



St Barbara LIMITED

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September 2010 Quarterly Report

New mine development commenced at Leonora

Overview

Summary

- Group gold production continues to grow in line with expectations, with output of 63,488 ounces for the September 2010 Quarter.

Leonora Operations

- Gold production was 30,005 ounces for the September 2010 Quarter at a cash operating cost of \$792 per ounce.
- These results reflect previously published guidance that Leonora Operations would have lower production and higher costs in the September 2010 Quarter. Guidance for FY11 is maintained at 155 Koz to 170 Koz. Cash operating cost per ounce is anticipated to fall as the grade of ore increases through the year.
- King of the Hills underground mine development has commenced.

Southern Cross Operations

- Consistent gold production continues.
- Gold production of 33,483 ounces for the September 2010 Quarter was higher than expected at a cash operating cost of \$801 per ounce.
- The mine life of Marvel Loch Underground has been extended to at least 30 June 2012.

Discovery and Growth

- Geochemical drilling at Hibernia on the Thunderbox Shear in the Leonora region has identified two large gold anomalies. The northern zone is approximately three km long. Ten km to the south, a second zone is over two km long. This area has not been effectively explored before. These two anomalies will be drill tested in the December 2010 Quarter.
- Deep drilling at Gwalia has intersected the ore body at depth.

Health & Safety

- The Total Recordable Injury Frequency Rate calculated as a rolling 12 month average of 11.1 as at 30 September 2010 remained unchanged from 30 June 2010.

Finance and Corporate

- Gold shipped in the September 2010 Quarter was 65,330 ounces, realising an average gold price of \$1,353 per ounce.
- Cash at 30 September 2010 increased to \$110.4 million.

Outlook

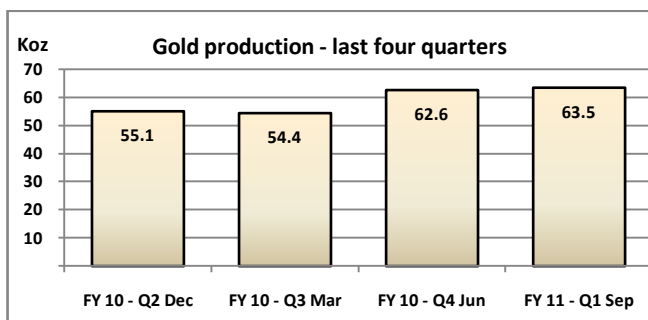
- The Company remains on track to deliver to published guidance, based on 265 Koz to 295 Koz gold production for FY11.

Tim Lehany
Managing Director & CEO
19 October 2010

Operations

Consolidated Gold Production

Consolidated gold production of 63,488 ounces for the September 2010 Quarter was the highest quarterly production since cessation of open pit mining in June 2009.



Production Summary		Mar Qtr FY10	Jun Qtr FY10	Sep Qtr FY11
Leonora	oz	27,284	31,130	30,005
Southern Cross	oz	27,153	31,514	33,483
Consolidated	oz	54,437	62,644	63,488
Total Cash Operating Costs				
Leonora	\$/oz	760	707	792
Southern Cross	\$/oz	979	752	801

Cash operating costs for both sites for the September 2010 Quarter included the introduction of a recharge of operational support costs, which had previously been accounted for as a corporate cost.

Leonora Operations

Gwalia

The grade of ore mined at Gwalia has steadily increased over the last three quarters. The grade for the September 2010 quarter of 6.0 grams per tonne of gold (g/t Au) was in line with expectations. As has previously been foreshadowed, the grade of ore mined is expected to increase during the remainder of the current fiscal year.

Production Summary		Mar Qtr FY10	Jun Qtr FY10	Sep Qtr FY11
Underground ore mined	t	172,375	194,845	155,392
Grade	g/t	5.2	5.3	6.0
Ore milled	t	173,437	194,075	170,086
Grade	g/t	5.1	5.2	5.7
Recovery	%	95	95	96
Gold production	oz	27,284	31,130	30,005

Ore mined for the September 2010 Quarter of 155,392 tonnes was slightly down on expectations, due to short term equipment unavailability in July. These issues were resolved by the end of July, and during August and September the tonnes of ore mined in each month were at an annual rate in excess of 700,000 tonnes.

The processing plant achieved recoveries of 96% which were slightly above expectations for the quarter.

In July a small parcel of third party ore was processed with no treatment of third party ore in August and September. As a consequence there have been minimal credits to apply against operating costs.

Development for the quarter focused on the Hoover Decline (168m), Adam Decline (162m) and Beech Decline (85m). Development of the Beech Decline will enable a new independent working area to be established in the mine (Figure 1).

Cash Operating Costs (\$ per ounce)	Mar Qtr FY10	Jun Qtr FY10	Sep Qtr FY11
Gold production (oz)	27,284	31,130	30,005
Costs			
Mining	495	562	547
Processing	189	158	153
Site services	56	45	84
Stripping and ore inventory adjustments	(12)	(96)	(26)
	728	669	758
By product credits	(1)	(2)	(2)
Third party refining and transport costs	1	2	1
Royalties	32	38	35
Total cash operating costs	760	707	792
Depreciation and amortisation	258	261	255
Total operating costs	1,018	968	1,047

Cash operating costs per ounce were higher in the September 2010 Quarter on account of lower ounces produced as expected, and the introduction of a recharge of operational support costs included in "Site services" amounting to \$29 per ounce. Cash operating costs are anticipated to fall as the grade of ore increases through the year.

