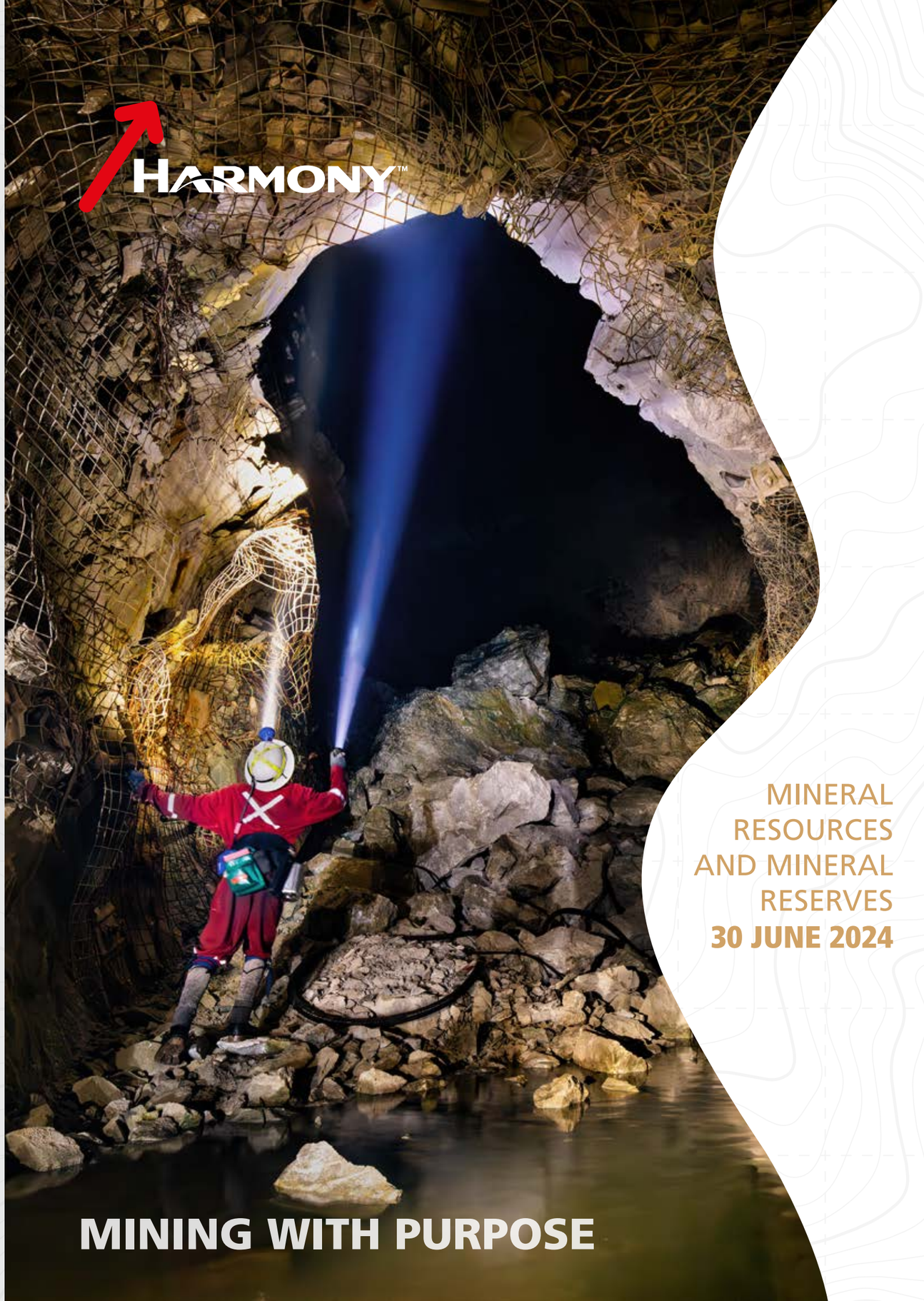
HARMONY™

www.harmony.co.za



MINERAL RESOURCES AND MINERAL RESERVES

30 JUNE 2024

OUR 2024 REPORTING SUITE

This report is supplemented by and should be read with our full reporting suite, comprising:

Integrated report, which provides our stakeholders with a balanced, holistic and transparent overview of our business model, strategy, performance and value creation.

Environment, social and governance (ESG) report, which provides insight into our ESG performance for 2024 and over the past five years, along with our aspirations. It is intended as a useful guide to support analysis and provides information about our shared value.

Financial report, which includes the consolidated and separate parent company annual financial statements.

Remuneration report provides clear and comprehensive information on our remuneration policies and practices with the goal of aligning director pay and remuneration in general, with company performance and good governance.

Notice to shareholders provides valuable information to shareholders who wish to participate in Harmony's upcoming annual general meeting (AGM), inclusive of the proxy form.

Annual **Form 20-F** report filed with the United States Securities and Exchange Commission, in compliance with the listing requirements of the New York Stock Exchange.

Operational report, a supplementary report, which includes technical and operational information about our operations.

Climate action and impact report (previously the TCFD report), a supplementary report, which discloses our climate-related governance, risk management, strategy, metrics and targets.

These reports and supporting documents are available at **www.harmony.co.za**.

Scan the **QR code** to download the 2024 reporting suite.

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■ Kareerand extension project

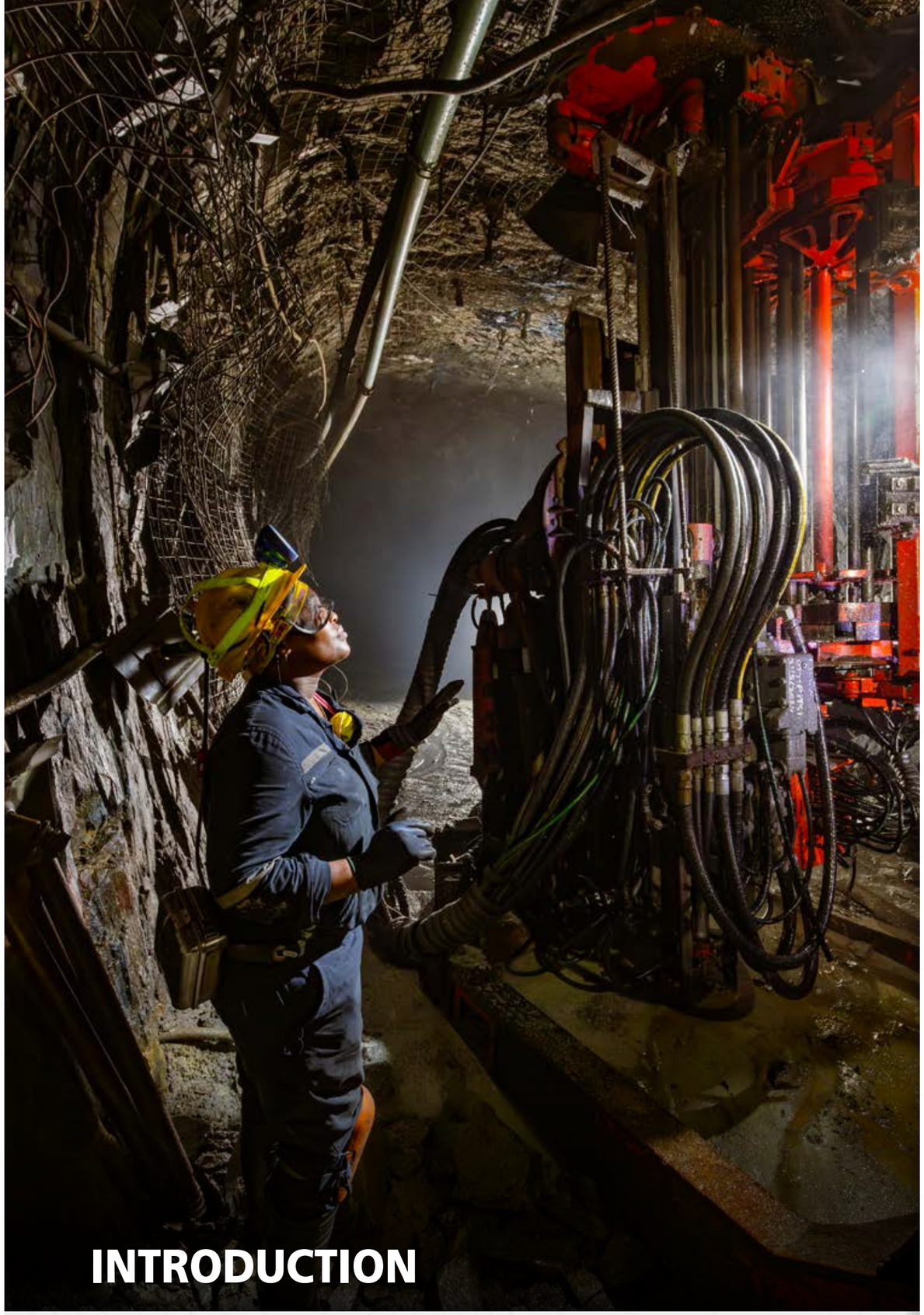
ABOUT THIS REPORT

This statement of Harmony's Mineral Resources and Mineral Reserves (South Africa, Papua New Guinea and Australia) as at 30 June 2024 is produced in accordance with the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (SAMREC), section 12.13 of the JSE Listings Requirements (as updated from time to time) and the requirements of the United States Securities and Exchange Commission (SEC) regulation S-K Subpart 1300.

In our Form 20-F the Mineral Resources are reported exclusive of Reserves. United States investors are urged to consider the disclosure in this regard in our Form 20-F which will be available on our website at **www.harmony.co.za/invest/annual-reports** on 31 October 2024.

NOTES

- Unless otherwise stated, Harmony's equity interest is 100%
- The convention adopted in this report is that the Measured and Indicated Mineral Resource estimates are reported inclusive of the portion converted to Mineral Reserves
- Throughout this report, "US$" or "dollar" refers to US dollar, unless otherwise stated
- "K" refers to kina, the currency of Papua New Guinea
- "Moz" refers to million ounces, "Mt" refers to million tonnes and "Mlb" refers to million pounds
- All production volumes are in metric tonnes (t), unless specifically stated as being imperial tons
- Rounding of figures may result in minor computational discrepancies in the Mineral Resource and Mineral Reserve tabulations
- In the case where tonnes and/or kilograms is so small that rounding to specified significant figures is zero, the number of decimals displayed was increased
- Where Harmony has included the Inferred Mineral Resource in a feasibility study, this is disclosed under the relevant project
- While our reporting currency is the South African rand, the US dollar equivalents of significant financial metrics, together with the applicable percentage movements, are also provided to aid sector and peer comparisons.



INTRODUCTION

CORPORATE PROFILE

Harmony is a gold mining specialist with a growing international copper footprint. We have embedded sustainable mining practices throughout our operations to ensure we produce safe, profitable ounces and improve our margins through operational excellence and value-accretive acquisitions. Our higher-quality ounces, Eva Copper Project and Tier 1 Wafi-Golpu project position us well to become a significant gold-copper producer. Through our secondary mining operations, we are the largest producer of gold globally through the retreatment of old tailings dams across South Africa.

Headquartered in Randfontein, South Africa, Harmony has a primary listing on Johannesburg's stock exchange, the JSE Limited (HAR) and an American depositary receipt programme listed on the New York Stock Exchange (HMY). Our shareholder base is geographically diverse and includes some of the largest fund managers globally. The largest shareholder base is in South Africa (45%), followed by the United States (38%).

What we do

Exploration and acquisitions
Exploring for and evaluating economically viable gold-bearing orebodies and/or value-accretive acquisitions in gold and copper.

Development
Evaluating development options to de-risk projects before major capital outlays, the design of efficient and sustainable operations and then the building of the necessary infrastructure, facilities and systems to enable mining operations.

Mining and processing
Establishing, developing and operating mines, reclamation sites and related processing infrastructure. Ore mined is milled and processed by our gold plants to produce gold doré bar.

Sales and financial management
Generating revenue through the sale of gold, silver and uranium produced and optimising efficiencies to maximise financial returns.

Stewardship and responsible mine closure
Empowering communities and employees throughout and beyond the life of our mines. Being responsible to our environment during operations. Restoring mining-impacted land for alternative economic use post-mining and approving mine closure commitments.

70+ years' gold mining experience in South Africa and almost two decades operating in Papua New Guinea.

1.56Moz produced (2023: 1.47Moz) with 12.2% (190 233oz) being from reclamation activities.

Market capitalisation of **R106.3 billion** (US$5.8 billion) at 30 June 2024 (2023: R49.0 billion (US$2.6 billion)).

40.26Moz gold and gold equivalent Mineral Reserves (2023: 39.34Moz).

How we do it

Mining with purpose

Our purpose is to be a global, sustainable gold and copper producer, creating shared value for all stakeholders while leaving a lasting positive legacy through:

- Committing to safe, ethical, social and ecologically responsible mining
- Creating longevity, profitability and sustainability
- Positioning our business to contribute to a low-carbon future.

Our mission

To create value by operating safely and sustainably, and to grow our margins.

Our values

- No matter the circumstances, safety is our main priority
- Achievement is core to our success
- We are all accountable for delivering on our commitments
- We are all connected as one team
- We uphold honesty in all our business dealings and communicate openly with stakeholders

Delivering impact

We recognise that our activities negatively and positively impact the natural resources on which we rely. Guided by our sustainable development framework, we aim to reduce risk, maximise opportunities and leave a lasting positive impact while creating and protecting value.

What differentiates us

What sets us apart from our peers is our ability to create a sustainable, profitable business enabled by the collective skills, resources and experience we have harnessed over the past seven decades.

Lower risk profile	Improving operational metrics	Long, diversified production profile	Strong and flexible balance sheet	Clear capital allocation framework
» Safety – a core value that always precedes production » Embedded ESG through a clear and sustainable development strategy » Governance – a leadership team with the right skills, knowledge and wealth of mining experience for strategic decision making » Decarbonisation – greener energy mix, focusing on renewables.	» Quality ounces and cost reduction aimed at lowering all-in sustaining costs (AISC) » Operational excellence and good momentum at each mine » Better efficiencies through various business improvement initiatives » Project execution discipline » Geared exposure to the rand/kg gold price.	» Significant copper exposure through two international projects » Excellent Resource to Reserve conversion potential » Identifying growth opportunities that lower risk and increase margins » Near-term copper production » Tier 1 copper-gold porphyry.	» Strengthened balance sheet supports future growth alongside shareholder capital returns » Net cash position with excellent liquidity » Able to fund capital and approved projects internally (cash and available facilities) at current gold prices » Clear hedging strategy.	» Balancing growth aspirations with shareholder returns » Consistent dividends in-line with policy.

Kareerand extension, Mine Waste Solutions

OUR OPERATIONS

Harmony operates in South Africa and Australasia, and has an abundance of opportunities to deploy capital across the world. We carefully determine which projects will deliver optimal return on capital on the basis of where we operate, how we manage risk and what skills we can leverage.

Having organised our operations into four strategic business areas (see the **Our strategy** section in our **Integrated report** for more details), we have actively pursued opportunities to extend the life of some of our larger and higher-grade assets, adding lower-risk, higher-margin ounces to our portfolio. This enables optimal value creation and free cash flow generation through assets already in our portfolio.

The Eva Copper Project positions Harmony as a positive contributor to a carbon-neutral future and augments our existing copper exposure afforded by the Wafi-Golpu Project in Papua New Guinea.

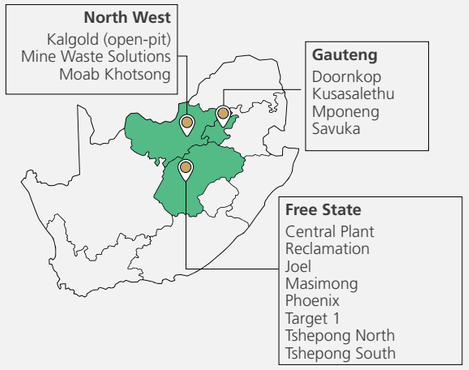
A summary of our operations is presented below and detailed information can be found in our **Operational report**.

Grouping of our assets based on grade and life-of-mine (LoM) as per our equity strategy (four strategic business areas) looks as follows:

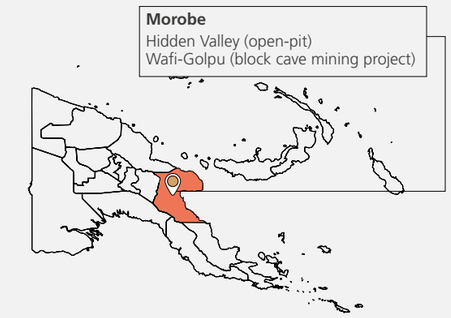
- South African (SA) high-grade underground operations: Moab Khotsong and Mponeng
- SA underground optimised operations with a focus on free cash generation: Tshepong North, Tshepong South, Doornkop, Joel, Target 1, Kusasalethu and Masimong
- SA high-margin surface assets: Mine Waste Solutions, Phoenix, Central Plant reclamation and dumps
- International assets: Hidden Valley, Wafi-Golpu copper-gold project (Papua New Guinea) and Eva Copper Project (Australia).

Major capital allocation for our underground assets is determined by grade and returns.

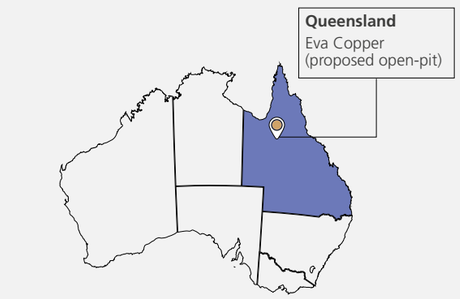
South Africa

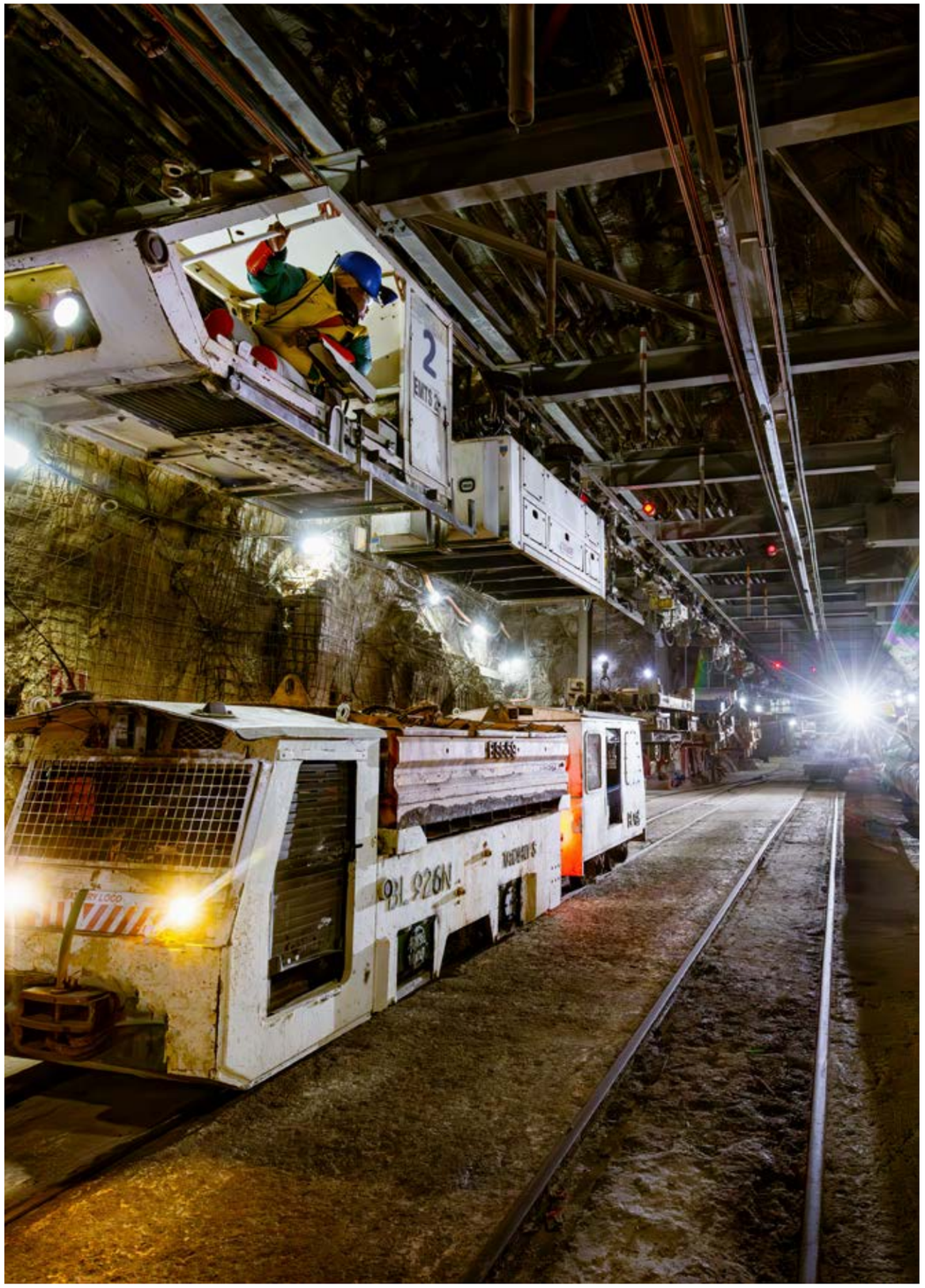


Papua New Guinea



Australia





■ Mponeng

South Africa

Location: Witwatersrand Basin and Kraaipan Greenstone Belt
Production: 1.40Moz (89.5% of group) (FY23: 1.33Moz (90.4% of group))
Total workforce: 43 667

Assets:
- Eight underground operations
- One open-pit mine
- Several surface source operations.

At 30 June 2024, our South African operations accounted for 66.3% of group Mineral Resources and 55.9% of group Mineral Reserves, both inclusive of gold and gold equivalent ounces.

Underground

North West

Moab Khotsong
6 499
212 162oz 8.03g/t grade
20 years 9.3Moz Resources 3.5Moz Reserves

West Rand[1]

Mponeng	Doornkop	Kusasalethu
5 490	4 152	3 968
281 350oz 9.94g/t grade	111 562oz 4.26g/t grade	123 523oz 6.58g/t grade
20 years 24.6Moz Resources 4.5Moz Reserves	**18 years** 7.5Moz Resources 1.9Moz Reserves	**3 years** 3.1Moz Resources 0.4Moz Reserves

Free State

Tshepong North	Tshepong South	Target 1	Joel	Masimong
3 774	3 490	2 005	1 927	2 093
104 426oz 4.47g/t grade	100 599oz 6.73g/t grade	59 769oz 4.02g/t grade	55 718oz 4.32g/t grade	57 229oz 3.76g/t grade
7 years 10.2Moz Resources 0.8Moz Reserves	**6 years** 14.5Moz Resources 0.7Moz Reserves	**5 years** 3.4Moz Resources 0.5Moz Reserves	**6 years** 1.8Moz Resources 0.4Moz Reserves	**2 years** 0.9Moz Resources 0.1Moz Reserves

Surface

North West

Kalgold
741
45 815oz 0.96g/t grade
12 years 2.0Moz Resources 0.6Moz Reserves

Waste rock dumps

Free State	North West	West Rand[1]
850**	692**	865**
35 141oz 0.48g/t grade	4 565oz 0.41g/t grade	15 722oz 0.32g/t grade
±1 year 0.16Moz Resources	**±1 year** 0.04Moz Resources	**±1 year** 0.002Moz Resources

Tailings

North West

Mine Waste Solutions (MWS)
2 396
121 207oz 0.17g/t grade
15 years 1.7Moz Resources 1.4Moz Reserves

West Rand

Savuka
240
19 579oz 0.15g/t grade
3 years 0.4Moz Resources 0.1Moz Reserves

Free State

Phoenix	Central Plant Reclamation (CPR)
347	250
29 674oz 0.15g/t grade	19 773oz 0.16g/t grade
4 years 0.4Moz Resources 0.2Moz Reserves	**11 years** 0.4Moz Resources 0.4Moz Reserves

Workforce* | Production for FY24 | LoM per FY25 plan

[1] *Western side of Gauteng that borders North West.*
* *Includes permanent employees and contractors at 30 June 2024.*
** *Some of this material is treated along with reef, while some is treated at dedicated waste rock treatment plants. The numbers for the Free State, North West and West Rand facilities above exclude MWS, Phoenix, CPR and Kalgold.*

Papua New Guinea

Location: New Guinea Mobile Belt in Morobe
Production: 0.16Moz (10.5% of group) (FY23: 0.14Moz (9.6% of group))
Total workforce: 2 264

Assets:
- Hidden Valley (open-pit gold and silver mine)
- Wafi-Golpu Project (significant copper-gold portfolio)
- Multiple exploration areas.

At 30 June 2024, our Papua New Guinea operation accounted for 28.0% of group Mineral Resources and 44.1% of group Mineral Reserves, both inclusive of gold and gold-equivalent ounces.

** Based on the 2018 feasibility study update*

Surface

Hidden Valley

2 083
164 000oz 1.52g/t grade
5 years 2.55Moz Resources 1.04Moz Reserves

Project

Wafi-Golpu

61
26 years* 35.13Moz Resources 16.69Moz Reserves

Australia

Location: Mt Isa Inlier, Queensland, Australia
Production: Project feasibility stage and exploration
Total workforce: 129**

Assets:
- Eva Copper Project
- Rosby exploration tenements.

We are making good progress with the feasibility study update for the Eva Copper Project in Queensland, Australia. On 25 March 2024, the Queensland government declared the Eva Copper Project as a "Prescribed Project" due to the strategic importance for the region. In addition, we have received conditional grant funding of A$20.7 million to further help accelerate the development of this project.

We have drilled 82 000 metres, growing the copper and gold Mineral Resource base. Harmony's current declared mineral resources is 366Mt at 0.40% copper for 1 472Kt of copper and 196Mt at 0.07g/t gold for 440Koz of gold. We anticipate the average annual copper production to be between 50 000 and 60 000 tonnes, subject to finalisation of the feasibility study.

Eva accounts for 5.7% of group Mineral Resources at 30 June 2024.

*** Includes Australia head office; includes both permanent employees and contractors at 30 June 2024.*

Project

Eva Copper

25
15 years 7.76Moz Resources

■ Eva Copper

Workforce | Production for FY24 | LoM per FY25 plan

COMPLIANCE AND SUMMARY

As at 30 June 2024

Harmony's statement of Mineral Resources and Mineral Reserves as at 30 June 2024 is produced in accordance with the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (SAMREC). It should be noted that the Mineral Resources are reported inclusive of the Mineral Reserves.

In our Form 20-F the Mineral Resources are reported exclusive of Reserves. United States investors are urged to consider the disclosure in this regard in our Form 20-F which will be available on our website at **www.harmony.co.za/invest/annual-reports** on 31 October 2024.

Reporting code and compliance

The SAMREC Code was developed and established in 1998 by the South African Institute of Mining and Metallurgy and is the recommended guideline for reporting on exploration results, Mineral Resources and Mineral Reserves for companies listed on the Johannesburg Stock Exchange.

The first version of the SAMREC Code was issued in March 2000 and adopted by the JSE in its Listings Requirements later that year; this was similarly the basis for the JSE Ongoing Reporting Requirements promulgated in 2005. The SAMREC Code was reviewed in 2004, updated in 2007 and amended in July 2009. The latest update of the SAMREC Code was launched on 19 May 2016 with this version superseding previous versions. In addition, section 12.13 of the JSE Listings Requirements was subsequently updated with the revised SAMREC and South African Code for the Reporting of Mineral Asset Valuation (SAMVAL) that came into effect on 1 January 2017.

The latest edition of the SAMREC Code includes an updated Table 1 template, which provides an extended list of the main criteria to be considered and reported when reporting on exploration results, Mineral Resources and Mineral Reserves. In complying with the principles of the code, comments relating to the items in the relevant sections of Table 1 must be provided on an "if not, why not" basis within the competent person's report. Guidelines for the compilation of Table 1 are for (i) the first-time declaration of exploration results, a Mineral Resource or a Mineral Reserve, and (ii) instances where this information has changed materially since last publicly reported for significant projects.

Reporting on an "if not, why not" basis ensures that it is clear to investors or other stakeholders whether items have been considered and deemed of low consequence or are not yet addressed or resolved. Harmony has adopted the compilation and updating of Table 1 as a standard to complement internal reports.

Harmony has written confirmation from the lead competent persons that the information disclosed in this report is compliant with the SAMREC Code and, where applicable, with the relevant JSE section 12 and SAMREC Table 1 requirements, and that it may be published in the form, format and context in which it was intended.

Harmony's Mineral Resources and Mineral Reserves reporting for the financial year ended 30 June 2024, complies with the SAMREC and new SEC S-K 1300 modernisation rules for technical disclosure. These amendments rescind SEC Industry Guide 7 and consolidate the disclosure requirements for registrants in a new subpart of Regulation S-K.

Our strategy

Harmony's strategy is to produce safe, profitable ounces and increase margins. This includes delivering safely on our operational plans, reducing costs and improving productivity. Harmony's growth journey entails acquiring quality assets. In FY17, Harmony invested in the life-of-mine extension at Hidden Valley and in FY18 acquired and integrated the higher-grade Moab Khotsong operations. In FY21, Harmony acquired the remainder of the AngloGold Ashanti Limited South African assets – Mponeng and related assets. In FY22, Harmony invested in the life-of-mine extension of the Moab Khotsong operation. In FY23, Harmony acquired the low-risk Eva Copper Project and surrounding exploration tenements from Copper Mountain Mining Corporation. In FY24, Harmony invested in the life-of-mine extension of the Mponeng operation.

ASSUMPTIONS

In converting Mineral Resources to Mineral Reserves, the following commodity prices and exchange rates were applied:

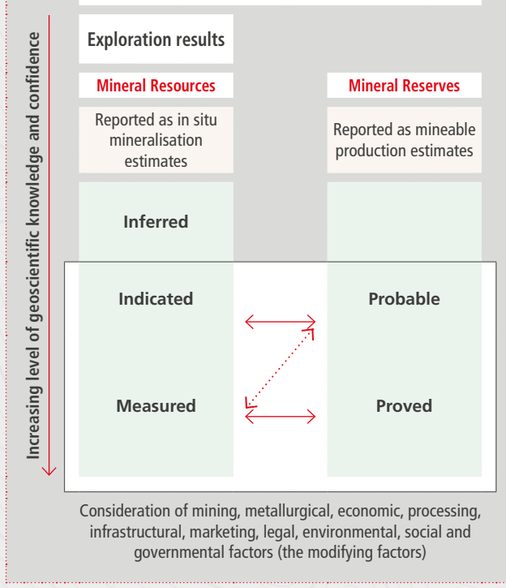
- A gold price of US$1 772/oz
- An exchange rate of R18.26/US$
- The above parameters resulted in a Rand/kg gold price of R1 040 000/kg for the South African assets
- The Hidden Valley Mine used commodity prices of US$1 772/oz Au, US$23.00/oz Ag and US$4.00/lb Cu at an exchange rate of AUD1.42 per US$
- The Wafi-Golpu joint venture used commodity prices of US$1 200/oz and US$3.00/lb Cu
- Gold equivalent ounces are calculated assuming US$1 772/oz Au, US$4.00/lb Cu and US$23.00/oz Ag, and assuming a 100% recovery for all metals.

Note
Au = gold **Cu** = copper **Ag** = silver **U_3O_8** = uranium

For more information on Harmony's reporting code, our SAMREC compliance and the definitions used, refer to the section, **Harmony standard for SAMREC-compliant reporting**.

Table 1

Classification relationship between exploration results, Mineral Resources and Mineral Reserves (SAMREC Code)



Independent review

Individual mines are independently reviewed on a three-year rotational basis. This year, the Mineral Resources and Mineral Reserves at Mponeng, Doornkop and Joel as well as the group SAMREC statement were independently reviewed by The Mineral Corporation for compliance with SAMREC.

Competent persons' declaration

The Mineral Resources and Mineral Reserves estimates in this report are based on information compiled by the two competent persons whose details are presented below. Both these full-time employees of Harmony Gold Mining Company Limited give consent to the inclusion of the information in this report in the form and context in which it appears. They are:

MINERAL RESOURCES AND MINERAL RESERVES

Theo van Dyk, *BSc (Hons), Pr.Sci.Nat, MGSSA*, who has 26 years' relevant experience and is registered with the South African Council for Natural Scientific Professions (SACNASP) and a member of the Geological Society of South Africa (GSSA).

Physical address
Randfontein Office Park, Corner Main Reef Road and Ward Avenue, Randfontein, South Africa

Postal address
PO Box 2, Randfontein 1760, South Africa

MINERAL RESOURCES AND MINERAL RESERVES

Gregory Job, *BSc (Geo), MSc (Min Econ), F AusIMM,* who has 36 years' relevant experience and is a Fellow of the Australian Institute of Mining and Metallurgy (F AusIMM) South-east Asia.

Physical address
Level 2, 189 Coronation Drive, Milton, Queensland 4064, Australia

Postal address
PO Box 1562, Milton, Queensland 4064, Australia

In South Africa, Harmony employs an Ore Reserve manager at each of its operations who takes responsibility as competent person for the compilation and reporting of Mineral Resources and Mineral Reserves at their respective operation. In Papua New Guinea and Australia, competent persons are appointed for the Mineral Resources and Mineral Reserves for specific projects and operations. Details on these competent persons are presented in the respective operational Mineral Resource and Mineral Reserve statements in this report.

Administrative information for professional organisations

Australasian Institute of Mining and Metallurgy (AusIMM)
Postal address: PO Box 660, Carlton, Vic 3053, Australia
Telephone: +61 3 9658 6100
Website: **www.ausimm.com.au**

South African Council for Natural Scientific Professions (SACNASP)
Postal address: Private Bag X540, Silverton, 0127, Gauteng South Africa
Telephone: +27 12 846 500
Website: **www.sacnasp.org.za**

Southern African Institute of Mining and Metallurgy (SAIMM)
Postal: PostNet Suite #212, Private Bag X31, Saxonwold, 2132
Physical: 7th Floor, Rosebank Towers, 19 Biermann Avenue Rosebank, 2196
Telephone: +27 11 538 0231
Website: **www.saimm.co.za**

Geological Society of South Africa (GSSA)
CSIR Miningtek
Carlow and Rustenburg Roads
Aukland Park, Johannesburg
South Africa
Telephone: +27 10 143 2096
Website: **www.gssa.org.za**

Details of the professional registrations of our competent persons can be obtained from the company secretary at: **companysecretariat@harmony.co.za**.

Legal entitlement to minerals reported

Harmony's South African operations operate under new order mining rights in terms of the Mineral and Petroleum Resources Development Act (MPRDA) 28 of 2002.

In Papua New Guinea, Harmony operates under the Independent State of Papua New Guinea Mining Act 20 of 1992. All required operating permits have been obtained and are in good standing.

In Australia, Harmony operates under the Mineral Resources Act 1989 of the State of Queensland. All required mining tenures have been obtained and are in good standing.

The legal tenure of each operation and project has been verified to the satisfaction of the accountable competent person.

Environmental management and funding

Harmony's environmental strategy aims to optimise our environmental performance by managing our environmental impacts, focusing on effective risk controls, reducing environmental liabilities, ensuring responsible stewardship of our products within our scope of influence, and complying with environmental legislation and regulations.

For further information regarding Harmony's approach to sustainability and environmental performance refer to the **ESG report 2024**, which is available at **www.harmony.co.za**.

Details relating to the provision for **Environmental rehabilitation** and funding for the group can be found in note 24 in Harmony's audited annual financial statements that are presented in a separate report, the **Financial report 2024**. This is also available online at **www.harmony.co.za**.

Mineral Resources and Mineral Reserves – summary

The company's attributable gold and gold equivalent Mineral Resources are declared as 136.5Moz as at 30 June 2024, a 1% decrease year on year from the 137.8Moz declared as at 30 June 2023. The total gold contained in the Mineral Resources at the South African operations represents 66% of the company total, with the Papua New Guinea operations representing 28% and Australian operations 6% of Harmony's total gold and gold equivalent Mineral Resources as at 30 June 2024.

Harmony's attributable gold and gold equivalent Mineral Reserves amount to 40.3Moz, a 2% increase from the 39.3Moz declared at 30 June 2023. The gold reserve ounces in South Africa represent 56%, while the Papua New Guinea gold and gold equivalent ounces represent 44% of Harmony's total Mineral Reserves as at 30 June 2024. The Australian gold and gold equivalent ounces will be declared once the feasibility study is concluded. (See Appendix for Mineral Resources and Reserves detail per operation.)

South Africa

Underground operations

The company's Mineral Resources at the South African underground operations as at 30 June 2024 are 76.8Moz (240.2Mt at 9.94g/t), an increase of 0.5% year on year from the 76.4Moz (237.4Mt at 10.01g/t) declared as at 30 June 2023. This increase is mainly due to an increase in Mineral Resources at the Tshepong North, Mponeng and Doornkop operations as result of geological model changes.

The company's Mineral Reserves at the South African underground operations as at 30 June 2024 are 12.9Moz (59.6Mt at 6.72g/t), an increase of 23% year on year from the 10.4Moz (50.0Mt at 6.50g/t) declared as at 30 June 2023. The increase in ounces is mainly as a result of the Mponeng extension project.

Surface operations (including Kalgold)

The company's Mineral Resources at the South African surface operations as at 30 June 2024 are 13.8Moz (1 544.4Mt at 0.28g/t), a decrease of 2% mainly due to normal depletion that was partially offset by the increase of Mineral Resources at the Kalgold operation.

The company's Mineral Reserves at the South African surface operations as at 30 June 2024 are 9.6Moz (1 143.2Mt at 0.26g/t), a decrease of 1% mainly due to normal depletion that was partially offset by the increase of Mineral Reserves at the Kalgold operation as a result of the change in the life-of-mine strategy.

Papua New Guinea

Operations

The company's attributable gold and gold equivalent Mineral Resources at the Papua New Guinea operations as at 30 June 2024 are 38.2Moz, a decrease of 3% year on year from the 39.3Moz declared as at 30 June 2023. This decrease is mainly due to normal depletion and a decrease in gold equivalents due to commodity price changes.

The company's gold and gold equivalent Mineral Reserves at the Papua New Guinea operations as at 30 June 2024 are 17.7Moz, a decrease of 8% year on year from the 19.2Moz declared as at 30 June 2023. The decrease is mainly due to normal depletion, geological model changes and a decrease in gold equivalents due to commodity price changes.

Australia

Operations

The company's Mineral Resource at the Australian operations as at 30 June 2024 are 1 472Mt copper and 440Koz gold.

Expressed as gold and gold equivalent Mineral Resources, is 7.8Moz, a decrease of 4% year on year from the 8.1Moz declared as at 30 June 2023. The decrease is mainly due to geological model changes and a decrease in gold equivalents due to commodity price changes. The company's gold and gold equivalent Mineral Reserves at the Australian operations will be declared once the feasibility study is concluded.

Optimal long term value creation

EXPLORATION	STUDIES	PERMITTING	MAJOR PROJECTS
Regional Eva Copper portfolio drilling	Kerimenge heap leach	**Wafi-Golpu copper-gold** » Gold: 0.86g/t » Copper: 1.1% » Framework memorandum of Understanding signed » Mining Development Contract negotiation in progress » Special Mining Lease to follow	Hidden Valley extension
Target North – Greenfields	TauTona CLR pillar		Moab Khotsong – Zaaiplaats
Kalgold drilling – Brownfields	Free State surface re-mining		MWS – Kareerand extension
	West Wits surface re-mining		Doornkop 207L & 212L
	Eva Copper		Eva Copper Project
			Renewable energy
			Mponeng extension (including TauTona VCR Pillar)

EXPLORATION

Our exploration strategy is to predominantly pursue brownfields exploration targets close to existing infrastructure. This will drive short to medium-term organic Mineral Reserve replacement and growth to support our current strategy of increasing quality ounces and to mitigate the risk of a depleting Mineral Reserve base.

Key work streams underpinning the FY24 exploration programme include:
» Exploration at Eva Copper
» Brownfield exploration at Hidden Valley, Kerimenge and Kalgold to optimise existing open-pit operations and extend mine life
» Brownfield exploration at our underground operations in South Africa
» Greenfield exploration at Target North
» Reviewing exploration opportunities as part of our new business strategy.

Eva Copper drilling

Since acquiring the project in December 2022, drilling has comprised 227 holes for 82 000m. The work programme forms part of major drill programme designed to validate or test various study elements including Resource definition, infrastructure sterilisation, metallurgical, geotechnical aspects, construction material characterisation, water borefield exploration and high-grade satellite ore feed targets for prospect development/drill testing continues.

Target North

» The exploration drilling programme from surface advanced and a total of 304.38 metres was drilled
» MAL23 third long directional deflection drill hole was completed and produced three additional reef intersections
» All drilling at Target North was completed in September 2023
» A resource estimate for the Target North project commenced in FY24 and should be completed early in FY25.

Kalgold drilling

Exploration is aimed at improving understanding of the potential to develop the Kraaipan Greenstone Belt into a new mineralised province with multiple mining centres.

STUDIES

Kerimenge heap leach project

The Kerimenge prospect is located approximately 8km to the east of the Hidden Valley Mine. Review of existing drill data commenced with the aim of developing a new resource estimate. Kerimenge is a historic gold deposit outlined by previous explorers that contains components of refractory and free milling oxide gold mineralisation.

TauTona CLR pillar

Study is aimed to understand if TauTona CLR shaft pillars can be extracted safely and economically to extend the current LoM.

West Wits surface re-mining

Surface re-mining in the West Wits area is currently limited to a single dump being worked through the Savuka Plant. The Deelkraal Tailings Storage Facility (TSF) is due to be mined next, and with Kusasalethu plant now being redundant (the mine's ore is trucked to Mponeng) it means that the Kusasalethu TSFs is also available, and the Kusasalethu plant provides the opportunity to increase the re-mining capacity in the region.

Free State surface re-mining

The Free State surface sources operations comprise the following: Phoenix operation, central plant re-treatment and waste rock dumps. The opportunity exists to increase the amount of re-mining by an estimated 1 200ktpm (limited by water availability) and various processing and deposition options are being evaluated.

Eva Copper

Harmony is taking 18 months to address the risks and opportunities identified in the due diligence and to complete the feasibility study update. To this end, additional data collection work programmes are underway to provide more certainty and resolution on the Mineral Resource, geotechnical, metallurgical models, and to firm up primary water supply and bulk power options. In parallel, an optimisation of the mine design, scheduling and planning, the process plant design, and execution planning is being undertaken. A strong project team was established, based in Brisbane and Cloncurry, leveraging highly experienced consultants and contractors. The project is fully permitted. The feasibility study update will be used to inform investment decision making and a Mineral Reserve declaration.

■ West Wits surface re-mining

PERMITTING

Papua New Guinea

Wafi-Golpu Project

The Wafi-Golpu Project is in the permitting phase. The proposal for development underpinning the special mining lease 10 (SML10) application was submitted to the Papua New Guinea Mineral Resources Authority in August 2016 and was updated in March 2018, when the feasibility study update was completed.

The updated proposals identified deep-sea tailings placement as the tailings management solution for the project. Informed by the feasibility study update, an environment impact statement (EIS) was submitted to the Conservation and Environment Protection Agency in June 2018, under the PNG Environment Act and Environment (Prescribed Activities) Regulation 2002.

Negotiations with the State Negotiating Team regarding the terms and conditions of the grant of SML10 and its associated tenements, including the terms and conditions of participation in the project by the State and its nominees, commenced in April 2018. In December 2018, the Wafi-Golpu joint venture participants entered into a Memorandum of Understanding (MoU) with the State of PNG, establishing a framework for the parties to progress the permitting of the Wafi-Golpu Project. In May 2019, the permitting process was injuncted pursuant to a stay order given in an action for judicial review of the MoU brought by the governor of the Morobe Province, which injunction remained in place until February 2020 when the State withdrew from the MoU and the judicial review was dismissed on that basis.

On 18 December 2020, the Conservation and Environment Protection Agency concluded its assessment of the Wafi-Golpu Project's environment permit application and granted an environment permit, namely EP-L3(767). This permit contains 57 conditions pertaining to environmental management requirements for the project, amalgamates previous environment permits, water extraction permits, and waste discharge permits held for exploration purposes at the project, and authorises mechanised mining on a Mining Lease involving chemical processing activity, and all other associated approved activities within the boundaries of SML10, LMPME92, ME93, ME94, ME96 and ME97. The permit also approves the use of Deep Sea Tailings Placement as the tailings management solution for the project.

Permitting negotiations resumed in early 2022, and in April 2023, the Wafi-Golpu joint venture participants entered into a Framework Memorandum of Understanding with the State of PNG, setting out the key terms and principles to guide the negotiation and preparation of the formal agreements relating to the permitting, development and operation of the project. These agreements include a mining development contract, a fiscal stability agreement, a state equity acquisition agreement and a memorandum of agreement (also referred to as a community development agreement).

The Wafi-Golpu Project will progress to development only once SML10 and all other associated tenements and permits are granted, and all relevant project agreements and landholder compensation agreements have been entered into. Permitting and other contract negotiations are ongoing.

The legal proceedings are continuing, but do not prevent the conduct of the SML10 negotiations, which resumed in early 2022 and is ongoing.

In the interim, no mining has occurred in the project area.

MAJOR PROJECTS

We have identified substantial opportunities in our existing portfolio through exploration and brownfield projects which will extend the life of some of our larger and higher-grade assets, adding lower-risk, higher-margin ounces to Harmony's portfolio. Each project brings multiple benefits to Harmony and exceeds all our minimum criteria for allocating capital. We will continue to focus on ensuring all our mines operate safely and optimally and will continue to invest across all our operations to ensure optimal production.

The salient features of our key projects are:

Papua New Guinea

Hidden Valley brownfield exploration

Kerimenge prospect – The Kerimenge prospect is located approximately 8km to the east of the Hidden Valley Mine. Drilling to support a prefeasibility study was completed during the year. Review of existing drill data commenced with the aim of developing a new Mineral Resource estimate. Kerimenge is a historic gold deposit outlined by previous explorers that contains components of refractory and free milling oxide gold mineralisation.

Hidden Valley life-of-mine extension

The Hidden Valley life-of-mine (LoM) extension project concept study/prefeasibility study considers the potential to convert both the 0.6Moz Au Kerimenge Mineral Resource and the 1.6Moz Au remaining in the Hidden Valley Mineral Resource outside the current LoM convert to a viable, low risk, high-margin mining operation. The project will assess the application of conventional carbon-in-leach and heap leach technologies for the Mineral Resources and investigate technologies to increase the tailings storage capacity, which is the current mine life constraint at Hidden Valley.

An extension of the mining lease and the amendment to the environmental permit will be required to continue operations beyond 2030.

Australia

Eva Copper Project

The Eva Copper Project is in a feasibility update phase. The project is located 75km north east of Cloncurry in the highly prospective Mt Isa inlier region and will involve mining native copper and copper sulphide ore from six open pits and processing it through a copper concentrator. The projected mine life is predicted to extend beyond 15 years, providing a stable platform for continued growth.

■ Eva

South Africa

Moab Khotsong – Zaaiplaats project

The Zaaiplaats project was approved by the board for implementation in October 2021. The project scope is to mine the Zaaiplaats orebody situated below the current Moab Khotsong middle mine area from 101 level to 114 level. Three new declines and associated infrastructure must be developed, equipped and commissioned below 101 level to allow the safe and economic mining of the Zaaiplaats orebody.

MWS – Kareerand extension

Mine Waste Solutions (MWS) is a reclamation operation in the Stilfontein/Orkney area treating 2.2 million tonnes per month from historical tailings facilities through the MWS plant. The residue is deposited on the existing Kareerand Tailings Storage Facility by cycloning. Kareerand TSF has a 560ha footprint and was sized to receive the reprocessed tailings from the MWS sources. The inclusion of additional sources into the MWS business in 2012 required additional deposition facilities. The authorisation of the Kareerand extension project increases the current footprint by 340ha and allows the combined complex to be operated to a height of 100 metres.

Doornkop 207L & 212L

The project extends the mining of the orebody at depth on 207 and 212 level. Both levels need to be developed, while the shaft infrastructure needs to be completed in order for each level to be able to handle the planned production. An ore handling system below the 212 level infrastructure needs to be developed. In order to provide adequate ventilation and cooling over the LoM, the DK1a Shaft will be converted into an intake shaft in conjunction with setting up a refrigeration plant.

Renewable energy

In order to achieve the renewable energy targets as set out in the Harmony Energy Efficiency and Climate Change Strategy document, it became necessary to implement a number of renewable energy technologies, including self-built PV plants, wheeling of wind and solar renewable energy, as well as small scale solar PV plants. Phase 2: 137MW to begin FY25.

Mponeng extension (including TauTona VCR Pillar)

The project will extend the Mponeng LoM by exploiting the VCR and the CLR orebodies below current infrastructure.

Mining of the VCR reef below infrastructure requires the extension of existing infrastructure from 126 level, both on the Eastern and on the Western side of the orebody.

Mining of the CLR reef requires the extension of the existing infrastructure from 120 level.

■ Kareerand extension project

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) SUMMARY

Delivering on our ESG commitments to drive towards sustainable development is a business imperative for Harmony.

Incorporating ESG imperatives into our strategy is critical to achieving sustainable mining. ESG imperatives are embedded in our strategy through the strategic pillar of responsible stewardship, while business and operational excellence imperatives are embedded in our operational excellence, cash certainty and effective capital allocation strategic pillars. Our sustainable development framework outlines the commitments and actions we take to foster stakeholder trust and comply with regulations while contributing to the UN SDGs. Meaningful stakeholder relationships, engagement and collaboration are critical enablers of the framework. Throughout this report, we outline our partnerships with our stakeholders to showcase how important they are in helping us deliver on our priorities and commitments.

Our detailed sustainable development framework can be found online.

Our strategy

To produce safe, profitable ounces and increase margins through operational excellence and value-accretive acquisitions

Strategic pillars

Responsible stewardship

To be mindful of, manage and limit the impacts of our activities on our employees, host communities and the environment.

Operational excellence

To prioritise safety, strict cost control and management of grades mined, together with disciplined mining, to improve productivity and efficiencies.

Cash certainty

To achieve operational plans, supported by current hedging strategy, contributes to cash flow certainty.

Effective capital allocation

To evaluate and prioritise safe organic growth opportunities and value-accretive acquisitions to ensure positive stakeholder returns and increase margins.

Our ESG imperatives

Environmental stewardship

Harmony's commitment to protecting the environment through ecologically responsible mining involves driving environmental sustainability and leadership. We strive for a greener, low-emissions business that leaves a lasting positive legacy. To coexist with the natural environment, it is crucial that we understand and appreciate the negative effects of our operations on the environment.

Our environmental strategy enables us to manage, mitigate and offset environmental risks associated with our activities.

Social stewardship

What we do as a business has a broader impact on the communities surrounding our operations and society at large. Harmony is guided by its socio-economic strategy to deliver on our responsibility of:

- Fostering relationships of trust with our employees, suppliers, host communities and governments
- Promoting shared value for all and delivering impact by going beyond compliance
- Responsibly closing our operations to ensure we create and preserve value wherever we operate.

Our social compact is further underpinned by and complies with Harmony's social and labour plans (SLPs) and mining rights in South Africa, and various agreements including the Hidden Valley memorandum of agreement (MoA) and our cultural heritage and access agreement with the Kalkadoon People in Australia.

The following priorities will ensure we continue to embed ESG practices across the business:

- Climate action: Decarbonise the business through energy efficiency and Harmony's renewable energy programme
- Climate resilience: Ensure Harmony and its infrastructure, sites and operations are adapted to withstand and mitigate the effects of climate change
- Biodiversity: Mitigate impacts to biodiversity and work towards offsetting through restoring sustainable value to land disturbed by our operations
- Water: Prioritise security of supply, protection of resource and responsible utilisation and recycling of water resources.
- Health, safety and wellbeing: Prioritise a strong safety culture, ensuring employee health, safety, wellbeing and zero loss of life
- Supporting our people: Providing and promoting strong leadership and an enabling culture that ensures we attract and retain an engaged, empowered, diverse and inclusive workforce; maintaining sound labour relations; and providing workforce training and education
- Partnering for thriving, sustainable communities and our social licence to operate: Strengthen stakeholder engagement and partner for sustainable communities while driving responsible procurement and supply chain transformation.

The social and ethics committee is responsible for governance of the sustainable development framework, with the board having ultimate accountability.

Our ESG imperatives

Governance stewardship

For Harmony, ethical mining equals ethical leadership that equals corporate trust. Under the board's leadership, we are committed to good governance practices that are responsive to an ever-changing operational, economical, social and environmental risk landscape.

Good governance lies at the heart of our performance and reporting. Guided by our policies and codes, we aim to do the right thing and tell our story honestly while safeguarding the natural ecosystems and communities impacted by our mining activities.

Business and operational excellence

To ensure that Harmony is pursuing operational sustainability, creating economic benefit and managing business resilience, we aim to improve productivity, efficiency, and maintain cash certainty while increasing margins and delivering shareholder returns – underpinned by our company values, culture and strong leadership.

The following priorities will ensure we continue to embed ESG practices across the business:

- Transparent and ethical mining: Drive ethical business practices, meet or exceed regulatory requirements, and partner with key stakeholders
- Ethical and accountable leadership: Internalise our commitment and accountability to Harmony's responsible corporate citizenship, ethical leadership and robust governance standards
- Governance excellence: Follow a proactive, strategic approach to governance, building on existing strengths to ensure best-in-class governance approaches, embedding ESG into our core strategy and taking a proactive approach to go beyond compliance with ESG legislation.
- Managing business resilience: Anticipate, identify and understand external influences and risks that affect our business, and develop appropriate responses to improve our economic impact and performance
- Pursuing technology and innovation for environmental, operational and safety improvements: Advance innovation capabilities to unlock and improve our sustainability
- Managing capital access and allocation for safe profitable ounces: Capital allocation is aimed at producing safe, profitable ounces and increasing margins through meeting approved capital allocation parameters.

Refer to the **Integrated report** for more information.

The social and ethics committee is responsible for governance of the sustainable development framework, with the board having ultimate accountability.

Our sustainable development framework was compiled considering the following best practice recommendations, guidelines and frameworks:

Harmony's operations conform to the World Gold Council's Responsible Gold Mining Principles (RGMPs). The conformance was independently assured by RSM South Africa Inc as per the **Assurance report**.

Harmony supports the TCFD's recommendations. For the past five years, aligning our transparent reporting on our climate change strategies and actions has informed our approach to repositioning our business as a climate-resilient operation.

