## Quarterly Report / Q4 June 2015

- Record annual production for Gwalia and Simberi
- Q4 gold production of 99,359 ounces at AISC A\$979/oz
- Simberi exceeded 100,000 ounce p.a. run rate in Q4

#### **Executive Summary**

#### **Operations**

Consolidated gold production was 99,359 ounces for the June quarter (Q3 Mar: 111,288 oz). Full year production was 377,387 ounces, a group record, exceeding the upper end of full-year guidance (350-370 koz).

Consolidated All-In Sustaining  $Cost^1$  (AISC) was A\$979 per ounce for the quarter (Q3 Mar: A\$798 per ounce) and A\$1,007 per ounce for the year. The average realised gold price for the quarter was A\$1,478 per ounce (Q3 Mar: A\$1,511 per ounce).

- Leonora (Western Australia) production was 72,222 ounces of gold for the quarter (Q3 Mar: 88,790 oz), with Gwalia production 57,208 ounces (Q3 Mar: 76,954 oz) and King of the Hills production 15,014 ounces (Q3 Mar: 11,836 oz). Full year production was a record for both Leonora at 297,819 ounces and Gwalia with 248,142 ounces (both a 16% improvement on FY14). King of the Hills ceased mining operations in April, and it is currently on care and maintenance whilst strategic options are evaluated.
- Simberi (PNG) gold production was a record 27,137 ounces for the quarter (Q3 Mar: 22,498 oz), comfortably in excess of the targeted 100,000 oz p.a. run rate. Mining, ore transport and processing operations all exceeded their targets and had record results.
- Sold Ridge (Solomon islands) As previously announced, the sale of the Gold Ridge Project was completed on 6 May 2015. Save for the previously announced cost of building and installing the new water treatment plant, which formed part of the sale process, the St Barbara Group has no residual environmental, rehabilitation or other liabilities relating to the Gold Ridge Project.

## **Health & Safety**

> The Company-wide Total Recordable Injury Frequency Rate (TRIFR), calculated as a rolling 12 month average, was 5.0 for the year to 30 June 2015 (Q3 Mar: 4.9).

#### **Exploration**

> Gwalia (Leonora) WA A program directed at extensions to the Gwalia lode system approximately 400m below current underground mine workings has continued with two further daughter holes drilled from the parent hole GWDD16. Both the parent and the first daughter holes intercepted the Gwalia mine sequence and some of the mineralised lodes as has been previously reported. The second daughter hole GWDD16B was prematurely terminated at a downhole depth of 1,945m due to equipment loss, while drill hole GWDD16C had achieved a downhole depth of 1,902m at the end of the quarter. This phase of the drilling program has extended into the September 2015 quarter. The full drilling program, which is aimed at delineating an indicated resource to support the planned shaft studies, is expected to be completed by December 2015.

t Barbara

- > Centenary Project (Leonora) WA Follow up drilling of four non-gold mineral anomalies identified from a ground based geophysical program has, so far, not generated results suggestive of economic mineralisation. The initial drilling program is complete and final results are due in the September 2015 quarter.
- Simberi PNG Trenching at Sorowar Southeast on the Simberi Mine Lease (PNG) was completed during the quarter, targeting extensions to mineralisation immediately east of the Sorowar open pit. Encouraging results were returned including:

#### Sorowar Southeast

- SIMTR853: 15m @ 1.9 g/t Au,
  - 10m @ 2.6 g/t Au and

15m @ 2.6 g/t Au

> Big Tabar Island PNG Detailed creek mapping and channel sampling commenced at Banesa Au-Cu porphyry prospect (EL609) during the June quarter.

## Finance (unaudited)

- > Debt was reduced by A\$73 million during the quarter to A\$347 million at 30 June 2015 (Q3 Mar: A\$420 million), primarily from a selective off market repurchase of US\$54 million of Senior Secured Notes at an average 5% discount.
- > Cash contribution from operations for the quarter was A\$69 million, consistent with the previous quarter (Q3 Mar: A\$69 million). Cash at bank as at 30 June 2015 was A\$77 million<sup>2</sup>, after repayment of debt and financing costs in the quarter of A\$85 million.
- A procurement cost reduction project completed during the quarter has resulted in cost savings of approximately \$18 million p.a. incorporated in the FY16 plan.

<sup>2</sup> Excluding A\$2 million restricted cash

<sup>1</sup> Non-IFRS measure, refer page 15

## Outlook

- > Guidance for FY16 is summarised as:
  - Forecast Gwalia (Leonora) gold production of between 220,000 and 250,000 ounces at an AISC of between A\$875 and A\$950 per ounce, with capex of between A\$30 and A\$35 million.
  - Forecast Simberi gold production of between 90,000 and 110,000 ounces at an AISC of between A\$1,275 and A\$1,400 per ounce, with capex of between A\$8 and A\$12 million.
  - > Forecast exploration expenditure of A\$10 million.
  - > More details are set out on pages 5, 8 and 12.

Bob Vassie Managing Director and CEO 21 July 2015

## St Barbara Gold Production & Guidance

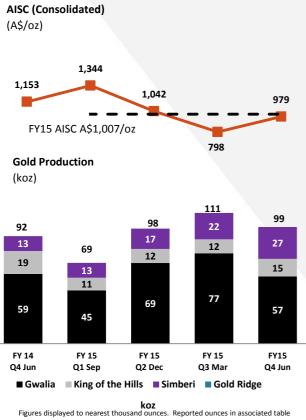
Production Summary		Q1 Sep	Q2 Dec	Q3 Mar	Q4 Jun	Year	Guidance	Guidance
Consolidated		FY15	FY15	FY15	FY15	FY15	FY15 <sup>[3]</sup>	FY16
Production								
Gwalia	oz	45,391	68,589	76,954	57,208	248,142	235 – 240 koz	220 - 250 koz
King of the Hills	oz	10,793	12,034	11,836	15,014	49,677	45 – 50 koz	9 koz <sup>4</sup>
Simberi	oz	12,639	17,294	22,498	27,137	79,568	70 – 80 koz	90 - 110 koz
Consolidated	OZ	68,823	97,917	111,288	99,359	377,387	350 – 370 koz	319 - 369 koz
Mined Grade							Reserve <sup>2</sup>	
Gwalia	g/t	7.9	9.0	9.7	8.6	8.9	8.2	n/a
King of the Hills	g/t	4.1	4.2	4.1	4.5	4.2	4.4	n/a
Simberi	g/t	1.10	1.09	1.38	1.28	1.23	1.1	n/a
Total Cash Operating Cos	ts <sup>[1]</sup>							
Gwalia	\$/oz	767	611	532	729	642	650 - 680	n/a
King of the Hills	\$/oz	1,085	1,093	1,177	1,095	1,112	1,170 – 1,220	n/a
Simberi	\$/oz	2,032	1,489	1,193	1,034	1,336	1,200 - 1,300	n/a
Consolidated	\$/oz	1,048	825	734	868	850	840 - 875	
All-In Sustaining Cost <sup>[1]</sup>								
Gwalia	\$/oz	1,086	883	645	860	841	n/a	875 - 950
King of the Hills	\$/oz	1,407	1,123	812	1,106	1,103	n/a	
Simberi	\$/oz	2,205	1,619	1,310	1,149	1,464	n/a	1,275 - 1,400
Consolidated	\$/oz	1,344	1,042	798	979	1,007		995 - 1,080
Capital Expenditure								
Gwalia	\$M					34	38 - 43	30 - 35
King of the Hills	\$M					5	4 - 6	-
Simberi	\$M					8	8 - 10	8 - 12
Consolidated	\$M				-	47	50 - 59	38 - 47

[1] Non-IFRS measure, refer page 15.

[2] Ore Reserve grade at 30 June 2014.

[3] FY15 guidance for Gwalia and King of the Hills issued in the June 2014 Quarterly Report, revised in March 2015 Quarterly Report. FY15 guidance for Simberi issued in the September 2014 Quarterly Report.

[4] Stockpiled as at 30 June 2015.

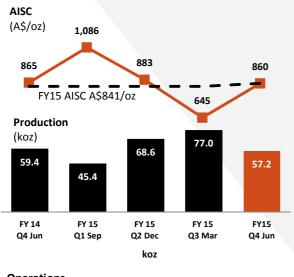


**FY16 Production Indicative Quarterly Guidance Profile** 



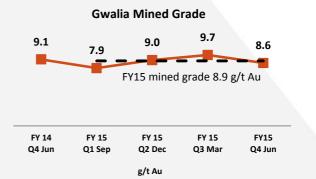
Indicative % of annual production (koz)

## Gwalia, Leonora, WA



#### Operations

- > Gwalia produced a record 248,142 ounces of gold for FY15 with 57,208 ounces of gold produced in the June quarter.
- > Gwalia outperformed the original FY15 guidance on three fronts:
  - > exceeded upper end of production guidance by 24%,
  - below lower end of capital spend guidance by 24%, and
  - > below lower end of total cash operating cost per ounce guidance by 11%.
- > The record performance at Gwalia in FY15 was the result of multiple factors including improvements in productivity, successfully implemented innovations, and better than anticipated grade.
- > Mined ore grade was 8.6 g/t Au for the quarter with an overall grade of 8.9 g/t Au in FY15. Mined grade in Q4 was higher than predicted due to minimal dilution and the benefit from the continuing presence of higher grade shoots in the new stopes that cannot be estimated from grade control drilling.
- > All In Sustaining Cost (AISC) of \$861 per ounce was higher in Q4 due to lower production than the previous record quarter. This was anticipated as the stoping sequence involved a greater proportion of mining activity in 'development' rather than 'production' phases, combined with a return to grades closer to the long term reserve grade.
- > During June 2015, work commenced on upgrading the ground support of the main decline between levels 1380 and 1460. The support upgrade interrupted mine haulage for one week in June, and the remainder of the work has been scheduled over the Q1 September 2015 quarter to minimise impact on production.



