

- Record quarter production of 119,436 ounces at AISC<sup>1</sup> of A\$812 per ounce
- Record full year production of 403,089 ounces at AISC of A\$891 per ounce
- \$344 million cash at bank and term deposits with no debt<sup>2</sup>
- Simberi Operations life of mine extended to FY21

## Executive Summary

### Operations

- Record consolidated full year and quarter production and All-In Sustaining Cost, and record annual production at both operations.
- Consolidated gold production for the quarter ended 30 June 2018 (Q4 June FY18) was 119,436 ounces (Q3 Mar FY18: 85,885 ounces). Full year production was 403,089 ounces (FY17: 381,101 ounces).
- Consolidated All-In Sustaining Cost (AISC) for Q4 June FY18 was A\$812 per ounce (Q3 Mar: A\$982 per ounce). The average realised gold price for Q4 June FY18 was A\$1,731 per ounce (Q3 Mar: A\$1,710 per ounce). Full year AISC was A\$891 per ounce (FY17: A\$907 per ounce).
- Gwalia (Western Australia) gold production for Q4 June FY18 was a record 84,537 ounces (Q3 Mar: 56,773 ounces) at record low AISC of A\$679 per ounce (Q3 Mar: A\$905 per ounce). Mined grade for Q4 June FY18 was 13.4 g/t Au (Q3 Mar: 15.0 g/t Au) with 205 kt milled (Q3 Mar: 127 kt). Full year production of 268,428 ounces was a record, with full year AISC of \$802 per ounce (FY17: 265,057 ounces at AISC A\$785 per ounce).
- Simberi (PNG) gold production for Q4 June FY18 was 34,899 ounces (Q3 Mar: 29,112 ounces) at AISC of A\$1,135 per ounce (Q3 Mar: A\$1,129 per ounce). Full year production of 134,661 ounces was the fourth consecutive annual record, with record low full year AISC of A\$1,068 per ounce (FY17: 116,044 ounces at AISC A\$1,187 per ounce).
- The recently completed Simberi life of mine plan<sup>3</sup> extends the life of the operation to FY21, with processing of low grade stockpiles in the final year.

### Health & Safety

- The Total Recordable Injury Frequency Rate (TRIFR, 12 month moving average) reduced from 2.6 at the end of Q3 March FY18 to 2.1 at the end of Q4 June FY18.

### Gwalia Extension Project

- The Gwalia Extension Project (GEP) consists of two main components, a ventilation upgrade and paste aggregate fill (PAF). PAF involves mixing paste from surface with waste crushed underground to fill stope cavities.
- The project is on schedule and within budget. The project is approximately half complete, with the ventilation shafts and surface ventilation infrastructure due to be commissioned in Q2 December FY20.

### Gwalia Mass Extraction

- The Gwalia Mass Extraction (GMX) pre-feasibility study announced in February 2018 comprises a new mining method and investment in underground grinding, mixing and hydraulic hoisting (slurry pumping) to lift mining rates, maintain margins and potentially increase production as the Gwalia mine deepens.
- A feasibility study on GMX is due to be completed in December 2018. More detailed engineering undertaken during the quarter as part of the feasibility study has resulted in revised key metrics for the outlook period to FY22. The revised metrics include substantially higher AISC in FY21 and FY22 than initially anticipated, due to a variety of reasons including commissioning now anticipated six months later, and higher capital costs which have been assigned to sustaining capital rather than growth capital.
- GMX remains a highly valuable project that supports profitable mine life to at least FY31. Details are set out on pages 7 and 8 of this report.

### Exploration

- Gwalia (Western Australia) - Drilling of GWDD19, directed at a target 2,600 metres below surface (mbs), was delayed during the period due to rod failure near the target. A new daughter hole (GWDD19A) directed at the original target was initiated at a downhole depth of 1,845 m and was

<sup>1</sup> Non IFRS measure, refer appendix

<sup>2</sup> Financial information unaudited. Balance comprises \$227 M cash, \$116 M term deposits (maturing between July 2018 and January 2019) and \$1 M restricted cash.

<sup>3</sup> LOM based on existing Reserves, refer to Ore Reserves and Mineral Resources Statement as at 30 June 2017, released 23 August 2017

completed in July 2018, intersecting intervals of gold mineralisation.

- Data interpretation of a **3D seismic program** targeting a 15 km<sup>2</sup> area around Gwalia prioritised two target areas immediately north and south of the Gwalia deposit between 600 mbs and 1900 mbs. A drill program consisting of two parent holes (GWDD20 and GWDD21) targeting each of the areas, was completed during Q4 June 2018. Both of these have intersected features similar to the Gwalia host structure, whilst GWDD21 has additionally encountered a narrow interval of gold mineralisation.
- **Horse-Paddock Well** (Western Australia) - Detailed interpretation of geophysical SAM and IP survey data has been completed leading to the selection of four targets for follow-up drilling in Q1 Sep FY19.
- **Pinjin** (Western Australia) - Final results were received for part of the 313 hole (PJAC01548 to PJAC1860) 20,308 metre aircore drill program completed in June 2018 (see summary on page 10 and details in Figures 3.0 to 3.4 and Table 3).
- **Simberi Island** (PNG) - Fifteen reverse-circulation (RC) drill holes exploring for potential shallow extensions to **sulphide gold** mineralisation at Sorowar were completed, see summary on page 11. Several further holes were completed, with results pending.
- A single 808 metre diamond drill hole (SDH371) was completed during Q4 June FY18 testing for conceptual **copper-gold porphyry** potential below the Pigiput open cut (see summary on page 10 and details in Figures 5.6 and 5.7 and Table 5). An additional three diamond drill holes (SDH372 to SDH374) tested potential deeper high-grade **sulphide** targets (Figure 5.6). Assay results are pending.
- **Option and Farm-in with Newcrest** - One diamond drill hole (TTD087) for a total 770 metres was completed at Kupo on Tatau Island, testing for copper-gold porphyry mineralisation (see summary on pages 11-12 and Figure 5.9).

## Finance (unaudited)

- Total cash at bank and term deposits at 30 June 2018 was A\$344<sup>1</sup> million (31 Mar 2018: A\$262<sup>1</sup> million). There were 9,521 ounces of gold inventory on hand at 30 June 2018 (Q3Mar: 4,371 ounces).
- The Company generated an operational cash contribution<sup>2</sup> in Q4 Jun FY18 of A\$105 million (Q3 Mar: A\$79 million).

1 Financial information unaudited. Balance comprises \$227 M cash, \$116 M term deposits (maturing between July 2018 and January 2019) and \$1 M restricted cash.

## Outlook

- Guidance for FY19 is summarised as follows:
  - Forecast Gwalia gold production between 245,000 and 260,000 ounces at an AISC of between A\$920 and A\$980 per ounce, with sustaining capex of between A\$50 and A\$55 million, plus growth capex of between A\$60 to A\$64 million. Gwalia sustaining capex includes capital to prepare the mine for GMX, establishing dual declines and increasing the number of mining fronts. This capex is reflected in the AISC guidance.
  - Forecast Simberi gold production between 105,000 and 115,000 ounces at an AISC of between A\$1,275 and A\$1,375 per ounce, with sustaining capex of between A\$8 and A\$10 million.
  - Forecast exploration expenditure between A\$21 and A\$27 million, consisting of:
    - A\$3 to A\$4 million at Greater Gwalia.
    - A\$6 to A\$8 million in the Leonora region
    - A\$4 to A\$5 million elsewhere in Australia, mainly at Pinjin in WA and
    - A\$8 to A\$10 million on the Tabar Island group (inc. Simberi) in PNG-
    - The above forecast does not include expenditure related to the PNG option and farm-in agreement with Newcrest.

**Bob Vassie**  
Managing Director and CEO  
26 July 2018

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## Quarterly presentation and audio webcast

Bob Vassie, Managing Director & CEO, will brief analysts and investors on the Q4 June FY18 Quarterly Report at 11:00 am Australian Eastern Standard Time (UTC + 10 hours) on Thursday 26 July 2018. Participation on the conference call is by personal invitation only.

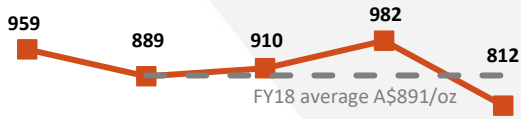
A live audio webcast will be available on the website at [www.stbarbara.com.au/investors/webcast/](http://www.stbarbara.com.au/investors/webcast/) or by [clicking here](#). The audio webcast is 'listen only' and does not enable questions. The audio webcast will subsequently be made available on the website.

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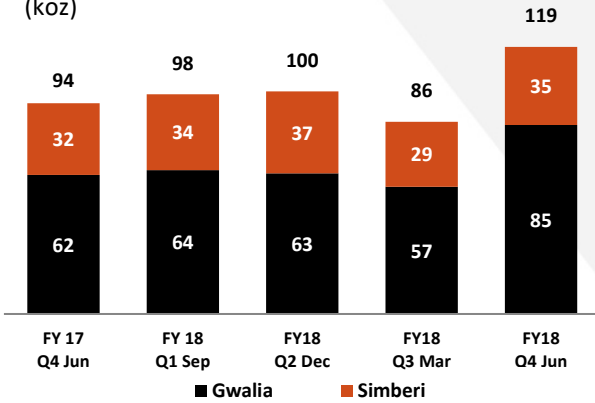
2 Non-IFRS measure, see cash movements table later in this quarterly report. Corresponds to Operational Cash Flow less sustaining capital, excludes growth capital of A\$7 M (Q2 Dec: \$11 M).

## Consolidated results

### Quarterly AISC (A\$/oz)

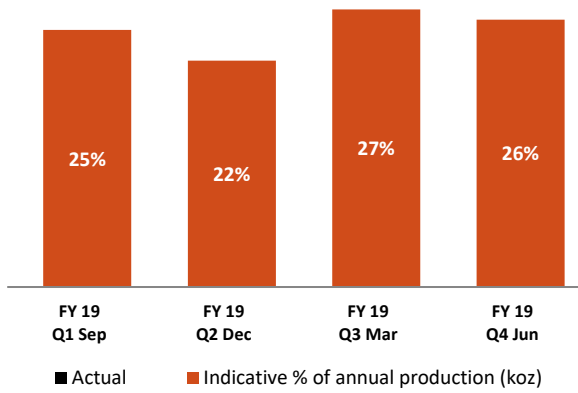


### Quarterly Gold Production (koz)



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

### FY19 Production Indicative Quarterly Guidance Mid-point Profile



## St Barbara Gold Production & Guidance

Production Summary Consolidated		Year FY17	Q1 Sep FY18	Q2 Dec FY18	Q3 Mar FY18	Q4 Jun FY18	Year FY18	Guidance FY18 <sup>1</sup>	Guidance FY19
<i>St Barbara's financial year is 1 July to 30 June</i>		<i>Year to 30 June 2017</i>	<i>Qtr to 30 Sep 2017</i>	<i>Qtr to 31 Dec 2017</i>	<i>Qtr to 31 Mar 2018</i>	<i>Qtr to 31 Mar 2018</i>	<i>Year to 30 June 2018</i>	<i>Year to 30 June 2018</i>	<i>Year to 30 June 2019</i>
<b>Production</b>									
Gwalia	oz	265,057	64,283	62,835	56,773	84,537	268,428	250 to 260 koz	245 to 260 koz
Simberi	oz	116,044	33,976	36,674	29,112	34,899	134,661	125 to 132 koz	105 to 115 koz
<b>Consolidated</b>	oz	<b>381,101</b>	<b>98,259</b>	<b>99,509</b>	<b>85,885</b>	<b>119,436</b>	<b>403,089</b>	<b>375 to 392 koz</b>	<b>350 to 375 koz</b>
<b>Mined Grade</b>								<u>Reserve grade<sup>2</sup></u>	
Gwalia	g/t	10.7	10.7	11.2	15.0	13.4	12.5	7.8	
Simberi	g/t	1.13	1.21	1.32	1.16	1.30	1.25	1.3	
<b>Total Cash Operating Costs<sup>3</sup></b>									
Gwalia	A\$/oz	592	621	668	679	530	613	n/a	
Simberi	A\$/oz	1,092	964	908	1,036	983	969	n/a	
<b>Consolidated</b>	A\$/oz	<b>689</b>	<b>740</b>	<b>757</b>	<b>800</b>	<b>662</b>	<b>732</b>	n/a	
<b>All-In Sustaining Cost<sup>3</sup></b>									
Gwalia	A\$/oz	785	816	859	905	679	802	840 to 880	920 to 980
Simberi	A\$/oz	1,187	1,027	994	1,129	1,135	1,068	1,070 to 1,130	1,275 to 1,375 <sup>4</sup>
<b>Consolidated</b>	A\$/oz	<b>907</b>	<b>889</b>	<b>910</b>	<b>982</b>	<b>812</b>	<b>891</b>	<b>920 to 970</b>	<b>1,030 to 1,100</b>

### 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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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.

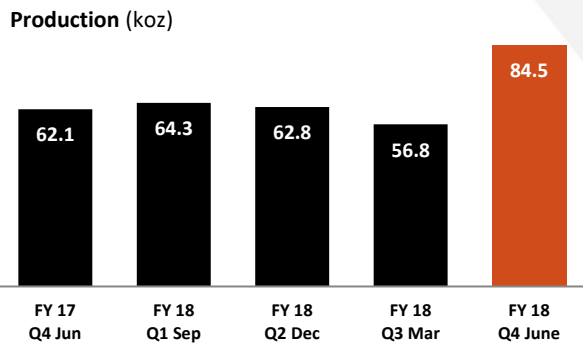
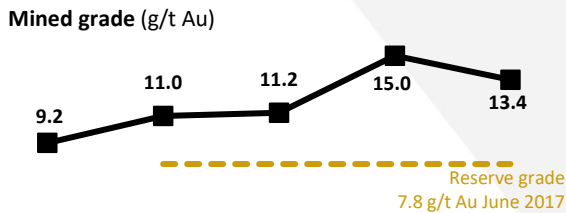
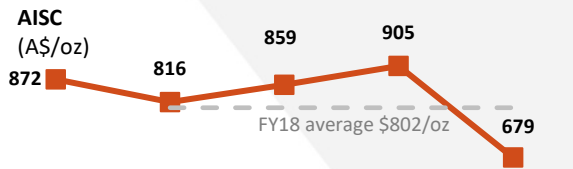
1 FY18 guidance previously amended Q3 March FY18 production update (released 6 April 2018) and in Q2 December 2017 quarterly report (released 23 January 2018).

2 Ore Reserve grade at 30 June 2017, refer Ore Reserve and Mineral Resources Statement (released 23 August 2017).

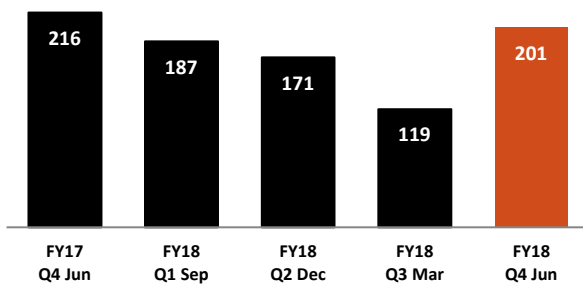
3 Non-IFRS measure, refer Appendix.

4 US\$960 to US\$1,030 per ounce @ AUD 0.75

## Gwalia, Leonora, WA



### Gwalia underground ore mined (kt)



## Operations

- Gwalia gold production for Q4 June FY18 was a quarter record 84,537 ounces (Q3 Jun: 56,773 ounces). The significant improvement on the previous quarter was due to increased volume from multiple production faces after the reset of the mining chevron in Q3. Average mined grade for the quarter was 13.4 g/t Au (Q3 Mar: 15.0 g/t Au).
- Full year production of 268,428 ounces was also a record, primarily due to improved grade of 12.5 g/t Au (FY17: 10.7 g/t Au). Higher grades resulted from the mining sequence passing through stopes in the high grade areas of the South West Branch.
- Mined volume was 201 kt (Q3 Mar: 119 kt). Full year mined volume of 679 kt was down on the previous year (FY17: 790 kt), constrained by ventilation, increasing depth and expansion project activities.
- Q4 June milled volume was 205 kt (Q3 Jun: 127 kt) with an associated drawdown of ore stockpile inventory, with recovery maintained at 98% (Q3 Mar: 98%).
- AISC was a quarterly record low A\$679 per ounce for Q4 June FY18 (Q3 Mar: A\$905 per ounce), with the decrease in unit costs primarily due to increased production.
- Full year AISC of A\$802 per ounce (FY17: A\$785 per ounce) was slightly above the previous year, primarily due to ventilation constraints and the production impact of the expansion project, including the removal of ventilation shaft raisebore waste.
- The lowest level mined in FY18 was at 1,620 mbs (FY17: 1,580 mbs).

