

Quarterly Report / Q3 March FY18

- Q3 March FY18 production of 85,885 ounces at AISC¹ of A\$982 per ounce
- FY18 Simberi & consolidated production guidance increased²
- New Gwalia Life of Mine Plan to FY 2031³
- \$262 million cash at bank with no debt⁴

Executive Summary

Operations

- Consolidated gold production for the quarter ended 31 March 2018 (Q3 March FY18) was 85,885 ounces (Q2 Dec FY18: 99,509 ounces).
- Consolidated All-In Sustaining Cost (AISC) for Q3
 March FY18 was A\$982 per ounce (Q2 Dec: A\$910 per
 ounce). The average realised gold price for Q3 March
 FY18 was A\$1,710 per ounce (Q2 Dec: A\$1,686 per
 ounce).
- Gwalia (Western Australia) gold production for Q3 March FY18 was 56,773 ounces (Q2 Dec: 62,835 ounces) at AISC of A\$905 per ounce (Q2 Dec: A\$859 per ounce). Mined grade for Q3 March FY18 was 15.0 g/t Au (Q2 Dec: 11.2 g/t Au) with 127 kt milled (Q2 Dec: 187 kt).
- Simberi (PNG) gold production for Q3 March FY18 was 29,112 ounces (Q2 Dec: 36,674 ounces) at AISC of A\$1,129 per ounce (Q2 Dec: A\$994 per ounce).

Health & Safety

The Total Recordable Injury Frequency Rate (TRIFR) increased from 2.4 at the end of Q2 December FY18 to 2.6 at the end of Q3 March FY18, as a result of one low-severity medically treated recordable injury.

Gwalia Extension Project

- Work on the Gwalia Extension Project (GEP) continued during the quarter. The Project remains on schedule and within budget.
- 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.
- PAF commissioning is expected to be delayed due to a variety of items, comprising delays in the supply of components, in preparation of the voids on the levels

- at 1420 and 1460 metres below surface (mbs) where the machinery will be located, and in completing the hole to 1420 mbs for the high-voltage cable.
- The GEP project plan now anticipates some concurrent raiseboring of ventilation shafts.

Exploration

- Gwalia (Western Australia) Activities focused on defining extensions to the Gwalia lode system continued during Q3 March FY18, including surface and underground drilling.
- Data interpretation of a 3D seismic program targeting a 15 km² area around Gwalia prioritised two target areas immediately north and south of the Gwalia deposit between 600 mbs and 1900 mbs. A drilling program is scheduled for Q4 June 2018.
- Drilling of GWDD19 from surface to 2,600 mbs continued, targeting potential extensions of the lode system at depth, the deepest hole yet at Gwalia. This hole will be completed during April 2018.
- Pinjin (Western Australia) Final results were received for the 163 hole (PJAC01385 to PJAC1547) 10,658 metre aircore drill program completed in December 2017 (Figures 4.0 to 4.4 and Table 1). A 3,760 metre Reverse Circulation (RC) drilling program for 19 holes commenced in March 2018 (see summary on page 8 and details in Figures 4.0 and 4.5).
- **Simberi Island** (PNG) A single 750 metre drill hole re-commenced to test a conceptual porphyry coppergold potential below the Pigiput open cut. Drilling seeking to identify more sulphide material to enhance the potential sulphide project also commenced during the quarter.
- Option and Farm-in with Newcrest Two diamond drill holes (TTD085 and TTD086) for a total 1,503

¹ Non IFRS measure, refer appendix

² Announced 6 April 2018 in Q3 March FY18 production update

³ Announced 21 February 2018 in 'Gwalia mine medium and long-term outlook'

⁴ Financial information unaudited. Cash balance includes A\$1.2 million restricted cash.

metres were completed at Talik North on Tatau Island testing for copper-gold porphyry mineralisation during Q3 March FY18 (see details on page 9). Assay results were returned for TTD084 and TTD085 (Figure 6.2 and Table 2).

Finance (unaudited)

- Total cash at bank at 31 March 2018 was A\$262¹ million (31 December FY18: A\$216¹ million) after net dividend payments of \$16 million and a \$4 million investment in ABM Resources NL. There were 4,371 ounces of gold inventory on hand at 31 March 2018 (Q2 Dec: 6,822 ounces).
- The Company generated an operational cash contribution² in Q3 March FY18 of A\$79 million (Q2 Dec: A\$79 million).

Outlook

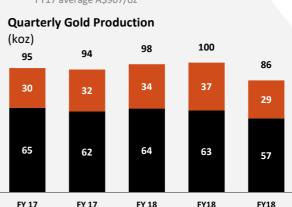
- Guidance for FY18 was revised upwards on 6 April 2018³ and is summarised as follows:
 - o Forecast Gwalia gold production is unchanged at between 250,000 and 260,000 ounces at an AISC of between A\$840 and A\$880 per ounce, with sustaining capex of between A\$35 and A\$40 million, plus growth capex of between A\$45 to A\$50 million (previously A\$50 to A\$55 million).
 - Forecast Simberi gold production of between 125,000 and 132,000 ounces (previously 115,000 and 125,000 ounces) at an AISC of between A\$1,070 and A\$1,130 per ounce (previously A\$1,130 and A\$1,230 per ounce), with capex of between A\$4 and A\$5 million (previously A\$5 and A\$7 million).
 - Forecast exploration expenditure of between A\$14 and A\$18 million (previously A\$16 and A\$20 million), consisting of:
 - A\$6 to A\$8 million at Gwalia (previously A\$8 to A\$10 million)
 - A\$4 to A\$5 million at Pinjin in WA and
 - A\$4 to A\$5 million on the Tabar (Simberi)
 Island group in PNG⁴

Bob Vassie

Managing Director and CEO 19 April 2018

Consolidated results





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

Q1 Sep

O2 Dec

Simberi

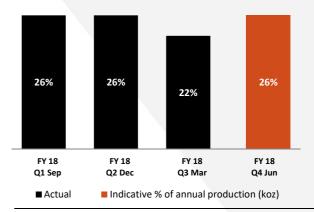
O3 Mar

FY18 Production Indicative Quarterly Guidance Profile

■ Gwalia

Q4 Jun

Q3 Mar



Quarterly presentation and audio webcast

Bob Vassie, Managing Director & CEO, will brief analysts and investors on the Q3 March FY18 Quarterly Report at 12:00 noon Australian Eastern Standard Time (UTC + 10 hours) on Thursday 19 April 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/ 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.

¹ Cash balance includes A\$1.2 M restricted cash (Q2 Dec: \$1.2 M).

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).

³ Announced 6 April 2018 in Q3 March FY18 production update

⁴ Excludes copper-gold porphyry exploration on the Tabar Island Group as part of the option and farm-in agreement with Newcrest.

St Barbara Gold Production & Guidance

Production Summa Consolidated	ry	Year FY17	Q1 Sep FY18	Q2 Dec FY18	Q3 Mar FY18	Q3 YTD FY18	Guidance FY18 ¹
St Barbara's financial y	St Barbara's financial year is		Qtr to	Qtr to	Qtr to	9 mths to	Year to 30 June 2018
1 July to 30 June		30 June 2017	30 Sep 2017	31 Dec 2017	31 Mar 2018	31 Mar 2018	
<u>Production</u> Gwalia		265.057	64 202	62.925	F.C. 772	102 001	250 to 260 koz
Gwalla	OZ	265,057	64,283	62,835	56,773	183,891	250 to 260 koz
Simberi	OZ	116,044	33,976	36,674	29,112	99,762	125 to 132 koz (prev. 115 to 125)
Consolidated	OZ	381,101	98,259	99,509	85,885	283,653	375 to 392 koz (prev. 365 to 385)
Mined Grade							Reserve grade ²
Gwalia	g/t	10.7	10.7	11.2	15.0	12.1	7.8
Simberi	g/t	1.13	1.21	1.32	1.16	1.24	1.3
Total Cash Operation	ng Costs ³						
Gwalia	A\$/oz	592	621	668	679	651	n/a
Simberi	A\$/oz	1,092	964	908	1,036	964	n/a
Consolidated	A\$/oz	689	740	757	800	761	n/a
All-In Sustaining Co	st ³						
Gwalia	A\$/oz	785	816	859	905	858	840 to 880
Simberi	A\$/oz	1,187	1,027	994	1,129	1,045	1,070 to 1,130 (prev. 1,130 to 1,230)
Consolidated	A\$/oz	907	889	910	982	924	920 to 970 (prev. 940 to 990)

Disclaimer

This report has been prepared by St Barbara Limited ("Company"). The material contained in this report is for information purposes only. This release is not an offer or invitation for subscription or purchase of, or a recommendation in relation to, securities in the Company and neither this release nor anything contained in it shall form the basis of any contract or commitment.

