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20 December 2021

## Presentation on Accelerating the Leonora Province Plan

Mr Craig Jetson, Managing Director & CEO, will brief analysts and investors on the Bardoc Acquisition and accelerated Leonora Province Plan at 11:00 am Australian Eastern Daylight Time (UTC + 11 hours) on Monday 20 December 2021.

### Analysts and institutional investors

Analysts and institutional investors can register for the briefing at <https://s1.c-conf.com/diamondpass/10018669-5ha1l2.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/](http://stbarbara.com.au/investors/webcast/) or by [clicking here](#). The audio webcast is 'listen only' and does not enable questions.

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### Authorised by

Board of Directors



# Accelerating the Leonora Province Plan

Craig Jetson  
Managing Director and CEO

20 December 2021

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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 (other than Tower Hill Mineral Resource estimates) has been extracted from the ASX announcement released by St Barbara entitled "Ore Reserves and Mineral Resources Statements 30 June 2021" dated 26 August 2021 which is available to view on [www.stbarbara.com.au](http://www.stbarbara.com.au) and [www.asx.com.au](http://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](http://www.stbarbara.com.au) and [www.asx.com.au](http://www.asx.com.au).

Any information in this presentation that relates to Tower Hill Mineral Resource estimates has been extracted from the ASX announcement released by St Barbara entitled "Strategic acquisition of Bardoc accelerates Leonora Province Plan" dated 20 December 2021 which is available to view on [www.stbarbara.com.au](http://www.stbarbara.com.au) and [www.asx.com.au](http://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.

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](http://www.adrbnymellon.com/dr_profile.jsp?cusip=852278100)

**Published** 20 December 2021





# 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.



# Transaction overview and rationale



# Transaction overview

## St Barbara to acquire Bardoc Gold via recommended scheme of arrangement

Transaction overview	<ul style="list-style-type: none"><li>St Barbara Limited (<b>St Barbara</b>) has entered into a scheme implementation deed for the all-scrip acquisition of Bardoc Gold Limited (<b>Bardoc</b>) by way of a scheme of arrangement (<b>Scheme</b>)</li><li>The Scheme has been recommended by the Bardoc Board<sup>1</sup></li></ul>
Consideration	<ul style="list-style-type: none"><li>Bardoc shareholders will receive 0.3604 new St Barbara shares for each Bardoc share held</li><li>The offer values Bardoc at \$157 million or 53.0 cents per Bardoc share<sup>2</sup>, representing:<ul style="list-style-type: none"><li>a 29% premium to the closing price of Bardoc shares on 17 December 2021 (<b>Last Closing Date</b>)</li><li>a 35% premium to the 30-day VWAP of Bardoc shares for the period ended on the Last Closing Date</li></ul></li><li>St Barbara shareholders to hold 87% of the combined entity, while Bardoc shareholders will hold 13%</li></ul>
Conditions and Deal Protections	<ul style="list-style-type: none"><li>The Scheme is subject to customary conditions, including:<ul style="list-style-type: none"><li>An independent expert concluding that the Scheme is in the best interests of Bardoc shareholders</li><li>Bardoc shareholder and Court approvals</li></ul></li><li>The Scheme is also subject to customary deal protection mechanisms, including no shop and no talk provisions, matching rights in the event of a competing proposal for Bardoc and a break fee payable by Bardoc in specified circumstances</li></ul>
Spin-Out Transaction	<ul style="list-style-type: none"><li>Subject to approval from Bardoc shareholders and regulatory authorities, Bardoc's South Woodie Woodie Project will be demerged into a wholly-owned subsidiary of Bardoc (<b>SpinCo</b>), with Bardoc shareholders owning 100% of the value of SpinCo</li></ul>
Timing	<ul style="list-style-type: none"><li>The Scheme is expected to be implemented in April 2022 subject to Bardoc shareholder and Court approvals</li></ul>

1. In the absence of a superior proposal and subject to an independent expert concluding that the Scheme is in the best interests of Bardoc shareholders  
2. Based on the closing price of St Barbara shares on the ASX on 17 December 2021



# Transaction rationale

**Transaction expands St Barbara's footprint in the Leonora province and accelerates the Leonora Province Plan**

## Strategic acquisition of Bardoc Gold

- Two Bardoc Gold projects ready to be developed
  - i. Aphrodite Underground
  - ii. Zoroastrian Underground
- Synergies to be achieved by delivering Bardoc ore by rail to the Leonora Processing Plant
- Expansive tenement package with significant future development potential