## Outlook

- FY19 guidance comprises:
  - Production between 245,000 and 260,000 ounces
  - AISC between A\$920 and A\$980 per ounce
  - Capital expenditure comprising:
    - Sustaining capex: A\$50 to A\$55 million, and
    - Growth capex: A\$60 to A\$64 million (includes A\$5 to A\$6 million related to GMX studies and preparation works).
- Sustaining capex is expected to increase in FY19 (FY18 sustaining capex actual \$34 million). Mining capitalised costs are predicted to increase due to a new stoping design and support standard, including greater offset of the decline. This increases the overall distance of tunnels to be built per level. Some increase in spending is also due to deferred capex from FY18. Non-mining projects include increasing future tailings storage capacity, purchase of a spare mill girth gear and establishing a new borefield for future water supply.

Production Summary		Q3 Mar	Q4 Jun	Year
Gwalia		FY18	FY18	FY18
Underground ore mined	kt	119	201	679
Grade	g/t	15.0	13.4	12.5
Ore milled <sup>1</sup>	kt	127	205	711
Grade <sup>1</sup>	g/t	14.2	13.2	12.0
Recovery	%	98	98	98
<b>Gold production</b>	<b>oz</b>	<b>56,773</b>	<b>84,537</b>	<b>268,428</b>
<b>All-In Sustaining Cost <sup>2</sup></b>		<b>A\$ per ounce</b>		
Mining		419	332	372
Processing		120	91	114
Site services		74	52	64
Stripping and ore inventory adjustments		22	13	22
		<b>635</b>	<b>488</b>	<b>572</b>
By-product credits		(2)	(2)	(2)
Third party refining & transport		1	2	1
Royalties		45	42	42
<b>Total cash operating costs</b>		<b>679</b>	<b>530</b>	<b>613</b>
less operating development		(110)	(58)	(80)
Adjusted cash operating cost		569	472	533
Corporate and administration		55	44	48
Corporate royalty		27	25	25
Rehabilitation		4	3	3
Capitalised mine & op development		206	99	159
Sustaining capital expenditure		44	36	34
<b>All-In Sustaining Cost (AISC)</b>		<b>905</b>	<b>679</b>	<b>802</b>

### Gwalia Extension Project Expenditure

Project expenditure to date (all capitalised):

- FY17 \$8 million
- FY18
  - Q1 \$4 million
  - Q2 \$11 million
  - Q3 \$7 million
  - Q4 \$10 million
  - Full year \$32 million

### Gwalia Extension Project (GEP)

#### Project Description

- The Gwalia Extension Project was announced on 27 March 2017, has an overall budget of A\$100 million, and is now expected to be completed in Q2 December FY20.
- The Project consists of two main components, a ventilation upgrade and paste aggregate fill (PAF). PAF involves mixing paste from surface with waste crushed underground to fill stope cavities.

#### Project Update

- Work on the Gwalia Extension Project continued during the quarter. The project remains on schedule and within budget.
- In Q4 June 2018 construction of the underground crushing and mixing 'PAF' infrastructure continued, behind schedule as noted in the Q3 March Report. Installation of overhead rails and foundation works in the relevant voids is currently underway with commissioning due to occur in Q2 Dec FY19.
- Raisebore activities are progressing well, with the first raisebore reaming upwards due to complete in late July on schedule, and pilot hole drilling for the second ventilation shaft due to complete around the same time. The project plan now anticipates some concurrent raiseboring of ventilation shafts, with completion expected in Q2 Dec FY20.

#### Gwalia Extension Project Summary

<b>Announced</b>	• 27 March 2017
<b>Status</b>	• Under construction
<b>Capex</b>	• A\$100 million
<b>Construction period</b>	• Commenced Q3 Mar FY17 • Anticipated completion Q2 Dec FY20 • PAF completion due Q2 Dec FY19

#### Key components

<b>Ventilation upgrade</b>	<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>3</sup></li> <li>• Approx. 80% of project budget</li> </ul>
<b>Paste Aggregate Fill (PAF)</b>	<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>

<sup>1</sup> Includes Gwalia mineralised waste

<sup>2</sup> Non-IFRS measure, refer Appendix

<sup>3</sup> Ore Reserves at 30 June 2017 extend down to 2,140 mbs, refer to Ore Reserves and Mineral Resources Statement as at 30 June 2017

## Gwalia Mass Extraction (GMX)

- The Gwalia Mass Extraction (GMX) study was announced on 21 February 2018 and consists of a pre-feasibility study (PFS) for a change in mining method and material handling at Gwalia below 1800 mbs (from approximately FY22 onwards). GMX supports a revised Life of Mine Plan to FY31 using existing Resources and Reserves<sup>1</sup>, including anticipated mining of 500 koz of Inferred Resources<sup>2</sup> beyond FY22.
- In the PFS a new mining method and investment in underground crushing, mixing and hydraulic hoisting (slurry pumping) is used to lift mining rates, maintain margins and potentially increase production as the Gwalia mine deepens and grade declines.
- A feasibility study (FS) is due to be completed in December 2018, and progress was made during Q4 June FY18 with the options study modelling different configurations of slurry pumping and comminution (milling and grinding) at depth.
- In addition to the initial plan utilising two stage crushing with HPGR<sup>3</sup> with positive displacement pumps, an alternative slurry pumping design is being considered in the FS, comprising:
  - Three stage crushing underground with no underground grinding,
  - Pump on the surface with three chamber pipe displacement feeder underground, allowing slurry pumping with maximum (P100) particle size of 20 mm.
- The alternative design may prove to be attractive by avoiding underground grinding in favour of utilising existing grinding capacity on the surface. The use of three-chamber displacement technology is a key innovation.
- The FS will assess the valuation and risk of the alternate designs, including the base-case of continued trucking, and select the preferred alternative for detailed design and construction.

### GMX Key Metrics

- More detailed engineering undertaken during the quarter as part of the feasibility study, together with the recently completed budget and life of mine planning cycle, has resulted in revised key metrics for the outlook period to FY22, as set out in the table below.
- It is now expected that GMX will be operational six months later than originally anticipated and therefore FY21 will be a full trucking year and FY22 will be a full year with GMX.

1 Ore Reserve and Mineral Resources Statement at 30 June 2017 (released 23 August 2017).

2 Inferred Resources per Ore Reserves and Mineral Resources Statements as at 30 June 2017 released 23 August 2017. There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will

- Study work has shown that development requirements for the optimized layout and increased volumes will be higher, and ground support costs will also be higher. In addition, a higher proportion of development costs in the initial two years of GMX have been assigned to sustaining capital as opposed to growth capital.
- The key metrics will be further refined with the completion of the Feasibility Study and may benefit from the final crushing and pumping flowsheet.
- The new metrics maintain the objective of GMX, as it enables doubling of mining rates to 1.4 Mtpa as grade declines at depth and extends mine life to FY31. This allows the mine to maintain high production volume, including an anticipated 300 koz in the first year of GMX in FY22 and rates in excess of 200 koz p.a. to FY29 with strong margins.

Gwalia Mass Extraction PFS Summary		
Announced	<ul style="list-style-type: none"> <li>21 February 2018</li> <li>updated 26 July 2018</li> </ul>	
Status	Prefeasibility Study <sup>4</sup>	
Capex	A\$100 million <sup>4</sup>	
PFS model - milestones	<ul style="list-style-type: none"> <li>Feasibility study due Dec 2018</li> <li>Investment decision December 2018</li> <li>Hydraulic hoisting construction FY 2021</li> <li>Full implementation FY 2022</li> </ul>	
Key Components		
Underground crushing of ore and hydraulic hoist	<u>Alternative 1</u>	<u>Alternative 2</u>
	<ul style="list-style-type: none"> <li>2 stage crushing and high-pressure grinding rolls to 2mm</li> <li>Mixing 50/50 ore with water and pumping to surface</li> </ul>	<ul style="list-style-type: none"> <li>3 stage crushing to 20mm</li> <li>Mixing 25% ore 75% water and pumping to surface</li> </ul>
New mining method - Island pillar <sup>5</sup>	<ul style="list-style-type: none"> <li>Applied selectively in thinner, low grade areas</li> <li>Provides greater seismic stability</li> <li>Allows longer strike length</li> <li>Ability to mine thinner lodes productively</li> </ul>	
Overall	<ul style="list-style-type: none"> <li>Increase mining rate to potential 1.4 Mtpa</li> <li>Supports mine-life to FY31</li> </ul>	

result in the determination of indicated mineral resources or that the production target will be realised.

3 High pressure grinding rolls

4 PFS level of accuracy, +/- 30%, per announcement 21 February 2018.

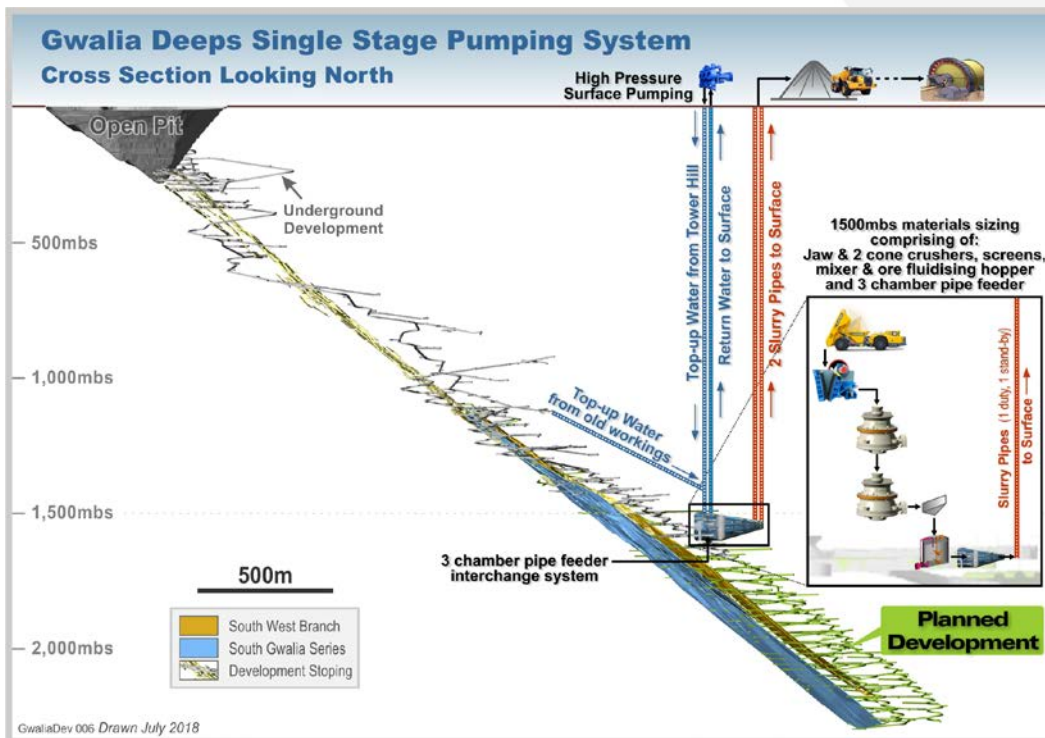
5 Mining method whereby a 'pillar' of ore is left in place to structurally support the roof of a mining cavity

## GMX key metrics

Gwalia Key Metrics		Guidance		Outlook	
		FY19F	FY20	FY21	FY22
Underground ore mined	kt	770	960	1,150	1,400
Mined grade	g/t Au	10.5	8.4	7.7	7.0
Gold Production	koz	245-260	255	280	300
AISC (inc. Corp allocation) <sup>1</sup>	A\$/oz	920-980			
AISC (exc. Corp allocation) <sup>2</sup>	A\$/oz		950	900	870
Capital expenditure	A\$M				
• Sustaining		50-55	57	53	50
• Growth (GEP)		55-58	1		
• GMX (drilling, PFS, FS and subsequent project)		5-6	50	50	
• GEP additional ventilation <sup>3</sup>				25	10
Anticipated lowest mining depth in FY	mbs	1700	1740	1780	1820

The above table is based on the GMX PFS (±30%).

## Alternative slurry pumping design being considered in the feasibility study



1 Inc. Corp. allocation as normally published by St Barbara Ltd (Leonora proportion of Corp. allocation in FY19F approx. \$20M)

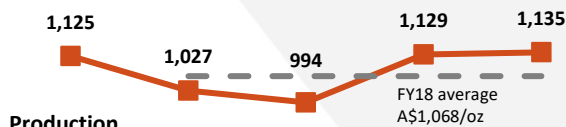
2 Corp. allocation excluded from GMX AISC-per-ounce outlook for transparency

3 ASX release 27 March 2017 Gwalia Extension Project approved

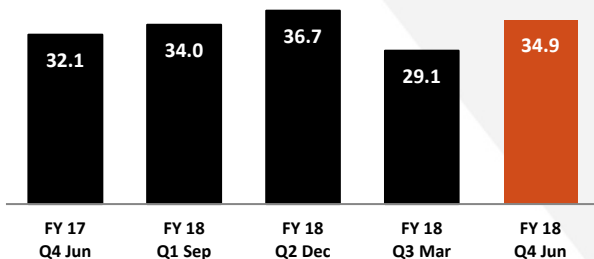


## Simberi, Papua New Guinea

AISC  
(A\$/oz)



Production  
(koz)



### Operations

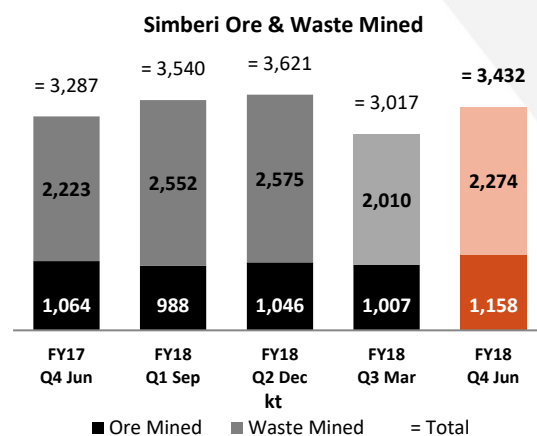
- Simberi gold production for Q4 Jun FY18 was 34,899 ounces (Q3 Mar: 29,112 ounces). Full year production was 134,661 ounces (FY17: 116,044 ounces), the fourth consecutive record year.
- Improved grade, with the mine plan allowing access to higher grade areas adjacent to the sulphide/oxide boundary, was the main reason for the improved result compared with both the previous quarter and the previous year.
- Incremental improvements in both mining and fixed plant operations contributed to the improved full year result. Recovery for FY18 averaged 85% (82% in each of FY17 and FY16).
- Q4 June FY18 All In Sustaining Cost (AISC) was A\$1,135 per ounce (Q3 Jun: A\$1,129 per ounce), which included an increase in sustaining capital expenditure. Full year AISC was a record low A\$1,068 per ounce (FY17: \$1,187 per ounce).
- Drilling beneath Sorowar pit seeking to identify further sulphide ore is ongoing; results of the initial 15 holes are reported in the exploration section and ancillary tables.
- Results of the drilling to date are encouraging as they demonstrate similarities to the existing sulphide deposit under the Pigiput pit, including oxide, sulphide and transitional ore. Increased density drilling is planned to inform the potential to extend the sulphide deposit and improve the economics of the sulphide project.
- The recently completed Simberi life of mine plan<sup>1</sup> extends the life of the operation to FY21. Mining will continue throughout FY19 and FY20, with low grade stockpiles accumulated over FY18 to FY20 to be processed in FY21.

1 LOM based on existing Reserves, refer to Ore Reserves and Mineral Resources Statement as at 30 June 2017, released 23 August 2017  
2 Non-IFRS measure, refer Appendix

Production Summary Simberi		Q3 Mar FY18	Q4 Jun FY18	Year FY18
Ore & waste mined	kt	3,017	3,432	13,610
Ore mined	kt	1,007	1,158	4,199
Grade	g/t	1.16	1.30	1.25
Ore milled	kt	874	805	3,586
Grade	g/t	1.22	1.45	1.35
Recovery	%	85	83	85
<b>Gold production</b>	<b>oz</b>	<b>29,112</b>	<b>34,899</b>	<b>134,661</b>
<b>All-In Sustaining Cost<sup>2</sup></b>	<b>A\$ per ounce</b>			
Mining		373	374	352
Processing		362	370	363
Site services		253	205	214
		<b>988</b>	<b>949</b>	<b>929</b>
By-product credits		(3)	(6)	(4)
Third party refining & transport		9	8	8
Royalties		42	32	36
<b>Total cash operating costs</b>		<b>1,036</b>	<b>983</b>	<b>969</b>
Corporate and administration		55	44	49
Rehabilitation		19	17	16
Sustaining capital expenditure		19	91	34
<b>All-In Sustaining Cost (AISC)</b>		<b>1,129</b>	<b>1,135</b>	<b>1,068</b>

### Outlook

- FY19 guidance comprises:
  - Production of between 105,000 and 115,000 ounces
  - AISC of between A\$1,275 and A\$1,375 per ounce<sup>3</sup>
  - Sustaining capex of A\$8 to A\$10 million.



