

Quarterly Report

Q2 December FY24



3 months to 31 December 2023 (unaudited)

St Barbara ("SBM" or the "Company") (ASX:SBM) provides the following Q2 December FY24 quarterly report.

Highlights

Project Development

- Simberi Resource definition drill program supporting a targeted upgrade of 1 Moz from Inferred to Indicated Resource now 50% complete
 - Initial results announced 23 January 2024 and further results anticipated in February
- Simberi metallurgical sample drilling complete and first batch of sample material dispatched in January
- Simberi Expansion Concept Study commenced – completion targeted for end of Q3 FY24
- 15-Mile Project Prefeasibility Study results announced 10 October 2023
 - Average 55 – 60kozpa gold production over 11 year mine life at average AISC of US\$992/oz
 - Initial capital of C\$182 million
- Updated environmental and social impact assessment studies and field work for 15-Mile Project advanced with approvals submissions targeted for September quarter FY25

Financial Strength

- Cash of A\$214 million at 31 December 2023
- Listed investments value rose to A\$22 million
- Gold sales for quarter of 14,958oz at average price of A\$3,016/oz
- Corporate office downsizing completed

Operating Performance

- Simberi gold production of 12,969oz – up 25% from Q1
- Oxide stockpile of 70Kt at 1.2 g/t built as at 31 December 2023
- Simberi anticipated to meet production guidance and breakeven operating cashflow for FY24:
 - Resumption of access to higher proportions of higher grade Sorowar ore in H2 FY24
 - Oxide ore stockpile built up in Q2
 - Mine fleet replacement units arrivals on schedule
- Touquoy processing plant transitioned to active care and maintenance

Exploration

- Drilling programs completed at Goldboro East and Pinjin JV (assays awaited on both)
-



Managing Director and CEO Andrew Strelein said “The value proposition for St Barbara now lies in the demonstration of the development potential of the projects in Nova Scotia and the Simberi Expansion. The Company is focused on advancing these projects as quickly as possible to realise maximum value for shareholders.”

“Our Mineral Resource position at 5.9 Moz is incredible for a Company of our size and I look forward to providing Mineral Resource and Ore Reserve updates in February and again at the end of FY24.”

“Since July, the new look St Barbara team have re-designed 15-Mile to be developed independently of Touquoy. That project is now moving towards permitting. At Simberi, oxide mine life has been extended through FY26 while we upgrade the confidence classification of the 4.0 Moz of Mineral Resources and finalise the optimal development design for the Simberi Expansion. The extension of oxide life, even at the projected neutral operating cashflow, allows us to avoid the costs and community impacts of prematurely switching to care and maintenance. The work at Simberi is rapidly advancing.”

“The Simberi team are doing a fantastic job of making operational improvements after several years of under-investment in operations reliability.”



Development Projects

St Barbara has key development projects on Simberi Island, Papua New Guinea and in Nova Scotia, Canada.

Simberi

The Simberi Expansion Life of Mine (LOM) Plan includes mining of multiple open pits during the life of the operation to exploit both the oxide and sulphide resources. Of the currently defined 2 Moz of Ore Reserves at Simberi, Pigiput dominates the LOM comprising around 58% of the contained ounces followed by Sorowar at around 18%, with Pigibo, Botlu and Samat all contributing around 7-8% and the remaining pits making up the balance.

Capital expenditure for the growth strategy at Simberi for FY24 is trending towards the lower end of the range of A\$10 and A\$13 million outlined in our guidance announcement of 30 October 2023¹.

St Barbara outlined the main components of the work streams on the Simberi Expansion in earlier announcements. Progress to date is summarised in Table 1.

Table 1. FY24 Simberi Expansion Project Schedule

Simberi Expansion	Status	Q1 Sep FY24	Q2 Dec FY24	Q3 Mar FY24	Q4 Jun FY24
Metallurgical drilling	Complete		✓		
Mine fleet selection trade off study	Complete		✓		
Pit wall geotechnical study update	Complete		✓		
Alternative flowsheet concept study	In Progress		→		
Commence metallurgical testwork on alternative flowsheet	On track			▲	
Resource definition drilling	50%	→			
Updated Mineral Resources and Ore Reserves	On track				▲

Metallurgical and Resource Definition Drilling

As previously announced² the 14-hole metallurgical drill program has been completed and the first batch of sample material dispatched by air freight. Base Metallurgical Laboratories Ltd in British Columbia, Canada has been selected as the preferred laboratory to undertake the metallurgical testwork. The testwork program is anticipated to begin at the end of Q3 FY24.

The metallurgical testing includes comminution, gravity recoverable gold, flotation, leaching, rheology and concentrate analysis, in addition to further mineralogical analysis and tailings geochemistry work. In particular, the program is targeting a review of ultra-fine grinding (UFG) as an alternative lower capital cost processing option to the previously assumed production of a gold concentrate for sale to third parties.

