

for the year ended 30 June

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SUDAN REGION

Block 12 exploration

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Supplement to the integrated annual report for the year ended 30 June 2023

The Group's strategic and growth plans inform a considered evaluation of all its operations and projects. During this process, Mineral Resources and targets are measured against the strategic plan and developed, where feasible, to deliver into the plan.

AIM OF THIS REPORT

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The Pan African Resources (Pan African or the Company or the Group) Mineral Resources and Mineral Reserves report 2023 conforms to the standards determined by the South African Code for Reporting of Mineral Resources and Mineral Reserves (SAMREC Code, 2016 edition) and reports the Group's position on Mineral Resources and Mineral Reserves at 30 June 2023.

This report accompanies Pan African's integrated annual report, including the annual financial statements for the year ended 30 June 2023, and must be read in conjunction with the entire reporting suite of documents. The entire suite of documents is available on our website at www.panafricanresources.com

The Mineral Resources component in this report is reported inclusive of Mineral Reserves, unless otherwise stated. Information in this report is presented by operation, mine or project on an attributable basis.

Rounding of numbers in this document may result in minor computational discrepancies.

OUR REPORTING SUITE



Our **integrated annual report** includes our annual financial statements and is available on our website at:

https://www.panafricanresources.com/investors/financial-reports/



Our provisional summarised audited results are available on our website at:

https://www.panafricanresources.com/investors/financial-reports/



Our environmental, social and governance report contains additional non-financial disclosures and is available on our website at:

https://www.panafricanresources.com/investors/gri-and-sustainability/



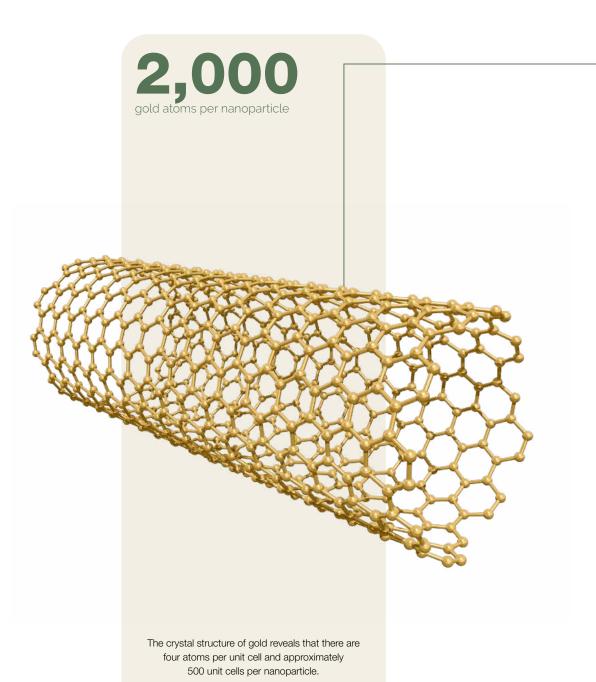
Our Task Force on Climate-related Financial Disclosures report is available on our website at:

https://www.panafricanresources.com/investors/gri-and-sustainability/



Our notice of annual general meeting will be available on our website on 31 October at:

https://www.panafricanresources.com/investors/shareholder-announcements/



Headline numbers - Group overview Pan African's operational footprint 2023 in review Looking towards 2024 and beyond Competent person Corporate governance reporting code Assessment and reporting in compliance with the SAMREC Code Assurance of Mineral Resources and Mineral Reserves The Mineral Resources management cycle The mine planning cycle Group Mineral Resources tabulation Group Mineral Reserves tabulation Exploration and reserve delineation drilling Organic growth Risks to the estimated Mineral Resources and Mineral Reserves

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OUR MINERAL RESOURCES AND MINERAL RESERVES

Pan African is a sustainable, safe, high-margin and long-life gold producer.

OUR MINERAL RESOURCES AND MINERAL RESERVES

HEADLINE NUMBERS - GROUP OVERVIEW

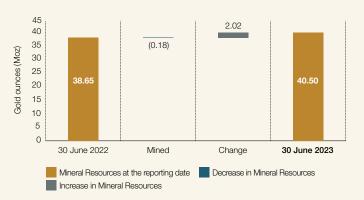
The estimated Mineral Resources and Mineral Reserves for the Group are reported according to the guidelines of the SAMREC Code. Estimated Mineral Resources and Mineral Reserves exclude any Exploration Targets, for which no Mineral Resources have been reported, and represent the attributable constituent for Pan African. All estimated Mineral Resources include that portion of the Mineral Resources that was converted to Mineral Reserves by applying modifying factors and a mine plan to the economical blocks.

Pan African's attributable gold Mineral Resources and Mineral Reserves at 30 June 2023 are tabled below. Mineral Reserves are reported inclusive of diluting and contaminating material delivered to the respective metallurgical plant for beneficiation and treatment.

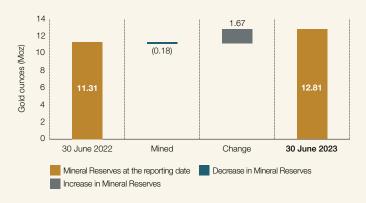
	Estimated Mine	eral Resources		Estimated Min	eral Reserves	
Category	At 30 June 2023 30 June 2		Category	At 30 June 2023	At 30 June 2022	
Total	40.5Moz Au	38.7Moz Au	Total	12.8Moz Au	11.3Moz Au	
Inferred Indicated	14.9Moz Au 22.1Moz Au	14.7Moz Au 20.2Moz Au	Probable	11.5Moz Au	9.7Moz Au	
Measured	3.5Moz Au	3.7Moz Au	Proved	1.3Moz Au	1.6Moz Au	

Any discrepancies in totals are due to rounding. All estimated Mineral Resources and Mineral Reserves reported are within the Group's existing mining rights or prospecting rights.

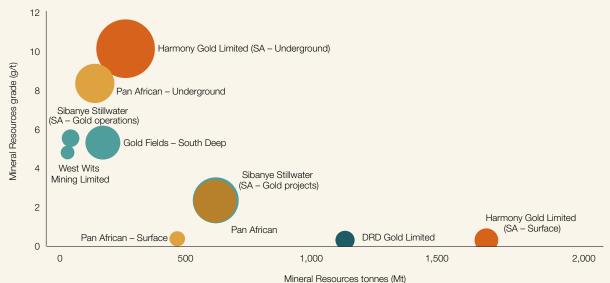
Estimated Mineral Resources reconciliation



Estimated Mineral Reserves reconciliation



Pan African compared with other South African gold miners¹



DRD Gold's Mineral Resources as declared in the DRD Gold 2022 annual integrated report.

Gold Fields' South Deep Mineral Resources as declared in the Gold Fields Mineral Resources and Mineral Reserves supplement to the integrated annual report 2022.

Harmony Gold's Mineral Resources as declared in the Harmony Gold Mineral Resources and Mineral Reserves report at 30 June 2022.

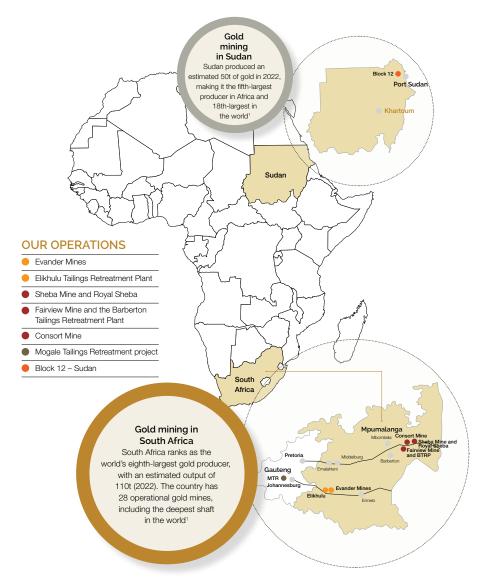
Sibanye Stillwater's Mineral Resources as declared in the Sibanye Stillwater Mineral Resources and Mineral Reserves report 2022 for the gold operations only, and includes DRD Gold's operations' Mineral Resources attributable to Sibanye Stillwater at 50.1%.

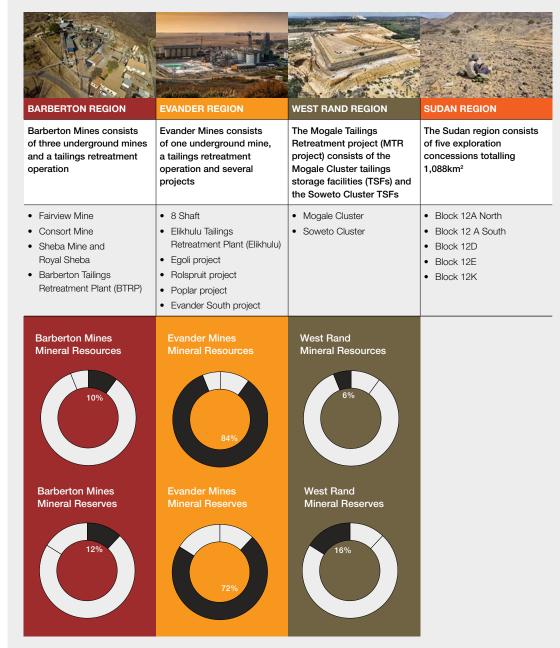
West Wits Mining's Mineral Resources as declared in the West Wits Mining annual report dated 30 June 2022.

¹ Bubble size reflects the ounce constituent of the Mineral Resources.

PAN AFRICAN'S OPERATIONAL FOOTPRINT

A unique combination of African underground and surface mining operations.





2023 IN REVIEW

Some of the Group's achievements for the year ended 30 June 2023 are presented below.



LICENCE TO OPERATE

- Barberton Mines' mining rights are valid until May 2051
- Evander Mines' mining right is valid until April 2038



PROJECTS

- Steady-state production from Evander Mines' 8 Shaft pillar
- Maintained Evander Mines' 8 Shaft phase 1 underground refrigeration plant construction, 24 Level development and the planning of the 25 Level to 26 Level mining phases
- Commissioned Evander Mines' 8 Shaft underground mining on 24 Level
- Commenced with the dewatering of the 3 Decline at Egoli
- Developed additional target blocks at the Consort Mine Prince Consort (PC) Shaft down-dip of the high-grade 42 Level orebody as well as at the Sheba Mine Main Reef Complex (MRC) orebody
- Access gained into an additional high-grade platform (260 Platform) in the MRC orebody at Fairview Mine
- · Completed the bulk sample mining at the Royal Sheba project
- Completed the pump station at the Leslie/Bracken TSF and commenced mining of the TSF at Elikhulu
- Finalised Barberton Mines' 8.75MW solar plant feasibility and funding



MINERAL RESOURCES

- The Group's estimated Mineral Resources base increased by 4.8% year-on-year to 40.5Moz (581.0Mt at 2.2g/t)
- Successful exploration drilling programme at Fairview, Consort and Sheba Mines generated additional Mineral Resources and Mineral Reserves as reported in this document
- · Successful acquisition of the MTR project
- Continued positive gold market economics resulted in limited movement in the reported cut-off grades of the Group's operations and projects



ENVIRONMENTAL, SOCIAL AND GOVERNANCE

- Successful commissioning of Evander Mines' water retreatment plant, with operational performance in line with the feasibility study.
- Commenced construction of Barberton Mines' 8.75MW solar plant in June 2023
- Feasibility studies on an agri-solar project for Evander Mines' and Barberton Mines' solar plants completed
- Successful handover of the Ngwane and Sheba (formerly Kaapvallei) schools to the Department of Basic Education by Barberton Mines
- Sponsorship of youth development and employment in the arts and culture film industry and the launch of a mini-series on the national broadcaster, SABC, communicating social issues on illegal mining, gender-based violence and health
- Sponsorship of sports development and fostering health and wellness among our employees. Our pro-elite running team achieved two gold medals in the prestigious Comrades Marathon in 2023
- Addressed gaps identified in the environmental, social and governance (ESG) readiness review report 2022
- Issued the initial Task Force on Climate-related Financial Disclosures report 2023
- Climate change targets for 2030 as per the Rand Merchant Bank (a division of FirstRand Bank Limited) Sustainability Bond Performance Targets
- Appointed an independent tailings review board consisting of members from independent credible tailings companies as per the Global Industry Standard on Tailings Management (GISTM) requirements
- Commissioned a formal compliance audit to gauge compliance of the TSFs, in relation to the GISTM, taking into consideration the individual ages of the TSFs and the legal framework at the time of construction and periods of operation



OPERATIONAL EXECUTION

- Achieved the revised production guidance of 175,000oz for the year by producing 175,209oz
 - Barberton Mines: 64,586oz
- BTRP: 19,875oz
- Evander Mines: 40.175oz (including toll treatment)
- Elikhulu: 50.573oz



SAFETY

- The Group's lost-time injury frequency rate (LTIFR) regressed from 1.04 to 1.86 per million man hours
- The Group's reportable injury frequency rate (RIFR) regressed from 0.35 to 0.81 per million man hours
- One fatal accident was recorded during the year ended 30 June 2023 (2022: nil)
- Evander Mines' LTIFR regressed to 3.64 (2022: 0.93) and the RIFR to 2.43 (2022: nil) per million man hours
- Evander Mines' (including Elikhulu) LTIFR regressed to 3.09
 (2022: 1.06) and the RIFR to 1.89 (2022: 0.21) per million man hours
- Evander Mines' metallurgical plant achieved 365 days or one year without a lost-time or reportable injury for the year under review
- Barberton Mines' LTIFR regressed to 1.26 (2022: 1.03) and the RIFR has significantly improved to 0.26 (2022: 0.41) per million man hours
- Sheba Mine achieved 11 years' fatality-free shifts
- · Consort Mine achieved 22 years' fatality-free shift
- Initiatives implemented on all sites to improve the Group's safety performance in the coming year



FINANCIAL METRICS

- Capital allocation aligned with the Group's strategic plan
- Managed production cash cost to US\$1,142/oz (2022: US\$1,099/oz)
- Group net debt increased to US\$22 million (2022: US\$13 million)



MINERAL RESERVES

- The Group's estimated Mineral Reserves base increased by 13.2% year-on-year to 12.81Moz (408Mt at 0.9g/t)
- Advancement in the reserve delineation drilling in the Barberton region
- · Optimisation of mining methods and modifying factors
- Additional platforms in the high-grade MRC and Rossiter orebodies at Fairview Mine to increase mining flexibility
- Optimisation of the BTRP scheduling and rehabilitation sources
- Successful acquisition of the MTR project during September 2022

LOOKING TOWARDS 2024 AND BEYOND

The following key Mineral Resources and Mineral Reserves focus areas support the Group's strategic plan and are designed to assist with growth in production, extend the operational life-of-mine plans and increase free cash flows, while reducing operational costs.



BARBERTON REGION

- Extend reserve definition drilling programmes on the MRC, Rossiter Reef and other orebodies
- Identify additional exploration targets via modern non-invasive target-generation techniques
- Increase Mineral Resources and Mineral Reserves base
- · Deliver into the 2024 operational plan and budget
- Advance the Royal Sheba project into mining execution
- Increase the life-of-mine for all operations
- · Advance Fairview Mine's subvertical shaft project
- Increase Fairview Mine's high-grade platform flexibility by accessing the 261 Platform
- Develop the main and cross-fractures on 37 and 38 Levels at Sheba Mine
- Access additional high-grade target blocks at Consort Mine
- Construct and commission the 8.75MW solar plant

EVANDER REGION

- Sustain production from Evander Mines' 8 Shaft pillar
- Expand Evander Mines' 8 Shaft 24 Level refrigeration plant into phase 2
- Ramp up stoping on Evander Mines' 8 Shaft 24 Level
- Advance the Egoli project in a phased manner
- Explore and evaluate additional underground payshoots such as the 5 Decline payshoot
- Advance Evander Mines' 8 Shaft 25 Level to 26 Level project development
- Update the structural model of the down-dip extension of the Kinross payshoot
- Evaluate the access plan for the Rolspruit project
- Extension of the enlarged Kinross TSF
- Complete the feasibility study to expand Evander Mines' solar plant with 12MW or more

WEST RAND REGION

- Commence construction of a 800ktpm tailings retreatment plant
- Compile an integrated mine plan for the Indicated Mineral Resources of the Soweto Cluster to dovetail with the schedule of the Mogale Cluster
- Evaluate the renewable energy solutions

SUDAN REGION

- Following the military-led coup d'état on 25 October 2021, the paramilitary group known as the Rapid Support Forces launched attacks against the ruling military group, the Sudanese Armed Forces, in April 2023. Because of the conflict that ensued thereafter, all expatriate employees of the Group were safely extracted from Sudan. Accordingly, a notice of force majeure on the Group's exploration licences was issued to the Sudanese Mineral Resources Company. All of the Group's in-country assets were placed on care and maintenance to minimise operational expenditure. During August 2023, the Group initiated the return of the expatriate workforce to re-commence with our exploration activities.
- Commence with reverse circulation and diamond drilling on selected targets in Block 12A North and Block 12A South's exploration concessions
- Commence with regional exploration over Block 12E's exploration concession
- Increase resource definition sampling of the Sataib and Wadi Dirut targets in Block 12A South
- Conclude the access agreement to the Block 12K exploration concession
- Resource definition sampling of the Babaline, Mathab and Apalyum targets in Block 12K
- Extensive geochemistry on multiple targets in Block 12A North, Block 12E and Block 12K
- Reporting of maiden estimated Mineral Resources

OTHER

INFORMATION

COMPETENT PERSON

The competent person for Pan African, Hendrik Pretorius, the Group technical services manager, signs off on the estimated Mineral Resources and Mineral Reserves report for the Group

Hendrik is a member of the South African Council for Natural Scientific Professions (SACNASP No. 400051/11 – Management Enterprise Building, Mark Shuttleworth Street, Innovation Hub, Pretoria, South Africa), as well as a member in good standing of the Geological Society of South Africa (GSSA No. 965978 – CSIR Mining Precinct, corner Rustenburg and Carlow Roads, Melville, South Africa). Hendrik has 20 years' experience in economic geology, mineral resource management and mining (surface mining and shallow to ultra-deep underground mining).

He is based at The Firs Building, 2nd Floor, Office 204, corner Cradock and Biermann Avenues, Rosebank, Johannesburg, South Africa. He holds a BSc (Hons) degree in Geology from the University of Johannesburg as well as a Graduate Diploma in Mining Engineering (GDE) from the University of the Witwatersrand.

Hendrik has reviewed and approved the information contained in this document as it pertains to Mineral Resources and Mineral Reserves and has provided written confirmation to Pan African that the information is compliant with the SAMREC Code and, where applicable, the relevant requirements of section 12 of the JSE Limited (JSE) Listings Requirements and Table 1 of the SAMREC Code, and may be published in the form and context in which it appears.

Hendrik is supported by key personnel and task experts for each discipline. Key personnel and their relevant experience are listed in the table below.

Name	Designation	Operation	Professional registration and qualification	Relevant experience
Edmund Thorne	Group mining engineer	Group	Beng (Mining Engineering) Mine managers' certificate of competency: Underground metalliferous mines (SA) First class mine managers' certificate (WA) Blasting certificate South African Institute of Mining and Metallurgy Australasian Institute of Mining and Metallurgy Association of Mine Managers of South Africa	>16 years
Itumeleng Phoshoko	Group projects manager	Group	Association of Mine Managers of South Africa Witwatersrand University Mining Engineers Association BSc (Engineering) Mining Engineering GDE Mining Engineering Mine managers' certificate of competency: Underground metalliferous mines Blasting certificate Advanced Diploma in Organisational Leadership	>19 years
Tyson Mutobvu	Group project geologist	Group	 SACNASP No. 400178/15 BSc (Hons) (Geology) MSc (Mining Engineering) MBA (Business Management) 	>13 years
Barend Steyn	Group mine planning manager	Group	BEng (Mining Engineering) South African Institute of Mining and Metallurgy Australasian Institute of Mining and Metallurgy	>15 years

CORPORATE GOVERNANCE REPORTING CODE Reporting code

The guiding principle in the Mineral Resources and Mineral Reserves report is to ensure integrity, transparency and materiality when informing all stakeholders on the status of the Group's mineral asset base.





Consideration of mining, metallurgical, processing, infrastructure, economic, marketing, legal, environmental, social and governance factors (collectively called the modifying factors)

Pan African is bound by the SAMREC Code, which sets out internationally recognised procedures and standards for the reporting of exploration results, Mineral Resources and Mineral Reserves. The SAMREC Code was developed by the South African Institute of Mining and Metallurgy as the recommended guideline for companies listed on the JSE. Furthermore, the Group also complies with section 12 of the JSE Listings Requirements and the Alternative Investment Market Rules for mining, oil and gas companies of the London Stock Exchange with regard to the reporting of Mineral Resources and Mineral Reserves. The relationship between estimated Mineral Resources and Mineral Reserves, as defined by the SAMREC Code, is presented here.



ASSESSMENT AND REPORTING IN COMPLIANCE WITH THE SAMREC CODE

In order to meet the requirements of the SAMREC Code, the material reported as Mineral Resources should have 'reasonable and realistic prospects for eventual economic extraction'.

Pan African has determined an appropriate cut-off grade, which has been applied to the quantified mineralised orebody. In determining the Mineral Resources and Mineral Reserves cut-off grades, Pan African uses the following metal price deck. Mineral Reserves represent the portion of the Measured and Indicated Mineral Resources above an economic cut-off grade within the life-of-mine plan. These Mineral Reserves have been estimated after considering all modifying factors affecting extraction. A range of disciplines is involved at each operation in the life-of-mine planning process, including geology, surveying, planning, mining design and engineering, rock engineering, metallurgy, financial management, human resources management and environmental management.

	Unit	30 June 2023	30 June 2022
Mineral Resources gold price	US\$/oz	1,663	1,906
	ZAR/kg	950,000	950,000
Mineral Reserves gold price	US\$/oz	1,488	1,706
	ZAR/kg	850,000	850,000
Exchange rate	US\$/ZAR	17.77	15.50

ASSURANCE OF MINERAL RESOURCES AND MINERAL RESERVES

The Group follows a process of internal and external third-party reviews on task-specific practices to add expert assurance regarding the Mineral Resources and Mineral Reserves estimates and compliance with the appropriate reporting codes.

This declaration is centred on information deemed important for the reporting of the estimated Mineral Resources and Mineral Reserves base for Pan African. It further reveals a level of transparency, materiality and completeness in the reporting of the mineral assets within the Group. Pan African's Mineral Resources and Mineral Reserves estimates are continuously reviewed by an internal competent person's team, managed by the corporate technical services team, with regular audits and reviews by external and independent subject experts.

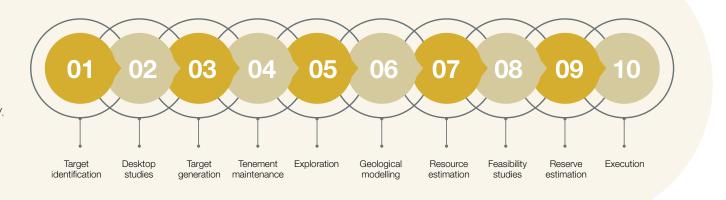
Pan African's Mineral Resources and Mineral Reserves assurance policy stipulates that each material operation and process, with regard to Mineral Resources and Mineral Reserves declaration, be reviewed annually by the internal competent person's team and at least three times in a six-year cycle by independent experts.

The following internal reviews were conducted by the internal competent person's team during the current financial year:

- Monthly reconciliation and production reviews
- · Quarterly sampling, logging and mapping observations
- · Regular assay laboratory audits
- Annual geological modelling assessments
- Annual Mineral Resources estimation (MRE) technique evaluations and audits
- · Annual modifying factor review and sign-off
- · Annual mine design and scheduling analyses
- Annual Mineral Reserves calculation review.

THE MINERAL RESOURCES MANAGEMENT CYCLE

Pan African subjects each mining site or project to the full Mineral Resources management value chain depicted below.



BARBERTON

REGION

THE MINE PLANNING CYCLF

Pan African applies a mine planning cycle to ensure strategically aligned operations and projects that are fit for purpose. The Group has an exceptional asset base and attractive growth opportunities, both in established projects and advanced brownfield resource definition prospects that could be executed into. The Group's strategy is based on global best practice in mineral resource management.





The mine planning cycle is arranged and fixed around a Group strategic plan. This plan is developed by the Group's executive committee and operational committee and is presented to the board of directors for approval.

- The Group strategic plan leads to a considered evaluation of all the operations and projects within the Group's portfolio.
 During this process, orebodies are measured against the strategic plan and developed, where feasible, to deliver into the plan.
- The optimisations applied enable the compilation of a report on the SAMRECcompliant Mineral Resources base from which a life-of-mine design can be obtained.
- The life-of-mine design identifies the manner in which the ore must be economically extracted to comply with the Group's strategic plan for the life of the operation or project.
- Business planning represents a rolling highresolution two-year plan for each operation to guide short-term Mineral Reserves definition drilling, exploration drilling and planning for production.
- A 12-month operational plan, including a high-resolution financial model and cash flow forecast, is derived from the business plan and represents a realistic forecast of the next year's production output for each operation. It is expected that operational changes will occur during a production year, although all efforts are made to plan and engineer around any foreseeable operational challenges.
- The combined operational, business and lifeof-mine plan is based on the reported Mineral Reserves of each operation and/or project.



GROUP MINERAL RESOURCES TABULATION

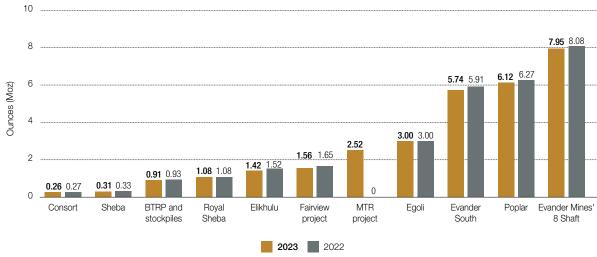
The total Mineral Resources for the Group increased from 38.65Moz (327.9Mt at 3.67g/t) in June 2022 to 40.50Moz (581.0Mt at 2.17g/t) in June 2023 – a gross annual increase of 1.85Moz, or 4.8%.

			Es	stimated Min	eral Resourc	es			
		At 30 Ju	ne 2023			At 30 Jur	ne 2022		
		Contained gold				Containe	Contained gold		
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz	
Measured	61.0	1.77	107.7	3.46	70.5	1.63	115.0	3.70	
Indicated	413.0	1.67	688.6	22.14	178.2	3.53	629.3	20.23	
Measured and Indicated	474.0	1.68	796.3	25.60	248.6	2.99	744.3	23.93	
Inferred	107.0	4.33	463.5	14.90	79.3	5.78	457.9	14.72	
Total	581.0	2.17	1,259.8	40.50	327.9	3.67	1,202.2	38.65	

Estimated Mineral Resources increased mainly as a result of the successful acquisition of the MTR project and changes in the cut-off grade applied at Barberton Mines and the Evander Mines' 8 Shaft areas. The Mineral Resources as reported are depleted for all mining activities taking place during the reporting period. Additional Mineral Resource blocks were reported at Barberton Mines' Fairview operation.

