

Quarterly Report / Q2 December FY21

(3 months to 31 December 2020)

Highlights Q2 December FY21¹

Safety

- TRIFR² safety performance was 3.3 as at 31 December 2020 (30 September 2020: 3.1), with corresponding LTIFR³ at 31 December 2020 of 0.39 (30 September 2020: 0.2)
- No COVID-19 transmissions on any site with ongoing high vigilance and comprehensive protocols in place

Operations

Gold production of 89,670 ounces (Q1 Sep FY21: 72,990 ounces)

- All-In Sustaining Cost (AISC) of A\$1,517 per ounce (Q1 Sep FY21: A\$1,711 per ounce)
- Operational cash contribution in Q2 Dec FY21 of A\$83 million (Q1 Sep FY21: A\$27 million)

Finance

- Total cash at bank of A\$118 million (Q1 Sep FY21: A\$93 million), after investments and other financing of \$18 million, exploration expenditure of A\$9 million, growth capex of A\$8 million and income tax payments of A\$7 million
 - Total debt of A\$102 million (Q1 Sep FY21: A\$105 million)

Average realised gold price in Q2 Dec FY21 of A\$2,126 per ounce (Q1 Sep FY21: A\$2,171 per ounce), with 59,485 ounces delivered into hedge contracts in the quarter

Outlook

FY21 guidance is maintained with consolidated gold production of between 370,000 to 410,000 ounces at an AISC of between A\$1,360 and A\$1,510 per ounce

Building Brilliance Program

Late in the first quarter of FY21, **Building Brilliance** at St Barbara was launched. This is an integrated company-wide program to create sustainable value through improving operational performance and reduce costs to deliver A\$80 to A\$120 million of annual cash contribution by FY23. The program is delivering early benefits that will be reflected in the results reported in the second half

Production Summary

		Q2 Dec FY20	Q3 Mar FY20	Q4 Jun FY20	Q1 Sep FY21	Q2 Dec FY21	1H FY21
Group TRIFR ²		4.2	3.2	3.0	3.1	3.3	3.3
Gold Production	koz	94	92	109	73	90	163
All-In Sustaining Cost	A\$/oz	1,364	1,405	1,301	1,711	1,517	1,605
Gold Sold	koz	97	99	104	66	99	166
Realised Gold Price	A\$/oz	1,960	2,123	2,412	2,171	2,126	2,144

¹ This report uses certain Non-IFRS measures as set out on the last page of this report. Unless otherwise noted, 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 2020' released to the ASX on 24 August 2020. This report has not been audited.

Investor RelationsMr David CotterellManager Investor Relations+61 3 8660 1959ASX: SBMMedia RelationsMr Ben WilsonGRACosway+61 407 966 083ADR: STBMYAuthorised byMs Sarah StandishCompany Secretary27 January 2021

² Total Recordable Injury Frequency Rate per million hours worked (12 month average)

³ Lost Time Injury Frequency Rate per million hours worked (12 month average)

Leonora Province Plan

- An internal review of the Leonora Province was completed in December 2020, which assessed the current resource and mineral inventory base contained within the regional tenement package, together with historical stockpiles. A strategic action plan is now being developed to define options and opportunities. A number of initial scopes of work are now advanced and in the planning phase include:
 - o Review of all the geological models and data sets
 - Planning a structural review of the region to refine targeting opportunities
 - Review of the metallurgical test work at Harbour Lights. Harbour Lights hosts a historical resource and is open at depth and along strike.
- The review highlighted low grade stockpiles within the Leonora tenements, some of which were trucked and milled in December 2020 and January 2021. Work is commencing on stockpiles at Braemore Sands and also the larger bulk stockpiles at Tower Hill. Further desktop assessment of an ore sorting trial is planned to understand the potential and costs associated with upgrading this material prior to trialling a bulk sample program.
 - In addition to the province plan work a number of supporting projects are planned to evaluate opportunities associated with:
 - Determining a cut-off grade strategy for Gwalia
 - Fully understanding the practical and theoretical throughput capacity of the Leonora mill to determine the processing cost ranges that can be achieved with incremental increased capacity. The objective is to ensure the viability of the lower grade resources from multiple options that are currently available, including further cash positive tolling arrangements
 - O Drilling of the Gwalia Shallows (already commenced) to bring these areas into Measured and Indicated resources. The revised cut-off grade and mill throughput capacity is expected to complement this work. This will form part of the strategy to "Fill the Mill"
 - o Understanding of the mineral field endowment and field grade. This is a key piece of work to evaluate and develop an overall strategic plan for the Leonora Province, and fill the mill with St Barbara owned ore as an aspiration.

These initial projects have commenced, while an overall holistic strategy is being developed as information and data becomes available. This includes a revision of the exploration drilling programs currently planned to support the conversion of resources in the Leonora region.

Building Brilliance at St Barbara

The Building Brilliance Program was launched late in Q1 September FY21 and has been gaining momentum during the December FY21 quarter. Building Brilliance initiatives are beginning to drive improvements in operational efficiency and unit cost within all our operations. Progress in delivering the targeted A\$80 to A\$120 million of annualised cash contribution will be reported in future quarterly reports.

Atlantic:

- o Mill de-bottlenecking: Improved gravity circuit capacity and grinding efficiency driving >5% increase in throughput
- o Maintenance efficiency: Improved shutdown planning on track to deliver 30% reduction in mill shut downtime
- o **Spend control**: Rigorous review process implemented for all discretionary spend.

Leonora:

- Development efficiency and drilling speed: Roll-out of tele-remote operations and full digital automation for underground equipment driving increases in fleet utilisation
- Spend control: Reviewing and challenging all third party spend at Gwalia operations to identify savings, including the mine production contract.

• Simberi:

- Mining fleet productivity: Plans established to improve availability through: workforce capability uplift; review of maintenance and spares strategy completed with critical spares ordered; sourcing additional truck capacity (contractor and second hand market)
- Mill recovery: Implemented review of planning processes to better delineate/identify sulphide transitional material with improved mine to mill reconciliation with mining for value lens
- o **Spend control**: Negotiation of key contracts to achieve immediate savings.

