

- > **95 koz gold produced at AISC A\$862/oz**
- > **Debt free, A\$99 million cash at bank**
- > **Gwalia Extension Project capex approved**

## Executive Summary

### Operations

- > **Consolidated gold production** for the March 2017 quarter was 95,346 ounces (Q2 Dec: 98,982 ounces).
- > **Consolidated All-In Sustaining Cost:** (AISC) was A\$862 per ounce (Q2 Dec: A\$876 per ounce). The average realised gold price for the quarter was A\$1,651 per ounce (Q2 Dec: A\$1,636 per ounce).
- > **Gwalia** (Western Australia) gold production for the quarter was 64,916 ounces (Q2 Dec: 70,925 ounces) at AISC of A\$786 per ounce (Q2 Dec: A\$716 per ounce). Mined grade for the quarter was 11.3 g/t Au (Q2 Dec: 11.9 g/t Au) with 186 kt ore milled (Q2 Dec: 201 kt).
- > **Simberi** (PNG) gold production for the quarter was a record 30,430 ounces (Q2 Dec: 28,057 ounces), at AISC of A\$1,025 per ounce (Q2 Dec: A\$1,277 per ounce).

### Health & Safety

- > The Company-wide Total Recordable Injury Frequency Rate (TRIFR), calculated as a rolling 12 month average, improved to a new record low of 1.5 to 31 March 2017 (Q2 Dec: 1.8).

### Gwalia Extension Project

- > The St Barbara Board approved capital expenditure for the Gwalia Extension Project, as announced on 27 March 2017.
- > A detailed budget and execution plan confirm that the Project will generate a robust financial return, and extend mining at Gwalia to at least 2,000 metres below surface (mbs) in FY 2024<sup>2</sup>, as well as providing opportunity for potential increases in production and the foundation for extending the mine life further, should sufficient reserves be identified.
- > The Project has an overall budget of A\$100 million and will take two and a half to three years to construct. The Project consists of two main components, a ventilation upgrade and paste aggregate fill involving mixing paste from surface with waste crushed underground to fill stope cavities.

### Exploration Investments

- > The Company has invested in two Australian explorers, Catalyst Metals Limited (ASX:CYL) and Peel Mining Limited (ASX:PEX). One component of the Company's growth strategy is targeted investments in early to advanced stage exploration through earn-in arrangements, joint ventures or direct equity investments.
- > Catalyst and Peel are strategic and highly prospective investments, building the Company's overall development pipeline.
- > Further investment opportunities are being evaluated, including operating, development and exploration assets.

### Exploration

- > **Gwalia (Leonora) WA** Activities focused on defining extensions to the Gwalia lode system continued during the quarter, with surface drill programs targeting down-plunge zones.
- > Eight daughter holes (GWDD130-Q, GWDD17F-H, and GWDD18D-E) were completed at Gwalia targeting below 2,000 metres, passing through intervals interpreted to represent South West Branch (SWB) and South Gwalia Series (SGS2).
- > A 3D seismic program targeting a 15 km<sup>2</sup> area surrounding the Gwalia mine has commenced. The program will assist in understanding the Gwalia shear zone and aim to identify possible Gwalia-like mineralised systems in the nearby area.
- > **Pinjin Project (Yilgarn) WA** Final results for the 22 hole (PJRC0001 to PJRC0022), 3,239 metre Reverse Circulation (RC) drilling program completed in the December 2016 quarter were received.
- > A 15,155 metre Aircore drilling program for 305 holes was completed during the March 2017 quarter testing five targets.
- > **Back Creek NSW** Processing and image generation from the airborne magnetic survey was completed over Back Creek

<sup>1</sup> Non-IFRS measure, refer Appendix

<sup>2</sup> Ore Reserves at 30 June 2016 extend down to 1,940 mbs, Annual Mineral Resources and Ore Reserves Report at 30 June 2016, available at [www.stbarbara.com.au](http://www.stbarbara.com.au)

EL8214 in central NSW. Inversion modelling of the magnetic data over areas of interest is underway.

- > **Tatau Island PNG** Trenching, mapping and drilling continued at Southwest Tatau Island during the March 2017 quarter, targeting high grade sulphide - oxide gold mineralisation.
- > **Option and Farm-in with Newcrest** A regional soil sampling program, designed as part of the Newcrest option and farm-in exploring for copper-gold porphyry targets, commenced early in the March 2017 quarter. 558 soil samples were collected on a 200 m x 200 m off-set grid covering a 21 km<sup>2</sup> area over Tatau Island.

### Finance (unaudited)

- > The Company is now debt free<sup>1</sup>. As announced on 13 February 2017, the final US\$20 million principal<sup>2</sup> of US Notes was repurchased on 15 March 2017. The Company has repaid a total of US\$325 million (A\$436 million) in principal since June 2015.
- > After debt repayments and interest of A\$56 million during the quarter, total cash at bank at 31 March 2017 was A\$99 million<sup>3</sup> (31 December 2016: A\$87 million).

### Outlook

- > Guidance for FY17 has been revised upwards and is summarised as follows:
  - > Forecast Gwalia (Leonora) gold production of between 260,000 and 265,000 ounces (previously 255,000 to 265,000 ounces) at an AISC of between A\$795 and A\$815 per ounce (previously A\$815 and A\$850 per ounce), with sustaining capex of between A\$32 and A\$35 million (unchanged), plus growth capex of between A\$12 to A\$15 million (unchanged).
  - > Forecast Simberi gold production of between 105,000 and 110,000 ounces (previously 95,000 and 105,000 ounces) at an AISC of between A\$1,285 and A\$1,330 per ounce (previously A\$1,330 and A\$1,490 per ounce), with capex of between A\$4 and A\$5 million (unchanged).
  - > Forecast exploration expenditure is unchanged at between A\$18 and A\$22 million, consisting of:
    - > A\$10 to A\$12 million at Gwalia
    - > A\$8 to A\$10 million split approximately 30% at Pinjin in WA and 70% on the Simberi Island group in PNG.

**Bob Vassie**  
Managing Director and CEO  
20 April 2017

1 No interest bearing borrowings, except for equipment leases amounting to less than A\$1 million

2 US\$21 million (~A\$28 million) in total consisting of principal repayment, premium and accrued interest.

3 Financial information unaudited

## St Barbara Gold Production & Guidance

Production Summary Consolidated		Year FY16	Q1 Sep FY17	Q2 Dec FY17	Q3 Mar FY17	Q3 YTD FY17	Guidance FY17 <sup>3</sup>
<b>Production</b>							
Gwalia	oz	267,166	67,118	70,925	64,916	202,959	260 to 265 koz (previously 255 to 265 koz)
King of the Hills <sup>4</sup>	oz	9,112	-	-	-	-	-
Simberi	oz	110,286	25,429	28,057	30,430	83,916	105 to 110 koz (previously 95 to 105 koz)
<b>Consolidated</b>	<b>oz</b>	<b>386,564</b>	<b>92,547</b>	<b>98,982</b>	<b>95,346</b>	<b>286,875</b>	<b>365 to 375 koz</b> (previously 350 to 370 koz)
<b>Mined Grade</b>							
<b>Reserve grade <sup>2</sup></b>							
Gwalia	g/t	9.3	10.4	11.9	11.3	11.2	8.3
Simberi	g/t	1.26	1.05	1.13	1.14	1.11	1.3
<b>Total Cash Operating Costs<sup>1</sup></b>							
Gwalia	\$/oz	609	580	546	582	569	n/a
King of the Hills <sup>4</sup>	\$/oz	893	-	-	-	-	-
Simberi	\$/oz	1,143	1,247	1,161	944	1,108	n/a
<b>Consolidated</b>	<b>\$/oz</b>	<b>768</b>	<b>763</b>	<b>721</b>	<b>697</b>	<b>727</b>	
<b>All-In Sustaining Cost<sup>1</sup></b>							
Gwalia	\$/oz	783	774	716	786	758	795 to 815 (previously 815 to 850)
King of the Hills <sup>4</sup>	\$/oz	964	-	-	-	-	-
Simberi	\$/oz	1,293	1,359	1,277	1,025	1,210	1,285 to 1,330 (previously 1,330 to 1,490)
<b>Consolidated</b>	<b>\$/oz</b>	<b>933</b>	<b>935</b>	<b>876</b>	<b>862</b>	<b>890</b>	<b>940 to 980</b> (previously 950 to 1,030)

[1] Non-IFRS measure, refer Appendix.

[2] Ore Reserve grade at 30 June 2016, refer Ore Reserve and Mineral Resources Statement (released 23 August 2016).

[3] FY17 guidance announced in Q4 June 2016 quarterly report (released 19 July 2016), updated in subsequent quarters.

[4] King of the Hills ceased mining in April 2015 and ceased processing in September 2015.

It was sold in October 2015 (refer ASX announcement 16 October 2015).

### Disclaimer

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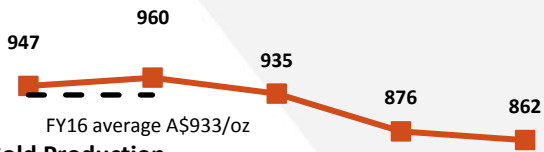
This report contains forward-looking statements that are subject to risk factors associated with exploring for, developing, mining, processing and the sale of gold. Forward-looking statements include those containing such words as anticipate, estimates, forecasts, indicative, should, will, would, expects, plans or similar expressions. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, and which could cause actual results or trends to differ materially from those expressed in this report. Actual results may vary

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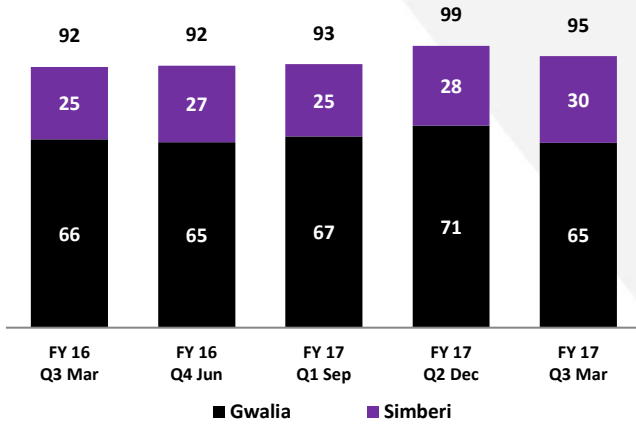
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The Company estimates its reserves and resources in accordance with the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves 2012 Edition ("JORC Code"), which governs such disclosures by companies listed on the Australian Securities Exchange.

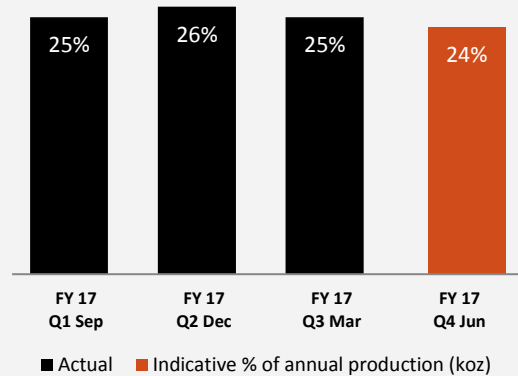
**AISC (Consolidated)**  
(A\$/oz)



**Gold Production**  
(koz)



**FY17 Production**  
**Indicative Quarterly Guidance Profile**



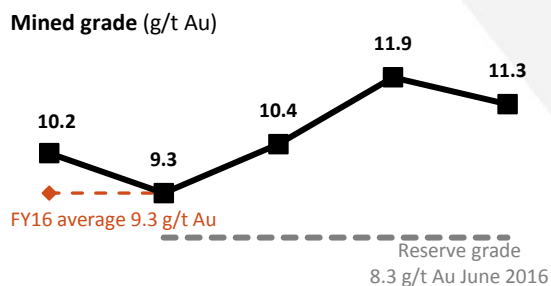
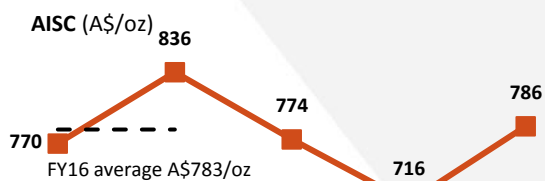
Figures displayed to nearest thousand ounces. Reported ounces in associated table.

**Presentation on quarterly report and audio webcast**

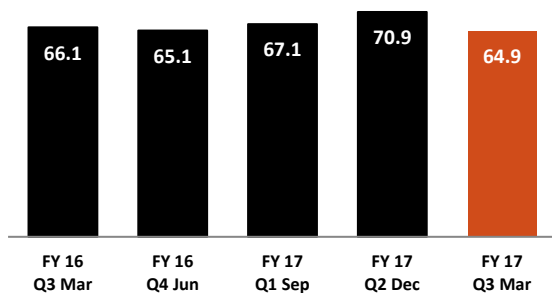
Bob Vassie, Managing Director & CEO, will brief analysts and institutional investors on the March 2017 Quarterly Report at 12:00 pm Australian Eastern Standard Time (UTC + 10 hours) on Thursday 20 April 2017. Participation on the conference call is by personal invitation only.

A live audio webcast of the briefing will be available on St Barbara's website at [www.stbarbara.com.au/investors/webcast/](http://www.stbarbara.com.au/investors/webcast/) or by [clicking here](#). The audio webcast is 'listen only' and does not enable questions. The audio webcast will subsequently be made available on the website.

## Gwalia, Leonora, WA



### Production (koz)



## Operations

- > Gwalia gold production for the March 2017 quarter was 64,916 ounces (Q2 Dec: 70,925 ounces).
- > Average mined grade for the quarter was 11.3 g/t Au (Q2 Dec: 11.9 g/t Au), which was higher than predicted due to lower than expected dilution and some high grade shoots. An average mined grade of ~9.0 g/t Au is anticipated for Q4 June 2017.
- > Overall mined tonnes decreased compared to the December quarter due to prolonged and significant rainfall during February and March that slowed production, and a short period of blasting related stoping sequence delays.
- > All In Sustaining Cost (AISC) was A\$786 per ounce for the quarter (Q2 Dec: A\$716 per ounce), an increase on the previous quarter primarily due to the lower ounces produced.
- > Recovery for the first three quarters of FY17 has been consistent at 97% (FY16: 96%).

## Outlook

- > FY17 guidance has been revised upwards due to above target year-to-date production as follows:
  - > Production of between 260,000 and 265,000 ounces (previously 255,000 and 265,000 ounces)
  - > AISC of between A\$795 and A\$815 per ounce (previously A\$815 and A\$850 per ounce)
  - > Capital expenditure (unchanged) comprising:
    - > Sustaining capex: \$32 to \$35, plus
    - > Growth capex: \$12 to \$15 million.

<b>Production Summary</b>		<b>Q1 Sep</b>	<b>Q2 Dec</b>	<b>Q3 Mar</b>
<b>Gwalia</b>		<b>FY17</b>	<b>FY17</b>	<b>FY17</b>
Underground ore mined	kt	203	196	175
Grade	g/t	10.4	11.9	11.3
Ore milled <sup>[1]</sup>	kt	215	201	186
Grade <sup>[1]</sup>	g/t	10.0	11.3	11.2
Recovery	%	97	97	97
<b>Gold production</b>	<b>oz</b>	<b>67,118</b>	<b>70,925</b>	<b>64,916</b>
<b>All-In Sustaining Cost <sup>[2]</sup></b>		<b>A\$ per ounce</b>		
Mining		373	359	347
Processing		109	111	114
Site services		55	58	58
Stripping and ore inventory adjustments		2	(20)	21
		<b>539</b>	<b>508</b>	<b>540</b>
By-product credits		(2)	(2)	(2)
Third party refining & transport		1	1	2
Royalties		42	39	42
<b>Total cash operating costs</b>		<b>580</b>	<b>546</b>	<b>582</b>
less operating development		(82)	(84)	(62)
Adjusted cash operating cost		498	462	520
Corporate and administration		53	50	49
Corporate royalty		25	25	25
Rehabilitation		4	3	4
Capitalised mine & op development		163	161	175
Sustaining capital expenditure		31	15	13
<b>All-In Sustaining Cost (AISC)</b>		<b>774</b>	<b>716</b>	<b>786</b>

[1] Includes Gwalia mineralised waste

[2] Non-IFRS measure, refer Appendix

### Gwalia Extension Project Approved

- > The St Barbara Board approved capital expenditure relating to the Gwalia Extension Project, as announced 27 March 2017 and set out below.
- > A detailed budget and execution plan confirm that the Project will generate a robust financial return, and extend mining at Gwalia to at least 2,000 metres below surface (mbs) in FY 2024<sup>1</sup>, as well as provide the foundation for potential further extensions.