> This work involves additional bolting and meshing so as to mitigate the risk of the shotcrete lining cracking and falling during the low level seismic events occasionally experienced after firing of stopes.

#### **Gwalia Deep Drilling Program**

A drilling program directed at extensions to the Gwalia lode system approximately 400m below current underground mine has continued with two further daughter holes being drilled from the parent hole GWDD16. No new results are available at this time, details are reported on page 11.

#### West Lode Drilling Program

- > West Lode constitutes one of the four major lode structures identified within the Gwalia Mine Sequence and is located approximately 80 m to the west of South West Branch.
- > Underground drilling completed during the latter part of FY15 has returned several significant intersections of the lode as measured by both true width and grade.
- > It is anticipated that the modelling of West Lode, incorporating the results of recent drilling, will result in an increase to the Measured and Indicated Resource at 30 June 2015.
- > Previous mining of West Lode has been confined to areas surrounding the old Sons of Gwalia workings. The current resource is yet to be mined and remains open to the north and down-dip.
- > Highly encouraging results returned from West Lode include:

#### West Lode:

- > UGD2217: 15.1m @ 6.1 g/t Au
- > UGD2232: 7.9m @ 16.9 g/t Au
- > UGD2233: 12.6m @ 13.0 g/t Au
- > UGD2234: 13.0m @ 8.3 g/t Au
- > UGD2242: 3.6m @ 18.8 g/t Au

- > UGD2252: 2.9m @ 22.6 g/t Au
- > UGD2255: 3.5m @ 22.3 g/t Au
- > UGD2274: 4.6m @ 17.5 g/t Au
- > UGD2288: 12.2m @ 5.7 g/t Au
- > UGD2302: 5.1m @ 13.1 g/t Au
- > These drilling results are very encouraging and aid our understanding of grade and thickness at depth, allowing the mine to optimise plans for extraction and timing. These additional results for West Lode are also relevant to the shaft studies, as a shaft would provide capacity to mine West Lode concurrent with South West Branch.

#### Gwalia Growth Projects – Gwalia Shaft

- > During FY16 the Company will perform scoping studies on a shaft from surface to approximately 1,500 metres below surface in parallel to the drill program.
- > The shaft studies are scheduled to be completed in the March 2017 quarter for consideration by the Board.

#### Outlook

- > FY16 guidance comprises:
  - Production of between 220,000 ounces and 250,000 ounces
  - > AISC of between A\$875 and A\$950 per ounce
  - Capital expenditure of between A\$30 and A\$35 million.
- > The record annual production in FY15 for Gwalia of 248,142 ounces clearly demonstrates that continuous improvement has been able to outpace the impacts of increasing depth of mining.
- > While the grade encountered during FY15 assisted the result, production also benefited from many improvement initiatives, the most significant of which was the ability to store more rock waste underground.
  - > This avoids costly haulage to surface for waste and frees up decline trucking capacity for ore. Readily available space to store waste, such as redundant drives, has now been fully utilised and the mine has now commenced a method of co-disposal of rock waste with paste fill in the open stopes.
  - Initial results are encouraging and this system will be fully implemented over the next quarter with the proportion of waste deposited underground to increase during FY16.
- > Another significant improvement is the use of an orepass between levels on the southern end of the orebody that allows decoupling of stope bogging and trucking, improving stope productivity. The first orepass is in place

and a new orepass will be developed for each new level. The portion of mining utilising the orepass system will increase as the mine advances over the next 18 months.

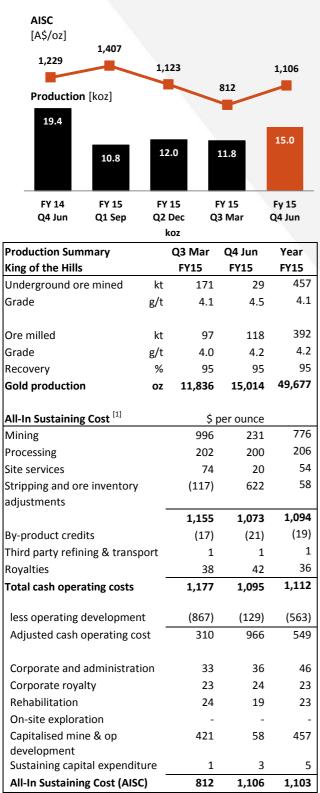
- > The mine will also trial 'centre slotting' as a method of blasting new stopes that places less stress on recently filled adjacent paste filled stopes, reducing stope cycle time and further increasing productivity.
- > FY16 guidance for Gwalia reflects that these improvements are in early stages of implementation.

Production Summary		Q3 Mar	Q4 Jun	Year
Gwalia		FY15	FY15	FY15
Underground ore mined	kt	250	216	902
Grade	g/t	9.7	8.6	8.9
Low grade development	kt	11	7	47
ore & stockpiles milled				
Grade	g/t	3.4	1.9	3.1
Ore milled	kt	259	225	931
Grade <sup>[1]</sup>	g/t	9.6	8.2	8.6
Recovery	%	96	96	96
Gold production	oz	76,954	57,208	248,142
[2]				
All-In Sustaining Cost <sup>[2]</sup>			per ounce	
Mining		353	469	449
Processing		84	99	104
Site services		35	65	44
Stripping and ore inventory		23	58	9
adjustments				
		495	691	606
By-product credits		(3)	(2)	(2)
Third party refining & transp	ort	1	1	1
Royalties	-	39	39	37
Total cash operating costs		532	729	642
less operating development	-	(73)	(102)	(84)
Adjusted cash operating cost		459	627	558
			· · · · ·	
Corporate and administratio	n	33	36	44
Corporate royalty		23	24	23
Rehabilitation		2	2	2
On-site exploration		-	-	-
Capitalised mine & op		103	145	156
development	·0	25	26	58
Sustaining capital expenditur	е.	645	860	841
All-In Sustaining Cost (AISC)		045	000	041

[1] Includes Gwalia mineralised waste

[2] Non-IFRS measure, refer page 15

## King of the Hills, Leonora, WA



Non-IFRS measure, refer page 15

#### Operations

- > King of the Hills ceased mining operations in April, with processing of ore forecast to continue into Q1 September 2015.
- > King of the Hills produced 49,677 ounces of gold for FY15 with 15,014 ounces of gold produced in the June quarter.
- > The main costs for King of the Hills during the quarter were adjustments related to the stockpile processed. Ore containing an estimated 9,410 ounces of gold was stockpiled at King of the Hills at the end of the quarter.
- > Strategic options for King of the Hills continue to be evaluated, which include divestment.
- > King of the Hills is currently under a care and maintenance program.

#### 2,300 2,205 AISC 1.619 [A\$/oz] 1,310 1,149 27.1 Production 22.5 [koz] 17.3 12.8 12.7 FY 14 FY 15 FY 15 FY 15 FY 15 O3 Mar O4 lun Q1 Sep O2 Dec Q4 Jun

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Simberi, Papua New Guinea

		koz		
Production Summary		Q3 Mar	Q4 Jun	Year
Simberi		FY15	FY15	FY15
Total ore & waste	kt	1,618	1,882	6,289
mined				
Ore mined	kt	460	725	2,070
Grade	g/t	1.38	1.28	1.23
Ore milled	kt	750	768	2,660
Grade	g/t	1.1	1.3	1.1
Recovery	%	83	86	84
Gold production	oz	22,498	27,137	79,568
All-In Sustaining Cost <sup>[1]</sup>		ç	s per ounce	
Mining		316	345	383
Processing		473	394	509
Site services		361	245	401
Stripping and ore invent	ory	-	-	-
adjustments	_			
		1,150	984	1,293
By-product credits		-	-	(2)
Third party refining &		13	37	21
transport				
Royalties	_	30	14	25
Total cash operating cos	sts	1,193	1,035	1,337
Corporate and administ	ration	33	36	43
Corporate royalty		-	-	-
Rehabilitation		21	17	23
On-site exploration		-	-	-
Capitalised mine & op				-
development		-	-	<i>.</i>
Sustaining capital expen	-	63	61	61
All-In Sustaining Cost (A	ISC)	1,310	1,149	1,464

[1] Non-IFRS measure, refer page 15

#### Operations

- > A solid turnaround during FY15 is evident at Simberi with quarterly production more than doubling and unit AISC halving. This has been achieved with lower levels of capital expenditure and has resulted in the mine operating cash positive with a margin of A\$329 per ounce in the June quarter. Simberi is now well positioned to take advantage of the 100,000 ounces of gold forward contracts at A\$1,600 per ounce in place to secure a stable cash margin on its forecast FY16 gold production.
- Simberi produced a site record 27,137 ounces of gold during the quarter, an increase of 21% on the previous quarter, and produced a record 10,005 ounces in the month of May. Gold production for the quarter comfortably exceeded the 100,000 oz p.a. target run rate.
- > All-In Sustaining Costs reduced by 12% to A\$1,149 per ounce giving a realised cash contribution of A\$329 per ounce. This is a continuation of a significant improvement trend and redefines our understanding of Simberi's cash generating potential.
- > The total volume of material and ore mined increased for the quarter, and is on track to reach 3.5 Mtpa of ore to the mill anticipated in FY16.
- > Operational improvements continue to drive increases in the performance of the Simberi processing plant. 3.5 Mtpa annualised throughput was achieved in the month of June with a site record of 289 kt of ore processed.
- > The increased focus on total ore delivery resulted in a 27% increase in tonnes delivered to the mill compared to the previous quarter. This has eliminated the previous dependence on ball mill scats.
- > Even with the above-target performance achieved in the quarter, there is confidence that Simberi can improve further:
  - > The ore delivery system was the key opportunity for reducing costs this quarter. During the quarter the usage of contract trucking and crushing reduced significantly as the reliability and throughput of the low-cost Ropecon and breaker ore delivery system improved significantly. The full effect of this will be seen in the next quarter.
  - > Several opportunities to improve automation in the processing plant have been identified and are being addressed systematically.
  - > A new solution is being trialled to the historic issue of 'carry back' (wet sticky ore accumulating at the aerial rope conveyor terminus), which will reduce the associated maintenance cost and increase availability.