King of the Hills

Mine development works at King of the Hills mine, Leonora, commenced on 9 October 2010.

Initial infrastructure and capital works have been completed to plan.

Both mine development and underground ore production will be undertaken by a mining contractor.

Outlook for Leonora Operations

Published guidance for Leonora Operations for the 2011 fiscal year is maintained at 155 Koz to 170 Koz. Gold production from Gwalia will progressively increase as the gold grade of the ore increases; particularly in the third and fourth quarters of the fiscal year.

Southern Cross Operations

Gold production for the September 2010 Quarter was 33,483 ounces, at a total cash operating cost of \$801 per ounce.

Production Summary		Mar Qtr FY10	Jun Qtr FY10	Sep Qtr FY11
Underground ore mined	t	218,583	254,701	267,822
Grade	g/t	3.5	5.1	3.4
Ore milled	t	292,459	242,703	270,729
Grade	g/t	3.4	4.3	4.1
Recovery	%	84	93	93
Gold production	oz	27,153	31,514	33,483

A positive reconciliation to reserve from processing a high grade Undaunted stope, higher than expected recoveries through the mill and utilisation of available stock piles, all contributed to the higher gold production for the quarter.

Resource drilling of the Undaunted and Contact Lodes has confirmed a modest increase in grade and tonnes. Recent drilling results from the Exhibition lode underpin an extension to the Marvel Loch Underground mine life to at least the end of FY12. A summary of significant intercepts is set out in Table 1.

Cash Operating Costs (\$ per ounce)	Mar Qtr FY10	Jun Qtr FY10	Sep Qtr FY11
Gold production (oz)	27,153	31,514	33,483
Costs			
Mining	512	529	490
Processing	316	212	224
Site services	47	43	72
Stripping and ore inventory adjustments	82	(60)	(5)
	957	724	781
By product credits	(10)	(12)	(15)
Third party refining and transport costs	2	2	2
Royalties	30	38	33
Total cash operating costs	979	752	801
Depreciation and amortisation	199	197	157
Total operating costs	1,178	949	958

Cash operating costs reflected the impact of processing high grade stockpiles established in the June 2010 Quarter, as well as the introduction of a recharge of operational support costs included in "Site services" amounting to \$20 per ounce.

Outlook for Southern Cross Operations

Published guidance for Southern Cross Operations for the 2011 fiscal year is maintained at 110 Koz to 125 Koz.

Discovery and Growth (D&G)

The Discovery and Growth team accelerated drilling programs during the September 2010 Quarter with a number of drilling projects initiated.

Leonora

King of the Hills: The pre-production phase of drilling at King of the Hills was completed in July with the final hole returning an intersection of 5.2m @ 26.2g/t Au from 385.3m down-hole, including 2.7m @ 47.1g/t Au (not true thickness), hosted within strongly quartz veined altered granite on the Eastern Flank of the ore body (Table 2). This intersection is encouraging for potential extension of the mineralised quartz veins deeper into the granite footwall.

Gwalia: Deep resource extension drilling commenced at Gwalia during the quarter with the aim of extending the resource to 2,000m below surface (Figure 2). The initial hole, GWDD13A, wedged off a previous hole, GWDD13, targeted the ore body extension at a depth of 1,900mbs and was completed with a significant intersection of 5m @ 5.1g/t Au from 2,164m down-hole (approximately true thickness) (Table 1). This first wedge hole has successfully intersected and confirmed the down-plunge extension of the central Gwalia lode system by over 200m in depth and has now provided the basis for further drilling. As a result, drilling has commenced on a second hole, GWDD13B, which is also wedged off GWDD13. A second drill rig has now been mobilised and has commenced drilling a third hole, GWDD12E, wedged off a previous hole, GWDD12. Both these wedge holes are aimed at the central part of the Gwalia lode system and are expected to intersect the target zone during the December 2010 Quarter (Figures 3 and 4). Based on the overall results of these three wedge holes, a decision will be made to move to a major program of infill drilling of Gwalia extensions at depth by the end of the December 2010 Quarter.

Hibernia prospect: "Hibernia" is the new name for what has previously been called "Thunderbox Corridor" and is located 80km north of Leonora along the major Thunderbox Shear Zone (Figure 5). A second phase of infill air-core drilling of the newly identified Hibernia prospect has been completed. Preliminary assay results indicate encouraging gold intercepts for several holes, as well as broad gold and arsenic geochemical anomalies defining two main prospects (Figure 6). One prospect is over three km long. Ten km to the south, a second prospect is over two km long.

A reverse circulation (RC) drill machine is presently being mobilised to test these two prospects at depth, which will be completed during the December 2010 Quarter.

Geological studies of the controls on high grade gold mineralisation at **Tower Hill** are being updated, with the aim of refining underground mine planning. A major structural geology study of the Leonora province, with the aim of generating targets for further drill testing, has commenced.

Southern Cross

Copperhead: Re-evaluation of historic data covering the previous Copperhead gold mine in the Southern Cross region has been completed and an initial drill program of six holes is being planned for the December 2010 Quarter. Four holes will test potential high grade underground zones within the largely unmined Western Lode (Figure 7) and another two holes will test depth extensions of the previously mined Northern and Southern lodes (Figure 8).

Compilation of historic data at **Fraser's South** and **Corinthian** has continued, with the aim of testing potential high grade underground extensions following the completion of drilling at Copperhead (Figure 9).

