth

- On-going deep drilling at Gwalia has continued to achieve high value intersections including 19.8m @ 22.6g/t Au from 1,682 metres below surface (mbs).

#### Health & Safety

- The Total Recordable Injury Frequency Rate, calculated as a rolling 12 month average increased from 8.9 as at 31 December 2010 to 11.0 as at 31 March 2011, with seven recordable injuries reported for the period.

#### Finance and Corporate

- Gold shipped in the March 2011 quarter was 59,815 ounces, realising an average gold price of A\$1,381 per ounce.
- Cash at bank at 31 March 2011 was \$82.5 million. In addition, proceeds from the sale of gold on 31 March 2011 amounting to \$11.4 million were received in early April.
- Cash outflows for the quarter included ongoing mine development at King of the Hills and an expanded exploration program.
- Ms Betsy Donaghey commenced as a Non-Executive Director of the Company on 4 April 2011.

#### Outlook

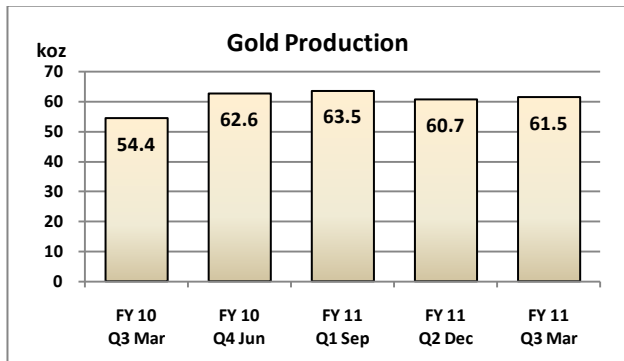
- Full year consolidated gold production is forecast to be between 255,000 and 270,000 ounces (previously 250,000 to 270,000 ounces). This represents a significant increase on FY10 gold production of 231,000 ounces.
- The Gwalia mine at Leonora is expected to continue to achieve a grade of 7 g/t Au or better in the June 2011 quarter with expected full year production in the range of 130,000 to 135,000 ounces of gold.
- Cash operating costs at Gwalia for FY11 are expected to increase following the extreme rain events in February and be in the range of \$680 to \$720 per ounce (previous guidance range \$630 to \$680).
- Production guidance for FY11 for Southern Cross Operations is expected to be in the range of 115,000 to 125,000 ounces of gold (previously 110,000 to 125,000 ounces), with improved cash operating costs of \$850-\$900 per ounce (previously \$950 to \$990 per ounce).

**Tim Lehany**  
Managing Director and CEO  
21 April 2011

## Operations

### Consolidated Gold Production

Gold production increased to 61,453 ounces for the March 2011 quarter, and 185,614 ounces for the nine months ended 31 March 2011.



Production Summary		Sep Qtr FY11	Dec Qtr FY11	Mar Qtr FY11
<b>Production</b>				
Leonora	oz	30,005	28,505	34,067
Southern Cross	oz	33,483	32,168	27,386
<b>Consolidated</b>	<b>oz</b>	<b>63,488</b>	<b>60,673</b>	<b>61,453</b>
<b>Milled Grade</b>				
Gwalia, Leonora		5.7	4.8	7.3
Marvel Loch, SXO		3.4	3.8	2.9
<b>Total Cash Operating Costs</b>				
Leonora	\$/oz	792	874	686
Southern Cross	\$/oz	801	840	964

## Leonora Operations

### Gwalia

Gold production for the March 2011 quarter increased by 20% to 34,067 ounces on lower volumes of ore but at a significantly higher grade. The milled ore grade for the March 2011 quarter was 7.3 g/t Au; a significant lift from 4.8 g/t Au for the December 2011 quarter and 5.7g/t Au for the September 2010 quarter. The lift in grade was driven by higher grade ore from South West Branch lode and much improved stope dilution performance.

As previously reported, ten days of ore production were lost in the March 2011 quarter, due to extreme rainfall events in the Leonora region. The resulting shortfall in tonnes mined was offset by significantly higher ore grades.

Costs associated with the ore production lost due to the extreme rainfall events, which were expensed and included in Leonora cash operating costs in the March 2011 quarter, amounted to \$2.0 million or \$59 per ounce of gold.

