



# St Barbara LIMITED

St Barbara Limited ACN 009 165 066  
Level 10, 432 St Kilda Road, Melbourne VIC 3004  
Locked Bag 9, Collins Street East, Melbourne VIC 8003  
Tel +61 3 8660 1900 Fax +61 3 8660 1999  
[www.stbarbara.com.au](http://www.stbarbara.com.au)

September 2011 Quarterly Report

## Record Production of 40,306 ounces at Gwalia

### Overview

#### Production Summary

- Gold production for the September quarter was 70,608 ounces. Production is expected to increase progressively during the year, particularly as the grade increases at Gwalia.

#### Leonora Operations, WA

- Gold production from the Gwalia mine was a record 40,306 ounces for the September quarter (up 5% on the previous quarter) at a milled grade of 7.4 g/t Au. Cash operating costs were \$712 per ounce.
- King of the Hills mine gold production was 9,343 ounces for the September quarter (up 32% on the previous quarter) as it continues to approach full production, at a cash operating cost of \$872 per ounce.

#### Southern Cross Operations, WA

- Gold production from the Marvel Loch mine was 20,959 ounces for the September quarter at a cash operating cost of \$1,193 per ounce. Production was below expectations (and consequently cash costs were above expectations) due to a temporary interruption in production from the Exhibition Decline which is now resolved.

#### Discovery and Growth

- One of the last holes in the current deep drilling at Gwalia, Leonora, WA, has recorded high value intersections including 2.8m @ 49.0g/t Au from 2,053 metres (m) and 6.5m @ 14.8g/t Au from 2,065m down hole, indicating that the Gwalia lode system extends further to the south than previously thought.
- Drilling results from Frasers, Southern Cross, WA included 4.8m @ 13.4g/t Au from 287m and 5.5m @ 8.4g/t Au from 284m down hole. A further drilling program is planned for the December quarter.
- The final hole of the first phase drilling program near Nyngan, in the East Lachlan Fold Belt, NSW, is possibly located on the outer edges of a potential porphyry copper-gold system. Detailed analysis of the drilling results is underway.

#### Health & Safety

- The Total Recordable Injury Frequency Rate, calculated as a rolling 12 month average, remained relatively unchanged at 12.6 at the end of the September quarter.

#### Finance and Corporate

- 72,254 ounces of gold were shipped in the September quarter, realising an average gold price of A\$1,571 per ounce.
- Cash at bank at 30 September 2011 was \$75 million, after paying \$7 million to extinguish an asset financing facility.

#### Outlook

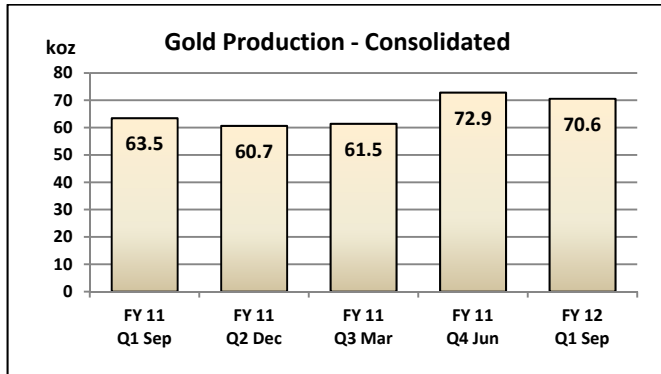
- FY12 production and cost guidance is maintained.
- Increasing grade at Gwalia is forecast to underpin a progressive increase in production and lowering of cash operating costs per ounce during the year.
- At Southern Cross Operations, forecast December quarter gold production is anticipated to increase following resolution of the temporary production interruption at Marvel Loch.
- Exploration drilling will continue in the December quarter at Gwalia, Jasper Hill and Marionette (all at Leonora), and at Frasers and Copperhead at Southern Cross.

**Tim Lehany**  
Managing Director and CEO  
24 October 2011

## Operations

### Consolidated Gold Production

Gold production for the September quarter was 70,608 ounces.