1

## Upgrading Leonora processing plant

- Significant resource position underpins plans to expand Leonora processing plant from 1.4Mtpa to 2.1Mtpa
- Low capital cost debottlenecking opportunity
- Enables the treatment of refractory ore from Harbour Lights and Bardoc's Aphrodite Underground
- Mining Proposal submitted for construction of dedicated rail siding at Leonora

2

## Updated Leonora Province Plan fills the mill

- Refractory treatment capability will be unique to Leonora, within a 200km radius, thereby providing future upside potential
- Open pit development of Tower Hill - initial open pit Indicated Mineral Resource 1.2Moz

3



# Strategic acquisition of Bardoc Gold





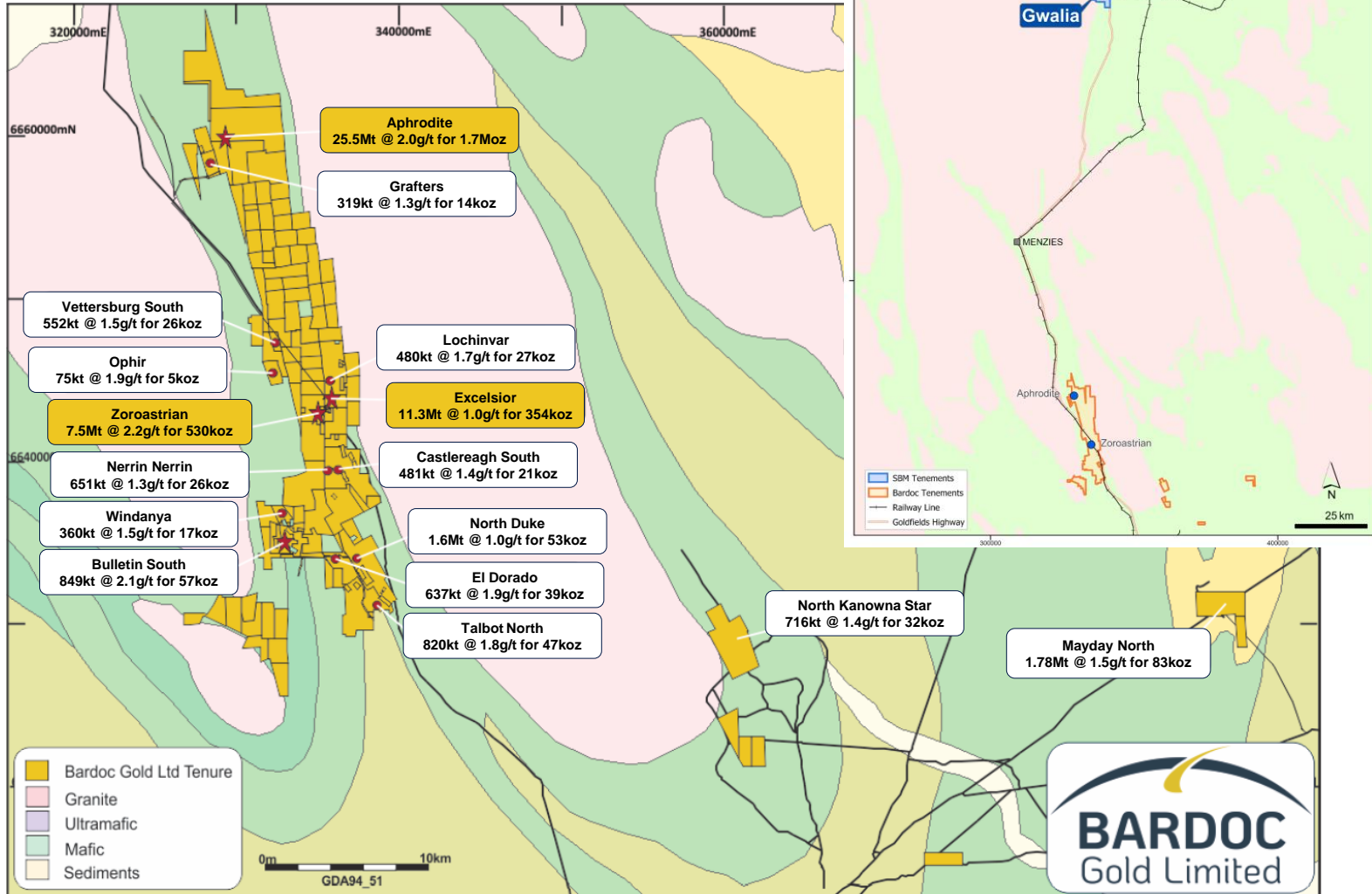
# Filling the mill with Bardoc Gold ore<sup>1</sup>