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

from the information in this report. The Company does not make, and this report should not be relied upon as, any representation or warranty as to the accuracy, or reasonableness, of such statements or assumptions. Investors are cautioned not to place undue reliance on such statements.

This report has been prepared by the Company based on information available to it, including information from third parties, and has not been independently verified. No representation or warranty, express or implied, is made as to the fairness, accuracy or completeness of the information or opinions contained in this report.

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.

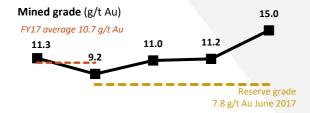
¹ FY18 guidance previously amended Q3 March FY18 production update (released 6 April 2018) and in Q2 December 2017 quarterly report (released 23 January 2018).

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

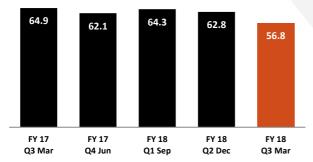
Non-IFRS measure, refer Appendix.

Gwalia, Leonora, WA

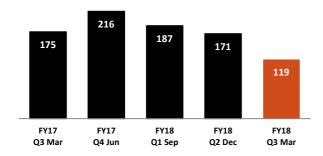




Production (koz)



Gwalia underground ore mined (kt)



Operations

- Gwalia gold production for Q3 March FY18 was 56,773 ounces (Q2 Dec: 62,835 ounces). Mining was primarily across the 1580 and 1620 levels.
- Average mined grade for the quarter was 15.0 g/t Au (Q2 Dec: 11.2 g/t Au), as the mining sequence included stopes from higher grade sections of the South West Branch.
- Mined volume was 119 kt (Q2 Dec: 187 kt). The fall in production had been anticipated, due mainly to changes in the Gwalia mine sequence to prioritise the main South West Branch lode, and to reset the mining chevron, which reduced the number of available working faces. Raiseboring for the extension project also generated additional waste.
- Milled volume was 127 kt (Q2 Dec: 187 kt) with an associated drawdown of ore stockpile inventory, with recovery at 98% (Q2 Dec: 97%).
- AISC was A\$905 per ounce for Q3 March FY18 (Q2 Dec: A\$859 per ounce), with the increase in unit costs primarily due to reduced production, mitigated by the high grade of the ore processed.
- Sustaining mine development and infrastructure capital expenditure in Q3 March FY18 was \$2.5 million.

Outlook

- FY18 guidance is updated as follows:
 - Production of between 250,000 and 260,000 ounces (unchanged)
 - O AISC of between A\$840 and A\$880 per ounce (unchanged)
 - o Capital expenditure comprising:
 - Sustaining capex: A\$35 to A\$40 million (unchanged) and
 - Growth capex: between A\$45 to A\$50 million (previously A\$50 to A\$55 million).

Production Summary		Q1 Sep	Q2 Dec	Q3 Mar
Gwalia		FY18	FY18	FY18
Underground ore mined	kt	187	171	119
Grade	g/t	10.7	11.2	15.0
Ore milled ¹	kt	192	187	127
Grade ¹	g/t	11.0	10.7	14.2
Recovery	%	97	97	98
Gold production	ΟZ	64,283	62,835	56,773
All-In Sustaining Cost ²		Д	\$ per oun	ce
Mining		374	384	419
Processing		128	128	120
Site services		60	73	74
Stripping and ore inventory		17	33	22
adjustments				
		579	618	635
By-product credits		(2)	(2)	(2)
Third party refining & transport		2	1	1
Royalties		42	39	45
Total cash operating costs		621	656	679
less operating development		(79)	(84)	(110)
Adjusted cash operating cost		542	572	569
Corporate and administration		45	51	55
Corporate royalty		25	24	27
Rehabilitation		3	3	4
Capitalised mine & op				
development		176	177	206
Sustaining capital expenditure	-	25	32	44
All-In Sustaining Cost (AISC)		816	859	905

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 expected to be completed between Q1 September FY20 and Q3 March 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 Q3 March FY18 delays occurred to a variety of PAF related items, comprising delays in the supply of components, and in preparation of the voids on the 1420 and 1460 mbs levels, where the machinery will be located, and in accurately positioning the bottom outlet of the 1,420 mbs drill-hole for the HV electrical cable-drop, due to varying geological conditions and existing reinforcement infrastructure. PAF is now likely to be commissioned in October 2018.
- Raisebore activities are progressing well, with the first raisebore reaming upwards having completed approximately 400 of 1,000 metres, and pilot hole drilling for the second ventilation shaft has commenced. The project plan now anticipates some concurrent raiseboring of ventilation shafts, which should result in the project being completed earlier in the guidance range (between Q1 Sep FY20 and Q3 Mar FY20).

Gwalia Extension Project Expenditure

Project expenditure to date (all capitalised):

0	FY1	.7	\$8 million
0	FY1	8	
	0	Q1	\$4 million
	0	Q2	\$11 million
	0	Q3	\$7 million
	0	YTD	\$22 million

Gwalia Extens	sion Project Summary
Announced	• 27 March 2017
Status	Under construction
Сарех	A\$100 million
Construction	Commenced Q3 Mar FY17
period	 Anticipated completion between Q1 Sep FY20 and Q3 Mar FY20
	PAF completion now due October 2018
Key compone	nts
Ventilation	Ventilation shafts, power & cooling
upgrade	 Supports mining to at least 2,000 mbs in FY 2024³
	Approx. 80% of project budget
Paste Aggregate	Underground waste crushing, paste and aggregate fill mixing and pumping
Fill	Increase trucking efficiency
(PAF)	Improve stope cycle times
	Reduce impact of vent shaft construction on production
	Approx. 20% of project budget

¹ Includes Gwalia mineralised waste

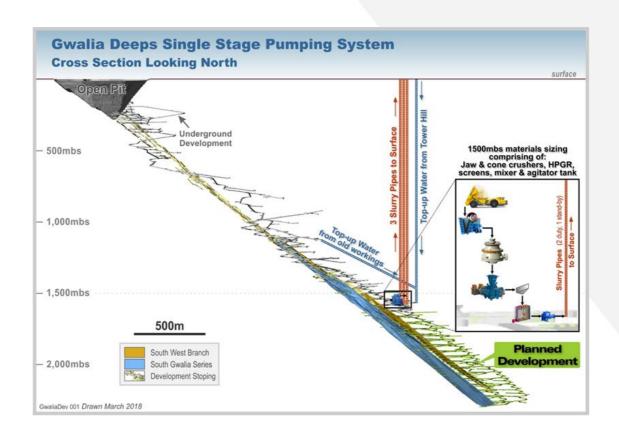
Non-IFRS measure, refer Appendix

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 FY 2021 onwards), which supports a revised Life of Mine Plan to FY 2031 using existing Resources and Reserves¹.
- In the PFS a new mining method and investment in underground grinding, mixing and hydraulic hoisting (slurry pumping) would be used to lift mining rates, maintain margins and potentially increase production as the Gwalia mine deepens.
- A feasibility study (FS) is due to be completed in Q2 December FY19, and progress was made during Q3 March FY18 with the modelling of different configurations of slurry pumping and comminution (milling and grinding) at depth.

Gwalia Mass E	xtraction PFS Summary
Announced	• 21 February 2018
Status	Prefeasibility Study
Сарех	A\$100 million
PFS model -	 Feasibility study due Q2 Dec FY19
milestones	Investment decision December 2018
	 Hydraulic hoisting construction FY 2021
	 Full implementation FY 2022
Key Component	ts
Underground crushing of ore and hydraulic hoist	 2 stage crushing and high-pressure grinding rolls Mixing 50/50 with water and pumping to surface
New mining method – Island pillar	 Provides greater seismic stability Allows longer strike length Ability to mine thinner lodes productively
Overall	 Increase mining rate to potential 1.4 Mpta Supports mine-life to FY 2031

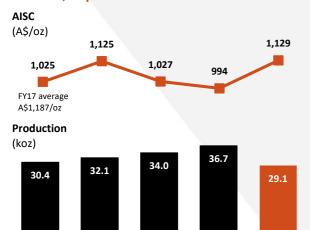


¹ Ore Reserve and Mineral Resources Statement at 30 June 2017 (released 23 August 2017).