- > The Project has an overall budget of A\$100 million and will take two and a half to three years to construct. The Project consists of two main components, a ventilation upgrade and paste aggregate fill.

#### Ventilation Upgrade

- > The Project provides additional ventilation via raise-bore<sup>2</sup> intake and exhaust ventilation shafts and related power and cooling infrastructure needed to mine between 1,800 and 2,000 mbs. To manage the primary execution risk associated with long raise-bore shafts, the design uses shorter, two-stage raise-bore shafts, connected by horizontal development (refer illustration on page 7). The timeframe for completion of the raise-bore shafts will depend on the eventual sequencing of the four individual shafts.

#### Paste Aggregate Fill (PAF)

- > PAF involves mixing paste from surface with waste rock crushed underground for stope fill. Disposing waste underground allows truck and ventilation resources to focus on ore production, boosting efficiency and potentially increasing production. PAF also allows faster stope filling and therefore reduces stope cycle times.
- > Expediting PAF for use during ventilation shaft construction will allow underground disposal of raise-bore chippings (i.e. waste), significantly reducing the impact of the project on ongoing production and greatly enhancing overall project value. PAF should be completed within 12 months.

#### Project Update

- > As previously advised, in January 2017 the Board approved \$6 million project readiness and early works expenditure during the March 2017 quarter, including detailed engineering, hiring project staff, engaging with vendors and commencing underground development.
  - > Underground development to the site of ventilation raise-boring is proceeding on schedule.
  - > Negotiations with PAF counterparties and associated detailed planning and engineering are well advanced, and tender requests for raise-bore contracts have been issued.
  - > All key positions on St Barbara's Gwalia Extension Project team have been filled with experienced project specialists.
- > \$2 million expenditure was incurred on the project in the March quarter.

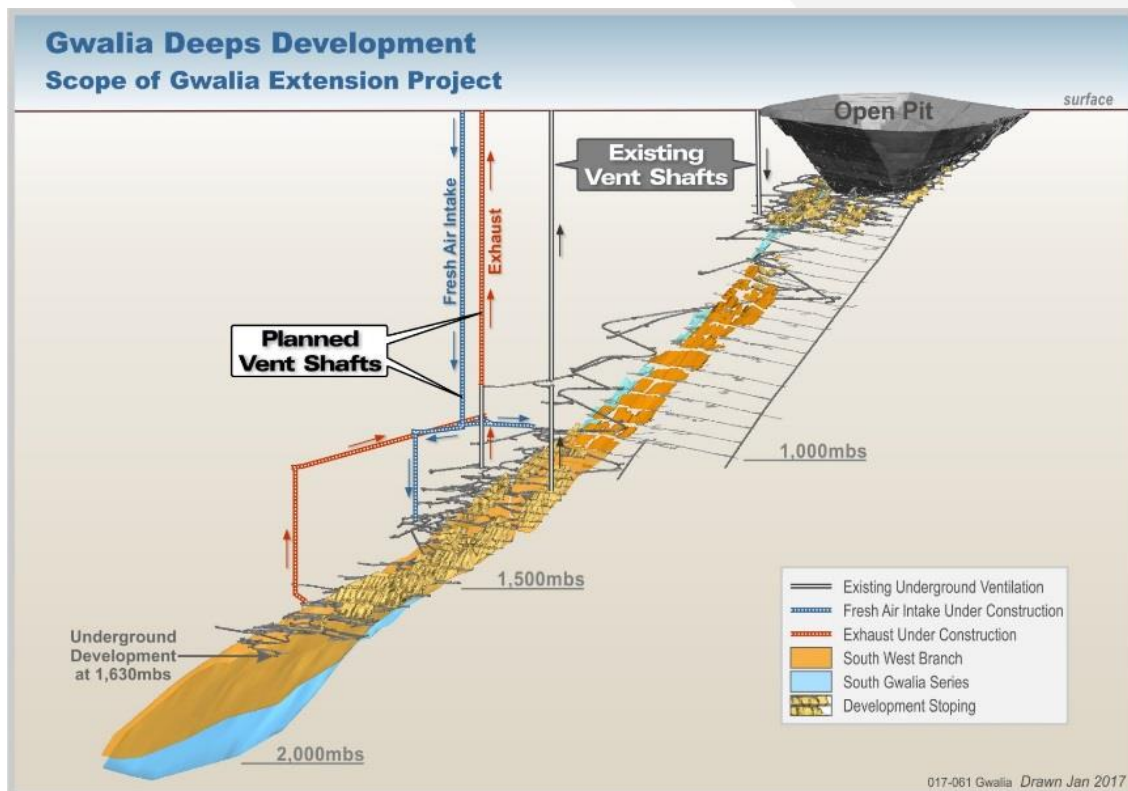
1 Ore Reserves at 30 June 2016 extend down to 1,940 mbs, Annual Mineral Resources and Ore Reserves Report at 30 June 2016, available at [www.stbarbara.com.au](http://www.stbarbara.com.au)

2 A raise-bore shaft is excavated from the bottom of the shaft by a rotating cutting device hauled up through a small, conventionally drilled pilot hole. A raise-bore is in contrast to a 'blind-sink' shaft which is excavated from surface.

Gwalia Extension Project Summary	
Capex	A\$100 million
Construction period	<ul style="list-style-type: none"> <li>• 2.5 to 3 years</li> <li>• PAF completed in first year</li> </ul>
Works	
Ventilation upgrade	<ul style="list-style-type: none"> <li>• Ventilation shafts, power &amp; cooling</li> <li>• Supports mining to at least 2,000 mbs in FY 2024<sup>1</sup></li> <li>• Approx. 80% of project budget</li> </ul>
Paste Aggregate Fill (PAF)	<ul style="list-style-type: none"> <li>• Underground waste crushing, paste and aggregate fill mixing and pumping</li> <li>• Increase trucking efficiency</li> <li>• Improve stope cycle times</li> <li>• Reduce impact of vent shaft construction on production</li> <li>• Approx. 20% of project budget</li> </ul>

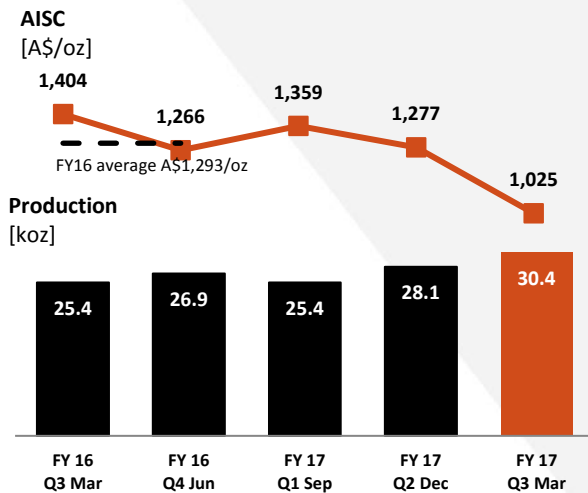
> Current mining is predominantly between 1,500 and 1,540 mbs. The project enables mining activities to continue to the limit of existing reserves at 1,940 mbs (commonly described as 2,000 mbs), which according to current planning will occur in FY 2024<sup>1</sup>.

> The Gwalia mineralised system is known to continue to 2,200 mbs, on a straight line from the original surface outcropping. Should the current drilling program identify sufficient resources below 2,000 mbs, the Feasibility Study defines additional chilling infrastructure that could extend ventilation from 2,000 mbs to allow mining to 2,200 mbs at a cost of between A\$30 to A\$35 million.



1. Ore Reserves at 30 June 2016 extend down to 1,940 mbs, Annual Mineral Resources and Ore Reserves Report at 30 June 2016, available at [www.stbarbara.com.au](http://www.stbarbara.com.au)

## Simberi, Papua New Guinea



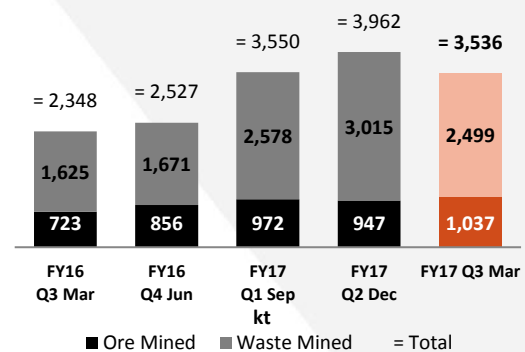
Production Summary		Q1 Sep	Q2 Dec	Q3 Mar
Simberi		FY17	FY17	FY17
Total ore & waste mined	kt	3,550	3,962	3,536
Ore mined	kt	972	947	1,037
Grade	g/t	1.05	1.13	1.14
Ore milled	kt	967	924	918
Grade	g/t	1.06	1.14	1.20
Recovery	%	77	83	85
<b>Gold production</b>	<b>oz</b>	<b>25,429</b>	<b>28,057</b>	<b>30,430</b>
<b>All-In Sustaining Cost</b> <sup>[1]</sup>		A\$ per ounce		
Mining		443	425	344
Processing		479	446	335
Site services		274	250	216
Stripping and ore inventory adjustments		-	-	-
		<b>1,196</b>	<b>1,121</b>	<b>895</b>
By-product credits				
Third party refining & transport		11	9	10
Royalties		40	31	39
<b>Total cash operating costs</b>		<b>1,247</b>	<b>1,161</b>	<b>944</b>
Corporate and administration		53	50	49
Rehabilitation		20	13	16
Capitalised mine & op development		-	-	-
Sustaining capital expenditure		39	53	16
<b>All-In Sustaining Cost (AISC)</b>		<b>1,359</b>	<b>1,277</b>	<b>1,025</b>

[1] Non-IFRS measure, refer Appendix

## Operations

- > Simberi produced a record 30,430 ounces of gold during the quarter (Q2 Dec: 28,057 ounces).
- > Simberi All-In Sustaining Cost (AISC) per ounce fell to A\$1,025 (Q2 Dec: A\$1,277) due to higher production and improved grade and recovery, together with the benefit of lower ore handling costs in the quarter.
- > Total material moved for the quarter was 3.5 Mt, down on the previous quarter due to planned maintenance of the excavator fleet and lower strip ratio. The strip ratio reduced to 2.4 during the quarter (Q2 Dec: 3.2:1), consistent with the life of mine plan, as the high intensity program of pre-stripping required to access new ore sources at Sorowar and Pigiput is now largely complete.
- > Plant recovery improved to 85% (Q2 Dec: 83%) due to ongoing improvement in ore and waste mining identification and selection, improved quality ore (especially from Pigibo), as well as a number of incremental operational improvements in the processing plant.

## Simberi Ore & Waste Mined



## Outlook

- > FY17 guidance has been increased as follows:
  - > Production of between 105,000 and 110,000 ounces (previously 95,000 and 105,000 ounces)
  - > AISC of between A\$1,285 and A\$1,330 per ounce (previously A\$1,330 and A\$1,490 per ounce)
  - > Capex of between A\$4 and A\$5 million (unchanged).



## Exploration Investments



- > The Company has invested in two Australian explorers, Catalyst Metals Limited (ASX:CYL) and Peel Mining Limited (ASX:PEX). One component of the Company's growth strategy is targeted investments in early to advanced stage exploration through earn-in arrangements, joint ventures or direct equity investments.
- > Catalyst and Peel are strategic and highly prospective investments, building the Company's overall development pipeline.
- > St Barbara remains a gold-focused company with no intention of a major diversification into other metals

### Peel Mining Limited

- > St Barbara Limited subscribed for 16 million ordinary shares of Peel Mining Limited ([www.peelmining.com.au](http://www.peelmining.com.au)) through a share placement on 4 April 2017. The A\$3.3 million investment by St Barbara represents a shareholding of approximately 9.5% in Peel.
- > Peel has landholdings primarily in New South Wales, which are strongly prospective for a number of minerals, including gold and especially copper. Peel holds a large tenement package south of Cobar, and the investment by St Barbara will provide Peel with additional funding to accelerate regional exploration activities across its tenement package.
- > The NewGold 'Peak' gold mine and the Glencore owned 'CSA' copper mines are located nearby, north of the Peel tenements.

### Catalyst Metals Limited

- > St Barbara purchased a 5% stake in Catalyst Metals Limited ([www.catalystmetals.com.au](http://www.catalystmetals.com.au)) through a share placement valued at A\$1.5 million on 16 March 2017.

- > Catalyst has significant landholdings in northern central Victoria, north of the historical 'gold rush' field at Bendigo, which includes the Whitelaw trend. The Catalyst tenements are north-west of Kirkland Lake's 'Fosterville' mine.
- > The placement will allow for the acceleration of the Catalyst exploration program.
- > Further opportunities are being evaluated, including operating, development and exploration assets.

## Exploration – Results March 2017 Quarter

### Gwalia Exploration Program, Leonora WA

- > **Gwalia Deeps Extension** The Gwalia Deeps drilling program continued with the successful completion of eight further daughter drill holes.
- > Daughter holes GWDD13Q, GWDD17F, GWDD17G and GWDD17H are intended to provide data for extending the Indicated Resource to 2,100 mbs. The holes entered the Mine Sequence at depths between 1,950 and 2,050 mbs and passed through intervals interpreted to represent South West Branch (SWB) and South Gwalia Series (SGS2), intersecting over 100 m of Mine Sequence.
- > Significant intercepts from these holes are indicated below (all intercepts referenced as metres below surface), with full details set out in Figures 2.0 to 2.2 and Table 1 in the Exploration Figures and Tables appendix.

#### GWDD13Q:

- > SWB 5.7m @ 8.4 g/t Au from 1,923 mbs
- > SGS2 7.1m @ 2.7 g/t Au from 1,964 mbs

#### GWDD17F:

- > SGS2 6.1m @ 5.2 g/t Au from 2,117 mbs

#### GWDD17G:

- > SGS2 10.9m @ 4.4 g/t Au from 2,118 mbs  
including 6.9m @ 6.1 g/t Au from 2,117 mbs

#### GWDD17H:

- > SWB 5.0m @ 2.3 g/t Au from 2,043 mbs  
including 1.4m @ 5.6 g/t Au from 2,043 mbs
- > SGS2 7.9m @ 3.7 g/t Au from 2,089 mbs  
including 3.7m @ 6.0 g/t Au from 2,091 mbs

- > Following the completion of GWDD13Q and GWDD17H two new daughter holes were commenced (GWDD13R and GWDD17I). At the end of the quarter GWDD13R and GWDD17I had reached down-hole depths of 1,667 m and 1,845 m respectively.

- > Daughter holes GWDD130, GWDD13P, GWDD18D and GWDD18E were intended to extend the Inferred Resource to 2,200 mbs. Mineralised intervals intersected between 2,100 and 2,150 mbs by these holes are interpreted to represent extensions of South West Branch (SWB) and South Gwalia Series (SGS2) (Refer to Figures 2.1 and 2.2 in the Exploration Figures and Tables appendix).

> Significant intercepts are indicated below (all intercepts referenced as metres below surface) with full details set out in Figures 2.0 to 2.2 and Table 1 in the Exploration Figures and Tables appendix.

**GWDD130:**

- > SWB 2.5m @ 2.9 g/t Au from 2,067 mbs
- > SGS2 4.4m @ 1.0 g/t Au from 2,130 mbs

**GWDD13P:**

- > SWB 6.5m @ 1.1 g/t Au from 2,133 mbs
- > SGS2 1.9m @ 2.5 g/t Au from 2,205 mbs

**GWDD18D:**

- > SGS2 6.4m @ 3.1 g/t Au from 2,175 mbs

**GWDD18E:**

- > unassigned 4.2m @ 12.1 g/t Au from 2,172 mbs  
including 0.3m @ 147.0 g/t Au from 2,174 mbs
- > SGS2 6.3m @ 7.1 g/t Au from 2,194 mbs

- > Following the completion of GWDD18E, a new daughter hole was commenced (GWDD18F). At the end of the quarter GWDD18F had reached a downhole depth of 1,886 m.

