



GOLDEN STAR

CREATING A LEADING AFRICAN GOLD PRODUCER

Q1 2020 Results Conference Call | May 2020

DISCLAIMER

SAFE HARBOUR: Some statements contained in this presentation are forward-looking statements or forward-looking information (collectively, "forward-looking statements") within the meaning of the United States Private Securities Litigation Reform Act of 1995 and applicable Canadian securities laws. Investors are cautioned that forward-looking statements are inherently uncertain and involve risks and uncertainties that could cause actual results to differ materially. Such statements include comments regarding: gold production, cash operating costs, AISC and capital expenditure estimates and guidance for 2020 on a consolidated and per mine basis, the Company's achievement of expected range of consolidated gold production for 2020; the accuracy of the Company's updated mineral reserve and resource models; the expected allocation of the Company's capital expenditures; the ability to expand the Company and its production profile through the exploration and development of its existing mines and through strategic value accretive acquisitions; the intended expansion of production and reduction of costs at both mines; the ability of the Company to optimize its Prestea mining operations; the anticipated improvement in development productivity as a result of the optimization of the Prestea operations; the potential impact of the COVID-19 pandemic on the Company's operations and the ability to mitigate such impact; the ability to expand the mineral reserves of the Company through further drilling; the ability of the Company to improve the geographical diversification of its portfolio; expected grade and mining rates for 2020; completion and commissioning of the paste fill plant project and timing thereof; improved recovery expected to result from the paste fill plant project; installation of the electrical substation and upgrade of the underground electrical infrastructure, and the timing thereof. Forward-looking information is subject to known and unknown risks, uncertainties and other important factors that may cause the actual results, performance or achievements of Golden Star to be materially different from those expressed or implied by such forward-looking information. There can be no assurance that future developments affecting the Company will be those anticipated by management. Please refer to the discussion of these and other factors in Management's Discussion and Analysis of financial conditions and results of operations for the year ended December 31, 2019, the three months ended March 31, 2020 and in our annual information form for the year ended December 31, 2019 as filed on SEDAR at www.sedar.com. The forecasts contained in this presentation constitute management's current estimates, as of the date of this presentation, with respect to the matters covered therein. We expect that these estimates will change as new information is received and that actual results will vary from these estimates, possibly by material amounts. While we may elect to update these estimates at any time, we do not undertake to update any estimate at any particular time or in response to any particular event. Investors and others should not assume that any forecasts in this presentation represent management's estimate as of any date other than the date of this presentation.

In this presentation, we use the terms "cash operating cost per ounce", "All-In Sustaining Cost per ounce" and "AISC per ounce". These terms should be considered as Non-GAAP Financial Measures as defined in applicable Canadian and United States securities laws and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with International Financial Reporting Standards ("IFRS"). "Cash operating cost per ounce" for a period is equal to the cost of sales excluding depreciation and amortization for the period less royalties, the cash component of metals inventory net realizable value adjustments and severance charges divided by the number of ounces of gold sold (excluding pre-commercial production ounces) during the period. "All-In Sustaining Costs per ounce" commences with cash operating costs and then adds sustaining capital expenditures, corporate general and administrative costs, mine site exploratory drilling and greenfield evaluation costs and environmental rehabilitation costs, divided by the number of ounces of gold sold (excluding pre-commercial production ounces) during the period. This measure

seeks to represent the total costs of producing gold from operations. These measures are not representative of all cash expenditures as they do not include income tax payments or interest costs. Changes in numerous factors including, but not limited to, mining rates, milling rates, gold grade, gold recovery, and the costs of labor, consumables and mine site general and administrative activities can cause these measures to increase or decrease. We believe that these measures are the same or similar to the measures of other gold mining companies but may not be comparable to similarly totaled measures in every instance. Please see our "Management's Discussion and Analysis of Financial Condition and Results of Operations for the year ended December 31, 2019" for a reconciliation of these Non-GAAP measures to the nearest IFRS measure.

INFORMATION: The information contained in this presentation has been obtained by Golden Star from its own records and from other sources deemed reliable, however no representation or warranty is made as to its accuracy or completeness. The mineral reserve and mineral resource estimates have been compiled by the Company's technical personnel in accordance with definitions and guidelines set out in the Definition Standards for Mineral Resources and Mineral Reserves adopted by the Canadian Institute of Mining, Metallurgy, and Petroleum and as required by Canada's National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101"). All mineral resources are reported inclusive of mineral reserves. Mineral resources which are not mineral reserves do not have demonstrated economic viability. Mineral reserve estimates reflect the Company's reasonable expectation that all necessary permits and approvals will be obtained and maintained. Mining dilution and mining recovery vary by deposit and have been applied in estimating the mineral reserves. Additional scientific and technical information relating to the mineral properties referenced in this news release are contained in the following current technical reports for those properties available at www.sedar.com: (i) Wassa - "NI 43-101 Technical Report on Resources and Reserves, Golden Star Resources, Wassa Gold Mine, Ghana" effective December 31, 2018; (ii) Bogoso/Prestea - "NI 43-101 Technical Report on Resources and Reserves, Golden Star Resources, Bogoso/Prestea Gold Mine, Ghana" effective date December 31, 2017.

CAUTIONARY NOTE TO US INVESTORS: This presentation uses the terms "measured mineral resources", "indicated mineral resources" and "inferred mineral resources." The Company advises US investors that while these terms are recognized and required by NI 43-101, the US Securities and Exchange Commission ("SEC") does not recognize them. Also, although disclosure of contained ounces is permitted under Canadian regulations, the SEC generally requires mineral resource information to be reported as in-place tonnage and grade. US Investors are cautioned not to assume that any part or all of the mineral deposits in the measured and indicated categories will ever be converted into mineral reserves. US investors should also note that "Inferred mineral resources" have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of inferred mineral resources will ever be upgraded to a higher category. In accordance with Canadian rules, estimates of inferred mineral resources cannot form the basis of feasibility or other economic studies. US investors are cautioned not to assume that any part or all of the inferred mineral resource exists or is economically or legally mineable.

CURRENCY: All monetary amounts refer to United States dollars unless otherwise indicated.

PARTICIPATING MANAGEMENT – Q1 2020 results conference call



Andrew Wray

Chief Executive Officer

- Appointed President and Chief Executive Officer in May 2019, member of the Board of Directors since October 2018
- Previously CEO of La Mancha Group
- Served as CFO at Acacia Mining
- Worked at JP Morgan Cazenove in the Corporate Finance team with over 15 years advising mining companies



Graham Crew

Chief Operating Officer

- Appointed Chief Operating Officer in July 2019, previously on the Board of Directors from October 2018 to July 2019
- Strong track record of transforming operations, with 25 years of operational, technical and corporate experience including the roles of General Manager at Barmingo and General Manager at Acacia Mining



Paul Thomson

Chief Financial Officer

- Joined Golden Star in February 2020
- Previously CFO of Berkeley Energia and Aureus Mining
- Started career as a chartered accountant at Ernst & Young and has since held a number of finance, corporate finance and business development roles over 25 years



Peter Spora

Head of Growth & Exploration

- Joined November 2019
- Most recently served as the Head of Discovery at La Mancha
- Previously Head of Discovery at Acacia Mining
- Peter is a geologist with 25 years of experience in discovery and business development roles

