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Barberton Mines

- Three underground gold mines: Fairview Mine, Sheba Mine and Consort Mine
- One tailings retreatment operation: BTRP

HIGHLIGHTS



Safety

No fatalities were reported

LTIFR (per million man hours) improved to 1.03 (2021: 1.07)

TRIFR (per million man hours) regressed slightly to 7.10 (2021: 6.21)

Barberton Mines achieved **2 million fatality-free shifts** on 10 May 2022

321 **COVID-19 cumulative cases** were reported (2021: 180)



Sales and production

Gold sales and production decreased by 7.5% to 95,298oz (2021: 103,065oz)



Capital expenditure

Total capital expenditure increased by 4.8% to US\$28.4 million (2021: US\$27.1 million), comprising:

- **sustaining capital** expenditure of US\$18.9 million (2021: US\$14.6 million)
- **expansion capital** expenditure of US\$9.5 million (2021: US\$12.5 million)



Cost of production

AISC[®] per ounce increased by 14.4% to US\$1,490/oz (2021: US\$1,303/oz)

Mining operations' AISC[®] per ounce increased by 19.2% to US\$1,645/oz (2021: US\$1,380/oz). AISC[®] was impacted by lower gold production at Sheba Mine and Consort Mine, which is being addressed by turnaround plans

BTRP's AISC[®] per ounce decreased by 5.8% to US\$891/oz (2021: US\$946/oz) as a result of improved recoveries

Production costs increased by 6.4% to US\$115.1 million (2021: US\$108.2 million), including:

- **engineering and technical service costs** increased by 36.7% to US\$10.8 million (2021: US\$7.9 million)
- **electricity costs** increased by 18.3% to US\$14.2 million (2021: US\$12.0 million)
- **mining and processing costs** increased by 2.8% to US\$33.2 million (2021: US\$32.3 million)
- **salaries and wages** increased by 2.9% to US\$46.2 million (2021: US\$44.9 million)

OVERVIEW OF OPERATIONS

The Fairview, Sheba and Consort underground operations constitute the Group's Barberton Mines complex which has been operating for over 130 years. Sheba Mine is recognised as one of the oldest working gold mines in the world and started its operations in 1885.

These flagship underground mines are high-grade operations that can produce approximately 80,000oz of gold per year, with an excellent long-term safety record.

Barberton Mines also includes the BTRP surface retreatment operation which is located within Fairview Mine's mining right footprint area. The BTRP was designed to treat 100,000t of tailings per month and adds low-cost and low-risk ounces to our production profile.

BARBERTON MINES' LIFE-OF-MINE IS ESTIMATED AT 20 YEARS PER THE REPORTED MINERAL RESERVES

Barberton Mines' mining rights for Fairview, Sheba and Consort Mines were renewed by the DMRE in June 2021 for a period of 30 years and are valid until June 2051.

Barberton Mines sustained its improved flexibility at the Fairview operation during the past year through accelerated underground development programmes at the high-grade MRC and Rossiter orebodies.

Five large high-grade platforms (256, 257, 258, 259 and 358 Platforms) are currently available for mining the MRC orebody and three platforms within the Rossiter orebody are also available. Fairview Mine produced 48,097oz (2021: 45,686oz) of gold.

The design of the subvertical shaft project at Fairview Mine is progressing as planned and this design should be completed over a period of two years, after which construction of the shaft can commence. It is expected that the subvertical shaft could contribute additional production of up to 10,000oz per annum through the increase in available hoisting capacity below 42 Level (3 Decline). During the evaluation phase of the subvertical shaft project, a 4 Decline will be developed to ensure effective down-dip production, by reducing equipment tramming distances and alleviating mechanised equipment congestion. Extension of the existing refrigeration infrastructure is also planned through the development of a pipe-raise to enable cooling as mining progresses at depth.

Fairview Mine is also the birthplace of BIOX®, an environmentally friendly process of releasing gold associated with sulphide (refractory) minerals, using micro-organisms that perform this process naturally and with excellent recoveries, consistently in the region of 98.8%. The BIOX® plant was commissioned in 1988 and is still used as the training facility for BIOX® plants globally.