<sup>3</sup> US\$960 to US\$1,030 per ounce @ AUD 0.75

## Exploration – Results June 2018 Quarter

### Gwalia Exploration Program, Leonora WA

- **Gwalia Deeps Extension:** The Gwalia Deeps drilling program continued with the commencement of GWDD19A after GWDD19 was delayed due to equipment failure. The lip for GWDD19A was cut at 1,845m (downhole) aiming to intersect the original target, the potential extension of the lode system, at a depth of 2,600 mbs. The hole was completed after the period with the results received shortly before publication of this report. Results appear to confirm the Gwalia mineralised system continues consistently to this depth, and include (all intercepts downhole, details in Figures 1.0 to 1.2 and Table 1):
  - 0.5 m @ 5.9 g/t Au from 2,786 m
  - 1.7 m @ 2.9 g/t Au from 2,805 m
  - 2.5 m at 6.8 g/t Au from 2,824 m, including 0.3 m at 50.5 g/t Au from 2,825 m
  - 0.9 m @ 1.7 g/t Au from 2,855 m
- **Gwalia Seismic Program:** Interpretation of a **3D seismic program** targeting a 15 km<sup>2</sup> area surrounding the Gwalia mine led to the prioritisation of two areas displaying attributes similar to those associated with the Gwalia deposit. These target areas are immediately north and south of the known lode system and located between 600 to 1,900 mbs. A drill program consisting of two parent holes (GWDD20 and GWDD21) targeting each of the areas, has been completed during Q4 June 2018. GWDD20 reached a downhole depth of 1,260 m (1,200 mbs) and GWDD21 a depth of 1,560 m (1,430 mbs).
- Intercepts of shearing and alteration (the mineralised shear corridor 'MSC'), similar to that displayed in the Gwalia deposit, were returned from GWDD20 between downhole depths of 938 m to 958 m and from GWDD21 between 1,453 m and 1,476 m.
- Full details are set out in Figures 1.0 to 1.2 and Table 2 in the Exploration Figures and Tables appendix.
- **Horse-Paddock Well, Leonora WA:** Detailed interpretation of conductivity/resistivity and magnetic data obtained through Induced Polarisation (IP) and Sub Audio Magnetic (SAM) surveys conducted at Horse-Paddock Well has been completed. This analysis identified 24 targets of which four, representing relatively discrete anomalies located in the central and southern part of the survey area, have been selected for RC drilling follow-up in Q1 Sep FY19, see figure 2.0.

### Pinjin Project, Yilgarn WA

- 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 19 exploration licences (1,232 km<sup>2</sup>) for 440 blocks (Figure 3.0).
- Ten Reverse Circulation (RC) drill holes (PJRC0048 to PJRC0057) for 1,916 metres were completed in April 2018. The overall 19 hole (PJRC0039 to PJRC0057) RC drilling program for 4,027 metres tested 17 bedrock conductors and two holes tested one gold in bedrock geochemical anomaly in the eastern Pinjin tenements (Figure 3.0). All ten holes drilled in the quarter encountered geology that explained the modelled EM conductors, with four holes intersecting sulphide bearing sediments, five holes intersecting zones of weak to moderate sulphides within volcanic rocks and one hole encountering significant saline ground water. No significant results were returned.
- A 313 hole (PJAC01548 to PJAC1860) 20,308 metre aircore drill program was completed in Q4 June FY18 (Figures 3.0 to 3.4). The drilling tested 6 targets, including infill and extension drilling at Graham's Find prospect, southeast Yindi station area, the Old Homestead Prospect, part of the Mulgabbie trend and reconnaissance drilling at two new geological targets in the western tenements. Final assay results were received for holes PJAC1548 to PJAC1760, preliminary composite results for holes PJAC1761 to PJAC1835, with assays for holes PJAC1836 to PJAC1860 still pending. Best results received to date (all intercepts downhole, details in Figures 3.3, 3.4 and Table 3) include:
  - PJAC1687: 1 m @ 1.5 g/t Au from 52 m
  - PJAC1690: 6 m @ 0.7 g/t Au from 52 m, including 2 m @ 1.6 g/t Au from 53 m
  - PJAC1701: 3 m @ 2.4 g/t Au from 58 m, including 1 m @ 6.6 g/t Au from 58 m
  - PJAC1716: 1 m @ 1.1 g/t Au from 65 m
- Aircore drilling at Graham's Find closed off the 3.2 kilometre long, north-northwest striking zone of anomalous gold ( $\geq 250$  ppb Au) and arsenic ( $\geq 250$  ppm As) in bedrock along strike to the south (Figure 3.2). Additional drilling at Graham's Find will comprise lake aircore drilling to test the 1.4 kilometre trend, interpreted to pass under Lake Rebecca.
- Aircore drilling at southeast Yindi station closed off the 6 kilometre long, north-northwest striking, semi-continuous zone of anomalous gold ( $\geq 50$  ppb Au), lead, bismuth and tungsten along strike to the south (Figure 3.3). The target remains open to the north.
- Infill aircore drilling of Target 16 which lies on the Mulgabbie trend helped further defined two parallel north - south striking 0.75 to 1 kilometre long anomalous zones of gold ( $\geq 250$  ppb

Au) and arsenic ( $\geq 250$  ppm As) in bedrock, that are both open along strike to the north (Figure 3.4).

- A 300 hole, 18,000 metre lake aircore drilling program commenced in late June 2018. The program is designed to test 5 targets under Lake Rebecca, including Graham's Find, the Mulgabbie trend and three geophysical targets (Figure 3.5). To date, 38 holes (PJAC1861 to PJAC1898) for 1,187 metres were completed testing one geophysical target. Drilling intersected highly variable geology, common shearing, alteration, quartz veining and minor sulphides. The program is expected to be completed in Q1 September FY19.
- Licence E39/1718 was not renewed by St Barbara and part of E31/1000 was subject to its sixth year compulsory partial surrender. Ground was selected where systematic exploration testing did not define bedrock geochemical anomalies warranting further work.

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

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- A 23 hole, 3,450 metre aircore drill program has been designed using aeromagnetic data and results from the recently completed surface Gravity and Passive Seismic surveys. Two drill fence lines with holes spaced between 400 metres and 800 metres apart were designed to test two targets in the Eastern part of EL8214 (Figure 4.0). Aircore drilling will commence in July 2018.

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

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- On Simberi Island (Figures 5.0 and 5.1), results for an initial reverse circulation (RC) drilling program, testing for sulphide gold potential beneath the current Sorowar oxide pit, have been received.
- To date, 15 holes (SORDGC-001 to -012 and SORDGC-021, 022 and 024) for 2,988 metres have been completed on four northeast orientated sections across part of the Sorowar pit (Figure 5.1).
- Best results (all intercepts downhole, details in Figures 5.2 to 5.5 and Table 4) include:

SORDGC001:

- 28 m @ 1.37 g/t Au from 114 m

SORDGC002:

- 19 m @ 4.96 g/t Au from 82 m

SORDGC007:

- 20 m @ 8.42 g/t Au from 60 m, and
- 15 m @ 7.08 g/t Au from 89 m

- Also on Simberi Island, (Figure 5.6), diamond drilling continued to test conceptual copper - gold porphyry potential below the Pigiput open cut and commenced targeting potential high-grade gold sulphide targets within ML136.
- A single diamond drill hole (SDH371) was drilled a further 485 metres during the quarter to a final depth of 808 metres. The hole was designed to test approximately 200 metres below the limits of historical drilling to gain a better understanding of the potential for copper - gold porphyry mineralisation at depth below the Pigiput open cut. Drilling intersected a brecciated, potassic altered, feldspar porphyry containing disseminated fine-grained chalcopyrite and molybdenite associated with anomalous levels of gold, copper and molybdenum. Further drilling is planned in Q1 September FY19. Best results (all intercepts downhole, details in Figures 5.6, 5.7 and Table 5) include:

SDH371:

- 30 m @ 0.52% Cu, 0.14% Mo and 0.28 g/t Au from 524 m, and
- 12 m @ 0.31% Cu, 0.05% Mo and 0.30 g/t Au from 724 m
- Three diamond drill holes (SDH372 to SDH374) were completed for 1,112 metres testing potential high-grade gold sulphide targets within ML136 (Figure 5.6). Assay results are pending.
- Exploration continued on EL609 at Tatau Island during Q4 June FY18. A second diamond drill hole TTD088 commenced in June 2018 at Kupo Prospect on Tatau Island and is currently at 590 metres depth (Figures 5.8 and 5.9). The hole was designed to test a northern porphyry target associated with anomalous arsenic - bismuth - gold - molybdenum surface geochemistry associated with phyllic alteration overprinting potassic alteration and a coincident magnetic low, as part of the St Barbara work program. TTD088 intersected potassic altered monzodiorite with local trace chalcopyrite below 600 metres depth (assay pending).

#### **Option and Farm-in with Newcrest,**

#### **Tatau & Tabar Islands, Papua New Guinea**

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- The St Barbara group (through its wholly owned PNG subsidiary Nord Australex 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 47 line kilometre creek mapping and 1,190 rock chip sampling program was completed in December 2017

following up potential porphyry copper - gold targets highlighted by the 1,064 hand auger soil sampling program covering 36 km<sup>2</sup> of central Tatau Island and Tupinda Prospect, Big Tabar Island. Results from the surface sampling program highlight the Talik North and Kupo porphyry prospects as priority drill targets (Figure 5.8).

- Assay results for the third hole (TTD086) drilled at Talik North are shown in Figure 5.10 and summarised in Table 6.
- A single diamond drill hole (TTD087) was completed at Kupo for 770 metres during Q4 June FY18 (Figure 5.9). TTD087 intersected monzonite and monzodiorite with potassic alteration and localised trace chalcopyrite in fractures present below 600 metres depth. Assay results for TTD087 are pending. To date, a total of four diamond drill holes have been completed as part of the Newcrest Option and Farm-in at Talik North and Kupo (TTD084 to TTD087) for a combined 3,251 metres.
- Subject to access, diamond drilling is expected to commence at the Banesa copper - gold porphyry prospect on Big Tabar Island in Q1 September FY19 (Figure 5.0).

#### Expenditure Q4 June FY18 (unaudited)

Expenditure on mineral exploration is shown below:

	<b>Q3 Mar FY18</b>	<b>Q4 Jun FY18</b>	<b>Year FY18</b>	
	A\$ million	A\$ million	A\$ million	
Australia	0.8	1.1	4.1	(expensed)
Pacific	1.0	1.5	4.1	(expensed)
Gwalia	1.2	1.3	5.5	(capitalised)
	<b>3.0</b>	<b>3.9</b>	<b>13.7</b>	

#### Planned Exploration – Q1 September FY19

The map below shows current and planned target areas for Q1 September FY19. Exploration in Q1 September FY19 will focus on:

- **Greater Gwalia**
  - 2,000 – 2,200 mbs: Assess target opportunities, and commence drilling of daughter holes, directed at extending the Indicated Mineral Resource further to the south.
  - 2,600 mbs: Continuation of surface hole (GWDD19A) directed at the potential down-plunge extension of the Gwalia deposit to 2,600 mbs.
  - 3D Seismic Targets: Complete downhole surveys on two parent holes to improve future targeting options from the 3D seismic model.



- Conduct extensions of the seismic coverage of the Greater Gwalia area to the north and south.

- **Leonora Region**
  - Horse-Paddock Well: RC drilling program to test high priority Geophysical targets.
- **Pinjin**
  - Assessment of the results from the 313 hole, 20,308 metre aircore drill program testing Graham's Find, southeast Yindi, the Old Homestead prospect and Target 16 on the Mulgabbie trend and two new geochemical targets in the western tenements.
  - Completion of the 300 hole 18,000 metre lake aircore drilling program planned to test Graham's Find, the Mulgabbie trend and three geophysical targets.
- **Back Creek (NSW)**
  - Completion of the 23 hole 3,450 metre Aircore drilling program and assess the results.
- **Simberi Island**
  - Ongoing campaign of increased density RC drilling focused on the Sorowar mining area.
  - Continue diamond drill testing of potential high-grade gold sulphide targets on ML136, Simberi Island.
  - Further drill testing of the potential for copper - gold porphyry mineralisation at depth below the Pigput open cut.
- **Tabar Islands (St Barbara)**
  - Complete diamond drill hole TTD088 at Kupo on Tatau Island and interpret the results.

- Subject to access, continuing the soil, rock chip sampling, reconnaissance mapping and trenching over gold and copper-gold targets on Tatau and Big Tabar Islands.

- **Tabar Islands (Newcrest option agreement)**

- Commence diamond drilling of the Banesa gold - copper porphyry target on Big Tabar Island.
- Interpret the results of the diamond drill hole TTD087 completed at Kupo on Tatau Island.

## Exploration - FY19 guidance & strategy

### Exploration guidance FY19

- Forecast exploration expenditure of between A\$21 and A\$27 million, consisting of:
  - A\$3 to \$4 million Greater Gwalia;
  - A\$6 to A\$8 million in Leonora region;
  - A\$4 to A\$5 million elsewhere in Australia, mainly at Pinjin in WA; and
  - A\$8 to A\$10 million on the Simberi Island group in PNG (excludes expenditure on copper - gold porphyry exploration in Tabar Island Group via option and farm-in with Newcrest).

### Strategy

- Exploration in FY19 continues the main FY18 exploration areas and adds increased campaigns in the Leonora region in WA and on Simberi Island in PNG.

#### Australia

- FY19 expenditure in the Leonora region is planned to be A\$6 to A\$8 million (FY18: A\$6 million). Horse Paddock Well is the first of a number of regional prospect areas that will be explored during the year. The increased exploration continues the use of improved, more powerful remote exploration techniques such as seismic, sub-audio magnetics (SAM) and induced polarisation (IP).
- The ongoing Gwalia seismic campaign of drilling targets identified from the 3D seismic model, as well as a daughter hole exploring potential extension to the Gwalia deposit to the south and further down-plunge, will account for approximately \$4 million in FY19.
- Work on the Pinjin project in the Yilgarn area of Western Australia will focus on continuing to test the highest ranked geological, structural and bedrock geochemical targets with significant Aircore drilling programs. This will include further focus on the Graham's Find, Mulgabbie and SE Yindi station trends. Targets returning significant results will be followed up

with reverse circulation (RC) drilling. Work on the Back Creek project in central New South Wales will focus on testing five geophysical and structural targets with Aircore and limited diamond drilling.

#### Simberi, PNG

- A campaign of high density RC drilling will take place to study a potential increase to the Sulphide gold resource to support the sulphide gold PFS, focused on Sorowar beneath the current oxide mining area.
- A review of the portfolio of prospects within ML136 and EL609, based on work completed in FY18, produced a list of exploration targets ranked on value, size and potential to define high-grade sulphide gold mineralisation and porphyry style copper-gold mineralisation.
- Drilling will be undertaken on the Simberi Island ML136, on Tatau Island and Big Tabar Island EL609 targeting either high-grade sulphide gold mineralisation and / or porphyry style copper - gold mineralisation. Drilling on the Simberi ML136 will include testing up to six potential high-grade sulphide targets and at least one copper - gold porphyry target. Drilling of the porphyry style copper - gold mineralisation on Big Tabar island will be the focus of the Newcrest Option and Farm-in. This includes drilling of the Banesa copper - gold porphyry target that will commence in Q1 September FY19.

### Exploration Investments

- 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.
- At the date of this report, St Barbara holds the following investments in Australian explorers <sup>1</sup> :

<a href="#">Catalyst Metals Limited</a> (ASX:CYL)	16%
<a href="#">Duketon Mining Limited</a> (ASX:DKM)	12%
<a href="#">Peel Mining Limited</a> (ASX:PEX)	16%
<a href="#">Prodigy Gold</a> (ASX:PRX) (formerly ABM Resources)	10%

### Health & Safety

- The Total Recordable Injury Frequency Rate (TRIFR) reduced from 2.6 at the end of Q3 March FY18 to 2.1 at the end of Q4 June FY18.
- The FY18 result equates to nine recordable injuries across 4.2 million hours worked.
- Health and safety related plans and strategies are continuously being reviewed, and developed, to aid in further reduction of the company's TRIFR rate through FY19.