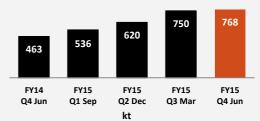
#### Outlook

- > FY16 guidance comprises:
  - > production of between 90,000 and 110,000 ounces,
  - All-In Sustaining Costs of between A\$1,275 and A\$1,400 per pounce
  - > capex of between A\$8 and A\$12 million.

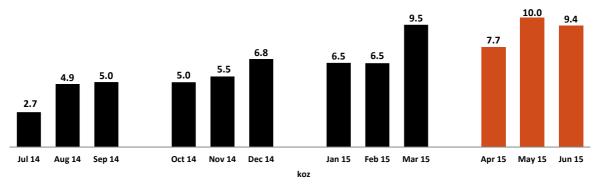
#### Simberi oxide life of mine /sulphide transition

- > During the quarter the Simberi life of mine plan was updated and the prefeasibility study (PFS) for the Simberi sulphide project was advanced.
- > Areas of Simberi's oxide reserves lie within the pit wall pushbacks of the deeper sulphide pits, meaning that a value optimised mine plan needs to include a phased cutover period between oxide and sulphide mining when both can be processed.
- Should the sulphide orebody not be mined, the value optimised oxide mine plan would leave behind some of the oxide ore. The phased cutover with both oxide and sulphide processing streams operating would also optimise recovery when processing transitional ores.
- In order to pursue the preferred strategy, the sulphide project PFS is being expedited and is currently focussed on metallurgical work that indicates traditional flotation will yield a marketable concentrate. An appropriate flow sheet has been developed that will utilise existing mine infrastructure, including the existing SAG and Ball mills and add flotation capability. The PFS is planned for completion in the December 2015 quarter.
- > The existing combined oxide and sulphide reserves indicate a long life operation in excess of 15 years with upside potential as the full extent of the sulphide orebody below the oxide is yet to be determined. The value optimised oxide mine plan would be of the order of four years if the Sulphide project was not progressed.

- > Resource development and exploration work for more oxide continues to yield encouraging results, as reported later in this report, and during FY16 some of this work will focus on establishing the full dimension of the sulphide orebody.
- > Resources and Reserves for Simberi will be reported with the annual financial report.







## FY15 Simberi Gold Production

## **Gold Ridge, Solomon Islands**

#### Divestment

- St Barbara completed the sale of the Gold Ridge Project as part of the Gold Ridge group of companies on 6 May 2015.
- > The Gold Ridge group of companies was sold to Goldridge Comminity (sic) Investment Limited (GCIL), a Solomon Islands company associated with local landowners, for a nominal price and on confidential terms.
- > The completion of the sale marks the passing of ownership to a Solomon Islands company associated with local landowners for the first time in the Project's history. Many of the shareholders and Directors of GCIL have had personal associations with and concerns for the success of the Gold Ridge Project since it was first established in the mid 1990's, with the GCIL Chairman being a former Minister of Mines and Energy.
- > As part of the sale negotiations, St Barbara agreed to fund on behalf of Gold Ridge Mining Limited (GRML) the manufacture, delivery and installation of a replacement water treatment plant at a cost of approximately A\$1 million, after the previous installation was vandalised in April 2014, subsequently replaced and operated by GRML and then completely destroyed in August 2014. The water treatment plant is a requirement for an operational mine, however, it is not necessary for the emergency dewatering proposed by GRML since September 2014. St Barbara will also provide technical advice and assistance to GCIL for a period of six months following the sale.
- > The parties also signed a Deed of Indemnity and Release in favour of the St Barbara Group in respect of the Project.
- > As a result of the sale, St Barbara has no residual provisions for environmental or rehabilitation liabilities relating to the Gold Ridge Project. The net result of the divestment is being determined as part of year-end financial reporting.
- > St Barbara believes that strong landowner representation is an important element in resolving the impasse that had developed with the Solomon Islands Government in relation to the management of the critical security, local resourcing and environmental issues associated with the Project.
- > Critical issues include management of water levels of the Tailing Storage Facility (TSF). Under St Barbara's ownership of GRML it was not possible to progress approval for urgent de-watering tasks. St Barbara came to the conclusion that direct community participation in the ownership of this asset and its intractable management issues could have more positive outcomes for local communities and the country as a whole.

- > There are indications that progress is finally being made regarding the TSF. The Solomon Islands Government published a full-page notice in a local paper on 20 July 2015 that it had instructed GRML to begin a 47-day emergency controlled release of untreated water from the surface of the TSF. The notice states that 'WHO [World Health Organisation] tests over the past year have consistently shown that the water was clean and well within the WHO standard for safe washing water ...". This is effectively the emergency controlled release of untreated water that GRML under St Barbara's ownership had sought repeatedly from the Government since September 2014.
- > The WHO recommended emergency dewatering in a report published in February 2015.

#### Background on Gold Ridge since April 2014

- > GRML suspended operations at the Gold Ridge Project on 3 April 2014 following extreme rainfall and flooding associated with Tropical Cyclone Ita. The flooding caused significant damage to the mine and public infrastructure, including the main bridge to site, isolating the mine from critical supplies of fuel for onsite power generation, food and medical supplies. This was followed by the incursion of hundreds of illegal miners to the mine and a rapid escalation in security risks for GRML personnel on site. All GRML personnel on site were temporarily evacuated from site on 7 April 2014. Force majeure notices were subsequently issued under certain mining and supply agreements.
- > A team of Gold Ridge experts attempted to return to site to undertake remedial work on 14 April 2014, subject to continuing support from the Solomon Islands Government and the Royal Solomon Islands Police Force. This plan was frustrated by a Solomon Islands Government imposed immigration ban to exclude a number of key GRML expatriate employees from re-entering the country after they had evacuated in the aftermath of the extreme rainfall and flooding associated with Cyclone Ita. The immigration ban was lifted on 10 June 2015 to allow the GRML management team to return to implement an agreed site stabilisation plan. All GRML employees and suppliers continued to be paid notwithstanding that operations were suspended.
- In July 2014, GRML repaired the vandalised and flooddamaged water treatment facility and commenced dewatering following receipt of the necessary approvals from the Solomon Islands Government. Construction work commenced on a new engineered spillway and an assessment of the requirements to return the entire operation to production was also prepared.
- > The GRML team's assessment of the operations indicated that a return to production during the remainder of the calendar year was unlikely due to the lack of public

infrastructure (the Tinahulu bridge on the public access road had been destroyed by flooding, preventing access for necessary mining supplies) and the presence of hundreds of illegal miners encamped in the mine. In recognition of this, the majority of expatriate employees were made redundant and voluntary redundancies were offered to local employees toward the end of July.

- > Negotiations with the Government and its appointed advisors (World Bank representatives) for the sale of the mine to the Solomon Islands Government were undertaken in August 2014 and extended through to the general election in November 2014. The negotiations resulted in a signed term sheet and draft deed of sale and deed of indemnity and release.
- > On 13 August 2014, GRML management withdrew remaining personnel from site following an escalation in the frequency and severity of security incidents over the previous three days. Management also advised employees of its plans to reduce the local work force from approximately 570 people to approximately 160 people. De-watering of the tailings storage facility was suspended as a result of the withdrawal of staff due to security and safety concerns and the de-watering treatment plant was subsequently vandalised a second time and rendered inoperable.
- > On 1 September 2014, GRML applied for government approval to commence dewatering of untreated water from the tailings storage facility. This application recognised that the timeframes required to meaningfully reduce the water levels in the tailings storage facility prior to commencement of the wet season would not allow time for reconstruction of the water treatment plant.
- > The application was supported by meetings between GRML and the Solomon Islands Government in which GRML provided the results of independent testing that concluded that the water proposed to be pumped from the tailings storage facility met with the requirements of the Australian and New Zealand Environment and Conservation Council Guidelines for Fresh Marine Water Quality (ANZECC 2000) and with the dilutive effect of the proposed dewatering plan, would be diluted immediately upon release to meet the standards of the World Health Organisation guidelines for drinking water.
- > The GRML application to de-water was not approved and the Solomon Islands Government commissioned an environmental expert report to be prepared for the World Health Organisation.
- > On 2 December 2014, GRML issued advertisements in local Solomon Islands newspapers to alert local communities to anticipate a series of uncontrolled releases from the tailings storage facility over the ensuing months during the wet season.