- > **Gwalia Seismic Reflection Program:** A full evaluation of extensions to the Gwalia Shear Zone will be undertaken through a 3D seismic geophysical program during Q4 June 2017. The survey will seek to identify extensions to the lode system and other potential occurrences of Gwalia-style mineralisation.

**Pinjin Project, Yilgarn WA**

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- > Exploration continued on the Pinjin project within the Yilgarn Province, WA. The Pinjin Project is located 150 km northeast of Kalgoorlie, comprising a large tenement package of 20 exploration licences (1,434 km<sup>2</sup>) for 485 blocks (Figure 4.0).
- > Final results for the 22 hole (PJRC0001 to PJRC0022), 3,239 metre Reverse Circulation (RC) drilling program completed in the December 2016 quarter were received (details in Figures 4.0 to 4.3 and Table 2). The RC drilling was designed to test beneath the best aircore results at two gold in bedrock geochemical targets. Preliminary 4 metre composite results were previously quoted in the December 2016 quarter. The results highlighted down dip mineralisation in fresh rock at one target (Figure 4.1,

Enlargement C area) and predominantly flat dipping supergene mineralisation at the other (Figure 4.1, Enlargement B area). Further work includes multi-element analysis, ground gravity and aircore drilling along strike.

- > An Aircore drilling program comprising 305 holes (PJAC0516 to PJAC0820) for 15,155 metres was completed in the March 2017 quarter (Figures 4.0 to 4.3). The Aircore drilling targeted four gold in bedrock geochemical anomalies defined by historical aircore drilling and one geophysical target. Final results have been received, with significant intercepts returned from two targets that are in line with previous aircore drilling (details in Figures 4.1, 4.2 and Table 3).

- > A 965 line kilometre Airborne Electromagnetic (AEM) Survey will be conducted in the June 2017 quarter over 11 targets testing for potential bedrock sulphide conductors within potential Banded Iron Formations (Figure 4.4). The purpose of the survey is to target gold associated with sulphide replacement of magnetite within Banded Iron Formation (BIF) rocks. If successful in defining sulphide conductors, limited ground EM follow-up may be needed to refine the target position and to guide drilling.

- > A 330 km<sup>2</sup> ground Gravity Survey is scheduled to commence in the June 2017 quarter over several western Pinjin tenements (Figure 4.4). The purpose of the survey is to map geological trends through cover on and around Lake Rebecca. The area has a subdued magnetic relief and gravity has previously been used to the northwest to define the prospective late basin volcanoclastic sediments which host the main deposits in the Carosue Dam area.

**Back Creek, NSW (EL 8214 and EL 8530)**

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- > A 3,776 line kilometre airborne magnetic survey was completed over Back Creek EL8214 in central NSW, during the December 2016 quarter. Data processing and image generation was completed in the March 2017 quarter (Figure 5.0). Inversion modelling of the magnetic data over areas of interest is underway.
- > A 3 sub-block application ELA5392 adjacent to EL8214 was granted as EL8530 on 7 March 2017 (Figure 5.0).

**Simberi, Tatau & Tabar Islands, Papua New Guinea (ML 136 and EL 609)**

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- > Exploration continued on EL609 at Simberi and Tatau Island during the March quarter (Figure 6.0). Trenching, mapping and drilling continued at Southwest Tatau targeting the Mt Tiro, Mt Siro and Seraror prospects.

**Tatau Island**

- > A detailed topographic map was generated for Tatau Island from airborne LiDAR (Light Detection and Ranging) survey flown in the December 2016 quarter to support regional exploration.

- > A 43 line kilometre ground magnetic survey was completed late in the March 2017 quarter. Areas covered include access tracks around Southwest Tatau as well as a soil grid over Talik.
- > A diamond drill program at Southwest Tatau targeting narrow, high-grade, sulphide-oxide gold targets identified by previous trenching continued through the March 2017 quarter. Nine diamond holes (TTD071 to TTD079) for 748.1 metres were completed in the March 2017 quarter. To date, 18 holes for 1,839.8 metres have been completed at South West Tatau. Assay results for 8 diamond drill holes (TTD067 to TTD074) testing the Nepewo and Mt Tiro prospect were returned (Figure 6.1 and Table 4). The diamond drilling has closed off mineralisation at Mt Tiro to the southeast.
- > A trenching and mapping program continued at Southwest Tatau to identify the number and determine the strike length of potential narrow high grade mineralised trends. Eight trenches (TATTR229 to TATTR236) were completed at Mt Siro during the March quarter for 880 metres and 176 samples. The trench sampling results received for TATTR229 to TATTR236 are highlighted in Figure 6.2 and include:

- > TATTR230 25m @ 1.7 g/t Au, including  
5m @ 4.4 g/t Au  
5m @ 4.8 g/t Au  
20m @ 1.5 g/t Au
- > TATTR231\* 75m @ 2.3 g/t Au, including  
5m @ 10.6 g/t Au
- > TATTR232 10m @ 3.1 g/t Au, and  
45m @ 1.2 g/t Au
- > TATTR233 30m @ 1.2 g/t Au
- > TATTR234 30m @ 0.8 g/t Au
- > \*Note that TATTR231 was sampled along a ridge potentially sub-parallel to the trend of mineralisation and is not representative of true width.
- > As part of the EL609 renewal process, Wardens hearings were conducted for EL609 on 8 and 9 March 2017.

#### Option and Farm-in with Newcrest, Tatau & Tabar Islands, Papua New Guinea

- > The St Barbara group (through its wholly owned PNG subsidiary Nord Australer Nominees (PNG) Ltd) entered into an Option and Farm-in Agreement with Newcrest PNG Exploration Limited (a wholly owned subsidiary of Newcrest Mining Limited) in November 2016 for copper-gold porphyry exploration within EL609 and EL2462 on nearby Tatau and Big Tabar Islands.

- > A regional soil and rock chip sampling program designed to cover six porphyry Cu-Au targets on central Tatau and parts of Big Tabar Island commenced early in the March 2017 quarter. The initial phase of the program includes 1,100 samples to be collected on a 200m x 200m offset grid. To date 558 soil and 121 rock chip samples have been collected covering a 21 km<sup>2</sup> area over Tugitugi, Kupo, Talik, Talik North and Daramba prospects (Figure 6.3).
- > Results for the program are expected to be finalised in the September quarter 2017.

#### Expenditure March Quarter (unaudited)

- > Expenditure on mineral exploration is shown below:

Q3 Mar 2017		
	A\$ million	
Australia	0.7	(expensed)
Pacific	1.4	(expensed)
Gwalia Deep Drilling	4.3	(capitalised)
<b>Total</b>	<b>6.4</b>	

#### Exploration – June 2017 Quarter

- > The map below shows current and planned target areas for the June 2017 quarter.



- > Exploration in the June 2017 quarter (Q4 FY17) will focus on:
  - > **Gwalia Deeps Below 2,000 mbs** Completion of the current phase of Gwalia Deeps drilling directed at establishing a Mineral Resource below 2,000 mbs.
  - > Completion of a 3D seismic survey over the **greater Gwalia** area to identify extensions to the lode system and other potential occurrences of Gwalia-style mineralisation.

- > Design of further aircore drilling at **Pinjin** to follow-up December 2016 quarter Reverse Circulation and March 2017 quarter Aircore drilling results.
- > Completion of an Airborne Electromagnetic (AEM) Survey over 13 targets on the **Pinjin** project.
- > Scheduled 330 km<sup>2</sup> ground Gravity survey for selected areas of the Pinjin project.
- > Review and interpret drill results for **Mt Tiro** prospect, Southwest Tatau.
- > Subject to access, continuing trenching, mapping and diamond drilling on Southwest Tatau Island targeting higher grade sulphide-oxide potential at the **Mt Siro** and **Seraror** prospects.
- > Continue the grid based regional soil and rock chip sampling over copper-gold porphyry targets on **Tatau and Big Tabar Islands**.
- > Completion of the 3D inversion modelling of selected areas of the airborne magnetics over **Back Creek** EL8214 to highlight areas for possible follow-up ground based exploration.

### Health & Safety

- > The Company-wide Total Recordable Injury Frequency Rate (TRIFR), calculated as a rolling 12 month average, reduced further to a record low of 1.5 to 31 March 2016 (Q2 Dec: 1.8).
- > The record low TRIFR of 1.5 compares well to the most recently published Western Australian averages. The gold mining average TRIFR is 2.5 and total metalliferous mining industry average is 2.2. Information on industry TRIFR is obtained from the Department of Mines and Petroleum "safety performance" annual compilation for 2014-15.

### Finance (unaudited)

- > 99,861 ounces of gold were sold in the December quarter, at an average realised gold price of A\$1,651 per ounce (Q2 Dec: 95,355 ounces at A\$1,636 per ounce).
- > Cash at bank at 31 March 2017 was \$99 million after total debt related payments during the quarter of A\$56 million, extinguishing the US Notes and making the company debt free, excepting minor finance leases.
- > The cash contribution from operations during the quarter was \$91 million (see cash movement table below), bolstered by proceeds from a larger than usual gold inventory at 31 December 2016.

- > Hedging in place at the date of this quarterly report comprises:

- > 26,000 ounces of gold forward contracts to be delivered in monthly instalments between April and June 2017 at US\$1,338 per ounce (this hedge announced 4 July 2016)
- > 50,000 ounces to be delivered in monthly instalments between July 2017 and June 2018 at A\$1,725 per ounce (this hedge announced 12 April 2017).

- > Cash movements for the March 2017 quarter are summarised in the following table:

<b>Cash movements &amp; balance A\$M (unaudited)</b>	<b>Q1 Sep FY17</b>	<b>Q2 Dec FY17</b>	<b>Q3 Mar FY17</b>
Leonora - operating cash flow <sup>[1]</sup>	64	71	67
Leonora - growth capital	-	(2)	(2)
Simberi - operating cash flow <sup>[1]</sup>	19	5 <sub>2</sub>	24 <sup>2</sup>
Rehabilitation , land management & project costs	(1)	(1)	(1)
Corporate costs	(4)	(4)	(5)
Corporate royalties	(2)	(2)	(2)
Exploration <sup>[3]</sup>	(3)	(5)	(6)
Investments <sup>[4]</sup>	-	-	(2)
Working capital movement	2	1	(5)
Cash flows before finance costs	75	63	68
Net interest and finance costs	(2)	(9)	(2)
US debt repayment	(56)	(121)	(54)
Net movement for quarter	17	(67)	12
Cash balance at start of quarter	137	154	87
<b>Cash balance at end of quarter</b>	<b>154</b>	<b>87</b>	<b>99</b>

1 Net of sustaining capex

2 As at 31 December 2016 there was 6,311 ounces of gold inventory at Simberi that was shipped on 1 January 2017

3 Includes Gwalia deep drilling

4 Comprises \$1.5 million investment in Catalyst on 16 March 2017 (\$3.3 million investment in Peel occurred in April 2017 and will appear in Q4)

## Corporate

### Share Capital

#### Issued shares

Opening balance 31 Dec 2016	<b>497,331,095</b>
Issued	nil
<b>Closing balance 31 Mar 2017</b>	<b>497,331,095</b>

#### Unlisted employee rights

Opening balance 31 Dec 2016	<b>20,961,921</b>
Issued <sup>1</sup>	42,440
Vested	nil
Lapsed	nil
<b>Closing balance 31 Mar 2017</b>	<b>21,004,361</b>

Comprises rights expiring:

30 June 2017	15,953,028
30 June 2018	3,974,617
30 June 2019	1,076,716

<b>Closing balance 31 Mar 2017</b>	<b>21,004,361</b>
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### ASX & ADR

The Company's shares are listed on ASX (ASX:SBM) and through American Depositary Receipts (ADR OTC: STBMY) traded in the USA.

### Scheduled Future Reporting

<u>Date</u>	<u>Report</u>
Late July	Q4 June 2017 Quarterly Report
22 August	Annual Financial Report Resources and Reserves Statements

[Dates are tentative and subject to change]

<sup>1</sup> Refer ASX Appendix 3B 31 March 2017

## Corporate Directory

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

### Board of Directors

Tim Netscher ..... Non-Executive Chairman  
Bob Vassie ..... Managing Director & CEO  
Kerry Gleeson ..... Non-Executive Director  
David Moroney ..... Non-Executive Director

### Executives

Bob Vassie ..... Managing Director & CEO  
Garth Campbell-Cowan ..... Chief Financial Officer

### Registered Office

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Melbourne Victoria 3004 Australia

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Facsimile +61 3 8660 1999

Email [info@stbarbara.com.au](mailto:info@stbarbara.com.au)

Website [www.stbarbara.com.au](http://www.stbarbara.com.au)

Australian Securities Exchange (ASX) Listing code "SBM"

American Depositary Receipts (ADR OTC code "STBMY")  
through BNY Mellon,  
[www.adrbnymellon.com/dr\\_profile.jsp?cusip=852278100](http://www.adrbnymellon.com/dr_profile.jsp?cusip=852278100)

Financial figures are in Australian dollars (unless otherwise noted).

Financial year commences 1 July and ends 30 June.

## Shareholder Enquiries

### Computershare Investor Services Pty Ltd

GPO Box 2975

Melbourne Victoria 3001 Australia

Telephone (within Australia) 1300 653 935

Telephone (international) +61 3 9415 4356

Facsimile +61 3 9473 2500

[www-au.computershare.com/investor](http://www-au.computershare.com/investor)

American Depositary Receipt enquires:

BNY Mellon Depositary Receipts

[www.bnymellon.com/shareowner](http://www.bnymellon.com/shareowner)

### Investor Relations Contact

Rowan Cole, Company Secretary + 61 3 8660 1900

### Substantial Shareholders

	% of Holdings <sup>1</sup>
Van Eck Associates Corporation	18.3%
M&G Investment Management Ltd	7.3%
Vinva Investment Management	5.2%

<sup>1</sup> As notified by the substantial shareholders to 19 April 2017

## Appendix

### Non-IFRS Measures

- > The Company supplements its financial information reporting determined under International Financial Reporting Standards (IFRS) with certain non-IFRS financial measures, including cash operating costs and All-In Sustaining Cost. We believe that these measures provide additional meaningful information to assist management, investors and analysts in understanding the financial results and assessing our prospects for future performance.
- > Cash Operating Costs are calculated according to common mining industry practice using The Gold Institute (USA) Production Cost Standard (1999 revision).
- > All-In Sustaining Cost (AISC) is based on Cash Operating Costs, and adds items relevant to sustaining production. It includes some, but not all, of the components identified in World Gold Council's Guidance Note on Non-GAAP Metrics - All-In Sustaining Costs and All-In Costs (June 2013).
  - > AISC is calculated on gold production in the quarter.
  - > For underground mines, amortisation of operating development is adjusted from "Total Cash Operating Costs" in order to avoid duplication with cash expended on operating development in the period contained within the "Mine & Operating Development" line item.
  - > Rehabilitation is calculated as the amortisation of the rehabilitation provision on a straight-line basis over the estimated life of mine.

### Competent Persons Statement

#### Exploration Results

- > The information in this report that relates to Exploration Results for Simberi and Pinjin is based on information compiled by Dr Roger Mustard, who is a Member of The Australasian Institute of Mining and Metallurgy. Dr Mustard is a full-time employee of St Barbara and has sufficient experience 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr Mustard consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.
- > The information in this report that relates to Exploration Results for Gwalia and the Leonora region is based on information compiled by Mr Robert Love, who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Love is a full-time employee of St Barbara and has sufficient experience 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 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore

Reserves'. Mr Love consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### Mineral Resource and Ore Reserve Estimates

- > The information in this report that relates to Mineral Resources or Ore Reserves is extracted from the report titled 'Ore Reserves and Mineral Resources Statements 30 June 2016' released to the Australian Securities Exchange (ASX) on 23 August 2016 and available to view at [www.stbarbara.com.au](http://www.stbarbara.com.au) and for which Competent Persons' consents were obtained. Each Competent Person's consent remain in place for subsequent releases by the Company of the same information in the same form and context, until the consent is withdrawn or replaced by a subsequent report and accompanying consent.
- > The Company confirms that it is not aware of any new information or data that materially affects the information included in the original ASX announcement released on 23 August 2016 and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the original ASX announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original ASX announcement.
- > Competent Person Mr Tim Richards is entitled to participate in St Barbara's long term incentive plan, details of which are most recently included in the 2016 Directors' and Financial Report released to the ASX on 23 August 2016. In 2014 increase in Ore Reserves was one of the performance measures under that plan. No incentive has been paid arising from this performance measure.
- > Full details are contained in the ASX release dated 22 August 2016 'Ore Reserves and Mineral Resources Statements 30 June 2016' available at [www.stbarbara.com.au](http://www.stbarbara.com.au).