The resource definition drilling program also advanced and is currently 50% complete. Both drill rigs were able to switch on to resource definition drilling by the end of Q2. This program is focussed on infill and extensions to the sulphide resource at Pigiput, Sorowar and Pigibo.

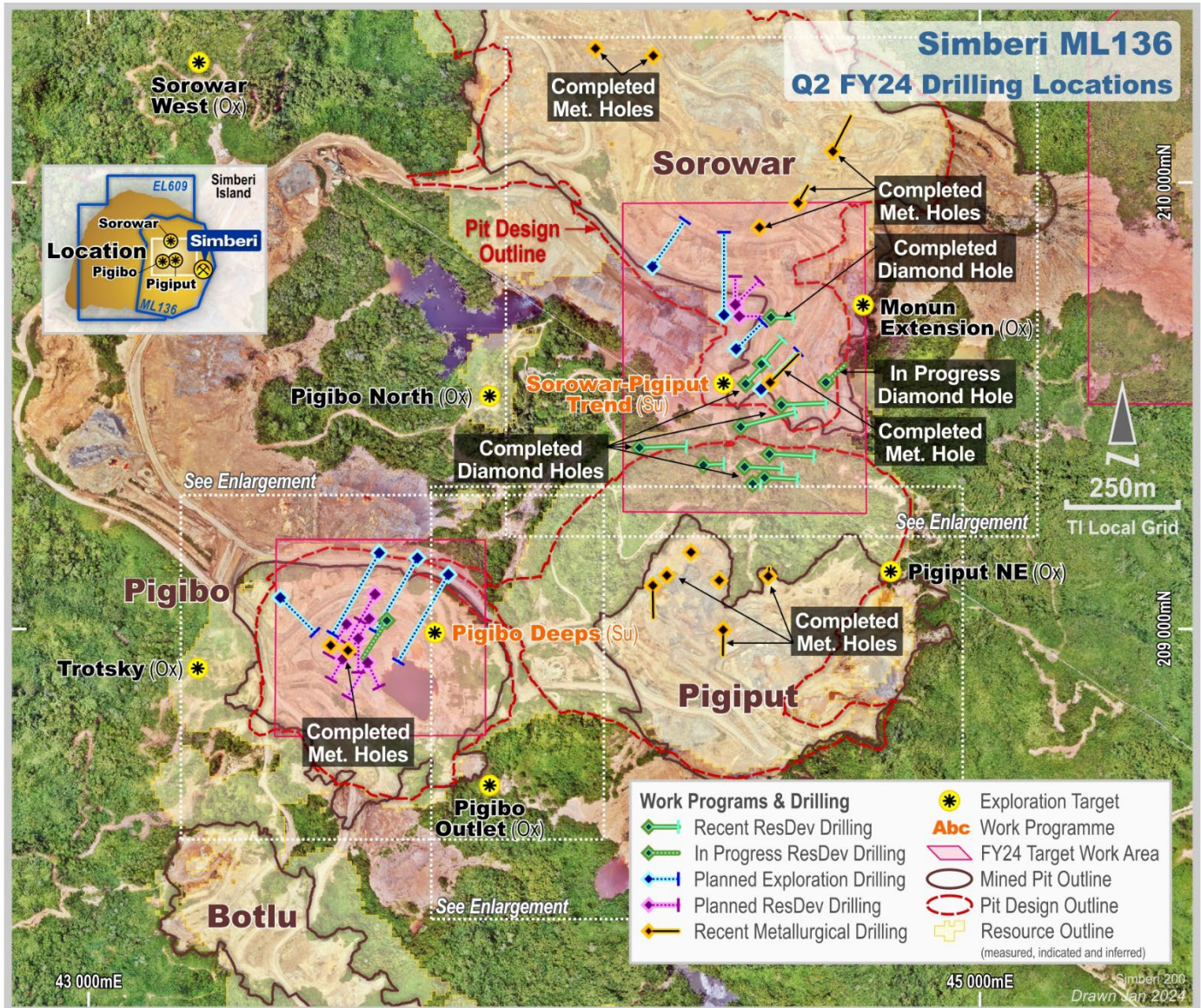
The program supports the work being carried out to target the conversion of 1 Moz from Inferred Mineral Resources to Indicated Mineral Resources with the intention for additional Ore Reserves to be included in the Simberi Expansion Project when the new Mineral Resource and Ore Reserve update is delivered at the end of FY24. Figure 1 below shows the locations of completed and planned drill holes.

¹ Refer to ASX announcement dated 30 October 2023 titled "FY24 Growth Capital, Production and Cost Guidance".

² Refer to ASX announcement dated 23 January 2024 titled "Simberi Resource Definition Drilling Update".