Comment on the Quarter from Managing Director and Chief Executive Officer

Mr Craig Jetson, Managing Director and CEO, said, "The second quarter of FY21 was a step-up from the first three months, with a steady production profile and lower All-in-Sustaining Costs. The operational cash contribution of A\$83 million was a strong result and reflects our improved cost profile as we deliver on Building Brilliance.

I was pleased to detail St Barbara's strategy at the investor presentation in mid-December. Our strategy provides a path to grow production +40% from 382 koz to 520-570 koz and reduce recurring annual costs by A\$45 million. This will be delivered in two uplifts. The first is to deliver Building Brilliance in operations and extend mine life. The business is already reducing costs with a dual focus on near-mine exploration and mine plan optimisation.

Next, via Uplift 2, we will execute our brownfield expansion projects. Delivery of the Simberi Sulphide Feasibility Study, Atlantic project pipeline and filling the mill at Leonora are key to extracting maximum value from our existing footprint and commitment to these regions.

We have assembled a team with extensive operational and technical experience to deliver our strategy. Working to a detailed plan to deliver A\$80 - A\$120 million annual cash contribution by FY23, we are singularly focused on creating enduring value for St Barbara as we actively address and solve historical challenges and constraints."

Quarterly briefing and audio webcast

Craig Jetson, Managing Director & CEO, will brief analysts and investors on the Q2 December FY21 Quarterly Report at 11:00 am Australian Eastern Daylight Time (UTC + 11 hours) on Wednesday 27 January 2021.

Analysts and institutional investors

Analysts and institutional investors can register for the briefing at https://s1.c-conf.com/diamondpass/10011728-js875f.html

Shareholders and media

An audio webcast will be available live and after the event on St Barbara's website at stbarbara.com.au/investors/webcast/ or by clicking here. The audio webcast is 'listen only' and does not enable questions.

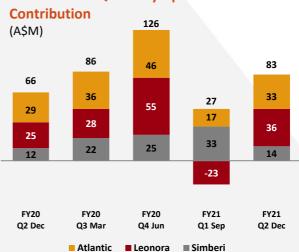
Overview

Group Safety Performance

Total Recordable Injury Frequency Rate



Consolidated Quarterly Operational Cash



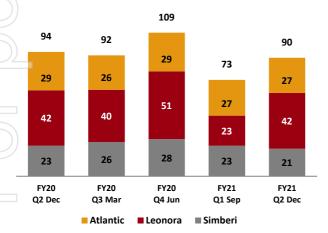
Consolidated Gold Production

Quarterly AISC



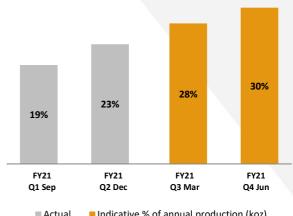
Combined Quarterly Gold Production

(koz)



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

FY21 Production Indicative Quarterly Guidance Profile



■ Indicative % of annual production (koz) Actual

Consolidated Gold Production & Guidance

Production Summ	nary	Q3 Mar	Q4 Jun	Year	Q1 Sep	Q2 Dec	1H	Guidance
Consolidated		FY20	FY20	FY20	FY21	FY21	FY21	FY21
St Barbara's finar 1 July to 30	•	Qtr to 31 Mar 2020	Qtr to 30 Jun 2020	Year to 30 Jun 2020	Qtr to 30 Sep 2020	Qtr to 31 Dec 2020	6 months to 31 Dec 2020	
1 July 10 30	June	31 WIUI 2020	30 Juli 2020	30 Juli 2020	30 Sep 2020	31 Dec 2020	31 Dec 2020	30 Julie 2021
<u>Production</u>								
Atlantic	OZ	26,032	29,209	106,663	27,226	26,693	53,919	100 to 115 k
Gwalia	OZ	39,684	51,297	171,156	22,625	42,198	64,823	175 to 190 k
Simberi	OZ	25,831	28,106	104,068	23,139	20,779	43,918	95 to 105 kg
Consolidated	OZ	91,547	108,612	381,887	72,990	89,670	162,660	370 to 410 k
	02	31,347	108,012	301,007	72,330	83,070	102,000	
Mined Grade	- 4	0.04	0.00	0.02	0.05	0.04	0.03	Milled grad
Atlantic	g/t	0.91	0.88	0.93	0.95	0.91	0.93	1.33
Gwalia	g/t	8.1	7.0	7.7	8.1	8.3	8.2	8.3
Simberi	g/t	1.05	1.07	1.06	1.19	1.49	1.32	1.25
Tatal Cash On Ca	-4-							
Total Cash Op. Co Atlantic		772	675	713	669	726	703	2/2
\ \ \	A\$/oz					736		n/a
Gwalia	A\$/oz		1,041	1,071	1,560	1,037	1,220	n/a
Simberi	A\$/oz	1,459	1,360	1,482	1,481	1,817	1,640	n/a
Consolidated	A\$/oz	1,116	1,025	1,083	1,203	1,128	1,162	n/a
All-In Sustaining (<u>Cost</u>							
Atlantic	A\$/oz	951	988	928	1,008	999	1,002	955 to 1,10
Gwalia	A\$/oz	1,556	1,389	1,485	2,592	1,573	1,933	1,435 to 1,5
Simberi	A\$/oz	1,629	1,467	1,631	1,678	2,070	1,863	1,665 to 1,8
Consolidated	A\$/oz	1,405	1,301	1,369	1,711	1,517	1,605	1,360 to 1,5
Group Exploration	n		Ac	tual	Actual	Actu	ıal	Guidance
Croup Exploration	.•			p FY21	Q2 Dec FY21	1H F)		FY21
				\$M	A\$M	A\$I		A\$M
Australia:					· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·
Leonora Region			2	2	1.9	4.1		8 - 9
Pinjin WA, Lake W	ells WA. Bac	k Creek NSW		3	3.7	5.0		10 - 11
Tabar Island Grou	•			1.1		2.4		2-3
<i>V)</i>	•	. Cumeu		1.5	1.3 1.8	3.3	5	10 - 12
Nova Scotia, Canada Consolidated			6.1		14.		30 - 35	
consonuateu				···	8.7	14.		30 - 33
Group Capex		Actual		Actual	Δ	ctual	6	uidance
Group capex		Sep FY21		Dec FY21		l FY21		FY21
	Sustaining	•					Sustainin	
	A\$M	A\$M	A\$M	A\$M	A\$M	A\$M	A\$M	A\$M
Atlantic	6	1	5	2	11	3	15 - 20	15 - 20
Gwalia	19	6	18	5	37	11	70 - 80	30 - 32
Simberi	2	1	3	1	5	2	12 - 15	4 - 5

