
25 January 2023

Presentation on Q2 December FY23 Quarterly Report and audio webcast

Mr Dan Lougher, Managing Director & CEO, will brief analysts and investors on the Q2 December FY23 Quarterly Report at 11.00 am Australian Eastern Daylight Time (UTC + 11 hours) on Wednesday 25 January 2023.

Analysts and investors can register for the briefing at <https://s1.c-conf.com/diamondpass/10028116-gah8z2.html>.

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.

Authorised by

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Q2 December FY23 Quarterly Presentation

Dan Lougher
Managing Director and CEO

25 January 2023

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Non-IFRS financial information: We supplement our financial information reporting determined under International Financial Reporting Standards (“IFRS”) with certain non-IFRS financial measures, including cash operating costs. Details of these are set out in the Supplement.

Financial figures are in Australian dollars unless otherwise noted. Financial year is 1 July to 30 June. This presentation is not audited.

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

Published 25 January 2023



Acknowledgement of Country

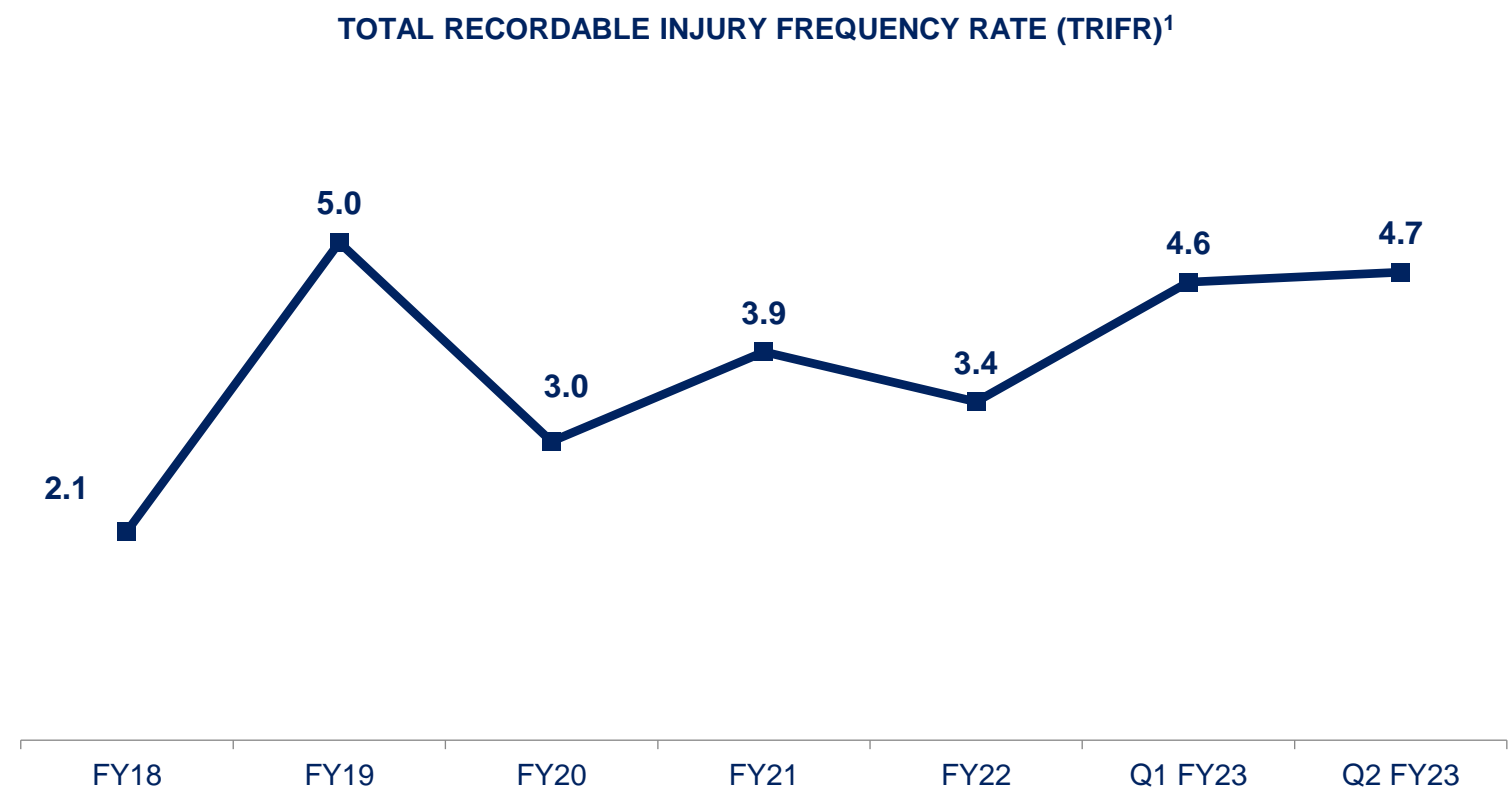
We at St Barbara acknowledge the First Nations people of the ancestral lands on which we operate in Australia, Canada and Papua New Guinea. We pay our respects to all First Nations people, and to Elders past, present, and emerging.

We recognise the unique cultural heritage, beliefs and connection to these lands, waters and communities held by First Nations people. We also recognise the importance of the continued protection and preservation of cultural, spiritual and educational practices.

Because we value treating all people with respect, we are committed to building successful and mutually beneficial relationships with the First Nations peoples throughout our areas of operation.



Safety always



1. Total Recordable Injury Frequency Rate (12 month avg.), total recordable injuries per million hours worked



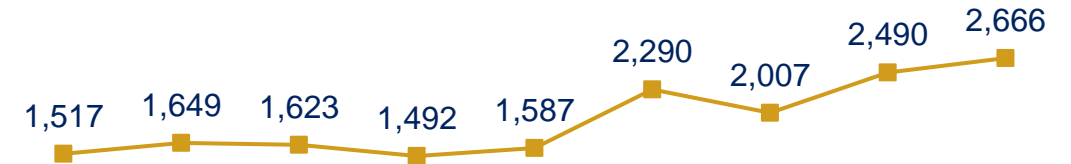
Atlantic Operations
Emergency Response Team confined space training



