



Presentation on Q2 December FY21 Quarterly Report and audio webcast

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

Analysts and institutional investors

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

Shareholders and media

A live audio webcast of the briefing will be available 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. The audio webcast will subsequently be made available on the website.

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Q2 December FY21 Quarterly Presentation

27 January 2021



Craig Jetson

Managing Director and Chief Executive Officer



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The Company estimates its reserves and resources in accordance with the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves 2012 Edition ("JORC Code"), which governs such disclosures by companies listed on the Australian Securities Exchange.

Non-IFRS 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.

Unless otherwise noted, information in this report that relates to Mineral Resources or Ore Reserves is extracted from the report titled 'Ore Reserves and Mineral Resources Statements 30 June 2020' released to the ASX on 24 August 2020. Full details of recent exploration results in ASX release 27 January 2021 '*Q2 December FY21 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

Title slide picture: Leonora Operations, Western Australia

Published: 27 January 2021

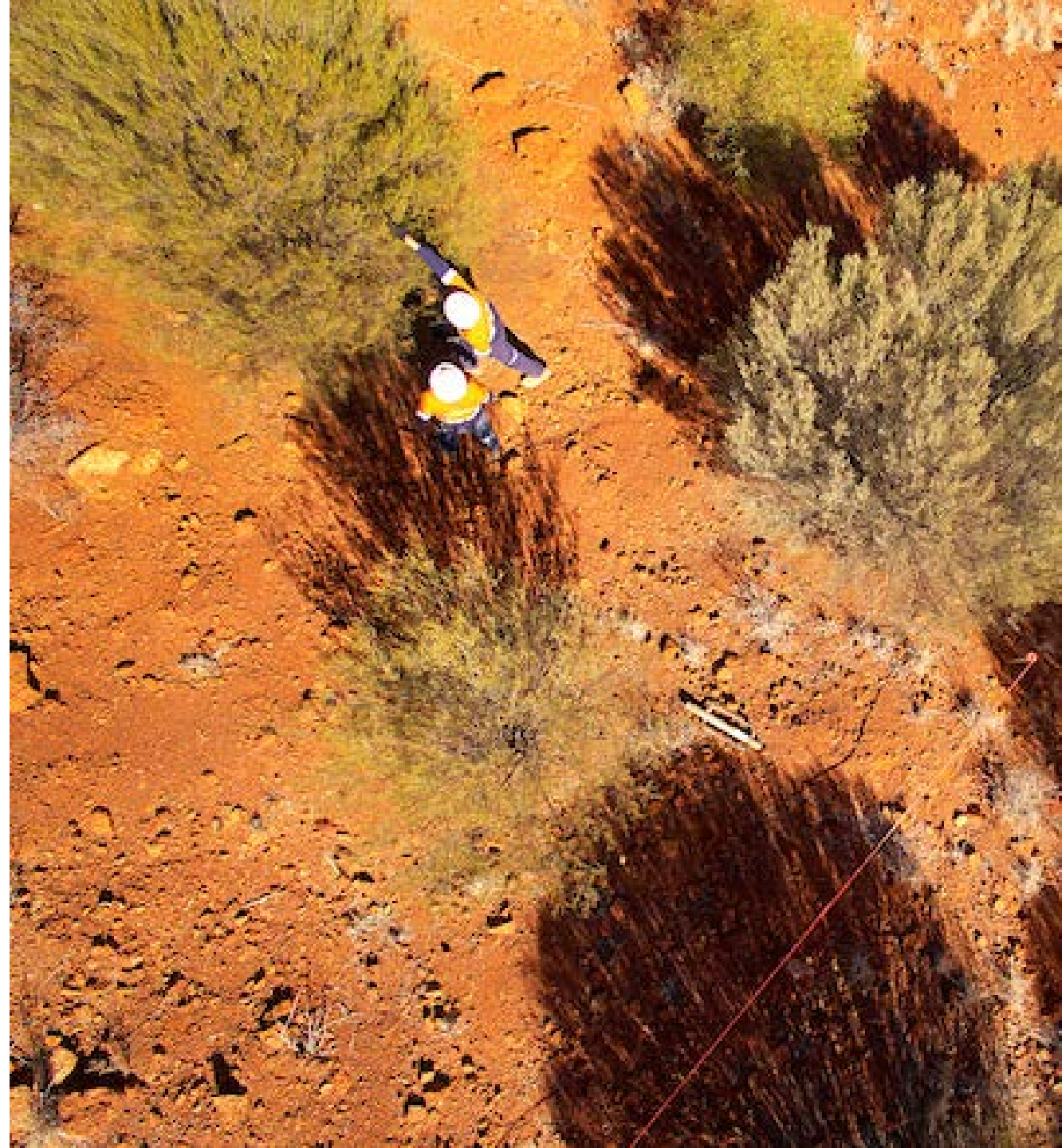


Acknowledgement of Country

We at St Barbara acknowledge the Traditional Custodians of the land upon which we operate and recognise their unique cultural heritage, beliefs and connection to these lands, waters and communities.

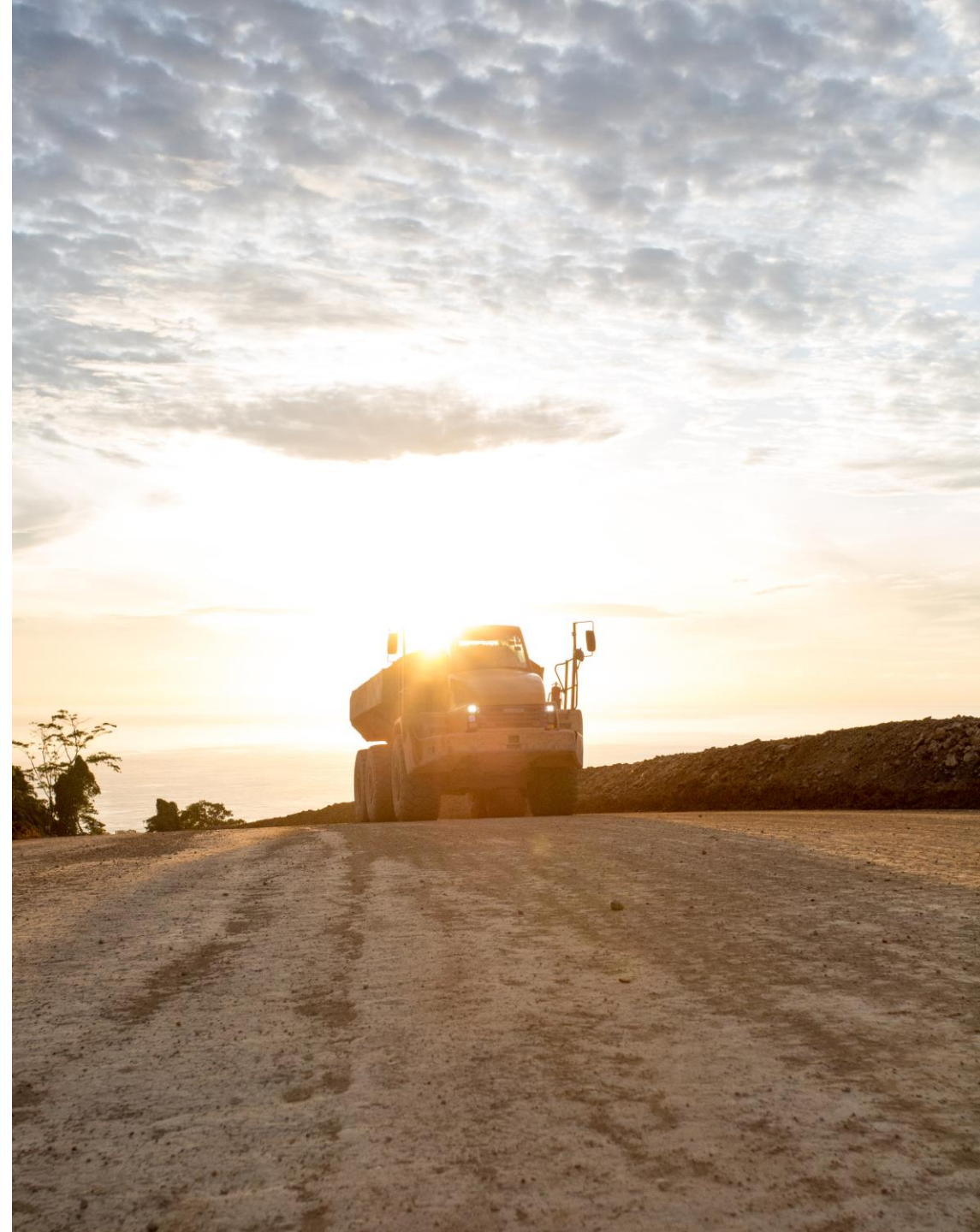
We pay our respects to all members of these Indigenous communities, and to Elders past, present, and emerging. We also recognise the importance of continued protection and preservation of cultural, spiritual and educational practices.

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



Contents

- **We are St Barbara**
- **Safety always**
- **Q2 FY21 Highlights**
- **Building Brilliance**
- **Operational Performance**
 - Atlantic
 - Leonora
 - Simberi
- **Project Update and Timeline**
- **Exploration**
- **What's next**



St Barbara is taking action across our sustainability commitments



SAFETY ALWAYS

Target is **Zero Harm**
TRIFR¹ 40% improvement in FY20
Embed CARE² behaviours across all operations
A workplace **safe from injury, bias, discrimination and harm**



EMPOWERED PEOPLE DIVERSE TEAMS

We are the only mining company to be a **WGEA³ Employer of Choice** (2015-2020)
Continue to **meet and exceed diversity objectives**—two new targets set in 2020
71% employee engagement in 2019, with annual surveys



STRONGER COMMUNITIES

Delivering on action plan to **address risks of Modern Slavery**
Extending 'CARE' to community – mental health, domestic violence & community wellbeing
Supporting **next generation of Indigenous leaders** through consultation and education



RESPECTING THE ENVIRONMENT

Carbon neutral by 2050 and by 2025 at **Atlantic Gold Operations**
Targeting **18% reduction in CO₂ per ounce of gold produced** by 2030
Operations **do not compete with agricultural or domestic** for water



GROWING SUSTAINABLY

Growing our business sustainably, where it makes sense, and with strong governance practices, means we can add value for everyone: our shareholders, our people and our communities.