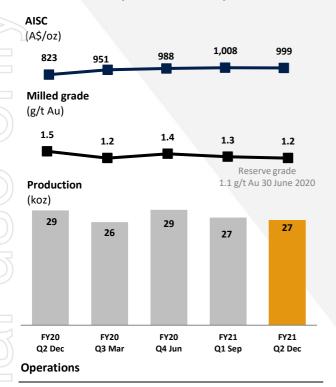
Group Exploration	Actual Q1 Sep FY21 A\$M	Actual Q2 Dec FY21 A\$M	Actual 1H FY21 A\$M	Guidance FY21 A\$M	
Australia:			1		
Leonora Region	2.2	1.9	4.1	8 - 9	
Pinjin WA, Lake Wells WA, Back Creek NSW	1.3	3.7	5.0	10 - 11	
Tabar Island Group, Papua New Guinea	1.1	1.3	2.4	2- 3	
Nova Scotia, Canada	1.5	1.8	3.3	10 - 12	
Consolidated	6.1	8.7	14.8	30 - 35	

Group Capex	Actu	ıal	Acti	ual	Act	ual	Guida	ance	
	Q1 Sep FY21		Q2 Dec	Q2 Dec FY21		1H FY21		FY21	
	Sustaining	Growth	Sustaining	Growth	Sustaining	Growth	Sustaining	Growth	
	A\$M	A\$M	A\$M	A\$M	A\$M	A\$M	A\$M	A\$M	
Atlantic	6	1	5	2	11	3	15 - 20	15 - 20	
Gwalia	19	6	18	5	37	11	70 - 80	30 - 32	
Simberi	2	1	3	1	5	2	12 - 15	4 - 5	
Consolidated	27	8	26	8	53	16	97 - 115	49 - 57	

¹ C\$880 to C\$1,010 per ounce @ AUD/CAD 0.92

US\$1,185 to US\$1,305 per ounce @ AUD/USD 0.71

Atlantic Gold, Nova Scotia, Canada



- Production for Q2 Dec FY21 was 26,693 ounces (Q1 Sep FY21: 27,226 ounces) reflecting slightly lower mill grades and marginally lower recovery.
- The average milled grade was slightly lower at 1.24 g/t Au (Q1 Sep FY21: 1.29 g/t Au), with mill throughput higher at 714 kt (Q1 Sep FY21: 698 kt).
- Gold recovery of 94% in Q2 Dec FY21 was consistent with the previous quarter (Q1 Sep FY21: 94%), with higher gravity circuit recovery helping offset the relining of two carbon-in-leach tanks in December.
- AISC of A\$999 per ounce for Q2 Dec FY21 was slightly lower than the previous quarter (Q1 Sep FY21: A\$1,008 per ounce).
- During the quarter sustaining capital expenditure amounted to A\$5 million (Q1 Sep FY21: A\$6 million), mainly on the next lift for the tailings storage facility.

Outlook

- FY21 guidance is unchanged and comprises:
 - o Production between 100,000 and 115,000 ounces
 - o AISC between A\$955 and A\$1,100 per ounce¹
 - Sustaining capex of A\$15 to A\$20 million
 - Growth capex of A\$15 to A\$20 million.

Atlantic Gold growth projects

- COVID-19 restrictions have slowed some stakeholder engagement related to permitting of the Atlantic growth projects. The Federal permitting agencies have reopened and are accepting submissions, however, the legislated requirement for public consultations has been interrupted due to COVID-19. Engagement with First Nations groups has largely recommenced with good progress at Fifteen Mile Stream. Impacts from COVID-19 on the progression of the Atlantic projects are being closely monitored with a mitigation action plan developed to minimise these impacts. Organisation changes have been made at Atlantic Gold with the appointment of a General Manager Community Engagement and Permitting focussing on First Nations Engagement, Government Engagement permitting.
- Beaver Dam: It is anticipated that the updated Federal Environmental Impact Statement (EIS), responding to the second round of information requests, will be submitted in Q3 Mar FY21 with approval of the EIS anticipated in Q2 Dec FY22. The Feasibility Studies relating to mining, plant design, and haul road along with the associated site investigations remain on schedule for completion in Q4 FY21. This includes the execution planning for subsequent project phases.
- Fifteen Mile Stream: Site investigative studies and First Nations engagement are advancing sufficiently to allow for the EIS submission in Q3 Mar FY21. Various Building Brilliance initiatives are being reviewed and developed for incorporation into the project with the Feasibility Study on track for completion in Q4 Jun FY21.
- Cochrane Hill: The Nova Scotia Government recently advised the deferral of a decision to designate Archibald Lake as a protected wilderness area. Whilst awaiting further clarification around this decision, work continued during the period with respect to several trade-off studies along with further environmental investigations in support of the planned EIS and Feasibility Study for this project.