1 Shareholdings as notified by St Barbara in substantial holder notices

## Finance (unaudited)

- 111,822 ounces of gold were sold in Q4 June FY18, at an average realised gold price of A\$1,731 per ounce (Q3 Mar: 91,773 ounces at A\$1,710 per ounce). There was 9,521 ounces of gold inventory on hand at 30 June 2018 (31 March 2017: 4,371 ounces).
- Total cash at bank and term deposits at 30 June 2018 was A\$344 million<sup>1</sup> (31 March 2018: A\$262 million) after income tax payments of \$7 million<sup>2</sup> and \$4 million investment in Duketon Mining in April.
- The Company generated an operational cash contribution<sup>3</sup> in Q4 June FY18 of A\$105 million (Q3 Mar: A\$79 million). Cash movements for FY18 are summarised in the following table:

Cash movements & balance A\$M (unaudited)	Q1 Sep FY18	Q2 Dec FY18	Q3 Mar FY18	Q4 Jun FY18	Year FY18
Leonora - operating cash flow <sup>4</sup>	62	56	56	93	267
Simberi - operating cash flow <sup>4</sup>	24	23	23	12	82
Operational cash contribution	86	79	79	105	349
Leonora - growth capital	(4)	(11)	(7)	(10)	(32)
Rehabilitation , land management & project costs	-	(1)	-	(1)	(2)
Corporate costs	(4)	(6)	(5)	(5)	(20)
Corporate royalties	(2)	(2)	(2)	(2)	(8)
Exploration <sup>5</sup>	(3)	(4)	(3)	(4)	(14)
Investments <sup>6</sup>	(1)	(12)	(4)	(4)	(21)
Income tax payments <sup>2</sup>	-	(31)	(2)	(7)	(40)
Working capital movement	(10)	4	4	9	7
Cash flows before finance costs	62	16	60	81	219
Net interest income	1	1	2	1	5
Dividends paid	(25)	-	(16)	-	(41)
Net movement for period	38	17	46	82	183
Cash balance at start of quarter (year)	161	199	216	262	161
<b>Cash balance at end of quarter (year)</b>	<b>199</b>	<b>216</b>	<b>262</b>	<b>344</b>	<b>344</b>
Restricted cash inc. in closing balance	1	1	1	1	1

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

<b>FY19:</b>	<b>100,000</b> ounces of forward gold contracts to be delivered in monthly instalments between July 2018 and June 2019 at <b>A\$1,750</b> per ounce (FY19 component of hedges announced 7 and 19 February 2018 and 7 March 2018).
<b>FY20:</b>	<b>50,000</b> ounces of forward gold contracts to be delivered in monthly instalments between July and December 2019 at <b>A\$1,750</b> per ounce (FY20 component of hedges announced 7 and 19 February 2018 and 7 March 2018).

- 1 Financial information unaudited. Balance comprises \$227 M cash, \$116 M term deposits (maturing between July 2018 and January 2019) and \$1 M restricted cash.
- 2 Represents pay-as-you-go (PAYG) monthly tax instalments that commenced in March 2018
- 3 Non-IFRS measure, see cash movements table this page. Corresponds to Operational Cash Flow less sustaining capital, but excludes growth capital of A\$4 million.
- 4 Net of sustaining capex
- 5 Includes Gwalia deep drilling
- 6 Refer 'Explorations Investments' earlier in this report

## Corporate

- During the quarter the Company applied to join the UN Global Compact ([unglobalcompact.org](http://unglobalcompact.org)) and the Extractive Industries Transparency Initiative ([eiti.org](http://eiti.org)).
- Representatives of the Group have been invited to present the new policy and initiatives to support employees impacted by domestic violence at the Women in Resources Asia Pacific Alumni Forum in Lae, Papua New Guinea in August 2018.
- The Group has been invited to submit data for a case study supporting the Minerals Council of Australia (MCA) initiative 'UN Sustainability Development Goals in the context of the Australian Mining Industry'.

### St Barbara admitted to NASDAQ International Designation ADR programme

- St Barbara established an American Depositary Receipt (ADR) programme on 5 August 1994 with The Bank of New York (now BNY Mellon) as depository.
- BNY Mellon issues St Barbara ADRs in the United States of America, maintains the ADR holder register, and distributes any dividends to ADR holders in U.S. dollars. General information on ADRs is available at [www.adrbnymellon.com/resources/dr-basics](http://www.adrbnymellon.com/resources/dr-basics).
- The Company was admitted to the [NASDAQ International Designation ADR program](#) during the quarter.

Ticker code	STBMY
Type	Sponsored Level 1 ADR
CUSIP	852278100
DR ISIN number	US8522781009
DR Exchange	OTC <a href="http://www.otcmarkets.com">www.otcmarkets.com</a>
Ratio	1 ADR = 5 SBM ordinary shares
Depository Bank	The Bank of New York Mellon <a href="http://www.bnymellon.com">www.bnymellon.com</a>

## Scheduled Future Reporting

<u>Date</u>	<u>Report</u>
22 August	Annual Financial Report Resources and Reserves Statements

Dates are tentative and subject to change

## Share Capital

Issued shares	
Opening balance 31 Mar 2018	516,541,773
Issued <sup>1</sup>	3,974,617
<b>Closing balance 30 Jun 2018</b>	<b>520,516,390</b>
Unlisted employee rights	
Opening balance 31 Mar 2018	6,296,723
Issued	nil
Exercised as shares	nil
Subject to assessment <sup>2</sup>	-3,974,617
Lapsed <sup>3</sup>	-33,578
<b>Closing balance 30 Jun 2018</b>	<b>2,288,528</b>
Comprises rights expiring:	
30 June 2019 <sup>4</sup>	1,070,277
30 June 2020 <sup>5</sup>	1,218,251
<b>Closing balance 30 Jun 2018</b>	<b>2,288,528</b>

1 ASX Appendix 3B 21 Jun 2018 shares issued in anticipation of rights vesting.  
2 Vesting of employee rights expiring on 30 June 2018 will be determined as part of annual financial reporting and advised on 22 August 2018

3 Shares lapsed associated with employee departures  
4 If these rights do not vest at 2019, they may be retested at 2020 and 2021  
5 If these rights do not vest at 2020, they may be retested at 2021 and 2022

## 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  
Rowan Cole ..... Company Secretary

### Registered Office

Level 10, 432 St Kilda Road  
Melbourne Victoria 3004 Australia  
Telephone ..... +61 3 8660 1900  
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

David Cotterell, Manager Investor Relations ..... +61 3 8660 1959  
Rowan Cole, Company Secretary ..... +61 3 8660 1900

### Substantial Shareholders

	% of Holdings <sup>1</sup>
Van Eck Associates Corporation	11.2%
Vinva Investment Management	5.2%

<sup>1</sup> As notified by the substantial shareholders to 25 July 2018



## 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, Pinjin and Back Creek 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 2017' released to the Australian Securities Exchange (ASX) on 23 August 2017 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 2017 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.
- Full details are contained in the ASX release dated 23 August 2017 'Ore Reserves and Mineral Resources Statements 30 June 2017' available at [www.stbarbara.com.au](http://www.stbarbara.com.au).

## Exploration Figures and Tables

Figure 1.0: Leonora: Gwalia Deeps Drilling Program Q4 FY18, Plan View

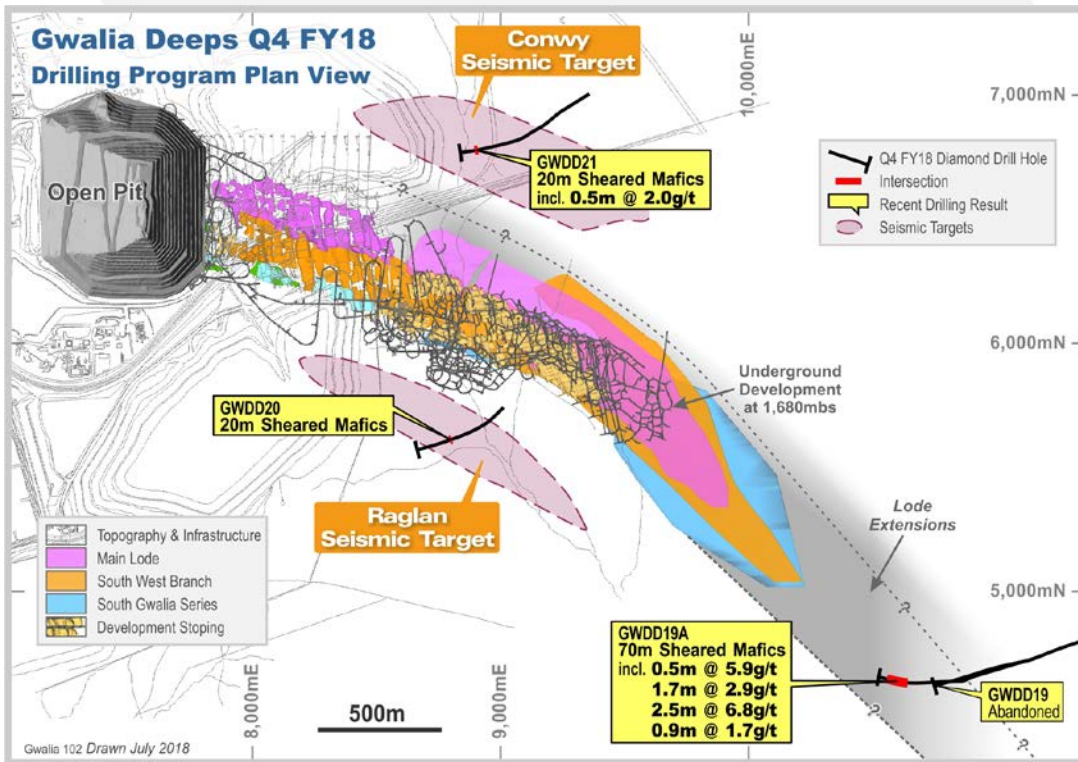


Figure 1.1: Gwalia Deeps Drilling Program Q4 FY18, Cross Section (looking north)

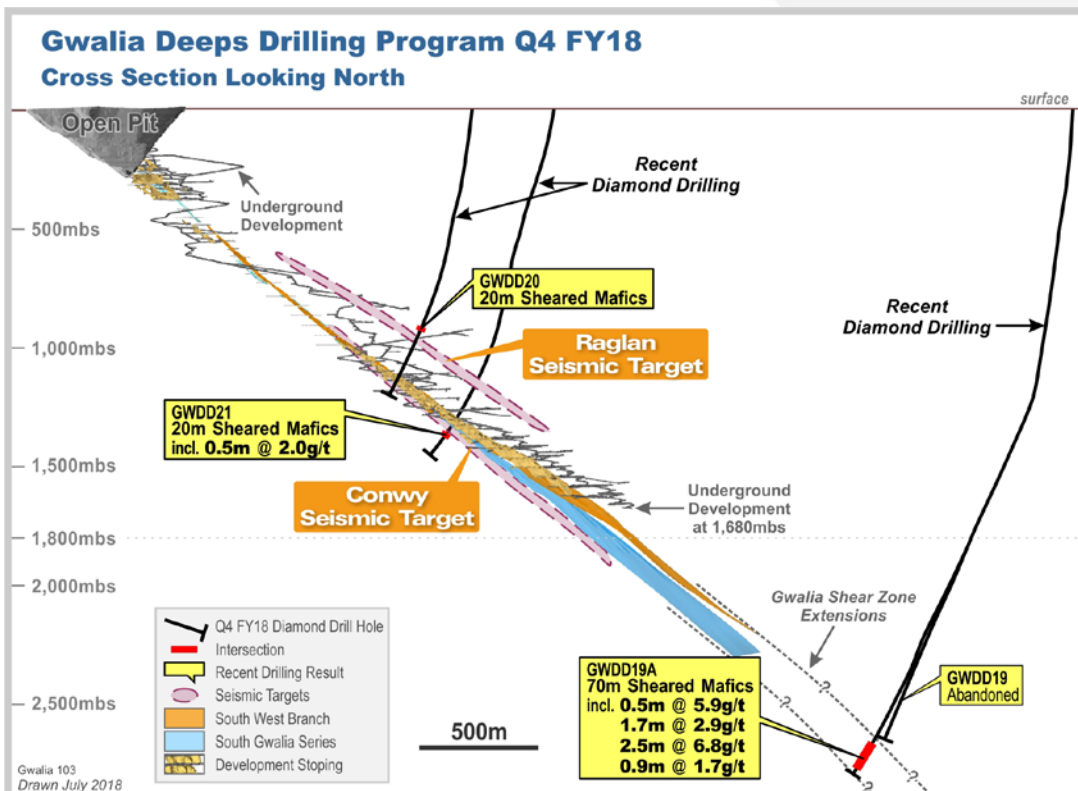


Figure 1.2: Gwalia Deeps Drilling Program Q4 FY18 Results, Long Section (looking west)

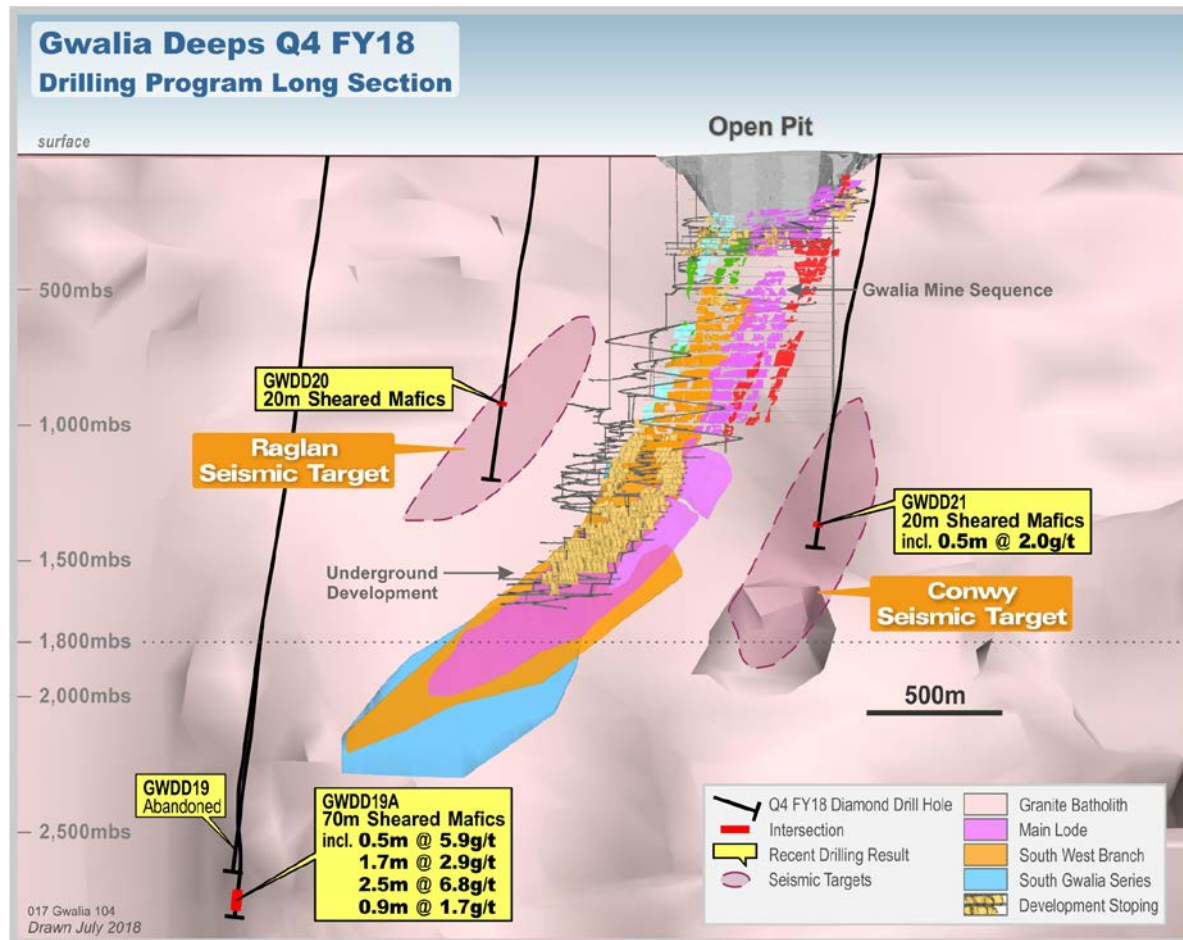
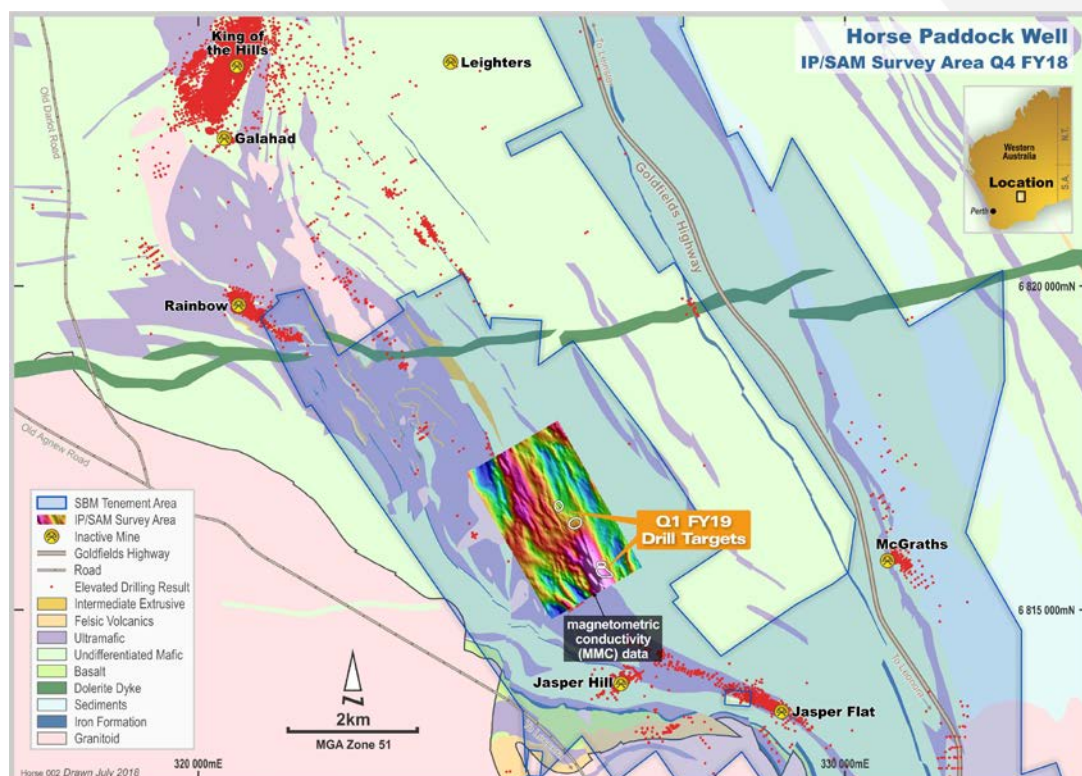
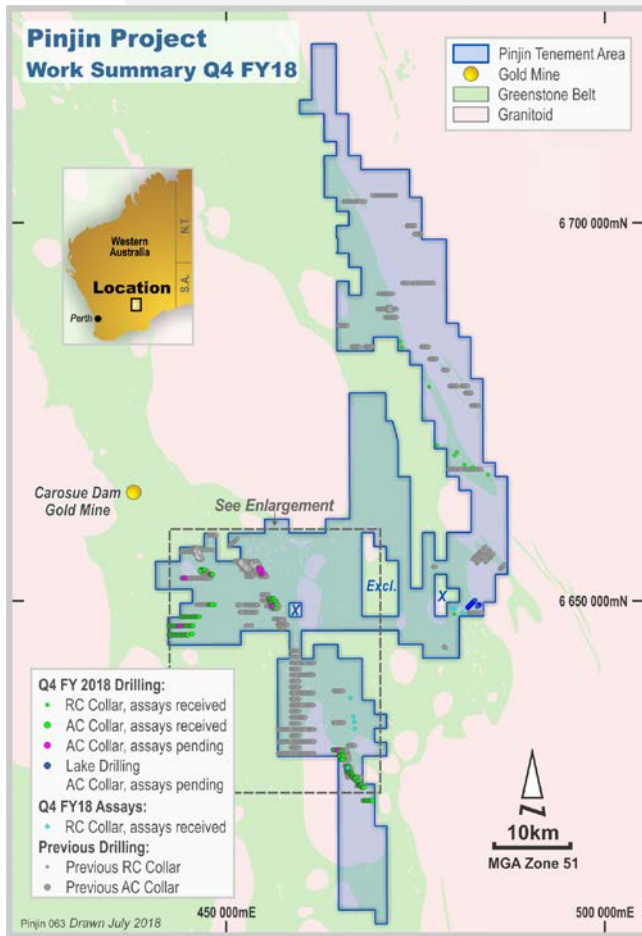


