Quarterly Report / Q1 September FY19

- **Q1 September FY19 production in line with FY19 guidance**
- **Consolidated gold production of 98,547 ounces at A$919 per ounce AISC[2]**
- **2 millionth ounce poured at Gwalia**
- **Cash balance A$350 million and no debt[1] after payment of $0.08 FY18 final dividend**

Executive Summary

Operations

- **Consolidated gold production** for the quarter ended 30 September 2018 (Q1 Sep FY19) was 98,547 ounces (Q4 Jun FY18: 119,436 ounces).
- **Consolidated All-In Sustaining Cost**[2] (AISC) for Q1 September FY19 was A$919 per ounce (Q4 Jun FY18: A$812 per ounce). The average realised gold price for Q1 Sep FY19 was A$1,681 per ounce (Q4 Jun FY18: A$1,731 per ounce).
- **Gwalia** (Western Australia) produced its 2 millionth ounce under St Barbara ownership in early October. Gwalia recommenced production in 2008 and produced its first millionth ounce in 2014.
- **Gwalia** gold production for Q1 September FY19 was 62,685 ounces (Q4 Jun FY18: 84,537 ounces) at AISC of A$833 per ounce (Q4 Jun FY18: A$679 per ounce). Mined grade for Q1 Sep FY19 was 12.4 g/t Au (Q1 Jun FY18: 13.4 g/t Au) with 168 kt milled (Q1 Jun FY18: 205 kt).
- **Simberi** (PNG) gold production for Q1 September FY19 was 35,862 ounces (Q1 Jun FY18: 34,899 ounces) at AISC of A$1,068 per ounce (Q1 Jun FY18: A$1,135 per ounce).

Health & Safety

- The Total Recordable Injury Frequency Rate (TRIFR, 12 month moving average) increased from 2.1 at 30 June 2018 to 2.8 at the end of Q1 September FY19, due to five low severity incidents.

Gwalia Extension Project

- The Gwalia Extension Project (GEP) consists of two main components, a ventilation upgrade and paste aggregate fill (PAF). The overall project is on schedule and within budget. The PAF (underground crushing of waste and mixing with paste for stope filling) component is expected to be commissioned in Q3 March FY19. The ventilation shafts and surface ventilation infrastructure are 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 (FS) is underway modelling different configurations of slurry pumping and comminution (milling and grinding) and comparing the valuation and risks to the base-case of continued trucking.
- The feasibility study on GMX is due to be completed in Q3 March FY19.

Exploration

- **Gwalia Deeps Extension:** The Gwalia Deeps drilling program continued with the testing of southern extensions to the lode system at 2,000 metres below surface (mbs) with two daughter holes completed, GWDD16D and GWDD16E. Both holes returned significant intersections of the Mine Sequence, including:
  - 18.6 m @ 10.3 g/t Au from 1,951 mbs (GWDD16D)
  - 6.0 m @ 12.2 g/t Au from 1,952 mbs (GWDD16E)
- **Gwalia Seismic Program:** A 3D seismic survey program in an area located south of Gwalia was completed, as well as a series of 2D traverse lines located north of the Gwalia pit, aiming at discovering potential extensions of the Gwalia shear. Analysis has identified a third significant target further to the south of the previous targets, with a drill hole planned for Q2 December FY19.
- **Simberi Island** (PNG) – Sulphide drilling results beneath Sorowar pit continue to be encouraging, with mineralisation demonstrating similarities to the Pigiput sulphide deposit. Significant results relating to 23 additional holes are reported in the exploration section and ancillary tables, including (all intercepts down-hole):
  - 33 m @ 5.67 g/t Au from 55 m (125ORDGC003)
  - 16 m @ 1.97 g/t Au from 56 m (165ORDGC014)
  - 7 m @ 5.45 g/t Au from 157 m (165ORDGC014)EOH

  The closer spaced drilling required to inform an updated Sulphide PFS is expected to be completed in Q3 March FY19.

- Two diamond drill holes (SDH375 and SDH376) were completed for 1,450 metres on ML136 testing for conceptual copper-gold porphyry potential below the Pigiput open cut (see summary on page 10 and details in Figure 5.7). Assay results are pending.
- **Option and Farm-in with Newcrest** – Results were received for the two diamond drill holes (TTD087 and TTD088) completed at Kupo on Tatau Island, testing for copper-gold porphyry mineralisation (see summary on page 10 and details in Figure 5.9 and Table 5). A diamond drill hole will commence at the Banesa Prospect on Big Tabar Island in Q3 March FY19 testing for copper-gold porphyry mineralisation highlighted in historical drilling (Figure 5.10).

Finance (unaudited)

- Total cash at bank and term deposits at 30 September 2018 was A$350[1] million (30 Jun 2018: A$343 million).
- The Company generated an operational cash contribution[3] in Q1 September FY19 of A$79 million (Q4 Jun FY18: A$105 million).

Outlook

- Guidance for FY19 is maintained, 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.
  - Informed by exploration results to date, forecast exploration expenditure has increased to between A$24 and A$30 million (previously between A$21 and A$27 million), comprising:
    - A$12 to A$15 million (previously A$9 to A$12 million) for the Leonora region (incorporating Greater Gwalia area, Gwalia deep drilling and Gwalia seismic)
    - 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
17 October 2018

Quarterly presentation and audio webcast

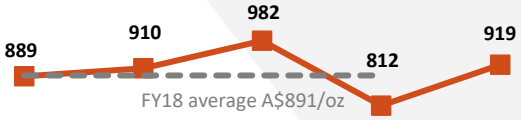
Bob Vassie, Managing Director & CEO, will brief analysts and investors on the Q1 September FY19 Quarterly Report at 11:00 am Australian Eastern Daylight Time (UTC + 11 hours) on Wednesday 17 October 2018. Participation on the conference call is by personal invitation only.

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.

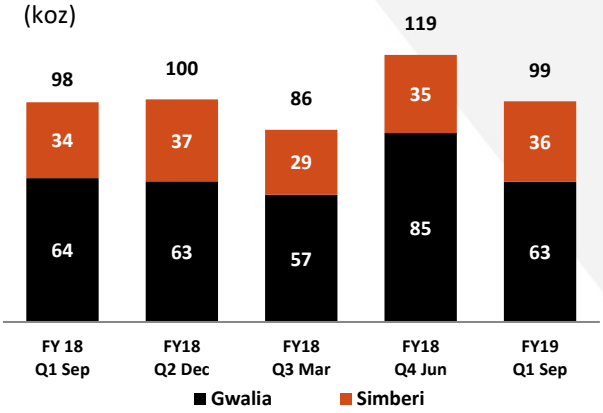
1 Financial information unaudited. Balance comprises $117 M cash, $233 M term deposits (maturing between January 2019 and June 2019) and excludes $1 M restricted cash.
2 Non IFRS measure, see appendix at the end of this report.
3 Non-IFRS measure, see cash movements table later in this quarterly report. Corresponds to Operational Cash Flow less sustaining capital, excludes growth capital of A$11 M (Q4 Jun: $10 M).

Consolidated results

Quarterly AISC (A$/oz)

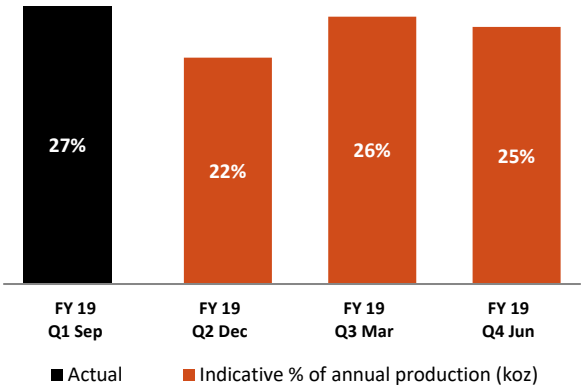


Quarterly Gold Production
(koz)



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		Q3 Mar FY18	Q4 Jun FY18	Year FY18	Q1 Sep FY19	Guidance FY19[1]
St Barbara's financial year is 1 July to 30 June		*Qtr to 31 Mar 2018*	*Qtr to 31 Mar 2018*	*Year to 30 June 2018*	*Qtr to 30 Sep 2018*	*Year to 30 June 2019*
Production						
Gwalia	oz	56,773	84,537	268,428	62,685	245 to 260 koz
Simberi	oz	29,112	34,899	134,661	35,862	105 to 115 koz
Consolidated	oz	**85,885**	**119,436**	**403,089**	**98,547**	**350 to 375 koz**
Mined Grade						Reserve grade[2]
Gwalia	g/t	15.0	13.4	12.5	12.4	7.5
Simberi	g/t	1.16	1.30	1.25	1.29	1.3
Total Cash Operating Costs[3]						
Gwalia	A$/oz	679	530	613	665	
Simberi	A$/oz	1,036	983	969	952	
Consolidated	A$/oz	**800**	**662**	**732**	**769**	
All-In Sustaining Cost[3]						
Gwalia	A$/oz	905	679	802	833	920 to 980
Simberi	A$/oz	1,129	1,135	1,068	1,068	1,275 to 1,375[4]
Consolidated	A$/oz	**982**	**812**	**891**	**919**	**1,030 to 1,100**

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.

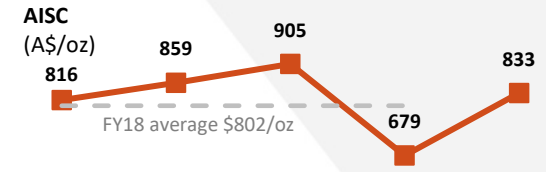
This report contains forward-looking statements that are subject to risk factors associated with exploring for, developing, mining, processing and the sale of gold. Forward-looking statements include those containing such words as anticipate, estimates, forecasts, indicative, should, will, would, expects, 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.

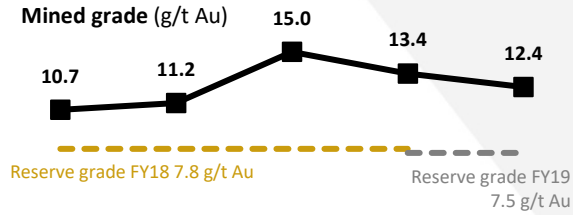
This report has been prepared by the Company based on information available to it, including information from third parties, and has not been independently verified. No representation or warranty, express or implied, is made as to the fairness, accuracy or completeness of the information or opinions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

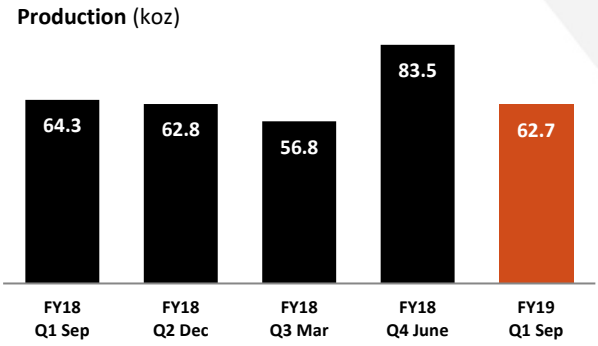
The Company estimates its reserves and resources in accordance with the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves 2012 Edition ("JORC Code"), which governs such disclosures by companies listed on the Australian Securities Exchange.

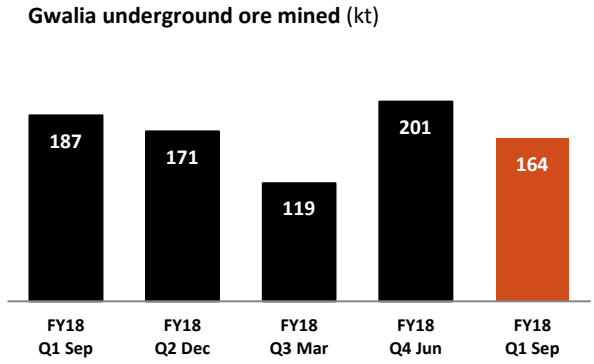
1 FY19 guidance released 26 July 2018 in Q4 June FY18 Quarterly Report
2 Ore Reserve grade at 30 June 2018, refer Ore Reserve and Mineral Resources Statement (released 27 August 2018).
3 Non-IFRS measure, refer Appendix.
4 Per initial FY19 guidance, US$960 to US$1,030 per ounce @ AUD 0.75

Gwalia, Leonora, WA









Operations

- The 2 millionth ounce produced since the mine restarted in 2008 under St Barbara ownership was poured at Gwalia in early October.
- Gwalia gold production for Q1 September FY19 was 62,685 ounces (Q4 Jun FY18: 84,537 ounces). Average mined grade for the quarter was 12.4 g/t Au (Q4 Jun FY18: 13.4 g/t Au).
- Ore sourced during the quarter was primarily from higher grade stopes in the South West Branch.
- Mined volume was 164 kt (Q4 Jun FY18: 201 kt). Gwalia Extension Project (GEP) development and raise boring activities were at a high level during the quarter, impacting mined volumes.
- Q1 September FY19 milled volume was 168 kt (Q4 Jun FY18: 205 kt), with recovery maintained at 98% (Q4 Jun FY18: 98%).
- AISC increased to A$833 per ounce for Q1 September FY19 (Q4 Jun FY18: A$679 per ounce), with the increase in unit costs primarily due to decreased production.

Outlook

- FY19 guidance is maintained, comprising:
  - 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).

Production Summary Gwalia		Q3 Mar FY18	Q4 Jun FY18	Q1 Sep FY19
Underground ore mined	kt	119	201	164
Grade	g/t	15.0	13.4	12.4
Ore milled [1]	kt	127	205	168
Grade [1]	g/t	14.2	13.2	11.8
Recovery	%	98	98	98
Gold production	**oz**	**56,773**	**84,537**	**62,685**
All-In Sustaining Cost [2]		A$ per ounce		
Mining		419	332	432
Processing		120	91	135
Site services		74	52	75
Stripping and ore inventory adjustments		22	13	(12)
		635	**488**	**630**
By-product credits		(2)	(2)	(1)
Third party refining & transport		1	2	2
Royalties		45	42	34
Total cash operating costs		**679**	**530**	**665**
less operating development		(110)	(58)	(73)
Adjusted cash operating cost		569	472	592
Corporate and administration		55	44	51
Corporate royalty		27	25	22
Rehabilitation		4	3	3
Capitalised mine & op development		206	99	146
Sustaining capital expenditure		44	36	19
All-In Sustaining Cost (AISC)		**905**	**679**	**833**

Gwalia Extension Project Expenditure

- Project expenditure to date (all capitalised):
  - FY17 $8 million
  - FY18 $32 million
  - Q1 FY19 $10 million
  - Project to date $50 million
- In addition to GEP, ventilation fans and bulk air cooling will be upgraded in FY20 at a cost of $9 million in anticipation of GMX and mining at greater depth.