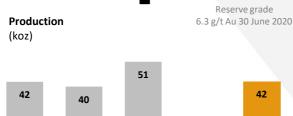
¹ C\$880 to C\$1,010 per ounce @ AUD/CAD 0.92

Gwalia, Leonora, WA

8.1

8.0

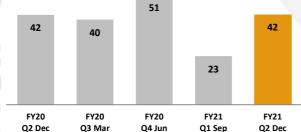




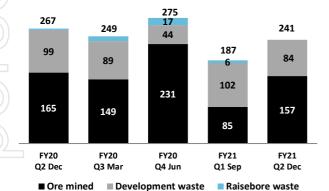
7.0

8.1

8.3



Gwalia total material moved (kt)



Operations

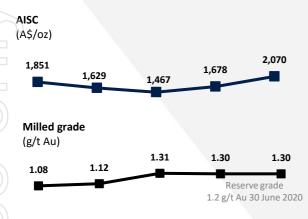
- Gwalia gold production for Q2 Dec FY21 was 42,198 ounces (Q1 Sep FY21: 22,625 ounces). Average mined grade for the quarter was 8.3 g/t Au (Q1 Sep FY21: 8.1 g/t Au).
- Q2 Dec FY21 mined volume was substantially higher at 157 kt compared to the previous quarter (Q1 Sep FY21: 85 kt), reflecting a return to higher volumes of stope ore.
- Ore milled in the quarter was 177 kt (Q1 Sep FY21: 97 kt), with recovery remaining consistent at 97%.

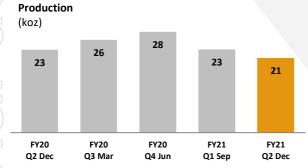
- AISC of A\$1,573 per ounce in Q2 Dec FY21 was significantly lower than the previous quarter (Q1 Sep FY21: A\$2,592 per ounce), largely as a result of increased production.
- A paste reticulation blockage in October delayed paste filling
 of stopes by ~11 days, negatively impacting stope tonnages in
 the quarter. As part of the decline rehabilitation program a 4
 day shutdown was conducted in November, which limited
 activities underground. A final 4 day shutdown in January will
 complete the decline rehabilitation program.
- Stope long hole drilling was impacted by some hole cleaning, delaying some firings. A review of drill & blast practices has been completed, looking at opening up the strike length and the ring designs, with external technical expertise assisting.
- The underground Wi-Fi network has been completed, which
 now enables long hole drilling from the surface during shift
 change. The Auto Drill features on the Sandvik rigs have also
 been commissioned. Together these initiatives are delivering
 an additional 30 to 40 drill metres per day, ramping up further
 as operations become accustomed to using the technology.
- The Sandvik AutoMine system is also now running on the Wi-Fi network, with improved bogging rates and the ability to run multiple loaders with one operator from surface. The next step is remote operating the new 422i development jumbo from surface to allow development drilling over shift change, which is expected to give a further lift in development advance rates. All of these initiatives are part of the Building Brilliance program
- Third party ore processed in Q2 Dec FY21 was 84 kt, with discussions also progressing on longer term contracts for third party ore.
- At the end of the quarter a new toll processing agreement (TPA) was entered into with Linden Gold Alliance (LGA). The TPA also includes a financing facility for the development of the Second Fortune Project. Under the TPA, LGA will deliver a minimum of 300 kt (and up to 390 kt) over a 22 month period, with ore scheduled for processing from April 2021.
- This TPA delivers the majority of the toll processing arrangements outlined in Building Brilliance Uplift 1 on slide 28 of the Investor Briefing dated 15 December 2020. However, additional suitable one-off toll milling arrangements with third parties are also being considered.

Outlook

- FY21 guidance is unchanged and comprises:
 - o Production between 175,000 and 190,000 ounces
 - o AISC between A\$1,435 and A\$1,560 per ounce
 - Sustaining capex of A\$70 to A\$80 million
 - o Growth capex of A\$30 to A\$32 million

Simberi, Papua New Guinea





Operations

- Simberi gold production for Q2 Dec FY21 was 20,779 ounces (Q1 Sep FY21: 23,139 ounces).
- Production was lower than the previous quarter due to substantially lower mill recovery at 63% (due to processing transitional ore – see below) (Q1 Sep FY21: 79%), offsetting higher milled tonnes of 796 kt (Q1 Sep FY21 703 kt). Milled grade was unchanged at 1.30 g/t Au (Q1 Sep FY21: 1.30 g/t Au).
- Total material movement was lower at 2,435kt (Q1 Sep FY21: 2,537kt), due to lower truck fleet availability. A fleet improvement program is in progress, which includes purchasing additional fleet.
- Mining focused primarily on East and West Botlu, Pigibo, Sorowar South and commencement of Samat open pits during the quarter.
- During the December quarter, the remaining 1,200 metres of original belt on the aerial Rope conveyor were replaced. This has improved availability and together with higher availability of the processing circuit resulted in higher mill throughput this quarter compared to the previous quarter.
- Recovery was lower than planned due to a higher proportion of transitional ore being processed.
 Transitional high grade ore usage was increased to

- manage negative reconciliation from mining, resulting in less available oxide ore.
- Negative reconciliation in the Samat pit reduced the availability of higher grade oxide ore. Further grade control drilling and a review of the grade control model is in progress.
- AISC for Q2 Dec FY21 increased ~23% to A\$2,070 per ounce (Q1 Sep FY21: A\$1,678 per ounce), primarily due to higher mining costs and ~11% lower production.
- Simberi has continued to operate through COVID-19 with no positive cases reported on the Island. We continue to monitor and protect our workforce and local community with COVID-19 management protocols.

Simberi Sulphide Project Update

- The Feasibility Study is progressing to plan and will be completed at the end of January 2021 for internal review, and for subsequent consideration by the Board in March 2021.
- The study anticipates one-year to obtain relevant permits and approvals, and a two-year construction period. The current mine plan anticipates processing oxides into FY24.
- The Company has engaged with the Papua New Guinea (PNG) Conservation and Environmental Protection Authority (CEPA) regarding a variation to the existing environmental permit. Through engagement with CEPA the delivery of the Environmental and Social Impact Assessment remains on track for submission in March 2021, with the approval timeline expected to take up to 12 months.
- During the quarter the Company provided an update to various government departments (CEPA, Mineral Resources Authority) and stakeholders (New Ireland Provincial Governor, Member for Namatani) on the project status and plan moving forward. The update was well received.