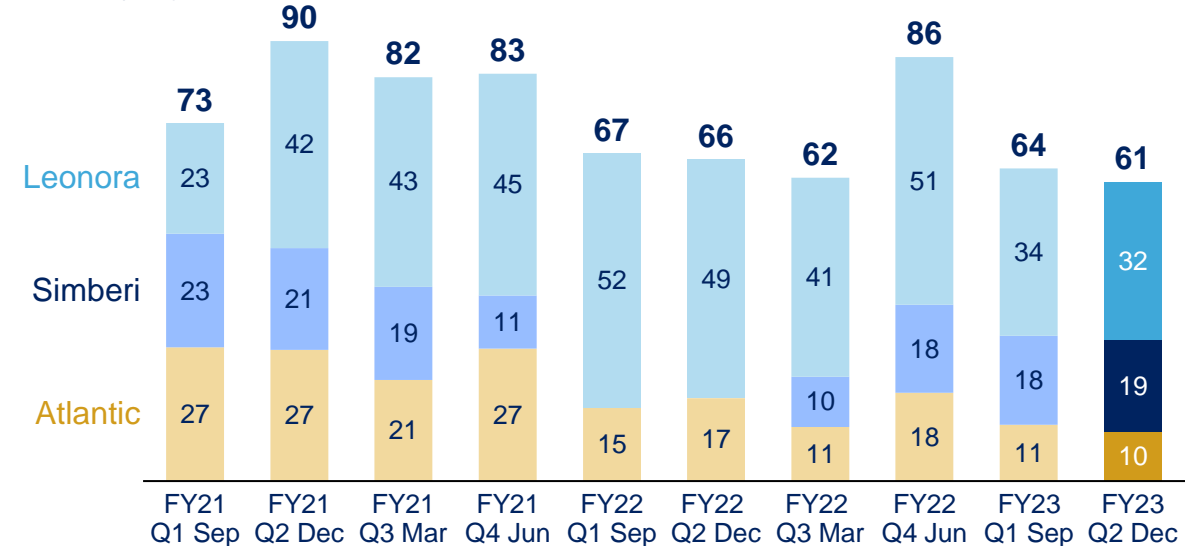
Q2 FY23 Highlights

- Gold production of 61koz at AISC¹ of \$2,666 per ounce
- \$38 million cash balance
- Merger of St Barbara and Genesis to form Hoover House, and demerger of St Barbara's non-Leonora assets to form Phoenician Metals announced
- Simberi Strategic Review: Oxide mining potential to extend through FY25 deferring Sulphide project capex
- Reset of St Barbara's strategic direction:
 - Zoroastrian development suspended
 - Strategic review completed at Simberi
 - Refocus on Fifteen Mile Stream permitting commenced following suspension of Beaver Dam

AISC
(A\$/oz)



GOLD PRODUCTION
(koz)

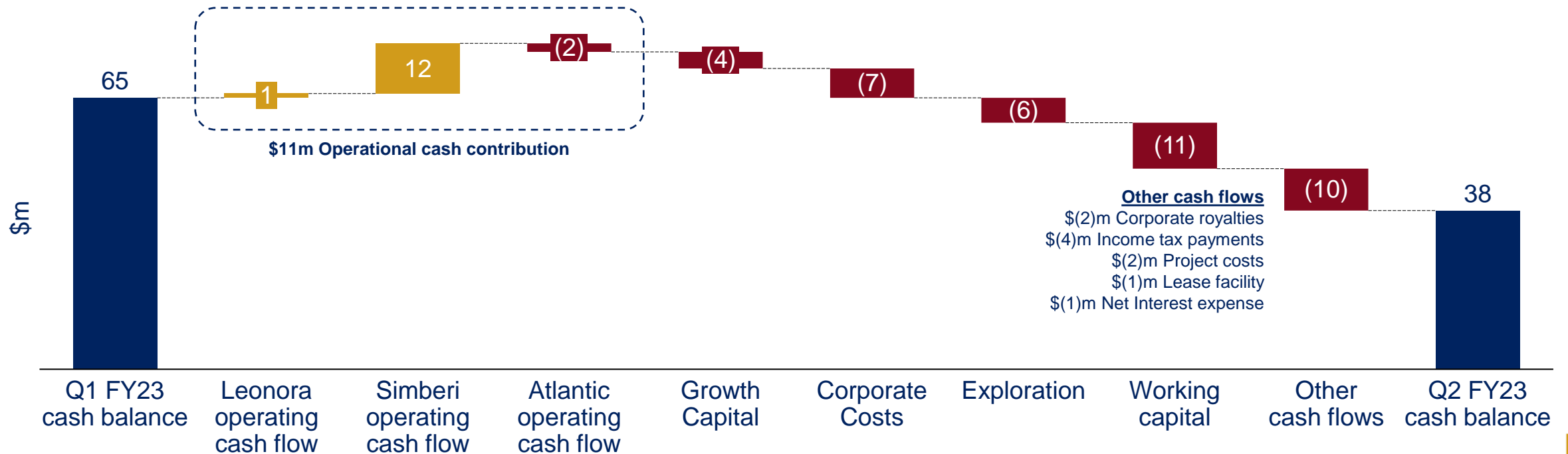


1. Non-IFRS financial measures, the details of these are set out in the Supplementary Slides, slide 19



Cash impacted by lower production and working capital movements

- First positive operational cash flow from Simberi in five quarters
- Lower grade and increased mine development reduced Leonora's operating cash flow
- Operating cash flow at Atlantic impacted by increased long term stockpile feed and tailings lift capital
- Working capital movements reflect reduction in payables at Atlantic, delayed BAS tax receipts and timing of ore purchases
- \$20m drawn down from debt facility during January 2023 to maintain strong working capital balance



Leonora Q2 FY23 Results

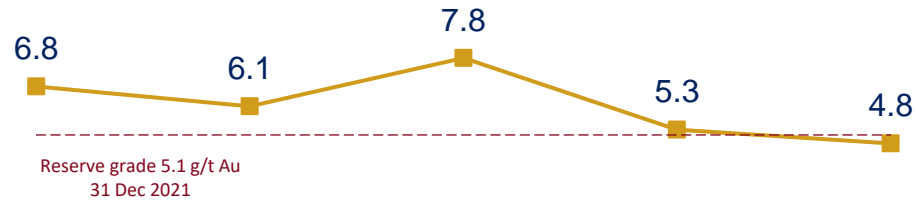
AISC

(A\$/oz)



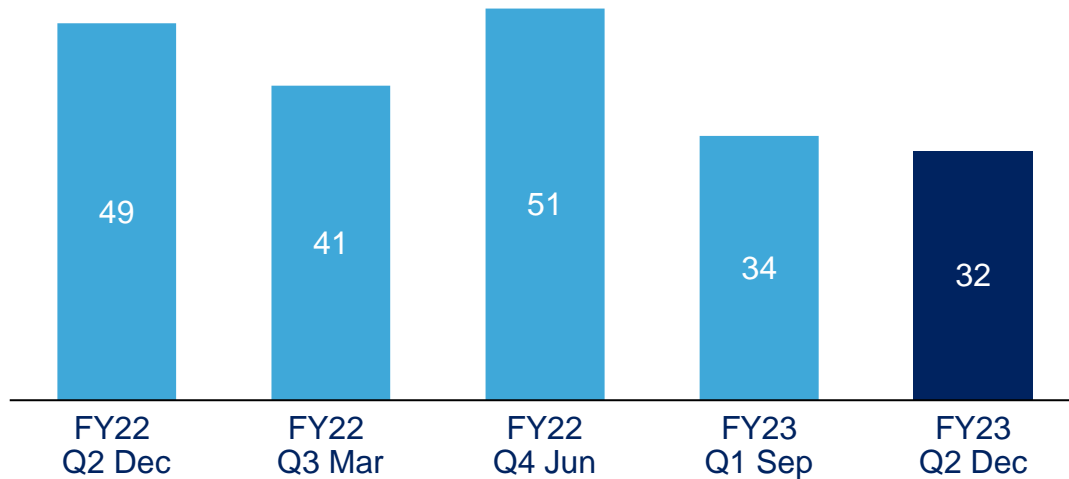
MINED GRADE

(g/t AU)