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 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 overall project remains on schedule and within budget.
- In Q1 September FY19 construction of the underground crushing and mixing 'PAF' infrastructure continued. Several of the main crushing circuit items have been transported down the decline to the 1420 level PAF chamber and are being installed. The 1,400 m deep hole for the high-voltage cable has been duplicated from 800 mbs after the initial hole was abandoned. PAF is expected to be commissioned in Q3 March FY19.
- Raisebore activities are progressing well, with the first surface raisebore hole completed and the second currently reaming upward. Pilot drilling for the first underground raisebore has commenced.

Gwalia Extension Project Summary	
Announced	• 27 March 2017
Status	• Under construction
Capex	• A$100 million
Construction period	• Commenced Q3 Mar FY17 • Anticipated completion Q2 Dec FY20 • PAF completion due Q3 Mar FY19
Key components	
Ventilation upgrade	• Ventilation shafts, power & cooling • Supports mining to at least 2,000 mbs in FY 2024 [3] • Approx. 80% of project budget
Paste Aggregate Fill (PAF)	• Underground waste crushing, paste and aggregate fill mixing and pumping • Increase trucking efficiency • Improve stope cycle times • Reduce impact of vent shaft construction on production • Approx. 20% of project budget

1 Includes Gwalia mineralised waste
2 Non-IFRS measure, refer Appendix
3 Ore Reserves at 30 June 2018 extend down to 2,140 mbs, refer to Ore Reserves and Mineral Resources Statement as at 30 June 2018

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 (LOM) Plan to FY31 using published Resources and Reserves at that time[1], including anticipated mining of 500 koz of Inferred Resources[2] 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 underway modelling different configurations of slurry pumping and comminution (milling and grinding), comprising:
    - The initial PFS plan utilising two stage crushing with HPGR[3] underground at depth, along with positive displacement pumps underground.
    - Pump on the surface with three chamber pipe displacement feeder underground, allowing pumping of a coarser slurry .
- 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.
- The feasibility study on GMX is due to be completed in March 2019.
- Expenditure on GMX in Q1 September FY19 was $1 M.

Gwalia Mass Extraction PFS Summary		
Study milestones	• Pre-Feasibility study (PFS) announced 21 February 2018 • PFS updated 26 July 2018 • Feasibility study due Q3 March FY19	
Status	Prefeasibility Study[4]	
Capex	A$100 million[4]	
Key Components		
Underground crushing of ore and hydraulic hoist	Alternative 1 • 2 stage crushing and high-pressure grinding rolls underground (indicative 2 to 5 mm particle size) • Mixing 50/50 ore with water and pumping to surface • Pumps underground	Alternative 2 • 3 stage crushing underground (indicative 5 to 20 mm particle size) • Mixing 25% ore 75% water and pumping to surface • Pump on surface
New mining method – Island pillar[5]	• Applied selectively in thinner, low grade areas • Provides greater seismic stability • Allows longer strike length • Ability to mine thinner lodes productively	
Overall	• Increase mining rate to potentially 1.4 Mpta • Supports mine-life to FY31	

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

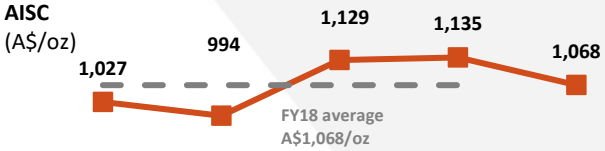
2 Inferred Resources per Ore Reserves and Mineral Resources Statements as at 30 June 2017 released 23 August 2017. There is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target will be realised.

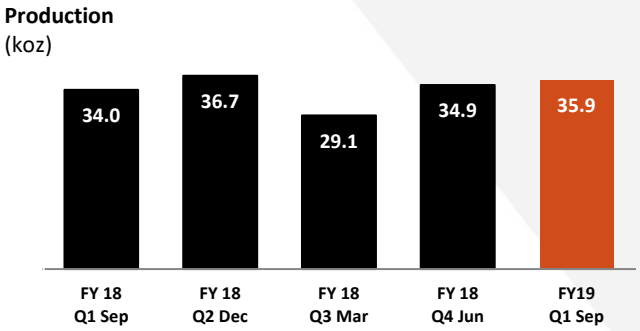
3 High pressure grinding rolls

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

Simberi, Papua New Guinea





Operations

- Simberi gold production for Q1 September FY19 was 35,862 ounces (Q4 Jun FY18: 34,899 ounces), the second highest production quarter on record.
- Milled grade at 1.48 g/t Au was a quarter record and a primary reason for the strong result, and reflected mining in higher grade zones in the Sorowar and Pigibo mine sequence.
- Recovery improved to 86%, exceeding the overall FY18 average of 85%.
- Q1 September FY19 All In Sustaining Cost (AISC) was A$1,068 per ounce (Q4 Jun FY18: A$1,135 per ounce). Exchange rate changes Q on Q (Simberi operates in US$) impacted the result.
- Drilling beneath Sorowar pit to identify further sulphide ore is ongoing, with significant results relating to 23 additional holes reported in the exploration section and ancillary tables.
- Results of the drilling to date continue to be encouraging, with Sorowar demonstrating similarities to the existing sulphide deposit under the Pigiput pit, including oxide, sulphide and transitional ore. The drilling to date has been at 60 m x 60 m spacing and an additional drill rig is being procured to accelerate the current program. The increased density drilling (at 30 m x 30 m) required to inform the updated Sulphide PFS is expected to be completed in Q3 March FY19.
- As previously announced, the Simberi Life of Mine plan [1] extends to FY21. Mining will continue throughout FY19 and FY20, with low grade stockpiles accumulated over FY18 to FY20 to be processed in FY21.
- It is anticipated that in Q3 March FY19 the Simberi Aerial Rope Conveyor ('Ropecon') will be shut for approximately 6 weeks whilst replacement ropes are being installed. Appropriate stockpiles, with some additional feed via trucking, will allow continued processing operations throughout this period.

Production Summary **Simberi**		**Q3 Mar FY18**	**Q4 Jun FY18**	**Q1 Sep FY19**
Ore & waste mined	kt	3,017	3,432	3,042
Ore mined	kt	1,007	1,158	1,078
Grade	g/t	1.16	1.30	1.29
Ore milled	kt	874	805	875
Grade	g/t	1.22	1.45	1.48
Recovery	%	85	83	86
Gold production	**oz**	**29,112**	**34,899**	**35,862**
All-In Sustaining Cost[2]		A$ per ounce		
Mining		373	374	351
Processing		362	370	353
Site services		253	205	202
		988	**949**	**906**
By-product credits		(3)	(6)	(6)
Third party refining & transport		9	8	8
Royalties		42	32	44
Total cash operating costs		**1,036**	**983**	**952**
Corporate and administration		55	44	51
Rehabilitation		19	17	19
Sustaining capital expenditure		19	91	46
All-In Sustaining Cost (AISC)		**1,129**	**1,135**	**1,068**

Outlook

FY19 guidance is maintained and comprises:

- Production of between 105,000 and 115,000 ounces
- AISC of between A$1,275 and A$1,375 per ounce[3]
- Sustaining capex of A$8 to A$10 million.

1 LOM based on existing Reserves, refer to Ore Reserves and Mineral Resources Statement as at 30 June 2018, released 27 August 2018

2 Non-IFRS measure, refer Appendix

3 Per initial FY19 guidance, US$960 to US$1,030 per ounce @ AUD 0.75

Exploration – Results September 2018 Quarter

Gwalia Exploration Program, Leonora WA

- **Gwalia Deeps Extension:** The Gwalia Deeps drilling program continued with the completion of daughter holes GWDD16D and GWDD16E. These drill holes were designed to test southern extensions to the Gwalia deposit at approximately 2,000 mbs. The holes entered the Mine Sequence at down hole depths of 2,050 m and 2,040 m respectively and passed through intervals interpreted to represent Main Lode, South West Branch, South Gwalia Series (SGS2) and West Lode (WL1), contained within a broader mineralised shear zone.
- Significant intercepts from these holes are indicated below (all intercepts downhole) with full details set out in Figures 1.0 to 1.3 and Table 1 in the Exploration Figures and Tables appendix.

  GWDD16D:

  - 4.3 m @ 1.6 g/t Au from 2,053 m
  - 18.6 m @ 10.3 g/t Au from 2,063 m

    including 6.7m @ 23.9 g/t Au
  - 8.1 m @ 4.7 g/t Au from 2,100 m
  - 0.8 m @ 12.1 g/t Au from 2,130 m

  GWDD16E:

  - 6.0 m @ 12.2 g/t Au from 2,041 m

    including 2.2m @ 22.4 g/t Au
- **Gwalia Seismic Program:** Following the successful completion of the Greater Gwalia 3D seismic program during FY17, another program of work to identify potential extensions to the Gwalia deposit through the application of seismic reflection technology was undertaken. The program of work comprised of:
  - A 3D seismic survey infill of a 4 km^2 block located south of the Gwalia waste dump in order to increase the resolution of the southern portion of the existing seismic data.
  - A series of five 2D traverse lines, totalling approximately 15km, located north of the Gwalia pit aiming to discover potential northern extensions of the Gwalia shear.
- Downhole seismic surveying of surface drill holes GWDD20 and GWDD21 was completed. These holes were drilled to test two significant target areas and are located to the immediate north and south of the Gwalia deposit. The surveys incorporated Full Waveform Sonic (FWS) and Vertical Seismic Profile (VSP) logging on both drill holes. Processing, interpretation and merging into the existing seismic dataset is underway with results expected in Q2 FY19.
- The seismic program also identified a third target area, to the south of the first two targets (Figure 1.0, 1.2)
- **Horse-Paddock Well, Leonora WA:** Following results obtained from the Induced Polarisation (IP) and Sub Audio Magnetic (SAM) surveys conducted at Horse-Paddock Well a follow up RC drilling program, shown in Figure 2.0 in the Exploration Figures and Tables appendix, has been prepared and is expected to commence early in Q2 FY19.

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 (1,164 km^2) for 416 blocks (Figure 3.0).
- The final assay results were received for the remaining 100 holes from a 313 hole (PJAC01548 to PJAC1860), 20,304 metre aircore drill program completed in Q4 June FY18 (Figures 3.1 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.
- Aircore drilling results for southeast Yindi station extended the previously defined north-northwest striking, semi-continuous zone of anomalous gold (≥ 50 ppb Au), lead, bismuth and tungsten along strike to the north (Figure 3.2). The mineralised trend now extends for over 7km.
- A 348 hole (PJAC1861 to PJAC2208), 14,022 metre lake aircore drilling program was completed in Q1 September FY19. The program tested 5 targets under Lake Rebecca, including Graham's Find, the Mulgabbie trend and three geophysical targets. Final assay results were received for holes PJAC1861 to PJAC1912 and preliminary composite results for holes PJAC1913 to PJAC2208. Best results received to date (all intercepts downhole, details in Figures 3.1, 3.3 and 3.4 and Table 2) include:
  - PJAC1939: 4 m @ 559 ppb Au from 52m, and
  - PJAC2144: 4 m @ 558 ppb Au from 28m
- Lake aircore drilling at Graham's Find tested the southern 1.4 km strike length of the trend that is located under Lake Rebecca. Preliminary results have assisted in defining a 3.4 kilometre long, north-northwest striking zone of anomalous gold (≥ 100 ppb Au) and arsenic (≥100 ppm As) in bedrock (Figure 3.3). A preliminary PJAC2073 intercept of 8 m @ 1853 ppb Au is associated with a mixture of transported material and the top few metres of weathered bedrock. Lake aircore drilling across the Mulgabbie trend identified similar geology as seen along strike to the north and south. Anomalous gold (≥ 50 ppb Au) and arsenic (≥50 ppm As) was identified in mafic chlorite schist (Figure 3.4). Lake aircore drilling of the geophysical targets located in the central Pinjin tenements failed to identify any anomalous gold in bedrock.
- A 215 hole aircore drill program for 13,000 metres commenced in August 2018 testing 9 targets. The program is

expected to be completed in Q2 December FY19 (Figures 3.0 to 3.4).

- Licence E31/999 was subject to its sixth year compulsory partial surrender. Ground was selected for surrender where systematic exploration testing did not define bedrock geochemical anomalies warranting further work.

Back Creek, NSW (EL 8214 and EL 8530)

- A 24 hole (BKAC0001 to BKAC0024) aircore drill program for 2,727 metres was completed in Q1 September FY19. Two drill fence lines with holes spaced between 400 metres and 800 metres apart were designed to test two geophysical targets in the Eastern part of EL8214 (Figure 4.0). No significant gold or copper results were received. Further review of the multi-element and Analytical Spectral Device (ASD) results will be completed. Drilling of the two western and one northern target is expected to occur in Q3 March FY19.

Simberi, Tatau & Tabar Islands, Papua New Guinea (ML 136, EL 609 and EL 2462)

- **Simberi Island** (PNG) – Sulphide drilling beneath Sorowar pit to identify sulphide ore continued in the quarter (Figures 5.0 to 5.6, Table 3). Results were encouraging, with mineralisation demonstrating similarities to the Pigiput sulphide deposit. The closer spaced drilling required to inform the Sulphide PFS is expected to be completed in Q3 March FY19. Significant results included (all intercepts downhole):

  125SORDGC003:

  - 33 m @ 5.67 g/t Au from 55 m,

    including 4 m @ 29.4 g/t Au from 80 m

  165SORDGC014:

  - 16 m @ 1.97 g/t Au from 56 m, and
  - 5 m @1.84 g/t Au from 78 m, and
  - 13 m @1.18 g/t Au from 109 m, and
  - 7 m @ 5.45 g/t Au from 157 m (end-of-hole (EOH))

- Also on Simberi Island (Figure 5.0), diamond drilling continued to test conceptual copper - gold porphyry potential below the Pigiput open cut and targeting potential high-grade gold sulphide targets within ML136.