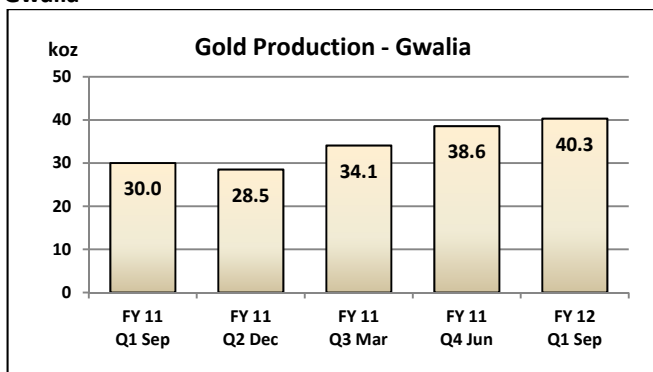


Production Summary Consolidated		Mar Qtr FY11	Jun Qtr FY11	Sep Qtr FY12
<b>Production</b>				
Gwalia	oz	34,067	38,556	40,306
King of the Hills	oz	-	7,066	9,343
Southern Cross	oz	27,386	27,238	20,959
<b>Consolidated</b>	<b>oz</b>	<b>61,453</b>	<b>72,860</b>	<b>70,608</b>
<b>Milled Grade</b>				
Gwalia	g/t	7.3	7.0	7.4
King of the Hills	g/t	-	4.6	3.8
Marvel Loch	g/t	2.9	2.9	2.5
<b>Total Cash Operating Costs</b>				
Gwalia	\$/oz	686	722	712
King of the Hills	\$/oz	-	699	872
Southern Cross	\$/oz	964	985	1,193

### Leonora Operations, WA

Leonora Operations gold production for the quarter was 49,649 ounces, 9% higher than the previous quarter.

#### Gwalia



Gwalia gold production for the September quarter increased by 5% from the June quarter to a record 40,306 ounces on slightly lower volumes offset by higher grade. The grade of ore milled for the quarter was 7.4g/t Au, compared to 7.0g/t Au in the previous quarter.

Recovery of 97% was 1% above the previous quarter and benefitted from the commissioning of a second Knelson concentrator, with an increase in gold reporting to the gravity circuit.

Grade is expected to continue to improve during the year as production moves into the higher grade parts of South West Branch (SWB).

Cash operating costs for the quarter were \$712 per ounce. The unit cash operating cost will reduce as the grade of ore increases through the year.

A number of steps have been taken in the Gwalia mine to improve mining flexibility and reliability, including the establishment of a magazine, a refuelling station, and an underground workshop located at 1,190mbs. These initiatives will reduce lost time for underground vehicles that would otherwise travel to the surface for repairs or fuel.

Production Summary Gwalia		Mar Qtr FY11	Jun Qtr FY11	Sep Qtr FY12
Underground ore mined	t	132,299	176,214	173,498
Grade	g/t	7.9	6.9	7.5
Ore milled	t	151,285	177,703	174,056
Grade	g/t	7.3	7.0	7.4
Recovery	%	96	96	97
<b>Gold production</b>	<b>oz</b>	<b>34,067</b>	<b>38,556</b>	<b>40,306</b>
<b>Cash Operating Costs</b>		\$ per ounce		
Mining		579	463	484
Processing		123	134	124
Site services		75	77	82
Stripping and ore inventory adjustments		(122)	15	(8)
		<b>655</b>	<b>689</b>	<b>682</b>
By product credits		(2)	(4)	(4)
Third party refining & transport		1	1	1
Royalties		32	36	33
<b>Total cash operating costs</b>		<b>686</b>	<b>722</b>	<b>712</b>
Depreciation and amortisation		255	254	254
<b>Total operating costs</b>		<b>941</b>	<b>976</b>	<b>966</b>

#### King of the Hills

King of the Hills produced 9,343 ounces of gold for the quarter compared to 7,066 ounces for the previous quarter, and is expected to continue to progressively increase gold production during the year. The grade of ore milled for the quarter was 3.8g/t Au compared to 4.6g/t Au in the previous quarter. Grade variation from quarter to quarter is anticipated.

Cash operating costs of \$872 per ounce were higher than the June quarter due mainly to the lower head grade.