Other Areas

East Lachlan Fold Belt: Three main target areas for porphyry-style copper-gold mineralisation have been identified under younger cover rocks, based on completion of "depth-to-basement" geophysical modelling. Detailed ground gravity surveys have been planned over these three areas to better define the targets for drill testing, and these are expected to commence early in the December 2010 Quarter.

Health & Safety

The Total Recordable Injury Frequency Rate calculated as a rolling 12 month average as at 30 September 2010 of 11.1 remained unchanged from 30 June 2010.

Financials (unaudited)

Gold shipped in the September 2010 Quarter of 65,330 ounces was sold at an average price of \$1,353 per ounce.

Cash at bank was \$110.4 million as at 30 September 2010.

The mark-to-market value of the King of the Hills price protection program comprising gold options contracts, as at 30 September 2010 was negative \$8.6 million, which has reduced significantly from the mark-to-market value reported at 30 June 2010 of negative \$38.7 million.

Changes in the mark-to-market value are recognised in the income statement and within an equity reserve at each half year reporting date. The amount recognised in the income statement is reported as a significant item.

Corporate

As previously announced, the Company sold its surplus Tarmoola processing plant during the quarter for \$3.0 million in cash, and realised a net profit of approximately \$1.2 million on the sale.

Under the terms of the sale, the purchaser is also required to rehabilitate the site of the plant, resulting in significant savings to the Company.

The Company has also entered into an agreement to sell non-core Leonora tenements to Jabiru Metals Limited for \$1.7 million, with St Barbara retaining all gold rights for a minimum of 5 years. The estimated net profit on this transaction is \$1.5 million.

Both these items will be significant items in the December 2010 Half Year accounts.

Voluntary share top-up and share sale facilities were launched on 13 October to enable small shareholders to buy or sell St Barbara shares free from transaction costs, subject to defined terms and conditions.

As previously announced, shareholders will be asked to consider a share consolidation in the ratio of one new

share for six existing shares at the upcoming Annual General Meeting of shareholders (AGM).

The AGM is to be held in Melbourne on 18 November commencing at 11.00am. Details are available on the Company website.

The Company's share capital structure as at 30 September 2010 was:

Issued shares	1,953,668,407
Unlisted employee options	24,201,366

In addition, and subject to shareholder approval at the Annual General Meeting of Shareholders on 18 November 2010, it is anticipated that 15.2 million performance rights (with continuous service and performance hurdles) will be issued.

During the September 2010 Quarter, a total of 1,000,000 shares were issued on the exercise of unlisted employee options.

The last \$1.2 million of Convertible Notes were redeemed in July 2010.

As previously reported, the Supreme Court of Western Australia delivered its judgment in the Kingstream litigation on 30 June 2010. The Court found in favour of St Barbara Limited and its subsidiary and dismissed all of the plaintiff's claims.

Kingstream has subsequently lodged an appeal against the decision, challenging the dismissal of the contractual causes of action, and the trial Judge's assessment of damages. St Barbara will defend the appeal. St Barbara had previously, in the lead up to the trial, lodged an appeal against a decision of the Court allowing the plaintiff to amend his statement of claim to reintroduce a claim in contract. Both appeals will be heard together, probably during the second quarter of 2011.

Outlook

The Company maintains its previously published forward guidance for the current fiscal year, and net profit guidance for the current half before significant items.

Based on forward guidance for gold production for the year of 265,000 to 295,000 ounces of gold, a \$50 per ounce change in the average gold price realised for the year equates to an estimated EBIT impact in the range of \$13.3 million to \$14.8 million.

Production for the first half of the current fiscal year is forecast to be in the range 130,000 to 140,000 ounces. Production is expected to increase in the second six months of the fiscal year, driven primarily by higher grade ore from the Gwalia mine at Leonora.

Corporate Directory

As at 30 September 2010

St Barbara Limited
ABN: 36 009 165 066

Board of Directors

Colin Wise Chairman
 Tim Lehany Managing Director & CEO
 Doug Bailey Non-Executive Director
 Barbara Gibson 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

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Substantial Shareholders	% of Holdings
	As Notified
M&G Group*	17.0%
Franklin Resources	6.0%
Hunter Hall Investment Management.....	5.1%

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

Australian Securities Exchange Listing "SBM"

Shareholder Enquiries

Computershare Limited

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 Financial figures are in Australian dollars.

Investor Relations Contacts

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Figure 1: Leonora Operations - Gwalia mine development