- Two diamond drill holes (SDH375 and SDH376) were completed for 1,449.5 metres during Q1 September FY19 testing for porphyry copper - gold mineralisation below the Pigiput open cut (Figure 5.7). SDH375 was drilled to a final depth of 729.3m to test for mineralisation approximately 200 metres to the southeast of the first hole SDH371. SDH376 was drilled to a final depth of 720.2 metres depth to test for mineralisation approximately 225 metres to the northeast of the first hole SDH371. SDH375 intersected polymict hydrothermal breccias and brecciated to competent intrusive. A mixed package of propylitic, sericitic and potassic alteration was intersected. Trace molybdenite mineralisation was observed locally between 460 and 680 metres. SDH376 intersected sediments, polymict hydrothermal breccias and brecciated intrusive. Potassic alteration increased in intensity down-hole to 440 metres, with trace visible molybdenite observed between 350 and 440 metres. Phyllic and propylitic alteration was present from 440 metres to end of hole. Once assay and ASD results are received, a review will be conducted prior to further work.

- Three diamond drill holes (SDH372 to SDH374) were completed for 1,112 metres during Q4 June FY18 testing potential high-grade gold sulphide targets within ML136 (Figure 5.7). The drill holes returned no significant results and sterilised down dip potential at Pylon 1 and Samat Deep targets.

- Exploration continued on EL609 on Tatau and Big Tabar Islands during Q1 September FY19. Work focussed on the execution of diamond drilling at Kupo on Tatau Island for both St Barbara as well as part of the Newcrest Option and Farm-in.

- A second diamond drill hole TTD088 was drilled a further 270 metres in July at Kupo Prospect on Tatau Island to a final depth of 860.2 metres (Figures 5.8 and 5.9). This formed part of the St Barbara work program testing a northern porphyry target associated with anomalous arsenic - bismuth - gold - molybdenum surface geochemistry. TTD088 intersected potassic altered monzodiorite with local trace bornite and chalcopyrite in fractures below 630 metres depth. Best results (all intercepts downhole, details in Figure 5.9 and Table 5) include:

  TTD088:

  - 108 m @ 0.16% Cu and 0.06 g/t Au from 637 m, including 6 m @ 0.49% Cu and 0.39 g/t Au from 733 m

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 single diamond drill hole (TTD087) was completed at Kupo for 770 metres during Q4 June FY18. TTD087 intersected monzonite and monzodiorite with potassic alteration and localised trace chalcopyrite in fractures present below 600 metres depth. Assay results for TTD087 were returned during the quarter. Best results (all intercepts downhole, details in Figure 5.9 and Table 5) include:

TTD087:

- 26 m @ 0.15% Cu and 0.03 g/t Au from 230m, and
- 72 m @ 0.21% Cu and 0.07 g/t Au from 603m, including 10 m @ 0.55% Cu and 0.08 g/t Au from 611m

- 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.
- Preparations are underway to complete a single deep diamond drill hole at the Banesa copper - gold porphyry prospect on Big Tabar Island testing for mineralisation highlighted in historical drilling (Figure 5.10). Drilling is expected to commence in Q3 March FY19.

Expenditure Q1 September FY19 (unaudited)

Expenditure on mineral exploration is shown below:

	Q4 Jun FY18	Q1 Sep FY19	
	A$ million		
Australia	1.1	2.1	(expensed)
Pacific	1.5	1.7	(expensed)
Gwalia	1.3	1.7	(capitalised)
	3.9	**5.5**	

Planned Exploration – Q2 December FY19

The map below shows current and planned target areas for Q2 December FY19.

Exploration in Q2 December FY19 will focus on:

- **Greater Gwalia**
  - 2,000 – 2,200 mbs: Assess target opportunities, and commence drilling of a parent hole (GWDD23) to determine southern strike extension of the Gwalia lode system.
  - 2,000 – 2,200 mbs: Drill daughter holes, directed at extending the Indicated Mineral Resource further to the south.
  - 2600mbs: Test the strike extension of the Gwalia deposit by drilling a daughter hole (GWDD19B) to step out 200m to the south of the GWDD19A intersection.
  - Seismic Target Drilling: Drill a parent hole (GWDD22) to test a new area located further to the south than previous targets.
- **Leonora Region**
  - Horse-Paddock Well: RC drilling program to test high priority Geophysical targets.
  - Sub-Audio Magnetics (SAM) and Induced Polarisation (IP) work program in the Trevor Bore, Kailis East and Gwalia North prospect areas.
- **Pinjin**
  - Assessment of the results from the 348 hole, 14,022 metre Pinjin lake aircore drilling program and design any follow-up drilling.
  - Complete the current Pinjin 215 hole, 13,000 metre aircore drilling program testing 9 targets.
  - Design and complete a 16 hole, 3,150 metre Pinjin Reverse Circulation (RC) drilling program testing the best six gold in bedrock aircore anomalies.
- **Back Creek (NSW)**
  - Assessment of the bottom of hole multi-element geochemistry and ASD data from the 24 hole 2,727 metre Aircore drilling program.
- **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.
  - Assessment of the results of the two holes (SDH375 and SDH376) testing the potential for copper - gold porphyry mineralisation at depth below the Pigiput open cut.

- **Tabar Islands (St Barbara)**
  - 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)**
  - As part of the Newcrest option period work program, advance the preparations towards commencing diamond drilling at the Banesa gold - copper porphyry target on Big Tabar Island.
  - Interpret the results of the diamond drill holes TTD087 and TTD088 completed at Kupo on Tatau Island.

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.
- Subsequent to the end of the quarter, St Barbara entered into an Earn-in and Joint Venture with Australian Potash Limited (ASX: APC), covering tenements at the Lake Wells Gold Project. Under the agreement St Barbara can earn a 70% interest in the project through total expenditure of $7.0 million.
- At the date of this report, St Barbara holds the following investments in Australian explorers [1] :

Catalyst Metals Limited (ASX:CYL)	16%
Duketon Mining Limited (ASX:DKM)	12%
Peel Mining Limited (ASX:PEX)	18%
Prodigy Gold (ASX:PRX)	10%

Health & Safety

- The Total Recordable Injury Frequency Rate (TRIFR) increased from 2.1 at the end of Q4 June FY18 to 2.8 at the end of Q1 September FY19, due to five low severity recordable injuries.
- Health and safety plans and strategies have taken into account the need for improvements in hazard identification and the introduction of effective controls to reduce and eliminate low severity recordable injuries. Plans introduced to address these target areas will be continually monitored through Q2 FY19.

Community

- The Company has joined the New Ireland Provincial Malaria Alliance (NIPMA) in PNG, which is seeking to eliminate malaria from the New Ireland Province.
- In partnership with Saracen Mineral Holdings Ltd, the Company is supporting the Shooting Stars netball program for Aboriginal girls in Leonora. Shooting Stars uses netball as a vehicle to encourage greater attendance at school for young Aboriginal girls living in remote Western Australian communities.

1 Shareholdings as notified by St Barbara in substantial holder notices

Finance (unaudited)

- 97,447 ounces of gold were sold in Q1 September FY19, at an average realised gold price of A$1,681 per ounce (Q4 Jun FY18: 111,822 ounces at A$1,731 per ounce).
- Total cash at bank and term deposits at 30 September 2019 was A$350 million[1] (31 March 2018: A$343 million) after growth capex of $11 million, income tax payments of $6 million[2] , $4 million investments and $28 million full year dividend payment.
- The Company generated an operational cash contribution[3] in Q1 September FY19 of A$79 million (Q4 Jun FY18: A$105 million). Cash movements for FY19 are summarised in the following table:

Cash movements & balance A$M (unaudited)	**Q3 Mar FY18**	**Q4 Jun FY18**	**Q1 Sep FY19**
Leonora - operating cash flow [4]	56	93	45
Simberi - operating cash flow [4]	23	12	34
Operational cash contribution	79	105	79
Leonora - growth capital	(7)	(10)	(11)
Rehabilitation , land management & project costs	-	(1)	(2)
Corporate costs [5]	(5)	(5)	(8)
Corporate royalties	(2)	(2)	(1)
Exploration [6]	(3)	(4)	(6)
Investments [7]	(4)	(4)	(4)
Income tax payments [2]	(2)	(7)	(6)
Working capital movement [8]	4	9	(9)
Cash flows before finance costs	60	81	32
Net interest income	2	1	3
Dividends paid	(16)	-	(28)
Net movement for period	46	82	7
Cash balance at start of quarter	215	262	343
Cash balance at end of quarter	**261**	**343**	**350**
Closing balance excludes restricted cash	1	1	1

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

FY19:	**68,000** ounces of forward gold contracts to be delivered in monthly instalments between November 2018 and June 2019 at **A$1,750** per ounce (remaining FY19 component of original 100,000 ounce hedges 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).

1 Financial information unaudited. Balance comprises $117 M cash, $233 M term deposits (maturing between January 2019 and June 2019), excludes $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 $11 million.
4 Net of sustaining capex
5 Cash corporate costs in Q1 September FY19 include payment of short term incentives for employees (inc. key management personnel) accrued at 30 June 2018
6 Includes Gwalia deep drilling
7 Refer 'Explorations Investments' earlier in this report
8 Working capital movement in Q1 September FY19 was predominantly due to increased gold-in-circuit inventory and payment of creditors

Corporate

- During the quarter the Company joined the UN Global Compact (unglobalcompact.org) and the Extractive Industries Transparency Initiative (eiti.org).
- On 14 September 2018 the Company released its Notice of Annual General Meeting, Annual Report, Corporate Governance Statement and Sustainability Report .
- The Company's Annual General Meeting will be held on 24 October 2018 as set out in the Notice of Annual General Meeting.
- As noted in the Annual Report, in FY18 the Board has appointed a world - wide executive search firm to identify an additional Non - Executive Director to complement the skills and experience of the existing Directors and which would increase the number of Directors on the Board from four to five. This process is continuing at the date of this report.

AFP Investigation

- In 2014, the Company announced that its internal reporting mechanisms had identified the provision of benefits to a foreign public official that may violate its Anti-Bribery and Anti-Corruption Policy or applicable laws in Australia or in foreign jurisdictions. The amount of the benefits provided to the foreign public official was not material to the Company. The Company self-reported the matter to relevant authorities, including the Australian Federal Police.
- Recently the Australian Federal Police has advised the Company that it has concluded its investigation and determined there is no action to be taken against the Company or its current or former employees.

Share Capital	
Issued shares	
Opening balance 30 June 2018	**520,516,390**
Issued[1]	3,774,209
Closing balance 30 Sep 2018	**524,290,599**
Unlisted employee rights	
Opening balance 30 Jun 2018	**2,288,528**
Issued	nil
Exercised as shares	nil
Lapsed	nil
Closing balance 30 Sep 2018	**2,288,528**
Comprises rights expiring:	
30 June 2019 [2]	1,070,277
30 June 2020 [3]	1,218,251
Closing balance 30 Sep 2018	**2,288,528**

Scheduled Future Reporting

Date	Report
24 October	Annual General Meeting
Late January 2019	Q2 December FY19 Quarterly Report

Dates are tentative and subject to change

1 ASX Appendix 3B 26 Sep 2018 shares issued in accordance with the St Barbara Ltd Dividend Reinvestment Plan.

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

3 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
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

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

American Depositary Receipt enquires:

BNY Mellon Depositary Receipts

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[1]
Van Eck Associates Corporation	13.3%
Vinva Investment Management	5.2%

1 As notified by the substantial shareholders to 16 October 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 2018' released to the Australian Securities Exchange (ASX) on 27 August 2018 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 27 August 2018 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 27 August 2018 'Ore Reserves and Mineral Resources Statements 30 June 2018' available at www.stbarbara.com.au.