- > Following an announcement by the Government in February 2015 that it was no longer interested in buying the Gold Ridge Project, representatives of GCIL approached St Barbara about buying GRML and Gold Ridge. Due diligence and negotiations were conducted over the following months.
- > On 11 March 2015 the World Health Organisation confirmed in a media release that untreated water from the tailings storage facility was not toxic to humans and recommended the immediate dewatering of the tailings storage facility to avoid a potential environmental catastrophe that would ensue if the tailings storage facility was to be breached.
- In March 2015 GRML again sought approval from the Solomon Islands Government for the immediate controlled release of untreated water using new pumping equipment installed by GRML, and in accordance with the recommendations of the environmental expert report commissioned by the Government. GRML also offered to provide the Government with A\$1 million in funding for the construction of a new water treatment plant on the basis that dewatering of untreated water would commence as soon as possible to minimise the immediate risk of an overflow. This application was formally rejected by the Solomon Islands Government.
- > Also in March 2015, the Solomon Islands Government advised that while it would not seek to acquire the Gold Ridge mine as announced by the former administration in the previous August, it would facilitate a transfer to another potential mining operator.
- > On 1 May 2015, St Barbara announced that it would sell Gold Ridge Mining Limited (GRML) and its associated companies to GCIL for a nominal purchase price on confidential terms. GRML, under its new ownership, retained all its significant gold assets, and the corresponding environmental obligations.
- > At the time of sale, the Solomon Islands Government had not approved the controlled dewatering of untreated water from the tailings storage facility.

## **Exploration**

#### **Gwalia Deep Drilling Program**

- > Resource extension drilling at Gwalia has continued with the objective of providing the required certainty to extend the Gwalia resource and to develop the case for mining below the current resource of 1800 mbs.
- > The initial parent hole was completed in February 2015 and reported to the ASX on 25 February 2015 while results from the first daughter drill hole were released to the ASX on 7 April 2015.
- > Two further daughter holes have been drilled from the parent hole GWDD16. GWDD16B was prematurely terminated at a downhole depth of 1,946m due to equipment loss while re-drill hole GWDD16C has achieved a downhole depth of 1,902m at the end of the quarter, remaining approximately 250m short of the target point. The full drilling program, which is aimed at delineating an indicated resource to support the planned shaft studies, is planned for completion by December 2015.

#### **Centenary Project Leonora WA**

- > The company has a total of 137 granted mining, exploration or prospecting licences covering an area of 1,579 km<sup>2</sup> in WA. These include the Centenary project approximately 60 km north of Leonora, nearby to the Jaguar and Bentley operations of Independence Group (Figure 2.0).
- > As previously announced, St Barbara has completed high powered ground electromagnetic (EM) survey work in this project area leading to the identification of six anomalies, four of which were deemed sufficiently encouraging to warrant follow-up drilling.
- > Three anomalies within E37-916, located close to the interpreted western boundary of the felsic-volcanic dominated stratigraphic package hosting the Jaguar and Bentley copper-zinc-silver volcanogenic massive sulphide (Cu-Zn-Ag VMS) deposits owned by Independence Group NL (ASX: IGO), were tested by inclined rotary mud/diamond drilling to targets approximately 200 metres below surface. Holes CNRD001 and CNRD002A passed through 30m and 4m, respectively, black shale at the target interval. No economic mineralisation was observed. CNRD003 did not return an intersection and will be redrilled to correctly target the source of the anomaly.
- > One highly conductive anomaly within E37-917, coincident with nickel geochemistry, was targeted by rotary mud/diamond hole CNRD004 but results have yet to be analysed at the time of preparing this report.
- > Final analytical and downhole electromagnetic data is yet to be received for the program and is expected to be available in the September 2015 quarter. Based on final

results we will determine if the anomalies have been sufficiently explained or if further drilling is warranted.

#### **Pinjin Project Yilgarn WA**

- > Exploration re-commenced on the Pinjin project within the Yilgarn Province, WA. The Pinjin Project is located 150 km northeast of Kalgoorlie and 190 km southeast of Leonora, comprising a large tenement package of 20 exploration licences (1,358 km<sup>2</sup>) for 485 blocks (Figure 3.0).
- > The focus during the June quarter was the collection and incorporation of all available historical drilling and surface sampling for the area and immediate surrounds into the company exploration database. 2014 high quality government airborne geophysics (magnetics, gravity and radiometrics) was merged with older surveys and reprocessed.
- > Field work commenced in late June 2015 with site assessments conducted at initial geological, structural and bedrock geochemical targets.

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

- > Warden hearings were conducted in April 2015 as part of the renewal process for exploration licence EL609 (Western Simberi, Tatau and Big Tabar Islands, Figures 4.0, 4.1 and 4.2). As per normal practice, a hearing was held on each of the three islands.
- > On Simberi Island (Figure 4.0), the exploration program is focused on identifying additional near-mine higher grade oxide resources as potential ore feed sources to extend oxide mine life.
- > Trenching within ML136 was completed at Sorowar Southeast, Pigibo North and Botlu North. A total of 17 trenches (SIMTR852 to SIMTR855; SIMTR903 to SIMTR915) were collected for 1,015 metres and 203 samples. Significant trench sampling results are highlighted in Figure 4.3 and include:

#### Sorowar Southeast:

> SIMTR853: 15m @ 1.9 g/t Au, including

5m @ 3.3 g/t Au, and 10m @ 2.6 g/t Au, including 5m @ 3.8 g/t Au, and 15m @ 2.6 g/t Au, including 5m @ 4.7 g/t Au

#### Pigibo North:

> SIMTR904: 10m @ 2.5 g/t Au, including

5m @ 3.7 g/t Au

#### West Simberi:

Surface sampling continued on West Simberi Island (EL609) during the June quarter. Ridge and spur soil (n= 185) and creek channel sampling followed up anomalous gold in stream sediment samples (Figure 4.4). A total of 432 ridge and spur soil samples have been collected during the March and June quarters with a maximum result of 1.15 g/t Au returned. A total of 47 creek channel samples and trenches (SIMTR856 to SIMTR902) for 1,430 metres and 287 samples were collected at West Simberi. A maximum channel sample result was returned from SIMTR891: 5m @ 0.7 g/t Au (Figure 4.5).

#### **Big Tabar Island:**

> Detailed creek mapping and channel sampling was conducted at Banesa Au-Cu prospect (EL609) during the June quarter. 3.5 line km of creek mapping were completed. A total of 48 creek channel samples and trenches (TABTR064 to TABTR107) for 2,145 metres and 422 samples were collected at Banesa. Initial Au and Cu assay results were received for trenches TABTR064 to TABTR078. Trenches are shown in relation to historical drilling results reported by Allied Gold Limited in the quarterly report for the period ended 30 June 2009 (Figure 4.6). Significant trench sampling results are highlighted in Figure 4.6 and include:

#### Banesa:

- > TABTR072: 10m @ 0.8 g/t Au
- > TABTR074: 5m @ 1.2 g/t Au and 0.2% Cu
- > Discussions are being held with two interested parties regarding potential joint venture arrangements for exploration relating to Banesa.

#### Expenditure (unaudited)

> All expenditure on mineral exploration for the June 2015 quarter and FY15 was expensed, and is shown below with totals for FY15:

	<u>Q4 Jun 2015</u>	<u>FY15</u>
Australia	A\$1.4 million	A\$3.6 million
Pacific	A\$0.9 million	A\$4.3 million
Gwalia Deep Drilling	A\$1.0 million	A\$2.1 million
Total		A\$10.0 million

#### September 2015 Quarter

- > Exploration in Q1 September 2015 will focus on:
  - > Continuing Gwalia deep drilling program;
  - Completion of drilling, sampling and downhole electromagnetic surveys on the Centenary Project;

- Further field visits to assess the highest ranked geological, structural and bedrock geochemical targets at Pinjiin. Initiate heritage surveys and lodgement of Programme of Work for Exploration in preparation for aircore drilling;
- Targeting near mine oxide potential within ML136 on Simberi;
- Continuing reconnaissance mapping and surface sampling, targeting oxide potential on West Simberi (EL609) following up anomalous gold results from the stream sediment sampling program;
- Trenching on southwest Tatau Island targeting higher grade oxide potential;
- Continuing detailed prospect mapping and surface sampling at Banesa Au-Cu prospect on Big Tabar Island;
- Progress access at Fotombar prospect on Big Tabar Island for mapping and surface sampling.
- > The map below shows current and planned target areas for Q1 September 2015.



#### FY16 Guidance - Exploration

#### Strategy

> The FY16 exploration program will largely focus on potential near-mine ore sources around Gwalia and Simberi. The aim for FY16 is to extend the life of each operation and provide future growth options for the Company.

#### Australia

- > Activities in the Leonora area for FY16 will concentrate on:
  - > The identification of further extensions to the Gwalia deposit where significant drill intercepts returned during the FY15 program of work indicated a further 300m down-plunge extension to the mineral system. A phased program of diamond drilling will be undertaken to quantify the resource to approximately 2,000 metres below surface.
  - Follow-up drilling and broader application of high powered electro-magnetic surveys will also be undertaken to pursue base metal and nickel targets within the Centenary project area.
- > Outside Leonora, work on the Pinjin project in the Yilgarn of Western Australia is focused on advancing early stage projects to decision point or drill ready targets. The highest ranked geological, structural and bedrock geochemical targets will be drill tested.