The February extreme rainfall events also slowed mine development in the Gwalia lateral access at 1340mbs and the Hoover Decline, which was at 1345mbs as at 31 March 2011. Mine development is back to normal operating levels.

Multiple independent mining areas have now been established, including the Adam, the Beech, the South

Gwalia Series and the South West Branch, thereby providing greater flexibility and reliability of ore supply.

Process plant recovery has remained above expectations, supported by a larger proportion of gold recovered through the gravity circuit.

Production Summary		Sep Qtr FY11	Dec Qtr FY11	Mar Qtr FY11
<b>LEONORA</b>				
Underground ore mined	t	155,392	183,641	132,299
Grade	g/t	6.0	4.9	7.9
Ore milled	t	170,086	193,854	151,285
Grade	g/t	5.7	4.8	7.3
Recovery	%	96	95	96
<b>Gold production</b>	<b>oz</b>	<b>30,005</b>	<b>28,505</b>	<b>34,067</b>
<b>Cash Operating Costs (\$ per ounce)</b>				
Mining		547	689	579
Processing		153	198	123
Site Services		84	92	75
Stripping and ore inventory adjustments		(26)	(136)	(122)
		<b>758</b>	<b>843</b>	<b>655</b>
By product credits		(2)	(2)	(2)
Third party refining and transport costs		1	1	1
Royalties		35	32	32
<b>Total cash operating costs</b>		<b>792</b>	<b>874</b>	<b>686</b>
Depreciation and amortisation	\$/oz	255	257	255
<b>Total operating costs</b>	<b>\$/oz</b>	<b>1,047</b>	<b>1,131</b>	<b>941</b>

Cash operating costs reduced significantly, notwithstanding a one off additional cost of \$59 per ounce from the February rainfall events, primarily as a consequence of higher ore grades.

### King of the Hills

Development continued as planned at King of the Hills with first development ore mined in March.

First stope production and ore processing through the Leonora Process Plant is due to commence in June, in line with expectations.

### Outlook for Leonora Operations

Full year gold production for Leonora Operations is expected to be in the range of 140,000 ounces to 145,000 ounces, comprising 130,000 to 135,000 ounces from Gwalia and the balance from King of the Hills.

Gwalia cash operating costs per ounce of gold for FY11 will be higher primarily as a consequence of the extreme rainfall events in February and are expected to be in the range \$680 to \$720 per ounce.

## Southern Cross Operations

Gold production for the March 2011 quarter was 27,386 ounces, at a total cash operating cost of \$964 per ounce, which was in line with expectations.

Ore tonnes mined, sourced mainly from the bulk, low grade Exhibition Lode, increased by over 10%. However gold production fell by 15% as a result of lower grades, with a consequent increase in cash costs per ounce as expected.

Production Summary		Sep Qtr	Dec Qtr	Mar Qtr
SOUTHERN CROSS		FY11	FY11	FY11
Underground ore mined	t	267,822	278,107	306,760
Grade	g/t	3.4	3.8	2.9
Ore milled	t	270,729	292,260	320,489
Grade	g/t	4.1	3.7	2.9
Recovery	%	93	93	90
<b>Gold production</b>	<b>oz</b>	<b>33,483</b>	<b>32,168</b>	<b>27,386</b>
<b>Cash Operating Costs (\$ per ounce)</b>				
Mining		490	466	551
Processing		224	239	286
Site Services		72	76	92
Stripping and ore inventory adjustment		(5)	37	9.0
		<b>781</b>	<b>818</b>	<b>938</b>
By product credits		(15)	(14)	(12)
Third party refining and transport costs		2	2	2
Royalties		33	34	36
<b>Total cash operating costs</b>		<b>801</b>	<b>840</b>	<b>964</b>
Depreciation and amortisation	\$/oz	157	161	180
<b>Total operating costs</b>	<b>\$/oz</b>	<b>958</b>	<b>1,001</b>	<b>1,144</b>

### Outlook for Southern Cross Operations

With the main source of ore for the June 2011 Quarter continuing to be the bulk, low grade Exhibition lode, ore grades are expected to continue at March 2011 quarter levels with similar cash operating costs per ounce of gold.