Changes in the cut-off grade are a result of the higher production cost used in the cut-off grade estimations relative to the previous declarations whereas the gold price assumed remained constant (June 2023: ZAR950,000/kg Au – June 2022: ZAR950,000/kg Au).

Attributable Mineral Resources





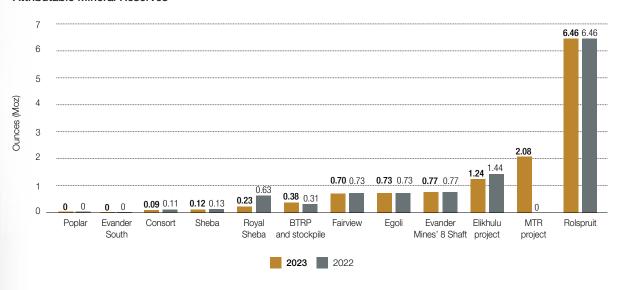
GROUP MINERAL RESERVES TABULATION

Pan African's estimated Mineral Reserves increased to 12.81Moz (408.3Mt at 0.90g/t) at 30 June 2023 post mining depletion of 0.18Moz relative to 11.31Moz (209.7Mt at 1.68g/t) at 30 June 2022 – a gross annual increase of 1.49Moz, or 13.2%. Mineral Reserves are reported inclusive of diluting and contaminating material delivered to the relevant metallurgical plant for treatment and beneficiation.

			E	stimated Mir	neral Reserve	es						
		ne 2023			At 30 Jun	ne 2022						
		Contained gold				Containe	Contained gold					
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz				
Proved	42.6	0.97	41.3	1.33	58.2	0.86	50.1	1.61				
Probable	365.7	0.89	357.0	11.48	151.5	1.99	301.9	9.70				
Total	408.3	0.90	398.35	12.81	209.7	1.68	352.0	11.31				

Increases in the Mineral Reserves were observed for Barberton Mines' surface marginal-grade stockpiles and as a result of the successful acquisition of the MTR project. Marginal decreases, mainly due to mining depletion, are evident at the BTRP, Fairview, Consort and Sheba operations at Barberton Mines as well as at Elikhulu. A redesign of the Royal Sheba project to optimise the plant feed grade from 2g/t to 3g/t resulted in a significant decrease in the Mineral Reserves reported.

Attributable Mineral Reserves



EXPLORATION AND RESERVE DELINEATION DRILLING

Pan African continuously defines and de-risks the Group's operational plan through ongoing reserve delineation drilling and other exploration techniques. Exploration drilling de-risks Inferred Mineral Resources, delineates exploration targets and enhances the operations' geological modelling and mining layouts.

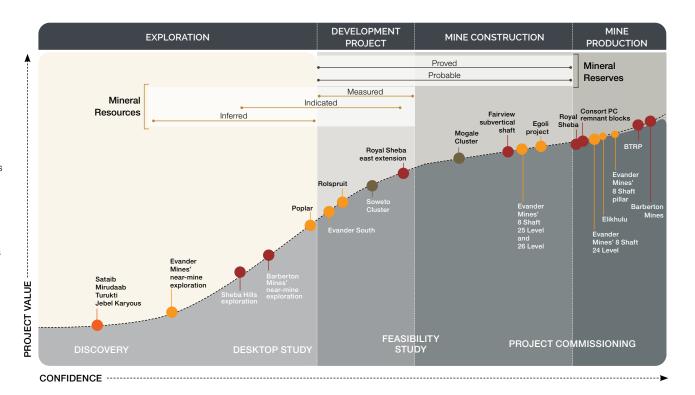
		At 30 J	lune 2023		At 30 June 2022			
Operation	Total metres	Number of boreholes	Total expenditure ZAR million	Total expenditure US\$ million (US\$/ZAR: 17.77)	Total metres	Number of boreholes	Total expenditure ZAR million	Total expenditure US\$ million (US\$/ZAR: 15.50)
Barberton Mines								
underground	10,618	149	16.1	0.9	8,922	116	8.9	0.6
Evander Mines	496	10	0.6	0.03	_	_	-	_
Elikhulu	-	-	-	-	_	-	_	_
MTR project	5,551	185	1.2	0.07	2,761	107	0.5	0.03

Reserve delineation drilling enables the technical service departments to model orebodies at high resolution and to identify optimisation opportunities ahead of regular planning sessions. All underground reserve delineation drill holes, along with stope and development chip sampling, are assayed for gold content and utilised during the monthly estimation of the grade and metal content of a planned panel, stope or other mining areas. The data and information are also utilised to continuously evaluate the representativeness of historical data in neighbouring panels, stopes and other mining areas. The business plan is also de-risked during this phase and any improvements to the operational plan are consequently done to ensure adherence to the Group's strategic plan.

ORGANIC GROWTH

Pan African has an exceptional pipeline of attractive growth opportunities, both in established projects and brownfield resource definition prospects.

The operations' robust life-of-mine plans support the Group's strategic plan. Current exploration drilling as well as initiatives to access and develop orebodies were aggressively pursued at the Group's operations during the year. The strategy of converting Mineral Resources to Mineral Reserves was progressed by moving organic growth projects further up the mining value curve and closer towards the feasibility and production stages. These include Evander Mines' 8 Shaft 24 to 26 Level projects, the Egoli project, Consort Mine's PC Shaft remnant blocks and the Royal Sheba project. The adjacent schematic illustrates the progress of near-mine growth projects that contributed ounces to the increased Mineral Resources for the year.





BARBERTON

REGION

RISKS TO THE ESTIMATED MINERAL RESOURCES AND MINERAL RESERVES

Mineral Resources and Mineral Reserves are estimates of the portion of the deposit owned by the Group that can be mined economically and safely.

There is an inherent geological and execution risk in the Mineral Resources and Mineral Reserves estimates. These estimates are functions of set criteria using geological, technical and economic parameters. Estimating the grade and/ or quantity of the Mineral Resources is conducted by geologically analysing the volume, continuity and shape of the deposit. Data employed for these analyses includes geological mapping, core drilling, logging and sampling (current and historical). Due to the nature of the deposits, complex geological judgements and scientific calculations are applied to interpret the data and construct orebody models.

Economic and technical factors, such as inflationary cost increases, volatile global markets and commodity prices, impact the cut-off grade applied in estimating the economically extractable Mineral Resources and Mineral Reserves that are reported. In addition, newly available geological data from operations can result in additional changes to the Mineral Resources and Mineral Reserves reported. The Group's financial position and results can be materially impacted by these changes to the Mineral Resources and Mineral Resources and Mineral Reserves.

Type of risk	Risk	Mitigation action	Level of risk
Financial	Volatile commodity price and foreign currency exchange rates	A relatively conservative rand gold price was used to calculate the modifying factors in comparison to the prevailing rand gold prices	Medium
	Cost inflation	Successfully concluded a three-year wage deal at Barberton Mines in 2021 Relatively low-cost and low-risk tailings operations at the BTRP and Elikhulu assist the Group in reducing the all-in sustaining cost per kilogramme produced Tailings retreatment accounted for 40% of the Group's gold production for the year ended June 2023	Low
Legal	Mining right legal tenure	Barberton Mines' mining rights are valid until May 2051 Evander Mines' mining right is valid until April 2038 The Department of Mineral Resources and Energy (DMRE) acknowledged receipt of the section 102 application on 10 May 2021 to incorporate MP30/5/1/2/2/248 PR and MP30/5/1/2/2/4272 PR into Evander Mines' mining right MP30/5/1/2/2/126 MR. Correspondence is ongoing to finalise the grant of the section 102 application. According to the Mineral and Petroleum Resources Development Act (MPRDA), all rights remain valid while being processed	Low
Operational	Modifying factors	Modifying factors, as defined in the Mineral Reserves conversion, are based on actual modifying factors achieved over the preceding three years The Group's mining operations have consistently exploited the same orebodies with the current infrastructure over a number of years	Low
	Limited mining flexibility	 Development rates have remained relatively constant year-on-year in the MRC high-grade 11-block at 1,360m developed in the current financial year (2022: 1,388m) An additional actively mined high-grade panel (260) in the MRC 11-block was accessed in January 2023 The high-grade 261 Platform (down-dip of the 260 Platform) is planned to intersect mineralisation by the last quarter of the following reporting period Drilling platforms for Fairview Mine's high-grade MRC cross-fracture down-dip extension drilling will be completed and drilled in the current reporting period Decline development at Consort Mine's PC Shaft remnant block and down-dip extension of the Main Muiden Reef (MMR) from 14 Level to 15 Level and lower is underway Additional decline development at Consort Mine's PC Shaft remnant block and down-dip extension of the 42 Level orebody from 42 Level to 45 Level is scheduled for the following reporting period Construction of the underground refrigeration plant at Evander Mines' 8 Shaft 24 Level is ongoing as per the plan 	Medium
	Nature reserve	Portions of Barberton Mines' mining rights overlap the boundaries of a proclaimed nature reserve, thereby impacting surface infrastructure, surface mining and environmental rehabilitation. The nature reserve was proclaimed fairly recently, while mining has been ongoing for 100 years or more Continuous communication and collaboration with governmental departments and other stakeholders are undertaken to ensure sustainable mining operations over Barberton Mines' valid mining rights	Low

There are currently no material legal proceedings or material conditions that are anticipated to impact the estimated Mineral Resources and Mineral Reserves reported for 2023 or Pan African's ability to continue mining activities as per life-of-mine plans.

Gold nanoparticles have a diameter ranging from

5nm to 400nm



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BARBERTON REGION

Gold was originally discovered in the Barberton area where it is hosted within the sediments and metavolcanics of the Barberton Greenstone Belt (BGB). The discovery of gold in the Barberton region resulted in an influx of prospectors, gold-seekers and financiers from the diamond fields of Kimberley and from elsewhere looking for new sources of wealth.

BARBERTON REGION

The Barberton goldfield has been in consistent and uninterrupted production since the 1880s. While these gold deposits were overshadowed by the later discovery of the Witwatersrand deposits, the Barberton goldfield remains a prolific gold-producing belt in South Africa.

The gold deposits in this granite-greenstone terrain are characterised by different styles of mineralisation, from free-milling to refractory ore. Refractory gold ore deposits, estimated to make up approximately 22% of global gold Mineral Reserves, typically involve large upfront capital for the construction of the technologically advanced metallurgical plants required to improve gold recoveries. This capital is offset by the high-grade nature of these deposits.

Barberton Mines' Fairview metallurgical plant hosts a BIOX® circuit which is designed to process refractory-type ore. This invested capital, combined with the high grades of the Barberton refractory orebodies, enables Barberton Mines to remain a sustainable gold producer.

BACKGROUND

Barberton not only saw the first major gold mining in South Africa but also the first great gold stock share boom. By late 1885, over 100 different shares were quoted on the Barberton stock exchange. Despite all the exuberance, only a handful of mines went on to produce gold. Since the discovery of gold in the BGB, approximately 11Moz of gold are recorded to have been produced. The Fairview, Consort and Sheba Mines that today make up Pan African's Barberton Mines complex started operations more than 130 years ago, accounting for 75% of the recorded total gold production from the BGB.

Mining at the Fairview Mine commenced in 1886 as a number of small operations accessing the rich gold ore from the surface. These operations continued intermittently until 1955 when they were consolidated under Federale Mynbou into what is now known as the Fairview Mine. Anglovaal Minerals acquired Fairview Mine in 1998.

Originally, the Consort area consisted of several small workings. Over time, the workings were consolidated into what became known as Consort Mine. In 1933, the company's name changed to Eastern Transvaal Consolidated Mines (ETC) and in 1948, ETC became a member of the Anglovaal Group.

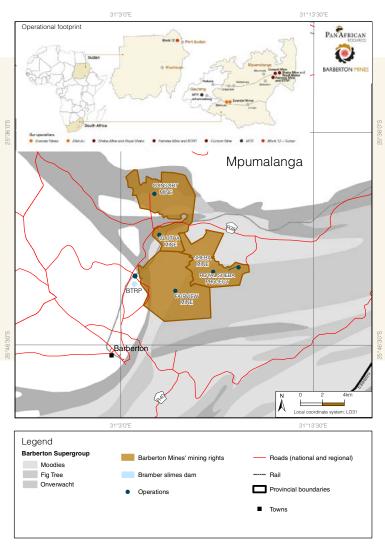
The Sheba Mine started operations with the discovery of Edwin Bray's Golden Quarry, the first 13,000t of ore yielding 50,000oz of gold (at 120g/t). Sheba Mine and its adjacent workings changed hands numerous times before being acquired by ETC in 1937.

The Barberton Mines' operations, comprising the Fairview, Consort and Sheba operations, were sold to Metorex in June 2003. Pan African acquired the operations from Metorex in 2007. Barberton Mines has therefore been in operation for over 136 years, with current production practices now well understood and embedded.

Barberton Mines' mineral assets comprise estimated Mineral Resources categories that range from early prefeasibility study stage to a feasibility study at the Royal Sheba project, as well as the three operating underground mines.

LOCATION

Barberton Mines is situated in the Mpumalanga province, South Africa, some 370km east of Johannesburg and 47km south-east of Mbombela. Barberton Mines comprises Fairview Mine, Sheba Mine, Consort Mine and the BTRP.



Fairview Mine produces approximately 46% of Barberton Mines' annual gold production, with Consort Mine, Sheba Mine and the BTRP producing 8%, 22% and 24%, respectively. Operating three underground mines is advantageous in providing mining flexibility, selectivity and versatility in terms of resource allocation.

The availability of deep-seated high-grade orebodies and lower-grade shallower resources from the mines provide options for planning in order to maintain the targeted grade/tonnage profile for annual gold production of approximately 100Koz. This also enables the optimal management of cash flows, operating costs and life of the operations at Barberton Mines from an early stage in the mine planning process.

The operations have a proven track record of consistently delivering a solid performance, driven to a large extent by an embedded culture of safety and cost control.

The mining methods used at Barberton Mines' underground operations are semi-mechanised up-dip cut-and-fill and up-dip room and stick mining. An estimated 16% of gold is recovered by sweeping and vamping contractors focusing on historically worked-out areas and mining high-grade remnant zones of ore. Gold is extracted using the $BIOX^{\oplus}$ gold extraction process, an environmentally friendly process which uses bacteria to release gold encapsulated in the sulphide ore.

Fairview Mine produces approximately

46%

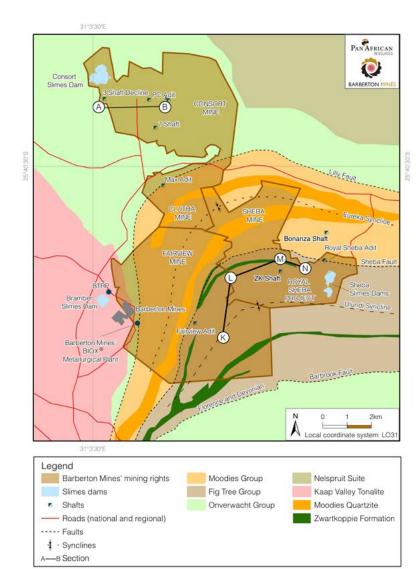
of Barberton Mines' annual gold production

Consort Mine, Sheba Mine and the BTRP produce

8%, 22% and 24% respectively

OPERATIONAL OVERVIEW

	Fairview Mine	Consort Mine	Sheba Mine	BTRP
Mining method	Underground Cut-and-fill, breast, up-dip	Underground Cut-and-fill, breast, up-dip	Underground Cut-and-fill, breast, up-dip	Surface Hydraulic, load-and-haul
Infrastructure and mineral processing	An underground mining complex consisting of adits and subdecline shaft systems. Gold-rich orebodies are mined from near surface to approximately 1.7km below surface at the MRC 11-block orebody. Ore is transported through three decline shaft systems to 11 Level. From here, the ore is crushed and transported via an aerial bucket system to the Fairview metallurgical plant. The plant consists of a milling, gravity gold separation, flotation, BIOX® and carbon-in-pulp (CIP) circuit with a carbon regeneration section, elution (and electro-winning) circuit and smelt house. The Fairview plant capacity is 13.5ktpm	An underground mining complex consisting of adits and subvertical shaft systems. Ore is extracted mainly from the MMR and PC Shaft sections, located 200m to 1.5km below surface. The ore is transported through the shaft system to the Consort metallurgical plant. Ore is crushed, milled, gravity gold concentrated and sulphides are floated. The float concentrate is transported to the Fairview BIOX® section for further processing, while the tailings are subjected to the Consort carbon-in-leach (CIL) circuit. The loaded carbon from the CIL section is transported to Fairview for elution (and electro-winning). The total capacity of the Consort metallurgical plant is 8ktpm	An underground mining complex consisting of adits and subvertical shaft systems. Ore is mined from near surface such as the MRC, Sheba West and Thomas orebodies to approximately 1.2km below surface in the Zwartkoppie (ZK) orebody. The ore is transported through the shaft system to the Sheba metallurgical plant. Here the ore is crushed and milled, gravity gold is separated and sulphides are floated. The gravity concentrate is smelted in the Fairview smelt house. The flotation concentrate is transported to the Fairview BIOX® section for further processing. The Sheba plant has a capacity of 11ktpm. In future this ore can be transferred to Fairview Mine with the establishment of a connection between the mines, referred to as Dibanisa	A surface remining site with road access from all surface material sources to the plant. Ore is either pumped (hydraulic remining and Fairview plant tailings) or trucked (load-and-haul) to the BTRP. The ore is milled in a regrind mill and processed through a CIL circuit, a carbon regeneration and elution (and electrowinning) section. The BTRP also has its own smelt house. The BTRP has a capacity of approximately 100ktpm
TSF	Tailings from the Fairview metallurgical plant are pumped to the BTRP circuit for further processing prior to deposition (refer to BTRP)	Tailings from the Consort CIL circuit are deposited onto the nearby Segalla TSF. The Segalla TSF has sufficient capacity to cater for the currently defined estimated Mineral Reserves at Consort Mine	Tailings from the Sheba flotation circuit are deposited onto the nearby Camelot TSF. The Camelot TSF has sufficient capacity to contain the tailings from the estimated Mineral Reserves of Sheba Mine and Royal Sheba	Tailings are deposited onto the newly commissioned Bramber extension TSF. The Bramber extension was constructed on the remined footprint of the historical Bramber TSF. The designed capacity of the TSF extension will cater for deposition of the current modelled life of the BTRP and Fairview operations
Mineralisation style	Orogenic greenstone-hosted hydrothermal-type deposit- Mineralisation is typically controlled by regional geological	s al structures such as main fault and shear zones. The zon	es are well defined within the globally recognised BGB	Deposition material of historically treated metallurgical tailings from the Fairview, Consort and Sheba Mines
Mineralisation characteristics	Mineralisation is typically continuous in the short- to med either vein-hosted ore lode deposits or as free-milling go	, , , , , , , , , , , , , , , , , , , ,	The material is confined to the deposition sites of historical tailings and extends approximately 1m beneath the historical footprint into the residual soil profile. The ore consists of oxidised tailings containing pyrite and arsenopyrite-associated gold, which was not recovered in the initial treatment process	
Life-of-mine	20 years (2022: 20 years)	9 years (2022: 9 years)	8 years (2022: 8 years)	3 years (2022: 2 years)
Exploration		drilling are conducted to define the extent of the mineralise evaluated for rehabilitation which could supply additional for	ation and to continuously upgrade the estimated Mineral F ged sources to the BTRP	Resources to Mineral Reserves. Furthermore, the
Climate		e, with only 11mm of rain on average. The highest precipit	frequent in summer months relative to in winter. The tempation month is December, with an average rainfall of 141m	



Geological setting of Barberton Mines' operations (section lines are illustrated on the map along the operations and depicted as sectional views under each operation's detailed discussion in this report)

REGIONAL GEOLOGICAL SETTING

The mineralisation at Barberton Mines is classified as Archaean epigenetic hydrothermal lode gold deposits within a granite-greenstone terrain. The distribution and localisation of these orebodies in the BGB can be largely attributed to the combined influence of thermal metamorphism and structural deformation. The BGB has produced approximately 11Moz of gold since the first discovery in the early 1880s. Barberton Mines has produced more than 75% of the total gold production recorded from the BGB.

GENESIS OF THE ORE IN BARBERTON

Metamorphic devolatisation, possibly from the mafic and ultra-mafic Onverwacht lava at the transition from greenschist to amphibolite facies, triggers the process by which fluid is released. These low-salinity fluids, which transport gold as a reduced sulphur complex containing H_2O , CO_2 and H_2S , are released from the minerals' crystal structures and can transport gold in solution to favourable depositional sites. The stability fields of most of the common sulphides in Barberton Mines' ore (pyrite, arsenopyrite and pyrrhotite) indicate that the gold complex in the transport fluid is $Au(HS)_2$.

To facilitate metal deposition from the hydrothermal fluid, the pressure, temperature or chemical conditions need to change. Most greenstone gold deposits form as a result of the mineralised fluid coming into contact with iron-bearing host rock. Conversely, Barberton Mines' host lithologies are not high in iron content. Therefore, the ore deposition occurred due to a drop in fluid pressure. Pressure shadows, which form during dilating, faulting and folding, create low-pressure zones, effectively drawing the fluids into these cavities and result in releasing pressure. Pressure fluctuations can further be caused by seismic activity, particularly during transpressional and orogenic events. When pressure is released, H₂S (the ligand that makes gold soluble) is driven off, resulting in gold precipitation.

MAH Altigani, RKW Merkle and RD Dixon, in their article, Geochemical identification of gold mineralisation in the Barberton Greenstone Belt, South Africa, dated 2015, conclude that the pervasive mineralising hydrothermal event post-dates the main tectonic metamorphic events. The hydrothermal fluids exploited weak zones in pre-existing faults and shear zones. The authors further conclude that the mineralising event occurred over an extended period of time and consisted of many individual pulses at varying depths.

The Barberton ores are thus mineralised shears with gold occluded in sulphide minerals. The sulphides often occur as massive assemblages in the shear structure. Lower-grade ore, in the wall rock, forms as a result of the alteration process during fluid flow and is associated with disseminated sulphide minerals. A late stage of gold mineralisation occurred in brittle fractures with the formation of quartz veins. These quartz veins often contain free gold in visible clusters.

REGION Servicing of booster fan at Fairview Mine

OUR MINERAL RESOURCES

BARBERTON

BARBERTON REGION continued

GEOLOGICAL/RESOURCE ESTIMATION METHODOLOGY

The estimated Mineral Resources and Mineral Reserves for the Barberton region are reported in compliance with the SAMREC Code.

Geological modelling

The grade and the structure in the BGB ore shoots are highly erratic in nature, and most of the data for evaluating resource blocks is derived from development adjacent to the mining blocks and from the position of the present and historical mining areas along with diamond drill hole information. The data is continuously evaluated for representativeness and accuracy. During the year, no discrepancies in data accuracy were noted. The continuity of grade values within the ore shoots is derived primarily from short-range statistical projections, based on historical mining measurements of the orebody, the study of its tectonic structure and continuity modelling such as variography and trend analyses.

The tectonic structure and orebody geometry have been modelled using the Lynx orebody modelling system (StopeCAD) and Datamine Studio RM®. These systems allow for the three-dimensional (3D) structure of the mineralised volume to be modelled, modified and viewed graphically. Additionally, these 3D models can be adjusted as new data becomes available. Furthermore, these systems are employed as a tool for visualising grade continuity and are an aid for mine planning.

Resource estimation

During grade control, both diamond-cored drill holes and underground channel/chip sampling results are utilised. A minimum sampling width of 230cm is used in the case of mechanical mining and 100cm for conventional scrapertype stoping. Where the reef width is narrower, hanging wall and footwall samples are included. Exploration diamond drill holes and sampling are conducted over a sample width of 50cm within the mineralised or lithological contacts. Drilling is also conducted on the tailings material that is re-treated at the BTRP. In this case, the samples from either auger drilling, dual drilling or sonic drilling are sampled at 150cm intervals.

All the samples are transported from site to the nearby SGS Barberton assay laboratory (SGS Barberton). SGS Barberton is an independent South African National Accreditation System (SANAS)-accredited assay laboratory (T0565) and is certified to conduct the relevant gold analyses. During transportation and submission, the samples are accompanied by a representative from Barberton Mines (either a geologist or sampler) and a sample dispatch note. Sample preparation and assaying are conducted by SGS Barberton. Preparation of the samples includes the drying of the sample at 110°C, followed by crushing to 85% passing 2.36mm. Between 0.5kg and 0.75kg of crushed material is subsampled and pulverised using Rocklabs LM2 and RM2000 pulverisers to 85% passing 75µm. A 25g (grade control) or 50g (exploration) aliquot is blended with a premix flux for fire assay purposes. Low-grade orebodies are analysed using atomic absorption spectrometry while high-grade orebodies employ a parted gravimetric finish.

An in-house quality assurance and quality control (QA/QC) system is implemented at Barberton Mines, where certified reference

material is employed to indicate the accuracy of the assaying procedure. For exploration, up to 10% of the samples are reassayed for precision tests and are accompanied by certified reference material at a 10% frequency rate. A two-times standard deviation from the expected certified reference material is employed as a failing criterion in the QA/QC system and triggers a reassaying procedure. All exploration samples retrieving grades in excess of 10g/t are immediately reassayed to validate the grades.

The MRE at Fairview. Sheba and Consort Mines uses an inverse distance weighted grade and orebody width estimate within a limited search ellipse defined for each orebody specifically. At Royal Sheba (located within the Sheba mining right), an ordinary kriging MRE is conducted for the various resource classification criteria. The search ellipse employed during the kriging process is in line with the orebody dimension and modelled variogram ranges. In all cases, historical data is employed during the MRE due to the rich history of mining and exploration in the area. All historical data is continuously evaluated relative to newly acquired data for representativeness. During the reporting period, no inconsistencies were noted in the historical or new data.

Extreme high-grade samples are evaluated per orebody and capped to an acceptable maximum grade for each orebody and operation specifically. These high grades are identified by sample statistics, histograms and capping curves. The capped high-grade samples are employed for the MRE of each orebody.

Developments and continuous improvements

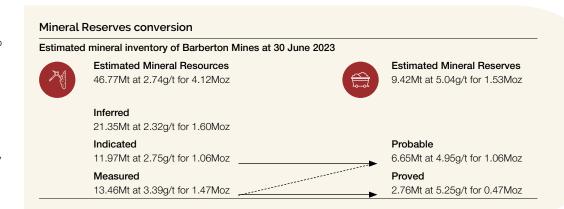
The introduction of a maiden 3D Mineral Resource estimate utilising ordinary kriging for the complex and highly variable Fairview and Sheba orebodies was achieved during the reporting period. The application of this modelling technique at Barberton Mines will bring improvement to the already existing robust models used in mine planning. The composited output drill hole assay database is uniquely flagged with mineralised domain codes using the interpretation boundaries. Additional subdomains may be added where distinct grade populations exist within the broader interpreted mineralised domains. The relationship between domains is assessed to determine how it will be employed during estimation and interpolation. Variogram studies are conducted on composited data for individual domains. The variogram model reflects the direction and extent of spatial continuity of the mineralisation within each domain reflecting the observed underlying geological controls. An ordinary kriging technique is applied for the estimation of grade into the block model underpinned by geological interpretation to reflect the controls on gold mineralisation.