1. Total Recordable Injury Frequency Rate (12 month average, total recordable injuries per million hours worked)
2. CARE stands for the following behaviours: C = Control; A = Action; R = Respect; E = Engage
3. Australian Workplace Gender Equality Agency (www.wgea.gov.au)

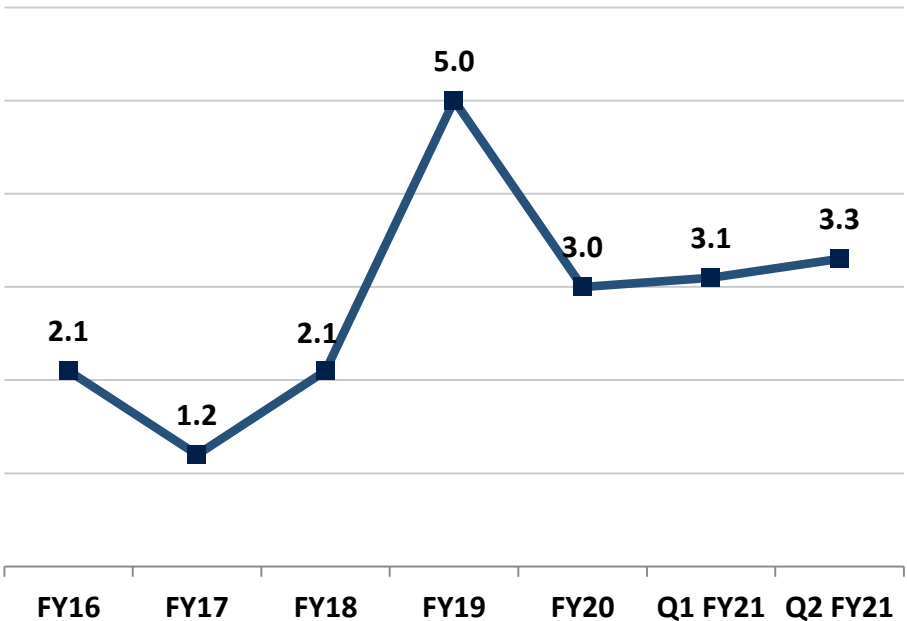
Safety always



**SAFETY
ALWAYS**

Zero harm is always our target.
Zero harm to all people as we responsibly operate our assets to their full potential.
This focus on safety guides everything we do.

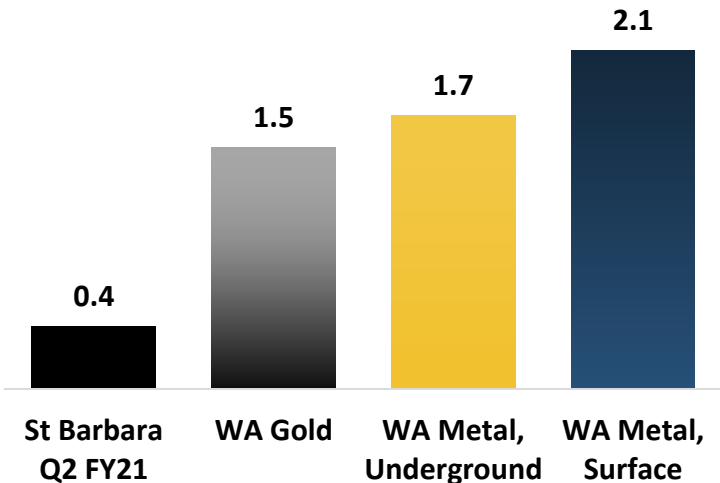
Total Recordable Injury Frequency Rate (TRIFR)¹



Three priority areas of focus in Q2 FY21:

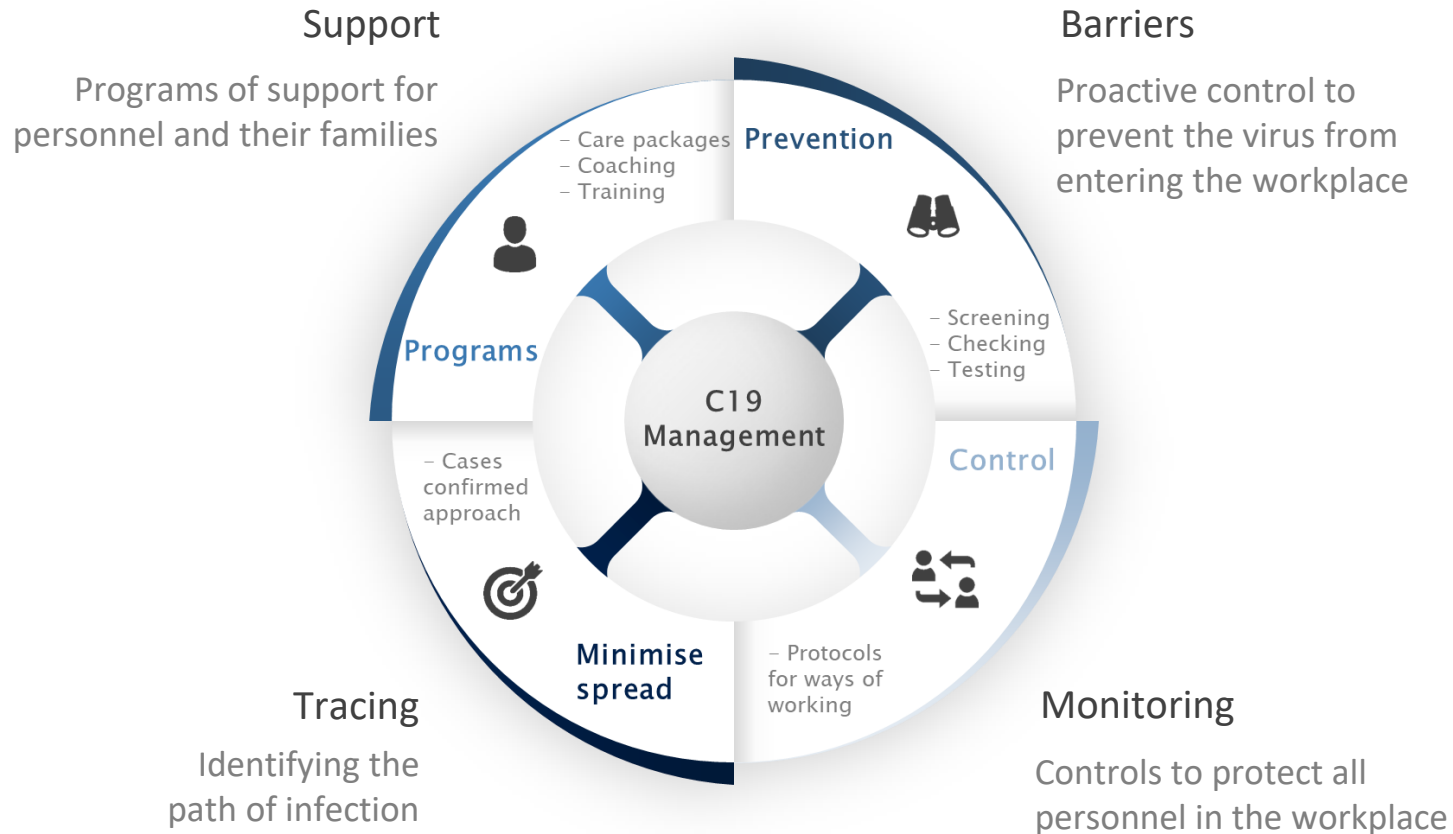
1. Contractor management
2. Line of fire prevention
3. COVID-19 management

St Barbara LTIFR² in comparison with Western Australian Mining benchmarks³



1. Total Recordable Injury Frequency Rate (12 month avg.), total recordable injuries per million hours worked
2. Lost Time Injury Frequency Rate (12 month avg.), the number of lost time injuries per million hours worked
LTIFR comparison not available for Canada, where common safety measure is number of lost time injury claims per 100 workers.
3. http://www.dmp.wa.gov.au/Documents/Safety/MSH_Stats_Reports_SafetyPerfWA_2018-19.pdf

St Barbara COVID-19 Management Framework



- Developed infectious diseases critical risk control standard
- Atlantic Gold: Screening controls for all employees, visitors and contractors with reduced personnel on site where possible
- Leonora: Reinforcing COVID-19 management plan, with effective application of protocols
- Simberi: Hygiene monitoring, use of masks and effective controls to prevent community transmission



GROWING SUSTAINABLY

Growing our business sustainably, where it makes sense, and with strong governance practices, means we can add value for everyone: our shareholders, our people and our communities.

Operational performance

- 90 koz produced at AISC of A\$1,517/oz (Q1: 73 koz at A\$1,711/oz)
- Building Brilliance initiatives are already driving improvements in operational efficiency and unit cost

Financial metrics

- Operational cash contribution of A\$83 M (Q1: A\$27 M)
- Average realised gold price in Q2 of A\$2,126 per ounce (Q1: A\$2,171 per ounce)

Capital management

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

Growth

- Detailed permitting timeline developed for Atlantic Gold projects and executive appointed to lead stakeholder engagement and permitting
- Leonora Province Plan completed and being developed into a strategic action plan to leverage the region's potential
- Simberi Sulphide Project on schedule for Q3 March FY21 Board review

What is Building Brilliance?

The first step in our strategy

- Company-wide program to rapidly and sustainably improve performance
- Focused on creating enduring value for St Barbara; addressing historical challenges and constraints
- We have a detailed plan to deliver A\$80 to A\$120 M annual cash contribution by FY23
- Plan based on rigorous diagnostic of each asset's unique opportunities
- Empowers whole organisation to take an owner's mindset
- Program gained momentum in the December quarter and initiatives are beginning to drive improvement in operational efficiency and unit cost



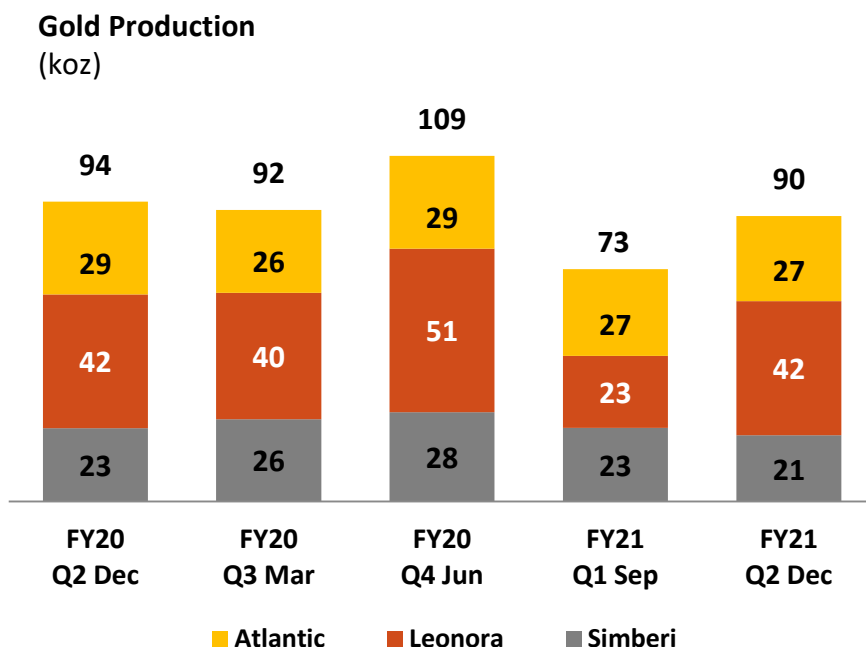
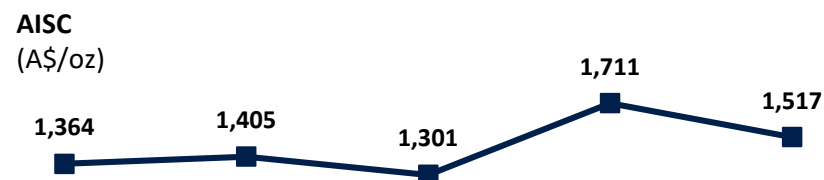
Building Brilliance initiatives