## About Bardoc Gold

- 3.1Moz Mineral Resources & 1.0Moz Ore Reserves<sup>1</sup>
- Large contiguous tenement package of 40 tenements covering an area of 447km<sup>2</sup>, located ~180km south of Leonora by rail
- Aphrodite and Zoroastrian higher grade deposits ready for development
- Synergies achieved by delivering Bardoc ore to the Leonora process plant via adjacent rail line

Bardoc Gold deposits	Zoroastrian Underground	Aphrodite Underground
Total Mineral Resources <sup>1</sup>	1.6Mt @ 4.0 g/t Au	6.7Mt @ 3.6 g/t Au
Ore type	Free-mill	Refractory
Targeted first production	H2 FY24	H1 FY25

## Bardoc tenement overview

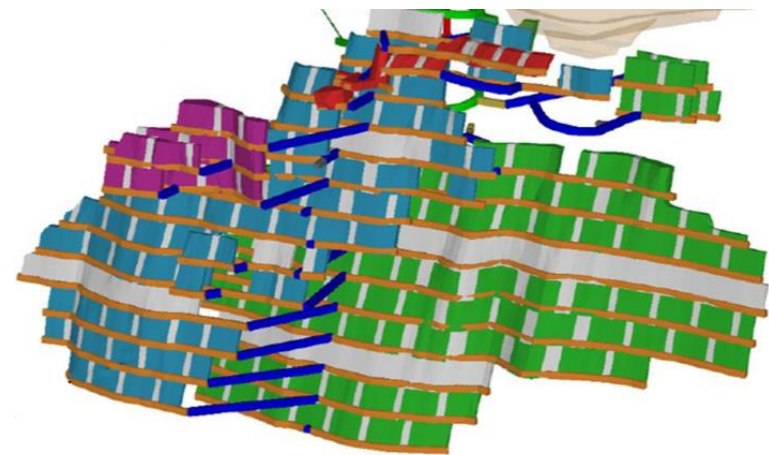


1. All Bardoc Gold estimates of mineral resources and ore reserves referable to joint Bardoc Gold/St Barbara ASX announcement of 20 December 2021 titled "St Barbara to acquire Bardoc Gold via Board recommended scheme of arrangement"

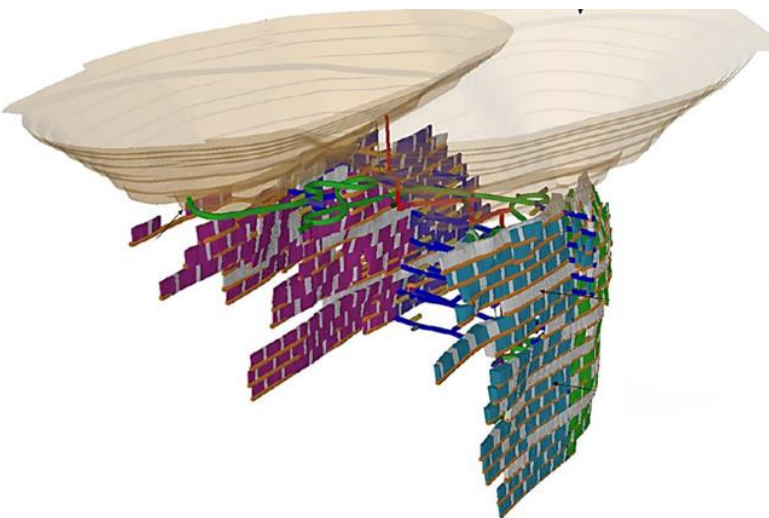


# Two new underground mines ready to be developed

Zoroastrian underground mine



Aphrodite underground mine



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

1. 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 arrangement”  
2. Preliminary estimate only, to be the subject of detailed analysis as part of proposed Leonora Province Plan Pre-Feasibility study