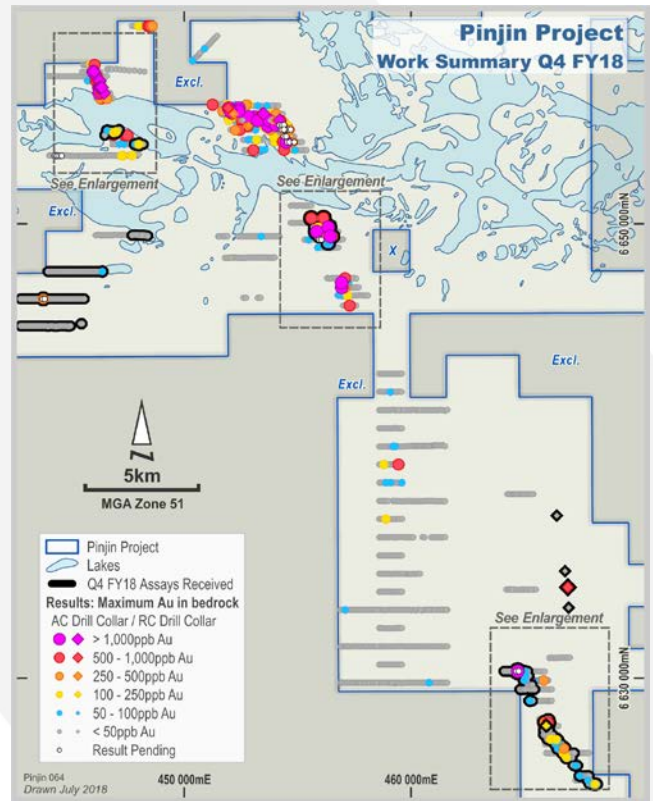
Figure 2.0: Horse Paddock Well – IP/SAM Survey Q4 FY18



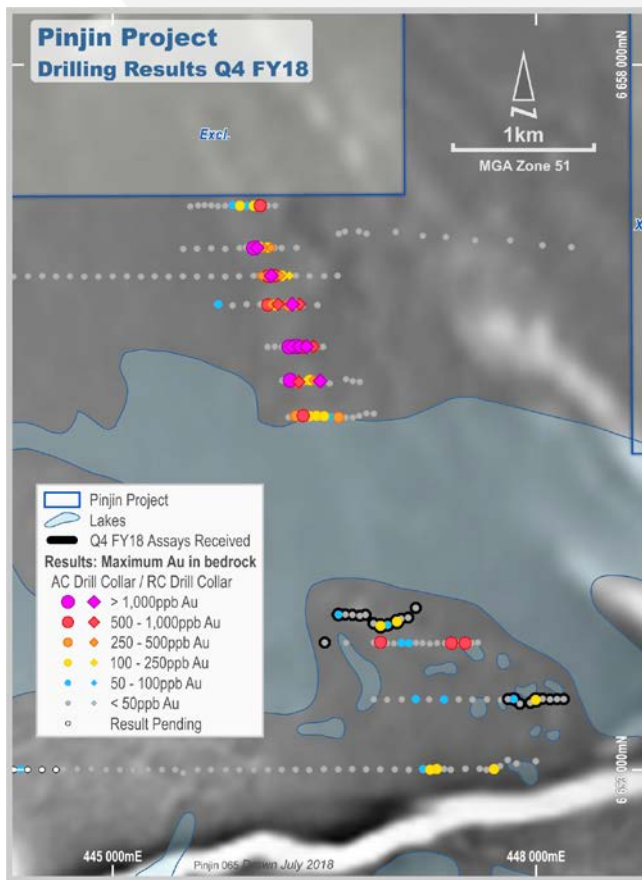
**Figure 3.0: Pinjin Project Aircore and Reverse Circulation Drilling Location Map**



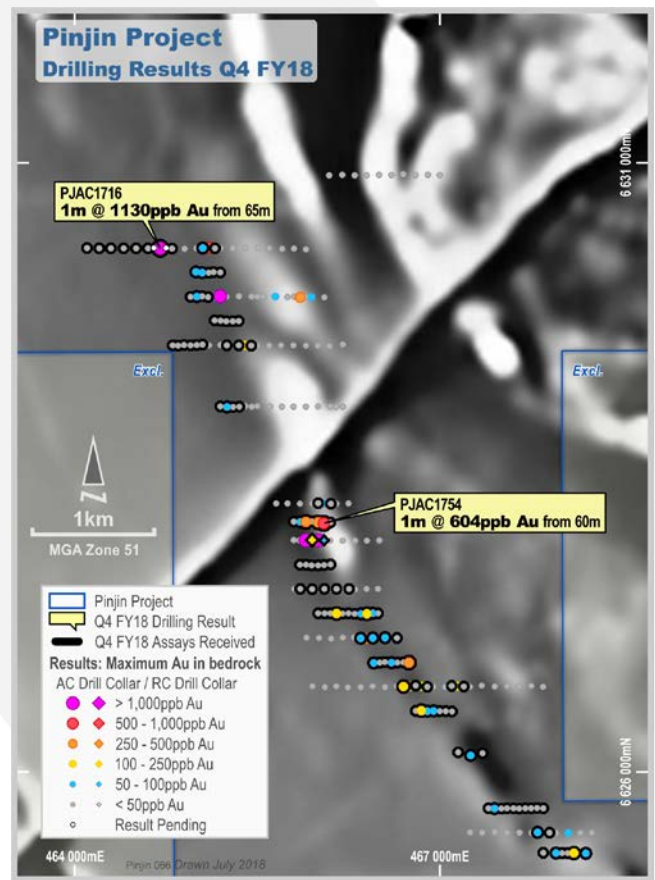
**Figure 3.1: Pinjin project Drilling Results Map (Enlargement) – maximum gold in bedrock**



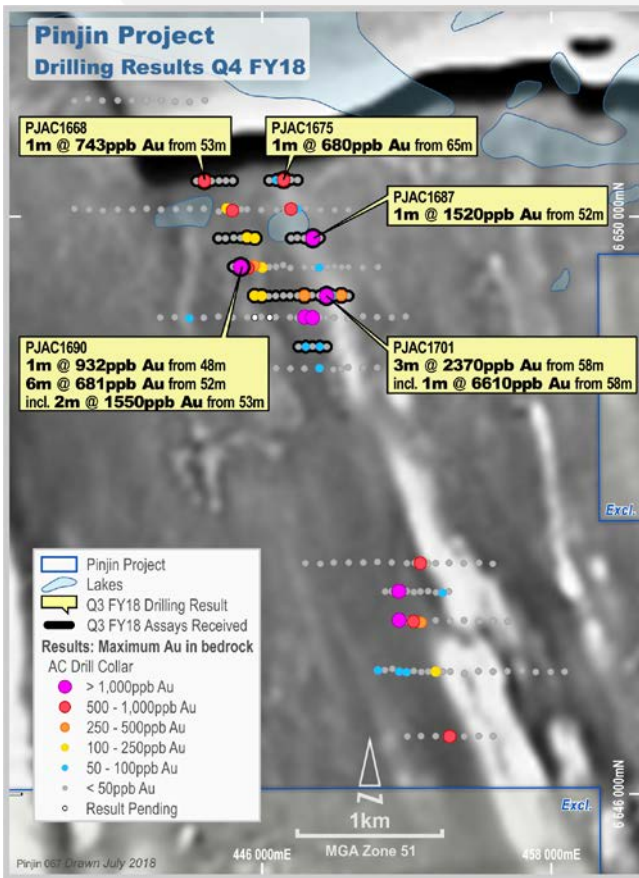
**Figure 3.2: Graham's Find Drilling Results Map (Enlargement) – maximum gold in bedrock**



**Figure 3.3: Southeast Yindi Drilling Results Map (Enlargement) – maximum gold in bedrock**



**Figure 3.4: Mulgabbie Trend Drilling Results Map (Enlargement) – maximum gold in bedrock**



**Figure 3.5: Pinjin Project Lake Aircore Drilling Location Map**

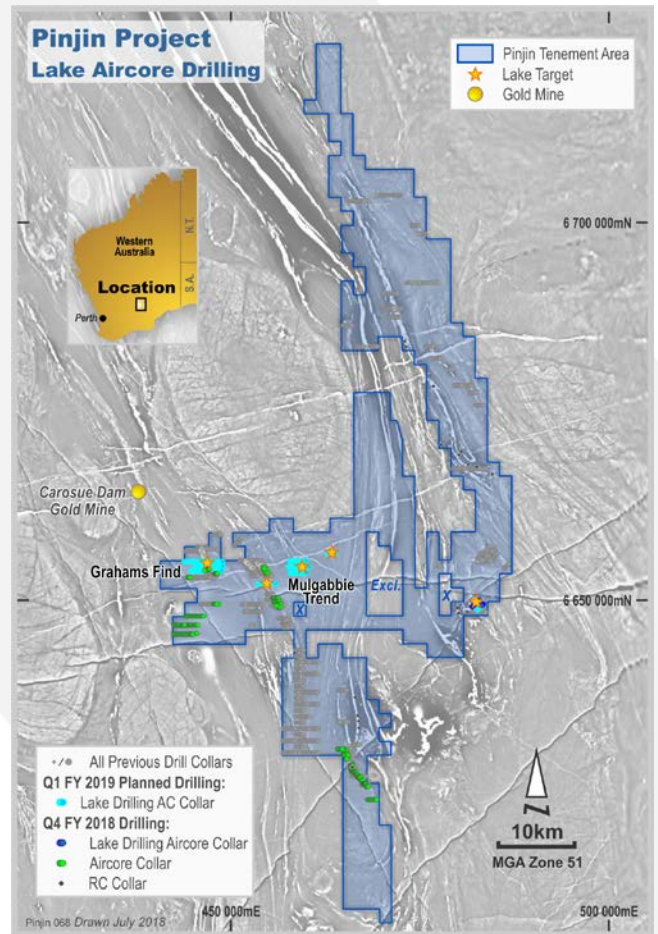


Figure 4.0: Drill Proposal Location Map, Back Creek EL8214 and EL8530, New South Wales

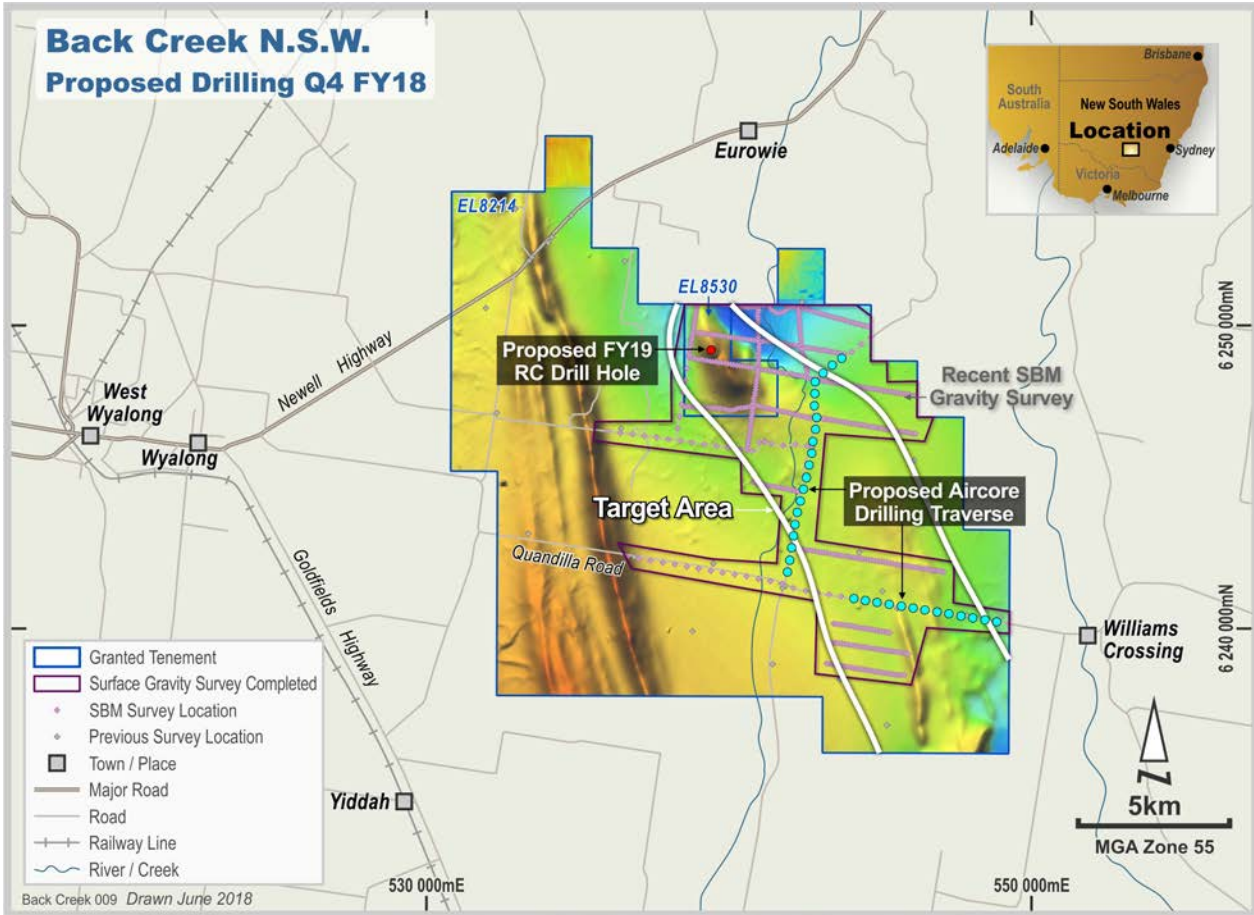


Figure 5.0: Tabar Islands Location Map, Papua New Guinea

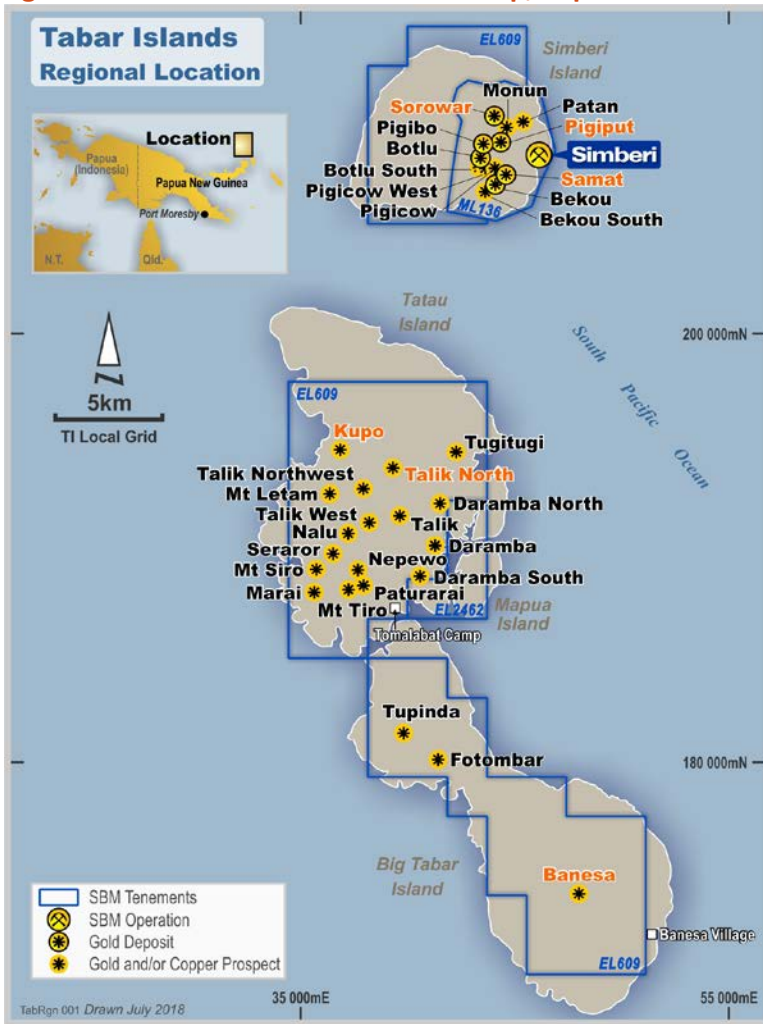


Figure 5.1: Location of Sorowar Sulphide Drill Cross Sections, Simberi Island, Papua New Guinea