Simberi, Papua New Guinea

FY 17

Q4 Jun



Operations

FY 17

Q3 Mar

• Simberi gold production for Q3 March FY18 was 29,112 ounces (Q2 Dec: 36,674 ounces).

FY 18

Q1 Sep

FY 18

Q2 Dec

FY 18

Q3 Mar

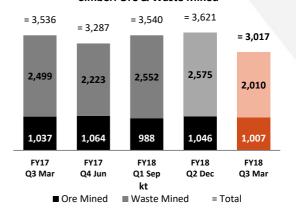
- The decrease in production was partially due to the illegal work stoppage, which halted production for 7 days, and subsequent impact as the processing plant ramped up. The illegal work stoppage was primarily due to misunderstandings regarding leave provisions and other employment conditions, which have now been clarified.
- Lower grades compared to previous quarters (with most higher grade ore currently sourced from Sorowar), in combination with stoppage-related lower mill throughput, resulted in lower production compared to previous quarters.
- All In Sustaining Cost (AISC) was A\$1,129 per ounce for Q3 March FY18 (Q2 Dec: A\$994 per ounce), which was also impacted by the strike and lower production.
- Drilling beneath Sorowar pit seeking to identify further sulphide ore is ongoing, the results of which will inform the Sulphide Project. Some delays have occurred due to difficult drilling conditions.

Outlook

- FY18 guidance has been upgraded as follows:
 - o Production of between 125,000 and 132,000 ounces (announced 6 April 2018, previously 115 to 125 koz)
 - O AISC of between A\$1,070 and A\$1,130 per ounce (previously A\$1,130 and A\$1,230 per ounce)
 - Capex of A\$4 to A\$5 million (previously A\$5 to A\$7 million).

Production Summary		Q1 Sep	Q2 Dec	Q3 Mar
Simberi		FY18	FY18	FY18
Ore & waste mined	kt	3,540	3,621	3,017
Ore mined	kt	988	1,046	1,007
Grade	g/t	1.21	1.32	1.16
Ore milled	kt	971	936	874
Grade	g/t	1.27	1.42	1.22
Recovery	%	86	86	85
Gold production	ΟZ	33,976	36,674	29,112
All-In Sustaining Cost ¹			per ounce	
Mining		338	327	373
Processing		366	342	362
Site services		218	201	253
		922	870	988
By-product credits		(2)	(4)	(3)
Third party refining &		7	7	9
transport				
Royalties		37	35	42
Total cash operating costs		964	908	1,036
Corporate and				
administration		45	51	55
Rehabilitation		13	15	19
Sustaining capital				
expenditure		5	20	19
All-In Sustaining Cost (AISC)		1,027	994	1,129

Simberi Ore & Waste Mined



¹ Non-IFRS measure, refer Appendix

Exploration – Results March 2018 Quarter

Gwalia Exploration Program, Leonora WA

- Gwalia Deeps Extension: The Gwalia Deeps drilling program
 continued with the drilling of parent hole GWDD19 targeting
 the potential extension of the lode system at a depth of 2,600
 mbs and is expected to reach completion during April 2018.
 This will be the deepest hole yet drilled at Gwalia and is
 directed to a position over 600m down-plunge from previous
 drill intercepts.
- Gwalia Seismic Program: Interpretation of a 3D seismic program targeting a 15 km² area surrounding the Gwalia mine has 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. Drilling to assess the target areas will commence in April 2018.
- Horse-Paddock Well, Leonora WA: Induced Polarisation (IP)
 and Sub Audio Magnetic (SAM) surveys were successfully
 completed directed at identifying King of the Hills style
 mineralisation. Geophysical interpretation has identified a
 feature which will be drilled in Q4 June FY18. Follow-up
 downhole SAM type exploration is likely as well as further
 elements in a program of work.

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 20 exploration licences (1,434 km²) for 485 blocks (Figure 4.0).
- Final results were received for the 163 hole (PJAC01385 to PJAC1547) 10,658 metre aircore drill program completed in December 2017 (Figures 4.0 to 4.4 and Table 1). The drilling tested the Graham's Find prospect, southeast Yindi station area and part of the Mulgabbie trend (Figure 4.1).
- The drilling at Graham's Find highlighted a 3.2 kilometre long, north-northwest striking zone of anomalous gold (≥ 250 ppb Au) and arsenic (≥250 ppm As) in bedrock that passes under Lake Rebecca and is potentially open to the southeast (Figure 4.2).
- The aircore drilling at southeast Yindi station defined a 6 kilometre long, north-northwest striking, semi-continuous zone of anomalous gold (≥ 50 ppb Au), lead, bismuth and tungsten in bedrock localised along a granite greenstone contact (Figure 4.3). The anomaly is open along strike to the north and south.
- Infill aircore drilling on the Mulgabbie trend defined two north

 south striking 0.75 to 1 kilometre long anomalous zones of gold (≥ 250 ppb Au) and arsenic (≥250 ppm As) in bedrock, that are both open along strike to the north (Figure 4.4).

- A Reverse Circulation (RC) drilling program comprising 19 holes for 3,760 metres commenced in March 2018, aimed at testing 17 bedrock conductors defined from recent airborne Electromagnetic (AEM) and surface Fixed Loop Electromagnetic (FLEM) surveys, as well as previous 6 g/t Au and 1 g/t Au in bedrock aircore drill results from southeast Yindi station (Figure 4.5).
- To date, nine holes (PJRC0039 to PJRC0047) have been completed for 2,111 metres. Two holes (PJRC0039 and PJRC0040) were drilled at southeast Yindi, intersecting narrow zones (~5 metres) of silica-sericite±pyrite alteration within the granite. Three of the seven holes (PJRC0041 to PJRC0047) testing bedrock conductors intersected sulphide bearing Banded Iron Formation (BIF) and three holes intersected graphitic black shale at target depths. The program will be completed in mid-April, with results reported in Q4 June FY18.
- A 300 hole 20,000 metre aircore infill and extension drilling program is planned at Graham's Find, southeast Yindi, the Mulgabbie trend and two new targets in the western tenements in Q4 June FY18. Subject to water levels, a 320 hole, 19,000 metre lake aircore drilling program is planned to test Graham's Find, the Mulgabbie trend and three geophysical targets commencing late in Q4 June FY18.

Back Creek, NSW (EL 8214 and EL 8530)

 A 20 hole, 3,000 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 5.0). Aircore drilling is planned to commence in late in Q4 June FY18. EL8214 was renewed for four years on 26 February 2018.

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

- On Simberi Island (Figure 6.0), a detailed pit mapping program, 3D modelling and multi-element geochemical review continued to better define controls on oxide and sulphide ore within ML136.
- A single 750 metre drill hole was designed to test gold mineralisation approximately 200 m below the limits of historical drilling. The hole will provide information on the potential for porphyry copper - gold mineralisation at depth below the pit. The initial drill hole SRCD003 was abandoned due to a combination of ground conditions and drill rig mechanical breakdown. A new hole SDH371 is currently at 323 metres depth and is expected to be completed in Q4 June FY18.
- Exploration continued on EL609 at Tatau and Big Tabar Islands during Q3 March FY18. Work focussed on the execution of

diamond drilling on Tatau Island as part of the Newcrest Option and Farm-in.