Mineral Resources classification

Blocks of Measured Resources are generally 20m on strike and 10m in the dip direction of actual mining. Where blocks are defined adjacent to a development end only, the grade and true width of the reef in the block are estimated by calculating the arithmetic mean or 'stretch average' of the samples along the development end. If the sample spacing is at the standard stope sampling grid of 3m, the block value is derived by calculating the inverse weighted estimated value of all available samples. During an ordinary kriging MRE, a Measured Resource block is defined as a block estimated within the modelled variogram range with a slope of regression not less than 70%. This effectively reports a Measured Resource within 50m of sufficient representative sampling.

Blocks of Indicated Resources are defined where only diamond drill hole samples and local geological information are available. Both the grades and orebody widths are either estimated by means of an inverse weighted estimate or ordinary kriging. The Indicated Resource extends up to the modelled variogram ranges of a sufficiently sampled area with a slope of regression not less than 50%. Grades and widths are mostly interpolated into the Indicated Resource blocks.

The Inferred Resource blocks are characterised by a regional grade and width obtained from arithmetic means, Sichel's t-estimates and ordinary kriging. Inferred Resource blocks are extrapolated to double the modelled variogram range or grade continuity for each orebody.



Reasonable prospects for eventual economic extraction

Indicated Mineral Resources are converted to Probable Mineral Reserves due to the lower confidence mainly in grade continuity relative to that of Measured Mineral Resources. In most instances, Measured Mineral Resources are converted to Proved Mineral Reserves. Certain Measured Mineral Resources are not immediately accessible for mining and require development or equipping. Under these circumstances, Measured Mineral Resources have been converted to Probable Mineral Reserves. Mineral Reserves are reported inclusive of diluting and contaminating material delivered to the relevant metallurgical plant for treatment and beneficiation. Inferred Mineral Resources are not converted to Mineral Reserves, nor are Inferred Mineral Resources utilised in feasibility studies.

MINING RIGHTS OF BARBERTON MINES

Barberton Mines is the holder of individual mining rights for gold for each of the three respective underground mining operations. The mining areas are situated in the Barberton region, located in the City of Mbombela Local Municipality, Mpumalanga province. On 28 April 2011, the DMRE converted the old order mining rights held by Barberton Mines for a period of 10 years in terms of Item 7 of Schedule II of the MPRDA.

Barberton Mines timeously submitted applications for the renewal of these mining rights, together with the relevant supporting documents to the DMRE in order to extend the operations' mining rights by a further 30 years. The DMRE granted the mining right renewal application on 1 June 2021, indicating that the mining rights would be valid until 31 May 2051

All estimated Mineral Resources and Mineral Reserves reported on in this document are located within the existing mining rights of Barberton Mines.

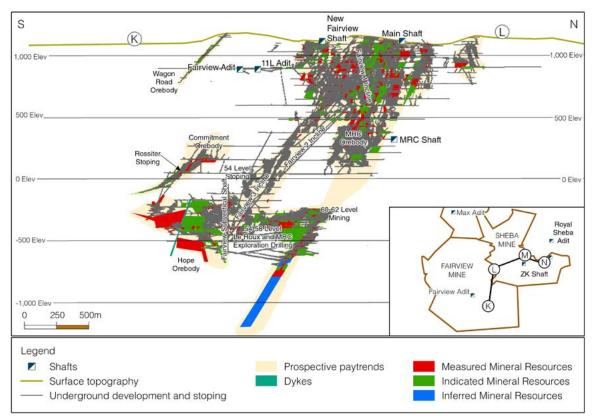
Right name	Project	Type of right	Right number	Area	Right holder	Expiry date	Status
Barberton Mines Proprietary Limited	Sheba Mine (including Royal Sheba)	Mining	MP30/5/1/2/2/189 MR	1,705.0645ha	Barberton Mines Proprietary Limited	31 May 2051	Effective - awaiting registration
Barberton Mines Proprietary Limited	Consort Mine	Mining	MP30/5/1/2/2/190 MR	2,520.8191ha	Barberton Mines Proprietary Limited	31 May 2051	Effective - awaiting registration
Barberton Mines Proprietary Limited	Fairview Mine	Mining	MP30/5/1/2/2/191 MR	3,033.8643ha	Barberton Mines Proprietary Limited	31 May 2051	Effective - awaiting registration

Each Barberton Mines operation has an approved environmental impact assessment (EIA), environmental management programme (EMP) and water-use licence (WUL). Barberton Mines' undiscounted scheduled closure cost (excluding latent and residual closure costs) of US\$5.0 million is funded by means of a Cenviro insurance investment product, underwritten by Centriq Insurance Company Limited, with a current value of US\$3.6 million. These funds are invested in a portfolio comprising a combination of money market, capital market and equity instruments. The aim of this investment is to provide the Group with the necessary liquidity for rehabilitation activities and to preserve the real value of the rehabilitation capital. The audit and risk committee reviews the performance of this portfolio on a regular basis. Barberton Mines has been informed, post the effective date of this report, of the rejection of its WUL renewal application at Sheba Mine due to a change of legislation that return-water dams are now required to be lined. This change came into effect after the construction of the return-water dam and it will not be feasible to retrofit the lining to an operating return-water dam. Barberton Mines conducted independent assessments that proposed alternative measures that would mitigate the need for lining to prevent any risk of pollution. These have been proposed to the Department of Water and Sanitation and a response is awaited.



FAIRVIEW MINE

During the reporting period, Fairview Mine continued its focus on optimising the extraction and successfully increasing flexibility within the MRC and Rossiter Reef. This was achieved by increasing development rates towards down-dip extensions of the orebodies and by increasing the reserve definition drilling rate. Broader-scale exploration drilling is focused on the Hope, Main Muiden and Golden Quarry Reefs, with desktop studies being conducted on various known but unmined lower-grade blocks in all orebodies.



SURFACE RIGHTS

The majority of the surface rights that form part of the Fairview mining area are owned by local government (the Department of Public Works and Infrastructure) and are under the management of the Mpumalanga Tourism and Parks Agency (MTPA). Fairview Mine has had an active lease agreement with the Department of Public Works and Infrastructure since 2012. The agreement continues on a month-to-month basis and is revised at 12-monthly intervals. This lease agreement enables Fairview Mine to continue using the surface areas for its approved mine works programme.

The Fairview Mine also owns surface rights on the farms Fairview 342JU and Portion 1 Bramber South 348JU, which adjoin the Fairview mining right area. Certain mine infrastructure, offices and the operational Bramber extension tailings dam are located on these properties. The Fairview Mine properties extend over a surface area of 3,034ha, of which approximately 4% is currently disturbed by mining and mining-related activities.

GEOLOGY

The rocks underlying the Fairview Mine area straddle the contact between the arenites of the Moodies Group to the north (Eureka Syncline) and the Fig Tree Group's greywacke and shale to the south (Ulundi Syncline). The contact is marked by the presence of the regionally identifiable Sheba Fault. The two synclines are refolded due to the immense force present during deformation, resulting in back-to-back isoclines that dip steeply to the south.

Tight isoclinal, thrust fault-related anticlines of Onverwacht Group schist (Zwartkoppie Formation) occur within the greywacke of the Fig Tree Group.

The Fairview Mine orebody is an epigenetic hydrothermal lode gold deposit. Three distinct types of mineralisation occur at the mine:

- Refractory sulphidic ore, which constitutes the bulk of the mined ore, is hosted in the greywacke and shale sequence of the Fig Tree Group. The mineralisation is found in close association with an anastomosing shear system that often parallels the stratigraphy and lithological contacts. Auriferous pyrite and arsenopyrite mineralisation are confined to ribbon-like shoots within the shear system and as disseminations in the wall rock. The shears are often defined by quartz-carbonate veining and the host rock can be sericitised and carbonatised on either side of the shear
- A coarse clastic unit of the Fig Tree Group hosts a series of hanging wall bodies. This coarse clastic unit consists of thick-bedded to massive greywacke, grading into arenite with interbedded granule stone layers. Two quartz-porphyry dykes and two dolerite dvkes intrude the host rock sediments. Although the mineralised fractures persist for up to 500m, payable gold values are confined to several discrete ribbon-like payshoots. Blue-black quartz veins, quartz-carbonate veins and stockworks are recognised in the hanging wall area. The contacts and texture of the veins suggest a dilation fracture fill origin, rather than replacement origin.

Refractory gold-quartz-carbonate-sulphide ore occurs as disseminated to massive pyrite and arsenopyrite mineralisation. The age relationship between the gold mineralisation and the quartz-porphyry dykes suggests that the Hope Reef is marginally older and the Le Roux Reef is marginally younger than the quartz-porphyry dykes. The quartz-porphyry dyke that intrudes into the Hope Reef mineralisation has been dated at 3,050 million years

Quartz veins, containing free-milling gold, occur in the Moodies Group in the footwall of
the Sheba Fault. The blue-grey quartz veins fill near-vertical cross-cutting fractures in the
siliceous, brittle quartzite units. Gold mineralisation generally occurs within the vein, but
may penetrate the adjacent host rock. Only minor pyrite and arsenopyrite are associated
with this ore type.

The deepest intersection on a Fairview orebody is at a depth of 1,660m below the adit elevation, approximately 100m below the current mining platforms. The orebody is open at depth.

OPERATIONAL PERFORMANCE

	Unit	30 June 2023	30 June 2022
Mining			
Total mined	t	110,794	109,982
Au mined grade	g/t	11.70	13.62
Processing			
Tonnes treated	t	110,794	109,982
Au head grade	g/t	11.70	13.62
Au sold	OZ	38,849	48,096
Plant recovery factor	%	93.23	92.79
Financial results			
Average Au price received	ZAR/kg	1,053,892	895,953
	US\$/oz	1,845	1,831
Capital expenditure	ZAR million	239.3	272.0
All-in sustaining costs	US\$/oz	1,558	1,335

ESTIMATED MINERAL RESOURCES

		Estimated Mineral Resources								
		At 30 Jur	ne 2023			At 30 Jun	e 2022			
	Contained gold					Containe	Contained gold			
	Tonnes	Grade	Tonnes		Tonnes	Grade	Tonnes			
Category	million	g/t	gold	Moz	million	g/t	gold	Moz		
Measured	1.73	9.86	17.06	0.55	1.71	9.66	16.55	0.53		
Indicated	1.18	8.25	9.72	0.31	1.06	9.07	9.61	0.31		
Measured and Indicated	2.91	9.20	26.79	0.86	2.77	9.43	26.16	0.84		
Inferred	2.00	10.87	21.74	0.70	1.95	12.96	25.29	0.81		
Total	4.91	9.88	48.53	1.56	4.72	10.89	51.46	1.65		

Notes:

Estimated Mineral Resources are reported in accordance with the SAMREC Code. Mineral Resources would be the same if reported according to the guidelines of the Canadian Institute of Mining's (CIM) National Institute at 1.88g/t for Fairview Mine and 1.68g/t for 11 Level, applying a gold price of ZAR950,000Kg (US\$1,663/oz at US\$/ZAR:17.77). Mineral Resources are reported inclusive of Mineral Reserves. All Mineral Resources reported exclude geological structures. Mineral Resources are reported as in situ tonnes (2.73t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations. Geological losses were applied according to the geological model.

MODIFYING FACTORS

At 30 June 2023	Gold price ZAR/kg	Cut-off value g/t Au	Cut-off value cmg/t	Stoping width cm	Dilution %	MCF %	PRF %
Fairview Mine	850,000	6.63	663	100	5	92.13	93.02

ESTIMATED MINERAL RESERVES

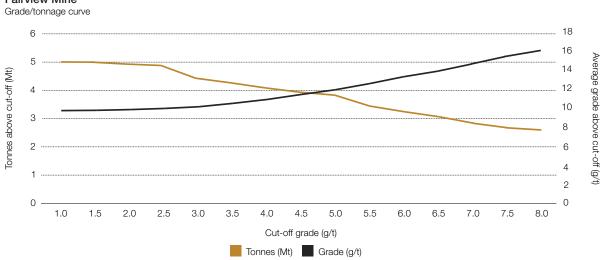
Estimated Mineral Reserves are reported inclusive of diluting and contaminating material delivered to the respective metallurgical plant for treatment and beneficiation.

	Estimated Mineral Reserves							
		At 30 Jun	ne 2023			At 30 June 2022		
		Contained gold				Containe	Contained gold	
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz
Proved Probable	0.83 0.82	9.95 16.54	8.22 13.48	0.26 0.43	0.90 0.94	9.87 14.91	8.84 13.96	0.28 0.45
Total	1.64	13.22	21.70	0.70	1.83	12.45	22.80	0.73

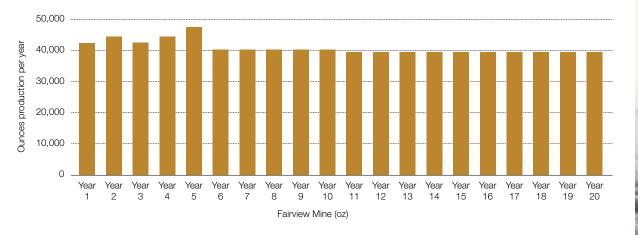
Notes

Estimated Mineral Reserves are reported in accordance with the SAMREC Code. Mineral Reserves would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Cut-off values are calculated at 6.63g/t for Fairview Mine and 5.39g/t for 11 Level, applying a gold price of ZAR850,000/kg (US\$1,488/oz at US\$/ZAR:17.77). All Mineral Reserves reported exclude geological structures. Mineral Reserves are reported as in situ tonnes (2.73t/m²). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations.

Fairview Mine



Fairview life-of-mine planning





ESTIMATED MINERAL RESOURCES AND MINERAL RESERVES RECONCILIATION



FACTORS THAT AFFECTED THE MINERAL RESOURCES RECONCILIATION

Depletion through mining activities

Geological boundary and structural updates

Mineral Resource block updates (tonnes and grade)

Cut-off grade increased from 1.75g/t for the prior financial year to 1.88g/t for the current financial year due to a constant gold price and increased costs assumed in the cut-off grade calculation



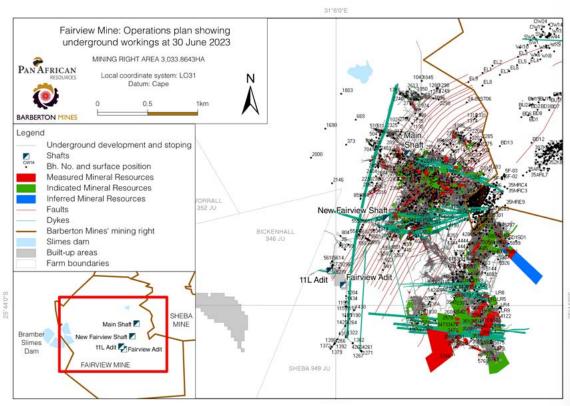
FACTORS THAT AFFECTED THE MINERAL RESERVES RECONCILIATION

Depletion through mining activities

Impact of updated geological structures and boundaries

Update of grades in Mineral Resource estimation blocks

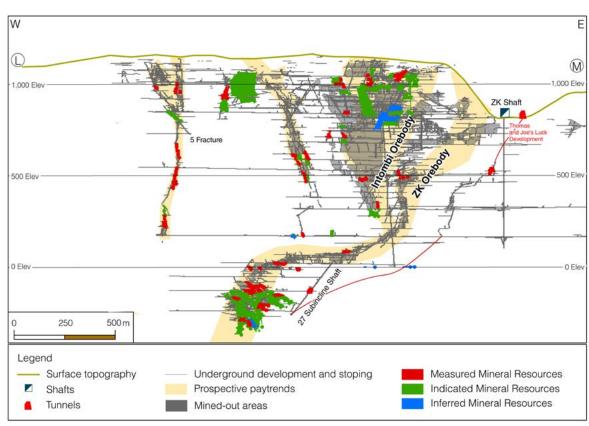
Mine call factor decreased from 99.6% to 92.1% and the plant recovery factor remained constant at 93%



Underground personnel transport

SHEBA MINE

Sheba Mine continued to focus on extraction of the MRC and ZK orebodies during the year, while the high-grade Verster and Thomas Reefs supplemented the plant feed material. Specific attention was given to the reserve definition drilling and development of the ZK orebody's down-dip extension on 37 Level and 38 Level in the unmined areas between the Sheba and Fairview Mines.



Simplified geological section of Sheba Mine

Additional platforms were developed on the free-milling Thomas orebody, where the mining method was optimised from the previous long hole open stoping to up-dip mining in order to limit dilution. Work on Project Dibanisa, combining Fairview and Sheba Mines' infrastructure to optimise costs and efficiency, has progressed well (refer to the Barberton Mines major projects section in this report).

SURFACE RIGHTS

The majority of the area used for the development of Sheba Mine's surface infrastructure is located on state-owned land under the control of the Department of Public Works and Infrastructure and is under the management of the MTPA. The adjacent land comprises primarily wilderness and grazing areas.

Sheba Mine's properties cover a surface area of some 1,705ha, of which approximately 14% is currently used for mining and mining-related activities. Sheba Mine has had an active lease agreement with the Department of Public Works and Infrastructure since 2012, which allows the operation to continue using the surface areas for its approved mine works programme. The agreement continues on a month-to-month basis and is revised at 12-monthly intervals.

GEOLOGY

The Sheba section straddles the contact between the arenites of the Moodies Group to the north (Eureka Syncline) and the Fig Tree Group's greywacke and shale to the south (Ulundi Syncline) similar to the stratigraphic occurrence of the adjacent Fairview Mine. The contact is marked by the presence of the regionally identifiable Sheba Fault. The two synclines are refolded due to the immense force present during the deformation events, resulting in back-to-back isoclines that dip steeply to the south. Tight isoclinal, thrust faultrelated anticlines of the Onverwacht Group schist (Zwartkoppie Formation) occur within the Fig Tree Group's greywacke.

The Sheba orebody is an epigenetic hydrothermal lode gold deposit. Three distinct types of mineralisation occur at the mine.

Refractory sulphidic ore (MRC section), which constitutes the bulk of the mined ore, is hosted in the greywacke and shale sequence of the Fig Tree Group. The mineralisation is found in close association with a shear system in the immediate hanging wall of greenschist anticlines of the Zwartkoppie Formation. Auriferous pyrite and arsenopyrite mineralisation occurs as massive replacement veins within the shear system and as disseminations in the wall rock.

- The ZK section is characterised by the occurrence of visible gold and disseminated pyrite in the greenschist as the prominent mineralisation, in association with shear and fracture-hosted smoky and white quartz veins.
- The mineralisation of the Royal Sheba orebody is encapsulated in a shear zone envelope around the Sheba Fault, ranging in width from 5m to 25m. The gold mineralisation occurs predominantly in sulphide minerals and as native gold.

The deepest orebody intersection on Sheba Mine is 1,200m below shaft collar elevation. The orebody is open at depth.

OPERATIONAL PERFORMANCE

	Unit	30 June 2023	30 June 2022
Mining			
Total mined	t	135,669	115,972
Au mined grade	g/t	4.9	4.8
Processing			
Tonnes treated	t	135,669	115,972
Au head grade	g/t	4.9	4.8
Au sold	OZ	18,929	17,439
Plant recovery factor	%	88.89	92.52
Financial results			
Average Au price received	ZAR/kg	1,053,892	895,953
	US\$/oz	1,845	1,831
Capital expenditure	ZAR million	88.7	119.7
All-in sustaining costs	US\$/oz	2,049	2,103

ESTIMATED MINERAL RESOURCES

The estimated Mineral Resources reported exclude those of the Royal Sheba deposit.

	Estimated Mineral Resources								
		At 30 Jun	e 2023			At 30 Jun			
		Containe	d gold			Containe	Contained gold		
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz	
Measured	0.56	8.72	4.91	0.16	0.61	8.73	5.29	0.17	
Indicated	0.26	4.69	1.24	0.04	0.25	4.59	1.17	0.04	
Measured and Indicated	0.83	7.43	6.15	0.20	0.86	7.51	6.46	0.21	
Inferred	0.33	10.42	10.42 3.40		0.42	8.94	3.75	0.12	
Total	1.15	8.27	9.55	0.31	1.28	7.97	10.20	0.33	

Notes:

Estimated Mineral Resources are reported in accordance with the SAMREC Code. Mineral Resources would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Cut-off values are calculated at 2.60g/t for Sheba Mine and 2.77g/t for the MRC and ZK sections, applying a gold price of ZAR950,000/kg (US\$1,663/oz at US\$XZAR:17.77). Mineral Resources are reported inclusive of Mineral Reserves. All Mineral Resources reported exclude geological structures. Mineral Resources are reported as in situ tonnes (2.73t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations. Geological losses were applied according to the geological model.

MODIFYING FACTORS

At 30 June 2023	Gold price ZAR/kg	Cut-off value g/t Au	Cut-off value cmg/t	Stoping width cm	Dilution %	MCF %	PRF %
Sheba Mine	850,000	5.97	597	100	5	91.18	90.65

ESTIMATED MINERAL RESERVES

The estimated Mineral Reserves reported exclude those of the Royal Sheba deposit. Mineral Reserves are reported inclusive of diluting and contaminating material delivered to the respective metallurgical plant for treatment and beneficiation.

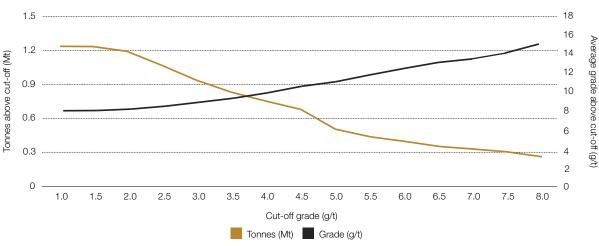
	Estimated Mineral Reserves								
		At 30 Jun			At 30 Jun				
		Containe	ed gold			Contained gold			
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz	
Proved	0.58	4.62	2.68	0.09	0.42	7.49	3.16	0.10	
Probable	0.22	5.17	1.13	0.04	0.18	5.18	0.92	0.03	
Total	0.80	4.77	3.80	0.12	0.60	6.81	4.09	0.13	

Notes:

Estimated Mineral Reserves are reported in accordance with the SAMREC Code. Mineral Reserves would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Cut-off values are calculated at 5.97g/t for Sheba Mine and 6.84g/t for the MRC and ZK sections, applying a gold price of ZAR850,000/kg (US\$1,488/oz at US\$/ZAR:17.77). All Mineral Reserves reported exclude geological structures. Mineral Reserves are reported as in situ tonnes (2.73t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations.

Sheba Mine

Grade/tonnage curve



Sheba Mine's estimated Mineral Reserves sensitivity



Sheba life-of-mine planning



ESTIMATED MINERAL RESOURCES AND MINERAL RESERVES RECONCILIATION



FACTORS THAT AFFECTED THE MINERAL RESOURCES RECONCILIATION

Depletion through mining activities

Geological boundary and structural updates

Mineral Resource block updates (tonnes and grade)

Cut-off grade increased to 2.60g/t for the current financial year relative to 2.05g/t for the prior financial year



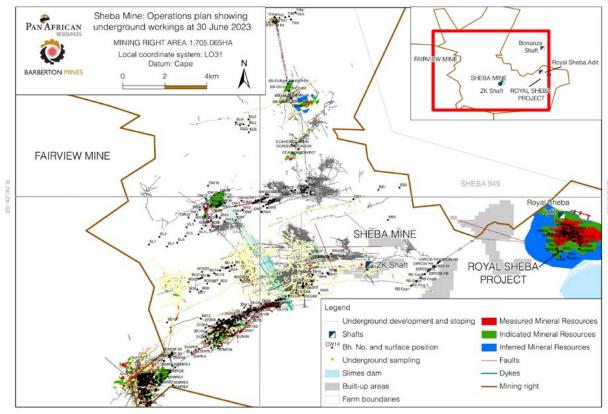
FACTORS THAT AFFECTED THE MINERAL RESERVES RECONCILIATION

Depletion through mining activities

Impact of updated geological structures and boundaries

Update of grades in Mineral Resource estimation blocks

The mine call factor decreased from 103% in the prior financial year to 91% in the current financial year



OTHER INFORMATION

Inspection of the

conveyor belts

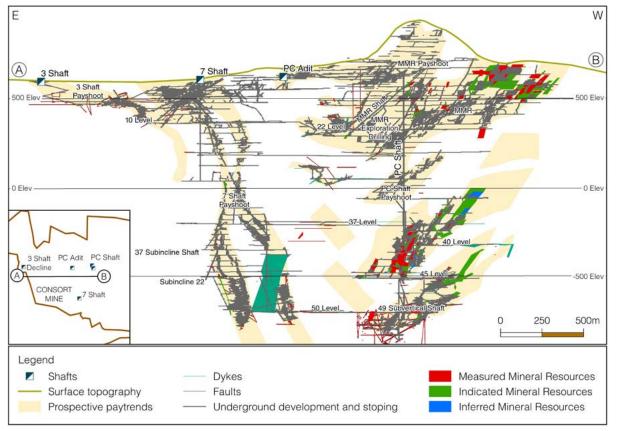
CONSORT MINE

During the year, development at Consort Mine progressed towards the Consort Bar and MMR orebodies at 38 and 15 Levels, respectively. Specific focus and studies were centred on equipping the PC Shaft remnant blocks and extracting high-grade ore between 42 and 41 Levels. Geotechnical constraints impeded the timeous development towards the strike and up-dip continuation of this orebody.

BARBERTON

REGION

Additionally, exploration drilling during the year focused on the MMR and PC horizons. High-resolution reserve definition drilling focused on the 15 Level MMR and deeper Consort Bar orebodies around 43 Level to 45 Level. The Group further transitioned the Consort Mine to a contractor mining model during the current reporting period.



SURFACE RIGHTS

Most of the area employed for the development of the Consort Mine surface infrastructure is state-owned land under the control of the Department of Public Works and Infrastructure and under the management of the MTPA. The surrounding land comprises primarily wilderness and grazing areas. A private nature reserve is located to the west of the mining right area.

Barberton Mines owns Portion 1 of the farm Segalla 306JU on which the Segalla TSF is located. A substantial part of the facility, however, falls outside Portion 1 on state-owned land, which is declared a conservation area and is controlled by the MTPA. The Consort Mine properties cover a surface area of some 2,521ha, of which approximately 14% is currently used for mining and mining-related activities. Consort Mine has had an active lease agreement with the Department of Public Works and Infrastructure since 2012 for the land on which the surface infrastructure and the Segalla TSF are located. This lease agreement allows Consort Mine to continue using the surface areas for its approved mine works programme.

GEOLOGY

The Consort area can be divided into two distinctive synclinal structures, termed the Three Shaft Syncline and the Top Section Synclines. The Shires structure, which is a prominent north-south striking shear zone separating these two synclines, is intruded by pegmatites.

The Consort orebody is an epigenetic hydrothermal lode gold deposit. Gold mineralisation at the Consort section is associated with the contact between the underlying schist of the Onverwacht Group and the overlying metapelite of the Fig Tree Group. This contact is marked by the presence of the Consort 'bar', a highly siliceous banded chert layer. The Consort Bar is thought to be a silicified mylonite occupying the contact. A series of northdipping tabular pegmatites, termed the Muiden Reef pegmatites, displace the south-dipping Consort contact and the mineralised shoots. Some scheelite mineralisation has been recorded, which is associated with the pegmatites.