Exploration Figures and Tables

Figure 1.0: Leonora: Gwalia Deeps Drilling Program Q1 FY19, Plan View

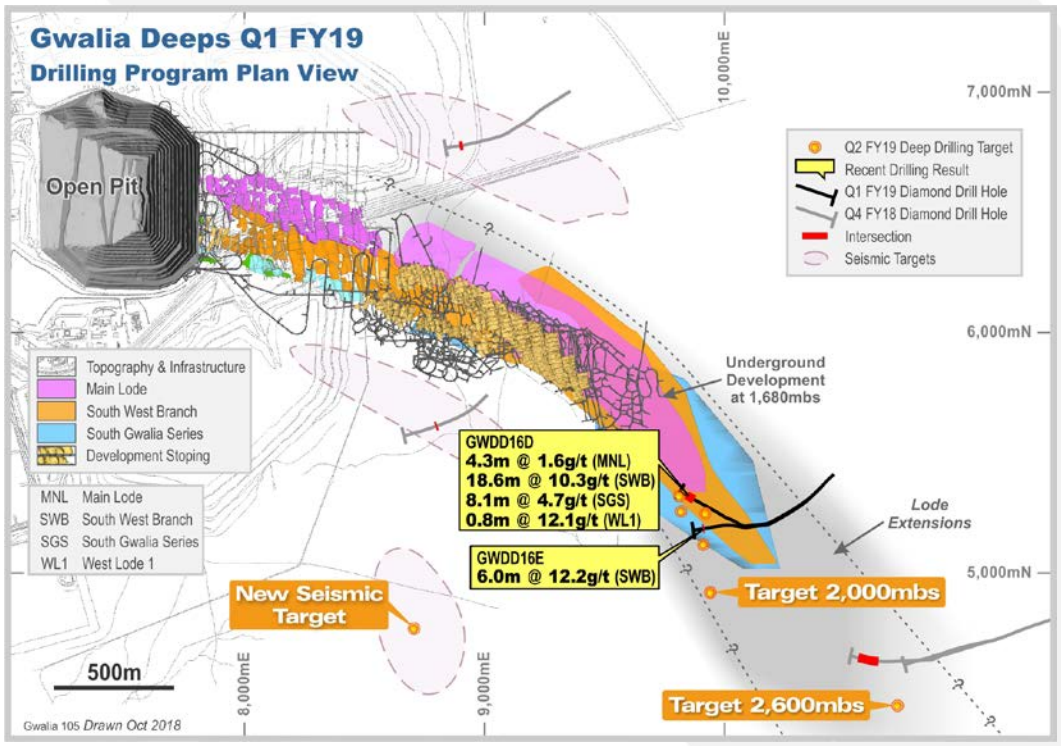


Figure 1.1: Gwalia Deeps Drilling Program Q1 FY19, Cross Section (looking north)

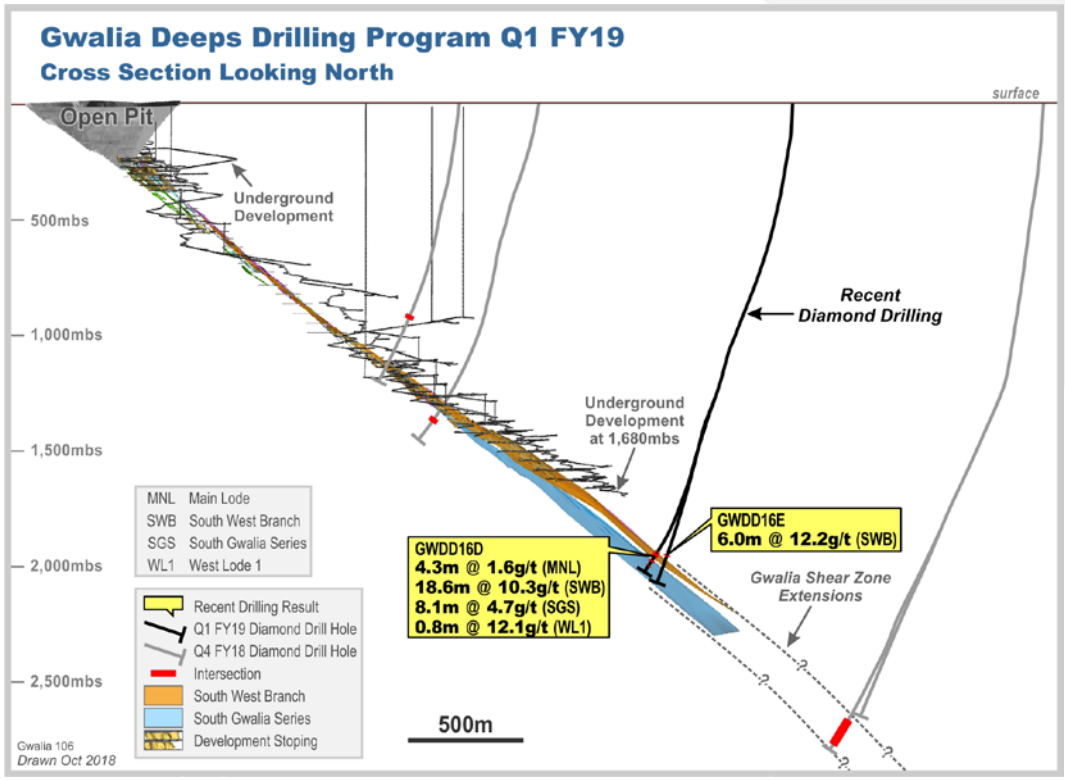


Figure 1.2: Gwalia Deeps Drilling Program Q1 FY19 Results, Long Section

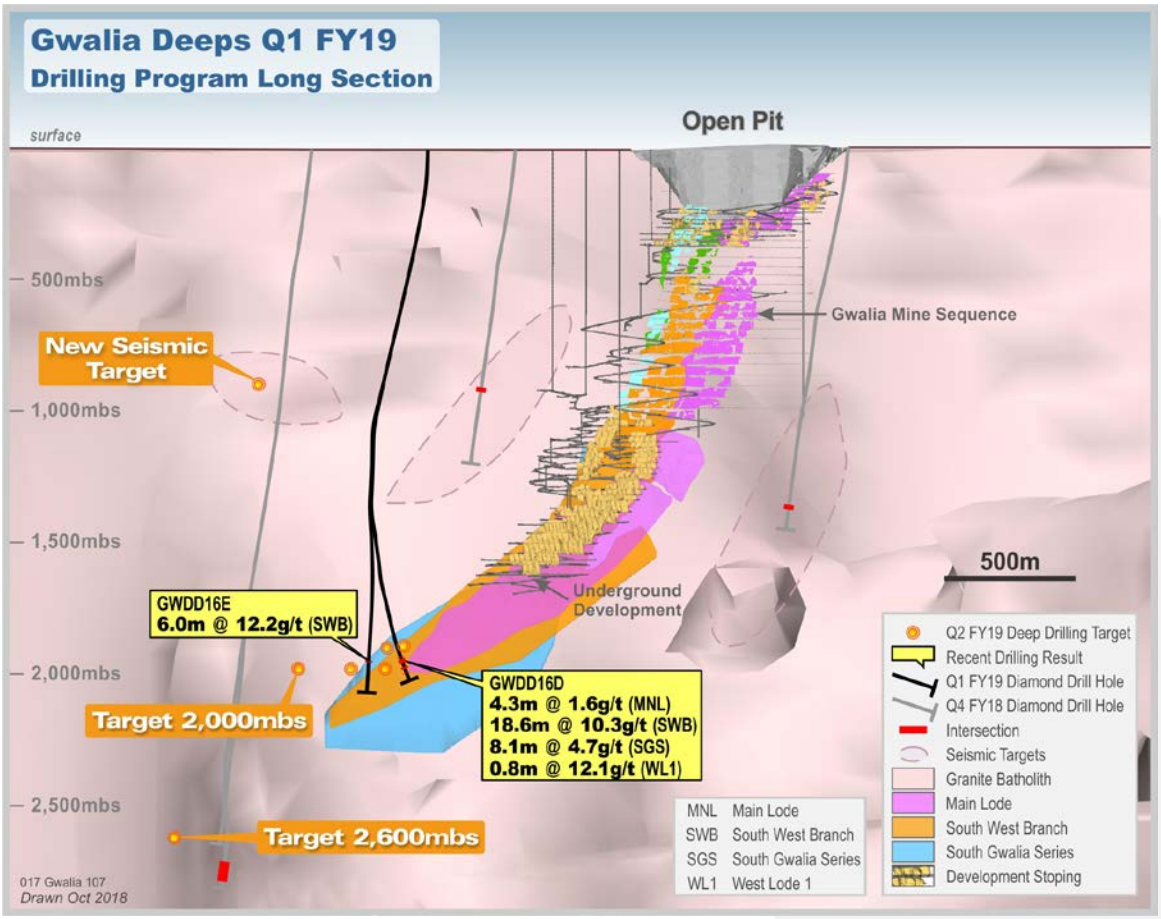


Figure 1.3: Gwalia Deeps Drilling Program Q1 FY19 Results, Long Section (looking west)

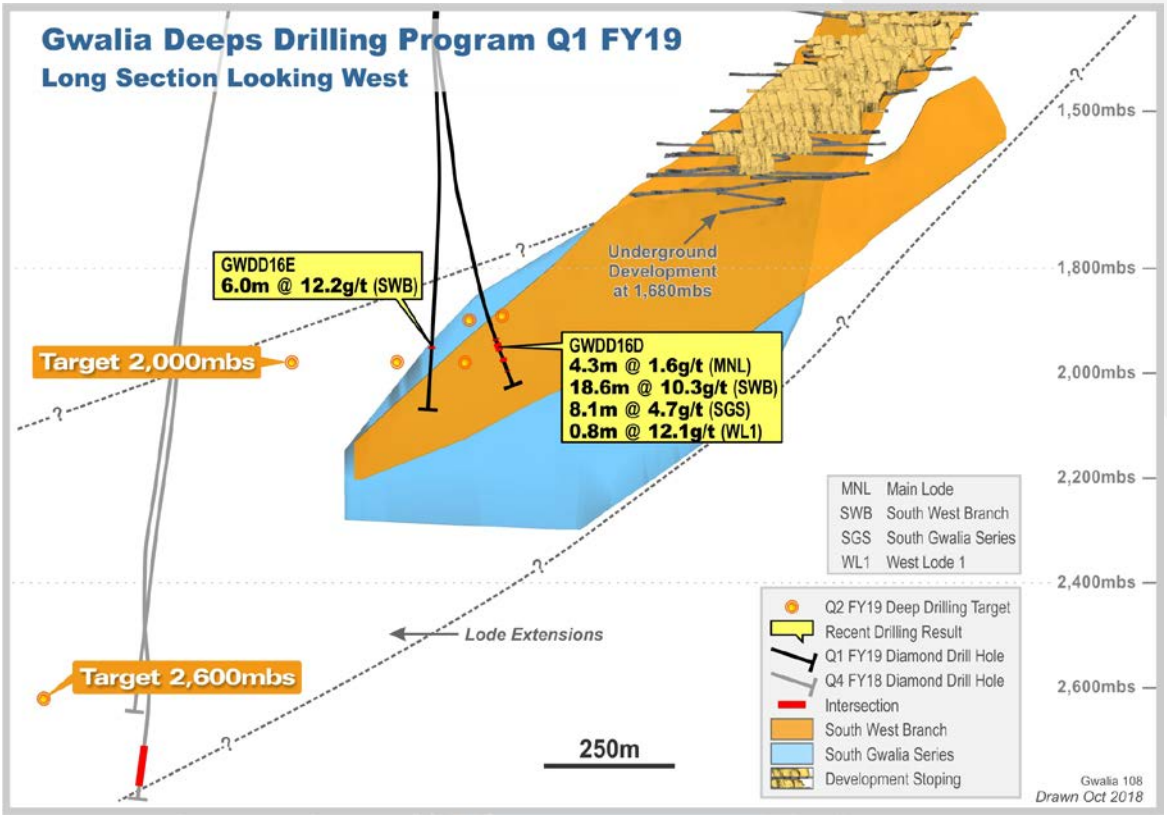


Figure 2.0: Horse Paddock Well – IP/SAM Survey Q1 FY19

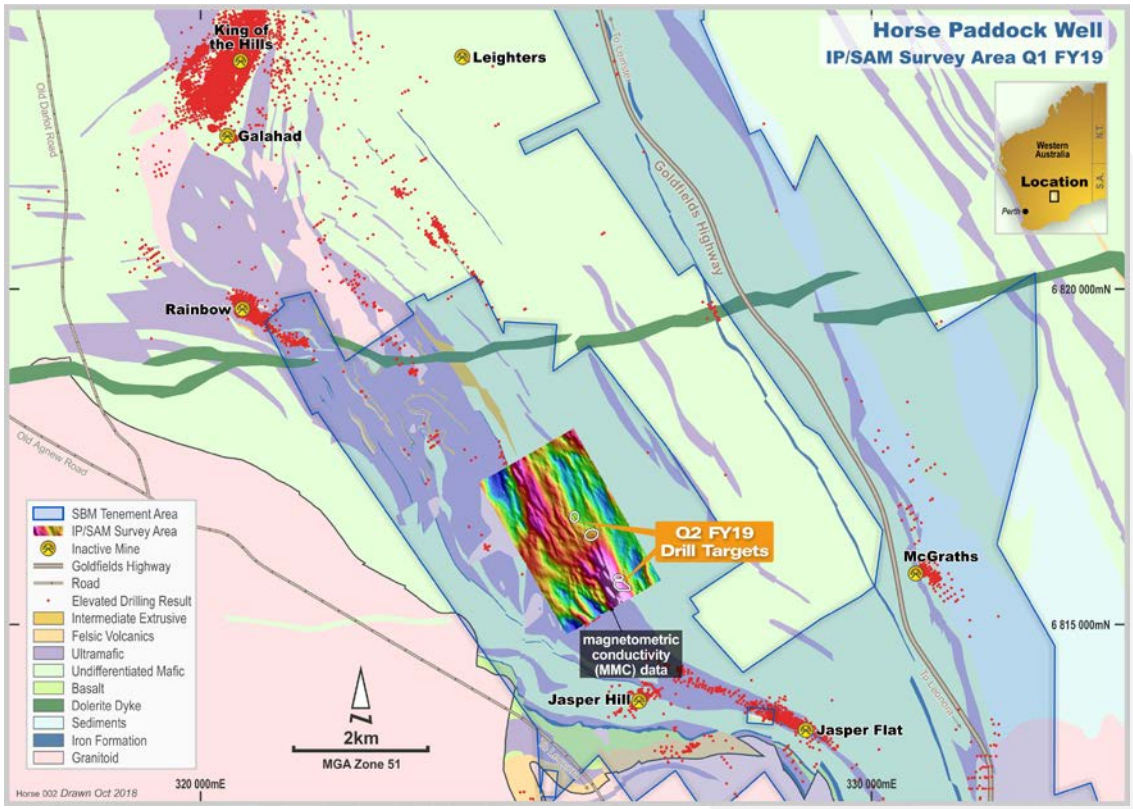


Figure 3.0: Pinjin Project Aircore and Reverse Circulation Drilling Location Map

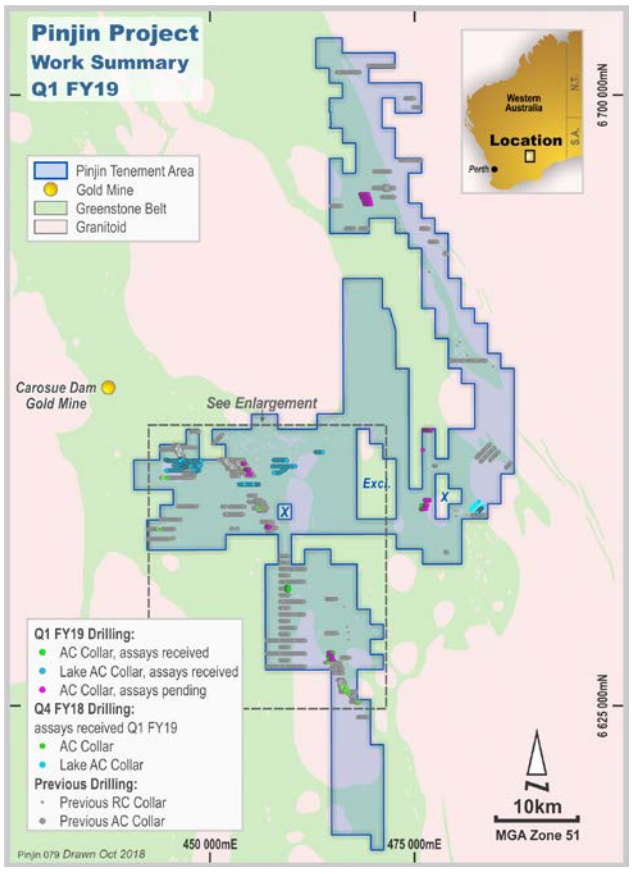


Figure 3.1: Pinjin Project Drilling Results Map (Enlargement) – maximum gold in bedrock

