



Presentation on Q1 September FY20 Quarterly Report and audio webcast

Bob Vassie, Managing Director & CEO, will brief analysts and institutional investors on the Q1 September FY20 Quarterly Report at 11:00 am Australian Eastern Standard Time (UTC + 11 hours) on Monday 21 October 2019. Participation on the conference call is by personal invitation only.

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.

Q1 September FY20 Quarterly Presentation



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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.

Financial figures are in Australian dollars unless otherwise noted.

Financial year is 1 July to 30 June.

Q1 Sep FY20 = quarter to 30 Sep 2019

Q2 Dec FY20 = quarter to 31 Dec 2019

Q3 Mar FY20 = quarter to 31 Mar 2020

Q4 Jun FY20 = quarter to 30 June 2020



Title slide picture: Simberi SAG Mill. Photo by Anna Mote.

- Highlights
- Safety
- Operations
- Projects
- Exploration
- Growth
- Conclusion
- Appendices



Maryse Bélanger (President Americas) and Bob Vassie (Managing Director and CEO) at Touquoy, NS Canada, September 2019. David Cotterell (Manager Investor Relations) and Les Cook (Mine Operations Superintendent) at left rear.

Operational performance

- 88 koz¹ at AISC² of A\$1,421/oz¹ (Q4: 86 koz at A\$1,219/oz)
- Gwalia total material moved increasing, best in 5 qtrs.
- Updated guidance issued 18 October

Financial metrics

- Operational cash contribution² of \$43 M (Q3: \$58 M)
- A\$503/oz cash contribution²
- \$0.04 per share final dividend paid 25 September

Capital management

- A\$112 M debt³, A\$76 M⁴ cash at bank
- A\$200 million debt facility available, undrawn
- Operating cash flow will fund all anticipated growth projects

Growth

- Atlantic Gold first contributing quarter
- Life-of-mine extension projects or studies at all mines
- Exploration success at Gwalia, Simberi and Atlantic

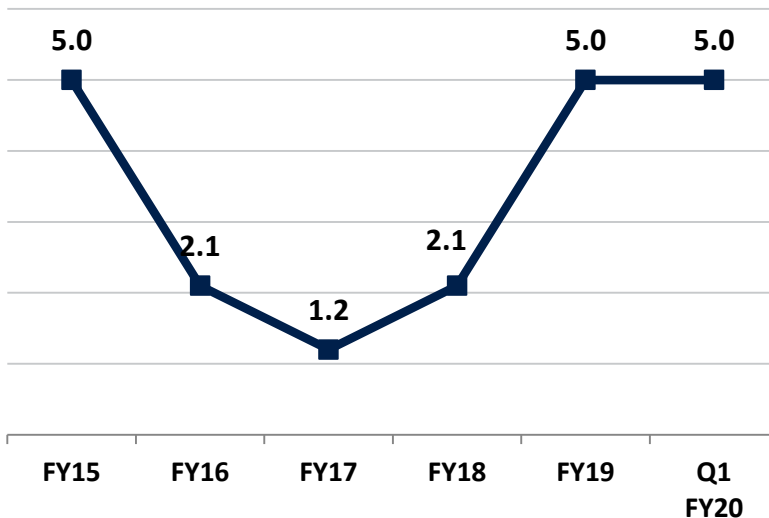
1. On full quarter from Atlantic basis. SBM attributable production was 83 koz at AISC of \$1,445/oz

2. Non IFRS measure, refer corresponding slide in Appendix

3. C\$100 M debt facility acquired with Atlantic Gold on 19 July 2019

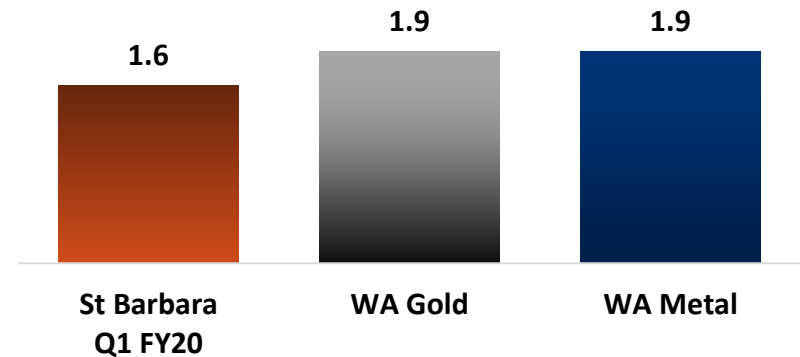
4. Financial information unaudited. Cash balance comprises \$66 M cash, \$10 M term deposits, and excludes \$2 M restricted cash

Total Recordable Injury Frequency Rate¹



- The Total Recordable Injury Frequency Rate (TRIFR, 12 month moving average) at 5.0 at the end of Q1 Sep FY20
- No damage or injuries from Hurricane Dorian in Nova Scotia
- Corresponding LTIFR remains below WA industry average

St Barbara LTIFR² in comparison with Western Australian Mining benchmarks³



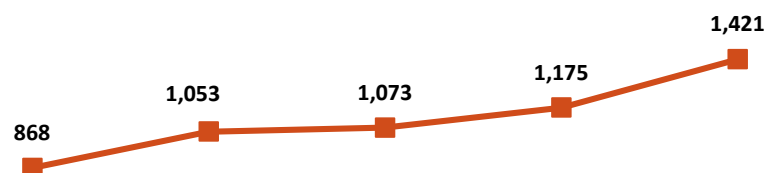
Safety results for Australian and PNG. Integration of Atlantic Gold safety systems underway.

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

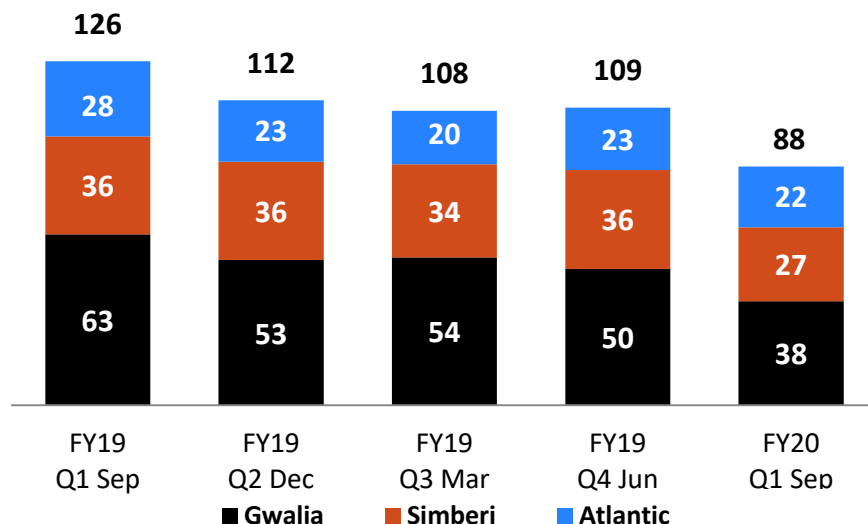
2. LTIFR = Lost Time Injury Frequency Rate (12 month avg.), the number of lost time injuries per million hours worked

3. Most recent statistics from www.dmp.wa.gov.au/Safety/Safety-statistics-16198.aspx

AISC (A\$/oz)



Gold Production (koz)



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

Q1 FY20 Production

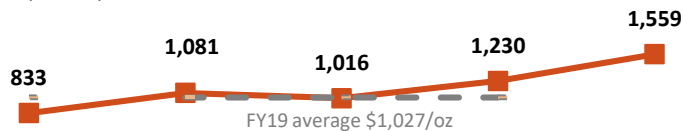
- Consolidated 88 koz² (Q4: 86 koz)
- Gwalia 38 koz (Q4: 50 koz)
- Simberi 27 koz (Q4: 36 koz)
- Atlantic 22 koz (Q4: 23 koz)

Q1 FY20 AISC¹

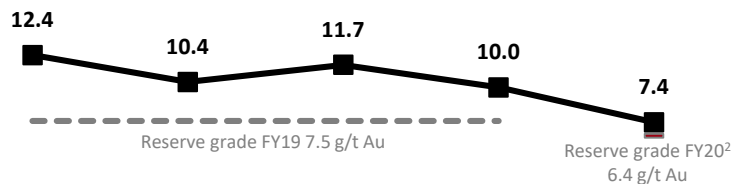
- Consolidated A\$1,421/oz² (Q4: A\$1,175/oz)
- Gwalia A\$1,559/oz (Q4: A\$1,230/oz)
- Simberi A\$1,603/oz (Q4: A\$1,203/oz)
- Atlantic A\$970/oz (Q4: A\$1,010/oz)

1. Non IFRS measure, refer corresponding slide in Appendix
 2. Atlantic Gold was acquired on 19 July 2019. Atlantic Gold quarterly production prior to this date provided for comparison. Reported Q1 Sep FY20 production and FY20 guidance includes 4,362 ounces produced by Atlantic Gold prior to acquisition. Consolidated Q1 AISC inc SBM attributable production = A\$1,445/oz.

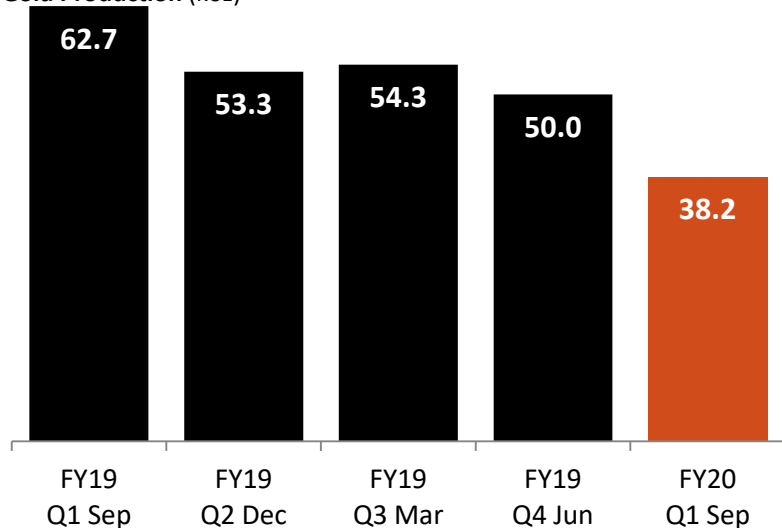
AISC (A\$/oz)



Mined grade (g/t Au)



Gold Production (koz)

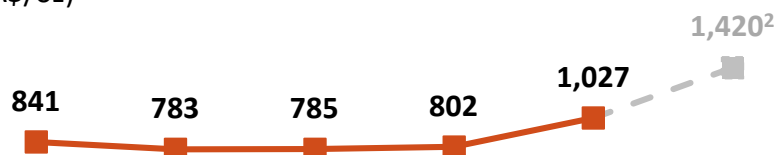


Reported ounces in Quarterly Report.