Option and Farm-in with Newcrest,

Tatau & Tabar Islands, Papua New Guinea

- 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 km² of central Tatau Island and Tupinda Prospect, Big Tabar Island.
- Results from the surface sampling program highlight the Talik
 North porphyry prospect as a priority drill target (Figure 6.1).
 A coincident copper molybdenum ± gold anomaly in soil and
 rock chip samples is associated with a circular 2.3 x 1.6 km
 magnetic low associated with late-stage, moderate to strong
 phyllic alteration, surrounding a weak central magnetic high
 interpreted to represent early-stage, partially exposed
 potassic alteration. An additional 45 rock chip samples were
 collected at Talik North during the quarter with results
 pending.
- Two diamond drill holes (TTD085 and TTD086) were completed at Talik North for 1,503 metres during Q3 March FY18. To date, a total of three diamond drill holes have been completed at Talik North (TTD084 to TTD086) for a combined 2,481 metres. Assay results for TTD084 and TTD085 have been returned (Table 2) with significant intersections including (all intercepts downhole):

TTD084:

- o 128 m @ 0.29 % Cu and 0.04 g/t Au from 672m, including 6m @ 1.4% Cu and 0.10 g/t Au from 748m, and
- o 145.4 m @ 0.18 % Cu and 0.07 g/t Au from 832m (to EoH)
- TTD085 intersected monzonitic intrusive and mafic dykes, with a strongly magnetic breccia unit located in the upper part of the hole. Alteration was variable downhole with early monzodioritic intrusive and magnetic breccia containing potassic alteration and phyllic alteration in late monzonitic intrusives. Visible trace chalcopyrite mineralisation was scattered down hole and closely associated with the late monzodioritic intrusive.
- TTD086 intersected monzonitic intrusive, a polymict breccia in the central part of the hole and the magnetic breccia observed in TTD085 was observed in the bottom of hole. Both breccia types contained chalcopyrite bearing mineralised clasts.

Alteration is consistent between all the Talik North drill holes, with phyllic alteration dominating the top of hole in late monzonitic intrusive, and increased potassic alteration at depth. Visible trace amounts of chalcopyrite were observed in association with late monzodiorite and breccia. Results for TTD086 are expected in Q4 June FY18 .

- 3D (three dimensional) inversion modelling of airborne geophysics over Talik North is planned to assist with further targeting.
- Subject to access, diamond drilling is expected to commence at the Kupo copper - molybdenum - gold porphyry prospect in Q4 June FY18 (Figure 6.0).
- Results from the 107 sample hand auger soil program completed at Tupinda prospect on Big Tabar Island highlighted a ≥100ppb Au anomaly associated with a circular magnetic low (Figure 6.3). Follow up work is not planned.

Expenditure Q3 March FY18 (unaudited)

Expenditure on mineral exploration is shown below:

	Q1 Sep FY18	Q2 Dec FY18	Q3 Mar FY18	
	A\$ million	A\$ million	A\$ million	
Australia	1.0	1.3	0.8	(expensed)
Pacific	0.8	0.8	1.0	(expensed)
Gwalia	1.2	1.4	1.2	(capitalised)
-	3.0	3.5	3.0	

Planned Exploration - Q4 June FY18

The map below shows current and planned target areas for Q4
June FY18.



- Exploration in Q4 June FY18 will focus on:
 - Gwalia Deeps 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.
 - Gwalia Deeps 2,600 mbs: Continuation of surface parent hole (GWDD19) directed at the potential down-plunge extension of the Gwalia deposit to 2,600 mbs.
 - o **3D Seismic Targets:** Commence drilling program on two priority targets.
 - Greater Gwalia: Conduct extensions of the seismic coverage of the Greater Gwalia area to the north and south.
 - Horse-paddock Well: Evaluate IP and SAM results with the aim to identify targets for drilling.
 - Completion and assessment of results from the 19 hole 3,760 metre RC drilling program in the eastern Pinjin tenements testing 17 bedrock conductors and 2 bedrock gold anomalies.
 - Completion of a 300 hole, 20,000 metre aircore infill and extension drilling program planned at Graham's Find, southeast Yindi, the Mulgabbie trend and two new geochemical targets in the western tenements.
 - Subject to water levels, commence a 320 hole, 19,000 metre lake aircore drilling program planned to test Graham's Find, the Mulgabbie trend and three geophysical targets.
 - Subject to drill rig availability, commence a 20 hole
 Aircore drilling program at Back Creek.
 - As part of the Newcrest option period work program, continue drilling copper-gold porphyry targets on **Tatau** and **Big Tabar Islands**. Including commence diamond drilling of the Kupo copper – molybdenum ± gold porphyry target on Tatau Island.
 - Interpret the results of the three diamond drill holes
 TTD084 to TTD086 completed at Talik North.
 - Complete diamond drill hole SDH371 testing the down plunge extent of gold mineralisation at **Pigiput** and better understand the potential for porphyry gold-copper mineralisation at depth.
 - 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.

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.
- During Q3 March FY18, the Company invested \$4.4 million in ABM Resources NL (ASX:ABU, <u>www.abmresources.com.au</u>) for 10% of the company's issued capital.
- In April 2018, St Barbara invested \$4.0 million in Duketon Mining (ASX: DKM, <u>duketonmining.com.au</u>) for 12% of the company's issued capital.
- At the date of this report, St Barbara holds the following investments in Australian explorers 1:

ABM Resources NL (ASX:ABU)	10%
Catalyst Metals Limited (ASX:CYL)	16%
<u>Duketon Mining Limited</u> (ASX:DKM)	12%
Peel Mining Limited (ASX:PEX)	16%

Health & Safety

- The Total Recordable Injury Frequency Rate (TRIFR) ² increased from 2.4 at the end of Q2 December FY18 to 2.6 at the end of Q3 March FY18. This was as a result of a single low-severity recordable injury.
- There is not a publicly available industry comparison rate for TRIFR. On a like-for-like basis, however, the Company recorded a Lost Time Injury Frequency Rate (LTIFR) of 0.7 at the end of Q3 March FY18, against the most recent available Western Australian gold mining industry average of 2.13.

Finance (unaudited)

- 91,773 ounces of gold were sold in Q3 March FY18, at an average realised gold price of A\$1,710 per ounce (Q2 Dec: 95,392 ounces at A\$1,686 per ounce). There was 4,371 ounces of gold inventory on hand at 31 March 2018 (31 December 2017: 6,822 ounces).
- Total cash at bank at 31 March 2018 was A\$262 million ⁴ (31 December 2017: A\$216 million) after an income tax payment of \$2 million ⁵, \$16 million paid for the interim dividend and an investment in ABM Resources of \$4.4 million. The \$4 million investment in Duketon Mining occurred in April.

¹ Shareholdings as notified by St Barbara in substantial holder notices

² Calculated as a rolling 12 month average per million hours worked

³ WA Dept. Mines, Industry, Regulation and Safety, <u>www.dmp.wa.gov.au/Documents/Safety/MSH Stats Reports SafetyPerfWA 2016-17.pdf</u>

⁴ Cash balance includes A\$1.2 million restricted cash (Dec 2017: A\$1.2 million).

⁵ Represents a pay-as-you-go (PAYG) monthly tax instalment that commenced in March 2018

 The Company generated an operational cash contribution¹ in Q3 March FY18 of A\$79 million (Q2 Dec: A\$79 million). Cash movements for Q3 March FY18 are summarised in the following table:

Cash movements & balance A\$M (unaudited)	Q1 Sep FY18	Q2 Dec FY18	Q3 Mar FY18
Leonora - operating cash flow ²	62	56	56
Simberi - operating cash flow ²	24	23	23
Operational cash contribution	86	79	79
Leonora - growth capital	(4)	(11)	(7)
Rehabilitation , land management & project costs	-	(1)	-
Corporate costs	(4)	(6)	(5)
Corporate royalties	(2)	(2)	(2)
Exploration ³	(3)	(4)	(3)
Investments ⁴	(1)	(12)	(4)
Income tax payments	-	(31)	(2)
Working capital movement	(10)	4	4
Cash flows before finance costs	62	16	60
Net interest income	1	1	2
Dividends paid	(25)	-	(16)
Net movement for period	38	17	46
Cash balance at start of quarter	161	199	216
Cash balance at end of quarter	199	216	262
Restricted cash inc. in closing balance	1	1	1

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

FY18:	13,500 ounces of forward gold contracts to be delivered in monthly instalments between April and June 2018 at A\$1,725 per ounce (remainder of hedge announced 12 April 2017), and
	13,500 ounces of forward gold contracts to be delivered in monthly instalments between April and June 2018 at A\$1,730 per ounce (remainder of hedge announced 1 June 2017).
FY19:	100,000 ounces of forward gold contracts to be delivered

announced 7 and 19 February 2018 and 7 March 2018).