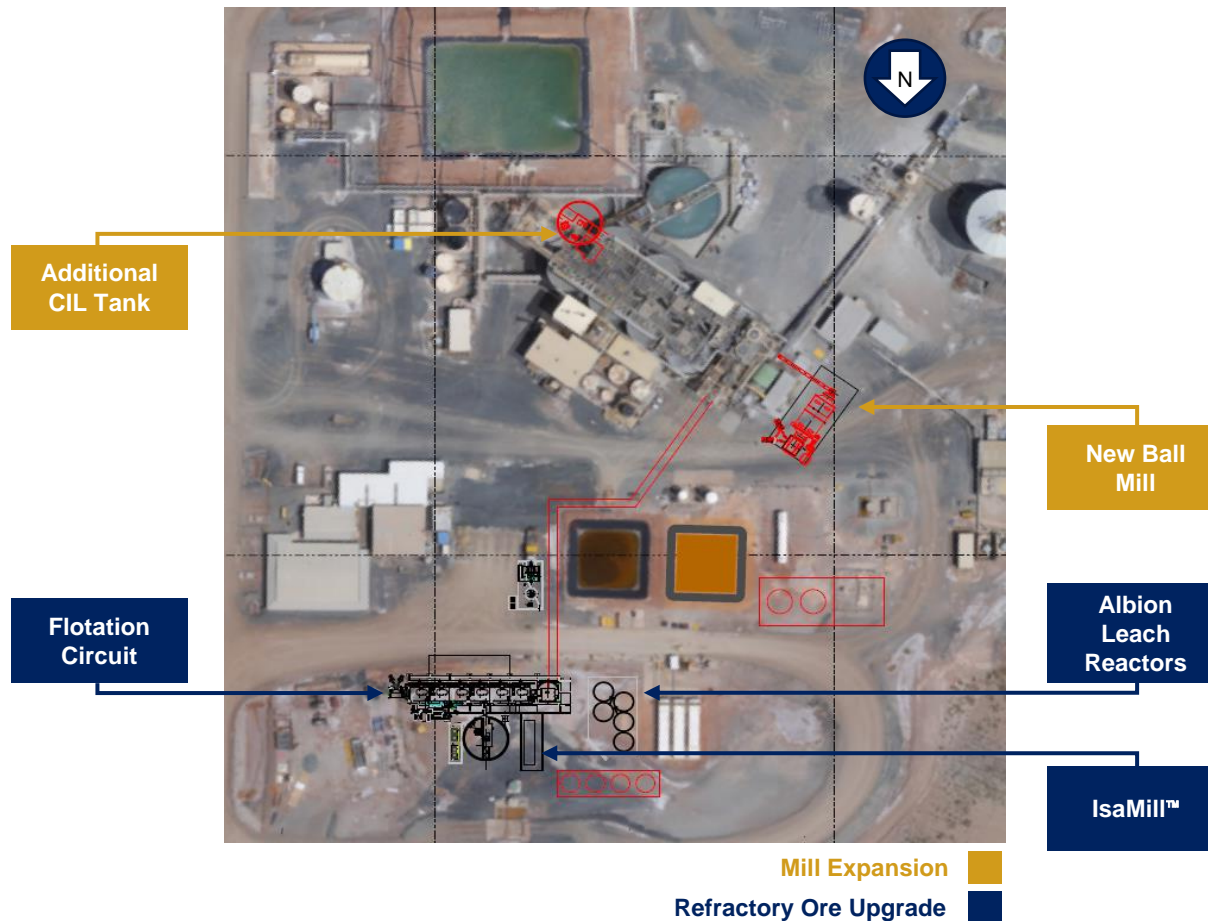


# Upgrading Leonora processing plant



# Building a regional processing hub

## Leonora processing plant layout



### Low capital cost debottlenecking opportunity

- Plan increases processing throughput from 1.4Mtpa to 2.1Mtpa
- Capital cost: ~A\$30M<sup>1</sup>
- Conveyor upgrades, additional ball mill and CIL tank to debottleneck existing infrastructure

### Integrated refractory treatment capability

- Capital cost: ~A\$110 - 120M<sup>1</sup>
- Treat Aphrodite and Harbour Lights refractory ore
- Flotation circuit and fine grind via IsaMill™ installation enables use of Albion Process™
- Pre-Feasibility Study to be completed by Q4 FY22

1. Preliminary estimate only, to be the subject of detailed analysis as part of proposed Leonora Province Plan Pre-Feasibility study