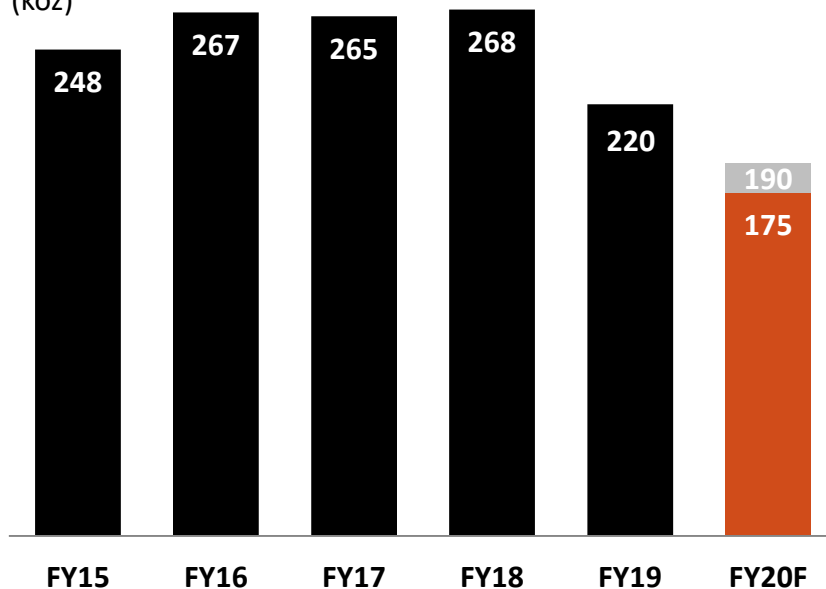
Q1 FY20 Production

- 38,153 oz (Q4: 49,966 oz)
- AISC¹ A\$1,559/oz (Q4: A\$1,230/oz)
- Mined grade of 7.4 g/t Au (Q4: 10.0 g/t Au)
- Mined lower grade stopes in Q1 as part of sequence, some dilution (overbreak) in final stope on edge of level
- Total material moved 267 kt, best in five quarters, improving mining rate in constrained environment
- Considering ventilation strategy change in Q2 and Q3, preparing for doubling of ventilation when GEP completed

AISC
(A\$/oz)



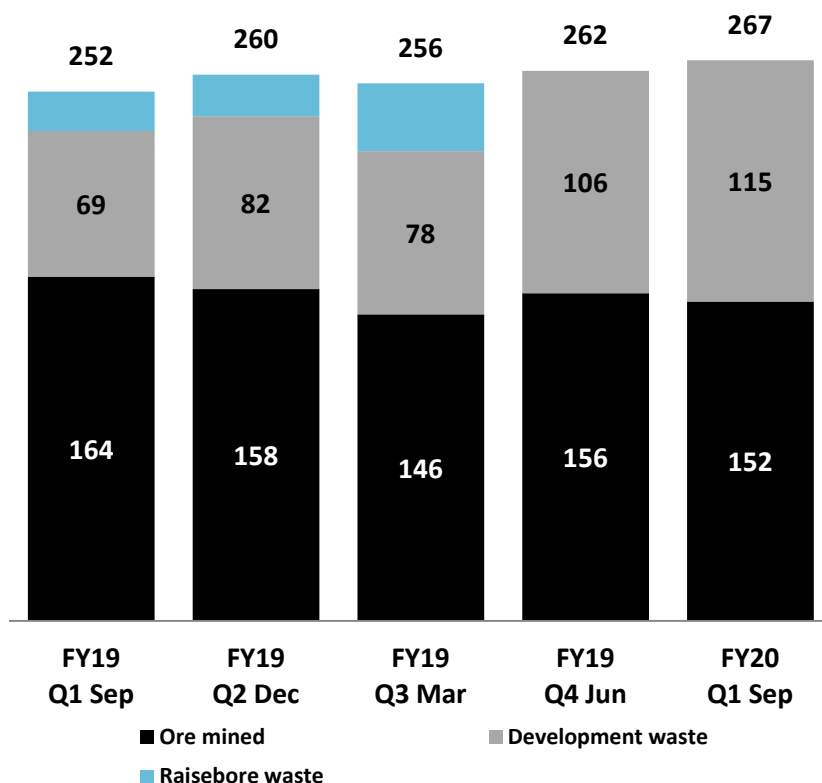
Production
(koz)



FY20 guidance

- Production of 175 to 190 koz
(previously 200 to 210 koz)
- AISC¹ of A\$1,390 to A\$1,450/oz
(previously A\$1,230 to A\$1,290/oz)
- Sustaining capex: A\$60 to A\$65 M
(previously A\$55 to A\$65 M)
- Growth capex: A\$32 to \$38 M
(previously A\$30 to A\$35 M)

Gwalia total material moved (kt)



Impact of GEP on trucking capacity

- Excavation of the approx. 11 m high x 10 m wide chambers at 1,420 and 1,460 mbs for the PAF circuit commenced in Q1 Sep FY17
- Raise-boring of the four 5-metre diameter vent shafts commenced in Q3 Mar FY18
- The vent shafts total 2,800 m in length and represent a volume of ~44,000 m³
- Trucking and ventilation capacity is liberated when raise boring is complete and PAF is commissioned

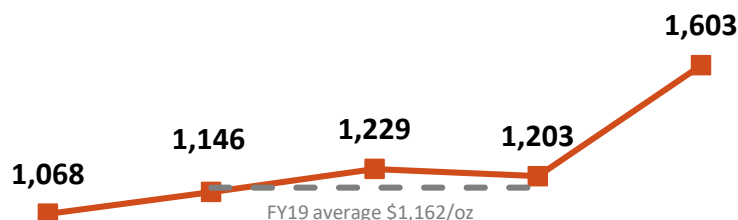
- Gwalia Extension Project (GEP) consists of two main components: a ventilation upgrade and paste aggregate fill (PAF)¹
- Budget of A\$112 million with planned completion in Q3 March FY20²
- A\$107 million spent on project to date
- PAF crushing circuit on 1420 level and mixing and pumping on 1460 is complete and commissioning is ongoing
- Final underground raisebore pilot hole completed and back reaming about to commence



Above: wet commissioning of PAF crushing circuit on 1420 level. Top L to R: Stef Loader Non-Executive Director, Bob Vassie (MD & CEO), Jarryd Dastlik (UG Fixed Plant Maint. Fitter) and Mark Eaton (PAF Maintainer)

1. PAF involves mixing paste from surface with waste crushed underground to fill stope cavities.
2. Project announced 27 March 2017 'Gwalia Extension Project approved'. Budget revised in 'Q3 March FY19 Quarterly Report' released 18 April 2019. An additional \$7 million of \$15 million spent on GEP later stages 'future proofing'.

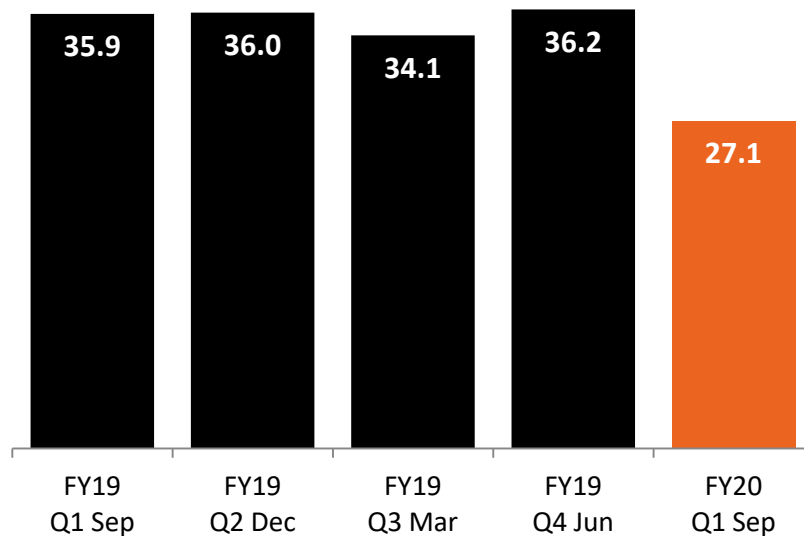
AISC (A\$/oz)



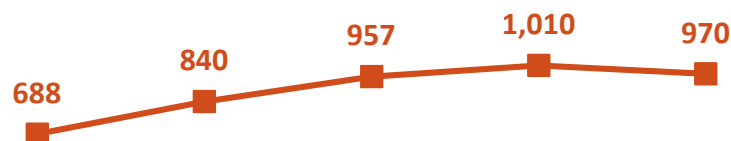
Q1 FY20 Production

- 27,061 oz (Q4: 36,231 oz)
- AISC¹ A\$1,603/oz (Q4: A\$1,203/oz)
- Milled grade 1.09 g/t Au (Q4: 1.68 g/t Au), due to stripping campaign in mining areas, 33% of mill feed during the quarter from stockpiles.
- Milled tonnes 857 kt, best throughput in four quarters
- Scrubber replacement and new pebble crusher installation in Q2, will improve throughput, downtime and costs, no material impact on Q2 results likely.
- Q1 production and costs as anticipated, no change to FY20 guidance