Figure 1. FY24 Completed and Planned Diamond Drilling, Simberi Island, Papua New Guinea



Mine Fleet Selection Trade off Study

The initial mine fleet selection trade off study was completed in November 2023. The study considered the following different truck and excavator combinations for Pigiput, the largest open pit:

- CAT 745 (41 tonne payload) Trucks with Hitachi EX1200 excavators
- Volvo A60H (55 tonne payload) Trucks with Hitachi EX1200 excavators
- CAT 777 (91 tonne payload) Trucks with Hitachi EX1900 excavators
- BIS Rexx (160 tonne payload) Trucks with Hitachi EX2600 excavators

Previous internal studies for the Sulphide expansion have been based on the smallest of the truck and excavator fleet combination (i.e. CAT 745 trucks with Hitachi EX1200 excavators). The current fleet in use at site is a mix of ~40 tonne payload trucks (CAT 740, CAT 745, Bell 50D and Terex TA400) matched with Hitachi EX1200 excavators. The results of this latest study highlighted improvements in project returns for the larger truck and excavator combinations. A definitive position on a preferred fleet will not be decided upon until the results of the other study work and the new resource model update are available as these have the potential to materially change the potential size of the open pits and the processing throughput rate, both of which will influence the mining equipment decision.



The Volvo A60H (55 tonne payload) together with the existing Hitachi EX1200 excavator is being carried forward into the alternative flowsheet concept study work as the preferred choice of truck. Work is currently underway to source two Volvo A660H trucks to trial in the current mining operations.

Pit Wall Geotechnical Study Update

A review of the current LOM Plan pit wall designs has been completed during the quarter. The review has yielded a recommendation to steepen the largest pit, Pigiput, by an additional three degrees from 36° to 39° overall slope angle following the incorporation of more recent geological information from pit wall mapping and refinement of the rock mass strength model. As discussed above, Pigiput has the largest resource endowment and is also the deepest of the proposed pits. Recommendations have been made for additional work including further diamond drilling, rock property testing and hydrogeological testing and modelling that may result in further improvements. These are currently under consideration.

Alternate Flowsheet Concept Study

The previous Feasibility Study for the Simberi Expansion³ assumed the production of gold concentrate from flotation for sale to the Asian market at a plant throughput rate of 3.0 Mtpa, with an option to expand to 3.7 Mtpa. A review of this study and previous studies undertaken in the past has highlighted the potential that UFG with cyanide leaching to produce gold dore may have been overlooked as an alternative attractive flowsheet option.

During the quarter, the Alternate Flowsheet Concept Study was commenced and is designed to understand the merits of the UFG / cyanide leach option as compared to the current gold concentrate float option. The Concept Study will also evaluate capital investment options across the logical alternative plant throughput scales. The study is considering six cases in total comprising the two flowsheet options with three different process rate options (~2 Mtpa, ~3 Mtpa and 3.7 Mtpa) for each flowsheet (see Table 2). The three alternative processing rates being considered relate to the sequence of step changes possible for the existing process plant ranging from retention of the current circuit with a new float circuit added through to modifications to, or replacement of, the existing ball and SAG mill in the higher throughput cases. This work is being done in advance of the metallurgical testwork to help guide the testwork program on the flowsheet options.

Table 2. Alternate Flowsheet Concept Study Cases

Throughput Rate	Gold Concentrate from Float	Gold Dore from Ultra Fine Grind (UFG) and gold leach
3.7 Mtpa (High Capex)	✓	✓
~3.0 Mtpa (Moderate Capex)	✓	✓
~2.0 Mtpa (Low Capex)	✓	✓

The six cases involve comminution modelling, construction of preliminary process flowsheets and capital and operating cost and gold recovery estimates. Benchmarking of twelve UFG / cyanide leach operations from around the world has been conducted and has been used as a guide in the preparation of the UFG cases. These parameters will then be provided as inputs for the generation of further iterations of mine plans.

To emulate the targeted uplift in Indicated Mineral Resources from the current resource definition drilling program, a new Mineral Resource model has been generated internally for this Concept Study exercise. This model flags material targeted for conversion from Inferred Resource to Indicated Resource classification in the next Mineral Resource model update due at the end of FY24 and includes the flagged material in a new optimised pit shell.

³ Refer to ASX announcement dated 27 April 2021 titled "Simberi Sulphide Feasibility Study highlights robust project; Board approves pre-investment work".