Production Summary		Mar Qtr	Jun Qtr	Sep Qtr
King of the Hills		FY11	FY11	FY12
Underground ore mined	t	7,680	58,139	77,034
Grade	g/t	2.9	4.7	3.7
Ore milled	t	-	50,105	82,179
Grade	g/t	-	4.6	3.8
Recovery	%	-	95	94
<b>Gold production</b>	<b>oz</b>	-	<b>7,066</b>	<b>9,343</b>
<b>Cash Operating Costs</b>		\$ per ounce		
Mining		-	534	716
Processing		-	194	247
Site services		-	90	67
Stripping and ore inventory adjustments		-	(129)	(176)
		-	<b>689</b>	<b>854</b>
By product credits		-	(14)	(15)
Third party refining & transport		-	-	-
Royalties		-	24	33
<b>Total cash operating costs</b>		-	<b>699</b>	<b>872</b>
Depreciation and amortisation		-	298	298
<b>Total operating costs</b>		-	<b>997</b>	<b>1,170</b>

## Southern Cross Operations, WA

Gold production for the September 2011 quarter was 20,959 ounces on lower volumes and lower head grade.

Production Summary		Mar Qtr	Jun Qtr	Sep Qtr
Marvel Loch		FY11	FY11	FY12
Underground ore mined	t	306,760	308,389	251,628
Grade	g/t	2.9	2.9	2.7
Ore milled	t	320,489	316,149	295,076
Grade	g/t	2.9	2.9	2.5
Recovery	%	90	93	89
<b>Gold production</b>	<b>oz</b>	<b>27,386</b>	<b>27,238</b>	<b>20,959</b>
<b>Cash Operating Costs</b>		\$ per ounce		
Mining		551	583	720
Processing		286	318	378
Site services		92	94	115
Stripping and ore inventory adjustments		9	(26)	(53)
		<b>938</b>	<b>969</b>	<b>1,160</b>
By product credits		(12)	(13)	(18)
Third party refining & transport		2	2	2
Royalties		36	27	49
<b>Total cash operating costs</b>		<b>964</b>	<b>985</b>	<b>1,193</b>
Depreciation and amortisation		180	184	264
<b>Total operating costs</b>		<b>1,144</b>	<b>1,169</b>	<b>1,457</b>

Production from the Exhibition decline was temporarily disrupted due to the subsidence of a mining void which intersected with the decline. Use of the decline was suspended for 14 days during the quarter while appropriate rehabilitation was completed. The related loss of production from low grade Exhibition stopes was partially offset by treatment of low grade stockpiles from satellite ore sources.

The Exhibition decline is now operational and production has resumed at expected levels. However, production for the quarter was lower than expected and, consequently, cash operating costs were higher. The grade of ore milled for the quarter was 2.5g/t Au, compared to 2.9g/t Au in the previous quarter, again directly related to the inclusion of

low grade stockpiles in place of Exhibition ore sources.

Cash operating costs of \$1,193 per ounce for the quarter reflect the lower volumes and grade of ore milled. Southern Cross Operations continues to generate positive cash flow.

## Discovery and Growth

The Discovery and Growth team completed a number of drilling programs early in the September 2011 quarter.

Evaluation of new targets continued within the Company's tenement holdings, and acquisition studies were undertaken elsewhere on high priority opportunities. As a result, three new tenements have been applied for in the Yilgarn province.

### Leonora Region

**Gwalia:** The deep drilling program at Gwalia was completed early in July, with the following intercepts from the final two holes (all intercepts down-hole, details in Table 1):

- GWDD12J intersected 8.7m @ 1.6g/t Au (South West Branch (SWB) lode) from 1,865m, 2.7m @ 5.0g/t Au from 1,928m (South Gwalia Series (SGS) lode), and 1.3m @ 10.0g/t Au from 1,853m (Main Lode).
- GWDD13G intersected 2.8m @ 49.0g/t Au from 2,053m (SWB lode) and 6.5m @ 14.8g/t Au from 2,066m (SGS lode) indicating that the Gwalia lode system extends further to the south than previously thought.

Following completion of this deep drilling program, the total Gwalia Mineral Resource was estimated and published on 24 August 2011 with new Ore Reserve estimates. The Gwalia Deeps resource remains open at depth below 1,840mbs.

Additional deep drilling is planned to commence in the December quarter with the objectives of extending the mineralisation on the southern edge of the Gwalia lode system within the current planned mining interval, and converting Inferred to Indicated Resources as a basis for increasing Ore Reserves at depth (Figure 2).

**Leonora targets:** A 3D modelling exercise has been completed to identify drill targets potentially hosting large-scale deposits in a key target zone centred on the Gwalia mine trend. Commencement of drilling four key targets is subject to obtaining heritage surveys and land clearances.

Elsewhere in the Leonora district, air-core geochemical and reverse circulation drilling is planned to commence in the December quarter on targets including Jasper Hill, Marionette and Coronation.