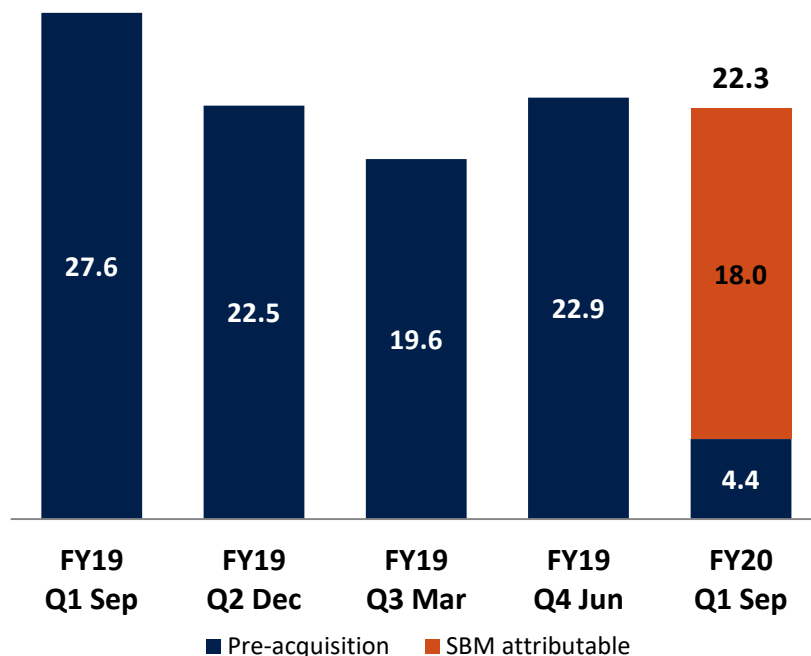
Production (koz)



AISC
(A\$/oz)



Production
(koz)



Q1 Sep FY20 performance

- Production 22.3 koz full quarter³
- AISC¹ A\$970/oz (C\$879/oz)
- Hurricane Dorian and detox tank maintenance interrupted processing for approx. one week

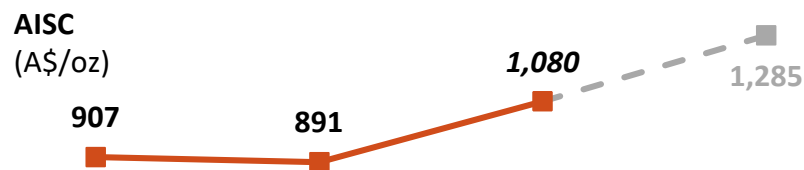
FY20 guidance

- 95 – 105 koz production
- AISC¹ A\$900/oz to A\$955/oz² (C\$810/oz to C\$860/oz)
- A\$13 – A\$17 M sustaining capex - program of plant improvement, TMF works, mining fleet refurbishment
- Growth capex to be announced Q2 Dec FY20

1. Non IFRS measure, refer corresponding slide in Appendix.

2. C\$810 to C\$860 per ounce @ AUD 0.90

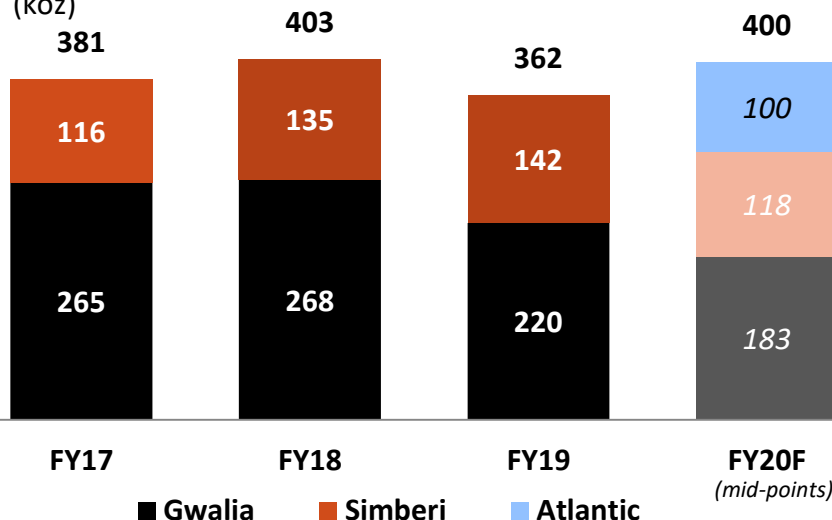
3. Atlantic Gold was acquired on 19 July 2019. Atlantic Gold quarterly production prior to this date provided for comparison. Reported Q1 Sep FY20 production and FY20 guidance includes 4,362 ounces produced by Atlantic Gold prior to acquisition. SBM attributable Q1 AISC = A\$964/oz.



FY20 Consolidated Guidance

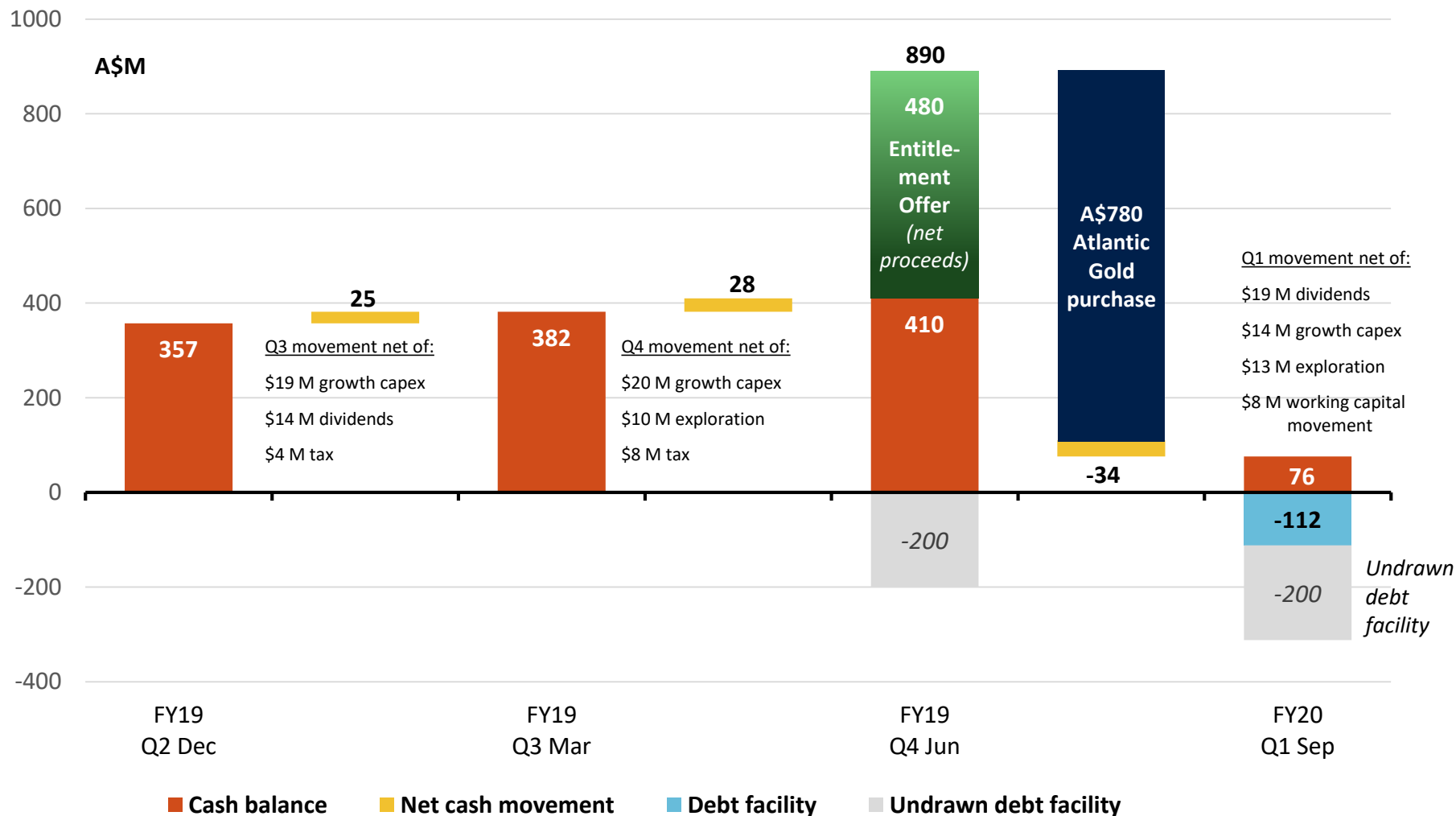
- Production 380 to 420 koz
- AISC¹ A\$1,240/oz to A\$1,330/oz
- Sustaining capex A\$77 to A\$87 M
- Growth capex A\$35 to A\$42 M (excluding Atlantic Gold)

Production
(koz)



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

1. Non IFRS measure, refer corresponding slide in Appendix





Gwalia, WA

- Continued testing of southern extensions in Deeps, results pending. Ongoing testing of near-mine prospects exploitable in short term at Rushmore, Jessie Alma, Cricket Pitch & Clay Duck

Horse Paddock Well & Trevor Bore, WA

- RC drilling completed on 19 targets, two with diamond drill tail extensions

Simberi Island, PNG

- Ongoing sulphide drilling beneath Sorowar pit (64 RC holes) continued to return significant sulphide and oxide