GOLDEN STAR - Overview



Two producing gold mines



Creating shared value
Focused on sustainability
98% Ghanaian workforce



Strong cash balance
\$42m¹
Net debt \$65m



Management & strategy change



Exploring
The full potential of the
Wassa complex



Turnaround
Optimising Prestea



195-210koz
2020 Production Guidance

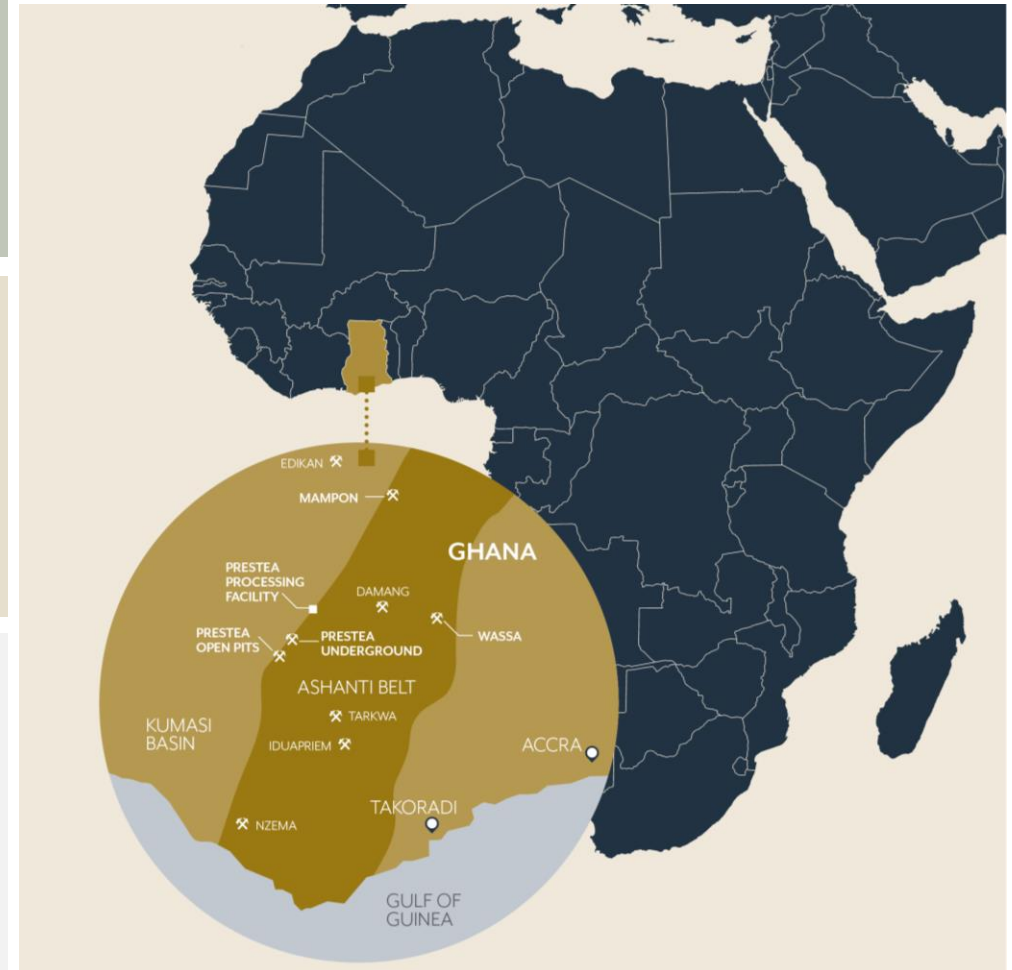


\$1,080-1,180/oz
2020 AISC Guidance²



Reserves & Resources³
P&P 1.7 Moz
M&I 6.3 Moz
Inferred 8.1 Moz

Two operating gold mines in Ghana - Wassa & Prestea



1. As at March 31, 2020.
2. See note on slide 2 regarding Non-GAAP Financial Measures
3. As at December 31, 2019

GOLDEN STAR – Q1 2020 performance summary & key events

Q1 2020 performance overview relative to Q4 2019



Production

Q1 2020 50.0koz
Q4 2019 52.7koz



Gold Sold

Q1 2020 45.6koz
Q4 2019 52.7koz



AISC/oz sold¹

Q1 2020 \$1,201/oz
Q4 2019 \$1,227/oz



Q1 2020
AISC/oz produced¹
\$1,165/oz produced



Adj. EBITDA¹

Q1 2020 \$17.2m
Q4 2019 \$16.2m



Operating Cash Flow²

Q1 2020 \$13.4m
Q4 2019 \$9.4m



Cash

Q1 2020 \$41.9m
Q4 2019 \$53.4m

Q1 2020 Adjusted
cash^{1,3} \$48.1m



Net Debt

Q1 2020 \$65.4m
Q4 2019 \$53.4m

Q1 2020 Adjusted
net debt^{1,3} \$59.2m

Q1 2020 key events

COVID-19

- Proactively managing the risks associated with the pandemic
- Cash conservation initiatives to mitigate risk to the balance sheet in an escalation of the pandemic. All operational and sustaining capital expenditure that is required to meet budgeted production levels continues
- Business continuity - Supply chain and sales logistics being carefully managed

Wassa

- Underground mining rates exceeded 4,300 tonnes per day through Q1 2020
- Continued to maintain low per tonne unit costs
- Mining progressed through lower grade areas

Prestea

- Alimak mining areas being optimised to improve the stope cycle time and reduce dilution
- Mining to be introduced on 17 Level with new long hole open stoping mining methodology
- In Q1 2020, reliant on a limited number of stopes, operational issues in these stopes had a significant impact on ore availability

Sustainability

- Financially supported the local communities and national pandemic response
- Released our Policy on Inclusion and Diversity in March to mark International Women's Day

1. See note on slide 2 regarding Non-GAAP Financial Measures.
2. Operating cash flow before working capital changes
3. Adjusted for the delayed Q1 2020 gold sale that was completed at the start of April

CORPORATE RESPONSIBILITY & HEALTH AND SAFETY

RECENT NEWS

Fatality at Prestea

- We continue to provide support to the family and friends of Francis Enyimah in the wake of this terrible incident in March.
- Corrective actions are being implemented

New policy implemented

- Launched new policy on inclusion and diversity.

PROJECTS & INITIATIVES

Malaria

- Reduced case rates to less than 0.25 per capita
- Lowest level in history of the program and an order of magnitude better than background rates

Tailings Rehabilitation – Oil Palm plantation

- Rehabilitation of historical tailings facilities with commercial oil palm plantation
- Creates a sustainable alternative livelihood that currently supports over 700 families

Local procurement

- Supporting local supply chains by sourcing services and supplies

RECOGNITION

- Featured in the UN Global Compact Canada Sustainable Development Goals Leading Practice Guide for SDG 1, 3 & 8
- Five successive Ghana Mining Industry Awards for leading social initiatives

LEADING PRACTICE

Safety & Environment

- Implementing Health and Safety strategy and 3-year plan
- TRIFR of 1.2 in line with peer group
- 100% compliance with air, noise, vibration and water requirements
- No reportable environmental incidents or significant spills

DIVERSITY & LOCAL REPRESENTATION

- 98% Ghanaian workforce, +50% from the host communities
- Increasing female representation in the workforce to +20% over the next five years

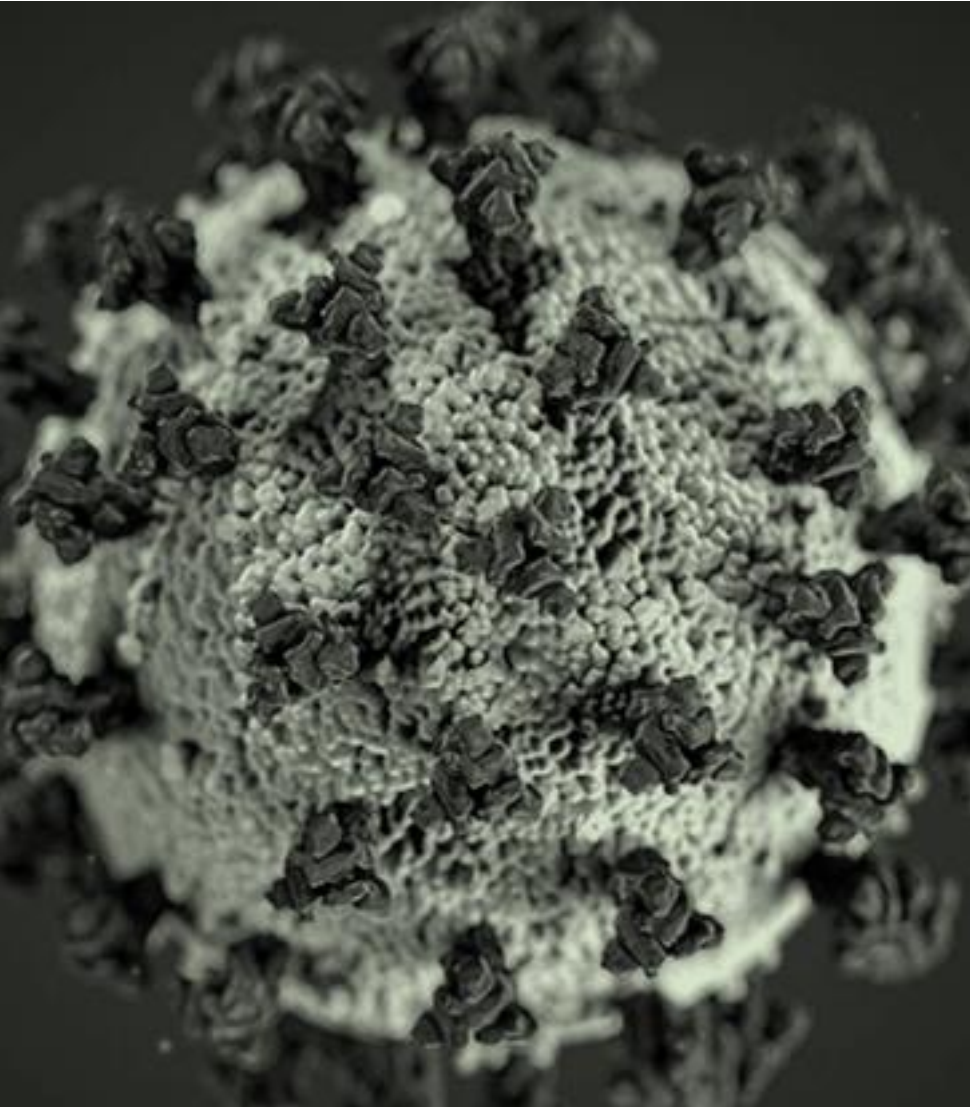
World Gold Council Member

- Golden Star aligns its approach to the World Gold Council's 10 Responsible Gold Mining Principles



COVID-19 – Proactive Management Controls

No Confirmed COVID-19 Cases Amongst Workforce



Proactive Controls and Procedure

Corporate office, Planning and Preparedness

- Epidemic and Pandemic Management Plans developed prior to WHO declaration of public health emergency
- Daily situation monitoring with support from International SOS
- Proactively moved corporate teams to work from home ahead of jurisdictional lock downs
- Proactively stopped travel international travel to sites ahead of jurisdictional bans

Wassa & Prestea Mine Sites

- Extensive education of workforce and host communities
- Site access controls proactively implemented
 - Temperature screening
 - Compulsory quarantine for those from outbreak areas
- Travel restrictions imposed to reduce transmission risk
- Enhanced hygiene and sanitation protocols implemented
- Medical preparedness activities
- Contribution to Ghana Government's COVID-19 response
- Support to host community prevention and preparation
- Private donor fund-raising to support community efforts



Business continuity

Gold sales

- Alternative export arrangements made due to reduced commercial flights
- Final shipment of Q1 2020 was delayed, since then gold export and sales have continued without interruption

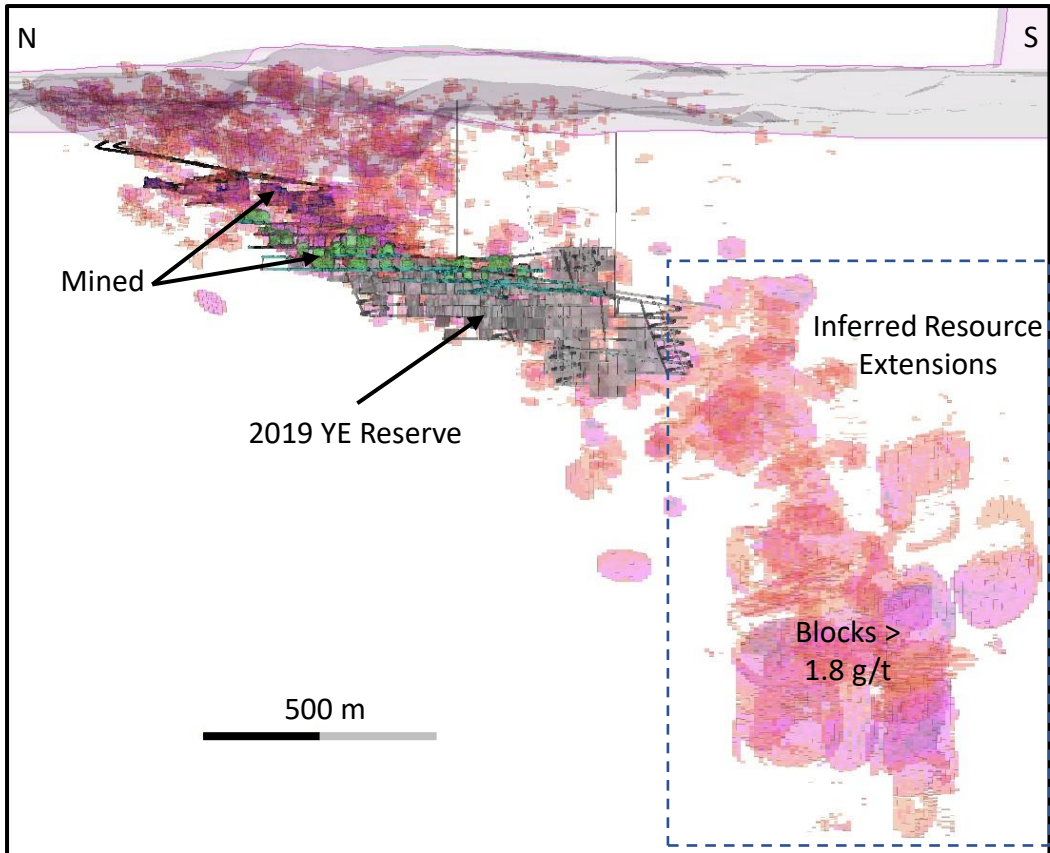
Supply chain

- Medical supply chains remain intact and additional stock obtained
- Supply chains for key consumables (cyanide, lime, grinding media, fuel and lubricants remain intact
- Alternative suppliers have been identified for essential supply chains