PRODUCTION

(koz)



Lower than expected production at Leonora

- Increased ore mined at Gwalia offset by COVID-19 absenteeism which delayed access to high grade stopes until next quarter and resulted in lower grade development ore being processed

Zoroastrian development suspended in expectation of nearby Genesis' ore supplies in FY24



Resetting Leonora

Costs



- Contractor consolidation saving ~\$1m per month
- Demobilisation of excess mining equipment enabled by utilisation improvement

Maintenance



- Hired additional skilled fitters
- Increased critical spares
- Standardised contractor equipment

Load & Haul



- Hot seating delivers ~5 extra truck loads per day
- Load scanning technology increased haul efficiency by ~4t per truck per haul

Development



- Second service crew hired to support lateral development
- Enhanced shotcrete mix reduced curing times

Processing



- Mill stability improvements through cyclone automation

New GM Andrew Lindsay leading change

Improvements to utilisation and availability delivered

+5% ore mined

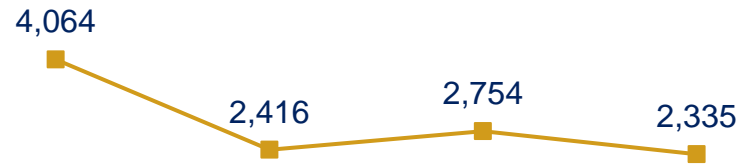
+5% development meters

+6% waste mined

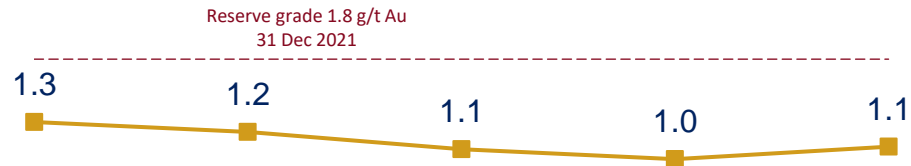


Simberi Q2 FY23 Results

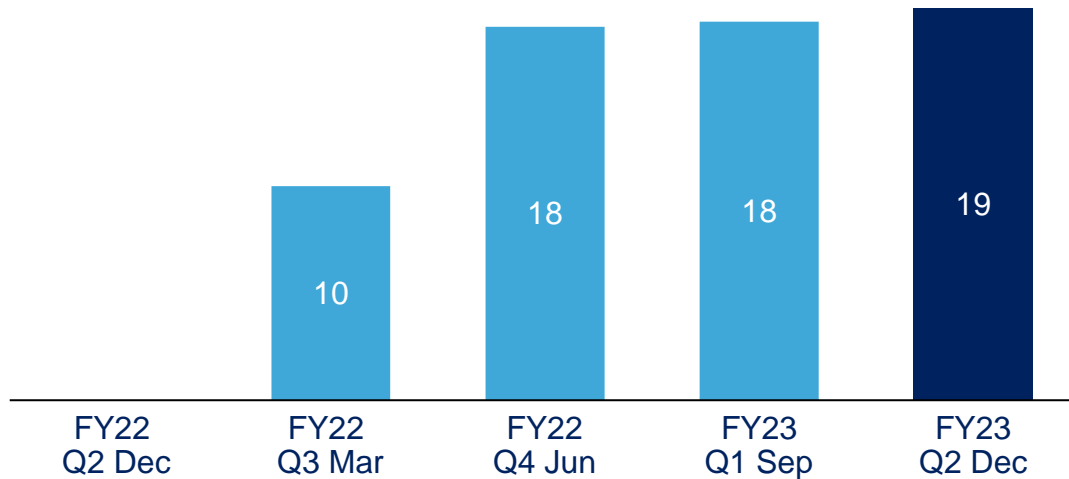
AISC
(A\$/oz)



MINED GRADE
(g/t AU)



PRODUCTION
(koz)



Stable production

- Marginal production improvement driven by access to higher grade in the Sorowar pit
- Improved grade and CIL operating consistency increased gold recovery by 4%

Strategic review concluded

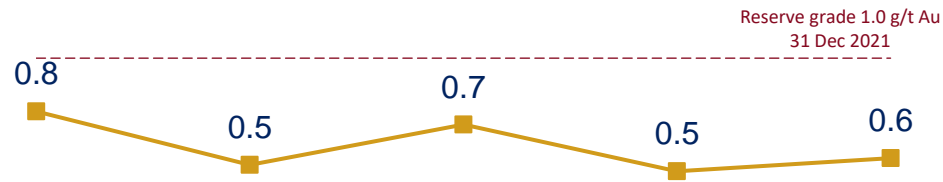


Atlantic Q2 FY23 Results

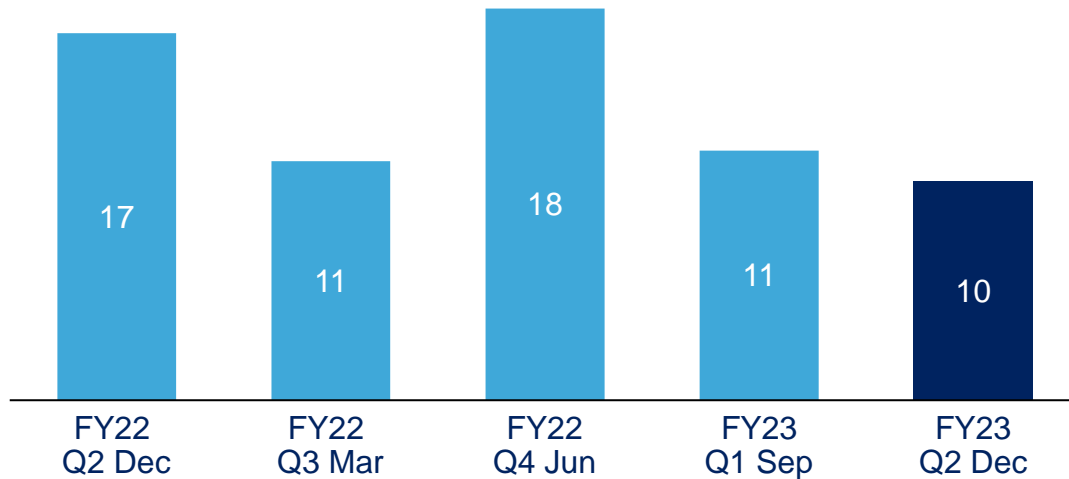
AISC
(A\$/oz)



MINED GRADE
(g/t AU)



PRODUCTION
(koz)



Lower production as Touquoy end of life approaches

- Production impacted by lower grade due to increased proportions of long term stockpiles in mill feed
- Small geotechnical failure in the pit caused by Hurricane Fiona delayed pit completion
 - Open pit mining to cease by end of January 2023
- Lift to the tailings management facility completed