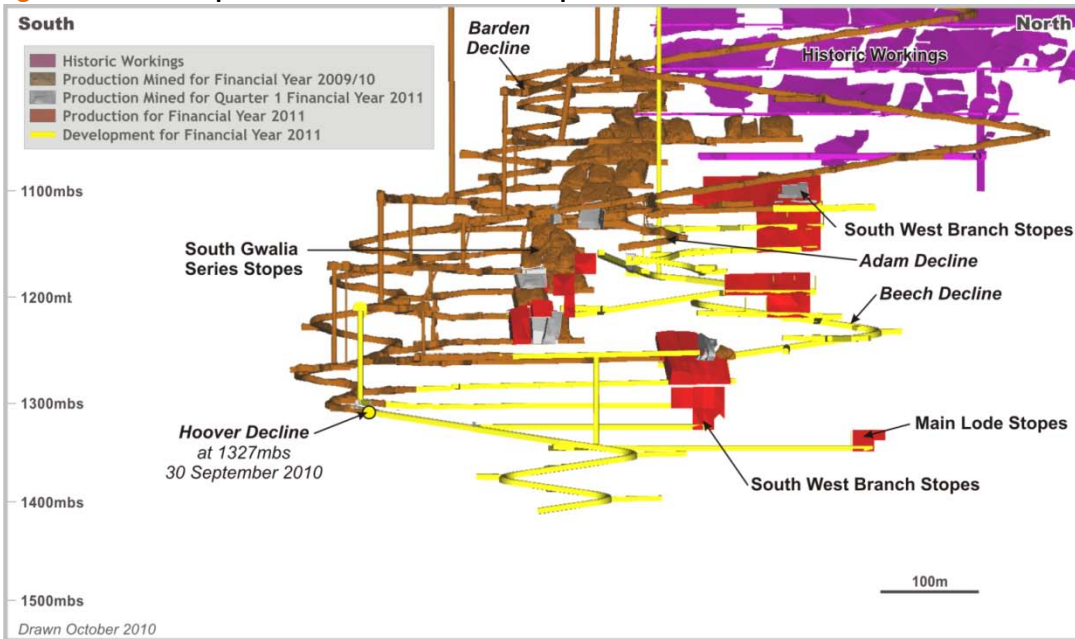


Figure 2: Leonora Operations – Gwalia Deeps

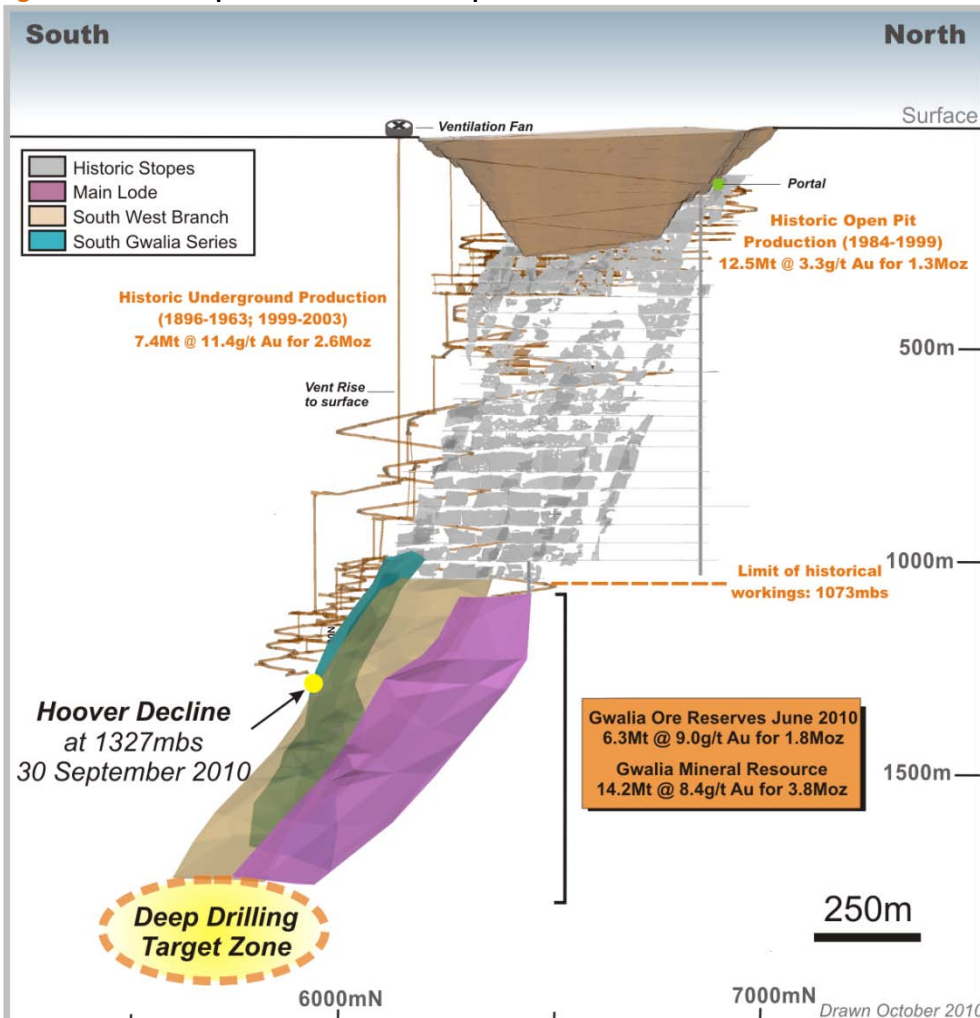


Figure 3: Leonora Operations – Gwalia Deeps drilling targets

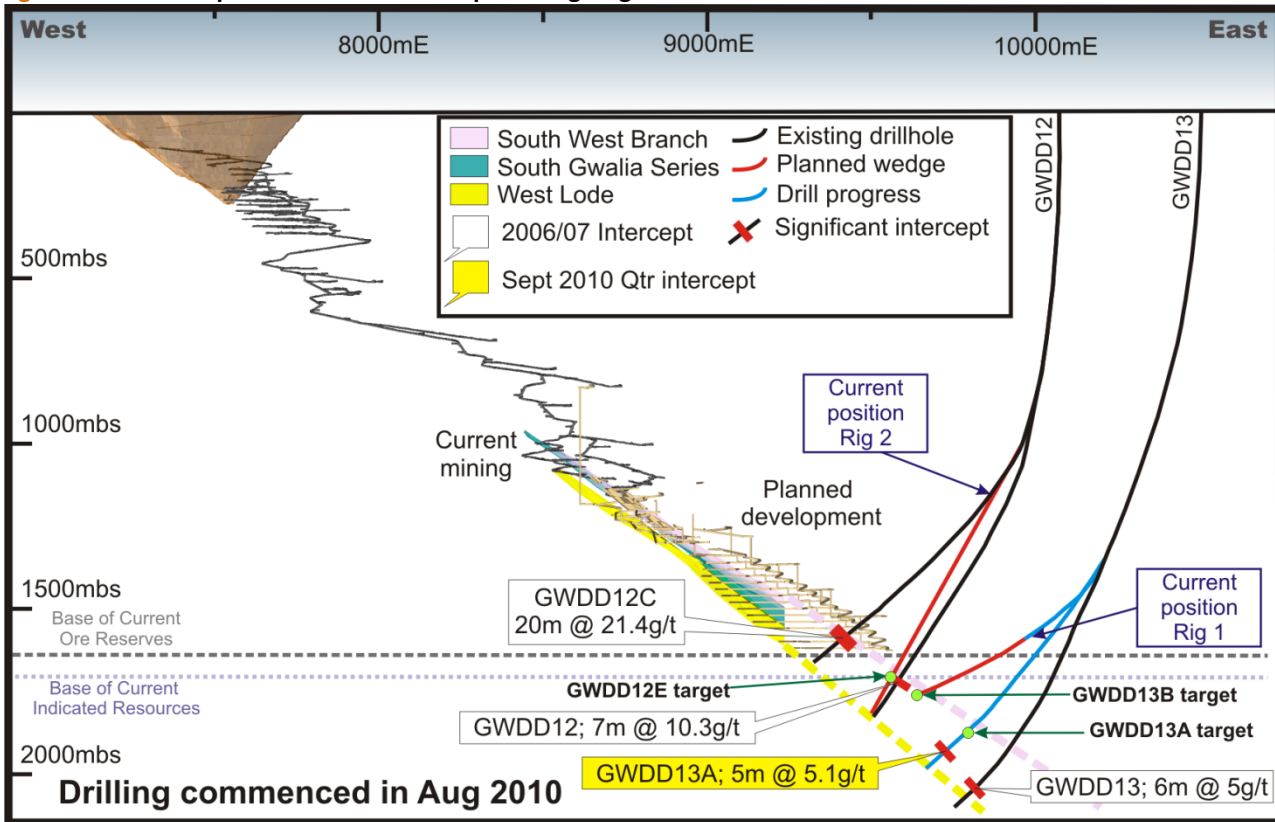


Figure 4: Leonora Operations - Gwalia Deep drilling targets