**WASSA
FLAGSHIP ASSET**

WASSA – Available infrastructure capacity creates phased growth opportunity



Current Operations – A Strong Foundation



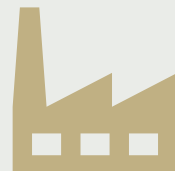
- Mining rates expected to exceed 4,000tpd in 2020
- 2020 production guidance of 155-165koz
- Paste fill plant currently being constructed - due to be commissioned in Q4 2020

Growth Phase One - Utilisation of decline capacity



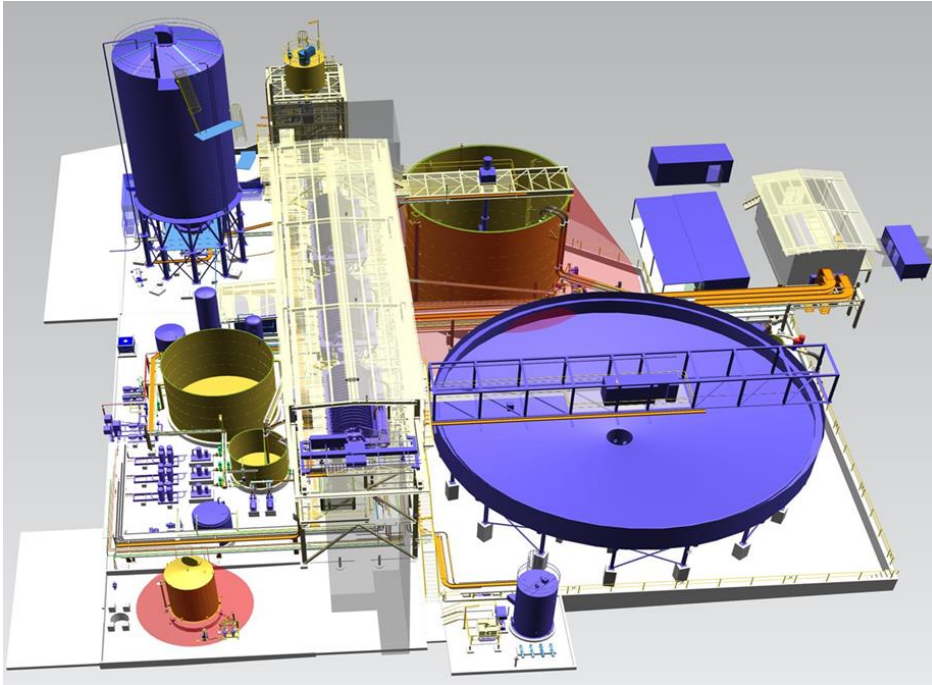
- Decline capacity 5,000tpd
- Implies 20-25% of additional production capacity once fully utilised
- Production should therefore rise accordingly
- The incremental production expected to have a positive impact on unit costs
- Mining fleet required to be expanded over time. 60 tonne trucks, additional loaders & jumbo

Growth Phase Two - Utilisation of plant capacity



- Processing plant capacity 7,800tpd - only ~50% utilised
- Additional underground mining infrastructure would be required to maximise utilisation of the plant
- The southern extensions could be accessed via a decline or a shaft
- Success in the ongoing exploration of the footwall zone could defer the need for major infrastructure

WASSA PROJECTS UPDATE – Investing in the longer-term potential



Paste Fill Plant

Project Timeline

- Paste plant construction started in H2 2019
- Project at 69% completion at March 31, 2020
- Commissioning expected in Q4 2020

Budget

- Capital cost: \$23m (\$13.5m in 2020)
- Operating cost: \$5-7 per tonne

Investment rationale

- Increase recovery of ore as a primary and secondary stope will be mined, we currently mine larger primary stopes, leaving support pillars
- Can return to certain mining areas to recover historical pillars
- Access more ore per development metre
- Supports increased mining rates



Electrical Upgrade

Project Timeline

- The civils work for the installation of the electrical substation is currently ongoing and is expected to be completed in conjunction with the completion of the paste fill project.

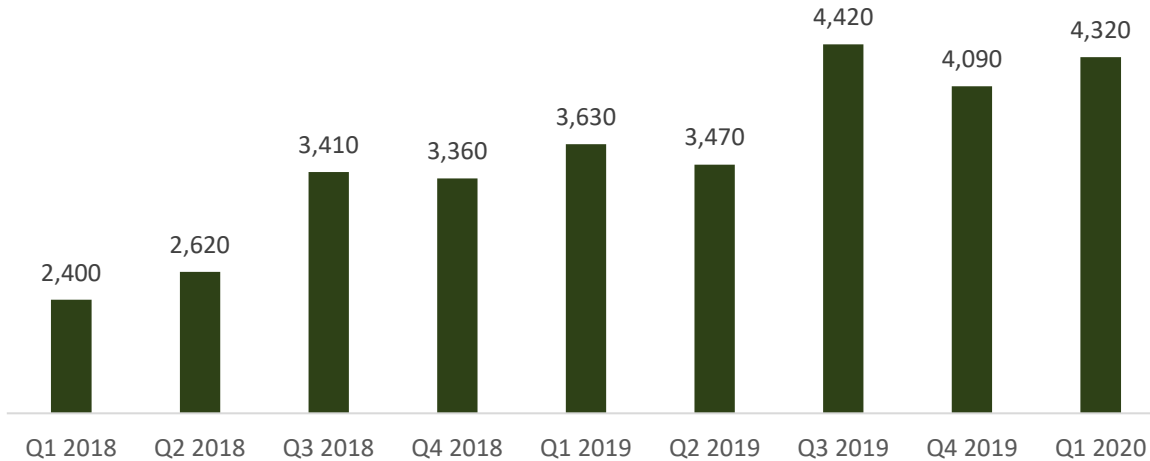
Investment rationale

- Electrical infrastructure upgrade to support the mine plan for the next five years
- Work to upgrade the underground electrical infrastructure is progressing alongside the substation project

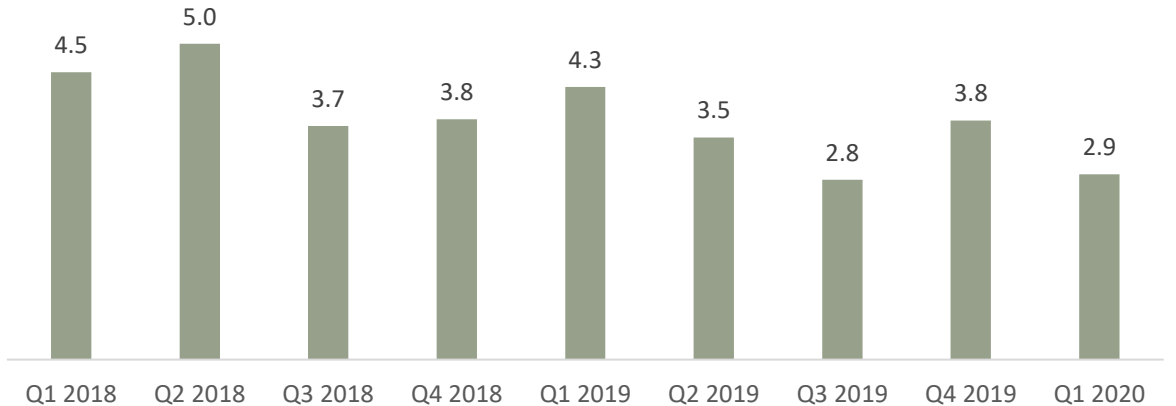


WASSA PRODUCTION SCORECARD – Performance tracking

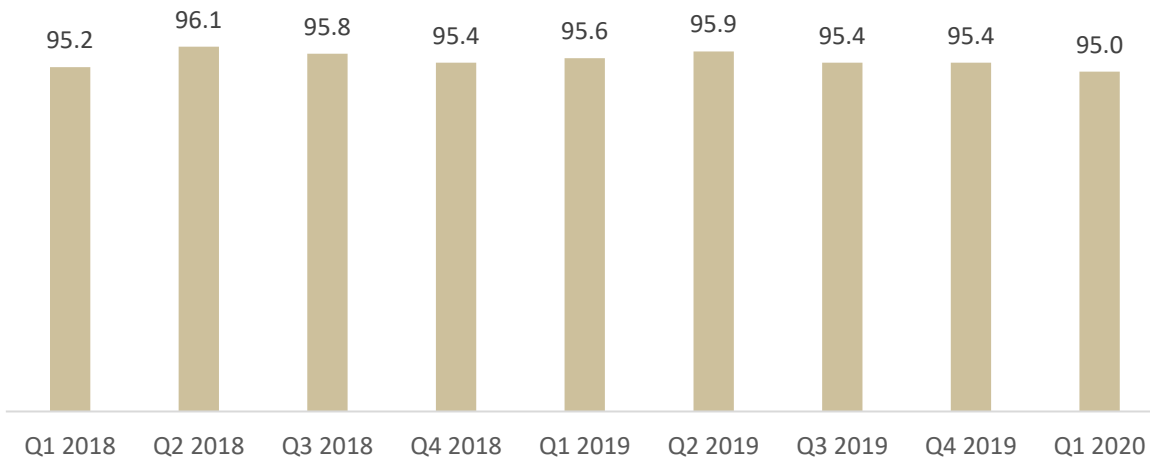
Mining Rate (ore tpd) – Sustained above 4,000tpd for three quarters