## Exploration Figures and Tables

Figure 1.0: Leonora: Summary of Gwalia Extension Drilling, Plan View

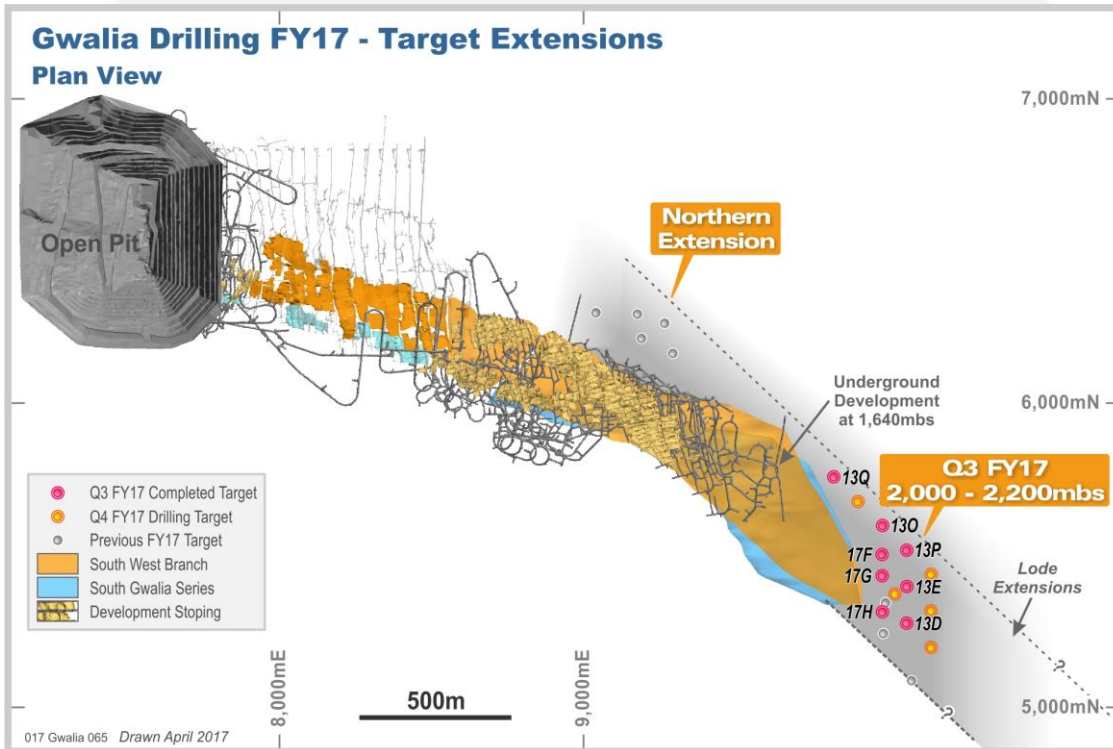


Figure 2.0: Gwalia Deeps Drilling Program Q3 FY17, Plan View

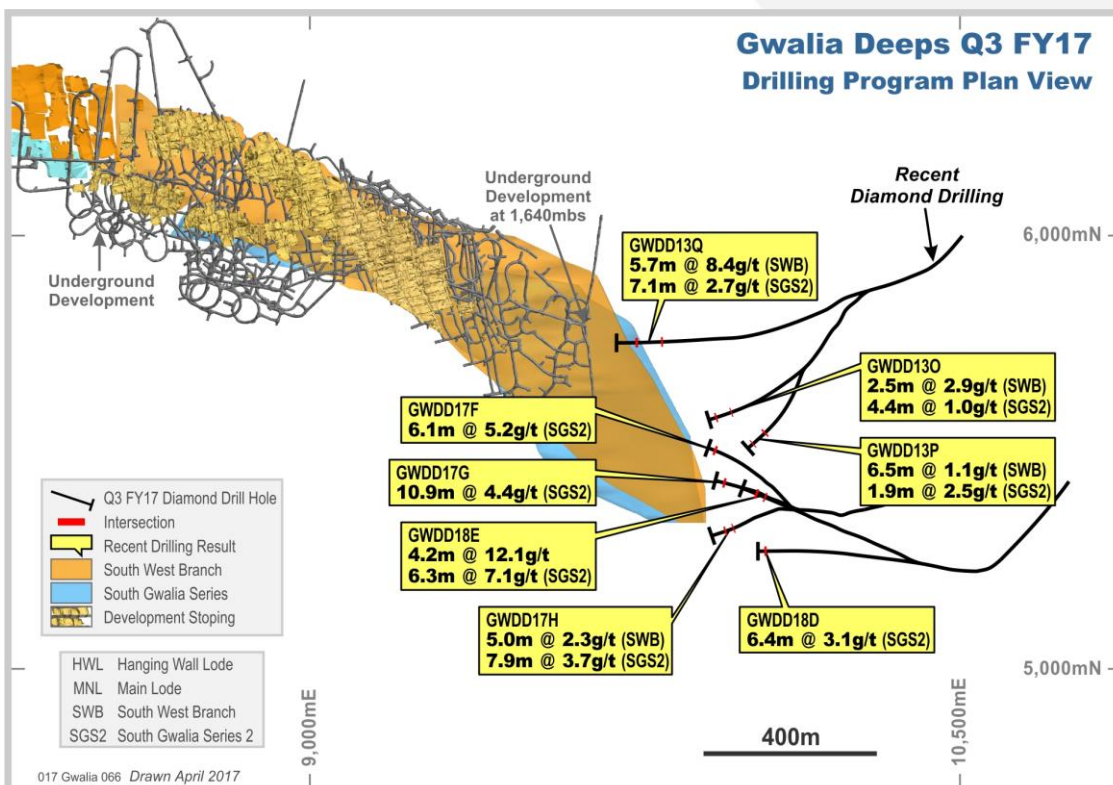




Figure 2.1: Gwalia Deeps Drilling Program Q3 FY17 Results, Long Section (looking west)

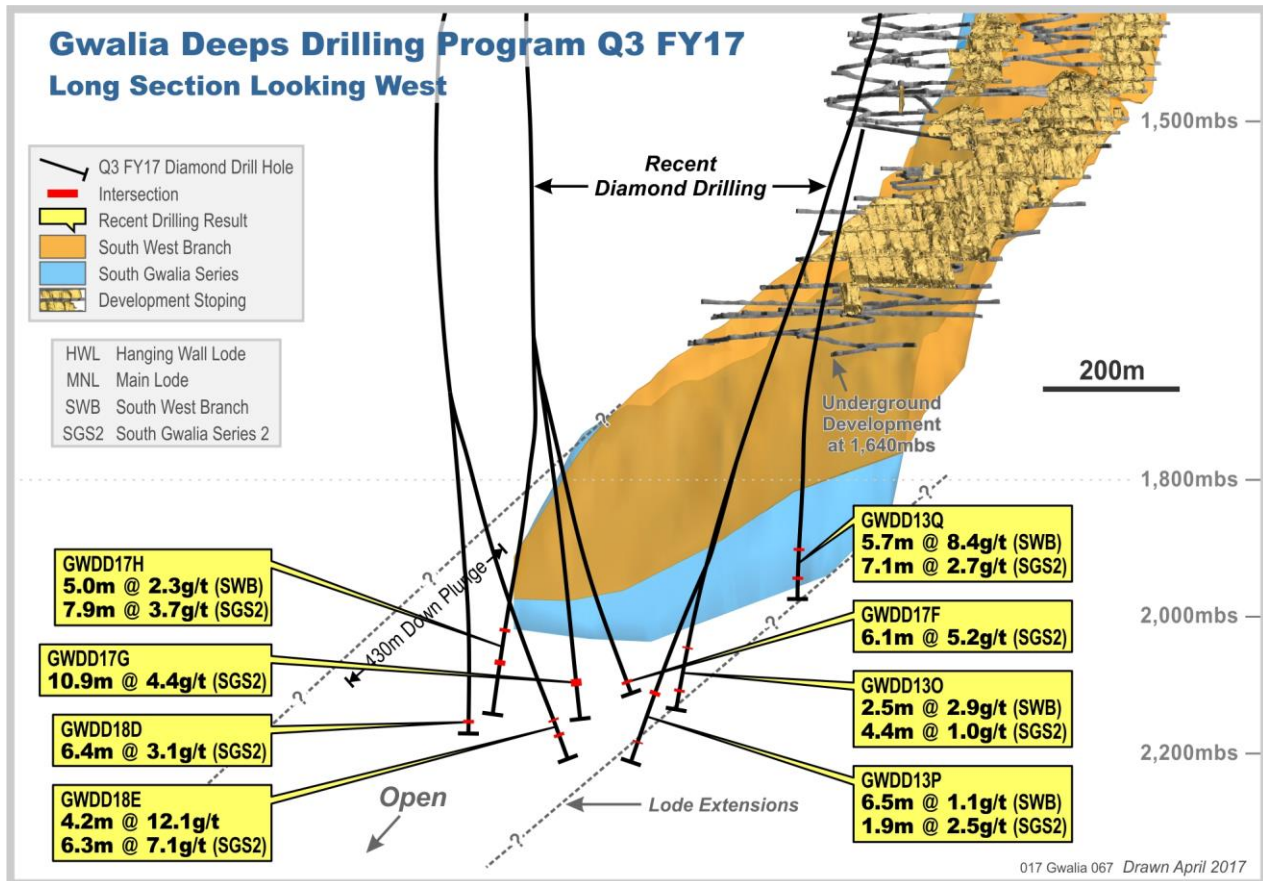
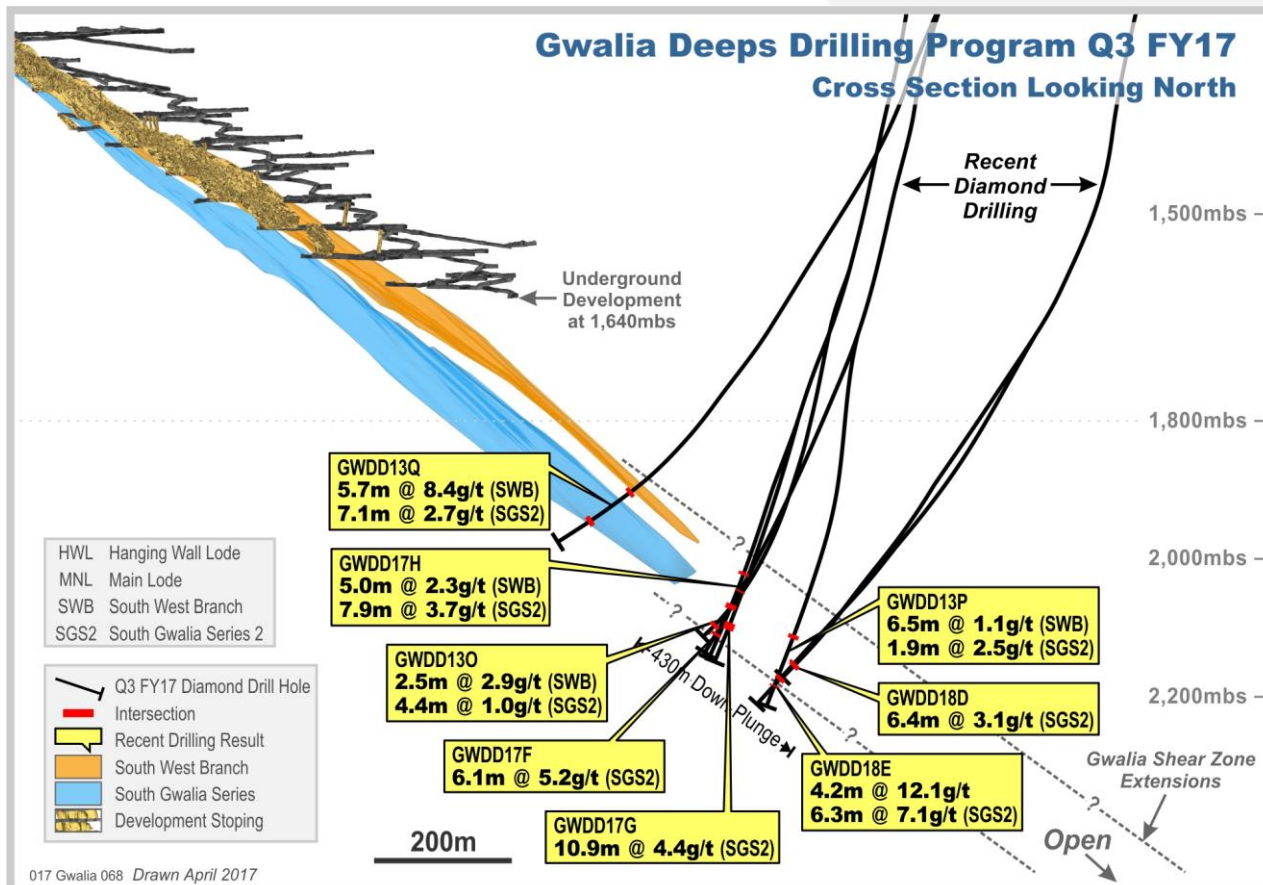
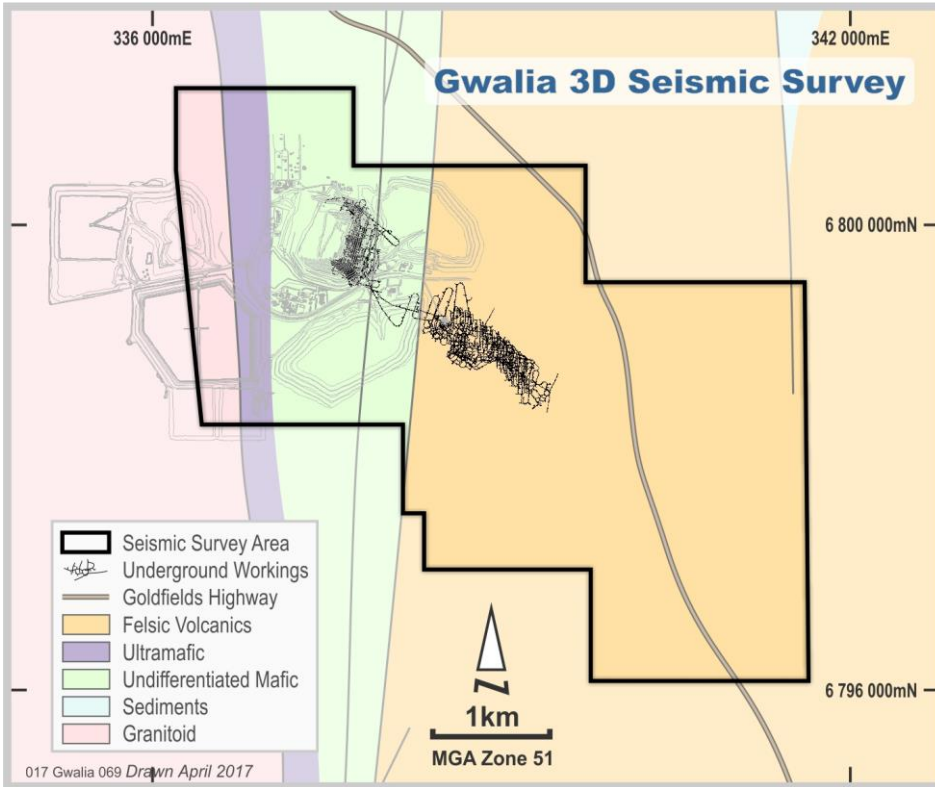