Shift in focus to development of Fifteen Mile Stream



Creating a leading Australian gold house

Merger of St Barbara and Genesis to form Hoover House

Demerger of St Barbara's non-Leonora assets to form Phoenician Metals



Creating a leading Australian gold house

Logical regional consolidation - 100% focus on the +65Moz Leonora District¹

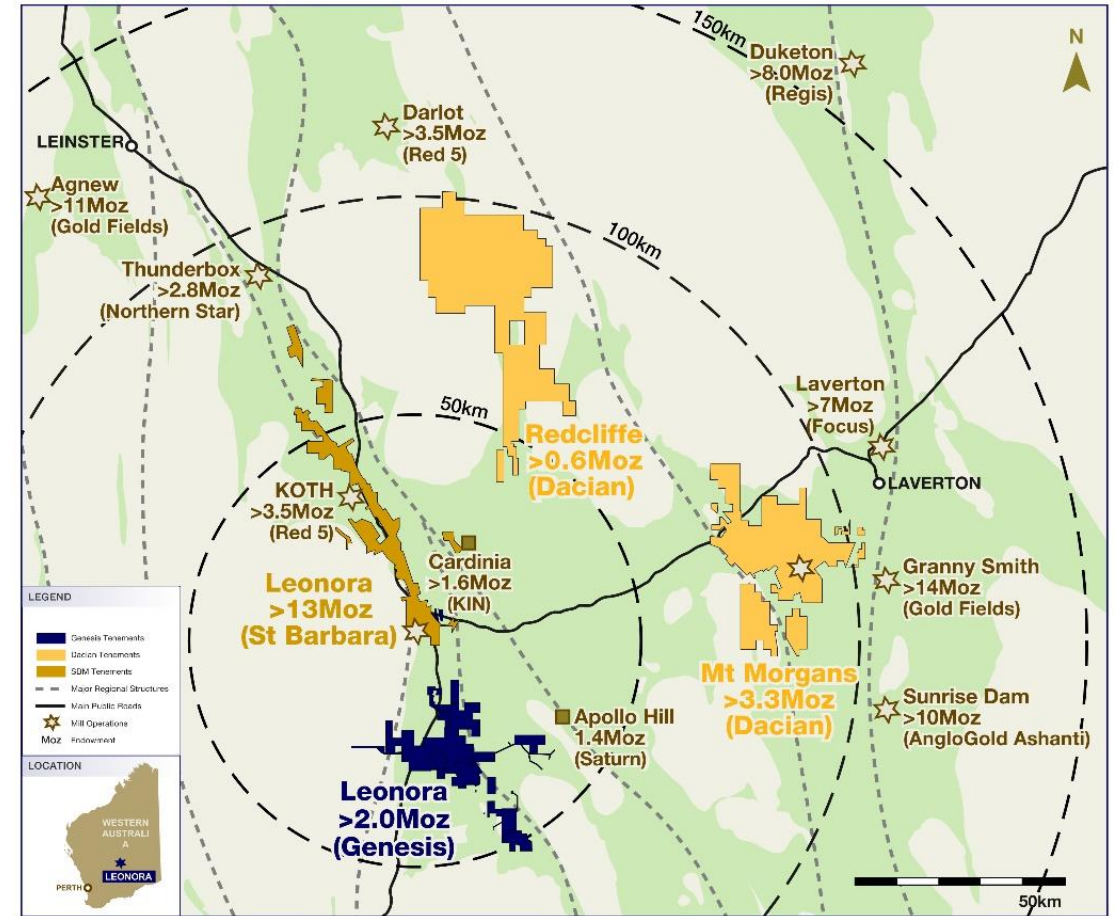
- 14.7Moz Mineral Resources / 3.2Moz Ore Reserves²
- Operational flexibility via **unique optimisation of mines and mills**
- **“Capital-light” business** - A\$400m eliminated / deferred³
- Opportunity to restore Gwalia to 180-200kozpa with lower costs by adding Ulysses
- **Base case** Leonora production target of +300kozpa⁴
- Unlocks **~A\$200m NPV** (post-tax)⁵ in **unique synergies** including capital deferral

Well-funded

- Hoover House pro-forma net cash of A\$187m⁶

Enhanced capital markets presence and investor relevance

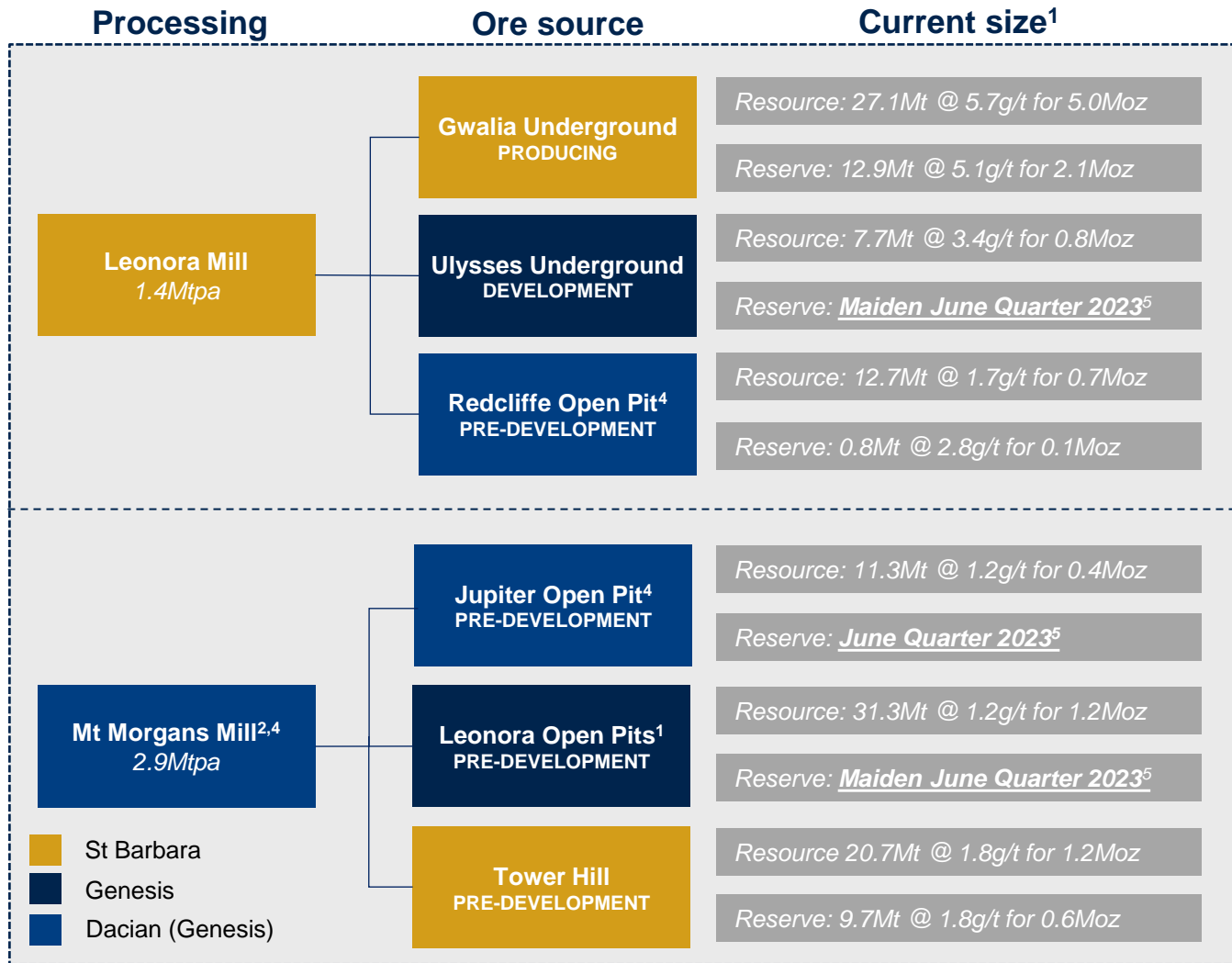
- Quality and size to “fill the gap” between the ASX100 golds and the rest