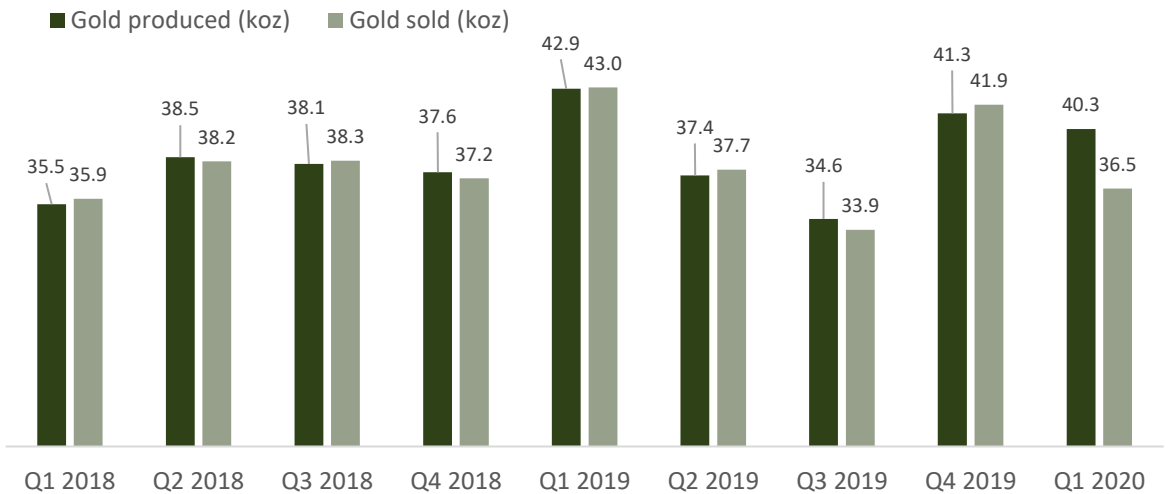
Grade (g/t) – Mining through lower grade areas in Q1 2020



Recovery (%) – Stable with lower grade

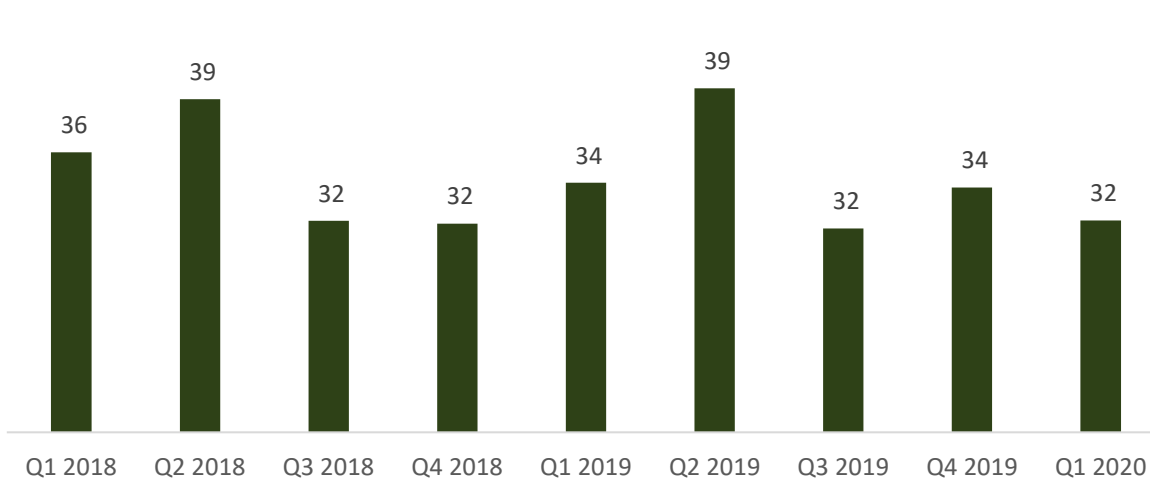


Production (koz) – Robust performance driven by ore volumes

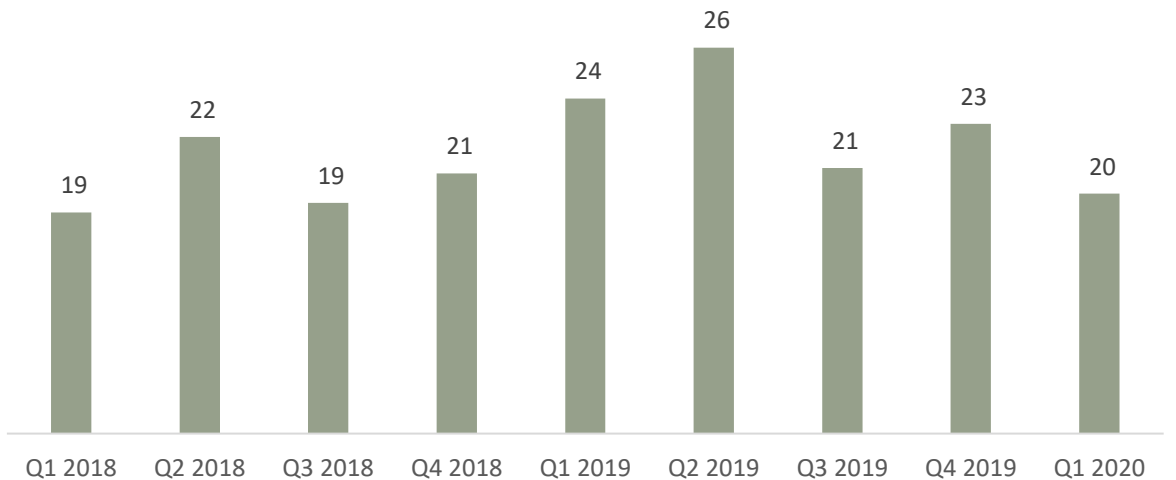


WASSA COST SCORECARD – Performance tracking

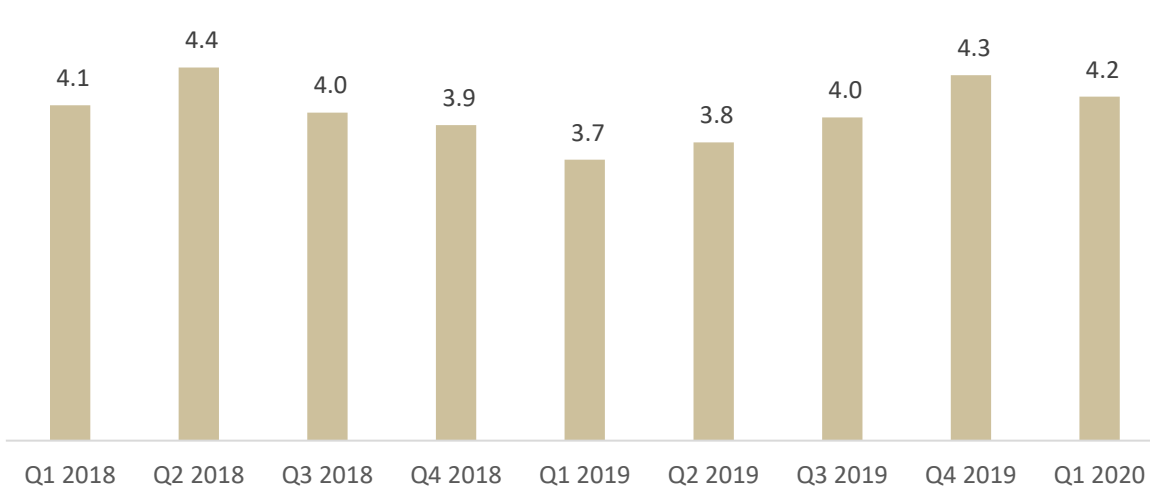
UG Mining Costs (\$/t ore mined) – Unit costs benefiting from higher volumes



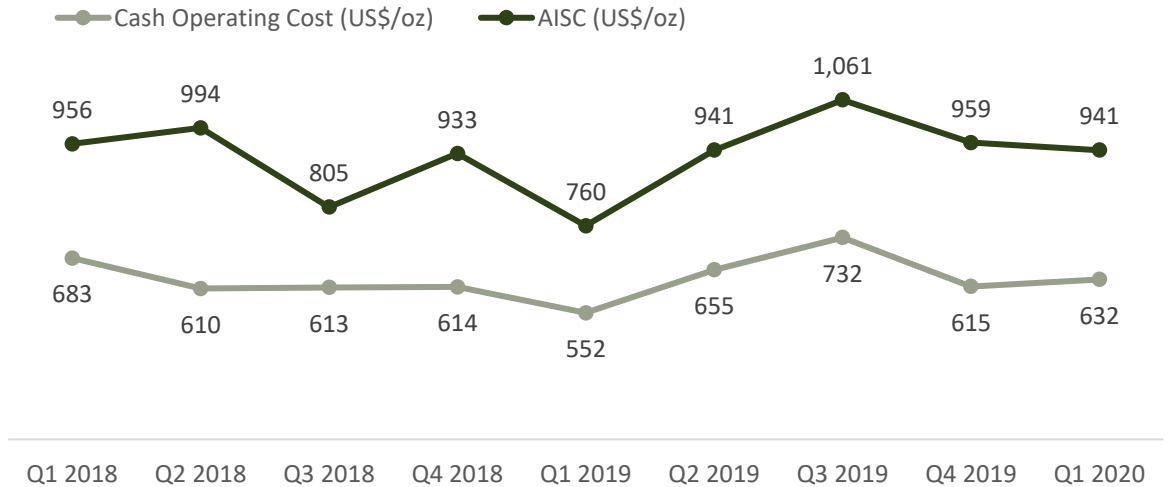
Processing Costs (\$/t) – Benefiting from higher ore volumes



Site G&A Cost (\$m) – Stable despite labour cost inflation



Cash operating cost & AISC¹ (\$/oz sold) – Q1 2020 AISC \$915/oz production



1. See note on slide 2 regarding Non-GAAP Financial Measures.



**PRESTEA
OPERATIONAL CHANGE UNDERWAY**

PRESTEA – Optimising Alimak operation and introducing long hole open stoping

Improvement initiatives – 2020 plan

24 Level – Operating changes

- Reduce Alimak stope height
- Use of a narrower Alimak platform to target reduced dilution