### Southern Cross Region

**Copperhead:** The final three drill holes of the first phase drilling program have been completed (holes CHR08, 09 and 1B).

Holes CHR08 and 1B both intersected wide intervals (20m to 30m thick) of banded iron formations (BIF) in the Western Series Lode but only containing low grade gold mineralisation. Drill hole CHR09 intersected the Northern

Series Lode but without significant gold mineralisation.

Evaluation and interpretation of the results of this first phase drilling has commenced, with a particular focus on understanding the complex structural controls on the high grade mineralisation intersected previously in hole CHR02D. The target potential at Copperhead will be re-evaluated to determine if additional drilling is warranted.

**Frasers:** During the September quarter a further six holes were drilled to complete the first phase drilling program (holes FSDD09 to 14 inclusive, Figure 3).

The target at Frasers is the depth extension of a series of lodes plunging south of the previous open pit mine. More significant gold mineralisation intersections during the quarter were associated with the BIF rock units appearing within the lode system at depth in holes FSDD012 and 13, as listed below (all intercepts down-hole, details in Table 1):

- FSDD010 intervals of 2.1m @ 12.3g/t Au from 309m in a sulphide rich BIF in a hanging wall position, 2.7m @ 3.1g/t Au from 329m, 2.1m @ 5.6g/t Au from 362m, and a deeper intercept of 2.0m @ 39.5g/t Au was intersected from 423m.
- FSDD012 intersected 4.8m @ 13.4g/t Au from 287m, 1.0m @ 24.1m from 306m, and 0.6m @ 32.7g/t Au from 316m.
- FSDD013 intersected 5.5m @ 8.4g/t Au from 283.7m and 3.8m @ 2.3g/t Au from 299m.

Drilling results from this first phase program have been compiled and interpreted, and a second phase program is being planned to extend the Frasers lodes system further south with drilling expected to recommence during the December 2011 quarter.

#### Other Areas

**Yilgarn province, WA:** Programs of work developed over several targets continue to be subject to the necessary approvals of heritage surveys and land clearances. Elsewhere regional targeting studies are continuing to generate priority areas with potential for larger higher grade deposits and for potential acquisition. As a result, three new areas have been covered by tenement applications.

#### East Lachlan Fold Belt, NSW:

The target in the Nyngan area, NSW, is an intrusion related porphyry copper-gold mineralisation within a large volcanic complex situated under younger cover rocks on the edge of the Great Artesian Basin. Following targeting based on detailed geological and geophysical studies, the planned drill program of nine holes was successfully completed. Each hole tested a specific target located approximately 2 to 4km apart over an area greater than 80km<sup>2</sup>.

The final hole BCRDD09 intersected mainly volcanic rocks with associated weak alteration and sulphide mineralisation (pyrite with minor chalcopyrite), confirmed by minor intervals of elevated copper and gold analytical results, suggesting that the hole is possibly located on the outer edges of a potential porphyry system.

Additional analysis is being completed on the mineral assemblages in hole BCRDD009, to be possibly followed by detailed gravity geophysical surveys, before drilling recommences late next quarter.

**Gawler, SA:** Work planned on EL4420 continues to be suspended following the six month moratorium that has been placed on accessing the Woomera Protected Area (WPA) and is due to be lifted in December this year. The geophysical gravity survey scheduled to commence last quarter was postponed until access is granted. In the meantime, a new tenement has been applied for near Whyalla, within the Gawler Block but outside the WPA.

## Health & Safety

Safety performance during the quarter remained relatively stable with the twelve month rolling Total Recordable Injury Frequency Rate at 12.6.

## Financials (unaudited)

72,254 ounces of gold were shipped in the September quarter, at an average gold price of A\$1,571 per ounce.

Cash at bank at 30 September 2011 was \$75 million.

The Company continued to strengthen its balance sheet with the payment of \$7 million to extinguish an asset financing facility. Interest bearing liabilities were \$4 million at 30 September 2011.

## Corporate

During the quarter, Van Eck Associates Corporation, a New York based investment advisory and hedge fund, became a substantial shareholder with a 5.0% shareholding at 30 September 2011.