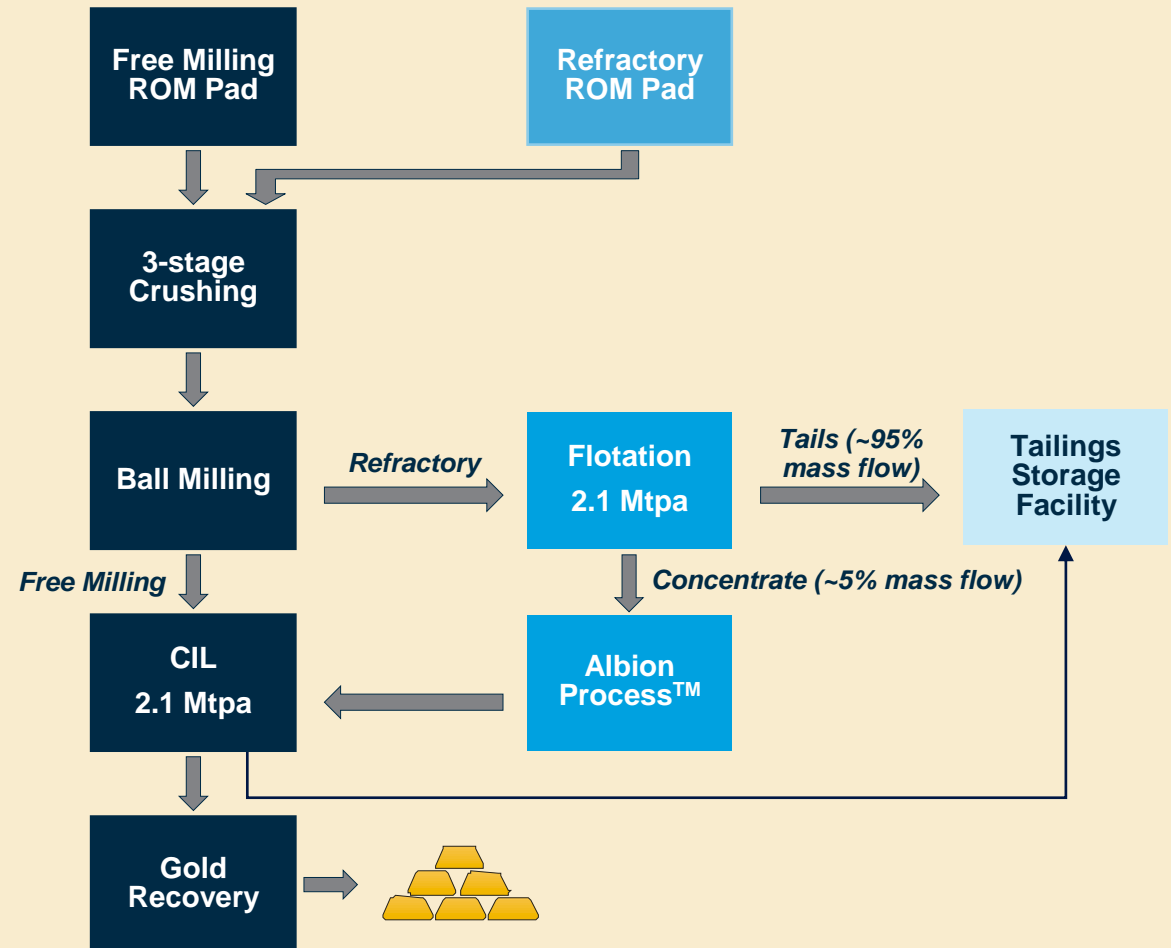


# Safe low cost Albion Process™

## Overview of the Albion Process™

- Developed by Glencore, the process has historically delivered 97% recoveries in refractory gold
  - Promising test work already completed on Aphrodite ore
  - In the process of conducting test work at Harbour Lights
- The Albion Process™ achieves safe and efficient atmospheric oxidation through:
  - Fine grinding of flotation concentrate
  - Efficient agitation and oxygen injection in Albion Leach Reactors
- The Leonora process plant will run campaign milling over approximately one month, seamlessly interchanging between refractory and free milling ore