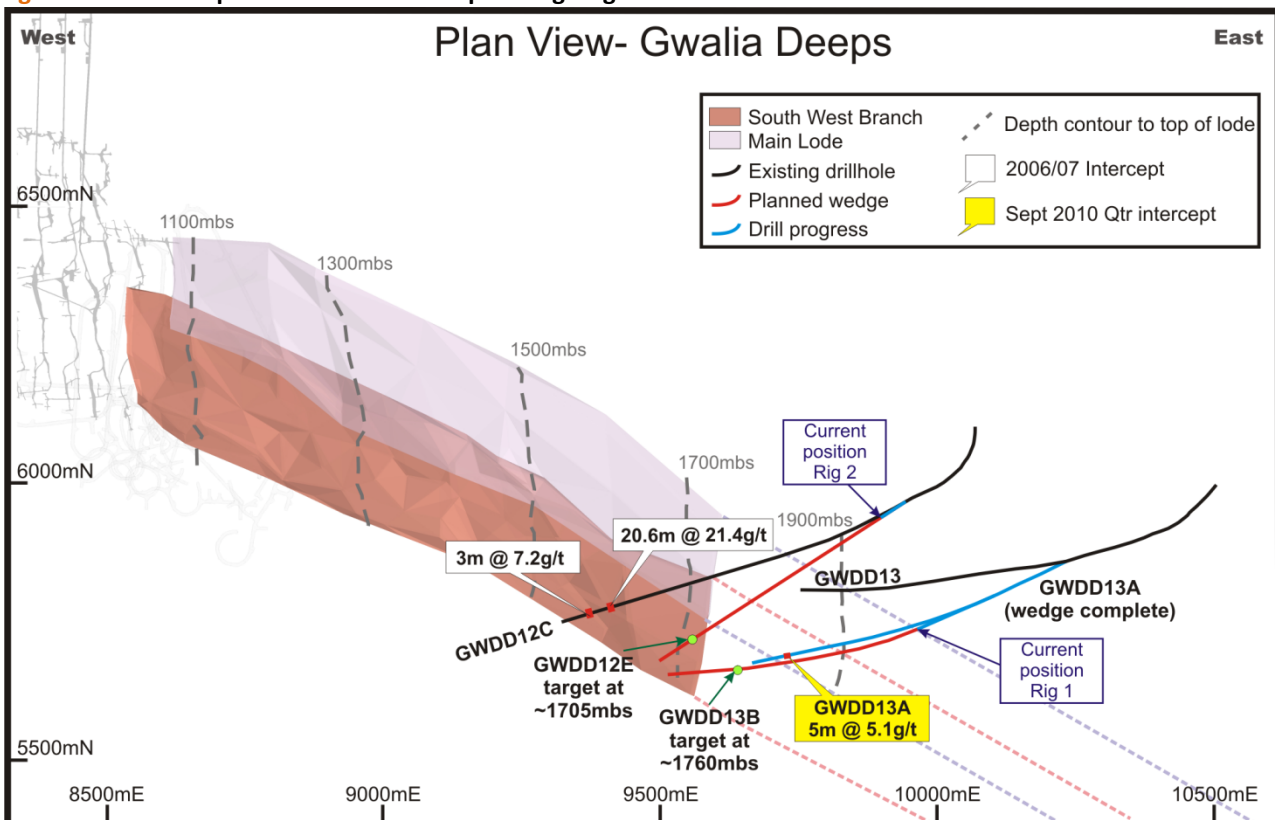


Figure 5: Leonora D&G – Regional

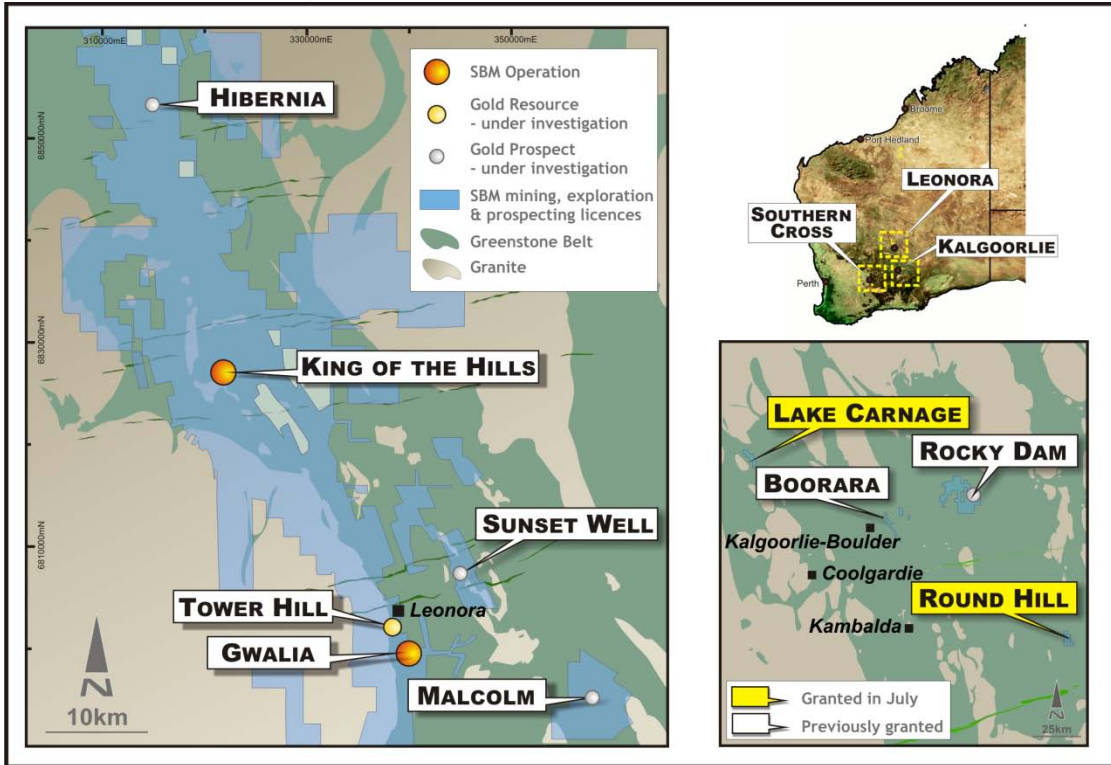


Figure 6: Leonora D&G – Hibernia