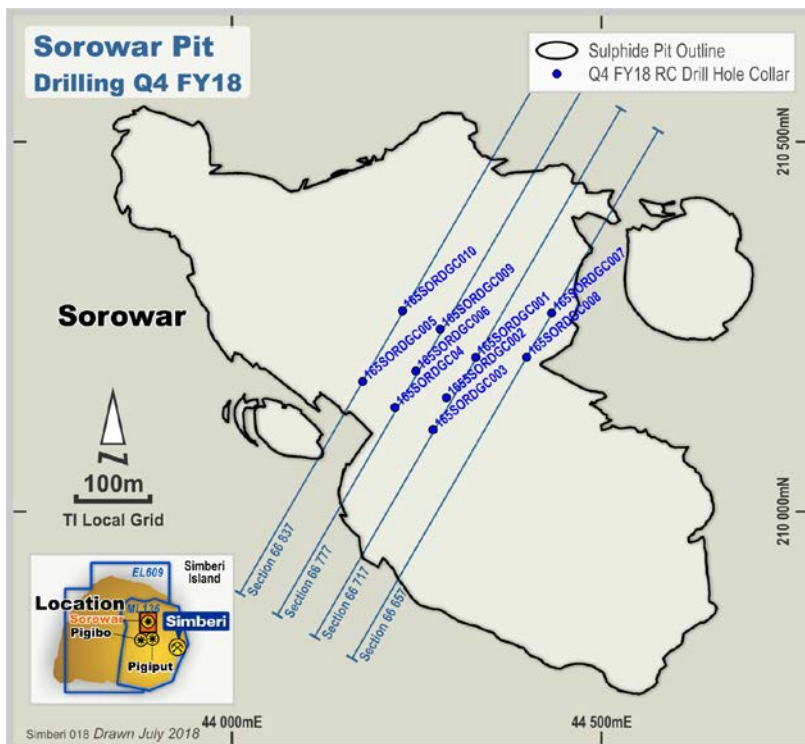




Figure 5.2: Sorowar Sulphide Drill Cross Section (66,837), Simberi Island, Papua New Guinea

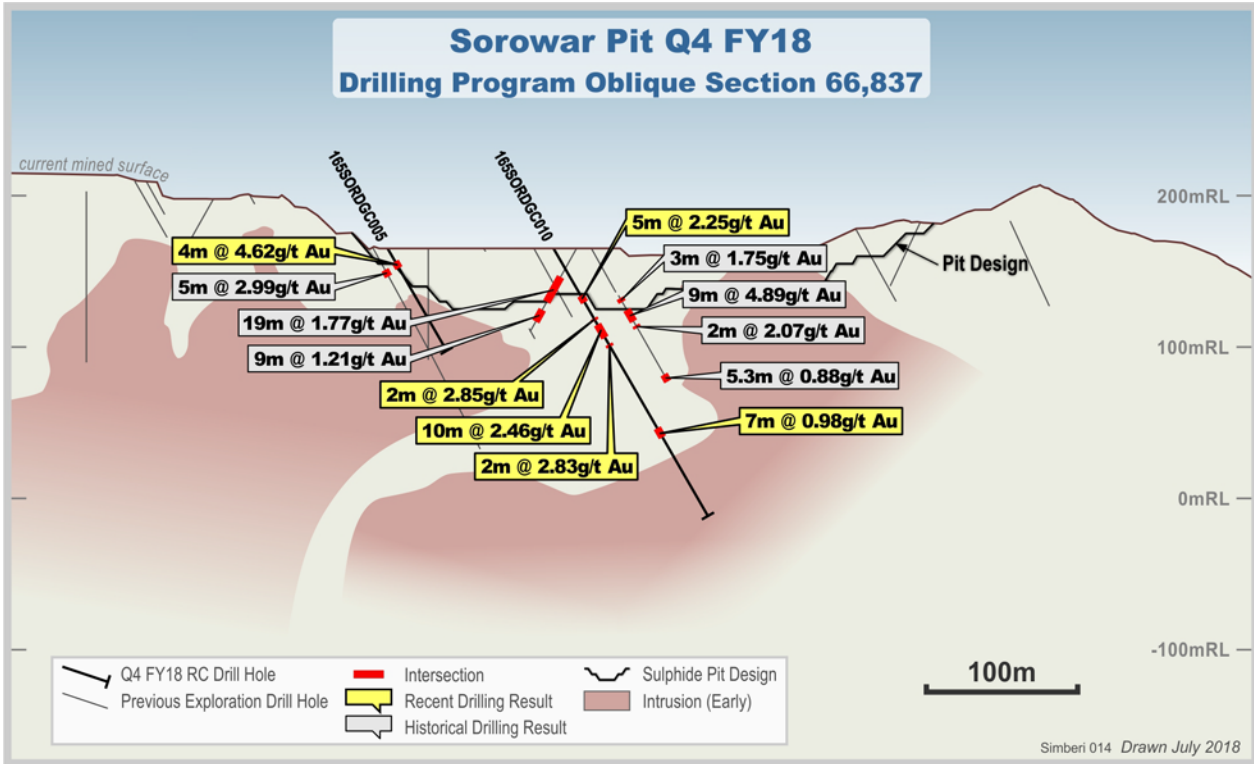


Figure 5.3: Sorowar Sulphide Drill Cross Section (66,777), Simberi Island, Papua New Guinea

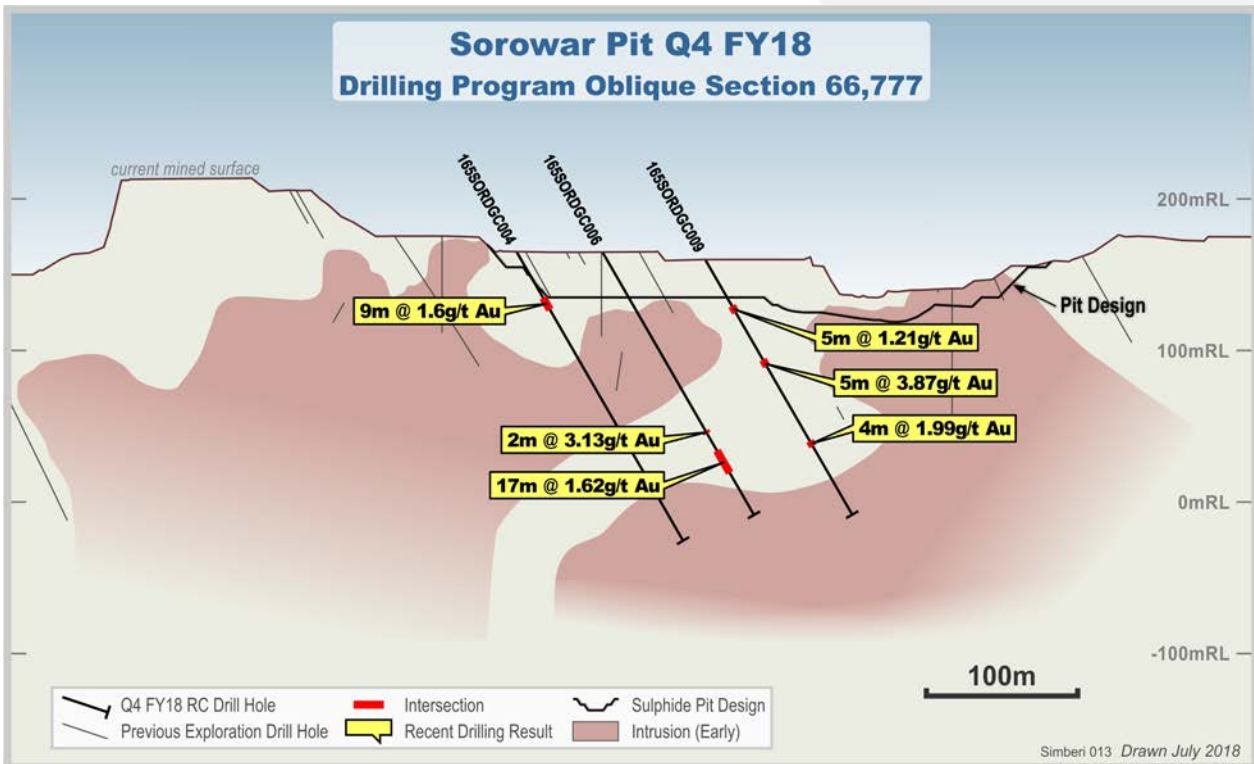


Figure 5.4: Sorowar Sulphide Drill Cross Section (66,717), Simberi Island, Papua New Guinea

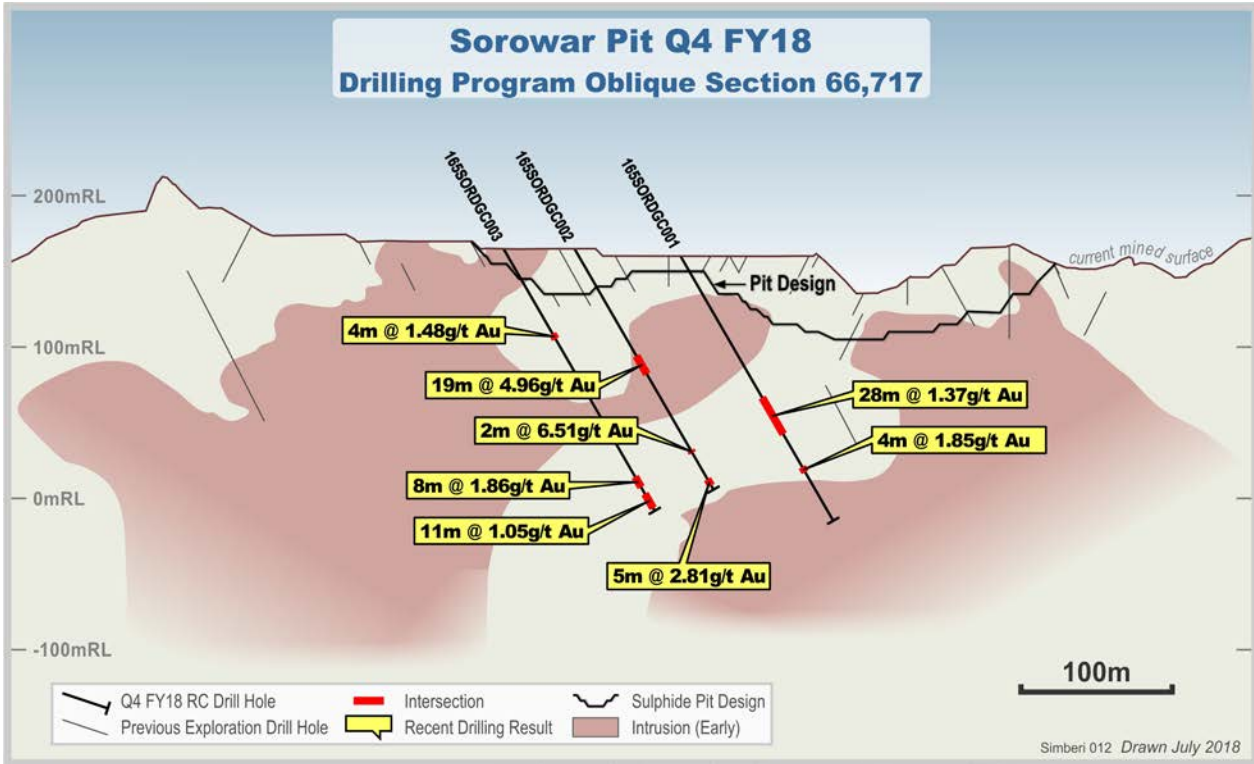


Figure 5.5: Sorowar Sulphide Drill Cross Section (66,657), Simberi Island, Papua New Guinea