**Building
Brilliance
initiatives are
beginning to
drive
improvements
in operations
efficiency and
unit cost**

Atlantic	Mill de-bottlenecking	Improved gravity circuit capacity and grinding efficiency driving >5% increase in throughput
	Maintenance efficiency	Improved shutdown planning on track to deliver 30% reduction in mill downtime
	Spend control	Rigorous review process implemented for all discretionary spend
Leonora	Development efficiency	Roll-out of tele-remote operations and full digital automation for underground equipment driving increases in fleet utilisation
	Drilling speed	
	Spend control	Reviewing and challenging all 3rd party spend at Gwalia operations to identify cost reduction opportunities
Simberi	Mining fleet productivity	Plans established to improve availability through: workforce capability uplift; review of maintenance and spares strategy; sourcing additional truck capacity (contractor and second hand market)
	Recovery	Implemented review of planning processes to better delineate/identify sulphide transitional material
	Spend control	Negotiation of key contracts to achieve immediate savings in progress

Consolidated Q2 December FY21 Results



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

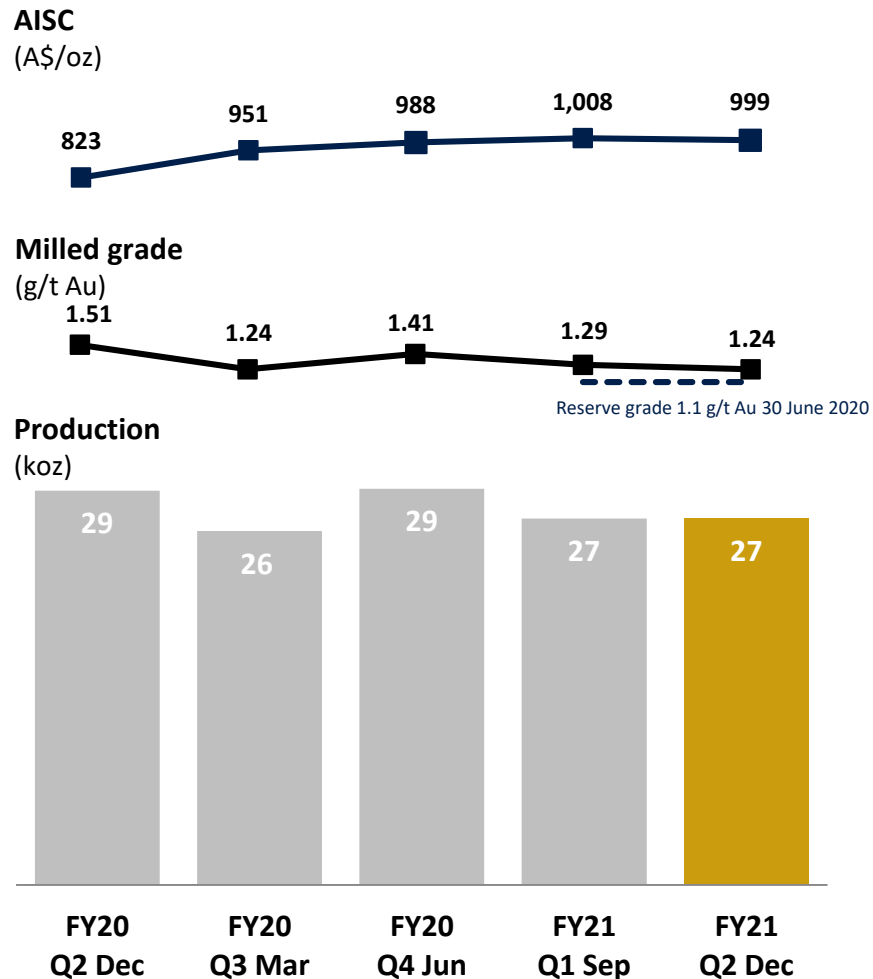
Q2 FY21 AISC

- **Consolidated** A\$1,517/oz (Q1: A\$1,711/oz)
- Atlantic A\$999/oz (Q1: A\$1,008/oz)
- Leonora A\$1,573/oz (Q1: A\$2,592/oz)
- Simberi A\$2,070/oz (Q1: A\$1,678/oz)

Q2 FY21 Production

- **Consolidated** 90 koz (Q1: 73 koz)
- Atlantic 27 koz (Q1: 27 koz)
- Leonora 42 koz (Q1: 23 koz)
- Simberi 21 koz (Q1: 23 koz)

Atlantic Q2 FY21 Results



Q2 FY21 production

- 26,693 oz (Q1: 27,226 oz)
- AISC A\$999/oz (C\$952/oz)
(Q1: A\$1,008/oz (C\$960/oz))
- Production was comparable to the previous quarter, with marginally lower mill grades offset by higher throughput and gravity circuit recovery.
- Progression of projects underpinned by a detailed Project Plan, led by appointment of General Manager Community Engagement and Permitting

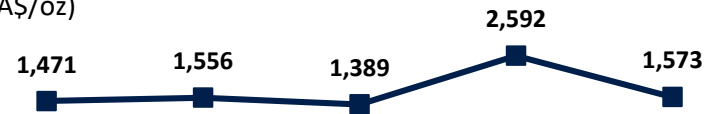
FY21 Guidance (retained)

- Production of 100 to 115 koz
- AISC of A\$955 to A\$1,100/oz¹
- Sustaining capex of A\$15 to A\$20 M
- Growth capex of A\$15 to A\$20 M

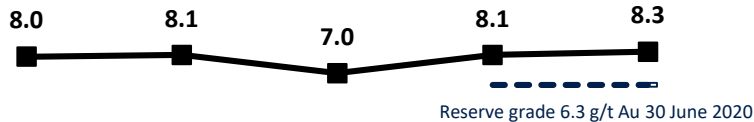
1. C\$880 to C\$1,010 per ounce @ AUD/CAD 0.92

Leonora Q2 FY21 Results

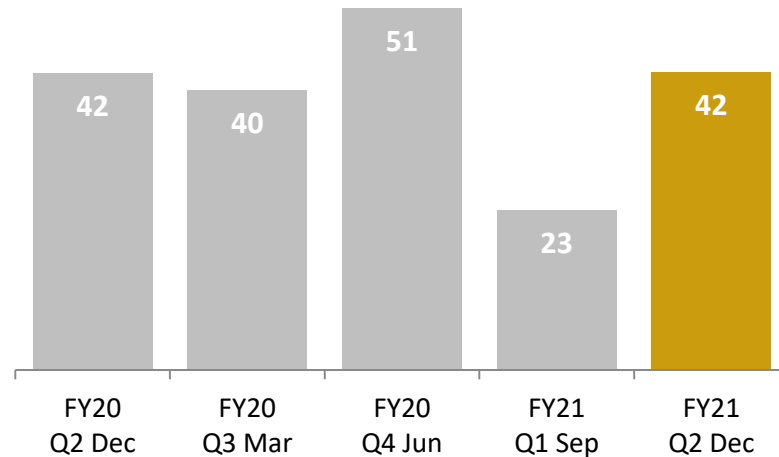
AISC
(A\$/oz)



Mined grade
(g/t Au)



Gold Production
(koz)



Q2 FY21 Production

- 42,198 oz (Q1: 22,625 oz)
- AISC A\$1,573/oz (Q1: A\$2,592/oz)
- Mined grade of 8.3 g/t Au (Q1: 8.1 g/t Au)
- Underground Wi-Fi network has been completed, enabling long hole drilling from the surface during shift change which, together with auto drill functionality, is delivering an additional 30 to 40 drill metres per day
- Sandvik Automine (also utilising Wi-Fi network) has improved bogging rates and running multiple loaders by one operator from surface
- Toll processing agreement with Linden Gold signed – delivers majority of toll processing outlined in Building Brilliance Uplift 1

FY21 Guidance (retained)

- Production of 175 to 190 koz
- AISC of A\$1,435 to A\$1,560/oz
- Sustaining capex of A\$70 to A\$80 M
- Growth capex of A\$30 to A\$32 M

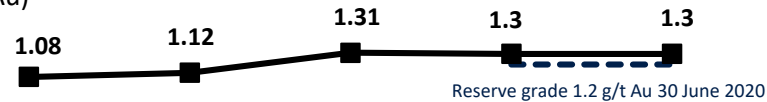
Simberi Q2 FY21 Results



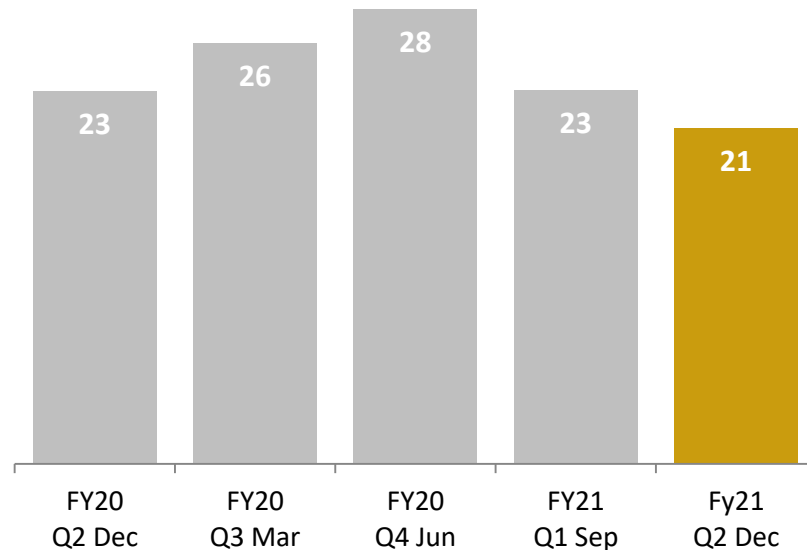
AISC
(A\$/oz)



Milled grade
(g/t Au)



Production
(koz)



Q2 FY21 Production

- 20,779 oz (Q1: 23,139 oz)
- AISC A\$2,070/oz (Q1: A\$1,678/oz)
- Grade stable at 1.30 g/t Au (Q1: 1.30 g/t Au)
- Production lower due to substantially lower mill recovery at 63%, resulting from higher proportion of transitional ore and negative reconciliation in Samat pit impacting higher grade oxide ore
- Remaining 1,200 metres of original belt were replaced on the RopeCon, improving availability and resulting in higher mill throughput
- Sulphide Feasibility Study on track to be reviewed by the Board in Q3 Mar 2021