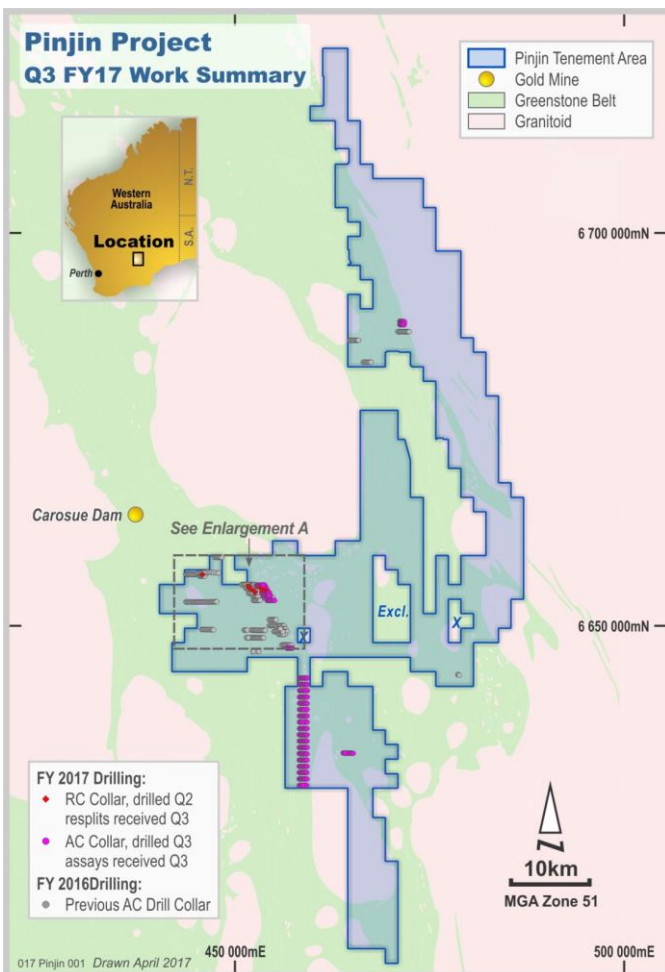
Figure 2.2: Gwalia Deeps Drilling Program Q3 FY17 Results, Cross Section (looking north)



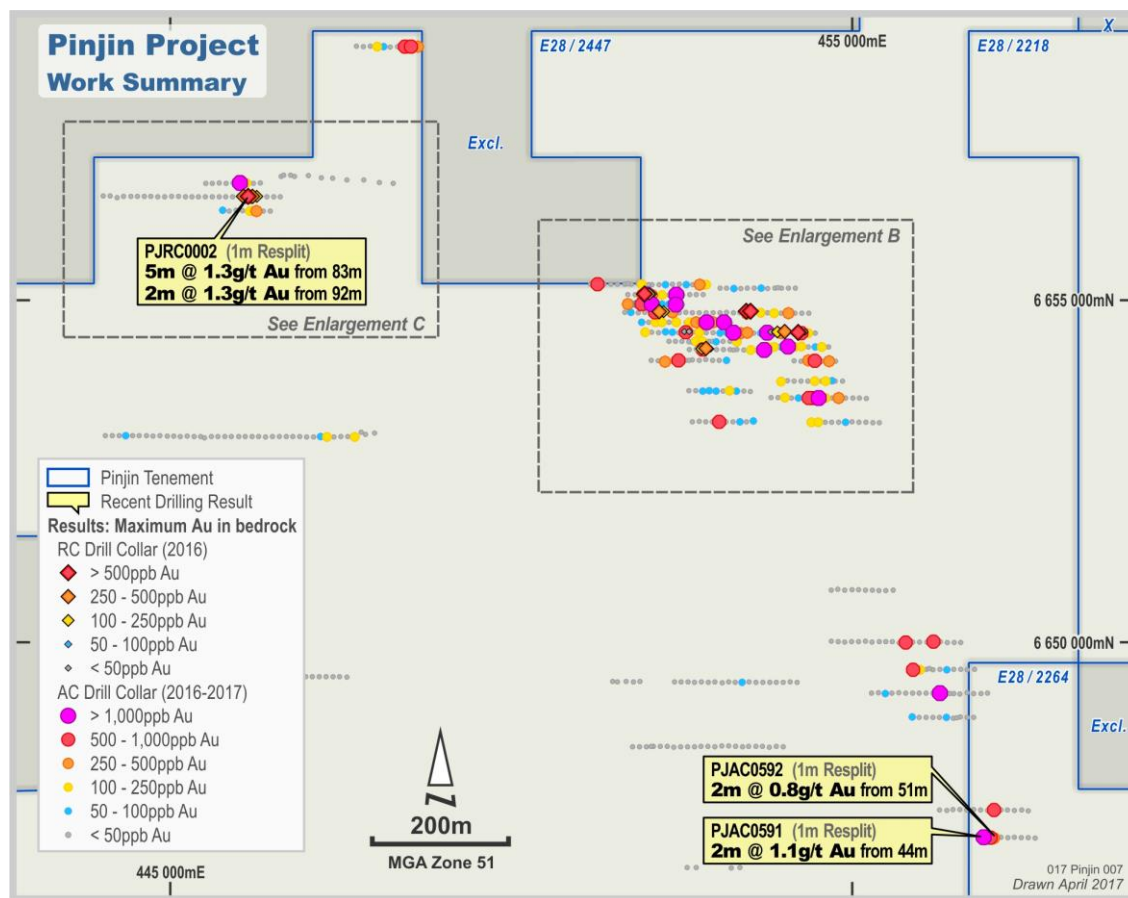
**Figure 3.0: Gwalia 3D Seismic Survey**



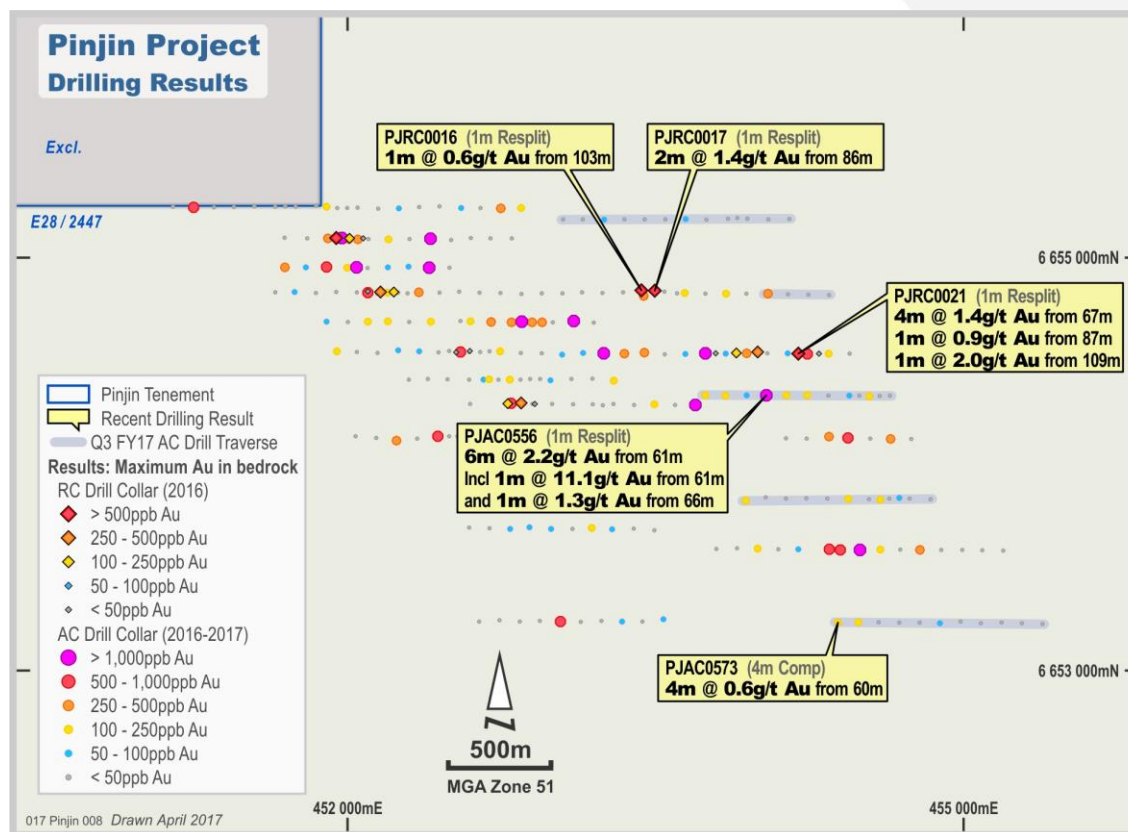
**Figure 4.0: Pinjin Project Reverse Circulation and Aircore Drilling Location Map**



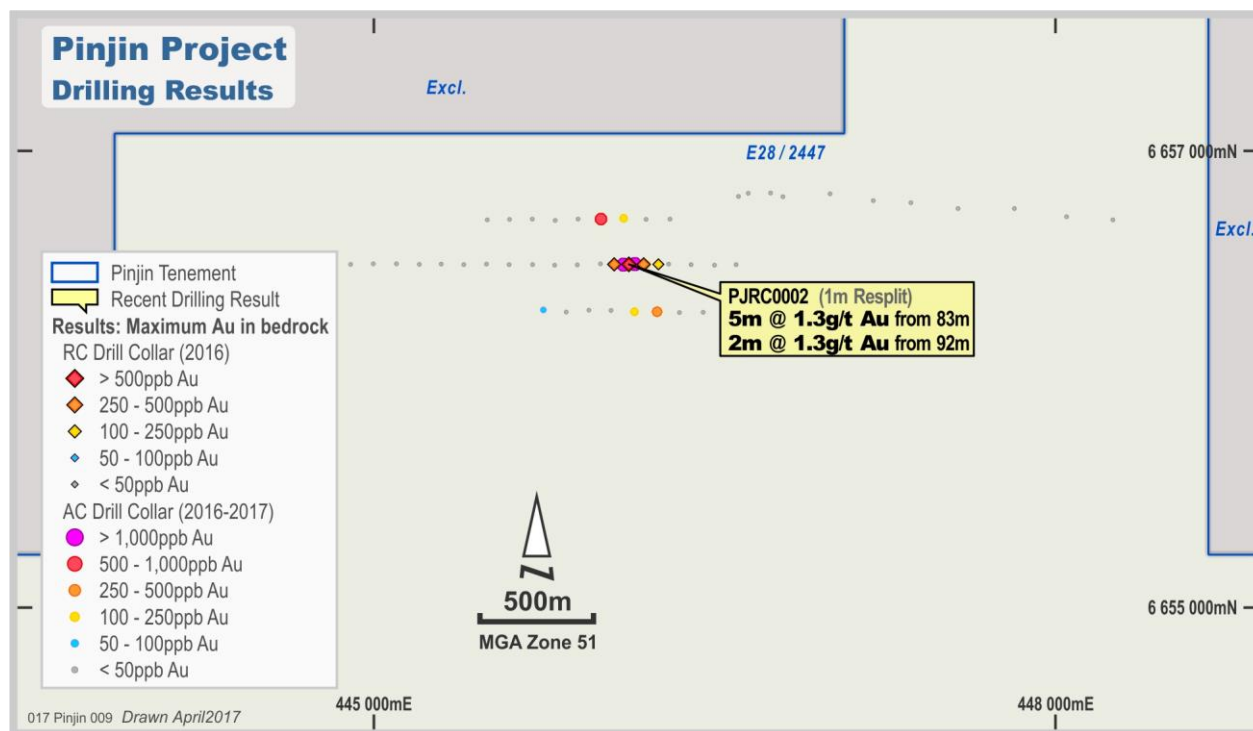
**Figure 4.1: Pinjin Project Reverse Circulation and Aircore Drilling Results Map (Enlargement A) - maximum gold in bedrock**



**Figure 4.2: Pinjin Project Reverse Circulation and Aircore Drilling Results Map (Enlargement B) - contour of maximum gold in bedrock**



**Figure 4.3: Pinjin Project Reverse Circulation and Aircore Drilling Results Map (Enlargement C) - contour of maximum gold in bedrock**