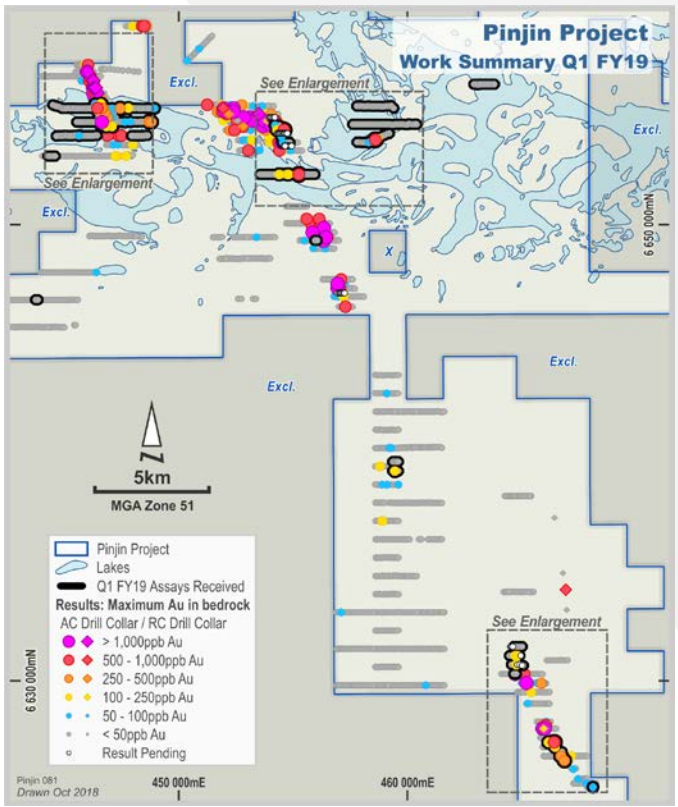


Figure 3.2: Southeast Yindi Drilling Results Map (Enlargement) – maximum gold in bedrock

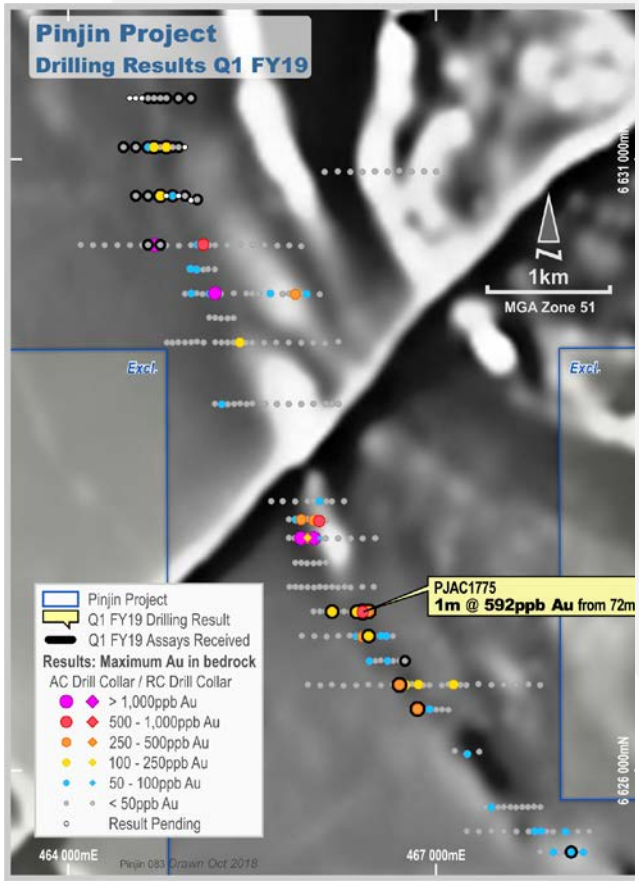


Figure 3.3: Graham's Find Drilling Results Map (Enlargement) – maximum gold in bedrock

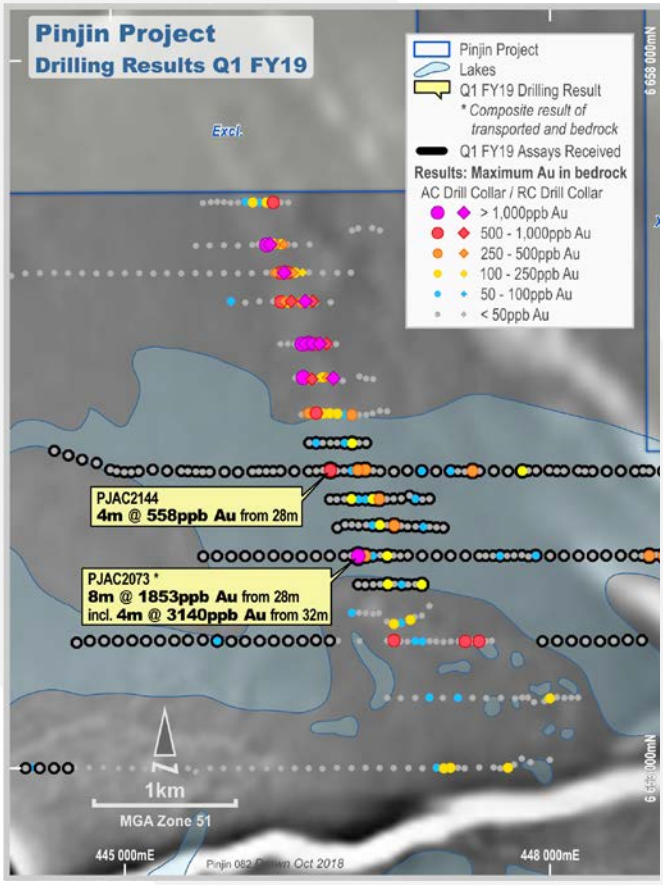


Figure 3.4: Mulgabbie Trend Drilling Results Map (Enlargement) – maximum gold in bedrock

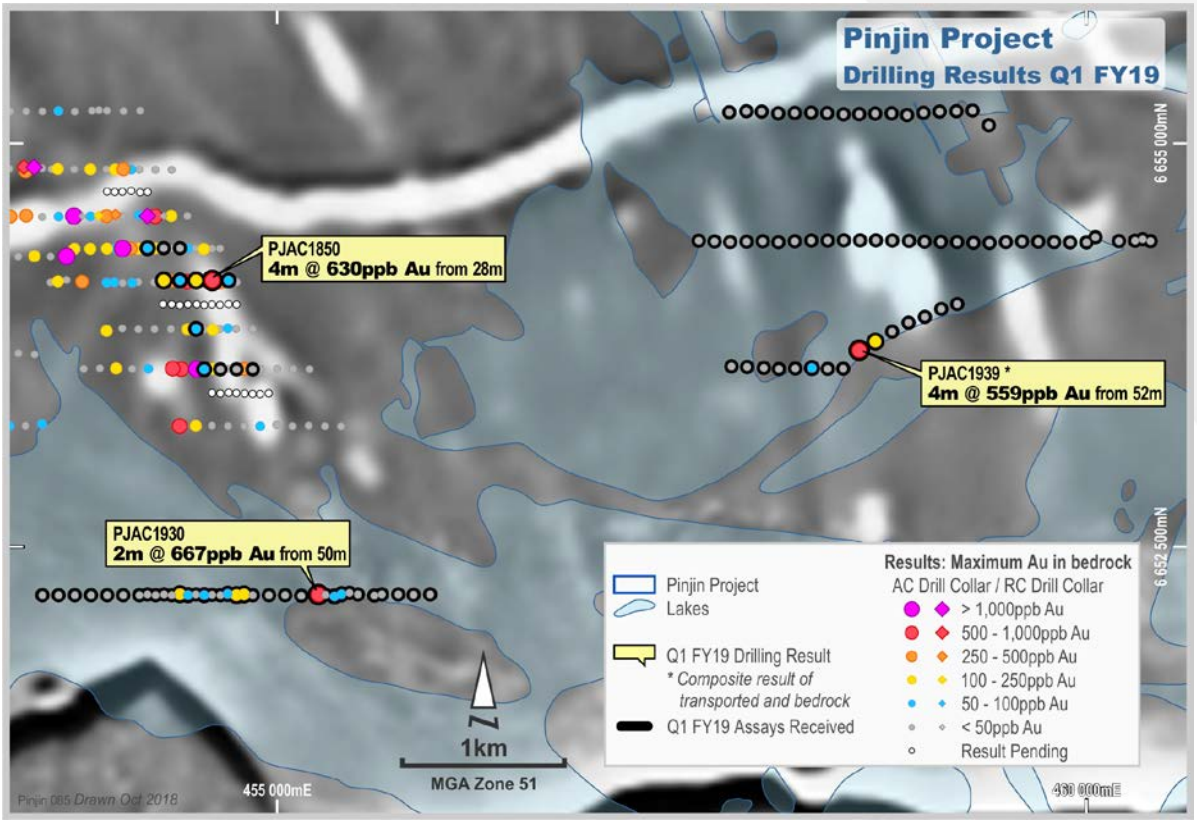


Figure 4.0: Back Creek Drilling Results Map – maximum gold in bedrock

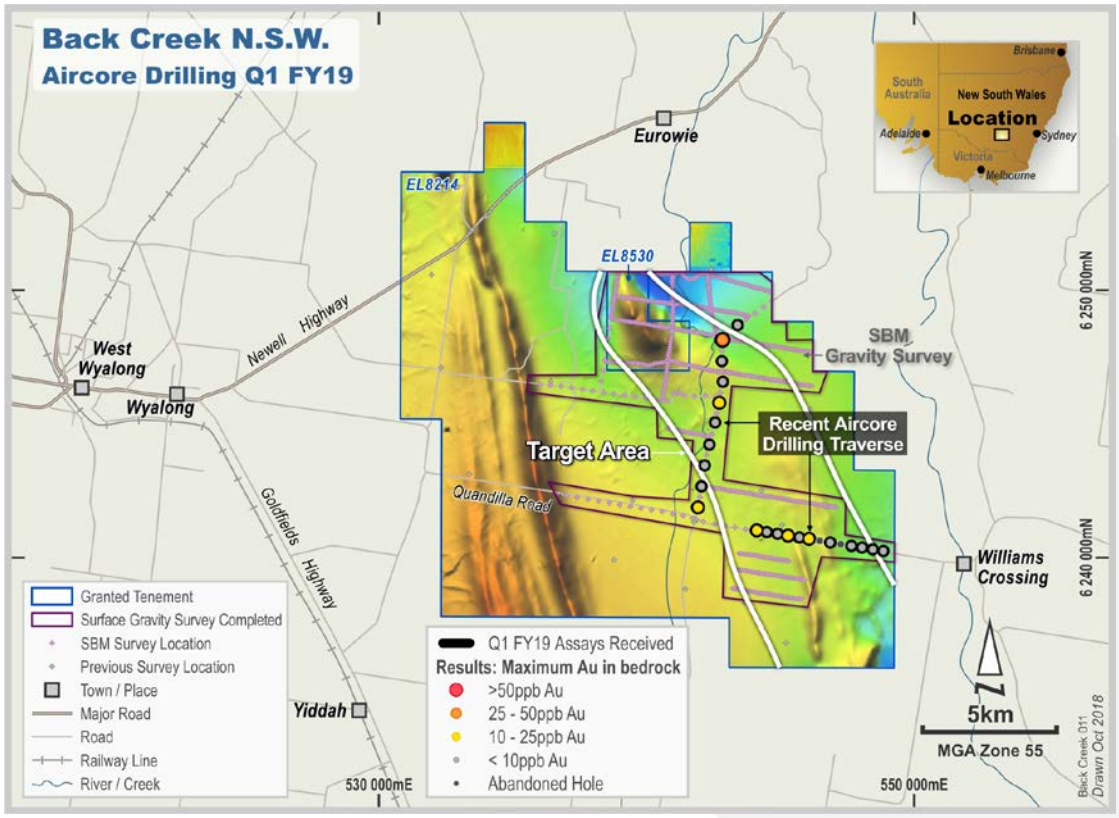


Figure 5.0: Tabar Islands Location Map, Papua New Guinea

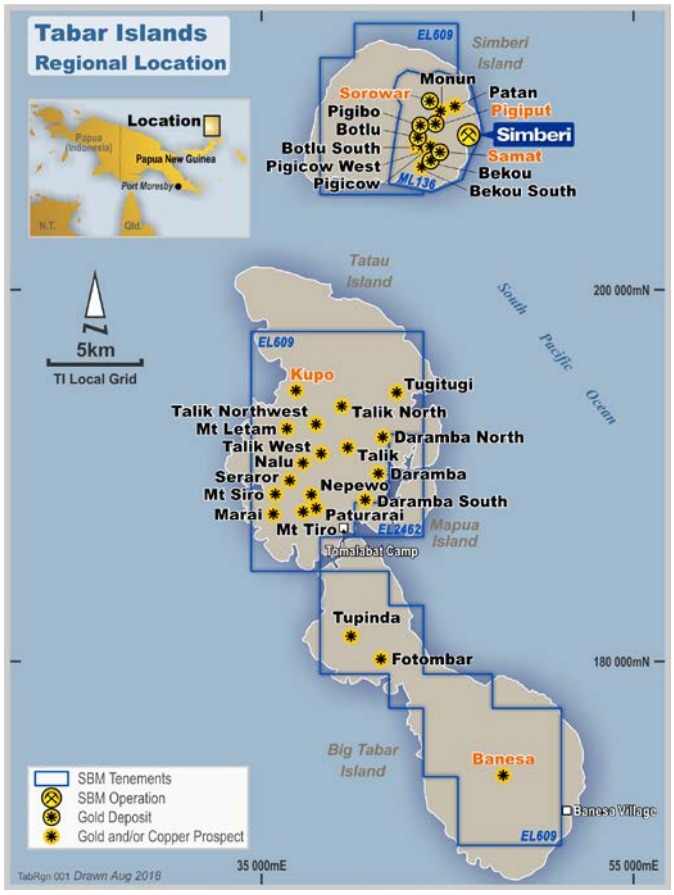


Figure 5.1: Location of Sorowar Sulphide Drill Cross Sections, Simberi Island, Papua New Guinea