We submit an annual performance report to CDP Water. This helps us manage the unique water-related risks and opportunities we face in the countries where we operate.

As a member of the Minerals Council South Africa, we subscribe to its membership compact, a mandatory code of ethical business conduct, and its guiding principles.

Additionally, Harmony:

- Adopts the principles of the International Council on Mining and Metals (ICMM), the UNGC and UN Voluntary Principles on Security and Human Rights in various sustainable development policies and position statements (Harmony is not a member or signatory to these organisations)
- Considers the Organisation for Economic Co-operation and Development's (OECD) guidelines for responsible investment
- Strives to ensure compliance with local and international guidelines by adopting tailings management best practice.

We are committed to making a meaningful contribution to the UN SDGs as we understand our role in addressing broader sustainable development issues. We have integrated the SDGs into our sustainable development framework, having identified specific targets for each SDG that we can help achieve. Refer to the section that follows for a snapshot view of how we contribute to the SDGs.

INDEPENDENT AUDIT OPINION

THE MINERAL CORPORATION

Mr Theo Van Dyk
Executive: Mineral Resources and Reserves
Harmony Gold Mining Company Limited
Randfontein Office Park
Corner Main Reef Road and Ward Avenue
Randfontein

26 August 2024

Dear Mr Van Dyk

ASSURANCE LETTER: INDEPENDENT AUDIT OF THE 2024 MINERAL RESOURCES AND MINERAL RESERVES

Mineral Corporation Consultancy (Pty) Limited (The Mineral Corporation or TMC), at Harmony Gold Mining Company Limited's (Harmony's) request, carried out an independent audit (the Audit) of the 30 June 2024 Mineral Resource and Mineral Reserve Estimates for Harmony's various gold operations in South Africa (Harmony SA Operations) and the 2024 Group Mineral Resource and Mineral Reserve Statement. The Mineral Resource and Mineral Reserve Estimates audited by TMC were prepared and signed off as at 30 June 2024 by in-house Competent Persons appointed by Harmony following the guidelines of the 2016 Edition of the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (The SAMREC Code, 2016) for inclusion in the 2024 Group Mineral Resource and Mineral Reserve Statement and disclosure according to Section 12 of the JSE Limited Listing Requirements and the United States Securities and Exchange Commission's (SEC's) Subpart 1300 of Regulation S K.

The Audit was carried out by Mineral Resource and Mineral Reserve Competent Persons from TMC following a risk-based audit methodology and the guidelines of The SAMREC Code (2016). The Mponeng, Doornkop and Joel Operations (Audit focus areas) were subjected to a detailed audit whereas the remainder of the operations were subjected to a high-level audit. The Audit entailed systematic and detailed reviews of the key elements of the Mineral Resource and Mineral Reserve estimation processes and the estimates to validate adherence to internal procedures and to identify any fatal flaws and material errors and/or omissions for remediation by Harmony before public disclosure. The Audit also included detailed reviews of the input geological and mine planning data, grade block models, Modifying Factors, Life of Mine Plans and economic testing as well as Mineral Resource and Mineral Reserve reporting.

Through the Audit, TMC could not identify any fatal flaws or material errors and/or omissions in relation to the input geological and mine planning data, geological modelling, mine planning and estimation, classification and reporting of the 2024 Mineral Resources and Mineral Reserves for the Harmony SA Operations. The input geological and mine planning data, estimation processes and final estimates were subjected to scrutiny and validation before sign-off by the Competent Persons. In addition, the Modifying Factors and planning parameters employed to develop Life of Mine Plans for the various operations were benchmarked to historical performance. The Mineral Resource Estimates satisfy The SAMREC Code (2016) requirements for reasonable prospects for eventual economic extraction while the Life of Mine Plans and the Mineral Reserves were tested for economic viability using reasonable economic parameters and price forecasts as per The SAMREC Code (2016) requirements. TMC has provided Harmony with recommendations for continuous improvement in respect of strengthening governance procedures relating to Mineral Resource and Mineral Reserve estimation and improving alignment with the Harmony procedures.

The 30 June 2024 Mineral Resources and Mineral Reserve Estimates for the remainder of the Harmony SA Operations have been compiled following Harmony's internal procedures and with no material errors. In all cases, the guidelines of The SAMREC Code (2016) have been met and the Mineral Resource and Mineral Reserve Estimates for the remainder of the Harmony SA Operations can be included in the Consolidated Harmony Mineral Resource and Mineral Reserve Statements for 2024 for disclosure according to Section 12 of the JSE Limited Listing Requirements and the SEC's Subpart 1300 of Regulation S-K.

These opinions do not imply that TMC has assumed the role of Competent Person for the purpose of reporting the 30 June 2024 Mineral Resources and Mineral Reserves for the Harmony SA Operations. Such role resides with the nominated personnel of Harmony SA.

Yours faithfully

Darren Portela
Director
BSc (Honours), Pr.Sci.Nat. (400040/12)

DIRECTORS: JE Murphy (Managing), W Banda (Zambian), AH Hart, RA Heins (British), C Madamombe (Zimbabwean), D Portela, GK Wilson

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> ADVISORS TO THE MINERAL BUSINESS

MINERAL RESOURCES AND MINERAL RESERVES

RELATIONSHIP BETWEEN HARMONY'S MINERAL RESOURCES AND MINERAL RESERVES

South Africa – Underground

Increasing level of geoscientific knowledge and confidence

Mineral Resources (total)

Tonnes	Gold		
Mt	g/t	000kg	000oz
240.2	9.94	2 388	76 780

Reported as in situ mineralisation estimates

Mineral Reserves (total)

Tonnes	Gold		
Mt	g/t	000kg	000oz
59.6	6.72	401	12 879

Reported as mineable production estimates

Inferred

Tonnes	Gold		
Mt	g/t	000kg	000oz
85.5	9.97	853	27 416

Indicated

Tonnes	Gold		
Mt	g/t	000kg	000oz
82.5	10.38	857	27 555

Probable

Tonnes	Gold		
Mt	g/t	000kg	000oz
34.3	7.07	242	7 794

Measured

Tonnes	Gold		
Mt	g/t	000kg	000oz
72.2	9.40	678	21 809

Proved

Tonnes	Gold		
Mt	g/t	000kg	000oz
25.4	6.23	158	5 084

Consideration of mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors (the modifying factors)

South Africa – Surface Mining (Kalgold)

Increasing level of geoscientific knowledge and confidence

Mineral Resources (total)

Tonnes	Gold		
Mt	g/t	000kg	000oz
73.0	0.94	69	2 208

Reported as in situ mineralisation estimates

Mineral Reserves (total)

Tonnes	Gold		
Mt	g/t	000kg	000oz
18.7	1.07	20	645

Reported as mineable production estimates

Inferred

Tonnes	Gold		
Mt	g/t	000kg	000oz
31.7	0.60	19	606

Indicated

Tonnes	Gold		
Mt	g/t	000kg	000oz
22.6	1.30	29	945

Probable

Tonnes	Gold		
Mt	g/t	000kg	000oz
8.4	1.18	10	317

Measured

Tonnes	Gold		
Mt	g/t	000kg	000oz
18.7	1.09	20	657

Proved

Tonnes	Gold		
Mt	g/t	000kg	000oz
10.3	0.99	10	328

Consideration of mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors (the modifying factors)

South Africa – Surface Retreatment

Increasing level of geoscientific knowledge and confidence

Mineral Resources (total)

Tonnes	Gold		
Mt	g/t	000kg	000oz
1 471.4	0.24	359	11 544

Reported as in situ mineralisation estimates

Mineral Reserves (total)

Tonnes	Gold		
Mt	g/t	000kg	000oz
1 124.5	0.25	280	9 001

Reported as mineable production estimates

Inferred

Tonnes	Gold		
Mt	g/t	000kg	000oz
109.1	0.18	19	615

Indicated

Tonnes	Gold		
Mt	g/t	000kg	000oz
1 088.2	0.25	269	8 654

Probable

Tonnes	Gold		
Mt	g/t	000kg	000oz
1 006.1	0.25	247	7 957

Measured

Tonnes	Gold		
Mt	g/t	000kg	000oz
274.1	0.26	71	2 274

Proved

Tonnes	Gold		
Mt	g/t	000kg	000oz
118.4	0.27	32	1 044

Consideration of mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors (the modifying factors)

South Africa – Total

Increasing level of geoscientific knowledge and confidence

Mineral Resources (total)

Tonnes	Gold	
Mt	000kg	000oz
1 784.6	2 816	90 531

Reported as in situ mineralisation estimates

Mineral Reserves (total)

Tonnes	Gold	
Mt	000kg	000oz
1 202.8	701	22 524

Reported as mineable production estimates

Inferred

Tonnes	Gold	
Mt	000kg	000oz
226.4	891	28 638

Indicated

Tonnes	Gold	
Mt	000kg	000oz
1 193.3	1 156	37 154

Probable

Tonnes	Gold	
Mt	000kg	000oz
1 048.8	500	16 068

Measured

Tonnes	Gold	
Mt	000kg	000oz
364.9	770	24 740

Proved

Tonnes	Gold	
Mt	000kg	000oz
154.1	201	6 456

Consideration of mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors (the modifying factors)

g/t omitted whenever underground mining, surface mining and retreatment is combined.

Papua New Guinea – Attributable gold

Increasing level of geoscientific knowledge and confidence

Mineral Resources (total)

Tonnes		Gold	
Mt	g/t	000kg	000oz
579.5	0.87	507	16 229

Reported as in situ mineralisation estimates

Mineral Reserves (total)

Tonnes		Gold	
Mt	g/t	000kg	000oz
206.5	0.90	186	5 969

Reported as mineable production estimates

Inferred

Tonnes		Gold	
Mt	g/t	000kg	000oz
131.6	0.80	105	3 311

Indicated

Tonnes		Gold	
Mt	g/t	000kg	000oz
446.1	0.90	402	12 870

Probable

Tonnes		Gold	
Mt	g/t	000kg	000oz
205.5	0.90	185	5 939

Measured

Tonnes		Gold	
Mt	g/t	000kg	000oz
1.8	0.86	2	49

Proved

Tonnes		Gold	
Mt	g/t	000kg	000oz
1.0	0.92	1	30

Consideration of mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors (the modifying factors)

Australia – Attributable gold

Increasing level of geoscientific knowledge and confidence

Mineral Resources (total)

Tonnes		Gold	
Mt	g/t	000kg	000oz
196.0	0.07	14	440

Reported as in situ mineralisation estimates

Mineral Reserves (total)

Tonnes		Gold	
Mt	g/t	000kg	000oz
—	—	—	—

Reported as mineable production estimates

Inferred

Tonnes		Gold	
Mt	g/t	000kg	000oz
27.7	0.08	2	68

Indicated

Tonnes		Gold	
Mt	g/t	000kg	000oz
168.3	0.07	12	372

Probable

Tonnes		Gold	
Mt	g/t	000kg	000oz
—	—	—	—

Measured

Tonnes		Gold	
Mt	g/t	000kg	000oz
—	—	—	—

Proved

Tonnes		Gold	
Mt	g/t	000kg	000oz
—	—	—	—

Consideration of mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors (the modifying factors)

Total attributable gold – Harmony surface mining (Papua New Guinea and Australia)

Increasing level of geoscientific knowledge and confidence

Mineral Resources (total)

Tonnes		Gold	
Mt	g/t	000kg	000oz
775.5	0.67	523	16 669

Reported as in situ mineralisation estimates

Mineral Reserves (total)

Tonnes		Gold	
Mt	g/t	000kg	000oz
206.5	0.90	186	5 969

Reported as mineable production estimates

Inferred

Tonnes		Gold	
Mt	g/t	000kg	000oz
159.2	0.67	107	3 379

Indicated

Tonnes		Gold	
Mt	g/t	000kg	000oz
614.5	0.67	414	13 241

Probable

Tonnes		Gold	
Mt	g/t	000kg	000oz
205.5	0.90	185	5 939

Measured

Tonnes		Gold	
Mt	g/t	000kg	000oz
1.8	0.86	2	49

Proved

Tonnes		Gold	
Mt	g/t	000kg	000oz
1.0	0.92	1	30

Consideration of mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors (the modifying factors)

Total gold equivalents – Harmony surface mining (Papua New Guinea and Australia)

Increasing level of geoscientific knowledge and confidence

Mineral Resources (total)		
Tonnes	Gold	
Mt	000kg	000oz
853.3	912	29 337

Reported as in situ mineralisation estimates

Mineral Reserves (total)		
Tonnes	Gold	
Mt	000kg	000oz
206.4	366	11 768

Reported as mineable production estimates

Inferred		
Tonnes	Gold	
Mt	000kg	000oz
174.1	150	4 829

Indicated		
Tonnes	Gold	
Mt	000kg	000oz
677.4	762	24 494

Probable		
Tonnes	Gold	
Mt	000kg	000oz
205.4	366	11 759

Measured		
Tonnes	Gold	
Mt	000kg	000oz
1.8	0.4	14

Proved		
Tonnes	Gold	
Mt	000kg	000oz
1.0	0.3	8

Consideration of mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors (the modifying factors)

Total attributable gold and gold equivalents – Harmony Underground, Surface Mining and Retreatment

Increasing level of geoscientific knowledge and confidence

Mineral Resources (total)		
Tonnes	Gold	
Mt	000kg	000oz
2 730.4	4 249	136 538

Reported as in situ mineralisation estimates

Mineral Reserves (total)		
Tonnes	Gold	
Mt	000kg	000oz
1 409.4	1 252	40 261

Reported as mineable production estimates

Inferred		
Tonnes	Gold	
Mt	000kg	000oz
437.1	1 148	36 845

Indicated		
Tonnes	Gold	
Mt	000kg	000oz
1 926.6	2 331	74 889

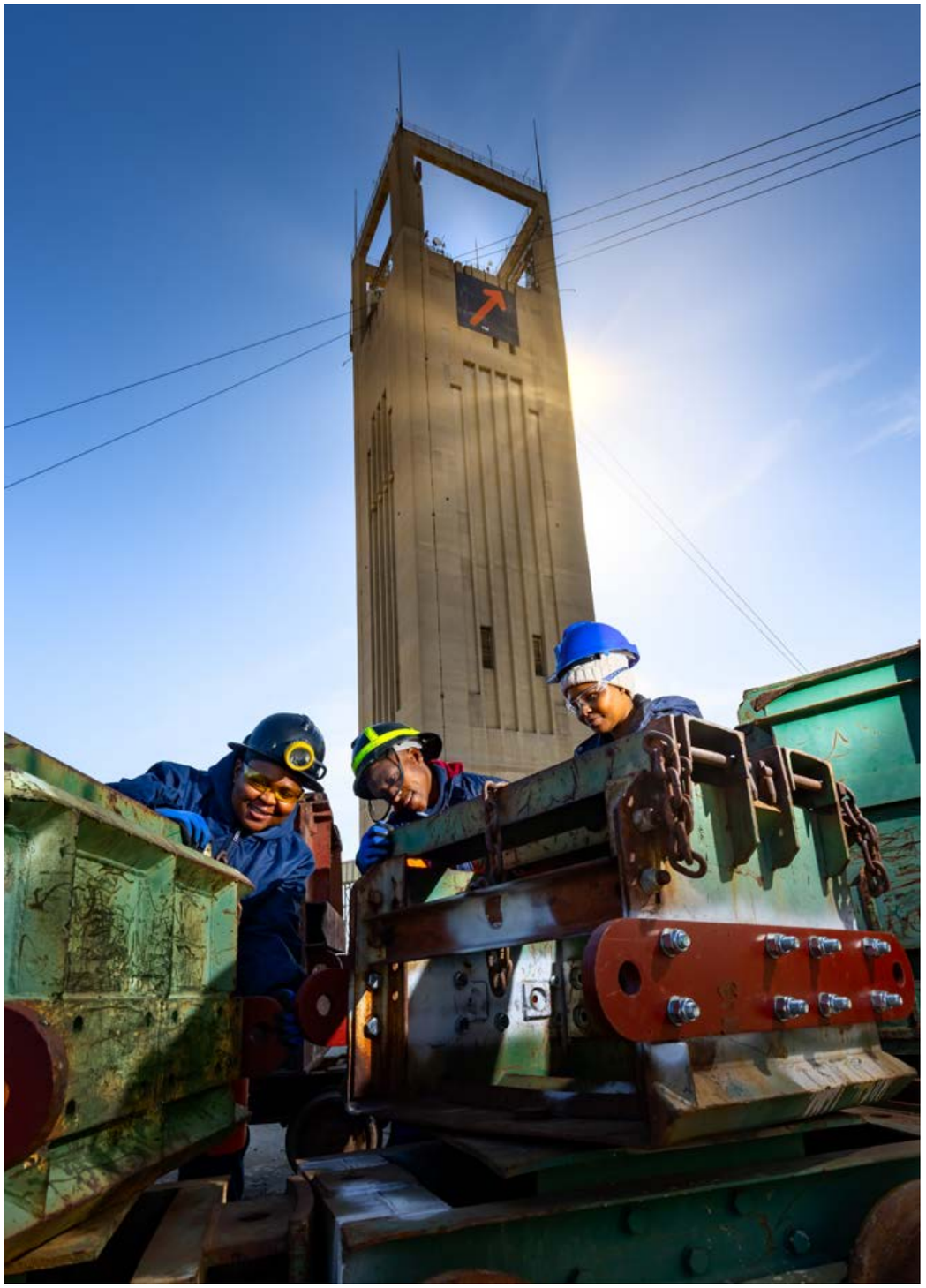
Probable		
Tonnes	Gold	
Mt	000kg	000oz
1 254.3	1 050	33 766

Measured		
Tonnes	Gold	
Mt	000kg	000oz
366.7	771	24 803

Proved		
Tonnes	Gold	
Mt	000kg	000oz
155.1	202	6 495

Consideration of mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors (the modifying factors)

g/t omitted whenever underground mining, surface mining and retreatment is combined.



■ Tshepong

MINERAL RESOURCES STATEMENT (METRIC)

Estimates at 30 June 2024

Operations	Measured Resources			Indicated Resources			Inferred Resources			Total Mineral Resources		
Gold	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)
South Africa Underground												
Free State region												
Tshepong North	14.3	11.98	172	6.1	10.53	65	7.9	10.16	80	28.4	11.16	317
Tshepong South	8.1	12.55	102	8.9	11.09	98	22.8	11.03	251	39.8	11.35	452
Joel	3.8	7.34	28	3.5	7.03	25	0.4	8.27	3	7.7	7.24	55
Masimong	2.5	9.42	24	0.4	8.83	4	0.01	8.97	0.1	3.0	9.33	28
Target 1	7.3	7.09	52	5.1	6.42	32	3.9	5.75	22	16.2	6.56	106
Target 3	0.6	9.19	6	2.9	10.17	30	1.2	8.66	11	4.8	9.66	46
Total Free State Underground	**36.6**	**10.44**	**382**	**27.0**	**9.42**	**254**	**36.2**	**10.16**	**368**	**99.8**	**10.06**	**1 004**
West Rand region												
Doornkop South Reef	4.9	6.70	33	6.9	7.19	50	2.0	8.53	17	13.8	7.21	100
Doornkop Main Reef	0.1	5.38	0.4	0.05	5.51	0.3	0.02	5.32	0.1	0.1	5.41	1
Doornkop Kimberley Reef	18.1	3.36	61	12.1	3.15	38	10.1	3.28	33	40.3	3.28	132
Kusasalethu	1.6	11.99	19	5.7	9.99	57	2.4	8.81	21	9.7	10.02	97
Mponeng	5.6	16.95	96	21.0	14.56	306	32.1	11.34	364	58.8	13.03	765
Total West Rand region	**30.4**	**6.88**	**209**	**45.8**	**9.85**	**451**	**46.6**	**9.34**	**436**	**122.8**	**8.92**	**1 095**
Klerksdorp operation												
Moab Khotsong	5.2	16.81	88	9.8	15.53	152	2.7	18.16	49	17.7	16.31	289
Total North West region	**5.2**	**16.81**	**88**	**9.8**	**15.53**	**152**	**2.7**	**18.16**	**49**	**17.7**	**16.31**	**289**
Total South Africa Underground	**72.2**	**9.40**	**678**	**82.5**	**10.38**	**857**	**85.5**	**9.97**	**853**	**240.2**	**9.94**	**2 388**
South Africa Surface												
Kraaipan Greenstone Belt												
Kalgold open-pit	18.7	1.09	20	22.6	1.30	29	7.9	1.60	13	49.2	1.27	62
Kalgold tailing dam	—	—	—	—	—	—	23.8	0.26	6	23.8	0.26	6
Total Kalgold	**18.7**	**1.09**	**20**	**22.6**	**1.30**	**29**	**31.7**	**0.60**	**19**	**73.0**	**0.94**	**69**
Free State region – Surface												
Tailings												
Other Free State tailings	169.3	0.27	46	585.5	0.22	131	15.5	0.19	3	770.3	0.23	180
Phoenix	44.9	0.27	12	—	—	—	—	—	—	44.9	0.27	12
Central	—	—	—	43.0	0.27	11	—	—	—	43.0	0.27	11
Waste rock dumps												
Free State WRD	—	—	—	0.1	0.55	0.04	11.6	0.44	5	11.7	0.44	5
Total Free State	**214.3**	**0.27**	**58**	**628.6**	**0.23**	**142**	**27.0**	**0.30**	**8**	**869.9**	**0.24**	**208**
North West region – Surface												
Tailings												
Mispah	—	—	—	66.3	0.31	20	4.8	0.21	1	71.1	0.30	21
Kop Paydam	—	—	—	11.2	0.21	2	—	—	—	11.2	0.21	2
Vaal River tailings	—	—	—	180.6	0.28	51	74.8	0.13	10	255.4	0.24	61
Mine Waste Solutions	59.8	0.21	13	161.5	0.25	40	—	—	—	221.3	0.24	53
Waste rock dumps												
Moab MOD	—	—	—	1.9	0.30	1	—	—	—	1.9	0.30	1
Vaal River WRD	—	—	—	—	—	—	2.5	0.24	1	2.5	0.24	1
Total North West	**59.8**	**0.21**	**13**	**421.4**	**0.27**	**115**	**82.1**	**0.14**	**11**	**563.3**	**0.25**	**138**
West Rand region – Surface												
Tailings												
West Wits tailings	—	—	—	38.0	0.32	12	—	—	—	38.0	0.32	12
Waste rock dumps												
West Wits WRD	—	—	—	0.2	0.37	0.1	—	—	—	0.2	0.37	0.1
Total West Rand	**—**	**—**	**—**	**38.2**	**0.32**	**12**	**—**	**—**	**—**	**38.2**	**0.32**	**12**
Total South Africa Surface (including Kalgold)	**292.8**	**0.31**	**91**	**1 110.8**	**0.27**	**299**	**140.8**	**0.27**	**38**	**1 544.4**	**0.28**	**428**
Total South Africa	**364.9**		**770**	**1 193.3**		**1 156**	**226.4**		**891**	**1 784.6**		**2 816**
Papua New Guinea[1]												
Hidden Valley	1.8	0.86	2	45.3	1.34	61	1.0	1.12	1	48.1	1.32	63
Hamata	—	—	—	1.9	1.91	4	0.2	1.49	0.3	2.0	1.87	4
Wafi	—	—	—	54.0	1.66	89	20.0	1.37	26	74.0	1.58	114
Golpu	—	—	—	345.0	0.72	249	70.0	0.62	44	415.0	0.70	292
Nambonga	—	—	—	—	—	—	24.0	0.69	16	24.0	0.69	16
Kerimenge	—	—	—	—	—	—	16.4	1.07	18	16.4	1.07	18
Total Papua New Guinea	**1.8**	**0.86**	**2**	**446.1**	**0.90**	**402**	**131.6**	**0.80**	**105**	**579.5**	**0.87**	**507**
Australia												
Little Eva	—	—	—	155.9	0.06	10	24.1	0.07	2	180.0	0.07	12
Bedford	—	—	—	2.1	0.15	0.3	1.3	0.13	0.2	3.4	0.14	0.5
Lady Clayre	—	—	—	5.1	0.15	1	1.1	0.08	0.1	6.2	0.14	1
Ivy Anne	—	—	—	5.2	0.07	0.4	1.2	0.07	0.1	6.4	0.07	0.5
Total Australia	**—**	**—**	**—**	**168.3**	**0.07**	**12**	**27.7**	**0.08**	**2**	**196.0**	**0.07**	**14**
Grand Total	**366.7**		**771**	**1 807.8**		**1 570**	**385.6**		**998**	**2 560.1**		**3 336**

Operations	Measured Resources		Indicated Resources		Inferred Resources		Total Mineral Resources	
Gold equivalents[1]	Tonnes (Mt)	Au eq (000kg)	Tonnes (Mt)	Au eq (000kg)	Tonnes (Mt)	Au eq (000kg)	Tonnes (Mt)	Au eq (000kg)
Papua New Guinea								
Silver								
Hidden Valley	1.8	0.4	45.3	11	1.0	0.4	48.1	12
Total	**1.8**	**0.4**	**45.3**	**11**	**1.0**	**0.4**	**48.1**	**12**
Copper								
Golpu	—	—	345.0	573	70.0	93	415.0	665
Nambonga	—	—	—	—	24.0	7	24.0	7
Total	**—**	**—**	**345.0**	**573**	**94.0**	**100**	**439.0**	**673**
Total silver and copper as gold equivalents	**1.8**	**0.4**	**390.3**	**584**	**95.0**	**100**	**487.1**	**685**
Total PNG including gold equivalents	**1.8**	**2**	**446.1**	**986**	**131.6**	**205**	**579.5**	**1 192**
Australia								
Copper								
Little Eva	—	—	155.9	82	24.1	13	180.0	95
Turkey Creek	—	—	22.4	15	3.6	2	26.0	17
Blackard	—	—	79.0	58	40.3	27	119.2	85
Scanlan	—	—	17.4	16	7.6	5	25.1	21
Bedford	—	—	2.1	2	1.3	1	3.4	3
Lady Clayre	—	—	5.1	3	1.1	1	6.2	4
Ivy Anne	—	—	5.2	3	1.2	1	6.4	3
Total copper as gold equivalents	**—**	**—**	**287.2**	**178**	**79.1**	**50**	**366.3**	**228**
Total Australia including gold equivalents	**—**	**—**	**287.2**	**190**	**79.1**	**52**	**366.3**	**241**
Total Harmony including equivalents	**366.7**	**771**	**1 926.6**	**2 331**	**437.1**	**1 148**	**2 730.4**	**4 249**

Other metals

Papua New Guinea[1]	Measured Resources			Indicated Resources			Inferred Resources			Total Mineral Resources		
Silver	Tonnes (Mt)	Grade (g/t)	Ag (000kg)	Tonnes (Mt)	Grade (g/t)	Ag (000kg)	Tonnes (Mt)	Grade (g/t)	Ag (000kg)	Tonnes (Mt)	Grade (g/t)	Ag (000kg)
Hidden Valley	1.8	18.96	34	45.3	19.28	873	1.0	26.29	27	48.1	19.42	933
Golpu	—	—	—	345.0	1.30	435	70.0	1.10	72	415.0	1.30	507
Total	**1.8**	**18.96**	**34**	**390.3**	**3.35**	**1 308**	**71.0**	**1.39**	**99**	**463.1**	**3.11**	**1 440**
Copper	**Tonnes (Mt)**	**Grade (%)**	**Cu (000t)**	**Tonnes (Mt)**	**Grade (%)**	**Cu (000t)**	**Tonnes (Mt)**	**Grade (%)**	**Cu (000t)**	**Tonnes (Mt)**	**Grade (%)**	**Cu (000t)**
Golpu	—	—	—	345.0	1.10	3 800	70.0	0.86	600	415.0	1.10	4 300
Nambonga	—	—	—	—	—	—	24.0	0.20	47	24.0	0.20	47
Total	**—**	**—**	**—**	**345.0**	**1.10**	3 800	**94.0**	**0.69**	**647**	**439.0**	**0.99**	**4 347**
Molybdenum	**Tonnes (Mt)**	**Grade (ppm)**	**Mo (000t)**	**Tonnes (Mt)**	**Grade (ppm)**	**Mo (000t)**	**Tonnes (Mt)**	**Grade (ppm)**	**Mo (000t)**	**Tonnes (Mt)**	**Grade (ppm)**	**Mo (000t)**
Golpu	—	—	—	345.0	94	32	70.0	72	5	415.0	90	37
Total	**—**	**—**	**—**	**345.0**	**94**	32	**70.0**	**72**	**5**	**415.0**	**90**	**37**

Australia[1]	Measured Resources			Indicated Resources			Inferred Resources			Total Mineral Resources		
Copper	Tonnes (Mt)	Grade (%)	Cu (000t)	Tonnes (Mt)	Grade (%)	Cu (000t)	Tonnes (Mt)	Grade (%)	Cu (000t)	Tonnes (Mt)	Grade (%)	Cu (000t)
Little Eva	—	—	—	155.9	0.34	531	24.1	0.34	81	180.0	0.34	612
Turkey Creek	—	—	—	22.4	0.42	95	3.6	0.43	15	26.0	0.42	110
Blackard	—	—	—	79.0	0.48	375	40.3	0.44	176	119.2	0.46	551
Scanlan	—	—	—	17.4	0.58	101	7.6	0.45	34	25.1	0.54	135
Bedford	—	—	—	2.1	0.57	12	1.3	0.46	6	3.4	0.53	18
Lady Clayre	—	—	—	5.1	0.38	19	1.1	0.37	4	6.2	0.38	23
Ivy Anne	—	—	—	5.2	0.34	18	1.2	0.33	4	6.4	0.34	22
Total	**—**	**—**	**—**	**287.2**	**0.40**	**1 150**	**79.1**	**0.41**	**321**	**366.3**	**0.40**	**1 472**

South Africa	Measured Resources			Indicated Resources			Inferred Resources			Total Mineral Resources		
Uranium	Tonnes (Mt)	Grade (kg/t)	U_3O_8 (Mkg)	Tonnes (Mt)	Grade (kg/t)	U_3O_8 (Mkg)	Tonnes (Mt)	Grade (kg/t)	U_3O_8 (Mkg)	Tonnes (Mt)	Grade (kg/t)	U_3O_8 (Mkg)
Free State Surface	—	—	—	177.0	0.10	18	—	—	—	177.0	0.10	18
North West Surface												
Mispah 1	—	—	—	66.3	0.13	9	4.8	—	—	71.1	0.12	9
Kop Paydam	—	—	—	11.2	0.12	1	—	—	—	11.2	0.12	1
Vaal River tailings	—	—	—	177.2	0.08	14	74.0	0.04	3	251.1	0.07	17
Mine Waste Solutions	60.6	0.07	4	160.8	0.08	13	—	—	—	221.3	0.08	17
Total North West Surface	60.6	0.07	4	415.4	0.09	37	78.7	0.04	3	554.7	0.08	44
Moab Khotsong Underground	—	—	—	15.0	0.77	12	2.7	0.71	2	17.7	0.76	14
Grand Total	**60.6**	**0.07**	**4**	**607.4**	**0.11**	**67**	**81.4**	**0.06**	**5**	**749.4**	**0.10**	**76**

[1] *Total attributable.*

Gold equivalent ounces are calculated assuming a US$1 772/oz Au, US$4.00/lb Cu and US$23.00/oz Ag with 100% recovery for all metals.

NB: Rounding of numbers may result in slight computational discrepancies.

Note: 1 tonne = 1 000kg = 2 204lbs.

1 troy ounce = 31.10348 grams.

MINERAL RESERVES STATEMENT (METRIC)

Estimates at 30 June 2024

Operations	Proved Reserves			Probable Reserves			Total Mineral Reserves		
Gold	Tonnes (Mt)	Grade (g/t)	Gold[2] (000kg)	Tonnes (Mt)	Grade (g/t)	Gold[2] (000kg)	Tonnes (Mt)	Grade (g/t)	Gold[2] (000kg)
South Africa Underground									
Free State region									
Tshepong North	3.0	4.77	14	2.0	5.57	11	5.0	5.09	25
Tshepong South	2.4	8.02	19	0.2	7.08	2	2.6	7.94	21
Joel	2.1	4.70	10	0.8	4.36	3	2.9	4.61	14
Masimong	0.8	4.36	3	0.2	4.59	1	0.9	4.40	4
Target 1	2.5	4.27	11	1.1	4.87	6	3.6	4.46	16
Total Free State Underground	**10.7**	**5.33**	**57**	**4.3**	**5.20**	**23**	**15.0**	**5.29**	**80**
West Rand region									
Doornkop South Reef	4.8	4.01	19	8.7	4.51	39	13.6	4.33	59
Kusasalethu	2.0	6.33	13	0.001	3.82	0.004	2.0	6.33	13
Mponeng	4.5	9.67	43	10.9	8.86	97	15.4	9.09	140
Total West Rand region	**11.3**	**6.66**	**75**	**19.7**	**6.93**	**136**	**31.0**	**6.83**	**211**
North West region									
Moab Khotsong	3.4	7.69	26	10.3	8.14	84	13.6	8.03	110
Total North West region	**3.4**	**7.69**	**26**	**10.3**	**8.14**	**84**	**13.6**	**8.03**	**110**
Total South Africa Underground	**25.4**	**6.23**	**158**	**34.3**	**7.07**	**242**	**59.6**	**6.72**	**401**
South Africa Surface									
Kraaipan Greenstone Belt									
Kalgold	10.3	0.99	10	8.4	1.18	10	18.7	1.07	20
Free State region – Surface									
Tailings									
Other Free State tailings	86.5	0.27	23	585.5	0.22	131	672.0	0.23	154
Phoenix	24.3	0.29	7	—	—	—	24.3	0.29	7
Central	—	—	—	41.2	0.28	11	41.2	0.28	11
Total Free State	**110.9**	**0.27**	**30**	**626.8**	**0.23**	**142**	**737.6**	**0.23**	**173**
North West region – Surface									
Tailings									
Mispah	—	—	—	66.3	0.31	20	66.3	0.31	20
Vaal River tailings	—	—	—	139.3	0.30	41	139.3	0.30	41
Mine Waste Solutions	7.5	0.28	2	161.4	0.25	40	168.9	0.25	42
Total North West	**7.5**	**0.28**	**2**	**367.1**	**0.28**	**101**	**374.6**	**0.28**	**103**
West Rand – Surface									
West Wits tailings	—	—	—	12.3	0.32	4	12.3	0.32	4
Total West Rand	**—**	**—**	**—**	**12.3**	**0.32**	**4**	**12.3**	**0.32**	**4**
Total South Africa Surface (including Kalgold)	**128.7**	**0.33**	**43**	**1 014.5**	**0.25**	**257**	**1 143.2**	**0.26**	**300**
Total South Africa	**154.1**		**201**	**1 048.8**		**500**	**1 202.8**		**701**
Papua New Guinea									
Hidden Valley	1.0	0.92	1	15.4	1.68	26	16.4	1.63	27
Hamata	—	—	—	0.1	1.68	0.2	0.1	1.68	0.2
Golpu[1]	—	—	—	190.0	0.83	159	190.0	0.83	159
Total Papua New Guinea	**1.0**	**0.92**	**1**	**205.5**	**0.90**	**185**	**206.5**	**0.90**	**186**
HV Hamata	**1.0**	**0.92**	**1**	**15.5**	**1.68**	**26**	**16.5**	**1.63**	**27**
Grand Total	**155.1**		**202**	**1 254.3**		**684**	**1 409.4**		**886**

Operations	Proved Reserves		Probable Reserves		Total Mineral Reserves	
Gold equivalents	Tonnes (Mt)	Au eq[2] (000kg)	Tonnes (Mt)	Au eq[2] (000kg)	Tonnes (Mt)	Au eq[2] (000kg)
Silver						
Hidden Valley	1.0	0.3	15.4	5	16.4	5
Copper						
Golpu[1]	—	—	190.0	361	190.0	361
Total silver and copper as gold equivalents	**1.0**	**0.3**	**205.4**	**366**	**206.4**	**366**
Total PNG including gold equivalents	**1.0**	**1**	**205.5**	**550**	**206.5**	**552**
Total Harmony including equivalents	**155.1**	**202**	**1 254.3**	**1 050**	**1 409.4**	**1 252**

Other metals

Papua New Guinea	Proved Reserves			Probable Reserves			Total Mineral Reserves		
Silver	Tonnes (Mt)	Grade (g/t)	Ag[2] (000kg)	Tonnes (Mt)	Grade (g/t)	Ag[2] (000kg)	Tonnes (Mt)	Grade (g/t)	Ag[2] (000kg)
Hidden Valley	1.0	19.58	20	15.4	26.02	400	16.4	25.62	420

	Tonnes (Mt)	Grade (%)	Cu[2] (000t)	Tonnes (Mt)	Grade (%)	Cu[2] (000t)	Tonnes (Mt)	Grade (%)	Cu[2] (000t)
Copper									
Golpu[1]	—	—	—	190.0	1.23	2 330	190.0	1.23	2 330

South Africa									
Uranium	Tonnes (Mt)	Grade (kg/t)	U_3O_8[2] (Mkg)	Tonnes (Mt)	Grade (kg/t)	U_3O_8[2] (Mkg)	Tonnes (Mt)	Grade (kg/t)	U_3O_8[2] (Mkg)
Moab Khotsong Underground	—	—	—	13.6	0.35	5	13.6	0.35	5

[1] *Total attributable.*
Gold equivalent ounces are calculated assuming a US$1 772/oz Au, US$4.00/lb Cu and US$23.00/oz Ag with 100% recovery for all metals.
[2] *Metal figures are fully inclusive of all mining dilutions and gold losses and are reported as mill-delivered tonnes and head grades. Metallurgical recovery factors have not been applied to the reserve figures.*
NB: Rounding of numbers may result in slight computational discrepancies.
Note: 1 tonne = 1 000kg = 2 204lbs.
1 troy ounce = 31.10348 grams.

MINERAL RESOURCES STATEMENTS (IMPERIAL)

Estimates at 30 June 2024

Operations	Measured Resources			Indicated Resources			Inferred Resources			Total Mineral Resources		
Gold	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)
South Africa Underground												
Free State region												
Tshepong North	15.8	0.349	5 514	6.8	0.307	2 079	8.7	0.296	2 588	31.3	0.325	10 182
Tshepong South	8.9	0.366	3 275	9.8	0.323	3 164	25.1	0.322	8 084	43.9	0.331	14 523
Joel	4.1	0.214	886	3.9	0.205	792	0.4	0.241	105	8.4	0.211	1 783
Masimong	2.8	0.275	762	0.5	0.258	120	0.01	0.262	3	3.3	0.272	885
Target 1	8.0	0.207	1 661	5.6	0.187	1 044	4.3	0.168	715	17.9	0.191	3 420
Target 3	0.7	0.268	178	3.3	0.297	965	1.3	0.253	340	5.3	0.282	1 483
Total Free State Underground	**40.3**	**0.304**	**12 276**	**29.7**	**0.275**	**8 164**	**39.9**	**0.296**	**11 835**	**110.0**	**0.293**	**32 276**
West Rand region												
Doornkop South Reef	5.4	0.195	1 061	7.6	0.210	1 592	2.2	0.249	550	15.2	0.210	3 204
Doornkop Main Reef	0.1	0.157	14	0.1	0.161	8	0.02	0.155	3	0.2	0.158	25
Doornkop Kimberley Reef	20.0	0.098	1 957	13.4	0.092	1 226	11.1	0.096	1 066	44.5	0.096	4 249
Kusasalethu	1.7	0.350	607	6.3	0.291	1 843	2.6	0.257	678	10.7	0.292	3 128
Mponeng	6.2	0.494	3 076	23.2	0.425	9 829	35.4	0.331	11 705	64.8	0.380	24 610
Total West Rand region	**33.5**	**0.201**	**6 715**	**50.5**	**0.287**	**14 499**	**51.4**	**0.272**	**14 002**	**135.3**	**0.260**	**35 216**
Klerksdorp operation												
Moab Khotsong	5.7	0.490	2 818	10.8	0.453	4 891	3.0	0.530	1 579	19.5	0.476	9 288
Total North West region	**5.7**	**0.490**	**2 818**	**10.8**	**0.453**	**4 891**	**3.0**	**0.530**	**1 579**	**19.5**	**0.476**	**9 288**
Total South Africa Underground	**79.5**	**0.274**	**21 809**	**91.0**	**0.303**	**27 555**	**94.3**	**0.291**	**27 416**	**264.8**	**0.290**	**76 780**
South Africa Surface												
Kraaipan Greenstone Belt												
Kalgold	20.6	0.032	657	24.9	0.038	945	8.7	0.047	405	54.2	0.037	2 007
Kalgold tailing dam	—	—	—	—	—	—	26.2	0.008	201	26.2	0.008	201
Total Kalgold	**20.6**	**0.032**	**657**	**24.9**	**0.038**	**945**	**34.9**	**0.017**	**606**	**80.4**	**0.027**	**2 208**
Free State region – Surface												
Tailings												
Other Free State tailings	186.6	0.008	1 476	645.4	0.007	4 205	17.0	0.006	94	849.1	0.007	5 775
Phoenix	49.5	0.008	393	—	—	—	—	—	—	49.5	0.008	393
Central	—	—	—	47.4	0.008	368	—	—	—	47.4	0.008	368
Waste rock dumps												
Free State WRD	—	—	—	0.1	0.016	1	12.8	0.013	163	12.9	0.013	165
Total Free State	**236.2**	**0.008**	**1 869**	**692.9**	**0.007**	**4 574**	**29.8**	**0.009**	**258**	**958.9**	**0.007**	**6 700**
North West region – Surface												
Tailings												
Mispah	—	—	—	73.1	0.009	652	5.2	0.006	32	78.3	0.009	684
Kop Paydam	—	—	—	12.3	0.006	76	—	—	—	12.3	0.006	76
Vaal River tailings	—	—	—	199.0	0.008	1 649	82.5	0.004	306	281.5	0.007	1 955
Mine Waste Solutions	66.0	0.006	405	178.0	0.007	1 290	—	—	—	244.0	0.007	1 696
Waste rock dumps												
Moab MOD	—	—	—	2.1	0.009	18	—	—	—	2.1	0.009	18
Vaal River WRD	—	—	—	—	—	—	2.8	0.007	20	2.8	0.007	20
Total North West	**66.0**	**0.006**	**405**	**464.5**	**0.008**	**3 685**	**90.5**	**0.004**	**357**	**621.0**	**0.007**	**4 448**
West Rand region – Surface												
Tailings												
West Wits tailings	—	—	—	41.9	0.009	394	—	—	—	41.9	0.009	394
Waste rock dumps												
West Wits WRD	—	—	—	0.2	0.011	2	—	—	—	0.2	0.011	2
Total West Rand	**—**	**—**	**—**	**42.1**	**0.009**	**396**	**—**	**—**	**—**	**42.1**	**0.009**	**396**
Total South Africa Surface (including Kalgold)	**322.7**	**0.009**	**2 931**	**1 224.4**	**0.008**	**9 599**	**155.2**	**0.008**	**1 221**	**1 702.4**	**0.008**	**13 752**
Total South Africa	**402.2**		**24 740**	**1 315.4**		**37 154**	**249.5**		**28 638**	**1 967.2**		**90 531**
Papua New Guinea[1]												
Hidden Valley	1.9	0.025	49	49.9	0.039	1 955	1.1	0.033	37	53.0	0.039	2 040
Hamata	—	—	—	2.1	0.056	115	0.2	0.044	9	2.3	0.055	123
Wafi	—	—	—	59.5	0.047	2 800	22.0	0.036	800	81.6	0.044	3 600
Golpu	—	—	—	380.3	0.021	8 000	77.2	0.018	1 400	457.5	0.021	9 400
Nambonga	—	—	—	—	—	—	26.5	0.019	500	26.5	0.019	500
Kerimenge	—	—	—	—	—	—	18.1	0.031	565	18.1	0.031	565
Total Papua New Guinea	**1.9**	**0.025**	**49**	**491.8**	**0.026**	**12 870**	**145.1**	**0.023**	**3 311**	**638.8**	**0.025**	**16 229**
Australia												
Little Eva	—	—	—	171.9	0.002	325	26.5	0.002	57	198.4	0.002	382
Bedford	—	—	—	2.3	0.004	10	1.4	0.004	5	3.7	0.004	16
Lady Clayre	—	—	—	5.6	0.004	24	1.3	0.002	3	6.9	0.004	28
Ivy Anne	—	—	—	5.7	0.002	12	1.3	0.002	3	7.0	0.002	15
Total Australia	**—**	**—**	**—**	**185.6**	**0.002**	**372**	**30.5**	**0.002**	**68**	**216.1**	**0.002**	**440**
Grand Total	**404.2**		**24 789**	**1 992.8**		**50 395**	**425.1**		**32 017**	**2 822.0**		**107 201**

Operations	Measured Resources		Indicated Resources		Inferred Resources		Total Mineral Resources	
Gold equivalents[1]	Tons (Mt)	Au eq (000oz)	Tons (Mt)	Au eq (000oz)	Tons (Mt)	Au eq (000oz)	Tons (Mt)	Au eq (000oz)
Papua New Guinea								
Silver								
Hidden Valley	1.9	14	49.9	364	1.1	11	53.0	390
Total	**1.9**	**14**	**49.9**	**364**	**1.1**	**11**	**53.0**	**390**
Copper								
Golpu	—	—	380.3	18 408	77.2	2 985	457.5	21 393
Nambonga	—	—	—	—	26.5	234	26.5	234
Total	**—**	**—**	**380.3**	**18 408**	**103.6**	**3 219**	**483.9**	**21 627**
Total silver and copper as gold equivalents	**1.9**	**14**	**430.2**	**18 772**	**104.7**	**3 230**	**536.9**	**22 016**
Total PNG including gold equivalents	**1.9**	**63**	**491.8**	**31 642**	**145.1**	**6 541**	**638.8**	**38 245**
Australia								
Copper								
Little Eva	—	—	171.9	2 640	26.5	406	198.4	3 046
Turkey Creek	—	—	24.7	470	4.0	77	28.6	547
Blackard	—	—	87.1	1 868	44.4	875	131.4	2 743
Scanlan	—	—	19.2	500	8.4	171	27.6	671
Bedford	—	—	2.3	60	1.4	30	3.7	89
Lady Clayre	—	—	5.6	96	1.3	21	6.9	116
Ivy Anne	—	—	5.7	89	1.3	19	7.0	108
Total copper as gold equivalents	**—**	**—**	**316.5**	**5 722**	**87.2**	**1 599**	**403.8**	**7 321**
Total Australia including gold equivalents	**—**	**—**	**316.5**	**6 094**	**87.2**	**1 667**	**403.8**	**7 761**
Total Harmony including equivalents	**404.2**	**24 803**	**2 123.7**	**74 889**	**481.8**	**36 845**	**3 009.7**	**136 538**

Other metals

Papua New Guinea[1]	Measured Resources			Indicated Resources			Inferred Resources			Total Mineral Resources		
Silver	Tons (Mt)	Grade (oz/t)	Ag (000oz)	Tons (Mt)	Grade (oz/t)	Ag (000oz)	Tons (Mt)	Grade (oz/t)	Ag (000oz)	Tons (Mt)	Grade (oz/t)	Ag (000oz)
Hidden Valley	1.9	0.553	1 078	49.9	0.562	28 068	1.1	0.767	856	53.0	0.566	30 002
Golpu	—	—	—	380.3	0.037	14 000	77.2	0.030	2 300	457.5	0.037	17 000
Total	**1.9**	**0.553**	**1 078**	**430.2**	**0.098**	**42 068**	**78.3**	**0.040**	**3 156**	**510.4**	**0.092**	**47 002**
Copper	Tons (Mt)	Grade (%)	Cu (Mlb)	Tons (Mt)	Grade (%)	Cu (Mlb)	Tons (Mt)	Grade (%)	Cu (Mlb)	Tons (Mt)	Grade (%)	Cu (Mlb)
Golpu	—	—	—	380.3	0.999	8 300	77.2	0.778	1 300	457.5	0.962	9 600
Nambonga	—	—	—	—	—	—	26.5	0.177	104	26.5	0.177	104
Total	**—**	**—**	**—**	**380.3**	**0.999**	**8 300**	**103.6**	**0.624**	**1 404**	**483.9**	**0.919**	**9 704**
Molybdenum	Tons (Mt)	Grade (lb/t)	Mo (Mlb)	Tons (Mt)	Grade (lb/t)	Mo (Mlb)	Tons (Mt)	Grade (lb/t)	Mo (Mlb)	Tons (Mt)	Grade (lb/t)	Mo (Mlb)
Golpu	—	—	—	380.3	0.188	71	77.2	0.144	11	457.5	0.179	82
Total	**—**	**—**	**—**	**380.3**	**0.188**	**71**	**77.2**	**0.144**	**11**	**457.5**	**0.179**	**82**

Australia[1]	Measured Resources			Indicated Resources			Inferred Resources			Total Mineral Resources		
Copper	Tons (Mt)	Grade (%)	Cu (Mlb)	Tons (Mt)	Grade (%)	Cu (Mlb)	Tons (Mt)	Grade (%)	Cu (Mlb)	Tons (Mt)	Grade (%)	Cu (Mlb)
Little Eva	—	—	—	171.9	0.309	1 170	26.5	0.307	180	198.4	0.308	1 350
Turkey Creek	—	—	—	24.7	0.383	208	4.0	0.391	34	28.6	0.384	243
Blackard	—	—	—	87.1	0.431	828	44.4	0.396	388	131.4	0.419	1 215
Scanlan	—	—	—	19.2	0.523	222	8.4	0.410	76	27.6	0.489	298
Bedford	—	—	—	2.3	0.522	27	1.4	0.420	13	3.7	0.483	40
Lady Clayre	—	—	—	5.6	0.343	42	1.3	0.332	9	6.9	0.341	52
Ivy Anne	—	—	—	5.7	0.311	39	1.3	0.302	9	7.0	0.309	48
Total	**—**	**—**	**—**	**316.5**	**0.363**	**2 536**	**87.2**	**0.368**	**708**	**403.8**	**0.364**	**3 244**

South Africa	Measured Resources			Indicated Resources			Inferred Resources			Total Mineral Resources		
Uranium	Tonnes (Mt)	Grade (kg/t)	U_3O_8 (Mkg)	Tonnes (Mt)	Grade (kg/t)	U_3O_8 (Mkg)	Tonnes (Mt)	Grade (kg/t)	U_3O_8 (Mkg)	Tonnes (Mt)	Grade (kg/t)	U_3O_8 (Mkg)
Free State Surface	—	—	—	195.1	0.202	39	—	—	—	195.1	0.202	39
North West Surface												
Mispah 1	—	—	—	73.1	0.265	19	5.2	—	—	78.3	0.247	19
Kop Paydam	—	—	—	12.3	0.246	3	—	—	—	12.3	0.246	3
Vaal River tailings	—	—	—	195.3	0.157	31	81.5	0.082	7	276.8	0.135	37
Mine Waste Solutions	66.8	0.134	9	177.2	0.163	29	—	—	—	244.0	0.155	38
Total North West Surface	66.8	0.134	9	457.9	0.179	82	86.8	0.082	7	611.5	0.160	98
Moab Khotsong Underground	—	—	—	16.5	1.543	26	3.0	1.424	4	19.5	1.525	30
Grand Total	**66.8**	**0.134**	**9**	**669.6**	**0.219**	**147**	**89.7**	**0.122**	**11**	**826.1**	**0.202**	**167**

[1] *Total attributable.*
Gold equivalent ounces are calculated assuming a US$1772/oz Au, US$4.00/lb Cu and US$23.00/oz Ag with 100% recovery for all metals.
NB: Rounding of numbers may result in slight computational discrepancies.
Note: 1 ton = 907kg = 2 000lbs.
1 troy ounce = 1.10348 grams.