**Figure 4.4: Pinjin Project Airborne Electromagnetic (AEM) Survey Location Map**

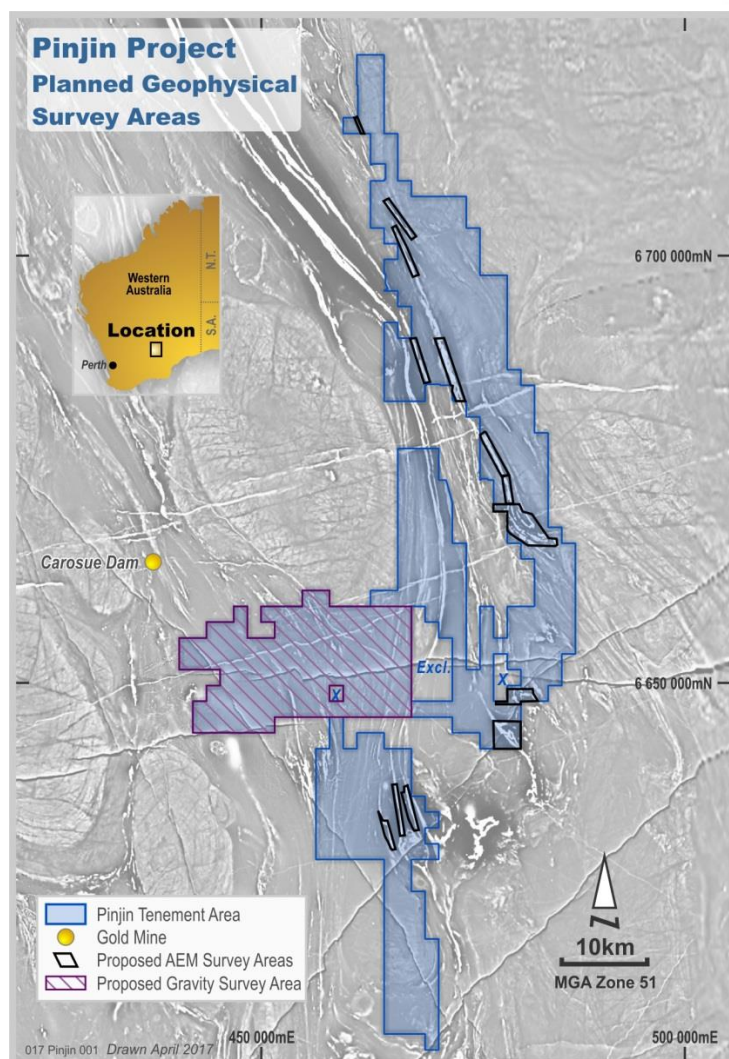


Figure 5.0: Back Creek EL8214 and EL8530, New South Wales

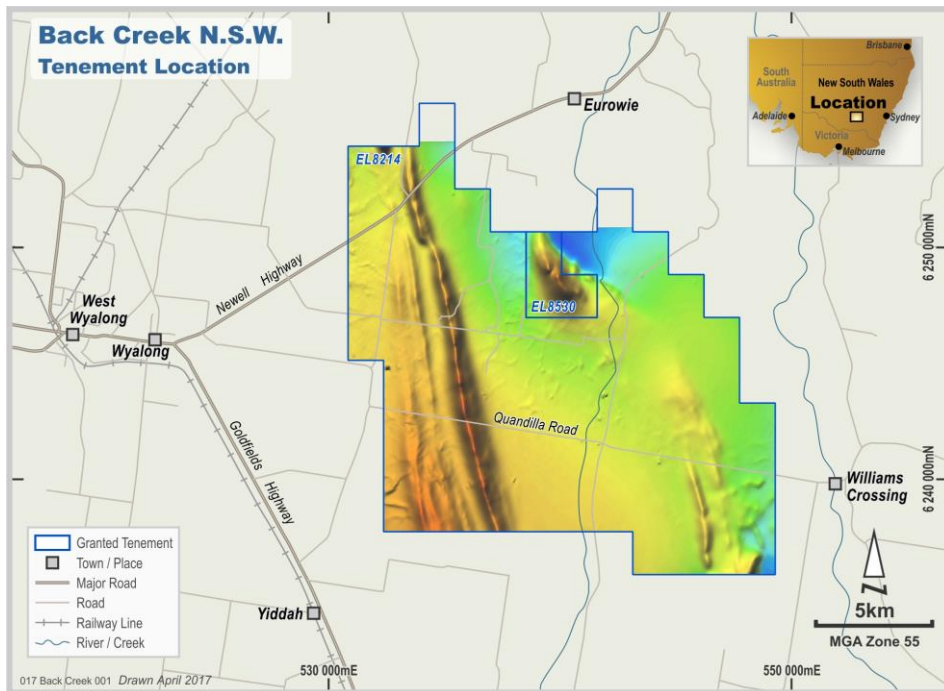


Figure 6.0: Tabar Islands Location Map, Papua New Guinea

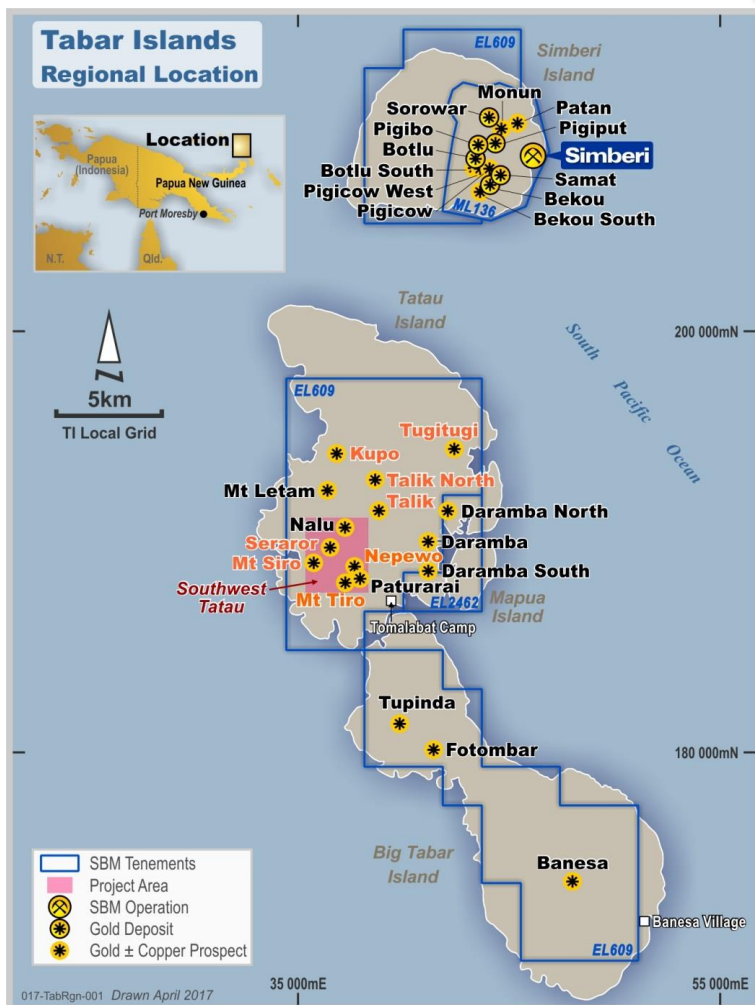


Figure 6.1: Southwest Tatau Trench and Drill Location Map, Tatau Island, Papua New Guinea

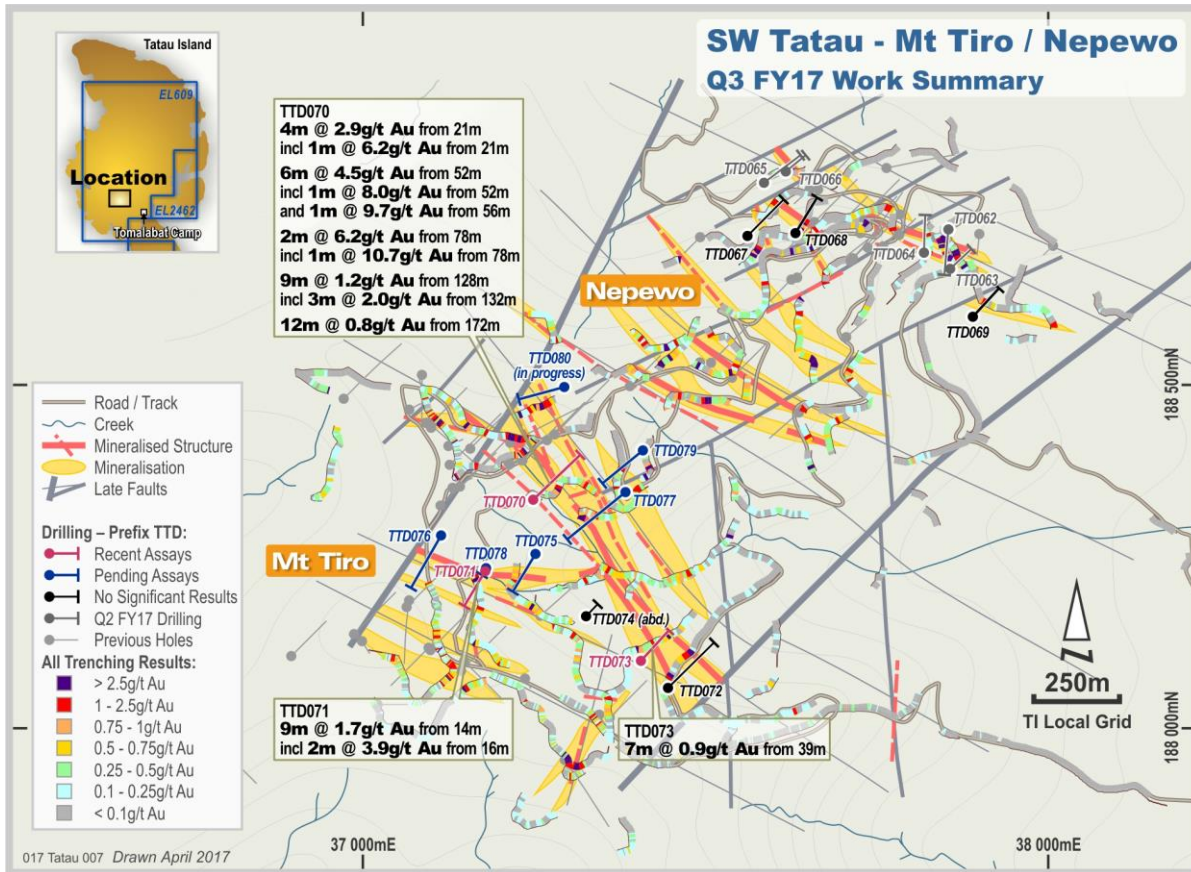
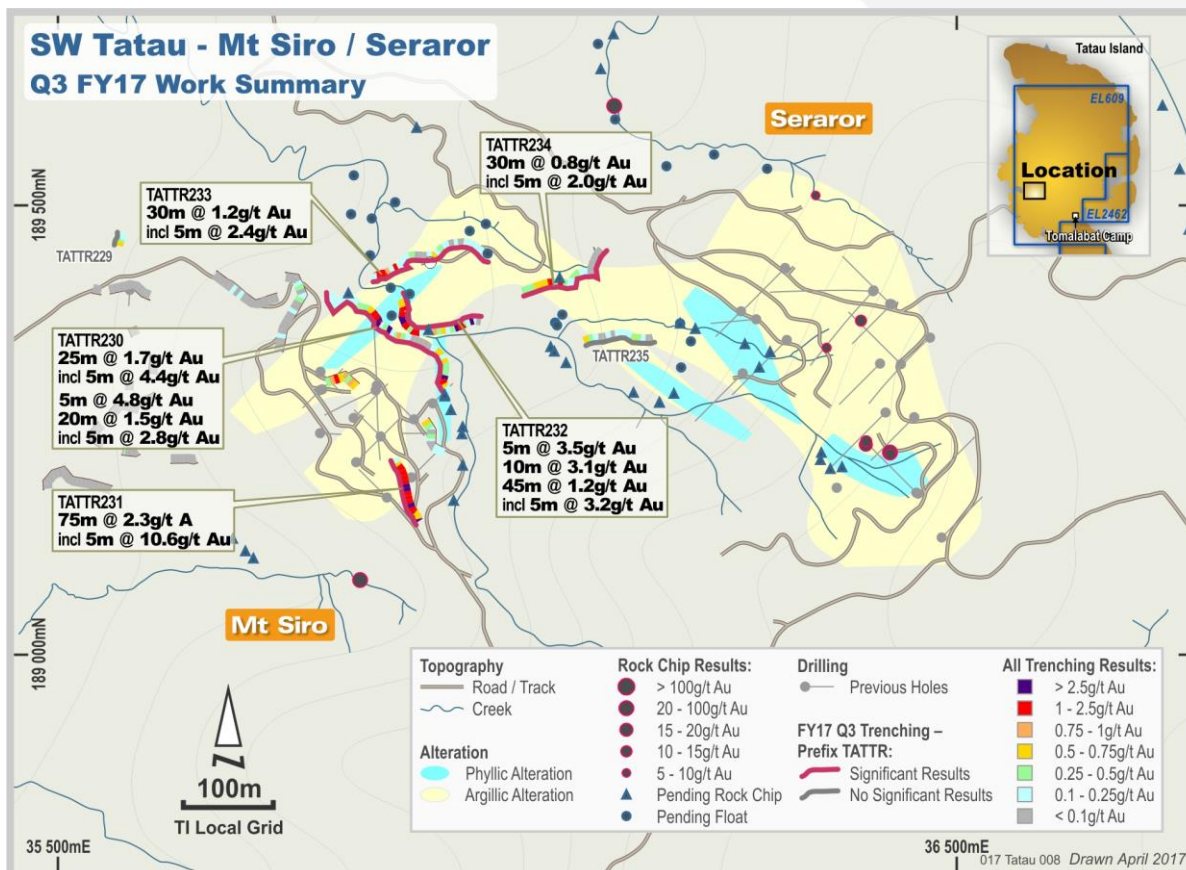
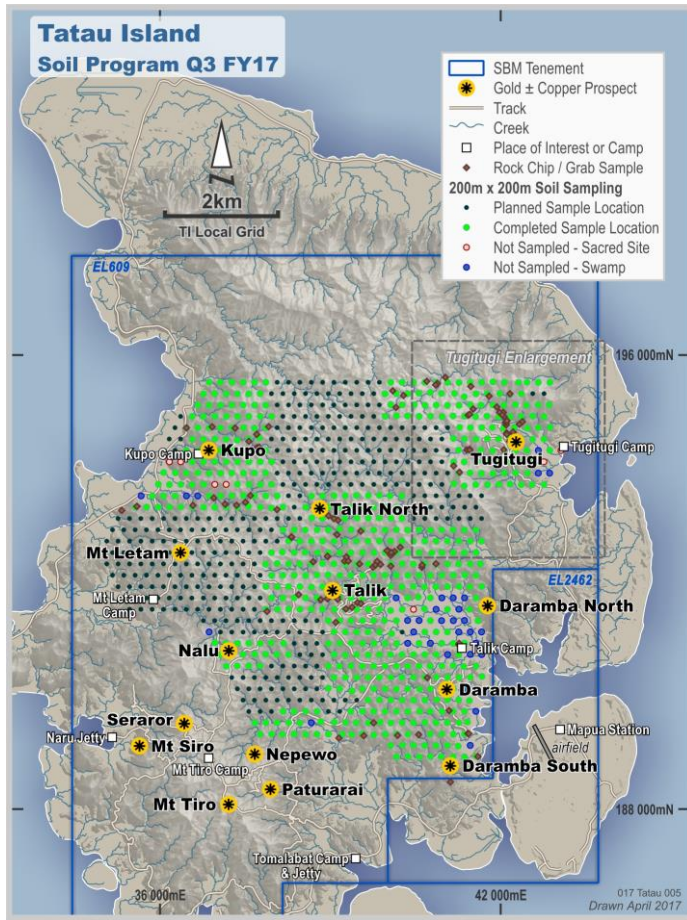


Figure 6.2: Mt Siro and Seraror Trench and Drill Location Map, Tatau Island, Papua New Guinea



**Figure 6.3: Regional Soil Survey Location Map, Tatau Island, Papua New Guinea**



**Table 1: Gwalia Deeps Significant Intercepts– Leonora Operations, Gwalia Mine**

Hole Id	Down-hole Mineralised Intersection									
	North m	East m	RL m	Metres Below Surface	Lode	Dip/ Azimuth degrees	From m	To m	Interval m	Gold grade g/t Au
GWDD13O	5594.3	9972.1	3308.1	2066.9	SWB	-60/250	2192.1	2194.5	2.5	2.9
	5582.5	9936.6	3245.5	2129.5	SGS2	-59/252	2264.0	2268.4	4.4	1.0
GWDD13P	5546.4	10049.6	3242.0	2133.0	SWB	-63/226	2242.5	2249.0	6.5	1.1
	5520.9	10021.8	3170.2	2204.8	SGS2	-62/229	2325.2	2327.1	1.9	2.5
GWDD13Q	5757.2	9811.5	3452.0	1923.0	SWB	-38/267	2102.1	2107.8	5.7	8.4
	5755.2	9754.8	3411.4	1963.6	SGS2	-34/269	2173.2	2180.3	7.1	2.7
GWDD17F	5504.4	9933.6	3257.8	2117.2	SGS2	-45/293	2207.3	2213.4	6.1	5.2
GWDD17G	5429.9	9954.4	3256.6	2118.4	SGS2	-68/285	2178.4	2189.4	10.9	4.4
				2117.2		Including	2180.2	2187.2	6.9	6.1
GWDD17H	5325.1	9975.3	3332.5	2042.5	SWB	-68/248	2102.0	2107.0	5.0	2.3
				2043.2		Including	2105.6	2107.0	1.4	5.6
	5318.4	9957.6	3286.5	2088.5	SGS2		2152.0	2159.9	7.9	3.7
				2091.0		Including	2156.2	2159.9	3.7	6.0
GWDD18D	5273.7	10051.2	3200.2	2174.8	SGS2	-46/270	2345.7	2352.0	6.4	3.1
GWDD18E	5397.9	10050.7	3203.3	2171.7	unassigned	-45/293	2364.6	2368.8	4.2	12.1
				2173.6		Including	2368.4	2368.8	0.3	147.0
	5406.4	10030	3180.6	2194.4	SGS2	-45/291	2394.5	2400.8	6.3	7.1

**NOTES:**

High grade cuts have not been applied.  
Dip and Azimuth angles estimated at intercept depth.  
Coordinates and Azimuth referenced to Gwalia Local Mine Grid  
Reported intercepts are all down hole lengths.  
Numbers have been rounded to one significant figure.



**Table 2: Pinjin Reverse Circulation Significant Intercepts – Yilgarn, WA**

Hole Id	North m	East m	RL m	Dip/ Azimuth degrees	Total Depth	Down-hole Mineralised Intersection			
						From m	To m	Interval m	Gold grade Au ppb
PJRC0002	6656502	446124	343	-60/270	138	83	88	5	1348
						92	94	2	1286
PJRC0016	6654854	453435	336	-60/270	150	103	104	1	601
PJRC0017	6654851	453500	336	-60/270	150	86	88	2	1350
PJRC0021	6654549	454199	334	-60/270	150	67	71	4	1405
						87	88	1	872
						109	110	1	1960

NOTES:

Coordinates and Azimuth referenced to MGA94 zone 51 Grid.

Reported intercepts are all down hole lengths.

Final results represent 1 metre intervals re-assayed and replace the 4 metre composite results quoted in the December quarter.

**Table 3: Pinjin Aircore Significant Intercepts – Yilgarn, WA**

Hole Id	North m	East m	RL m	Dip/ Azimuth degrees	Total Depth	Down-hole Mineralised Intersection			
						From m	To m	Interval m	Gold grade Au ppb
PJAC0556	6654348	454046	335	-60/270	67.0	61	67	6	2174
<i>including</i>						61	62	1	11100
<i>and</i>						66	67	1	1250
PJAC0573	6653248	454399	333	-60/270	87.0	60	64	4	551
PJAC0591	6647205	456948	342	-60/270	69.0	44	46	2	1149
PJAC0592	6647196	457046	342	-60/270	70.0	51	53	2	792

NOTES:

Coordinates and Azimuth referenced to MGA94 zone 51 Grid.

Reported intercepts are all down hole lengths.