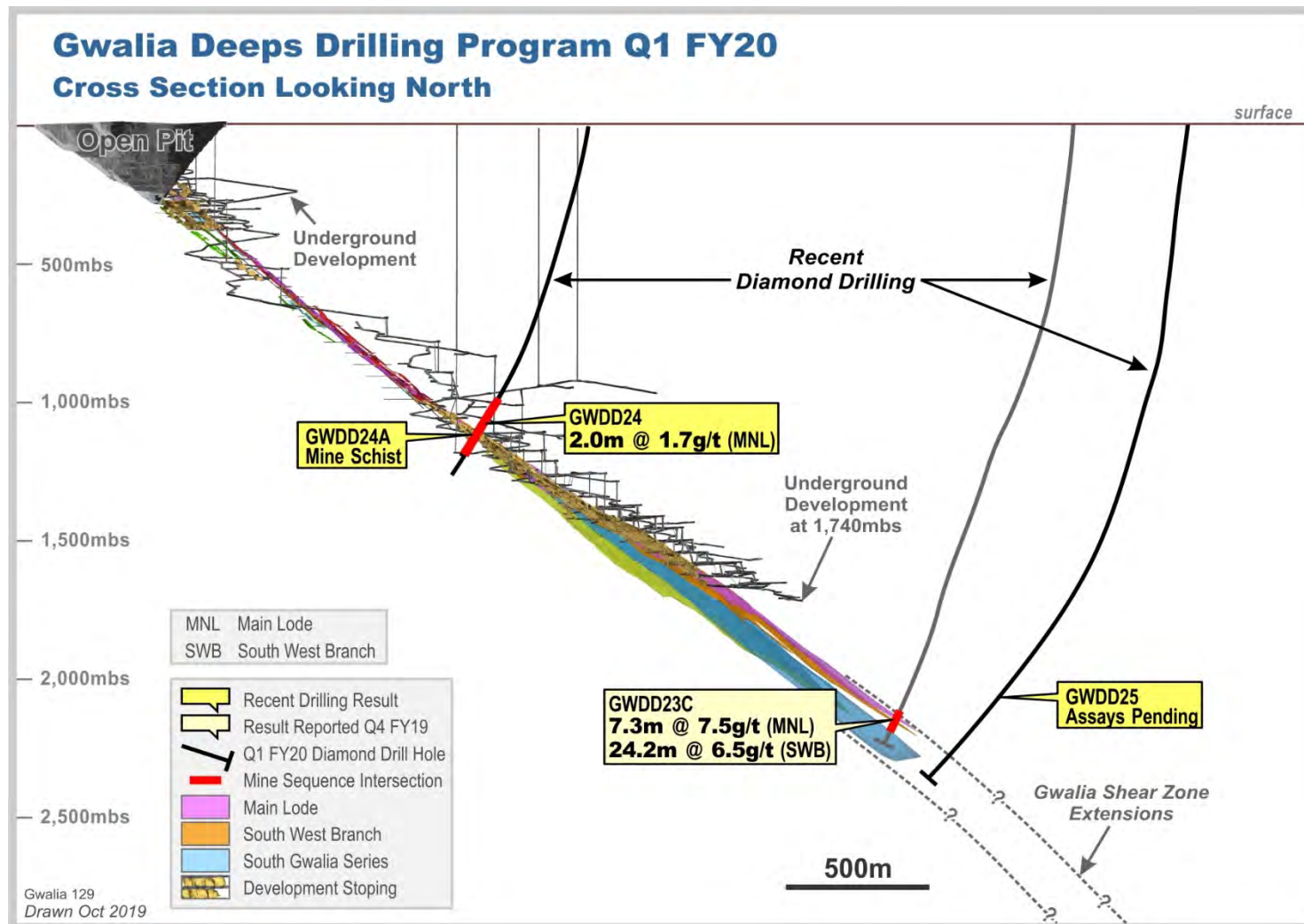
mineralisation including encouraging intersections near surface

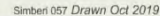
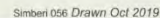
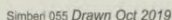
Moose River Corridor, Canada, NS

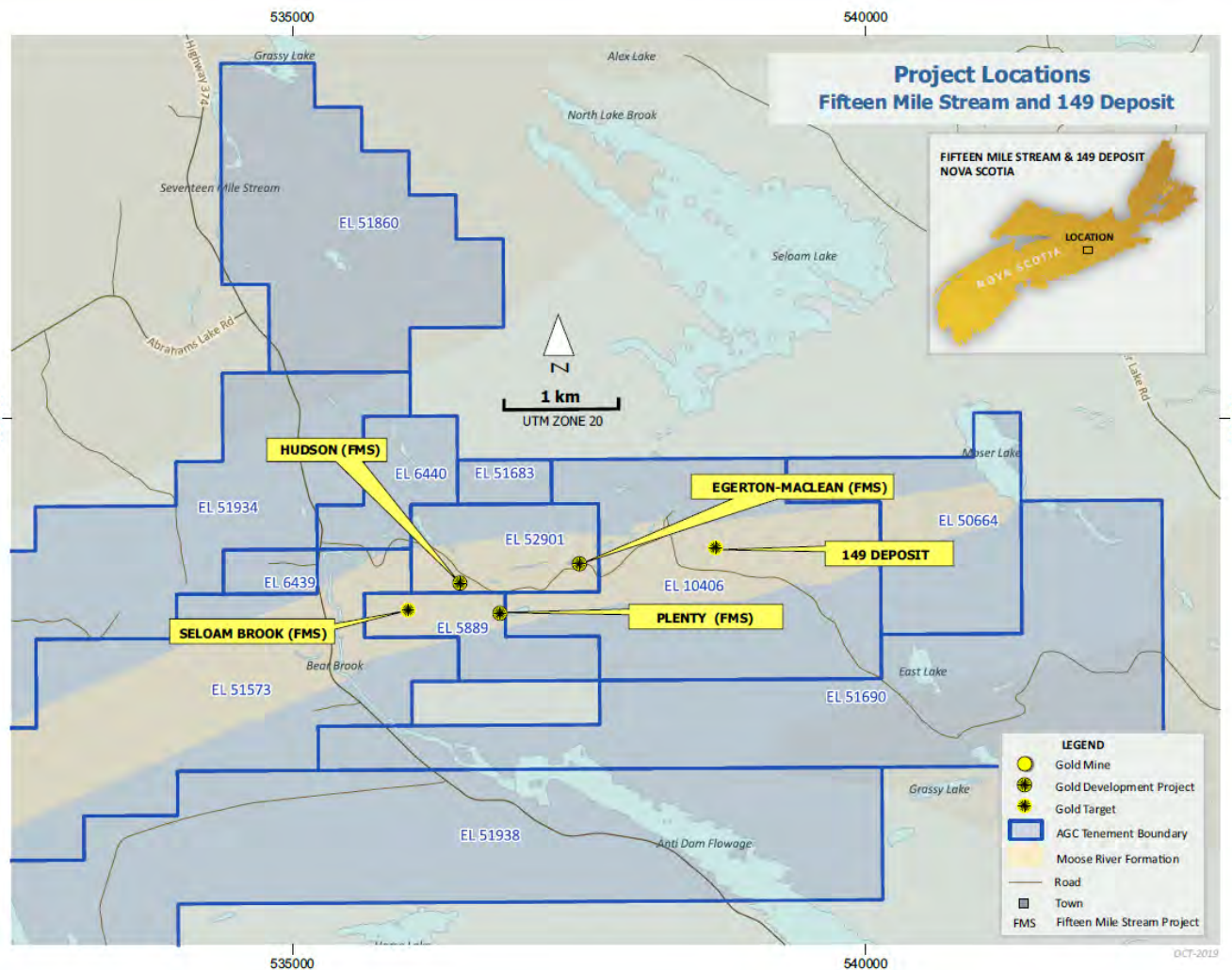
- Ongoing drilling at potential extensions to existing planned pits and potential satellite pits with encouraging results at Fifteen Mile Stream and Cochrane's Hill

South West Nova Scotia Regional Program

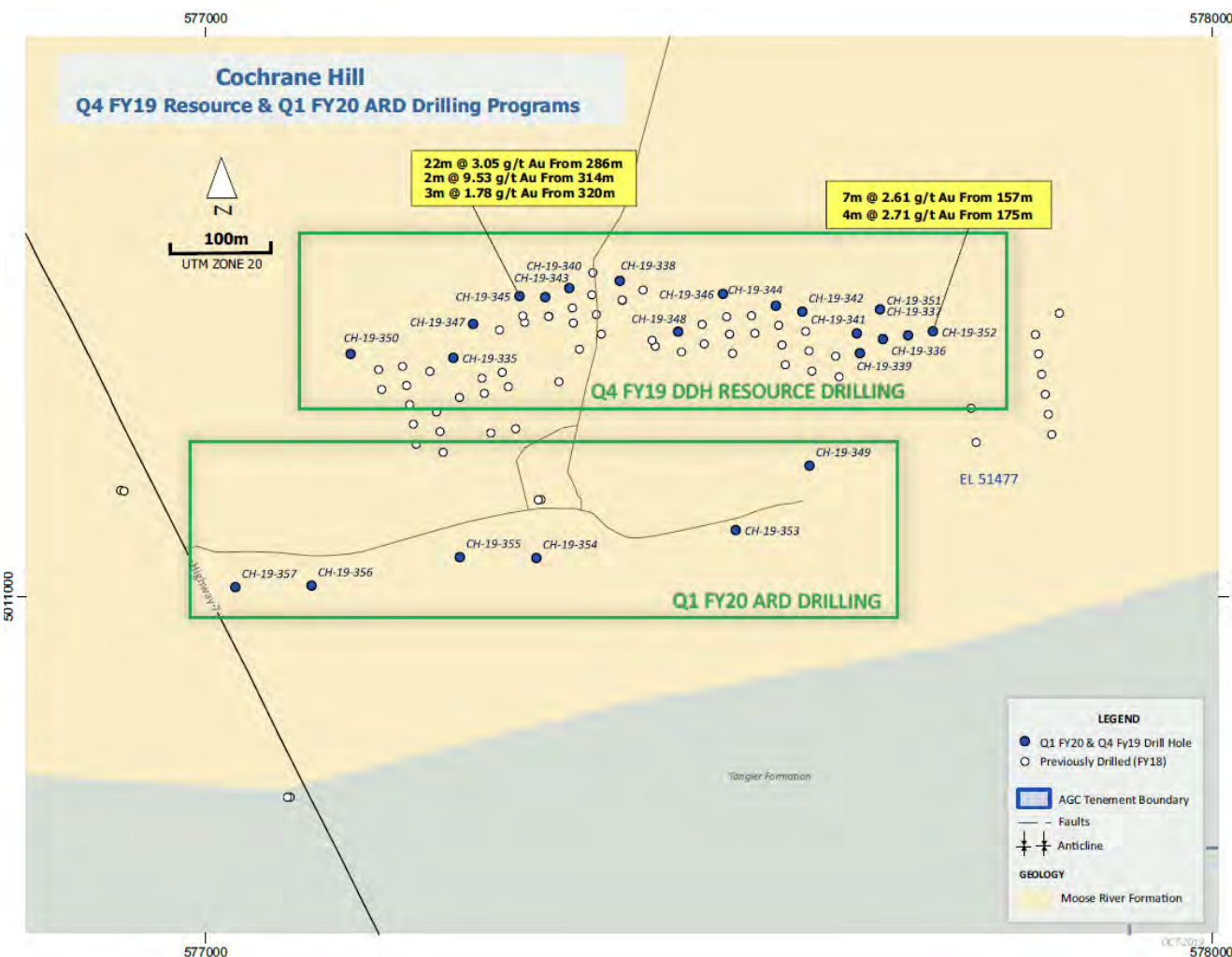
- Airborne geophysical survey has commenced on 1,900 km² in new tenements







- Seloam Brook:** 13 diamond drill follow-up of FY2018-FY2019 drilling. Significant intercepts (all downhole):
 - SB-19-028:
 - 7 m @ 0.79 g/t from 63 m
 - SB-19-030:
 - 4 m @ 0.84 g/t Au from 56 m
 - SB-19-031:
 - 4 m @ 9.73 g/t Au from 81 m
 - 2 m @ 1.71 g/t Au from 149 m
 - 6 m @ 2.22 g/t Au from 174 m
- 8 diamond drill focused on resource expansion between the planned **Hudson** and **Egerton-Maclean** open pits - Assays are pending - supports the potential extension of gold mineralization along the fold axis and shear zone up to ~200 m east of the Hudson pit and ~100 m northwest of the Egerton-MacLean.