17 Level – Introducing a new level

- Establish long hole stope mining methodology on a new operating level

Targeted benefits of operational change

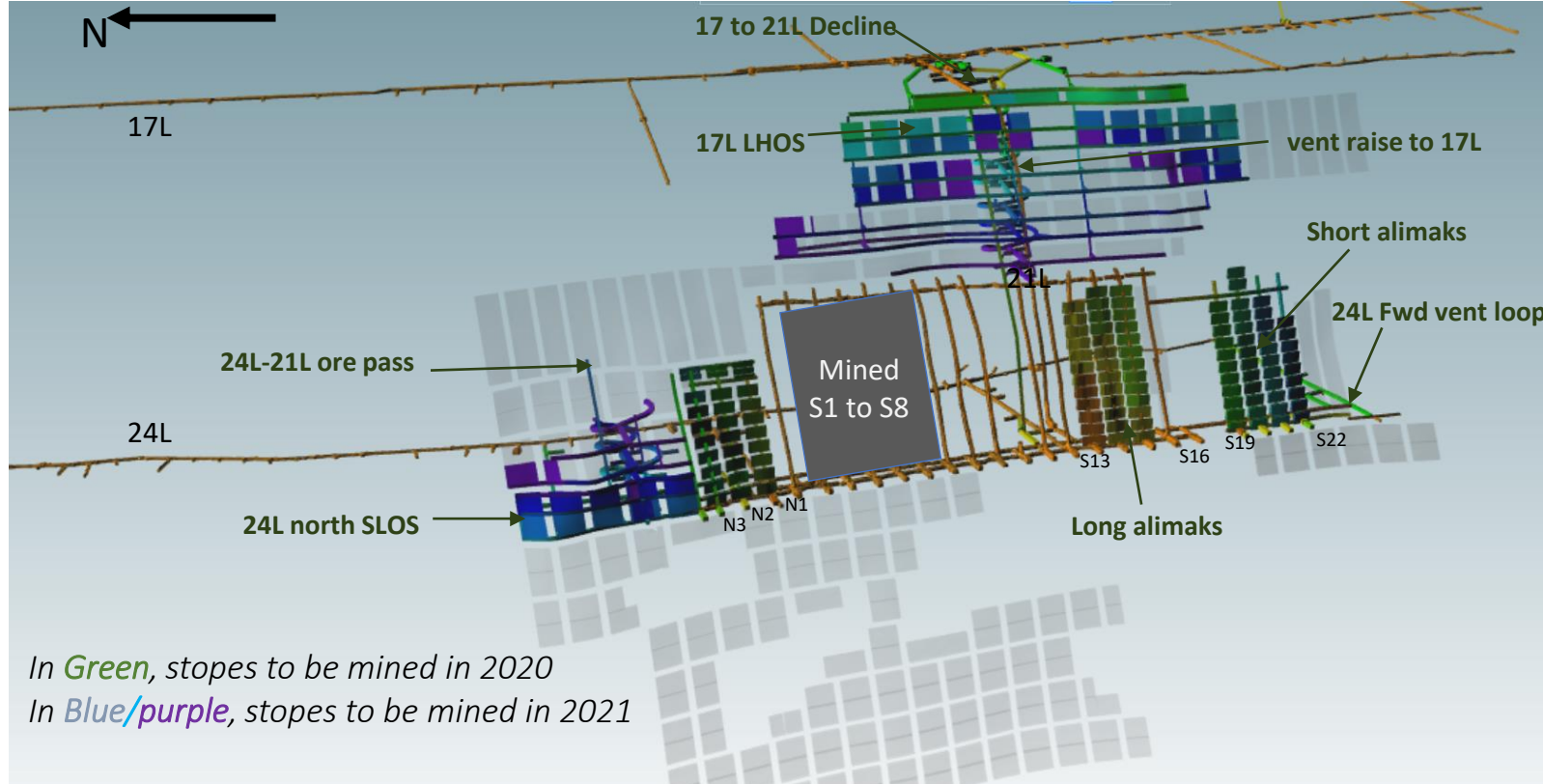
Reduced mining execution risk

Reduced dilution

Faster Alimak stope cycle time

Increase flexibility and ore volumes

Prestea Underground - Planned mining areas to Q4 2021



Q1 2020 progress update

24 Level – Existing Alimak operation

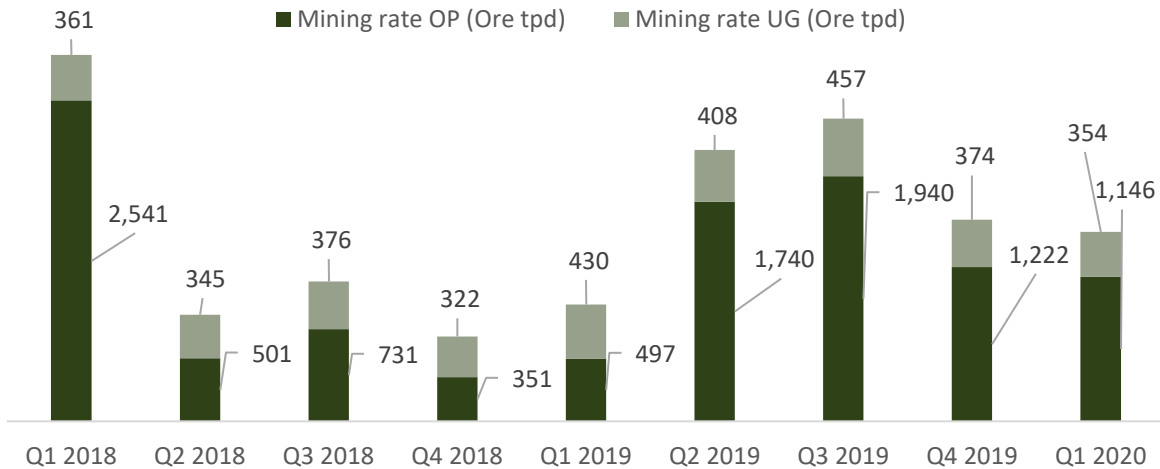
- Mining from S13, S14 and S15 in Q1 2020
- Volumes constrained by ore availability
- The first optimised stopes (S16, S19 and N1) are currently being developed and expected to transition into production later in 2020

17 Level – Introducing long hole open stoping

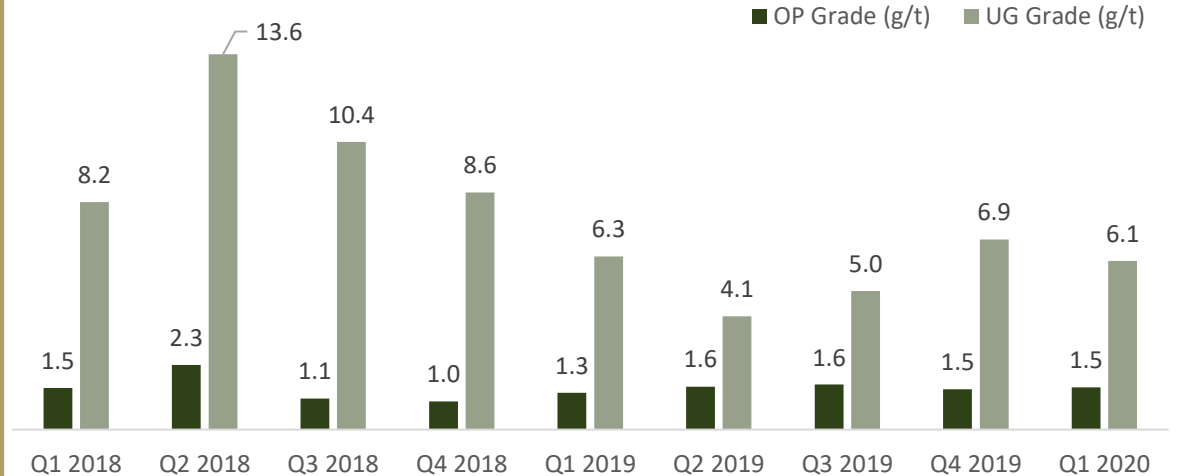
- Ore drives being developed in Q1 2020
- Ventilation and maintenance workshop being established
- There has been COVID-19 related delays to certain drilling and mining equipment which may result in a delay to stoping activities
- The first stope was planned to come online late in Q3 2020, this may move into Q4 2020

PRESTEA PRODUCTION SCORECARD – Performance tracking

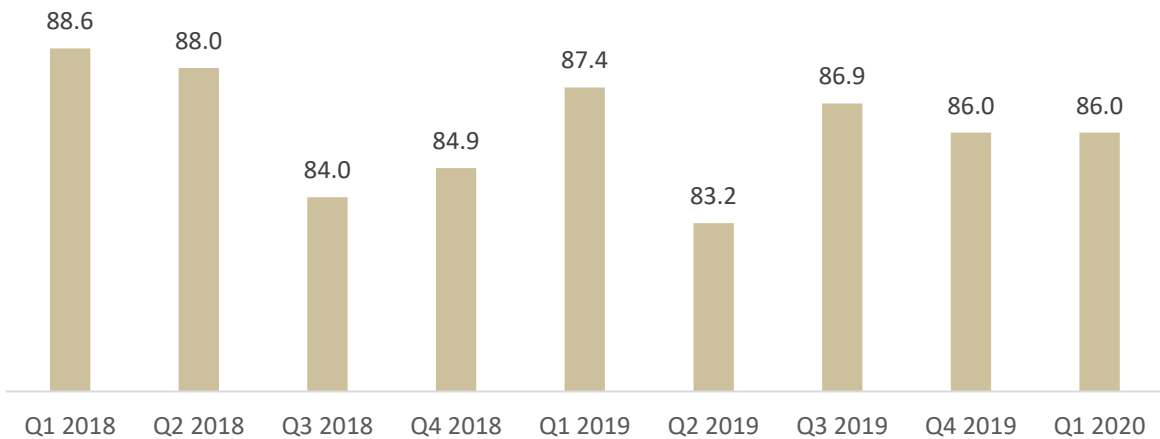
Mining Rate (ore tpd) – UG mining rates constrained by ore availability