**Table 4: SW Tatau Significant Intercepts – Tatau Island, Papua New Guinea**

Hole Id	North m	East m	RL m	Dip/ Azimuth degrees	Total Depth	Lode	Down-hole Mineralised Intersection			
							From m	To m	Interval m	Gold grade g/t Au
<b>TTD067 (Nepewo)</b>	188,718	37561	159.0	-61 / 046	149.5		No Significant Results			
<b>TTD068 (Nepewo)</b>	188,722	37631	163.0	-58 / 034	114.0		No Significant Results			
<b>TTD069 (Nepewo)</b>	188,600	37890	93.0	-61 / 043	115.4		No Significant Results			
<b>TTD070 (Mt Tiro)</b>	188,334	37248	232.7	-59 / 047	187.9	TR,SU	21	25	4.0	2.9
<i>including</i>						TR	21	22	1.0	6.2
						TR,SU	52	58	6.0	4.5
<i>including</i>						TR	52	53	1.0	8.0
<i>and</i>						SU	56	57	1.0	9.7
						SU	78	80	2.0	6.2
<i>including</i>						SU	78	79	1.0	10.7
						SU	128	137	9.0	1.2
<i>including</i>						TR,SU	132	135	3.0	2.0
						SU	172	184	12.0	0.8
<b>TTD071 (Mt Tiro)</b>	188,230	37178	237.8	-55 / 211	107.7	OX,TR	14	23	9.0	1.7
<i>including</i>						OX,TR	16	18	2.0	3.9
<b>TTD072 (Mt Tiro)</b>	188,059	37445	182.8	-55 / 045	176.4		No Significant Results			
<b>TTD073 (Mt Tiro)</b>	188,098	37404	223.8	-60 / 210	128.3	OX	39	46	7.0	0.9
<b>TTD074 (Mt Tiro)</b>	188,163	37325	173.4	-60 / 044	48.8		No Significant Results			

NOTES:

Coordinates and Azimuth referenced to Tabar Island Grid (TIG).  
Reported intercepts are all down hole lengths.

**Contents**

<b>Drilling:</b>	Section 1 Sampling Techniques and Data
	Section 2 Reporting of Exploration Results

**Drilling - Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary																								
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Half-core sampling of NQ2 diamond drilling with boundaries defined geologically. Samples are mostly one metre in length unless a significant geological feature warrants a change from this standard unit. The upper or right-hand side of the core is submitted for sample analysis, with each one metre of half core providing between 2.5 – 3 kg of material as an assay sample.</li> </ul>																								
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Diamond drilling using NQ2 (50.6mm) sized core (standard tubes). Holes have been surveyed using a single shot electronic camera. All core is orientated using a Reflex ACT II RD orientation tool.</li> </ul>																								
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Core is metre marked and orientated and checked against drillers blocks to ensure that any core loss is accounted for.</li> <li>Sample recovery is rarely less than 100%. Where minor core loss does occur it is due to drilling conditions and not ground conditions.</li> </ul>																								
<b>Logging</b>	<ul style="list-style-type: none"> <li>All SBM holes are logged primarily for lithology, alteration and vein type/intensity which are key to modelling gold grade distributions. Validation of geological data is controlled via the use of library codes and reliability and consistency of data is monitored through regular peer review.</li> <li>All logging is qualitative.</li> </ul>																								
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>SBM half core is cut using a core saw before being sent to SGS laboratory in Kalgoorlie where the entire sample is crushed to achieve particle size &lt;4mm followed by complete pulverisation (90% passing 75 µm).</li> </ul>																								
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>SBM samples were analysed for gold using fire assay with a 50g charge and analysis by flame Atomic Absorption Spectrometry (AAS). QC includes insertion of 3 commercial standards (1 per 20 samples), barren material used for blank control samples, use of barren flush material between designated high grade samples during the pulverising stage, re-numbered sample pulp residues re-submitted to original laboratory, and sample pulp residues submitted to accredited umpire laboratory, submission of residual (duplicate) half core from ore intervals. The analysis of gold was sound and re-analysis of pulps showed acceptable repeatability with no significant bias.</li> </ul>																								
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>Sampling data is recorded electronically in spread sheets which ensure only valid non-overlapping data can be recorded. Assay and down hole survey data are subsequently merged electronically. All drill data is stored in a SQL database on secure company server.</li> </ul>																								
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Collars for surface holes are recorded by DGPS. Upon completion of underground drill holes an authorised surveyor will pick up the collar by placing a survey rod into the hole to measure azimuth and dip. This process may also occur while the hole is in progress by surveying the drill rods in the hole.</li> <li>All coordinates and Azimuth are specified in using the Gwalia Local Mine Grid (LE_SGMG). The two-point transformation of MGA_51 to LE_SGMG is detailed below:</li> </ul> <table border="1"> <thead> <tr> <th>Grid</th> <th>Azimuth</th> <th>MGAE 1</th> <th>MGAN 1</th> <th>MGAE 2</th> <th>MGAN 2</th> <th>GridE 1</th> <th>GridN 1</th> <th>GridE 2</th> <th>GridN 2</th> <th>Rotation</th> <th>Scale</th> </tr> </thead> <tbody> <tr> <td>LE_SGMG Sons of Gwalia Mine Grid</td> <td>15.13</td> <td>337371.157</td> <td>6800342.586</td> <td>340246.451</td> <td>6799408.751</td> <td>7200.281</td> <td>6987.844</td> <td>10219.711</td> <td>6836.814</td> <td>344.522</td> <td>1</td> </tr> </tbody> </table>	Grid	Azimuth	MGAE 1	MGAN 1	MGAE 2	MGAN 2	GridE 1	GridN 1	GridE 2	GridN 2	Rotation	Scale	LE_SGMG Sons of Gwalia Mine Grid	15.13	337371.157	6800342.586	340246.451	6799408.751	7200.281	6987.844	10219.711	6836.814	344.522	1
Grid	Azimuth	MGAE 1	MGAN 1	MGAE 2	MGAN 2	GridE 1	GridN 1	GridE 2	GridN 2	Rotation	Scale														
LE_SGMG Sons of Gwalia Mine Grid	15.13	337371.157	6800342.586	340246.451	6799408.751	7200.281	6987.844	10219.711	6836.814	344.522	1														
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Surface drilling is spaced on an approximate 60m x 80m below 1620 metres below surface Drilling data is sufficient to establish down plunge continuity for all lodes.</li> </ul>																								
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Sampling is perpendicular to lode orientations and is sound based on past production and underground mapping.</li> </ul>																								
<b>Sample security</b>	<ul style="list-style-type: none"> <li>Company personnel or approved contractors only allowed on drill sites; drill samples are only removed from drill site by approved contractors to the company's secure core logging/processing facility; cut core is consigned to accredited laboratories for sample preparation and analysis.</li> </ul>																								
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>Regular reviews of core logging and sampling are completed through SBM mentoring and auditing. Additionally, regular laboratory inspections are conducted by SBM personnel. Inspections are documented electronically and stored on secure company server. No significant issues were identified.</li> </ul>																								

## Drilling - Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>SBM has 100% ownership of the two tenements M37/25 and M37/333 over the Gwalia deposit.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Western Mining Corporation (WMC) and Sons of Gwalia (SGW), have previously completed deep diamond drilling below 1,100 metres below surface</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Gold mineralisation occurs as a number of stepped, moderately east dipping, foliation parallel lodes within strongly potassic altered mafic rocks which extend over a strike length of approximately 500 metres and to a vertical depth of at least 2,200 metres below surface. The deposit exhibits significant down-plunge continuity but is interrupted at approximately 1,200 metres below surface (mbs) by a cross cutting post-mineralisation doleritic dyke, with a horizontal width of approximately 30 metres.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>Drill hole information is included in intercept table outlining mid-point co-ordinates including vertical hole depth and composited mineralized intercepts lengths and depth.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>Down hole intercepts are reported as length weighted averages. No high grade cut is applied.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>Down hole length is reported for all holes; true width is not immediately known until further drilling is completed and the orebody modelled.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate diagrams are included within the body of the report</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Details of all holes material to Exploration Results have been reported in the intercept table.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>These holes test the deepest limits of mineralisation and no other data is available</li> </ul>
<b>Further Work</b>	<ul style="list-style-type: none"> <li>Further exploration drill holes are planned</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Details of all holes material to Exploration Results have been reported in the intercept table.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Data is included in the body of the report</li> </ul>
<b>Further Work</b>	<ul style="list-style-type: none"> <li>Follow-up drilling is planned and is discussed in the body of the report</li> </ul>

**Contents**

- Drilling: Section 1 Sampling Techniques and Data  
Section 2 Reporting of Exploration Results

**Drilling - Section 1 Sampling Techniques and Data**

(Criteria in this section apply to the succeeding section.)

Criteria	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> <li>Sampling was conducted via Aircore drilling on 50m or 100m spacing with line spacing's of 400m, 800m or as individual lines. Where possible all holes were drilled to blade refusal.</li> <li>Aircore samples were collected from a rig mounted cyclone by bucket and were then placed directly on the ground in rows of ten.</li> <li>Aircore Drill spoil was sampled with a scoop to generate 4m composite samples of approximately 3kg.</li> <li>The 3kg composite samples were submitted to Bureau Veritas Minerals Pty Ltd, Perth where they were sorted and dried, crushed to 10mm and pulverized to -75µm. A 40g charge of pulverized sample was then digested with aqua regia with a gold analysis by ICP-MS to a detection limit of 1ppb. The same digested sample was also tested for arsenic by ICP-AES to 1ppm detection limit.</li> <li>Composite samples that return anomalous Au values were subsampled on a metre by metre basis. These samples were submitted to Bureau Veritas Minerals Pty Ltd, Perth where they were sorted and dried, crushed to 10mm and pulverized to -75µm. A 40g charge of pulverized sample was then analyzed for Au, Pd &amp; Pt by Fire Assay with an ICP finish to a detection limit of 1ppb.</li> <li>Representative specimens of end of hole rock chips were stored in plastic chip trays for future reference.</li> <li>The EOH Aircore samples as well as a selection of RC samples were submitted to Genalysis and were prepared in the same manner. A 10g charge of pulverized sample was then digested by four acid digestion with analysis by the Scott Halley technique (ICP-OES &amp; ICP-MS to ultra-trace levels) via 4A/OM20 method for 60 elements (Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Dy, Er, Eu, Fe, Ga, Gd, Ge, Hf, Ho, Ln, K, La, Li, Lu, Mg, Mn, Mo, Na, Nb, Nd, Ni, P, Pb, Pr, Rb, Re, S, Sb, Sc, Se, Sm, Sn, Sr, Ta, Tb, Te, Th, Ti, Tl, Tm, U, V, W, Y, Yb, Zn &amp; Zr).</li> <li>Anomalous RC composite samples returned during December quarter 2016 were subsampled using previously completed one metre samples collected by the rigs cone splitter system. These were submitted to Bureau Veritas Minerals Pty Ltd, Perth where they were sorted and dried, crushed to 10mm and pulverized to -75µm. A 40g charge of pulverized sample was then analyzed for Au by Fire Assay with an ICP finish to a detection limit of 1ppb.</li> </ul>
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <li>Aircore drilling was carried out using a three and a half inch blade bit to refusal, generally at the fresh rock interface. Drilling was carried out by Raglan Drilling who utilised a truck mounted R/A 180 Rig with 750 cfm and 350 psi.</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>Sample recoveries and condition (wet/dry) were not recorded.</li> <li>The drill cyclone and sample buckets were cleaned regularly, in particular after wet ground was encountered. The cyclone was also cleaned several times during the course of each hole and after the completion of each hole.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>All drill holes were logged in full for lithology, alteration, weathering/regolith and colour.</li> <li>Aircore logging is both qualitative and quantitative.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>Aircore samples were collected as both dry and wet samples using a sample scoop.</li> <li>All Aircore composite samples were sorted, dried, crushed and pulverized to produce a 40g charge prior to fire assay.</li> <li>Aircore samples were collected at 1m intervals and composited in 4m samples using a scoop to sample individual metre samples.</li> <li>QC procedures for 4m composite sampling involved the insertion of certified reference material, field duplicates and blanks at a ratio of 1:50.</li> <li>Bureau Veritas inserted certified standards and replicates and lab repeats.</li> </ul>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li>The composite samples used a 40g charge with an aqua regia digest which is considered appropriate for analysis of the regolith dominated sample medium.</li> <li>Certified reference material was inserted into the sample stream at a ratio of 1:50.</li> <li>Field duplicates and blanks were inserted at a ratio of 1:50.</li> <li>Bureau Veritas inserted certified standards and replicates and lab repeats.</li> </ul>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>Primary geological and sampling data were recorded into made for purposed excel spreadsheets. Data was then transferred into the St Barbara corporate DataShed database where it was validated by an experienced database geologist.</li> <li>No adjustments to assay data were made.</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>Prior to drilling, all holes were marked out using a handheld GPS with ±3m accuracy for easting, northings and ±10m elevation. Upon completion of the program all holes were resurveyed using a dGPS with decimetre accuracy to determine the final collar positions.</li> <li>No downhole surveys were conducted on Aircore holes.</li> <li>All locations were captured in MGA94 zone 51 grid.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>Aircore drilling was conducted on 50m or 100m drill spacing's and a line spacing of 400m, 800m or as individual lines.</li> <li>Aircore results reported are based on the 1m Fire Assay re-splits of original 4m composite samples.</li> </ul>

Criteria	Commentary
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>The majority of Aircore drill holes had a dip and azimuth of -60/270. Holes were drilled vertically in areas were transported cover made drilling difficult. Due to the early stage of the project there is not yet an exact understanding of the primary orientation of mineralisation.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>Only trained and experienced contractors and company personnel were allowed to collect the samples; all samples were held within a secure company location before dispatch to Bureau Veritas in Perth for Au analysis.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>No audits or reviews of sampling protocols have been completed.</li> </ul>

### **Drilling - Section 2 Reporting of Exploration Results**

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>SBM has 100% ownership of the 20 tenements comprising the Pinjin Project. These include: E28/2234, E28/2283, E28/2284, E31/0999, E31/1000, E31/1005, E31/1007, E39/1718, E28/2218, E28/2245, E28/2250, E28/2264, E28/2357, E28/2375, E28/2445, E31/1056, E31/1082, E28/2246, E28/2247 and E28/2494.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>There have been numerous historical holders of the project area which covers over ~1,358 square kilometres.</li> <li>Exploration has been conducted by numerous companies including but not limited to Newmont Pty Ltd, Endeavour Minerals, WMC, Goldfields Exploration Pty Ltd, Anglo American, Gutnick Resources, Carpentaria Exploration Company, BHP, Uranex, Placer Exploration Ltd, Jacksons Minerals Limited, Anglo Australian Resources, Troy Resources NL, Saracen, Hawthorn Resources and Renaissance Minerals Limited.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>SBM is targeting Archean orogenic gold mineralisation near major regional faults.</li> <li>The tenement package covers Archean greenstones within the highly prospective Eastern Goldfields Province of the Yilgarn Craton. The Pinjin project covers portions of the prospective Laverton and Keith-Kilkenny Tectonic Zones which pass through the eastern and western portions respectively.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>Drill hole information for holes returning significant results have been reported in the intercept table. Included in the intercept table are collar position obtained by dGPS pickup, hole dip and azimuth acquired from hand held compass and clinometer, composited mineralised intercepts lengths and depth as well as hole depth. Metres below surface (mbs) for intercepts were calculated for the start of the intercept.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>Broad down hole intercepts are reported as length weighted averages using a cut-off of 500ppb Au. Such intercepts may include material below cut-off but no more than 5 sequential meters of such material and except where the average drops below the cut-off. Salvage is only included where its average grade exceeds 500 ppb Au.</li> <li>No high grade cut is applied.</li> <li>No metal equivalent values are used for reporting exploration results.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>Down hole length is reported for all holes; true width is not known as the orientation of mineralisation is not fully understood.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>Included in the body of the report.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>Diagrams show all drill holes material and immaterial to Exploration Results.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>Details of all holes material to Exploration Results have been reported in the intercept table, and all other drill holes drilled during the reporting period are highlighted on diagrams included in the report.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>Data is included in the body of the report.</li> </ul>
<i>Further Work</i>	<ul style="list-style-type: none"> <li>Further exploration aircore drill holes are planned and are discussed in the body of the report.</li> </ul>

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Drilling:	Section 1 Sampling Techniques and Data Section 2 Reporting of Exploration Results
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**Drilling - Section 1 Sampling Techniques and Data**

(Criteria in this section apply to the succeeding section.)