- **Cochrane Hill** down dip and eastern Extension: 17 diamond drill holes resource conversion

- Significant intersections (all downhole):

CH-19-335:

- 1 m @ 10.25 g/t Au from 243 m
- 1 m @ 19.55 g/t Au from 248 m
- 15 m @ 2.17 g/t Au from 253 m
- 7 m @ 1.68 g/t Au from 280 m

CH-19-344:

- 25 m @ 2.49 g/t Au from 220 m

CH-19-345:

- 22 m @ 3.05 g/t Au from 286 m
- 2 m @ 9.53 g/t Au from 314 m
- 3 m @ 1.78 g/t Au from 320 m

Strategy for the next 5 years – “Stronger for Longer”



Diversify production base

Seeking a portfolio of robust operations



Sustainable long life operations

Aiming for above average mine life at bottom-third AISC



Quality growth pipeline

Actively add, manage and progress assets in all phases of the pipeline



Talented people who deliver

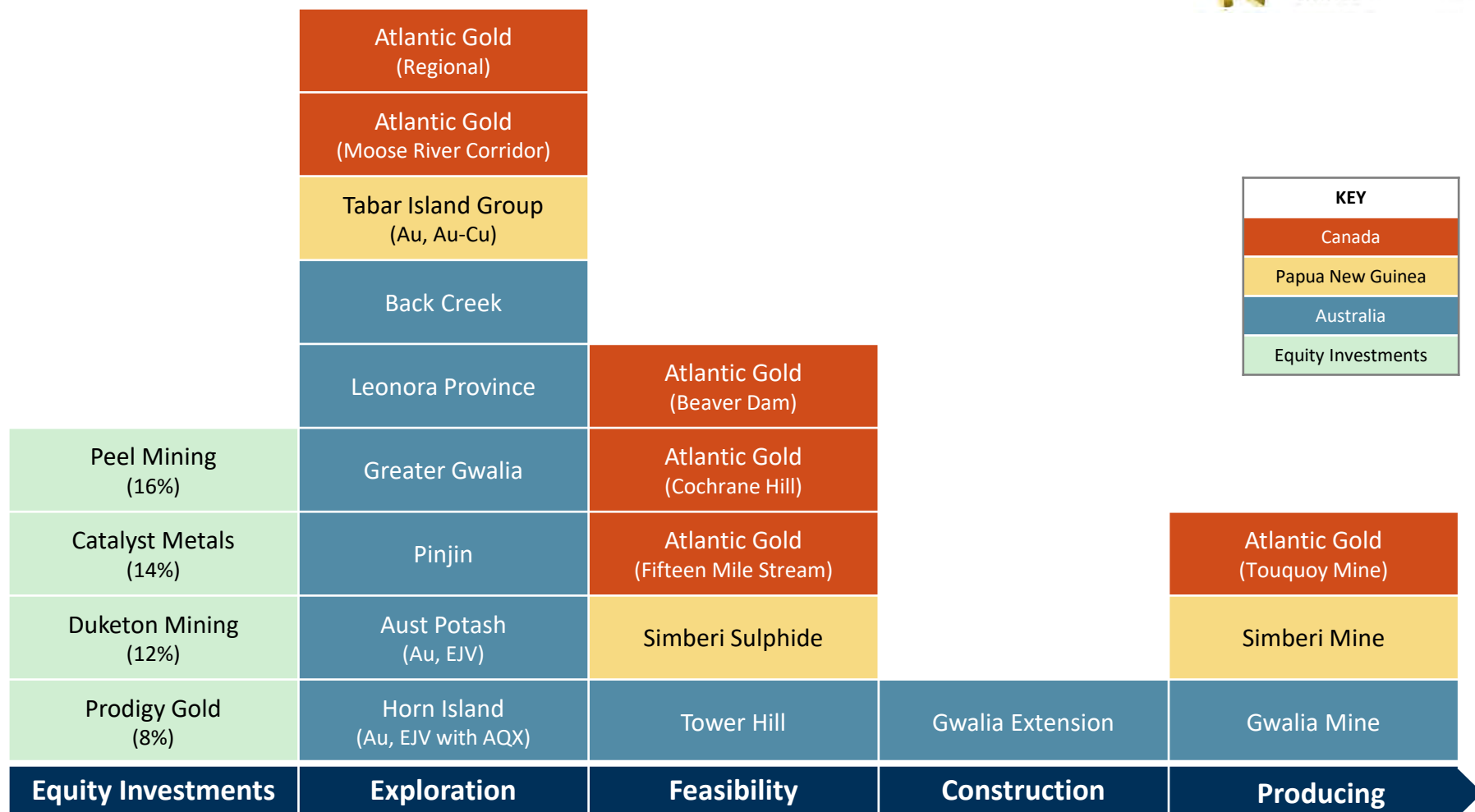
Support and work with our people to continue to achieve extraordinary results



Trusted to operate

Our various stakeholders trust us everywhere we choose to operate

Growth Pipeline



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. Atlantic holds a 63.1% beneficial interest in Touquoy. Atlantic owns 60% of Touquoy and 7.9% of Moose River Resources Inc. (MRRI) that has a 40% carried interest in Touquoy. Atlantic has the right to purchase MRRI's 36.9% beneficial interest at fair market value. Atlantic can recoup capital expenditures relating to the development of the mine and related assets before it begins making payments to MRRI with respect to the carried interest.

- Operational results at Gwalia and Simberi impacted by lower grades, mining sequence, GEP at Gwalia
- Underlying results (total material moved and plant throughput) improving
- Updated guidance at Gwalia
- New guidance at Atlantic Gold
- First quarter from Atlantic encouraging, first planning cycle has operations running to plan
- Encouraging regional exploration results at Gwalia
- Continued positive Simberi sulphide drilling results
- Promising exploration results from Atlantic development projects in Moose River Corridor



Underground at Gwalia, WA, October 2019. L to R: Bob Vassie (Managing Director and CEO), Stephen Dean (Non-Executive Director), Tim Netscher (Non-Executive Director & Chairman)



Visit by Board to Fifteen Mile Stream Atlantic Gold development project, Nova Scotia, Canada September 2019. L to R: David Moroney (Non-Executive Director), Kerry Gleeson (Non-Executive Director), Tim Netscher (Non-Executive Chairman), Klaus Popelka (observed) GM Exploration, Stef Loader (side) (Non-Executive Director), Bob Vassie (Managing Director and CEO), Maryse Bélanger (President Americas), Tim Bourke (observed) (Exploration Senior Geologist)

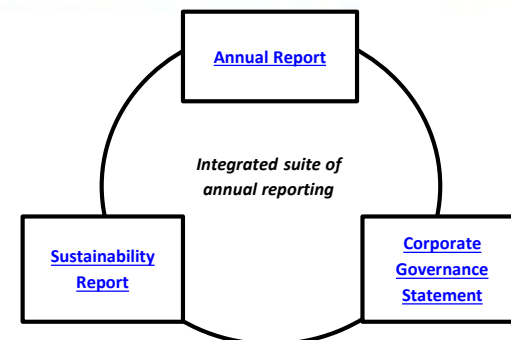
Gender Diversity Leader Runner-up Mining Journal Awards

- St Barbara recognised for its commitment to gender diversity, awarded Runner Up, Gender Diversity Leader in the Mining Journal's 2019 International Awards.



ESG Reporting rated 'Leading'

- During the quarter, ACSI rated the Group as 'Leading' in the materials sector for its ESG (Environment Social Governance) Reporting



Leonora sponsorships

- Leonora Bike Challenge.** A fitness program of several months culminated in in September with a 30km or 70km bike ride by local school aged children.

Atlantic Community

- Donation towards purchase of a mobile ultrasound unit to better serve patients in and around Middle Musquodoboit.