Published production guidance for Southern Cross Operations for the 2011 financial year is expected to be met, at between 115,000 to 125,000 ounces (previously 110,000 to 125,000 ounces) and improved cash operating costs of \$850 to \$900 per ounce (previously \$950 to \$990 per ounce).

### Discovery and Growth (D&G)

The Discovery and Growth team continued drilling programs during the March 2011 quarter with a number of drill targets successfully tested both near-mine and regionally. Evaluation of new targets continued within the Company's tenement holdings, and acquisition studies continued elsewhere on high priority areas.

#### Leonora Region

**Gwalia:** Deep resource extension drilling continued at Gwalia during the quarter to infill resource extensions from 1,640mbs to more than 1,800mbs (Refer Figure 1). Four wedge holes were completed during the quarter – GWDD 13C, 12G, 12H and 13D and a fifth GWDD 12I is nearly completed:

- GWDD 13C delineated the southern edge of the Gwalia lode system, intersecting 3.0m @ 29.2g/t Au down-hole from 1,753mbs.
- GWDD 12F, 12G & 12H were aimed at the main part of the South West Branch lode, at around 1,650mbs, within the Gwalia lode system; GWDD 12G intersected two zones of 2.8m @ 11.8g/t Au from 1,626mbs and 12.0m @ 11.7g/t Au from 1,633mbs; and GWDD 12H intersected 6m @ 10.7g/t Au from 1,645mbs.

- GWDD 13D intersected three zones: 2.9m @ 29.0g/t Au from 1,674mbs (possibly corresponding to Main Lode) and 19.8m @ 22.6g/t Au from 1,682mbs which included two zones of 12.3m @ 30.1g/t Au (corresponding to South West Branch Lode) and 5m @ 15.4g/t Au (possibly SGS Lode)(all down-hole intervals).
- At the end of the quarter, hole GWDD 12I was in progress targeting the Gwalia Lode system.

These results continue to confirm the high grade gold tenor of the Gwalia lode system down to 1,800mbs. All down hole intervals are approximately true thicknesses of the lode system. Refer to Table 1 for details of significant intercepts.

A revised resource estimate will be prepared as at 30 June 2011.

#### Southern Cross Region

**Copperhead:** The initial two diamond drill holes of a planned six hole program at Copperhead have been completed. Progress has been delayed due to difficult ground conditions.

The drill hole CHDD 02C has intersected only anomalous gold mineralisation within well developed sulphides and alteration in both the Northern and Southern Lodes from approximately 950mbs (refer to Figure 2). This first hole has confirmed potential extensions of the Lodes system at depth and a second hole has been commenced to further test shallower parts of these Lodes. Further assay results are pending.

The drill hole CHDD 05, aimed at testing the largely unmined Western Lode, has been completed but failed to intersect the central part of the Lode because of severe hole deviation. As a result, a further hole will be drilled, and the balance of the six hole drill program will continue into the June quarter.

**Fraser's South:** The initial four diamond drill holes of a planned seven hole program to test potential high grade underground extensions of the main lode systems have been completed. Low grade gold mineralisation was intersected from the first three holes, and results are awaited from the lode intersection in hole FSDD 04. Drilling will continue into the June quarter.

#### Other Areas

**Yilgarn province, WA:** Programs of work are being developed over several existing targets subject to approval of heritage surveys and land clearances, including potential new targets generated by the recently completed regional structural geology study of the Leonora province.

**East Lachlan Fold Belt (NSW):** A detailed ground gravity survey was completed during the quarter and has contributed to the successful delineation of at least 11 priority targets with potential for porphyry-style copper-gold mineralisation under younger cover rocks. Land access arrangements have been completed and drill testing of these targets will commence in late April 2011.

## Health & Safety

Despite ongoing safety improvement efforts, the Total Recordable Injury Frequency Rate, calculated as a rolling 12 month average, increased during the quarter from 8.9 to 11.0. Injuries associated with the increase in activity in surface exploration drilling were a significant contributor to this.

Southern Cross Operations has performed very well with no reportable injuries for the eight months to 31 March, 2011.

## Financials (unaudited)

Gold shipped in the March 2011 quarter of 59,815 ounces was sold at an average price of \$1,381 per ounce.