Outlook

- FY21 guidance is unchanged and comprises:
 - o Production between 95,000 and 105,000 ounces
 - AISC between A\$1,665 and A\$1,840 per ounce¹
 - o Sustaining capex of A\$12 to A\$15 million
 - Growth capex of A\$4 to A\$5 million related to the feasibility study.

 $^{^{1}}$ US\$1,185 to US\$1,305 per ounce @ AUD/USD 0.71 $\,$

Exploration Activities

- Exploration activity for Q2 Dec FY21 is presented in the following order:
 - Australia
 - o Canada
 - o PNG

and is summarised in the table below:

Exploration Activity Sum	mary
	Australia
Gwalia Near Mine (WA)	• 20 UG Diamond holes for 4,636 m
Leonora Regional (WA)	• 46 RC holes for 7,367 m
	• 26 Aircore holes for 1,533 m
Pinjin (WA)	No field activity
Lake Wells (WA)	• 260 Aircore holes for 15,727 m
	• 1.5 Diamond holes for 452 m
Back Creek (NSW)	No field activity
Horn Island (QLD)	• 12 Diamond holes for 4,489 m
Drummartin JV (VIC)	• 11 Aircore holes for 1,008 m
	Canada
Moose River Corridor	No field activity
Touquoy Camp	• 10 Diamond holes for 1,680 m
	• 32 RC holes for 3,376 m
NE Regional	2 Diamond holes for 313 m
SW Regional	• 212 IFRC holes for 5,142 m
	PNG
Simberi	• 11 Diamond holes for 849 m
	• 17 RC holes for 905 m
Tatau	No field activity

Australia

Gwalia Exploration, Leonora WA (Figure 1.0)

- Gwalia near mine: An underground diamond drill program testing Gwalia Shallows mineralisation between 350 and 600 mbs was carried out with 20 holes completed during the quarter for 4,636 m. To date, 38 holes have been completed for 8,806 m, to test the Shallows. An additional phase of Gwalia Shallows underground drilling, comprising 8 holes for 2,500 metres, is planned to assist with resource estimation work and will commence early in Q3 Mar FY21.
- Leonora regional: A 46 hole RC drill program for 7,367 m was completed testing 5 targets (Jasper Hills, Beaumaris, Falklands Trend, Backgammon and Royal Arthur Bore). A 26 hole Aircore drill program for 1,533 m was completed at Ascension. Assay results for both programs will be reported in Q3 Mar FY21.

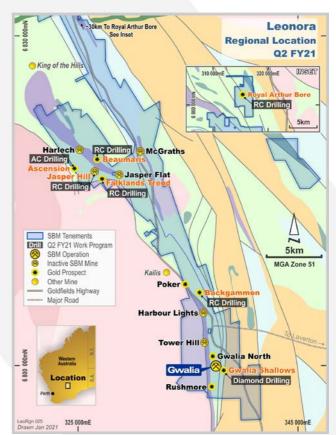


Figure 1.0 Gwalia and surrounding Leonora tenements

Pinjin Project, WA (Figure 2.0)

 No field activities occurred during the quarter. Final assays from the 5 hole RC program completed in the previous quarter were returned. Follow up drilling is planned in Q4 June FY21.

Lake Wells Gold Project, WA (Figure 2.0)

 A 338 hole, 19,853 m Aircore drill program testing five targets commenced in September and was completed in December 2020. Anomalous bedrock gold assay results will be followed up by a 19 hole RC drill program in Q3 Mar FY21. A 3 hole diamond drill program commenced in December 2020 and to date 1.5 holes have been completed for 452 m.

Back Creek, NSW (Figure 2.0)

 Subject to access, diamond drilling at the North East target in EL8530 testing an induced polarisation (IP) chargeability anomaly and the South West target in EL8214 testing a gold in bedrock anomaly is planned to commence in Q3 Mar FY21.

Horn Island, QLD (Figure 2.0)

 A diamond drill program of 13 holes for 4,591 m that commenced in late September 2020 was completed testing two main chargeability anomalies including one surrounding and extending approximately 600 m northwest from the current Alice Queen Limited (ASX: AQX) inferred resource and a second located further to the northwest. All assay results are expected to be received in the Q3 Mar FY21.

Drummartin, VIC (Figure 2.0)

An aircore drill program of up to 118 holes for 18,025 m planned to test four gravity targets commenced in December 2020. To date 11 holes have been completed for 1,008 m. Subject to access, drilling is expected to recommence in Q3 Mar FY21.



Figure 2.0 Australia and Papua New Guinea Project Locations

Canada

Atlantic Gold, Nova Scotia (Figure 3.0)

Moose River Corridor

Subject to access, a program of 58 drill holes for 3,595 m (41 IFRC holes for 1,435 m, 14 RC holes for 1,560 m and 3 diamond holes for 600m) testing three Caribou targets is expected to commence in early Q3 Mar FY21.

Touquoy Camp

• 10 diamond drill holes for 1,680 m and 20 RC holes for 2,088 m were completed in Q2 Dec FY21 testing a 1,100 m strike length of the Higgins-Lawlers-Stillwater (HLS) target located 2 km South West of Touquoy Mine. An additional 12 RC drill holes for 1,288 m were completed testing an 800 m strike length of the Higgins-Lawlers-Stillwater-Gap (HLS-Gap) target located in between the HLS target and the Touquoy Mine.

Subject to results, additional drill programs will commence in Q3 Mar FY21, with up to an additional 3,700 m of drilling planned for HLS, HLS-Gap and Touquoy West Scheelite Closure.

SW Regional

 Interface RC (IFRC) drilling program continued until early-December 2020. 212 IFRC holes were completed for 5,142 m testing six targets (Moses Lake A, Green Harbour A, C, D and E, plus Pleasantfield C). To date, the overall drill program comprises 424 IFRC holes for 10,662 m testing nine targets. Drilling is expected to recommence early in Q3 Mar FY21. Exploration Licence 52645 at Pleasant River Barrens was surrendered.