## Share Capital at 30 September 2011

### Issued shares

Closing balance 30 Sep 2011 (unchanged)	<b>325,615,389</b>
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### Unlisted employee options

Opening balance 30 June 2011	3,679,561
Lapsed	(333,334)
Closing balance 30 September 2011	<b>3,346,227</b>

### Unlisted performance rights

Opening balance 30 June 2011	2,388,863
Lapsed	nil
Closing balance 30 September 2011	<b>2,388,863</b>

## 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  
 Betsy Donaghey..... Non-Executive Director  
 Phil Lockyer ..... Non-Executive Director  
 Robert Rae..... Non-Executive Director

#### 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

Level 10, 432 St Kilda Road  
 Melbourne Victoria 3004  
 Australia

Telephone..... +61 3 8660 1900  
 Facsimile..... +61 3 8660 1999  
 Email..... melbourne@stbarbara.com.au  
 Website ..... www.stbarbara.com.au

Substantial Shareholders	% of Holdings <sup>1</sup>
M&G Investment Management Ltd <sup>2</sup> .....	18.1%
Tradewinds Global Investors LLC.....	6.4%
Hunter Hall Investment Management Ltd .....	6.4%
Franklin Resources Inc.....	6.0%
Van Eck Associates Corporation .....	5.0%

1. % as notified by the substantial shareholders.
2. M&G Group's interest includes shares disclosed by Vanguard Precious Metals & Mining Fund.

Australian Securities Exchange (ASX) Listing "SBM"

#### Shareholder Enquiries Computershare Limited

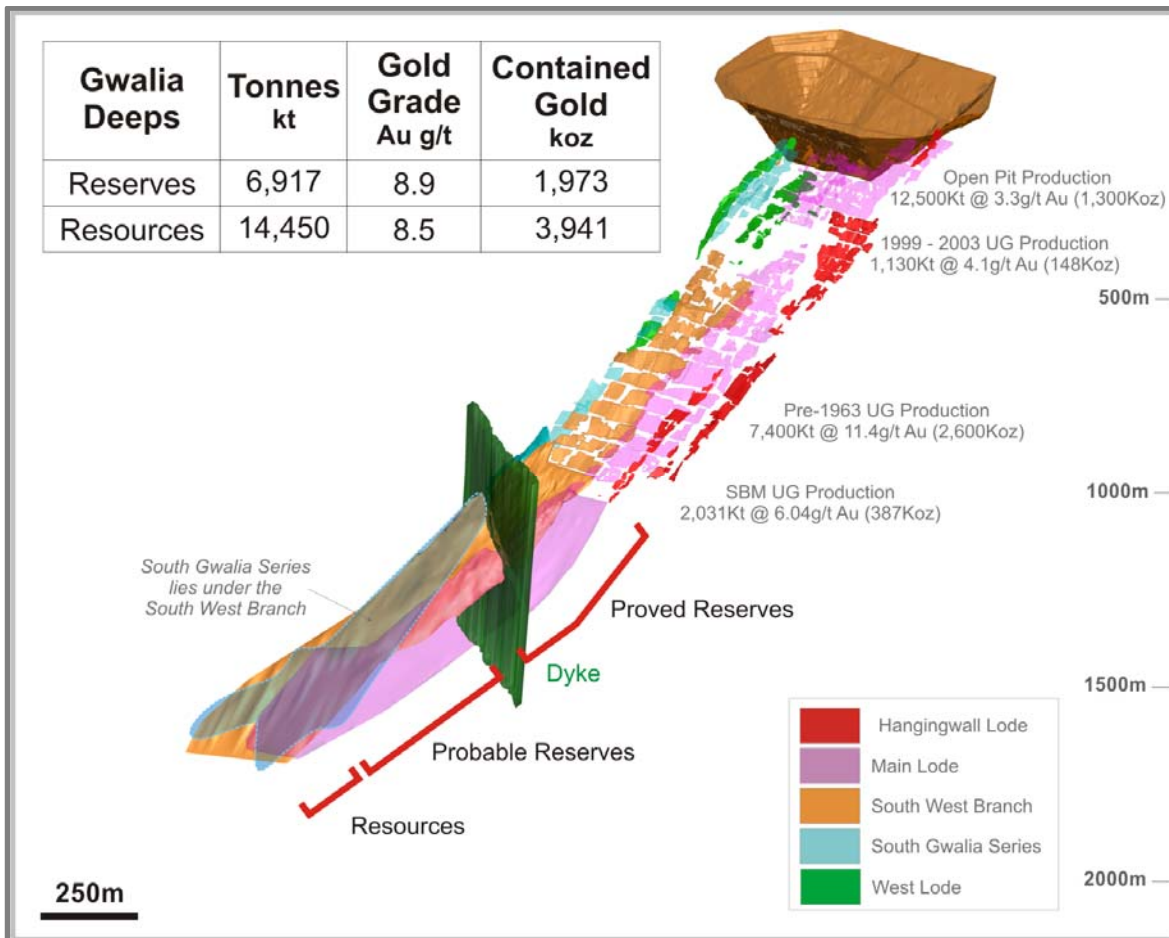
GPO Box 2975  
 Melbourne Victoria 3001  
 Australia  
 Telephone (within Australia) ..... 1300 653 935  
 Telephone (international) ..... +61 3 9415 4356  
 Facsimile..... +61 3 9473 2500