1. Leonora District is defined as the 150km radius surrounding the Leonora town. Total endowment is mined ounces plus un-mined Mineral Resources
2. See Appendices C and D in relation to Mineral Resource and Ore Reserve estimates for St Barbara, Genesis and Dacian
3. Refer to slide 22 of the presentation “Creating a leading Australian Gold House” lodged on the ASX 12 December 2022
4. See Appendix G for the material assumptions relating to the production target. This production target must be read in conjunction with the following cautionary statement: “there is a low level of geological confidence associated with inferred mineral resources included in the Production Target and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised”
5. NPV5% estimate on a post-tax basis and over next 10 years. There is no guarantee or assurance given that some or all of these synergies will be achieved or that any assumptions underlying them are correct. Please refer to the disclaimer section for important cautionary information relating to forward-looking statements
6. See Appendix A for further information
7. Dacian Ore Reserve and Mineral Resource estimate is inclusive of stockpile depletion of 21koz as at 30 November 2022.



Focus on Leonora – right ores in the right mills



Benefits to Hoover House shareholders

The addition of Ulysses Underground enables “quality > quantity” mining strategy
Reduced mining rate to 0.7 - 0.8Mtpa of higher grade ore

Target mining rate of 0.6 - 0.7Mtpa

Potential to enhance metallurgical recovery (optimum grind size) and reduced transport costs by milling at Leonora

Low risk, high grade, open pit “sweetener”, risk management lever, closer to Gwalia
Includes 3.4g/t Hub open pit with underground upside

Time (milling stockpiles) and capital to drill and expand Mineral Resources and Ore Reserves

Time to install leaner owner operator model (Genesis Mining Services)

Addition of open pit volumes to fully utilise Mt Morgans mill capacity

Capital saving, eliminates time required to construct new mill

Re-evaluate Ore Reserves with larger / lower cost milling solution

1. See Appendices C & D
2. See Appendix B
3. Leonora Gold Project Open Pits include Admiral, Puzzle and Orient Well
4. As at 12 December 2022, Genesis had a 77% holding in Dacian, the takeover bid for which was extended to close on 30 January 2023, and Genesis' interest in Dacian may increase further under that bid. See Appendix B for further information
5. Subject to Feasibility study outcomes

Subject to optimisation
New strategic plan post merger September quarter 2023



Phoenician Metals overview

Phoenician Metals to realise the value of non-core assets for St Barbara shareholders

Phoenician Metals is to be established with:

- High calibre management team dedicated to extracting value from Phoenician Metals
- 6.2Moz in Mineral Resources / 3.7Moz in Ore Reserves in two proven mining jurisdictions¹
- Highly leveraged to the gold price with FY23E production of 110-130koz at A\$2,200-2,450/oz²
- ASX-listed investments of ~A\$34m³ and inheriting St Barbara's royalty portfolio
- An exciting and extensive exploration portfolio
- Strong and flexible balance sheet - A\$85m⁴ cash / nil debt⁵
- Hoover House to retain 20% stake in Phoenician Metals

Intention to apply to list on the ASX

Phoenician Metals to be headquartered in Perth, providing access to large and experienced workforce of mining professionals

1. See Appendices C & D for information related to Mineral Resources and Ore Reserves
 2. Refer to announcement titled "Quarterly Report Q1 FY23" released to ASX on 18 October 2022. FY23 AISC guidance based on US\$1,450 to US\$1,600 per ounce at AUD/USD of 0.63 for the Simberi Operations and C\$1,800 to C\$2,014 per ounce at AUD/CAD of 0.87 for the Atlantic Operations
 3. Based on St Barbara's holding and closing prices as at 24 January 2023.
 4. See Appendix G
 5. Excludes lease liabilities



Phoenician Metals strategic focus

Corporate

- Establish a distinctive corporate culture and identity focused on value
- Actively manage investment portfolio to enhance value
- Exploration of Back Creek (NSW) project

Atlantic

- Prioritise development of Fifteen Mile Stream and target development in FY26
- Investigate repurposing Touquoy plant for use at Fifteen Mile Stream
- Complete processing of stockpiles at Touquoy by end of 2024
- Pause permitting process for Beaver Dam
- Continue exploration at Mooseland, South-West and Goldboro East

Simberi

- Extend oxide production through FY25 and into FY26
- Sulphides Mineral Resource and Ore Reserve extension drilling
- Revisit Sulphides Expansion development plan by FY26
- Prepare for investment decision with Mining Lease renewal by FY28

Atlantic operations





St Barbara

Supplementary slides



Exploration Results

The information in this presentation 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.

Full details of recent exploration results is in ASX release 'Quarterly Report Q1 September FY23' released to the Australian Securities Exchange (ASX) on 18 October 2022 which is available to view on www.stbarbara.com.au.

Mineral Resources and Ore Reserves reporting

The information in this presentation that relates to Ore Reserves for Tower Hill is extracted from the report titled 'Quarterly Report Q1 September FY23' released to the Australian Securities Exchange (ASX) on 18 October 2022 and available to view at stbarbara.com.au and for which Competent Persons' consents were obtained.

The information in this presentation that relates to Mineral Resources for Old South Gwalia is extracted from the report titled 'Quarterly Report Q4 June FY22' released to the Australian Securities Exchange (ASX) on 27 July 2022 and available to view at stbarbara.com.au and for which Competent Persons' consents were obtained.

The information in this presentation that relates to all other Mineral Resources or Ore Reserves is extracted from the report titled 'Quarterly Report Q3 March FY22' released to the Australian Securities Exchange (ASX) on 28 April 2022 (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.

St Barbara confirms that it is not aware of any new information or data that materially affects the information included in the announcements referred to above (Original Announcements) and that all material assumptions and technical parameters underpinning the Mineral Resources and Ore Reserves estimates in the Original Announcements continue to apply and have not materially changed. St Barbara confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the Original Announcements.



Non-IFRS Measures

We supplement our 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 meaningful information to assist management, investors and analysts in understanding our financial results and assessing our prospects for future performance.