#### Simberi

- > A review of the portfolio of prospects within ML136 and EL609, based on work completed in FY15, produced a list of exploration targets ranked on value, size and potential to define oxide mineralisation and possible feed options to the mine. In FY16, up to seven of the most prospective of these will be drilled tested. Drilling will commence on the first of these targets in Q1 September 2015.
- > At Simberi, encouraging exploration results for the near mine targets on ML136 at Patan and Pigibo North will be tested for oxide ore. On West Simberi (EL609), surface geochemical sampling will continue to test for potential oxide mineralisation. To the south on Tatau Island (EL609), trenching and possible follow-up drilling at Mt Tiro, Mt Siro, Seraror and Nepewo is aimed at delineating the extent of existing gold mineralisation. On Big Tabar Island (EL609), drilling may be undertaken at the Banesa Au-Cu target subject to the results detailed mapping, surface geochemical sampling and potential geophysical surveys. Detailed mapping and surface sampling will be conducted at Fotombar Prospect.

#### Expenditure

> Exploration expenditure guidance for FY16 is A\$10 million, split approximately 55% Western Australia and 45% PNG, with approximately 40% of expenditure to be spent on drill testing targets.

## **Health & Safety**

> The Company-wide Total Recordable Injury Frequency Rate (TRIFR), calculated as a rolling 12 month average, increased from 4.9 at 31 March 2015 to 5.0 for the twelve months ended 30 June 2015. Following the fatal injury to a local contractor at Simberi in March 2015, new safety initiatives focusing on management of contractors and safety leadership have been undertaken.

## **Financials (unaudited)**

- > 104,954 ounces of gold were sold in the June quarter, at an average realised gold price of A\$1,478 per ounce (Q3 Mar: 105,460 oz at A\$1,511 per ounce).
- > Cash at bank at 30 June 2015 was A\$77 million<sup>1</sup> after repayment of debt and financing costs in the quarter. The repurchase of US\$54 million of the Senior Secured Notes (at a 5% discount) in June 2015 plus accrued interest resulted in a net cash outflow of A\$67 million.
- > Cash movements for the June 2015 quarter are summarised in the following table:

Cash balance A\$M (unaudited)	Q2 Dec FY15	Q3 Mar FY15	Q4 Jun FY15
Leonora - operating cash flow <sup>[2]</sup>	37	68	59
Simberi - operating cash flow <sup>[2]</sup>	(4)	2	10
- project capex	(1)	-	-
Gold Ridge	(2)	(1)	-
Rehabilitation and corporate capex	(1)	(1)	(1)
Corporate costs <sup>[3]</sup>	(6)	(5)	(4)
Corporate royalties	(2)	(2)	(2)
Exploration <sup>(4)</sup>	(2)	(2)	(3)
Other project costs (see below)	-	-	(2)
Working capital movement	12	(16)	(3)
Cash flows before finance costs	31	43	54
Net interest and finance costs	(17)	(3)	(18)
US debt repayment	-	-	(67)
Restricted cash reclassified as Sundry Debtors	(2)	-	-
Net movement for quarter	12	40	(31)
Cash balance at start of quarter	56	68	108
Cash balance at end of $quarter^{[1]}$	68	108	77

> Total interest bearing liabilities at 30 June 2015 of A\$347 million included US\$196 million Senior Secured Notes (after the repayment of AU\$54 million face value in June 2015) and the US\$75 million Red Kite loan, with the balance comprised of lease liabilities. The decrease from the balance of A\$420 million at 31 March 2015 was primarily due to repayment of the Senior Secured Notes.

<sup>1.</sup> Excludes restricted cash held on deposit of \$2M covering bank guarantees

<sup>2.</sup> Net of sustaining capex

<sup>3.</sup> Includes corporate redundancy payments and restructuring consulting fees incurred in relevant quarters

<sup>4.</sup> Includes Gwalia Deep Drilling

- > The Company manages exposure to US dollar denominated debt using US dollar revenue from gold sales.
- > As at 30 June 2015 there were 100,000 ounces of gold forward contracts to be delivered between July 2015 and June 2016 at a strike price of A\$1,600 per ounce. These contracts are in place to secure a stable cash margin on Simberi's forecast FY16 gold production.
- > The remaining 34,000 ounces of gold forward contracts at a strike price of A\$1,415 per ounce reported in the March 2015 quarterly report were delivered in full by 30 June 2015.
- "Other Project Costs" in the June quarter of A\$2 million include the cost of a procurement cost reduction project. To date, this procurement cost reduction project has resulted in cost savings of approximately \$18 million p.a. being incorporated in the FY16 plan.

#### Corporate

- > As previously advised, Colin Wise retired as Non-Executive Chairman and Doug Bailey retired as Non-Executive Director on 30 June 2015. Colin had been Non-Executive Chairman since 2004, and Doug had been a Non-Executive Director since 2006.
- > Tim Netscher was appointed Non-Executive Chairman on 1 July 2015, and Kerry Gleeson was appointed Non-Executive Director on 18 May 2015.
- > The composition of Board Committees from 1 July 2015 and as at the date of this report is:

#### Audit and Risk Committee

- David Moroney (Chair)
- Kerry Gleeson
- Tim Netscher

#### Health, Safety, Environment and Community Committee

- Tim Netscher (Chair)
- Kerry Gleeson
- David Moroney
- Bob Vassie

#### **Remuneration Committee**

- Kerry Gleeson (Chair)
- David Moroney

Tim Netscher

- > With these changes the Board renewal process which commenced in 2012 and was led by retiring Non-Executive Chairman Colin Wise, is now complete.
- > As advised on 18 June and 6 July 2015 respectively, Moody's and Standard and Poor's affirmed their

respective ratings of the Company (see below under Senior Secured Notes) and revised their respective outlooks on the ratings from negative to stable.

#### Share Capital

Issued shares	
Opening balance 31 March 2015	495,102,525
Issued	Nil
Closing balance 30 June 2015	495,102,525
Unlisted performance rights	
Opening balance 31 March 2015	21,556,379
Issued	Nil
Lapsed (provisional <sup>1</sup> )	-1,496,708
Closing balance 30 June 2015	20,059,671

#### ASX & ADR

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

#### Senior Secured Notes

Issued March 2013	US\$250 million
Repurchased Q4 June 2015	<u>US\$54 million</u>
Balance remaining at 30 June 2015	US\$196 million
Closing bid at 30 June 2015	US\$ 0.95
Coupon	8.875% p.a.
Redemption date	15 April 2018
S&P rating	В-
Moody's rating	Caa1

> Debt covenants under the Notes are not impacted by the sale of Gold Ridge operations nor operational performance generally. The debt covenants include change of control provisions.

## **Scheduled Future Reporting**

<u>Date</u>	<u>Report</u>
25 August	FY15 Financial Report
Late October	September 2015 Quarterly Report

[Dates are tentative and subject to change]

1 Assessment subject to approval by Remuneration Committee and Board

## **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. 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 Papua New Guinea 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 Ltd 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 Ltd 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 2014' released to the Australian Securities Exchange (ASX) on 27 August 2014 and available to view at www.stbarbara.com.au and for which Competent Person's consents were obtained. The Competent Person's consents 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.
- > Other than the sale of the Gold Ridge Project announced to the ASX on 1 and 7 May 2015, 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 2014 and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the original ASX announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original ASX announcement.
- > Competent Persons Dr Mustard and Mr de Vries are entitled to participate in St Barbara's long term incentive plan, details of which are included in the 2014 Annual Report and Notice of 2014 Annual General Meeting released to the ASX on 17 October 2014. In 2012 and 2013 increase in Ore Reserves was one of the performance measures under that plan.
- > Full details are contained in the ASX release dated 27 August 2014 'Ore Reserves and Mineral Resources Statements 30 June 2014' available at www.stbarbara.com.au

## **Corporate Directory**

St Barbara Limited ABN 36 009 165 066

## **Board of Directors**

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

#### Executives

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

#### **Registered Office**

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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).