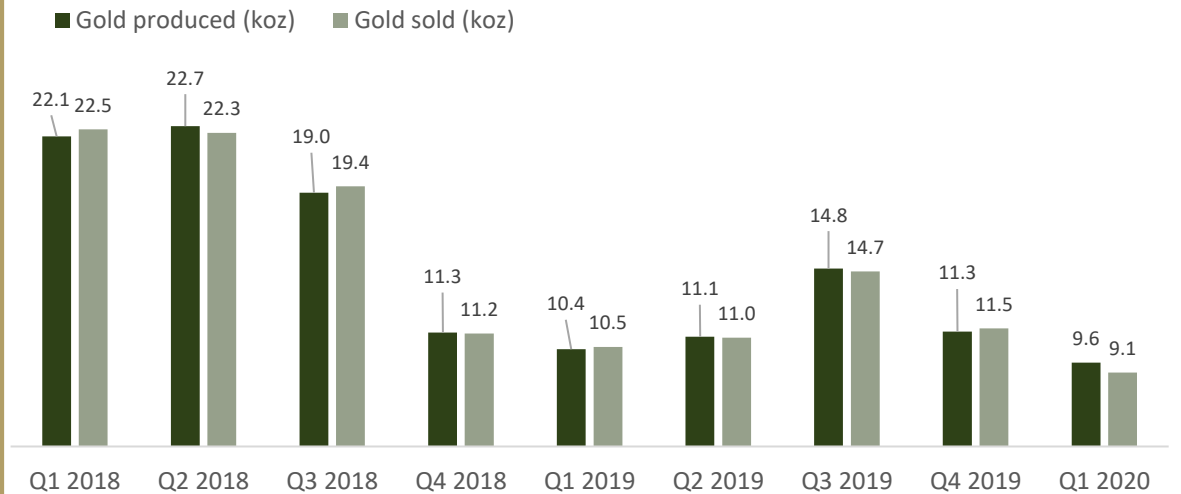
Grade (g/t) – Underground grade realized below reserve grade



Recovery (%) – Consistent with recent performance

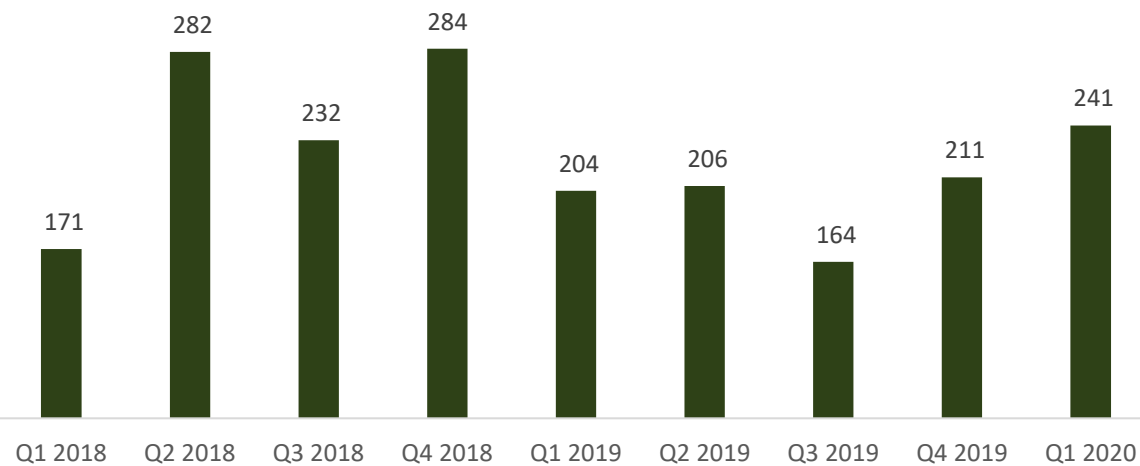


Production (koz) – Ore volumes and dilution control key to increasing production

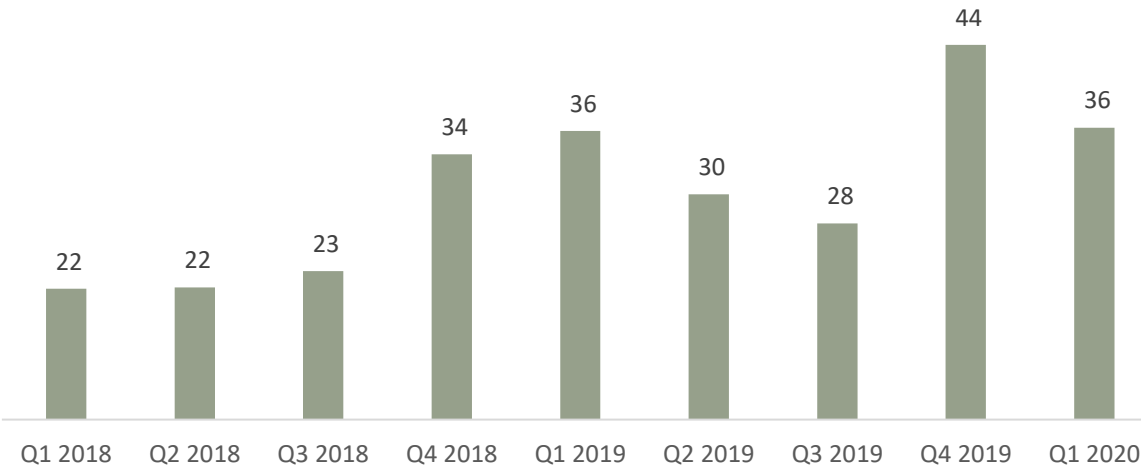


PRESTEA COST SCORECARD – Performance tracking

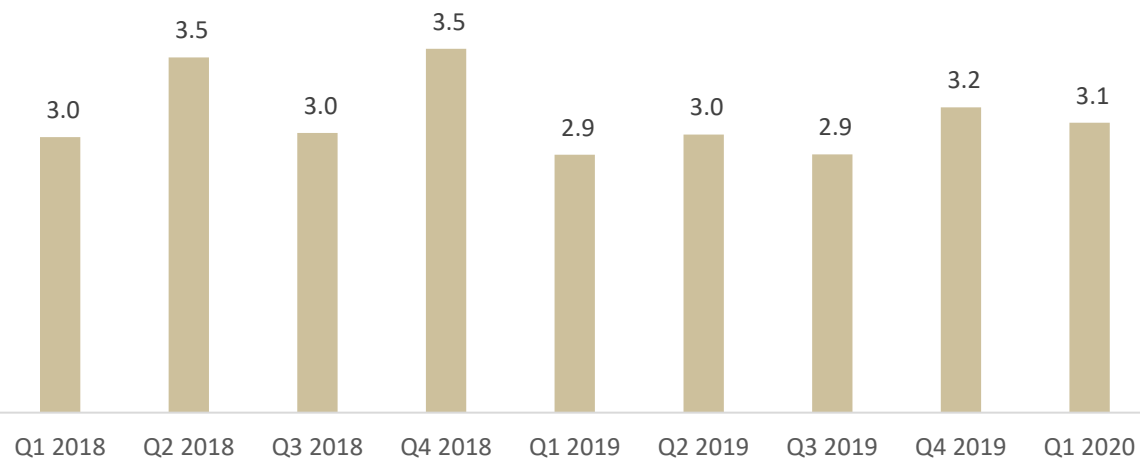
UG Mining Costs (\$/t ore mined) – Anticipated to reduce as ore volumes increase



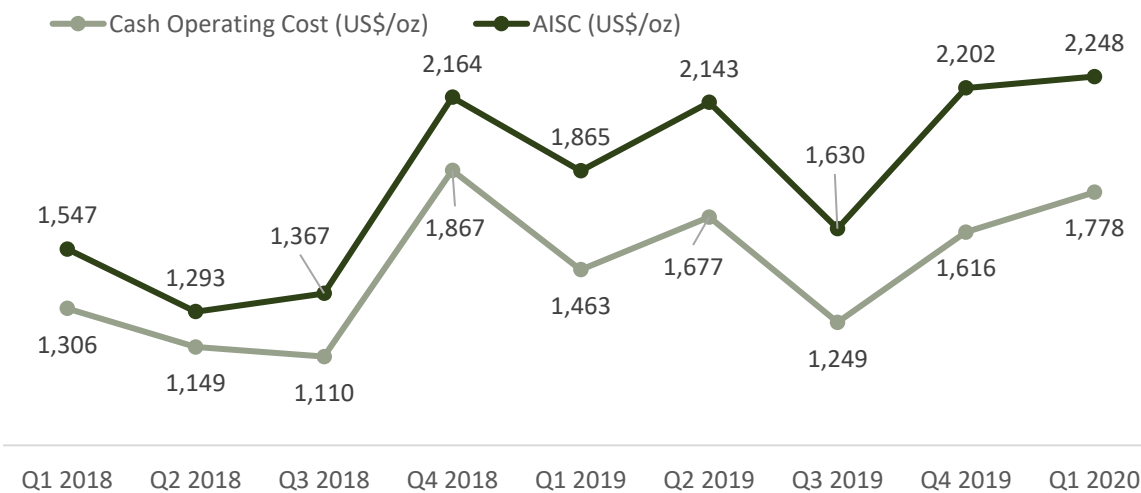
Processing Costs (\$/t) – Q4 2019 and Q1 2020 impacted by ore availability



Site G&A Cost (\$m) – Q1 2020 in line with recent performance



Cash operating cost & AISC¹ (\$/oz sold) – Q1 2020 AISC \$2,210/oz of production



1. See note on slide 2 regarding Non-GAAP Financial Measures.

The image shows a large industrial casting machine at the top, pouring molten metal into a series of molds arranged in a line. The metal is bright orange-yellow, indicating high temperature. The background is a dark, industrial setting with various mechanical parts and structures. The text "FINANCIAL RESULTS" is overlaid in white, bold, sans-serif font on the left side of the image.