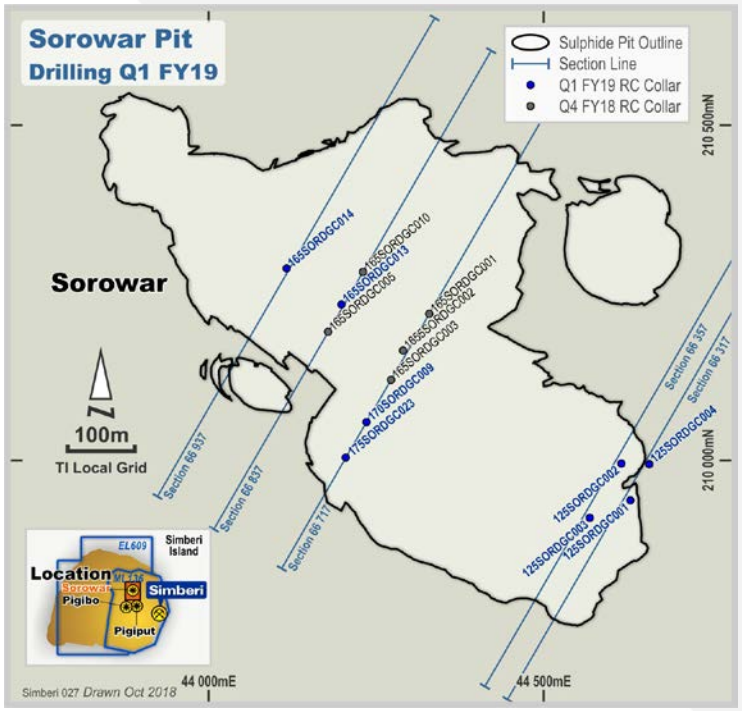


Figure 5.2: Sorowar Sulphide Drill Cross Section (66,937), Simberi Island, Papua New Guinea

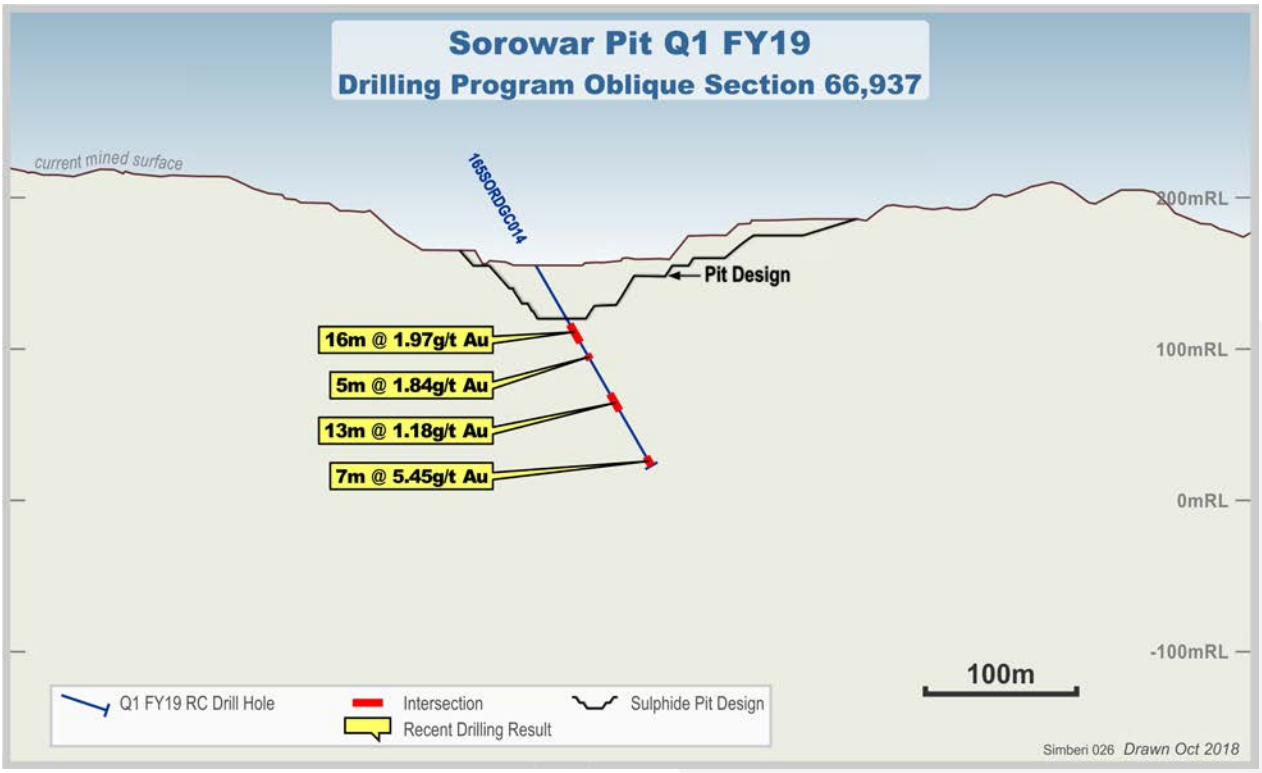


Figure 5.3: Sorowar Sulphide Drill Cross Section (66,837), Simberi Island, Papua New Guinea

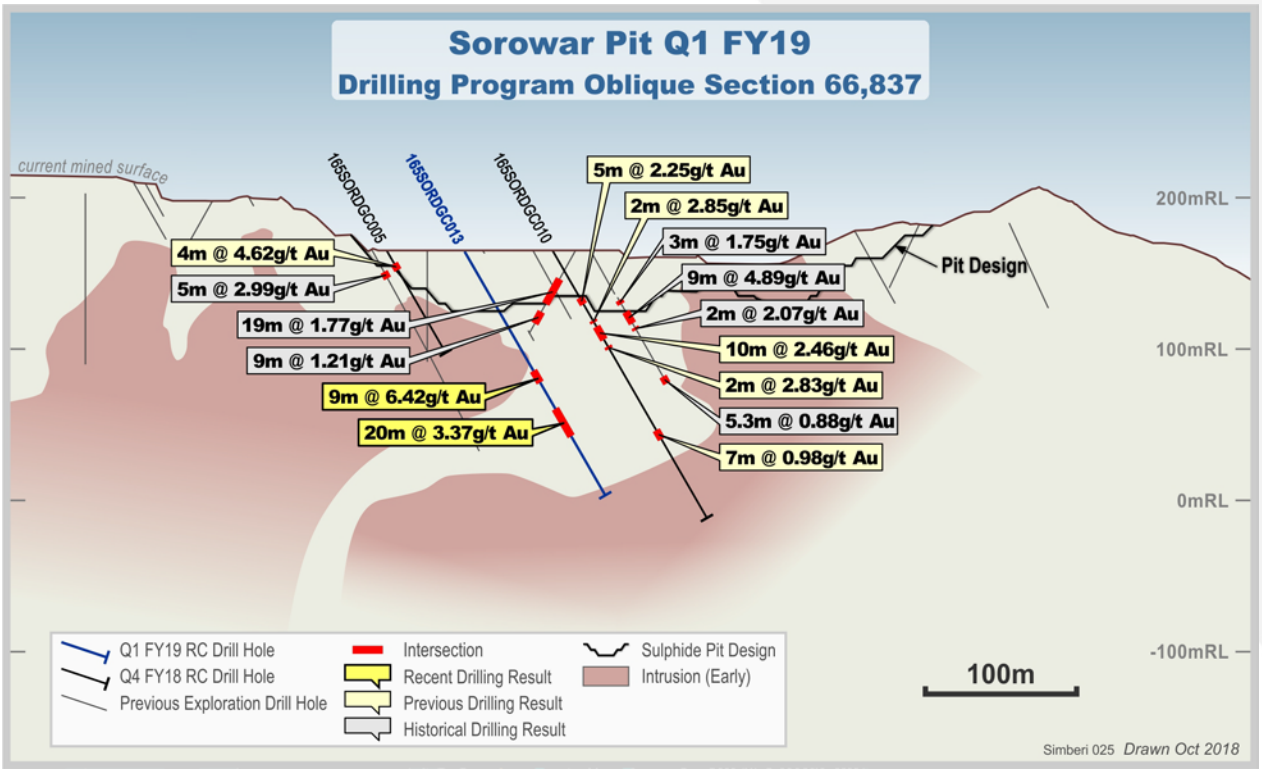


Figure 5.4: Sorowar Sulphide Drill Cross Section (66,717), Simberi Island, Papua New Guinea

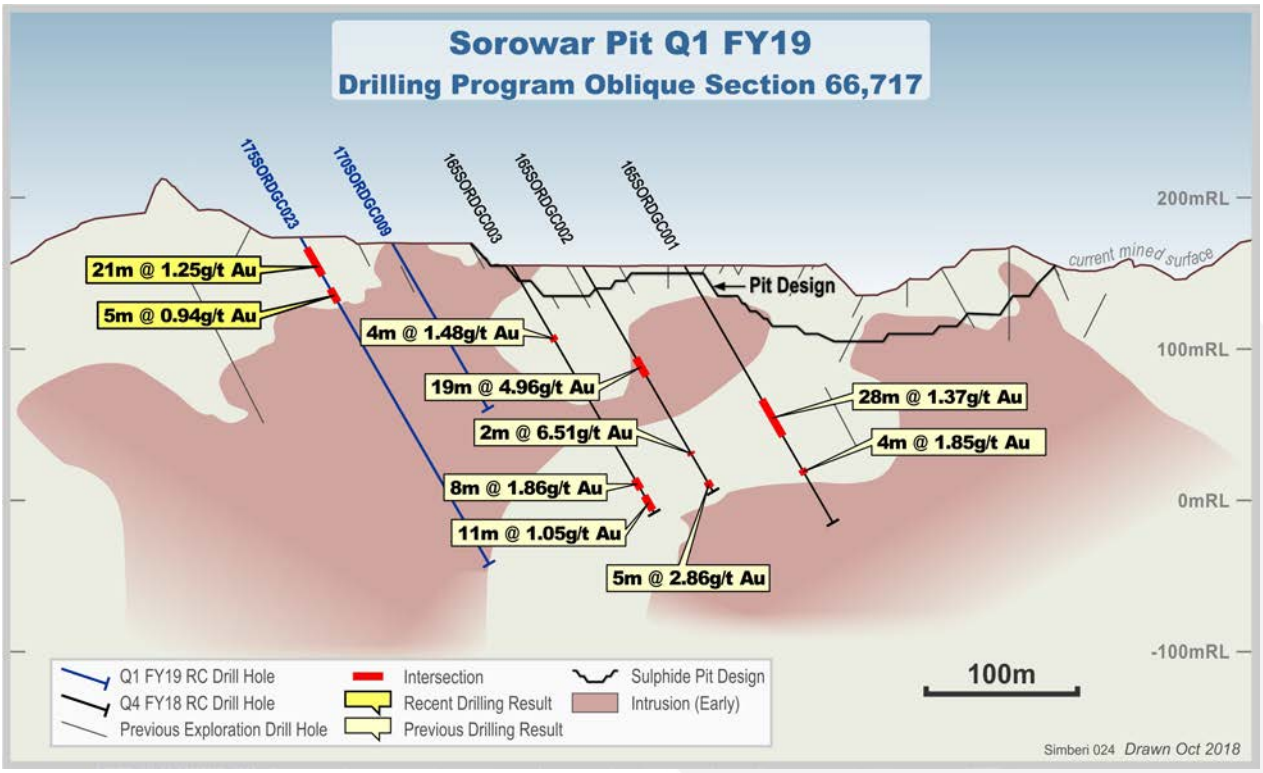


Figure 5.5: Sorowar Sulphide Drill Cross Section (66,357), Simberi Island, Papua New Guinea