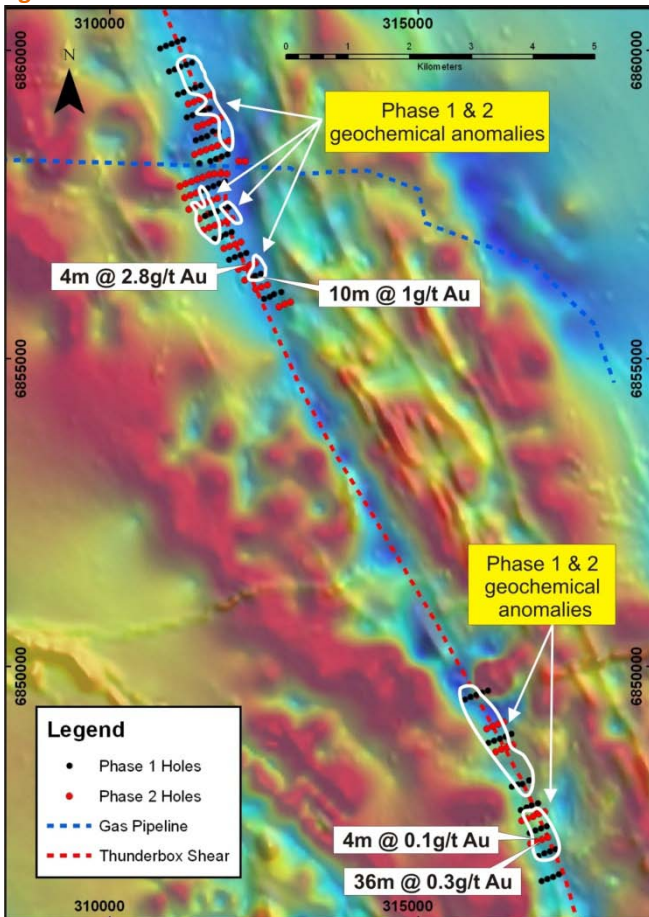


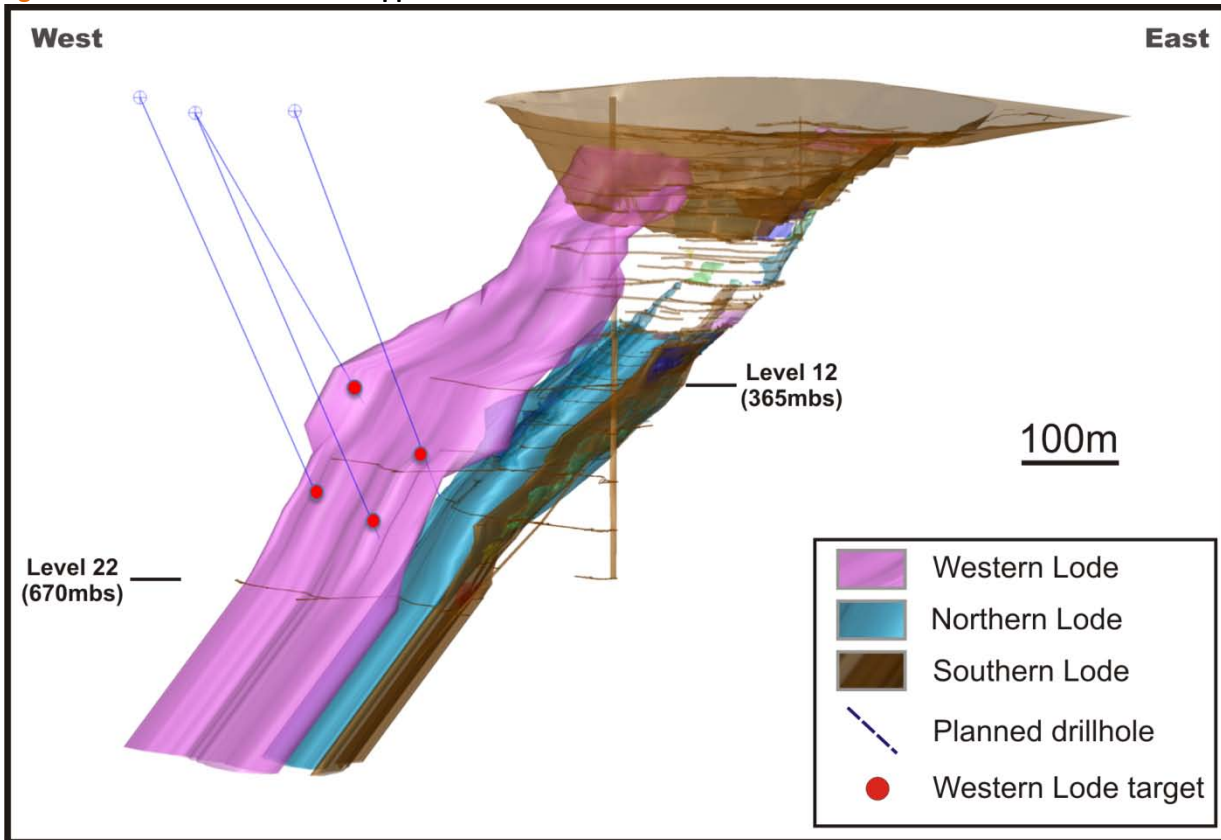
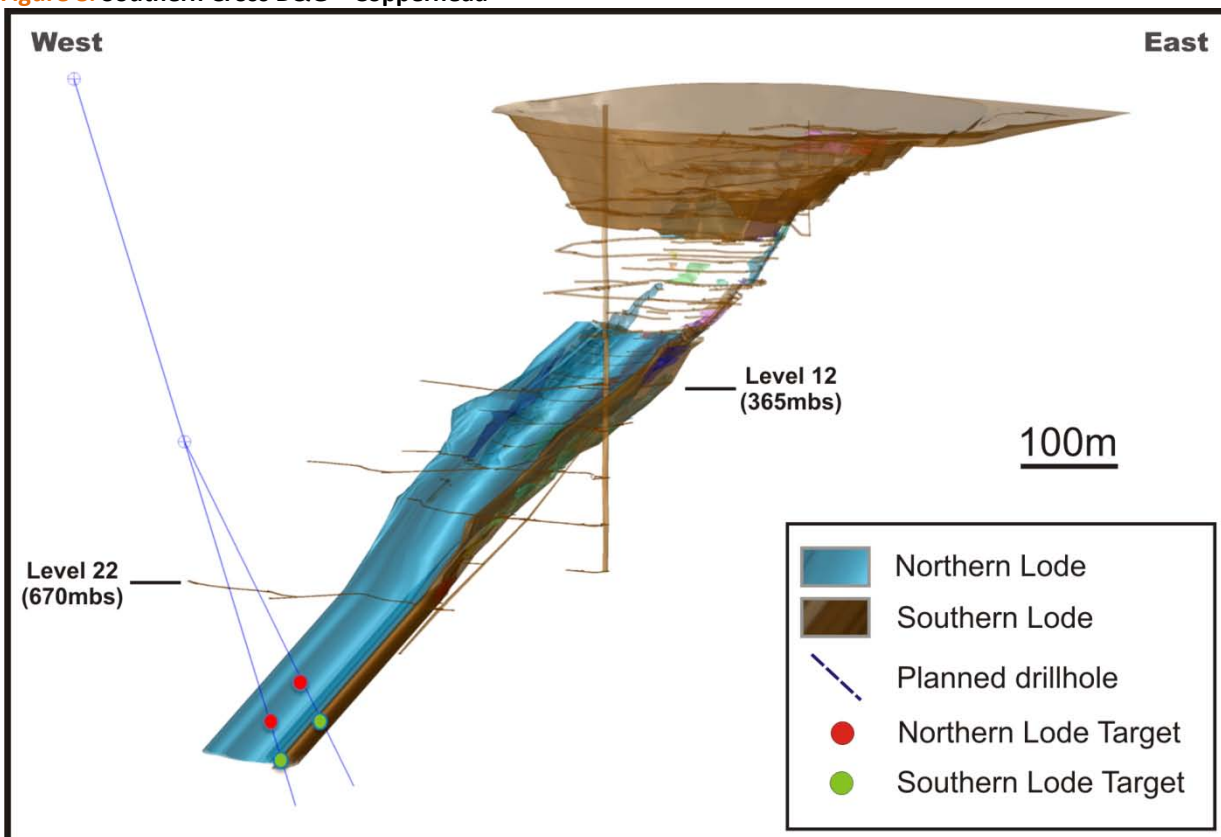
Figure 7: Southern Cross D&G – Copperhead