Consolidated Production, Costs, Guidance Summary



Production Summary Consolidated		Q3 Mar FY19	Q4 Jun FY19	Year FY 19	Q1 Sep FY20 AG full quarter	Q1 Sep FY20 AG SBM attributable	Guidance FY20
<i>St Barbara's financial year is 1 July to 30 June</i>		<i>Qtr to 31 Mar 2019</i>	<i>Qtr to 30 Jun 2019</i>	<i>Year to 30 June 2019</i>	<i>Qtr to 30 Sep 2019</i>	<i>Qtr to 30 Sep 2019</i>	<i>Year to 30 June 2020</i>
Production							
Gwalia	oz	54,261	49,966	220,169	38,153	38,153	175-190 koz (prev. 200 to 210 koz)
Simberi	oz	34,097	36,231	142,177	27,061	27,061	110-125 koz (no change)
Atlantic	oz	19,612	22,948	92,639	22,355	17,993	95-105 koz (new)
Consolidated	oz	107,970	109,145	454,985	87,569	83,206	380-420 koz (prev. 310-335 koz ex. Atlantic)
Mined Grade							<u>Reserve grade¹</u>
Gwalia	g/t	11.7	10.0	11.1	7.8	7.8	6.4
Simberi	g/t	1.46	1.48	1.43	1.09	1.09	1.3
Atlantic	g/t	0.95	0.91	0.98	0.86	0.86	1.1
Total Cash Operating Costs²							
Gwalia	A\$/oz	713	821	746	1,124	1,124	n/a
Simberi	A\$/oz	1,066	1,021	1,016	1,440	1,440	n/a
Atlantic	A\$/oz	766	744	662	747	746	n/a
Consolidated	A\$/oz	834	871	813	1,125	1,088	n/a
All-In Sustaining Cost²							
Gwalia	A\$/oz	1,016	1,230	1,027	1,559	1,559	1,390 to 1,450 (prev. 1,230 to 1,290)
Simberi	A\$/oz	1,229	1,203	1,162	1,603	1,603	1,285 to 1,450 ³ (no change)
Atlantic	A\$/oz	957	1,010	862	970	964	900 to 955 ⁴ (new)
Consolidated	A\$/oz	1,073	1,175	1,036	1,421	1,445	1,240 to 1,330 (prev. 1,250 to 1,350, ex. Atlantic)

1. Ore Reserve grade at 30 June 2019, refer Ore Reserve and Mineral Resources Statement (released 21 August 2019).
2. Non-IFRS measure, refer Appendix.
3. US\$900 to US\$1,015 per ounce @ AUD 0.70
4. C\$810 to C\$860 per ounce @ AUD 0.90



A\$7 – A\$9 million Leonora

- Shift in focus from Gwalia Deep Drilling to region and Greater Gwalia

A\$5 – A\$7 million Pinjin, Lake Wells & Back Creek

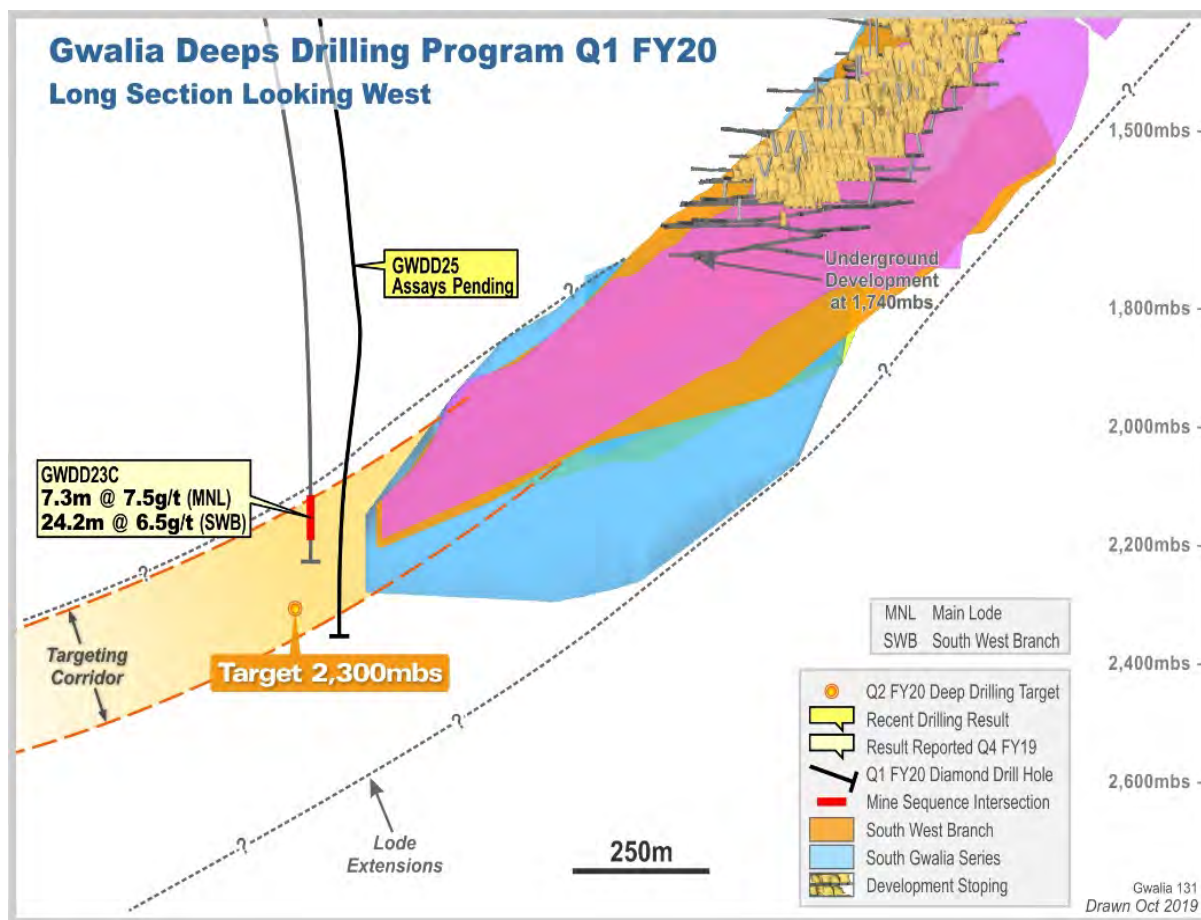
- Geophysics/aircore drilling of identified targets