A lenticular body of fine-grained siliceous amphibolite, termed the 'footwall lens', occurs on the northern limb of the Top Section Syncline and is host to the mineralisation in the PC and MMR shoots. Mineralisation consists of arsenopyrite and visible gold associated with fractures in the footwall lens. The Consort Bar is host to mineralisation in the 7 Shaft, 3 Shaft and Ivaura areas.

The deepest intersection of the Consort orebody is 1.450m below adit elevation. The orebody is open at depth.

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BARBERTON REGION continued

OPERATIONAL PERFORMANCE

	Unit	30 June 2023	30 June 2022
Mining			
Total mined	t	96,161	96,084
Au mined grade	g/t	2.4	3.5
Processing			
Tonnes treated	t	96,161	96,084
Au head grade	g/t	2.4	3.5
Au sold	OZ	6,807	10,202
Plant recovery factor	%	92.59	91.05
Financial results			
Average Au price received	ZAR/kg	1,053,892	895,953
	US\$/oz	1,845	1,831
Capital expenditure	ZAR million	22.8	33.2
All-in sustaining costs	US\$/oz	2,577	2,329

ESTIMATED MINERAL RESOURCES

	Estimated Mineral Resources							
	At 30 June 2023							
		Containe	Contained gold			Contained gold		
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz
Measured	0.34	9.01	3.03	0.10	0.35	8.57	2.99	0.10
Indicated	0.18	8.17	1.51	0.05	0.22	7.83	1.70	0.05
Measured and Indicated	0.52	8.71	4.54	0.15	0.57	8.28	4.70	0.15
Inferred	0.32	11.34	3.57	0.11	0.33	11.08	3.62	0.12
Total	0.84	9.70	8.12	0.26	0.89	9.31	8.32	0.27

Notes:

Estimated Mineral Resources are reported in accordance with the SAMREC Code. Mineral Resources would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Cut-off values are calculated at 3.77g/t for Consort Mine, 4.05g/t for the PC Shaft and 3.13g/t for the MMR, applying a gold price of ZAR950,000/kg (US\$1,663/cz at US\$/ZAR:17.77). Mineral Resources are reported inclusive of Mineral Reserves. All Mineral Resources reported exclude geological structures. Mineral Resources are reported as in situ tonnes (2.73t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations. Geological losses were applied according to the geological model.

MODIFYING FACTORS

At 30 June 2023	Gold price ZAR/kg	Cut-off value g/t Au	Cut-off value cmg/t	Stoping width cm	Dilution %	MCF %	PRF %
Consort Mine	850.000	9.55	955	100	5	94.03	90.85



ESTIMATED MINERAL RESERVES

Estimated Mineral Reserves are reported inclusive of diluting and contaminating material delivered to the respective metallurgical plant for treatment and beneficiation.

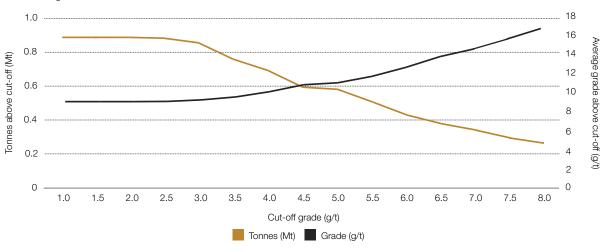
	Estimated Mineral Reserves							
		At 30 June 2023			At 30 June 2022			
		Containe	d gold			Containe	Contained gold	
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz
Proved	0.32	5.47	1.73	0.06	0.31	5.85	1.80	0.06
Probable	0.24	5.03	1.19	0.04	0.27	5.42	1.48	0.05
Total	0.55	5.28	2.92	0.09	0.58	5.65	3.28	0.11

Notes:

Estimated Mineral Reserves are reported in accordance with the SAMREC Code. Mineral Reserves would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Cut-off values are calculated at 9.55g/t for Consort Mine, 10.97g/t for the PC Shaft and 7.01g/t for the MMR, applying a gold price of ZAR850,000/kg (US\$1,488/oz at US\$/ZAR:17.77). All Mineral Reserves reported exclude geological structures. Mineral Reserves are reported as in situ tonnes (2.73t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations.

Consort Mine

Grade/tonnage curve



Consort Mine estimated Mineral Reserves sensitivity



Life-of-mine planning

Studies are being conducted to evaluate the possibility of feeding Royal Sheba ore into the Consort Mine's plant from year nine onwards. The Mineral Reserves of the Clutha Section are scheduled to be mined during the final two years of Consort Mine's life.

Consort life-of-mine planning



ESTIMATED MINERAL RESOURCES AND MINERAL RESERVES RECONCILIATION



FACTORS THAT AFFECTED THE MINERAL RESOURCES RECONCILIATION

Depletion through mining activities

Geological boundary and structural updates

Mineral Resource block updates (tonnes and grade)

Cut-off grade increased from 2.75g/t for the prior financial year to 3.77g/t for the current financial year



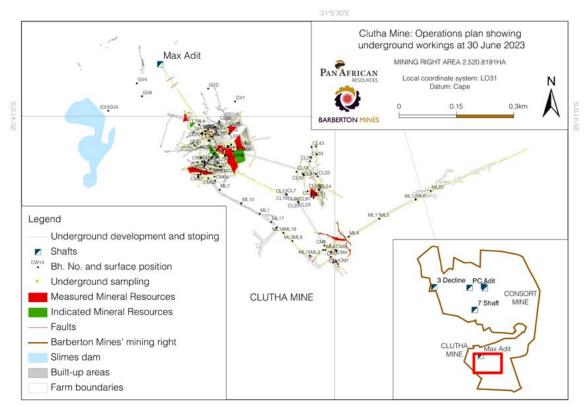
FACTORS THAT AFFECTED THE MINERAL RESERVES RECONCILIATION

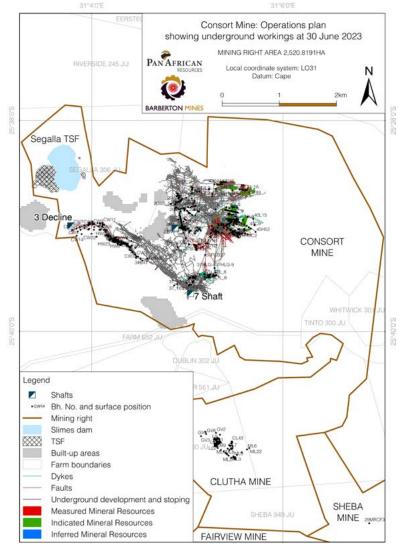
Depletion through mining activities

Impact of updated geological structures and boundaries

Update of grades in Mineral Resource estimation blocks

The mine call factor decreased year-on-year from 110% to 94% while the plant recovery factor declined slightly from 91% to 90.8% for the current financial year

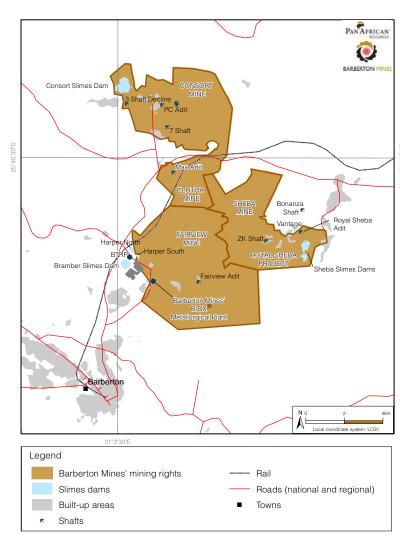




Consort Mine's underground development, stoping, infrastructure and Mineral Resources

BARBERTON TAILINGS RETREATMENT PLANT

Mining of the Harper North, Harper South and Vantage dams progressed in accordance with the plan. It is envisaged that the Royal Sheba project will form part of the BTRP feed sources when this project is commissioned and enabled through the construction of a run-of-mine (RoM) crusher circuit. This will allow the BTRP to treat approximately 35,000tpm of RoM material from the Royal Sheba project, thereby extending the life of the operation and ensuring its sustained output in future. Additionally, the currently mined Western Cross orebody at the Sheba Mine, lends itself to a bulk mining approach. This will further supplement feed material to the BTRP.



Location of Barberton Mines' operations and TSFs illustrating the feed sources for the BTRP

SURFACE RIGHTS

The Fairview Mine owns surface rights on the farm Fairview 342JU on which the BTRP is located.

GEOLOGY

The BTRP operation re-treats previously processed gold ore in the form of slime or tailings material. The slime emanated mostly from historical mining and processing activities of the same orebodies that are currently being mined underground from the existing Barberton Mines operations. The feed sources supplying the BTRP include the Harper South and Harper North complexes, contributing approximately 60,000t per month to the BTRP. Furthermore, the Vantage TSF and screened low-grade stockpile material add an additional 10,000t per month. The remainder of the capacity is filled with residue material from the BIOX® plant at Fairview Mine and the CIP residue at a rate of 10,000t per month. Tailings-related feed material is sustainable at a reducing rate over the next three years. The total life of the BTRP is currently modelled at three years excluding processing of Royal Sheba hard rock material.

OPERATIONAL PERFORMANCE

	Unit	30 June 2023	30 June 2022
Mining			
Total mined	t	921,753	908,198
Au mined grade	g/t	1.4	1.6
Processing			
Tonnes treated	t	921,753	908,198
Au head grade	g/t	1.4	1.6
Au sold	OZ	19,875	19,559
Plant recovery factor	%	47.34	42.87
Financial results			
Average Au price received	ZAR/kg	1,017,667	895,953
	US\$/oz	1,781	1,831
Capital expenditure	ZAR million	11.6	5.7
All-in sustaining costs	US\$/oz	717	891

OUR MINERAL RESOURCES AND MINERAL RESERVES

Gold pour at the Fairview smelt house



ESTIMATED MINERAL RESOURCES

	Estimated Mineral Resources								
		At 30 Jun	ie 2023			At 30 Jun	e 2022		
		Containe	Contained gold			Contained gold			
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz	
Measured	5.79	1.56	9.01	0.29	6.30	1.55	9.79	0.31	
Indicated	4.27	1.59	6.79	0.22	4.37	1.59	6.94	0.22	
Measured and Indicated	10.06	1.57	15.80	0.51	10.67	1.57	16.74	0.54	
Inferred	12.65	1.00	12.61	0.41	11.96	1.01	12.08	0.38	
Total	22.70	1.25	28.41	0.91	22.63	1.27	28.82	0.93	

Estimated Mineral Resources are reported in accordance with the SAMREC Code. Mineral Resources would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Cut-off values are calculated at 0.2g/t for the BTRP, applying a gold price of ZAR950,000/kg (US\$1,663/oz at US\$/ZAR:17.77). Mineral Resources are reported inclusive of Mineral Reserves. All Mineral Resources reported exclude geological structures. Mineral Resources are reported as in situ tonnes (1.4t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations. Geological losses were applied according to the geological model.

MODIFYING FACTORS

At 30 June 2023	Gold price ZAR/kg	Cut-off value g/t Au	Cut-off value cmg/t	Minimum mining width cm	Dilution %	PRF %
BTRP	850,000	0.3	150	500	_	37.46

ESTIMATED MINERAL RESERVES

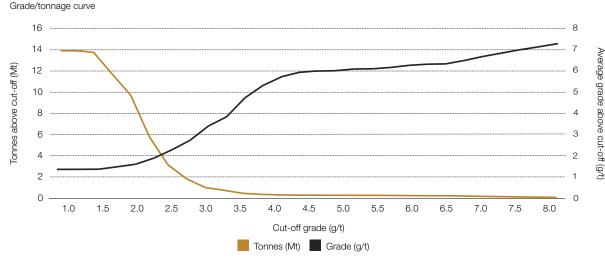
Estimated Mineral Reserves are reported inclusive of diluting and contaminating material delivered to the respective metallurgical plant for treatment and beneficiation.

		Estimated Mineral Reserves								
		At 30 Jun	ie 2023			At 30 Jun	e 2022			
		Contained gold				Containe	Contained gold			
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz		
Proved	0.64	1.30	0.83	0.03	1.20	1.42	1.71	0.05		
Probable	3.29	3.36	11.07	0.36	4.95	1.60	7.94	0.26		
Total	3.93	3.03	11.90	0.38	6.15	1.57	9.63	0.31		

Notes:

Estimated Mineral Reserves are reported in accordance with the SAMREC Code. Mineral Reserves would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Cut-off values are calculated at 0.3g/t for the BTRP, applying a gold price of ZAR850,000/kg (US\$1,488/oz at US\$/ZAR:17.77). All Mineral Reserves reported exclude geological structures. Mineral Reserves are reported as in situ tonnes (1.4t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations.

BTRP





BTRP estimated Mineral Reserves sensitivity

Life-of-mine planning

Lower recovery feed sources for the BTRP are planned to be offset and supplemented by RoM material from the Royal Sheba project to ensure a sustainable long life of the BTRP operation. The RoM circuit could enable the BTRP to treat up to 35ktpm of RoM material. Current indications are that RoM material can be fed into the plant from year three in the life-of-mine scheduling, thereby offsetting some tailings feed sources at that point. Royal Sheba ore is planned to be treated at the Consort metallurgical plant in the initial three years of mining.

BTRP and Royal Sheba life-of-mine planning



ESTIMATED MINERAL RESOURCES AND MINERAL RESERVES RECONCILIATION



FACTORS THAT AFFECTED THE MINERAL RESOURCES RECONCILIATION

Depletion through mining activities

Inclusion of screened low-grade stockpile material

The cut-off grade remained constant year-on-year



FACTORS THAT AFFECTED THE MINERAL RESERVES RECONCILIATION

Depletion through mining activities

The plant recovery factor improved to 37.5% from 34.1% in the prior financial year

Inspecting ventilation infrastructure at Fairview Mine

BARBERTON MINES' **MAJOR PROJECTS**

Barberton Mines' assets also include projects that are at varying stages of exploration and development. The individual projects and level of study are summarised and illustrated in the figure alongside.

ROYAL SHEBA PROJECT

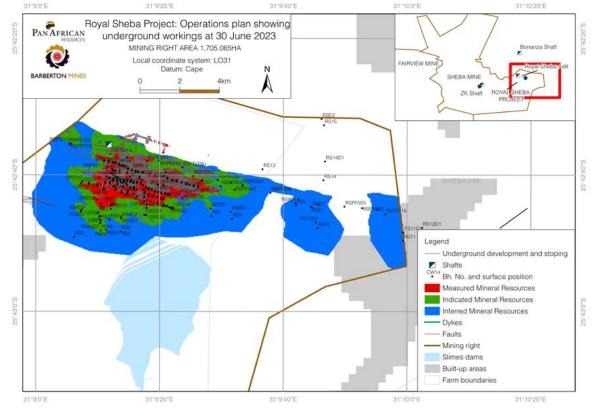
The Group initiated preliminary mining activities at the Royal Sheba project to further define the grades and recoveries expected from this large-scale orebody. These activities included the extraction of a 10,000t bulk sample from historically unmined areas located 26m below surface, between 6 Level and 7 Level during the prior reporting period.

The design of the bulk sample is being conducted in a manner that will enable mining to continue on those levels or to further access down-dip extensions of the orebody. The mining areas are accessed from the existing Royal Sheba adit, from where a slightly up-dipping (+1°) haulage is mined towards a location 70m in the footwall of the reef horizon and then accessing the position of the life-of-mine decline where the Group can continue mining towards the unmined downdip and strike extents of the orebody. During the current financial year, the bulk sample position was intersected as planned and the mineralisation encountered confirmed the Mineral Resource estimates of the area. Following this successful intersection of the orebody, the 10,000t bulk sample was extracted in the 2022 reporting period, and processed at the Group's Consort and Sheba metallurgical plants during the reporting period.

GEOLOGY

The Royal Sheba project straddles the contact between the arenites of the Moodies Group to the north (Eureka Syncline) and the Fig Tree Group's greywacke and shale to the south (Ulundi Syncline), similar to the stratigraphic occurrence of the Sheba Mine. The contact is marked by the presence of the regionally identifiable Sheba Fault. The two synclines are refolded due to the immense force present during deformation, resulting in back-to-back isoclines that dip steeply to the south.

The mineralisation of the Royal Sheba orebody is encapsulated in a shear envelope of the Sheba Fault, ranging in width from 5m to 25m. The gold mineralisation occurs predominantly in finely disseminated sulphide minerals (mainly pyrite) and native gold.



Simplified geological section of Sheba Mine and the Royal Sheba project

ESTIMATED MINERAL RESOURCES

	Estimated Mineral Resources							
		At 30 June 2023				At 30 Jun		
		Contained gold			Contained gold			
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz
Measured	5.04	2.30	11.57	0.37	5.04	2.30	11.57	0.37
Indicated	6.07	2.25	13.64	0.44	6.07	2.25	13.64	0.44
Measured and Indicated	11.11	2.27	25.21	0.81	11.11	2.27	25.21	0.81
Inferred	6.06	1.37	8.31	0.27	6.06	1.37	8.31	0.27
Total	17.17	1.95	33.52	1.08	17.17	1.95	33.52	1.08

Notes:

Estimated Mineral Resources are reported in accordance with the SAMREC Code. Mineral Resources would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Cut-off values are calculated at 0.8g/t for Royal Sheba, applying a gold price of ZAR950,000/kg (US\$1,663/oz at US\$/ZAR:17.77). Mineral Resources are reported inclusive of Mineral Resources reported exclude geological structures. Mineral Resources are reported as in situ tonnes (2.73t/m²). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations. Geological losses were applied according to the geological model.

MODIFYING FACTORS

At 30 June 2023	Gold price ZAR/kg	Cut-off value g/t Au	Cut-off value cmg/t	Stoping width cm	Dilution %	MCF %	PRF %
Royal Sheba project	850,000	1.70	1,190	700	10	90	85

ESTIMATED MINERAL RESERVES

Estimated Mineral Reserves are reported inclusive of diluting and contaminating material delivered to the respective metallurgical plant for treatment and beneficiation.

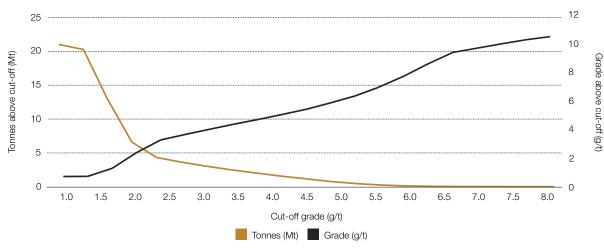
	Estimated Mineral Reserves							
		At 30 June 2023				At 30 Jun	ie 2022	
		Contained gold			Containe	Contained gold		
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz
Proved	0.40	2.65	1.06	0.03	4.95	1.69	8.36	0.27
Probable	2.09	2.91	6.07	0.20	6.25	1.82	11.38	0.37
Total	2.49	2.86	7.13	0.23	11.20	1.76	19.75	0.63

Notes:

Estimated Mineral Reserves are reported in accordance with the SAMREC Code. Mineral Reserves would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Cut-off values are calculated at 1.70g/t for Royal Sheba, applying a gold price of ZAR850,000/kg (US\$1,488/oz at US\$/ZAR:17.77). All Mineral Reserves reported exclude geological structures. Mineral Reserves are reported as in situ tonnes (2.73t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations.

Royal Sheba project

Grade/tonnage curve



ESTIMATED MINERAL RESOURCES AND MINERAL RESERVES RECONCILIATION



FACTORS THAT AFFECTED THE MINERAL RESOURCES RECONCILIATION

Proposed mining method optimisation to long hole open stoping

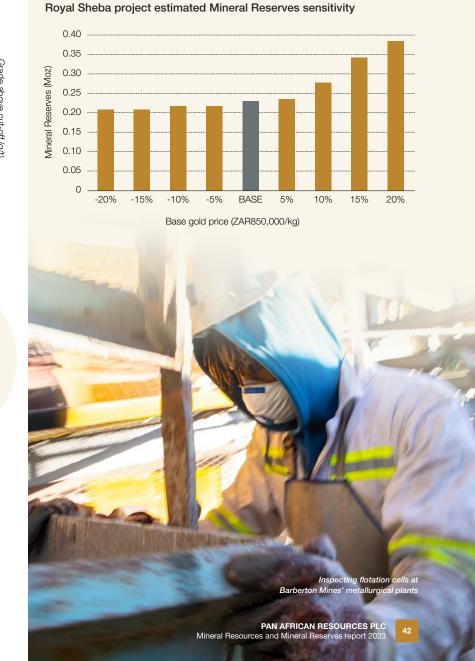
Cut-off grade remained constant year-on-year at 0.8g/t



FACTORS THAT AFFECTED THE MINERAL RESERVES RECONCILIATION

Long hole open stoping mining method adopted

Cut-off grade increased from 0.8g/t to 1.7g/t in the current reporting period



BARBERTON MINES' ESTIMATED MINERAL RESOURCES AND MINERAL RESERVES RECONCILIATION

At 30 June 2023, Barberton Mines reported estimated Mineral Resources of 4.12Moz (46.77Mt at 2.74g/t) and estimated Mineral Reserves of 1.53Moz (9.42Mt at 5.04g/t) contained gold.

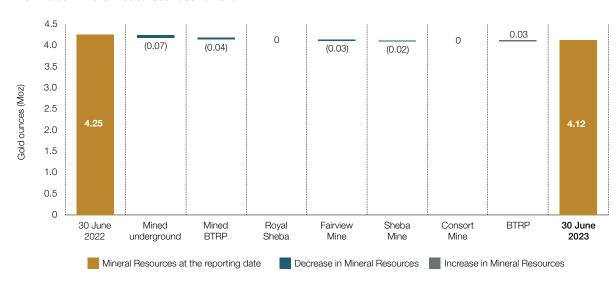
The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce the Mineral Reserves. Estimated Mineral Reserves are reported as mill-delivered tonnes at the contained grade, having duly considered all modifying factors.

Mineral Resources and Mineral Reserves reported are contained within the mining right boundaries of Barberton Mines. All mined-out areas have been depleted from the reported Mineral Resources and Mineral Reserves.

ESTIMATED MINERAL RESOURCES COMPARISON

	Estimated Mineral Resources								
		At 30 Jun	ie 2023			At 30 Jur	ne 2022		
		Containe	Contained gold			Contained gold			
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz	
Measured	13.46	3.39	45.59	1.47	14.00	3.30	46.21	1.49	
Indicated	11.97	2.75	32.91	1.06	11.97	2.76	33.06	1.06	
Measured and Indicated	25.42	3.09	78.50	2.52	25.98	3.05	79.27	2.55	
Inferred	21.35	2.32	49.63	1.60	20.72	2.56	53.05	1.71	
Total	46.77	2.75	128.13	4.12	46.70	2.83	132.31	4.25	

Estimated Mineral Resources reconciliation



RECONCILIATION OF ESTIMATED MINERAL RESOURCES

Barberton Mines' Mineral Resources decreased by 3% year-on-year, with a total decrease of 134Koz reported inclusive of 85Koz being depleted and sold (113Koz of RoM material) through mining activities. The underground portion of the estimated Mineral Resources for the Barberton region decreased by 122Koz (4%) for the reporting period.

This change can be ascribed to the following factors:

- Re-evaluating Fairview Mine's remnant areas and the high-grade MRC 11-block platforms
- New sampling in areas at Consort Mine and the PC Shaft remnant blocks adding additional flexibility at the operation
- Updating of Mineral Resource blocks through geological modelling processes at all the underground operations
- Changes in cut-off grades.

RECONCILIATION OF ESTIMATED MINERAL RESERVES

Barberton Mines' Mineral Reserves decreased by 10.9Mt at 1.10g/t (388Koz), or decreased by 20% in contained gold.

The decrease in the estimated Mineral Reserves can mainly be ascribed to:

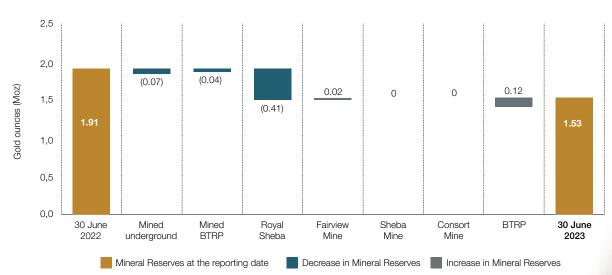
- mining depletion of 70.3Koz from RoM underground mining of which 65.0Koz was recovered
- mining depletion of 42.5Koz from RoM at the BTRP remining activities of which 0.02Moz was recovered in the plant
- an increase in the cut-off grade of the Royal Sheba project was the main contributor in the decrease of the Mineral Reserves reported.

ESTIMATED MINERAL RESERVES COMPARISON

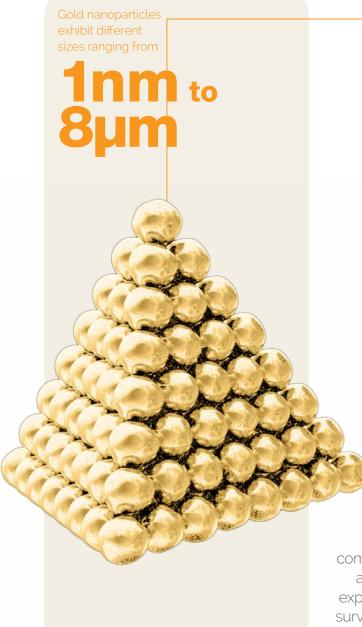
Estimated Mineral Reserves are reported inclusive of diluting and contaminating material delivered to the respective metallurgical plant for treatment and beneficiation.

	Estimated Mineral Reserves								
		At 30 Jun	ne 2023			At 30 Jur	ne 2022		
		Contained gold				Contained gold			
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz	
Proved	2.76	5.25	14.52	0.47	7.78	3.07	23.87	0.77	
Probable	6.65	4.95	32.95	1.06	12.58	2.84	35.67	1.15	
Total	9.42	5.04	47.47	1.53	20.36	2.92	59.54	1.91	

Estimated Mineral Reserves reconciliation



Mechanised mining equipment at Fairview Mine



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EVANDER REGION

reconciliation

Resources and Mineral Reserves

Historically, exploration in the Evander region commenced in 1903 with the advent of diamond drilling and progressed, intermittently, through various major exploration phases that included extensive geophysical surveys and drilling that realised the economic potential of the Kimberley Reef on the southern edge of the main Witwatersrand Basin.

EVANDER REGION

With approximately 34Moz of high-grade Mineral Resources, ranging from shallow to ultra-deep locations, the Evander Basin has the potential to remain a prolific gold producer for decades to come.

The Winkelhaak, Leslie/Bracken and Kinross Mines were combined to form the current layout of Evander Mines.

Although large-scale underground operations ceased at Evander Mines in 2018 as a result of the low gold price and high cost of production, the high-grade but variable characteristic of the Kimberley Reef has enabled Evander Mines to continue small-scale 'selective mining' in the localised high-grade lower-cost section. This is illustrated by the mining currently being conducted successfully at the 8 Shaft pillar.