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

in monthly instalments between July 2018 and June 2019

at A\$1,750 per ounce (FY19 component of hedges

Corporate

- The FY18 interim dividend of \$0.04 per share fully franked announced on 21 February 2018 was paid on 28 March 2018.
- Dividends paid in cash totalled \$16 million, plus 1.1 million new shares issued under the corresponding Dividend Reinvestment Plan (DRP). 1,063 shareholders (11% of all shareholders), holding 112 million shares (22% of issued capital), participated in the DRP, which conserved \$4.5 million in cash.

Share Capital

•	
Issued shares	
Opening balance 31 Dec 2017	515,427,192
Issued ⁵	1,114,581
Closing balance 31 Mar 2018	516,541,773
Unlisted employee rights	
Opening balance 31 Dec 2017	6,296,723
Issued	nil
Exercised as shares	nil
Lapsed	nil
Closing balance 31 Mar 2018	6,296,723
Comprises rights expiring:	
30 June 2018 ⁶	3,974,617
30 June 2019 ⁷	1,076,716
30 June 2020 ⁸	1,245,390
Closing balance 31 Mar 2018	6,296,723

Scheduled Future Reporting

<u>Date</u>	Report
25 July	Q4 June FY18 Quarterly Report
22 August	Annual Financial Report
	Resources and Reserves Statements

Dates are tentative and subject to change.

¹ Non-IFRS measure, see cash movements table this page. Corresponds to Operational Cash Flow less sustaining capital, but excludes growth capital of AS4 million.

Net of sustaining capex

³ Includes Gwalia deep drilling

Refer 'Explorations Investments' earlier in this report

⁵ ASX Appendix 3B 28 Mar 2018 interim dividend DRP shares

⁶ If these rights do not vest at 2018, they may be retested at 2019 and 2020

⁷ If these rights do not vest at 2019, they may be retested at 2020 and 2021

⁸ If these rights do not vest at 2020, they may be retested at 2020 and 2021

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

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Email	info@stbarbara.com.au
Website	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

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

Financial year commences 1 July and ends 30 June.

Shareholder Enquiries

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GPO Box 2975

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www-au.computershare.com/investor

American Depositary Receipt enquires:

BNY Mellon Depositary Receipts www.bnymellon.com/shareowner

Investor Relations

Rowan Cole, Company Secretary +61 3 8660 1900

Substantial Shareholders

	_
Van Eck Associates Corporation	11.2%
M&G Investment Management Ltd	5.2%
Vinva Investment Management	5.2%

% of Holdings1

¹ As notified by the substantial shareholders to 18 April 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 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.



Quarterly Report / Q3 March FY18

Exploration Figures and Tables

Figure 1.0: Leonora: Gwalia Deeps Drilling Program Q3 FY18, Plan View

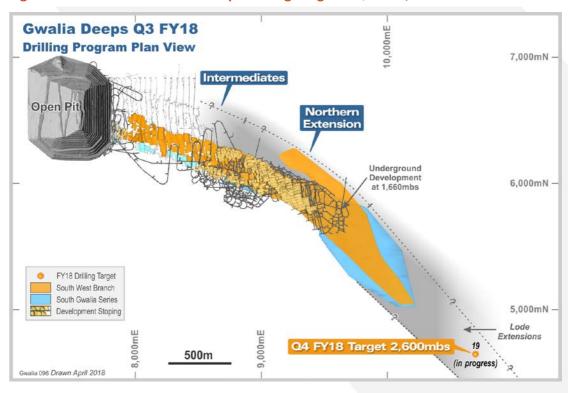


Figure 2.0: Gwalia Deeps Drilling Program Q3 FY18, Cross Section (looking north)

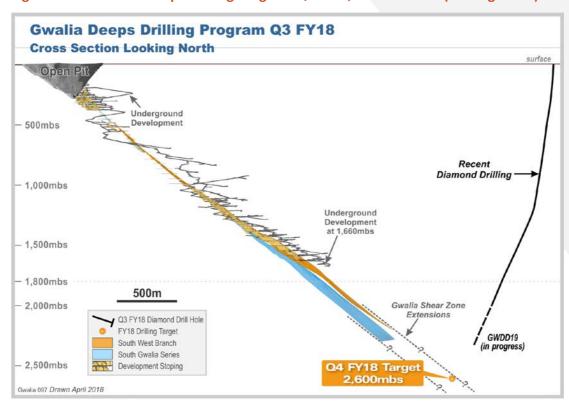


Figure 2.1: Gwalia Deeps Drilling Program Q3 FY18 Results, Long Section (looking west)

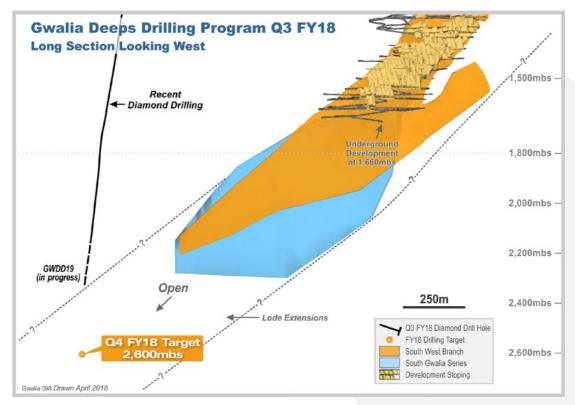
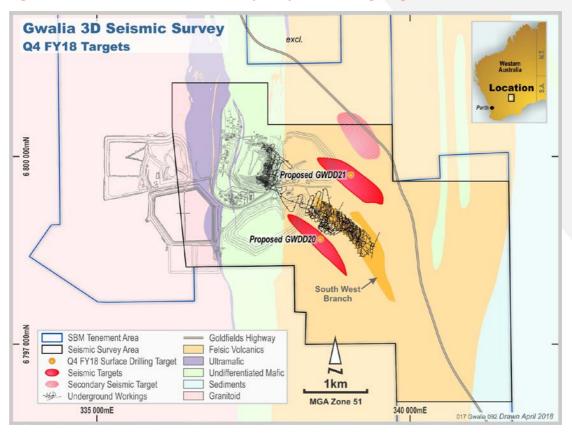


Figure 3.0: Gwalia 3D Seismic Survey, Proposed Drilling Targets



Pinjin Project Pinjin Tenement Area **Work Summary Q3 FY18** Gold Mine Greenstone Belt Granitoid 6 700 000mN -Location Carosue Dam O Gold Mine See Enlargement 6 650 000mN -Q3 FY 2018 Drilling: · RC Collar, assays pending Q3 FY18 Assays: AC Collar, assays received AC Collar, resplits received 10km Previous Drilling: MGA Zone 51 · Previous RC Collar Previous AC Collar 450 000mE 500 000mE

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

Pinjin 044 Drawn April 2018

Pinjin Project Work Summary Q3 FY18 Excl. See Enlargement See Enlargement Excl. Excl. 5km MGA Zone 51 Pinjin Project > Lakes Q3 FY18 Assays Received Results: Maximum Au in bedrock See Enlargement AC Drill Collar / RC Drill Collar ● > 1,000ppb Au ● ◆ 500 - 1,000ppb Au 250 - 500ppb Au 100 - 250ppb Au • 50 - 100ppb Au < 50ppb Au</p> · Result Pending Pinjin 045 Drawn April 2018 450 000mE 460 000mE

Figure 4.1: Pinjin Project Drilling Results Map (Enlargement) – maximum gold in bedrock

Figure 4.2: Graham's Find Drilling Results Map (Enlargement) – maximum gold in bedrock

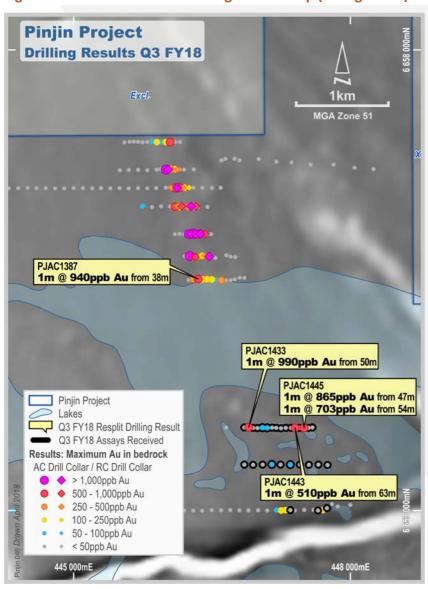


Figure 4.3: Southeast Yindi Drilling Results Map (Enlargement) – maximum gold in bedrock