NE Regional

 Two diamond holes for 313 m were completed at Cameron Dam. Subject to access, an additional 16 diamond holes for 2,550 m and 10 IFRC holes for 200 m will be completed in Q3 Mar FY21 testing four targets (Cameron Dam, Little Meander, Lake Catcha and Harrigan Cove).



Figure 3.0 Nova Scotia Project Locations

PNG

Simberi, Tatau & Tabar Islands (Figure 4.0)

 Diamond and RC drilling of five oxide targets on Simberi Island (ML136) to define potential additional inferred resources continued through Q2 Dec FY21. 17 RC holes for 905 m and 11 diamond drill holes 849.2 m was completed. To date, 40 RC holes for 2,080 m and 18 diamond holes for 1,340 m has been completed at Pigibo North, Andora, Monun South and NW Sorowar. Drilling is expected to continue through part of Q3 Mar FY21.



Figure 4.0 Tabar Islands Location Map, Papua New Guinea

Group Exploration Expenditure (unaudited)

Expenditure on mineral exploration is shown below:

	<u>Q1</u> Sep FY21	<u>Q2</u> Dec FY21	<u>1H</u> FY21
		A\$ million	
Australia*	3.5	5.6	9.1
Canada – Moose River Corridor	0.1	0.1	0.2
Canada – Regional*	1.4	1.7	3.1
PNG*	1.1	1.3	2.4
	6.1	8.7	14.8

^{*} These items are expensed

Equity Investments

 At the date of this report, St Barbara holds the following investments in Australian explorers¹:

Catalyst Metals Limited (ASX:CYL)	14%
<u>Duketon Mining Limited</u> (ASX:DKM)	12%
Peel Mining Limited (ASX-PFX)	13%

• During the quarter St Barbara participated in the new capital raise by Catalyst Metals (ASX: CYL) investing \$3.2 million.

¹ Shareholdings as notified by St Barbara in substantial holder notices

Health, Safety, Environment and Community

Total Recordable Injury Frequency Rate (TRIFR) ¹ safety performance was 3.3 as at 31 December 2020 compared to 3.1 at 30 September 2020. The corresponding Lost Time Injury Frequency Rate (LTIFR)² at 31 December 2020 was 0.39 (30 September 2020: 0.2).

There have been:

- Six recordable injuries for the quarter, most of low severity, with one lost time injury and the injured worker has now returned to light duties.
- No COVID-19 transmissions with ongoing protocols including screening, hygiene and physical distancing in place.
- Focus over the quarter has been on contractor management, COVID-19 management and Line of Fire prevention across all sites.
- COVID-19 management remains unchanged and focus is high.
 - Atlantic Gold has received official notification from Nova Scotia Environment (NSE) of legal proceedings in relation to 32 environmental incidents, which were self-reported by the Company to NSE. Atlantic Gold has been proactively working with NSE to address these matters. Full and thorough remediation work was conducted at the time of the incidents, all of which were reported, with an ongoing focus on mitigation. The main incidents raised by the NSE relate to instances where significant rainfall events have caused water, containing silty road materials, to run-off secondary access driveways, causing and overwhelm the existing storm water management system to overflow. There is no connection with or impact on current mining activities, including the tailings processing and management facility. Any consequences resulting from these charges are likely to have an immaterial financial impact.

COVID-19 Management

- St Barbara continues to diligently apply our COVID-19 Protocols including ongoing screening, increased hygiene, personal protective equipment (masks) and non-essential personnel working remotely where risks remain high.
- In PNG, all fly-in fly-out (FIFO) workers complete thorough screening and quarantine before coming onto site and all local workers are screened on a daily basis. Leonora continues to apply screening for all FIFO personnel from Perth and daily screening while on site. Atlantic continues to screen all personnel on a daily basis including any visitors and contractors.

SBM COVID-19 Management Framework



Community

• During the quarter:

- Leonora Shooting Stars school engagement program for girls won a Special Commendation award at the Department of Mines, Industry Regulation and Safety Community Partnership Resource Sector Awards
- March 2020 marked 15 years of St Barbara's ownership
 of the Gwalia mine. Celebrations for this important
 milestone, rescheduled from earlier in the year due to
 COVID-19 restrictions, took place in late November with
 the Leonora community.
- In PNG, members of the Tabar community produced their first chocolate bar under the joint effort of St Barbara, Simberi Mining Area Association (SMAA) and Simberi Mining Services (SMS). St Barbara reintroduced cocoa farming under a sustainable development program upon purchasing the mine in 2012.
- Atlantic Gold held key stakeholder meetings with First Nations groups (KMKNO, PLFN and Paqtnkek Chiefs/Councils) as part of the engagement and permitting process for our growth projects.
- We continued to build on the breadth and depth of experience in the business to enhance Traditional Owner and First Nations engagement capacity, an important component of the Community and Social Performance Strategy.

Sustainability

• During the quarter:

The Group's submission to the Carbon Disclosure Project (CDP) scored a 'C' for Climate Change, with the highest recognition being 'A'. CDP is a not-for-profit charity that runs the global disclosure system for investors, companies, cities, states and regions to

Total Recordable Injury Frequency Rate per million hours worked (12 2 Lost Time Injury Frequency Rate per million hours worked (12 month average).

manage their environmental impacts. The CDP Climate Change incorporates 15 criteria. The world's economy looks to CDP as the gold standard of environmental reporting with the richest and most comprehensive dataset on corporate and city action.