MINERAL RESERVES STATEMENT (IMPERIAL)

Estimates at 30 June 2024

Operations	Proved Reserves			Probable Reserves			Total Mineral Reserves		
Gold	Tons (Mt)	Grade (oz/t)	Gold[2] (000oz)	Tons (Mt)	Grade (oz/t)	Gold[2] (000oz)	Tons (Mt)	Grade (oz/t)	Gold[2] (000oz)
South Africa Underground									
Free State region									
Tshepong North	3.3	0.139	461	2.2	0.162	356	5.5	0.148	818
Tshepong South	2.6	0.234	608	0.3	0.207	52	2.8	0.232	660
Joel	2.4	0.137	323	0.9	0.127	112	3.2	0.134	436
Masimong	0.8	0.127	106	0.2	0.134	23	1.0	0.128	130
Target 1	2.7	0.125	338	1.3	0.142	179	4.0	0.130	517
Total Free State Underground	**11.8**	**0.155**	**1 837**	**4.8**	**0.152**	**723**	**16.6**	**0.154**	**2 560**
West Rand region									
Doornkop South Reef	5.3	0.117	621	9.6	0.132	1 266	14.9	0.126	1 887
Kusasalethu	2.2	0.185	407	0.001	0.112	0.1	2.2	0.185	407
Mponeng	4.9	0.282	1 389	12.1	0.258	3 115	17.0	0.265	4 503
Total West Rand region	**12.4**	**0.194**	**2 417**	**21.7**	**0.202**	**4 381**	**34.1**	**0.199**	**6 798**
North West region									
Moab Khotsong	3.7	0.224	831	11.3	0.237	2 690	15.0	0.234	3 521
Total North West region	**3.7**	**0.224**	**831**	**11.3**	**0.237**	**2 690**	**15.0**	**0.234**	**3 521**
Total South Africa Underground	**28.0**	**0.182**	**5 084**	**37.8**	**0.206**	**7 794**	**65.7**	**0.196**	**12 879**
South Africa Surface									
Kraaipan Greenstone Belt									
Kalgold	11.4	0.029	328	9.2	0.034	317	20.6	0.031	645
Free State region – Surface									
Tailings									
Other Free State tailings	95.4	0.008	753	645.4	0.007	4 205	740.8	0.007	4 957
Phoenix	26.8	0.008	224	—	—	—	26.8	0.008	224
Central	—	—	—	45.5	0.008	366	45.5	0.008	366
Total Free State	**122.2**	**0.008**	**976**	**690.9**	**0.007**	**4 571**	**813.1**	**0.007**	**5 547**
North West region – Surface									
Tailings									
Mispah	—	—	—	73.1	0.009	651	73.1	0.009	651
Vaal River tailings	—	—	—	153.6	0.009	1 324	153.6	0.009	1 324
Mine Waste Solutions	8.3	0.008	67	177.9	0.007	1 285	186.2	0.007	1 352
Total North West	**8.3**	**0.008**	**67**	**404.6**	**0.008**	**3 260**	**412.9**	**0.008**	**3 327**
West Rand – Surface									
West Wits tailings	—	—	—	13.5	0.009	126	13.5	0.009	126
Total West Rand	**—**	**—**	**—**	**13.5**	**0.009**	**126**	**13.5**	**0.009**	**126**
Total South Africa Surface (including Kalgold)	**141.9**	**0.010**	**1 372**	**1 118.3**	**0.007**	**8 274**	**1 260.2**	**0.008**	**9 646**
Total South Africa	**169.8**		**6 456**	**1 156.1**		**16 068**	**1 325.9**		**22 524**
Papua New Guinea									
Hidden Valley	1.1	0.027	30	17.0	0.049	832	18.1	0.048	862
Hamata	—	—	—	0.1	0.049	7	0.1	0.049	7
Golpu[1]	—	—	—	209.4	0.024	5 100	209.4	0.024	5 100
Total Papua New Guinea	**1.1**	**0.027**	**30**	**226.5**	**0.026**	**5 939**	**227.7**	**0.026**	**5 969**
HV Hamata	**1.1**	**0.027**	**30**	**17.1**	**0.049**	**839**	**18.2**	**0.048**	**869**
Grand Total	**171.0**		**6 487**	**1 382.6**		**22 007**	**1 553.6**		**28 493**

Operations	Proved Reserves		Probable Reserves		Total Mineral Reserves	
Gold equivalents	Tons (Mt)	Au eq[2] (000oz)	Tons (Mt)	Au eq[2] (000oz)	Tons (Mt)	Au eq[2] (000oz)
Silver						
Hidden Valley	1.1	8	17.0	167	18.1	175
Copper						
Golpu[1]	—	—	209.4	11 592	209.4	11 592
Total silver and copper as gold equivalents	1.1	8	226.4	11 759	227.5	11 768
Total PNG including gold equivalents	1.1	39	226.5	17 698	227.7	17 737
Total Harmony including equivalents	**171.0**	**6 495**	**1 382.6**	**33 766**	**1 553.6**	**40 261**

Other metals

Papua New Guinea	Proved Reserves			Probable Reserves			Total Mineral Reserves		
Silver	Tons (Mt)	Grade (oz/t)	Ag[2] (000oz)	Tons (Mt)	Grade (oz/t)	Ag[2] (000oz)	Tons (Mt)	Grade (oz/t)	Ag[2] (000oz)
Hidden Valley	1.1	0.571	649	17.0	0.759	12 870	18.1	0.747	13 519
Copper	Tons (Mt)	Grade (%)	Cu[2] (Mlb)	Tons (Mt)	Grade (%)	Cu[2] (Mlb)	Tons (Mt)	Grade (%)	Cu[2] (Mlb)
Golpu[1]	—	—	—	209.4	1.112	5 135	209.4	1.112	5 135

South Africa	Proved Reserves			Probable Reserves			Total Mineral Reserves		
Uranium	Tons (Mt)	Grade (lb/t)	U_3O_8[2] (Mlb)	Tons (Mt)	Grade (lb/t)	U_3O_8[2] (Mlb)	Tons (Mt)	Grade (lb/t)	U_3O_8[2] (Mlb)
Moab Khotsong Underground	—	—	—	15.0	0.699	11	15.0	0.699	11

[1] *Total attributable.*
Gold equivalent ounces are calculated assuming a US$1772/oz Au, US$4.00/lb Cu and US$23.00/oz Ag with 100% recovery for all metals.
[2] *Metal figures are fully inclusive of all mining dilutions and gold losses and are reported as mill-delivered tonnes and head grades. Metallurgical recovery factors have not been applied to the reserve figures.*
NB: Rounding of numbers may result in slight computational discrepancies.
Note: 1 ton = 907kg = 2 000lbs.
1 troy ounce = 31.10348 grams.

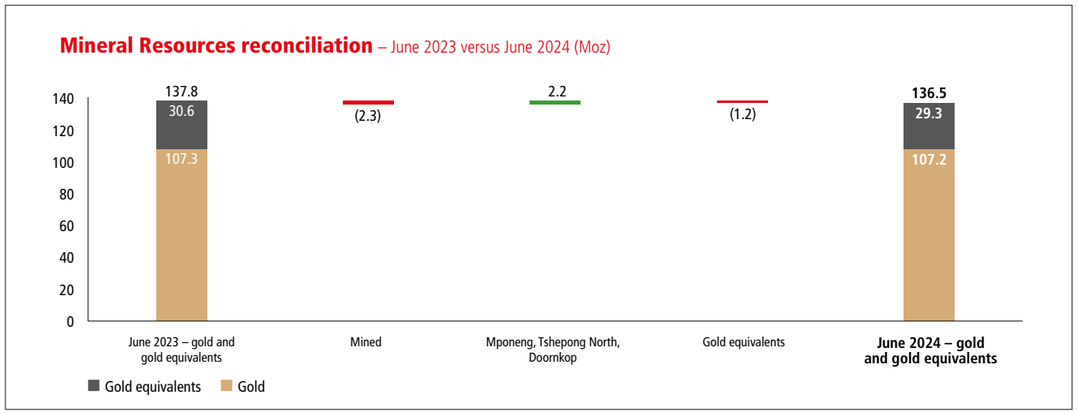
MINERAL RESOURCE AND MINERAL RESERVE RECONCILIATION

Mineral Resource

As at 30 June 2024, attributable gold and gold equivalent Mineral Resources were 136.5Moz, down from 137.8Moz. The following tables show the year-on-year reconciliation of the Mineral Resources.

Mineral Resource reconciliation – gold and gold equivalents

	kg (000)	Moz
June 2023 – Gold and gold equivalents	4 290	137.8
Changes during FY24:		
Mined	(74)	(2.3)
Net of depletion variance excluding gold equivalents	70	2.2
Gold equivalents	(39)	(1.2)
June 2024 – Gold and gold equivalents	4 247	136.5



Mineral Resource comparison – FY23 vs FY24

South Africa Underground	FY23 Gold oz (mil)	FY24 Gold oz (mil)	Depletion Gold oz (mil)	Net of depletion variance Gold oz (mil)	Net of depletion % variance Gold oz (mil)	Comments
Tshepong North	9.848	**10.182**	0.175	0.509	5.2	Increase is due to the increase in the B Reef Resources as result of new geological information.
Tshepong South	14.520	**14.523**	0.136	0.139	1.0	Increase as result of an 1,1% increase in the Resource on reef cmg/t.
Joel	1.947	**1.783**	0.086	(0.078)	(4.0)	Resource grade decreased by 2%. Klippan erosional channel boundary adjustment in the east resulted in a further reduction in ounces.
Masimong 5	0.913	**0.885**	0.119	0.092	10.1	Footprint of Resource increased with extension of the LoM by one year as additional ground became available to mine due to good development grades achieved in FY24.
Target 1	3.490	**3.420**	0.072	0.003	0.1	Remained constant.
Target 3	1.483	**1.483**	—	—	—	
Total Free State Underground	32.200	**32.276**	0.589	0.664	2.1	
West Rand						
Doornkop South Reef	2.888	**3.204**	0.140	0.455	15.8	Increased as result of a decrease in the Resources cut-off from 650cmg/t to 490cmg/t in alignment with the LOM strategy.
Doornkop Main Reef	0.025	**0.025**	—	—	—	
Doornkop Kimberley Reef	4.249	**4.249**	—	—	—	
Total Doornkop	7.163	**7.478**	0.140	0.455	6.4	
Kusasalethu	3.506	**3.128**	0.163	(0.216)	(6.2)	Decrease in the measured Resource grade influenced by new sampling data.
Mponeng	24.039	**24.610**	0.349	0.920	3.8	Additions from model updates and structural gains based on new geological information.
Total West Rand	34.708	**35.216**	0.652	1.159	3.3	
North West						
Moab Khotsong (including Zaaiplaats)	9.514	**9.288**	0.340	0.114	1.2	Structural gains in Zaaiplaats project area based on new geological information.
Total North West	9.514	**9.288**	0.340	0.114	1.2	
Total South Africa Underground	76.422	**76.780**	1.580	1.937	2.5	

Gold	FY23 Gold oz (mil)	FY24 Gold oz (mil)	Depletion Gold oz (mil)	Net of depletion variance Gold oz (mil)	Net of depletion % variance Gold oz (mil)	Comments
South Africa Surface						
Kraaipan Greenstone Belt						
Kalgold	1.814	**2.007**	0.054	0.247	13.6	Pit shell design optimised to mine higher grades in Watertank main.
Kalgold tailing dam	0.201	**0.201**	—	—	—	
Total Kalgold	2.015	**2.208**	0.054	0.247	12.2	
Free State Surface						
Other Free State tailings	5.775	**5.775**	—	—	—	
Free State (Phoenix)	0.445	**0.393**	0.064	0.013	2.9	Change as result of survey updates.
Free State (Central)	0.385	**0.368**	0.040	0.023	6.1	Change as result of survey updates.
Waste rock dumps	0.245	**0.165**	0.040	(0.041)	(16.7)	Depletion and survey update.
Total Free State Surface	6.849	**6.700**	0.144	(0.005)	(0.1)	
North West Surface						
Mispah	0.675	**0.684**	—	0.009	1.3	Increase in inferred Resource due to new deposition.
Kop Paydam	0.076	**0.076**	—	—	—	
Moab MOD	0.020	**0.018**	0.005	0.003	16.0	Change as result of survey updates.
Vaal River tailings	2.072	**1.955**	0.188	0.071	3.4	Change as result of survey updates.
Vaal River WRD	0.020	**0.020**	—	—	—	
Mine Waste Solutions	1.789	**1.696**	0.082	(0.011)	(0.6)	Change as result of survey updates.
Total North West Surface	4.651	**4.448**	0.275	0.072	1.6	
West Wits Surface						
West Wits tailings	0.442	**0.394**	0.059	0.011	2.5	Change as result of survey updates.
West Wits WRD	0.003	**0.002**	0.007	0.006	182.3	Change as result of survey updates.
Total West Wits Surface	0.445	**0.396**	0.066	0.017	3.8	
Total South Africa Surface (including Kalgold)	13.961	**13.752**	0.540	0.331	2.4	
Total South Africa (including Underground, Surface and Kalgold)	90.383	**90.531**	2.120	2.268	2.5	

Gold	FY23 Gold oz (mil)	FY24 Gold oz (mil)	Depletion Gold oz (mil)	Net of depletion variance Gold oz (mil)	Net of depletion % variance Gold oz (mil)	Comments
Papua New Guinea						
Hidden Valley/Kaveroi	2.265	**2.040**	0.196	(0.029)	(1.3)	Depletion partially offset by additional ounces identified.
Hamata	0.129	**0.123**	—	(0.005)	(4.1)	Updated geological model and pit optimisation.
Wafi	3.600	**3.600**	—	—	—	
Golpu	9.400	**9.400**	—	—	—	
Nambonga	0.500	**0.500**	—	—	—	
Kerimenge	0.565	**0.565**	—	—	—	
Total Papua New Guinea	16.459	**16.229**	0.196	(0.034)	(0.2)	
Australia						
Little Eva	0.366	**0.382**	—	0.016	4.5	Updated geological model.
Bedford	0.023	**0.016**	—	(0.007)	(32.1)	Updated geological model.
Lady Clayre	0.028	**0.028**	—	—	—	
Ivy Anne	0.015	**0.015**	—	—	—	
Total Australia	0.431	**0.440**	—	0.009	2.1	
Grand Total	107.274	**107.201**	2.316	2.243	2.1	
Papua New Guinea						
Silver – Equivalent gold ounces						
Hidden Valley	0.475	**0.390**	—	(0.085)	(17.9)	Change in commodity price assumptions.
Copper – Equivalent gold ounces						
Golpu	22.166	**21.393**	—	(0.773)	(3.5)	Change in commodity price assumptions.
Nambonga	0.242	**0.234**	—	(0.008)	(3.5)	Change in commodity price assumptions.
Total Copper – Equivalent gold ounces	22.408	**21.627**	—	(0.781)	(3.5)	
Total PNG equivalent gold ounces	22.883	**22.016**	—	(0.867)	(3.8)	
Total PNG including equivalent gold ounces	39.342	**38.245**	0.196	(0.901)	(2.3)	
Australia						
Copper – Equivalent gold ounces						
Little Eva	3.306	**3.046**	—	(0.260)	(7.9)	Updated geological model and change in commodity price assumptions.
Turkey Creek	0.642	**0.547**	—	(0.095)	(14.9)	Updated geological model and change in commodity price assumptions.
Blackard	2.681	**2.743**	—	0.062	2.3	Updated geological model and change in commodity price assumptions.
Scanlan	0.711	**0.671**	—	(0.040)	(5.7)	Updated geological model and change in commodity price assumptions.
Bedford	0.119	**0.089**	—	(0.030)	(24.9)	Updated geological model and change in commodity price assumptions.
Lady Clayre	0.121	**0.116**	—	(0.005)	(4.1)	Change in commodity price assumptions.
Ivy Anne	0.111	**0.108**	—	(0.003)	(2.7)	Change in commodity price assumptions.
Total Australia equivalent gold ounces	7.693	**7.321**	—	(0.372)	(4.8)	
Total Australia including equivalent gold ounces	8.124	**7.761**	—	(0.363)	(4.5)	
Grand Total (excluding equivalent)	107.274	**107.201**	2.316	2.243	2.1	
Grand Total (including equivalent)	137.849	**136.538**	2.316	1.004	0.7	

Silver	FY23 (Moz)	FY24 (Moz)	Depletion (Moz)	Net of depletion variance (Moz)	Net of depletion % variance (Moz)	Comments
Hidden Valley	33.586	**30.002**	—	(3.583)	(10.7)	
Golpu	17.000	**17.000**	—	—	—	
Total silver	50.586	**47.002**	—	(3.583)	(7.1)	

Copper	FY23 (Mlb)	FY24 (Mlb)	Depletion (Mlb)	Net of depletion variance (Mlb)	Net of depletion % variance (Mlb)	
Golpu	9 600.000	**9 600.000**	—	—	—	
Nambonga	103.503	**103.503**	—	—	—	
Little Eva	1 413.768	**1 349.500**	—	(64.267)	(4.5)	New geological model increases and partially offset by pit optimisation.
Turkey Creek	274.761	**242.531**	—	(32.230)	(11.7)	New geological model increases and partially offset by pit optimisation.
Blackard	1 146.728	**1 215.371**	—	68.643	6.0	New geological model increases and partially offset by pit optimisation.
Scanlan	304.264	**297.607**	—	(6.657)	(2.2)	New geological model increases and partially offset by pit optimisation.
Bedford	50.841	**39.662**	—	(11.179)	(22.0)	New geological model increases and partially offset by pit optimisation.
Lady Clayre	51.638	**51.638**	—	—	—	
Ivy Anne	47.837	**47.837**	—	—	—	
Total copper	12 993.339	**12 947.649**	—	(45.690)	(0.4)	

Molybdenum	FY23 (Mlb)	FY24 (Mlb)	Depletion (Mlb)	Net of depletion variance (Mlb)	Net of depletion % variance (Mlb)
Golpu	82.000	**82.000**	—	—	—
Total Molybdenum	82.000	**82.000**	—	—	—

Mineral Reserve

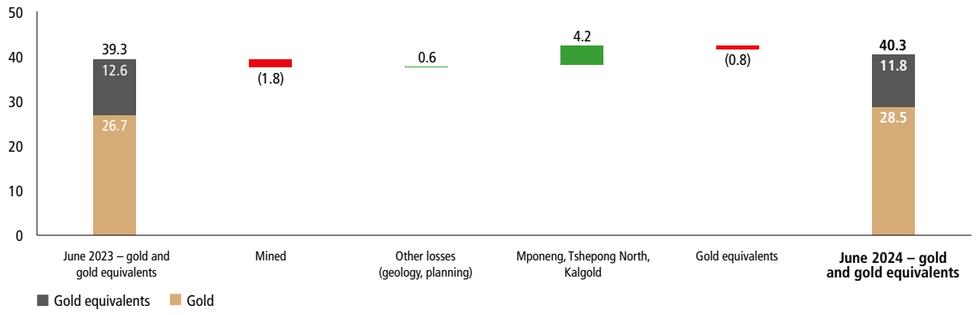
As at 30 June 2024, Harmony's attributable gold and gold equivalent Mineral Reserves were 40.3Moz, up from 39.3Moz.

The year-on-year Mineral Reserves reconciliation is shown below.

Mineral Reserve reconciliation – gold and gold equivalents

	kg (000)	Moz
June 2023 – Gold and gold equivalents	1 224	39.3
Changes during FY24:		
Mined	(57)	(1.8)
Net of depletion variance excluding gold equivalents	111	3.6
Gold equivalents	(26)	(0.8)
June 2024 – Gold and gold equivalents	1 252	40.3

Mineral Reserves reconciliation – June 2023 versus June 2024 (Moz)



Mineral Reserve comparison – FY23 vs FY24

Gold	FY23 (Moz)	FY24 (Moz)	Depletion (Moz)	Net of depletion variance (Moz)	Net of depletion % variance (Moz)	Comments
South Africa Underground						
Free State						
Tshepong North	0.602	**0.818**	0.109	0.325	53.9	Inferred B Reef resources upgraded and converted to Proven and Probable Reserves.
Tshepong South	0.850	**0.660**	0.105	(0.085)	(10.0)	Depletion partially offset by additional ounces identified.
Joel	0.535	**0.436**	0.059	(0.040)	(7.5)	Depletion partially offset by additional ounces identified. Klippan erosional channel boundary adjustment in the east resulted in a further reduction in ounces.
Masimong 5	0.150	**0.130**	0.060	0.040	26.4	Mineral Reserves increased with extension of the LoM by one year as additional ground became available to mine due to mineable face length creation in FY24.
Target 1	0.539	**0.517**	0.063	0.041	7.6	Mineral Reserves increased due to the inclusion of additional massive stopes in LoM based on new geological information and design changes.
Total Free State	2.677	**2.560**	0.397	0.280	10.5	
West Rand						
Doornkop South Reef	1.901	**1.887**	0.115	0.102	5.3	Due to LIB Exploration drilling and on reef development which increased ore body confidence classification.
Kusasalethu	0.412	**0.407**	0.128	0.123	30.0	Mainly due to additional one year added in the LoM.
Mponeng	1.779	**4.503**	0.286	3.010	169.2	LoM extension project approved extending the LoM to 20 years.
Total West Rand	4.092	**6.798**	0.529	3.235	79.1	
North West						
Moab Khotsong (including Zaaiplaats)	3.681	**3.521**	0.220	0.059	1.6	Structural gains in Zaaiplaats project area based on new geological information.
Total North West	3.681	**3.521**	0.220	0.059	1.6	
Total South Africa Underground	10.449	**12.879**	1.146	3.575	34.2	

Gold	FY23 (Moz)	FY24 (Moz)	Depletion (Moz)	Net of depletion variance (Moz)	Net of depletion % variance (Moz)	Comments
South Africa Surface						
Kraaipan Greenstone Belt						
Kalgold	0.392	**0.645**	0.054	0.306	78.0	Increase attributed to the inclusion of Watertank Main in the LoM at improved strip ratio.
Total Kalgold	0.392	**0.645**	0.054	0.306	78.0	
South Africa Surface						
Other Free State tailings	4.957	**4.957**	—	—	—	
Phoenix	0.278	**0.224**	0.064	0.010	3.5	Change as result of survey updates.
Central	0.385	**0.366**	0.040	0.022	5.7	Change as result of survey updates.
Total Free State Surface	5.620	**5.547**	0.105	0.032	0.6	
North West Surface						
Vaal River tailings	1.444	**1.324**	0.188	0.068	4.7	Change as result of survey updates.
Mine Waste Solutions	1.431	**1.352**	0.082	0.004	0.2	Change as result of survey updates.
Mispah	0.651	**0.651**	—	—	—	
Total North West Surface	3.525	**3.327**	0.270	0.072	2.0	
West Rand Surface						
West Wits tailings	0.176	**0.126**	0.059	0.009	5.2	Change as result of survey updates.
Total West Rand Surface	0.176	**0.126**	0.059	0.009	5.2	
Total South Africa Surface (including Kalgold)	9.714	**9.646**	0.488	0.419	4.3	
Total South Africa (including Underground, Surface and Kalgold)	20.164	**22.524**	1.634	3.994	19.8	

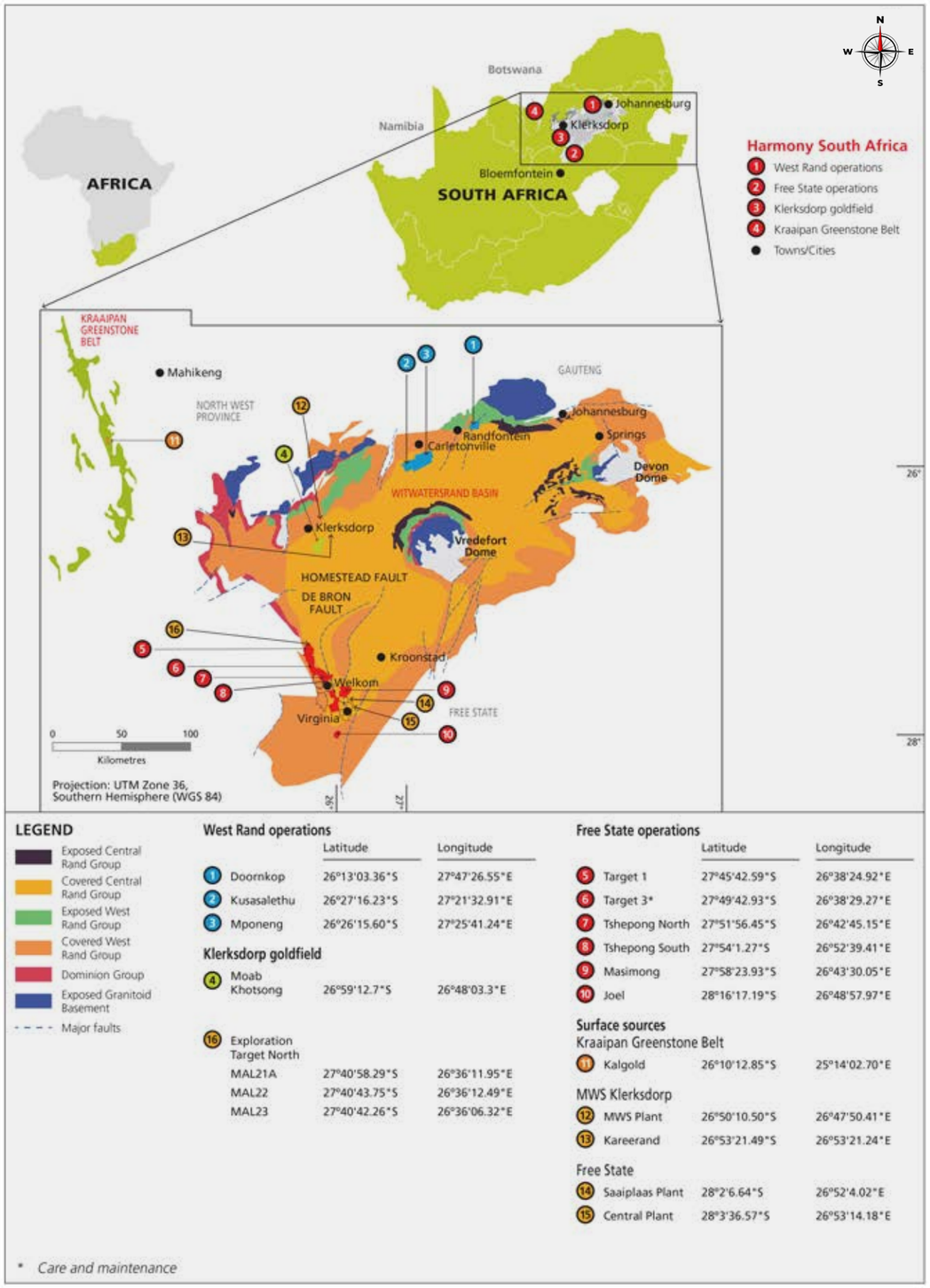
Mineral Resource and Mineral Reserve reconciliation continued

Gold	FY23 (Moz)	FY24 (Moz)	Depletion (Moz)	Net of depletion variance (Moz)	Net of depletion % variance (Moz)	Comments
Papua New Guinea						
Hidden Valley/Kaveroi	1.059	**0.862**	0.186	(0.010)	(1.0)	Depletion partially offset by additional ounces identified.
Hamata	0.009	**0.007**	—	(0.002)	(23.6)	Pit design changes.
Golpu	5.500	**5.100**	—	(0.400)	(7.3)	Geological model changes.
Total Papua New Guinea	6.568	**5.969**	0.186	(0.413)	(6.3)	
Grand Total	26.732	**28.493**	1.820	3.581	13.4	
Silver – Equivalent gold ounces						
Hidden Valley	0.238	**0.175**	—	(0.063)	(26.3)	Depletion partially offset by additional ounces identified and a change in commodity price assumptions.
Copper – Equivalent gold ounces						
Golpu	12.371	**11.592**	—	(0.779)	(6.3)	Geological model changes.
Total PNG equivalent gold ounces	12.609	**11.768**	—	(0.842)	(6.7)	
Total PNG including equivalent gold ounces	19.177	**17.737**	0.186	(1.254)	(6.5)	
Grand Total (excluding equivalent)	26.732	**28.493**	1.820	3.581	13.4	
Grand Total (including equivalent)	39.341	**40.261**	1.820	2.740	7.0	

EXPLORATION AND PROJECTS

LOCATION AND GEOLOGICAL SETTING OF OPERATIONS, PROJECTS AND EXPLORATION

Harmony – South Africa



LEGEND

- Exposed Central Rand Group
- Covered Central Rand Group
- Exposed West Rand Group
- Covered West Rand Group
- Dominion Group
- Exposed Granitoid Basement
- Major faults

West Rand operations

		Latitude	Longitude
1	Doornkop	26°13'03.36"S	27°47'26.55"E
2	Kusasalethu	26°27'16.23"S	27°21'32.91"E
3	Mponeng	26°26'15.60"S	27°25'41.24"E

Klerksdorp goldfield

4	Moab Khotsong	26°59'12.7"S	26°48'03.3"E
16	Exploration Target North		
	MAL21A	27°40'58.29"S	26°36'11.95"E
	MAL22	27°40'43.75"S	26°36'12.49"E
	MAL23	27°40'42.26"S	26°36'06.32"E

Free State operations

		Latitude	Longitude
5	Target 1	27°45'42.59"S	26°38'24.92"E
6	Target 3*	27°49'42.93"S	26°38'29.27"E
7	Tshepong North	27°51'56.45"S	26°42'45.15"E
8	Tshepong South	27°54'1.27"S	26°52'39.41"E
9	Masimong	27°58'23.93"S	26°43'30.05"E
10	Joel	28°16'17.19"S	26°48'57.97"E

Surface sources

Kraaipan Greenstone Belt

11	Kalgold	26°10'12.85"S	25°14'02.70"E

MWS Klerksdorp

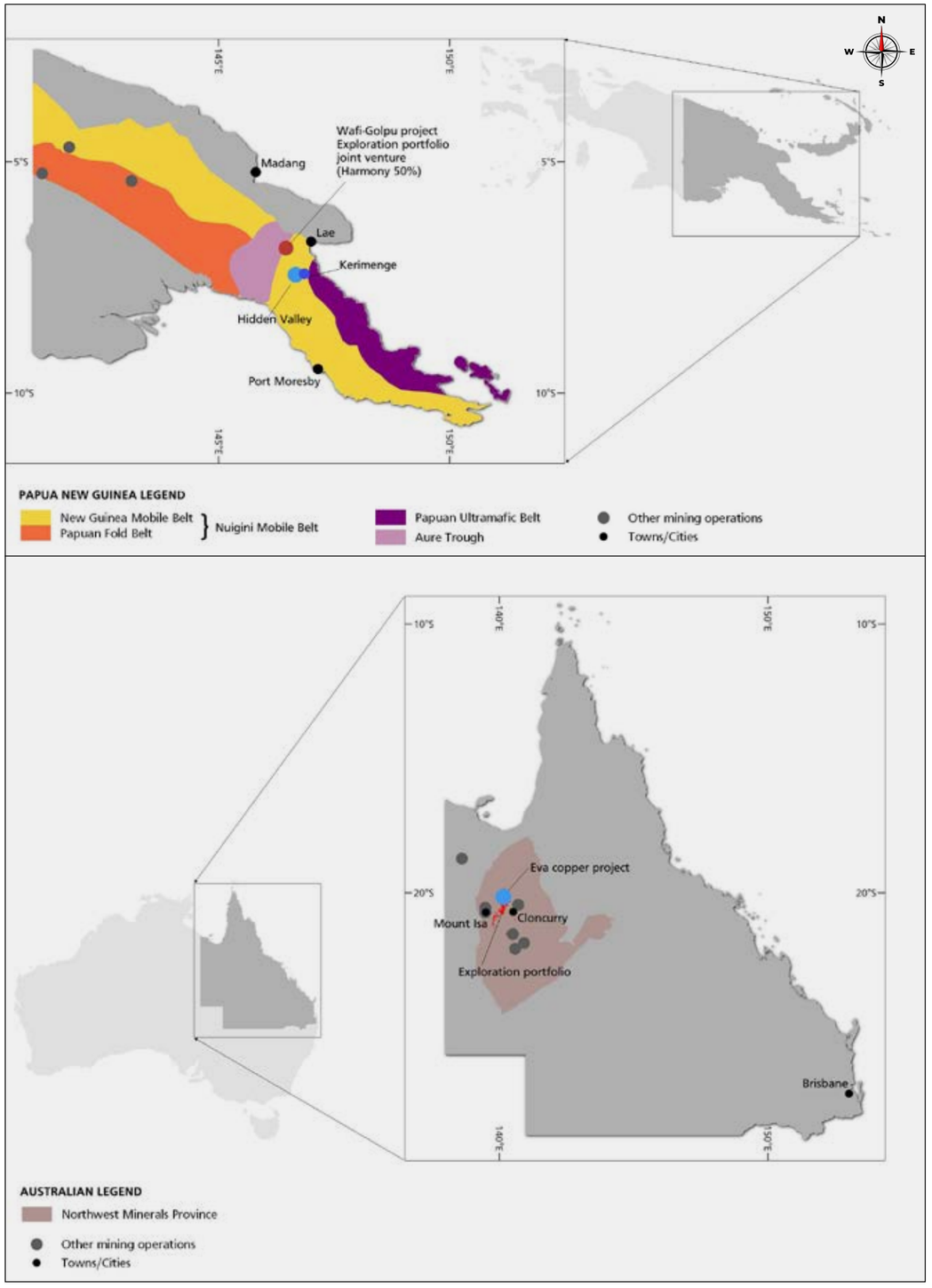
12	MWS Plant	26°50'10.50"S	26°47'50.41"E
13	Kareerand	26°53'21.49"S	26°53'21.24"E

Free State

14	Saaiplaas Plant	28°2'6.64"S	26°52'4.02"E
15	Central Plant	28°3'36.57"S	26°53'14.18"E

* *Care and maintenance*

Harmony – South East Asia and Australia



EXPLORATION

Key work streams underpinning the FY24 exploration programme included:

- Brownfield exploration at Hidden Valley, Kerimenge and Kalgold to optimise existing open-pit operations and extend mine life. Kerimenge deposit infill drilling to inform a prefeasibility study
- Brownfield exploration at our underground operations in South Africa
- Brownfield Drilling at the Eva Copper Project to inform a Feasibility Study Update
- Greenfield target generation on the regional tenement package encompassing the Eva Copper Project
- Reviewing exploration opportunities as part of the new business strategy.

In line with the company's strategy and growth targets, capital allocated to exploration projects for organic growth in FY24 focused on near-mine, brownfield targets. Although greenfield exploration activities have been scaled back, as part of a balanced approach, Harmony continued to maintain regional greenfield tenement interests for exposure to major new gold and copper-gold discoveries in highly prospective under explored terranes and mining districts throughout Papua New Guinea and Australia.

Papua New Guinea

Key geological features

Papua New Guinea is one of the world's most prospective, yet underexplored, terrains for porphyry copper-gold and epithermal gold mineralisation. The New Guinea Mobile Belt, which spans the core of the Irian Jaya-Papua New Guinea mainland, is host to a number of world-class porphyry copper-gold and gold deposits, including Golpu (Cu-Au), Ok Tedi (Cu-Au), Grasberg (Cu-Au) and Porgera (Au).

The central rock belt that makes up the highland spine of Papua New Guinea formed as a result of subduction-related interaction between the Pacific plate (in the north), converging with the Australian plate (in the south). Deposits typical of subduction-related arc settings include:

- Epithermal gold deposits that form at shallow depths, relatively close to the earth's surface, examples of which include Hidden Valley, Hamata, Kerimenge, Wau and Wafi
- Porphyry copper-gold systems that form at deeper levels in the crust and are associated with the emplacement of intrusive stocks and dykes. These systems are among the largest sources of copper ore in the world, and can also contain significant amounts of gold, molybdenum and silver as by-products. Golpu is a high-grade porphyry copper-gold system.

Key legal and regulatory features

Mining in Papua New Guinea is governed by a range of legislation, including the Mining Act 1992, the Mining (Safety) Act 1977 and the Environment Act 2000.

Under the Mining Act, Minerals are owned by the State, which issues and administers mining tenement under a concessionary system through the offices of the Mineral Resources Authority. The following types of tenement are available under the Act, namely exploration licence, mining lease, special mining lease, alluvial mining lease, lease for mining purpose and mining easement.

Exploration licences are issued for a term not exceeding two years and are renewable for further two-year terms, subject to compliance with expenditure and other conditions. Each licence contains a condition conferring on the State the right, exercisable at any time prior to the commencement of mining, to make a single purchase of up to 30% equitable interest in any Mineral discovery under the licence at a price pro rata to the accumulated exploration expenditure.

If, pursuant to a feasibility study approved by the board of directors, a decision is made to develop a mine on a Mineral Resource, a permitting process must be followed, including:

- Applying to the Mineral Resources Authority for a mining lease (or, at the discretion of the Minister for Mines, a special mining lease). This includes entering into a memorandum of agreement with local, provincial and national governments and landowners regarding the allocation to those parties of a share of the royalties payable by the tenement holder to the State, and other community and local business-related matters. If the Minister determines that a special mining lease is required, it will be necessary to enter into a mining development contract with the State, setting out the applicable project implementation, fiscal and other arrangements in respect of the proposed mining operation. Other relevant agreements include a fiscal stability agreement and a state equity acquisition agreement if the State takes up an interest pursuant to the purchase option in the exploration licence
- Applying to the Conservation and Environment Protection Authority for a level 3 environment permit. This includes undertaking an environmental impact study.

The permitting process can be very prolonged, particularly in the case of special mining leases.

Since 2009, the mining regime in PNG has been the subject of a comprehensive review involving various PNG Government agencies. Legislation on the subject of the review includes the Mining Act 1992, the Mining (Safety) Act 1997, the Income Tax Act 1959 and the Environment Act 2000. In addition, the review has addressed Mineral policy generally and such mining-specific issues as biodiversity offsets, offshore mining, sustainable development, involuntary relocation and mine closure.

The review is ongoing, and its outcomes are presently unclear. Various draft revisions of the Mining Act have been circulated and submitted to the PNG Chamber of Mines and Petroleum for its comments. The most recent draft revisions include an increase in the royalty rate, changes to the terms of the PNG Government's right to acquire an interest in a mine discovery, the introduction of a development levy and a waste fee, the introduction of an obligation to maintain production at minimum prescribed levels, a prohibition on non-local "Fly-In, Fly-Out" employment practices, and the introduction of downstream processing obligations.

Pursuant to the tax regime review and notwithstanding industry objections, certain adverse changes to the fiscal regime were introduced with effect from 1 January 2017. The main changes were the introduction of an additional profit tax, the cessation of the double deduction allowance for exploration expenditure, and an increase in the rates of interest withholding and dividend withholding taxes.

In June 2020, the Mining (Amendment) Act 2020 was enacted to require the real-time provision of production and Mineral sale data to the Mineral Resource Authority and expand the State's ability, via a holding company, to apply for tenement and other related permits and authorisations in respect of reserved land.

In July 2020, a proposed Organic Law on Ownership and Development of Hydrocarbons and Minerals and the Commercialisation of State Businesses was tabled for comment. The Organic Law (if adopted) will materially alter the legislative and regulatory regime governing mining in Papua New Guinea, including the ownership of Minerals by Government and the transformation of the methodology of its participation in mining operations from a concessionary to a production-sharing regime.

The Papua New Guinea Chamber of Mines and Petroleum, as the representative mining industry body, has engaged with the State in response to these proposed legislative changes, some of which the industry considers to be materially adverse. However, there has been only limited response by the State.

Harmony's operations and projects in Papua New Guinea will potentially be adversely affected by the changes presently being considered. If introduced and applied to Harmony's operations and projects in PNG, the changes could have a material adverse effect on Harmony's business, operating results and financial condition.

Harmony in Papua New Guinea – a summary

Harmony began actively exploring in Papua New Guinea in 2003. Since then, we have developed a high-quality project portfolio, both in established mineral provinces and in emerging gold and copper districts. Harmony has advanced several gold and copper-gold prospects which are at various stages of exploration and evaluation across Harmony's tenement areas.

In line with the company's strategy and growth targets, capital was allocated to exploration projects for organic growth in FY24 focused on near-mine, brownfield targets. Although Greenfield exploration activities have been scaled back, as part of a balanced approach, Harmony continued to maintain its greenfield tenement interests and a rationalisation of tenure has continued for exposure to major new gold and copper-gold discoveries in highly prospective, underexplored terranes and mining districts throughout Papua New Guinea. The country is highly prospective and underexplored and the case for exploration investment in Papua New Guinea will remain strong if the current or proposed legislative environment remains supportive.

PNG Exploration FY24

Key work streams underpinning the FY24 exploration programme included:

- The Wafi-Golpu copper-gold deposit permitting process and progressing the special mining lease application
- Kerimenge deposit prefeasibility study work

In FY24, we spent R152 million (US$8.1 million) on exploration in Papua New Guinea, driven largely by activities related to the Wafi-Golpu Project. Exploration expenditure of R425 million (US$23.3 million) is planned for FY25, on the back of increased project work and associated study costs.

Tenements held in joint venture

Wafi-Golpu joint venture and exploration portfolio joint venture (Harmony 50%)

Harmony is in a 50:50 joint venture with Newmont over a number of tenements in the Morobe Province. The aggregate tenement package in Morobe Province, held in a 50:50 joint venture between Newmont and Harmony, stands at 153km^2 (unchanged year on year). These tenements encompass the Wafi-Golpu Project and span the Wafi transfer zone and its strike extensions.

The Wafi-Golpu Project is presently in the permitting phase, and the relevant agreements with the State and other stakeholders in the project are presently being negotiated.

The Wafi transfer zone and its strike extensions are prospective for epithermal gold and porphyry style copper-gold deposits, and the exploration strategy is to discover bulk tonnage (~1Moz) or high-margin gold or copper-gold deposits to provide new resource options that can leverage infrastructure or complement the Wafi-Golpu Project.

During FY24, statutory commitments for joint venture tenure was met through completion of field programmes comprising drilling (5 holes/782m) surface sampling and field mapping. Drilling was designed to investigate the metallurgical leach characteristics of the high sulphidation gold mineralisation of the Wafi resource.

Exclusively held tenements

Morobe Consolidated Goldfields Limited and Harmony Gold (PNG) Exploration Limited (Harmony 100%)

Harmony's 100% owned tenement portfolio in the Morobe Province was essentially unchanged year on year comprising 265.6km² as at 30 June 2024. Work programme expenditure focused on:
1: Drilling and study work on the depth extension of the Hidden Valley deposit
2: Prefeasibility studies on the Kerimenge gold deposit.

Papua New Guinea – joint venture exploration (Harmony 50%)

Exploration portfolio tenements (Wafi-Golpu district)

Objectives	**Wafi transfer zone – grassroots exploration targeting discovery of additional Mineral Resources to expand Wafi-Golpu into a mineral district.**
Progress in FY24	» Four drill holes were completed for 782m into the Wafi Au resource. The objective of the drilling was to provide sample for column leach test work to investigate oxide and sulphide leach characteristics. The new drilling also helps underpin the current resource declaration which is not part of the mine plan. The drill core was dispatched to Perth, Australia where is was run through the Corescan hyperspectral system before being sampled for geochemical assay and metallurgical test work. Additional to this, surface sampling work programmes were undertaken on three exploration licences to meet statutory requirements to maintain the tenure in good standing.
Targets/plans for FY25	» Meet statutory maintenance commitments to keep tenure in good standing through Greenfield generative work programmes focused on developing new centres of mineralisation away from the Special Mining Lease (SML) application.

Hidden Valley district brownfields exploration

Objectives	**Brownfields exploration within a 10km radius of the Hidden Valley plant to develop replacement resources and support the LoM extension and investigate the potential for standalone projects.**
Progress in FY24	» Work to progress the Kerimenge prefeasibility study continued in FY24 with metallurgical and geotechnical studies completed on drill core dispatched to Australia. A short work programme of surface sampling (augered soils grid) and mapping to meet statutory maintenance commitments on the newly granted EL2724 was completed.
Targets/plans for FY25	» Brownfield surface sampling and mapping work programmes are planned on the Hidden Valley ML151 targeting the historic prospects Big Wau and Salemba. Additionally, follow up work on the Kerimenge trend targeting the Daulo, Waurike and Lemenge prospect areas are proposed.

Australian exploration FY24

The Eva Copper Project, located approximately 75km north-east of Cloncurry, comprises five mining leases (142.8 square kilometres) and 19 exploration permits (341.25 square kilometres). The titles form a key strategic holding in a Tier 1 mining jurisdiction, recognised as a highly prospective iron oxide copper-gold province. Major operating mines in the district include Mt Isa (Cu, Pb, Zn, Ag), Ernest Henry (Cu, Au), and Dugald River (Zn, Pb, Ag).

Key exploration workstream for FY24 included:
» Brownfield drilling programme to improve orebody knowledge and test potential strike and depth extensions
» Regional and detailed surface gravity geophysical surveys
» Data consolidation and interpretation and generative work to identify and rank brownfield and greenfield targets across the holding.

Drilling remains in progress at Eva Copper Project with three rigs on-site. FY24 exploration and project study expenditure in Australia (largely driven by Eva Copper Project) was R727 million (US$38.9 million). Exploration and project study expenditure of R1 916 million (US$104.9 million) is planned for FY25.

Australia – Greenfields and brownfields exploration

Eva Copper Project mining leases and exploration leases

Objectives	» Expand the resource and reserve base to leverage infrastructure planned for the Eva Copper Project » Delineation of high grade ore zones or satellite deposits » Development of a balanced project and exploration portfolio to sustain growth.
Progress in FY24	» 82 000m of drilling (227 holes) was completed during the year. The drilling was undertaken as part of the Eva Feasibility study update, designed to increase confidence in the Mineral Resource base and support study elements including: – Metallurgical test work – Geotechnical aspects – Primary water supply – Infrastructure sterilisation. At year end the work program was on going with three drill rigs on-site » A regional surface gravity survey comprising some 2 228 stations was completed over an approximate 80km by 20km area extending from the Barkly Highway in the south to north of the Little Eva Deposit. Station spacing was nominally 1 000m by 500m. Further, detailed infill gravity surveys were completed over the Little Eva, Legend, Lady Clayre and Ivy Ann deposit areas to help characterise the geophysical footprints for each of the deposits. This work comprised an additional 3 438 stations collected on nominal 200m by 50m spacing over each of the deposits. The gravity data is particularly useful for discriminating and prioritising prospective targets » Compilation of historic geochemical, geophysical and geophysical and historic drill datasets continued. Over 200 prospect areas within the tenement area have been identified and ranked to date.
Targets/plans for FY25	1. Continuation of the brownfields exploration drilling programme on mining lease tenure to develop historic resource areas at Legend, Longamundi and Great Southern 2. Identification and prioritisation of high-grade satellite ore feed targets for prospect development/drill testing within 100km of infrastructure planned for Eva Copper Project including drill target development work at Mt Michael EPM9611and at Ivy Ann on EPM25760 3. Further data consolidation and integration to develop a pipeline of prioritised greenfield and brownfield targets.

South Africa

All our underground mines are located within the Witwatersrand Supergroup. Most are situated in the south-western corner of the Witwatersrand Basin or Free State goldfields, and comprise sedimentary rocks extending laterally for hundreds of kilometres into the West Rand goldfields and East Rand Basin. Our mining assets include an open-pit operation on the Kraaipan Greenstone Belt to the north-west of the Witwatersrand Basin. Additional information on geology is provided per operation in this report.

Exploration FY24

In FY24, Harmony spent R171 million (US$9.2 million) on exploration in South Africa (FY23: R144 million; US$8.1million). Expenditure of R246 million (US$13.4 million) planned for FY25 includes R90 million (US$5 million) budgeted for exploration and R86 million (US$5 million) budgeted for prefeasibility studies across various sites.

Underground resource definition drilling

In all, 71 950 metres were drilled across Harmony's underground operations in South Africa (FY23: 67 834 metres).

Using a method known as continuous coring, underground exploration drilling is conducted as per required intervals from existing underground excavations (haulages and cross-cuts). This drilling provides information to determine the elevation and grade of the targeted reef horizon as well as geological features in the immediate surrounding lithology. It assists in structural geological interpretation and evaluation of specific areas as well as compilation of regional structural geological and evaluation models. Mine geologists and planners use drilling information to determine a mine's development strategy and eventually its economic viability.

South Africa – summary of brownfields exploration

Kalgold mine lease extension

Objectives	**To advance feasibility studies in support of an expansion of the Kalgold open-pit mining operation by:** » Additional resource growth to underpin expansion studies and improve operational flexibility » Identifying new high-grade satellite resources » Delineating extensions to known deposits.
Progress in FY24	No further Resource extension drilling was carried out at the Kalgold satellite prospects in FY24[1]. A Resource model update was compiled for the Spanover and Windmill North prospects, using all the assay results obtained and verified from the drilling programme completed in FY23.
Targets/plans for FY25	No additional Resources extension drilling is planned for FY25, as the drilling of all satellite prospects within the mining authorisation area has now been completed.

[1] *Complete assay results and resource details are tabulated in the technical annexure available on the website at www.harmony.co.za: SAMREC Table 1 Report – Kalgold operation, North West province, Republic of South Africa.*

Kalgold prospecting rights

Objectives	**Exploration is aimed at improving the understanding of the potential to develop the Kraaipan Greenstone Belt into a new mineralised province with multiple mining centres.**
Progress in FY24	No exploration drilling took place in FY24, as mining rights conversion and prospecting rights applications were not granted by the Department of Mineral Resources and Energy (DMRE) in FY23. A new prospecting right application was submitted in April 2024, which was approved by the DMRE. Granting of the new prospecting right, by the DMRE, may take up to six months.
Targets/plans for FY25	Provision was made in the FY25 exploration budget in order to complete phase I of the reverse circulation drilling programme at the Goldridge – Ferndale prospect. This includes 26 boreholes (3 600 metres of drilling) at a cost of R7.6 million. Due to the expected delay of the prospecting right grant, no drilling is expected to take place before January 2025. Surface mapping will also be done at sites where previous geochemical anomalies have been identified.

South Africa – summary of brownfields exploration

Doornkop – South Reef

Objectives	**The objective of the project is to improve the geological confidence and establish a better understanding of the grade trends and geological structures in order to de-risk the mine from a geological perspective.** **The main aim is to better define the Resource above 207 and 212 levels and to reduce the Inferred Resource in the life-of-mine.**
Progress in FY24	A total of 56 (including deflections) boreholes have been drilled to date which has improved the confidence in the orebody.
Targets/plans for FY25	Exploration will continue into identified areas to further increase the geological confidence and increase the Mineral Resource base. LIB drilling sites are strategically selected to drill into prospective areas with potential to be included into the life-of-mine. Exploration targets: » North-eastern block » South-western block.

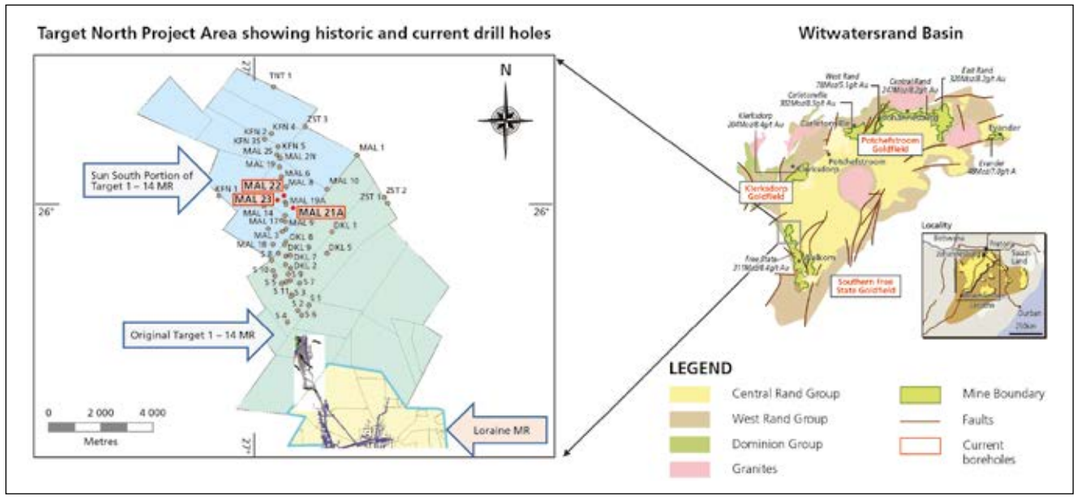
Tshepong South (Phakisa), B Reef

Objectives	**Exploration drilling is in progress to determine areas of economic value in the down-dip extensions of the B-Reef channels being mined in the west-south area of Tshepong North shaft payshoot. The drilling is focused on above infrastructure prospective areas by utilizing underground development platforms on 66, 69 and 71 levels.**
Progress in FY24	Progress was made in the footwall development, allowing for a more intensive exploration drilling programme to identify payshoots. The existence of the B3 facies was confirmed, with the normal variations in reef development. Footwall development has been expanded according to information gathered regarding geological structures. On-reef development was completed in the 65 line between 69 and 66 levels, with on-reef development continuing above 66 level as well as at the 67 line on 69 level. Ledging started in the 69, 65 line in February 2024 and is ongoing.
Targets/plans for FY25	Drilling is continuing between 69 and 71 levels, to further define the reef development and grade distribution in the expected payshoot, as well as confirming the geological structure model.

Target North

Objectives	**The aim of the current exploration programme is to confirm the geological model, which was created on the completion of the Target North study work. The model defined a potential block of well mineralised Venterspost Conglomerate Formation reefs that overlay the alluvial fans of the EA (Upper Elsburg) and Dreyerskuil reefs.** **Two fans have been identified in the Target North area, namely the Dreyerskuil and Mariasdal fans.**
Progress in FY24	The exploration drilling programme from surface was completed by drilling the last 304.38 metres. MAL23 drill hole third directional deflection was completed, producing three additional reef intersections. Upon completion of the drilling, work began on determining a new resource estimate for the project, with the assistance of ExplorMine Consultants. This work was done in three phases, namely: » Geological borehole database update » Wireframing and compilation of 3D geological models » Block modelling and resource estimation. Phases 1 and 2 of this work were completed during FY24.
Targets/plans for FY25	Phase 3 of the work was completed in August 2024. The application of modern industry best practice estimation techniques on the updated geological model resulted in a preliminary Mineral Resource estimate of 13.8 million ounces (58.8Mt at 7.29g/t) in the Inferred Mineral Resource category. The latest Mineral Resource estimations were done focusing on a portion of the orebody and indicates reduced ounces at a higher grade than the previous estimate. Each phase of the project and final report is being externally reviewed by our external assurance providers. The report will be used to identify any further resource definition drilling that may be required for additional improvements of the geological and estimation models.

South Africa – summary of brownfields exploration



South Africa – summary of brownfields exploration

Joel – high-grade Beatrix Reef extension (Klippan)

Objectives	**Exploration is planned to upgrade the Mineral Resource confidence classification to Indicated Mineral Resources and determine the economic mining limit in the south and south-east originally classified as the non-depositional zone. Drilling is also probing into the south-west to determine if any upside in value could exist in an area that is currently estimated as low grade. Opportunities are explored in ground above 137 level in order to decongest planned mining which is currently concentrated on 137 level.**
Progress in FY24	In total seven holes were drilled on 121 level, six of these intersected reef, with values corresponding to the grade trends expected in the area. The seventh hole intersected the uneconomic Klippan erosion channel, indicating a northwards change in the initial interpreted strike. This was further confirmed by an exposure in the 117 haulage east. On 129 level one hole intersected the VS5, firming up the model in the area.
Targets/plans for FY25	The project is focusing towards the south-west for FY25, prospecting for payable resources on 117 level west. In total seven holes are planned at an estimated total length of 1 000m.

Joel – 145 level and 137 east exploration

Objectives	**The life-of-mine of Joel can be extended by extending the decline down a further level below 137 level. The objective of this project is to upgrade the Mineral Resource of 137 level and to determine the economic mining limit to the north and north east below current mining infrastructure in the 145 level decline project area.**
Progress in FY24	Five holes were drilled on 137 level for the year. These holes were focused towards the central and eastern part of the envisaged block at the E7 and E8 lines. Values returned were not favourable and a lower grade area has been interpreted here, with the expectation that the high grades will be towards the west of this block.
Targets/plans for FY25	Drilling will continue towards the mine boundary on 137 level and below 137 level to firm up the geological model extending into the 145 level decline project area.

Brownfields exploration is focused on improving confidence in the geological model, as well as adding and upgrading additional Mineral Resources to the mine.

South Africa – summary of brownfields exploration

Mponeng mine below 126 level VCR and CLR exploration

Objectives	**Exploration is focused on improving confidence in the geological model in areas below 126 level for the VCR, as well as adding and upgrading additional Mineral Resources to the mine. Target areas for FY24 – FY25 are focused on both VCR and CLR areas that require additional information to further expand the mining fronts east and west.**
Progress in FY24	Exploration drilling for VCR and CLR targets completed 4 224m for the year. The drilling increased confidence of the VCR ounces on the eastern area of the Booysens Shale footwall zone, which allowed upgrading from the Mineral Resource towards the Mineral Reserve.
Targets/plans for FY25	Mponeng has planned 4 975m for infill exploration drilling of the VCR and CLR. This drilling will improve confidence in Indicated and Inferred portions of the Mineral Resources below 126 level extension area for the potential upgrading of the VCR. For the CLR, drilling will be focused to improve confidence on the current model.