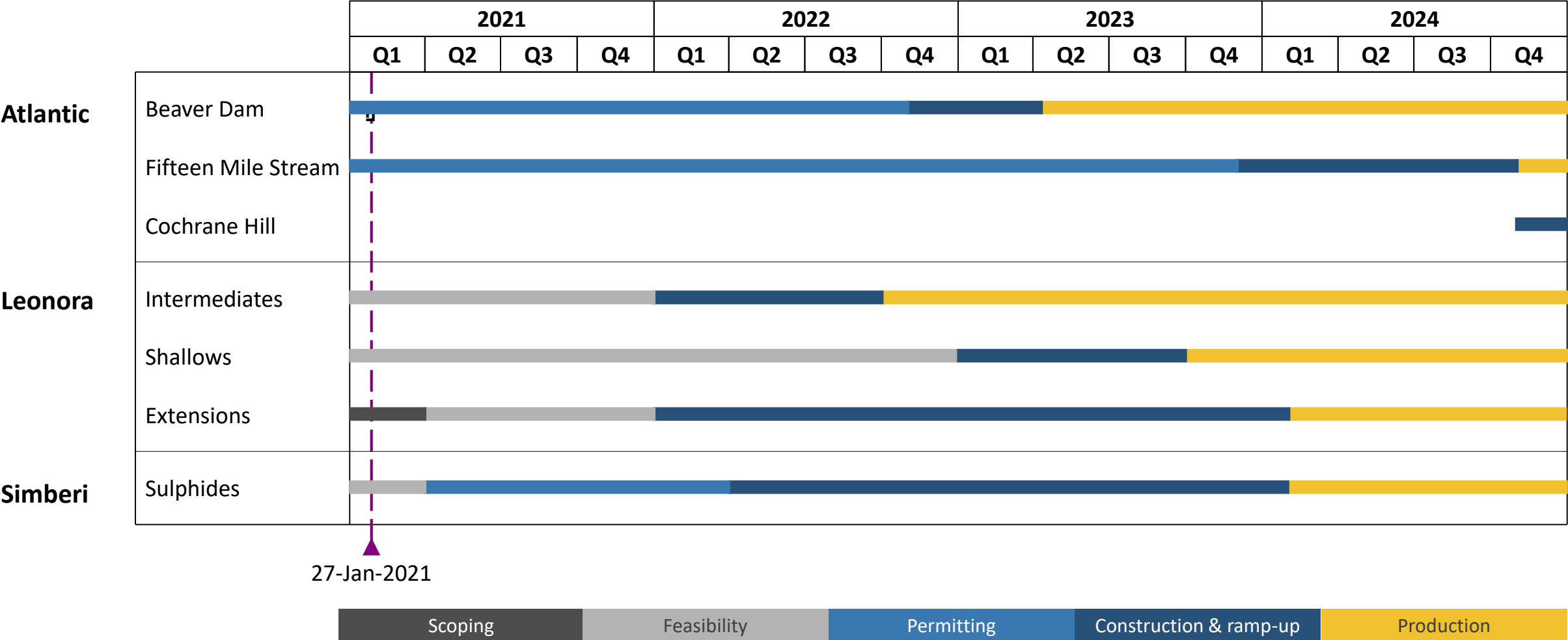
FY21 Guidance (retained)

- Production of 95 to 105 koz
- AISC of A\$1,665 to A\$1,840/oz¹
- Sustaining capex of A\$12 to A\$15 M
- Growth capex of A\$4 to A\$5 M

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

Brownfield project pipeline

Indicative development timeline¹

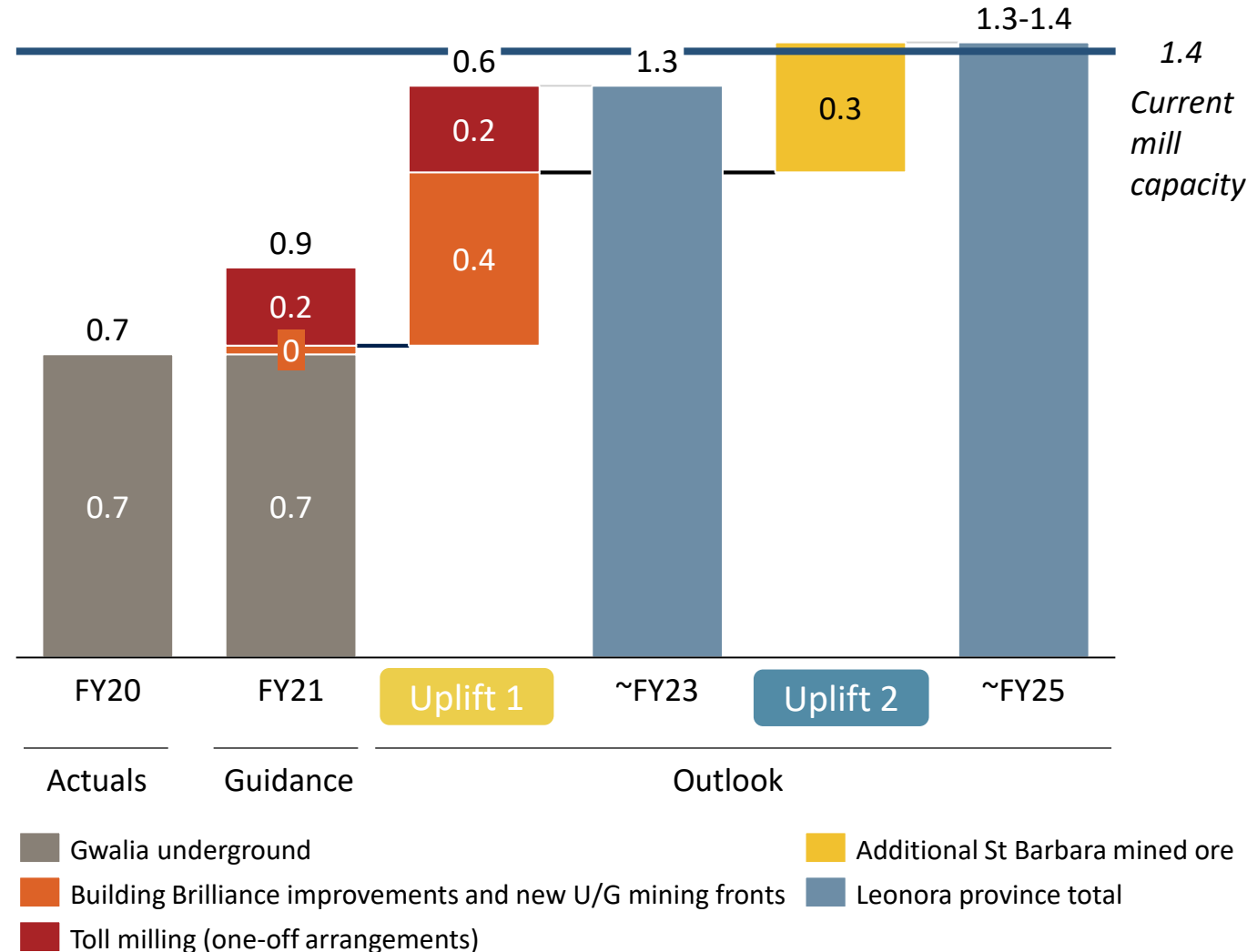


1. Indicative project timeline assumes approvals and permitting milestones achieved

Our strategy at Leonora is to fill the mill



Annual mill throughput (Mt)



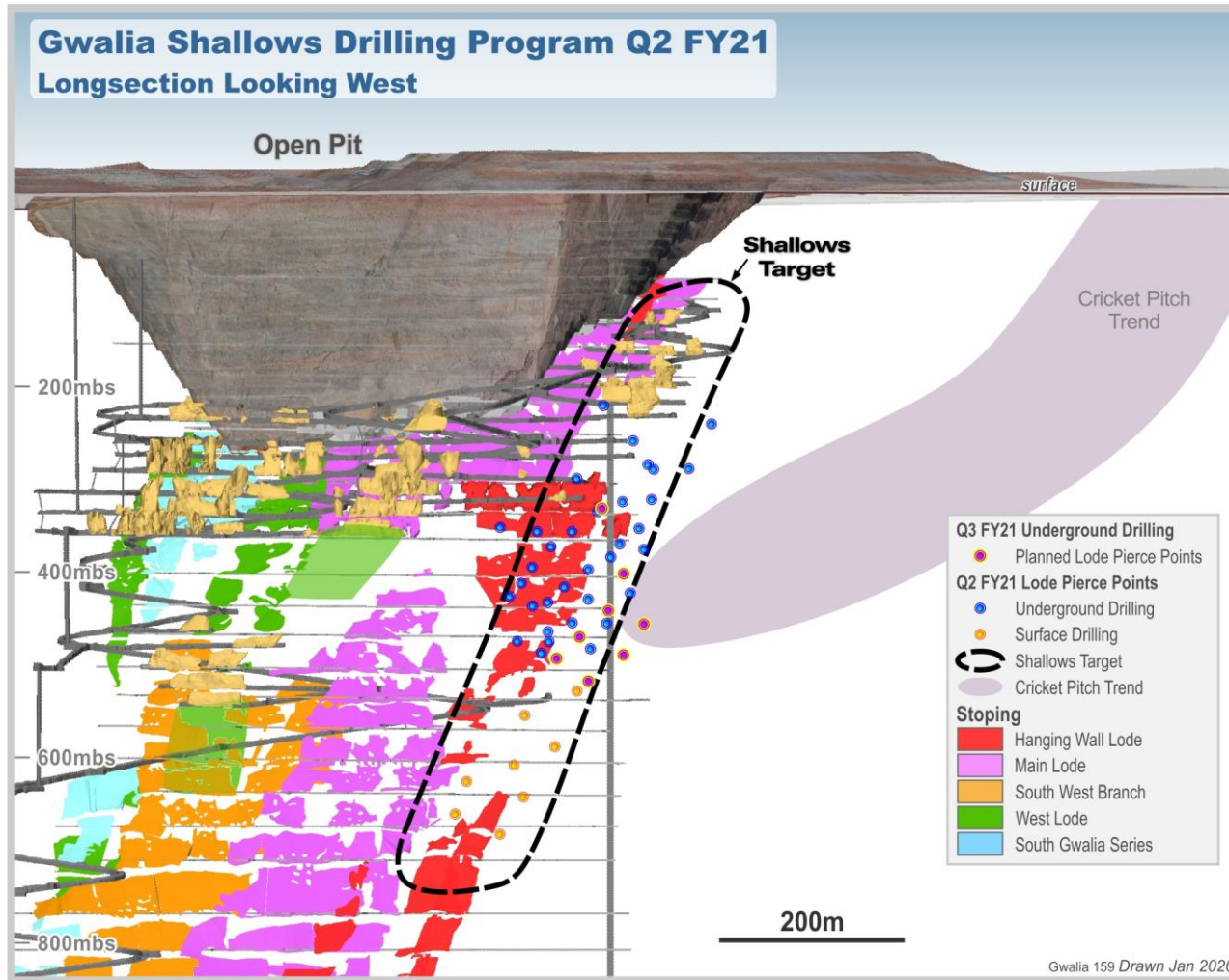
Uplift #1: Maximise the value from current operations through productivity improvements and cost reduction