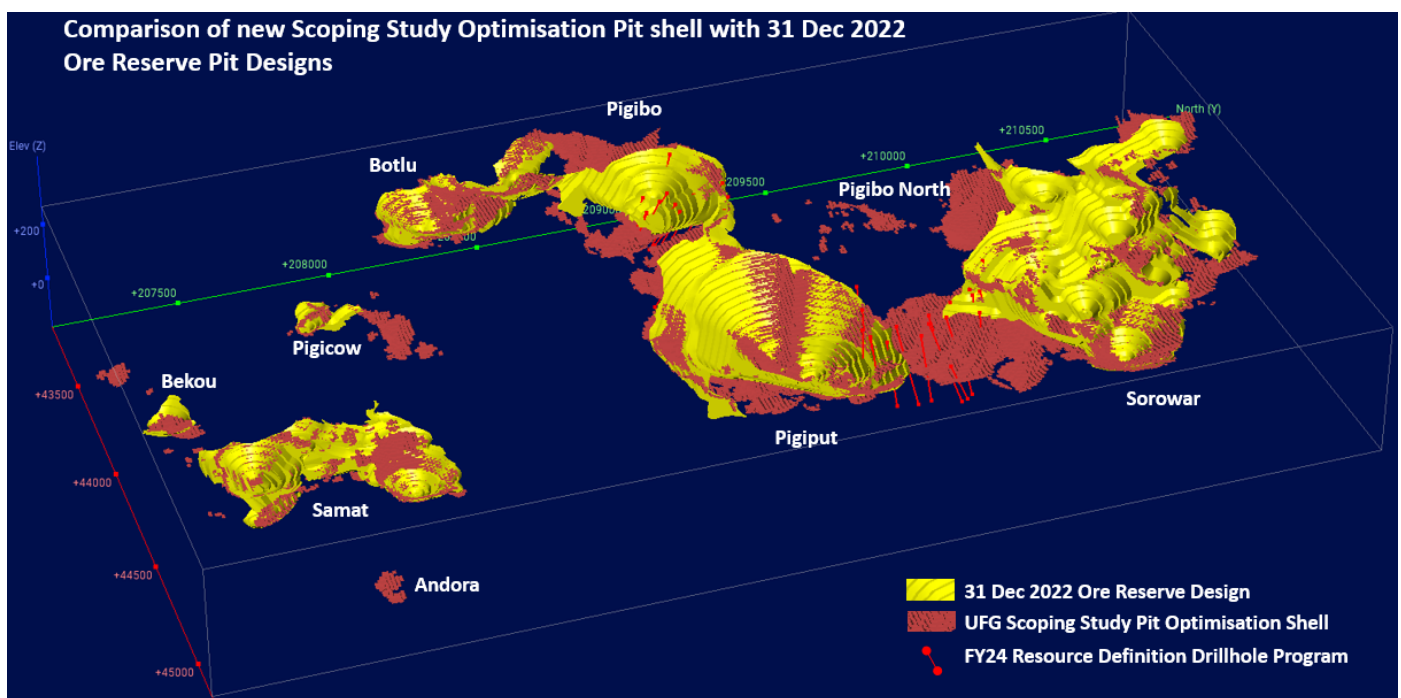
The cases also incorporate learnings from the completed mine fleet and pit wall studies described above. The increased slope angles from the recent geotechnical review are being incorporated into the re-optimisation of mine plans along with costings for the larger Volvo A60H truck paired with the Hitachi EX1200 excavator.

The Concept Study is expected to be concluded at the end of Q3 FY24.

Initial 3.7 Mtpa UFG Case

Good progress has already been made on the first of the six cases which is based on the 3.7 Mtpa throughput rate with UFG / cyanide leach flowsheet. Figure 3 below shows a comparison of the currently reported Ore Reserve Pit Designs, as at 31 December 2022, (shown in yellow) with the optimal pit shells (shown in red) now generated when the Inferred Resources targeted for conversion is included together with the latest input parameters. Both the Ore Reserve design and this latest 3.7 Mtpa UFG optimal pit shell are based on a US\$1,500/oz gold price.

Figure 2. Ore Reserve Design and Concept Study Optimal Pit Comparison



These initial results are very encouraging, and we look forward to improving the confidence of this material once the resource definition drilling program is complete and the updated Mineral Resources and Ore Reserves are released at the end of FY24.

Further results from the resource definition drilling will be released over the coming months along with the results of the Alternative Flowsheet Concept Study at the end of Q3 FY24.



Atlantic

At the start of Q2, the Company announced the results of the 15-Mile Pre-feasibility study⁴. Highlights of the Pre-feasibility study were:

- Ore Reserves increased by 7% to 618koz of contained gold;
- Mineral Resources increased by 7% to 836koz of contained gold;
- Stable annual production of 55 – 60kozpa over an 11 year mine life;
- Post-tax NPV (discount rate 5%) of C174 million (A\$198 million) and post-tax IRR of 20.3% using a long-term gold price of US\$1,700 per ounce, exchange rates of C\$1.00 = US\$0.78 and C\$1.00 = A\$1.14;
- Initial capital of C\$182 million (A\$207 million);
- Life of mine AISC for this low strip ratio project estimated to be US\$992/oz (A\$1,445/oz)
- Consolidation of infrastructure and efficient storage of waste and low-grade materials to greatly reduce surface disturbance footprint; and
- Short construction and ramp-up time through utilisation of existing Touquoy processing plant and optimised starter tailings management facility.