## Process flow diagram

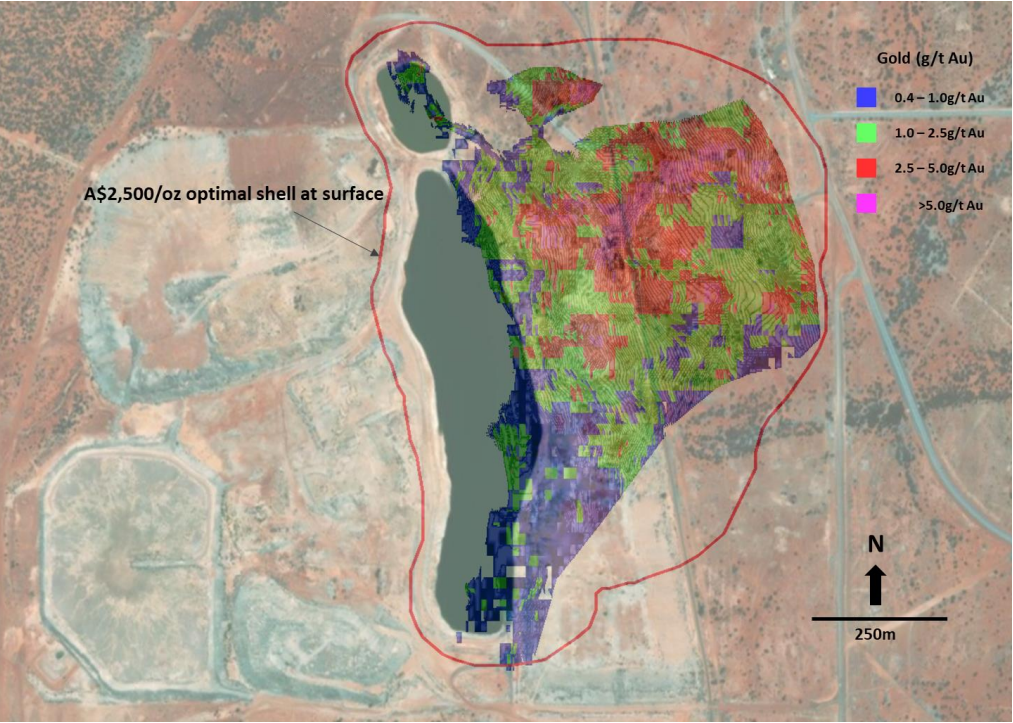


# Updated Leonora Province Plan fills the mill

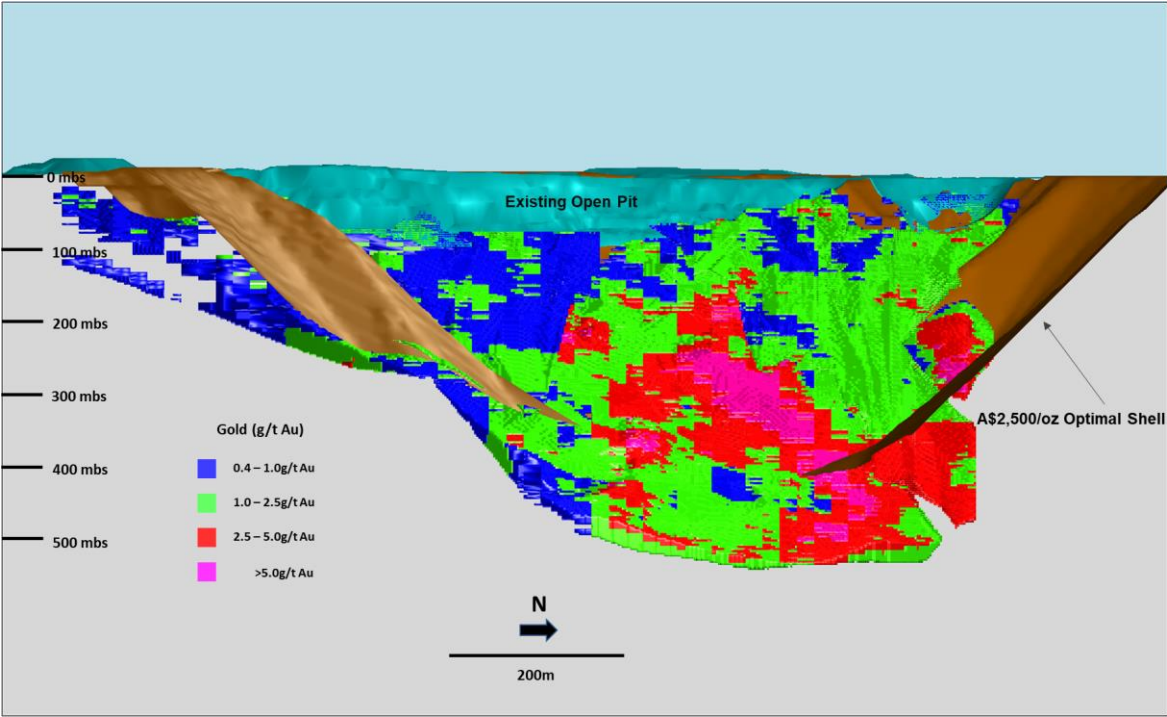


# Tower Hill shifts to open cut and grows Mineral Resource by 0.6Moz

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





# Filling the Leonora processing plant

Mine	Ore mining rate being evaluated	Mineral Resources		
	Mtpa	Tonnes (Mt)	Grade (g/t Au)	Moz Au
Gwalia Underground	1.1	25.4	5.9	4.8
Trevor Bore	TBD	TBD	TBD	TBD
Zoroastrian Underground	0.3 - 0.5 <sup>1</sup>	1.6 <sup>2</sup>	4.0 <sup>2</sup>	0.2 <sup>2</sup>
Aphrodite Underground <sup>3</sup>	0.9 - 1.0 <sup>1</sup>	6.7 <sup>2</sup>	3.6 <sup>2</sup>	0.8 <sup>2</sup>
Harbour Lights <sup>3</sup>	1.1 – 2.1	12.9	1.5	0.6
Tower Hill Open Pit	1.1 – 2.9	20.7	1.8	1.2

1. Indicative rates, to be the subject of detailed analysis as part of the proposed Leonora Province Plan Pre-Feasibility Study
2. As stated in the market release titled "St Barbara to acquire Bardoc Gold via Board recommended scheme of arrangement" on 20 December 2021
3. Refractory ore





# Targeted timeline<sup>1</sup>

Target date	Event
December 2021	Execution of Scheme Implementation Deed for acquisition of Bardoc
April 2022	Anticipated implementation of Bardoc Scheme of Arrangement
Q4 FY22	Pre-Feasibility Study of Leonora mill expansion to 2.1Mtpa & Refractory ore processing complete
Q2 FY23	Feasibility Study of Leonora mill expansion to 2.1Mtpa & Refractory ore processing complete
Q3 FY23	Mobilisation of mining contractor for Aphrodite and Zoroastrian underground mines
Q3 FY23	Construction of Leonora expansion to 2.1Mtpa & Refractory ore processing commences
Q4 FY23	Construction of Zoroastrian underground mine commences
Q1 FY24	Construction of Aphrodite underground mine commences