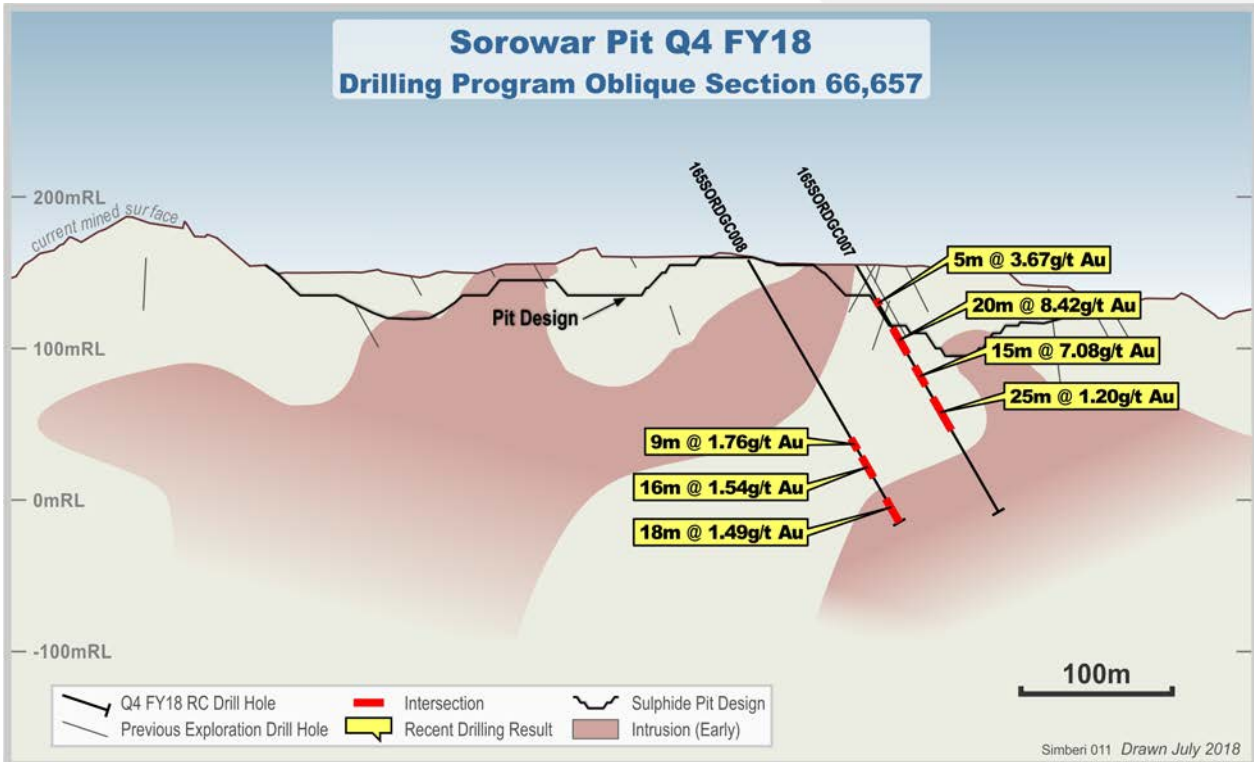


Figure 5.6: Simberi ML136 Drill Location Map, Simberi Island, Papua New Guinea

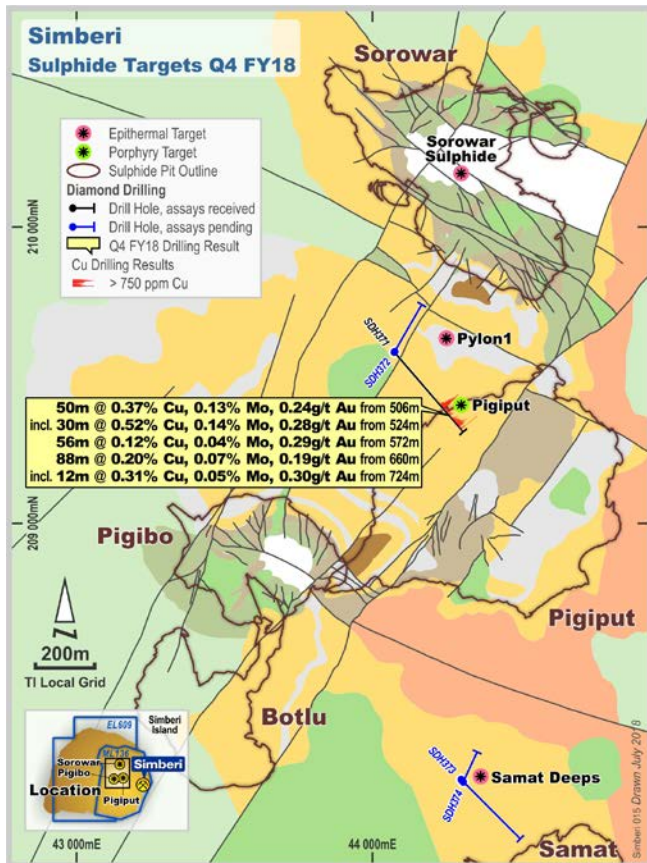
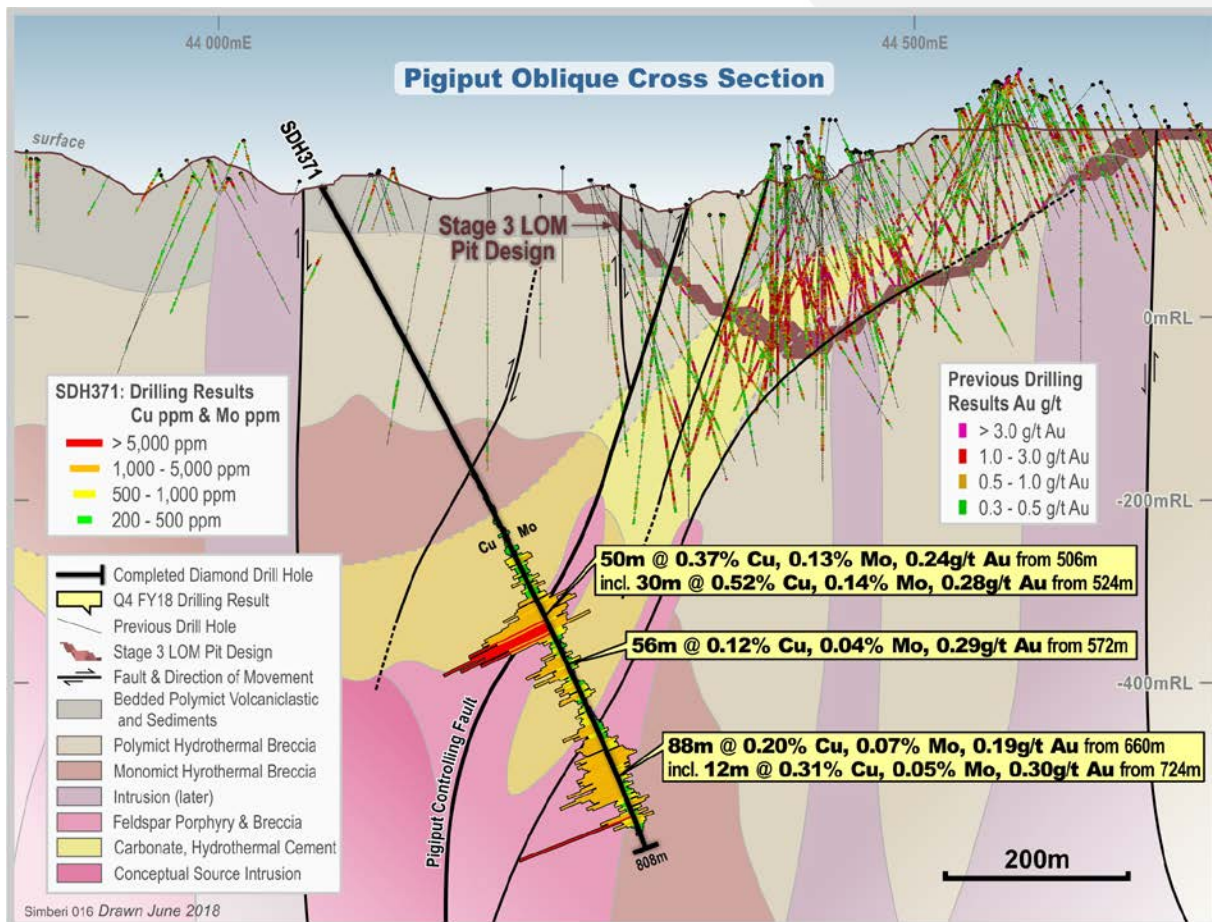
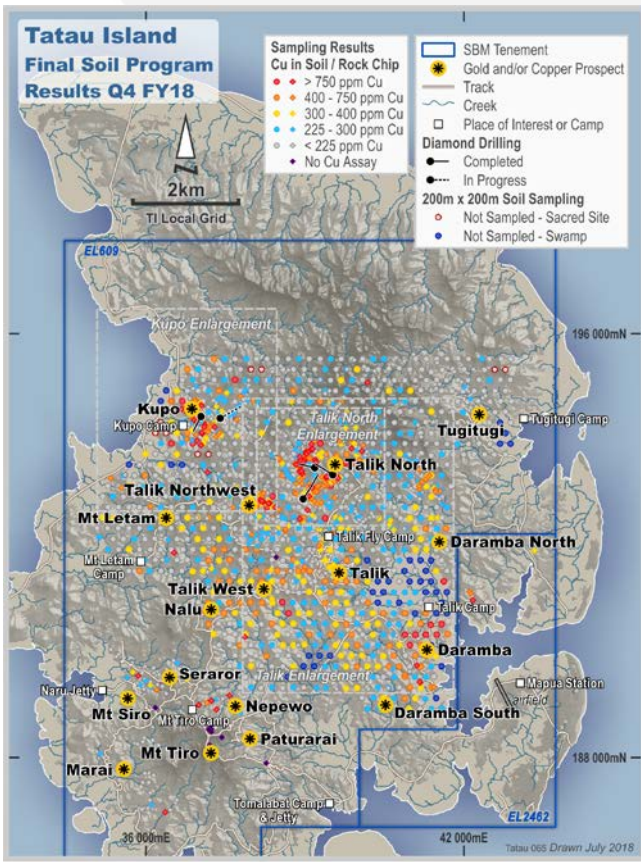


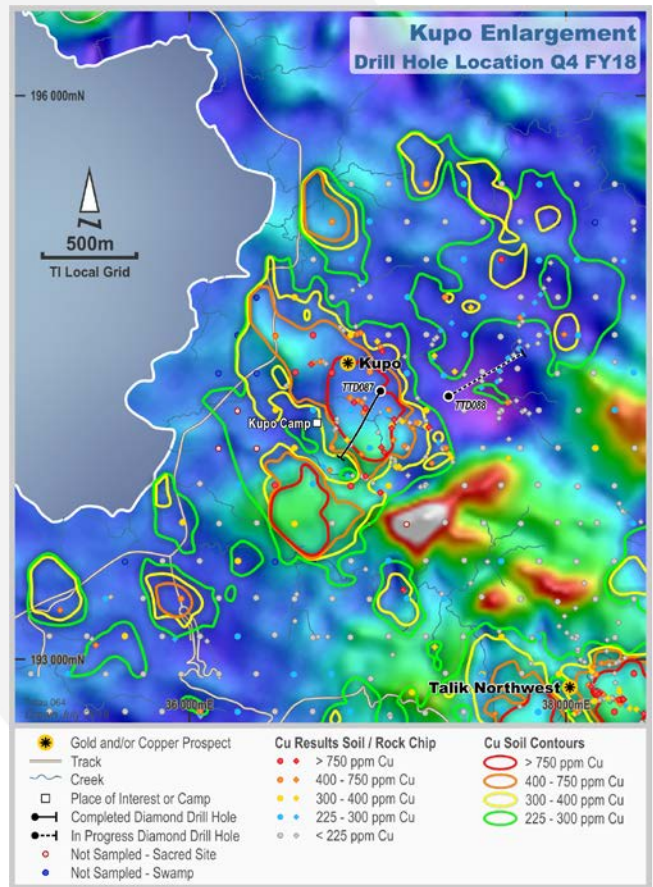
Figure 5.7: Pigiput Schematic Drill Cross Section, Simberi Island, Papua New Guinea



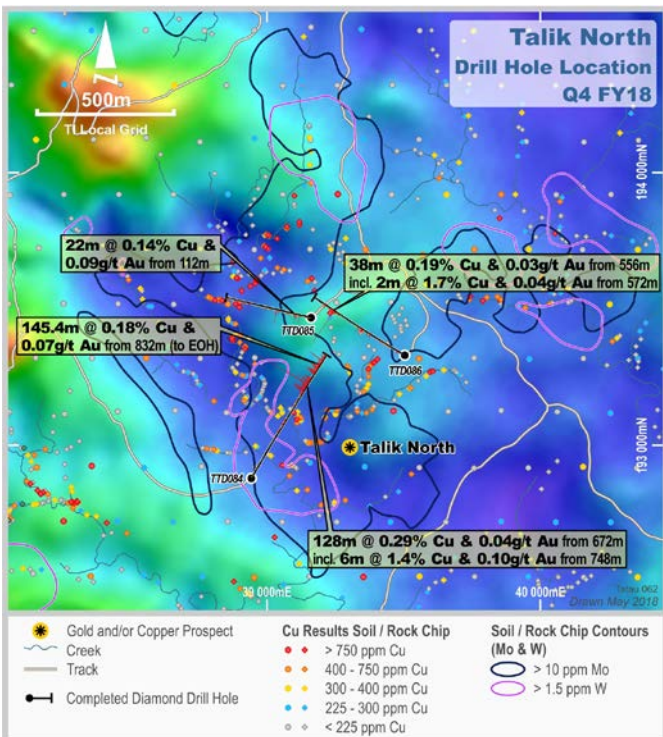
**Figure 5.8: Surface Sample and Drill Location Map, Tatau Island, Papua New Guinea**



**Figure 5.9: Kupo Drill Location Map, Tatau Island, Papua New Guinea**



**Figure 5.10: Talik North Drill Location Map, Tatau Island, Papua New Guinea**



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

Hole Id	Down-hole Mineralised Intersection									
	North	East	RL	Metres Below Surface	Lode	Dip/ Azimuth	From	To	Interval	Gold grade
	m	m	m			degrees	m	m		m
GWDD19A	4642	10722	2752	2630	-	-65/272	2785.9	2786.4	0.5	5.9
GWDD19A	4643	10714	2739	2640	-	-65/270	2805.0	2806.7	1.7	2.9
GWDD19A	4643	10706	2716	2665	-	-66/270	2824.0	2826.5	2.5	6.8
						including	2824.4	2824.7	0.3	50.5
GWDD19A	4643	10694	2689	2690	-	-67/271	2855.1	2856.0	0.9	1.7

**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: Gwalia Seismic Targets Significant Intercepts– Leonora Operations, Gwalia Mine**

Hole Id	Down-hole Mafic Schist Shear Zone Intersection										
	North	East	RL	Metres Below Surface	Seismic Target	Dip/ Azimuth	From	To	Interval	Including Mineralised Interval	
	m	m	m			degrees	m	m		m	m
GWDD20	5614	8799	4459	920	Raglan	-65/250	937.7	957.7	19.9	-	-
GWDD21	6914	8856	4018	1360	Conwy	-54/274	1452.5	1476.2	23.7	0.55	1.99

GWDD20 – Intersected 19.95m (937.75 – 957.7m) wide structure similar to Gwalia mafic schist shear zone. Structure of 19.95m interval displaying strong foliation with weak biotite alteration and low quartz veining. Non-significant gold mineralisation. Structure interpreted as potential southern extension of Gwalia Msc shear zone.

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

Hole Id	North	East	RL	Dip/ Azimuth	Total Depth	Down-hole Mineralised Intersection				
	m	m	m	degrees	m	From	To	Interval	Gold grade	Comments
						m	m	m	Au ppb	
<b>PJAC1675</b>	456,148	6,650,252	332.6	-60/271	82	65	66	1	680	Transitional
<b>PJAC1687</b>	456,350	6,649,850	335.0	-60/269	96	52	53	1	1,520	Oxide
<b>PJAC1668</b>	455,599	6,650,246	335.9	-60/273	93	53	54	1	743	Oxide
<b>PJAC1690</b>	455,850	6,649,650	335.3	-60/269	62	48	49	1	932	Transitional
						52	58	6	681	Transitional
<i>including</i>						53	55	2	1,550	Transitional
<b>PJAC1701</b>	456,445	6,649,449	335.1	-60/276	74	58	61	3	2,370	Transitional
<i>including</i>						58	59	1	6,610	Transitional
<b>PJAC1716</b>	464,701	6,630,299	431.5	-60/268	77	65	66	1	1,130	Transitional
<b>PJAC1754</b>	466,045	6,628,042	435.5	-60/271	66	60	61	1	604	Oxide

NOTES:

Coordinates and Azimuth referenced to MGA94 zone 51 Grid.

Reported intercepts are all down hole lengths.

**Table 4: Sorowar Significant Intercepts – Simberi Island, Papua New Guinea**

Hole Id	RL	Dip/ Azimuth	Total Depth	Down-hole Mineralised Intersection			
	m	degrees	m	From	To	Interval	Gold grade
				m	m	m	g/t Au
SORDGC001	165	-60 / 030	208	114	142	28	1.37
				167	171	4	1.85
SORDGC002	165	-60 / 030	184	82	101	19	4.96
				154	156	2	6.51
				176	181	5	2.81
SORDGC003	165	-60 / 030	200	65	69	4	1.48
				174	182	8	1.86
				187	198	11	1.05
SORDGC004	165	-60 / 030	220	35	44	9	1.6
SORDGC005	165	-60 / 030	78	10	14	4	4.62
SORDGC006	165	-60 / 030	200	136	138	2	3.13
				151	168	17	1.62
SORDGC007	165	-60 / 030	200	38	43	5	3.67
				60	80	20	8.42
				89	104	15	7.08
				113	138	25	1.20
SORDGC008	159	-60 / 030	200	136	145	9	1.76
				150	166	16	1.54
				182	200	18	1.49
SORDGC009	165	-60 / 030	200	41	46	5	1.21
				82	87	5	3.87
				144	148	4	1.99
SORDGC010	165	-60 / 030	204	36	41	5	2.25
				53	55	2	2.85
				58	68	10	2.46
				73	75	2	2.83
				137	144	7	0.98

NOTES:

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

**Table 5: Pigiput Significant Intercepts – Simberi Island, Papua New Guinea**

Hole Id	North	East	RL	Dip/ Azimuth	Total Depth	Down-hole Mineralised Intersection					
	m	m	m	degrees	m	From	To	Interval	Copper grade	Gold grade	Molybdenum grade
						m	m	m	% Cu	g/t Au	% Mo
<b>SDH371</b>	209,578	44,074	144.2	-60 / 140	808.0	506	556	50	0.37	0.24	0.13
<i>including</i>						524	554	30	0.52	0.28	0.14
						572	628	56	0.12	0.29	0.04
						660	748	88	0.20	0.19	0.07
<i>including</i>						724	736	12	0.31	0.30	0.05

**NOTES:**

Coordinates and Azimuth referenced to Tabar Island Grid (TIG).

Reported intercepts are all down hole lengths.

All intercepts are sulphide.