*Financial figures are in Australian dollars.*

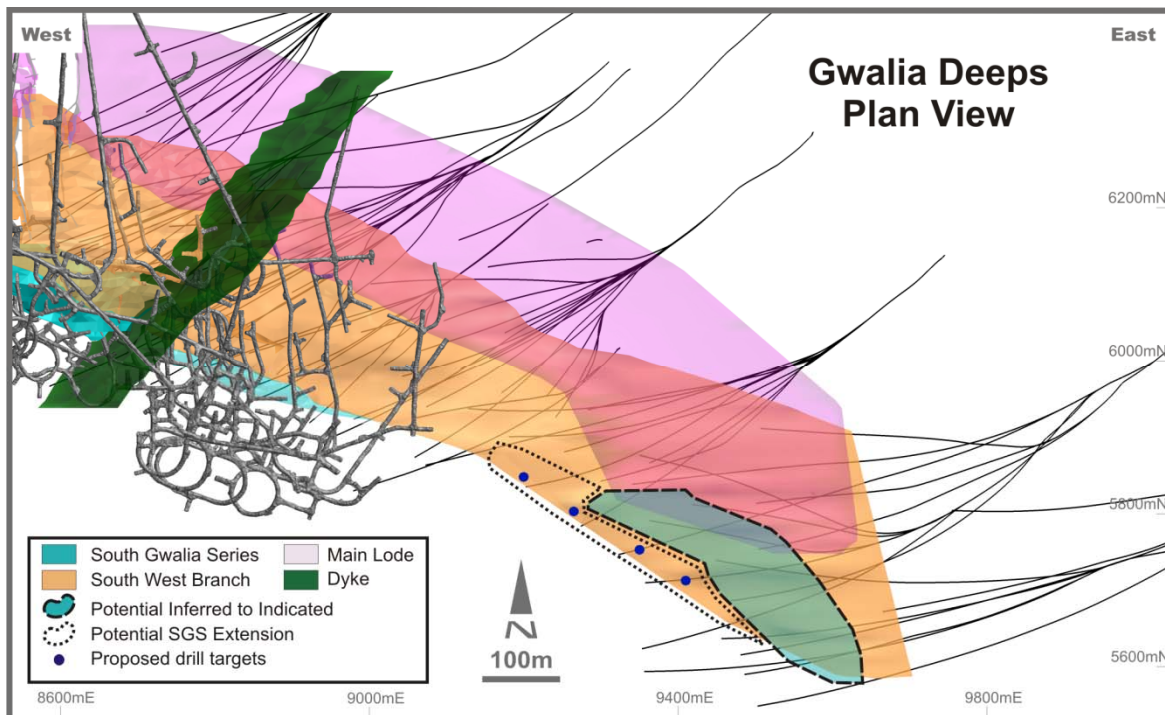
## Investor Relations Contacts

Ross Kennedy..... + 61 3 8660 1903  
 Rowan Cole ..... + 61 3 8660 1914

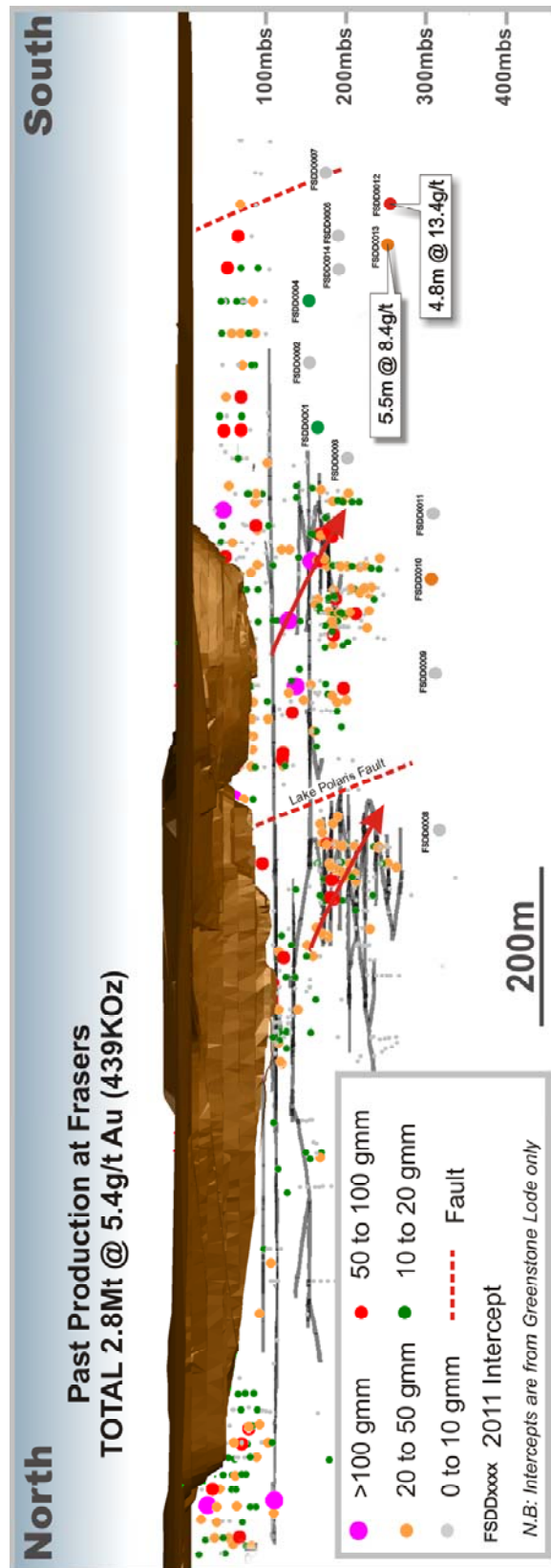
**Figure 1: Gwalia Deeps (Leonora) Ore Reserves and Mineral Resources**



**Figure 2: Gwalia Deeps (Leonora) Planned Drilling Program**



**Figure 3: Frasers (Southern Cross) Cross Section Showing Results From Recent Drilling**



**Table 1: Significant Intercepts**

Hole No	North (local)	East (local)	Dip/ Azimuth	Vertical Depth mbs	Lode	Down-hole Mineralised Intersection		
						From m	Length m	Gold grade g/t Au
<b>LEONORA</b>								
<b>Gwalia Deeps</b>								
GWDD12J	5796	9535	-50/280	1670.8	Main Lode	1853.1	1.3	10.0
GWDD12J	5798	9525	-49/280	1682.3	South West Branch	1865.5	8.7	1.6
GWDD12J	5805	9484	-44/279	1725.3	South Gwalia Series	1927.9	2.7	5.0
GWDD13G	5612	9586	-34/257	1698.4	South West Branch	2053.2	2.8	49.0