All-In Sustaining Cost (AISC)	All-In Sustaining Cost 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). Refer most recent quarterly report available at stbarbara.com.au for example.
Cash contribution	Cash flow from operations before finance costs, refer reconciliation of cash movement in the most recent quarterly report available at stbarbara.com.au
Cash operating costs	Calculated according to common mining industry practice using The Gold Institute (USA) Production Cost Standard (1999 revision). Refer most recent quarterly report available at stbarbara.com.au for example
EBIT	Earnings before interest revenue, finance costs and income tax expense
EBITDA	EBIT before depreciation and amortisation
EBITDA margin	$\text{EBITDA} \div \text{Revenue}$
Underlying EBITDA / NPAT	EBITDA or NPAT after excluding identified significant items. Refer Financial Report for year ended 30 June 2022 (p3) for details.
Earnings Per Share (EPS)	Profit attributable to equity holders (excluding any costs of servicing equity other than ordinary shares) / weighted average number of ordinary shares outstanding during the reporting period



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Scheduled ASX Announcements

22 February 2023 Half year financial results



Appendix A – Pro-forma snapshot as at 9 December 2022

Pro-forma entities

		St Barbara	Genesis	Equity raising	Hoover House	Phoenician
Share price	A\$	\$0.65	\$1.20	\$1.20		
30-day VWAP	A\$	\$0.61	\$1.24			
No. ordinary shares ¹	M	817	410	229		
Market Capitalisation	A\$M	531	490	275		
% shareholding in MergeCo	%	37.8%	40.6% ²	21.6%	100.0%	
Cash and equivalents (30 Nov 2022)	A\$M	47	88	275	237	85
Debt (30 Nov 2022) ^{3,4}	A\$M	137	-		50	-
Enterprise Value	A\$M	621	402			
Gold Ore Reserves ⁵	Moz	6.8	0.1		3.2	3.7
Gold Mineral Resources ⁵	Moz	16.7	4.2		14.7	6.2

Notes: Market data as at 9 December 2022

1. Refer to latest Appendix 2A ASX announcements from St Barbara (30 November 2022) and Genesis (9 December 2022);
2. Factors in an additional ~20.3m Genesis shares based on conversion of some Genesis options and performance rights under the SID
3. Syndicated debt facility of A\$50m and C\$80m (A\$87m) at AUD/CAD 0.92 at 9 December 2022 close.
4. Excludes lease liabilities.
5. See Appendix C and D of this presentation in relation to Ore Reserves and Mineral Resources



Appendix B – Dacian update

Genesis owns approximately 77% of Dacian, with the Takeover Bid remaining open for acceptance

Dacian owns strategic 2.9Mtpa processing plant in the heart of the Leonora district

Dacian strategic review continues with Dacian seeking expressions of interest for access to Mt Morgans Mill from ~March quarter of CY2023 through to ~September quarter of CY2024¹

Genesis will continue to have input into Dacian strategic review subject to compliance with the Corporations Act and (so long as Dacian remains listed) ASX Listing Rules²

Genesis' Takeover Bid is unconditional and final as to price, and is extended to 30 January 2023 (unless further extended).

If Genesis does not reach 90% of Dacian, it will be unable to undertake compulsory acquisition of minorities, and:

- A. Dacian will remain a separate company
- B. Transactions between Hoover House and Dacian will be on arms length terms and / or may be subject to minority shareholder approval.
- C. Future decisions regarding Dacian's funding, assets and operations (including the future operating strategy for Mt Morgans) will continue to be made by the Board of Dacian in the best interest of all Dacian shareholders

Accordingly, in that event, certain of the operational benefits and synergies from regional consolidation shown or discussed in this presentation which assume a 100% acquisition of Dacian may not be able to be fully realised

In seeking to realise such synergies, Hoover House will at all times comply with the relevant provisions of the Corporations Act and (so long as Dacian remains listed) ASX Listing Rules

1. Refer Dacian ASX Announcement 16 November 2022 - opportunity for third-parties to access the Mt Morgans Processing Plant
 2. Refer Genesis Bidder's Statement dated 29 July 2022 for further information on the strategic review
 3. Refer to DCN ASX announcement dated 27 July 2022, "2022 Mineral Resources and Ore Reserves Update"



Appendix C – Combined Ore Reserves

Hoover House

Ore Reserves by deposit

Deposit	Tonnes (000's)	Proved		Tonnes (000's)	Probable		Tonnes (000's)	Total	
		Grade (g/t Au)	Ounces (000's)		Grade (g/t Au)	Ounces (000's)		Grade (g/t Au)	Ounces (000's)
St Barbara^{1,2}									
Gwalia	1,543	7.3	361	11,318	4.8	1,761	12,862	5.1	2,121
Aphrodite	-	-	-	2,782	3.6	322	2,782	3.6	322
Zoroastrian	-	-	-	795	3.8	97	795	3.8	97
Tower Hill	-	-	-	9,700	1.8	560	9,700	1.8	560
Total Leonora Operations	1,543	7.3	361	24,595	3.5	2,740	26,139	3.7	3,100
Dacian³									
Mine Stockpiles	-	-	-	371	0.8	9	371	0.8	9
LG Stockpiles	-	-	-	1,249	0.6	23	1,249	0.6	23
Total Mt Morgans	-	-	-	1,620	0.6	32	1,620	0.6	32
Hub OP	-	-	-	256	4.1	34	256	4.1	34
GTS OP	-	-	-	499	2.2	35	499	2.2	35
Total Redcliffe Project	-	-	-	755	2.8	69	755	2.8	69
Total Dacian	-	-	-	2,375	1.3	101	2,375	1.3	101
Hoover House Total	1,543	7.3	361	26,970	3.3	2,841	28,513	3.5	3,201

1. Ore Reserves for Tower Hill is extracted from the report titled 'Quarterly Report Q1 September FY23' released to the Australian Securities Exchange (ASX) on 18 October 2022

2. All other Ore Reserves for St Barbara are extracted from the report titled 'Quarterly Report Q3 March FY22' released to the ASX on 28 April 2022.

3. Ore Reserves for Dacian are extracted from the report titled '2022 Mineral Resources and Ore Reserves update' released to the ASX on 27 July 2022 and presented on 100% basis. Dacian Ore Reserve and Mineral Resource estimate inclusive of stockpile depletion of 21koz as at 30 November 2022.



Appendix C – Combined Ore Reserves

Phoenician Metals Ore Reserves by deposit

Deposit	Tonnes (000's)	Proved Grade (g/t Au)	Ounces (000's)	Tonnes (000's)	Probable Grade (g/t Au)	Ounces (000's)	Tonnes (000's)	Total Grade (g/t Au)	Ounces (000's)
St Barbara¹									
Simberi Oxide	2,718	1.2	108	6,244	1.1	222	8,962	1.1	330
Simberi Sulphide	2,530	1.8	143	24,808	2.0	1,582	27,338	2.0	1,726
Simberi Stockpile	-	-	-	403	1.9	25	403	1.9	25
Total Simberi Operations	5,248	1.5	251	31,455	1.8	1,829	36,704	1.8	2,080
Atlantic Operations	21,680	1.1	782	20,501	1.1	711	42,182	1.1	1,493
Atlantic Operations Stockpile	6,040	0.5	90	-	-	-	6,040	0.5	90
Total Atlantic Operations	27,720	1.0	872	20,501	1.1	711	48,222	1.0	1,583
Phoenician Total	32,968	1.1	1,123	51,956	1.5	2,540	84,926	1.3	3,663

1. Ore Reserves for St Barbara are extracted from the report titled 'Quarterly Report Q3 March FY22' released to the ASX on 28 April 2022.