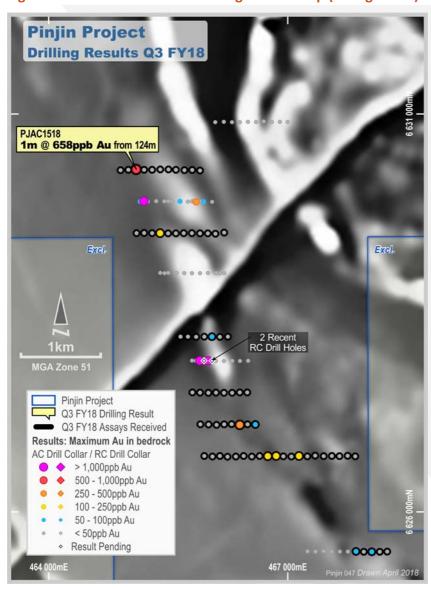


Figure 4.4: Mulgabbie Trend Drilling Results Map (Enlargement) – maximum gold in bedrock

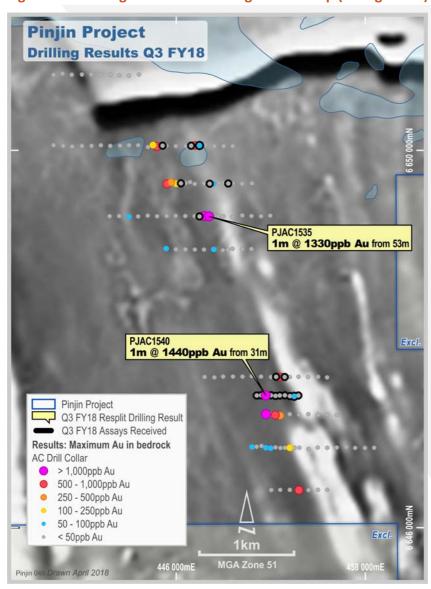
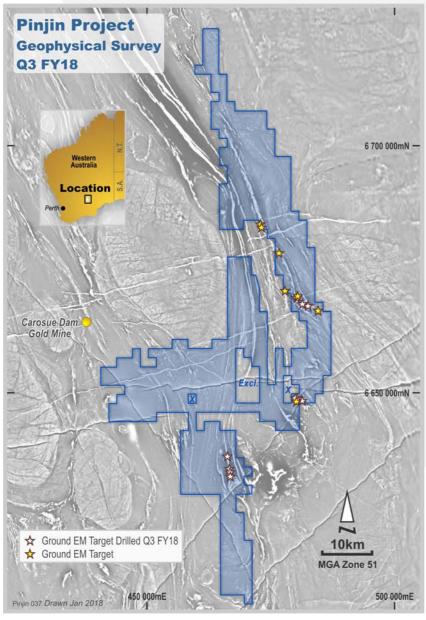


Figure 4.5: Pinjin Project Ground Electromagnetic (EM) Drill Target Location Map



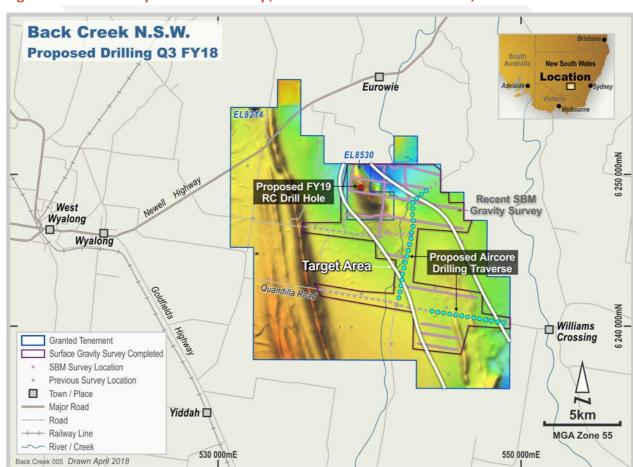


Figure 5.0: Drill Proposal Location Map, Back Creek EL8214 and EL8530, New South Wales

Tabar Islands Simberi **Regional Location** Island Monun Patan Pigibo -Location Botlu Simberi **Botlu South** Samat Papua New Guinea Pigicow West Pigicow Bekou **Bekou South** Tatau Island 200 000mN -EL609 Kupo TI Local Grid *Tugitugi Talik Northwest Mt Letam * Talik West
Nalu *
Seraror *
Mt Siro *
Tatau * Daramba North Talik * Daramba * Daramba South ** Paturarai

** Tiro FL 2462 Mapua Marai * Tatau Mt Tiro Island Tomalabat Camp Tupinda * Fotombar 180 000mN -Big Tabar SBM Tenements Banesa Island Project Area SBM Operation □ Barnesa Village Gold Deposit Gold and/or Copper Prospect EL609

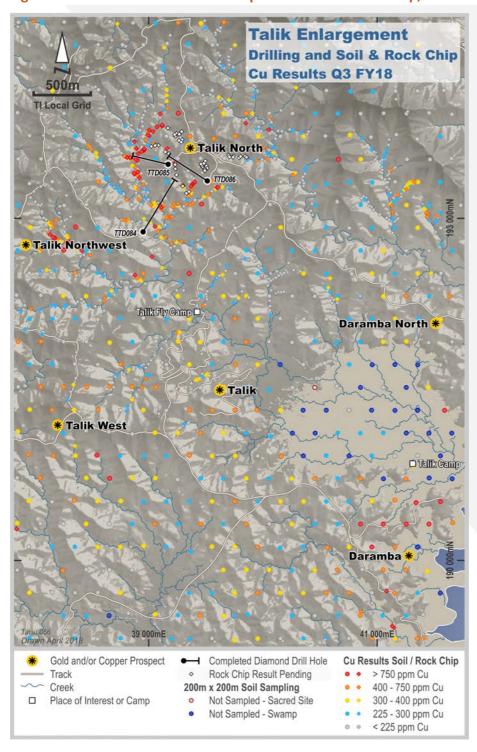
35 000mE

Figure 6.0: Tabar Islands Location Map, Papua New Guinea

TabRgn 001 Drawn April 2018

55 000mE

Figure 6.1: Talik North Surface Sample and Drill Location Map, Tatau Island, Papua New Guinea



Talik North Drill Hole Location 22m @ 0.14% Cu & 0.09g/t Au from 112m 145.4m @ 0.18% Cu & 0.07g/t Au from 832m (to EOH) TTD086 (Assays Pending) * Talik North TTD084 128m @ 0.29% Cu & 0.04g/t Au from 672m incl: 6m @ 1.4% Cu & 0.10g/t Au from 748m 40 000mE Cu Results Soil / Rock Chip Gold and/or Copper Prospect Soil / Rock Chip Contours Creek • • > 750 ppm Cu (Mo & W) 400 - 750 ppm Cu Track > 10 ppm Mo 300 - 400 ppm Cu > 1.5 ppm W Completed Diamond Drill Hole 225 - 300 ppm Cu Rock Chip Result Pending < 225 ppm Cu

Figure 6.2: Talik North Drill Location Map, Tatau Island, Papua New Guinea

Big Tabar - Tupinda Big Tabar Island Soil Sampling Q3 FY18 ocation Tupinda South TI Local Grid Au Soil Results > 750 ppb Au 500 - 750 ppb Au Big Tabar Island 250 - 500 ppb Au 100 -250 ppb Au • 50 - 100 ppb Au < 50 ppb Au **EL609** Cu Soil / Rock Chip Contours > 300 ppm Cu > 225 - 300 ppm Cu Au Soil / Rock Chip Contours SBM Tenement Creek > 100 ppb Au Copper Prospect 0 Previous Drill Hole Location > 50 - 100 ppb Au 40 000mE 38 000mE Big Tabar 004 Drawn April 2018

Figure 6.3: Tupinda Soil Copper and Gold Results Map, Big Tabar Island, Papua New Guinea

Table 1: Pinjin Aircore Significant Intercepts – Yilgarn, WA

liala id	North	East	RL	Dip/ Azimuth	Total Depth	Down-hole Mineralised Intersection				
Hole Id	m	m	m	degrees	m	From	То	Interval	Gold grade	Comments
	""	111	111	degrees	rees	m	m	m	Au ppb	Comments
PJAC1387	6,655,511	446,351	329.2	-60 / 270	57	38	39	1	940	Oxide
PJAC1433	6,653,903	446,899	332.8	-60 / 270	66	50	51	1	990	Oxide
PJAC1443	6,653,897	447,402	333.3	-60 / 270	73	63	64	1	510	Oxide
PJAC1445	6,653,897	447,499	332.2	-60 / 270	70	47	48	1	865	Oxide
						54	55	1	703	Oxide
PJAC1518	6,630,303	465,098	434.5	-60 / 270	135	124	125	1	658	Oxide
PJAC1535	6,649,299	456,348	336.4	-60 / 270	68	53	54	1	1,330	Oxide
PJAC1540	6,647,405	456,945	340.9	-60 / 270	62	31	32	1	1,440	Oxide

NOTES:

Coordinates and Azimuth referenced to MGA94 zone 51 Grid. Reported intercepts are all down hole lengths.