Target 1 exploration

Objectives	**BLK12_B and C (EA reefs) to establish the gold mineralisation potential/trends of the 3BMC and 1BC reefs, within the inter-fan areas of Block_12B and C, north of the current LoM footprint.**
Progress in FY24	Five boreholes were drilled during FY23/24 with a total of 741m. The majority returned with favourable assay values, which confirmed the expected payshoot extension of EA-reefs toward the north of the current SLOS mining footprint. Furthermore, well mineralised EA7-reefs has been intersected further to the east, and this has contributed to BLK_12 A and B being converted from Mineral Resource to Mineral Reserve and now forms part of the three-year production plan.
Targets/plans for FY25	Target has planned a total of 580m for exploration drilling, with three holes aimed specifically at EA7-reefs intersections north of the current mine design. This drilling is aimed at improving the current geological and grade model and to improve the confidence level of the Inferred and Indicated portions of the Mineral Resource in BLK_12 B and C.
Objectives	**BLK_12 Dreyerskuil reef (DK1 and DK4) to define the sub-crop of the DK1, DK4 and EA13 Reefs within Block 12, and also establish gold mineralisation potential within Block 12.**
Progress in FY24	Three boreholes were drilled during FY23/24. One borehole intersected the targeted DK4-reef, and returned a favourable assay result. The other two boreholes did not intersect the anticipated reefs, however, provided significant structural information for consolidation of the geological model.
Targets/plans for FY25	Target has planned a total of 580m for exploration drilling, with three holes aimed specifically at DK1/DK4-reef intersections north of the current mine design. This drilling is aimed at improving the current geological and grade model and, also, to improve the confidence level in the Inferred and Indicated portion of the Mineral Resource in BLK_12 B and C.
Objectives	**BLK_5 and 6 (DK1 reefs) to establish the gold mineralisation potential/trends of the DK1 and DK4 reefs within Block 5 and 6. With special emphasis on delineating the high-grade payshoots on DK1 elevation within the 270 DK1 98 line.**
Progress in FY24	Seven boreholes were drilled during FY23/24. The majority returned favourable assay values, which confirmed the expected high-grade extension of DK1 reef payshoot trending southerly direction from BLK_4 into BLK_5. This has led to a portion of the block being included into Mineral Reserves for the three-year plan.
Targets/plans for FY25	Target has planned a total of 760m for exploration drilling. This drilling is aimed at improving the current geological and grade model and, also, to improve the confidence level in the Inferred and Indicated portion of the Mineral Resource in BLK_5 and 6.

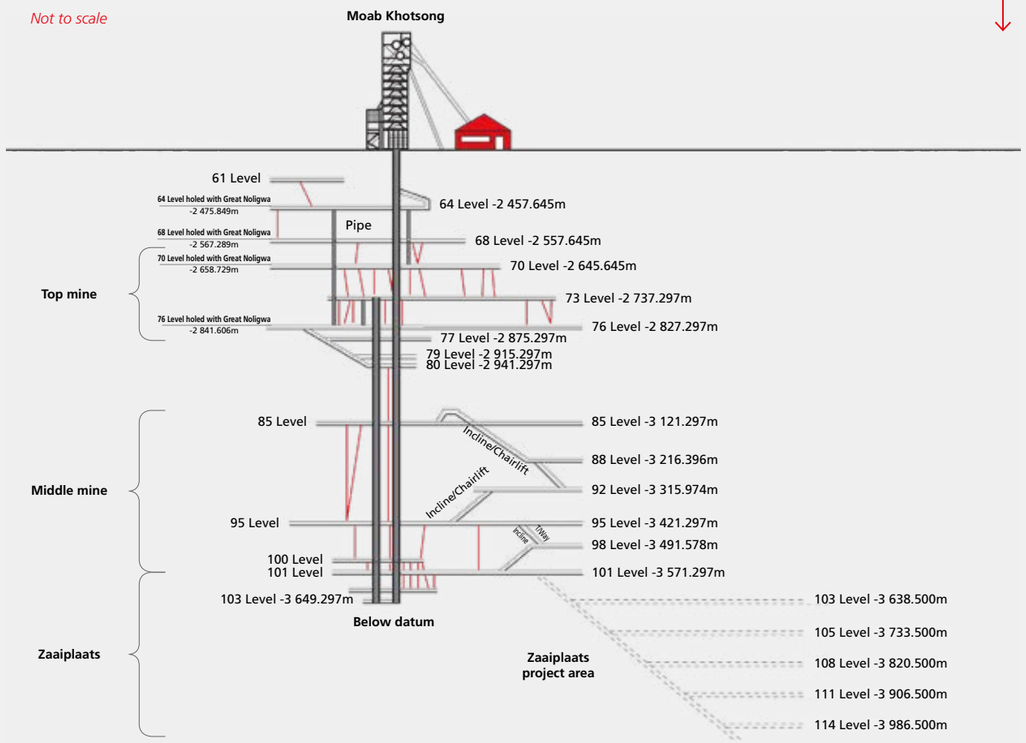
South Africa – summary of brownfields exploration

Moab Khotsong Exploration

Objectives	**Exploration targets have been identified to generate new Mineral Resources and Mineral Reserves while updating the structure, geozone and estimation models in three strategic areas:** » Top mine below 76 level » Zaaiplaats area 3 LIB drilling » Zaaiplaats area 4 hydraulic drilling
Progress in FY24	Top mine below 76 level – Achieved 2 124m and defined the Jersey fault cut-off for Top mine which will assist in the understanding of the influence of the fault zone on the Zaaiplaats orebody towards the south. Zaaiplaats area 3 LIB drilling – long hole drilling achieved 3 525m and assisted with structural confidence within the northern corner of the Zaaiplaats orebody. 101 level development advanced to the west as scheduled creating drilling platforms that is required to drill towards the area A Vaal Reef blocks. Zaaiplaats area 4 hydraulic drilling – achieved 4 339m and contributed to the delineation of the below 101 level structure adjacent to the Jersey fault zone.
Targets/plans for FY25	Top mine below 76 level – 2 187m is planned to continue the drilling into the Jersey fault cut-off for Top mine towards the south. This will assist in understanding the influence of the fault zone on the Zaaiplaats orebody towards the south. Zaaiplaats area 3 LIB drilling – 4 524m is planned to upgrade structure, geozone and estimation models within the northern to central portion of the Zaaiplaats orebody as drilling platforms becomes available towards the west. Zaaiplaats area 4 hydraulic drilling – 4 323m is planned to delineate the below and above 101 level structure adjacent to the Jersey fault zone and to gain information on the geological facies which will inform the Zaaiplaats geozone and estimation models as drilling platforms becomes available towards the west.

Moab Khotsong: Schematic of shaft and mining layout of the Moab Khotsong shaft

Not to scale



Kusasalethu 105 to 113 level exploration

Objectives	**Potential to extend the life-of-mine at Kusasalethu through an exploration drilling programme to explore areas adjacent to current mining for economic potential. Two main areas of interest were identified: the area east of the Hammer Dyke on 102 and 105 levels and the area east of the current mining on 109 and 113 levels.**
Progress in FY24	In FY24, higher grade TC2 reef were intersected to the south of the Moletsane fault. Some promising assay values >1 500cm.g/t were received from this exploration area.
Targets/plans for FY25	One LIB-machine is planned to continue drilling to further understand the extent of the TC2 facies to the south of the Moletsane Fault. Further drilling information will enable the delineation of the higher grade TC2 facies that could result in a mine extension beyond the current life-of-mine planning.

■ Moab Khotsong Zaaiplaats Project

PROJECTS

Harmony currently has one major projects and one study in Papua New Guinea:

- The Wafi-Golpu Project is owned by the Wafi-Golpu joint venture, a 50:50 unincorporated joint venture between subsidiaries of Harmony and Newmont respectively
- HVXX study – potential CIL and/or heap leach of ores below the current of Hidden Valley and incorporating the Kerimenge Resource.

Eva Copper Project-multi pit and copper concentrator feasibility study in Queensland, Australia.

Harmony has several projects underway in Papua New Guinea, Australia and South Africa which are essential to the longevity of the business. The aim of these projects is to ensure a pipeline of exploitable, cost-efficient Mineral Reserves.

Papua New Guinea

Harmony currently has three projects in Papua New Guinea, located in the Morobe Province:

- The Wafi-Golpu Project, being a greenfield undeveloped deep-level block cave mine. The project is held under a 50:50 unincorporated Wafi-Golpu joint venture between wholly owned PNG-registered subsidiaries of, respectively, Harmony Gold Mining Company Limited (namely, Wafi Mining Limited) and Newcrest Mining Limited (namely, Newcrest PNG2 Limited). The environmental permit was granted in 2020 with negotiations continuing with permits associated with the special mining lease
- The Hidden Valley life-of-mine extension concept study
- Kerimenge Resource Concept study.

Wafi-Golpu Project (Harmony 50%)

Headline summary

- **Location:** Eastern Papua New Guinea in the Morobe Province (supports Harmony's geographical diversification strategy)
- **Tenement holding:** The Wafi-Golpu joint venture participants are the holders in equal shares of exploration licences EL440 and EL1105. The Golpu, Wafi and Nambonga deposits are located on exploration licence EL440
- **Commodity:** Copper-gold (supports Harmony's commodity diversification strategy)
- **Deposits:** The Golpu, Wafi and Nambonga deposits
- **Resource:** Contains 18.6Moz gold and 8.6Mt copper
- **Level of confidence:** Feasibility study completed March 2018
- **Mining method:** Block cave with multi-cave options
- **Production rate:** 16.85Mtpa, steady-state production estimated at 161 000t of copper, 266 000oz of gold (more than 1.4Moz of gold equivalent ounces annually)
- **Grade:** Above average grades for gold – 0.90g/t and copper – 1.27%
- **Costs:** US$0.26/lb are in the lowest decile for copper production
- **Operating life-of-mine:** >28 years (potential to extend to 40 years)
- **Project lifecycle:** In permitting phase. The Wafi-Golpu joint venture participants have applied for a special mining lease (SML 10) and an environment permit to undertake the construction, operation and ultimately, closure of the greenfield block cave copper-gold mine. The environment permit was granted in December 2020. The permits associated with the special mining lease application are a work in progress.

Project technical overview

The Golpu, Wafi and Nambonga deposits are located in eastern Papua New Guinea (PNG), approximately 60km south-west of Lae in Morobe Province. The proposed mine site is situated at an elevation of approximately 400m above sea level in moderately hilly terrain located near the Watut River, approximately 30km upstream from its confluence with the Markham River. Lae, the second largest city in Papua New Guinea, will host at its port the project's concentrate export facilities, which will be linked to the mine site by a concentrate pipeline. Tailings will be disposed of by means of deep-sea tailings placement in the Huon Gulf, to the north of the mouth of the Markham River.

The 2018 feasibility study update, which remains the basis for the business case, is based on block caving the Golpu Mineral Resource. The project is a viable development of a high-quality Mineral Resource, capitalising on the high-grade nature of the copper-gold Golpu orebody, an optimised capital expenditure profile and the ability to optimise the production rate and cash flow by preferentially (in time) targeting higher-grade sections of the Mineral Reserve early.

The primary project deliverable is the commissioning of a mining operation to produce at nameplate capacity of 16.84Mtpa, a high-quality copper and gold concentrate with ore sourced from three block caves, namely BC44, BC42 and BC40.

Project permitting overview

The Wafi-Golpu Project is in the permitting phase. The proposal for development underpinning the special mining lease 10 (SML 10) application was submitted to the Papua New Guinea Mineral Resources Authority in August 2016 and was updated in March 2018, when the feasibility study update was completed.

This update identified deep-sea tailings placement as the tailings management solution for the project. Informed by the feasibility study update, the environment impact statement (EIS) was submitted to the Conservation and Environment Protection Agency in July 2018.

Negotiations with the State Negotiating Team regarding the terms and conditions of the grant of SML 10 and its associated tenements, including the terms and conditions of participation in the project by the State and its nominees, commenced in April 2018. In December 2018, the Wafi-Golpu joint venture participants entered into a memorandum of understanding (MoU) with the State of PNG, establishing a framework for the parties to progress the permitting of the Wafi-Golpu Project.

In May 2019, the permitting process was injuncted pursuant to a stay order given in an action for judicial review of the MoU brought by the Governor of the Morobe Province. The injunction remained in place until February 2020 when the State withdrew from the MoU and the judicial review was dismissed on that basis.

In December 2020, the Conservation and Environment Protection Agency concluded its assessment of the Wafi-Golpu Project's environment permit application and granted an environment permit approving deep-sea tailings placement as the project's tailings management method.

In March 2021, the Governor of Morobe Province and the Morobe Provincial Government commenced legal proceedings in the national court seeking judicial review of the grant of the environment permit, and for interim orders to stay the environment permit and restrain the State of PNG from granting a special mining lease for the Wafi-Golpu Project. Injunctions sought by the plaintiffs are presently the subject of an appeal to the Supreme Court.

In December 2022, landholders represented by the Centre for Environmental Law and Community Rights Inc commenced legal proceedings also seeking judicial review of the grant of the environment permit. Application by the plaintiffs for the proceedings to be joined with those of the governor and Morobe Provincial Government was dismissed by the Supreme Court.

Both legal proceedings are continuing, but do not presently prevent the conduct of the SML 10 negotiations, which resumed in early 2022.

In April 2023, the Wafi-Golpu Joint Venture participants entered into a Framework Memorandum of Understanding setting out the key terms and principles to guide the negotiation and preparation of the formal agreements relating to the permitting, development and operation of the project. The negotiation of those agreements is ongoing.

In the interim, no mining has occurred in the project area.

The Wafi-Golpu Project will progress to development only once:

- SML 10 and all other associated tenements and necessary permits required for project development have been granted. This will only occur after all required agreements with the State have been negotiated and executed, including a mining development contract, a fiscal stability agreement and a state equity acquisition agreement
- All required agreements with the State and landowners have been negotiated and executed, including a memorandum of agreement with local, provincial and national government and landholders governing the allocation and distribution between them of identified project benefits, including royalties payable to the State
- Individual compensation agreements have been executed with affected landholders
- The judicial reviews of the environment permit have been dismissed, and/or the validity of the environment permit for the life of the project has been confirmed
- All necessary approvals have been received from the boards of directors of the ultimate holding companies of the Wafi-Golpu joint venture participants, namely Harmony and Newcrest Mining Limited.

Initial activities after the achievement of the above execution conditions will focus on the establishment of project delivery capacity and capability. This will be followed by the validation and update of the feasibility study completed in March 2018 which will further inform decisions associated with the commencement of site access roads and bridges, the construction of accommodation facilities and the construction of the Nambonga and Watut declines.

Hidden Valley life-of-mine extension study (Harmony 100%)

Headline summary

- **Location:** Eastern Papua New Guinea in the Morobe Province
- **Tenement holding:** Hidden Valley Mine is situated on Mining Lease ML 151 and Kerimenge on Exploration Licence EL2751.1
- **Environment permit:** Hidden Valley, EP L3(578).

The Hidden Valley life-of-mine extension concept study considers the conversion of the remaining resource in stage 9. The project will assess a third TSF and/or heap leach operations for the resources and/or other technologies to increase the tailings storage capacity, which is the current LoM constraint at Hidden Valley.

An extension of the mining lease and an amendment to the environmental permit will be required.

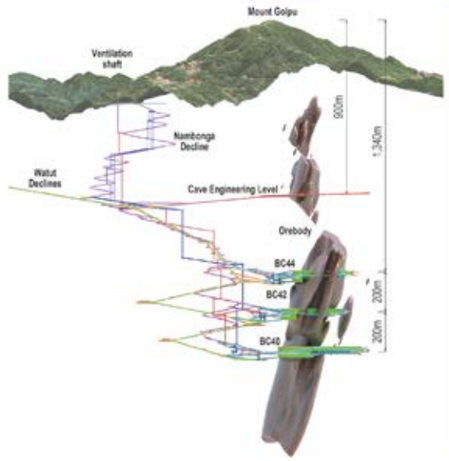
Kerimenge study (Harmony 100%)

Headline summary

- **Location:** Eastern Papua New Guinea in the Morobe Province
- **Tenement holding:** Kerimenge on Exploration Licence EL2751.1

The Kerimenge concept study considers the conversion of the resource in Kerimenge deposit. The project will assess heap leach operations for the resources at the Kerimenge location and opportunity to integrate into the Hidden Valley life-of-mine extension as a CIL processing option.

A mining lease and environmental permit will be required.



PREFERRED DEVELOPMENT OPTION FOR WAFI-GOLPU

The diagram alongside illustrates the preferred development option. Evaluation of this preferred development option in the feasibility study update is based on:

- Mining 155Mt (approximately 40%) of the current known Ore Reserve in two block cave levels being block cave 44 (BC44, 65Mt) at 4400mRL and block cave 42 (BC42, 90Mt) at 4200mRL, both at a feasibility level of confidence
- Mining and processing the remaining Ore Reserve (210Mt), currently at a prefeasibility level of confidence, in a third block cave level, block cave 40 (BC40) at 4000mRL
- Total ore mined of 376Mt over 28 years
- (26 years post commercial production), including 11Mt of development ore.

Note that when development tonnages are allocated to the block caves levels, the volumes per cave are 68Mt (BC40), 93Mt (BC42) and 215Mt (BC44). The values (tonnages and durations) per block cave level refer to production from the drawpoints, not development.

Decline Cross Section – Ore Body.

Papua New Guinea

Papua New Guinea – Prefeasibility

Kerimenge heap leach project

Objectives	**To add meaningful ounces and margin, and to extend the life, of Harmony's PNG Operations.** **Contributes towards HSEAsia production profile at a time Hidden Valley is moving towards closure and the Wafi-Golpu Project production is delayed due to permitting.**
Progress in FY24	Completed metres of diamond drilling for geotechnical assessment and Resource definition.
Targets/plans for FY25	Update Resource based on latest drilling and test work. Commence mining studies on update Resource including the option to incorporate into the Hidden Valley life-of-mine extension plans. Continue community engagement.

■ Kerimenge

Australia

Australia – Greenfields and brownfields exploration

Harmony's strategic expansion and diversification efforts were reaffirmed in December 2022 when it acquired 100% of the Eva Copper Project from Copper Mountain Mining Corporation (CMMC) in December 2022.

The project is located 75km north east of Cloncurry in the highly prospective Mt Isa inlier. The project will involve mining sulphide and native copper ore from six open pits and processing the ore through a purpose built copper concentrator. The project site will also include a blended power generation solution with preserved optionality to connect to the QLD States CopperString project in the future; and a site accommodation facility.

The projected mine life is predicted to extend beyond 15 years, providing a stable platform for continued growth.

While CMMC declared a Mineral Reserve, Harmony is updating the feasibility study to address the risks and opportunities identified in the due diligence. To this end, additional drilling has occurred and now well advanced to provide more certainty and resolution on the Resource, geotechnical, metallurgical models, and to firm up primary water supply and bulk power options. In parallel, an optimisation of the mine design, scheduling and planning, the copper concentrator process plant design, capital and operating costs and execution planning and schedules of cost is being undertaken.

A highly experienced project team has been established, based in Brisbane and Cloncurry leveraging highly experienced consultants and contractors.

The project is fully permitted, although there may be potential amendments based on feasibility recommendations. We anticipate the declaration of Harmony's maiden Reserve upon the successful conclusion of the feasibility study.

■ Eva

South Africa

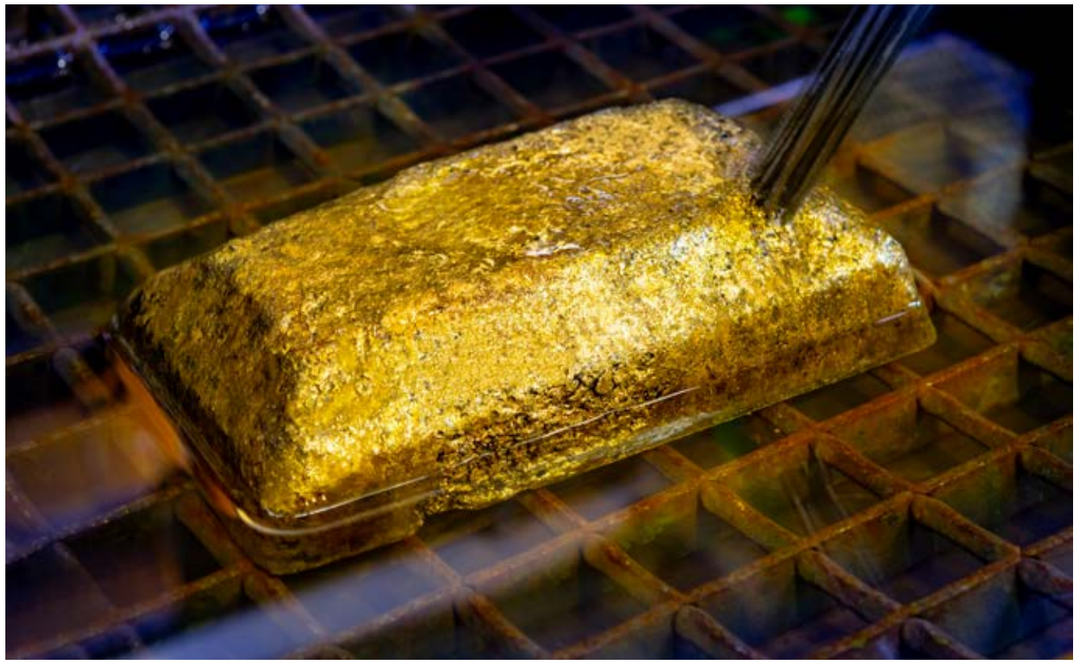
In South Africa, projects are currently in progress at Free State surface re-mining, Doornkop, Mponeng, Kareerand and Moab Khotsong, all of which are aimed at extending the life-of-mine at these operations.

South Africa – summary of projects currently underway

South Africa – summary projects

Doornkop – 207 and 212 levels project

Objectives	**The project extends the mining of the orebody at depth on 207 and 212 level. Both levels need to be developed, while the shaft infrastructure needs to be completed in order for each level to be able to handle the planned production. An ore handling system incorporating 215 level also needs to be put in place. In order to provide adequate ventilation and cooling over the LoM, the DK1a Shaft will be converted into an intake shaft in conjunction with setting up a refrigeration plant.**
Progress in FY24	Capital development on 207L was completed during the last quarter of FY24. The 212 tonnage handling arrangement was completed, enabling tipping of rock onto the main belt system. Recommissioning of the existing and building up additional trackless equipment commenced in the last quarter of FY24. The delayed commissioning of trackless equipment and cleaning constraints negatively affected production on 212 during the year. Exploration drilling is in progress to improve the geological confidence, increase the Mineral Reserves and better define the Mineral Resource.
Targets/plans for FY25	Mid-shaft loading including the recommissioning of sub-ventilation shaft rock handling infrastructure is in final stages of completion. In addition new conveyor with the vibrating feeder was added to the Main Shaft rock handling system to allow for additional capacity and flexibility in handling the development waste on 212 that is currently in progress. Capital development on 207 level is complete. Exploration will continue in line with a strategy that supports better definition of the Mineral Resource base. Original approach to providing cooling to Doornkop lower levels (reaming of the ventilation shaft from surface to 76 level, and the construction of the 10MW fridge plant) was put on hold pending investigation into a feasibility of converting Doornkop DK1A ventilation shaft to down-casting shaft. This approach is promising more volume of air that will be delivered to production levels, but the indication is that cooling of air will still be required, although it could be split between Doornkop Main Shaft and DK1A Shaft.



■ Gold

South Africa – summary projects

MWS – Mispah tailings dam retreatment project

Objectives	**The opportunity was identified to reclaim the Mispah 1 Tailings Storage Facility (TSF) through Mine Waste Solutions.**
Progress in FY24	Procurement was scheduled to start in March 2024 with construction in January 2025.
Targets/plans for FY25	Complete procurement process for all work packages to enable construction to commence.
Objectives	**The feasibility study will investigate the viability of reclaiming 67.4Mt from the Mispah 1 TSF at a rate of 28ktpd and pumping it to MWS plant via the east pump station and treating it through the MWS stream 2 as replacement tonnage in the future reclamation profile and not as additional reclamation tonnage over and above the planned current reclamation rate of MWS.**
Progress in FY24	The environmental authorisation of the new reclamation pump station and piping systems between the Mispah 1 reclamation station and the east pump station, over the Vaal river, is in progress, with the environmental authorisation (basic assessment) received in September 2023 and the Water User Licence received in November 2023.
Targets/plans for FY25	All required environmental authorisations received.
Objectives	**The slurry transfer pipeline from the Mispah 1 TSF over the Vaal River to the east pump station did not trigger the requirement for a full environmental impact assessment.**
Progress in FY24	Feasibility Study Gate review held on 22 July 2024 and approved, pending capital application approval. Pre-implementation phase planning to be initiated. Civil tender to be awarded in August 2024 pending commercial approvals and vote number.
Targets/plans for FY25	Forecast construction completion and commissioning ahead of production requirement in July 2026.

South Africa – summary projects

Mponeng extension (TauTona CLR pillar)

Objectives	**The extension project study considers the feasibility of extending the Mponeng LoM by exploiting CLR pillar at TauTona.**
Progress in FY24	The feasibility study is scheduled to be completed in the second quarter of FY25, with several access options being studied.
Targets/plans for FY25	Optimisation of designs and schedules to deliver the optimal NPV value.

Mponeng extension (TauTona VCR pillar)

Objectives	**The TauTona shaft pillar extraction was approved by the board for implementation in FY24. The project scope is to extract modelled sections of the VCR orebody within the shaft pillar which can be mined without damaging the shaft and related infrastructure. This will assist in adding value during the Mponeng LoM extension plan. The focus, however, is to add gold production into the gold gap that will exist between the current LoM plan and the Mponeng depth extension.**
Progress in FY24	The project kicked off in July 2024 and opening up and rehabilitation activities have commenced on 75L at Mponeng and TauTona in order to open up this access way and allow travelling between the shafts.
Targets/plans for FY25	Continuous opening up is planned for the 2025 period. In 2025 the project is planned to: » Support and equip the Mponeng 75L tipping cross-cut » Start with the opening up and rehabilitation of the major FOG from TauTona 75L » Start with the support and equipping of the 66-68L decline on TauTona.

Mponeng LoM extension project

Objectives	**The Mponeng LoM extension CLR project was approved by the board for implementation in FY24. The project scope is to:** **» Mine the CLR below 120L through a trackless ramp to access 124L and 127L. Included in this is substantive development on 116L to enable ventilation** **» Mine the VCR east below 126L through a twin decline system to access 129L and 132L** **» Mine VCR west below 126L through a trackless ramp to access 129L, 132L and 135L.** **The trackless ramps and twin decline system, with the associated infrastructure must be developed, equipped and commissioned below infrastructure to enable the economic extraction of the three areas.**
Progress in FY24	Development for the CLR 120L extension has commenced. This includes development on 116L and 120L.
Targets/plans for FY25	The CLR below 120L was scheduled to start in July 2024. In 2025 the project is planned to: » Continue with development on 116L, 120L workshop, 119L tipping loop, and 124L trackless ramp » Start with trackless workshop equipping, and truck tipping arrangements on 119L » A number of raise bore ventilation holes must be completed. The VCR east below 126L is scheduled to start in April 2024. In 2025 the project is planned to start with development in the current declines for access to the planned tipping infrastructure and development from 126L.

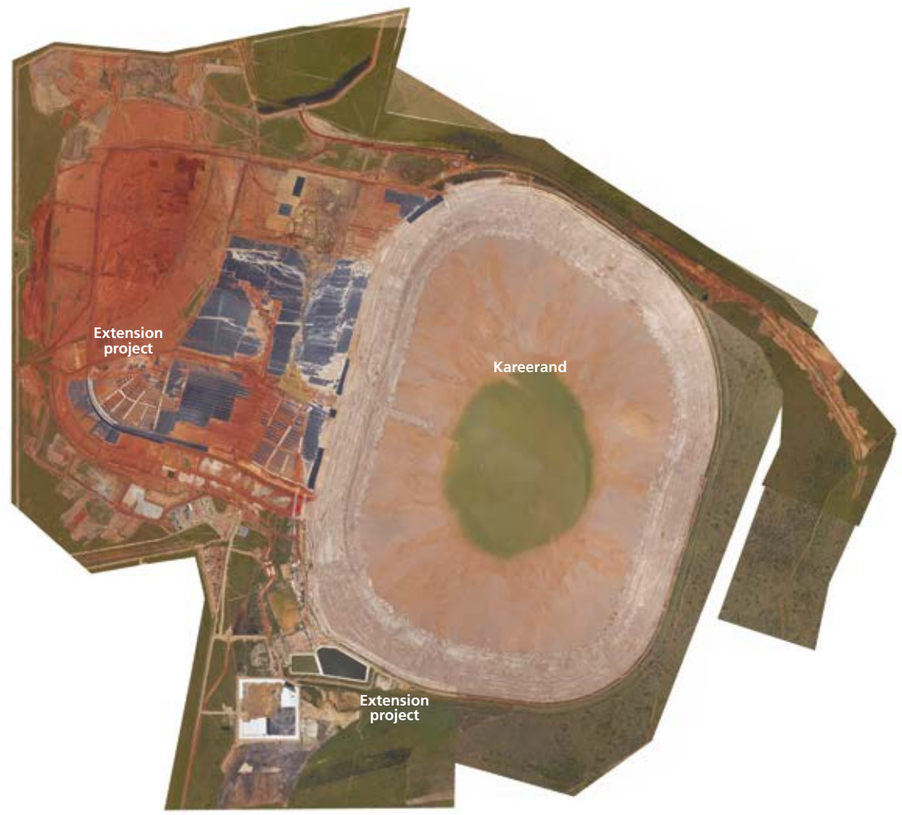
Moab Khotsong – Zaaiplaats project

Objectives	**The Zaaiplaats project was approved by the board for implementation in FY21. The project scope is to mine the Zaaiplaats orebody situated below the current Moab Khotsong middle mine area from 101 level to 114 level. Three new declines and associated infrastructure must be developed, equipped and commissioned below 101 level to allow the safe and economic mining of the Zaaiplaats orebody.**
Progress in FY24	The project developed 2 961m in FY24 – creating a platform to support the start of the trackless development of the decline. Progressed the commissioning of Trackless Mobile Machinery. Commissioning of Trackless Mobile Machinery for the decline development is CAS L9 compliant. Project construction work continued with 100L conveyor system installation, equipping of TMM workshop on 101L and Installation of the 11KV Electrical Reticulation.
Targets/plans for FY25	FY25 capital continuation was approved to progress the sinking of the three decline system, including the installation of the designed services to support future mining operations below 101L. In 2025 the project is planned to: » Complete Trackless Mobile Machine permanent workshops to service all TMM mining operations » Commission the first two Return Booster fans situated on 101L » Install the first two 11KV electrical power supply systems to 101L with associated substations » Improve the productivity of the TMM sinking rates based on improved availability and enhanced operator skills through the introduction of shift cycle mining operations.

South Africa – summary projects

MWS – Kareerand extension

Objectives	**Mine Waste Solutions (MWS) is a reclamation operation in the Stilfontein/Orkney area treating 2.2 million tonnes per month from historical tailings facilities through the MWS plant. The residue is deposited on the existing Kareerand Tailings Storage Facility by cyclone. Kareerand TSF has a 560ha footprint and was sized to receive the reprocessed tailings from the MWS sources. The inclusion of additional sources into the MWS business in 2012 required additional deposition facilities. The authorisation of the Kareerand extension project increases the current footprint by 340ha and allows the combined complex to be operated to a height of 100 metres.**
Progress in FY24	The construction of the basin progressed against the schedule to commission the phase 1 portion of the footprint by 2 September 2024. The basin is being prepared to receive tailings by this date. The peripheral infrastructure required to support the operation of the TSF is under construction. Parts of the infrastructure is commissioned, with the remainder of the infrastructure being brought into operation as required.
Targets/plans for FY25	The construction of the basin will continue against the schedule to commission the phase 2 portion of the footprint by 2 September 2025. Tailings deposition in the phase 1 basin will be directed to the planned areas of the footprint and will ramp up to a steady 30% of the incoming tailings stream. The peripheral infrastructure required to support the operation of the TSF will be brought into operation as required.



■ Mine Waste Solution (Kareerand)

Our focus on zero harm is an investment in our business and in our people.

Harmony's South African operations include nine deep-level mines, an open-pit mining operation and several surface retreatment facilities. Combined, these account for gold Mineral Resources of 90.5Moz and gold Mineral Reserves of 22.5Moz. These are equivalent to 66% and 56% respectively of total group Mineral Resources and Mineral Reserves.

SA OPERATIONS

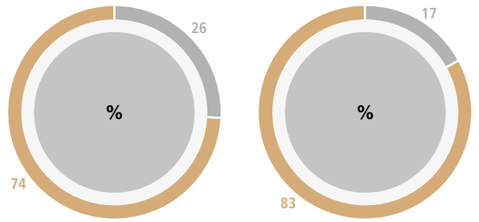
SOUTH AFRICA

WEST RAND

Mineral Resources (inclusive)
35.2Moz

Mineral Reserves
6.8Moz

Gold and Gold equivalents
Contribution to Harmony



Location of West Rand operations

Harmony's West Rand operations are located on the north and north-western rim of the Witwatersrand Basin.

The Doornkop shaft complex is south of Krugersdorp, 30km west of Johannesburg, in the province of Gauteng. The property lies between Sibanye-Stillwater's Cooke 1 shaft and Durban Roodepoort Deep.

Kusasalethu is on the West Wits Line, adjacent to the Savuka and Mponeng mines to the east and the dormant Deelkraal to the west. Kusasalethu is situated 14km south of Carletonville and 90km south-west of Johannesburg. Post-year end 2020 the acquisition from AngloGold Ashanti Limited of Mponeng, as well as infrastructure related to TauTona and Savuka, was completed.

Mponeng Mine was purchased by Harmony Gold in October 2020 as part of the transaction whereby the ownership of the remaining AngloGold Ashanti Ltd South African operations was transferred. Mponeng Mine is 100% owned by Harmony Gold and forms part of the West Rand operations.

Regional geology

Description of the geological characteristics of the West Rand, refer to the Geology section under each operation.

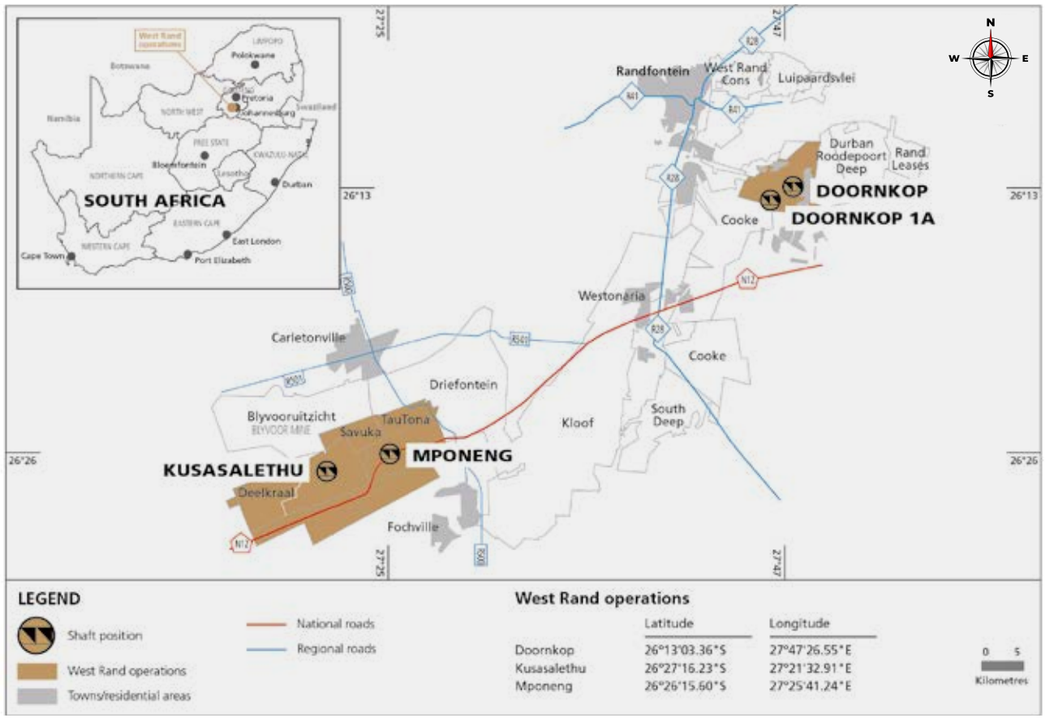
MINERAL RESOURCES AND MINERAL RESERVES BY OPERATION

West Rand	67 – 93
Doornkop	**70**
Kusasalethu	**76**
Mponeng	**82**

KUSASALETHU/MPONENG STRATIGRAPHIC COLUMN

SACS no 42 (2006)			Formation	Member	Mponeng Mponeng classification (2010)	LOG
Witwatersrand Supergroup	Ventersdorp Supergroup	Klipriviersberg group	Alberton Porphyry		Alberton lava	
			Ventersdorp			
					VCR	
	Central Rand Group	Turffontein subgroup	Elsburg		Elsburg Quartzite Denny's Quartzite	
			Kimberley	Libanon Reef	LIBA5, LIBA4 LIBA3, LIBA2 LIBARZ Libanon Reef	
		Johannesburg subgroup	Booysens	Doornkop member	Doornkop Quartzite Booysens Shale	
			Krugersdorp	Bird Reef	Krugersdorp Quartzite Bird Reef	
			Luipaardsvlei	Livingstone Reef	Luipaardsvlei Quartzite Livingstone Reef	
			Randfontein	Johnstone Reefs Middlevlei Reef	Johnstone Reef Randfontein Quartzite Middlevlei Reef	
			Main	Carbon Leader	Main Quartzite Green Bar Carbon Leader	
			Blyvooruitzicht		Blyvooruitzicht Quartzite North Leader Reef	
	West Rand Group	Jeppestown Subgroup	Maraisburg		Maraisburg Quartzite	
			Roodepoort		Transition Zone Roodepoort Shales	
			Crown		Crown Lavas	
			Babrosco	Veldschoen Reef	Florida Quartzites Veldschoen Reef	

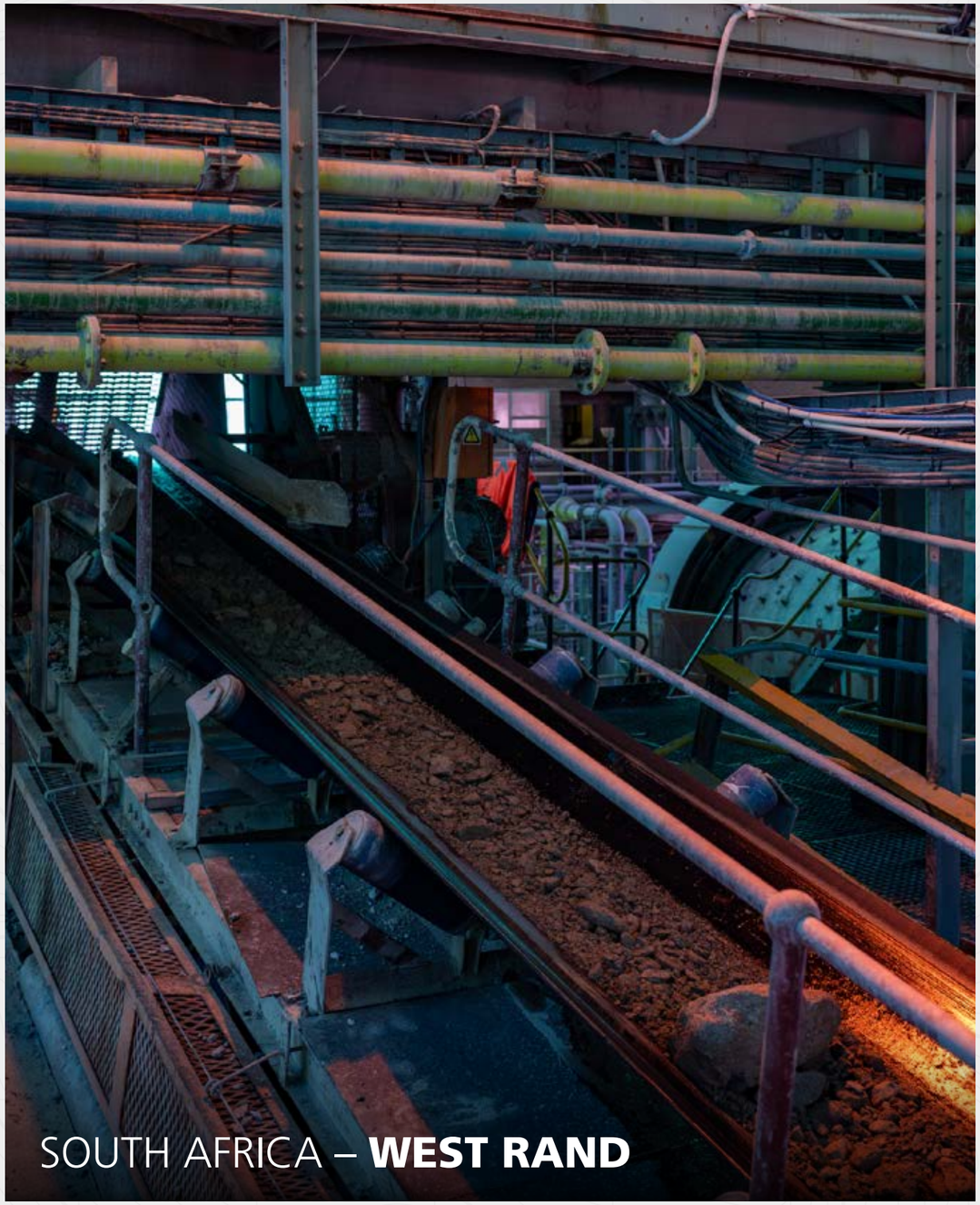
West Rand Operations – Locality



WEST RAND STRATIGRAPHIC COLUMN (DOORNKOP)

Group	Sub-group	Formation	Informal unit	Member
Klipriviers-berg		Westonaria	Klipriviersberg	
		Ventersdorp	VCR	VCR
Central Rand Group	Turffontein	Elsburg	Elsburg massives and individuals	Modderfontein Waterpan
		Westonaria	Quartzites and conglomerates	Gemsbokfontein Panvlakte Gemspost Vlakfontein
		Robinson	Shale	Kimberley Reefs
	Johannesburg	Booysens Shale	Upper transitional Shale Lower transitional	Kimberley Shale
		Krugersdorp	Bird Amygdaloid Bird Reefs White Reef	Bird
			Luipaardsvlei Quartzite	Luipaardsvlei
		Livingstone Conglomerate	Livingstone Reef	Livingstone Reef
		Randfontein Quartzite		
		Johnstone Conglomerate	Johnstone Reef	Johnstone Reef
		Langlaagte Quartzite		
		Main Conglomerate	Main Reef, Leader Reef, South Reef	Langlaagte
West Rand Group	Jeppestown	Roodepoort		

DOORNKOP



SOUTH AFRICA – **WEST RAND**

Mineral Resources (inclusive)
7.5Moz

Mineral Reserves
1.9Moz

Detailed Mineral Resource and Mineral Reserve estimates are presented in this section.

History
Exploration in the area started in the early 1930s with the sinking of the main and ventilation shafts, by JCI, from 1983. By 1989, steady production had been achieved from mining the Kimberley Reef, which is shallower than the South Reef that is currently being mined. The South Reef shaft extension was approved in October 1991 and the reef was intersected in October 1993. Stoping of the South Reef began in 1995. Shaft deepening continued with stoppages between November 1996 and May 1999. Harmony acquired Doornkop in January 2000. The South Reef project was relaunched in January 2003, resulting in the deepening of the mine to 1 980m below collar.

Nature of the operation
Doornkop is a single-shaft operation currently exploiting the South Reef to some 2 000m below surface. The narrow South Reef is exploited by means of conventional stoping. The ore mined at Doornkop is processed at the mine's carbon-in-pulp plant, which is directly beside the shaft. Mining of the Kimberley Reef was suspended during FY14 to focus on the build-up production from the South Reef and to prevent losses as a result of the lower gold price. Mining of the Kimberley Reef may resume should economic circumstances improve sufficiently.

Geology
The Doornkop shaft lease area lies to the south-east of the major north-easterly striking Roodepoort fault, which dips to the south and constitutes the southern edge of the Witpoortjie horst block or gap. This horst block comprises the stratigraphically older sediments of the West Rand Group, with the overlying Central Rand Group sediments having been removed by erosion. Doornkop is bounded by the Roodepoort fault and a number of other faults, including the Saxon fault, which constitute conspicuous structural breaks. Another major fault, the Doornkop fault, which trends in an east-west direction, occurs toward the southern portion of the lease area. This fault dips to the south and has an up-throw to the north.

As nearly the entire upper Witwatersrand section lies within the lease area, all major zones are present. However, given the distance of the area from the primary source of gold, the number of economic bands and their payability is limited. Eight of the well-known reefs are present in the area but only the South Reef and potentially the Kimberley Reef are considered viable at this stage.

The South Reef is between 20m and 95m above the Main Reef horizon. The hanging wall of the South Reef consists of siliceous quartzite with non-persistent bands of "blue shot" grit and thin argillite partings. The South Reef footwall is a light-coloured and fairly siliceous quartzite. Secondary conglomerate bands and stringers in the hanging wall and footwall of the South Reef may contain sporadic gold values. The general strike of the reef is east-west with a flat dip from five to 15 degrees.

In the coming financial year, exploration drilling is set to continue. Focus will be on targeting potentially high grade areas with limited geological information in order to increase the geological confidence and profitable ounces.

Mineral rights/legal aspects and tenure
The current mining right encompasses an area of 2 941.021ha and was successfully converted, executed and registered as a new order mining right at the Mineral and Petroleum Resources Titles Office (MPRTO) on 25 February 2009 under MPT18/2009. The Department of Mineral Resources and Energy reference GP30/5/1/2/2/09MR is valid from 7 October 2008 to 6 October 2038.

Mining methods and mine planning
The mining method used is longwall mining with stability pillars on major geological structures. Geotechnical dip pillars have been introduced between raiseline to minimise seismicity. The flat dip, which results in the development of long cross-cuts, presents challenges in terms of ore handling, especially for the bottom part of the raises, ventilation and in the long lead times between the start of cross-cuts development to completion of stoping per raise line.

Mineral processing
The carbon-in-pulp plant has a monthly milling capacity of 225 000 tonnes. Before Sibanye-Stillwater's Cooke shafts were placed on care and maintenance, this included toll treatment of approximately 120 000 tonnes a month of ore from these shafts.

Infrastructure
Doornkop's surface and underground infrastructure, including its power and water supplies, can cope with current planned peak production level requirements. The 192, 197, 202 and 207 levels are track-bound, while current development on 212 levels is trackless. Plans are in place to eventually make this level track-bound. Work continues on certain essential underground infrastructure on the South Reef, including the permanent tipping arrangements required to bring 212 level to full production. Ore is hoisted through the main shaft. Currently, the mine uses Sibanye-Stillwater's Cooke 1 shaft, which is 7km away, as a second escape way.

Mineral Resource estimation
The estimation method used for local measured data on the shaft is ordinary kriging. For local Indicated and Inferred data, it is simple macro-kriging. Estimates are generally kriged into 30m x 30m blocks for the Measured Resources from the point support data. Indicated Resources are kriged into 60m x 60m blocks, using the associated regularised variograms together with a macro-kriging decluster. Similarly, Inferred Resources are estimated using the associated regularised variograms and kriging into 120m x 120m blocks. Any unkriged areas in the Inferred regions are then covered by global mean estimates. Geozones are based on grade distribution and structure to ensure correct grade estimates for the different areas.

Environmental impact
In line with the Mineral and Petroleum Resources Development Act (MPRDA), Doornkop has the environmental management programme (Ref: GP 30/5/1/2/2/ (09) EM), approved by the Department of Minerals Resources and Energy (DMRE) on 7 June 2010.

Every second year environmental compliance audits and inspections are conducted by environmental inspectors from DMRE and Department of Water and Sanitation (DWS) to verify the status of compliance against applicable environmental legislations such as the National Water Act, 1998 (Act 36 of 1998) National Environmental Management Act, 107 of 1998 and the National Nuclear Regulator Act 47 of 1999.

Doornkop's online environmental legal register, available at **www.dreyer-legal.co.za**, is used to monitor compliance and to obtain relevant legal updates applicable to the operation to ensure compliance.

Monitoring of key environmental indicators, such as air, noise, water, biodiversity is conducted to assess and manage the impacts of both mining and processing of gold bearing material on the environment.

Annually, Doornkop operation is certified and audited in terms of ISO 14001:2015 environmental management system standard and the International Cyanide Management Institute in terms of the cyanide management code. As required by both ISO 14 001 and the cyanide management code, every effort is made to either eliminate or minimise the impacts of mining activities on the environment and surrounding communities.

Material risk

Material risk that may impact Doornkop's Mineral Resource and Mineral Reserve statement:

Significant risk	Remedial action
» Unexpected geological features.	» Exploration drilling planned into all areas with low geological confidence included in the life-of-mine.

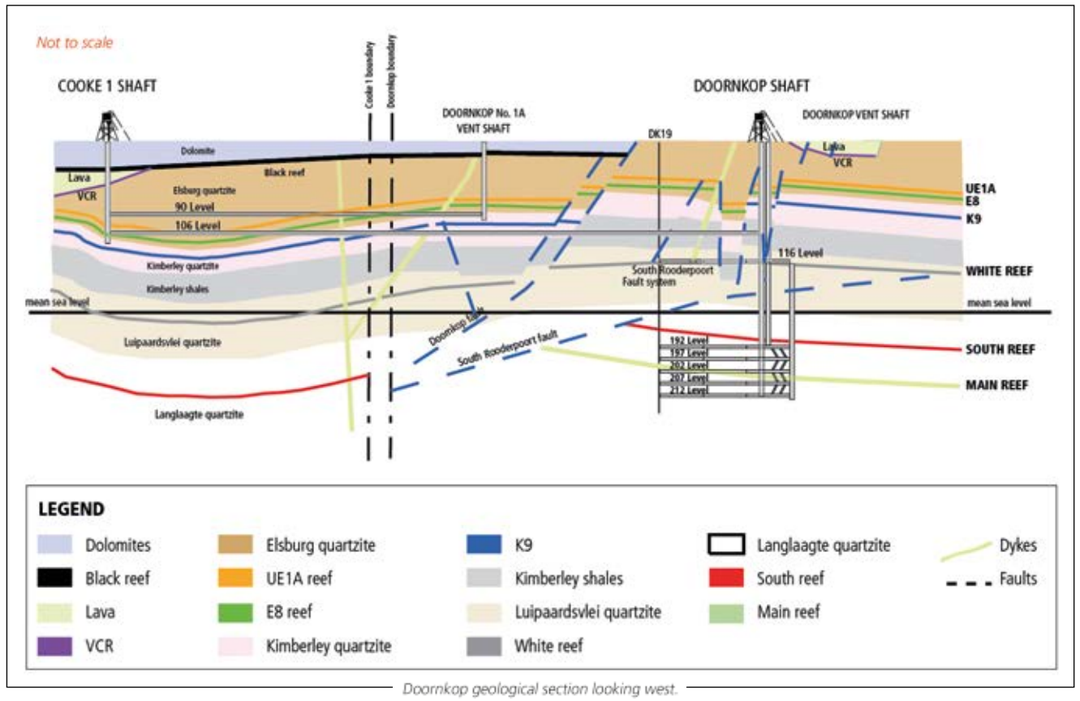
Competent person

Ore Reserve manager

Hilton Chirambadare

BSc (Geology, Mathematics), BSc Hons (Geology), GDE, MENG, MBA, SACNASP

21 years' experience in gold mining, 17 years on Witwatersrand gold deposits (underground) and three years on the Kraaipan Greenstone Belt (surface).



Doornkop geological section looking west.