Significant progress was made in Q2 towards the preparation work required for revised environmental approval submissions and pre-engagement on 15-Mile, with community consultations commencing.

A revised Beaver Dam Mineral Resource and Ore Reserve estimate was well advanced in Q2, with a planned updated Mineral Resource and Ore Reserve Statement to be announced in February 2024.

Drill testing of extensions of mineralisation at Cochrane Hill will take place in Q3 after approvals were obtained and site preparations were largely completed in Q2. Investigation on the potential for the application of ore-sorting technology to Cochrane Hill ore was positive and further work will now proceed on a larger sample.

Capital expenditure for the growth strategy at Nova Scotia for FY24 is trending towards the lower end of the range of \$13 to \$15 million outlined in our guidance announcement of 30 October 2023⁵.

Table 3. FY24 Nova Scotia Project Schedule

Nova Scotia Projects	Status	Q1 Sep FY24	Q2 Dec FY24	Q3 Mar FY24	Q4 Jun FY24
Touquoy plant relocation study	Complete		✓		
Withdrawal of previous permit submissions	Complete		✓		
15-Mile Pre-feasibility Study	Complete		✓		
Beaver Dam Mineral Resource and Ore Reserve update	In Progress			▲	
Update environmental and social impact assessment studies	On track		→	→	→
Cochrane Hill project drilling	On track			→	→

⁴ Refer to ASX announcement dated 10 October 2023 titled "Strong 15 Mile Project Pre-feasibility Results".

⁵ Refer to ASX announcement dated 30 October 2023 titled "FY24 Growth Capital, Production and Cost Guidance".



Safety and sustainability

There were no reportable injuries at Touquoy as the operation transitioned into the closure and care and maintenance of the processing plant. At Simberi there were two reportable injuries for the quarter.

The 12-month moving average Total Recordable Injury Frequency Rate (TRIFR) rose from 1.5 in Q1 to 2.8 at the end of Q2 as the higher reportable injuries at Touquoy in Q1 become more significant against the lower worker exposure hours arising from workforce reductions at the end of that quarter.

Operations

Simberi Operations, New Ireland Province, Papua New Guinea

Production Summary		Q2 Dec FY23	Q3 Mar FY23	Q4 Jun FY23	Q1 Sep FY24	Q2 Dec FY24	Half Year FY23	Half Year FY24
Ore Mined	kt	759	513	479	592	632	1,614	1,224
Waste mined	kt	1,978	1,589	1,858	1,697	1,467	3,924	3,165
Mined grade	g/t	1.09	1.13	1.10	0.88	1.12	1.04	1.00
Ore milled	kt	626	566	500	464	451	1,356	914
Milled grade	g/t	1.15	1.10	1.81	0.96	1.18	1.07	1.07
Recovery	%	81	81	86	73	75	79	74
Gold production	oz	18,747	16,254	25,189	10,379	12,969	36,877	23,348
Gold sold	oz	21,575	19,994	17,895	15,579	13,644	37,294	29,223
Realised gold price	\$/oz	2,641	2,774	2,941	2,920	3,020	2,592	2,966
All-In Sustaining Cost (AISC)	\$/oz produced	2,335	2,472	2,208	4,548	3,889	2,540	4,162

Simberi gold production was up 25% on Q1 at 12,969 ounces despite the loss of six days of production at the end of Q2 due to an unplanned SAG mill stoppage.

Productivity of the trucking fleet increased over the December quarter and enabled the building of a ROM stockpile of ~70,000 tonnes at 1.2 g/t, containing ~2,700 ounces. Further fleet additions are due for arrival in Q3 to replace ageing units and improve reliability of mine performance, including the introduction of two of the larger Volvo A60H trucks as part of the truck trial for the Sulphide Expansion.

Mined grade is anticipated to further improve in Q3, and again in Q4, as the mine schedule accesses a higher proportion of tonnes from the higher-grade zones in Sorowar. The Company continues to anticipate achieving production guidance supported by improvements to the processing plant reliability through shutdown work in H1, the arrival of new fleet and the scheduled access to higher grade feed in H2 FY24.

The AISC was lower than Q1 at \$3,889 per ounce, but above our internal expectations for Q2 primarily driven by lower gold production due to the unplanned plant shutdown at the end of the quarter. An estimated 2,400 ounces of production were delayed into Q3 because of the unplanned shutdown. Simberi is largely a fixed cost mine and accordingly AISC is anticipated to fall with the higher anticipated production in H2 FY24.