- Achieve consistency in performance with Building Brilliance and open new mining fronts
- Maximise mill throughput through operational improvements and low capital options
- ✓ Process additional ore with toll milling to reduce costs, while exploring and developing other opportunities in province

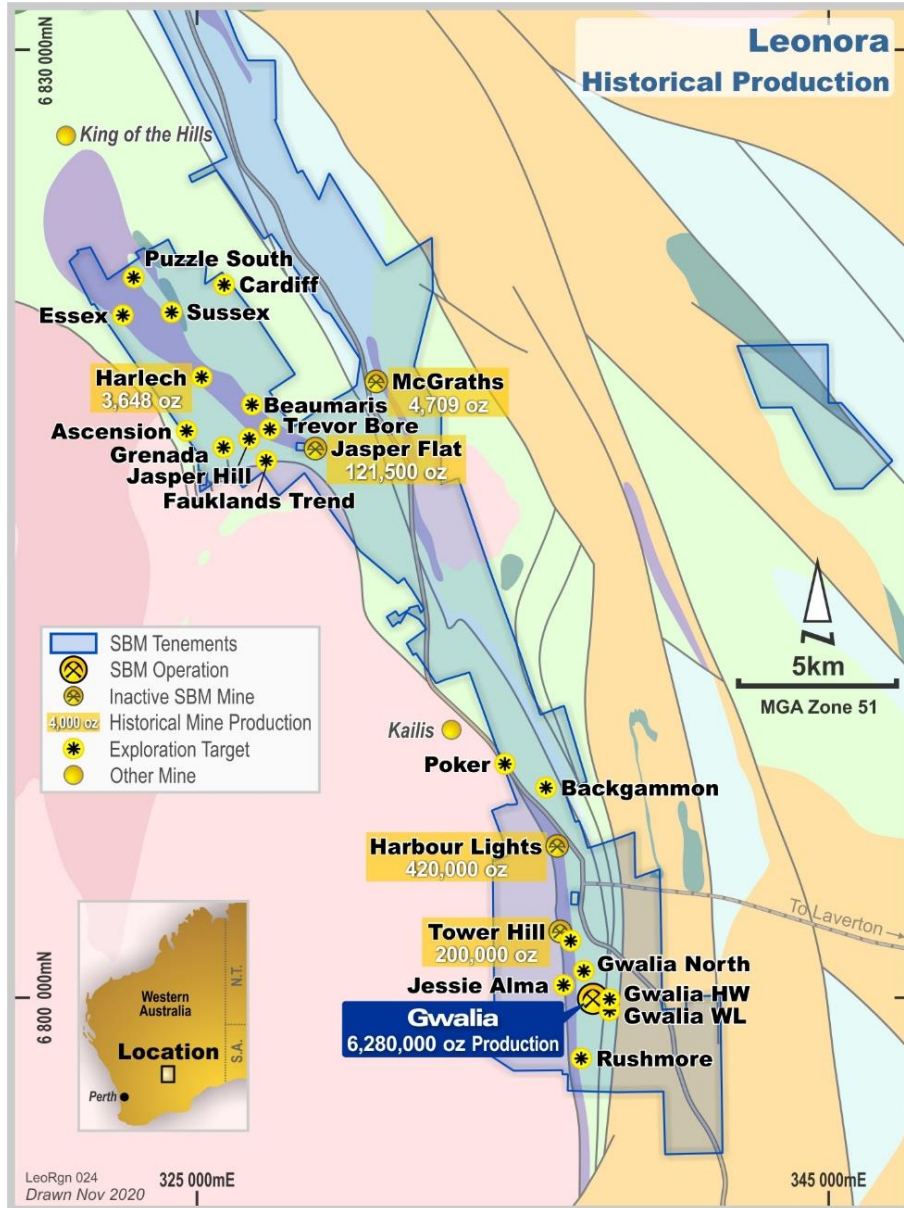
Uplift #2: Realise opportunities in the Leonora province to expand production

- ✓ Explore options in Gwalia Shallows, historical open pits and stockpiles
- Replace toll-milling ore with St Barbara mined material from ore sources in surrounding areas
- Consider expansion of mill capacity or explore other outside tolling arrangements to maximise production

Gwalia Shallows well advanced

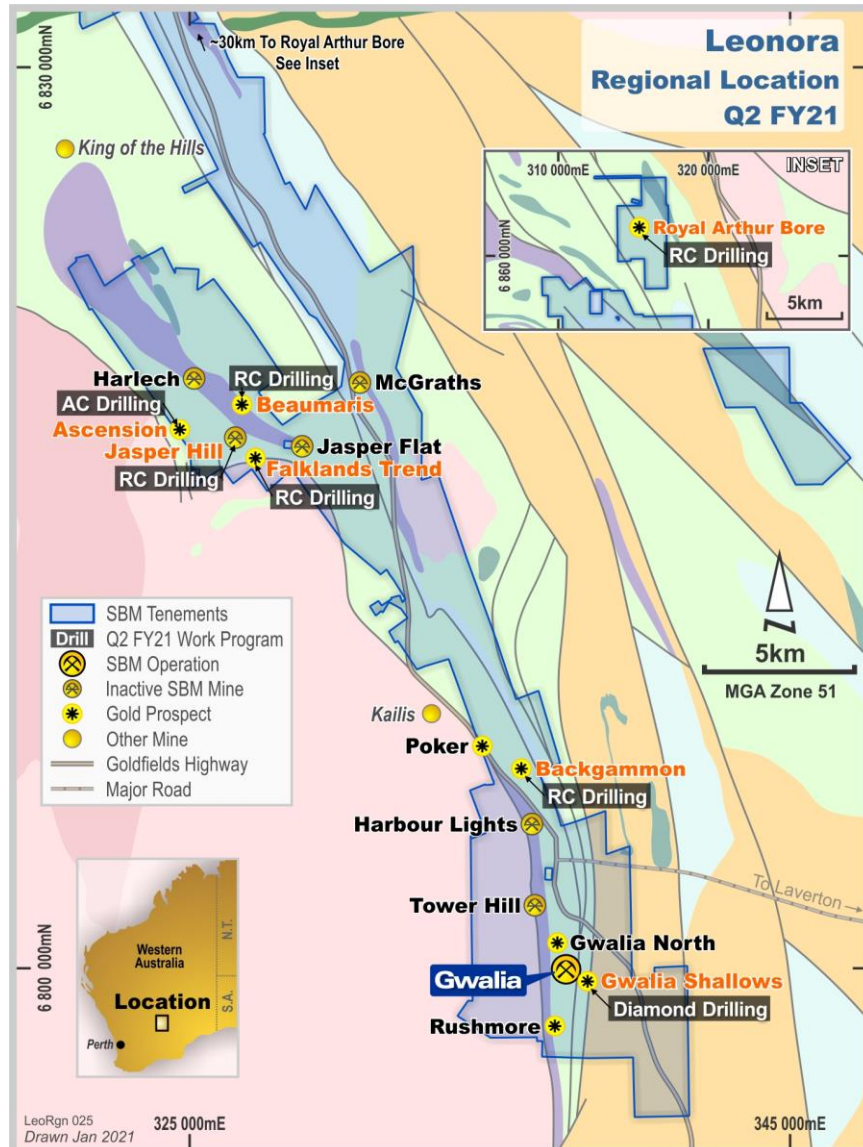


- An underground diamond drill program consisting of 20 holes was completed during the quarter testing the Gwalia Shallows mineralisation between 350 and 600 mbs
- To date, 38 holes have been completed, identifying 3 hangingwall lodes
- An additional phase comprising 8 holes for 2,500 metres, is planned to assist with modelling and resource estimation work and will commence early in Q3 Mar FY21



- An internal review completed in December 2020 assessed the current resource, mineral inventory base and historical stockpiles (with some milled in December and January)
- The next stage is a strategic action plan, with a number of initial scopes now advanced and in the planning phase
- Work is commencing on assessing additional stockpiles at Braemore Sands and larger bulk stockpiles at Tower Hill. Further desktop assessment of an ore sorting trial is also planned
- Fully understanding throughput capacity of the Gwalia mill is a key piece of work.

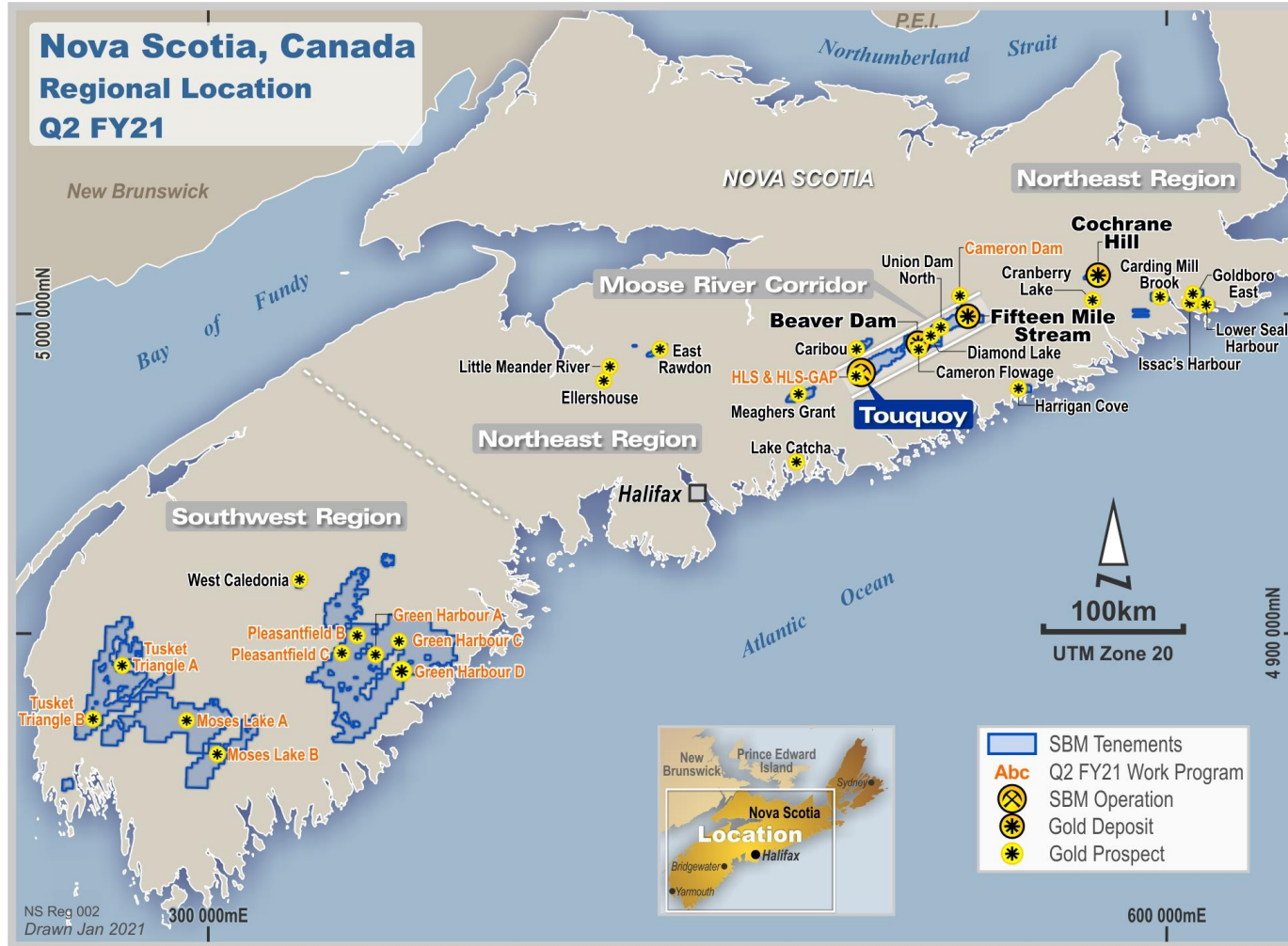
Exploration| Gwalia near mine and regional targets