Cash at bank was \$82.5 million as at 31 March 2011, which did not include cash proceeds of \$11.4 million from the sale of gold on 31 March 2011, received in early April 2011.

Cash outflows for the quarter included ongoing mine development at King of the Hills and an expanded exploration program.

Total interest bearing liabilities at 31 March 2011, comprising asset financing facilities, were \$11.5 million.

## Corporate

Ms Elizabeth (Betsy) Donaghey commenced as a Non-Executive Director of the Company on 4 April 2011. Ms Donaghey is a civil engineer with extensive oil and gas industry and corporate experience.

The unmarketable parcel share sale facility that was launched in December 2010 concluded in March 2011, with a total of 45,655 shares being sold on-market at \$2.03 per share.

In April 2011, the Supreme Court of Victoria handed down its decision in litigation commenced by Ed Eshuys, former Managing Director and CEO of the Company. The Court found that Mr Eshuys failed to establish any breach of his employment contract by the Company in assessing the amount of a performance based completion payment. The action was accordingly dismissed, with Mr Eshuys to pay the Company's party/party costs of the proceeding. Subject to any appeal, the litigation is now concluded.

The Company's share capital structure as at 31 March 2011 was:

Issued shares	325,615,389
Unlisted employee options	4,033,567
Unlisted performance rights	2,527,603

## Outlook

Consolidated gold production for FY 11 is forecast at 255,000 to 270,000 ounces. Cash operating costs for Gwalia will be within the revised guidance range of \$680 to \$720 per ounce for the year.

## Corporate Directory

**St Barbara Limited**  
**ABN: 36 009 165 066**

### Board of Directors

Colin Wise .....	Non-Executive Chairman
Tim Lehany .....	Managing Director & CEO
Doug Bailey .....	Non-Executive Director
Phil Lockyer .....	Non-Executive Director
Robert Rae .....	Non-Executive Director
Betsy Donaghey .....	Non-Executive Director (appointed 4 April 2011)

### Executive Team

Tim Lehany .....	Managing Director & CEO
Garth Campbell-Cowan .....	Chief Financial Officer
Ross Kennedy .....	EGM Corporate Services
David Rose .....	Chief Operating Officer
Phil Uttley .....	EGM Discovery and Growth

### Registered Office

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### Substantial Shareholders

### % of Holdings

	As Notified
M&G Group* .....	18.1%
Hunter Hall Investment Management .....	6.4%
Franklin Resources .....	6.0%

\* M&G Group's interest includes shares disclosed by Vanguard Precious Metals & Mining Fund

Australian Securities Exchange Listing "SBM"