BACKGROUND

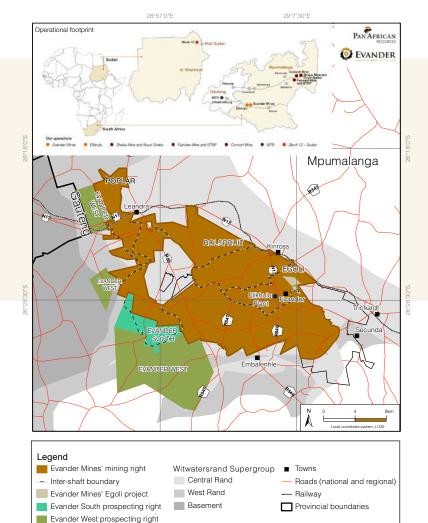
The Evander goldfield is centred around Evander, a town founded in 1955 to serve the burgeoning mining community. The first gold to be produced in this region came from the Winkelhaak Mine in December 1958 and over the next nine years, three other mines were brought into production, namely Leslie Mine, Bracken Mine and Kinross Mine. Evander Mines (Leslie/Bracken, Kinross and Winkelhaak Mines) exploits the Kimberley Reef, where mining methods employed include underground conventional breast-type scraper mining using rail-bound equipment with some trackless mechanised development.

More recently, Elikhulu, the Group's flagship tailings retreatment operation, was commissioned in 2018. Hydraulic mining of the Kinross tailings dam is utilised to pump material at a rate of 1.2mtpm to Elikhulu. Elikhulu achieved its inaugural gold pour on 16 August 2018, within budget and ahead of schedule. The plant is fed by the historical Kinross, Leslie/Bracken and Winkelhaak TSFs where the gold is extracted at a CIL hybrid plant. The modern retreatment plant at Elikhulu has the capacity to produce up to 60,000oz of gold per year, with an expected remaining life-of-mine of 10 years.

Evander Mines' mineral assets comprise advanced projects containing SAMREC-compliant estimated Mineral Resources that range from early prefeasibility study stage (the Poplar, Evander South and Rolspruit projects) to a bankable feasibility study at the Egoli project in addition to the above-mentioned mining operations, including Elikhulu. The current revenue streams for Evander Mines are primarily generated from the 8 Shaft pillar and 24 Level mining and Elikhulu.

LOCATION

Evander Mines is situated close to the town of Evander, Mpumalanga province, approximately 120km east-south-east from Johannesburg near the town of Secunda.



The Evander region represents a unique complex of underground mining, tailings retreatment and treatment of buy-in material.

This enables the Group to optimise mining of the high-grade underground orebody, the Kimberley Reef and supplement available plant capacity with compatible external sources from other regions.

Additionally, the low-cost Elikhulu retreatment operation adds safe, high-margin ounces to the complex's annual production.

Elikhulu produces approximately

56%

of the Evander region's annual production

External buy-in sources add approximately

8%

to the Evander region's annual production

8 Shaft produces approximately

of the Evander region's annual production

Taung Gold boundary

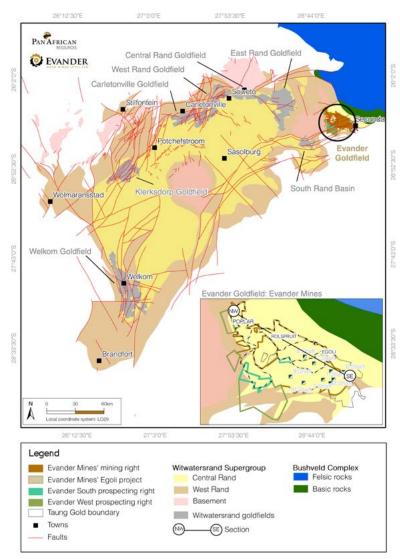
OUR MINERAL RESOURCES BARBERTON EVANDER WEST RAND SUDAN OTHER AND MINERAL RESERVES REGION REGION REGION INFORMATION

EVANDER REGION continued

OPERATIONAL OVERVIEW

	8 Shaft	Elikhulu						
Mining method	Underground Conventional breast, scraper mining	Surface Hydraulic mining						
Infrastructure and mineral processing	An underground complex consisting of vertical and decline shaft systems. The gold-bearing reef is mined from the 8 Shaft pillar, approximately 1.6km below surface and from 24 Level, some 2.4km below surface. Ore is transported through the decline shaft systems to 15 Level. From there, the ore is transported across to Evander Mines' 7 Shaft (7 Shaft), where it is hoisted and conveyed to the Kinross metallurgical plant. The plant consists of a milling, gravity gold separation and CIP circuit with a carbon regeneration section, elution (and electro-winning) circuit and smelt house. The Kinross plant capacity is currently 60ktpm but can be upgraded to the original design capacity of approximately 240ktpm with the refurbishment of defunct mills	A surface remining site with road access from all surface material sources to the plant. Ore is pumped (hydraulic remining) to the Elikhulu plant in slurry form. The ore is subjected to pre-oxidation to enhance the metallurgical recovery, and processed through a CIL circuit, with a carbon regeneration and elution (and electro-winning) section. Elikhulu has its own smelt house. The designed processing capacity at Elikhulu is approximately 1,200ktpm						
TSF	Tailings from the Kinross metallurgical plant are pumped to the Elikhulu residue tank	Tailings from the Elikhulu residue tank are deposited onto the new regional Kinross extension TSF (Elikhulu TSF) and the Winkelhaak TSF at a ratio of 1,000ktpm and 200ktpm, respectively. The designed capacity of the Kinross TSF extension will cater for deposition of the current modelled life of the operation						
Mineralisation style	Palaeo-placer and braided stream-type sedimentary deposit scavenged gold from the hinterland and underlying deposits. Mineralisation is concentrated in robust conglomeratic and carbonaceous units	Deposition material of historically treated metallurgical tailings from the Winkelhaak, Leslie/Bracken and Kinross Mines						
Mineralisation characteristics	Gold is associated with disseminated sulphides in the form of pyrite. High grades occur where the reef is characterised by carbon specks or bands	The material is confined to the deposition site of historical tailings and approximately 1m beneath the historical footprint. The ore consists of oxidised tailings containing pyrite-associated gold which was not recovered in the initial treatment process						
Life-of-mine	13 years (2022: 14 years) due to the addition of 25 and 26 Level mining areas	10 years (2022: 11 years)						
Exploration	Ongoing sampling programmes and reserve delineation drilling are conducted to define the mineralisation continuity and to continuously upgrade estimated Mineral Resources to Mineral Reserves							
Climate	The Evander region is located in the Highveld climatic region of South Africa, with warm and wet summers and cool, dry winters. Rain falls mostly as showers and thunderstorms, mainly between October and March. Average annual rainfall is approximately 565mm. The most rainfall is experienced in January, which receives on average 110mm of rain. The driest months are June and July, with no rainfall expected on average. The average monthly midday temperatures range from 16.5°C in June to 25.7°C in January. The region is the coldest during June when evening temperatures drop to 0.1°C on an average night							



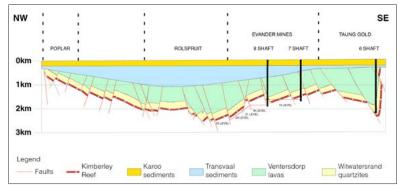


Regional geological setting of Evander Mines

REGIONAL GEOLOGICAL SETTING OF EVANDER MINES

Evander Mines exploits the Kimberley Reef in the Evander Basin, the eastern-most extremity of the Witwatersrand Supergroup. The Kimberley Reef is mined throughout the major gold mining districts within the Witwatersrand Supergroup, including the East Rand, Central Rand, West Rand, Far West Rand and Free State goldfields. Deposition models for gold within the conglomeratic horizons follow a palaeo-placer-type sedimentological deposition along with winnowing, erosion and concentration of gold-bearing footwall lithologies. Various studies have highlighted the importance of hydrothermal activity for deposition, remobilisation and enrichment within certain packages of the Witwatersrand Supergroup.

SECTION ACROSS THE EVANDER BASIN



Generalised long section through Evander Mines and its projects

MINING RIGHTS

Evander Mines was the holder of an old order mining right for gold and associated minerals which was converted by the DMRE in terms of Item 7 of Schedule II of the MPRDA to a new order mining right (MP30/5/1/1/2/126 MR) on 29 April 2008, with the new order right valid until 28 April 2038. Evander Mines also holds the Evander West and Evander South prospecting rights. All estimated Mineral Resources and Mineral Reserves reported in this document are located within the existing mining right and prospecting rights held by Evander Mines.

The Evander South prospecting right (MP30/5/1/2/2/248 PR) contains estimated Mineral Resources of 25.1Mt at 7.11g/t for 5.7Moz (12.8Mt at 8.40a/t for 3.4Moz are Indicated Mineral Resources and 12.3Mt at 5.77g/t for 2.3Moz are in the Inferred Mineral Resources category). The Evander South and Evander West prospecting rights are being consolidated into Evander Mines' mining right in terms of section 102 applications that were lodged at the DMRE in December 2017, with these applications being accepted by the DMRE and still being processed. Acknowledgement of this section 102 application was received from the DMRE on 10 May 2021 and registration is still in process. There is ongoing correspondence with the DMRE with regard to the status of the applications, which remain valid until they are granted as per the MPRDA.

Pre-shift 'toolbox talk' meeting at the waiting place at the 24 Level mining area

Right name	Project	Type of right	Right number	Area	Expiry date	Status
Evander Gold Mining Proprietary Limited	Evander South	Prospecting	MP30/5/1/2/2/248 PR	2,551ha	29 June 2019	Section 102 application to include prospecting right into Evander Mines' mining right is pending (lodged 8 December 2017). Acknowledgement of the application was received from the DMRE on 10 May 2021
Evander Gold Mining Proprietary Limited	Evander West	Prospecting	MP30/5/1/2/2/4272 PR	11,189ha	19 October 2016	Renewal application lodged (October 2016). Section 102 application to include prospecting right into Evander Mines' mining right is pending (lodged 8 December 2017). Acknowledgement of the application was received from the DMRE on 10 May 2021
Evander Gold Mining Proprietary Limited	Evander Gold Mining	Mining	MP30/5/1/2/2/126 MR	31,783ha	28 April 2038	Effective

Evander Mines has an approved EIA, EMP and WUL, which incorporate the Elikhulu operations.

Evander Mines has lodged an undiscounted scheduled closure cost (excluding latent and residual closure costs) of US\$14.0 million that is fully funded by means of a Cenviro insurance investment product underwritten by Centriq Insurance Company Limited, with a current value of US\$18.0 million. These funds are invested in a portfolio comprising a combination of money market, capital market and equity instruments. The aim of the investment is to provide the Group with the necessary liquidity for rehabilitation activities and to preserve the real value of the rehabilitation capital. A rehabilitation strategy and implementation plan was compiled and updated in 2017 to rehabilitate dormant and non-productive areas in terms of the Group's ESG focus and concurrent rehabilitation strategy. The audit and risk committee reviews the performance of this portfolio on a regular basis.

SURFACE RIGHTS

Evander Mines' mining right extends over 31,783ha. Evander Mines also owns a surface area of 6,676ha, of which 2,230ha are utilised for mining and mining-related activities. The surface activities are limited to the three main shaft complexes: Kinross, Winkelhaak and Leslie/Bracken. There is also one TSF associated with each of the three complexes. No surface exploration activities were undertaken on the prospecting right areas during the period under review.

Historically, mining at Evander Mines involved underground operations from nine shafts

at the Kinross. Winkelhaak and Leslie/Bracken sections. Water abstraction is via both the

7 and 8 Shafts in the Kinross section. Evander Mines currently mines the 8 Shaft pillar and

is accessing unmined ore on 24 Level while also reprocessing surface TSFs via Elikhulu.



OUR MINERAL RESOURCES

AND MINERAL RESERVES

ground rock support installation nder Mines' 8 Shaft pillar mining REGION



GEOLOGICAL/RESOURCE ESTIMATION METHODOLOGY

The estimated Mineral Resources and Mineral Reserves for the Evander region are reported in compliance with the SAMREC Code.

Geological modelling

The grade and structure of the Kimberley Reef are highly erratic in nature, and most of the data for evaluating the resource blocks is derived from underground development adjacent to the mining blocks, and from the position of the present mining areas along with diamond drill hole information. The continuity of grade values within the ore shoots is derived primarily from short-range statistical and geostatistical projections, historical mining data, actual measurements of the orebody and continuity modelling, including variography and trend analyses.

The tectonic structure and orebody geometry have been modelled using Datamine Studio RM®. This system allows for the 3D structure of the mineralised volume to be constructed, modified and viewed graphically. Additionally, the 3D models can be updated as new data becomes available. Importantly, this system is also utilised as a tool for visualising grade continuity and is a valuable aid for mine planning.

Drone surveys are conducted on a monthly basis over the tailings dams being remined, forming the basis of the geological and resource models for the Elikhulu operation.

Resource estimation

For grade control, diamond-cored drill hole sampling and underground stope and development sampling, a minimum sampling width of 20cm is adhered to. Exploration diamond drill hole sampling is conducted over a sample width of 50cm within the mineralised zone or lithological contacts. Auger drilling, dual drilling or sonic drilling is also conducted to sample the tailings material that is re-treated at the Elikhulu operation. These are sampled at 150cm intervals.

All the samples are transported from site to the accredited SGS Barberton assay laboratory. SGS Barberton is a SANASaccredited assay laboratory (T0565) and is certified to conduct the relevant gold analyses. The samples are collected by SGS Barberton at Evander Mines in the presence of a mine representative (sampler) and are accompanied by a sample dispatch note. Transportation of the samples is done in sealed containers by SGS Barberton employees to the assay laboratory. Sample preparation and assaying are conducted by SGS Barberton. Preparation of the samples includes the drying of the sample at 110°C, followed by crushing to 85% passing 2.36mm. Between 0.5kg and 0.75kg of crushed material is subsampled and pulverised using a Rocklabs LM2 or RM2000 pulveriser to 85% passing 75µm. A 25g (grade control) or 50g (exploration) aliquot is mixed with a premix flux for fire assay purposes. Low-grade orebodies are analysed using atomic absorption while high-grade orebodies employ a parted gravimetric finish.

An in-house QA/QC system is implemented at Evander Mines where certified reference material is employed to monitor the accuracy of the assaying procedure. For exploration, up to 10% of the samples are reassayed for precision tests and are accompanied by certified reference material at a 10% frequency. A two-times standard deviation from the expected certified content is employed as a failing criterion in the QA/QC system and triggers a reassaying procedure. All exploration samples retrieving grades in excess of 10g/t are immediately reassayed to validate the grades.

Extreme high-grade samples are evaluated per geozone and capped to an acceptable maximum grade. These high grades are identified by sample statistics, histograms and capping curves. The capped high-grade samples are employed for the MRE of each geozone.

The MRE method employed for generating local grade estimates at Evander Mines is ordinary kriging. The orientations and ranges of each geozone's semi-variogram are used to determine the kriging search parameters, and the estimation parameters are optimised for each search and each geozone. In all cases, historical data is employed during the MRE due to the rich history of mining and exploration in the area. All historical data is continuously evaluated relative to newly acquired data for representativeness. During the reporting period, no inconsistencies were noted in the historical or new data.

Mineral Resources classification

Hard rock Kimberley Reef estimates are kriged into 30m by 30m blocks for the Measured Resources from point data within the modelled variogram ranges. Indicated Mineral Resources are macro-kriged into 60m by 60m parent cells, employing a regularised declustered grid of samples on the same basis. Estimation is conducted within the modelled variogram ranges per geozone. Inferred Mineral Resources are macro-kriged into a 120m by 120m parent cell within the identified geozones, based on the modelled variogram range from a regularised and declustered data set on the same grid size. The Measured and Indicated Resource models are then tested on gold content estimated versus assayed, centimetre grammes per tonne (cmg/t) kriging efficiency and slope of regression, and merged together with the Inferred Mineral Resources model to produce a combined kriged block model.

The Mineral Resources for the tailings are estimated by a capped 3m composited drill hole data set. The MRE is conducted through ordinary kriging, employing anisotropic variography into a parent cell of 50m by 50m by 3m (X, Y, Z) dimensions. The MRE parameters such as the minimum and maximum number of samples, maximum samples per drill hole and scaling factors are assessed through a quantitative kriging neighbourhood analysis. Measured Mineral Resources for the tailings are classified if a block is estimated within the variogram range with a slope of regression of 80% or more. Indicated Mineral Resources for the tailings extend up to double the variogram range due to the nature of the deposit. All other estimates for the tailings are classified as Inferred Mineral Resources.

Mineral Reserves conversion Estimated mineral inventory of Evander Mines at 30 June 2023 Mineral Resources 274.5Mt at 3.84g/t for 33.86Moz Inferred 57.4Mt at 6.98g/t for 12.89Moz Indicated 169.5Mt at 3.48g/t for 18.97Moz Probable 131.4Mt at 1.97g/t for 8.34Moz

Proved

➤ 39.8Mt at 0.67g/t for 0.86Moz

Reasonable prospects for eventual economic extraction

47.5Mt at 1.31g/t for 2.00Moz

Measured

Indicated Mineral Resources are converted to Probable Mineral Reserves due to the lower confidence mainly in grade continuity relative to that of Measured Mineral Resources. In most instances, Measured Mineral Resources are converted to Proved Mineral Reserves. Certain Measured Mineral Resources are not immediately accessible for mining and require development or equipping. In these situations, Measured Mineral Resources have been converted to Probable Mineral Reserves. Mineral Reserves are reported inclusive of diluting and contaminating material delivered to the respective metallurgical plant for treatment and beneficiation. Inferred Mineral Resources are not converted to Mineral Reserves, nor are Inferred Mineral Resources utilised in feasibility studies.



EVANDER MINES' 8 SHAFT

GEOLOGY

The Kimberley Reef is an oligomictic, pebbly conglomerate and comprises a composite sequence of channel sediments that define longitudinal gravel bars and sand bars with pebbly veneers. The reef in the area strikes in an east-west direction and dips to the north at about 10°. The area is also divided by two major normal faults, striking in an east-north-east to west-south-west direction. The reef thickness varies from a waste on contact up to a 50cm well-developed oligomictic conglomerate. Average reef thickness is 35cm within the 8 Shaft vicinity. High gold values in the Kimberley Reef are mostly located at the base of the unit and are associated with the presence of carbon and some visible gold on the footwall contact.

LOCATION

8 Shaft is situated about 5km north-west of the town of Evander. The 8 Shaft boundary covers an area of 44km² and is located between the Rolspruit project to the north-west and 7 Shaft to the south-east. The 8 Shaft pillar mining, however, only covers approximately 0.3km² of the total 8 Shaft area. During the reporting period, mining occurred in the 2 Decline area on the western side at a depth of 2,300m to 2,500m below surface as well as at the 8 Shaft pillar at a depth of 1,600m below surface.

OPERATIONAL PERFORMANCE

	Unit	30 June 2023	30 June 2022
Mining			
Total mined	t	159,063	129,087
Au mined grade	g/t	6.6	12.0
Processing			
Tonnes treated	t	159,063	129,087
Au head grade	g/t	6.6	12.0
Au sold	OZ	32,806	48,850
Plant recovery factor	%	96.45	98.12
Financial results			
Average Au price received	ZAR/kg	1,050,071	889,168
	US\$/oz	1,838	1,817
Capital expenditure	ZAR million	1,077.9	410.5
All-in sustaining costs	US\$/oz	1,158	1,112

Excluding toll treatment.

All underground mining development and infrastructure placement for the mining of 24 Level progressed, with initial mining on 24 Level commencing during the reporting period. Furthermore, an independent environmental engineering contractor commissioned phase 1 of the underground refrigeration plant within the mined excavation area created on 24 Level during the reporting period. Phase 2 of the refrigeration plant construction is expected in the following reporting period. Phase 1 of the project enables mining of both the 24 Level F line stopes and mining of the 24 Level B. C and D raise lines. Phase 2 will allow for additional mining crews to be placed on 24 Level as well as for subsequent mining on 25 Level.

The Group has internally evaluated the potential for continued mining on 25 and 26 Levels from 24 Level at 8 Shaft, where the 2 Decline extends from the bottom of 18 Level. Development leading from the existing 24 Level footwall infrastructure allows access to both 25 and 26 Levels, with an on-reef decline layout. The mining of 25 and 26 Levels demonstrates a compelling business case and will extend 8 Shaft's production profile, post cessation of operations, of the 8 Shaft pillar and the 24 Level complex for an additional eight years, with annual production of approximately 65Koz.

The project development plan is as follows. The existing 24 Level footwall infrastructure intersects the Kimberley Reef horizon on 25 Level. A twin-barrel on-reef decline system will then access the higher-grade ore extending deeper to the north-west of the current 24 Level mining area. Due to the shallower dip in the area, sublevels will be introduced to limit mining back-lengths to approximately 150m.

The mining method employed at 25 and 26 Levels will be a hybrid of conventional breast mining and mechanised trackless on-reef development. Stope faces will be drilled utilising handheld pneumatic-driven air leg-assisted rock drills. Blasted ore will be cleaned by means of a series of scraper winches from the face into strike and centre gullies. Ore will be collected in ore loading bays at the bottom of the raise and then loaded with diesel-driven load haul drivers and tipped onto strike conveyors running along the sublevel strike drives. The strike conveyors will deposit the ore onto the decline dip conveyor, which will tip the ore into bins. Ore will then be drawn on 24 Level and transferred by diesel locomotives to the vent shaft where the ore will be hoisted to 17 Level and tipped down to 18 Level.

As a result of the on-reef development layout, limited waste from 25 and 26 Levels will be blended with the ore stream and processed at the Kinross metallurgical plant.

The ventilation and refrigeration studies for mining the 2 Decline on the 25 and 26 Levels were completed by an independent consulting company.

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ESTIMATED MINERAL RESOURCES

		Estimated Mineral Resources								
		At 30 Jur	ne 2023			At 30 Jur	e 2022			
		Containe	ed gold			Containe				
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz		
Measured	3.53	12.68	44.71	1.4	3.84	12.67	48.67	1.56		
Indicated	1.31	10.88	14.20	0.46	1.31	10.88	14.20	0.46		
Measured and Indicated	4.83	12.19	58.91	1.89	5.15	12.22	62.87	2.02		
Inferred	19.22	9.80	188.36	6.06	19.22	9.80	188.36	6.06		
Total	24.05	10.28	247.27	7.95	24.37	10.31	251.23	8.08		

Notes:

Estimated Mineral Resources are reported in accordance with the SAMREC Code. Mineral Resources would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Cut-off values are calculated at 660cmg/t, applying a gold price of ZAR950,000/kg (US\$1,663/oz at US\$/ZAR:17.77). Mineral Resources are reported inclusive of Mineral Resources. All Mineral Resources reported exclude geological structures. Mineral Resources are reported as in situ tonnes (2.71t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations. Geological losses were applied according to the geological model.

MODIFYING FACTORS

At 30 June 2023	Gold price ZAR/kg	Cut-off value g/t Au	Cut-off value cmg/t	Stoping width cm	Dilution %	MCF %	PRF %
8 Shaft	850,000	8.57	1,029	120	12.6	85	95.3

ESTIMATED MINERAL RESERVES

Estimated Mineral Reserves are reported inclusive of diluting and contaminating material delivered to the respective metallurgical plant for treatment and beneficiation.

		Estimated Mineral Reserves							
		At 30 Jun	ie 2023			At 30 Jun	ne 2022		
		Containe	ed gold		Contained gold				
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz	
Proved Probable	1.74 1.77	7.40 6.26	12.86 11.10	0.41 0.36	1.07 2.24	7.78 6.93	8.29 15.56	0.27 0.50	
Total	3.51	6.82	23.96	0.77	3.31	7.20	23.85	0.77	

Notes:

Mineral Reserves are reported in accordance with the SAMREC Code. Mineral Reserves would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Cut-off values are calculated at 1,029cmg/t, applying a gold price of ZAR850,000/kg (US\$1,4880z at US\$/ZAR:17.77). All Mineral Reserves reported exclude geological structures. Mineral Reserves are reported as in situ tonnes (2.71t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations. The Mineral Reserves are only reported within the 8 Shaft pillar area.

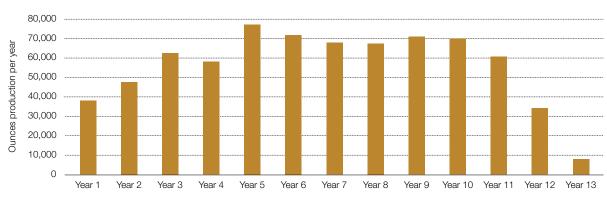
Evander Mines' 8 Shaft

Grade/tonnage curve 25 Average grade Tonnes above cut-off (Mt) 12 10 900 950 1,000 1,050 1,100 1,150 1,200 1,250 1,300 Cut-off grade (g/t)

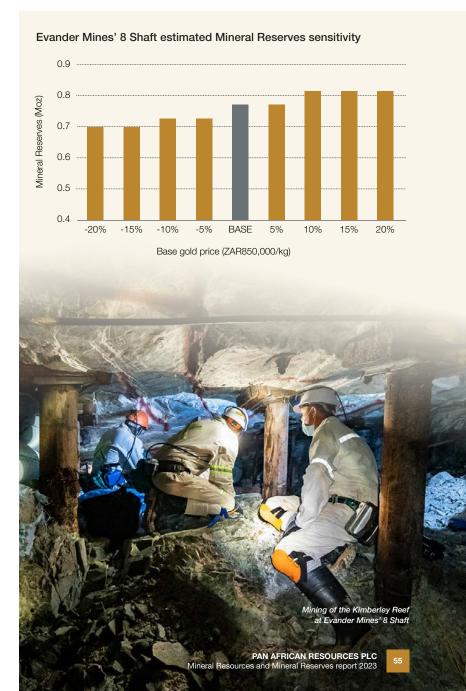
Evander Mines' 8 Shaft life-of-mine planning

The current 8 Shaft estimated Mineral Reserves are planned to be depleted over 13 years through the mining of the 8 Shaft pillar and 24, 25 and 26 Level mining.

Tonnes (Mt) Grade (g/t)



Evander Mines' 8 Shaft (oz)



ESTIMATED MINERAL RESOURCES AND MINERAL RESERVES RECONCILIATION



FACTORS THAT AFFECTED THE MINERAL RESOURCES RECONCILIATION

FACTORS THAT AFFECTED THE MINERAL RESERVES RECONCILIATION

Depletion through mining activities

Geological boundary and structural updates

Mineral Resource block updates

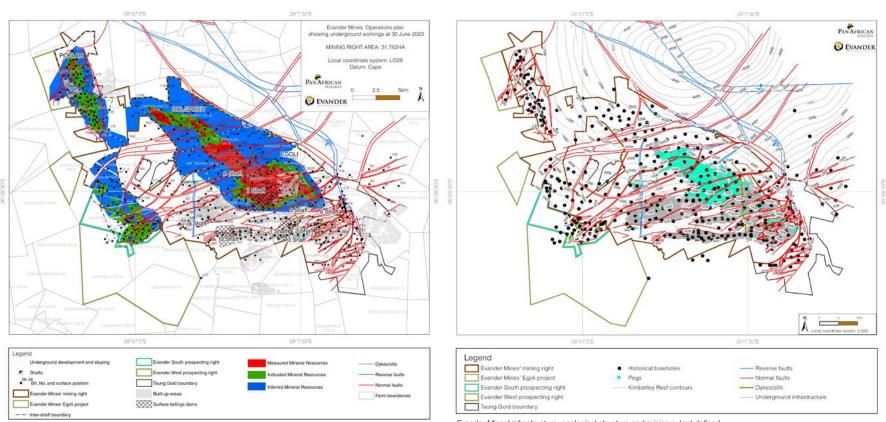
Cut-off grade remained constant year-on-year at 660cmg/t

Depletion through mining activities

Impact of updated geological structures and boundaries

Update of grades in Mineral Resource estimation blocks

Modifying factors remained constant year-on-year as per achieved results



ELIKHULU

Elikhulu and the related infrastructure at Evander Mines, owned and operated by Pan African, re-treats historical gold plant tailings at a rate of ~1.2mtpm.