A\$8 - \$9 M exploration budget for **near mine and regional** exploration around Gwalia for FY21

Exploration activity during the quarter focussed on

- Gwalia Shallows
 - Additional drilling underway to assist resource estimation
- Leonora Regional (Jasper Hills, Beaumaris, Falklands Trend, Backgammon, Royal Arthur Bore and Ascension)
 - Assay results for both programs expected in Q3 Mar FY21



**A\$10 - \$12 M exploration
budgeted in Canada for FY21**

Exploration activity during the
quarter focussed on:

- Higgins-Lawlers-Stillwater target
 - Located 2 km south west of
Touquoy
- Northeast Regional
- Southwest Regional

Exploration | Simberi Island



**A\$2 - \$3 M exploration budget
in PNG for FY21**

Exploration activity during the
quarter focussed on

- 5 oxide targets on Simberi Island are being drill tested with the aim of defining additional inferred resources
- Drilling is expected to continue through part of Q3 Mar FY21



What's next

In the 2H FY21 we will progress each of our three assets aligned with the strategy presented in December:

- Delivery of the Simberi sulphide project feasibility study
- Advance the Leonora Province action plan, including regional exploration
- Submission of the EIS for both Beaver Dam and Fifteen Mile Stream
- Building Brilliance Program to deliver cash contribution from productivity and cost reduction initiatives
- Drill results from Leonora Regional and Simberi oxide targets are expected in 2H FY21



Supplementary slides



**We are at the forefront of inclusion and diversity in the minerals industry,
ahead of much larger peers**



EMPOWERED PEOPLE DIVERSE TEAMS

We are an employer of choice committed to inclusion and diversity. We provide a caring work environment where our talented people are happy, thrive, feel safe and can fulfil their potential.

Achieved 28% representation of women in Australian operations workforce in 2020

Women across our PNG workforce increased to 16%, on track for achieving target of 18% by June 2022

33% of Directors are women¹

100% of our Australian women have returned to work after parental leave for the last 11 years

Nil gender pay gap in 'like-for-like' roles²

Employer of Choice for Gender Equality by WGEA³ – the only ASX listed mining company to receive the citation

Initial signatory to WGEA Pay-Equity pledge with Craig Jetson, Managing Director & CEO appointed **Pay Equity Ambassador**

Submitted gender data to Bloomberg's Gender Equality Index

PNG Business Coalition for Women – maintaining active membership

**Employer of choice for
Gender Equality (WGEA)**

6 years running



1. Compared to 26.8% nationally, WGEA Australia's gender equality scorecard Nov 2019, www.wgea.gov.au/sites/default/files/documents/2018-19-Gender-Equality-Scorecard.pdf
2. Refer St Barbara Corporate Governance Statement for details, www.stbarbara.com.au/about_us/governance
3. Australian Workplace Gender Equality Agency, www.wgea.gov.au/



STRONGER COMMUNITIES

We strive to help our communities thrive, grow and prosper. We build meaningful relationships, investing time and energy to ensure local communities are enriched by being our neighbours.

We continued to build on the breadth and depth of experience in the business to enhance Traditional Owner and First Nations engagement capacity, an important component of the Community and Social Performance Strategy.

In PNG, members of the Tabar community produced their **first chocolate bar** under the joint effort of mining company St Barbara, Simberi Mining Area Association (SMAA) and Simberi Mining Services (SMS). **St Barbara reintroduced cocoa farming** under a sustainable development program upon purchasing the mine in 2012.

Atlantic held **key stakeholder meetings** with First Nations groups (KMKNO, PLFN and Paqtnkek Chiefs/Councils) as part of the engagement and permitting process for our growth projects.

Leonora **Shooting Stars** school engagement program for girls won a **Special Commendation** award at the **Department of Mines, Industry Regulation and Safety** Community Partnership Resource Sector Awards

Consolidated production, costs and guidance summary



Production Summary Consolidated		Q2 Dec FY20	Q3 Mar FY20	Q4 Jun FY20	Year FY20	Q1 Sep FY21	Q2 Dec FY21	1H FY21	Guidance FY21
<i>St Barbara's financial year is 1 July to 30 June</i>		<i>Qtr to 31 Dec 2019</i>	<i>Qtr to 31 Mar 2020</i>	<i>Qtr to 30 Jun 2020</i>	<i>Year to 30 June 2020</i>	<i>Qtr to 30 Sep 2020</i>	<i>Qtr to 31 Dec 2020</i>	<i>6 months to 31 Dec 2020</i>	<i>Year to 30 June 2021</i>
<u>Production</u>									
Atlantic ¹	oz	29,067	26,032	29,209	106,663	27,226	26,693	53,919	100 to 115 koz
Gwalia	oz	42,022	39,684	51,297	171,156	22,625	42,198	64,823	175 to 190 koz
Simberi	oz	23,070	25,831	28,106	104,068	23,139	20,779	43,918	95 to 105 koz
Consolidated	oz	94,159	91,547	108,612	381,887	72,990	89,670	162,660	370 to 410 koz
<u>Mined Grade</u>									
Atlantic	g/t	1.02	0.91	0.88	0.93	0.95	0.91	0.93	1.33
Gwalia	g/t	8.0	8.1	7.0	7.7	8.1	8.3	8.2	8.3
Simberi	g/t	1.03	1.05	1.07	1.06	1.19	1.49	1.32	1.25
<u>Total Cash Operating Costs</u>									
Atlantic	A\$/oz	669	773	675	713	669	736	703	n/a
Gwalia	A\$/oz	1,016	1,117	1,041	1,071	1,560	1,037	1,220	n/a
Simberi	A\$/oz	1,704	1,459	1,360	1,482	1,481	1,817	1,640	n/a
Consolidated	A\$/oz	1,077	1,116	1,025	1,083	1,203	1,128	1,162	n/a
<u>All-In Sustaining Cost</u>									
Atlantic	A\$/oz	823	951	988	928	1,008	999	1,002	955 to 1,100 ²
Gwalia	A\$/oz	1,471	1,556	1,389	1,485	2,592	1,573	1,933	1,435 to 1,560
Simberi	A\$/oz	1,851	1,629	1,467	1,631	1,678	2,070	1,863	1,665 to 1,840 ³
Consolidated	A\$/oz	1,364	1,405	1,301	1,369	1,711	1,517	1,605	1,360 to 1,510

1. Atlantic Gold was acquired on 19 July 2019. Atlantic Gold production, grade and costs prior to this date provided for comparison. Reported Q1 Sep FY20 production included 4,362 ounces produced by Atlantic Gold prior to acquisition
2. C\$880 to C\$1,010 per ounce @ AUD/CAD 0.92
3. US\$1,185 to US\$1,305 per ounce @ AUD/USD 0.71

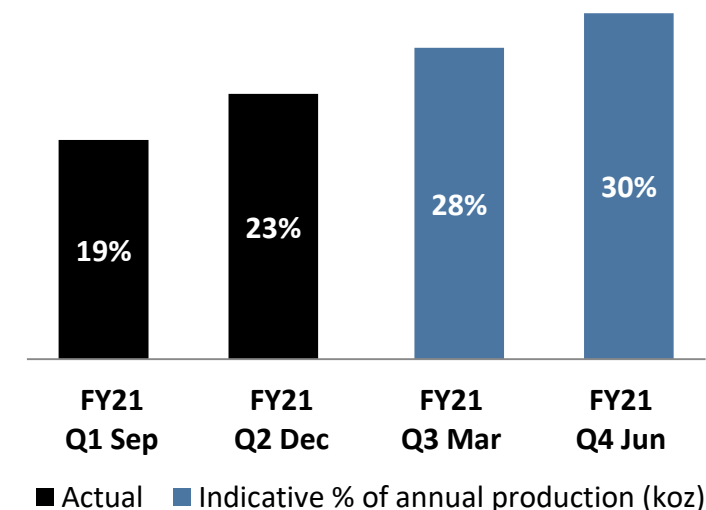
Guidance summary – exploration, capex, production profile

Exploration Guidance FY21 A\$ M

Australia	
• Leonora Region	8 – 9
• Pinjin WA, Lake Wells WA, Back Creek NSW	10 – 11
Tabar Island Group, Papua New Guinea	2 – 3
Nova Scotia, Canada	10 – 12
Consolidated	30 – 35

Capex	Guidance FY21	
	Sustaining	Growth
	A\$ M	A\$ M
Leonora	70 – 80	30 – 32
Simberi	12 – 15	4 – 5
Atlantic	15 – 20	15 – 20
Consolidated	97 – 115	49 – 57