Doornkop

Gold – Mineral Resource estimates at 30 June 2024 (inclusive)

	Measured				Indicated				Inferred				Total			
	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)
South Reef	4.9	6.70	33	1 061	6.9	7.19	50	1 592	2.0	8.53	17	550	13.8	7.21	100	3 204
Main Reef	0.1	5.38	0.4	14	0.05	5.51	0.3	8	0.02	5.32	0.1	3	0.1	5.41	1	25
Kimberley Reef	18.1	3.36	61	1 957	12.1	3.15	38	1 226	10.1	3.28	33	1 066	40.3	3.28	132	4 249
Total	**23.1**	**4.08**	**94**	**3 033**	**19.0**	**4.62**	**88**	**2 826**	**12.1**	**4.15**	**50**	**1 619**	**54.3**	**4.28**	**233**	**7 478**

Modifying factors

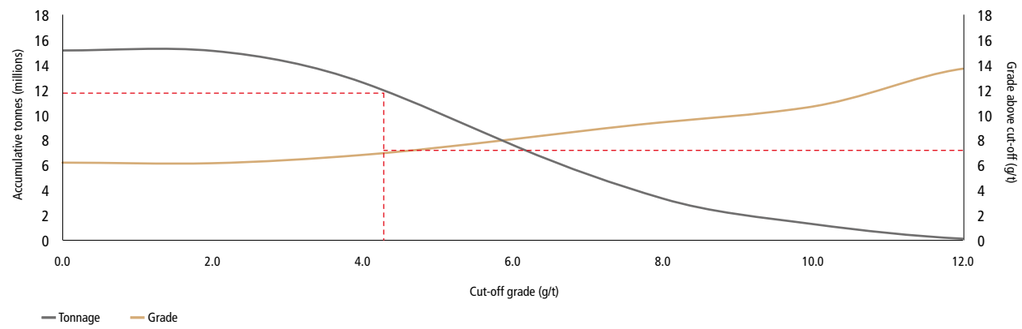
South Reef	MCF (%)	SW (cm)	MW (cm)	PRF (%)	Cut-off (cmg/t)
2023	81	124	153	97	739
2024	81	124	157	97	500

Gold – Mineral Reserve estimates at 30 June 2024

	Proved				Probable				Total			
	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)
South Reef	4.8	4.01	19	621	8.7	4.51	39	1 266	13.6	4.33	59	1 887

Doornkop Mine: South Reef

Measured and Indicated Mineral Resource grade-tonnage curve



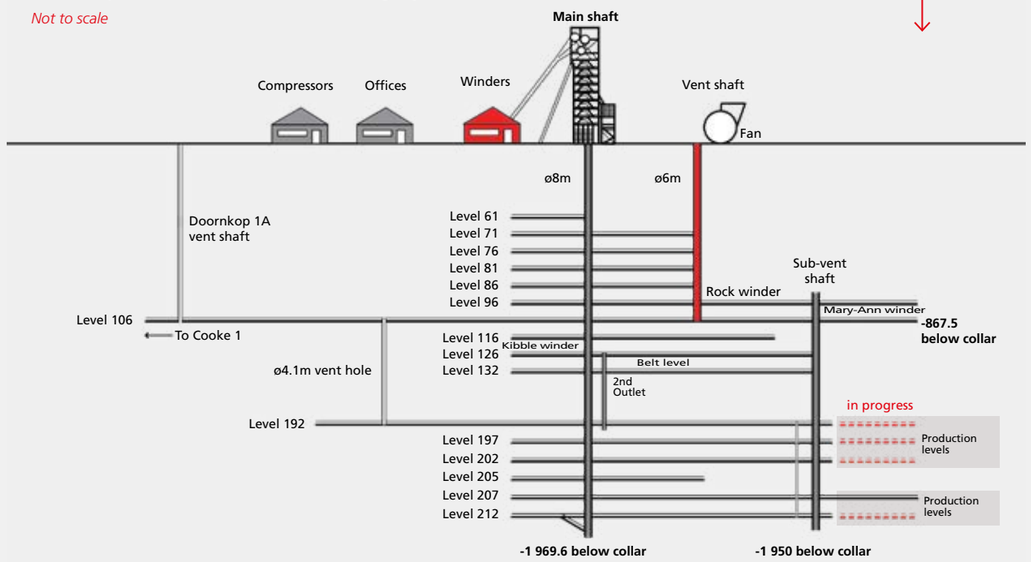
Operational performance

Doornkop: Key operating statistics

	Unit	FY24	FY23	FY22	FY21	FY20
Operation						
Volumes milled	000t (metric)	**815**	898	874	851	681
	000t (imperial)	**900**	990	963	938	750
Gold produced	kg	**3 470**	4 213	3 444	3 670	2 994
	oz	**111 562**	135 451	110 726	117 993	96 259
Grade	g/t	**4.26**	4.69	3.94	4.31	4.40
	oz/t	**0.124**	0.137	0.115	0.126	0.128
Development						
Total metres (excluding capital metres)		**8 836**	7 455	6 500	6 271	6 042
Reef metres		**1 798**	1 435	1 449	1 713	1 474
Capital metres		**2 894**	2 737	2 708	1 149	315
Financial						
Average gold price received	R/kg	**1 210 252**	1 035 665	896 779	853 957	747 282
	US$/oz	**2 013**	1 813	1 834	1 725	1 484
Capital expenditure	Rm	**687**	716	491	425	281
	US$m	**37**	40	32	28	18
Cash operating cost	R/kg	**880 229**	708 908	729 965	595 550	567 632
	US$/oz	**1 464**	1 241	1 493	1 203	1 127
All-in sustaining cost	R/kg	**1 031 845**	831 553	823 966	680 524	649 041
	US$/oz	**1 716**	1 456	1 685	1 374	1 289

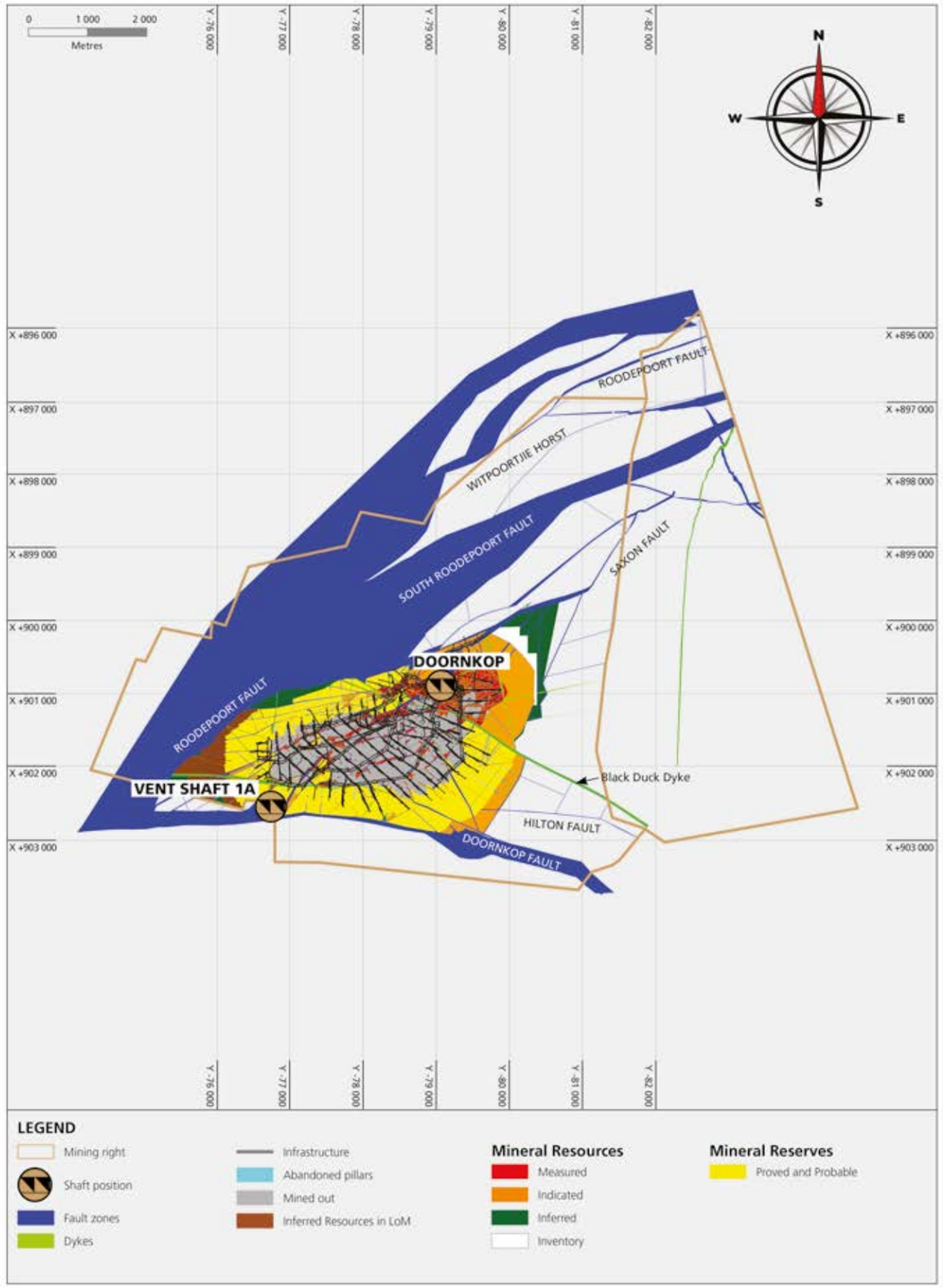
Doornkop: Schematic of shaft and mining layout

Not to scale



Doornkop Mine

South Reef: Mineral Resources and Mineral Reserves – June 2024



KUSASALETHU

SOUTH AFRICA – **WEST RAND**

Mineral Resources (inclusive)
3.1Moz

Mineral Reserves
0.4Moz

Detailed Mineral Resource and Mineral Reserve estimates are presented in this section.

History
Harmony acquired the Elandsrand and Deelkraal mines from the then AngloGold Ashanti Ltd in 2001. Shaft sinking of twin vertical shafts at Elandsrand began in January 1975 and was completed in December 1978. First gold was produced in 1979. In February 2010, Elandsrand changed its name to Kusasalethu, which means "our future" in Zulu.

Nature of the operation
The 10m-diameter rock/ventilation shaft was initially sunk to 2 195m and the man/material shaft to 2 127m. By June 1984, a 10m-diameter sub-vertical rock/service shaft had been completed to a depth of 3 048m and a 7m-diameter sub-vertical ventilation shaft to a depth of 3 048m. Both shafts were deepened to a final depth below surface of 3 318m and 3 388m respectively as part of the deepening project to extract the higher-grade pay shoot towards the west of the mine. In December 2014, a decision was taken to suspend operations in the old portion of Kusasalethu and to restructure the mine. Subsequently, mining above 98 level ceased.

Kusasalethu employs sequential grid mining, which is in essence an upside-down christmas tree configuration. This method is used to direct seismic stresses away from current working areas into virgin rock areas.

Given the decrease in the Mineral Reserve at Kusasalethu in recent years, a result of normal depletion, a revised, shortened life-of-mine plan was implemented in FY15. This plan aims to optimise the mine's cash flow at a higher grade and create a stronger operating margin while providing the flexibility necessary to access the high-grade payshoot of the Ventersdorp Contact Reef below infrastructure should economic circumstances allow. Due to enhancements in the geological model during FY24, the stated life-of-mine was increased by 12 months when compared to the previous years' report.

Geology
Kusasalethu is situated in the West Wits Basin and mines the Ventersdorp contact reef as its main orebody.

The Ventersdorp Contact Reef facies model at Kusasalethu is based on the paleotopographic or slope and terrace model. Nine facies types have been recognised at Kusasalethu – eight sedimentological and one structural. Four of the facies are thick, high-grade, geologically distinct reef terraces separated from one another by a thin low-grade slope reef.

The sand-filled channel is a thick low-grade facies. The Sandy Terrace Complex is found on the same elevation as the Terrace Complex but is essentially a pebbly quartzite with no grade. The Mondeor conglomerates have been identified sub-cropping against the Ventersdorp Contact Reef in stopes in certain areas and have been delineated as separate facies in these areas.

The Elsburg conglomerates, found on the western side of Kusasalethu, form the footwall to the Ventersdorp Contact Reef and are part of the Turffontein Supergroup. It is a predominantly polymictic matrix-supported conglomerate of well-packed and moderately sorted, sub-rounded smoky (80%), black-grey (15%) quartz pebbles, chert (3%) and some elongated shale pebbles (2%). The matrix is pale yellow to light green and medium-grained and pyritic in places.

The Ventersdorp Contact Reef is overlain by the Ventersdorp Lava belonging to the Ventersdorp Supergroup. The reef is light to mid-grey in colour and fine crystalline, seldom containing phenocrysts. In places it is amygdaloidal with quartz and pyrite mineralisation. Flow structures are also present at the base of the lava. It breaks into very angular fragments due to weak jointing and flow banding – it would appear to be andesitic in composition.

Geological discontinuities observed at Kusasalethu include faults, dykes and sills. Sills may occur in the footwall in areas adjacent to certain dykes. Flat bedding plane faulting also occurs and results in reef duplication, elimination and brecciation. Faults and dykes are classified according to their relative geologic ages as follows: Pre-Ventersdorp Contact Reef, Ventersdorp, Platberg, Bushveld and Pilanesberg structures.

Kusasalethu mines in blocky ground created by structures in the form of dykes and faults. The dykes are fairly basic in composition and they tend to strike north-north-east and south-south-west with a general dip of 75 degrees. The faults, however, have a strike mostly of east-south-east and west-north-west with a few exceptions. Generally, these are normal faults with the accompanying loss of ground with varying throws – from mere centimetres to a massive 60m (the Kittims and De Twem faults).

Mineral rights/legal aspects and tenure
The current mining right encompasses a total area of 7 000ha. Kusasalethu's mining right has been successfully converted, executed and registered as a new order mining right at the Mineral and Petroleum Resources Titles Office (MPRTO). GP30/5/1/2/2/07MR is valid from 18 December 2007 to 17 December 2037. In terms of section 102 of the Mineral and Petroleum Resources Development Act (MPRDA), the farms Buffelsdoorn and Deelkraal have been successfully included into Kusasalethu's mining right, increasing the extent of the original mining right from 51km to 70km. These farms are contiguous to the south of the principal mining right.

Mining methods and mine planning
Mining is by means of sequential grid with regional dip stabilising pillars, backfill and preconditioning to offset the effects of mining at this depth. Mining is conducted over five levels from 98 level to 113 level. Large geological structures are stabilised by means of clamping pillars. Mine planning is done in two major phases, a life-of-mine plan is done annually and six-month mine plans are reviewed monthly to ensure ample time to react to changes in the dynamic mining environment. All planning is done in the digital environment by means of computer-assisted draughting.

Mineral processing
Ore mined is processed at the Mponeng gold plant, which is 17km from the mine. Mponeng processing facility have been in operation since 1986, as such the processing method is considered well established for the style of mineralisation processed. The plant therefore makes use of historical trends and data as a basis for their recoveries of VCR and CLR, however, when projects are planned for optimisation, appropriate test work will be performed.

The ore processed at the Mponeng gold plant is a blend of ore received from the Mponeng mine and the Kusasalethu mine. The latest test work performed was in 2019 and analysed these blends to determine optimal conditions for processing. Updated test work was conducted during 2024, with final results still pending.

The ore is initially ground down by means of semi-autogenous milling, after which a conventional gold leach process incorporating liquid oxygen injection is applied. The gold is then recovered by means of carbon-in-pulp (CIP) technology together with electrowinning and smelting processes. Smelting is done on-site and the unrefined gold is dispatched to Rand Refinery.

Infrastructure
Ore mined is transported by rail-bound equipment to the shaft's main orepass system where it gravity feeds to 115 level. Ore is then hoisted via the sub-vertical shaft to above 73 level and then to surface. Given the depth of mining, major engineering infrastructure required includes refrigeration and cooling installations on surface and underground.

Mineral Resource estimation

Data for valuation is obtained by means of chip sampling on the reef horizon in a 6m x 6m grid. Supplemental information is obtained from underground exploration drilling and existing surface exploration boreholes. All sampling done is subject to quality assurance/quality control, as prescribed by SAMREC, to ensure data quality and accuracy. Based on similarities in geology, the mining lease is divided into a total of nine geozones. Based on confidence levels for geostatistical data, valuation is by means of a computer-generated block model as follows:

- Measured blocks (30m x 30m grid)
- Indicated blocks (60m x 60m grid)
- Inferred blocks (120m x 120m grid).

The block model is then digitally transferred to the digital environment for valuation.

Environmental impact

Kusasalethu's environmental aspects and impacts are managed according to the Environmental Management Programme (EMPr), as approved by the Department of Mineral Resources and Energy (DMRE), in terms of the MPRDA. All environmental aspects and impacts emanating from mining activities are documented in a dedicated report and in the environmental aspect register, as required by MPRDA and ISO 14001:2015.

The approved EMPr was amended in 2014, in terms of section 102 of the MPRDA. This amendment allowed for the inclusion of the dimensions of the waste rock dumps, as well as the new height details and footprint of the tailings storage facility, reclamation of the rock dumps and the expansion of the existing underground workings for numerous portions of the farm Deelkraal 142 IQ. The DMRE approved the amendments in 2018.

Annual performance monitoring audits are conducted by various departments, including the DMRE and the Department of Water and Sanitation to verify compliance with the following legislation:

- Mine Health and Safety Act
- National Water Act
- National Environmental Management Act
- MPRDA.

All environmental impacts arising from mining activities are managed in terms of the requirements of the approved EMPr, the water use licence, the waste permit and in line with ISO 14001:2015. As required by relevant regulations, environmental audits or performance assessments to verify compliance with the approved EMPr are conducted every second year by independent environmental consultants and a report is submitted to the DMRE. External and internal environmental legal compliance audits are also conducted. An off-site legal environmental register is used to monitor compliance, and to obtain applicable and relevant environmental legal updates for the operation.

In line with Harmony's biodiversity and rehabilitation position statement, Kusasalethu's management has successfully implemented an alien invader plant eradication programme since 2016. To date, this programme, which continues to run, has cleared invasive plant species from more than 3 500ha of the 5 113ha of surface mining right area.

Biomonitoring surveys are also conducted on surface water resources, close to the operation, to safeguard the scarce resource and to ensure compliance with the conditions of the water use licence issued in terms of the National Water Act to:

- Determine the condition of biological communities in the rivers and streams and to determine the chemical water quality in streams during the wet and dry seasons
- Provide baseline reference conditions for future studies in order to assist Kusasalethu's management in identifying environmental liabilities that might result from current mining activities regarding the potential contamination of surface streams.

Full chemical analyses include:

- Monthly sampling of surface streams
- Quarterly analysis of borehole water to monitor groundwater quality.

Kusasalethu is ISO 14001:2015 certified and complies with the requirements of ISO 14001:2015 for which it is audited annually by an independent certification body. The operation was initially certified in 2011, and most recently in 2018, under the new ISO 14001 (2015). In line with this accreditation, every effort is made to eliminate or minimise the negative effects of mining activities on the environment and adjacent communities.

The operation has also been accredited in terms of the Cyanide Code by the International Cyanide Management Institute. Independent third-party audits are conducted every three years to check compliance with the Cyanide Code.

Material risks

Material risks that may impact Kusasalethu's Mineral Resource and Mineral Reserve statement:

Significant risks	Remedial actions
» Seismicity	» Control of mining sequence and appropriate support systems
» Water build-up at Deelkraal	» Dewatering of the Deelkraal area through 98 level
» Backfill volumes	» Waste rock dump on surface used to supplement backfill volumes
» Major engineering infrastructure failure.	» Extended production breaks scheduled over the past three years to allow for infrastructure upgrades.

Competent person

Joseph Modise

MSCC 2002 Certificate No: 1866 & NHD – Mineral Resource Management from Witwatersrand Technikon

37 years' experience in the Witwatersrand.

Sample of Ventersdorp Contact Reef (VCR) mined at our Kusasalethu Mine

■ VCR Reef.

The sample description is as follows: Poorly sorted and moderately packed clast to matrix supported conglomerate of predominantly medium-sized quarts pebbles (oligomectic: with an 85:15 ratio: milky Quartz versus smokey Quartz ratio) – set within a medium-grained arenetic to pyritic matrix.

Well mineralised (20% – 25%) disseminated pyrite to heavily bottom-loaded pyrrhotite basal contact (with an estimated {Au value} of between 1 500 – 2 000cm.g/t). At its base is a dual band – flow banded mylonite with micro xenoliths. The twin mylonite bands on the bottom contact is indicative of two distinct phases of deformation, likely associated with the world's largest known meteor crater, known as the Vredefort dome.

Kusasalethu

Gold – Mineral Resource estimates at 30 June 2024 (inclusive)

	Measured				Indicated				Inferred				Total			
	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)
Ventersdorp Contact Reef	1.6	11.99	19	607	5.7	9.99	57	1 843	2.4	8.81	21	678	9.7	10.02	97	3 128

Modifying factors

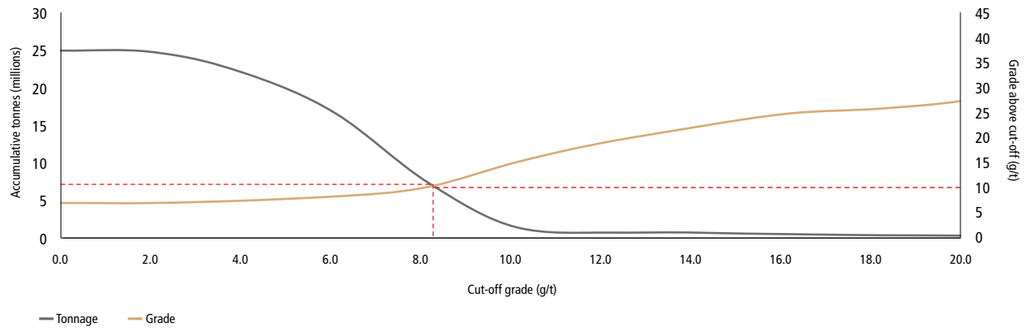
Ventersdorp Contact Reef	MCF (%)	SW (cm)	MW (cm)	PRF (%)	Cut-off (cmg/t)
2023	86	132	156	96	1 100
2024	85	133	159	96	1 096

Gold – Mineral Reserve estimates at 30 June 2024

	Proved				Probable				Total			
	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)
Ventersdorp Contact Reef	2.0	6.33	13	407	0.001	3.82	0.004	0.1	2.0	6.33	13	407

Kusasalethu Mine: VCR Reef

Measured and Indicated Mineral Resource grade-tonnage curve



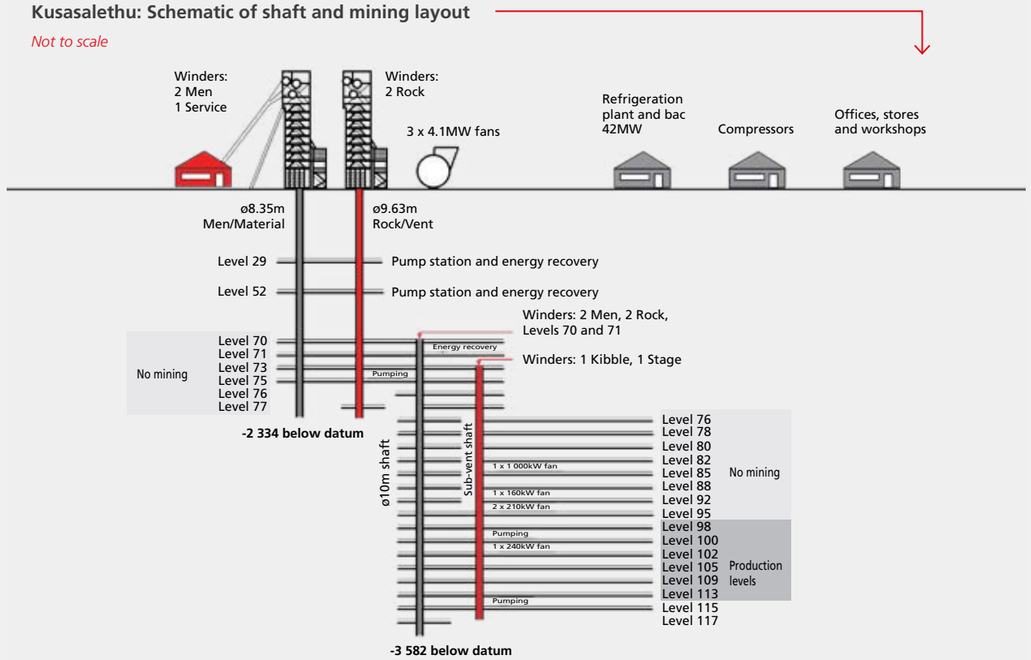
Operational performance

Kusasalethu: Key operating statistics

	Unit	FY24	FY23	FY22	FY21	FY20
Operation						
Volumes milled	000t (metric)	**584**	567	607	708	615
	000t (imperial)	**644**	626	669	780	678
Gold produced	kg	**3 842**	3 460	4 567	3 999	3 015
	oz	**123 523**	111 242	146 833	128 570	96 934
Grade	g/t	**6.58**	6.10	7.52	5.65	4.90
	oz/t	**0.192**	0.178	0.219	0.165	0.143
Development						
Total metres (excluding capital metres)		**2 724**	2 822	2 817	2 202	3 039
Reef metres		**472**	992	1 025	282	1 019
Capital metres		**—**	—	—	—	—
Financial						
Average gold price received	R/kg	**1 222 101**	1 040 274	902 634	854 201	743 153
	US$/oz	**2 033**	1 821	1 846	1 725	1 476
Capital expenditure	Rm	**226**	253	210	205	188
	US$m	**12**	14	14	13	12
Cash operating cost	R/kg	**965 284**	956 938	678 403	742 452	849 782
	US$/oz	**1 606**	1 675	1 387	1 500	1 687
All-in sustaining cost	R/kg	**1 058 639**	1 068 851	739 681	814 048	923 054
	US$/oz	**1 761**	1 871	1 513	1 644	1 833

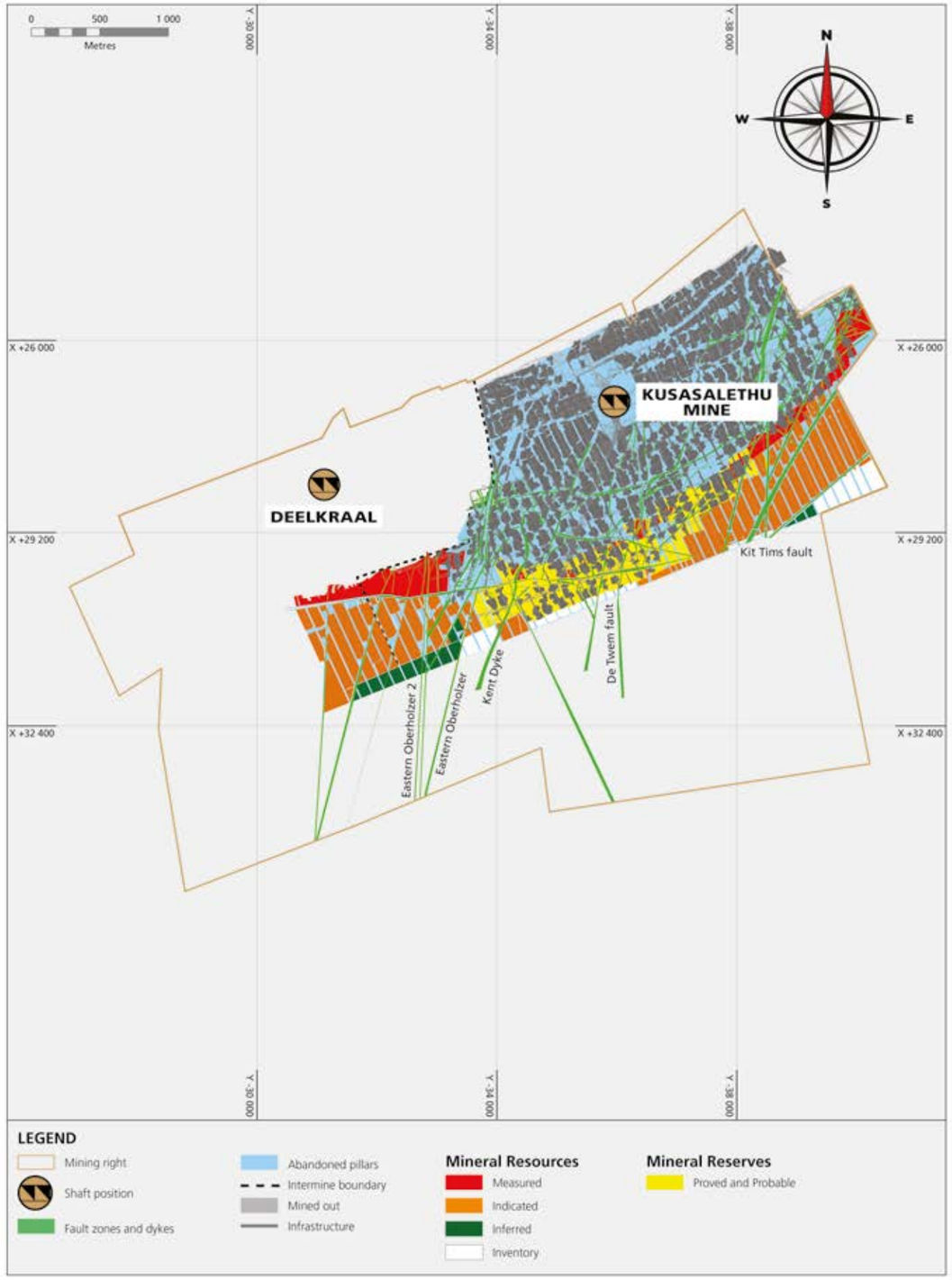
Kusasalethu: Schematic of shaft and mining layout

Not to scale

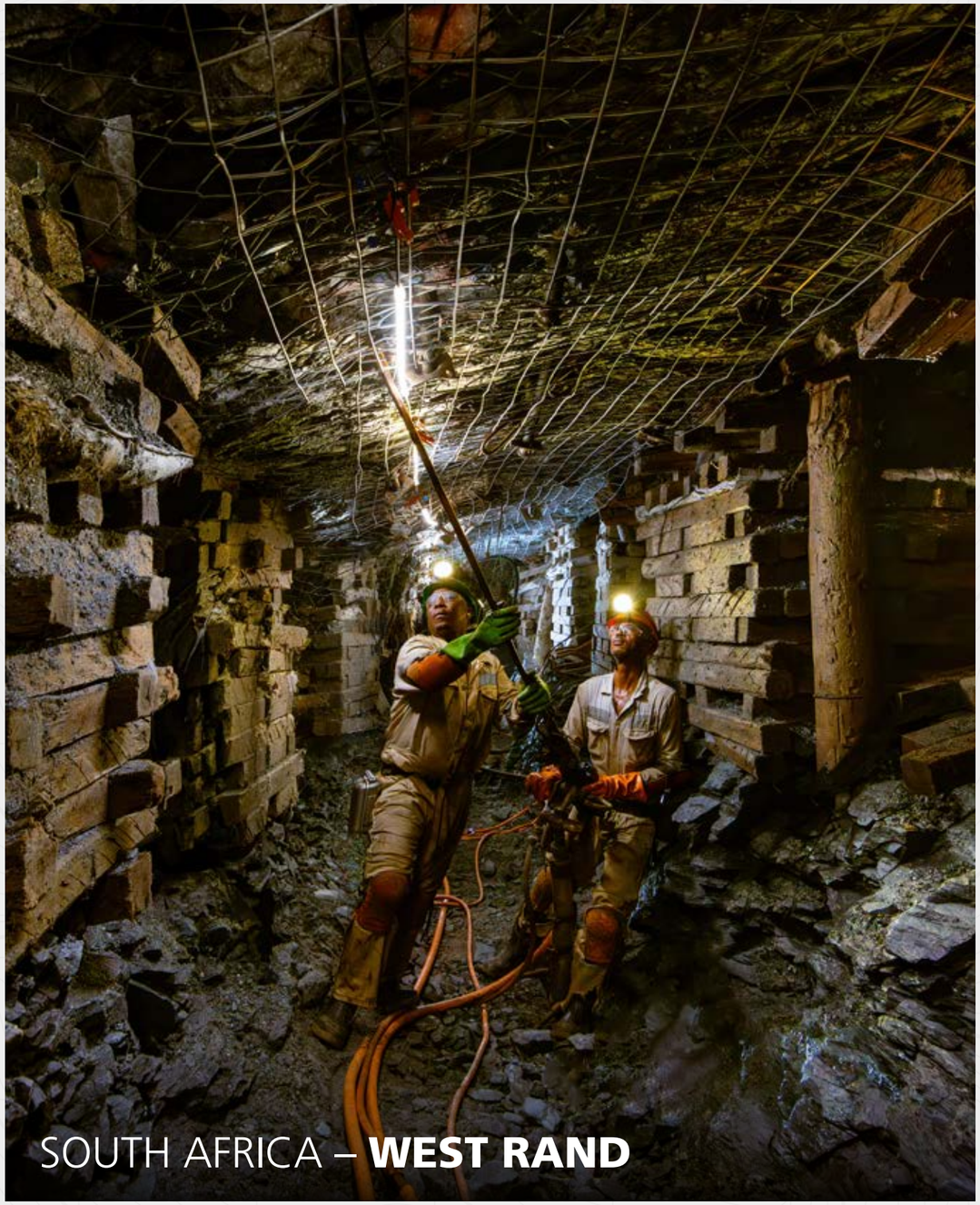


Kusasalethu Mine

Ventersdorp Contact Reef: Mineral Resources and Mineral Reserves – June 2024



MPONENG



SOUTH AFRICA – **WEST RAND**

Mineral Resources (inclusive)
24.6Moz

Mineral Reserves
4.5Moz

Detailed Mineral Resource and Mineral Reserve estimates are presented in this section.

History

Mponeng Mine is located on a site that has been operational for 38 years.

Mponeng was previously known as the Western Deep Levels South shaft, or No 1 shaft. The original twin shaft sinking from surface commenced in 1981 and was commissioned along with the gold plant complex in 1986 when mining began. Production started through the use of two hoisting shafts, a sub-shaft and two service shafts. The name changed to Mponeng Mine in 1999.

In 2017, Savuka and TauTona mines commenced orderly closure and the remaining TauTona Mineral Resources and Mineral Reserves are published as part of Mponeng Mine.

Western Deep Levels commenced mining in 1957 as part of the Anglo American operations. Mponeng, previously known as Western Deep Levels 1 shaft or South Mine, commenced in February 1980 and the first ore was hoisted in June 1986. The initial scope of the operation was to set up the shaft infrastructure consisting of a main shaft and a service shaft that was complemented with horizontal development from TauTona Mine and Savuka Mine on 75 level and 81 level to establish the mining in the main shaft area.

The sub-shaft complex was established and commissioned to 109 level in 1993. The deepening project ensured access down to 120/123 level, by commissioning the shaft in 2001 and executing the Ore Reserve development in the period 2001 to 2004 to establish the mining area from 109 level to 120 level. The SSV shaft and the SS2 shaft were sunk and equipped in the period 2004 to 2009. In 2007, the Ventersdorp Contact Reef (VCR) B120 project was approved and is known today as B120 Phase 1. Phase 1 is currently being executed to accesses the VCR orebody through four parallel declines at 7.5 degrees down to 126 level which, at the time, was the limit of the Mponeng lease area. Mponeng Mine has been mining the VCR orebody extensively with co-extraction of the Carbon Leader Reef (CLR) ore that commenced during 2020 on the old TauTona lease area. A study to further extend the LoM was concluded early 2024 and final approval for this was done during February 2024. This will allow the mine to extend the previous LoM with 13 years ensuring at least a 20 year LoM.

Nature of the operation

Mponeng Mine is a deep-level gold mine operating between 3 160m and 3 740m below mine datum (BMD) and is currently the deepest mine in the world with development at 3 841m BMD. Future mining is planned to deepen the shaft bottom to 4 227m BMD. The orebody is part of the Witwatersrand Basin and the majority of production was always from VCR with limited CLR mining commencing during 2020. Approval to extend the current LoM was done during February 2024. The extension will allow the establishment of new levels for the VCR and CLR reefs.

Geology

The VCR is the main reef horizon mined at Mponeng Mine.

The VCR forms the base of the Ventersdorp Supergroup, which caps the Witwatersrand Supergroup through an angular unconformity. The overlying Ventersdorp Lavas halted the deposition of the VCR, preserving it in its current state. The CLR, previously mined at TauTona and Savuka mines, is found within the Witwatersrand Supergroup. The CLR lies 900m beneath the VCR on Mponeng. The VCR is preserved across the Mponeng lease area and dips at approximately 22 degrees in a south-south-east direction.

The VCR was deposited on uneven footwall strata due to uplift and is now represented by a shallow angular unconformity. The footwall lithologies to the VCR therefore vary across Mponeng Mine as the unconformity cuts deeper in an easterly direction into older strata of the Witwatersrand Supergroup. Fluvial action during deposition of the VCR continually eroded and reworked the conglomerate, creating steep slopes and embayments between relatively undisturbed terraces.

The CLR conglomerate was deposited by several sedimentary cycles. Erosion and reworking of the conglomerate and quartzite sediments have resulted in the preservation of the CLR within the Central Rand Group of the Witwatersrand Supergroup.

Deposit type

The VCR consists of a quartz pebble conglomerate, which can be up to 3m thick in places. The footwall stratigraphy, following periods of uplift and erosion, controlled the development and preservation of the VCR, which is characterised by a series of channel terraces preserved at different relative elevations, and the highest gold values are preserved in these channel deposits.

The different channel terraces are divided by zones of thinner slope reef, which are of lower value and become more prevalent on the higher terraces and on the harder footwall units.

The relatively argillaceous protoquartzites of the Kimberley formation in the central portion of Mponeng are covered by the best-preserved VCR conglomerates.

The Elsburg formation in the west is relatively more durable, while the eastern side of the mine is dominated by shales and siltstones of the Booysens formation.

VCR is poorly preserved on the Krugersdorp formation on the far eastern side of Mponeng.

The CLR is the other gold-bearing reef reported as part of the total Mineral Resource for Mponeng. The CLR is located near the base of the Johannesburg sub-group, which forms part of the Central Rand Group of the Witwatersrand Supergroup of rocks.

The CLR has historically been mined extensively at Savuka and TauTona mines and the remaining portions thereof have now been transferred to Mponeng Mine. The CLR in the West Wits consists of, on average, a 20cm thick, tabular, auriferous quartz pebble conglomerate and three sedimentary facies.

Economically, the most important facies is Unit 1, which overlies Unit 2. Unit 1 is a complex channel deposit that is only present along the eastern side of the West Wits lease area.

Unit 2 can be up to 2m thick. Unit 3 is exposed in the southern edges of the lease area and is the oldest of the conglomerates.

Mineralisation style

Gold mineralisation followed an episode of deep burial, fracturing and alteration. A variant of Archean gold-bearing hydrothermal fluid was introduced into the conglomerates and circulated throughout in hydrothermal cells. The fluids precipitated gold and other elements through reactions that took place at elevated temperatures along the reef horizon, which was the more favourable fluid conduit. In the case of the VCR, the resulting gold grades are mostly uniformly distributed throughout the reef package.

CLR mineralisation associated with the conglomerate occurs in the form of fine layers and stringers of pyrite rather than finely disseminated pyrite around the pebbles. Flyspeck carbon can be frequently found at the base of the conglomerate. The hydrocarbon precipitated also in thin, flat veins, usually at the base of the carbon leader conglomerate, and this is where the majority of the gold is concentrated.

The VCR displays strong alteration features, which can be explained by the hydrothermal fluids that infiltrated the reef and have overprinted on the original mineral assemblage. Portions of the reef contain authigenic sulphides such as pyrite, pyrrhotite, chalcopyrite, spahelerite and galena, incorporated in the conglomerate matrix. Gold associations with these mineral assemblages indicate a strong correlation of gold mobilisation and redistribution at the time of the hydrothermal fluid influx. There is also a strong association of gold with a chloritisation event focused along the reef horizon. The chlorite alteration gives a dark coloration to the reef. Gold was precipitated by cooling and reactions between the fluids and wallrock, in this case pyritic conglomerates. Gold mineralisation was enhanced in certain areas of high fluid throughput, which were often the sites of high carbon precipitation and early alteration in the case of the CLR.

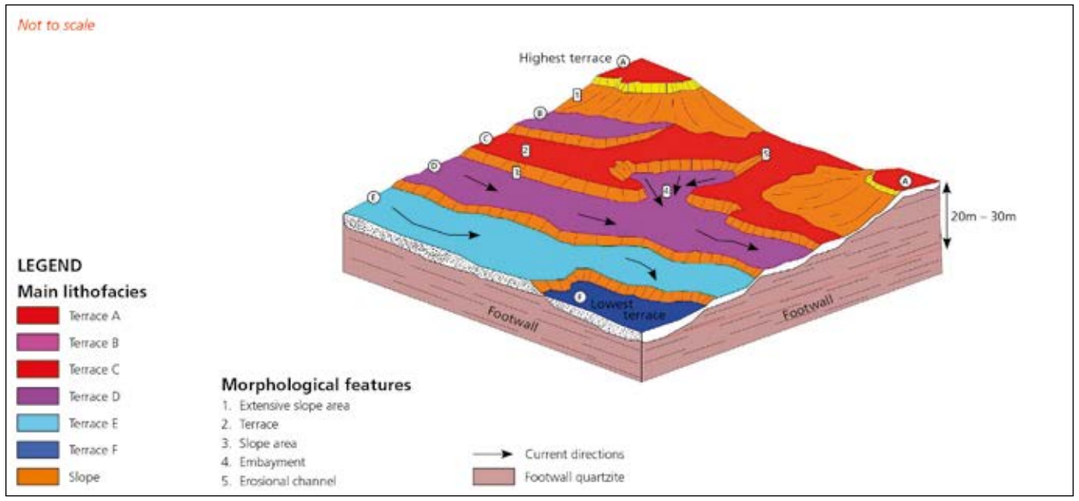
Reef sedimentology (VCR and CLR)

The VCR is characterised by a predominantly pebble to matrix-supported conglomerate that was deposited on an uneven topographic surface (see Figure 1).

The first pulse of VCR deposition followed a prolonged episode of regional uplift centred on the Bank Anticline to the east and north-east of the mine property. The VCR sedimentary package displays all the characteristics associated with a braided fluvial environment.

Following the initial depositional phase, a series of fluvial regressions, caused by continuing regional uplift, resulted in the erosion and reworking of the sediments. This created embayments which eroded into the original conglomerate terraces. The area between these embayments and terraces is referred to as slope, where extensive slumping often left only a thin veneer of preserved conglomerate.

Figure 1: Schematic 3D representation showing the depositional environment



The terraces are separated by narrow, laterally impersistent areas of slope reef. These slope reef areas can constitute up to approximately 10% – 15% in some areas. The preservation of the VCR across the softer footwall unit of the Booysens shale in the east is more erratic in nature where erosional channels on the terraces can result in reef channel widths reducing as well as slight relative elevation changes. Onto the west towards the Elsburg footwall sub-units, preservation is more consistent with very little relative changes in deposition and preservation.

Distribution and orientation of slopes and terraces were largely influenced by the nature of the underlying footwall rock and its natural susceptibility to fluvial and erosional processes. Consequently, the more competent and siliceous footwall lithologies generally host a high proportion of higher reef terraces, whereas the less competent lithologies host a higher proportion of lower terrace and channelised reef with occasional slope boundaries.

Quartzites of the Elsburg formation lie beneath the VCR on the western portion of Mponeng and Savuka. On Mponeng the quartzites generally host a poorly developed VCR that often consists of a single pebble layer. On Savuka, the VCR on the Elsburg footwall has been extensively mined, suggesting that a breakthrough might exist on Mponeng. On a local scale, prominent sub-crop-parallel channels of thicker reef occur which are oriented along sedimentary troughs in the footwall, and probably represent accumulation of sediment at the bases of ridges.

The Elsburg facies is thought to represent an extensive area of denudation where early VCR was washed off a gentle westward-facing surface by seasonal flooding, thus indicating an over-bank depositional environment. Recently, it has been exposed that VCR on the lower terraces has developed and eroded onto the Elsburg units further west than on the upper levels, showing good preservation and persistent channel development. The mine is currently mining 30% of its ore on the Elsburg footwall unit.

On the eastern side of Mponeng and TauTona, the VCR lies on the Booysens shale formation, which represents an area of highly variable and undulating palaeotopography. Terrace elevation differences often exceed 15m. The Booysens facies VCR is considered as representing the more proximal facies of the reef, with a general increase in average pebble size compared with the adjacent Kimberley footwall. Reef thickness is generally reduced on the upper terraces due to the undulating topography but is above the mine average in the lower terraces. On the lower levels in the east the erratic nature of the VCR is dominant on the Booysens shale. The preservation of the VCR is erratic, and the terrain is currently exhibiting a thinly preserved VCR with thick channel developed in places.

The contact between the Booysens and the Krugersdorp is generally considered to be the eastern limit of economic VCR Mineral Resource.

The long axes of the lower terraces reflect the local palaeo-drainage direction during the reworking phase of the VCR. Drainage from the higher terraces onto slopes and lower terraces resulted in local embayments and valleys aligning perpendicular to the main drainage direction.

The reef channel orientations on the Booysens shale geozone appear to be similar to those on the Kimberley quartzites on the western side of the Booysens footwall, but swing parallel to the regional palaeo footwall strike on the eastern side of the geozone. Areas of slope, erosional facies or non-depositional facies separate the channels.

Deposition of the VCR was followed by rapid extrusion of lavas and tuffs of the Ventersdorp Supergroup. Fluvial activity was abruptly halted, causing preservation of the underlying palaeotopographic features.

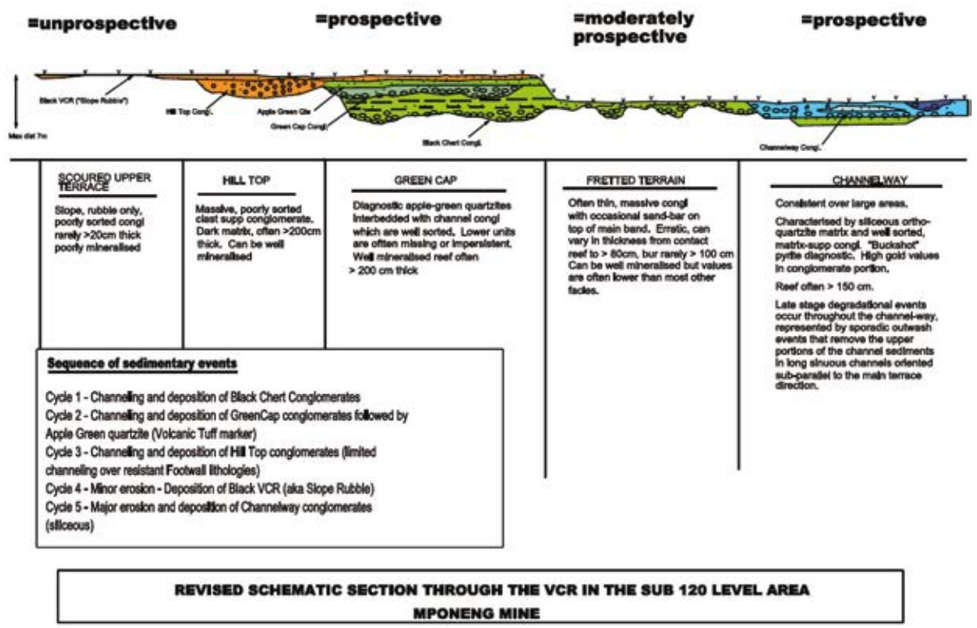
The facies model consists of three geological parameters: terrace elevation, footwall lithology, and channel development (or "reef architecture").

The output of the model provides the geological basis for the evaluation model. Polygons defining areas of thick and thin VCR are outlined using new geological information. Figure 3 illustrates how the VCR orebody is subdivided according to the footwall lithology and used within the estimation process. The estimation domains are based on geological information.

The estimation domains are defined and refined using mostly data from chip sampling and, to a lesser extent, borehole sampling. The thick/thin (VTK/VTN) of the Kimberley domain split is largely confined to mined, and therefore sampled, areas, with very little projection of those areas into unmined ground. The unmined ground is estimated separately as a "mixed" domain (VMD) by means of a percentage krig in which each macro-block is assigned a certain percentage thick and thin channel.

The trends of new VTN areas are similar to those areas defined above 120 level and north of the Mponeng shaft area and the rest of the VCR areas above 120 level. A similar trend of the thick domain (VTK) is followed.

Figure 2: Schematic section of the proposed VCR palaeo-morphology indicating the variation of terrace deposition characteristics



The dark blue of the Kimberley zone (Figure 3) defines the thick facies and the light blue defines the thin facies.

Similarly, on the Booysens domain where the yellow defines the thin facies and the pink defines the thick facies.

The other principal economic horizon mined at Mponeng Mine is the Carbon Leader Reef (CLR).

The CLR is part of the Central Rand Group near the base of the Carletonville formation. The CLR possesses a considerable lateral persistence, covering an area of approximately 5km x 30km. The CLR lies 800m – 900m stratigraphically deeper than the VCR. The CLR resides on a disconformity as it truncates the underlying North Leader, which appears to be a reef body in many ways with varying gold content.

Following the burial of the North Leader by a succession of protoquartzites and immature conglomerates (the footwall beds or Blyvooruitzicht formation), the West Wits area was eroded to produce a scoured but generally planar unconformity. Oligomictic small-pebble conglomerates (10cm – 50cm thick), also known as CLR, were deposited on this unconformity, followed by mature sands. This conglomerate is referred to as the No 3 band. The No 3 band was gently folded, scoured and eroded and then overlain by a thick (c.400cm) package of sediments, the No 2 package. This unit in turn was gently folded and eroded. Later, a planar unconformity (possibly the result of a marine transgression) formed over the entire region. Pre-existing conglomerates were reworked in places, forming a very mature oligomictic conglomerate (the No 1 band) that was subsequently well mineralised with gold. No conglomerate is present on this No 1 unconformity in places, probably due to a combination of variations in transport direction and the presence of sandy material under the unconformity.

Gold mineralisation followed an episode of deep burial, fracturing and alteration. A variant of Achaean greenstone gold-bearing hydrothermal fluid was introduced into the reef environment and was probably circulated in hydrothermal cells.

The Carbon Leader conglomerate system proved a suitable fluid conduit and various minerals were precipitated in the permeable, often structurally prepared host. Solid hydrocarbon precipitated in very thin, flat veins, which usually formed at the base of the Carbon Leader. Gold was precipitated by cooling and reactions between the fluid and the wall rocks, in this case pyritic conglomerates. The regional distribution of gold was strongly influenced by subtle changes in the physical properties of the conglomerates and their footwall lithologys. Gold mineralisation was enhanced in areas of high fluid throughput, which were often the sites of high carbon precipitation and strong early alteration.

Mineral rights/legal aspects and tenure

Table 1: Prospecting and mining rights registered in the name of Harmony gold for Mponeng Mine

As part of the acquisition of AngloGold Ashanti Ltd South African business, all mining rights related to Mponeng were transferred and are now held by Golden Core. There are two mining rights that form the Mponeng area which were successfully converted, executed and registered at the Mineral and Petroleum Resources Titles Office. The principal mining right (GP30/5/1/2/2(01) MR) covers an area of 6 477ha for the mining of gold, silver, nickel and uranium. This mining right, granted on the 14 February 2006, unless cancelled or suspended will continue in force for 36 years ending 13 February 2036. The other mining right, GP30/5/1/2/2(248) MR, is planned to be incorporated into the principal mining right (GP30/5/1/2/2(01) MR. On 15 February 2022, Golden Core applied in terms of section 102 of the MPRDA, substantively similar to the AngloGold Ashanti Ltd application, to consolidate the mining rights and mining right areas into a single mining right (GP30/5/1/2/2(01) MR) as part of the Golden Core Consolidation Application referred to above, which is currently pending at the DMRE.

Operation	Licence type	Reference no.	Effective date	Expiry date	Area (ha)
Mponeng Mine	Mining Right	GP30/5/1/2/2(01) MR	14-Feb-2006	13-Feb-2036	6 477.35
Magnum Farm	Mining Right	GP30/5/1/2/2(248) MR	16-Oct-2012	15-Oct-2022	195.83

Mining methods and mine planning

Gold prices applied are R1 040 000/kg for Mineral Reserve and R1 100 000/kg for Mineral Resource. The Mineral Resource is reported at an average width of 139cm overall of which 160cm applied to VCR and WUDLS and 125cm applied to CLR.

The orebody is extracted by means of mostly breast mining methods with associated waste mining in addition to the reef being extracted. The dilution resulting from these waste sources is captured and incorporated in the tonnage calculation with historic performance being the benchmark. In addition to the in-stope dilution sources being accounted for, allowance is also made for dilution from development waste sources to mill by both schedule results and factors based on history. Widths used are based on the channel width of the orebody being mined and are aligned with the mining method (stoping and ledging) and historical achievements.

Geological models and the sampling data are presented for the mine's evaluation in a Datamine file format.

Cut-off grades are derived by taking into consideration the available Mineral Resource for the selected project areas, the operating cost as captured for the business plan and the required margin. Modifying factors are also being brought into the equation.

Due to the variability of the VCR with respect to value and the seismic risk associated with deep-level mining, the sequential grid mining method is used at Mponeng. The aim is to create sufficient flexibility to mitigate the risks posed to the production plan by doing sufficient development to have at least 24 months of minable Reserves available.

(a) Some design criteria include the following for the VCR orebody:
- Breast mining to strike spans of 180m with 30m-wide dip stabilising pillars orientated on true dip
- Major geological features are bracketed
- Incorporation of 30m strike stability pillars at a maximum dip spacing of 100m (skin to skin) on the side of the raise where the mining is conducted last in order to minimise closure in the stoping areas below 109 level
- Rock engineering requirements are adhered to.

(b) Some design criteria include the following for the CLR orebody:
- Breast mining to strike spans of 180m with 40m-wide dip stabilising pillars orientated on true dip
- Major geological features are bracketed
- Incorporation of 30m strike stability pillars at a maximum dip spacing of 100m (skin to skin) on the side of the raise where the mining is conducted last in order to minimise closure
- Rock engineering requirements are adhered to.

(c) On the VCR horizon above 109 level the access haulages have all been developed in the hanging wall with the exception of 99 level. For the areas below 109 level all the haulages are being developed in the footwall. In the case of the CLR all haulages will be developed in the footwall.
- Middling to reef 85m – 150m for the VCR and 70m for footwall placement in the CLR orebody
- Where possible, the VCR haulages are placed out of the Booysens shale; however, where these shales are traversed, allowance is made for reduced rate of advance to account for delays due to additional support requirements.

(d) The overall mining sequence is an inverted Christmas tree however, within each raise the face configuration is underhand when mining towards the west and overhand (top panels leading) when mining towards the east (the bottom panels leading). This is, however, governed by the presence of large geological structures within the raise line.

Based on the latest geological structure model and the selected mining method (sequential grid) the geotechnical team designed a suitable pillar layout based on modelling results. These include dip stabilising bracket and strike pillars. A detailed mine design and schedule is done based on the pillar design taking cognisance of uneconomical areas which on a macro-scale are excluded. This design and schedule are the basis of the mine plan and the Mineral Reserves declared. With the exploitation of ever-deepening Mineral Resources and the need for flexibility on a mine of this nature the sequential grid mining method was adopted. This has been proven as the method best suited to the deep-level gold mining with its associated seismicity and therefore flexibility requirements.

Mining rates are based on current and expected performance depending on underground conditions and constraints. Development is done by either mechanised, mechanical or conventional method depending on the most suitable method for the specific requirements. Dilution is included in the production plan mainly from external waste sources from the stoping operations, but allowances are also made for dilution occurred in the ore flow process.

Planning Mineral Resource is based on the Mineral Resources available at a required mining value where a cut-off value (971cmg/t) is determined and these Mineral Resources are excluded from the planning Mineral Resource on a macro-scale. Geotechnical design is done of the available planning Mineral Resource and mine design is done accordingly. An estimated 44% of the reported Mineral Reserve is accessible through current infrastructure. The remainder of the reported Mineral Reserve forms part of the LoM extension that has been approved during February 2024. Execution on this will commence during July 2024.

Mineral processing

Mponeng and its processing facility has been in operation since 1986, as such the processing method is considered well established for the style of mineralisation processed. The plant therefore makes use of historical trends and data as a basis for their recoveries of VCR and CLR, however, when projects are planned for optimisation, appropriate test work will be performed.

The ore processed at the Mponeng gold plant is a blend of ore received from the Mponeng Mine and the Kusasalethu Mine. The latest test work performed was in 2019 and analysed these blends to determine optimal conditions for processing. Updated test work was conducted during 2024, with final results still pending.