Table 2: Talik North Significant Intercepts – Tatau Island, Papua New Guinea

	North	East	RL	Dip/ Azimuth							
Hole Id	m	m	m	degrees	m	Lode	From	То	Interval	Copper grade	Gold grade
							m	m	m	% Cu	g/t Au
TTD084	192,879	38,943	96.7	-50 / 032	977.4	SU	672	800	128.0	0.29	0.04
including						SU	748	754	6.0	1.4	0.10
						SU	832	977.4	145.4	0.18	0.07
TTD085	193,467	39,162	169.2	-60 / 285	756.0	SU	112	134	22.0	0.14	0.09

NOTES:

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

PINJIN - JORC Code, 2012 Edition – Table 1

Contents

Section 1 Sampling Techniques and Data Drilling:

Section 2 Reporting of Exploration Results

Drilling - Section 1 Sampling Techniques and Data

Criteria in this section apply Criteria	
Criteria Sampling techniques	 Sampling was conducted via Aircore and RC drilling, RC drill holes were on 50m spacing's with line spacing's of 200m, 250m or 300m. AC drill holes were on 50m or 100m spacing's with line spacing's ranging between 250m and 1.2km or as individual socut lines. The majority of RC holes were designed as individual holes to test EM targets, however, two were designed at 50m spacings to test a geochemical anomaly. Samples were collected from a rig-mounted cyclone by bucket and were then placed directly on the ground in nearows of between ten and fifty (depending on hole depth). Drill spoil was sampled with a scoop to generate 4m composite samples of approximately 3kg. 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. 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-NS to a detection limit of 1ppb. The same digested sample was also tested for arsenic by ICP-AES to 1ppm detection limit. 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. Anomalous Aircore Composite samples (>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
Drilling techniques	 Aircore drilling was carried out by two different Aircore rigs, one using an 85mm bit and the other using a 97mm bit. All holes were drilled to refusal which was generally at the fresh rock interface. Drilling was carried out by Raglan Drilling who utilised truck mounted R/A 180 Rigs with 750 cfm and 350 psi. 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.
Drill sample recovery	 Sample 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.
Logging	 All drill holes were logged in full for lithology, alteration, weathering/regolith and colour. Aircore and RC logging is both qualitative and quantitative.
Sub-sampling techniques and sample preparation	 Aircore and RC samples were collected as both dry and wet samples using a sample scoop. All composite samples were sorted, dried, crushed and pulverised to produce a 40g charge prior to fire assay. Samples were collected at 1m intervals and composited in 4m samples using a scoop to sample individual metre samples. QC procedures for 4m composite sampling involved the insertion of certified reference material, field duplicates and blanks at ratios of 1:50. Bureau Veritas inserted certified standards and replicates and lab repeats.
Quality of assay data and laboratory tests	 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. The RC composite samples used a 40g charge for fire assay which is considered appropriate for gold mineralisation in fresh rock material. Certified reference material was inserted into the sample stream at a ratio of 1:50. Field duplicates and blanks were inserted at a ratio of 1:50. Bureau Veritas inserted certified standards and replicates and lab repeats.

Criteria	Commentary
Verification of sampling and assaying	 Primary geological and sampling data were recorded into made for purposed excel spreadsheets. Data was then transferred into the St Barbara corporate DataShed database where it was validated by an experienced database geologist. No adjustments to assay data were made.
Location of data points	 Prior to drilling, all holes were marked out using a handheld GPS with ±3m accuracy for easting, northings and ±10m elevation. Upon completion of the program all holes were resurveyed using a dGPS with decimetre accuracy to determine the final collar positions. No downhole surveys were conducted on Aircore holes. 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. All locations were captured in MGA94 zone 51 grid.
Data spacing and distribution	 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. The majority of RC holes were designed as individual holes to test EM targets, however, two were designed at 50m spacings to test a geochemical anomaly. Reported Aircore results are based on the 1m Fire Assay re-splits of original 4m composite samples. RC results are based on the 4m composite sampling.
Orientation of data in relation to geological structure	 The majority of Aircore drill holes had a dip and azimuth of -60/270. 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. 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 -60/270.
Sample security	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.
Audits or reviews	No audits or reviews of sampling protocols have been completed.

Drilling - Section 2 Reporting of Exploration Results

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

Criteria	Commentary
Mineral tenement and land tenure status	• SBM has 100% ownership of the 20 tenements comprising the Pinjin Project. These include: E28/2234, E28/2283, E28/2284, E31/0999, E31/1000, E31/1005, E31/1007, E39/1718, E28/2218, E28/2245, E28/2250, E28/2264, E28/2357, E28/2375, E28/2445, E31/1056, E31/1082, E28/2246, E28/2247 and E28/2494.
Exploration done by other parties	 There have been numerous historical holders of the project area which covers over ~1,358 square kilometres. 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, Uranez, Placer Exploration Ltd, Jacksons Minerals Limited, Anglo Australian Resources, Troy Resources NL, Saracen, Hawthorn Resources and Renaissance Minerals Limited.
Geology	 SBM is targeting Archean orogenic gold mineralisation near major regional faults. The tenement package covers Archaean 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.
Drill hole Information	 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.
Data aggregation methods	 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 > 1000 ppb Au are used to highlight higher grades zones within the broader zone. No high grade cut is applied. No metal equivalent values are used for reporting exploration results.
Relationship between mineralisation widths and intercept lengths	Down hole length is reported for all holes; true width is not known as the orientation of mineralisation is not fully understood.
Other substantive exploration data	Included in the body of the report.
Diagrams	Diagrams show all drill holes material and immaterial to Exploration Results.
Balanced reporting	 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.
Other substantive exploration data	Data is included in the body of the report.
Further Work	Further exploration Aircore and RC drill holes are planned and are discussed in the body of the report.

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
Sampling techniques	 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 prepped on-site to produce a 200gm or 250gm pulp sample. A 50gm charge was then extracted from the 200gm or 250gm pulp for Au fire assay and ICP - AES base metal analysis.
Drilling techniques	 Diamond Drilling comprised PQ (85mm), HQ (63.5mm) or HQ3 (61.1mm) and on occasion NQ2 (50.5mm) or NQ3 (45mm) core recovered using 1.5m to 3m barrels. When ground conditions permit, an ACT Digital Core Orientation Instrument was used by the contractor to orientate the core.
Drill sample recovery	 Diamond drilling recovery percentages were measured by comparing actual meters recovered per drill run versus meters measured on the core blocks. Recoveries averaged over >90% with increased core loss present in fault zones and zones of strong alteration.
Logging	 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. All holes are fully logged.
Sub-sampling techniques and sample preparation	 All drill samples not associated with the Newcrest option and farm-in agreement work program, included reverse circulation rock chips and diamond core. Reverse circulation rock chips were sampled directly from the cyclone as 1 metre intervals or 2 metre interval composites. Reverse circulation rock chips collected for re-assay and geochemical studies of drill holes completed by the Simberi Mining Department were collected by spear. All core was half cut with the upper or left-hand side submitted for assay. All drill samples were routinely submitted for total pulverisation (85% passing 75 µm). Quality control of sub-sampling consisted of insertion of blank control samples and coarse reject duplicates, both at a ratio of 1:20 samples. All 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 total pulverisation (85% passing 75 µm). For PQ diameter core a further cut was completed, whereby quarter core is submitted to provide a practical sample size. Quality control of subsampling consisted of insertion of blank control samples and coarse reject duplicates, both at a ratio of 1:20 samples. Drill samples not associated with the Newcrest option and farm-in agreement work program, including reverse circulation rock chips and diamond the samples were fully prepared at the company's on-site sample preparation facility on Simberi Island with 200g pulps sent to ALS Laboratory in Townsville. Pulp residues are stored in Townsville for future re-assay if required. All drill core samples associated with the Newcrest option and farm-in agreement work program, samples were sent to ITS PNG Ltd Lae sample preparation facility with 250g pulps sent to Intertek Laboratory in Perth. Pulps residuals are