GWDD13G	5609	9575	-34/257	1706.3	South Gwalia Series	2065.5	6.5	14.8
<b>SOUTHERN CROSS</b>								
<b>Frasers South</b>								
FSDD0010	11505	4916	-72/81	303.4	Greenstone Lode	308.6	2.1	12.3
FSDD0010	11506	4922	-72/81	323.2	Greenstone Lode	329.0	2.7	3.1
FSDD0010	11507	4932	-72/81	354.7	Scholls Lode	362.5	2.1	5.6
FSDD0010	11510	4951	-71/82	412.1		423.0	2.0	39.5
FSDD0012	11005	4926	-57/91	253.5	Greenstone Lode	287.0	4.8	13.4
FSDD0012	11004	4936	-57/91	267.9	Greenstone Lode	306.0	1.0	24.1
FSDD0012	11004	4941	-57/91	275.7	Greenstone Lode	315.6	0.6	32.7
FSDD0013	11050	4933	-54/86	249.1	Greenstone Lode	283.7	5.5	8.4
FSDD0013	11051	4942	-54/86	260.8	Greenstone Lode	299.0	3.8	2.3

**Note:**

All mineralised intersections are quoted as down-hole lengths and gold values are uncut; for Gwalia the intersections are approximately true thickness and the nominal cut-off grade is 3g/t Au; and for other projects the nominal cut-off grade is 1g/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.