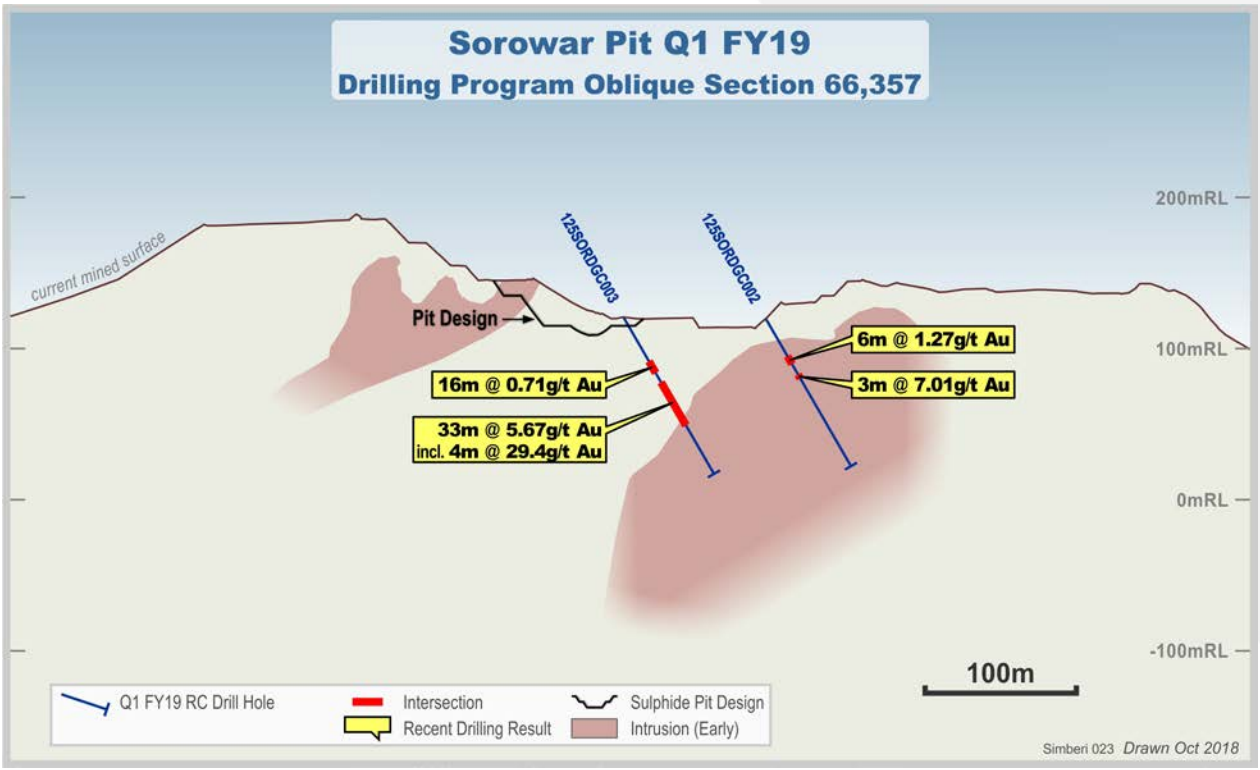


Figure 5.6: Sorowar Sulphide Drill Cross Section (66,317), Simberi Island, Papua New Guinea

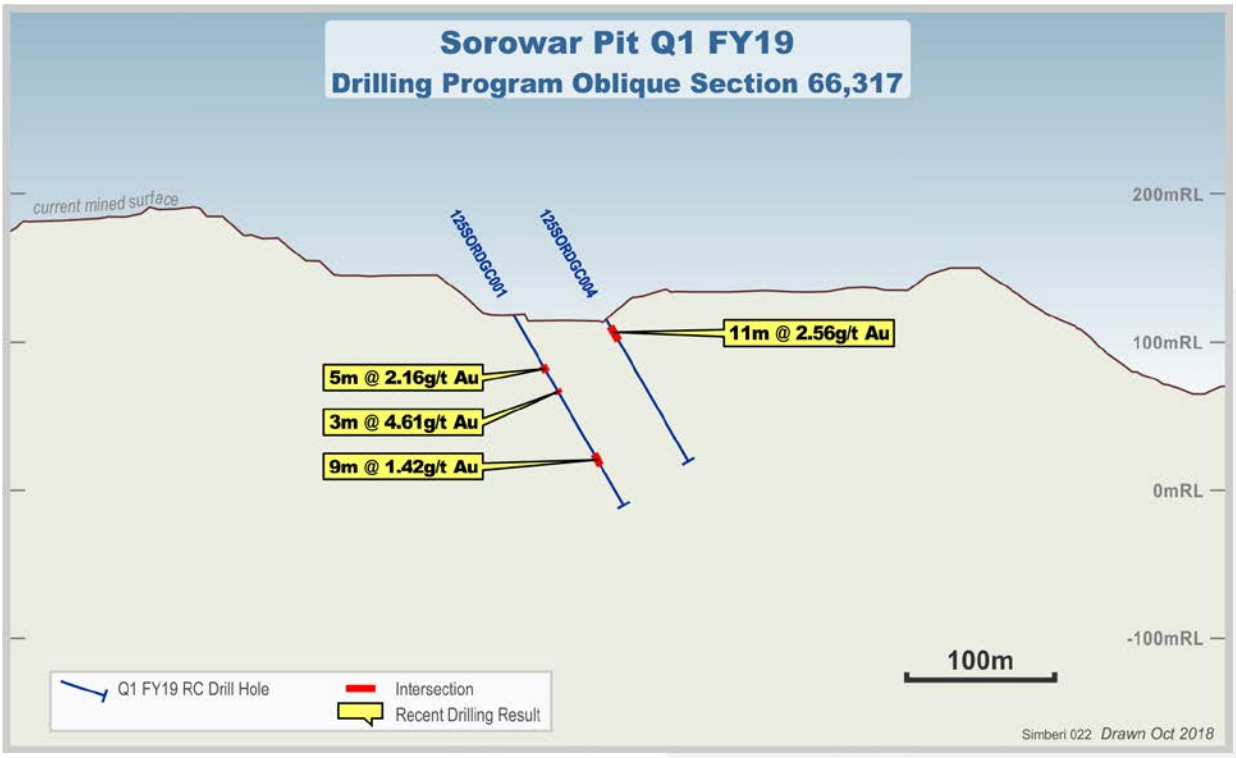


Figure 5.7: Simberi ML136 Drill Location Map, Simberi Island, Papua New Guinea

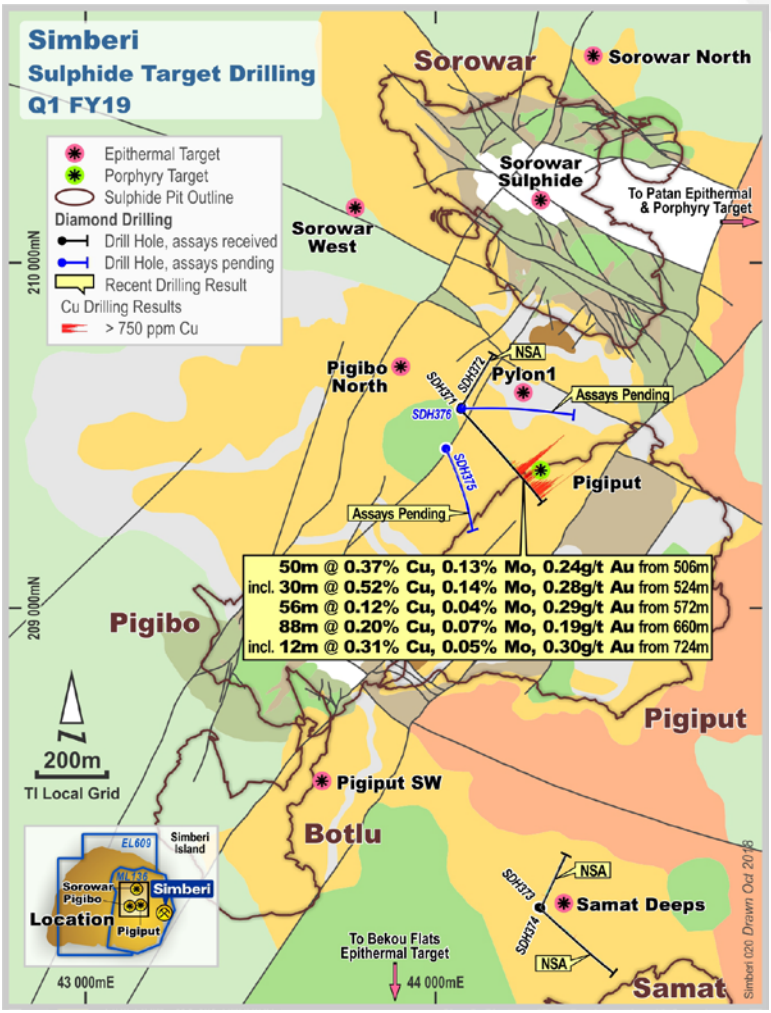


Figure 5.8: Surface Sample and Drill Location Map, Tatau Island, Papua New Guinea

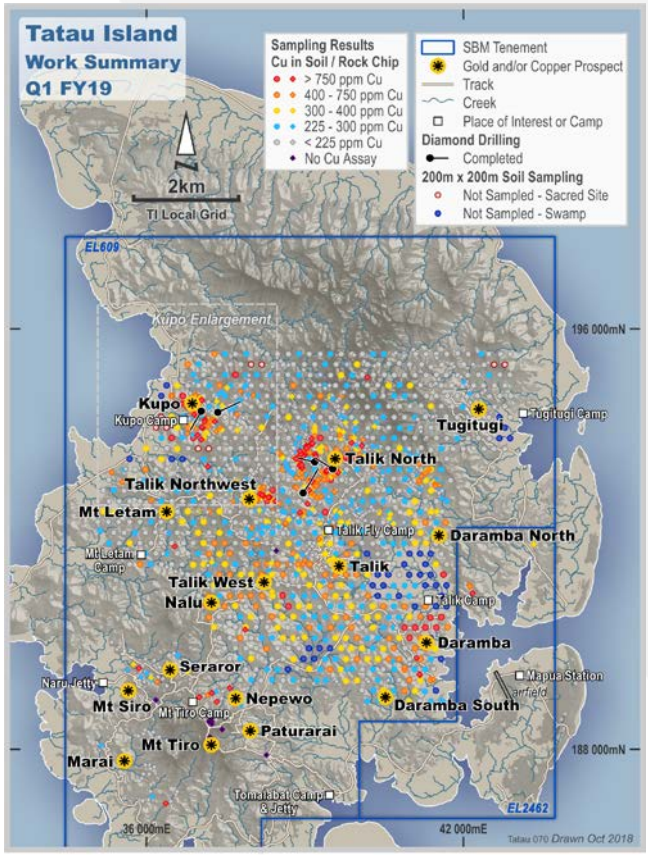


Figure 5.9: Kupo Drill Location Map, Tatau Island, Papua New Guinea

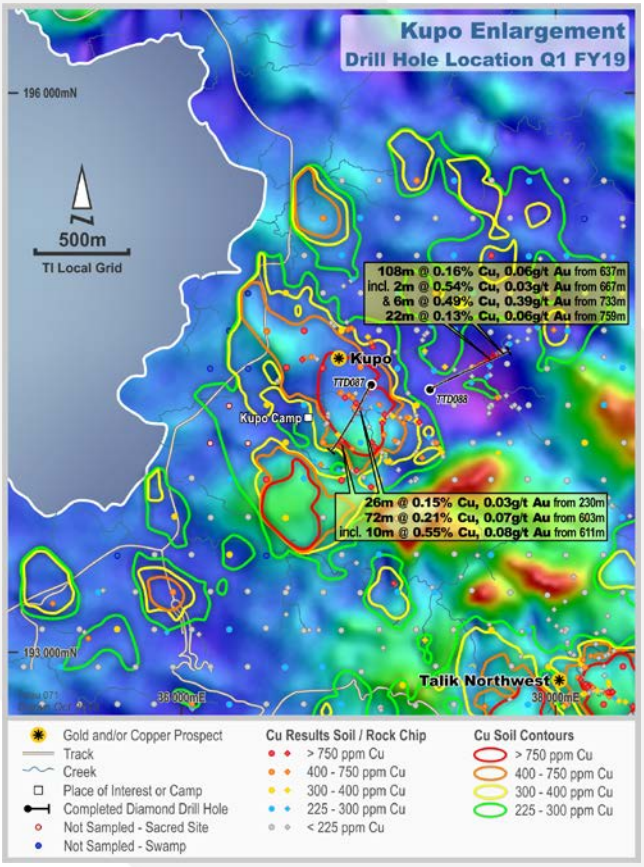


Figure 5.10: Banesa Drill Location Map, Big Tabar Island, Papua New Guinea

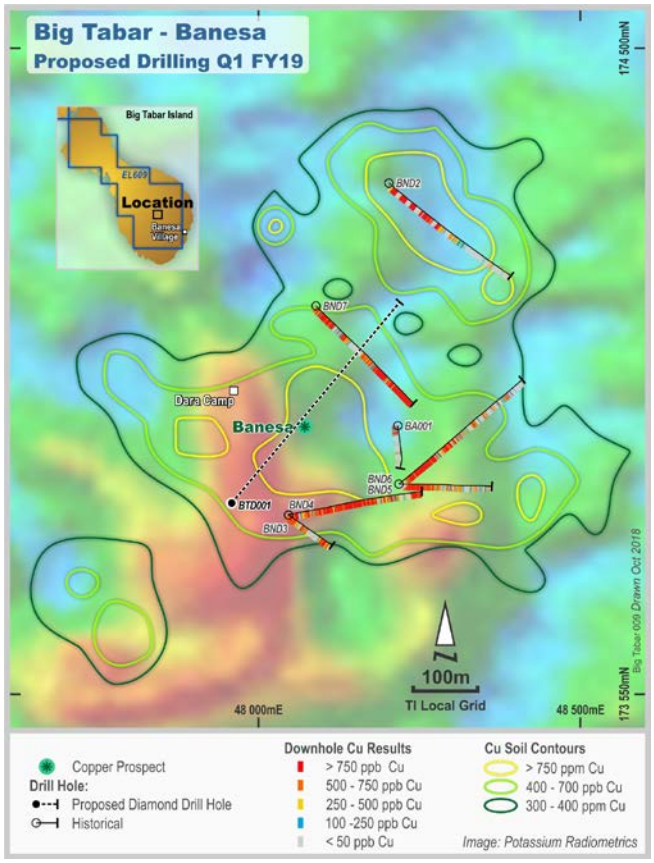


Table 1: Gwalia Deeps Significant Intercepts – Leonora Operations, Gwalia Mine

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	g/t Au
GWDD16D	5298	9871	3443	1937	MNL	-53/298	2052.7	2057.0	4.3	1.6
GWDD16D	5303	9862	3429	1951	SWB	-53/298	2062.9	2081.5	18.6	10.3
						Including	2071.2	2077.9	6.7	23.9
GWDD16D	5312	9845	3404	1976	SGS2	-53/299	2099.5	2107.6	8.1	4.7
GWDD16D	5320	9831	3382	1998	WL1	-53/300	2130.2	2131.0	0.8	12.1
GWDD16E	5185	9910	3428	1952	SWB	-71/260	2041.0	2047.0	6.0	12.2
						Including	2043.8	2046.0	2.2	22.4

NOTES:

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

Table 2: Pinjin 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	
PJAC1775	6,627,299	466,400	440.0	-60/272	84	72	73	1	592	OX
PJAC1850	6,654,150	454,600	335.0	-60/272	54	28	32	4	630	TR
PJAC1876	6,649,632	482,427	321.8	-90/002	41	20	21	1	737	OX
PJAC1930	6,652,203	455,256	335.0	-90/002	74	50	52	2	667	TR
PJAC1939*	6,653,718	458,596	350.0	-90/002	58	52	56	4	559	OX
PJAC2073*	6,654,499	446,647	350.0	-90/002	47	28	36	8	1,853	OX
*Including**						32	36	4	3,140	OX
PJAC2144	6,655,104	446,451	350.0	-90/000	48	28	32	4	558	OX

NOTES:

Coordinates and Azimuth referenced to MGA94 zone 51 Grid.
Reported intercepts are all down hole lengths.
* is in transported/bedrock mix.