The ore is initially ground down by means of semi-autogenous milling, after which a conventional gold leach process incorporating liquid oxygen injection is applied. The gold is then recovered by means of carbon-in-pulp (CIP) technology together with electrowinning and smelting processes.

Infrastructure

Mponeng is an established mine that has been in operation since 1986. All surface and underground infrastructure is in place to support the current reserve declaration and includes processing plant, tailing dam, roads, water and power supply, offices, housing, security, etc.

Mponeng is an operating mine with well-established logistic support. Transport of ore is done on premises as well as processing which is done next to the mine at the Mponeng Mine gold plant.

Mineral Resource estimation

The estimation method used for local measured estimates on the shaft is ordinary kriging (OK) and for local Indicated and Inferred estimates is simple macro-kriging (SMK). The orientations and ranges of each geozone's semi-variogram are used to determine the kriging search parameters, and the estimation parameters are also optimised. Estimates are generally kriged into 30m x 30m blocks for the Measured Resources from the point support data. The Indicated Resources are kriged into 60m x 60m blocks and data is capped at Mponeng Mine.

Gold is the only variable estimated for large block sizes. Channel width is estimated for all block sizes.

The Mineral Reserve classification is based on the Mineral Resource category. The choice of the appropriate category of Mineral Resource depends upon the quantity, distribution and quality of data available and the level of confidence attached to the data. The Mineral Resource is classified per the SAMREC guidelines into the following components: Measured, Indicated and Inferred Resources.

Discounts to the Mineral Resource due to the "unknown" complex geological structure ahead of current mining faces and are based on the level of information available. These discounts are regularly checked to confirm that they are still appropriate for the areas being mined in.

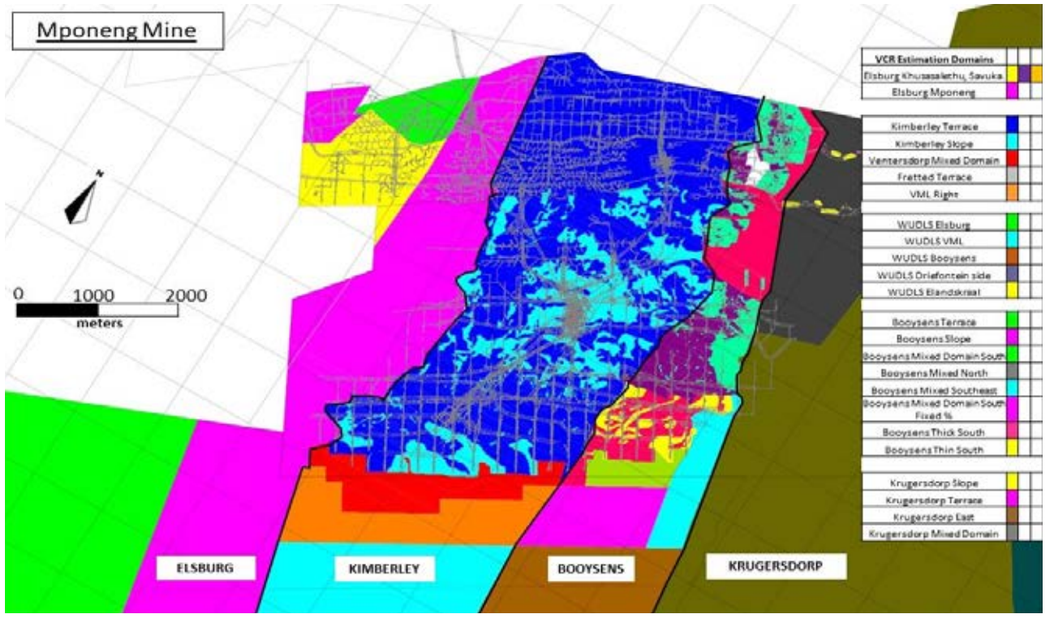
For the Mineral Reserves, which are modified Indicated and Measured Mineral Resources, consideration was given to the modifying factors affecting extraction. No Measured Mineral Resources have been converted to Probable Mineral Reserves instead of Proved Mineral Reserves due to uncertainties associated with modifying factors that are considered in the conversion from Mineral Resources to Mineral Reserves.

The Datamine mining software system is currently in use on this shaft. A scripting/macro-system has been generated, which is linked to a customised scripting menu. This menu allows for professional and easy managing of the data and building of geostatistical models.

The imported data is associated to the geozones for the geostatistical model generation. It is also assumed that the differing support sizes for chip samples and borehole samples are negligible. Histograms and statistics of the raw data are then calculated for each geozone for comparison purposes.

The various search parameters files are based on the modelled semi-variograms. The defined search ellipse adheres to the direction of the associated semi-variogram, as well as the range distances. The current minimum and maximum is variable for VCR measured estimation per geozone as well as for the Indicated/Inferred estimation VCR and CLR.

Figure 3: VCR Footwall geozones that form the basis of the geological facies model.



Environmental impact

Mponeng's environmental aspects and impacts are managed according to the Environmental Management Programme (EMPr), as approved by the Department of Mineral Resources and Energy (DMRE), in terms of the MPRDA. All environmental aspects and impacts emanating from mining activities are documented in a dedicated report and in the environmental aspect register, as required by the MPRDA and ISO 14001:2015.

Every second year performance monitoring audits are conducted by various departments, including the DMRE and the Department of Water and Sanitation to verify compliance with the following legislation:

- Mine Health and Safety Act
- National Water Act
- National Environmental Management Act
- MPRDA.

All environmental impacts arising from mining activities are managed in terms of the requirements of the approved EMPr, the water use licence, the waste permit and in line with ISO 14001:2015.

As required by relevant regulations, environmental audits or performance assessments to verify compliance with the approved EMPr are conducted every second year by independent environmental consultants and a report is submitted to the DMRE. External and internal environmental legal compliance audits are also conducted. An off-site legal environmental register is used to monitor compliance, and to obtain applicable and relevant environmental legal updates for the operation.

Full chemical analyses include:

- Monthly sampling of surface streams
- Quarterly analysis of borehole water to monitor groundwater quality.

Mponeng is ISO 14001:2015 certified and complies with the requirements of ISO 14001:2015 for which it is audited annually by an independent certification body. The operation was initially certified in 2011, and most recently in 2018, under the new ISO 14001 (2015). In line with this accreditation, every effort is made to eliminate or minimise the negative effects of mining activities on the environment and adjacent communities.

The operation has also been accredited in terms of the Cyanide Code by the International Cyanide Management Institute. Independent third-party audits are conducted every three years to check compliance with the Cyanide Code.

Material risks

Material risks that may impact Mponeng's Mineral Resource and Mineral Reserve statement:

Significant risks	Remedial actions
» Seismicity.	» Support strategy » Seismic management around mass response » Cycle mining implemented » Preconditioning » Monitor seismic potency.
» Face length flexibility.	» Optimise development rates » Critical raise line scrutiny » Maintain affective mining mix.
» Flooding of shaft bottom.	» Standby pumps at shaft bottom » 127 level dam.

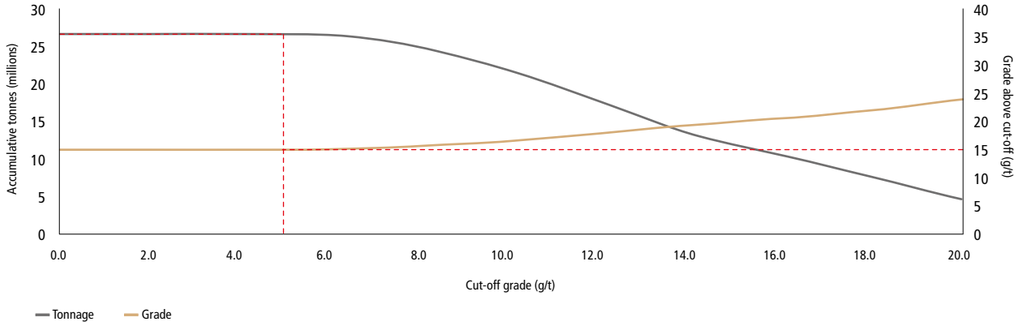
Competent person

Ore Reserve manager

William Herman Olivier
Certificate of Competency for Mine Survey, GDE, South African Geomatics Council (SAGC) 0136
34 years' experience in gold mining.

Mponeng Mine: VCR and CLR Reef

Measured and Indicated Mineral Resource grade-tonnage curve



Mponeng

Gold – Mineral Resource estimates at 30 June 2024 (inclusive)

	Measured				Indicated				Inferred				Total			
	Tonnes	Gold			Tonnes	Gold			Tonnes	Gold			Tonnes	Gold		
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Mponeng	5.6	16.95	96	3 076	21.0	14.56	306	9 829	32.1	11.34	364	11 705	58.8	13.03	765	24 610

Modifying factors

Mponeng	MCF (%)	SW (cm)	MW (cm)	PRF (%)	Cut-off (cmg/t)
2023	81	147	214	98	971
2024	80	146	211	98	971

Gold – Mineral Reserve estimates at 30 June 2024

	Proved				Probable				Total			
	Tonnes	Gold			Tonnes	Gold			Tonnes	Gold		
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Mponeng	4.5	9.67	43	1 389	10.9	8.86	97	3 115	15.4	9.09	140	4 503

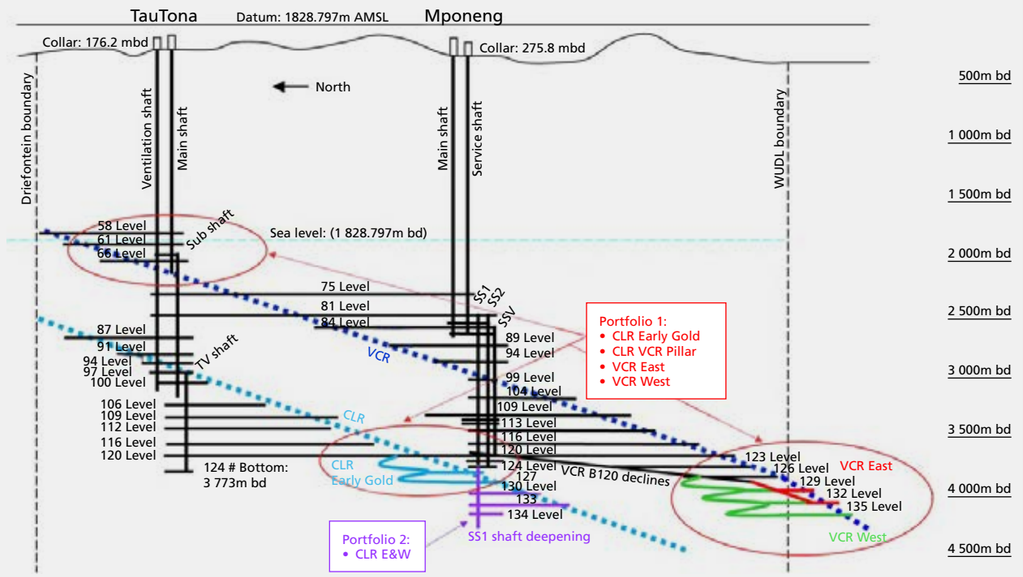
Operational performance

Mponeng: Key operating statistics

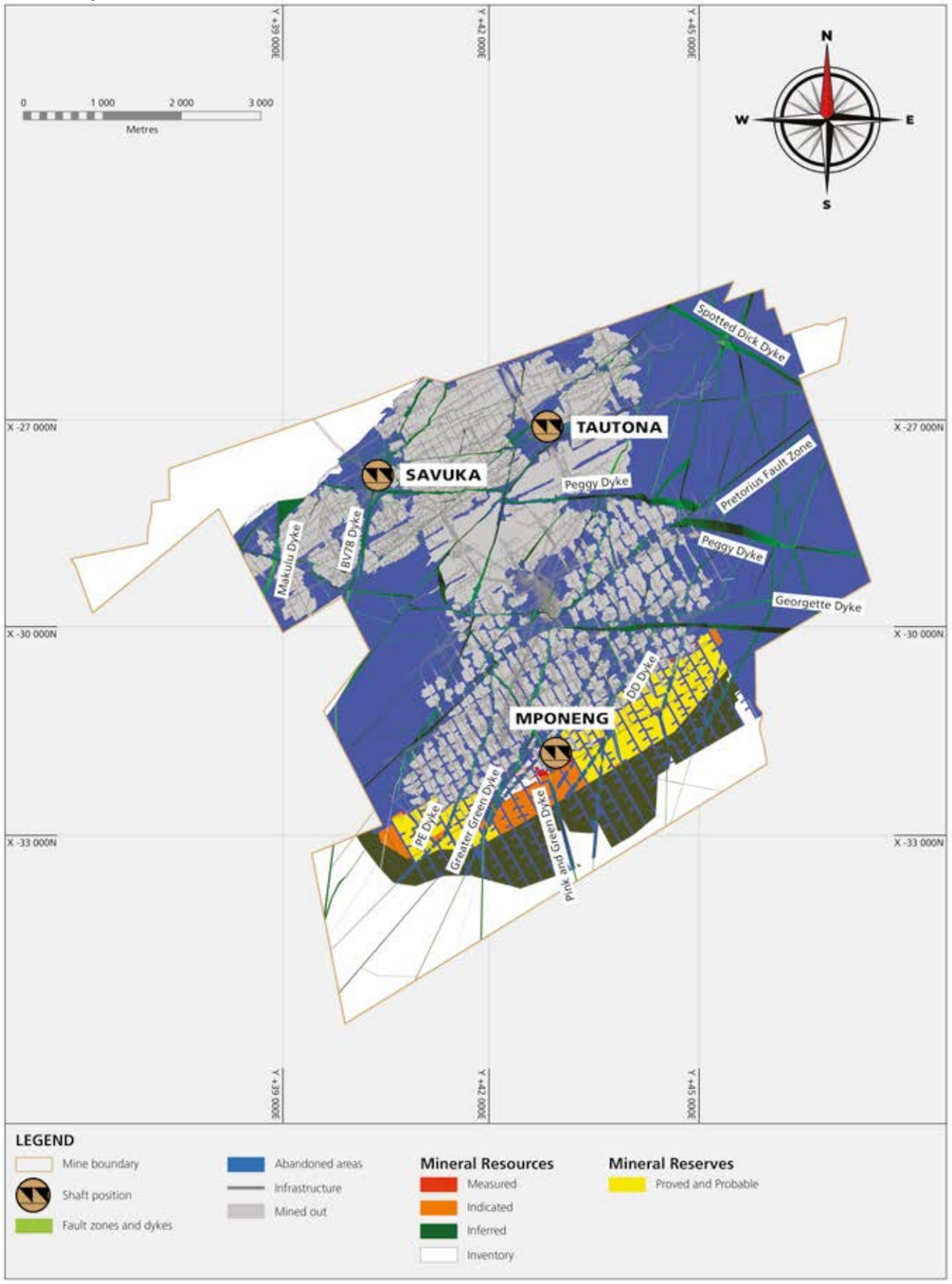
	Unit	FY24	FY23	FY22	FY21	FY20
Operation						
Volumes milled	000t (metric)	**880**	884	840	683	—
	000t (imperial)	**971**	975	926	753	—
Gold produced	kg	**8 751**	7 449	6 086	5 446	—
	oz	**281 350**	239 490	195 669	175 092	—
Grade	g/t	**9.94**	8.43	7.25	7.97	—
	oz/t	**0.290**	0.246	0.211	0.233	—
Development						
Total metres (excluding capital metres)		**7 142**	8 000	8 331	6 299	—
Reef metres		**1 379**	1 500	1 249	815	—
Capital metres		**—**	—	—	—	—
Financial						
Average gold price received	R/kg	**1 223 096**	1 048 824	930 257	896 474	—
	US$/oz	**2 035**	1 836	1 902	1 811	—
Capital expenditure	Rm	**890**	704	605	493	—
	US$m	**48**	40	40	32	—
Cash operating cost	R/kg	**670 811**	671 474	739 026	532 812	—
	US$/oz	**1 116**	1 176	1 511	1 076	—
All-in sustaining cost	R/kg	**785 108**	784 093	865 976	659 760	—
	US$/oz	**1 306**	1 373	1 771	1 333	—

North-South section through TauTona and Mponeng mines

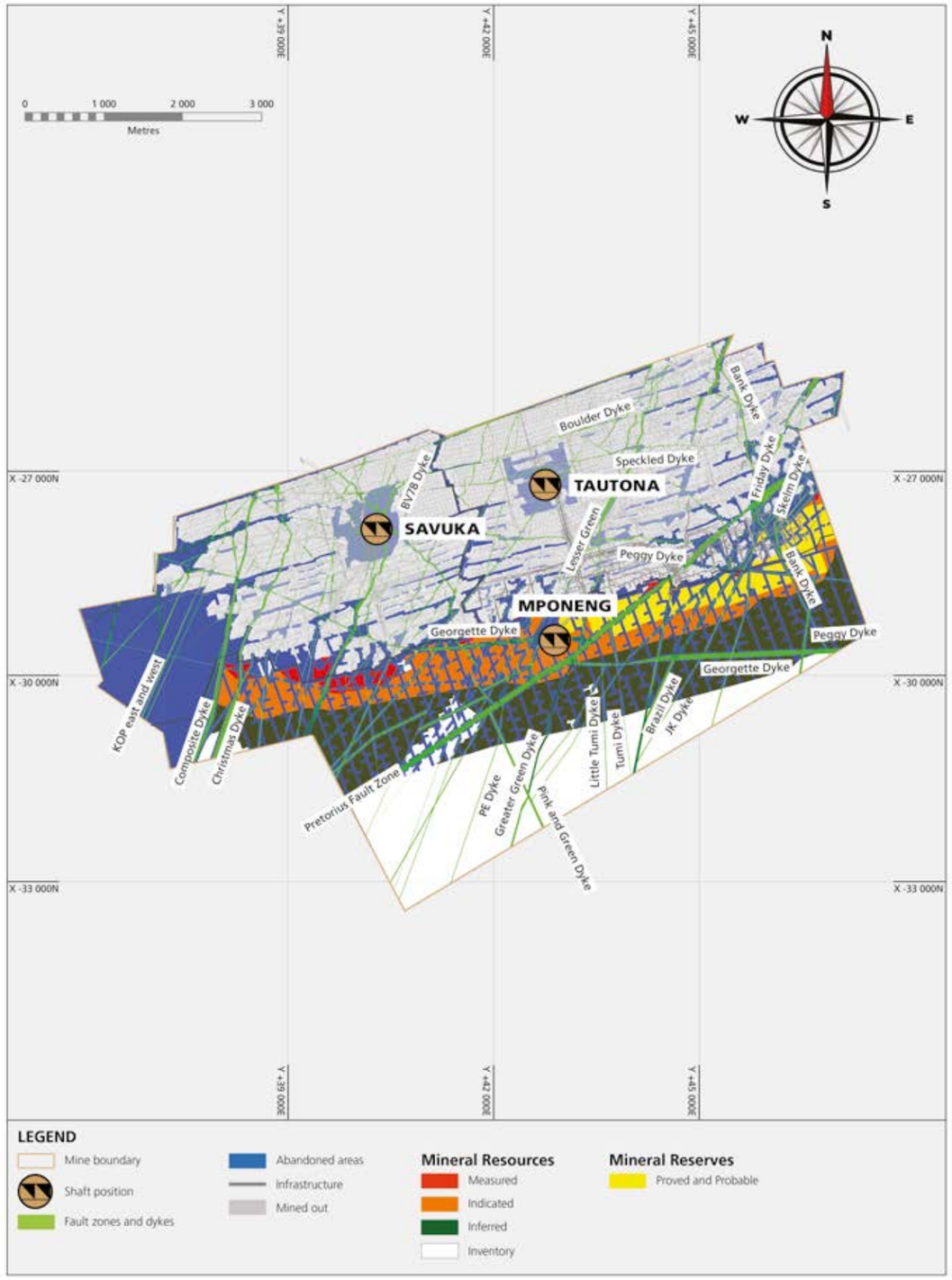
Not to scale



Mponeng Mine
Ventersdorp Contact Reef: Mineral Resources and Mineral Reserves – June 2024



Mponeng Mine
Carbon Leader Reef: Mineral Resources and Mineral Reserves – June 2024



SOUTH AFRICA

KLERKSDORP

Mineral Resources (inclusive)

9.3Moz

Mineral Reserves

3.5Moz

Harmony has one underground mining operation in the Klerksdorp area – Moab Khotsong. As at 30 June 2024, the estimated Mineral Resource (inclusive) was 9.3Moz and the estimated Mineral Reserve was 3.5Moz.

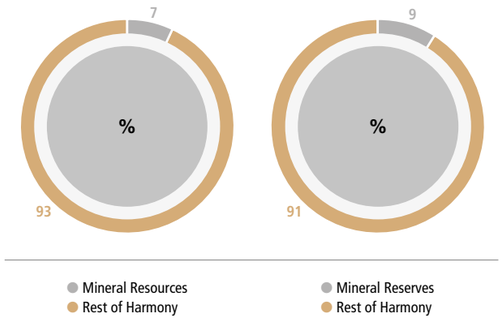
Location of operation

Moab Khotsong, which includes the mining and surface infrastructure of the adjacent Great Noligwa, is located in the Free State province, near the towns of Orkney and Klerksdorp, about 180km south-west of Johannesburg. The mining lease area lies just south of the Vaal River, which forms a natural boundary between South Africa's North West and Free State provinces.

Regional geology

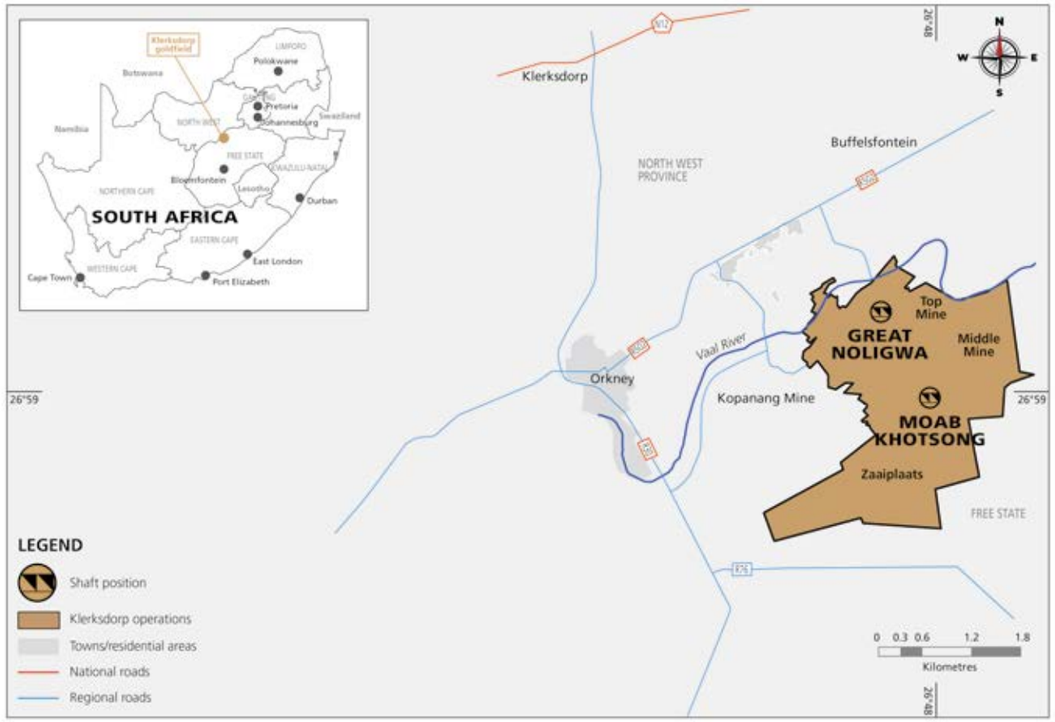
For a description of the geological characteristics of the Klerksdorp area, refer to the Geology section under Moab Khotsong.

Gold and Gold equivalents
Contribution to Harmony



MINERAL RESOURCES AND MINERAL RESERVES BY OPERATION	
Klerksdorp	**94 – 103**
Moab Khotsong	**96**

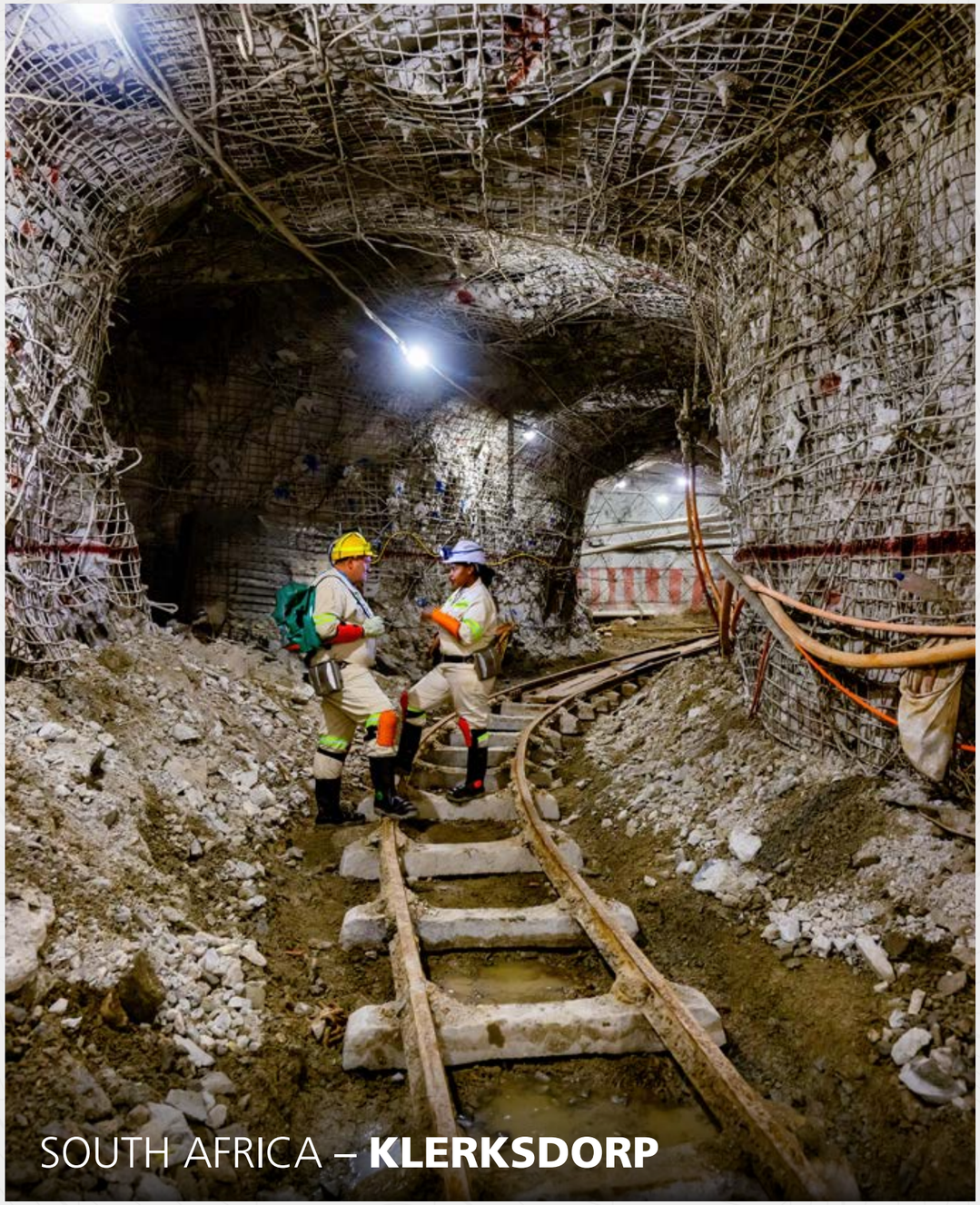
Moab Khotsong – Locality



KLERKSDORP STRATIGRAPHIC COLUMN

Group	Sub-group	Formation	Informal unit and reefs	Member
Klipriviersberg		Albertori/ Orkney	Lava beds	
		Mondeor	Elsburg massives and individuals	Modderfontein Waterpan
Central Rand Group	Turffontein	Klerksdorp	Quartzites and conglomerates	Gold Estates Quartzite
				Dennys Reef
		Gold Estate		Kimberley Reefs
	Johannesburg	Crystalkop	C-Reef	C-Reef
		Strathmore	Zandpan Marker Vaal Reef Vaal Reef	Bird
		Stilfontein	Quartzite	Quartzites with minor interbedded conglomerates
			Millar Reef	Millar Reef
			Quartzites	
			Livingstone Reef	Livingstone Reef
		Commonage		Quartzite
West Rand Group	Jeppestown	Roodepoort		

MOAB KHOTSONG



Mineral Resources (inclusive)
9.3Moz

Mineral Reserves
3.5Moz

Detailed Mineral Resource and Mineral Reserve estimates are presented in this section.

History
The Moab Khotsong Mine began production in 2003, while Great Noligwa, which was merged with Moab Khotsong in 2014, began production in 1968. These mines are collectively referred to as Moab Khotsong. Harmony acquired Moab Khotsong from AngloGold Ashanti Ltd in March 2018. Zaaiplaats Reserves were included into the Moab Khotsong Reserves as at June 2021, following the conclusion of the feasibility study and approval of capital by the board.

Nature of the operation
Moab Khotsong is the youngest of the South African deep-level gold mines with three vertical shaft systems maintained to service the mine. The orebody is subdivided by major faults into three distinct geographical mining areas. These are referred to as Top mine and Middle mine, accessed through Moab Khotsong and Noligwa shafts, and Zaaiplaats, designed to be accessed through a decline system off the base of the Moab Khotsong shaft.

Geology
The Vaal Reef is the primary economic horizon at Moab Khotsong. A secondary economic horizon, the C Reef, contributes less than 5% of total mining volumes. Both reefs are narrow tabular deposits forming part of the Witwatersrand Supergroup and are stratigraphically located near the middle of the Central Rand Group. The Vaal Reef lies approximately 255m below the C Reef.

The geology at Moab Khotsong is structurally complex with large fault-loss areas between the three mining areas (Top mine, Middle mine and Zaaiplaats). The geological setting is one of crustal extension, dominated by major south-dipping fault systems with north-dipping Zuiping faults wedged between the south-dipping faults. The De Hoek and Buffels East faults are structural bounds for the reef blocks of the Middle mine to the north-west and south-east respectively. The northern boundary of Moab Khotsong's Middle mine is the north-dipping Zuiping fault. Moab Khotsong requires a reduced drill spacing pattern of the order of 50m x 50m, which allows for accurate delineation of the structurally bound mineable blocks so that accurate and efficient mine designs can be implemented to ensure optimal extraction and maximum orebody use.

The mineralisation model adopted for the deposit is that of gold precipitation in the conglomerates through the actions of hydrothermal fluids. The fluids precipitated gold and other elements through reactions that took place at elevated temperatures (300°C to 350°C). Migrating liquid and gaseous hydrocarbons precipitated as solid hydrocarbon (carbon), which was then mesophased through metamorphism and structural deformation. Carbon was preferentially precipitated in bedding-parallel fractures that most commonly followed the base of the Vaal Reef package (A-bottom sub-facies) however, gold and uranium mineralisation is also commonly observed within the A-middle and A-top sub-facies of the Vaal Reef. Gold was precipitated very soon after the carbon, giving the critical gold-carbon association that characterises many of the high-grade Vaal Reef localities.

A geological model is employed to delineate variations (either lateral or vertical) in characteristics of the Vaal Reef and C Reef. The current geological model thus sub-divides these two reefs into homogeneous zones based on geological and grade characteristics.

The Vaal Reef consists of a thin basal conglomerate (the C-facies) and a thicker sequence of upper conglomerates (A-facies). These two sedimentary facies are separated by the B-facies, which is a layer of barren orthoquartzite. The A-facies is the primary economic horizon at Moab Khotsong however, remnants of the C-facies are sporadically preserved below the A-facies. High gold values in the Vaal Reef are often located at the base of this unit and are associated with high uranium values and the presence of carbon. Uranium is an important by-product recovered from the Vaal Reef.

The C Reef is mined on a limited scale in the central part of Top mine where a high-grade, north-south trending sedimentary channel, containing two economic horizons, has been exposed. To the east and the west of this channel, the C Reef is poorly developed with limited areas containing economic concentrations of gold and uranium. As with the Vaal Reef, high uranium values are also often associated with high gold values. A carbon seam, with a thickness of 5mm to 20mm, commonly occurs at the base of the conglomerate.

To the north of the mine, the C Reef sub-crops against the Gold Estates Conglomerate Formation and, in the extreme south of the mine, the C Reef has been eliminated by a deep Kimberley erosion channel and the Jersey fault.

Mineral rights/legal aspects and tenure
Harmony holds the following mining rights, which have been successfully converted, executed and registered as new order mining rights at the Mineral and Petroleum Resources Titles Office:

- NW30/5/1/2/2/15MR valid from 12 September 2007 to 11 September 2037
- NW30/5/1/1/2/16MR valid from 20 August 2008 to 19 August 2038.

These rights cover a combined area of 10 991.1296ha (15MR = 1 372.4696ha and 16MR = 9 618.660ha.)

Mining methods and mine planning
The tabular nature of the orebody, along with its depth and structural complexity, dictates the mining method employed at Moab Khotsong. The primary mining method used at Moab Khotsong is conventional breast mining, on a scattered grid. The method, as opposed to sequential grid mining, is necessitated by the complex geology at Moab Khotsong, which prevents the implementation of a strict mining sequence. Moab Khotsong makes extensive use of backfill for the support of stopes. The economic reef horizons of top and middle mine are exploited between depths of 1 698m and 3 054m below surface.

Zaaiplaats is located between the elevations of 3 054m and 3 526m below surface. Zaaiplaats will be accessed by declines from the north-eastern end of the Zaaiplaats ground to take advantage of the existing access development in place.

Mineral processing

Moab Khotsong's mineral processing is done through the Great Noligwa gold plant with design capacity exceeding the maximum planned production volume from the operation. The plant uses the reverse gold leach method which recovers gold and uranium through gold cyanide and acid uranium leaching.

Infrastructure

Moab Khotsong and Great Noligwa's surface and underground infrastructure, as well as the power and water services, are designed to fully meet planned life-of-mine production and service capacity requirements. The operation has a dedicated ore processing plant in close proximity to Moab Khotsong and tailings are pumped to existing tailings storage facilities. Most of the waste rock is separated from reef ore underground and accounted for separately. All waste and reef are delivered to the metallurgical plant.

Mineral Resource estimation

The geostatistical estimation model is created per reef type and per geological zone.

Measured model: Point data and drill hole data, capped to the 99th percentile, uses the ordinary kriging method with experimental semi-variograms, search/estimation parameters, kriging efficiency and slope of regression. Commonly measured models are done on a 10m x 10m and 30m x 30m estimation block size.

Indicated model: Declustered data uses simple macro-kriging (SMK) with experimental semi-variograms, search/estimation parameters. Commonly Indicated models are done on a 60m x 60m estimation block size.

Inferred model: Declustered data uses SMK with experimental semi-variograms, search/estimation parameters. Commonly, Indicated models are done on a 120m x 120m estimation block size.

Inferred model beyond estimation confidence: Global arithmetic mean of the declustered data for all the areas to the lease boundary.

Environmental impact

Harmony, holder of the tenement, has addressed the requirements of the Department of Mineral Resources and Energy (DMRE) and the EMPr licence, NW30/5/1/2/2/15&16MR was granted on 21 October 2022. Further licencing, permits and certificates include:

(1) Atmospheric emission licence, AEL/FS/MKO-HGM/14/10/2019 issued to Moab Khotsong Operations (Harmony Gold Mining Company) in terms of section 41(1) of the National Environmental Management: Air Quality Act 39 of 2004, in respect of Listed Activity No.4.1: Drying and Calcining and 4.17: Precious and Base Metal Production and Refining.

(2) Waste disposal site licence, NWP/WM/DK2/ 2018/04/01/02, issued for the management of the Harmony Vaal Reefs waste disposal site.

(3) Moab Khotsong is ISO 14001 certified for its environmental management system. As part of its certification and compliance obligations, Moab Khotsong is committed to continually improve its processes and services to prevent pollution, minimise waste, increase carbon efficiency, use natural Resources efficiently and protect the environment.

(4) Water Use Licence, 08/C24B/AGJ/9799, issued by the Department of Water and Sanitation (DWS).

All environmental impacts arising from mining activities are managed in terms of the requirements of the approved EMPr, the water use licence, the waste permit and in line with ISO 14001:2015. As required by relevant regulations, environmental audits or performance assessments to verify compliance with the approved EMPr are conducted every second year by independent environmental consultants and a report is submitted to the DMRE. External and internal environmental legal compliance audits are also conducted. An off-site legal environmental register is used to monitor compliance, and to obtain applicable and relevant environmental legal updates for the operation.

There are no sensitive areas that may affect the project or any other environmental factors, including interested and affected parties and/or studies that could have a material effect on the likelihood of eventual economic extraction.

Moab Khotsong is ISO 14001:2015 certified and complies with the requirements of ISO 14001:2015 for which it is audited annually by an independent certification body.

Regarding environmental rehabilitation liability, all costs associated with demolition and rehabilitation of the footprint after mining activities cease have been considered in the environmental rehabilitation liabilities. This liability covers all buildings, offices, water tanks, plants, tailings storage facilities, waste rock dumps and properties, among others. The liability is assessed annually and updated to include new infrastructure or demolition and all rates are updated (either escalated or revised) annually. These costs are then escalated to future values and discounted back to present value for inclusion in Harmony's rehabilitation liability in the financial statements.

Material risks

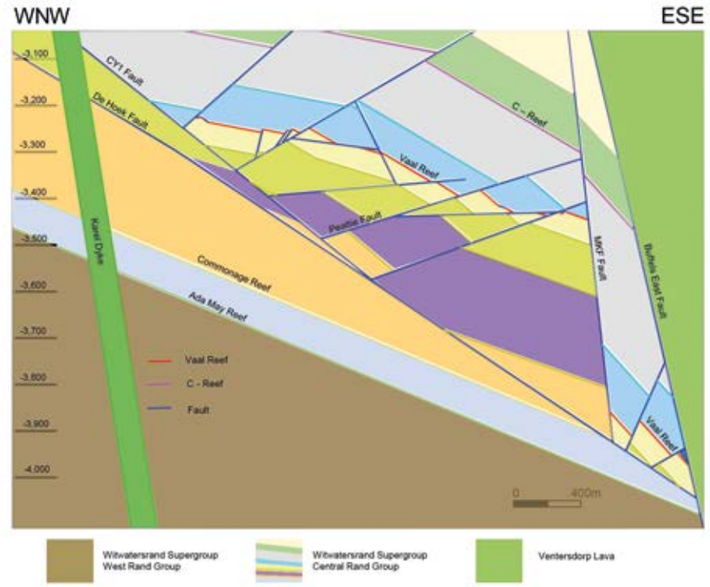
Material risks that may impact Moab Khotsong's Mineral Resource and Mineral Reserve statement:

Significant risks	Remedial actions
» Flooding from neighbouring mines » Seismicity » Structural complexity.	» Pumping » Mining industry occupational safety and health programme » Maintaining seismic network system » Comprehensive risk drilling programme.

Competent person

Acting Ore Reserve manager

Van Heerden Esterhuizen
BSc Geology, BSc Hons (Geology), SACNASP, GSSA
13 years' hard rock, deep-level and ultra-deep-level gold mining experience on the Witwatersrand Supergroup.



Geological cross-section through Moab Khotsong (west-north west and east-south east).

Moab Khotsong

Gold – Mineral Resource estimates at 30 June 2024 (inclusive)

	Measured				Indicated				Inferred				Total			
	Tonnes		Gold		Tonnes		Gold		Tonnes		Gold		Tonnes		Gold	
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Moab Khotsong	5.2	16.81	88	2 818	9.8	15.53	152	4 891	2.7	18.16	49	1 579	17.7	16.31	289	9 288

Modifying factors

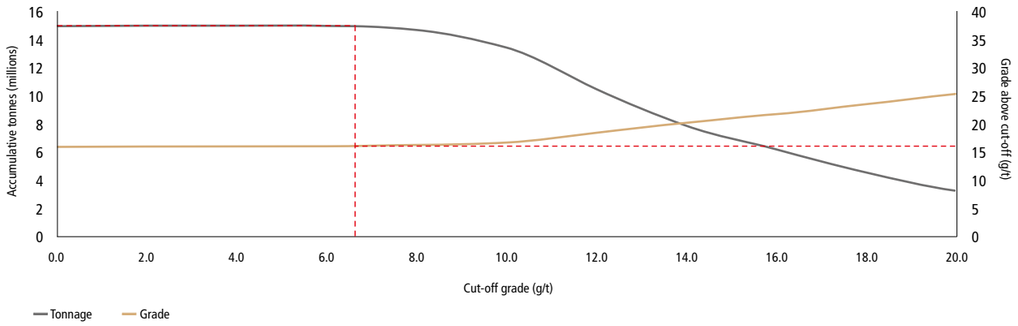
Moab Khotsong	MCF (%)	SW (cm)	MW (cm)	PRF (%)	Cut-off (cmg/t)
2023	67	174	210	96	1 500
2024	76	160	213	97	1 800

Gold – Mineral Reserve estimates at 30 June 2024

	Proved				Probable				Total			
	Tonnes		Gold		Tonnes		Gold		Tonnes		Gold	
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Moab Khotsong	3.4	7.69	26	831	10.3	8.14	84	2 690	13.6	8.03	110	3 521

Moab Mine: Total Mine

Measured and Indicated Mineral Resource grade-tonnage curve



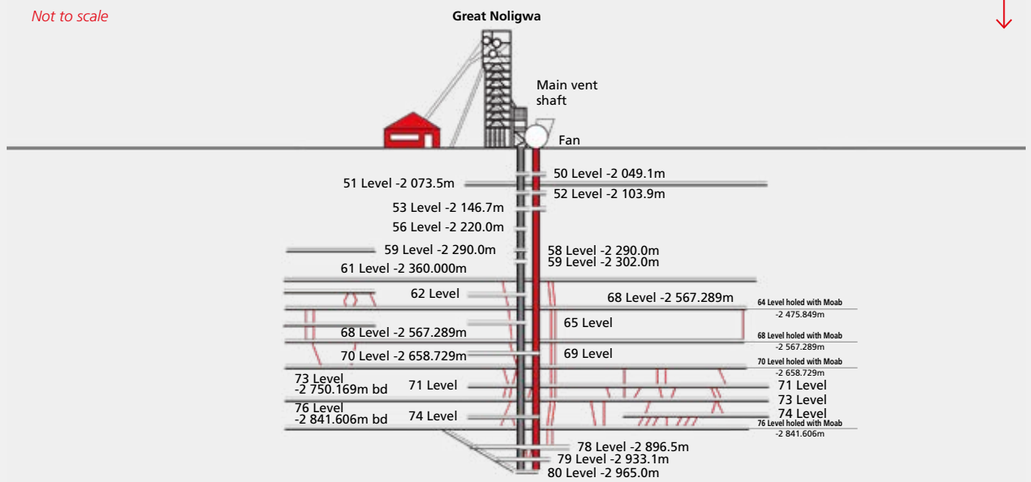
Operational performance

Moab Khotsong: Key operating statistics

	Unit	FY24	FY23	FY22	FY21	FY20
Operation						
Volumes milled	000t (metric)	**822**	920	959	903	746
	000t (imperial)	**906**	1 015	1 059	995	822
Gold produced	kg	**6 599**	6 668	6 508	7 166	6 592
	oz	**212 162**	214 381	209 237	230 391	211 938
Grade	g/t	**8.03**	7.25	6.79	7.94	8.84
	oz/t	**0.234**	0.211	0.198	0.232	0.258
Development						
Total metres (excluding capital metres)		**4 663**	6 738	7 755	6 981	8 815
Reef metres		**1 328**	1 026	1 424	1 144	1 173
Capital metres		**2 960**	3 510	2 668	2 070	1 363
Financial						
Average gold price received	R/kg	**1 219 199**	1 047 845	903 905	852 392	736 533
	US$/oz	**2 028**	1 835	1 848	1 722	1 463
Capital expenditure	Rm	**1 330**	1 167	894	633	498
	US$m	**71**	66	59	41	32
Cash operating cost	R/kg	**699 300**	683 995	635 146	536 710	497 953
	US$/oz	**1 163**	1 198	1 299	1 084	989
All-in sustaining cost	R/kg	**798 866**	782 441	739 870	626 795	566 942
	US$/oz	**1 329**	1 370	1 513	1 266	1 126

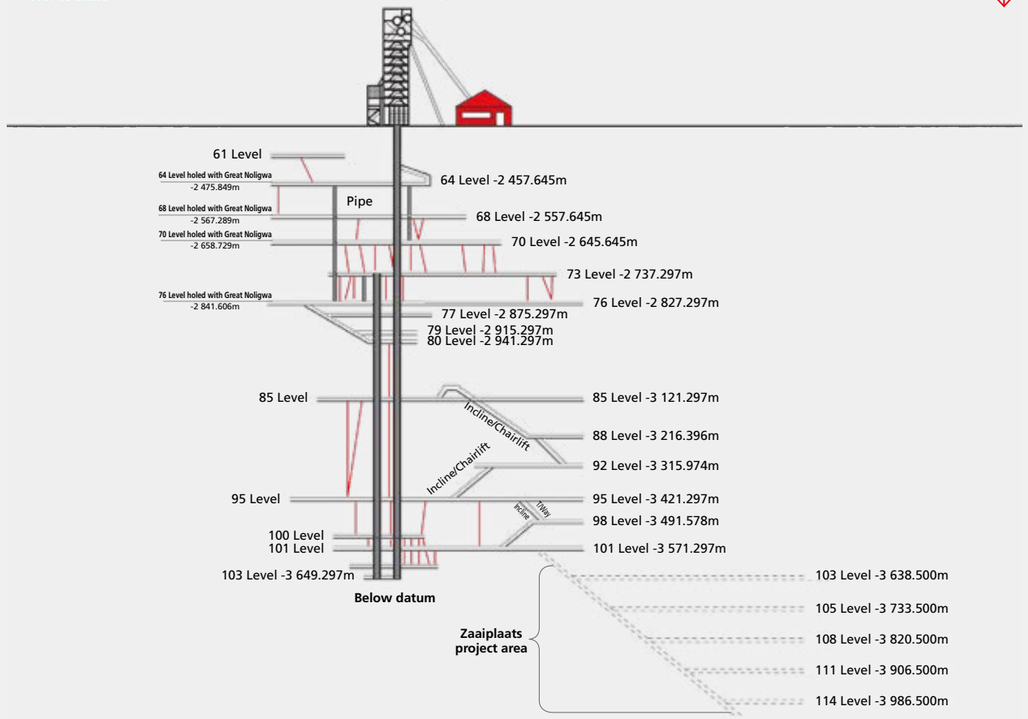
Moab Khotsong: Schematic of shaft and mining layout of the Great Noligwa shaft

Not to scale

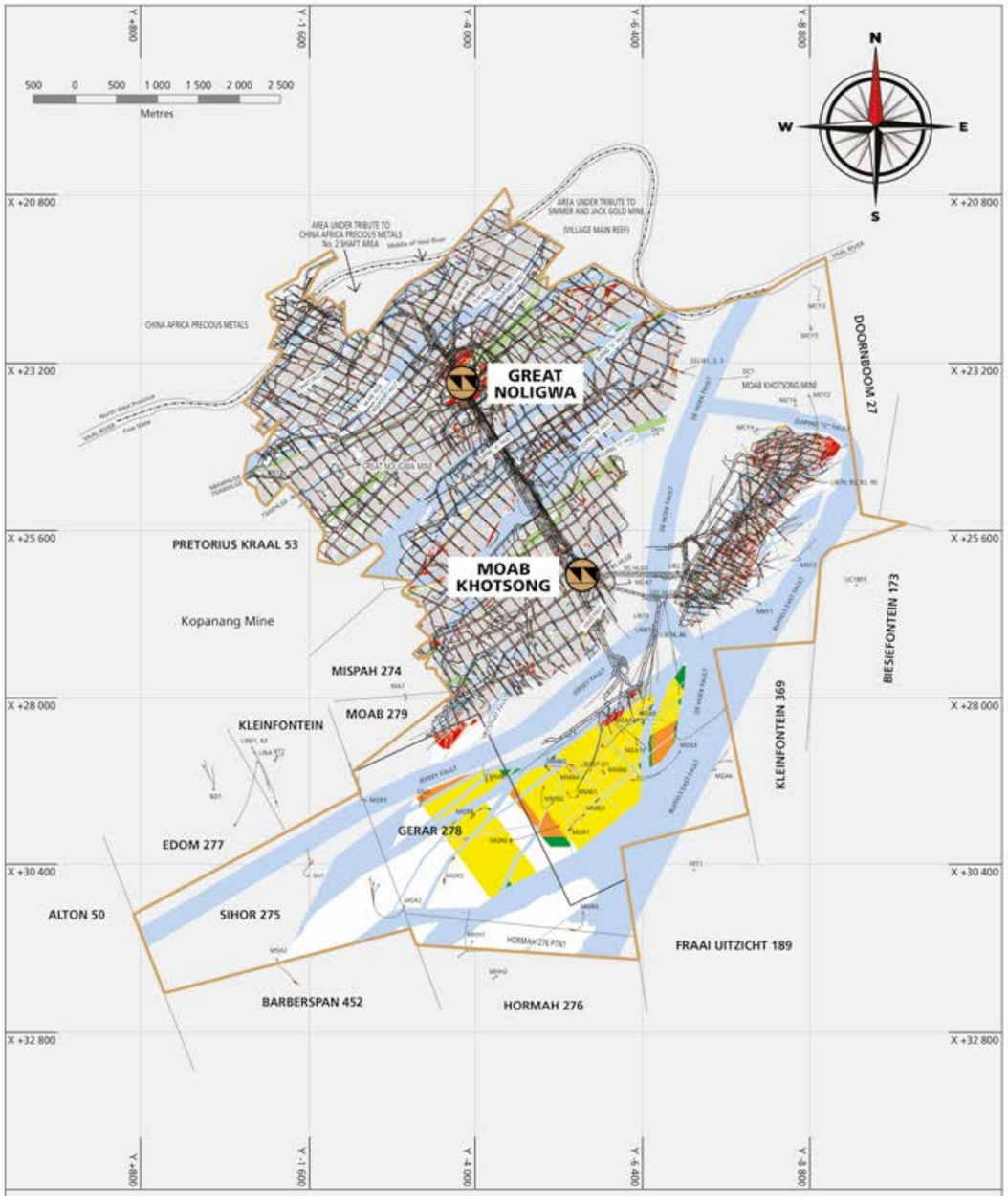


Moab Khotsong: Schematic of shaft and mining layout of the Moab Khotsong shaft

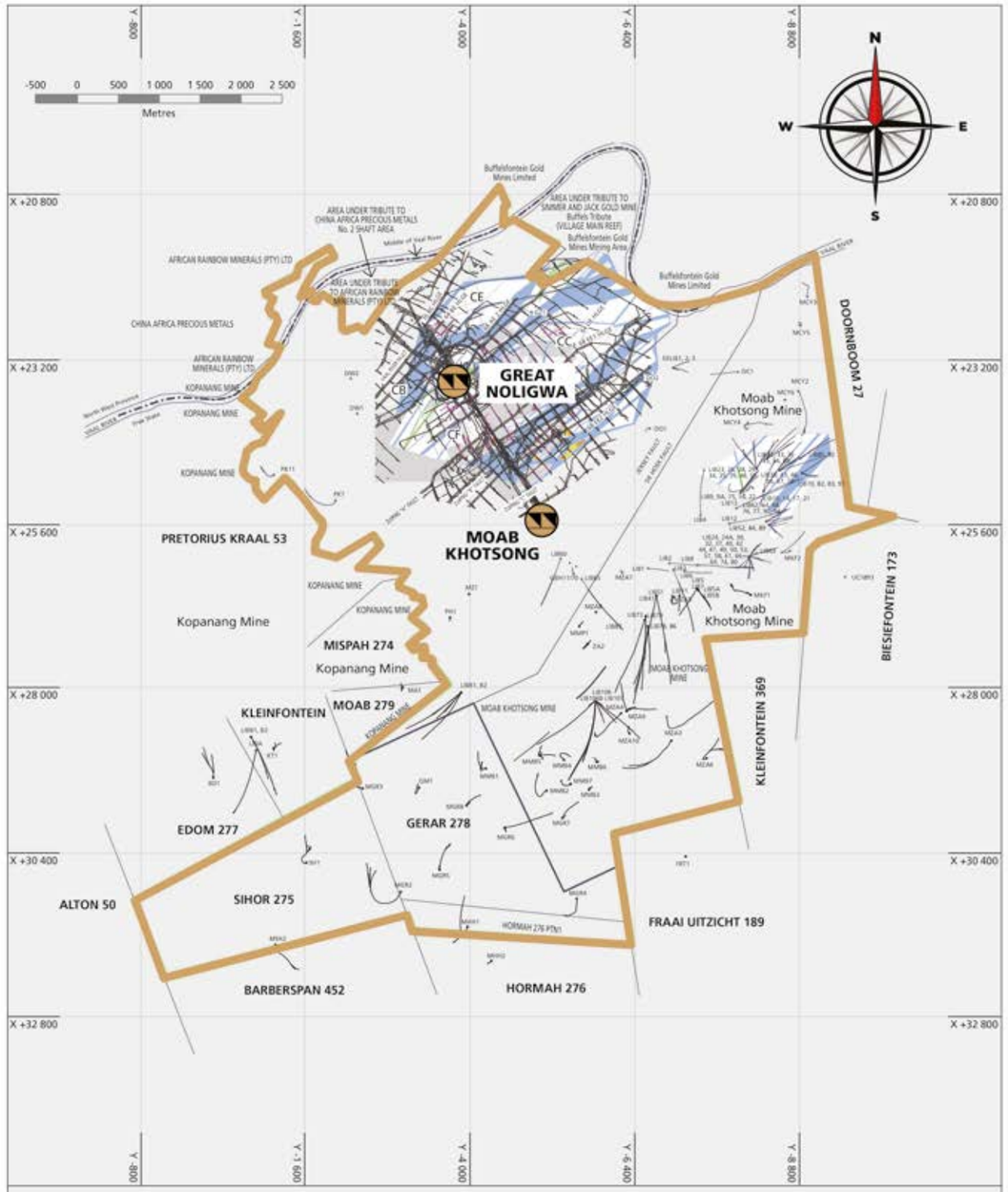
Not to scale



Great Noligwa and Moab Khotsong
Vaal Reef: Mineral Resources and Mineral Reserves – June 2024



Great Noligwa and Moab Khotsong
C Reef: Mineral Resources and Mineral Reserves – June 2024



SOUTH AFRICA

FREE STATE

Mineral Resources (inclusive)

32.3Moz

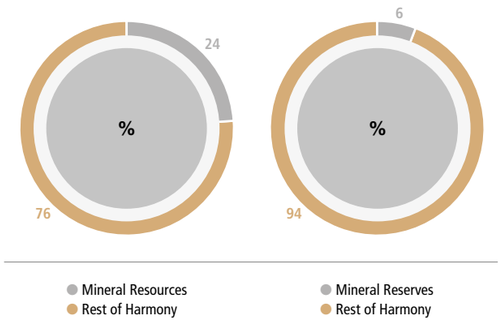
Mineral Reserves

2.6Moz

Harmony has five underground operations in the Free State. As at 30 June 2024, their combined estimated Mineral Resource (inclusive) was 32.3Moz and the combined estimated Mineral Reserve was 2.6Moz.