## **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 Contact**

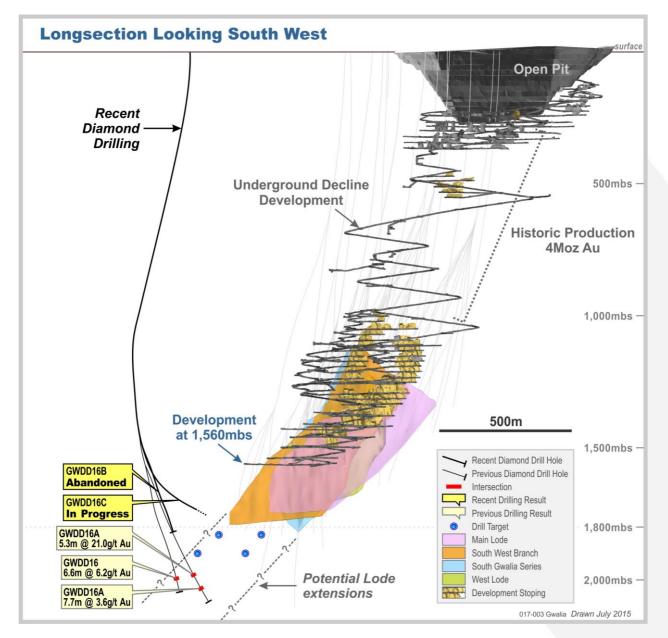
Rowan Cole, Company Secretary	+ 61 3 8660 1900
Substantial Shareholders	% of Holdings <sup>1</sup>
Hunter Hall Investment Management Ltd	15.0%
M&G Investment Management Ltd	11.5%
Franklin Resources Inc	6.6%

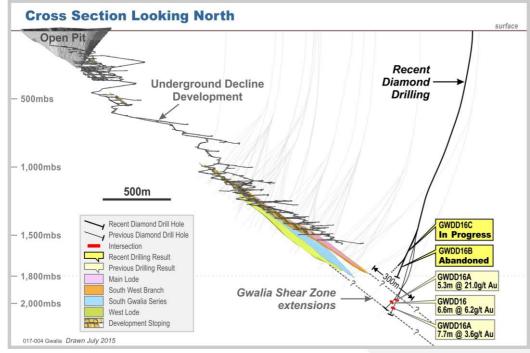
1. As notified by the substantial shareholders to 20 July 2015



Quarterly Report / Q4 June 2015

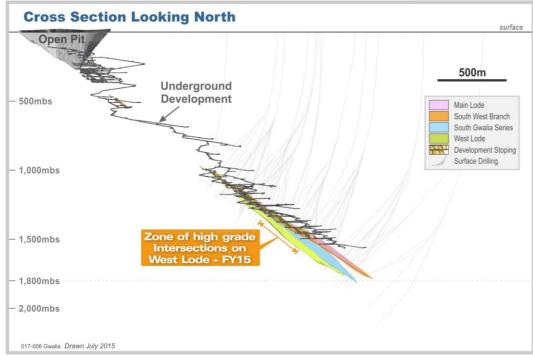
## Figure 1.0: Leonora: Gwalia Long Section (looking south west)

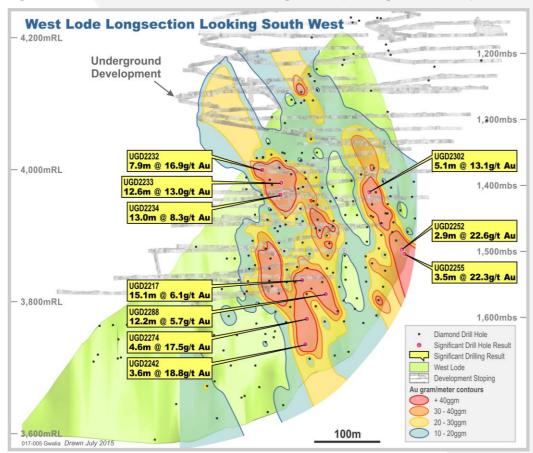






## Figure 1.2: Leonora: Gwalia Cross Section (looking north) West Lode drilling location

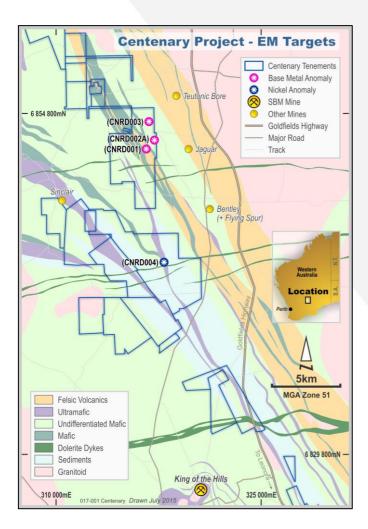


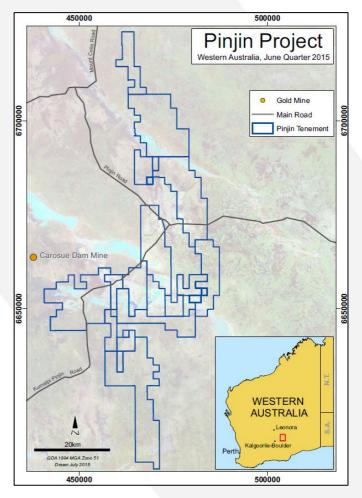


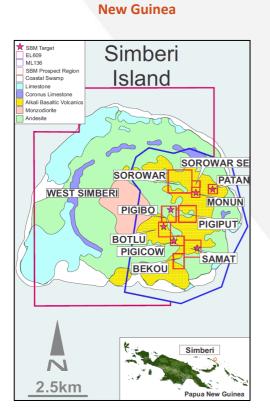
## Figure 1.3: Leonora: Gwalia West Lode Longsection (looking South West)

# Figure 2.0: Leonora: Centenary Project electromagnetic targets

Figure 3.0: Pinjin Project Location Map, WA







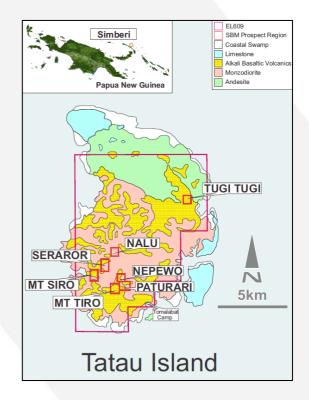
Simberi Island Location Map, Papua

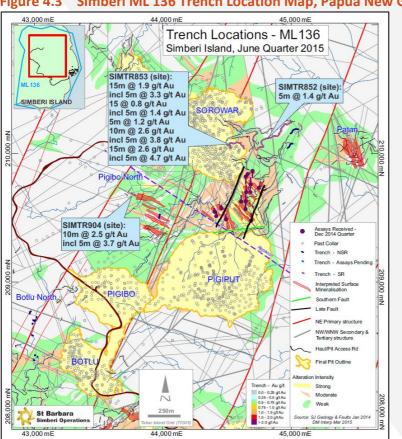
Figure 4.0

Figure 4.2 Big Tabar Island Location Map, Papua New Guinea



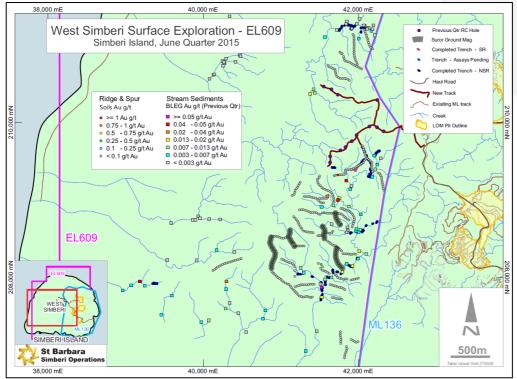


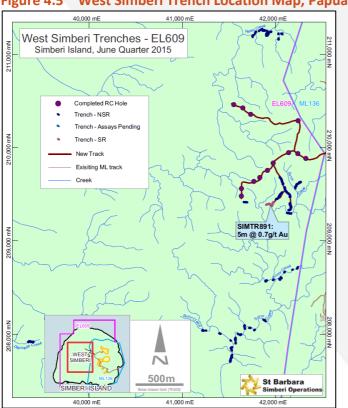




#### Figure 4.3 Simberi ML 136 Trench Location Map, Papua New Guinea







## Figure 4.5 West Simberi Trench Location Map, Papua New Guinea

Figure 4.6 Banesa Trench Location Map, Big Tabar Island, Papua New Guinea

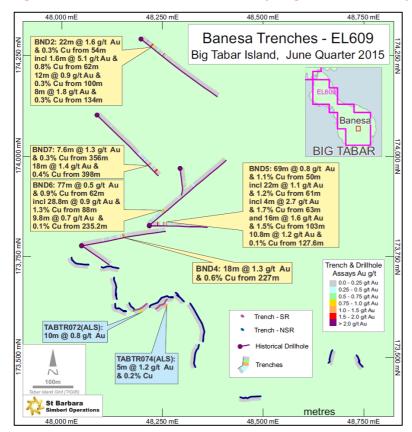


Table 1. Significant intercepts – Leonora, Gwalla Mine, West Lode											
Hole Id North E	North E	East	RL	Metres	Total	Down-hole Mineralised Intersection					
			Below Surface	Denth	Dip/ Azimuth	From	То	Interval	True Thickness	Gold grade	
						degrees	m	m	m	m	g/t Au
UGD2217	5985.6	9184.4	3831.6	1548.4	128.1	-54.2/280.8	93.0	108.3	15.3	15.1	6.1
UGD2232	5924.8	8994.0	3999.5	1380.5	96.0	5.5/235.8	66.6	78.6	12.0	7.9	16.9
UGD2233	5953.5	9008.8	3980.0	1400.0	63.0	-17.0/251.8	38.7	52.6	13.9	12.6	13.0
UGD2234	5951.9	9033.9	3961.3	1418.7	58.0	-52.6/219.4	36.4	49.4	13.0	13.0	8.3
UGD2242	5990.8	9284.1	3733.9	1646.1	236.2	-18.6/297.3	215.9	220.0	4.1	3.6	18.8
UGD2252	6137.4	9070.9	3878.5	1501.5	102.1	-21.3/313.4	89.0	92.0	3.0	2.9	22.6
UGD2255	6141.5	9087.8	3872.2	1507.8	101.9	-28.4/323.9	81.0	84.9	3.9	3.5	22.3
UGD2274	5992.7	9248.5	3772.8	1607.2	143.0	-61.5/277.1	115.7	120.3	4.6	4.6	17.5
UGD2288	6021.5	9192.4	3810.6	1569.4	114.0	-47.9/303.2	80.5	92.8	12.3	12.2	5.7
UGD2302	6088.1	8998.0	3966.3	1413.7	125.9	9.0/238.5	92.9	100.9	8.0	5.1	13.1
NOTEC											

#### Table 1: Significant Intercepts – Leonora, Gwalia Mine, West Lode

NOTES:

60 g/t Au high grade cut is applied. The reported intercepts are all down hole lengths.