### Shareholder Enquiries

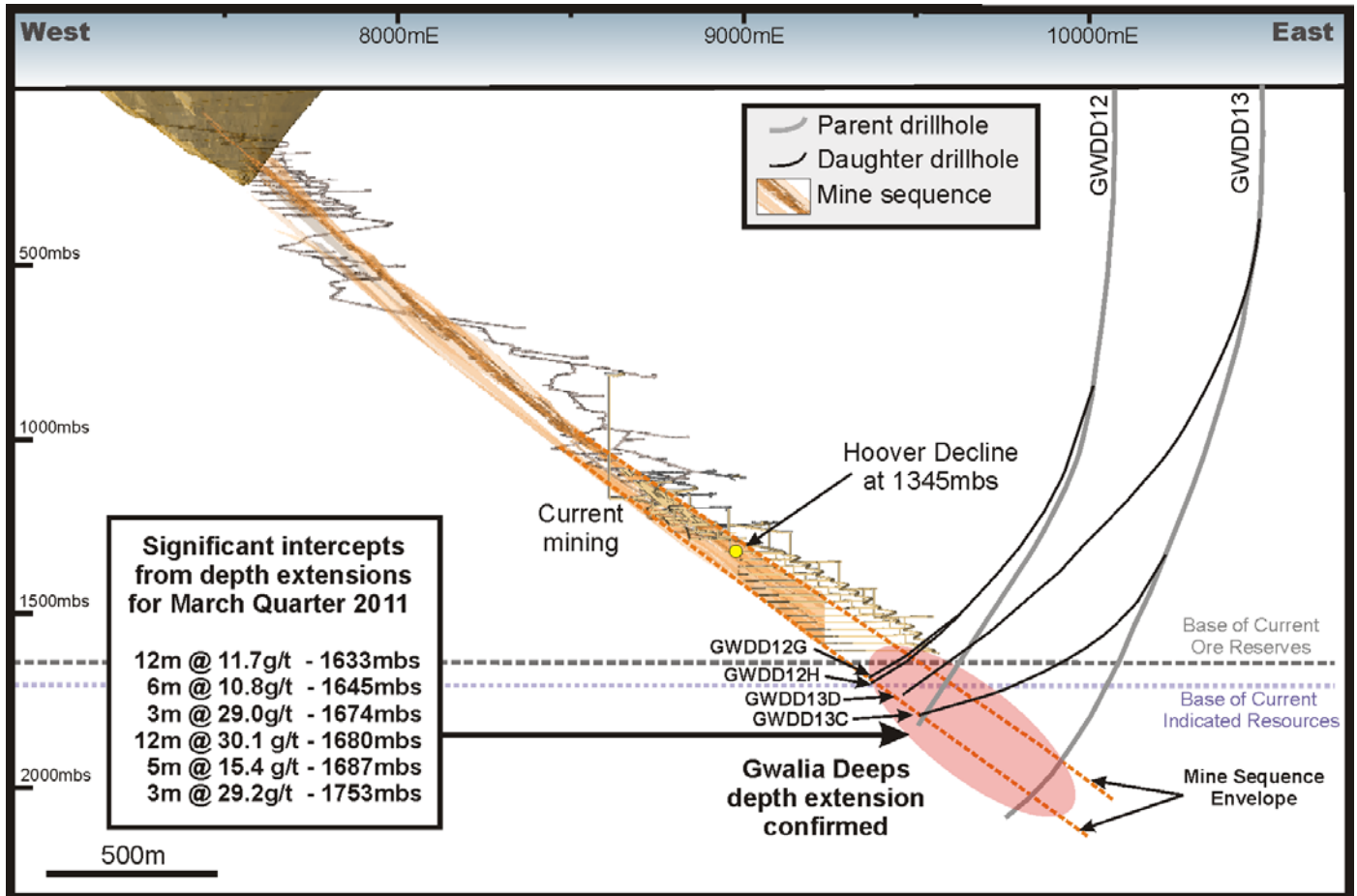
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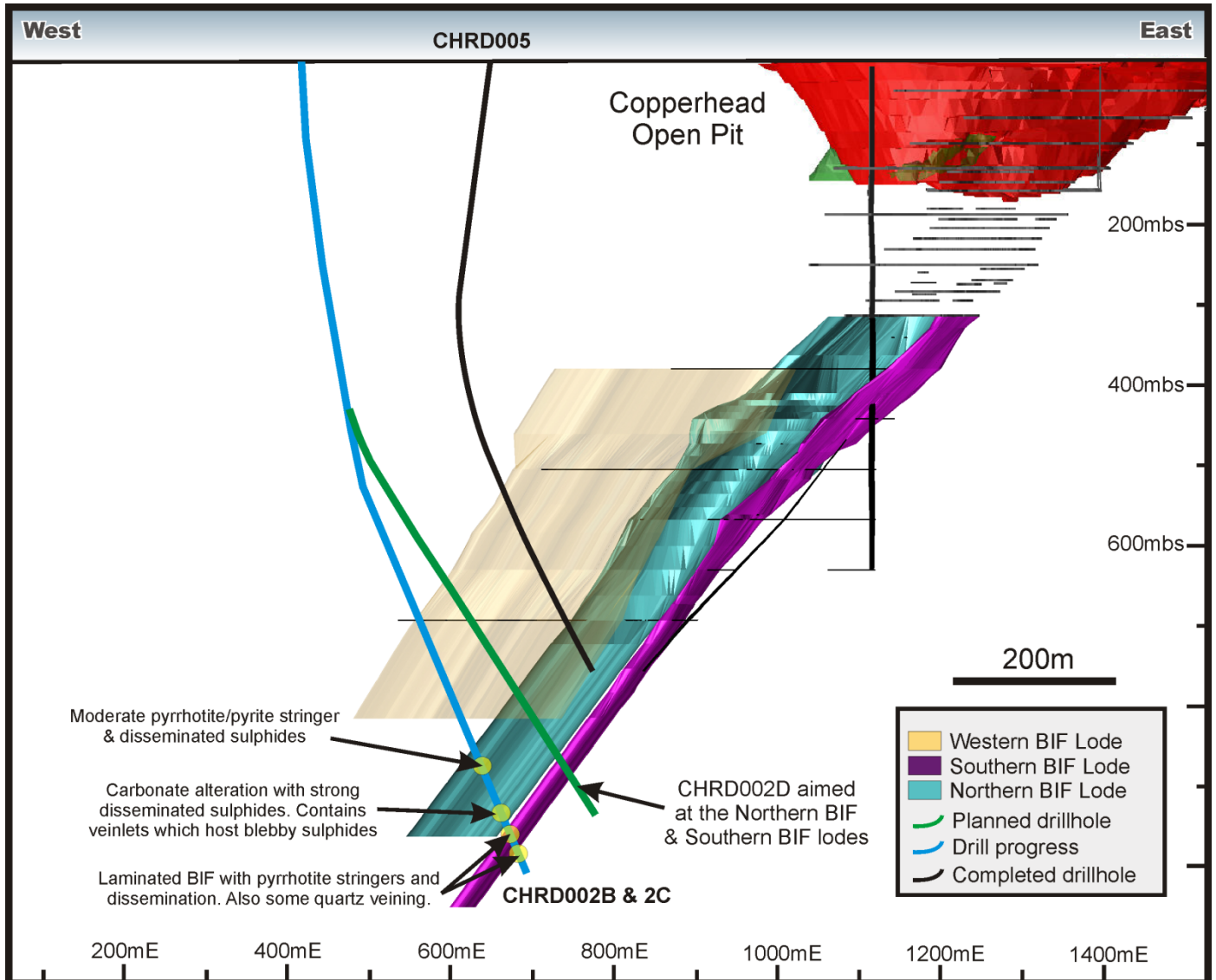
*Financial figures are in Australian dollars.*