Table 3: Sorowar 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 m	To m	Interval m	Gold grade g/t Au	Comments
165SORDGC013	210,233	44,198	164	-60/030	186	91	100	9	6.42	SU
						120	140	20	3.37	SU
175SORDGC023	210,004	44,205	175	-60/030	250	9	30	21	1.25	SU
						45	50	5	0.94	SU
125SORDGC001	209,940	44,629	125	-60/030	156	47	52	5	2.16	OX
						66	69	3	4.61	SU
						116	125	9	1.42	SU
125SORDGC002	209,995	44,616	125	-60/030	119	9	15	6	1.19	OX
						35	41	6	1.27	OX
						49	52	3	7.01	SU
125SORDGC003	209,914	44,569	125	-60/030	125	39	55	16	0.71	OX
						55	88	33	5.67	TR,SU
Including						80	84	4	29.4	SU
125SORDGC004	209,994	44,657	122	-60/030	122	17	28	11	2.56	OX,TR
130SORDGC001	209,968	44,324	131	-60/030	135	No Significant Results				
130SORDGC002	209,966	44,323	131	-90/000	127	No Significant Results				
130SORDGC003	210,024	44,353	130	-60/030	132	107	112	5	5.02	SU
130SORDGC004	209,939	44,376	130	-60/030	120	59	67	9	0.74	SU
130SORDGC005	209,936	44,373	130	-90/000	79	76	79	3	1.90	EOH,SU
130SPRDGC006	210,334	44,675	115	-60/030	200	60	62	2	2.33	SU
130SORDGC008	210,428	44,601	125	-60/030	200	No Significant Results				
130SORDGC009	210,463	44,542	133	-60/030	222	No Significant Results				
150SORDGC001	210,195	44,593	148	-60/030	177	132	137	5	0.98	SU
						149	153	4	1.59	SU
						164	168	4	3.65	SU
150SORDGC002	210,109	44,615	149	-60/030	212	16	20	4	0.74	OX
						89	94	5	1.36	SU
						123	127	4	1.62	SU
						140	150	10	2.47	SU
						182	184	2	6.28	SU

Table 3 continued: Sorowar 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	Gold grade	Comments
						m	m	m	g/t Au	
150SORDGC005	210,007	44,592	149	-60/030	211	137	140	3	2.17	SU
170SORDGC009	210,058	44,233	170	-60/030	126	No Significant Results				
165SORDGC016	210,363	44,022	165	-60/030	228	162	168	6	0.89	SU
165SORDGC014	210,286	44,116	165	-60/030	164	56	75	16	1.97	SU
						78	83	5	1.84	SU
						109	122	13	1.18	SU
						157	164	7	5.45	EOH, SU
165SORDGC017	210,268	44,150	165	-60/030	174	70	76	6	0.80	SU
						147	156	9	0.81	SU
135SORDGC008	209,915	44,412	135	-60/030	184	No Significant Results				
120SORDGC003	209,914	44,567	125	-60/030	125	No Significant Results				

NOTES:

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

Table 4: Simberi 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
						m	m	m	% Cu	g/t Au
SDH372 (Pigiput)	209,583	44,074	141.9	-55/030	320.7	No Significant Results				
SDH373 (Samat)	208,134	44,295	141.5	-55/135	493.0	No Significant Results				
SDH374 (Samat)	208,132	44,300	141.4	-55/025	298.0	No Significant Results				

NOTES:

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

Table 5: Kupo 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
TTD087	194,429	37,014	91.8	-55/215	770.0	SU	230	256	26	0.15	0.03
						SU	603	675	72	0.21	0.07
including						SU	611	621	10	0.55	0.08
TTD088	194,404	37,329	126.6	-55/056	860.2	SU	637	745	108	0.16	0.06
including						SU	667	669	2	0.54	0.03
and						SU	733	739	6	0.49	0.39
						SU	759	781	22	0.13	0.06

NOTES:

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

LEONORA - JORC Code, 2012 Edition – Table 1

Contents

Drilling - Section 1 Sampling Techniques and Data

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

Criteria	Commentary
Sampling techniques	• 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.
Drilling techniques	• 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.
Drill sample recovery	• Core is metre marked and orientated and checked against drillers blocks to ensure that any core loss is accounted for. • Sample recovery is rarely less than 100%. Where minor core loss does occur it is due to drilling conditions and not ground conditions.
Logging	• 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. • All logging is qualitative.
Sub-sampling techniques and sample preparation	• 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 <4mm followed by complete pulverisation (90% passing 75 μm).
Quality of assay data and laboratory tests	• 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.
Verification of sampling and assaying	• 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.
Location of data points	• 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. • 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:

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

Data spacing and distribution	• 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.
Orientation of data in relation to geological structure	• Sampling is perpendicular to lode orientations and is sound-based on past production and underground mapping.
Sample security	• 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.
Audits or reviews	• 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.

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 two tenements M37/25 and M37/333 over the Gwalia deposit.
Exploration done by other parties	• Western Mining Corporation (WMC) and Sons of Gwalia (SGW), have previously completed deep diamond drilling below 1,100 metres below surface.
Geology	• 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.
Drill hole Information	• Drill hole information is included in intercept table outlining mid-point co-ordinates including vertical hole depth and composited mineralized intercepts lengths and depth.
Data aggregation methods	• Down hole intercepts are reported as length weighted averages. No high grade cut is applied.
Relationship between mineralisation widths and intercept lengths	• Down hole length is reported for all holes; true width is not immediately known until further drilling is completed and the orebody modelled.
Diagrams	• Appropriate diagrams are included within the body of the report.
Balanced reporting	• Details of all holes material to Exploration Results have been reported in the intercept table.
Other substantive exploration data	• These holes test the deepest limits of mineralisation and no other data is available.
Further Work	• Further exploration drill holes are planned.
Balanced reporting	• Details of all holes material to Exploration Results have been reported in the intercept table.
Other substantive exploration data	• Data is included in the body of the report.
Further Work	• Follow-up drilling is planned and is discussed in the body of the report.

IP and SAM Sampling: Section 1 Sampling Techniques and Data

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

<table>
<tr><th>Criteria</th><th>Commentary</th></tr>
<tr><td>Sampling techniques</td><td>

Induced Polarisation (IP)

<u>Survey Summary</u>
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.
<u>Survey Specification</u>
<table>
<tr><td>Contractor</td><td>Gap Geophysics Australia Pty. Ltd. (GAP)</td></tr>
<tr><td>Survey Configuration</td><td>Dipole-dipole</td></tr>
<tr><td>Survey Date</td><td>22nd - 29th March, 2018</td></tr>
<tr><td>Job Number</td><td>17066 STBA</td></tr>
<tr><td>Methods</td><td>chargeability, resistivity</td></tr>
<tr><td>Line Spacing</td><td>350-850 m</td></tr>
<tr><td>Line Direction</td><td>030-210 degrees</td></tr>
<tr><td>Receiver Dipole Spacing</td><td>75 m</td></tr>
<tr><td>Transmitter (Tx)</td><td>Gap GeoPak IPTX-2500</td></tr>
<tr><td>Tx Frequency</td><td>0.125 Hz (2 sec off / 2 sec on)</td></tr>
<tr><td>Receiver (Rx)</td><td>SMARTem24</td></tr>
<tr><td>Current</td><td>1.1 - 29A</td></tr>
</table>

Sub-Audio Magnetic (SAM)

<u>Survey Summary</u>
A single block was surveyed using an east-northeast line direction and north-northwest grounded dipole.
<u>Survey Specification</u>
<table>
<tr><td>Contractor</td><td>Gap Geophysics Australia Pty. Ltd. (GAP)</td></tr>
<tr><td>Survey Configuration</td><td>Galvanic SAM</td></tr>
<tr><td>Survey Date</td><td>March 2018</td></tr>
<tr><td>Job Number</td><td>17066 STBA</td></tr>
<tr><td>Methods</td><td>TMI, MMC, GSEM</td></tr>
<tr><td>Line Spacing</td><td>50 m</td></tr>
<tr><td>Line Direction</td><td>030-210 degrees</td></tr>
<tr><td>TMI Sample Interval</td><td>~0.5 m</td></tr>
<tr><td>MMC, GSEM Sample Interval</td><td>~2.0 m</td></tr>
<tr><td>Total Line Kilometres</td><td>89 km</td></tr>
<tr><td>Transmitter (Tx)</td><td>Gap GeoPak HPTX-70</td></tr>
<tr><td>Tx Frequency</td><td>6.25 Hz</td></tr>
</table>
</td></tr>
<tr><td>Drilling techniques</td><td>• No drilling completed</td></tr>
<tr><td>Drill sample recovery</td><td>• No drilling completed</td></tr>
<tr><td>Logging</td><td>• No drilling completed</td></tr>
<tr><td>Sub-sampling techniques and sample preparation</td><td>• No drilling completed</td></tr>
<tr><td>Quality of assay data and laboratory tests</td><td>• No drilling or sample analysis completed.</td></tr>
</table>

Criteria	Commentary
Verification of sampling and assaying	• No drilling or sample analysis completed.
Location of data points	• Points located with a handheld GPS. • Co-ordinates are recorded in WGS84, MGA Zone 51.
Data spacing and distribution	• The current spacing of survey stations and lines is deemed appropriate for this phase of exploration.
Orientation of data in relation to geological structure	• Survey lines were designed to be approximately perpendicular to the interpreted strike of stratigraphy - as deemed appropriate.
Sample security	• No sampling or assaying completed.
Audits or reviews	• No audits or reviews completed.

IP and SAM - 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 tenement M 37/587 over the Horse-Paddock Well prospect area.
Exploration done by other parties	• 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.
Geology	• The prospect is located within a NNW trending belt of mafic and sedimentary rocks overlayed 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.
Drill hole Information	• No drilling completed.
Data aggregation methods	• Not applicable for this data.
Relationship between mineralisation widths and intercept lengths	• No drilling completed.
Diagrams	• Appropriate diagrams are included within the body of the report.
Balanced reporting	• All relevant details material to Exploration Results have been included in the report.
Other substantive exploration data	• Not applicable for this data.
Further Work	• Further exploration drill holes are planned.

PINJIN - JORC Code, 2012 Edition – Table 1

Contents

Drilling - Section 1 Sampling Techniques and Data

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

Criteria	Commentary
Sampling techniques	• Sampling was conducted via Aircore drilling. Aircore drill holes were on 50m or 100m spacing's with line spacing's ranging between 250m and 1.2km or as individual scout lines. • 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 twenty (depending on hole depth). During the lake program samples were only placed on the ground when the lake surface was reasonably dry and firm. • 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. • 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. • 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 40g charge of pulverised sample was then analysed for Au, Pd & Pt by Fire Assay with an ICP finish to a detection limit of 1ppb. • 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. • 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 & 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 & Zr).
Drilling techniques	• 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.
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 logging is both qualitative and quantitative.
Sub-sampling techniques and sample preparation	• Aircore 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 2m or 4m samples using a scoop to sample individual metre samples. • QC procedures for 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. • 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.
Verification of sampling and assaying	• 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. • 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 locations were captured in MGA94 zone 51 grid.
Data spacing and distribution	• Aircore drill holes were on 50m or 100m spacing's with line spacing's ranging between 250m and 1.2km or as individual scout lines. • Reported Aircore results are based on the 1m Fire Assay re-splits of original 4m composite samples or the original composite sampling.

Criteria	Commentary
Orientation of data in relation to geological structure	• The majority of land based aircore drill holes had a dip and azimuth of -60/270. Land based aircore holes were drilled vertically in areas were transported cover made drilling difficult. All lake aircore drilling was drilled vertically. Aircore drilling was designed on E-W traverses which is broadly perpendicular to the regional structures known to control mineralisation.
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 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.
Exploration done by other parties	• There have been numerous historical holders of the project area which covers over ~1,232 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

(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 collected for sample preparation. For PQ diameter core a further cut was completed, whereby quarter core is submitted to provide a practical sample size. • 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. Pulps residuals are stored in Lae for six months following assay. • 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.
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. 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. • 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.
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. • 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.
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. • RC drilling chips were sieved, cleaned and stored in plastic chip trays for logging and future reference. • All holes are fully logged.
Sub-sampling techniques and sample preparation	• 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 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. • 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 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. • 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.

Criteria	Commentary
Quality of assay data and laboratory tests	• 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. • 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. • Intertek Perth, SGS Townsville and ALS Townsville inserted certified standards and replicates and lab repeats.
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 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.
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. • At Sorowar pit, the RC drilling targeting sulphide gold mineralisation is drilled on an approximate 60m by 60m spacing.
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. • 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.
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 in-fills, single vein coatings and crackle brecciation in the more competent andesite units, along andesite/polymict breccia contact margins as well as sulphide disseminations. • On Tatau and Big Tabar Islands, located immediately south of Simberi, 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. • Diamond drilling is being conducted on the Simberi ML136 testing for potential porphyry Cu-Au mineralisation at depth below Pigiput pit.
Drill hole Information	• 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. • 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.
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.

End of report