Criteria	Commentary
Quality of assay data and laboratory tests	 Drill samples not associated with the Newcrest option and farm-in agreement work program including reverse circulation rock chips and diamond core half core samples were analysed for gold using fire assay with a 50g charge and analysis by flame atomic absorption spectrometry (Au-AA26 method). Additional elements (Ag, As, Cu, Fe, Mo, Pb, S, Sb and Zn) were analysed by Aqua Regia digestion using Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES) via method ME-ICP41. 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. All drill samples associated with the Newcrest option and farm-in agreement work program samples and some drill samples not associated with the Newcrest option and farm-in agreement work program, 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, V, 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. Both Intertek P
Verification of sampling and assaying	 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.
Location of data points	 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 by hand held GPS. All holes were downhole surveyed using either a Reflex or Ranger single shot camera with the first reading at about 15m and then approximately every 30m increments to the bottom-of-the hole.
Data spacing and distribution	Drilling data is not yet sufficient to establish continuity of the lodes and therefore the drill spacing is irregular and broad spaced.
Orientation of data in relation to geological structure	Where surface mapping and sampling has contributed to understanding of outcropping geological structures, drilling and sampling has been undertaken orthogonal to the mapped structure.
Sample security	 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
Audits or reviews	No audits or reviews of sampling protocols have been completed.

Drilling - Section 2 Reporting of Exploration Results

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

Criteria	Commentary
Mineral tenement and land tenure status	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.
Exploration done by other parties	 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.
Geology	 The Simberi gold deposits are low sulphidation, intrusion related adularia-sericite epithermal gold deposits. The dominant host rocks for mineralisation are andesites, volcaniclastics and lesser porphyries. Gold mineralisation is generally associated with sulphides or iron oxides occurring within a variety of fractures, such as simple fracture infills, single vein coatings and crackle brecciation in the more competent andesite units, along andesite/polymict breccia contact margins as well as sulphide disseminations. On Tatau and Big Tabar Islands, located immediately south of Simberi, porphyry Cu-Au, epithermal quartz Au-Ag and carbonate-base metal Au mineralisation is present. The current drilling is targeting porphyry Cu-Au mineralisation
Drill hole Information	 associated with multi-phase intrusive stocks. 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 intercepts lengths and depth as well as hole depth.
Data aggregation methods	 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 ≥5.0g/t Au and ≥1m down hole. 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 > 1% Cu may be reported. Au and Cu grades are reported.
	 In 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.
Relationship between mineralisation widths and intercept lengths	Down hole length is reported for all holes; true width is not known as the orientation of the orebody is not fully understood.
Diagrams	Diagrams show all drill holes material and immaterial to Exploration Results.
Balanced reporting	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.
Other substantive exploration data	Included in the body of the report. Core holes are routinely measured for bulk density determinations to be used for potential future resource modelling.
Further work	Included in the body of the report.

<u>Surface Sampling - Section 1 Sampling Techniques and Data</u>

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

Criteria	Commentary
Sampling techniques	 For the Regional and Tupinda soil survey, samples were collected by first removing organic litter from the surface. A hand auger was then used to collect a C-horizon sample from typically between 140cm to 190cm depth. Sampling teams were supervised by a geologist who determined the depth of the sample collected. A bulk sample of ≥2kg was then collected in a calico bag. A reference sample of soil and any weathered rock fragments is placed in a plastic chip tray for ASD analysis. Rock chip samples (2 to 5kg) are cleaned of any organic material and placed in a calico bag. A small reference rock chip sample is placed in a plastic chip tray for ASD analysis.
Drilling techniques	• N/A
Drill sample recovery	• N/A
Logging	 All rock chip and float were qualitatively logged for lithology, alteration, weathering and colour. Regional soil sample sites were recorded for land use, vegetation type, slope (degrees) and slope direction. For regional soil samples, the depth (from, to) collected was recorded in centimetres. Regional soil samples were logged for regolith (weathering) type, colour, tone and moisture content by a geologist. A digital photograph is taken showing the soil profile laid out and the location of the sample material highlighted.
Sub-sampling techniques and sample preparation	 Rock chip, float and soil samples collected were taken to a restricted area at the company's on-site sample preparation facility on Simberi Island and dried in a dedicated oven at low Temperature (60°C) for 24 hours to reduce weight for transport. Since 1st August 2017, all surface samples associated with the Newcrest option and farm-in agreement work program are sent to Intertek in Lae (PNG) for sample preparation and analysis. Prior to 5th November 2017, all surface samples not associated with the Newcrest option and farm-in agreement work program were sent to ALS Laboratory in Brisbane for analysis. From the 5th of November 2017, all surface samples are sent to Intertek in Lae. At ALS, sample preparation involves drying, jaw crush to 70% passing -6mm, pulverise in LM5 or LM2 to a minimum 85% passing -75um. At Intertek, sample preparation involves drying, jaw crush to 95% passing -4.75mm, pulverise in LM5 or LM2 to a minimum 95% passing -106um.
Quality of assay data and laboratory tests	 Previous regional soil and rock chip samples were prepared and analysed by ALS Brisbane and ALS Townsville. Samples were coarse crushed, dried at 105°C, whole sample pulverised (85% passing 75 microns) and then riffle split. Pulps were analysed for Au via 30g Fire Assay and AAS finish (Au-AA21 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, Ti, U, V, W, Y, Zn and Zr) via multi acid digest with HF (GEO-4A01 method) and Inductively Coupled Plasma Mass Spectroscopy (ICPMS) via (MEMS61L method). Since 1st August 2017, all surface samples associated with the Newcrest option and farm-in agreement work program were prepared and analysed by Intertek Lae and Intertek Townsville. Samples were analysed for Au via 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, Ti, 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). Regional soil sample field duplicates are collected in the field while collecting the original sample. Field duplicates are collected from a new hole dug less than 1m from the primary sample site at the same depth as the primary sample. Field duplicates are collected so that 5% of samples (1 in 20) are a duplicate. Standards (OREAS45d, OREAS45e) are inserted into the sample sequence so that 5% of samples (1 in 20) are a standard. For rock chip sample QC, Standards (OREAS45d, OREAS45e) are inserted into the sample sequence so that 5% of samples (1 in 20) are a standard.
Verification of sampling and assaying	• N/A
Location of data points	All regional soil and rock chip sampling sites were surveyed by a hand held GPS for Easting, Northing and RL using WGS84, or using Tabar Island Grid (TIG).
Data spacing and distribution	 Regional soil sample sites are located on a 200m x 200m off-set grid. Subject to results, follow-up soil samples may be collected on 100m x 100m spacing in selected areas. A fine 100m x 100m spacing was used at Tupinda on Big Tabar Island. In some areas samples cannot be collected due to the presence of sacred sites or swamps. Rock chip sample locations are dictated by the presence of outcrop and are usually restricted to creeks, cliffs and breaks in slope.
Orientation of data in relation to geological structure	• N/A
Sample security	Only trained company personnel were allowed to collect the samples. All samples were held within a secure company building before dispatch. Prior to 1st August 2017, samples were dispatched to ALS in Brisbane for sample preparation and then Au and multi-element analysis. After 1st August 2017, samples were prepared at Intertek Lae and then analysed at Intertek Townsville.
Audits or reviews	No audits or reviews of sampling protocols have been completed.

<u>Surface Sampling - Section 2 Reporting of Exploration Results</u>

 $\underline{\text{(Criteria listed in the preceding section also apply to this section.)}}$

Criteria	Commentary
Mineral tenement and land tenure status	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.
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Drill hole Information	• N/A
Data aggregation methods	• N/A
Relationship between mineralisation widths and intercept lengths	• N/A
Diagrams	Figures show all sample sites material and immaterial to Exploration Results.
Balanced reporting	All rock chip, float and soils sample locations with any significant results are shown in Figures.
Other substantive exploration data	Included in the body of the report.
Further work	Included in the body of the report.

End of report