Appendix D – Combined Mineral Resources

Hoover House

Mineral Resources by deposit

Deposit	Measured			Indicated			Inferred			Total		
	Tonnes (000's)	Grade (g/t Au)	Ounces (000's)	Tonnes (000's)	Grade (g/t Au)	Ounces (000's)	Tonnes (000's)	Grade (g/t Au)	Ounces (000's)	Tonnes (000's)	Grade (g/t Au)	Ounces (000's)
St Barbara^{1,2}												
Gwalia Deeps	3,776	5.8	704	18,946	5.7	3,492	2,484	6.8	540	25,206	5.8	4,736
Gwalia Open Pit	2,221	2.3	164	6,218	2.9	600	-	-	-	8,439	2.8	764
Old South Gwalia	27	4.4	4	1,223	3.6	142	607	3.7	72	1,857	3.7	218
Harbour Lights	-	-	-	12,268	1.4	569	616	1.7	33	12,884	1.5	602
Tower Hill	-	-	-	20,682	1.8	1,177	-	-	-	20,682	1.8	1,177
Aphrodite Open Pit	-	-	-	13,458	1.5	666	5,321	1.3	229	18,780	1.5	895
Aphrodite Underground	-	-	-	4,156	3.7	497	2,571	3.3	271	6,726	3.6	768
Zoroastrian Open Pit	-	-	-	3,702	1.9	228	1,730	1.6	87	5,432	1.8	315
Zoroastrian Underground	-	-	-	800	4.7	120	812	3.4	90	1,612	4.0	209
Excelsior	-	-	-	9,645	1.0	313	1,685	0.8	41	11,330	1.0	354
Bardoc Satellite Open Pits	152	2.2	11	4,314	1.6	217	4,950	1.6	251	9,417	1.6	480
Total Leonora Operations	6,176	4.4	883	95,412	2.6	8,021	20,776	2.4	1,614	122,365	2.7	10,518
Genesis³												
Ulysses	795	5.3	135	4,341	3.1	434	2,607	3.2	269	7,743	3.4	838
Admiral	-	-	-	5,081	1.5	242	8,741	1.1	318	13,822	1.3	560
Orient Well	-	-	-	4,304	1.0	138	4,496	1.1	164	8,800	1.1	302
Puzzle	-	-	-	5,765	1.1	204	2,950	1.1	107	8,715	1.1	310
Genesis Stockpile	-	-	-	226	0.8	6	-	-	-	226	0.8	6
Total Genesis	795	5.3	135	19,717	1.6	1,025	18,794	1.4	857	39,306	1.6	2,017
Dacian (100% basis)⁴												
Greater Westralia Mining Area	200	4.2	27	3,150	4.1	412	5,570	3.1	561	8,920	3.5	1,001
Jupiter Mining Area	1,960	1.6	100	8,420	1.1	289	970	1.2	37	11,340	1.2	426
Cameron Well project Area	-	-	-	170	0.9	5	500	0.8	12	660	0.8	17
Mt Morgans Stockpiles	1,620	0.6	32	-	-	-	3,630	0.4	48	5,250	0.5	79
Redcliffe Southern Zone	-	-	-	1,640	2.9	155	7,500	1.3	302	9,130	1.6	458
Redcliffe Central Zone	-	-	-	880	2.9	82	2,650	1.7	142	3,530	2.0	224
Total Dacian	3,780	1.3	159	14,250	2.1	943	20,820	1.6	1,102	38,840	1.8	2,204

Note: Mineral Resources are reported inclusive of Ore Reserves.

1. Mineral Resources for Old South Gwalia is extracted from the report titled 'Quarterly Report Q4 June FY22' released to the ASX on 27 July 2022.
2. All other Mineral Resources for St Barbara are extracted from the report titled 'Quarterly Report Q3 March FY22' released to the ASX on 28 April 2022.
3. Mineral Resources for Genesis are extracted from the report titled 'Leonora Resource Increases By More Than 400,000oz to 2Moz' released to the ASX on 29 March 2022.
4. Mineral Resources for Dacian are extracted from the report titled '2022 Mineral Resources and Ore Reserves update' released to the ASX on 27 July 2022 and presented on an 100% basis. Dacian Ore Reserve and Mineral Resource estimate inclusive of stockpile depletion of 21koz as at 30 November 2022.



Appendix D – Combined Mineral Resources

Phoenician Metals

Mineral Resources by deposit

Deposit	Tonnes (000's)	Measured Grade (g/t Au)	Ounces (000's)	Tonnes (000's)	Indicated Grade (g/t Au)	Ounces (000's)	Tonnes (000's)	Inferred Grade (g/t Au)	Ounces (000's)	Tonnes (000's)	Total Grade (g/t Au)	Ounces (000's)
St Barbara²												
Simberi Oxide	3,600	1.2	138	9,800	1.1	335	5,200	1.1	177	18,600	1.1	650
Simberi Sulphide	4,000	1.6	191	47,500	1.5	2,452	19,900	1.6	932	71,400	1.6	3,575
Total Simberi Operations	7,600	1.3	329	57,300	1.5	2,787	25,100	1.4	1,109	90,000	1.5	4,225
Atlantic Operations	23,393	1.1	834	28,815	1.0	936	6,428	1.1	221	58,636	1.1	1,990
Total Atlantic Operations	23,393	1.1	834	28,815	1.0	936	6,428	1.1	221	58,636	1.1	1,990
Phoenician Total	30,993	1.2	1,163	86,115	1.3	3,723	31,528	1.3	1,330	148,636	1.3	6,215

Note: Mineral Resources are reported inclusive of Ore Reserves.

1. Mineral Resources for Old South Gwalia is extracted from the report titled 'Quarterly Report Q4 June FY22' released to the ASX on 27 July 2022.
2. All other Mineral Resources for St Barbara are extracted from the report titled 'Quarterly Report Q3 March FY22' released to the ASX on 28 April 2022.
3. Mineral Resources for Genesis are extracted from the report titled 'Leonora Resource Increases By More Than 400,000oz to 2Moz' released to the ASX on 29 March 2022;
4. Mineral Resources for DCN are extracted from the report titled '2022 Mineral Resources and Ore Reserves update' released to the ASX on 27 July 2022 and presented on an 100% basis.



Appendix G – Production target material assumptions

Pursuant to Listing Rule 5.16, Genesis and St Barbara (as applicable) provide the following information in respect of the material assumptions on which the “300koz pa” production target is based. This information also applies in respect of the “180-205koz pa” production target in respect of Gwalia and Ulysses, which forms part of the “300koz pa” production target.