Atlantic Operations, Nova Scotia, Canada

Atlantic transitioned the processing plant to care and maintenance during Q2. Gold sales in Q2 were 1,314 ounces at a price of \$2,973 per ounce. A further 872 ounces of gold are estimated to be contained in the carbon fines and will be recovered and sold in coming months.

Closure and care and maintenance costs are trending towards the midpoint of the FY24 guidance range of \$14 to \$16 million.



Guidance for FY24

Annual guidance for gold production, AISC and sustaining capital costs is expected to remain within guidance, however with production in Q2 lower than anticipated the trend is towards the lower end of guidance on Simberi production and towards higher end of guidance on Simberi AISC.

Operation	Gold production (koz)	AISC (A\$/oz)	Sustaining capital (A\$M)
Atlantic Operations	6	3,100 – 3,200 ⁶	1 – 2
Simberi Operations	60 – 70	2,750 – 3,050 ⁷	15 – 20

Exploration activities

Papua New Guinea

Simberi, Tatau & Tabar Islands

The Simberi exploration team were focused on the resource definition and metallurgical drilling programs discussed above. The announcement on 23 January 2024⁸ outlines the drill results available to date supporting the work targeting the conversion of 1 Moz of Inferred Mineral Resource to Indicated Mineral Resource.

Canada

Northeast Regional

A diamond drill program comprising four holes for 902 metres was completed at Goldboro East in December 2023. The work was designed to test for shallow and depth potential extensions to Signal Gold's Goldboro deposit (~3.0 Moz Au Open Pit and Underground NI 43-101 Resource) on St Barbara's tenement located immediately to the east. Regional exploration activities included the collection of 28 rock chip samples during a surface sampling program at Isaac's Harbour.

Moose River Corridor

A diamond drill program comprising 25 diamond holes for 2,500 metres is planned to commence at Cochrane Hill East and West in late February 2024. The drilling is designed to test the exploration potential along strike to the ENE and WSW over prospective targets. The drilling will also complete sterilisation for potential operations infrastructure. Permits were received and drill pads prepared during the quarter.

Significant intercepts at Cochrane Hill West that are being followed-up in this proposed campaign include: CHC-07-019: 8 m @ 12.24 g/t Au from 4 m; CHC-07-020: 4 m @ 10.5 g/t Au from 17 m; and CHC-07-018: 4 m @ 6.57 g/t Au from 11 m. In addition, a 3-hole, 1,425 metre diamond drill program has also been prepared for Cochrane Hill Deeps and is designed to test for high grade, down plunge extensions to the Cochrane Hill gold deposit, outside the current pit optimisation. The combined drill programs are expected to take 2 months to complete.

Regional exploration activities included the collection of 43 till samples and 13 rock chip samples during surface sampling programs at three targets (Touquoy West, Beaver Dam and 15 Mile).

Southwest Regional

Regional exploration activities included the collection of 159 till samples and 36 rock chip samples during a surface sampling program at Mill Village.

Interface Reverse Circulation Drilling (IFRC) drilling at Pleasantfield East, Falcon and Pleasantfield S1 is planned to be completed in H2 FY24. The program consists of up to 76 holes for 1,900 metres testing approximately 6 km strike length of the anticline.

⁶ C\$2,760 to C\$2,850 per ounce at AUD/CAD of 0.89.

⁷ US\$1,815 to US\$2,015 per ounce at AUD/USD of 0.66.

⁸ Refer to ASX announcement dated 23 January 2024 titled "Simberi Resource Definition Drilling 50% Complete; Targeting Upgrade of 1Moz from Inferred to Indicated Mineral Resource".



Australia

Back Creek, New South Wales

A diamond drill program of two holes for a combined 800 metres is now prepared for February to test magnetic highs at the Northeast Target for both porphyry Cu-Au and epithermal Au style mineralisation. A 32-hole aircore drill program for approximately 3,800 metres will test a further 1.1 km strike length of the Southwest Target for orogenic gold style mineralisation. All necessary permissions are now in place, so the drilling is only subject to the weather conditions in this active farming area

Pinjin Project, Western Australia

Plowden Resources Pty Ltd completed a reverse circulation (RC) drill program at the Pinjin South Earn-In and Joint Venture between September and early October. The drill program comprised 13 RC holes for 2,304 metres testing promising gold, nickel and lithium targets. Assay results from the program are expected in February 2024.

Group Exploration expenditure (unaudited)

Exploration expenditure for FY24 is trending below guidance of between \$5 and \$6 million.

Group Exploration	Actual Year FY23	Actual Q1 Sep FY24	Actual Q2 Dec FY24	Guidance FY24
		\$M	\$M	\$M \$M
Australia	9	0.3	0.1	1
Tabar Island Group, Papua New Guinea	4	-	-	1
Nova Scotia Regional	-	0.1	0.2	4 – 5
Consolidated	13	0.4	0.3	5 – 6

Figure 3. Q2 and Q3 FY24 Drill Programs, Nova Scotia, Canada





Finance (unaudited)

St Barbara sold 14,958 ounces of gold in the December quarter at an average realised gold price of \$3,016 per ounce. This included gold sales from Atlantic of 1,314 ounces at a price of \$2,973 per ounce.