FINANCIAL RESULTS

Q1 2020 CONSOLIDATED FINANCIAL RESULTS

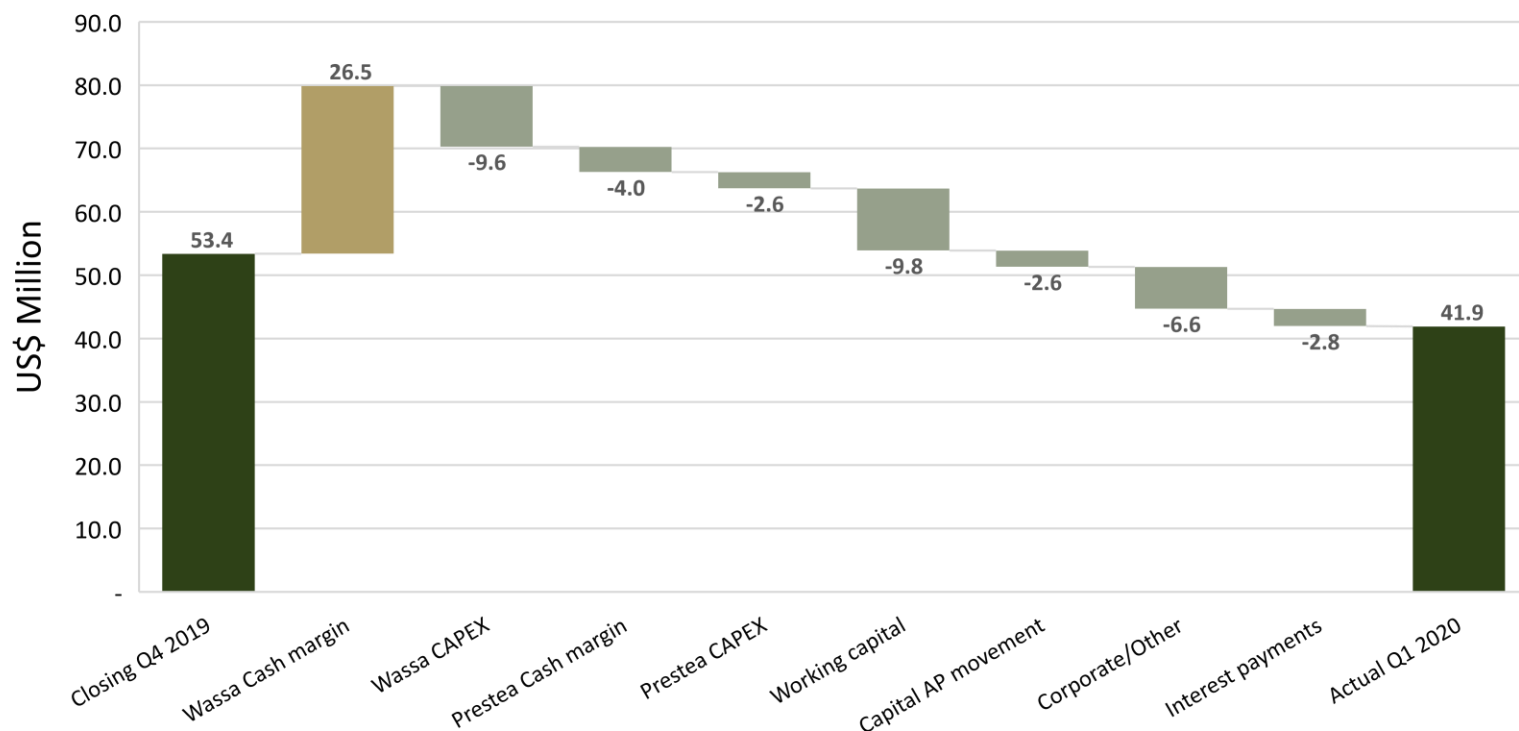
		Q1 2020	Q1 2019	YoY ¹ % change	Q4 2019	QoQ ¹ % change
Total gold produced	koz	50.0	53.3	(6)%	52.7	(5)%
Total gold sold	koz	45.6	53.5	(15)%	53.4	(15)%
All-in Sustaining Costs per Ounce Sold	\$/oz	1,201	976	23%	1,227	(2)%
All-in Sustaining Costs per Ounce Produced	\$/oz	1,165	975	19%	1,244	(7)%
Average realized gold price	\$/oz	1,477	1,257	18%	1,410	5%
Gold revenues	\$m	67.4	67.3	—	66.1	2%
EBITDA²	\$m	18.5	15.0	24%	(54.6)	(134)%
Loss/(gain) on fair value of financial instruments	\$m	(4.1)	3.9	(205)%	3.0	(236)%
Other (income)/expense	\$m	2.7	(0.3)	(952)%	11.0	(75)%
Impairment charges	\$m	-	-	-	56.8	(100)%
Adj. EBITDA²	\$m	17.2	18.5	(7)%	16.2	6%
Adj. income/(loss) per share (restated) ²	\$/share	(0.01)	0.02	(150)%	(0.03)	(67)%
Adj. income/(loss) per share (prior accounting treatment) ²	\$/share	0.07	0.09	(22)%	0.05	40%

- Gold revenues benefited from higher realized price (18% on Q1 19 and 5% on Q4 19) offset by lower production volumes and shipment deferral.
- Gold sold 4.4koz lower than production due to change in scheduling following COVID-19 subsequently sold in the first week of April
 - \$6.2 million impact on impact on revenues and cash
 - \$2.5 million impact on EBITDA
 - \$3.4 million increase in working capital
- Adverse impact on AISC as reflected in the difference between AISC per ounce sold and produced

- Adjusted loss per share calculation reviewed by management to exclude share-based costs and total income tax expenditure as adjusting entries – prior year periods restated for updated Non-GAAP measure
- Quarter marked by higher Corporate G&A relating to non-recurring relocation costs of \$0.9 million – the relocation of the Corporate office was completed at end of April 2020

1. Year on Year ("YoY"), Quarter on Quarter ("QoQ")
 2. See note on slide 2 regarding Non-GAAP Financial Measures.

NET CASH FLOW BRIDGE – Q1 2020 net cash movement and financial position



Total cash outflow \$11.5m in Q1 2020

- Cash reduction primarily due to working capital changes and higher Corporate G&A charges
- Operating cashflow before working capital movements of \$13.4m
- Total capital expenditure of \$12.5m

Working capital outflow of \$9.8m and \$2.6m outflow in capex payables

- \$5.2m build-up in inventories relating to finished gold on hand and supplies
- Total AP outflow of \$3.7m including capital payable as a roll over from Q4 2019
- Income tax payment of \$2.3m for Wassa

Corporate and other costs

- Elevated by non-recurring charges of \$0.9m, Other charges of \$0.6m and Corporate capex of \$0.3m for the office relocation

		Q1 2020	Q1 2019	Q4 2019
Cash position at end of period	\$m	41.9	81.9	53.4
Adjusted cash position – Adjusted for the impact of deferred gold sale ¹	\$m	48.1	-	-
Macquarie credit facility	\$m	57.7	-	57.4
August 2021 Convertible Debentures	\$m	47.6	45.2	47.0
Finance leases	\$m	2.0	1.8	2.4
Ecobank facilities	\$m	-	35.3	-
Vendor agreements	\$m	-	17.0	-
Gross debt	\$m	107.3	99.3	106.8
Net Debt	\$m	65.4	17.4	53.4
Adjusted Net Debt – Adjusted for the impact of deferred gold sale ¹	\$m	59.2	-	-

Cash and net debt

- Cash reduced by \$11.5m during Q1
- Cash and Net debt adjusted for impact of delayed shipment amounts to \$48.1m and \$59.2m respectively¹
- Macquarie principal repayment due from June at \$5m per quarter
- Hedging - Zero cost gold collars added during the quarter

1. See note on slide 2 regarding Non-GAAP Financial Measures.



EXPLORATION & GEOLOGY

EXPLORATION – Redefining the exploration strategy



EXPLORATION FOCUS – Shifting to near term impact

EXPLORATION GUIDANCE

\$

\$6.2m

Exploration budget

\$3.5m capitalised & \$2.7m expensed

EXPLORATION STRATEGY

- Wassa mineralisation system now extends over 2.5km along strike & 1.5km depth and still open
- Wassa focus now on infill drilling of Inferred resource from underground positions
- Regional programs to focus on targets along the existing haul road to the south
- Identifying attractive land packages for acquisition

EXPLORATION OBJECTIVES – 2020

Mineral Reserve and Resource update – Completed Q1 2020



Drill Wassa footwall zone – Commenced Q1 2020



Father Brown desktop mine design work – Starting Q2 2020



Regional target generation and drilling – On Hold



Mineral Reserves & Resources – Wassa underground resource continues to grow

Mineral Reserve & Resource update

Total Reserves	Total Measured and Indicated Resources	Total Inferred Resources
1.7Moz	6.3Moz	8.1Moz

Wassa Underground Proven Reserve

228koz | 87% growth

Reflects improved geological understanding of 2020 & 2021 mining areas

Wassa Underground Measured & Indicated Resource

2Moz | 18% growth

Infill drilling improved geological confidence in ore body

Wassa Underground Inferred Resource

7Moz | 19% growth

Southern extensions of ore body continued to deliver additional Inferred Resource

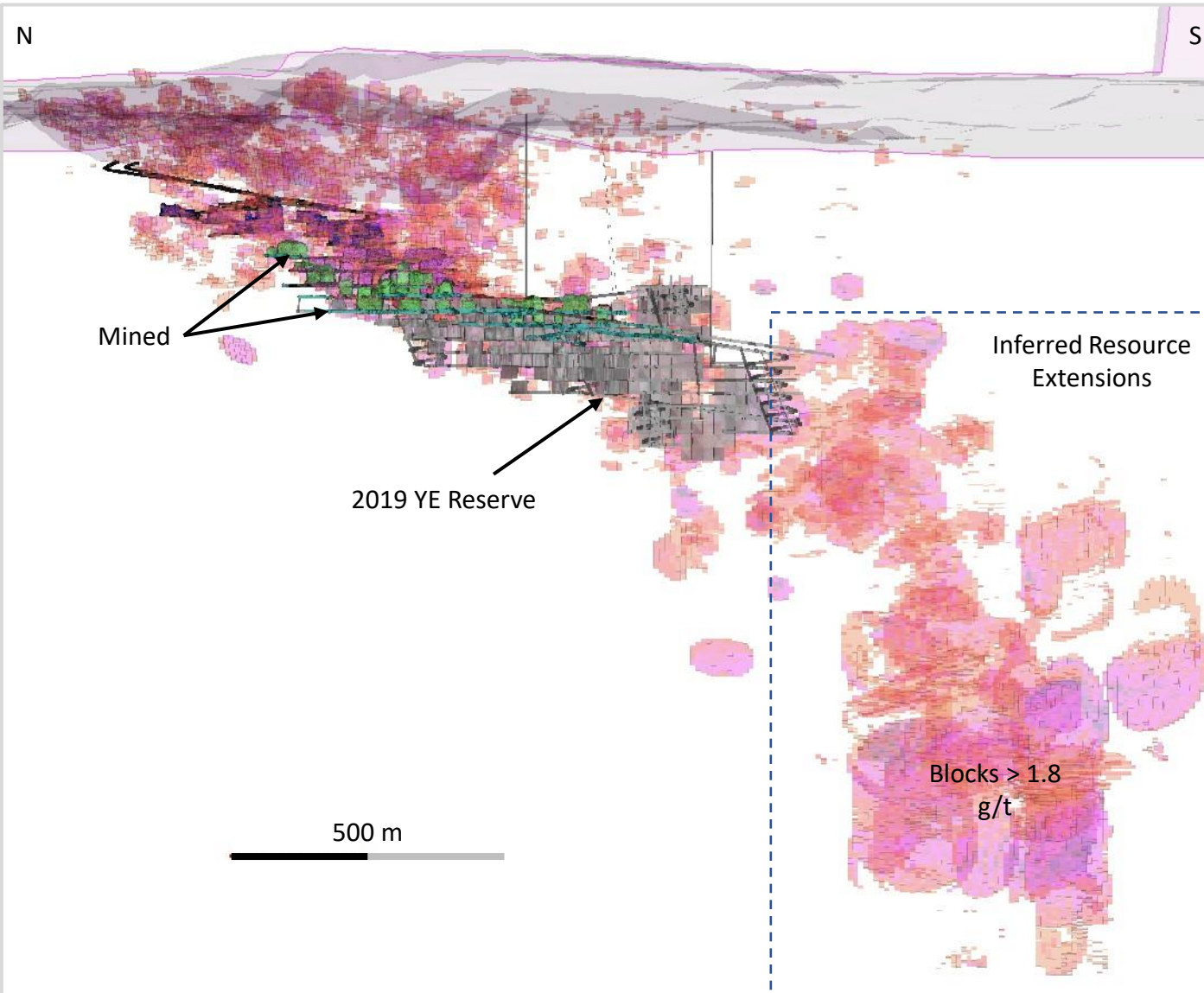
Mineral Reserve Estimate – December 31, 2019