**Table 6: Talik North Significant Intercepts – Tatau Island, Papua New Guinea**

Hole Id	North	East	RL	Dip/ Azimuth	Total Depth	Lode	Down-hole Mineralised Intersection				
	m	m	m	degrees	m		From	To	Interval	Copper grade	Gold grade
							m	m	m	% Cu	g/t Au
<b>TTD086</b>	193,330	39,504	135.0	-55 / 300	747.5	SU	556	594	38	0.19	0.03
<i>including</i>							572	574	2	1.70	0.04

**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
<b>IP and SAM Sampling:</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>

## IP and SAM Sampling: 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>Induced Polarisation (IP)           <p><u>Survey Summary</u></p> <p>Three dipole-dipole IP lines were collected on lines 1250N, 2100N and 2450N using a 100 m dipole and 75 m spaced readings. Good quality data were acquired. The effective depth of investigation was approximately 100 m possibly down to 200 m in some areas.</p> <p><u>Survey Specification</u></p> <hr/> <table> <tr> <td><b>Contractor</b></td> <td>Gap Geophysics Australia Pty. Ltd. (GAP)</td> </tr> <tr> <td><b>Survey Configuration</b></td> <td>Dipole-dipole</td> </tr> <tr> <td><b>Survey Date</b></td> <td>22<sup>nd</sup> - 29<sup>th</sup> March, 2018</td> </tr> <tr> <td><b>Job Number</b></td> <td>17066 STBA</td> </tr> <tr> <td><b>Methods</b></td> <td>chargeability, resistivity</td> </tr> <tr> <td><b>Line Spacing</b></td> <td>350-850 m</td> </tr> <tr> <td><b>Line Direction</b></td> <td>030-210 degrees</td> </tr> <tr> <td><b>Receiver Dipole Spacing</b></td> <td>75 m</td> </tr> <tr> <td><b>Transmitter (Tx)</b></td> <td>Gap GeoPak IPTX-2500</td> </tr> <tr> <td><b>Tx Frequency</b></td> <td>0.125 Hz (2 sec off / 2 sec on)</td> </tr> <tr> <td><b>Receiver (Rx)</b></td> <td>SMARTem24</td> </tr> <tr> <td><b>Current</b></td> <td>1.1 - 29A</td> </tr> </table> <hr/> </li> <li>Sub-Audio Magnetic (SAM)           <p><u>Survey Summary</u></p> <p>A single block was surveyed using an east-northeast line direction and north-northwest grounded dipole.</p> <p><u>Survey Specification</u></p> <hr/> <table> <tr> <td><b>Contractor</b></td> <td>Gap Geophysics Australia Pty. Ltd. (GAP)</td> </tr> <tr> <td><b>Survey Configuration</b></td> <td>Galvanic SAM</td> </tr> <tr> <td><b>Survey Date</b></td> <td>March 2018</td> </tr> <tr> <td><b>Job Number</b></td> <td>17066 STBA</td> </tr> <tr> <td><b>Methods</b></td> <td>TMI, MMC, GSEM</td> </tr> <tr> <td><b>Line Spacing</b></td> <td>50 m</td> </tr> <tr> <td><b>Line Direction</b></td> <td>030-210 degrees</td> </tr> <tr> <td><b>TMI Sample Interval</b></td> <td>~0.5 m</td> </tr> <tr> <td><b>MMC, GSEM Sample Interval</b></td> <td>~2.0 m</td> </tr> <tr> <td><b>Total Line Kilometres</b></td> <td>89 km</td> </tr> <tr> <td><b>Transmitter (Tx)</b></td> <td>Gap GeoPak HPTX-70</td> </tr> <tr> <td><b>Tx Frequency</b></td> <td>6.25 Hz</td> </tr> </table> <hr/> </li> </ul>	<b>Contractor</b>	Gap Geophysics Australia Pty. Ltd. (GAP)	<b>Survey Configuration</b>	Dipole-dipole	<b>Survey Date</b>	22 <sup>nd</sup> - 29 <sup>th</sup> March, 2018	<b>Job Number</b>	17066 STBA	<b>Methods</b>	chargeability, resistivity	<b>Line Spacing</b>	350-850 m	<b>Line Direction</b>	030-210 degrees	<b>Receiver Dipole Spacing</b>	75 m	<b>Transmitter (Tx)</b>	Gap GeoPak IPTX-2500	<b>Tx Frequency</b>	0.125 Hz (2 sec off / 2 sec on)	<b>Receiver (Rx)</b>	SMARTem24	<b>Current</b>	1.1 - 29A	<b>Contractor</b>	Gap Geophysics Australia Pty. Ltd. (GAP)	<b>Survey Configuration</b>	Galvanic SAM	<b>Survey Date</b>	March 2018	<b>Job Number</b>	17066 STBA	<b>Methods</b>	TMI, MMC, GSEM	<b>Line Spacing</b>	50 m	<b>Line Direction</b>	030-210 degrees	<b>TMI Sample Interval</b>	~0.5 m	<b>MMC, GSEM Sample Interval</b>	~2.0 m	<b>Total Line Kilometres</b>	89 km	<b>Transmitter (Tx)</b>	Gap GeoPak HPTX-70	<b>Tx Frequency</b>	6.25 Hz
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Criteria	Commentary
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>No drilling or sample analysis completed</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>No drilling or sample analysis completed</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Points located with a handheld GPS</li> <li>Co-ordinates are recorded in WGS84, MGA Zone 51</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>The current spacing of survey stations and lines is deemed appropriate for this phase of exploration</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Survey lines were designed to be approximately perpendicular to the interpreted strike of stratigraphy - as deemed appropriate.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>No sampling or assaying completed</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>No audits or reviews completed</li> </ul>

#### **IP and SAM - 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 tenement M 37/587 over the Horse-Paddock Well prospect area.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Exploration work has been carried out by Sons of Gwalia and ESSO among others. There are abundant exploration data available including soil sampling, RAB and shallow RC drilling. Open pit mining activities have been conducted at nearby operations at Harlech and Jasper Flat.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>The prospect is located within a NNW trending belt of mafic and sedimentary rocks overlaid by an ultramafic suite and is exposed to shallow seated granitic intrusions. The terrain has been cross cut by NE trending faults/shears. Significant gravity features analogous to the King of the Hills setting have been identified</li> </ul>
<b>Drill hole information</b>	<ul style="list-style-type: none"> <li>No drilling completed</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>Not applicable for this data</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>No drilling completed</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>All relevant details material to Exploration Results have been included in the report.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>Not applicable for this data</li> </ul>
<b>Further Work</b>	<ul style="list-style-type: none"> <li>Further exploration drill holes are planned</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 and RC drilling. RC drill holes were testing specific EM targets and were not on any regular spacing, however, two were designed at 50m spacing to test a geochemical anomaly. AC drill holes were on 50m or 100m spacing's with line spacing's ranging between 250m and 1.2km or as individual scout lines.</li> <li>Samples were collected from a rig-mounted cyclone by bucket and were then placed directly on the ground in neat rows of between ten and fifty (depending on hole depth). During the lake program samples were only placed on the ground when the lake surface was reasonably dry and firm.</li> <li>Drill spoil was sampled with a scoop to generate either 2m or 4m composite samples of approximately 3kg. 2m composites were collected during the lake drilling program when the lake surface was too wet and not conducive to laying samples on the ground.</li> <li>During RC drilling one meter samples were also generated by the rigs cone splitter system and collected in calico bags, these were left on the ground on top of the corresponding meter of drill spoil. One meter samples are submitted for assaying based on the results of the initial 4m composite sampling.</li> <li>The 3kg Aircore composite samples were submitted to Bureau Veritas Minerals Pty Ltd, Perth where they were sorted and dried, crushed to 10mm and pulverised to -75µm. A 40g charge of pulverised 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>The 3kg RC composite samples were submitted to Bureau Veritas Minerals Pty Ltd, Perth where they were sorted and dried, crushed to 10mm and pulverised to -75µm. A 40g charge of pulverised sample was then analysed for Au by Fire Assay with an ICP finish to a detection limit of 1ppb. The same pulp was also tested for arsenic by ICP-AES to 1ppm detection limit.</li> <li>Anomalous Aircore Composite samples (&gt;100ppb Au) were subsampled on a metre by metre basis using an aluminium scoop. These samples were submitted to Bureau Veritas Minerals Pty Ltd, Perth where they were sorted and dried, crushed to 10mm and pulverised to -75µm. A 40g charge of pulverised sample was then analysed for Au, Pd &amp; Pt by Fire Assay with an ICP finish to a detection limit of 1ppb.</li> <li>Anomalous RC composite samples (&gt;100ppb) are subsampled using the previously collected one metre samples from 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 pulverised to -75µm. A 40g charge of pulverised sample was then analysed for Au by Fire Assay with an ICP finish to a detection limit of 1ppb.</li> <li>Representative specimens from end of hole Aircore rock chips were stored in plastic chip trays for future reference. For RC drilling a representative specimen of every meter was 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 pulverised 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> </ul>
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <li>Aircore drilling was carried out by an 85mm bit. All holes were drilled to refusal which was generally at the fresh rock interface. Drilling was carried out by Raglan Drilling who utilised two separate Aircore rigs; a truck mounted R/A 180 Rig with 750 cfm and 350 psi and a track mounted lake rig with 750 cfm and 350 psi.</li> <li>RC drilling was carried out using 140 to 145mm hammer bits. Drilling was completed by Raglan Drilling who utilised a truck mounted SCHRAMM T685W rig with Sullair 1150/350 on board air.</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>Sample recoveries and condition (wet/dry) were routinely 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 and RC logging is both qualitative and quantitative.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>Aircore and RC samples were collected as both dry and wet samples using a sample scoop.</li> <li>All composite samples were sorted, dried, crushed and pulverised to produce a 40g charge prior to fire assay.</li> <li>Samples were collected at 1m intervals and composited in 2m or 4m samples using a scoop to sample individual metre samples.</li> <li>QC procedures for composite sampling involved the insertion of certified reference material, field duplicates and blanks at ratios of 1:50.</li> <li>Bureau Veritas inserted certified standards and replicates and lab repeats.</li> </ul>

Criteria	Commentary
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li>The Aircore 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>The RC composite samples used a 40g charge for fire assay which is considered appropriate for gold mineralisation in fresh rock material.</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 purpose 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 <math>\pm 3m</math> accuracy for easting, northings and <math>\pm 10m</math> 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 RC holes were surveyed downhole by Raglan drilling who captured dip/azimuth readings at 20 intervals using a Reflex gyro tool. The gyro tool provides True North Azimuth.</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>AC drill holes were on 50m or 100m spacing's with line spacing's ranging between 250m and 1.2km or as individual scout lines.</li> <li>RC holes were designed as individual holes to test EM targets and were on no particular spacing.</li> <li>Reported Aircore and RC results are based on the 1m Fire Assay re-splits of original 4m composite samples or the original composite sampling.</li> </ul>
<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 <math>-60/270</math>. AC holes were drilled vertically in areas were transported cover made drilling difficult. AC drilling was designed on E-W traverses which is broadly perpendicular to the regional structures known to control mineralisation.</li> <li>The RC holes were drill perpendicular to the modelled EM plates and had a variety of dips and azimuths, however, the dominant dip and azimuth was <math>-60/270</math>.</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 19 tenements comprising the Pinjin Project. These include: E28/2234, E28/2283, E28/2284, E31/0999, E31/1000, E31/1005, E31/1007, 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 <math>\sim 1,232</math> 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 1 sequential meter of such material and except where the average drops below the cut-off. Supplementary grades of <math>&gt; 1000</math> ppb Au are used to highlight higher grades zones within the broader zone.</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>

Criteria	Commentary
<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>

#### SIMBERI - JORC Code, 2012 Edition – Table 1

##### Contents

Drilling:	Section 1 Sampling Techniques and Data Section 2 Reporting of Exploration Results
Surface Sampling:	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>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 or quarter core was sampled on nominal 1 or 2-metre intervals with the upper or left - hand side of the core collected for sample preparation. For PQ diameter core a further cut was completed, whereby quarter core is submitted to provide a practical sample size.</li> <li>Half core or quarter core was dispatched to the ITS PNG Ltd (Lae) sample preparation facility with 250g pulps sent to Intertek Laboratory in Perth. Pulp residuals are stored in Lae for six months following assay.</li> <li>RC Drilling at Sorowar - One meter samples were generated by the rigs cyclone splitter system by collection in calico bags. One meter calico bag samples are then submitted for assay. Samples were fully prepared at the company's on-site sample preparation facility on Simberi Island with 200g pulps sent to SGS Laboratory in Townsville. Pulp residues are stored in Townsville for future re-assay if required.</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. Drilling was completed by Quest Exploration Drilling (QED). When ground conditions permit, an ACT Digital Core Orientation Instrument was used by the contractor to orientate the core.</li> <li>RC drilling at Sorowar was carried out using 140 to 145mm hammer bits. Drilling was completed by Quest Exploration Drilling (QED) who utilised a track mounted SCHRAMM 685 rig coupled to an auxiliary compressor/booster unit. A limited number of holes were drilled using a DML 45 drill, also coupled to the auxiliary compressor/booster unit.</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.</li> <li>RC drilling recoveries and condition (wet/dry) were routinely recorded. 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>Diamond holes are qualitatively geologically logged for lithology, structure and alteration and qualitatively 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 dry and wet.</li> <li>RC drilling chips were sieved, cleaned and stored in plastic chip trays for logging and future reference.</li> <li>All holes are fully logged.</li> </ul>

Criteria	Commentary
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>All diamond drill core associated with St Barbara work program was half cut with the upper or left-hand side submitted for assay. For PQ diameter core a further cut was completed, whereby quarter core is submitted to provide a practical sample size. All samples were sent to ITS PNG Ltd Lae sample preparation facility, where preparation involves drying, jaw crush to 95% passing -4.75mm, pulverise in LM5 or LM2 to a minimum 95% passing -106um, with 250g pulps sent to Intertek Laboratory in Perth. Pulps residuals are stored in Lae for six months following assay. Quality control of sub-sampling consisted of insertion of blank control samples and coarse reject duplicates, both at a ratio of 1:20 samples.</li> <li>All diamond drill core samples associated with the Newcrest option and farm-in agreement work program diamond core was sampled on 2 metre intervals. For HQ and NQ diameters, core was cut in half with the upper or left-hand side of the core routinely submitted. For PQ diameter core a further cut was completed, whereby quarter core is submitted to provide a practical sample size. Quality control of sub-sampling consisted of insertion of blank control samples and coarse reject duplicates, both at a ratio of 1:20 samples. All samples were sent to ITS PNG Ltd Lae sample preparation facility, where preparation involves drying, jaw crush to 95% passing -4.75mm, pulverise in LM5 or LM2 to a minimum 95% passing -106um, with 250g pulps sent to Intertek Laboratory in Perth.</li> <li>All Sorowar reverse circulation rock chip samples were fully prepared at the company's on-site sample preparation facility on Simberi Island. Preparation involved drying, jaw crush to 70% passing -6mm, pulverise in LM5 or LM2 to a minimum 85% passing -75um, with 200g pulps sent to SGS Laboratory in Townsville. 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>All diamond drill samples associated with the Newcrest option and farm-in agreement work program and the St Barbara work program (excluding the Sorowar RC drill samples) were sent to Intertek for analysis. Half or quarter core samples were analysed for Au via 50g Fire Assay ICP and AAS finish (FA50/ICP OE04 method) for low detection sample or 50g Fire Assay and AAS finish (FA50/AA method) 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 4 acid digest with HF (4A method) and Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES) or Inductively Coupled Plasma Mass Spectroscopy (ICP-MS) via (OM10 method). 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>All reverse circulation rock chips from Sorowar drilling were analysed for gold using fire assay with a 50g charge and analysis by flame atomic absorption spectrometry (FAA505 method) at SGS, Townsville. 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>Intertek Perth, SGS Townsville and 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. Tatau and Tabar Island collars were surveyed initially by hand held GPS and by DGPS after hole completion. All holes were downhole surveyed using either a Reflex or Ranger single shot camera with the first reading at about 18m 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> <li>At Sorowar pit, the RC drilling targeting sulphide gold mineralisation is drilled on an approximate 60m by 60m spacing.</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> <li>At Sorowar pit, the RC drilling targeting sulphide gold mineralisation is optimised with holes drilled at 60° dip towards the northeast where possible to test the interpreted main northwest striking orientation to mineralisation. Limited RC holes are drilled in a vertical orientation when access is restricted.</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 samples sent to Intertek are stored in locked and guarded storage facilities until receipted at the Laboratory</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 three tenements over the Simberi Islands; ML136 on Simberi Island, EL609 which covers the remaining area of Simberi Island, as well as Tatau Island and Big Tabar Island and 4 sub-block EL2462 which covers part of Tatau and Mapua Island.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>CRA, BHP, Tabar JV (Kennecott, Nord Australex 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.</li> <li>On Tatau and Big Tabar Islands, located immediately south of Simberi, porphyry Cu-Au, epithermal quartz Au-Ag and carbonate-base metal Au mineralisation is present. The current drilling is targeting porphyry Cu-Au mineralisation associated with multi-phase intrusive stocks.</li> <li>Diamond drilling is being conducted on the Simberi ML136 testing for potential porphyry Cu-Au mineralisation at depth below Pigiput pit.</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 mineralised intercept lengths and depth as well as hole depth.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>For gold only epithermal mineralisation, 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. 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.</li> <li>For porphyry copper-gold mineralisation, broad downhole intercepts are reported as length weighted averages using a cut-off of 0.1% Cu and a minimum length of 20m with up to 10m of sequential internal dilution. Supplementary cut-offs of <math>&gt; 1\%</math> Cu may be reported. Au and Cu grades are reported.</li> <li>For both mineralised styles, core loss is assigned the same grade as the sample grade; no high grade cut is applied; grades are reported to two significant figures and 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 will be reported in intercept tables, 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 potential 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>

End of report