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

#### **Contents**

Drilling: Section 1 Sampling Techniques and Data

Section 3 Estimation and Reporting of Mineral Resources

## Drilling - Section 1 Sampling Techniques and Data

(Criteria in this section ap	oply to all succeeding sections.)
Criteria	Commentary
Sampling techniques	<ul> <li>Half-core sampling of NQ2 diamond drilling with boundaries defined geologically. Samples are mostly one metre in length unless a significant geological feature warrants a change from this standard unit. The upper or right-hand side of the core is submitted for sample analysis, with each one metre of half core providing between 2.5 – 3 kg of material as an assay sample.</li> </ul>
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	<ul> <li>Core is metre marked and orientated and checked against drillers blocks to ensure that any core loss is accounted for.</li> <li>Sample recovery is rarely less than 100%. Where minor core loss does occur it is due to drilling conditions and not ground conditions.</li> </ul>
Logging	<ul> <li>All SBM holes are logged primarily for lithology, alteration and vein type/intensity which are key to modelling gold grade distributions. Validation of geological data is controlled via the use of library codes and reliability and consistency of data is monitored through regular peer review.</li> <li>All logging is qualitative.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>SBM half core is cut using a core saw before being sent to SGS laboratory in Kalgoorlie where the entire sample is crushed to achieve particle size &lt;4mm followed by complete pulverisation (90% passing 75 μm).</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>SBM samples were analysed for gold using fire assay with a 50g charge and analysis by flame Atomic Absorption Spectrometry (AAS). QC includes insertion of 3 commercial standards (1 per 20 samples), barren material used for blank control samples, use of barren flush material between designated high grade samples during the pulverising stage, re-numbered sample pulp residues re-submitted to original laboratory, and sample pulp residues submitted to accredited umpire laboratory, submission of residual (duplicate) half core from ore intervals. The analysis of gold was sound and re-analysis of pulps showed acceptable repeatability with no significant bias.</li> </ul>
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.
Data spacing and distribution	• Data spacing for grade control drilling is approximately 10m x 15m from 1000mbs to 1480mbs, resource definition is approximately 20m x 30m and surface drilling is approximately 60m x 80m from 1580mbs to 1800mbs. Drilling data is sufficient to establish down plunge continuity for all lodes.
Orientation of data in relation to geological structure	<ul> <li>Sampling is perpendicular to lode orientations and is sound based on past production and underground mapping.</li> </ul>

Criteria	Commentary
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	<ul> <li>Regular reviews of core logging and sampling are completed through SBM mentoring and auditing. Additionally, regular laboratory inspections are conducted by SBM personnel. Inspections are documented electronically and stored on secure company server. No significant issues were identified.</li> </ul>

## Drilling - Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in the pre	ceding section also apply to this section.)
Criteria	Commentary
Database Integrity	<ul> <li>Information is captured through spread sheets and validated prior to loading into the SBM corporate database which ensures only valid non-overlapping data can be recorded. Assay and down hole survey data are subsequently merged electronically. All drill data is stored in an SQL database on secure company server. Validation of data included visual checks of hole traces, analytical and geological data and ad hoc validation of 20 holes to original core photos and hard copy geological logs.</li> </ul>
Site Visits	• The Competent Person directly supervised geological modelling and mineral resource estimation, and is the site Manager Geology.
Geological Interpretation	• Mineralisation domains are defined by abundance of quartz and quartz/carbonate veining, the presence of distinctive laminated veining (quartz/sericite/sulphides +/- au), strong potassic alteration, abundance of sulphides (commonly >3% pyrite) and elevated gold grade (>0.5g/t).
Dimensions	• The mineralised zone strikes 15 degrees east of true north over a distance of 500m and plunges 45 degrees to the southeast. The mineralised zone consists of several stepped or an echelon style foliation parallel lodes disposed in plan in a "horse-shoe" shape with the limbs converging at the southern end. The mineralised zone and individual lodes dip east at 35 to 45 degrees and are conformable with the foliation of the Mine Sequence mafic schists. Individual lode widths vary from 2m to 30m true width. Mineralisation has been tested to approximately 2,000m below surface and remains open.
Estimation and modelling techniques	<ul> <li>West Lode domain was estimated using ordinary kriging. Three parent block sizes have been estimated; 4mE x 8mN x 4mRL for areas covered by underground grade control drilling, 8mE x 16mN x 4mRL for the area covered by resource development drilling and 16mE x 32mN x 4mRL for areas covered by surface drilling below approximately 1,580 metres vertical depth. Estimation was completed using Datamine 3.20. Search parameters reflect a structure plunging steeply to the southeast consistent with geological observation of high grade mineralisation geometry. Estimation parameters for West Lode were:         <ul> <li>Rotation Azimuth = 349 degrees, Dip = 38 degrees, Pitch = -70 degrees. Max search distances = 200m. Major/Semi-Major anisotropy = 1.6; Major/Minor = 6.6. Min samples = 8, max samples =20</li> <li>Isolated high grade composites were top cut prior to estimation (60 g/t).</li> </ul> </li> </ul>
Moisture	Tonnages are estimated on a dry basis
Cut-off parameters	• The model is reported at a 2.5g/t Au cut-off on 20mRL x 20mN panels for each lode to account for non- selective mining across strike.
Mining factors or assumptions	• The proposed mining method for West Lode is underground, open stoping with paste fill. Minimum stoping panels are 20mRL x 20mN with the resource reported on same size panels to reflect this relationship.
Metallurgical factors or assumptions	Metallurgical recovery has been proven to be consistently >95%

Criteria	Commentary
Environmental factors or assumptions	• The project covers an area that has been previously impacted by mining. The tenement area includes existing ethnographic heritage sites. SBM have undertaken extensive Aboriginal Heritage Surveys within the tenements and management measures are in place.
Bulk density	• Bulk density is assigned on a lode by lode basis and is routinely monitored via grade control drilling using the weight in air/weight in water method. Density ranges between 2.71g/cm3 and 2.79g/cm3
Classification	• The Gwalia resource is classified as a function of drill spacing, geological continuity and mining. Areas where grade control drilling has been completed to 20mx30m and geological continuity has been established through mining are classified as Measured. Areas where drill density is 30m x 40m, 60m x 80m or less with high geological continuity are classified as Indicated and elsewhere where drill density is sparse classified as Inferred.
Audits or Reviews	<ul> <li>The Gwalia Mineral Resource Estimate is reviewed internally in August, January and May of each year by site geologists and scrutinised by a panel of competent company geologists. The review covers all aspects of the estimate including source data, geological model, resource estimate and classification. In addition, the reporting of the company Mineral Resources is guided by the company's Mineral Resource Estimation System and overseen by the SBM Resources and Reserves Committee.</li> <li>The Gwalia Mineral Resource Estimate was audited by Quantitative Group (QG) as part of SBM's routine corporate governance practices in 2014. The audit assessed SBM's compliance with reporting under the JORC Code (2012) regime and considered the guidelines and reporting standards stated in the Code. QG also considered the overall quality of the resource estimate and the main risks associated with the data, process and implementation approach adopted by SBM. The findings from the audit show that the data, interpretation, estimation parameters, implementation, validation, documentation and reporting are all fit for purpose with no material errors or omissions and that SBM have completed the work with a high degree of professionalism. The resource estimate is of high industry standard suitable for both public reporting and internal mine design and scheduling.</li> </ul>
Discussion of relative accuracy/confidence	• The resource estimate is a global estimate. Grade control drilling is completed in advance of development to improve local estimates of grade.