Elikhulu is expected to yield an approximate average of 50Koz of gold per annum over its 10-year remaining life-of-mine. These production estimates exclude an Inferred Resource of 74Koz of gold delineated in the soil material beneath the existing Winkelhaak tailings dump.

GEOLOGY

The ore being treated at Elikhulu originated from the previously mined and metallurgically treated Kimberley Reef from the Winkelhaak, Leslie/Bracken and Kinross Mines as part of Evander Mines' historical operations. The tailings of the treated material were deposited onto three TSFs that will be reclaimed in the following order: Kinross (the Kinross TSF facility was depleted in the reporting period), Leslie/Bracken and Winkelhaak. Post their processing, these TSFs will be consolidated into a modern, single, enlarged regional Kinross tailings extension facility, thus reducing Evander Mines' environmental footprint and associated environmental impact.

OPERATIONAL PERFORMANCE

	Unit	30 June 2023	30 June 2022
Mining			
Total mined	t	13,587,372	13,732,148
Au mined grade	g/t	0.36	0.34
Processing			
Tonnes treated	t	13,549,161	13,732,148
Au head grade	g/t	0.36	0.34
Au sold	OZ	50,573	52,218
Plant recovery factor	%	32.23	34.93
Financial results			
Average Au price received	ZAR/kg	1,060,148	888,552
	US\$/oz	1,856	1,817
Capital expenditure	ZAR million	332.5	168.5
All-in sustaining costs	US\$/oz	1,008	1,003

The pump station at the Leslie/Bracken TSF was completed and commissioned during the reporting period. This pump station will allow for slurry from the Leslie/Bracken TSF to be moved to the Elikhulu plant at a rate of approximately 1.2mtpm. Mining of the Leslie/Bracken TSF will continue for the following four years of the modelled life of the Elikhulu operation. From here, remining will move to the Winkelhaak TSF for the remaining six years.

ESTIMATED MINERAL RESOURCES

	Estimated Mineral Resources								
		At 30 Jun	ie 2023			At 30 June 2022			
		Contained gold				Containe	Contained gold		
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz	
Measured	43.51	0.31	13.49	0.43	52.16	0.31	16.23	0.52	
Indicated	111.18	0.26	28.39	0.91	106.38	0.27	28.61	0.92	
Measured and Indicated	154.69	0.27	41.88	1.35	158.53	0.28	44.84	1.44	
Inferred	8.71	0.27	2.31	0.07	8.73	0.27	2.32	0.07	
Total	163.40	0.27	44.19	1.42	167.26	0.28	47.16	1.52	

Notes:

Mineral Resources are reported in accordance with the SAMREC Code. Mineral Resources would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Paylimit values are calculated at 0.1g/t, applying a gold price of ZAR950,000/kg (US\$1,663/oz at US\$/ZAR:17.77). The paylimit criteria are applied to the global grade of the whole TSF to be remined due to the low selectivity of the mining method. Mineral Resources are reported inclusive of Mineral Resources. Mineral Resources are reported as in situ tonnes (1.35t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations. Geological losses were applied according to the geological model.

MODIFYING FACTORS

At 30 June 2023	Gold price ZAR/kg	Paylimit value g/t Au	Mining loss cm	Dilution %	PRF %
Elikhulu	850,000	0.2	_	_	37.59

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ESTIMATED MINERAL RESERVES

Estimated Mineral Reserves are reported inclusive of diluting and contaminating material delivered to the respective metallurgical plant for treatment and beneficiation.

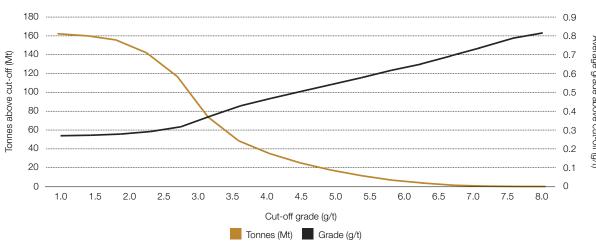
	Estimated Mineral Reserves							
		At 30 Jun	e 2023			At 30 Jur	ne 2022	
		Contained gold				Containe		
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz
Proved	37.66	0.30	11.30	0.36	48.91	0.31	15.26	0.49
Probable	103.27	0.26	27.29	0.88	110.36	0.27	29.58	0.95
Total	140.93	0.27	38.60	1.24	159.27	0.28	44.84	1.44

Notes:

Estimated Mineral Reserves are reported in accordance with the SAMREC Code. Mineral Reserves would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Paylimit values are calculated at 0.2g/t, applying a gold price of ZAR850,000/kg (US\$1,488/oz at US\$/ZAR:17.77). The paylimit criteria are applied to the global grade of the whole TSF to be remined due to the low selectivity of the mining method. All Mineral Reserves reported exclude geological structures. Mineral Reserves are reported as in situ tonnes (1.35t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations.

Elikhulu

Grade/tonnage curve

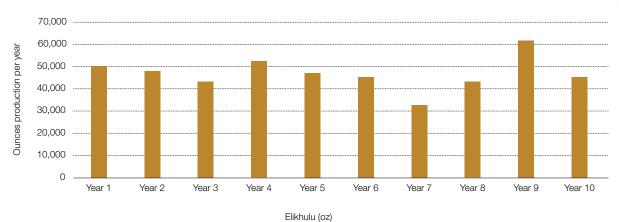


Elikhulu's estimated Mineral Reserves sensitivity 1.5 1.0 0.5 0.5 Base gold price (ZAR850,000/kg)



Elikhulu's life of mine planning

Current schedules indicate a 10-year life of the Elikhulu operation at current throughput.



ESTIMATED MINERAL RESOURCES AND MINERAL RESERVES RECONCILIATION



FACTORS THAT AFFECTED THE MINERAL RESOURCES RECONCILIATION

Depletion through mining activities

TSF boundary updates for Leslie/Bracken and Winkelhaak TSFs

Mineral Resource block updates on the Leslie/Bracken TSF



FACTORS THAT AFFECTED THE MINERAL RESERVES RECONCILIATION

Depletion through mining activities

Impact of updated TSF limits for Leslie/Bracken and Winkelhaak TSFs

Update of grades in Mineral Resource estimation blocks in Leslie/ Bracken estimates

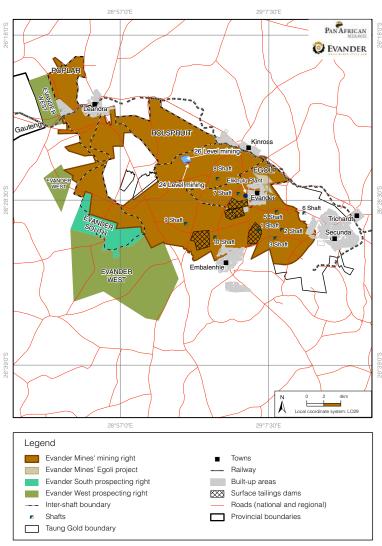
Modifying factors employed as per actual results since the commissioning of Elikhulu



EVANDER MINES' PROJECTS

Evander Mines' assets also include projects that are at varying stages of exploration and development. The individual projects and level of study are summarised and illustrated in the map alongside.

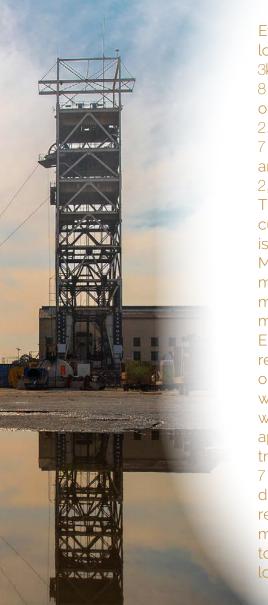
The Group remains focused on creating shareholder value through unlocking the potential of its organic growth and brownfield exploration projects.



Location of Evander Mines' growth projects



EVANDER MINES' 7 SHAFT – EGOLI PROJECT



Evander Mines' 7 Shaft

Evander Mines' 7 Shaft is located approximately 3km south-east of 8 Shaft. The Egoli project orebody is approximately 2.5km west of the 7 Shaft infrastructure and some 2.000m to 2,500m underground. The 7 Shaft complex is currently operational and is utilised by Evander Mines for hoisting RoM material from the 8 Shaft mining to the Kinross metallurgical plant. The Egoli project infrastructure requirements are less onerous when compared with the 8 Shaft remnant workings, which are approximately 13km in tramming distance from 7 Shaft. This tramming distance historically resulted in significant mining losses in addition to time-consuming logistical processes.

Post the depletion of the current 8 Shaft pillar and 24 Level extraction. Egoli will use existing mining and metallurgical infrastructure with on-reef development conducted by a hybrid mining method, where stoping will be conducted on a conventional basis with hand-held equipment and development by trackless machinery. The Egoli project will be accessed directly from 7 Shaft (twin shaft system) with one decline (3 Decline). Blasted ore generated in the stopes will be cleared into the advance strike gullies by means of a scraper and winch combination. The strike gully winches will scrape the ore into the centre gully from where it will again be scraped down-dip into the receiving bay. A belt-loading winch will then scrape the ore onto static grizzlies constructed over strike conveyors, which, in turn, will transport the broken rock to dip conveyors located in the decline cluster. The 3 Decline conveyor system will tip broken rock into the main decline ore passes located between 14 and 15 Levels. The broken rock will then be drawn on 15 Level and trammed by rail to the 7 Shaft complex for hoisting to surface and processing at the existing Kinross metallurgical plant.

Being a brownfield project with limited development risk, the feasibility study anticipates that approximately 560m of underground development will be required from the breakaway position of the current 3 Decline to intersect the Egoli project orebody.

The Egoli project has all the required permitting in place through Evander Mines' mining right that is valid until 2038, as well as the applicable WUL and approved EMP. The substantial existing infrastructure which is currently operational comprises a twin vertical shaft system (7 Shaft) to a depth of 1,960m, hoisting infrastructure and processing facilities at the Kinross metallurgical plant. In addition, the necessary surface and engineering infrastructure such as offices, change house, lamp room, workshop, electricity supply, metallurgical plant and TSFs are already in place, and only require refurbishment and upgrading where applicable.

A feasibility study, previously conducted by independent consultants DRA Global in 2019, concluded that the Egoli project is a highly attractive project with excellent returns in the current economic environment, with possible upside to the lifeof-mine and annual gold production for the Group following the successful conversion of Inferred Mineral Resources to Indicated Mineral Resources, and subsequently to Mineral Reserves, as underground development progresses. The initial life-of-mine is planned for nine years with average recoverable gold production of approximately 72,000oz per annum at an average head grade of 6.61g/t, based on current Measured and Indicated Resources only. The mine design and schedule are planned to produce 45,000t per month of RoM ore to the Kinross metallurgical plant. With the upgrading of the currently defined Inferred Mineral Resources to an Indicated category, the life-of-mine could be extended beyond 14 years.

The Egoli project can increase Evander Mines' underground gold production profile materially, at a relatively low capital cost with significant cost and time savings, using the existing shaft and metallurgical facilities.

Following the reprioritisation of the Group's capital expenditure programmes, a more phased approach for the development of the Egoli project is being followed, concurrent with the 8 Shaft 24 Level as well as 25 and 26 Level developments. Egoli's first phase of development will entail the dewatering of the 3 Decline infrastructure to 19 Level, where a drilling platform will be established to enable infill drilling to finalise short-term mine planning. This first phase commenced in June 2022 with the dewatering process progressing to below 19 Level during the current reporting period. The Egoli project's phased development approach and production profile will coincide with the depletion of the 24 Level Mineral Reserves.

GEOLOGY

The Kimberley Reef is an oligomictic, pebbly conglomerate and comprises a composite sequence of channel sediments that define longitudinal gravel bars and sand bars with pebbly veneers. The reef in the area strikes in an eastwest direction and dips to the north at about 10°. The reef thickness varies from a waste on contact up to a 50cm welldeveloped oligomictic conglomerate. Average reef thickness is 30cm within the 7 Shaft vicinity. High gold values in the Kimberley Reef are mostly located at the base of the unit and are associated with the presence of carbon and some visible gold on the footwall contact.

The Egoli project orebody is a defined high-grade fluvial channel (payshoot) and is a large orebody of world-class proportions. This payshoot represents a divergent fluvial channel which forms part of the basin-wide Kimberley Reef deposition system. The Kimberley Reef has been mined from the Evander goldfield in the east as well as at operations in the Welkom goldfield in the west (an extent of over 400km). Locally, the Egoli project payshoot is comparable with the currently mined Kinross payshoot (at the 8 Shaft) in geology, mineralisation as well as time and style of deposition. The successfully mined Kinross payshoot is therefore analogous to the Egoli project payshoot and has been deposited by the same fluvial system with the same source areas of sediment.

ESTIMATED MINERAL RESOURCES

	Estimated Mineral Resources									
		At 30 Jur	ne 2023			At 30 Jun				
		Containe	ed gold			Containe	Contained gold			
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz		
Measured	0.46	8.51	3.90	0.12	0.46	8.51	3.90	0.13		
Indicated	2.94	9.85	28.93	0.93	2.94	9.85	28.93	0.93		
Measured and Indicated	3.39	9.67	32.83	1.05	3.39	9.67	32.83	1.06		
Inferred	6.26	9.68	60.58	1.95	6.26	9.68	60.58	1.95		
Total	9.65	9.68	93.41	3.00	9.65	9.68	93.41	3.00		

Motos

Estimated Mineral Resources are reported in accordance with the SAMREC Code. Mineral Resources would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Cut-off values are calculated at 267cmg/t, applying a gold price of ZAR950,000/kg (US\$1,663/oz at US\$/ZAR:17.77). Mineral Resources are reported inclusive of Mineral Resources. All Mineral Resources reported exclude geological structures. Mineral Resources are reported as in situ tonnes (2.71t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations. Geological losses were applied according to the geological model.

MODIFYING FACTORS

At 30 June 2023	Gold price ZAR/kg	Cut-off value g/t Au	Cut-off value cmg/t	Stoping width cm	Dilution %	MCF %	PRF %
Egoli project	850,000	2.07	248	120	8.6	85	95

The regional Elikhulu TSF at Evander Mines which will contain all the future underground and Elikhulu processed residues

ESTIMATED MINERAL RESERVES

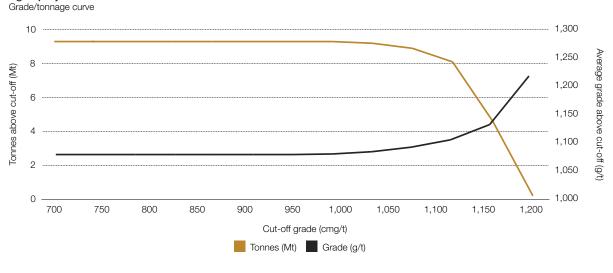
Estimated Mineral Reserves are reported inclusive of diluting and contaminating material delivered to the respective metallurgical plant for treatment and beneficiation.

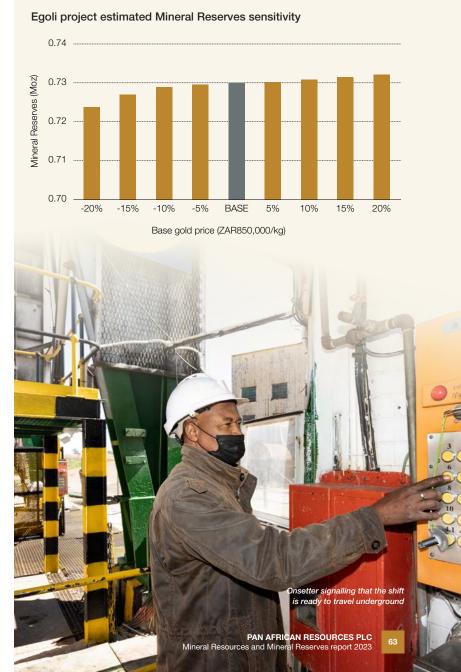
		Estimated Mineral Reserves							
		At 30 Jun	e 2023			At 30 Jur	ne 2022		
		Contained gold				Containe	Contained gold		
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz	
Proved	0.45	5.90	2.64	0.08	0.45	5.90	2.64	0.08	
Probable	2.99	6.72	20.08	0.65	2.99	6.72	20.08	0.65	
Total	3.44	6.61	22.72	0.73	3.44	6.61	22.72	0.73	

Notes:

Estimated Mineral Reserves are reported in accordance with the SAMREC Code. Mineral Reserves would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Cut-off values are calculated at 248cmg/t, applying a gold price of ZAR850,000/kg (US\$1,488/oz at US\$/ZAR:17.77). All Mineral Reserves reported exclude geological structures. Mineral Reserves are reported as in situ tonnes (2.71t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations.

Egoli project



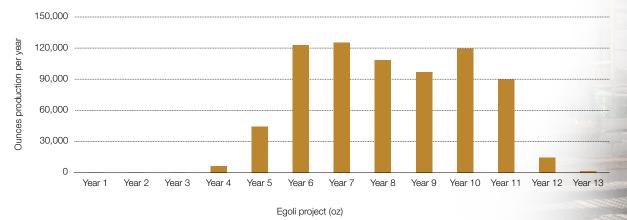


LIFE-OF-MINE PLANNING

The feasibility study and early works programme compiled by DRA Global, scheduling only the Measured and Indicated Mineral Resources, specified a nine-year life-of-mine for the Egoli project. Post the Group's evaluation and reassessment of its capital employment strategy and the peak funding required for the Egoli project, the decision was taken to progress the project as an internal phased organic growth section over a calculated three-and-a-half-year period, ramping up as the mining at 24 Level winds down. This further materially reduces the upfront debt funding requirement. The nine-year life will commence in year three of the project plan, post the dewatering of the 3 Decline at the 7 Shaft system.

The Egoli project payshoot extends past the current 8 Shaft infrastructure, towards the Rolspruit project and, through the current geological model's extrapolation and terminates at the Poplar project. This represents a total project target trend extending in excess of 15km, which is contained within the existing Evander Mines mining right.

Egoli project life-of-mine planning



ESTIMATED MINERAL RESOURCES AND MINERAL RESERVES RECONCILIATION



FACTOR THAT AFFECTED THE MINERAL RESOURCES RECONCILIATION

FACTOR THAT AFFECTED THE MINERAL RESERVES RECONCILIATION

Cut-off grade increased slightly due to increases in mining costs and a constant gold price assumed

Modifying factors remained constant year-on-year



ROLSPRUIT PROJECT

BACKGROUND

The Rolspruit project is an exploration project where the orebody is a down-dip extension of the same Kinross payshoot currently being exploited at 8 Shaft. The project is located immediately west-north-west of the 8 Shaft. Exploration on the Rolspruit project commenced in 1955. and by 1988, a total of 53 boreholes with accompanying reef deflections had been completed by various companies.

The Group regularly reviews its portfolio of exploration projects and applies the latest available economic data to assess their feasibility.

GEOLOGY

The Kimberley Reef strikes in an east-west direction and dips at 28° to the north, and has been intersected at an average depth of 2.300m below surface. The footwall sill break is an intrusive sill that is associated with a reverse fault, which resulted in a 90m displacement of the reef horizon. The Kimberley Reef at Rolspruit is a well-developed oligomictic conglomerate up to 1m thick, averaging about 37cm. In this area, the Kimberley Reef is very similar to that of the 8 Shaft with high gold grade values mostly located at the base of the unit, and associated with the presence of carbon and some visible gold on the footwall contact.

MINERAL RESOURCES

The MRE was performed by ExploreMine Consultants Proprietary Limited in April 2011, with no recent updates as no new information on the project is available. A review of the resulting prefeasibility study was conducted in 2012 and reviewed by SRK Consulting (South Africa) in 2017, with all operational and capital expenditure being escalated. An extensive channel sampling database for the adjoining 8 Shaft area and the surface drilling data for Rolspruit formed the dataset for the reviewed resource estimation. Furthermore, the MRE is audited annually to ensure compliance with industry-accepted estimation practices and the relevant reporting codes.

Macro-ordinary kriging was applied to the Indicated Resources while a Sichel's t-estimation technique was used to estimate the Inferred Mineral Resources. The Indicated MRE was defined on the 8 Shaft channel sampling dataset and subsequent geozones. The block size employed during this estimation was 60m by 60m.

ESTIMATED MINERAL RESOURCES

		Estimated Mineral Resources								
		At 30 June 2023				At 30 June 2022				
		Containe	ed gold			Containe				
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz		
Measured	-	-	-	_	_	=	_	_		
Indicated	23.78	11.78	280.09	9.00	23.78	11.78	280.09	9.00		
Measured and Indicated	23.78	11.78	280.09	9.00	23.78	11.78	280.09	9.00		
Inferred	2.09	9.25	19.36	0.62	2.09	9.25	19.36	0.62		
Total	25.87	11.58	299.45	9.63	25.87	11.58	299.45	9.63		

Notes:

Estimated Mineral Resources are reported in accordance with the SAMREC Code. Mineral Resources would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Cut-off values are calculated at 424cmg/t, applying a gold price of ZAR950,000/kg (US\$1,663/oz at US\$/ZAR:17.77). Mineral Resources are reported inclusive of Mineral Resources reported exclude geological structures. Mineral Resources are reported as in situ tonnes (2.71t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations. Geological losses were applied according to the geological model.

MODIFYING FACTORS

At 30 June 2023	Gold price ZAR/kg	Cut-off value g/t Au	Cut-off value cmg/t	Stoping width cm	Dilution %	MCF %	PRF %
Rolspruit project	850,000	3.96	475	120	16.5	85	96.4

ESTIMATED MINERAL RESERVES

Mineral Reserves are reported inclusive of diluting and contaminating material delivered to the respective metallurgical plant for treatment and beneficiation.

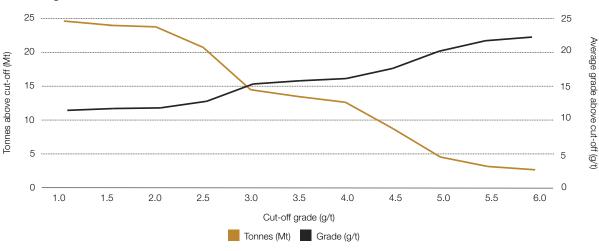
	Estimated Mineral Reserves							
	At 30 June 2023					At 30 Jur	ne 2022	
		Contained gold			Contained gold			
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz
Proved	-	-	-	-	_	-	_	_
Probable	23.36	8.60	201.01	6.46	23.36	8.60	201.01	6.46
Total	23.36	8.60	201.01	6.46	23.36	8.60	201.01	6.46

Notes:

Estimated Mineral Reserves are reported in accordance with the SAMREC Code. Mineral Reserves would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Cut-off values are calculated at 475cmg/t, applying a gold price of ZAR850,000/kg (US\$1,488/oz at US\$/ZAR:17.77). All Mineral Reserves reported exclude geological structures. Mineral Reserves are reported as in situ tonnes (2.71t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations.

Rolspruit project

Grade/tonnage curve



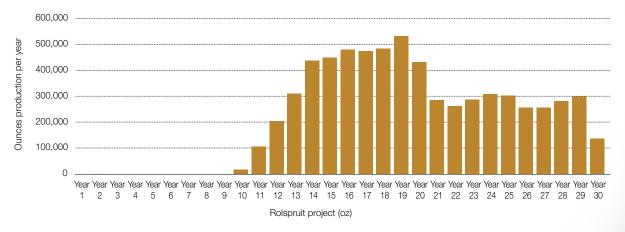
Rolspruit project estimated Mineral Reserves sensitivity 7 6 5 4 9 10 10 10 15% -10% -5% BASE 5% 10% 15% 20% Base gold price (ZAR850,000/kg)



LIFE-OF-MINE PLANNING

Turgis Consulting conducted a prefeasibility study on the Rolspruit project in 2012. The study indicated a potential 29-year life-of-mine for the Rolspruit project with peak production of approximately 450Koz per annum. The project will, however, require new twin shaft infrastructure to a depth of 2,371m for the main shaft and 2,261m for the ventilation shaft as well as underground development to enable the cost-effective extraction of ore from the Rolspruit project according to the Turgis Consulting prefeasibility study. The life of the project is dependent on when the construction of the required shaft infrastructure commences.

Rolspruit project life-of-mine planning



ESTIMATED MINERAL RESOURCES AND MINERAL RESERVES RECONCILIATION



FACTOR THAT AFFECTED THE MINERAL RESOURCES RECONCILIATION

Cut-off grade increased slightly year-on-year to 424cmg/t (2022: 418cmg/t)



FACTOR THAT AFFECTED THE MINERAL RESERVES RECONCILIATION

Cut-off grade increased slightly due to an inflationary increase in mining costs assumed through conventional narrow tabular breast mining at a depth of more than 2,500m to 475cmg/t (2022: 461cmg/t)



POPLAR PROJECT

BACKGROUND

The Poplar project is situated in the north-western limb of the Fyander Basin, west of the town of Leandra. Exploration of the Poplar project commenced in the mid-1950s and has been the subject of several studies. A total of 104 mother holes were drilled in the project area, with an additional 146 intersections obtained through deflection drill holes. No additional information has been obtained during the period under review.

The Group regularly reviews its portfolio of exploration projects and applies the latest available economic data to assess their feasibility.

GEOLOGY

The Kimberley Reef occurs at a depth below surface of between 500m in the west and 1,200m in the east. The reef strikes north-south and dips 9° to 24° to the east. The Kimberley Reef comprises a sequence of fluvial, channel sediments that were deposited in a braided stream environment. Deposition of the reef was influenced by the footwall lithologies. The Kimberley Reef horizon has a channel width of approximately 30cm, generally a thin reef hosting high gold grades. The reef has north-east to south-west trending channels or payshoots which are evident in other parts of the Evander Basin.

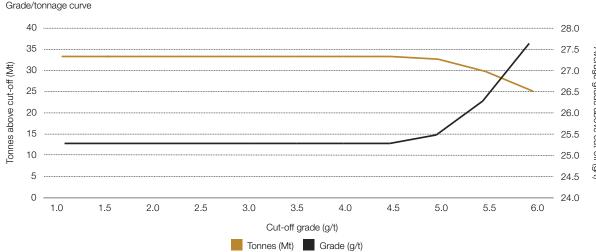
A series of seven major, subparallel and fairly evenly spaced faults traverse the property. These are all orientated in a roughly north-north-east to south-south-west direction. Throws on these faults vary between 50m and 400m.