Total cash at bank at 31 December 2023 was \$214 million, including restricted cash of A\$47 million for the Touquoy reclamation bond. Discussions with Nova Scotian Department of Natural Resources and Renewables continue with respect to the additional A\$43 million estimate for the full C\$80 million anticipated to be required for the updated reclamation bond.

Cash movements are summarised in the following table:

Cash movements & balance A\$M (unaudited)	Q2 Dec FY23	Q3 Mar FY23	Q4 Jun FY23	Year FY23	Q1 Sep FY24	Q2 Dec FY24
Growth Projects						
Atlantic	(3)	(3)	(3)	(11)	(2)	(3)
Simberi	-	-	-	(2)	(1)	(2)
Atlantic Care & Maintenance	-	-	-	-	-	(4)
Atlantic Rehabilitation	-	-	-	-	-	(2)
Exploration	(6)	(3)	(3)	(16)	-	-
Simberi Operation	12	13	3	19	-	(10)
Atlantic Operation	(2)	13	16	28	6	-
Corporate Costs	(7)	(5)	(6)	(25)	(5)	(4)
Project costs	(2)	(4)	(5)	(14)	-	-
Corporate Royalties	(2)	(2)	(2)	(7)	(2)	-
Income Tax payments	(4)	3	(12)	(16)	2	-
Working Capital movement	(11)	(8)	11	(15)	(4)	-
Cashflows before financing costs	(25)	4	(1)	(59)	(6)	(25)
Net Interest income/(expense)	(1)	(2)	(1)	(6)	-	2
Lease facility	(1)	(3)	(7)	(11)	(1)	(2)
Other financing	-	20	(159)	(140)	-	3
Dividends Paid	-	-	-	-	-	-
Discontinued Operations - Leonora						
Operating Cashflow	1	4	32	48	(24)	-
Working capital finalisation	-	-	-	-	(32)	-
Growth Capital	(1)	(1)	(1)	(8)	-	-
Proceeds from Leonora Asset Sale	-	-	371	371	5	-
Net Movement for Period	(27)	22	234	195	(58)	(22)
Cash Balance at start of quarter	65	38	60	99	294	236
Total Cash at end of quarter	38	60	294	294	236	214
<i>Cash available for use</i>	38	60	247	247	189	167
<i>Restricted cash</i>	-	-	47	47	47	47

Group Sustaining Capex	Actual Q2 Dec FY23 \$M	Actual Q3 Mar FY23 \$M	Actual Q4 Jun FY23 \$M	Actual Q1 Sep FY24 \$M	Actual Q2 Dec FY24 \$M	Guidance FY24 \$M
Atlantic	5	0	-	-	-	1 – 2
Simberi	1	1	3	1	4	15 – 20

Group Growth Capex	Actual Q2 Dec FY23 \$M	Actual Q3 Mar FY23 \$M	Actual Q4 Jun FY23 \$M	Actual Q1 Sep FY24 \$M	Actual Q2 Dec FY24 \$M	Guidance FY24 \$M
Atlantic	3	3	3	2	3	13 – 15
Simberi	-	-	-	1	2	10 – 13



Corporate

Mr David Moroney retired from the board of St Barbara with effect on 31 December 2023, consistent with the board renewal process underway since the middle of 2023.

With respect to the distribution of Genesis Minerals Limited (ASX: GMD) (“Genesis”), the Company was pleased to announce on 14 December 2023⁹, that the Australian Taxation Office ruled the transaction was a return of capital to St Barbara shareholders. The assessed value of the distribution of 0.25067 Genesis shares for each St Barbara share was valued at \$0.3042 per share based on market value at the time of the distribution on 7 July 2023.

The Company completed a review of historical sustainability and ESG commitments and given the recent corporate restructuring decided to withdraw all ESG targets until the assessment of the re-design of development projects at Simberi and Nova Scotia have reached development decision points. Appropriate commitments will be included in project specific development proposals for both locations. St Barbara has a sustainability policy and will continue to report against those initiatives annually.

Equity Investments

The listed investment portfolio increased in value to A\$22 million over the course of Q2, with increases in the share prices of Catalyst Metals Ltd (ASX: CYL) and Kin Mining NL (ASX: KIN).