# SIMBERI - JORC Code, 2012 Edition – Table 1

#### **Contents**

Trenching:	Section 1 Sampling Techniques and Data
	Section 2 Reporting of Exploration Results
Surface Sampling:	Section 1 Sampling Techniques and Data
	Section 2 Reporting of Exploration Results

## Trenching - Section 1 Sampling Techniques and Data

Criteria	apply to all succeeding sections.) Commentary
Sampling techniques	<ul> <li>Sampling of trenches was done over measured intervals of between 1 and 5 meters dependent on geology. A geo-pick was used to collect a continuous channel sample from the trench faces across the designated interval with the samples collected in calico bags. Samples (3 to 5kg) were prepped on-site (jaw crushed, disk mill pulverised and then split) to produce a 200g pulp sample. A 25g charge was then extracted from the pulp for Au analyses by Aqua Regia digestion followed by an Atomic Absorption Spectroscopy (AAS) instrument finish.</li> </ul>
Trenching/Benching techniques	• Trenches were created by both hand and mechanical techniques. Hand trenches were dug using spades, crowbars and shovels to depths of between 1 and 2 meters. Creek channel sampling is conducted in the same manner as trenches, where continuous exposure of bedrock is made by hand clearing of vegetation and cover. Mechanised trenches were dug by an excavator or dozer exposing up to 5 meters of trench wall.
Drill sample recovery	• N/A
Logging / Mapping	All trenches were qualitatively geologically mapped for lithology, structure and alteration.
Sub-sampling techniques and sample preparation	<ul> <li>Samples are routinely submitted for total pulverisation (85% passing &lt;75 μm) at the company onsite sample preparation facility on Simberi Island.</li> <li>200g pulps are sent to St Barbara's Simberi Laboratory where a 25g sub-sample is taken.</li> <li>For Banesa trench samples, the 200g pulps were sent to ALS, Townsville for analysis.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The Mine Lease samples were analysed for gold at the Simberi Lab using Aqua Regia digestion with a 25g charge and analysis by Atomic Absorption Spectrometry.</li> <li>The West Simberi and Banesa samples were analysed for gold at ALS (Townsville) via 50g fire assay and AAS finish (Method Au26). At Banesa, Cu, Ag, As, Fe, Mo, Pb, S, Sb and Zn were analysed via Nitric Aqua Regia Digestion and ICP-AES Finish (Method ME-ICP41).</li> <li>Two blanks were inserted at the start of each trench. QC included insertion of gold standards (1:100).</li> </ul>
Verification of sampling and assaying	• Sampling data is recorded electronically which ensures only valid non-overlapping data can be recorded. Assay and trench survey data are subsequently merged electronically. All data is stored in a SQL database on secure company server.
Location of data points	• All trenches were initially surveyed by a handheld GPS to capture the trench start point. The GPS used the Tabar Island Grid (TIG) which is based on WGS84 ellipsoid. The path of the trench from the initial start point to the end was surveyed by Tape & Compass method. Trench interval coordinates were then generated using basic trigonometry.
Data spacing and distribution	Trench data spacing is irregular and broad spaced.
Orientation of data in relation to geological structure	<ul> <li>Where preceding surface mapping and sampling of trenches has contributed to understanding of outcropping geological structures, trenching and sampling has been undertaken to extend the strike length of the mapped structure. However, in many of the areas the lode orientation is poorly understood.</li> </ul>

Criteria	Commentary
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 200gm pulps are then consigned to ALS in Townsville for Au-base metal analysis.
Audits or reviews	No audits or reviews of sampling protocols have been completed.

## Trenching - 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 over the Simberi Islands; ML136 on Simberi Island, and EL609 which covers the remaining area of Simberi Island, as well as Tatau Island and Big Tabar Island.
Exploration done by other parties	<ul> <li>CRA, BHP, Tabar JV (Kennecott, Nord Australex and Niugini Mining), Nord Pacific, Barrick and Allied Gold have all previously worked in this area. Nord Pacific followed by Allied Gold were instrumental in the discovery and delineation of the 5 main oxide and sulphide deposits at Simberi.</li> </ul>
Geology	<ul> <li>The Simberi gold deposits are low sulphidation, intrusion related adularia-sericite epithermal gold deposits. The dominant host rocks for mineralisation are andesites, volcanoclastics and lesser porphyries. Gold mineralisation is generally associated with sulphides or iron oxides occurring within a variety of fractures, such as simple fracture in-fills, single vein coatings and crackle brecciation in the more competent andesite units, along andesite/polymict breccia contact margins as well as sulphide disseminations. On Tatau and Big Tabar Islands, located immediately south of Simberi, potential also exists for porphyry Cu-Au, epithermal quartz Au-Ag and carbonate-base metal Au mineralisation.</li> </ul>
Trench/Bench Information	Included in the report text and annotated on diagrams.
Data aggregation methods	<ul> <li>Broad trench intercepts are spikes within the broader aggregated interval using a cut-off of 0.5 g/t Au and a minimum grade*length of 5gmpt. Such intercepts may include material below cut-off but no more than 5 sequential meters of such material and except where the average drops below the cut-off. Selvage is only included where its average grade exceeds 0.5 g/t Au.</li> <li>Using the same criteria for included sub-grade, supplementary cut-offs, of 2.5g/t Au, 5.0g/t Au and 10g/t Au, may be used to highlight higher grade zones and spikes within the broader aggregated interval. Single assays intervals are reported only where ≥1.0g/t and ≥5m trench length is intercepted. No high grade cut is applied.</li> <li>No metal equivalent values are used for reporting exploration results.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>Trench intercepts are sampled along the length of the trench and are reported for all trenches; true width is not reported.</li> </ul>
Diagrams	Diagrams show all trenches material and immaterial to Exploration Results.
Balanced reporting	Details of all trenches material to Exploration Results have been reported in the text, and all other trenches dug during the reporting period are highlighted on diagrams included in the report.
Other substantive exploration data	Included in the body of the report.
Further work	Included in the body of the report.

## Surface Sampling - Section 1 Sampling Techniques and Data

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

Criteria	Commentary
Sampling techniques	<ul> <li>BLEG Stream Sediment samples were only collected in sites where water was actively flowing. Sediment which passed through a 2mm sieve was collected in calico bags for a total weight of 3-5kg.</li> <li>-80# Stream Sediment samples were only collected from sediment trap sites. Sediment which passed through a 80 micron sieve (&lt;180µm) was collected in plastic stream sediment sachets. Excess water was decanted from the sachet once the sediment had settled. Approximately 200g of sediment was collected in each sachet.</li> <li>Panned Concentrate samples were only collected from active trap sites. The sediment was dug from several traps at the sample site and sieved into two pans through a 5mm plastic sieve. The pans of -5mm material were then panned down to approximately 50 grams.</li> <li>Float samples were collected from stream sample sites along with the other sample types. Approximately 3-5kg of selected floats were collected in a calico bag.</li> <li>Soil samples were collected by first digging through the organic A horizon until the B horizon was reached (Approximately 40cm depth). A bulk sample of approximately 3kg was then collected in a calico bag.</li> </ul>
Drilling techniques	• N/A
Drill sample recovery	• N/A
Logging	<ul> <li>All BLEG, Panned Concentrate and -80# samples were qualitatively logged for stream gradient, trap description and surrounding outcrop and float description.</li> <li>All Float and Soil samples were qualitatively logged for lithology, alteration, weathering and colour.</li> </ul>
Sub-sampling techniques and sample preparation	<ul> <li>BLEG, Panned Concentrate and -80# samples were sun dried prior to dispatch to ALS Townsville for preparation and analysis.</li> <li>Float and Soil samples were fully prepared at the company's on-site sample preparation facility on Simberi Island with 200g pulps sent to ALS Laboratory in Townsville for analysis.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>BLEG Samples were analysed for gold by ALS Townsville. QC included insertion of field duplicates (1:100).</li> <li>-80# Samples, Panned Concentrate, Float and Soil samples were analysed for gold by ALS Townsville using Aqua Regia digestion with a 50g charge and analysis by Inductively Coupled Plasma Mass Spectroscopy. Base metals were analysed using Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES). QC included insertion of field duplicates(1:100) and low level gold standards(1:100).</li> </ul>
Verification of sampling and assaying	• N/A
Location of data points	<ul> <li>All sampling sites were surveyed by a hand held GPS using Tabar Island Grid (TIG) which is based on WGS84 ellipsoid and is GPS compatible.</li> </ul>
Data spacing and distribution	• The sampling programs were designed to test the West Simberi catchment areas such that further stages of exploration could be planned.
Orientation of data in relation to geological structure	• N/A
Sample security	<ul> <li>Only trained company personnel were allowed to collect the samples; All samples were held within a secure company building before dispatch to ALS in Townsville for Au-base metal analysis.</li> </ul>
Audits or reviews	<ul> <li>No audits or reviews of sampling protocols have been completed.</li> </ul>

## Surface Sampling - Section 2 Reporting of Exploration Results

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

Criteria	Commentary
Mineral tenement and land tenure status	<ul> <li>SBM has 100% ownership of the two tenements over the Simberi Islands; ML136 on Simberi Island, and EL609 which covers the remaining area of Simberi Island, as well as Tatau Island and Big Tabar Island.</li> </ul>
Exploration done by other parties	<ul> <li>CRA, BHP, Tabar JV (Kennecott, Nord Australex and Niugini Mining), Nord Pacific, Barrick and Allied Gold have all previously worked in this area. Nord Pacific followed by Allied Gold were instrumental in the discovery and delineation of the 5 main oxide and sulphide deposits at Simberi.</li> </ul>
Geology	<ul> <li>The Simberi gold deposits are low sulphidation, intrusion related adularia-sericite epithermal gold deposits. The dominant host rocks for mineralisation are andesites, volcanoclastics and lesser porphyries. Gold mineralisation is generally associated with sulphides or iron oxides occurring within a variety of fractures, such as simple fracture in-fills, single vein coatings and crackle brecciation in the more competent andesite units, along andesite/polymict breccia contact margins as well as sulphide disseminations. On Tatau and Big Tabar Islands, located immediately south of Simberi, potential also exists for porphyry Cu-Au, epithermal quartz Au-Ag and carbonate-base metal Au mineralisation.</li> </ul>
Drill hole Information	• N/A
Data aggregation methods	• N/A
Relationship between mineralisation widths and intercept lengths	• N/A
Diagrams	Figures 4.3 to 4.6 show all sample sites material and immaterial to Exploration Results.
Balanced reporting	All BLEG stream sediment and soils sample results are shown in Figure 4.4
Other substantive exploration data	Included in the body of the report.
Further work	Included in the body of the report.