ESTIMATED MINERAL RESOURCES

	Estimated Mineral Resources							
	At 30 June 2023							
		Contained gold				Contained gold		
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz
Measured	-	-	-	-	_	=	_	=
Indicated	17.56	7.48	131.28	4.22	18.38	7.35	135.02	4.34
Measured and Indicated	17.56	7.48	131.28	4.22	18.38	7.35	135.02	4.34
Inferred	8.82	6.71	59.17	1.90	8.98	6.67	59.92	1.93
Total	26.38	7.22	190.46	6.12	27.36	7.12	194.93	6.27

Estimated Mineral Resources are reported in accordance with the SAMREC Code. Mineral Resources would be the same if reported according to the guidelines of the CIM's National Instrument 43-101, Cut-off values are calculated at 519cmg/t, applying a gold price of ZAR950,000/kg (US\$1,663/oz at US\$/ZAR:17,77), All Mineral Resources reported exclude geological structures. Mineral Resources are reported as in situ tonnes (2.71t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations. Geological losses were applied according to the geological model.

Poplar project



ESTIMATED MINERAL RESOURCES RECONCILIATION



FACTOR THAT AFFECTED THE MINERAL RESOURCES RECONCILIATION

Cut-off grade increased slightly year-on-year due to an inflationary increase in mining costs to 519cmg/t (2022: 489cmg/t)

EVANDER SOUTH PROJECT

BACKGROUND

The Evander South project is in the south-western limb of the Evander Basin. It is located directly west of Evander Mines' 9 Shaft and is south of the Poplar project. A total of 116 mother holes were drilled in the project area, with 475 deflections.

No additional information has been obtained during the period under review.

GEOLOGY

The Kimberley Reef at Evander South occurs at a depth of between 300m in the west and 1,200m in the east, below surface, with a north-south strike and dips between 6° and 19°. It comprises a sequence of fluvial channel sediments that were deposited in a braided stream environment with final deposition influenced by the footwall lithologies. The high-grade Kimberley Reef is associated with carbon and is a narrow, small pebble, clast-supported and well-packed oligomictic conglomerate. Carbon was observed in several of the borehole intercepts drilled at the Evander South project.

ESTIMATED MINERAL RESOURCES

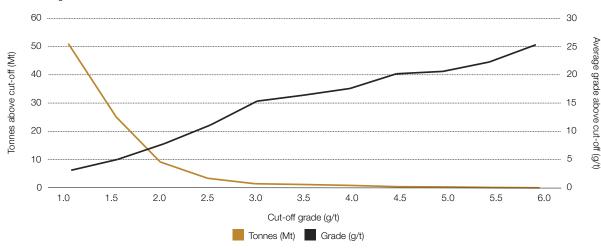
	Estimated Mineral Resources								
-		At 30 Jun	ne 2023			At 30 Jun			
		Contained gold				Containe	ed gold		
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz	
Measured	_	_	_	_	_	_	_		
Indicated	12.77	8.40	107.20	3.45	13.41	8.16	109.38	3.52	
Measured and Indicated	12.77	8.40	107.20	3.45	13.41	8.16	109.38	3.52	
Inferred	12.33	5.77	71.19	2.29	13.27	5.60	74.36	2.39	
Total	25.10	7.11	178.39	5.74	26.68	6.89	183.74	5.91	

Notes:

Estimated Mineral Resources are reported in accordance with the SAMREC Code. Mineral Resources would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Cut-off values are calculated at 348cmg/t, applying a gold price of ZAR950,000/kg (US\$1,663/oz at US\$/ZAR:17.77). All Mineral Resources reported exclude geological structures. Mineral Resources are reported as in situ tonnes (2.71t/m3). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations. Geological losses were applied according to the geological model.

Evander South project

Grade/tonnage curve



ESTIMATED MINERAL RESOURCES RECONCILIATION



FACTOR THAT AFFECTED THE MINERAL RESOURCES RECONCILIATION

Cut-off grade increased slightly year-on-year due to an inflationary increase in mining costs to 348cmg/t (2022: 333cmg/t)

EVANDER MINES' ESTIMATED MINERAL RESOURCES AND MINERAL RESERVES RECONCILIATION

At 30 June 2023, Evander Mines reported estimated Mineral Resources of 33.9Moz (274.5Mt at 3.8g/t) and estimated Mineral Reserves of 9.2Moz (171.2Mt at 1.7g/t) contained gold. The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce the Mineral Reserves. Mineral Reserves are reported as mill-delivered tonnes at the head grade, having duly considered all modifying factors. Mineral Resources and Mineral Reserves reported are contained within the mining right and prospecting right boundaries of Evander Mines.

The Evander South Mineral Resources of 25.1Mt at 7.1g/t for 5.7Moz (12.8Mt at 8.4q/t for 3.4Moz are Indicated Mineral Resources and 12.3Mt at 5.8a/t for 2.3Moz are Inferred Mineral Resources) occur on the Evander South prospecting right MP30/5/1/2/2/248 PR. This prospecting right is being consolidated into the Evander Mines mining right MP30/5/1/2/2/126 MR through a section 102 application that was lodged at the DMRE on 8 December 2017. Acknowledgement of the section 102 application was received from the DMRE on 10 May 2021 and registration thereof is currently being processed.

All mined-out areas have been depleted from the reported estimated Mineral Resources and Mineral Reserves.

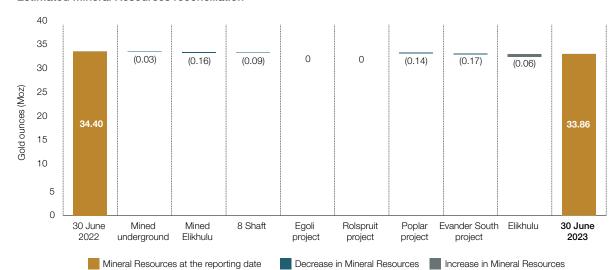
ESTIMATED MINERAL RESOURCES COMPARISON

	Estimated Mineral Resources							
		At 30 Jui	ne 2023			At 30 Jur		
		Contain	ed gold			Contained gold		
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz
Measured	47.50	1.31	62.09	2.00	56.46	1.22	68.80	2.21
Indicated	169.52	3.48	590.11	18.97	166.18	3.59	596.23	19.17
Measured and Indicated	217.02	3.01	652.20	20.97	222.64	2.99	665.03	21.38
Inferred	57.44	6.98	400.97	12.89	58.55	6.92	404.89	13.02
Total	274.46	3.84	1,053.17	33.86	281.18	3.81	1,069.92	34.40

Notes:

Estimated Mineral Resources are reported in accordance with the SAMREC Code. Mineral Resources would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Cut-off values are calculated at 348cmg/t, applying a gold price of ZAR950,000/kg (US\$1,663/oz at US\$/ZAR:17.77). All Mineral Resources reported exclude geological structures. Mineral Resources are reported as in situ tonnes (2.71t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations. Geological losses were applied according to the geological model.

Estimated Mineral Resources reconciliation



RECONCILIATION OF ESTIMATED MINERAL RESOURCES

Evander Mines' estimated Minera Resources posted the following changes for the reporting period

Total Mineral Resources decreased by 0.54Moz contained gold from 34.40Moz (281.18Mt at 3.81g/t) at 30 June 2022 to 33.86Moz (274.46Mt at 3.84g/t) post total mining depletion.

The decrease can mainly be attributed to:

- the escalation in the mining costs assumed in the calculation of cut-of grades at 8 Shaft as well as at the Poplar and Evander South projects. This contributed 0.44Moz to the total decrease including the mining depletion of 0.03Moz during the current reporting period
- 0.16Moz RoM that was depleted from the Kinross and Leslie/Bracken TSFs through remining activity, of which 0.05Moz was recovered at the Elikhulu plant.

RECONCILIATION OF ESTIMATED MINERAL RESERVES

Evander Mines' total Mineral Reserves decreased by 195Koz contained gold, post mining depletion during the current financial year. Mineral Reserves are reported inclusive of diluting and contaminating material delivered to the respective metallurgical plant for treatment and beneficiation.

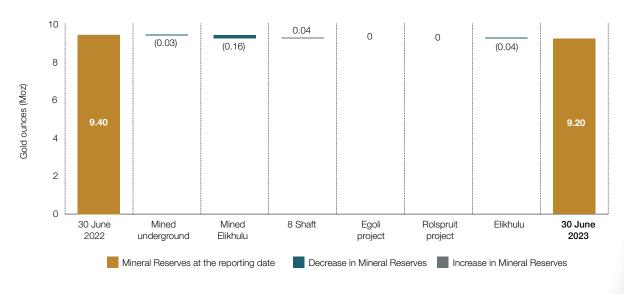
This decrease is attributable to:

- the depletion of ~191Koz of RoM content through both the underground and failings operations
- the inclusion of the 25 and 26 Level mining areas to the Mineral Reserves of the 8 Shaft complex
- remodelling and scheduling of the Leslie/Bracken and Winkelhaak TSFs at the Flikhulu operation.

ESTIMATED MINERAL RESERVES COMPARISON

	Estimated Mineral Reserves							
		At 30 Jun	At 30 June 2023			At 30 June 2022		
		Contained gold				Contained gold		
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz
Proved	39.85	0.67	26.81	0.86	50.42	0.52	26.18	0.84
Probable	131.39	1.97	259.47	8.34	138.95	1.92	266.22	8.56
Total	171.24	1.67	286.28	9.20	189.37	1.54	292.41	9.40

Estimated Mineral Reserves reconciliation



Inspection of the CIL tanks at the Elikhulu plant The simulated melting points of gold nanoparticles are between

615~ 1,115K

which are much lower than that of bulk gold (1,336K)

Baorigioaria	
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WEST RAND REGION

Background

Historical mines in this region accessed gold ore from surface shafts and declines to 1,500m below surface.

As the mining activities in the region diminished, the environmental legacy remained, impacting communities in the surrounding areas.

WEST RAND REGION

The Mogale and Soweto Cluster TSFs stem from past mining activities relating to the West Rand Consolidated Mine, Luipaardsvlei Gold Mine, Rand Leases and the Durban Roodepoort Deep Gold Mine. A century's worth of mining, and processing high-grade reefs through various technologies, resulted in over 240Mt of low-grade gold-containing material being deposited on surface.

The Group, through its Elikhulu operation, has demonstrated the environmental and economic advantages for communities and businesses in re-treating these large-scale historical TSFs while generating value for our stakeholders.

BACKGROUND

The Mogale Cluster TSFs stem from mining activities relating to West Rand Consolidated Mines (WRCM) and the Luipaardsvlei Gold Mine. Mining of the Kimberley, Bird, Livingstone, South and Main Reefs commenced in this region in 1908. In 1952, WRCM also became the first producer of uranium oxide in South Africa. Similarly, the Soweto Cluster TSFs emanated from the mining activities of Rand Leases and Durban Roodepoort Deep Gold Mine. Later, Durban Roodepoort Deep, now called DRD Gold, closed all the underground operations under its management and focused on surface tailings retreatment operations, primarily on the East Rand of the Witwatersrand goldfield.

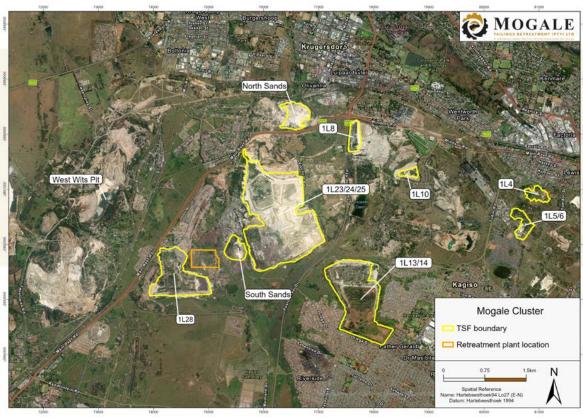
Mintails Limited (Mintails) acquired the moveable TSF assets of the Mogale and Soweto Clusters and, subsequently, the surface mining right over the Mogale Cluster. Mintails commenced with tailings retreatment on some of the Mogale Cluster TSFs in 2007 through a processing plant with a capacity of up to 100,000 tpm. However, as a result of financial constraints, Mintails went into liquidation in August 2018. During November 2022, following the completion of a positive definitive feasibility study managed by DRA Global on the Mogale Cluster alone, Pan African was able to acquire all the surface assets of Mintails, including all permits held by the company and its subsidiaries. These assets are now consolidated into Mogale Tailings Retreatment Company Proprietary Limited (MTR), a subsidiary of Pan African.

The Group commenced with the construction of a new 800ktpm capacity tailings retreatment plant during the last quarter of the reporting period.

MTR project ground clearance work on the new plant site

LOCATION

The MTR plant is located on the West Rand of the Gauteng province, South Africa, approximately 30km west of Johannesburg, near the towns of Meadowlands (to the east) and Randfontein (to the west).



Location of the Mogale Cluster tailings resources

Historical mining in the area resulted in 126Mt of processed ore tailings being deposited in the Mogale Cluster region. The Group has demonstrated that it can safely and economically extract gold from these deposits while improving the environmental conditions and availing land for development which otherwise would remain dormant for the community.

The designed processing capacity at the plant is approximately

800ktpm

The plant will produce approximately

50Koz

per annum



Location of the Soweto Cluster tailings resources

Drilling results from the 2L16 and 2L24 TSFs, comprising 110Mt of the available 133Mt at the Soweto Cluster, have resulted in favourable and economic evaluations.

These two TSFs alone will extend the overall MTR project's life-of-mine from 13 years to 21 years while also improving production from 50Koz to 60Koz per annum.

Additional studies will be conducted on the remaining TSFs.

The processing capacity of the MTR plant will increase to

1,000ktpm

from year four

The life of the project will be extended to

21 years

with increased output of approximately

60Koz

per annum

WEST RAND REGION

OPERATIONAL OVERVIEW

	MTR project
Mining method	Surface Hydraulic mining
Infrastructure and mineral processing	A surface remining site with road access from all surface material sources to the plant. Ore will be pumped (hydraulic remining) to the MTR plant in slurry form. The ore is subjected to pre-oxidation to enhance the metallurgical recovery, and processed through a CIL circuit, with a carbon regeneration and elution (and electro-winning) section. The MTR plant will have its own smelt house. The designed processing capacity at the plant is approximately 800ktpm later increasing to 1mtpm
TSF	Tailings from the MTR residue tank will be deposited firstly into the defunct West Wits pit and thereafter onto a new regional 1L23-25 extension TSF (MTR TSF). The designed capacity of the MTR TSF will cater for deposition of the current modelled life of the operation as well as the reprocessed Mineral Reserves of the Soweto Cluster
Mineralisation style	Deposition material of historically treated metallurgical tailings from reefs mined at WRCM, Luipaardsvlei Gold Mine, Rand Leases and the Durban Roodepoort Deep Gold Mine
Mineralisation characteristics	The material is confined to the deposition sites of historical tailings and approximately 1m beneath the historical footprints. The ore consists of oxidised tailings containing pyrite-associated gold which was not recovered in the initial treatment process
Life-of-mine	21 years (2022: nil years)
Exploration	Ongoing sampling programmes and reserve delineation drilling are conducted to define the mineralisation continuity and to continuously upgrade estimated Mineral Resources to Mineral Reserves
Climate	The West Rand region is located in the subtropical highland climatic region of South Africa, with warm and wet summers and cool, dry winters. Rain falls mostly as showers and thunderstorms, mainly between October and March. Average annual rainfall is approximately 509mm. The most rainfall is experienced in December and January, which receive on average 90mm of rain per month. The driest months are July and August, with no rainfall expected on average. The average monthly midday temperatures range from 17°C in June to 26°C in January. The region is the coldest during June when evening temperatures drop to 4°C on an average night

GEOLOGICAL SETTING

The ore that will be treated at the MTR plant originated from the previously mined and metallurgically treated Kimberley, Bird, Livingstone, South and Main Reefs from historical gold mining operations of WRCM, Luipaardsvlei Gold Mine, Rand Leases and DRD Gold. The reefs are arenaceous conglomeratic sedimentary rocks of the Archaean age and are generally considered as ancient river placers. These reefs are frequently less than a metre thick and characterised by abundant pyrite, which may comprise up to 5% of the reef, as well as flyspeck and/or seam carbon/kerogen. These three components display a strong spatial correlation with the gold mineralisation, which is rarely visible, in the 10 to 20 micron range.

The tailings of the treated material were deposited onto various TSFs on surface that will be reclaimed over the modelled life of the operation. Once re-treated, the final tailings emanating from these TSFs will be consolidated into a modern tailings facility, through the filling of legacy opencast mines and the construction of an enlarged modern facility on the 1L23-25 footprint. This will reduce the MTR plant's environmental footprint and associated environmental impact.

MINING RIGHTS

Mining licence ML12/2003 was previously owned by WRCM, a subsidiary of DRD Gold. This licence was acquired by Mogale Gold and then Mintails in 2006. The licence was converted to a mining right for surface resources, mining right MR206, in terms of the MPRDA. The mining right covered the Consolidated African Mining sand dump and TSFs 1L8, 1L9 and 1L10. During 2009, Mintails applied for the transfer of the surface deposits, TSFs 1L23-25, 1L28, 1L13-15, South Sands and the West Wits pit acquired from DRD Gold into MR206, through a section 102 application. In 2014, MR206 was executed by the DMRE while registration is still pending at the Mining Titles registration office. MR206 and the surface moveable assets in the form of the TSFs and sand dumps comprise the Mogale Cluster. Mintails further acquired the Soweto Cluster TSFs from DRD Gold through a commercial agreement to purchase the moveable assets. This agreement covered the 2L8, 2L11, 2L12, 2L16, 2L17, 2L18, 2L20, 2L21 and 2L24 TSFs.

According to South African legislation and the MPRDA, TSFs and sand dumps deposited legally prior to the enactment of the MPRDA in 2002 are classified as moveable assets and can be re-treated by the common law owner of the asset and do not require a specific mining right. Other permits required to reclaim this surface material include an environmental management plan and environmental authorisation, a WUL and a National Nuclear Regulator permit due to the uranium content. All of these permit applications are in advanced stages of being granted, and there has been no indication that these will be declined.

Right name	Project	Type of right	Right number	Area	Expiry date	Status
Mogale Gold Proprietary Limited	Mogale Cluster	Mining	GP30/5/1/2/2(206)MR	963.081ha	28 April 2029	Effective

MTR has lodged an undiscounted scheduled closure cost (excluding latent and residual closure costs) of US\$7.3 million. A rehabilitation strategy and implementation plan was compiled and updated in 2017 to rehabilitate dormant and non-productive areas in terms of the Group's ESG focus and concurrent rehabilitation strategy. The audit and risk committee reviews the performance of this portfolio on a regular basis.

SURFACE RIGHTS

MTR acquired several portions of the remaining extent of Portion 136 of the farm Luipaardsvlei 246 IQ from First Wesgold Properties Proprietary Limited, with a total area of approximately 788.63ha. Furthermore, MTR also acquired three portions of the remaining extent of Portion 136 of the farm Luipaardsvlei 246 IQ from Kopano Bricks Limited with a total area of 95.34ha. Mogale Gold, a subsidiary of MTR, owns the remaining extent of Portion 66 of the farm Waterval 174 IQ comprising 29.02ha. Additionally, the Group also owns various surface right permits. All of the Group's infrastructure, such as the metallurgical plant, offices, pump stations and pipelines, will be constructed on surface areas owned and managed by the Company.

GEOLOGICAL/RESOURCE ESTIMATION METHODOLOGY

The estimated Mineral Resources and Mineral Reserves for the West Rand region are reported in compliance with the SAMREC Code.

Geological modelling

The surface areas of the MTR TSFs have been surveyed using LiDAR drone technology. These survey measurements are accurate and of the required detail for modelling purposes. From the point cloud produced by the LiDAR survey, wireframes were constructed to represent 3D wireframes for accurate volume and tonnage calculations. The footprint or floor of the TSFs was constructed from the soil intercept depths obtained from drill hole data. These closed 3D solids represent the geological model for each of the TSFs and all estimates are constrained to these models.

Resource estimation

The TSFs are sampled by means of auger drilling. With a few exceptions, the tops of the dams are accessible to drill rigs, and the slime dams are easily drilled. All of the sample holes are 50mm in diameter and drilled from the dam surface down to ground level. The sampling unit comprised a hydraulic auger drill with stainless steel

tube pipes in 3m lengths while 1.5m spirals are used to gather the soil sample. Samples were taken at these 1.5m intervals, each at an average weight of 4.13kg.

Once pipes and spirals are lifted out of the hole, the spiral is fitted onto a pipe clamp device. This drilled material is forced out by turning the spiral in the opposite direction directly into a sample bag. The spiral is then removed from the tube, with the remainder of the sample also placed in the sample bag. Thereafter, the spiral is enclosed inside a 110mm PVC pipe and cleaned with water to reduce the chance of contamination. A wet cloth is used to clean the inside of the pipe after every 1.5m of drilling. Prior to the next depth being drilled, both sample bowls are cleaned thoroughly. Once all the sample material is transferred to the sample bag, it is immediately sealed to contain the moisture and labelled accordingly.

The whole process is overseen by a technician to ensure best practices in order to produce quality samples and achieve accurate results. All the samples are transported from site to the accredited SGS Performance assay laboratory (SGS Performance) in Randfontein. SGS Performance is a SANAS-accredited assay laboratory (T0265) and is certified to conduct the relevant gold analyses. The samples are delivered to SGS Performance in the presence of a Company representative (sampler or geotechnician) and accompanied by a sample dispatch note. Transportation of the samples to the assay laboratory is done in sealed containers. Sample preparation and assaying is conducted by SGS Performance. Preparation of the samples includes the drying of the sample at 110°C, followed by pulverising a 300g subsample (obtained via rotary splitting of the complete dried sample) using a Rocklabs LM2 or RM2000 pulveriser to 80% passing 75µm. A 50g aliquot is mixed with a premix

flux for fire assay purposes and analysed using atomic absorption spectrometry.

An in-house QA/QC system is implemented at the MTR plant where certified reference material is employed to monitor the accuracy of the assaying procedure. For exploration, up to 10% of the samples are reassayed for precision tests and are accompanied by certified reference material at a 10% frequency. A three-times standard deviation from the expected certified content is employed as a failing criterion in the QA/QC system and triggers a reassaying procedure.

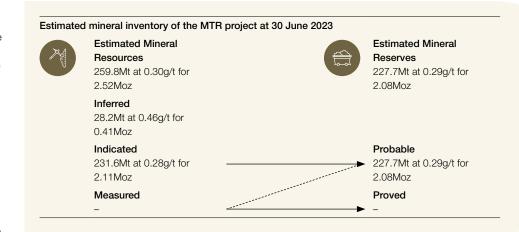
The ordinary kriging MRE method is employed at the MTR plant for generating local grade estimates. Each TSF at the MTR plant consists of a number of dumps clustered together. Where some of the individual dumps have different characteristics, they were hard domained for the estimation process. All samples are composited to 1.5m intervals in accordance with the auger drilling procedure. Capping of high-grade outlier assay values is conducted in order not to smear high-grade estimates into areas. All variograms are anisotropic as there are no definite continuity directions for the MTR TSFs. The nugget percentages, for the respective TSFs, varies between 29% and 64%, with the average at 44% as expected for this type of TSF. The continuity ranges vary between 100m and 250m with an average of 180m. The vertical variogram direction is a function of the downhole variograms and the expected layered continuity observed on these TSFs. The ranges of each domain's semi-variogram are used to determine the kriging search parameters, and the estimation parameters are optimised for each search and each domain. In all cases, historical data is employed during the MRE. All historical data is continuously evaluated relative to newly acquired data for representativeness. During the reporting period, no inconsistencies were noted in the historical or new data.

Mineral Resources classification

The spacing of the drill hole data and confidence in the kriging estimate (which is derived from the kriging efficiencies and regression slope values) are the primary criteria used for differentiating the Mineral Resources classification areas. Additionally, the data is of sufficient quality, and the geological understanding and interpretation are considered appropriate for this level of Mineral Resource classification.

Mineral Resources are classified as Measured when the geological, sampling and QA/QC confidence is high, with at least eight drill holes in the variogram range.

Furthermore, the kriging efficiency must be more than 60% and the regression slope more than 90%. Similarly, Mineral Resources are classified as Indicated when the geological, sampling and QA/QC confidence is high with at least four drill holes in the variogram range. Furthermore, the kriging efficiency must be more than 20% but less than 60% and the regression slope more than 60% but less than 90%. All other areas are classified as Inferred Mineral Resources.



Indicated Mineral Resources are converted to Probable Mineral Reserves due to the lower confidence mainly in grade continuity relative to that of Measured Mineral Resources. In most instances, Measured Mineral Resources are converted to Proved Mineral Reserves. Certain Measured Mineral Resources are not immediately accessible for mining and require development or equipping. In these situations, Measured Mineral Resources have been converted to Probable Mineral Reserves. Mineral Reserves are reported inclusive of diluting and contaminating material delivered to the respective metallurgical plant for treatment and beneficiation. Inferred Mineral Resources are not converted to Mineral Reserves, nor are Inferred Mineral Resources utilised in feasibility studies.

MOGALE CLUSTER

The Mogale Cluster TSFs and the related MTR project infrastructure on the West Rand, owned and operated by Pan African, will be utilised to re-treat historical gold plant tailings at a rate of up to 0,8mtpm through a newly constructed tailings retreatment plant.

This project was acquired following the completion of a successful definitive feasibility study, managed by DRA Global, highlighting positive project economics on the Mogale Cluster alone, with a net present value of ZAR1,006 million, a real ungeared internal rate of return of 20.1% and a payback period estimated at 38 months.

The Mogale Cluster is expected to yield an average of approximately 50Koz of gold per annum over the initial 11 years of its life-of-mine, while the last two years are expected to yield an average of approximately 25Koz of gold per year. These production estimates exclude an Inferred Resource of 49Koz of gold estimated at the base of some of the TSFs.

GEOLOGY

The ore being treated from the Mogale Cluster originated from the previously mined and metallurgically treated Kimberley, Bird, Livingstone, South and Main Reefs of WRCM and Luipaardsvlei Gold Mine. The tailings of the treated material were deposited onto eight TSFs that will be reclaimed during the remining process. Post processing, these TSFs will be consolidated into a modern, enlarged regional West Wits pit and 1L23-25 TSFs, thus reducing the MTR plant's environmental footprint and associated environmental impact.

ESTIMATED MINERAL RESOURCES

			E	stimated Min	eral Resourc	es		
	At 30 Jun	ie 2023			At 30 Jur	At 30 June 2022		
		Containe	ed gold			Containe	ed gold	
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz
Measured	-	-	-	_	_	-	-	-
Indicated	121.62	0.29	35.05	1.13	_	_	_	-
Measured and Indicated	121.62	0.29	35.05	1.13	-	-	-	_
Inferred	4.65	0.33	1.53	0.05	_	_	_	-
Total	126.27	0.29	36.58	1.18	-	-	-	-

Notes:

Mineral Resources are reported in accordance with the SAMREC Code. Mineral Resources would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Paylimit values are calculated at 0.1g/t, applying a gold price of ZAR950,000/kg (US\$1,663/oz at US\$/ZAR:17.77). The paylimit criteria are applied to the global grade of the whole TSF to be remined due to the low selectivity of the mining method. Mineral Resources are reported inclusive of Mineral Resources. Mineral Resources are reported as in situ tonnes (1.4t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations. Geological losses were applied according to the geological model.