Figure 8: Southern Cross D&G – Copperhead


Figure 9: Southern Cross D&G - Regional

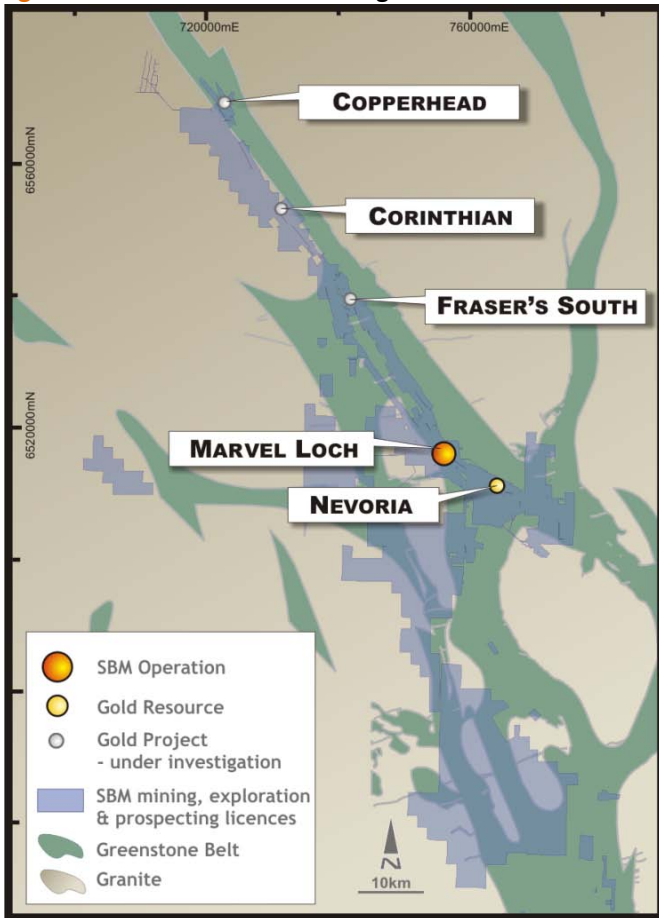


Table 1: Significant Intercepts

Hole No	North (local)	East (local)	Vertical Depth	Lode	Mineralised Intersection	
					Length m	Gold g/t Au
LEONORA						
Gwalia Deeps						
GWDD13A	5687	9730	1930		5.0	5.1
SOUTHERN CROSS						
Marvel Loch						
UNRD027	10757	4689	802	Undaunted	5.9	40.1
UNRD025	10757	4689	799		7.8	11.4
UNRD026	10757	4689	813		14.4	5.9
EXRD134	10158	4862	728	Exhibition Pipe	24.4	6.1
EXRD140	10158	4860	728		20.9	4.9
EXRD137	10156	4861	773		19.5	4.7
EXRD133	10158	4862	745		28.7	2.9
EXRD135	10158	4862	720		19.3	3.1
EXRD132	10158	4862	710		27.1	2.1
EXRD139	10156	4861	732		15.3	3.2
EXRD138	10156	4861	758		25.6	1.8
EXRD141	10158	4860	731		20.0	2.3

Notes:

1. A top cut of 50 g/t Au is applied to the Exhibition Pipe intersection. A top cut of 150 g/t Au is applied to the Undaunted Lode intersection.
2. Mineralised intersections are quoted as true widths.

Table 2: Significant Intercepts

Hole No	North (local)	East (local)	Dip/Azi	Mineralised Intersection		
				From m	Length m	Gold g/t Au
LEONORA						
King of the Hills						
TARD4056	10820	50575	-48/91	385.3	5.2	26.2
				includes	2.7	47.1

Note:

1. Mineralised intersections are quoted as downhole lengths.

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 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.