



Delivering the Leonora Province Plan

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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.

Mineral Resources and Ore Reserves reporting

Any information in this presentation that relates to St Barbara Mineral Resources or Ore Reserves estimates has been extracted from the ASX announcement released by St Barbara entitled "Ore Reserves and Mineral Resources Statements 31 December 2021" dated 18 February 2022 which is available to view on www.stbarbara.com.au and www.asx.com.au.

Any information in this presentation that relates to Bardoc Gold Project Mineral Resource and Ore Reserve estimates has been extracted from the ASX announcement jointly released by St Barbara and Bardoc entitled "St Barbara to acquire Bardoc Gold via Board recommended scheme of arrangement" dated 20 December 2021 which is available to view on www.stbarbara.com.au and www.asx.com.au.

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.

Full details of recent exploration results in ASX release 25 January 2022 'Q2 December FY22 Quarterly Report.

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

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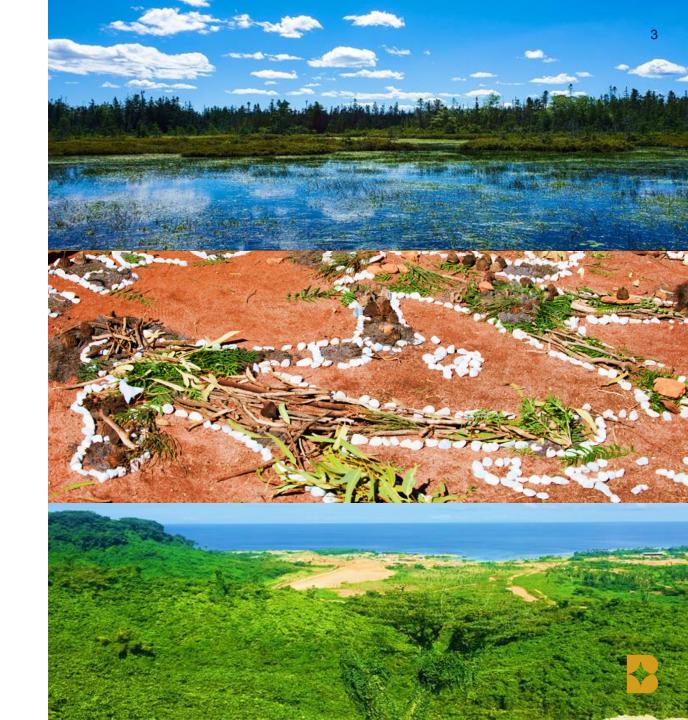


Acknowledgement of Country

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.



Delivering the Leonora Province Plan



Gwalia turned around

New potential mining front – Old South Gwalia

Planned acquisition of Bardoc Gold

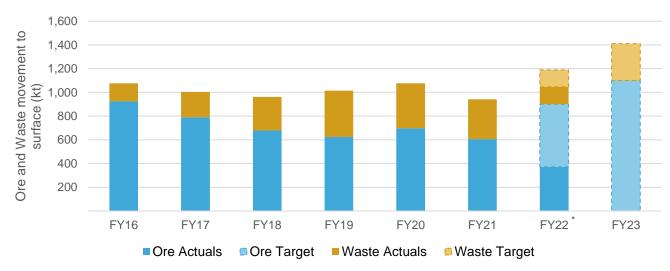
Advancing Tower Hill, Harbour Lights and Trevor Bore

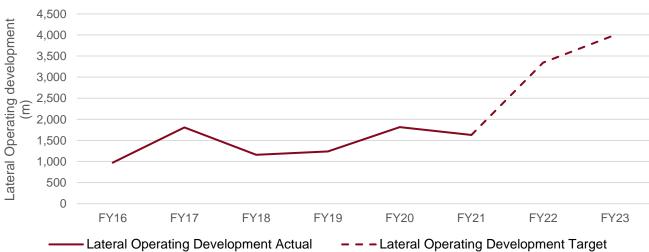
Expanding Leonora processing plant to 2.1mtpa