A\$8 – A\$12 million PNG

- Simberi Oxides/Sulphides and Porphyry

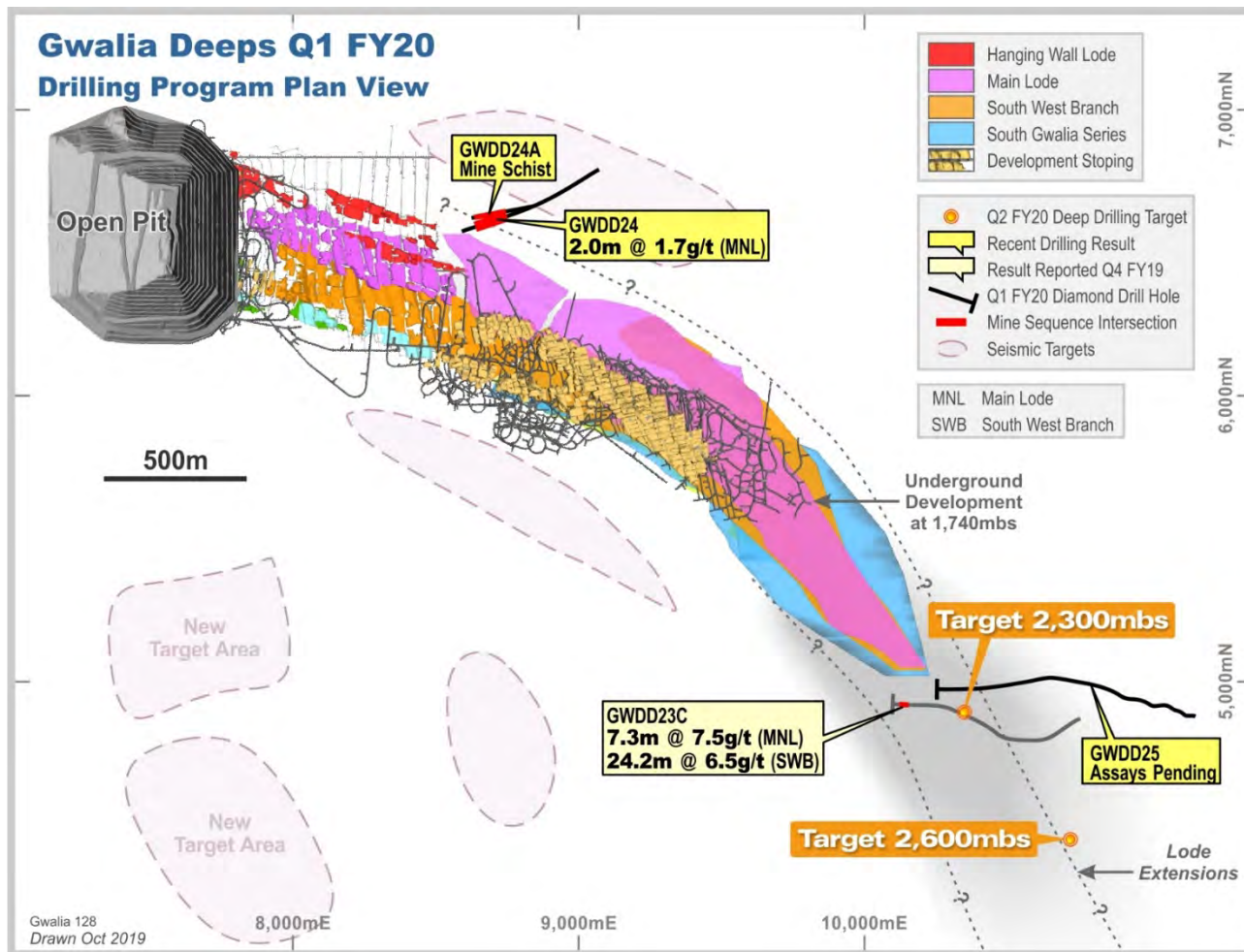
A\$11 – 13 million Atlantic Gold Canada

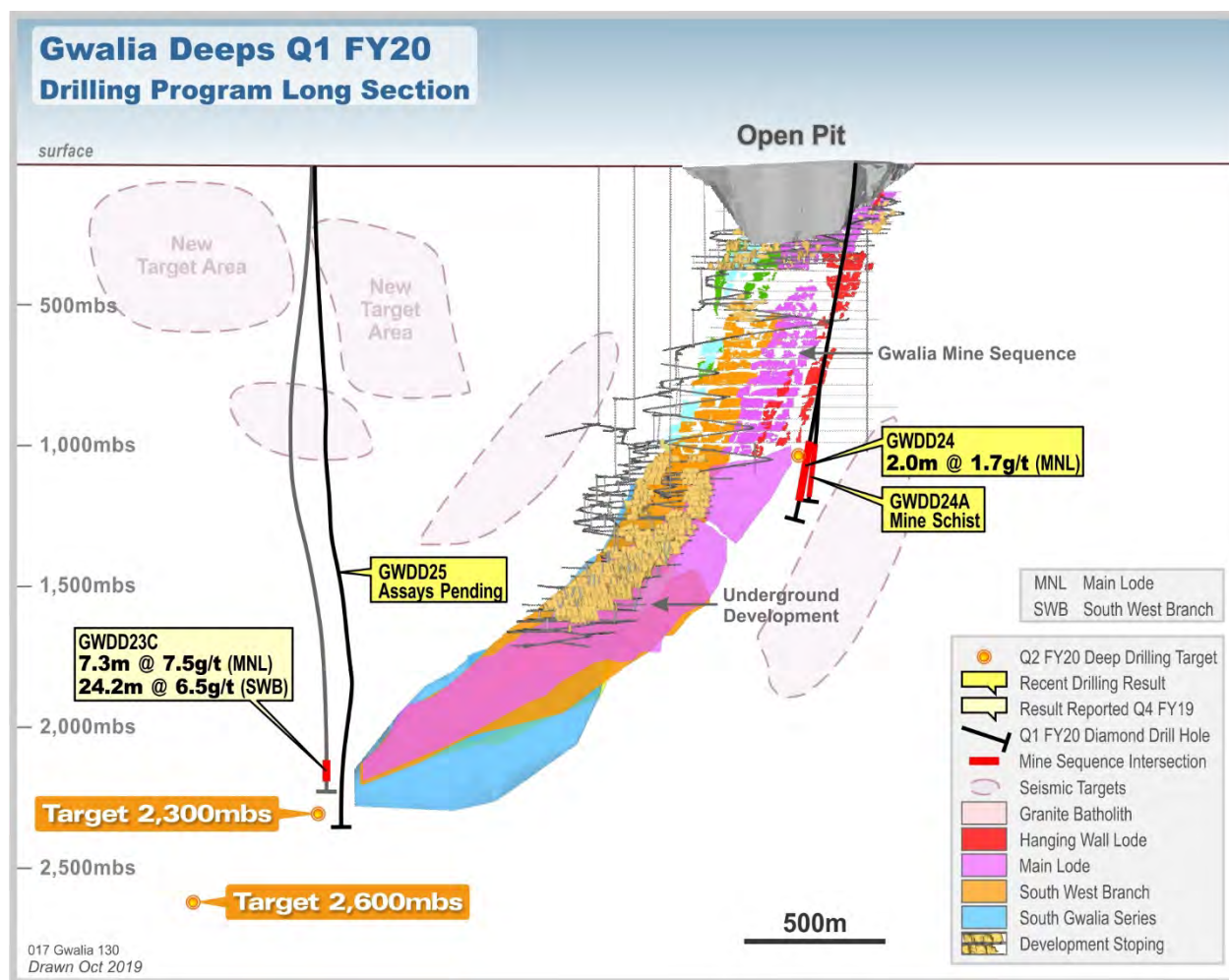
- Moose River Corridor and South West Region

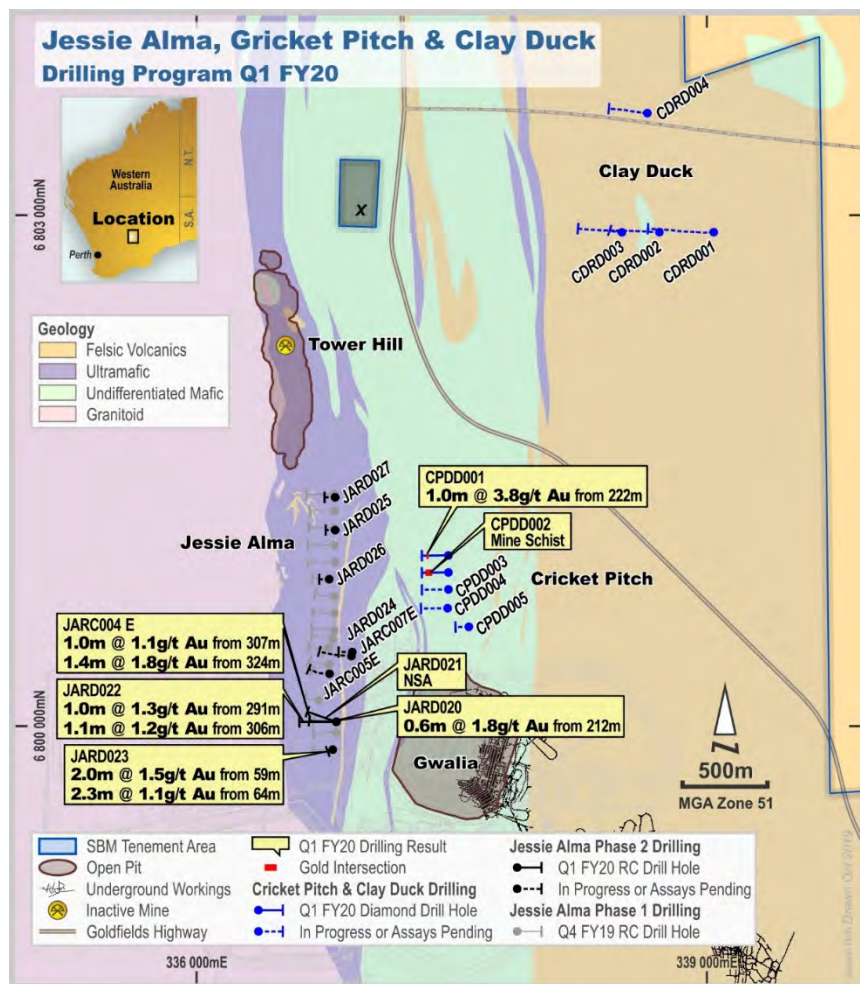


Gwalia Deep Drilling

- Awaiting assay results for GWDD025

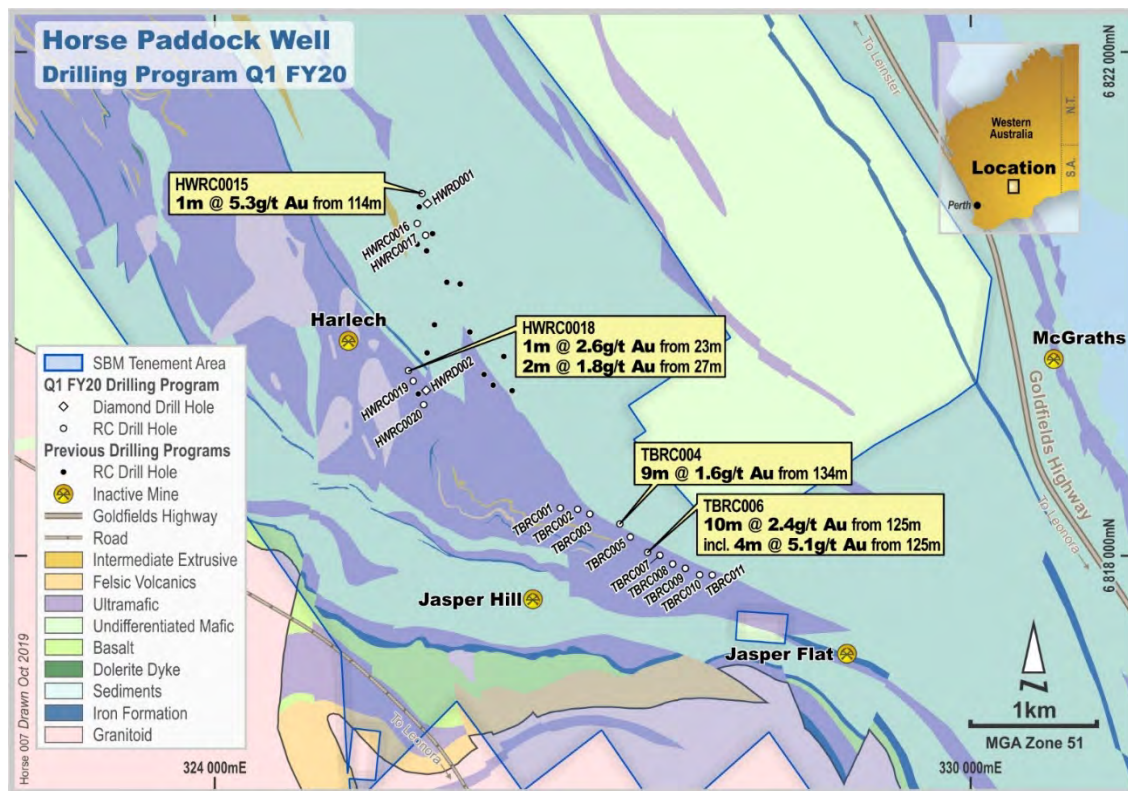






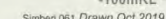
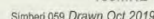
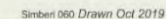
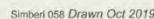
Greater Gwalia

- Emphasis on short term exploitable projects
- Phase 2 drilling, comprising of eight new diamond drill holes with RC pre-collars, and four existing hole extensions via diamond tails Significant results from this program include (all intercepts down-hole):
 - 1.4 m @ 1.8 g/t Au from 324 m (JARC004)
 - 1.1 m @ 1.2 g/t Au from 305 m (JARD022)
 - 2.0 m @ 1.5 g/t Au from 59 m (JARD023)
 - 2.3 m @ 1.1 g/t Au from 64 m (JARD023)