This year St Barbara submitted data to the Bloomberg Gender Equality Index joining a number of global companies that support transparent reporting of gender statistics. The index incorporates 74 metrics within five pillars:

- Female leadership & talent pipeline
- Equal pay & gender pay parity
- Inclusive culture
- Sexual harassment policies
- Pro-women brand

TO BEN BUSIED IOLI

Finance (unaudited)

- 99,461 ounces of gold were sold in Q2 Dec FY21, at an average realised gold price of A\$2,126 per ounce (Q1 Sep FY20: 66,460 ounces at A\$2,171 per ounce), with 59,485 ounces delivered into hedge contracts in the quarter.
- Total cash at bank at 31 December 2020 was A\$118 million¹ (30 September 2020: A\$93 million), after investments and other financing of A\$18 million, exploration expenditure of A\$9 million, growth capex of A\$8 million and income tax payments of A\$7 million.
- During the quarter the Company signed a debt facility agreement with Linden Gold Alliance in support of a toll processing agreement at Gwalia. The debt facility is a A\$16 million term loan to fund the redevelopment of the Second Fortune Project, with the first draw down in December 2020 amounting to A\$9.1 million. The debt facility includes loan covenants and security and is at a commercial interest rate for this type of facility.
- Total debt owing under the Company's syndicated facility at 31 December 2020 was A\$102 million (30 September 2020: A\$105 million). The Australian tranche of the syndicated facility of A\$200 million remains undrawn.
- The Company generated an operational cash contribution in Q2 Dec FY21 of A\$83 million (Q1 Sep FY21: A\$27 million).
- Cash movements are summarised in the following table:

Cash movements & balance A\$M (unaudited) Operating cash flow ² Atlantic		Q2 Dec FY20	Q3 Mar FY20	Q4 Jun FY20	Q1 Sep FY21	Q2 Dec FY21
		25	36	46	17	33
	Leonora	12	28	55	(23)	36
7	Simberi	29	22	25	33	14
Operational cash co	ontribution	66	86	126	27	83
Growth capital -	Atlantic	(10)	(2)	(2)	(1)	(2
	Leonora	(1)	(7)	(8)	(6)	(5
	Simberi	(4)	(1)	(1)	(1)	(1
Project costs		(2)	(2)	(3)	(2)	(7
Corporate costs ³		(6)	(7)	(7)	(7)	(7
Corporate royalties		(1)	(2)	(3)	(1)	(3
Exploration ⁴		(10)	(6)	(4)	(6)	(9
Investments		3	-	-	(61)	(3
Income tax paymen	ts	(24)	(1)	(6)	(2)	(7
Working capital mo	vement	(2)	3	(5)	(27)	2
Cash flows before f	nance costs	9	61	87	(87)	4:
Net interest income	e/(expense)	(3)	(1)	(2)	(2)	(1
Other financing ⁵		(3)	(1)	-	(1)	(15
Syndicate facility dr	aw down (repayment)	-	200	-	(200)	
Dividends paid		-	(18)	-	(22)	
Net movement for	period	3	241	85	(312)	25
Cash balance at sta	rt of quarter	76	79	320	405	93
Cash balance at en	d of quarter	79	320	405	93	118

¹ Financial information unaudited. Balance comprises A\$118 M cash.

Net of sustaining capex.

³ Cash corporate costs in Q1 Sep FY21 include payment of short term incentives for employees (inc. key management personnel) accrued at 30 June 2020.

⁴ Includes Gwalia deep drilling.

⁵ Includes Linden Gold Alliance gold loan draw down (\$9M) and net foreign exchange losses (\$6M) related to USD and CAD Group cash balances.

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

Financial Year	Volume ounces	Price \$/oz	Туре	Delivery	Delivery schedule	Announced
FY21	2,138	C\$ 1,759	Forward	Feb 2021	-	24 Feb 2020 ¹
Mar 21 to	78,010	C\$ 2,050	European call	Apr 2021 to Dec 2022	Monthly	24 Feb 2020 ¹
Dec 22			ontions			

Corporate

Share Capital

Issued shares	ASX:SBM
Opening balance 30 September 2020	705,357,181
Issued ²	933
Closing balance 31 December 2020	705,358,114
Unlisted employee rights	ASX:SBMAK
Opening balance 30 September 2020	2,189,017
Issued ²	1,995,257
Exercised as shares	Nil
Lapsed ³	-309,968
Closing balance 31 December 2020	3,874,306
Comprises rights:	
30 June 2021	676,869
30 June 2022	1,368,733
30 June 2023	1,828,704
Closing balance 31 December 2020	3,874,306

These forward contracts and European call options replaced previous forward contacts priced at C\$1,550/oz.

² ASX Appendix 3G 27 Nov 2020 rights issued to eligible employees under St Barbara Ltd Rights Plan; ASX Appendix 2A 27 Nov 2020 shares issued in accordance with the St Barbara Tax Exempt Share Plan.

³ ASX Appendix 3G 27 Nov 2020 rights lapsed of departed employees

Corporate Directory

St Barbara Limited ABN 36 009 165 066

Board of Directors

Tim Netscher	Non-Executive Chairman
Craig Jetson	Managing Director & CEO
Steven Dean	Non-Executive Director
Kerry Gleeson	Non-Executive Director
Stef Loader	Non-Executive Director
David Moroney	Non-Executive Director

Company Secretary

Sarah Standish General Counsel & Company Secretary

Executives

Craig Jetson	Managing Director & CEO
Garth Campbell-Cowan	Chief Financial Officer
Val Madsen	Executive General Manager People
Evan Spencer	Chief Operating Officer

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 <u>www.stbarbara.com.au</u>

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.