Installing refractory processing capability at Leonora



Turning around operational performance at Gwalia

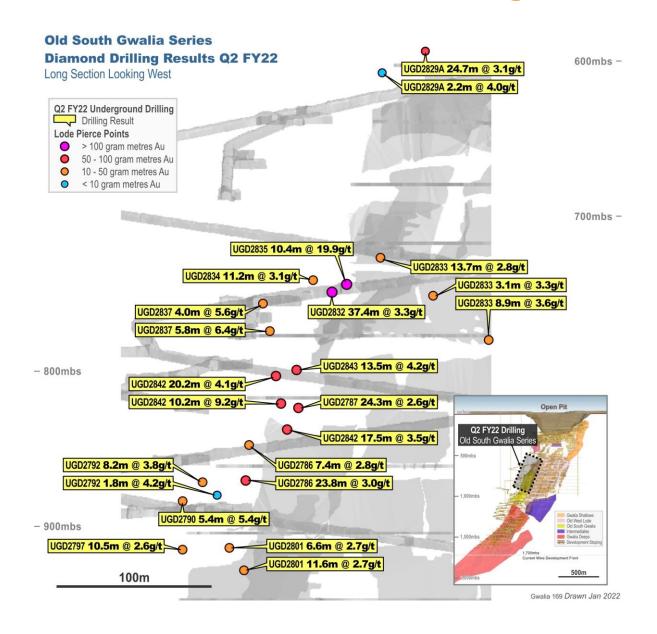




- FY16 to FY20 Declining performance
 - Fewer tonnes moved to surface
 - Limited development metres
 - Waste material stored underground
- FY21 to FY22 Turnaround
 - Moving historical waste material to surface
 - Increase in development metres
- FY21 Impacted by Fall of Ground Event
 - Cleared remaining waste stored underground
- FY22 Increase ore delivery to surface to 900kt
 - Haul fleet focused on ore delivery
 - Additional jumbos added to fleet to further increase development metres
- FY23 Increase ore delivery to surface to 1.1Mt



Potential new shallower mining front

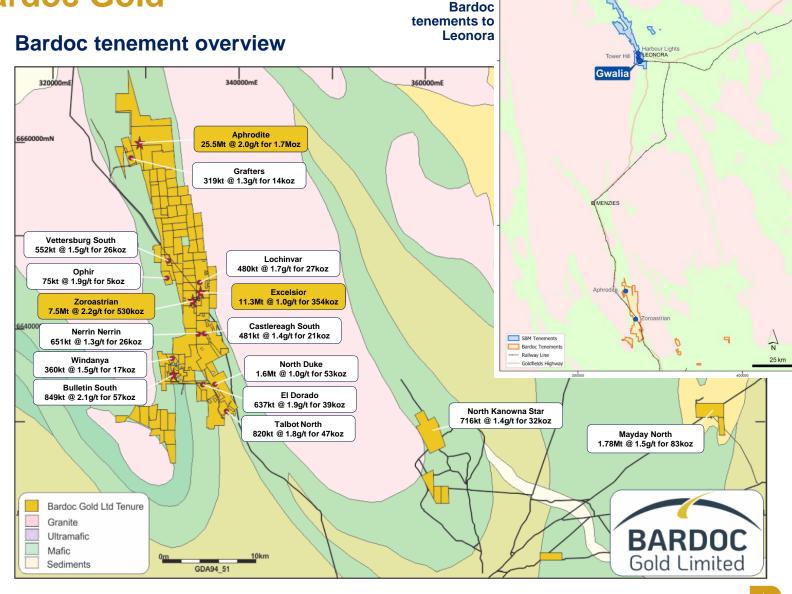




Planned acquisition of Bardoc Gold¹

About Bardoc Gold

- 3.1Moz Mineral Resources & 1.0Moz Ore Reserves¹
- Large contiguous tenement package located ~180km south of Leonora by rail
- Aphrodite and Zoroastrian higher grade deposits ready for development
- Synergies to be achieved by delivering Bardoc ore to the Leonora process plant via adjacent rail line



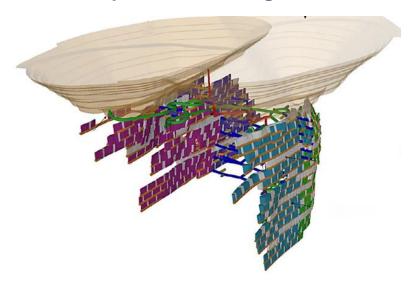
Railway from



Two new underground mines ready to be developed

Zoroastrian underground mine

Aphrodite underground mine



Total Mineral Resources ¹	1.6Mt @ 4.0 g/t Au	6.7Mt @ 3.6 g/t Au	
Capital cost to develop ²	Estimated A\$15M	Estimated A\$30M	
Ore type	Free-mill	Refractory	
Mining method	Longhole open stoping	Longhole open stoping	
Targeted construction commencement ³	Q4 FY23	Q1 FY24	
Targeted first production ³	H2 FY24	H1 FY25	
Permitting	Mining Proposal and Closure Plan Approved	Mining Proposal and Closure Plan Submitted	

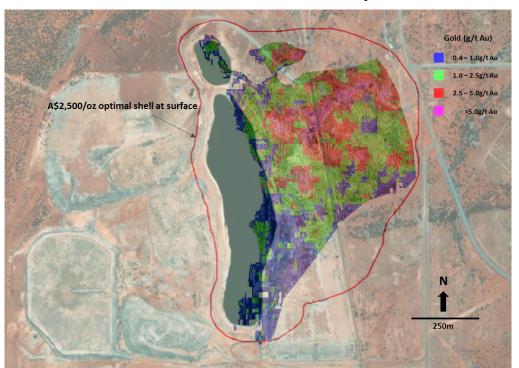
All Bardoc Gold estimates of mineral resources and ore reserves referable to joint Bardoc Gold/St Barbara ASX announcement of 20 December 2021 titled "St Barbara to acquire Bardoc Gold via Board recommended scheme of