At the date of this report, St Barbara holds the following listed investments:

Company	Shares (M)	Ownership (%)	Value (A\$M) ¹⁰
Catalyst Metals (ASX: CYL)	12.7	5.7	8.6
Kin Mining (ASX: KIN)	158.1	13.4	9.6
Peel Mining (ASX: PEX)	41.5	7.2	4.2
Total	-	-	22.4

Authorised by

Andrew Strelein

Managing Director & CEO

25 January 2024

⁹ Refer to ASX announcement dated 14 December 2023 titled “ATO Class Ruling for In-specie Distribution of Genesis Shares”.

¹⁰ Based on ASX closing share prices on 24 January 2024.



For more information

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Share capital

Issued shares	ASX:SBM
Opening Balance 30 September 2023	817,970,380
Issued	Nil
Closing balance 31 December 2023	817,970,380

Unlisted employee rights	ASX:SBMAK
Opening balance 30 September 2023	7,476,779
Issued	47,051,024
Exercised as shares	Nil
Lapsed ¹¹	(660,306)
Closing balance 31 December 2023	53,867,497
Comprises rights expiring:	
30 June 2024	2,647,187
30 June 2025	4,169,286
30 June 2026	47,051,024
Unlisted rights issued under the NED Equity Plan	Nil
Closing balance 31 December 2023	53,867,497

11 Rights lapsed due to conditions not being met.



Corporate directory

St Barbara Limited ABN 36 009 165 066

Board of Directors

Kerry Gleeson, *Non-Executive Chair*

Andrew Strelein, *Managing Director & CEO*

Stef Loader, *Non-Executive Director*

Joanne Palmer, *Non-Executive Director*

Mark Hine, *Non-Executive Director*

Warren Hallam, *Non-Executive Director*

Company Secretary

Kylie Panckhurst, *General Counsel & Company Secretary*

Executives

Andrew Strelein, *Managing Director & CEO*

Sara Prendergast, *Chief Financial Officer*

Randy McMahon, *EGM Simberi*

Brett Ascott, *EGM Projects & Technical Support*

Roger Mustard, *EGM Exploration*

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Financial figures are in Australian dollars (unless
otherwise noted)

Financial year commences 1 July and ends 30 June

Q1 Sep FY24 = quarter to 30 Sep 2023

Q2 Dec FY24 = quarter to 31 Dec 2023

Q3 Mar FY24 = quarter to 31 Mar 2024

Q4 Jun FY24 = quarter to 30 Jun 2024

¹² As notified by the substantial shareholder up to 24 January 2024.

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Substantial Shareholders

% of Holdings ¹²	
Baker Steel Capital Managers LLP	9.2%



Production and All-In Sustaining Cost

Production summary		Simberi Operations				
		Q2 Dec FY23	Q3 Mar FY23	Q4 Jun FY23	Q1 Sep FY24	Q2 Dec FY24
Ore Mined	kt	759	513	479	592	632
Waste mined / in-pit handling	kt	1,978	1,589	1,858	1,697	1,467
Mined grade	g/t	1.09	1.13	1.10	0.88	1.12
Ore milled	kt	626	566	500	464	451
Milled grade	g/t	1.15	1.10	1.81	0.96	1.18
Recovery	%	81	81	86	73	75
Gold production	oz	18,747	16,254	25,189	10,379	12,969
Gold sold	oz	21,575	19,994	17,895	15,579	13,644
Realised gold price	A\$/oz	2,641	2,774	2,941	2,937	3,016
All-In Sustaining Cost¹³ A\$/oz produced						
Mining		1,098	1,126	750	1,918	1,678
Processing		750	799	631	1,455	1,253
Site Services		446	512	430	796	723
Stripping and ore inventory adj		(171)	(310)	131	-	(154)
		2,123	2,127	1,942	4,169	3,500
By-product credits		(6)	(16)	(9)	(14)	(9)
Third party refining & transport		8	7	8	20	18
Royalties		58	102	51	108	79
Total cash operating costs		2,183	2,220	1,992	4,283	3,588
Corporate and administration		98	106	52	118	55
Rehabilitation		33	58	37	70	60
Sustaining capital expenditure		21	88	127	77	186
All-In Sustaining Cost (AISC)		2,335	2,472	2,208	4,548	3,889

13 Non-IFRS measure, refer to Appendix on page 17 [17](#).



Disclaimer

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This report contains forward-looking statements that are subject to risk factors associated with exploring for, developing, mining, processing and the sale of gold. Forward-looking statements include those containing such words as anticipate, estimates, forecasts, indicative, should, will, would, expects, plans or similar expressions. Such forward-looking statements are not guarantees of future performance and involve known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of the Company, and which could cause actual results or trends to differ materially from those expressed in this report. Actual results may vary 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.

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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 Resources and Ore Reserves 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 as at 31 December 2022' released to the ASX on 22 February 2023 (Original Report) and available to view at stbarbara.com.au and for which Competent Persons' consents were obtained. Each Competent Person's consent remains 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 Report 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 Report 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 Report.

Full details are contained in Original Report available at stbarbara.com.au