## Investor Relations Contacts

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**Figure 1: Deep Drilling at Gwalia, Leonora**


**Figure 2: Copperhead Cross Section showing current drilling**



**Table 1: Significant Intercepts**

Hole No	North (local)	East (local)	Dip/Azi	Vertical Depth mbs	Lode	Downhole Mineralised Intersection		
						From m	Length m	Gold g/t Au
<b>LEONORA</b>								
<b>Gwalia Deeps</b>								
GWDD12G	5724.4	9478.3	-36/262	1626	Main Lode	1860	2.8	11.8
GWDD12G	5723.2	9469.1	-35/262	1633	South West Branch	1867	12.0	11.7
GWDD12H	5773.6	9472.1	-36/281	1645	South West Branch	1875	6.0	10.8
GWDD12H	5778.9	9445.1	-34/281	1664	South Gwalia Series	1910	3.4	4.3
GWDD13C	5587.4	9661.2	-15/254	1753	South West Branch	2145	3.0	29.2
GWDD13C	5573.1	9605.8	-15/256	1771	South Gwalia Series	2205	1.1	33.7
GWDD13D	5645.6	9552.3	-37/264	1674	Main Lode	2053.7	3.0	29.0
GWDD13D	5644.4	9540.0	-36/264	1682	South West Branch and South Gwalia Series	2060.2	19.8	22.6
Including	5644.7	9543.4	-37/264	1680	South West Branch	2060.2	12.3	30.1
	5643.8	9534.5	-37/264	1687	South Gwalia Series	2075	5.0	15.4

**Note:**

1. Mineralised intersections for Gwalia Deeps are quoted as downhole lengths and uncut; nominal cut-off grade 3g/t Au.

**Competent Persons Statement**

References to Exploration Results including significant gold intersections and geological interpretations contained in this report have been compiled by Mr. Phillip Uttley. Mr. Uttley is a Fellow of The Australasian Institute of Mining and Metallurgy and is a full time employee of the company. Mr. Uttley has sufficient experience relevant to the style of mineralisation, type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person in accordance with The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, December 2004 (JORC Code). Mr. Uttley consents to the inclusion in the report of the matters based on his information, in the form and context in which they appear.