At Consort Mine's PC Shaft 42 Level, the extraction of the first target block was successfully completed while access to the second block is currently underway. This project contributed significantly to Barberton Mines' underground production in the prior financial year. As a result of this performance and expected continuation of the orebody at depth, a cemented backfill grout plant was commissioned at Consort Mine to assist with supporting the poor ground conditions associated with this high-grade, highly altered schistose orebody. The grout plant will also enhance the volume to be extracted from the orebody. Secondary support on the strike and down-dip extensions of the orebody is being installed, while the final cuts of the 42 Level block are being extracted at a reduced rate due to the unfavourable ground conditions. It is envisaged that the down-dip extension of the orebody could be accessed during the first half of the 2023 financial year. Furthermore, additional high-grade mineralisation was also identified on the PC Shaft's 20 Level, where exploration and establishment activities for mining are underway.

Mining of the Thomas and Verster orebodies at Sheba Mine has assisted with maintaining Sheba Mine's production profile for the 2022 financial year. The focus has now shifted to accessing high-grade cross-fractures within the ZK orebody on 37 Level while developing down-dip to 38 Level.

The BTRP has produced 19,560oz (2021: 18,239oz) for the 2022 financial year at an AISC¹ of US\$891/oz (2021: US\$946/oz). The remaining life-of-mine from current tailings sources is estimated at two years. In the coming years, production at the BTRP is expected to be supplemented with ore from Barberton Mines' Royal Sheba orebody, where the extraction of a 10,000t bulk sample is currently in progress. Mining of the Royal Sheba orebody has the potential to increase the BTRP's life by an estimated additional 18 years.

CHALLENGES

The adverse impact on gold production from community unrest and illegal mining remains a challenge. Only six production shifts at Sheba Mine were adversely affected in the current financial year as a result of community protest activities, an improvement from prior years where up to three full production days had been lost. The improvement can be attributed to increased employment opportunities for the local communities created by the Barberton Blueberries project (commissioned in October 2021), enhanced security measures, sustained community engagement and awareness programmes through social media channels and community engagement forum meetings with representative groups.

The Group continues to implement awareness programmes that inform stakeholders about the importance of mining, its contribution to the economy and local communities, as well as the dangers of illegal mining to the sustainability of our operations and the livelihoods of all stakeholders.

¹ Amounts include Evander Mines' surface sources.



Chairlifts at Fairview Mine | Circle: Double boom drill rig at Royal Sheba

Illegal mining continues to adversely affect operations and the safety and security of our employees which, in turn, impacts revenue and related security costs. The Group's risk and security executive continues to introduce new technology, integrated security strategies and joint collaborative efforts with national law enforcement agencies which are bearing tangible results.

The geological variability and complexity of Barberton Mines' greenstone orogenic orebodies also present operational challenges. Greenstone belt orogenic shear zone-hosted gold deposits are characteristically variable in metal content and mineralised extents, along both strike and down-dip. As a result of this variability, the Group continued with its highly intensive exploration programmes to identify additional mining face length of the high-grade platforms in the Fairview MRC and Rossiter orebodies during the financial year. Along with the increase in the available minable faces and strike length of the high-grade panels, the width of the platforms has also been optimised. These enhancements were made without impacting the grade of the ore being extracted from these platforms at Fairview Mine. Refer to **page 12** for more information on Barberton Mines' optimisation initiatives.

A fifth high-grade platform (259) at Fairview Mine's MRC orebody was accessed in April 2022, and development towards the down-dip 260 Platform is progressing according to plan. The availability of these high-grade platforms greatly enhanced the mining flexibility at Fairview and resulted in improved production levels which are expected to be sustained in the coming years.

FOCUS FOR 2023

Our focus remains on the continued exemplary safety performance, delivering quality ounces consistent with our production guidance from Barberton Mines' complex of approximately 100,000oz per annum and advancing value-accretive growth opportunities within our orebodies.

The Group has a demonstrable record of replenishing its Mineral Resources and Mineral Reserves through effective brownfield exploration and is looking at organic growth projects, such as the Royal Sheba project, to further enhance the sustainability and longevity of the Group's operations.

Our primary focus areas for the 2023 financial year are:

- reducing underground unit costs
- optimising the Consort and Sheba Mines
- improving Barberton Mines' infrastructure utilisation by advancing the Royal Sheba project and Project Dibanisa
- extending the Mineral Reserves definition drilling programmes
- identifying additional exploration targets using modern geophysical techniques and following up through exploration drilling
- commissioning the solar PV renewable energy plant that will result in reduced carbon emissions and operating costs, while also ensuring a reliable electricity supply at Barberton Mines.