	Proven Mineral Reserve			Probable Mineral Reserve			Total Mineral Reserve		
	Mt	g/t	koz	Mt	g/t	koz	Mt	g/t	koz
Wassa Open Pit	-	-	-	9.9	1.57	500	9.9	1.57	500
Wassa Underground	1.7	4.11	228	5.7	3.61	661	7.4	3.72	889
Stockpiles	1.1	0.62	21	-	-	-	1.1	0.62	21
Subtotal Wassa	2.8	2.78	249	15.6	2.31	1,160	18.4	2.38	1,410
Prestea Open Pit	-	-	-	-	-	-	-	-	-
Prestea Underground	-	-	-	0.9	11.0	302	0.9	11.0	302
Subtotal Prestea	-	-	-	0.9	11.0	302	0.9	11.0	302
GSR Total	2.8	2.78	249	16.5	2.76	1,463	19.3	2.76	1,712

Mineral Resource Estimate – December 31, 2019

	Measured & Indicated Resource			Inferred Resource		
	Mt	g/t	koz	Mt	g/t	koz
Wassa Open Pit	29.2	1.29	1,206	0.6	1.31	26
Wassa Underground	16.2	3.89	2,027	58.8	3.75	7,097
Father Brown Adoikrom Underground	0.9	8.67	254	1.9	6.07	367
Wassa Other	2.5	2.32	187	0.4	2.11	29
Subtotal Wassa	48.8	2.34	3,675	61.7	3.79	7,518
Bogoso / Prestea (Refractory)	19.8	2.76	1,760	0.8	2.69	71
Mampon	0.1	1.61	5	0.02	1.66	1
Prestea South	1.7	2.08	114	0.07	1.87	4
Prestea Underground	1.1	17.15	626	1.6	9.54	486
Bogoso / Prestea (Other)	2.2	1.68	118	0.7	1.47	32
Subtotal Bogoso / Prestea	24.9	3.27	2,624	3.2	5.8	594
GSR Total	73.7	2.66	6,299	64.9	3.89	8,113

EXPLORATION – Improving the understanding of the Southern Extensions



7Moz INFERRED RESOURCE – Infill Drilling

Improving geological understanding

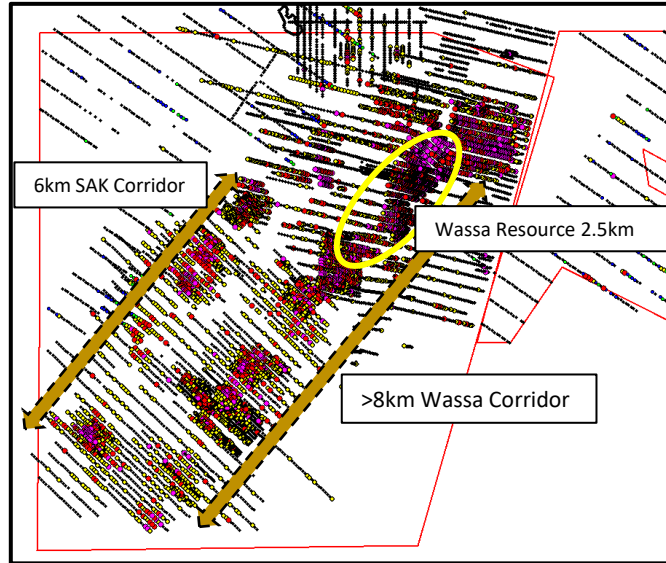
- Targeting further improvements of the geological confidence and understanding of the southern extension at Wassa
- Ongoing investment to **increase drill density** to determine optimal stope sequencing
- Target 12 months of definition drilling ahead of 2021 mining

FOOTWALL ZONE – A Parallel Underground Target

Testing for mineralization in the footwall

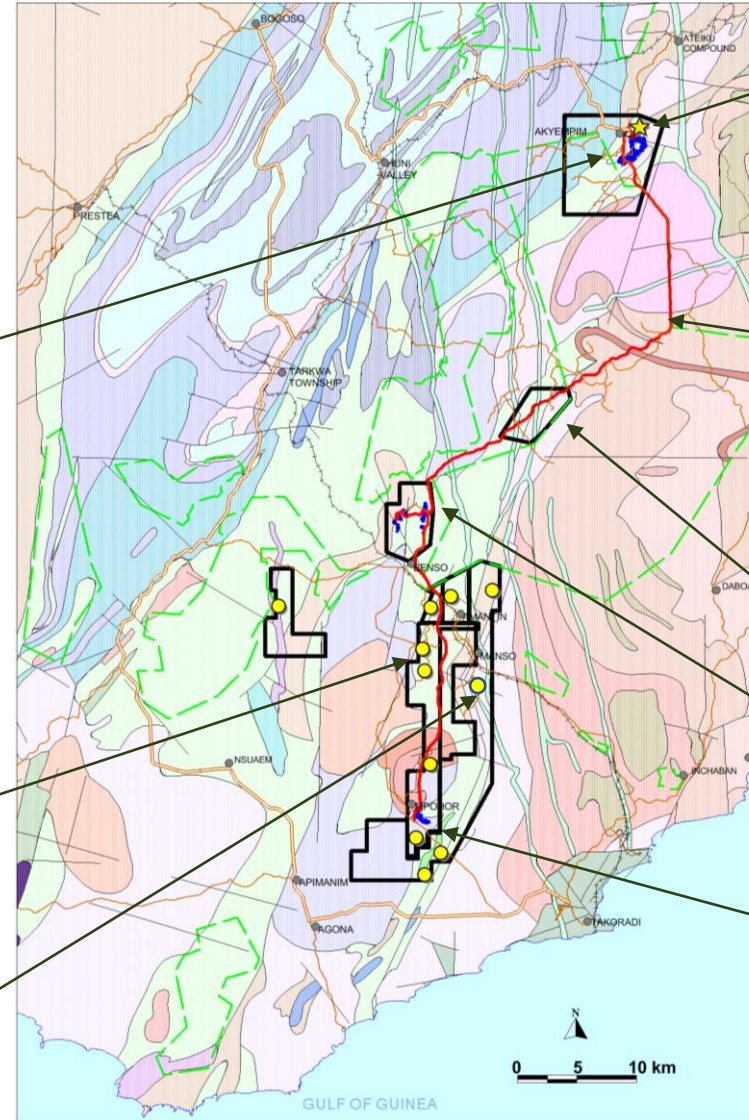
- Two holes drilled in Q1 2020
- Intersected projections of the mineralized structures with significant alteration
- Generally showed anomalous gold values, insufficient value to be economically viable
- Drilling results undergoing review
- Will assess whether further drilling is warranted later this year

WASSA REGIONAL EXPLORATION – Prospective targets along existing haul road



Abada & Apotunso Prospects
 High grade quartz vein & shear
 Historical intercepts include 8 m at 5.48 g/t

Manso North (Angu)
 3-5km long gold anomaly (>100ppb)
 Historical testing – Auger drilling



Wassa Plant
 Capacity: 7,800 tpd
 Current utilisation: ~4,000 tpd

Existing GSR Haul Road
 85 km long from Wassa to Father Brown



Chichiwelli
 Indicated Resources: 52 koz
 (850 kt at 1.9 g/t)

Benso
 Indicated Resources: 112 koz (1,200 kt at 2.9 g/t)
 Under pit intercept 15.5 m at 6.2 g/t

Father Brown
 Indicated Resources: 238 koz
 (982 kt at 7.5 g/t)



OUTLOOK – Creating a leading African gold producer

Long term vision & Principles

- **Strategy** | Refocus the company under the new management team to pursue the growth and optimisation of the existing portfolio of assets and look to business development for further growth.
- **Vision** | The creation of a sustainable mid-tier gold miner operating across Africa.
- **Core principles** | To safely and sustainably generate returns for all stakeholders from a portfolio of African gold mines. New management is focused on creating a Golden Star culture and behaviours that can be rolled out across an enlarged portfolio of assets.

Organic growth & Optimisation

- **Wassa** | A long life gold mine with very significant growth potential. The underground mine is currently generating c.4kt/day with plant capacity of c.8kt/day. Production increases expected to come with a low level of capital intensity.
- **Wassa exploration & growth** | Potential for reserve growth through depth extension toward the south and in the footwall to the main mining areas. Targeted drilling started in 2019 and continues through 2020.
- **Prestea optimisation** | The focus is currently on near-term operational improvements, while also working through internal studies for the longer-term mine plans. These plans will introduce the longhole mining methodology to a new level in the mine during 2020 and will optimize the Alimak stope heights to reduce dilution and improve cycle time.

External growth

- **Approach** | Disciplined approach to growth opportunities, targeting new assets that deliver immediate cash flow or near-term cash flow.
- **Diversification** | The Company will remain focussed on gold but will look to add new assets across Africa to improve the geographical diversification of the portfolio.

WASSA GUIDANCE



155-165koz
Production Guidance



\$620-660/oz
Cash cost
\$930-990/oz
AISC¹



\$42-46m
Capex Guidance

PRESTEA GUIDANCE



40-45koz
Production Guidance



\$1,400-1,550/oz
Cash cost
\$1,650-1,850/oz
AISC¹



\$9-10.5m
Capex Guidance

GROUP GUIDANCE - 2020



195-210koz
Production Guidance



\$790-850/oz
Cash cost
\$1,080-1,180/oz
AISC Guidance¹



\$55-60m
Capex Guidance

1. See note on slide 2 regarding Non-GAAP Financial Measures.

THANK YOU – Q&A

CONTACT US

Michael Stoner

Investor Relations & Business Development

+44 020 8167 7000

investor@gsr.com

NYSE American: **GSS** | TSX: **GSC**