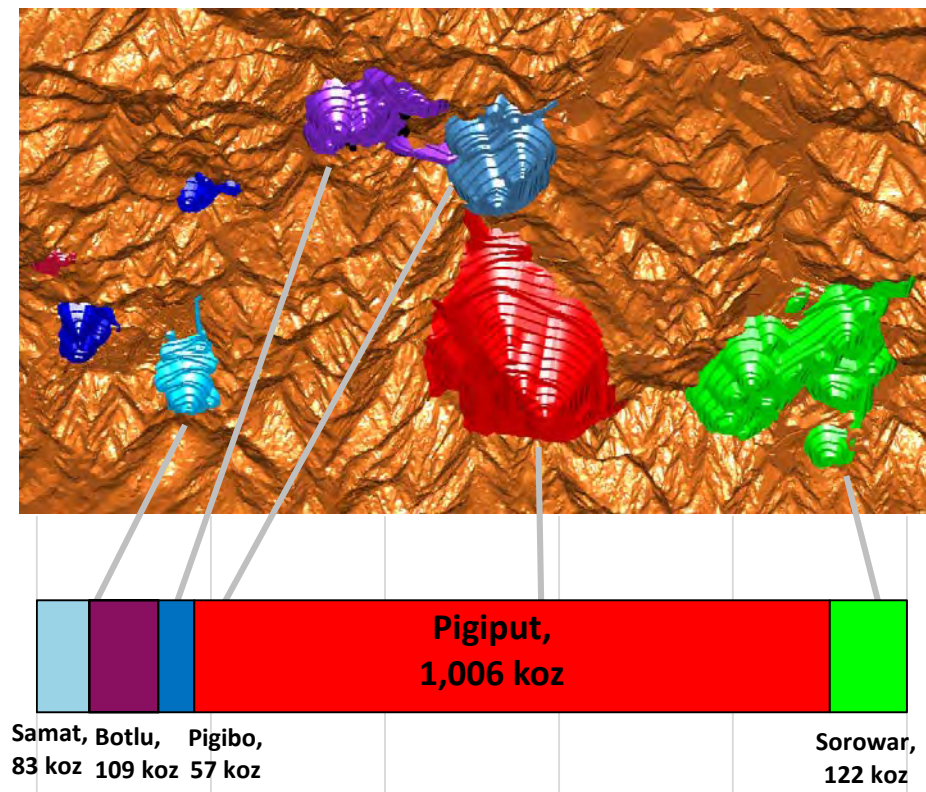


- Horse Paddock Well (Leonora, WA): A third phase of drilling comprising eight RC drill holes and two extensional diamond tails. Results include (all downhole):
 - 1.0 m @ 5.3 g/t Au from 114 m (HWRC0015)
 - 1.0 m @ 2.6 g/t Au from 23 m (HWRC0018)
 - 2.0 m @ 1.8 g/t Au from 27 m (HWRC0018)

- Trevor Bore (Leonora, WA): 11 RC holes to 200 mbs, over a strike length of 1.4 km, testing SAM anomalies. Results include (all downhole):
 - 9.0 m @ 1.6 g/t Au from 134 m (TBRD004)
 - 2.0 m @ 2.3 g/t Au from 90 m (TBRD006)
 - 10.0 m @ 2.4 g/t Au from 125 m (TBRD006)
 - inc. 4.0 m @ 5.1 g/t Au from 125 m



Modelled ultimate pit shells¹ with associated sulphide reserves



Distribution of 1.4 Moz Sulphide Reserve

1.4 Moz Sulphide Reserve @ 2.4 g/t Au,

3.3 Moz Sulphide Resource @ 1.6 g/t Au²

- Focused exploration for sulphide ore underway to improve project economics
- Sorowar not drilled at depth previously
- Sorowar drill results to date indicate significant additional sulphide and oxide mineralisation
- Updated Reserves and Resources planned for Q3 March FY20

1. Taken from 2016 Simberi Sulphide PFS. PFS level of accuracy $\pm 30\%$. For full explanation refer to Q3 March 2016 Quarterly Report released 19 April 2016.
2. For details refer to ASX release 21 October 2019 'Q1 September FY20 Quarterly Report'



In **Canada's Nova Scotia** province the Group has exploration interests at various stages, including:

- Advanced prospects being permitted for mining operations (**Beaver Dam, Fifteen Mile Stream, Cochranes Hill**)
- Potential satellite pits within the Moose River Corridor
- Early stage tenements comprising nearly 1,900 km² in the **south west** of the province.

Hedging Summary at 18 October 2019



Financial Year	Volume ounces	Price \$/oz	Delivery (all monthly instalments)	Announced
FY20	20,280 (29,720 of initial 50,000 ounces delivered year to date since 1 July 2019)	A\$1,750	October and December 2019	7 & 19 Feb 2018 and 7 Mar 2018
FY20	24,000	A\$1,809	January and June 2020	26 Oct 2018
FY20	24,000	US\$1,300	January and June 2020	10 Dec 2018
FY21	26,000	A\$1,809	July and December 2020	26 Oct 2018
FY21	26,000	US\$1,300	July and December 2020	10 Dec 2018

Atlantic Gold	Volume ounces	Price \$/oz	Delivery (quarterly instalments)	Announced
Nov 2019 to Feb 2021	100,873	C\$1,550	November 2019 to February 2021	21 Sep 2018

Ore Reserves Summary as at 30 June 2019 + Atlantic Gold



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)	2,220	8.0	568	7,915	5.9	1,506	10,135	6.4	2,073
Tower Hill, (WA)	-	-	-	2,572	3.7	306	2,572	3.7	306
Simberi Oxide, (PNG)	1,547	1.5	75	5,346	1.2	213	6,893	1.3	288
Simberi Sulphide, (PNG)	1,615	2.0	105	16,520	2.4	1,270	18,135	2.4	1,375
Simberi Stockpiles, (PNG)	1,058	0.7	24	-	-	-	1,058	0.7	24
Total (30 June 2019)	6,440	3.7	772	32,353	1.1	3,295	38,793	3.3	4,066
Atlantic Gold, (NS)	25,400	1.1	902	26,550	1.1	973	51,950	1.1	1,875
Total All Projects	31,840	1.6	1,674	58,903	2.3	4,268	90,743	2.0	5,941

Notes

- Ore Reserves are based on a gold price of: Gwalia (AU\$1,600/oz), Tower Hill (AU\$1,250/oz), Simberi (US\$1,250/oz)
- Cut-off Grades Gwalia (4.7g/t Au), Tower Hill (2.8g/t Au), Simberi Oxide (0.5g/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
- Details relating to each of the estimates are contained in the 2019 Annual Mineral Resource and Ore Reserve Report at www.stbarbara.com.au/exploration/Ore-Reserves-mineral-resources/
- The information for the Atlantic Gold Mineral Resources or Ore Reserves is extracted from the report entitled 'Moose River Consolidated Mine, Nova Scotia, Canada, NI 43-101 Technical Report' created on 25 March 2019 and 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, that all material technical assumptions and technical parameters underpinning the estimates in the market 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 market announcement.

Full details are contained in the ASX release dated 21 August 2019 'Ore Reserves and Mineral Resources Statements 30 June 2019' available at www.stbarbara.com.au

Mineral Resources Summary at 30 June 2019 + Atlantic Gold



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)	5,034	7.3	1,183	17,527	6.0	3,393	1,129	5.5	199	23,690	6.3	4,775
Tower Hill, (WA)	-	-	-	4,604	3.9	574	489	3.3	51	5,093	3.8	625
Simberi Oxide, (PNG)	2,414	1.3	103	10,562	1.1	376	12,886	0.9	383	25,862	1.0	862
Simberi Sulphide, (PNG)	2,897	1.6	150	43,450	1.7	2,375	18,591	1.4	810	64,938	1.6	3,335
Total (30 June 2019)	10,345	4.3	1,436	76,143	2.7	6,718	33,095	1.4	1,443	119,583	2.5	9,597
Atlantic Gold, (NS)	25,180	1.2	936	32,230	1.1	1,183	6,060	1.3	252	63,470	1.2	2,371
Total All Projects	35,525	2.1	2,372	108,373	2.3	7,901	39,155	1.3	1,695	183,053	2.0	11,968

Notes

1. Mineral Resources are reported inclusive of Ore Reserves
2. Cut-off Grades Gwalia (2.5g/t Au), Tower Hill (2.5g/t Au), Simberi Oxide (0.4g/t Au), Simberi Transitional and Sulphide (0.6g/t Au)
3. 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
5. Details relating to each of the estimates are contained in the 2019 Annual Mineral Resource and Ore Reserve Report at www.stbarbara.com.au/exploration/Ore-Reserves-mineral-resources/
6. The information for the Atlantic Gold Mineral Resources or Ore Reserves is extracted from the report entitled 'Moose River Consolidated Mine, Nova Scotia, Canada, NI 43-101 Technical Report' created on 25 March 2019 and 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, that all material technical assumptions and technical parameters underpinning the estimates in the market 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 market announcement.

Full details are contained in the ASX release dated 21 August 2019 'Ore Reserves and Mineral Resources Statements 30 June 2019' available at www.stbarbara.com.au

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.

- | | |
|-------------------------------|---|
| Cash operating costs | <ul style="list-style-type: none">• Calculated according to common mining industry practice using The Gold Institute (USA) Production Cost Standard (1999 revision) <p>Refer most recent quarterly report available at stbarbara.com.au for example</p> |
| All-In Sustaining Cost | <ul style="list-style-type: none">• 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) <p>Refer most recent quarterly report available at stbarbara.com.au for example</p> |
| Cash contribution | <ul style="list-style-type: none">• Refer cash movements table in Finance section of corresponding Quarterly Report. It is the sum of 'operating cash flow' from individual operations, net of sustaining capital expenditure.• Cash contribution per ounce = cash contribution ÷ ounces of gold sold• Refer most recent quarterly report available at stbarbara.com.au for example |

Scheduled ASX Announcements

23 October 2019	Annual General Meeting
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Exploration Results

The information in this presentation that relates to Exploration Results for Simberi and Pinjin 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.

The information in this presentation that relates to Exploration Results for Gwalia and the Leonora region is based on information compiled by Mr Robert Love, who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Love 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'. Mr Love consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Exploration Results for Nova Scotia is based on information compiled by Dr David Lowe, who is a professional member of Geoscientists Nova Scotia and the Association of Engineers and Geoscientists of Alberta. Dr Lowe 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 Lowe 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 and Simberi is extracted from the report titled 'Ore Reserves and Mineral Resources Statements 30 June 2019' released to the Australian Securities Exchange (ASX) on 21 August 2019 and 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 information included in the original ASX announcement released on 21 August 2019 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.

The information for the Atlantic Gold Mineral Resources or Ore Reserves is extracted from the report entitled 'Moose River Consolidated Mine, Nova Scotia, Canada, NI 43-101 Technical Report' created on 25 March 2019 and 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, that all material technical assumptions and technical parameters underpinning the estimates in the market 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 market announcement.

Full details are contained in the ASX release dated 21 August 2019 'Ore Reserves and Mineral Resources Statements 30 June 2019' available at stbarbara.com.au.

Scheduled ASX Announcements

23 October 2019	Annual General Meeting
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Stef Loader (Non-Executive Director) and Bob Vassie (MD & CEO), discussing PAF commissioning, 1,420 mbs at Gwalia, October 2019