FY21 Production Indicative Quarterly Guidance Profile

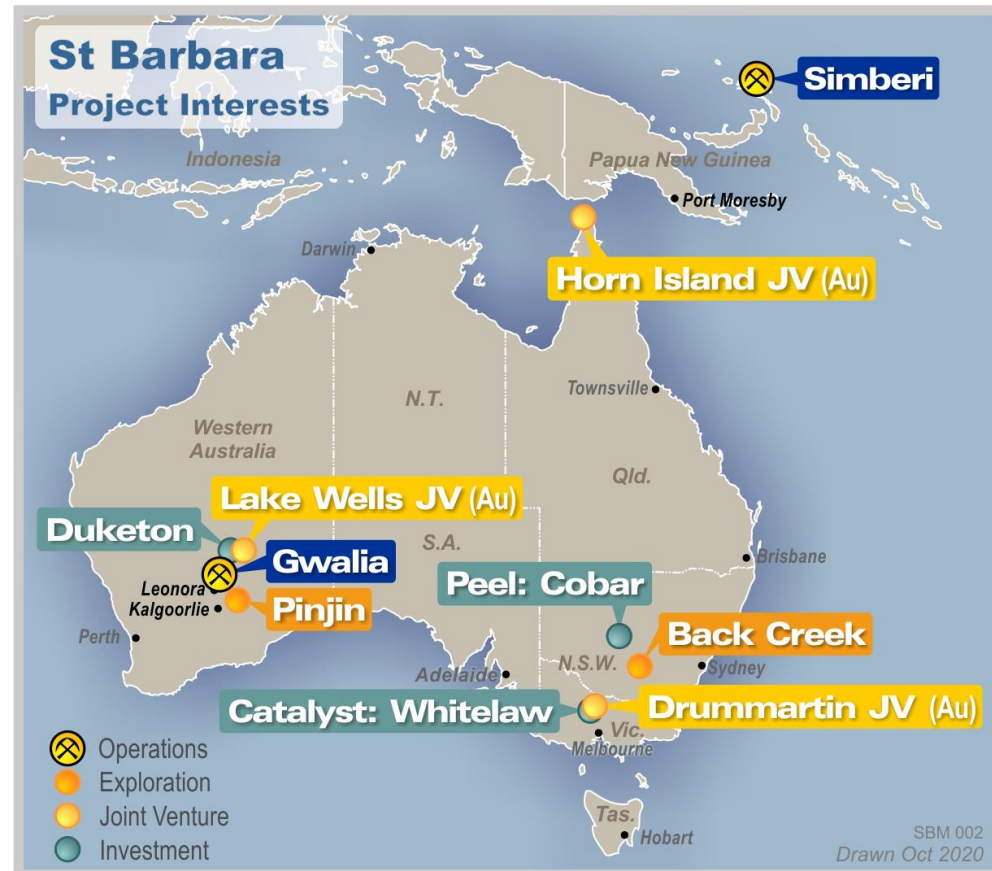


Hedging summary as at 27 January 2021



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

Equity investments and joint ventures



Joint ventures with Australian explorers

Drummartin with Catalyst Metals (ASX:CYL)

Horn Island with Alice Queen (ASX:AQX)

Lake Wells with Australian Potash (ASX:APC)

Equity investments in Australian explorers

Catalyst Metals Limited (ASX:CYL) 14%

Duketon Mining Limited (ASX:DKM) 12%

Peel Mining Limited (ASX:PEX) 13%

Project pipeline



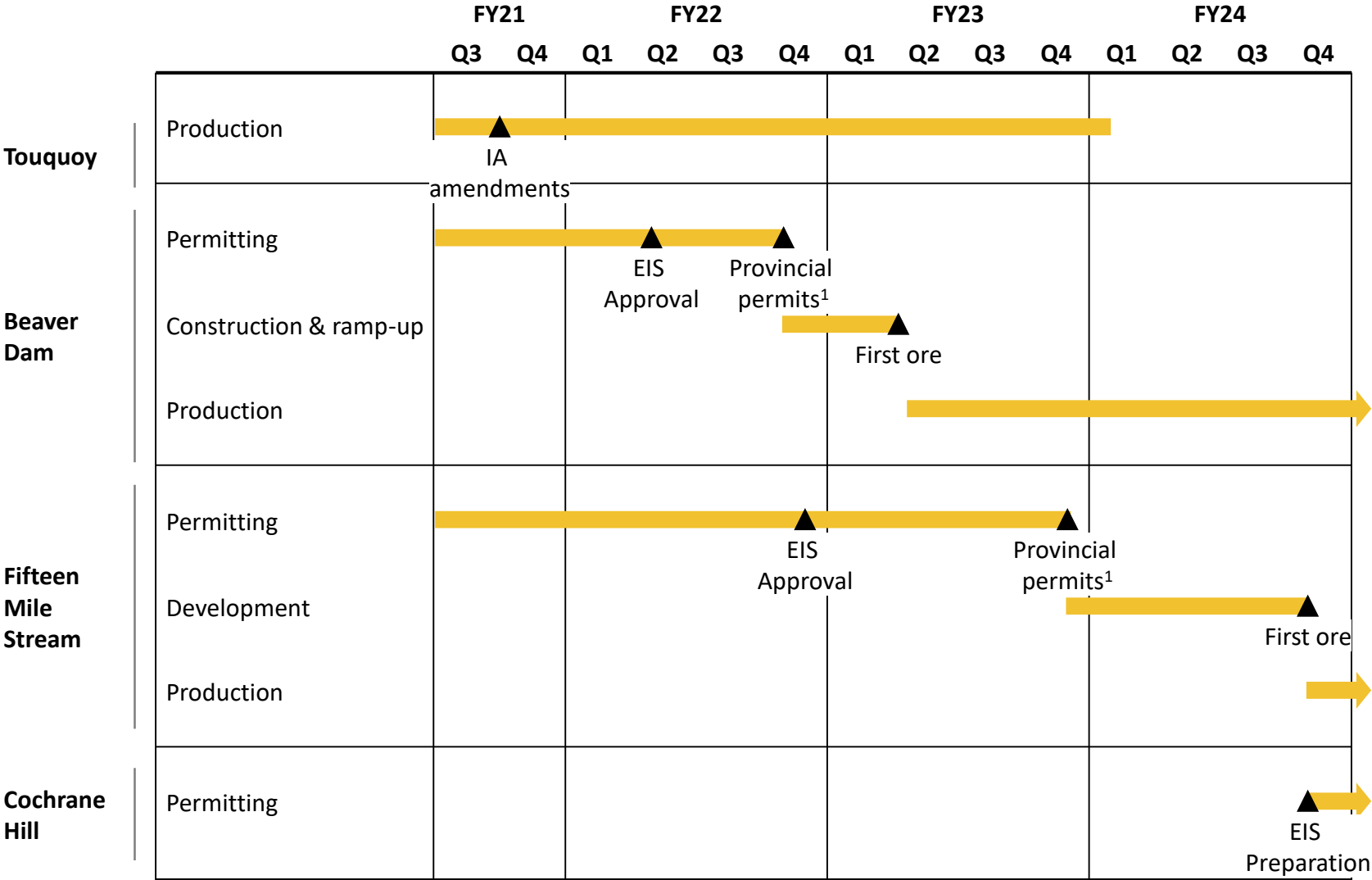
	Regional Nova Scotia				
	Moose River Corridor				
	Simberi Island (oxides)				
	Back Creek	Cochrane Hill			
	Greater Gwalia	Simberi Sulphides			
	Pinjin	Leonora Province			
Peel Mining (13%)	Aust Potash ¹ (Au, EJV)	Gwalia Shallows			Touquoy Mine
Catalyst Metals (14%)	Horn Island ² (Au, EJV with AQX)	Gwalia Intermediates	Fifteen Mile Stream		Simberi Mine
Duketon Mining (12%)	Catalyst Metals ³ (Au, EJV with CYL)	Tower Hill	Beaver Dam		Gwalia Mine
Equity Investments	Exploration	Feasibility	Permitting	Construction	Producing

1. Earn-in and Joint Venture Agreement with Australian Potash announced 8 October 2018
2. Earn-in and Joint Venture Agreement in Horn Island with Alice Queen announced 5 June 2019
3. Earn-in and Joint Venture Agreement with Catalyst Metals announced 25 November 2020

Atlantic brownfield expansion projects are progressing to provide long-term stable production



Indicative timeline for Atlantic project development



Changes in Federal regulatory permitting have impacted project timelines

Beaver Dam

- Satellite pit (37 km from Touquoy mill)
- Minimal infrastructure utilising innovative solutions and technology
- Dedicated team to facilitate permitting

Fifteen Mile Stream

- EIS Submission in February 2021
- Requires EIS and provincial approvals

Cochrane Hill

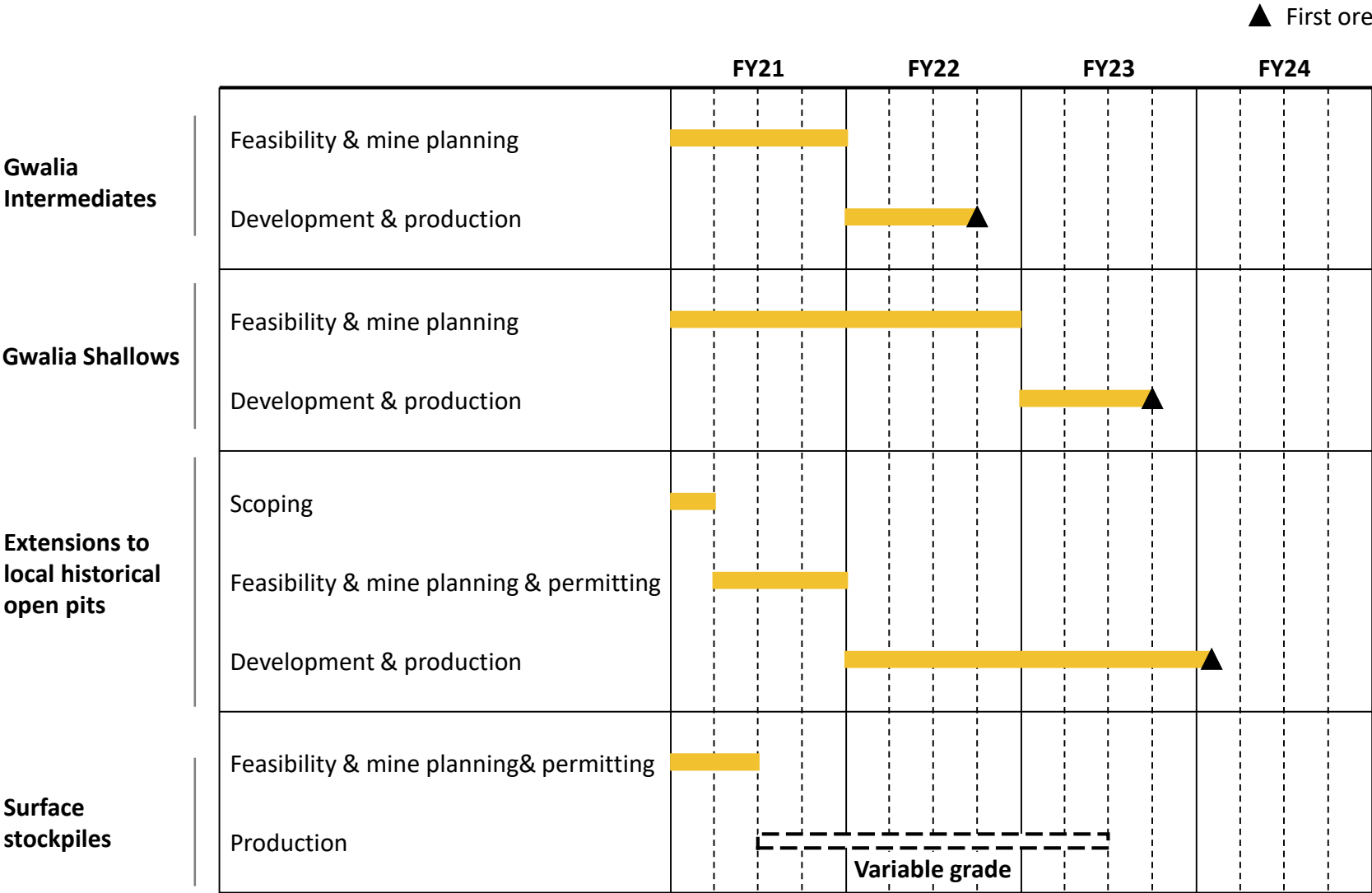
- Decision in October 2020 on Archibald Lake defers any decision on conservation subject to outcome of EIS process

1. Provincial permits: Industrial Approval; Wetland Alteration; Water Withdrawal Authorization; Fisheries Authorization; Metal and Diamond Mining Effluent Regulations Schedule 2.