Gold and Gold equivalents

Contribution to Harmony



MINERAL RESOURCES AND MINERAL RESERVES BY OPERATION	
Free State	**104 – 141**
Tshepong North	**108**
Tshepong South (Phakisa)	**116**
Joel	**122**
Masimong	**129**
Target 1	**136**

Location of Free State Operations

Harmony has five underground mining operations in the Free State located in the south-western corner of the Witwatersrand Basin, between the towns of Allanridge, Welkom, Theunissen and Virginia. These operations are as follows:

Joel, the most southerly of the gold mines in the Harmony stable, is situated some 40km south of Welkom, 30km south-east of Virginia and 20km north of Theunissen. The mine has a common boundary with Sibanye-Stillwater's Beatrix gold mine to the west.

Tshepong South (Phakisa) which is located north-west of Masimong 5 shaft, between the town of Odendaalsrus and the city of Welkom. It is some 13km north of Welkom and is bounded to the south by Eland shaft, to the west by Nyala shaft and to the north by Tshepong North shaft.

Tshepong North, to the north of Tshepong South (Phakisa), is between the town of Odendaalsrus and the township of Kutloanong, some 20km north of Welkom. It is bounded to the north by the dormant Jeanette Mine, to the south and east by Tshepong South (Phakisa) shaft, and to the south-west by Nyala shaft.

Masimong is located on the north-eastern side of the De Bron fault, approximately 12km east of Welkom and 10km north of Virginia. It is bounded to the south by Masimong 4 shaft and Saaiplaas 3 shaft.

Target 1, the most northerly of Harmony's mines in the Free State, is situated some 30km north of the town of Welkom. Target 3, to the south of Target 1, is on care and maintenance.

Free State Operations – Locality

Processing plants in the Free State

Harmony has four gold processing plants in the Free State:

- Harmony One, which processes the ore mined at Tshepong North, Tshepong South, Masimong and Joel. Harmony One plant is a carbon-in-leach (CIL) plant with a processing capacity of 390t a month
- Target plant, which has a monthly capacity of 105 000t
- Central plant, which has capacity to retreat 300 000t of tailings a month
- Saaiplaas plant, which retreats tailings for the Phoenix (Tswelopele Beneficiation) operation, has a monthly capacity of 500 000t.

All of these plants, except Saaiplaas, have received their certification in terms of the International Cyanide Management Code for the Manufacture, Transport, and Use of Cyanide in the Production of Gold (Cyanide Code).

Regional geology of the Free State goldfield

The Witwatersrand Basin, situated on the Kaapvaal Craton, has been filled by a 6km thick succession of sedimentary rocks, which extends laterally for hundreds of kilometres. Our Free State mining operations exploit the Basal, B, Elsburg, Dreyerskuil and Beatrix reefs.

The Free State goldfield is divided into two sections, cut by the north-south striking De Bron fault. This major structure has a downward vertical displacement to the west of about 1 500m in the region of Bambanani, as well as a dextral shift of 4km. This known lateral shift allows a reconstruction of the orebodies to the west and east of the De Bron fault. Several other major faults, such as the Homestead fault, lie parallel to the De Bron fault.

To the west of the De Bron fault, current operating mines are Target, Tshepong North, Tshepong South (Phakisa) and Joel. Dips of the reef are mostly towards the east, averaging 30 degrees but become steeper approaching the De Bron fault. To the east of the fault lies the Masimong Mine. The reefs occurring here mostly dip towards the west at 20 degrees, although Masimong is structurally complex and dips of up to 40 degrees have been measured. Between these two blocks lies the uplifted Horst block of West Rand Group sediments with no reef preserved.

The western margin area is bound by synclines and reverse thrust faults and is structurally complex. Towards the south and east, reefs sub-crop against overlying strata, eventually cutting out against the Karoo to the east of the lease area.

Most of the Mineral Resource tends to be concentrated in reef bands located on one or two distinct unconformities. A minor portion of the Mineral Resource is located on other unconformities. Mining is mostly deep-level underground mining, exploiting the narrow, generally shallow dipping tabular reefs.

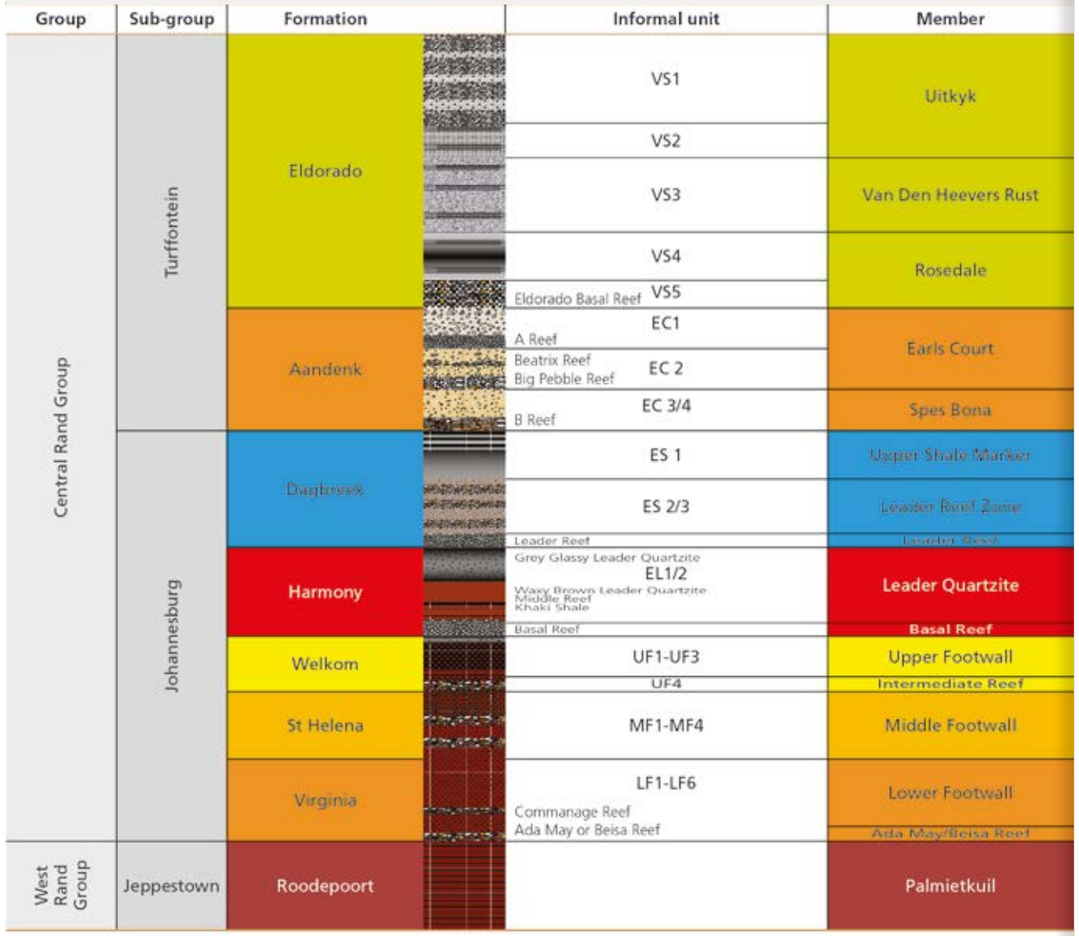
The Basal Reef is the most common reef horizon and is mined at all shafts except Target 1 and Joel. It varies from a single pebble lag to channels of more than 2m thick. It is commonly overlain by shale, which thickens northwards. Tshepong North and Tshepong South(Phakisa) has resorted to undercutting in its mining panels to reduce the effect of shale dilution.

The B Reef is a highly channelised orebody located 140m stratigraphically above the Basal Reef. Because of its erratic nature, it has only been mined at Masimong, Tshepong North, Tshepong South(Phakisa) and the Target 2 and Target 3 shafts. Within the channels, grades are excellent, but this reduces to almost nothing outside the channels. Consequently, these shafts have undertaken extensive exploration to locate these pay channels.

Joel Mine, 40km south of Welkom, is the only Harmony Free State operation to mine the Beatrix Reef.

The Target operation is at the northern extent of the Free State goldfields, some 30km north of Welkom. The reefs currently exploited here are the Elsburg-Dreyerskuil conglomerates, which form a wedge-shaped stacked package, comprising 35 separate reef horizons, often separated by quartzite beds. The Elsburg Reefs are truncated by an unconformity surface at the base of the overlying Dreyerskuil member. Below the sub-crop, the Elsburg Reefs dip steeply to the east, with dips becoming progressively shallower down dip. Close to the sub-outcrop, the thickness of the intervening quartzites reduces, resulting in the Elsburg Reefs coalescing to form composite reef packages that are exploited by massive mining techniques at Target. The Dreyerskuil reefs also consist of stacked reefs dipping shallowly to the east. These reefs tend to be less numerous, but more laterally extensive than the underlying Elsburg reefs.

FREE STATE STRATIGRAPHIC COLUMN



TSHEPONG NORTH

SOUTH AFRICA – **FREE STATE**

Mineral Resources (inclusive)
10.2Moz

Mineral Reserves
0.8Moz

Detailed Mineral Resource and Mineral Reserve estimates are presented in this section.

History
The feasibility study for the initial development of Tshepong North was concluded in 1984. Work to establish the site started in September 1984 and by 1986 shaft sinking was underway. Sinking and equipping of the shaft was completed in 1991, with the mine being commissioned in November 1991.

Nature of the operation
The Tshepong North mine is a mature underground operation mining at moderate depths of between 1 600m and 2 400m below surface. The mine is spilt in upper mine and lower mine sections (decline system) of which the production is a 50/50 ratio from both sections.

Geotechnical and geological complexities resulted in face length flexibility challenges that directly negatively affected both the volume mined and gold produced and as a result Tshepong mine has gone through a restructuring process during FY23. This entailed reducing the footprint of the mine whereby the North-west and North-south area of the mine has been closed and undergone a sealing off project. Stoping production crews were reduced from 80 crews to 58 crews and development production crews reduced from 60 crews to 28 crews.

Geology
The principal gold-bearing orebody is the strati-form and strata-bound Basal Reef (known as the Basal Reef Zone or BRZ). This unit comprises a thin conglomerate at the base of the BRZ, overlain by clean "placer" quartzites. The Basal Reef is underlain by a thick series of siliceous and argillaceous quartzites comprising the Welkom formation and overlain by shales and quartzites of the Harmony formation, both of the Johannesburg sub-group of the Central Rand Group. Although not apparent within the mine lease area, the Basal Reef sits unconformably on the Welkom formation.

The Basal Reef dips towards the east at 25°C with a general north- south strike. The Lower Cycle Black Chert facies predominates in the majority of the lease area. Reef consists of an oligomictic small pebble matrix-supported conglomerate lag with a fly-speck carbon contact with moderate to high grade value trends striking north-west south-east. The EN area of the mine consists of the Loraine facies which consist of small to medium upward fining polymictic matrix supported conglomerate with low to moderate grades. The rest of the reef package constitutes barren siliceous fine-grained reef quartzite. The entire reef package reaches up to 120cm thick and is overlain by 4m – 6m thick Khaki shale.

The Central Rand Group itself is overlain in turn by lavas and sediments of the Ventersdorp System and the more recent sediments of the Karoo Group.

The B Reef occurs approximately 145m stratigraphically above the Basal Reef and varies in thickness from 30cm to 170cm. The conglomerate varies in character depending on the facies, with B1 being a small to medium pebble conglomerate and usually no more than 30cm thick with abundant carbon. The B2 facies is a small pebble lag in an argillaceous quartzite, with little to no mineralisation. B3 facies is a 20cm to 150cm thick conglomerate, mature, well packed, with pebble sizes varying from small to cobble size, very polymictic, normally with abundant pyrite and some carbon. This is the most common facies.

Mineral rights/legal aspects and tenure
Tshepong South (Phakisa) and Tshepong North mines, though reporting separate on production figures since FY23, still share the same mining right under "Tshepong Operations". Tshepong Operations encompasses an area of 10 798.74ha. The ARMGold/Harmony Freegold joint venture (Freegold (Harmony) Pty Ltd) holds several mining rights in the Free State goldfields have been successfully converted and executed as new order mining rights, some of which are still to be registered at the Mineral and Petroleum Resources Titles Office (MPRTO). The mining right for Tshepong Operations, FS30/5/1/284MR, is valid from 11 December 2007 to 10 December 2029.

Mining methods and mine planning
The shaft's primary economic reef horizon is the Basal Reef that is extracted by undercut mining, leaving a quartzite beam in the Hanging wall to ensure the stability of the overlaying shale. The secondary B Reef is extracted via open stoping mining. Both the Basal Reef and B Reef is mined conventionally from a single shaft barrel reaching a depth of 2 600m below collar. The orebody is broken up into blocks by geological structures with large throws. Due to this a scattered mining method is used. Scattered mining is when mining is done between the major geological structures. The mine design criteria is based on the sequential grid mining method where the cross-cuts are spaced at fixed distances of 180m apart however, additional development can be required in some instances and/or the cross-cut spacing can be changed depending on the prevailing geological structures. Primary waste development is done ahead of the stoping front in the virgin stress environment.

Primary development is done off-reef (in the waste rock), while secondary development is done on-reef (in the mineralised zone). In primary development, horizontal haulages are developed from the vertical shaft on strike a proximity 90m below the reef horizon, extending to the extremities of the mining level. Inter-level spacing is the perpendicular distance between two consecutive level stations underground (approximately 84m). Further development is done at set intervals along the haulages towards the mineralised zones in the form of cross-cuts. For secondary development, an inclined excavation that connects two levels is established, referred to as a raise or winze, depending on the upwards or downwards direction in the development.

The B Reef which stratigraphically occurs approximately 145m above the Basal Reef, necessitating separate infrastructure (ie footwall development) from that for the Basal Reef. The presence of khaki shale approximately 6m thick above the Basal Reef strains the footwall development rates for the B Reef, requiring the installation of ring sets for the first 25m of development.

A key feature of scattered mining is that the mine design includes pillars in the stoping areas that are designed to cave or crush in a planned and controlled manner. The pillar dimensions are determined by the geotechnical properties of the host rock. The use of crush pillars minimises the risk of unpredicted collapse of stoping areas. These collapses can compromise the safety of mining operations and may lead to permanent closure of stoping panels or the sterilisation of ore.

Mineral processing

The ore mined is transported by rail for processing at the Harmony One carbon-in-pulp plant, situated some 23km from the shaft by rail. Harmony One plant is located on the southern edge of the city of Welkom in the Free State province of South Africa. It is the highest producing gold plant owned and operated by Harmony. Harmony One plant currently processes underground ore from multiple shafts, as well as ore from several surface sources (eg dumps). The plant was built in 1986, and the milling, leaching and carbon-in-pulp technology reflects the technology which was current at the time. Plant design capacity is 390 000tpm (tonnes per month), steady state.

Infrastructure

The surface and underground infrastructure as well as the power and water supplies available exceed planned peak production requirements. Broken rock handling above 66 level is track-bound, transferred to a number of inter-level sub-vertical transfer systems that gravity feeds to the main silos on 68 level. The broken rock handling below 66 level is track-bound, transferred to a decline belt system that feeds to the silos on 66 level from where the rock is transferred by track to the main inter-level sub-vertical transfer system on 66 level. The rock is hoisted to surface through the main shaft. From the shaft the rock is transported to the processing plant by train.

Mineral Resource estimation

Tshepong North and Tshepong South (Phakisa) estimation processes are still under one umbrella. The Datamine valuation model uses all the underground chip sampling data points and boreholes values drilled in the Tshepong North and South lease area. Geozones are determined based on reef facies types and value trends. The Tshepong South (Phakisa) and Tshepong North sections share 13 Basal Reef geozones and 7 B Reef geozones. The geozones are capped at an optimal percentile using a system called the quantile process to avoid overestimation due to high outlying values. Based on confidence levels for geostatistical data, valuation is by means of a computer-generated block model as follows:

- Measured blocks 30m x 30m grid
- Indicated blocks 60m x 60m grid
- Inferred blocks 120m x 120m grid.

The block model is then digitally transferred to the digital environment for valuation. The entire lease area is blocked and cut against major structure, geozones and haloes. The blocks are evaluated by importing the valuation model from Datamine into Deswik, and applying the kriging method in the valuation browser of Deswik.

Mineral Resources have been estimated on the basis of geoscientific knowledge with input from the ore reserve manager, geologists and geostatistical staff. The mine's Mineral Resources are categorised, blocked-out and ascribed an estimated value. Computerised geostatistical estimation processes are used.

Environmental impact

Tshepong North strives to prevent pollution, or otherwise minimise, mitigate and remediate harmful effects of the operations on the environment and hence maintain their ISO 14001 certification. We are also committed to ensuring compliance with applicable environmental legislation. Environmental aspects and impacts at Tshepong North are managed in terms of an environmental management programme (EMPr), as approved by the Department of Mineral Resources and Energy (DMRE). All environmental aspects and impacts emanating from mining activities are documented in the associated EMPr report and the environmental aspect register as required by the MPRDA and ISO 14001:2015 standard.

The operation is ISO 14001 accredited and conforms with the requirements of the ISO 14001:2015 standard, for which it is audited annually. Annual performance monitoring and audits are conducted by the DMRE to verify compliance with the following legislation:

- Mine Health and Safety Act
- National Water Act
- National Environmental Management Act
- MPRDA.

All environmental impacts emanating from mining activities are managed in terms of the EMPr and ISO 14001:2015 requirements. Environmental audits or performance assessments are conducted by independent environmental consultants every second year to verify compliance with Tshepong North approved EMPr, as required by Regulation 55 of the MPRDA, and the report is submitted to the DMRE.

In addition, an internal environmental legal compliance audit is conducted to verify compliance. An online environmental legal register is maintained at **www.dreyer-legal.co.za** to monitor compliance and to provide applicable and relevant environmental legal updates for the operation. Biomonitoring surveys are also conducted on surface water streams and monitoring boreholes close to the operation in compliance with draft water use licence conditions and the National Water Act.

Material risks

Material risks that may impact the Tshepong North Mineral Resource and Mineral Reserve statement:

Significant risks	Remedial actions
» Orebody complexity » Ventilation of decline area.	» Extensive exploration drilling and increased development to improve the execution of the production plan » Installation of booster fans on 75 level.

Competent person

Ore Reserve manager

Andrew Murray Louw
BSc Hons (Geo hydrology), SACNASP
28 years' relevant experience.

Tshepong North

Gold – Mineral Resource estimates at 30 June 2024 (inclusive)

	Measured				Indicated				Inferred				Total			
	Tonnes		Gold		Tonnes		Gold		Tonnes		Gold		Tonnes		Gold	
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Tshepong North	14.3	11.98	172	5 514	6.1	10.53	65	2 079	7.9	10.16	80	2 588	28.4	11.16	317	10 182

Modifying factors

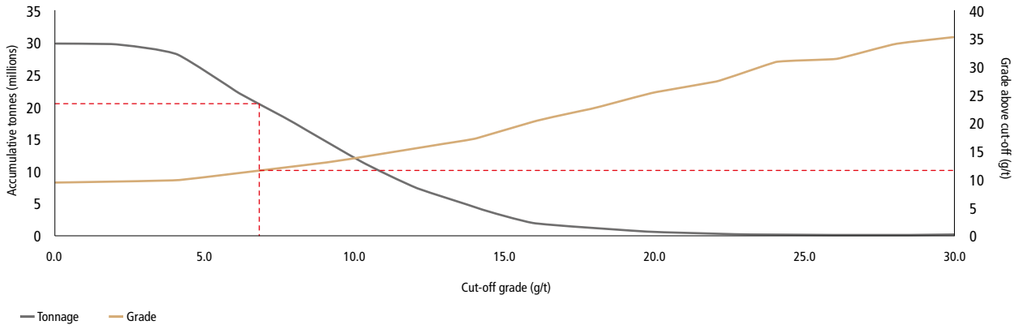
Tshepong North	MCF (%)	SW (cm)	MW (cm)	PRF (%)	Cut-off (cmg/t)
2023	72	118	142	95	800
2024	70	118	143	95	750

Gold – Mineral Reserve estimates at 30 June 2024

	Proved				Probable				Total			
	Tonnes		Gold		Tonnes		Gold		Tonnes		Gold	
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Tshepong North	3.0	4.77	14	461	2.0	5.57	11	356	5.0	5.09	25	818

Tshepong North: Basal and B Reef

Measured and Indicated Mineral Resource grade-tonnage curve



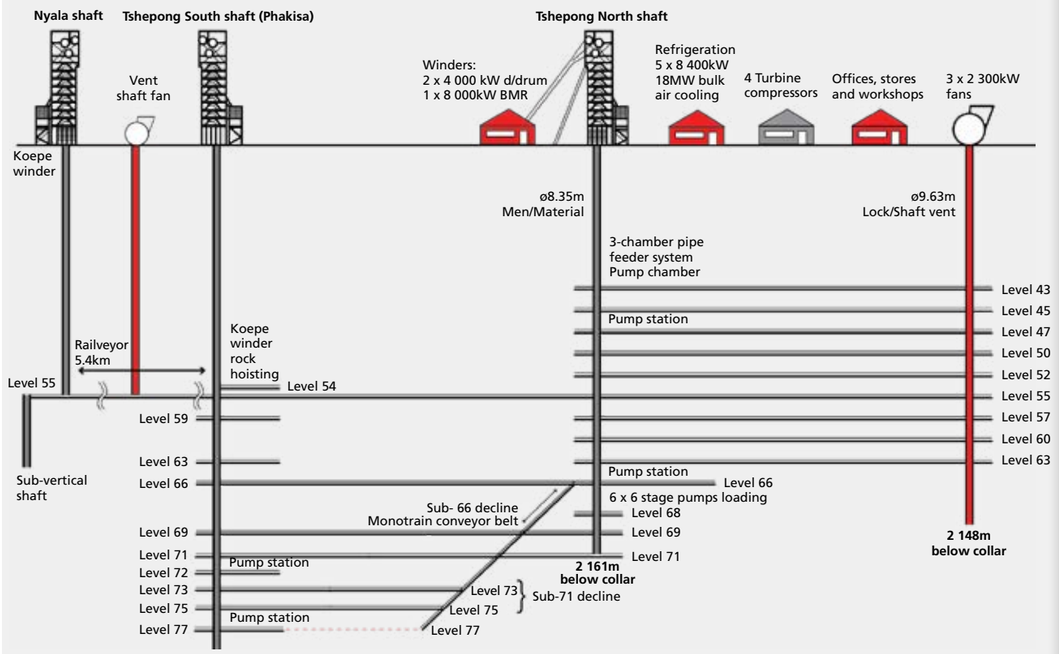
Operational performance

Tshepong North: Key operating statistics

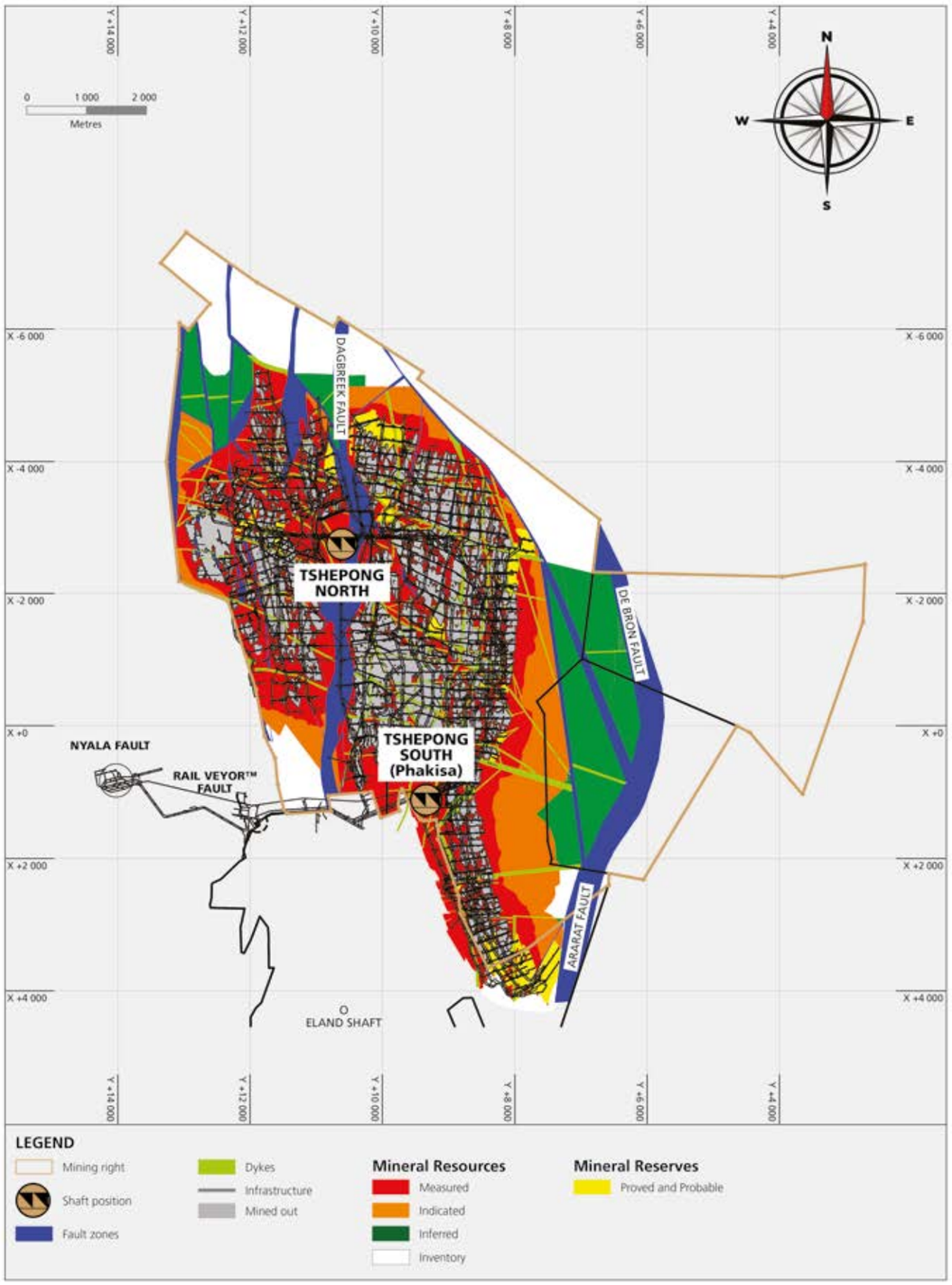
	Unit	FY24	FY23	FY22	FY21	FY20
Operation						
Volumes milled	000t (metric)	**726**	795	988	944	—
	000t (imperial)	**800**	876	1 090	1 041	—
Gold produced	kg	**3 248**	3 354	3 793	4 237	—
	oz	**104 426**	107 834	121 949	136 222	—
Grade	g/t	**4.47**	4.22	3.84	4.49	—
	oz/t	**0.131**	0.123	0.112	0.131	—
Development						
Total metres (excluding capital metres)		**8 085**	8 835	14 374	13 303	—
Reef metres		**1 124**	1 654	1 567	1 319	—
Capital metres		**—**	—	1 126	1 000	—
Financial						
Average gold price received	R/kg	**1 213 187**	1 041 078	902 645	843 287	—
	US$/oz	**2 018**	1 823	1 846	1 703	—
Capital expenditure	Rm	**559**	553	1 038	746	—
	US$m	**30**	31	68	48	—
Cash operating cost	R/kg	**884 464**	797 069	763 163	662 877	—
	US$/oz	**1 471**	1 396	1 561	1 339	—
All-in sustaining cost	R/kg	**1 078 897**	975 498	994 235	827 334	—
	US$/oz	**1 795**	1 708	2 033	1 671	—

Schematic of shaft and mining layout of the Nyala, Tshepong South (Phakisa) and Tshepong North shafts

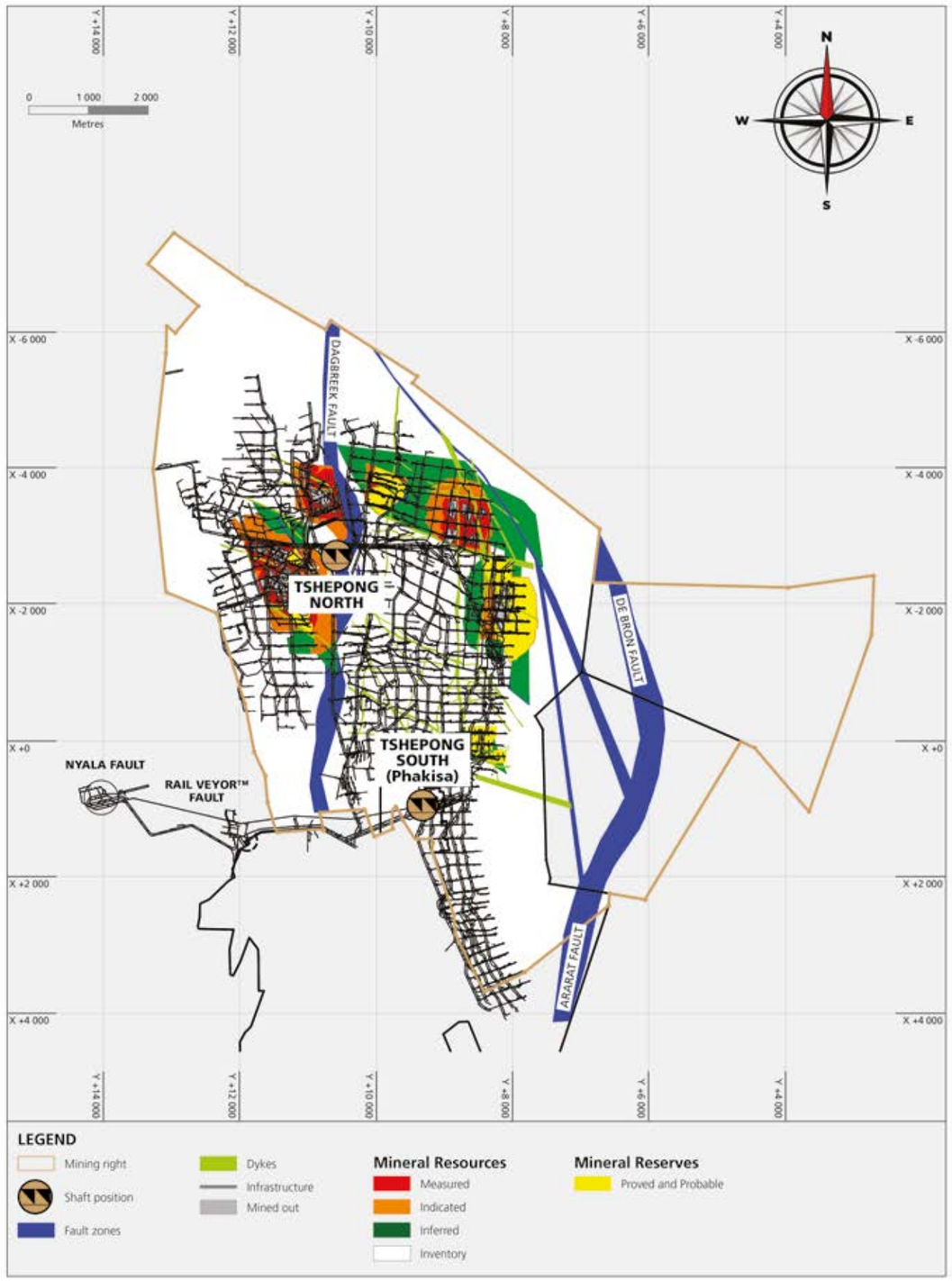
Not to scale



Tshepong North
Basal Reef: Mineral Resources and Mineral Reserves – June 2024



Tshepong North
B Reef: Mineral Resources and Mineral Reserves – June 2024



TSHEPONG SOUTH (PHAKISA)

SOUTH AFRICA – **FREE STATE**

Mineral Resources (inclusive)
14.5Moz

Mineral Reserves
0.7Moz

Detailed Mineral Resource and Mineral Reserve estimates are presented in this section.

History

The Tshepong South mine (Phakisa) began as a project in October 1993, with shaft sinking commencing in February 1994. It was formerly known as Free State Geduld 4, Freddies 4 and Tshepong South. In 1995, shaft sinking was halted on 59 level due to the low gold price prevailing at that time. Subsequently, the financial climate improved and operations resumed in September 1996. Sinking was then completed to the station brow on 75 level. Low gold prices again resulted in the shaft being mothballed in the last quarter of 1999.
In January 2002, Harmony acquired a stake in Phakisa as part of the Freegold acquisition from AngloGold Ashanti Ltd, following which the operation was acquired in full in September 2003. Sinking and equipping of the shaft to a depth of 2 427m was completed in 2006. In 2008 Phakisa started production and reached full-scale production in June 2011.

Nature of the operation

Tshepong South (Phakisa) is a single barrel, moderate to deep-level conventional underground operation mining at depths of between 2 014m and 2 600m below surface.

Currently the bulk of the mining is towards the South at 74% with 26% of mining occurring to the north. The North Basal Reef is depleting in approximately two years' time and only Isolated Blocks of Grounds (IBGs) will be mining through to the fourth year. The mining will then shift to the South of the mine (Basal Reef) concurrently with the migration to the newly exposed B Reef area currently being developed to the North. The mining mix between the Basal Reef and the B Reef is planned approximately at 80/20 ratio in the life-of-mine due to the erratic nature of the mineralisation in the B Reef.

Geology

The principal gold-bearing orebody is the strati form and strata-bound Basal Reef (known as the Basal Reef Zone or BRZ). This unit comprises a thin conglomerate at the base of the BRZ, overlain by clean "placer" quartzites. The Basal Reef is underlain by a thick series of siliceous and argillaceous quartzites comprising the Welkom formation and overlain by shales and quartzites of the Harmony formation, both of the Johannesburg sub-group of the Central Rand Group. Although not apparent within the mine lease area, the Basal Reef sits unconformably on the Welkom formation.

The Basal Reef dips towards the east at 25°C in the north and up to 45°C in the south. The Lower Cycle Black Chert facies predominates in the north with a north-west south-east value trend. The reef consists of an oligomictic small pebble matrix-supported conglomerate lag with fly-speck carbon contact. The rest of the reef package constitutes barren siliceous fine-grained reef quartzite. The entire reef package reaches up to 160cm thick in the north and 65cm thick in the south and is overlain by 1cm to 110cm (45cm average in the south) of lower khaki shale. This in turn is overlain by the approximately 3-4m thick waxy brown leader quartzite, above which lies the 3-4m thick upper khaki shale.

The Upper Cycle Black Chert facies Basal Reef prevails in the south of the lease area, and consists of a slightly polymictic (yellow shale specks present), matrix-supported medium-pebble conglomerate with a more gradational contact absent of carbon where mineralisation is associated with fine disseminated and buckshot pyrite. The conglomerate is slightly thicker compared to the Lower Cycle, but is also overlain by barren reef quartzite, the entire package being characteristically up to only 65cm thick. The lower khaki shale is up to 1m thicker.

The Central Rand Group itself is overlain in turn by lavas and sediments of the Ventersdorp System and the more recent sediments of the Karoo Group.

The B Reef occurs approximately 145m stratigraphically above the Basal Reef and varies in thickness from 30cm to 170cm. The conglomerate varies in character depending on the facies, with B1 being a small to medium pebble conglomerate and usually no more than 30cm thick with abundant carbon. The B2 facies is a small pebble lag in an argillaceous quartzite, with little to no mineralisation. B3 facies is a 20cm to 150cm thick conglomerate, mature, well packed, with pebble sizes varying from small to cobble size, very polymictic, normally with abundant pyrite and some carbon. This is the most common facie.

Mineral rights/legal aspects and tenure

Tshepong South (Phakisa) and Tshepong North mines, though reporting separate on production figures since FY23, still share the same mining right under "Tshepong Operations". Tshepong Operations encompasses an area of 10 798.74ha. The ARMGold/Harmony Freegold joint venture (Freegold (Harmony) Pty Ltd) holds several mining rights in the Free State goldfields have been successfully converted and executed as new order mining rights, some of which are still to be registered at the Mineral and Petroleum Resources Titles Office (MPRTO). The mining right for Tshepong Operations, FS30/5/1/284MR, is valid from 11 December 2007 to 10 December 2029.

Mining methods and mine planning

The shaft's primary economic reef horizon is the Basal Reef that is extracted both by undercut mining (North), leaving a quartzite beam in the hangingwall to ensure the stability of the overlaying shale and open mining (South). The Basal Reef is mined conventionally from a single shaft barrel reaching a depth of 2 600m below collar. The orebody is broken up into blocks by geological structures with large throws. Due to this a scattered mining method is used. Scattered mining is when mining is done between the major geological structures. The mine design criteria is based on the sequential grid mining method where the cross-cuts are spaced at fixed distances of 160m apart however, additional development can be required in some instances and/or the cross-cut spacing can be changed depending on the prevailing geological structures. Primary waste development is done ahead of the stoping front in the virgin stress environment.

Primary development is done off-reef (in the waste rock), while secondary development is done on-reef (in the mineralised zone). In primary development, horizontal haulages are developed from the vertical shaft, extending to the extremities of the mining level. Inter-level spacing is the perpendicular distance between two consecutive level stations underground (approximately 80m). Further development is done at set intervals along the haulages towards the mineralised zones in the form of cross-cuts. For secondary development, an inclined excavation that connects two levels is established, referred to as a raise or winze, depending on the upwards or downwards direction in the development.

A key feature of scattered mining is that the mine design includes pillars in the stoping areas that are designed to cave or crush in a planned and controlled manner. The pillar dimensions are determined by the geotechnical properties of the host rock. The use of crush pillars minimises the risk of unpredicted collapse of stoping areas. These collapses can compromise the safety of mining operations and may lead to permanent closure of stoping panels or the sterilisation of ore.

The B Reef which stratigraphically occurs approximately 145m above the Basal Reef commenced mining and is accessed by means of conventional grid development and extracted as an open stoping operation. The B Reef will necessitate separate infrastructure (ie footwall development) from that for the Basal Reef. The presence of khaki shale approximately 6m thick above the Basal Reef constrains the footwall development rates for the B Reef, requiring the installation of ring sets for the first 25m of development. A geological feature such as a dyke or large fault may allow the development to bypass the shale, increasing the mining rate with less complexity.

Mineral processing

The ore mined is transported by rail for processing at the Harmony One carbon-in-pulp plant, situated some 23km from the shaft by rail. Harmony One plant is located on the southern edge of the city of Welkom in the Free State province of South Africa. It is the highest producing gold plant owned and operated by Harmony. Harmony One plant currently processes underground ore from multiple shafts, as well as ore from several surface sources (eg dumps). The plant was built in 1986, and the milling, leaching and carbon-in-pulp technology reflects the technology which was current at the time. Plant design capacity is 390 000tpm (tonnes per month), steady state.

Infrastructure

Surface infrastructure includes a well-established network of paved roads and railway lines as well as a water pipeline and electrical lines to supply and deliver the materials required and transport the ore hoisted to the Harmony One plant for treatment.

The underground infrastructure is that of a mature, moderate to deep-level underground mining operation using conventional underground mining methods to depths of 2427BMD.

Mineral Resource estimation

Tshepong North and Tshepong South (Phakisa) estimation processes are still under one umbrella. The Datamine valuation model uses all the underground chip sampling data points and boreholes values drilled in the Tshepong North and South lease area. Geozones are determined based on reef facies types and value trends. The Tshepong South and Tshepong North sections share 13 Basal Reef geozones and 7 B Reef Geozones. The geozones are capped at an optimal percentile using a system called the quantile process to avoid overestimation due to high outlying values. Based on confidence levels for geostatistical data, valuation is by means of a computer-generated block model as follows:

- Measured blocks 30m x 30m grid
- Indicated blocks 60m x 60m grid
- Inferred blocks 120m x 120m grid.

The block model is then digitally transferred to the digital environment for valuation. The entire lease area is blocked and cut against major structure, geozones and haloes. The blocks are evaluated by importing the valuation model from Datamine into Deswik, and applying the kriging method in the valuation browser of Deswik.

Mineral Resources have been estimated on the basis of geoscientific knowledge with input from the ore reserve manager, geologists and geostatistical staff. The mine's Mineral Resources are categorised, blocked-out and ascribed an estimated value. Computerised geostatistical estimation processes are used.

Environmental impact

Tshepong South (Phakisa) strives to prevent pollution, or otherwise minimise, mitigate and remediate harmful effects of the operations on the environment and hence maintain their ISO 14001 certification. We are also committed to ensuring compliance with applicable environmental legislation.

Environmental aspects and impacts at Tshepong South are managed in terms of an environmental management programme (EMPr), as approved by the Department of Mineral Resources and Energy (DMRE). All environmental aspects and impacts emanating from mining activities are documented in the associated EMPr report and the environmental aspect register as required by the MPRDA and ISO 14001:2015 standard.

The operation is ISO 14001 accredited and conforms with the requirements of the ISO 14001:2015 standard, for which it is audited annually monitoring and audits are conducted by the DMRE to verify compliance with the following legislation:

- Mine Health and Safety Act
- National Water Act
- National Environmental Management Act
- MPRDA.

All environmental impacts emanating from mining activities are managed in terms of the EMPr and ISO 14001:2015 requirements. Environmental audits or performance assessments are conducted by independent environmental consultants every second year to verify compliance with Tshepong South approved EMPr, as required by Regulation 55 of the MPRDA, and the report is submitted to the DMRE.

In addition, an internal environmental legal compliance audit is conducted to verify compliance. An online environmental legal register is maintained at **www.dreyer-legal.co.za** to monitor compliance and to provide applicable and relevant environmental legal updates for the operation. Biomonitoring surveys are also conducted on surface water streams and monitoring boreholes close to the operation in compliance with draft water use licence conditions and the National Water Act.

Material risks

Material risks that may impact the Tshepong South (Phakisa) Mineral Resource and Mineral Reserve statement:

Significant risks	Remedial actions
» Ventilation – elevated cross-cut intake temperatures » Engineering – logistics » Mining flexibility – facelength.	» Reduce water usage and improve ice production to 3 400t/day, investigating new Howden Ice plant » Railveyor – install additional booster drive, ensure alignment of A-Frames and rails to curb derailments » Increased development and more equipping crews in the south area of the mine, faster handover from development to stoping.

Competent person

Conrad Pienaar
BSc Hons (Geology), SACNASP
15 years' relevant experience.

Ore Reserve Manager

Lana Cousin-Forster
BSc Hons (Geology)
22 years' relevant experience.

Tshepong South

Gold – Mineral Resource estimates at 30 June 2024 (inclusive)

	Measured				Indicated				Inferred				Total			
	Tonnes (Mt)	Gold (g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	Gold (g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	Gold (g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	Gold (g/t)	Gold (000kg)	Gold (000oz)
Tshepong South	8.1	12.55	102	3 275	8.9	11.09	98	3 164	22.8	11.03	251	8 084	39.8	11.35	452	14 523

Modifying factors

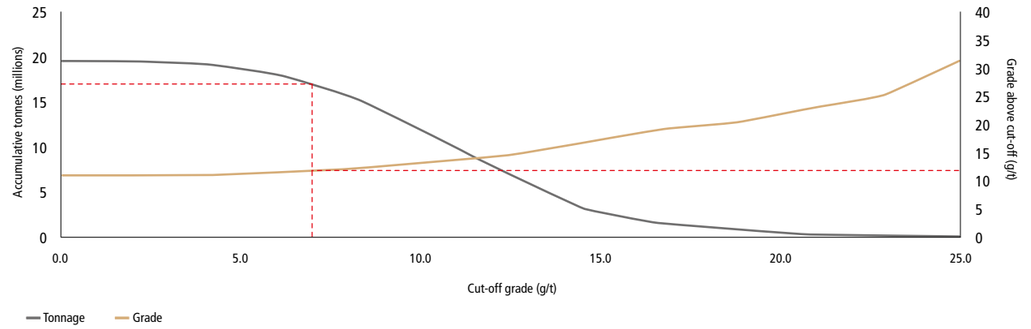
Tshepong South	MCF (%)	SW (cm)	MW (cm)	PRF (%)	Cut-off (cmg/t)
2023	83	130	153	95	791
2024	83	133	152	95	790

Gold – Mineral Reserve estimates at 30 June 2024

	Proved				Probable				Total			
	Tonnes (Mt)	Gold (g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	Gold (g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	Gold (g/t)	Gold (000kg)	Gold (000oz)
Tshepong South	2.4	8.02	19	608	0.2	7.08	2	52	2.6	7.94	21	660

Tshepong South: Basal Reef

Measured and Indicated Mineral Resource grade-tonnage curve



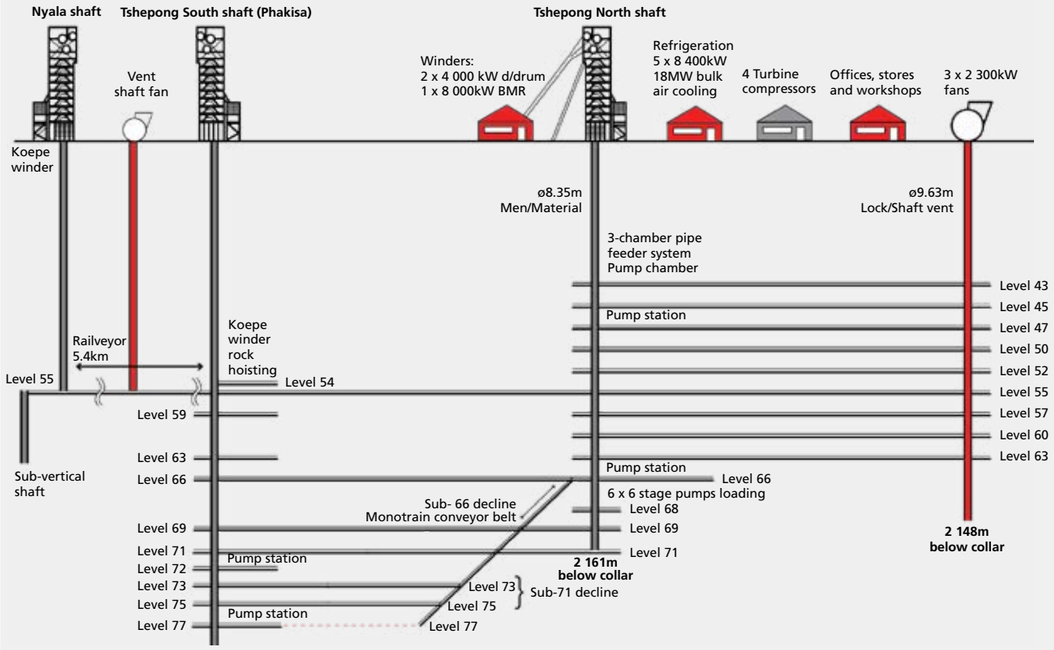
Operational performance

Tshepong South: Key operating statistics

	Unit	FY24	FY23	FY22	FY21	FY20
Operation						
Volumes milled	000t (metric)	**465**	506	573	614	—
	000t (imperial)	**512**	557	631	677	—
Gold produced	kg	**3 129**	3 431	3 229	3 182	—
	oz	**100 599**	110 310	103 814	102 304	—
Grade	g/t	**6.73**	6.78	5.64	5.18	—
	oz/t	**0.196**	0.198	0.165	0.151	—
Development						
Total metres (excluding capital metres)		**5 965**	6 655	7 331	7 510	—
Reef metres		**1 055**	1 198	996	1 066	—
Capital metres		**2 116**	1 119	—	—	—
Financial						
Average gold price received	R/kg	**1 211 447**	1 043 180	904 303	847 351	—
	US$/oz	**2 015**	1 826	1 849	1 711	—
Capital expenditure	Rm	**527**	514	476	366	—
	US$m	**28**	29	32	24	—
Cash operating cost	R/kg	**833 307**	691 925	679 169	663 304	—
	US$/oz	**1 386**	1 211	1 389	1 340	—
All-in sustaining cost	R/kg	**1 002 141**	841 983	843 688	799 352	—
	US$/oz	**1 667**	1 474	1 725	1 614	—

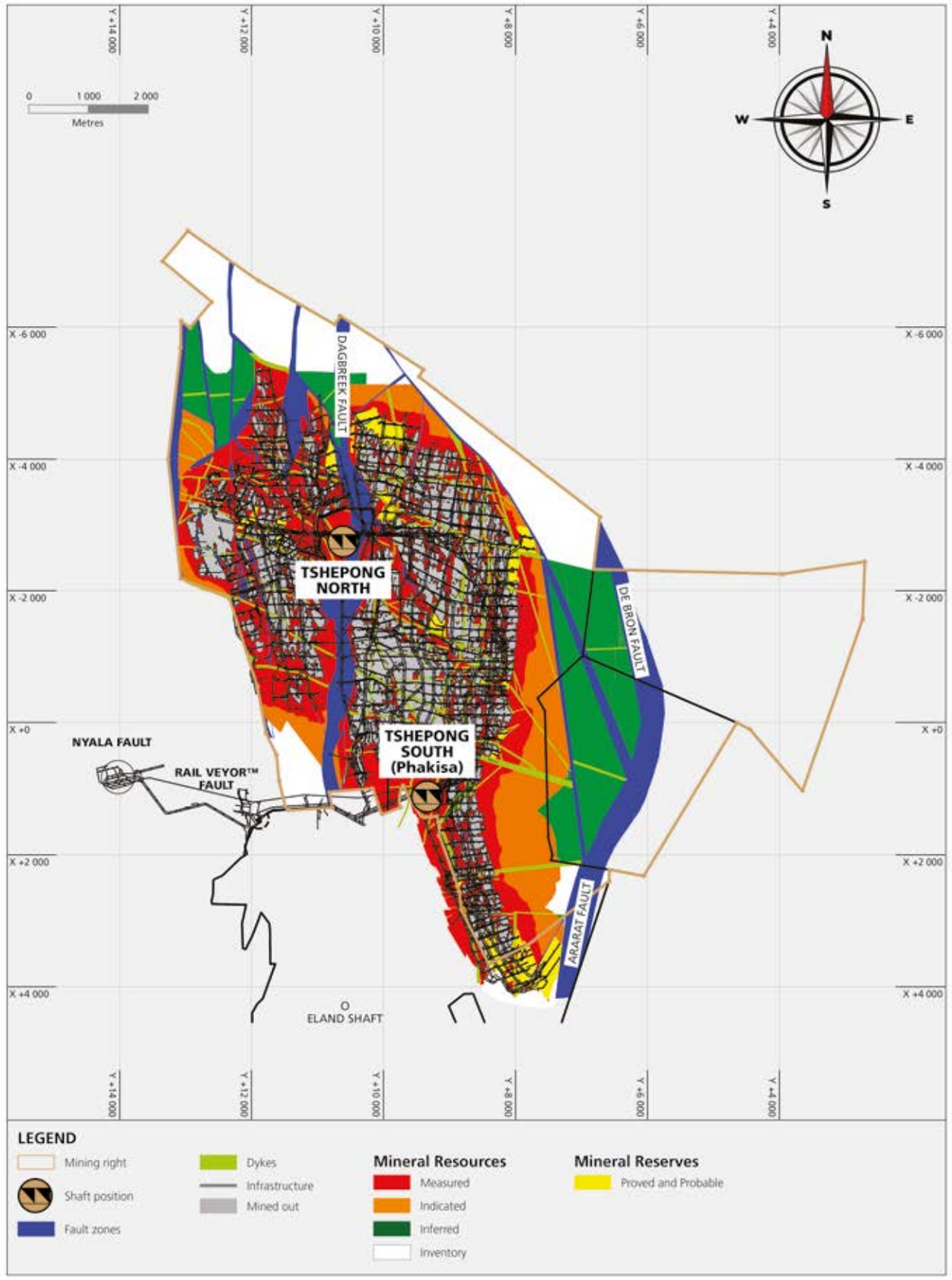
Schematic of shaft and mining layout of the Nyala, Tshepong South (Phakisa) and Tshepong North shafts

Not to scale



Tshepong South (Phakisa)

Basal Reef: Mineral Resources and Mineral Reserves – June 2024



JOEL

SOUTH AFRICA – **FREE STATE**

Mineral Resources (inclusive)
1.8Moz

Mineral Reserves
0.4Moz

Detailed Mineral Resource and Mineral Reserve estimates are presented in this section.

History
Active prospecting in the area began on the farms Leeuwbult 580 and Leeuwfontein 256 in 1981. Construction of the twin-shaft system began in September 1985 and was completed by December 1987. Joel South was designed to be a fully trackless mining operation. Previously known as HJ Joel, the mine's name changed to Joel in 1998 when the then AngloGold Ashanti Ltd was established. The mine's name was later changed to Taung in 1999, reverting to Joel in January 2002 when the Freegold joint venture between Harmony and ARMGold assumed responsibility for the operation.

Nature of the operation
Joel consists of two interconnected shaft complexes: the south shaft complex, which is currently in operation, and the north shaft complex.

The south shaft complex has two shafts, namely 3 shaft (men and material) and 4 shaft (ventilation). This shaft system was sunk beyond the reef sub-outcrop and is located on the southern extremity of the orebody. These two shafts go down to 1 050m below collar and cover four levels, namely 60 and 70 levels (which are mined-out trackless levels), 90 level, which is the main transfer level, and 95 level, which houses the pumping and loading facilities.