H2 FY24	Zoroastrian underground mine first ore
Q4 FY24	Leonora mill expansion to 2.1Mtpa complete
H1 FY25	Aphrodite underground mine & Leonora mill refractory ore processing commences

<sup>1.</sup> All dates are indicative only and subject to change, including for the outcomes of proposed studies. All target dates relating to Aphrodite and Zoroastrian are subject to implementation of the Bardoc Scheme of Arrangement. Target dates are generally consecutive – a delay in completion of an earlier event may result in a delay in later events..





# Growth plans are expected fully funded through debt and operating cash flow<sup>1</sup>

## Capital projects estimates

- Simberi Sulphide Project: ~US\$170M FY22 to FY24
- Beaver Dam mine construction: ~A\$117M FY23 to FY24
- Zoroastrian mine construction: ~A\$15M FY23 to FY24<sup>2</sup>
- Aphrodite mine construction: ~A\$30M FY24<sup>2</sup>
- Leonora additional ball mill and debottlenecking: ~A\$30M FY23 to FY24<sup>2</sup>
- Leonora mill Albion Process™: ~A\$110M – 120M FY23 to FY25<sup>2</sup>

## Syndicated debt facility

- Maturity date: 31 July 2025
- Facility A: A\$200M
- Facility B: C\$100M (C\$80M drawn down as at 30 June 2021)
- Accordion facility of US\$150M to be subscribed to following approval of Simberi Sulphide project

1. Subject to market and operating conditions including the granting of required permits. Financial modelling based on following key assumptions: Gold price A\$2,267/oz, AUD:USD 0.75 AUD:CAD 0.92  
2. Preliminary estimate only, to be the subject of detailed analysis as part of proposed Leonora Province Plan Pre-Feasibility study



# Accelerating the Leonora Province Plan

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**St Barbara**