Q1 Sep FY21 = quarter to 30 Sep 2020

Q2 Dec FY21 = quarter to 31 Dec 2020

Q3 Mar FY21 = quarter to 31 Mar 2021

Q4 Jun FY21 = quarter to 30 Jun 2021

1 As notified by the substantial shareholders to 25 January 2021

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.investorcentre.com/au

Investor Relations

David Cotterell, Manager Investor Relations +61 3 8660 1959

Substantial Shareholders

% of Holdings1

Van Eck Associates Corporation	10.9%
L1 Capital Pty Ltd	5.0%
Vanguard Group	5.0%

Scheduled Future Reporting

Date	Report				
17 February	Half Year Financial Results				
28 April	Q3 March FY21 Quarterly Report				
Dates are tentative and subject to change					

Appendix

Production Sumn	mary			Atlantic	Gold, NS			Gwalia, WA					
		Q2 Dec FY20	Q3 Mar FY20	Q4 Jun FY20	Q1 Sep FY21	Q2 Dec FY21	1H FY21	Q2 Dec FY20	Q3 Mar FY20	Q4 Jun FY20	Q1 Sep FY21	Q2 Dec FY21	1H FY2
Ore mined	kt	1,124	1,006	1,127	1,077	854	1,931	165	149	231	85	157	24
Vaste mined	kt	975	728	906	1,137	1,087	2,224	99	89	44	102	84	18
arade	g/t	1.02	0.91	0.88	0.95	0.91	0.93	8.0	8.1	7.0	8.1	8.3	8.
Ore milled ¹	kt	637	693	681	698	714	1,411	184	179	244	97	177	27
rade ¹	g/t	1.51	1.24	1.41	1.29	1.24	1.27	7.3	7.1	6.8	7.5	7.6	7
Recovery	%	94	94	95	94	94	94	97	97	97	97	97	9
old production	OZ	29,067	26,032	29,209	27,226	26,693	53,919	42,022	39,684	51,297	22,625	42,198	64,82
old sold	OZ	29,051	29,563	30,620	22,789	29,294	52,083	43,098	42,268	51,025	16,490	47,846	64,33
ealised gold pric	ce A\$/oz	1,846	1,998	2,350	1,844	1,966	1,913	1,914	2,019	2,358	1,914	2,022	1,99
II-In Sustaining	Cost												
A\$/oz produced													
Mining		264	274	253	266	280	273	651	743	719	1,047	735	84
rocessing		320	365	315	302	302	302	183	166	168	224	101	1
ite services		114	126	138	121	139	130	116	150	99	214	117	1
tripping & ore in	nventory adj	(67)	(38)	(81)	(52)	(29)	(40)	11	(6)	(9)	35	11	
		631	727	625	637	692	665	961	1,053	977	1,520	964	1,1
By-product credit	ts	(1)	(1)	(2)	(1)	(2)	(1)	(2)	(2)	(2)	(3)	(3)	(
hird party refinion	ng &	2	2	3	2	3	2	1	2	2	1	2	
Royalties		37	45	49	31	43	37	56	64	64	42	74	
Total cash operat	ting costs	669	773	675	669	736	703	1,016	1,117	1,041	1,560	1,037	1,2
ess operating de	velopment *	-	-	-	-	-	-	(118)	(190)	(191)	(356)	(215)	(26
Adjusted cash op	erating cost *	-	-	-	-	-	-	898	927	850	1,204	822	9
Corporate and ad	dministration	58	73	64	90	75	82	58	73	64	90	75	:
Corporate royalty	y *	-	-	-	-	-	-	33	39	54	44	59	
Rehabilitation		5	6	5	13	13	13	5	6	5	12	8	
Operating develo		-	-	-	-	-	-	110	182	193	379	191	2
Capitalised mine	development	-	-	-	-	-	-	340	308	178	827	342	5
Sustaining capita	l expenditure	91	99	244	236	175	205	27	21	45	36	76	
II In Suctaining	Cost (AISC)	823	951	988	1,008	999	1,002	1,471	1,556	1,389	2,592	1,573	1,9

Includes Gwalia mineralised waste

	Production Summary		Simberi, PNG							
			Q2 Dec FY20	Q3 Mar FY20	Q4 Jun FY20	Q1 Sep FY21	Q2 Dec FY21	1H FY21		
	Ore mined	kt	697	721	967	767	576	1,343		
	Waste mined	kt	2,491	2,077	1,692	1,769	1,859	3,628		
	Grade	g/t	1.03	1.05	1.07	1.19	1.49	1.32		
	Ore milled	kt	811	858	788	703	796	1,499		
	Grade	g/t	1.08	1.12	1.31	1.30	1.30	1.30		
	Recovery	%	83	84	85	79	63	70		
-,	Gold production	OZ	23,070	25,831	28,106	23,139	20,779	43,918		
111	Gold sold	oz	25,057	26,876	22,738	27,181	22,321	49,502		
	Realised gold price	A\$/oz	2,170	2,427	2,616	2,601	2,559	2,582		
	All-In Sustaining Cost									
//	A\$/oz produced									
1.	Mining		616	513	444	526	760	637		
	Processing		681	576	543	597	652	623		
	Site services		348	310	333	330	362	345		
	Stripping & ore invento	ory adj	-	-	_	(3)	-	(1		
			1,645	1,399	1,320	1,450	1,774	1,603		
	By-product credits		(12)	(11)	(24)	(56)	(33)	(45		
U	Third party refining & transport		12	8	11	11	7			
	Royalties	59	63	53	76	69	73			
	Total cash operating c	1,704	1,459	1,360	1,481	1,817	1,640			
	less operating develop	-	-	-	-	-	,			
	Adjusted cash operatir	-	-	-	-	-7				
	Corporate and adminis	58	73	64	90	75	82			
	Corporate royalty *	-	_	-	-	-				
/ [Rehabilitation	33	29	23	31	35	33			
	Operating developmer	-	-	-	-	-				
	Capitalised mine development		-	-	-	-	-			
	Sustaining capital expe	nditure	56	68	20	76	143	108		
	-	(AISC)	1,851	1,629	1,467	1,678	2,070	1,863		

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.

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.
- 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.
- Cash Contribution is cash flow from operations before finance costs, refer reconciliation of cash movement earlier in this quarterly report.
- Cash Operating Costs are calculated according to common mining industry practice using The Gold Institute (USA) Production Cost Standard (1999 revision).

Competent Persons Statement

Exploration Results

• The information in this report that relates to Exploration Results 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.

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 2020' released to the Australian Securities Exchange (ASX) on 24 August 2020 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 announcements released on 24 August 2020 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 announcements 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 announcements.
- Full details are contained in the ASX release dated 24 August 2020
 'Ore Reserves and Mineral Resources Statements 30 June 2020'
 available at www.stbarbara.com.au.