MODIFYING FACTORS

At 30 June 2023	Gold price ZAR/kg	Paylimit value g/t Au	Mining loss cm	Dilution %	PRF %
Mogale Cluster	850,000	0.2	-	-	55

ESTIMATED MINERAL RESERVES

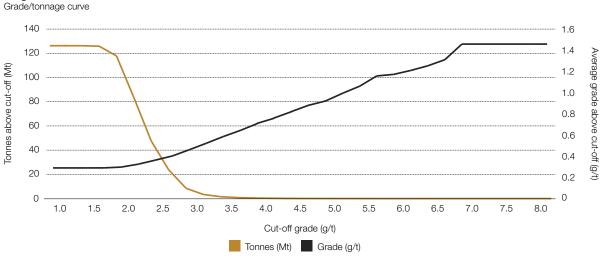
Estimated Mineral Reserves are reported inclusive of diluting and contaminating material delivered to the respective metallurgical plant for treatment and beneficiation.

			Е	stimated Mir	neral Reserve	es		
		At 30 Jur	ne 2023			At 30 Jun	ne 2022	
		Containe	ed gold			Containe	ed gold	
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz
Proved	-	-	-	-	_	_	_	
Probable	119.33	0.29	34.04	1.10	_	_	-	_
Total	119.33	0.29	34.04	1.10	-	-	_	_

Notes:

Estimated Mineral Reserves are reported in accordance with the SAMREC Code. Mineral Reserves would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Paylimit values are calculated at 0.2g/t, applying a gold price of ZAR850,000/kg (US\$1,488/oz at US\$YZAR:17.77). The paylimit criteria are applied to the global grade of the whole TSF to be remined due to the low selectivity of the mining method. All Mineral Reserves reported exclude geological structures. Mineral Reserves are reported as in situ tonnes (1.4t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations.

Mogale Cluster

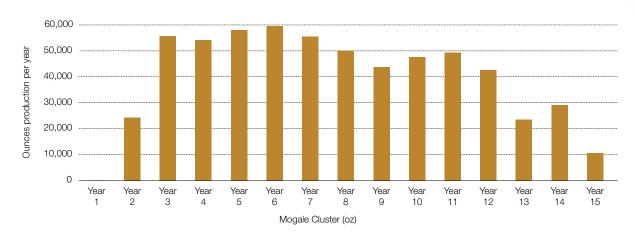


Mogale Cluster estimated Mineral Reserves sensitivity Mineral Reserves (Moz) 1.0 0.5 0 -20% -15% -10% -5% BASE 5% 10% 15% 20% Base gold price (ZAR850,000/kg) The Group's chief executive officer, Cobus Loots, addressing attendees at the MTR project soil turning ceremony



Mogale Cluster life-of-mine planning

Current schedules for the Mogale Cluster indicate a 13-year life-of-mine.



ESTIMATED MINERAL RESOURCES AND MINERAL RESERVES RECONCILIATION



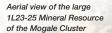
FACTOR THAT AFFECTED THE MINERAL RESOURCES RECONCILIATION



FACTOR THAT AFFECTED THE MINERAL RESERVES RECONCILIATION

New project acquired

New project acquired



SOWETO CLUSTER

The Soweto Cluster TSFs and the related MTR project infrastructure on the West Rand, owned and operated by Pan African, will be utilised to re-treat historical gold plant tailings at a rate of up to 1.0mtpm through a newly constructed tailings retreatment plant within the Mogale Cluster.

GEOLOGY

The ore being treated from the Soweto Cluster originated from the previously mined and metallurgically treated Kimberley, Bird, Livingstone, South and Main Reefs from Rand Leases and Durban Roodepoort Deep Gold Mine. The tailings of the treated material were deposited onto eight TSFs that will be reclaimed during the remining process. Post their processing, these TSFs will be consolidated into the same modern, enlarged regional West Wits pit and 1L23-25 TSFs as the Mogale Cluster TSFs, thus reducing the MTR plant's environmental footprint and associated environmental impact.

ESTIMATED MINERAL RESOURCES

			Es	timated Min	neral Resources			
		At 30 June 2023				At 30 Jur	ne 2022	
		Containe	Contained gold			Contained gold		
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz
Measured	-	_	_	_	_	-	_	_
Indicated	109.93	0.28	30.56	0.98	_	-	_	_
Measured and								
Indicated	109.93	0.28	30.56	0.98	_	_	_	_
Inferred	23.56	0.48	11.33	0.36	_	_	_	_
Total	133.49	0.31	41.89	1.35	_	_	-	_

Notes:

Mineral Resources are reported in accordance with the SAMREC Code. Mineral Resources would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Paylimit values are calculated at 0.1 glt, applying a gold price of ZAR950,000/kg (US\$1,663/oz at US\$/ZAR:17.77). The paylimit criteria are applied to the global grade of the whole TSF to be remined due to the low selectivity of the mining method. Mineral Resources are reported inclusive of Mineral Reserves. Mineral Resources are reported as in situ tonnes (1.35t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations. Geological losses were applied according to the geological model.

MODIFYING FACTORS

At 30 June 2023	Gold price ZAR/kg	Paylimit value g/t Au	Mining loss cm	Dilution %	PRF %
Soweto Cluster	850,000	0.2	-	-	60.47

ESTIMATED MINERAL RESERVES

Estimated Mineral Reserves are reported inclusive of diluting and contaminating material delivered to the respective metallurgical plant for treatment and beneficiation.

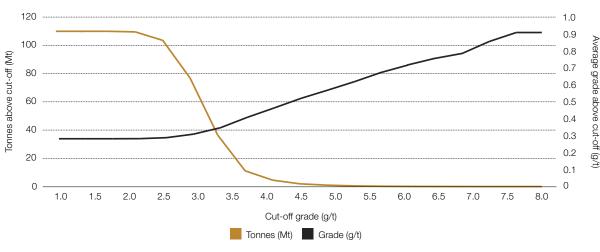
				stimated Mir	neral Reserve	al Reserves					
		At 30 Jur	At 30 June 2023			At 30 Jur	ne 2022				
		Containe	ed gold			Containe	ed gold				
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz			
Proved	-	-	_	-	_	-	_				
Probable	108.32	0.28	30.55	0.98	_	_	_	-			
Total	108.32	0.28	30.55	0.98	-	-	_	-			

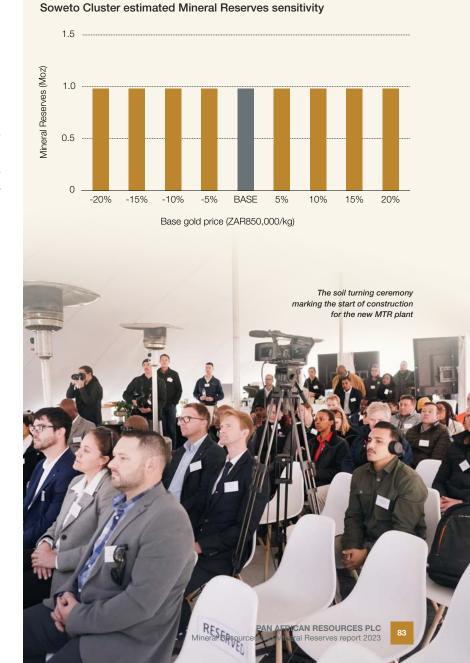
Notes:

Estimated Mineral Reserves are reported in accordance with the SAMREC Code. Mineral Reserves would be the same if reported according to the guidelines of the CIM's National Instrument 43-101. Paylimit values are calculated at 0.2g/t, applying a gold price of ZAR850,000/kg (US\$1,488/oz at US\$/ZAR:17.77). The paylimit criteria are applied to the global grade of the whole TSF to be remined due to the low selectivity of the mining method. All Mineral Reserves reported exclude geological structures. Mineral Reserves are reported as in situ tonnes (1.35t/m³). Any discrepancies in totals are due to rounding. Effects of mining and recovery losses have been considered in the cut-off grade calculations.

Soweto Cluster

Grade/tonnage curve

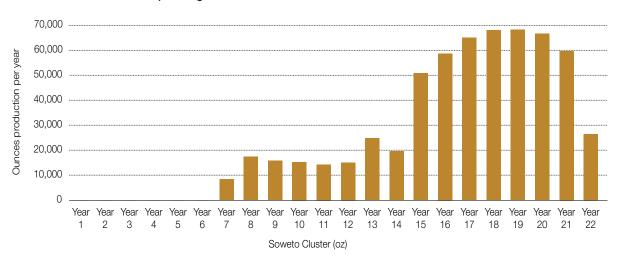




Life-of-mine planning

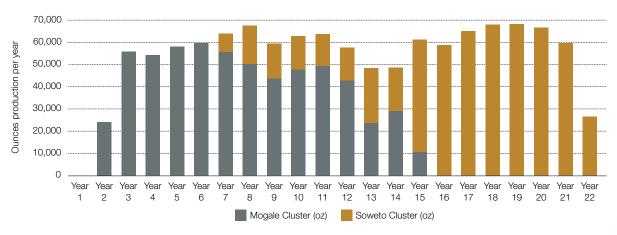
Current schedules for the Soweto Cluster indicate a 16-year life.

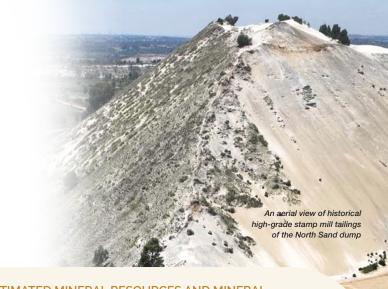
Soweto Cluster life-of-mine planning



The combined Mogale and Soweto Clusters' life-of-mine is 21 years and achieves an average output of 60,000oz of gold from the second year of operation.

MTR project life-of-mine planning





ESTIMATED MINERAL RESOURCES AND MINERAL RESERVES RECONCILIATION



FACTOR THAT AFFECTED THE MINERAL RESOURCES RECONCILIATION

New project acquired



FACTOR THAT
AFFECTED THE
MINERAL RESERVES
RECONCILIATION

New project acquired



Gold nanoparticles

have a broad spectrum of application areas including medicine, food industry, water purification, drugdelivery, photo-thermal therapy, imaging, sensing, catalysis and even antimicrobials



Background

Location

Regional geological setting

Exploration concessions of Block 12

Block 12 exploration

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87 89

90

SUDAN REGION

The Group has secured five prospective exploration concessions (or exploration licences) from Sudan's Ministry of Mines in north-eastern Sudan (Block 12), covering an area of almost 1,100km² and located some 70km north-west of the town Port Sudan.



SUDAN REGION

Sudan produced some 50t of gold in 2022 (https://en.wikipedia.org/wiki/List_of_countries_by_gold_production), making it the sixth-largest gold producer in Africa after South Africa, Ghana, Burkina Faso, Tanzania and Mali, and the nineteenth-largest producer in the world.

Despite the recent political unrest in Khartoum, the capital city of Sudan, mining producers and developers have been able to maintain their operations in the country. Among the various mines in the Ariab mining district, the large-scale Hassai Mine stands out as one of the most active. Located approximately 170km south-west of Pan African's Block 12 exploration concession area, Hassai annually produces 0.1Moz of gold, with the vast majority of gold being extracted by artisanal workers.

On 28 February 2022, Perseus Mining Limited acquired Orca Gold's Block 14 project, now formally known as The Meyas Sand Gold project, in the northern Red Sea state of Sudan for C\$215 million. Pan African identified Block 12 as being highly prospective. It is located within the Nakasib Shear Zone (NSZ), which shares geological similarities with the renowned Hassai Mine. Block 12 features significant artisanal mining, including hard rock veins and alluvial deposits. In 2021, Pan African applied for exploration concessions on Block 12A North, Block 12A South, Block 12D, Block 12E and Block 12K, which were granted to the Company for a period of three years.

BACKGROUND

Gold artefacts, dating back to predynastic times (about 3,500 BC), demonstrate evidence of gold production in the Red Sea district, close to Port Sudan, for a long period. Limited recent exploration has been completed in Sudan, which has created opportunities for mid-tier gold mining companies and junior explorers to start to explore and develop prolific depositional provenance models, based also on existing operations and shear zone geophysical signatures in Egypt to the north.

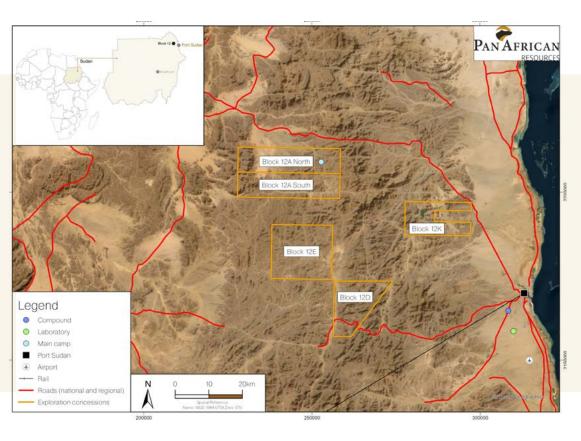
Following the military-led coup d'état on 25 October 2021, the paramilitary group known as the Rapid Support Forces launched attacks against the ruling military group on 15 April 2023. Because of the conflict that ensued thereafter, all expatriate employees of the Group were extracted safely from Sudan. Additionally, a notice of force majeure on the Group's exploration activities was handed to the Sudanese Mineral Resources Company. Despite the current circumstances, the Group remains confident that the armed attacks will subside in due course, allowing for the resumption of exploration activities. During this period, all of the Group's assets in the country are under guarded watch and have been placed on care and maintenance to minimise operational expenditure.

In August 2023 following the close of the reporting period, the Group has initiated the return of the expatriate workforce so as to restart our exploration activities.



LOCATION

Block 12 is located in north-eastern Sudan, in the Red Sea district, and covers a highly prospective area of 1,088km². The concession is located within the Nubian Desert, approximately 40km to 80km north-west of Port Sudan. The area has a sparse population and is extremely arid, with an average annual rainfall of 76.1mm, most of which occurs in November and December. Temperatures are high with average maximum temperatures exceeding 40°C between June and August. Vegetation, as well as large wild animals, is generally sparse. The topography is very rugged in areas, varying between 100mamsl to 1,750mamsl.



REGIONAL GEOLOGICAL SETTING

Block 12 is located within the Arabian-Nubian Shield (ANS) where gold has been mined for more than 5,000 years. The ANS formed between 900 million and 600 million years ago and extends from Israel and Palestine south to Ethiopia and Somalia. The ANS formed through progressive cratonisation of intra-oceanic island arcs and back-arc basins with continental micro-plates. The ANS consists of several terrains, which are separated by sutures represented by wide shear zones that are generally young towards the north. In Sudan, the Nakfa Terrain protolith is between 870 million and 840 million years old, whereas the Haya Terrain protolith is 870 million to 790 million years old, and the Gebeit Terrain protolith is 830 million to 720 million years old.

More locally, the five Block 12 exploration concessions are underlain by upper Proterozoicage volcano-sedimentary rocks, and associated with intrusive rocks located within the NSZ that separates the Gebeit and Haya Terrains. The NSZ attains a maximum thickness of approximately 50km and strikes in a north-east direction for at least 250km. The official geological map of Sudan is currently in the process of being updated by the Geological Research Authority of Sudan.

Gold mineralisation in the ANS was introduced during the East African orogeny, some 600 million years ago (Pan African age). Numerous mineralisation styles have been identified within the ANS. Although gold is the dominant metal that has been explored for to date the occurrence of other metals, including copper, tungsten and molybdenum, have also been recorded.

Mineralisation styles expected include but are not limited to:

Alluvial/placer-type gold mineralisation

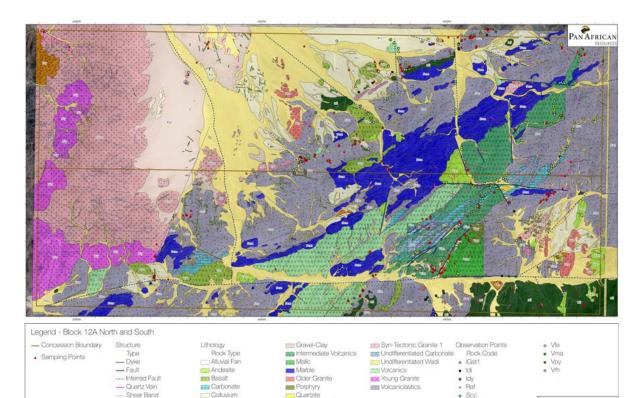
Alluvial gold deposits are currently being worked by local artisanal miners as the visible gold is easily extracted from the alluvial sands.

Gold is liberated from in situ gold veins by mechanical breakdown of these veins through weathering. The gold is then deposited in the alluvial sands which were washed from the hills and mountains, locally termed Wadis. The gold then forms nuggets as a result of supergene activity within the alluvial sands. Alluvial deposits currently produce more gold than any other mineralisation style in the Block 12 area.

Orogenic-type gold mineralisation

Orogenic gold mineralisation is associated with narrow quartz veins which often also contain copper. The subvertical veins, which are generally around 1m or less in width, may extend for tens and even hundreds of metres. Gold values are reportedly high and crushing and panning operations, observed by the Group's geologists in the field, confirm these reports. The Group obtained 14 rock samples during reconnaissance site investigations which yielded an average grade of 13.6g/t for this style of mineralisation. The quartz veins may form as a number of widely spaced individual veins that would lend themselves to shallow underground mining while broader mineralised zones, observed in the field, may represent open-pit mining targets.

Three principle orogenic mineralisation trends have been identified in Block 12. These include hydrothermal orogenic systems, volcanogenic massive sulphide systems and porphyry-type systems.



Sheared Granite

Silica Rocks

Svenite

Geological setting of the Block 12A North and South exploration concession areas

Diorite

Dolerite

Gabbro

- Tectonic Lineament

· Scs

Van

Vba

EXPLORATION CONCESSIONS OF BLOCK 12

Pan African Resources Minerals Co Limited, a subsidiary of the Group, is the holder of five exploration concessions in the Red Sea district of Sudan.

Right name	Type of right	Right number	Area	Expiry date	Status
Block 12A North	Exclusive prospecting licence	BLOCK RS 12A-N	22,685ha	5 July 2025	Effective, renewable for a further two years
Block 12A South	Exclusive prospecting licence	BLOCK RS 12A-S	22,699ha	5 July 2025	Effective, renewable for a further two years
Block 12D	Exclusive prospecting licence	BLOCK RS 12D	18,484ha	17 April 2025	Effective, renewable for a further two years
Block 12E	Exclusive prospecting licence	BLOCK RS 12E	29,101ha	17 April 2025	Effective, renewable for a further two years
Block 12K	Exclusive prospecting licence	BLOCK RS 12K	15,847ha	17 April 2025	Effective, renewable for a further two years

Exploration concessions are valid for a period of three years. After the initial three-year period, the concessions can be extended twice for a period of one year each. At the point of each extension, the exploration concession holder is required to relinquish 50% of the concession area, or remaining concession area in the case of the second extension period. At any time during the active exploration concession period, the holder can apply to upgrade the exploration concession to a mining lease.

A mining lease can only be applied for once a positive feasibility study with economic results is completed and submitted to the Sudanese Mineral Resources Company and the Ministry of Mines. A mining lease is active for a period of 25 years and is renewable, with each renewal period valid for 20 years. Once a mining lease has been approved, the Sudanese government would own a 30% free carried interest in the company to which the mining lease was granted.



BI OCK 12 FXPI ORATION

During September 2022, the Group successfully commissioned the first commercial fire assay multi-element analytical laboratory in Sudan, consisting of fire assay with both gravimetric finish and atomic absorption spectrometry finish as well as an X-ray fluorescence spectrometer.

This laboratory is used to analyse all exploration samples collected from the Block 12 exploration concessions granted to Pan African by the Sudan Ministry of Mines and is available to analyse samples from any regional exploration work by other explorers. The laboratory can assay more than 8,000 samples per month and is located at the Group's main headquarters established in Port Sudan. This enables the quick turnaround of critical assay results for informative decision-making during the exploration phases. Selected check analyses of the samples processed in the Group's laboratory will be conducted with accredited laboratories internationally while the Group is progressing accreditation of its laboratory.

Prior to the conflict, an exploration team was active within Block 12A South and Block 12A North, conducting soil geochemistry and hard rock chip sampling programmes to further define the initial 10 targets that were identified for further exploration. These were prioritised based on the size, extent of artisanal workings, presence of alluvial workings and associated tailings, prospectivity and upside potential. Initial assaying results received from the exploration targets identified in the south-eastern corner of Block 12A South averaged 1.7g/t from 12 samples taken from quartz veins, rock debris and soil. However, some of the structures sampled indicated significantly higher gold mineralisation results, with values ranging from 2.9g/t up to 9.4g/t. These structures will be further defined as part of a confirmatory sampling programme. Remote sensing imagery in Block 12A North detected a notable north-east/south-west anomaly approximately 11km long. Initial field investigations identified a siliceous unit hosting significant iron oxide alteration, with reported grades of 7.3g/t, 0.19g/t and 0.58g/t for gold. Further sampling along the strike and down-dip of the unit, as well as subsequent mapping, revealed a potential extension of the mineralised zone of several kilometres towards the south-west.

No Mineral Resources or Mineral Reserves are currently reported for any of the targets. The Group is presenting the current results as an exploration target with applied minimum and maximum expected values.

				Explorati	on target			
		At 30 Jur	ne 2023			At 30 Jur	ne 2022	
		Containe	ed gold			Containe	ed gold	
Category	Tonnes million	Grade g/t	Tonnes gold	Moz	Tonnes million	Grade g/t	Tonnes gold	Moz
Minimum of expected range	2.75	1.00	2.75	0.09	_	_	_	_
Maximum of expected range	4.5	7.30	32.85	1.02	_	_	_	_

Protons: **79** 92 Glossary Corporate information 93 Neutrons: 118 79 OTHER INFORMATION There are 79 protons and 118 neutrons in the nucleus of one gold atom.

GLOSSARY

TERMS AND ABBREVIATIONS USED IN THIS REPORT

<u>%</u>	Parts per hundred/percentage
<u>°C</u>	Degrees Celsius
um	Micrometre
3D	Three-dimensional
7 Shaft	Evander Mines' 7 Shaft
8 Shaft	Evander Mines' 8 Shaft pillar as well as the 24, 25 and
	26 Level project
79	The atomic number of gold
ANS	Arabian-Nubian Shield
Au	Gold
Au(HS) ₂	Gold in aqueous sulphide solution
Barberton Mines	Barberton Mines Proprietary Limited
BC	Before Christ
BGB	Barberton Greenstone Belt
BIOX®	Biological Oxidation (BIOX®) gold extraction process
	developed at Barberton Mines. It is an environmentally
	friendly process of releasing gold from the sulphide that
	surrounds it by using bacteria
Brownfield	Project based on prior work or rebuilt from a previous one
project	
BTRP	Barberton Tailings Retreatment Plant, a gold recovery tailings plant owned by Barberton Mines, which
	commenced production in 2014
C\$	Canadian dollar
CIL	Carbon-in-leach
CIM	Canadian Institute of Mining
CIP	Carbon-in-pulp
cm	Centimetre
cmg/t	Centimetre grammes per tonne
CO ₂	Carbon dioxide
Contained gold	31.10399 grammes of gold
ounce (oz)	
Contained gold	1,000 grammes or 32.150743 ounces of gold
kilogramme (kg)	
DMRE	Department of Mineral Resources and Energy
EIA	Environmental impact assessment
Elikhulu	Elikhulu Tailings Retreatment Plant
EMP	Environmental management programme

ESG	Environmental, social and governance
ETC	Eastern Transvaal Consolidated Mines
Evander Mines	Evander Gold Mines Limited and Evander Gold Mining Proprietary Limited
Exploration Target	An Exploration Target is a statement or estimate of the exploration potential of a mineral deposit in a defined geological setting where the statement or estimate, quoted as a range of tonnes and a range of grade or quality, relates to mineralisation for which there has been insufficient exploration to estimate Mineral Resources.
<u>g</u>	Gramme
g/t	Grammes/tonne
GISTM	Global Industry Standard on Tailings Management
GSSA	Geological Society of South Africa
H ₂ O	Water
H ₂ S	Hydrogen sulphide
ha	Hectares
JSE	JSE Limited incorporating the Johannesburg Securities Exchange, the main bourse in South Africa
K	Kelvin
kg	Kilogramme
km	Kilometre
km²	Square kilometre
Koz	Thousand ounces
ktpm	Thousand tonnes per month
LTIFR	Lost-time injury frequency rate
m	Metre
m³	Cubic metre
mamsl	Metres above mean sea level
MCF	Mine call factor
Metorex	Metorex Limited

Mineral Reserves	A Mineral Reserve is the economically minable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at a prefeasibility or feasibility level as appropriate that include application of modifying factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.
	The reference point at which Mineral Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.
	Mineral Reserves are reported inclusive of diluting and contaminating material delivered for treatment or dispatch from the mine without treatment. To avoid confusion in reporting Mineral Reserves, the definition of treatment is taken to include any beneficiation of the raw product that might take place before or during the metallurgical process. For clarity, tonnages and grade of saleable product may be reported for certain commodities, with clear descriptions indicating such.
Mineral Resources	A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.
	Mineral Resources are subdivided, and must be so reported, in order of increasing confidence in respect of geoscientific evidence, into Inferred, Indicated or Measured categories.
Mintails	Mintails Limited
mm	Millimetre
MMR	Main Muiden Reef
Moz	Million ounces
MPRDA	Mineral and Petroleum Resources Development Act
-	

GLOSSARY continued

MRC	Main Reef Complex
MRE	Mineral Resources estimation
Mt	Megatonne
MTPA	Mpumalanga Tourism and Parks Agency
mtpm	Million tonnes per month
MTR	Mogale Tailings Retreatment Proprietary Limited
MTR project	The Mogale Tailings Retreatment project is located in the Mogale district. A plant
or plant	is being constructed to process gold tailings deposited onto the Mogale Gold and MSC TSFs
MTR TSF	MTR project tailings storage facility
MW	Megawatt
n	Neutron
nm	Nanometre
NSZ	Nakasib Shear Zone
OZ	Ounce
р	Proton
Pan African	Holding company – Pan African Resources PLC
PC	Prince Consort
PRF	Plant recovery factor
PVC	Polyvinyl chloride
QA/QC	Quality assurance and quality control
RIFR	Reportable injury frequency rate
RoM	Run-of-mine
SA	South Africa
SACNASP	South African Council for Natural Scientific Professions
SAMREC Code	South African Code for Reporting of Mineral Resources and Mineral Reserves (2016 edition)
SANAS	South African National Accreditation System
SGS Barberton	SGS Barberton assay laboratory
SGS Performance	SGS Performance assay laboratory in Randfontein
t	Tonnes
the current financial year or the period/year under review	The year ended 30 June 2023
the Group or the Company or Pan African Resources	Pan African Resources PLC, listed on the London Stock Exchange's Alternative Investment Market and on the JSE in the 'Gold Mining' sector
the prior financial year	The year ended 30 June 2022
tpm	Tonnes per month
TSF	Tailings storage facility
US\$	United States dollar
WRCM	West Rand Consolidated Mines
WUL	Water-use licence
ZAR	South African rand
ZK	Zwartkoppie

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