Composition of production target

- For the purposes of Listing Rule 5.16.3, the 300koz pa production target is comprised of 56% Ore Reserves (comprised further of 49% of material in the Probable category and 7% of material in the Proved category) and 44% Mineral Resources (comprised further of 10% of material in the Measured category, 25% of material in the Indicated category and 9% of material in the Inferred category). The 300koz pa production target is expected to be achieved in FY26.
- A further breakdown is presented as follows:

	Gwalia	Tower Hill	Ulysses	Admiral	Jupiter¹	TOTAL
Production target ounces ²	124koz pa	60koz pa	81koz pa	9koz pa	27koz pa	301koz pa
	41%	20%	27%	3%	9%	100%
Ore Reserves Underpinning the Production Target	124koz pa	45koz pa	-	-	-	169koz pa or 56%
Proved	17%	0%	-	-	-	12%
Probable	83%	100%	-	-	-	88%
Mineral Resources Underpinning the Production Target ³	-	15koz pa	81koz pa	9koz pa	27koz pa	132koz pa or 44%
Measured	-	0%	21%	0%	55%	24%
Indicated	-	96%	50%	85%	43%	56%
Inferred ⁴	-	4%	29%	15%	2%	20%
Merged Company interest in project	Underground 100%	Open pit 100%	Underground 100%	Open pit 100%	Open pit 77% ⁵	

- Notwithstanding the percentage ownership of the Merged Company in Jupiter, the figures in the table are stated on a 100% ownership basis.
- The estimated Ore Reserves and Mineral Resources underpinning the 300koz pa production target have been prepared by a competent person or persons in accordance with the requirements of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Please refer to the JORC compliance statements on slide 4 and the Competent Persons Statements on slide 5 of the presentation “Creating a leading Australian Gold House” lodged on the ASX 12 December 2022 for more information.
- The Mineral Resources stated are exclusive of Ore Reserves.
- Please note that there is a low level of geological confidence associated with inferred mineral resources and there is no certainty that further exploration work will result in the determination of indicated mineral resources or that the production target itself will be realised.
- Genesis’ takeover bid is extended to 30 January 2023, and Genesis’ interest in Jupiter may increase further under that bid.



• Mining – Open pit

For the open pit production targets, conventional mechanised open pit mining equipment utilising hydraulic excavators and rear dump trucks remains and continues to be the selected mining method.

In terms of open pit wall angles and geotechnical conditions, all open pit mining areas have existing exposure as well as geotechnical drilling, core logging and rock property test work that has been utilised to provide geotechnical parameters regarding overall slope angles, berm widths, locations, and batter angles. These parameters have been incorporated into designs.

The Jupiter open pit production target is based on a detailed pit design generated using mining software with 2% of ounces in the Inferred Mineral Resource category. Mining recovery and dilution was modelled through conversion of the Mineral Resource block model to a regularised Mining Model (5 x 5 x 2.5 blocks) and estimated by taking into consideration ore body geometry (width and dip), excavator size and the grade of the diluent material.

The Tower Hill open pit production target is based upon the previously published St Barbara Ore Reserve estimate published in the report titled “Quarterly Report Q1 September FY23” released to the ASX on 18 October 2022. Additional ore contribution to the target was based on pit optimisations generated using mining software and modifying factors for mining dilution and ore loss were applied at rates of 8% and 4% respectively, taking into consideration ore body geometry (width and dip), excavator size, and the grade of the diluent material. 1% of the Tower Hill ounces are in the Inferred Mineral Resource category.

The Admiral open pit production target is based upon a detailed pit design and includes 15% of ounces in the Inferred Mineral Resource category. Modifying factors for mining dilution and ore loss were applied at rates of 18% and 6% respectively, taking into consideration ore body geometry (width and dip), excavator size, and the grade of the diluent material.

Mining – Underground

The Ulysses Underground production target is based on mining shapes generated using the Ulysses Mineral Resource block model and includes 29% of ounces in the Inferred Mineral Resource category.

Ulysses Underground is planned to be mined using conventional underground mining methods. The mining will consist of Longhole Open Stopping (LHOS) on 10m level spacing with voids remaining open and insitu rock rib and sill pillars used for stability. Mining operations will be undertaken by a conventional fleet of twin boom jumbos, 76mm production drills, 10-15t loaders and 60t trucks.

Stope shapes have a minimum mining width of 2.5 metres and a minimum stope dip angle of 35 degrees. Dilution skins were applied at 0.5 metres in the hanging wall and 0.15 metres in the footwall. A mining recovery factor of 90% has also been applied to the stopes, representing ore loss through the course of mining. Stope strike lengths have been designed in accordance to geotechnical studies in consideration to Hydraulic Radius and Effective Radius Factor (ERF) with placement of rib and sill pillars. No dilution or ore loss has been applied to ore development shapes.

The Gwalia Underground production target is based on mining shapes generated using the Gwalia Deeps Mineral Resource block model. Stopes shapes have a minimum mining width of 3m and a minimum stope dip angle of 40 degrees. Stope dilution factors vary by ore lode. South West Branch (SWB) and South Gwalia Series (SGS) have an average estimated dilution of 13% and 17%, respectively. Mining dilution of 18% has been applied to all West Lode stopes. Mining dilution of 30% has been applied to Main Lode stopes. A mining recovery factor is also applied to all stopes. The mining recovery factor is 92% for triple-lift and double-lift stopes and 90% for single-lift stopes. The profiles of development excavations are designed inclusive of 10% overbreak. No further dilution factors or mining recovery factors are applied to development ore.

Processing & Metallurgical – Open pit

The mined material from the Admiral, Tower Hill, and Jupiter open pits will be treated through the Mt Morgans 2.9 Mtpa Processing Plant, which is a standard crushing, milling and CIL circuit, with the throughput rate being confirmed by plant performance and process throughput modelling.

Variable metallurgical recovery factors, based on grind size, throughput, metallurgical test work, and historic plant performance data have been applied through the production target with the weighted average recovery being 91.5%.

Average recoveries for each of the production target areas are 91.5%, 91.6% and 91.0% with these being achieved by a blended ore feed from Admiral, Tower Hill and Jupiter mining areas respectively.

No deleterious elements have been observed in the metallurgical or geological test work, or since commissioning of the Processing Plant in March 2018.

Processing & Metallurgical – Underground

The mined material from the Ulysses and Gwalia underground mines will be treated through the Gwalia 1.4 Mtpa Processing Plant, which is a standard crushing, milling and CIL circuit, with the throughput rate being confirmed by plant performance and process throughput modelling.

Variable metallurgical recovery factors, based on grind size, throughput, metallurgical test work, and historic plant performance data have been applied through the production target with the average weighted recovery being 94.9%.

Average recoveries for each of the production target areas are 96.0% and 89.3% with these being achieved by a blended ore feed from Gwalia Underground and Ulysses Underground mining areas respectively. No deleterious elements have been observed in the metallurgical or geological test work.





St Barbara