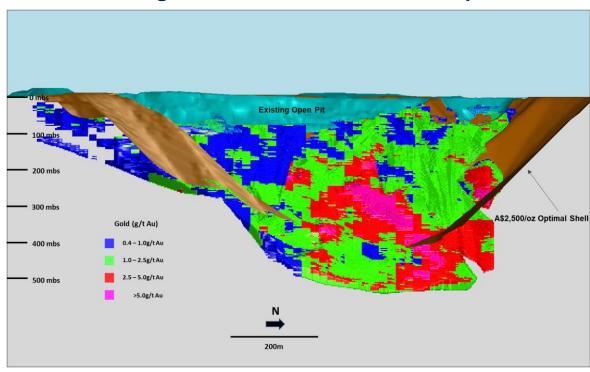
Preliminary estimate only, to be the subject of detailed analysis as part of proposed Leonora Province Plan Pre-Feasibility study Development of and target dates relating to Aphrodite and Zoroastrian are subject to implementation of the Bardoc scheme of arrangement

Tower Hill shifts to open cut and grows Mineral Resource by 0.6Moz

Plan view of Tower Hill deposit



Long section view of Tower Hill deposit

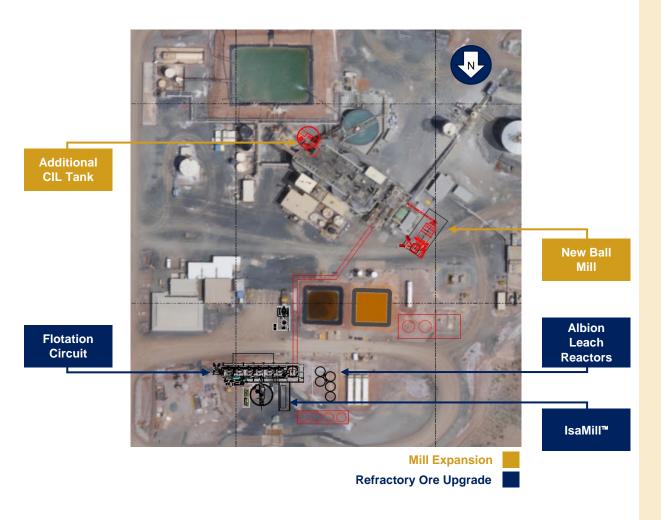


Change in Indicated and Inferred Mineral Resource	Million Tonnes	Grade (g/t)	Million Ounces
Previous Tower Hill Underground (as at 30 June 2021)	5.1	3.8	0.6
Current Tower Hill Open Pit	21.0	1.8	1.2
Variance	16.0	1.2	0.6



Creating a unique processing hub

Increasing processing capacity to 2.1Mtpa and adding refractory capacity

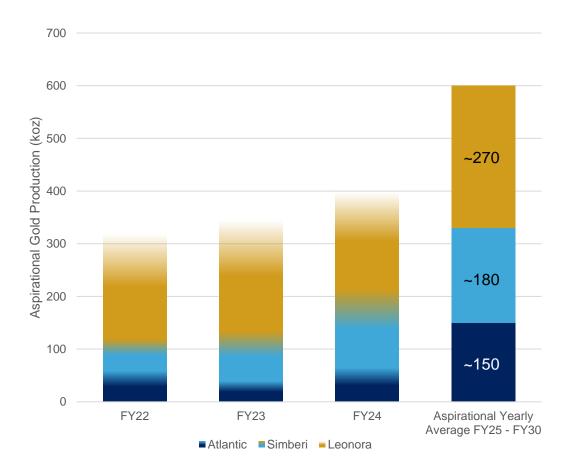


Free Milling ROM Pad Refractory **ROM Pad** 3-stage Crushing Tails (~95% **Tailings Flotation** Refractory mass flow) Storage **Ball Milling** 2.1 Mtpa Facility Concentrate (~5% mass flow) Free Milling CIL Albion **Process™** 2.1 Mtpa Gold Recovery

Process flow diagram

Leonora processing plant layout

Aspirational production of ~600Kozpa



- 1. Leonora: aspirational production of ~270kozpa once the proposed 2.1Mtpa processing facility is installed comprising 180kozpa from Gwalia Underground and 90kozpa from near mine and/or acquired properties
- Simberi: aspirational production of ~180kozpa upon completion of the Sulphide Project
- 3. Atlantic: aspirational production of ~150kozpa once production comes online from Beaver Dam, then Fifteen Mile Stream and later Cochrane Hill

Aspiration for each asset to operate for at least ten years.