Leonora province plan is to ramp up production from near-mine opportunities



Indicative timeline for Leonora Province development



Plant at Leonora has up to **0.4 Mt in spare capacity** (1.4 Mt total)

Toll milling has been underway during FY21 and will **continue until at least mid-FY23**

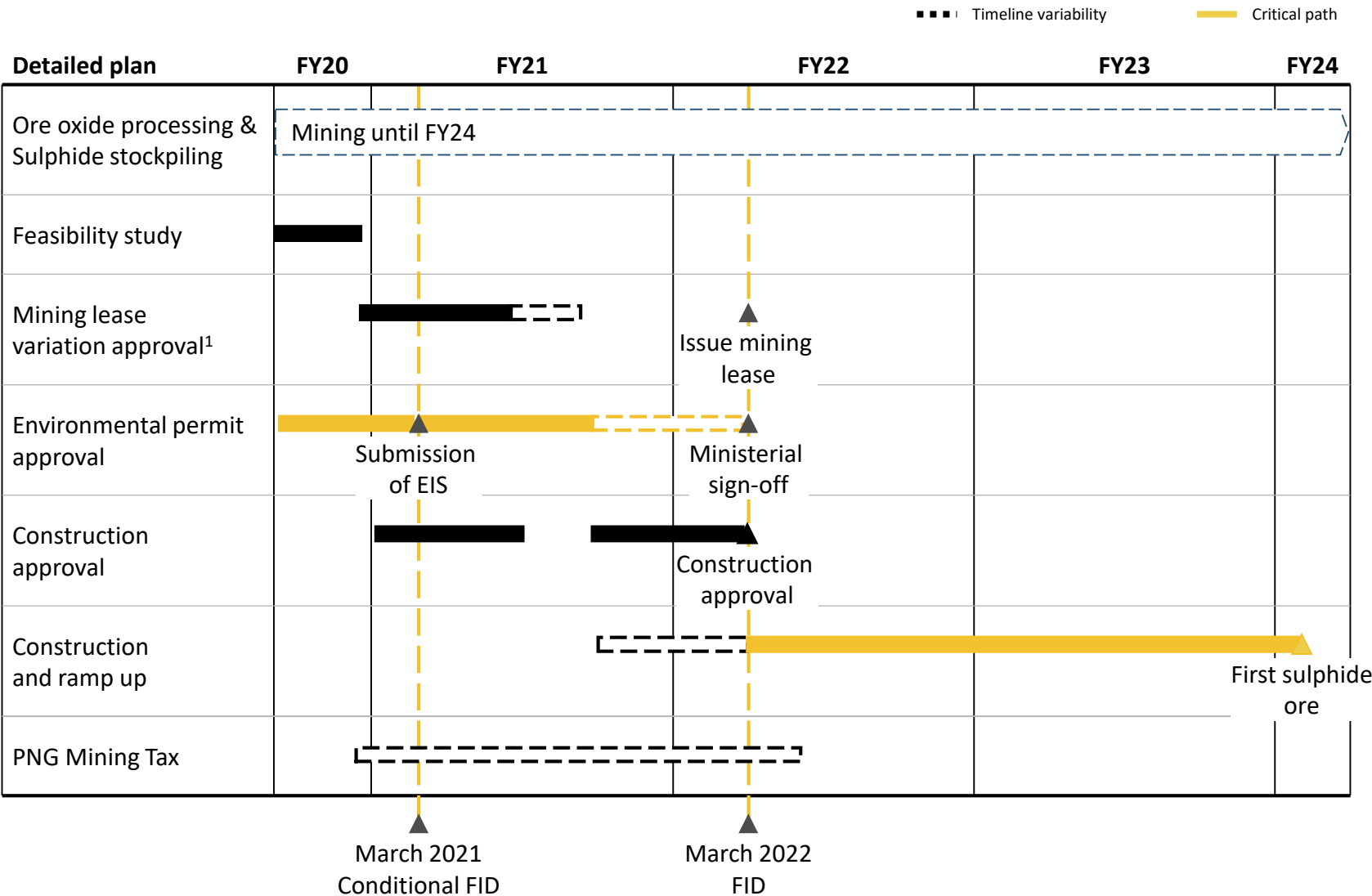
Plan is to develop the Leonora province to **maximise throughput of St Barbara owned ore to replace toll-milled ore**

Source: Leonora technical services team; Tower Hill Pre-Feasibility Study

Simberi brownfield expansion will maintain production beyond FY24



Simberi sulphides expansion project indicative timeline



- Simberi sulphides expansion is an extension of existing operations**
- Utilises existing infrastructure on Simberi Island
 - Maintains mining methodology; requires deepening of existing pits
 - Requires an amendment to the existing mining lease to allow for processing of sulphides—new lease is not required
 - Does not exceed current processing or deep-sea tailings pipe throughput
- St Barbara is managing risks around the project timeline**
- Engaging with government and stakeholders to discuss project
 - Potentially bringing forward long lead item purchases
 - Starting detailed design ahead of final permit approval
 - Making conditional investment decisions under legislative uncertainty

1. Required for sulphide processing of any kind
Source: St Barbara SME interviews; expert interviews; PNG Environmental Act

Ore Reserves Summary as at 30 June 2020



Project	Proved			Probable			Total		
	Tonnes ('000)	Gold (g/t)	Ounces ('000)	Tonnes ('000)	Gold (g/t)	Ounces ('000)	Tonnes ('000)	Gold (g/t)	Ounces ('000)
Gwalia, (WA)	1,583	8.0	409	7,824	5.9	1,483	9,407	6.3	1,892
Tower Hill, (WA)	-	-	-	2,572	3.7	306	2,572	3.7	306
Simberi Oxide, (PNG)	1,702	1.3	73	6,035	1.1	220	7,737	1.2	293
Simberi Sulphide, (PNG)	1,386	2.6	114	21,253	2.4	1,651	22,638	2.4	1,765
Simberi Stockpiles, (PNG)	678	0.6	12	-	-	-	678	0.6	12
Atlantic Gold, (NS)	21,370	1.2	796	23,700	1.1	851	45,070	1.1	1,647
Atlantic Gold Stockpiles, (NS)	5,450	0.5	89	-	-	-	5,450	0.5	89
Total All Projects	32,168	1.4	1,493	61,384	2.3	4,511	93,552	2.0	6,005

Notes

- Ore Reserves are based on a gold price of: Gwalia (AU\$1,600/oz), Tower Hill (AU\$1,250/oz), Simberi and Atlantic Gold (US\$1,300/oz)
- Cut-off Grades Gwalia (4.7 g/t Au), Tower Hill (2.8 g/t Au), Simberi Oxide (0.5 g/t Au), Atlantic Gold (0.3 g/t Au – 0.5 g/t Au)
- Mineral Resources are reported inclusive of Ore Reserves
- Data is rounded to thousands of tonnes and thousands of ounces. Discrepancies in totals may occur due to rounding
Full details are contained in the ASX release dated 24 August 2020 'Ore Reserves and Mineral Resources Statements 30 June 2020' available at www.stbarbara.com.au

Mineral Resources Summary at 30 June 2020



Project	Measured			Indicated			Inferred			Total		
	Tonnes ('000)	Gold (g/t)	Ounces ('000)	Tonnes ('000)	Gold (g/t)	Ounces ('000)	Tonnes ('000)	Gold (g/t)	Ounces ('000)	Tonnes ('000)	Gold (g/t)	Ounces ('000)
Gwalia, (WA)	3,991	6.4	819	17,403	6.0	3,353	1,201	5.5	214	22,595	6.0	4,386
Tower Hill, (WA)	-	-	-	4,604	3.9	574	489	3.3	51	5,093	3.8	625
Simberi Oxide, (PNG)	2,197	1.2	90	8,062	1.1	280	8,542	0.9	260	18,801	1.0	630
Simberi Sulphide, (PNG)	3,119	1.5	168	52,642	1.6	2,772	16,699	1.4	747	72,459	1.6	3,687
Atlantic Gold, (NS)	24,281	1.1	868	32,399	1.1	1,102	7,203	1.1	256	63,883	1.1	2,227
Total All Projects	33,587	1.8	1,945	115,110	2.2	8,081	34,134	1.4	1,529	182,832	2.0	11,555

Notes

1. Mineral Resources are reported inclusive of Ore Reserves
2. Cut-off Grades Gwalia (2.5 g/t Au), Tower Hill (2.5 g/t Au), Simberi Oxide (0.4 g/t Au), Simberi Transitional and Sulphide (0.6 g/t Au), Atlantic Gold (0.3 g/t Au)
3. Atlantic and Simberi Mineral Resources are reported constrained by a US\$1,800/oz pit shell
4. Data is rounded to thousands of tonnes and thousands of ounces. Discrepancies in totals may occur due to rounding
Full details are contained in the ASX release dated 24 August 2020 'Ore Reserves and Mineral Resources Statements 30 June 2020' available at www.stbarbara.com.au

Competent persons statement

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.

Mineral Resource and Ore Reserve Estimates

The information in this presentation that relates to Mineral Resources or Ore Reserves for Gwalia, Tower Hill, Simberi and Atlantic Gold is extracted from the report titled '*Ore Reserves and Mineral Resources Statements 30 June 2020*' released to the Australian Securities Exchange (ASX) on 24 August 2020. The report is available to view at stbarbara.com.au. The Company confirms that it is not aware of any new information or data that materially affects the estimates of Mineral Resources or Ore Reserves and that all material assumptions and technical parameters underpinning the estimates in the original ASX announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original ASX announcement.

Full details are contained in the ASX release dated 24 August 2020 '*Ore Reserves and Mineral Resources Statements 30 June 2020*' available at stbarbara.com.au.

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

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Scheduled ASX Announcements

17 February 2021

FY21 Half Year Financial Report



St Barbara