Criteria	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> <li>Diamond Drilling - Sampled using PQ (85mm), HQ (63.5mm) or HQ3 (61.1mm) and on occasion NQ2 (50.5mm) or NQ3 (45mm) sized core using standard triple tubes. Half core was sampled on nominal 1-metre intervals with the upper or left - hand side of the core prepped on-site to produce a 200gm pulp sample. A 50gm charge was then extracted from the 200gm pulp for Au fire assay and ICP - AES base metal analysis.</li> </ul>
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <li>Diamond Drilling comprised PQ (85mm), HQ (63.5mm) or HQ3 (61.1mm) and on occasion NQ2 (50.5mm) or NQ3 (45mm) core recovered using 1.5m to 3m barrels. When ground conditions permit, an ACT Digital Core Orientation Instrument was used by the contractor to orientate the core.</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>Diamond drilling recovery percentages were measured by comparing actual meters recovered per drill run versus meters measured on the core blocks. Recoveries averaged over &gt;90% with increased core loss present in fault zones and zones of strong alteration. No relationship exists between sample recovery and grade.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>Diamond holes are qualitatively geologically logged for lithology, structure and alteration and quantitatively logged for veining and sulphides. Diamond holes are geotechnically logged with the following attributes qualitatively recorded - strength, infill material, weathering and shape. Whole core together with half core, were photographed when wet.</li> <li>All holes are fully logged.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>Diamond core was sampled largely on 1 metre intervals. Core was cut with the upper or left-hand side of the core routinely submitted for total pulverisation (85% passing 75 µm). Quality control of sub-sampling consisted of insertion of blank control samples and coarse reject duplicates, both at a ratio of 1:20 samples. The samples were fully prepared at the company's on-site sample preparation facility on Simberi Island with 200g pulps sent to ALS Laboratory in Townsville.</li> <li>Pulp residues are stored in Townsville for future re-assay if required.</li> </ul>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li>Half Core samples were analysed for gold using fire assay with a 50g charge and analysis by flame atomic absorption spectrometry. Base metals were analysed by Aqua Regia digestion using Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES). QC included insertion of certified reference material (1 in 20); insertion of in-house blank control material (1 in 20); and the insertion of reject residues (1 in 20). QAQC results were assessed as each laboratory batch was received and again on a quarterly basis. Results indicate that pulveriser bowls were adequately cleaned between samples.</li> <li>ALS Townsville inserted certified standards and replicates and lab repeats.</li> </ul>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>Sampling data is recorded electronically which ensures only valid non-overlapping data can be recorded. Assay and downhole survey data are subsequently merged electronically. All drill data is stored in a SQL database on secure company server. No twin holes have been completed.</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>All Simberi Island collars were surveyed by in-house surveyors using DGPS using Tabar Island Grid (TIG) which is based on WGS84 ellipsoid and is GPS compatible (RC holes reported in this period are still pending pickup by dGPS). Tatau and Tabar Island collars were surveyed by hand held GPS. All holes were downhole surveyed using either a Reflex or Ranger single shot camera with the first reading at about 15m and then approximately every 30m increments to the bottom-of-the hole.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>Drilling data is not yet sufficient to establish continuity of the lodes and therefore the drill spacing is irregular and broad spaced.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>Where surface mapping and sampling has contributed to understanding of outcropping geological structures, drilling and sampling has been undertaken orthogonal to the mapped structure.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>Only company personnel or approved contractors are allowed on drill sites; drill core is only removed from drill site to secure core logging/processing facility within the gated exploration core yard; core is promptly logged, cut and prepped on site. The 200gm pulps are then consigned to ALS in Townsville for Au-base metal analysis.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>No audits or reviews of sampling protocols have been completed.</li> </ul>

## Drilling - Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>SBM has 100% ownership of the two tenements over the Simberi Islands; ML136 on Simberi Island, and EL609 which covers the remaining area of Simberi Island, as well as Tatau Island and Big Tabar Island. A 4 sub-block EL2462 was granted on 15 November 2016.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>CRA, BHP, Tabar JV (Kennecott, Nord Australalex and Niugini Mining), Nord Pacific, Barrick and Allied Gold have all previously worked in this area. Nord Pacific followed by Allied Gold was instrumental in the discovery and delineation of the 5 main oxide and sulphide deposits at Simberi.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>The Simberi gold deposits are low sulphidation, intrusion related adularia-sericite epithermal gold deposits. The dominant host rocks for mineralisation are andesites, volcanoclastics and lesser porphyries. Gold mineralisation is generally associated with sulphides or iron oxides occurring within a variety of fractures, such as simple fracture in-fills, single vein coatings and crackle brecciation in the more competent andesite units, along andesite/polymict breccia contact margins as well as sulphide disseminations. On Tatau and Big Tabar Islands, located immediately south of Simberi, potential also exists for porphyry Cu-Au, epithermal quartz Au-Ag and carbonate-base metal Au mineralisation.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>Drill hole information is included in intercept table outlining collar position obtained by DGPS pickup, hole dip and azimuth acquired from a downhole surveying camera as discussed in section 1, composited mineralized intercepts lengths and depth as well as hole depth. Metres below surface (Mbs) for intercepts were calculated by measuring the distance between the midpoint of the intercept and a Lidar survey based topographic surface.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>Broad down hole intercepts are reported as length weighted averages using a cut-off of 0.5 g/t Au and a minimum grade*length of 5gmpt. Such intercepts may include material below cut-off but no more than 5 sequential meters of such material and except where the average drops below the cut-off. Selvage is only included where its average grade exceeds 0.5 g/t Au.</li> <li>Using the same criteria for included sub-grade, supplementary cut-offs, of 2.5g/t Au, 5.0g/t Au and 10g/t Au, may be used to highlight higher grade zones and spikes within the broader aggregated interval. Single assays intervals are reported only where <math>\geq 5.0\text{g/t Au}</math> and <math>\geq 1\text{m}</math> down hole. In core holes, core loss is assigned zero grade. No high grade cut is applied.</li> <li>No metal equivalent values are used for reporting exploration results.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>Down hole length is reported for all holes; true width is not known as the orientation of the orebody is not fully understood.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>Diagrams show all drill holes material and immaterial to Exploration Results.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>Details of all holes material to Exploration Results have been reported in the intercept table, and all other drill holes drilled during the reporting period are highlighted on diagrams included in the report.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>Included in the body of the report. Core holes are routinely measured for bulk density determinations to be used for future resource modelling.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>Included in the body of the report.</li> </ul>



## Trenching - Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> <li>Sampling of trenches was done over measured intervals of between 1 and 5 meters dependent on geology. A geo-pick was used to collect a continuous channel sample from the trench faces across the designated interval with the samples collected in calico bags. Samples (3 to 5kg) were prepped on-site (jaw crushed, disk mill pulverised and then split) to produce a 200g pulp sample. A 25g charge was then extracted from the pulp for Au analyses by Aqua Regia digestion followed by an Atomic Absorption Spectroscopy (AAS) instrument finish.</li> </ul>
<i>Trenching/Benching techniques</i>	<ul style="list-style-type: none"> <li>Trenches were created by both hand and mechanical techniques. Hand trenches were dug using spades, crowbars and shovels to depths of between 1 and 2 meters. Creek channel sampling is conducted in the same manner as trenches, where continuous exposure of bedrock is made by hand clearing of vegetation and cover. Mechanised trenches were dug by an excavator or dozer exposing up to 5 meters of trench wall.</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
<i>Logging / Mapping</i>	<ul style="list-style-type: none"> <li>All trenches were qualitatively geologically mapped for lithology, structure and alteration.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>Samples are routinely submitted for total pulverisation (85% passing &lt;75 µm) at the company onsite sample preparation facility on Simberi Island.</li> <li>200g pulps are sent to St Barbara's Simberi Laboratory where a 25g sub-sample is taken.</li> <li>For Banesa trench samples, the 200g pulps were sent to ALS, Townsville for analysis.</li> </ul>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li>The SW Tatau samples were analysed for gold at the Simberi Lab using Aqua Regia digestion with a 25g charge and analysis by Atomic Absorption Spectrometry.</li> <li>QC included the insertion of two in house blanks at the start of each batch of trench samples, the insertion of certified gold standards (1:100) as well as the collection of field duplicates (1:100).</li> </ul>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>Sampling data is recorded electronically which ensures only valid non-overlapping data can be recorded. Assay and trench survey data are subsequently merged electronically. All data is stored in a SQL database on secure company server.</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>All trenches were initially surveyed by a handheld GPS to capture the trench start point. The GPS used the Tabar Island Grid (TIG) which is based on WGS84 ellipsoid. The path of the trench from the initial start point to the end was surveyed by Tape &amp; Compass method. Trench interval coordinates were then generated using basic trigonometry.</li> <li>Selected recent trenches have been picked up using dGPS WGS84 zone 56.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>Trench data spacing is irregular and broad spaced.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>Where preceding surface mapping and sampling of trenches has contributed to understanding of outcropping geological structures, trenching and sampling has been undertaken to extend the strike length of the mapped structure. However, in many of the areas the lode orientation is poorly understood.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>Only company personnel or approved contractors are allowed on drill sites; drill core is only removed from drill site to secure core logging/processing facility within the gated exploration core yard; core is promptly logged, cut and prepped on site. The 200gm pulps are then consigned to ALS in Townsville for Au-base metal analysis.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>No audits or reviews of sampling protocols have been completed.</li> </ul>

## Trenching - Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>SBM has 100% ownership of the two tenements over the Simberi Islands; ML136 on Simberi Island, and EL609 which covers the remaining area of Simberi Island, as well as Tatau Island and Big Tabar Island. A 4 sub-block ELA2462 was granted 15 November 2016.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>CRA, BHP, Tabar JV (Kennecott, Nord Australalex and Niugini Mining), Nord Pacific, Barrick and Allied Gold have all previously worked in this area. Nord Pacific followed by Allied Gold was instrumental in the discovery and delineation of the 5 main oxide and sulphide deposits at Simberi.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>The Simberi gold deposits are low sulphidation, intrusion related adularia-sericite epithermal gold deposits. The dominant host rocks for mineralisation are andesites, volcanoclastics and lesser porphyries. Gold mineralisation is generally associated with sulphides or iron oxides occurring within a variety of fractures, such as simple fracture in-fills, single vein coatings and crackle brecciation in the more competent andesite units, along andesite/polymict breccia contact margins as well as sulphide disseminations. On Tatau and Big Tabar Islands, located immediately south of Simberi, potential also exists for porphyry Cu-Au, epithermal quartz Au-Ag and carbonate-base metal Au mineralisation.</li> </ul>
<i>Trench/Bench Information</i>	<ul style="list-style-type: none"> <li>Included in the report text and annotated on diagrams.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>Broad trench intercepts are spikes within the broader aggregated interval using a cut-off of 0.5 g/t Au and a minimum grade*length of 5gmpt. Such intercepts may include material below cut-off but no more than 5 sequential meters of such material and except where the average drops below the cut-off. Salvage is only included where its average grade exceeds 0.5 g/t Au.</li> <li>Using the same criteria for included sub-grade, supplementary cut-offs, of 2.5g/t Au, 5.0g/t Au and 10g/t Au, may be used to highlight higher grade zones and spikes within the broader aggregated interval. Single assays intervals are reported only where <math>\geq 1.0\text{g/t}</math> and <math>\geq 5\text{m}</math> trench length is intercepted. No high grade cut is applied.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>Trench intercepts are sampled along the length of the trench and are reported for all trenches; true width is not reported.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li>Diagrams show all trenches material and immaterial to Exploration Results.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>Details of all trenches material to Exploration Results have been reported in the text, and all other trenches dug during the reporting period are highlighted on diagrams included in the report.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>Included in the body of the report.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>Included in the body of the report.</li> </ul>

## Surface Sampling - Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> <li>For the regional soil survey, samples were collected by first removing organic litter from the surface. A hand auger was then used to collect a C-horizon sample from typically between 140cm to 190cm depth. Sampling teams were supervised by a geologist who determined the depth of the sample collected. A bulk sample of <math>\geq 2</math>kg was then collected in a calico bag. A reference sample of soil and any weathered rock fragments is placed in a plastic chip tray for ASD analysis.</li> </ul>
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>All rock chip and float were qualitatively logged for lithology, alteration, weathering and colour.</li> <li>Regional soil sample sites were recorded for land use, vegetation type, slope (degrees) and slope direction. For regional soil samples, the depth (from, to) collected was recorded in centimetres. Regional soil samples were logged for regolith (weathering) type, colour, tone and moisture content by a geologist. A digital photograph is taken showing the soil profile laid out and the location of the sample material highlighted.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>Rock chip, float and soil samples collected from the regional soil survey and from Mt Siro and Seraror were taken to a restricted area at the company's on-site sample preparation facility on Simberi Island and dried in a dedicated oven at low temperature (60°C) for 24 hours to reduce weight for transport.</li> <li>The whole samples were sent to ALS Laboratory in Brisbane for analysis. Samples were sterilised at Steritech Pty Ltd an irradiation facility in Brisbane.</li> </ul>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li>Regional soil and rock chip samples were prepared and analysed by ALS Brisbane and ALS Townsville. Samples were coarse crushed, dried at 105°C, whole sample pulverised (85% passing 75 microns) and then riffle split. Pulps were analysed for Au via 30g Fire Assay and AAS finish and then multi-elements (Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn and Zr) via multi acid digest with HF and Inductively Coupled Plasma Mass Spectroscopy (ICPMS).</li> <li>Regional soil sample field duplicates are collected in the field while collecting the original sample. Field duplicates are collected from a new hole dug less than 1m from the primary sample site at the same depth as the primary sample. Field duplicates are collected so that 5% of samples (1 in 20) are a duplicate. Standards (OREAS45d, OREAS45e) are inserted into the sample sequence so that 5% of samples (1 in 20) are a standard.</li> </ul>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>All regional soil and rock chip sampling sites were surveyed by a hand held GPS for Easting, Northing and RL using WGS84.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>Regional soil sample sites are located on a 200m x 200m off-set grid. Subject to results, follow-up soil samples may be collected on 100m x 100m spacing in selected areas. In some areas samples cannot be collected due to the presence of sacred sites or swamps.</li> <li>Rock chip sample locations are dictated by the presence of outcrop and are usually restricted to creeks, cliffs and breaks in slope.</li> </ul>
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>N/A</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>Only trained company personnel were allowed to collect the samples. All samples were held within a secure company building before dispatch to ALS in Brisbane for Au and multi-element analysis.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>No audits or reviews of sampling protocols have been completed.</li> </ul>

## Surface Sampling - Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"><li>SBM has 100% ownership of the two tenements over the Simberi Islands; ML136 on Simberi Island, and EL609 which covers the remaining area of Simberi Island, as well as Tatau Island and Big Tabar Island. A 4 sub-block EL2462, granted on 15 November 2016 covers a small part of Tatau Island.</li></ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"><li>CRA, BHP, Tabar JV (Kennecott, Nord Australalex and Niugini Mining), Nord Pacific, Barrick and Allied Gold have all previously worked in this area. Nord Pacific followed by Allied Gold was instrumental in the discovery and delineation of the 5 main oxide and sulphide deposits at Simberi.</li></ul>
<i>Geology</i>	<ul style="list-style-type: none"><li>The Simberi gold deposits are low sulphidation, intrusion related adularia-sericite epithermal gold deposits. The dominant host rocks for mineralisation are andesites, volcanoclastics and lesser porphyries. Gold mineralisation is generally associated with sulphides or iron oxides occurring within a variety of fractures, such as simple fracture in-fills, single vein coatings and crackle brecciation in the more competent andesite units, along andesite/polymict breccia contact margins as well as sulphide disseminations. On Tatau and Big Tabar Islands, located immediately south of Simberi, potential also exists for porphyry Cu-Au, epithermal quartz Au-Ag and carbonate-base metal Au mineralisation.</li></ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"><li>N/A</li></ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"><li>N/A</li></ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"><li>N/A</li></ul>
<i>Diagrams</i>	<ul style="list-style-type: none"><li>Figures show all sample sites material and immaterial to Exploration Results.</li></ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"><li>All rock chip, float and soils sample locations with any significant results are shown in Figures.</li></ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"><li>Included in the body of the report.</li></ul>
<i>Further work</i>	<ul style="list-style-type: none"><li>Included in the body of the report.</li></ul>

End of report