The north shaft complex is a single-shaft system, sunk and lined to 1 471m below collar, but not yet equipped to hoist people. Feasibility studies were conducted in 2005 to determine whether this shaft could assist in extending Joel's life-of-mine by opening up 129 level. This shaft was upgraded in February 2006 to enable hoisting of ore through the north shaft barrel. Hoisting was halted in March 2007, owing to the deteriorating shaft infrastructure. The shaft has since been re-equipped to hoist ore and acts as a second outlet for the mine. A short one-compartment lift shaft from 110 level gives access to 121 level. The single drum winder at this level is used to transport men and material down to 121 level and for hopper hoisting of development and some stoping ore. The lift shaft has since been deepened to access 129 level. The lift shaft will service men and material only, whereas the north shaft will be dedicated to hoisting ore.

The two shaft complexes (north and south) are connected via a triple decline system, spanning four levels and consisting of an approximately 1 600m belt decline (decommissioned), a chairlift decline to 110 level and two material declines in tandem down to 117 level. The decline levels are 98, 104, 110 and 117 with the last two connected to the north shaft. Although they share a boundary, there are no holing connections between Joel and Beatrix.

Joel currently has a life-of-mine expectancy of six years. This includes mining up to 137 level and the Beatrix block swap.

To access the orebody from 137 level, two declines were developed at 12° from 129 level – a chairlift decline and a conveyor belt decline. Primary footwall development is currently underway on 137 level.

Geology
The main structures at Joel are associated with the Platberg Extension. These faults are north-south striking, steeply dipping and typically have downthrows to the east of 10m to 100m. These downthrows form a graben against the De Bron fault, which has a 450m up throw to the east. East of the De Bron fault, the reef has been either truncated or eroded against the Karoo Supergroup.

Minor east-west striking faults are also present. However, displacements on these faults are generally less than 10m, which are believed to be Klipriviersberg in age. Low angle reverse faulting is also present. These structures trend north-south, have small displacements and dip towards the east. These structures may be related to the central Rand Contractional event.

The Klippan formation was preserved as an east-west trending erosional channel that has eroded deeply through the Witwatersrand sediments and has eliminated the Beatrix/VS5 horizon in the eastern portion of the mine and cut out a significant chunk in an east-west direction through the middle of the lease area. Regionally the Klippan formation is preserved in the north-south striking basin, known as the Virginia Basin in the southern Free State, which parallels the De Bron fault.

A deep erosional channel of Platberg group volcano-sedimentary rock, known as the Klippan channel, truncates the Beatrix Reef some 1.8km to the north of south shaft. This washout feature is wedge-shaped with its apex to the west and widening to the east. The estimated dimension from the apex to the eastern property boundary is approximately 1.8km. The reef has been shown to be continuous to the north of this feature.

Where unaffected by the Klippan channel, the reef is bound to the east by the De Bron fault, which strikes north-north-east. The CD fault, which strikes north-east and is roughly halfway between the two shafts, has a 320m sinistral lateral displacement south of the fault towards the north-east.

The complex nature of the reef has resulted in a highly irregular distribution of gold throughout the mining area. There are broad low and high-grade zones over hundreds of metres, which are considered likely to be repeated within the reef environment beyond the limits of the current development. However, the detailed grade distribution within these zones remains very unpredictable.

For the purposes of Resource estimation, a detailed facies model is used and is based on detailed sedimentological observations.

Mineral rights/legal aspects and tenure
The current mining right, encompassing an area of 2 355.8ha, was successfully converted, executed and registered as a new order mining right at the Mineral and Petroleum Resources Titles Office on 6 August 2010 under 73/2010MR. The right was granted on 3 December 2007 for a period of 11 years, ending on 2 December 2018. The right has been successfully renewed in terms of section 24 (1) of the Mineral and Petroleum Resources Development Act for a further 11 years, ending on 14 February 2030.

Mining methods and mine planning
Joel operates at an intermediate mining depth and the mining method is tailor made for the variable grades intersected as well as the associated rock-related hazards anticipated at this depth.

Given the variable grades and geological complexity, mining is conducted mainly in terms of a pre-developed scattered mining system. This system allows for unpay and geologically complex areas to be left un-mined with some cognisance taken of the overall panel configuration and stability of footwall development. This allows for selective mining, based on the proven Ore Reserve during the development phase.

In addition, stoping panel stability in an intermediate stress environment may require additional stabilising pillars be left to support the immediate hanging wall. These take the form of inter-panel crush pillars between neighbouring mining panels. The major rock-related risk is the occurrence of unexpected panel collapses.

Minor falls of ground, due to geology, bedding, shale and jointing, do occur but are mostly addressed via a proven in-stope support system. As the largest portion of Joel's production is currently mined between 129 and 137 levels, production is focused mainly on four or five raise lines.

In addition, as mining has advanced into more complex geological areas, dip and strike-related structures are more commonly intersected. The change to a higher support resistance system, given the intersection of a more complex geological environment, has been largely successful and the occurrence of large geological "back breaks" and falls-of-ground are rare. Timber-based packs were installed along gullies and as breaker line support in panels to improve hanging wall stability. From a management perspective, it is of utmost importance that geological structures are reported, mapped and properly supported using high-support resistance pack units to ensure a stable stoping horizon.

With the marginal increase in depth and the more complex geological environment, the incidence of low magnitude (<1.5) seismic events has slowly increased. This activity has manifested mainly in reasonably low-stress (45Mpa) strike-orientated dyke intersections with stoping excavations. The installation of a 10-station regional seismic network to highlight potentially unstable areas and structures prone to bursting was completed with the seismic data used to highlight potential problem areas. The seismic network is maintained, and its operational and health status are kept well above the 80% mark.

Mineral processing

Joel ore is transported by road for processing at the Harmony One carbon-in-pulp plant, which is situated some 40km from the shaft. Harmony One plant is located on the southern edge of the city of Welkom in the Free State province of South Africa. It is the highest producing gold plant owned and operated by Harmony. Harmony One plant currently processes underground ore from multiple shafts, as well as ore from several surface sources (eg dumps). The plant was built in 1986, and the milling, leaching and carbon-in-pulp technology reflects the technology which was current at the time. Plant design capacity is 390 000tpm (tonnes per month) steady state.

Infrastructure

Surface infrastructure includes a well-established network of paved roads and railway lines as well as a water pipeline and electrical lines to supply and deliver the materials required and transport the ore hoisted to the Harmony One plant for treatment.

Joel's upper mining levels are in a mature phase of operation. The decline project development, from 129 to 137 levels, which started in 2011, is completed. Decline project engineering construction was completed and stoping has commenced on 137 level.

Mineral Resource estimation

The method used to estimate local measurements on the shaft is ordinary kriging with simple macro-kriging used for local Indicated and Inferred estimates. Estimates are generally kriged into 30m x 30m blocks for Measured Resources from the point support data. Indicated Mineral Resources are kriged into 60m x 60m blocks, using associated regularised variograms together with a macro-kriging decluster.

Similarly, Inferred Mineral Resources are estimated using associated regularised variograms and kriging into 120m x 120m blocks. Any un-kriged areas in the Inferred regions are then covered by global mean estimates. Geozones are based on grade distribution to ensure correct grade estimates are conducted for each area.

Environmental impact

Environmental aspects and impacts at Joel are managed in terms of an environmental management programme (EMPr), as approved by the Department of Mineral Resources and Energy (DMRE), and in line with the Mineral and Petroleum Resources the Development Act (MPRDA). All environmental aspects and impacts emanating from mining activities are documented in the associated EMPr report and the environmental aspect register as required by the MPRDA and ISO 14001:2004.

Performance monitoring and audits are conducted annually by the DMRE to verify compliance with the following legislation:

- Mine Health and Safety Act
- National Water Act
- National Environmental Management Act
- MPRDA.

All environmental impacts emanating from mining activities are managed in terms of the EMPr and ISO 14001:2004 requirements.

Environmental audits or performance assessments are conducted by independent environmental consultants every second year to verify compliance with Joel's approved EMPr, as required by Regulation 55 of the MPRDA, and the report is submitted to the DMRE. In addition, an internal environmental legal compliance audit is conducted to verify compliance. An online environmental legal register is maintained at **www.dreyer-legal.co.za** to monitor compliance and to provide applicable and relevant environmental legal updates for the operation.

Biomonitoring surveys are also conducted on surface water streams close to the operation in compliance with draft water use licence conditions and the National Water Act to:

- Determine the condition of biological communities as well as the chemical water quality in rivers and streams during the wet seasons
- Provide baseline reference conditions for future studies in order to assist Joel Mine's management in identifying environmental liabilities relating to the potential contamination of surface streams resulting from current mining activities.

The operation is ISO 14001 accredited and conforms with the requirements of ISO 14001:2004, for which it is audited annually. Joel is also accredited in line with the International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold (Cyanide Code), initially in 2010 and most recently on 1 February 2017. Joel is committed to eliminating and/or minimising the effects of mining activities on the environment and adjacent communities.

Material risks

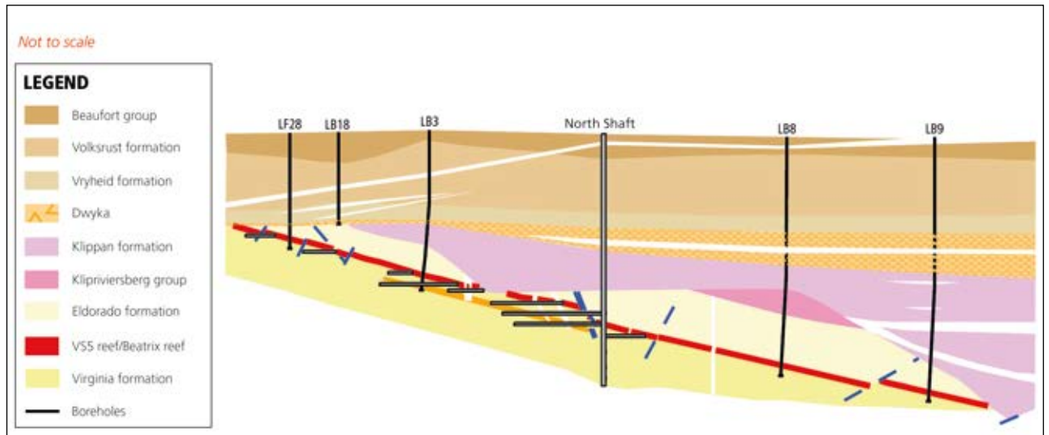
Material risks that may impact Joel's Mineral Resource and Mineral Reserve statement:

Significant risks	Remedial actions
» Flooding of 145 level (shaft bottom)	» Construct new dam on 145 level
» Lack of mining flexibility.	» Prioritising development to open raise lines.

Competent person

Ore Reserve manager

Johann Diederick Ackermann
BSc Geology, SAIMM
30 years' relevant experience in Witwatersrand gold mining.



Joel geological section looking west.

Joel

Gold – Mineral Resource estimates at 30 June 2024 (inclusive)

	Measured				Indicated				Inferred				Total			
	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)
Joel	3.8	7.34	28	886	3.5	7.03	25	792	0.4	8.27	3	105	7.7	7.24	55	1 783

Modifying factors

Joel	MCF (%)	SW (cm)	MW (cm)	PRF (%)	Cut-off (cmg/t)
2023	84	170	184	94	915
2024	82	174	184	95	915

Gold – Mineral Reserve estimates at 30 June 2024

	Proved				Probable				Total			
	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)
Joel	2.1	4.70	10	323	0.8	4.36	3	112	2.9	4.61	14	436

Joel Mine: Beatrix Reef

Measured and Indicated Mineral Resource grade-tonnage curve

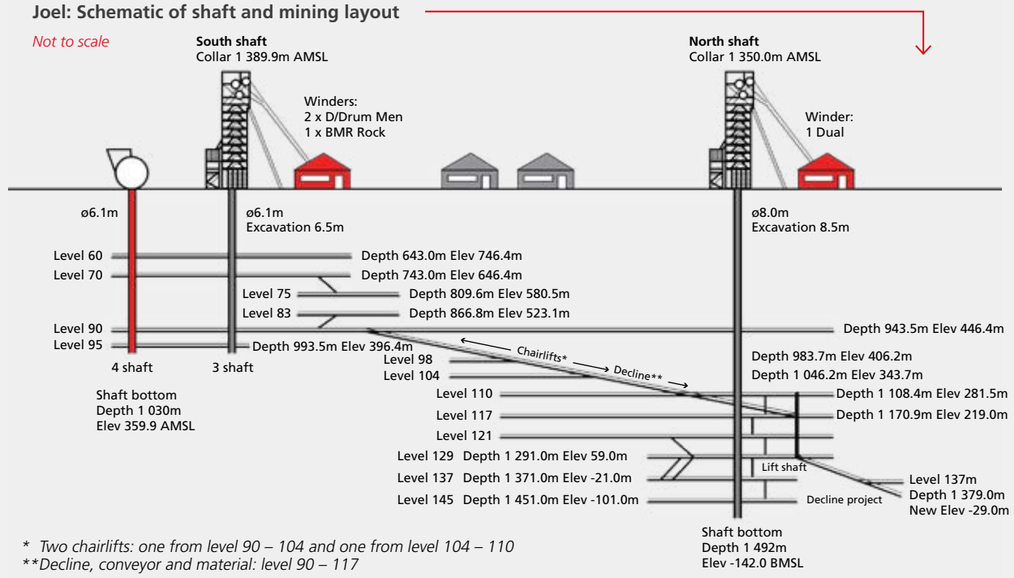
Operational performance

Joel: Key operating statistics

	Unit	FY24	FY23	FY22	FY21	FY20
Operation						
Volumes milled	000t (metric)	**401**	435	434	359	349
	000t (imperial)	**442**	481	478	396	384
Gold produced	kg	**1 733**	1 947	1 556	1 424	1 391
	oz	**55 718**	62 598	50 026	45 783	44 722
Grade	g/t	**4.32**	4.48	3.59	3.97	3.99
	oz/t	**0.126**	0.130	0.105	0.116	0.116
Development						
Total metres (excluding capital metres)		**3 194**	3 221	3 364	3 397	2 734
Reef metres		**935**	847	1 104	1 806	832
Capital metres		**—**	—	—	—	—
Financial						
Average gold price received	R/kg	**1 216 923**	1 040 581	907 660	848 131	734 620
	US$/oz	**2 024**	1 822	1 856	1 713	1 459
Capital expenditure	Rm	**236**	231	225	172	151
	US$m	**13**	13	15	11	10
Cash operating cost	R/kg	**975 319**	823 291	845 931	796 982	718 024
	US$/oz	**1 622**	1 441	1 730	1 610	1 426
All-in sustaining cost	R/kg	**1 145 064**	950 713	983 593	936 296	826 970
	US$/oz	**1 905**	1 665	2 011	1 891	1 642

Joel: Schematic of shaft and mining layout

Not to scale



** Two chairlifts: one from level 90 – 104 and one from level 104 – 110*
***Decline, conveyor and material: level 90 – 117*

Joel Mine

Beatrix Reef: Mineral Resources and Mineral Reserves – June 2024

MASIMONG

Mineral Resources (inclusive)
0.9Moz

Mineral Reserves
0.1Moz

Detailed Mineral Resource and Mineral Reserve estimates are presented in this section.

History

Masimong was originally known as Erfdeel when it was sunk by Anglo American's gold and uranium division in 1985. Harmony purchased Saaiplaas 3 from Anglo American in March 1997 and the two Erfdeel shafts in September 1998, which were renamed Saaiplaas 4 and 5. After the closure of Saaiplaas 3 in early 1998, following the collapse of the gold price, an opportunity arose to reopen the entire shaft complex, comprising the Saaiplaas 4 and 5 shafts, in September 1998 when it was renamed Masimong.

Masimong 5 shaft (formerly Saaiplaas 5), the youngest of the shafts, was sunk in 1985. Reef and waste ore was transported via a twin haulage system to Masimong 4 (Saaiplaas 4) until September 2001, when equipping of the reef and waste-hoisting infrastructure was completed at 5 shaft. Mining operations at Masimong 4 and Saaiplaas 3, which had been sunk in 1981 and 1976 respectively, subsequently ceased as they were no longer economically viable. When hoisting operations began at Masimong 5 shaft, Masimong 4 was downscaled to a service and small-scale mining shaft in the quarter ended 30 June 2001.

By 30 June 2002, prevailing market conditions had improved and mining at Masimong 4 was once again economically viable. Additional personnel were redeployed to develop and access new areas of Masimong 4 to facilitate future production. Extraction of the Saaiplaas 3 shaft pillar was terminated due to technical difficulties. Subsequently, in June 2004, operations at Masimong 4 were also rationalised. The shaft is currently used solely for pumping.

During FY12, a bulkhead water plug was installed to seal off Saaiplaas 3 from the rest of the Masimong complex. The shaft was then abandoned due to flooding. Operations at Masimong 5 remain susceptible to changes in the gold price as it is one of the lowest average mining grade underground operations still in production on the Witwatersrand Basin.

Nature of the operation

Masimong is a single-shaft operation, which exploits two reef horizons, the Basal and B reefs at 1 650m to 2 010m below surface. These two reefs' narrow tabular bodies are mined by means of conventional open stoping. Due to enhancements in the geological model during FY24, the life-of-mine was increased by 12 months when compared to the previous years' report.

Geology

Mining takes place in a structurally complex zone between two major north-south trending faults: the De Bron/Homestead fault in the west and the Saaiplaas fault in the east. The orebody has been subjected to severe deformation and contains numerous folds (anticlines and synclines) as well as an abundance of smaller faults. The dip of the reef bands is very variable – from 45 degrees to the east, adjacent to the western side of the lease, to less than two degrees in parts of the southern area.

Production is hosted within two quartz pebble conglomerate bodies, developed above unconformity surfaces, the Basal and the B reefs. Approximately 80% of the centares (1 centare = 1 square metre) are from the Basal Reef horizon and 20% from the B Reef horizon.

The primary facies of Basal Reef intersected at Masimong 5 Mine is the Black Chert facies. It comprises two upward fining cycles. The lower one has a small to medium pebble conglomerate at its base, overlain by a grey orthoquartzite. The upper unit consists of a pyrite rich grit. The upper cycle tends to erode large segments of the lower higher grade cycle in the south-west, with resultant lower values. Towards the east of the shaft, it appears that only the upper unit is present. Carbon is almost always present on the bottom contact of the lower cycle of the black chert facies.

The B3 facies of the B Reef comprises polymictic medium to large pebble-supported conglomerates, with porphyry clasts, and yellow and green shale pebbles (fragments). The shale clasts are angular and tabular with the most common being yellow to mustard in colour. The non-durables account for 5% – 10% of the total clast composition. The durable pebbles are mainly black, smoky and vein quartz, sub rounded to rounded. Pebble sizes range from 0.7cm – 4.5cm, and are poorly sorted. The matrix has a yellow-green argillaceous composition with noticeable yellow and black speckling. The B3 can occur on the shale or above the B2 quartzite. It can be a solid band or inter-bedded. The B3 facies is the primary facies being mined at Masimong and range from a pebbly quartzite to matrix or clast supported conglomerate with carbon present in the latter.

Mineral rights/legal aspects and tenure

The current mining right, encompassing an area of 22 582.99ha, was successfully converted, executed and registered as a new order mining right at the Mineral and Petroleum Resources Titles Office on 11 December 2007 (Reference FS30/5/1/2/2/82MR valid from 11 December 2007 to 10 December 2029).

Mining methods and mine planning

Masimong mines at moderate depths of between 1 650m and 2 010m below surface. The reef horizon is accessed by means of conventional grid development. The Basal Reef, which accounts for approximately 80% of the on-reef production profile, is mined by the open and undercut method, depending on whether the reef is overlain by shale. The B Reef, making up the remaining 20% of the on-reef production profile, is located approximately 120m stratigraphically above the Basal Reef, which necessitates separate infrastructure (footwall development).

The presence of the upper shale marker, approximately 20m thick below the B Reef, strains the development rates of the B Reef, requiring drop raising for holing on all box holes. In addition, all on-reef development must be conducted by means of wide raising. Despite the marginality of the orebody and the current economic environment, current mine reserves give a life expectancy of two years, mainly due to the successful accessing of known value trend extensions.

Mineral processing

The ore mined is transported by rail for processing at the Harmony One carbon-in-pulp plant, situated some 12km from the shaft. Harmony One plant is located on the southern edge of the city of Welkom in the Free State province of South Africa. It is the highest producing gold plant owned and operated by Harmony. Harmony One plant currently processes underground ore from multiple shafts, as well as ore from several surface sources (eg dumps). The plant was built in 1986, and the milling, leaching and carbon-in-pulp technology reflects the technology which was current at the time. Plant design capacity is 390 000tpm (tonnes per month) steady state.

Infrastructure

Surface infrastructure includes a well-established network of paved roads and railway lines as well as a water pipeline and electrical lines to supply and deliver the materials required and transport the ore hoisted to the Harmony One plant for treatment.

The underground infrastructure is that of a mature, low-cost mining operation approaching the end of its economic life. The only undeveloped area of any economic significance lies to the south and south-east of the shaft in ground formerly located within the Masimong 4 shaft area.

Mineral Resource estimation

The estimation method used for local measured data on the shaft is ordinary kriging and, for local Indicated and Inferred estimates, simple macro-kriging. Estimates are generally kriged into 30m x 30m blocks for Measured Resources from the point support data. Indicated Resources are kriged into 60m x 60m blocks, using associated regularised variograms together with a macro-kriging decluster. Similarly, Inferred Mineral Resources are estimated using the associated regularised variograms and kriging into 120m x 120m blocks. Geozones are based on grade and facies distribution to ensure correct grade estimates are calculated for each area. For more details on the estimation process, see Harmony standards.

Environmental impact

Environmental aspects and impacts at Masimong are managed in terms of an environmental management programme (EMPr), as approved by the Department of Mineral Resources and Energy (DMRE), and in line with the Mineral and Petroleum Resources the Development Act (MPRDA). All environmental aspects and impacts emanating from mining activities are documented in the associated EMPr report and the environmental aspect register as required by the MPRDA and ISO 14001:2004.

Annual performance monitoring and audits are conducted by the DMRE to verify compliance with the following legislation:

- Mine Health and Safety Act
- National Water Act
- National Environmental Management Act
- MPRDA.

All environmental impacts emanating from mining activities are managed in terms of the EMPr and ISO 14001:2004 requirements.

Environmental audits or performance assessments are conducted by independent environmental consultants every second year to verify compliance with Masimong's approved EMPr, as required by Regulation 55 of the MPRDA, and the report is submitted to the DMRE. In addition, an internal environmental legal compliance audit is conducted to verify compliance. An online environmental legal register is maintained at **www.dreyer-legal.co.za** to monitor compliance and to provide applicable and relevant environmental legal updates for the operation.

Biomonitoring surveys are also conducted on surface water streams close to the operation in compliance with draft water use licence conditions and the National Water Act to:

- Determine the condition of biological communities as well as the chemical water quality in rivers and streams during the wet seasons
- Provide baseline reference conditions for future studies in order to assist Masimong Mine's management in identifying environmental liabilities relating to the potential contamination of surface streams resulting from current mining activities.

The operation is ISO 14001 accredited and conforms with the requirements of ISO 14001:2004, for which it is audited annually. Masimong is also accredited in line with the International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold (Cyanide Code), initially in 2012. Masimong is committed to eliminating and/or minimising the effects of mining activities on the environment and adjacent communities.

Material risks

Material risks that may impact Masimong's Mineral Resource and Mineral Reserve statement:

Significant risks	Remedial actions
» Adverse changes in the gold price » Unexpected geological features » Unexpected decline in value/grade.	» Open up the high-grade Basal Reef area, pillars and B Reef value zones as replacement ground » Extensive exploration drilling from underground platforms » Extensive exploration drilling to confirm grade trends ahead of extraction and to reduce external factors causing dilution.

Competent person

Ore Reserve manager

Deon Lodder

Mine Surveyors Certificate of Competency, IMSSA, NHD Mineral Resource Management, Mine Managers Certificate of Competency, AMMSA, MBL degree

38 years' relevant experience.

Masimong

Gold – Mineral Resource estimates at 30 June 2024 (inclusive)

	Measured				Indicated				Inferred				Total			
	Tonnes		Gold		Tonnes		Gold		Tonnes		Gold		Tonnes		Gold	
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Masimong	2.5	9.42	24	762	0.4	8.83	4	120	0.01	8.97	0.1	3	3.0	9.33	28	885

Modifying factors

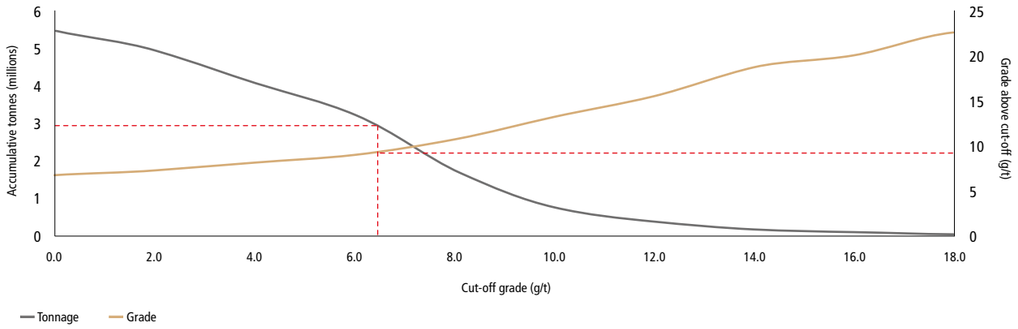
Masimong	MCF (%)	SW (cm)	MW (cm)	PRF (%)	Cut-off (cmg/t)
2023	60	138	155	95	1 016
2024	60	137	146	95	1 022

Gold – Mineral Reserve estimates at 30 June 2024

	Proved				Probable				Total			
	Tonnes		Gold		Tonnes		Gold		Tonnes		Gold	
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Masimong	0.8	4.36	3	106	0.2	4.59	1	23	0.9	4.40	4	130

Masimong Mine: Basal and B Reef

Measured and Indicated Mineral Resource grade-tonnage curve

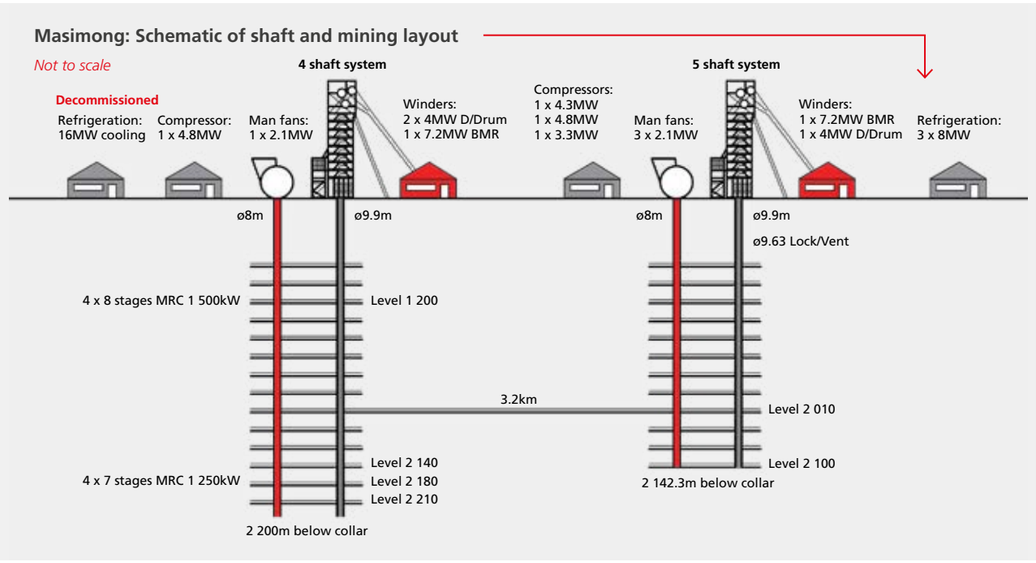


Operational performance

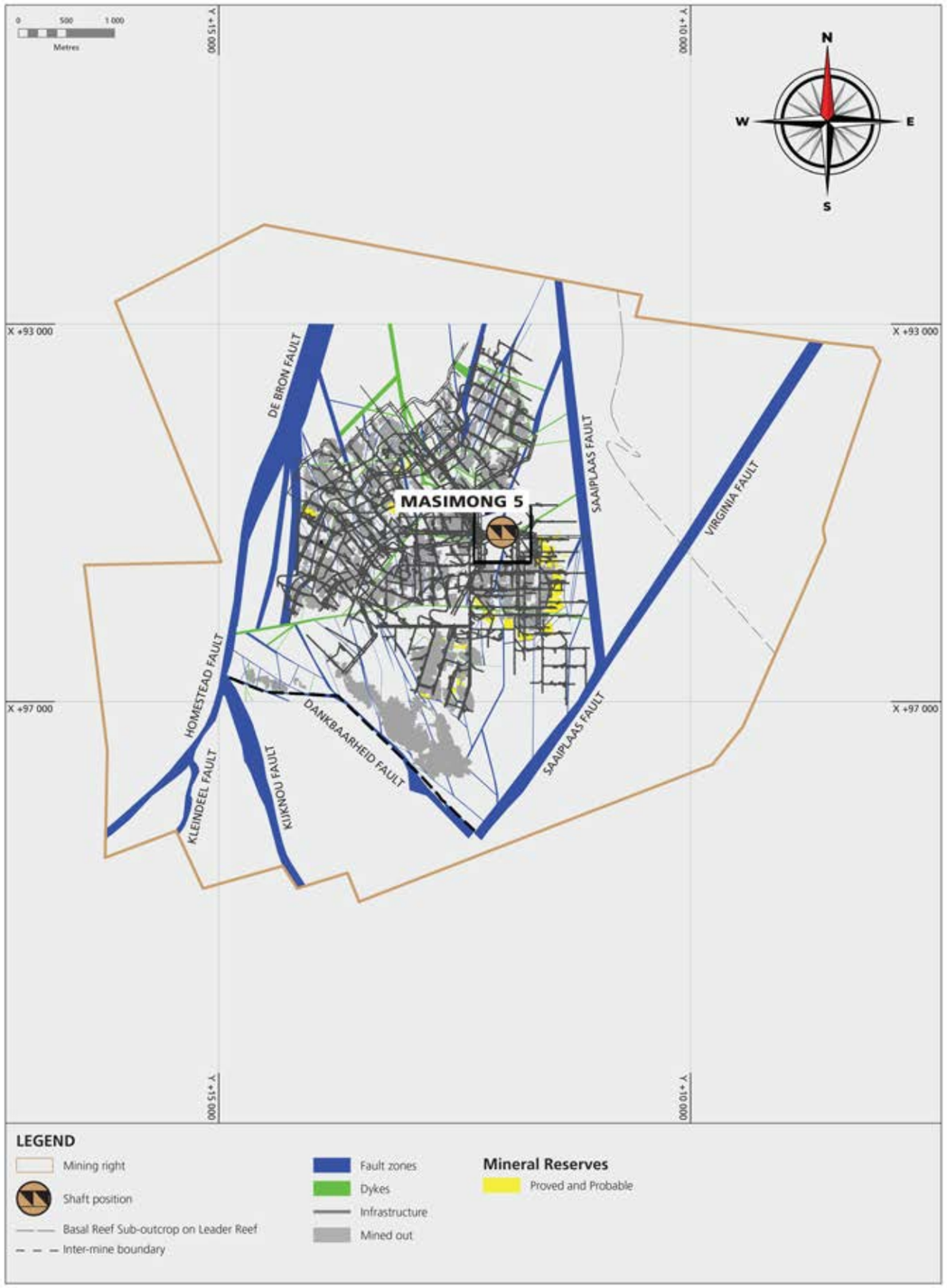
Masimong: Key operating statistics

	Unit	FY24	FY23	FY22	FY21	FY20
Operation						
Volumes milled	000t (metric)	**473**	470	486	510	489
	000t (imperial)	**523**	519	536	563	539
Gold produced	kg	**1 780**	1 961	1 910	2 012	1 999
	oz	**57 229**	63 047	61 407	64 687	64 269
Grade	g/t	**3.76**	4.17	3.93	3.95	4.09
	oz/t	**0.109**	0.121	0.115	0.115	0.119
Development						
Total metres (excluding capital metres)		**2 474**	2 921	3 321	2 833	2 246
Reef metres		**640**	1 129	723	1 044	759
Capital metres		**—**	—	—	—	—
Financial						
Average gold price received	R/kg	**1 216 723**	1 036 670	906 822	820 780	691 282
	US$/oz	**2 024**	1 815	1 854	1 658	1 373
Capital expenditure	Rm	**44**	47	49	29	24
	US$m	**2**	3	3	2	2
Cash operating cost	R/kg	**1 057 287**	871 508	789 912	715 835	620 804
	US$/oz	**1 759**	1 526	1 615	1 446	1 233
All-in sustaining cost	R/kg	**1 121 951**	925 703	845 299	764 577	655 888
	US$/oz	**1 866**	1 621	1 729	1 544	1 302

Masimong: Schematic of shaft and mining layout

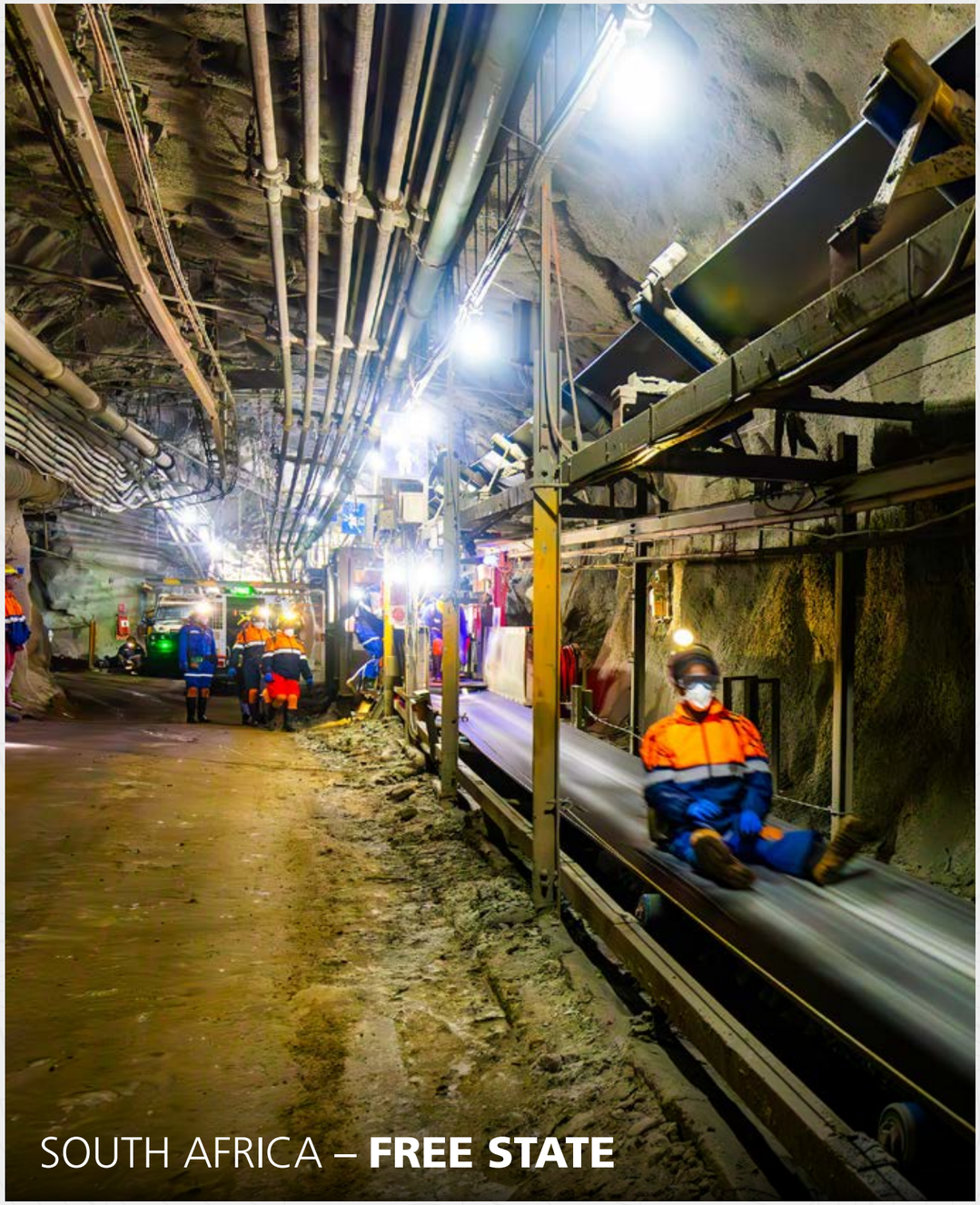


Masimong 5 Mine
Basal Reef: Mineral Reserves – June 2024



Masimong 5 Mine
B Reef: Mineral Reserves – June 2024

TARGET 1



Mineral Resources (inclusive)
3.4Moz

Mineral Reserves
0.5Moz

Detailed Mineral Resource and Mineral Reserve estimates are presented in this section.

History
Outcropping on the Target 1 property (originally Loraine) is an inlier of the Ventersdorp conglomerates (the Bothaville formation). The similarity of these conglomerates to those of the Witwatersrand Sequence focused interest in this area and led to the discovery of the Free State goldfields. Prospecting on these conglomerates was first undertaken around 1890 via a vertical and incline shaft. Mining has been conducted in the Free State goldfields for well over 60 years.

The initial model for exploration north of the Loraine gold mine, which at the time was managed by Anglovaal Limited, was proposed by DW Boshoff (chief geologist) in 1978. The Loraine gold mine held the Mineral rights immediately to the north of the mine. The Target Exploration Company Limited, a company formed by Anglovaal specifically for the purpose of exploration, later acquired this area. Options to Mineral rights north of Target were acquired by Sun Mining and Prospecting Company Proprietary Limited. Feasibly studies centred on Sun Concept Mine South (CMS). The formation of Avgold Limited in 1996 was intended to further the gold mining and exploration interests of Anglovaal. Harmony acquired Target in 2002.

Nature of the operation
The Target 1 operation includes a single underground mine constructed as an extension to the Loraine gold mine and uses 1 shaft as access. Target 3 shaft is currently on care and maintenance and serves as a second escape way for Target 1, while Target 5 serves as a ventilation shaft for Target 1 and is situated on the outskirts of Nyakallong township.

The mine has decline systems off the Target 1 shaft, extending 6km to the mining areas, some 2 300m below surface. The mine is essentially a trackless massive mining operation, and also using conventional labour-intensive mining method in certain areas.

The mine is located some 5km to the north of the original Loraine 1 shaft, and the ore-body is accessed via a 6km-long 12 degree decline developed from level 203 of the vertical shaft system. Initially, the decline was developed to provide a drilling platform for the exploration and evaluation of the orebody but it was later used as the main access for all services, logistics, personnel and the extraction of ore.

The orebody is composed of some 67 individual conglomerates in the Uitkyk (Elsburg) and Van der Heeversrust (Dreyerskuil) members of the upper Eldorado (Elsburg) formation. These reefs lend themselves to massive mining techniques where composited conglomerate units can be mined as one stope. These stopes are long-hole drilled and blasted, and tonnages are cleaned and transported by trackless machinery – some of which are operated remotely.

Massive mining is particularly relevant where the reefs become condensed and steeper in the western portion of the orebody. Mining of the massives contributes 75% of total tonnes stoped. Massive stopes have to be mined in a sequence, broadly from down-dip to up-dip. Mined out stopes are backfilled for support, and to address environmental and safety concerns.

Conventional narrow-reef scattered mining makes up 15% of stope tonnes mined where individual reefs are extracted in places where massive mining method is not suitable or deemed uneconomical. Mine planning allows for the mining of certain stopes in the stratigraphically highest gold-bearing units to provide over-stoping for massive stopes to be mined in the future. The remaining 10% of tonnes is sourced from trackless development mining.

A new sub-level open stope massive mining method was adopted in BLK12, which will do away with the NRM de-stressing and the use of backfill. Mining will commence from top to bottom in the western margin of EA1, EA3 and EA3 reefs. The top massive stopes will create a de-stressed window which retreats ahead of the lower massive stopes below.

Geology
Target is located on the western margin of the Achaean Witwatersrand Gold Basin, which is on the Kaapvaal Craton. The sediments of the Central Rand Group occur within an oval-shaped basin, which has a 160km-long axis through the Welkom area and Johannesburg, and a short axis of about 80km. The Central Rand Basin is superimposed on the West Rand Group or Lower Witwatersrand Basin, which has a much larger aerial extent at the centre of the Kaapvaal Craton.

A thrust fault system has resulted in the post-depositional folding of the strata into a synclinal shape. This "border feature" is the western limit of the graben structure, which is some 10km wide and hosts most of the Welkom gold mines. The eastern limit of this graben is the well-defined De Bron fault. The Target 1 gold prospect is a northward continuation of the Free State goldfields.

The full potential of the Basal Reef, which produces 85% of the gold from this area, has yet to be established in the Target area because, given time constraints, initial drilling focused on the shallower Elsburg and Kimberley reefs. The reefs in the Aandenk (Kimberley) formation include the B Reef at the base, the Big Pebble Reef and the A Reef.

The Eldorado (Elsburg) formation is developed as a sequence of oligomictic auriferous conglomerates referred to as the EA Reefs, which have been mined extensively at the Loraine gold mine. The Elsburg reefs are overlain by a remnant of the diamictite facies of the south, termed the boulder beds at Lorraine. The reefs and associated quartzites represent alluvial sediment influx from a source area to the west. The distribution of gold mineralisation is clearly related to the sedimentology and this primary sedimentological control of gold distribution is understood. However, research has shown that some remobilisation of gold has taken place over small distances. This is not extensive enough to mask the sedimentary controls.

Mineral rights/legal aspects and tenure
The current mining rights encompasses an area of 7 952.78ha. Harmony holds several mining rights for the Target Mine in the Free State goldfields which have been successfully converted and executed as new order mining rights. Certain of these rights are still to be registered at the Mineral and Petroleum Resources Titles Office (MPRTO).

Those mining rights that have been registered as new order mining rights are FS30/5/1/2/2/14MR, which is valid from 30 November 2007 to 29 December 2025 and covers 4 237.00ha, and FS30/5/1/2/2/225MR, which is valid from 12 December 2013 to 11 December 2026, covering 3 715.78ha.

Mining methods and mine planning
The stoping methods employed at Target are as follows:

Long-hole stoping methods
Massive open stoping
Sub-level open stoping

Other stoping methods
Narrow-reef conventional

Development methods
Trackless development
Narrow reef development

Massive open stoping
Massive open stoping is based on the mining of a large volume of ore at a low working cost. The proximity of the reefs in the sub-outcrop area allows for several reefs to be composited and mined simultaneously using this method. The schedule indicates that massive open stope is going to contribute 43% of life-of-mine tonnes over the period of five years. De-stress environment is created with Narrow reef conventional mining prior to the development of a massive stope. The same principles and methodology are applied to areas where similar geology allows for mining of a massive stope.

Sub-level open stoping
After analysis and consideration of improved geological and geotechnical information available, an alternative mining method was considered and subsequently adopted for Block 12 – a modified top-down sub-level open stope mining method. This does away with the NRM de-stressing and the use of backfill. With this method, the top massive stopes will create a de-stressed window that retreats ahead of the lower massive stopes below. It should be noted that the drill rings only "fan out" to an angle of minimum 50°C to keep the drill holes roughly aligned with the direction of the primary in situ stresses, and to create the draw-bell loading points to assist with mucking the ore. The life-of-mine tonnage profile indicates that mining in sub-level open stope is going to contribute 42% of life-of-mine tonnes over the period of five years. Mining is to take place from EA1, EA3 and EA7 reefs.

Narrow-reef conventional
The schedule indicates that monthly tonnage over life-of-mine period of five years is to be mined from the Dreyerskuil and Elsburgs (DK1A, DK4 and EA13) reefs by means of conventional narrow reef mining. The schedule also indicates that the Mineral Reserves for DK4 reef will be depleted during the second year of life-of-mine. Narrow reef mining is essential as it must provide a de-stressed environment for mechanised open stoping, and must also contribute 15% of tons and 33% of gold production over the life-of-mine period of five years . There is no practical and safer alternative to this method. The rate of over stoping must liberate sufficient levels of de-stressed reserves to enable the planned 63 000tpm (tonnes per month) production rate.

Mineral processing
At Target, ore and development rock are hoisted together, and milled and processed at the Target plant adjacent to the mine. Target shares its plant with a Harmony waste rock dump that is monitored and managed by Surface Sources. The plant's design capacity exceeds the maximum planned production from these sources. Gold is recovered through gold cyanide leaching.

Infrastructure
The general area of Target 1 (mining right FS30/5/1/2/2/14MR) is well developed in terms of access and mining-related infrastructure. Access to all three Target shafts (1, 2 and 5) is via a well-maintained paved road. The area also has well-established rail links and an airfield.

The Target 1 shaft is used to transport men, material and rock from surface to 203 level. A single decline, equipped with a conveyor belt, connects 203 level to 255 level some 2 050m below surface. The decline splits at 255 level into a conveyor decline and a vehicle decline descending to the extent of development, currently at 291 level which is 2 300m below surface.

Mineral Resource estimation
Geological modelling, via wireframes of faults and lower surfaces of mineralised packages, is the primary control in the geostatistical evaluation. The estimation method used for local Measured, Indicated and Inferred estimates at Target is ordinary kriging. A total of 23 reef packages are estimated individually without data from adjacent reefs. Estimates are generally kriged into "parent cells" and then assigned to sub-cells, using associated variograms and estimation parameters.

Distinctions between the Mineral Resource categories, based on data density and spatial relationships of gold grades, are defined through variography. Where block grades are estimated by data and separated by distances greater than the maximum grade continuity ranges, they have been classified as an Inferred Mineral Resource. Blocks are therefore not informed by the first kriging run (where the search ellipse was matched to grade continuity ranges) and entirely Inferred. Each reef model is then restored to its original wireframe position and combined into a single 3D model. Geozones are based on the structure, while the Mineral Resource classification is based on the slope of regression.

The Datamine mining software system is currently in use on this shaft. A macro-system has been generated, linked to a customised scripting menu that allows for professional and easy management of the data and the building of geostatistical models. For more details on the estimation process, see Harmony standards.

Environmental impact
Environmental aspects and impacts at Target are managed in terms of an environmental management programme (EMPr), as approved by the Department of Mineral Resources and Energy (DMRE), and in line with the Mineral and Petroleum Resources the Development Act (MPRDA). All environmental aspects and impacts emanating from mining activities are documented in the associated EMPr report and the environmental aspect register as required by the MPRDA and ISO 14001:2004.

Performance monitoring and audits are conducted by the DMRE to verify compliance with the following legislation:
- Mine Health and Safety Act
- National Water Act
- National Environmental Management Act
- MPRDA.

All environmental impacts emanating from mining activities are managed in terms of the EMPr and ISO 14001:2004 requirements.

Environmental audits or performance assessments are conducted by independent environmental consultants every second year to verify compliance with Target's approved EMPr, as required by Regulation 55 of the MPRDA, and the report is submitted to the DMRE. In addition, an internal environmental legal compliance audit is conducted to verify compliance. An online environmental legal register is maintained at **www.dreyer-legal.co.za** to monitor compliance and to provide applicable and relevant environmental legal updates for the operation.

Biomonitoring surveys are also conducted on surface water streams close to the operation in compliance with draft water use licence conditions and the National Water Act to:
- Determine the condition of biological communities as well as the chemical water quality in rivers and streams during the wet seasons
- Provide baseline reference conditions for future studies in order to assist Target Mine's management in identifying environmental liabilities relating to the potential contamination of surface streams resulting from current mining activities.

The operation is ISO 14001 accredited and conforms with the requirements of ISO 14001:2015, for which it is audited annually. Target is also accredited in line with the International Cyanide Management Code for the Manufacture, Transport and Use of Cyanide in the Production of Gold (Cyanide Code), initially in 21 October 2010 and most recently on 13 January 2021. Target is committed to eliminating and/or minimising the effects of mining activities on the environment and adjacent communities.

Material risks

Material risks that may impact Target's Mineral Resource and Mineral Reserve statement:

Significant risks	Remedial actions
» Grade dilution from waste/backfill in the massive stopes » Trackless development production » Grade dilution expected to increase as sub-level open stope mining progresses deeper.	» Reduce pillar mining between mined-out areas » Acquired new drill rig to improve availability and production » Ring holes will be measured to ensure compliance to the minimum fan out inclination of 50°C. Hover-map scans conducted to monitor caving rate and dilution.

Competent person

Ore Reserve manager

Seabata Motlatla

BSc Hons (Geology), SACNASP, Graduate Diploma in Engineering (Mining), Project Management Certificate NQF Level 5

20 years' relevant experience.

Target 1 and 3
Gold – Mineral Resource estimates at 30 June 2024 (inclusive)

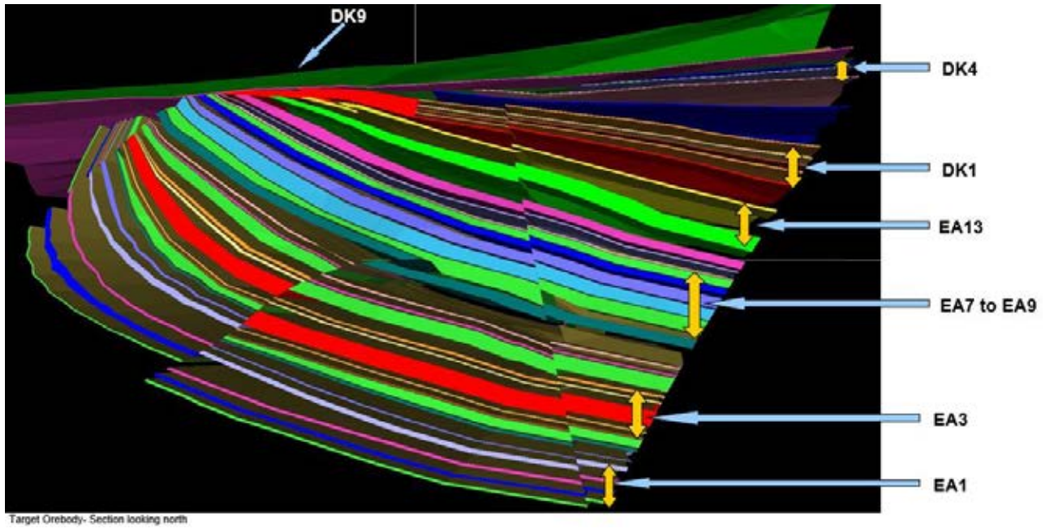
	Measured				Indicated				Inferred				Total			
	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)
Target 1	7.3	7.09	52	1 661	5.1	6.42	32	1 044	3.9	5.75	22	715	16.2	6.56	106	3 420
Target 3	0.6	9.19	6	178	2.9	10.17	30	965	1.2	8.66	11	340	4.8	9.66	46	1 483

Modifying factors

Target 1	MCF (%)	SW (cm)	MW (cm)	PRF (%)	Cut-off (g/t)
2023	95	180	0	95	3.40
2024	94	178	0	94	3.45

Gold – Mineral Reserve estimates at 30 June 2024

	Proved				Probable				Total			
	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)



Target Orebody- Section looking north

Target 1	2.5	4.27	11	338	1.1	4.87	6	179	3.6	4.46	16	517

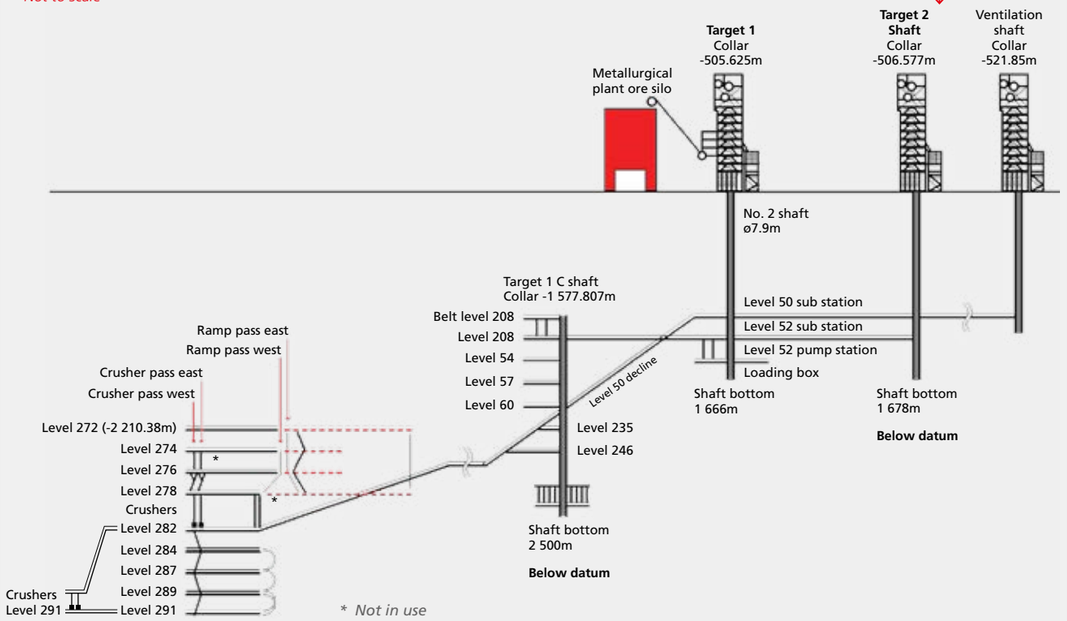
Operational performance

Target 1: Key operating statistics

	Unit	FY24	FY23	FY22	FY21	FY20
Operation						
Volumes milled	000t (metric)	**462**	365	455	488	543
	000t (imperial)	**510**	402	501	537	598
Gold produced	kg	**1 859**	1 275	1 800	1 603	2 244
	oz	**59 769**	40 992	57 872	51 536	72 146
Grade	g/t	**4.02**	3.49	3.96	3.28	4.13
	oz/t	**0.117**	0.102	0.116	0.096	0.121
Development						
Total metres (excluding capital metres)		**1 915**	1 387	1 544	2 211	2 152
Reef metres		**13**	47	55	368	96
Capital metres		**—**	—	194	96	191
Financial						
Average gold price received	R/kg	**1 219 817**	1 041 564	904 992	870 640	681 388
	US$/oz	**2 029**	1 824	1 851	1 758	1 353
Capital expenditure	Rm	**488**	428	384	368	347
	US$m	**26**	24	25	24	22
Cash operating cost	R/kg	**1 266 487**	1 594 661	996 938	1 037 115	670 647
	US$/oz	**2 107**	2 792	2 039	2 095	1 332
All-in sustaining cost	R/kg	**1 558 946**	1 903 111	1 210 404	1 232 098	817 066
	US$/oz	**2 593**	3 332	2 475	2 488	1 623

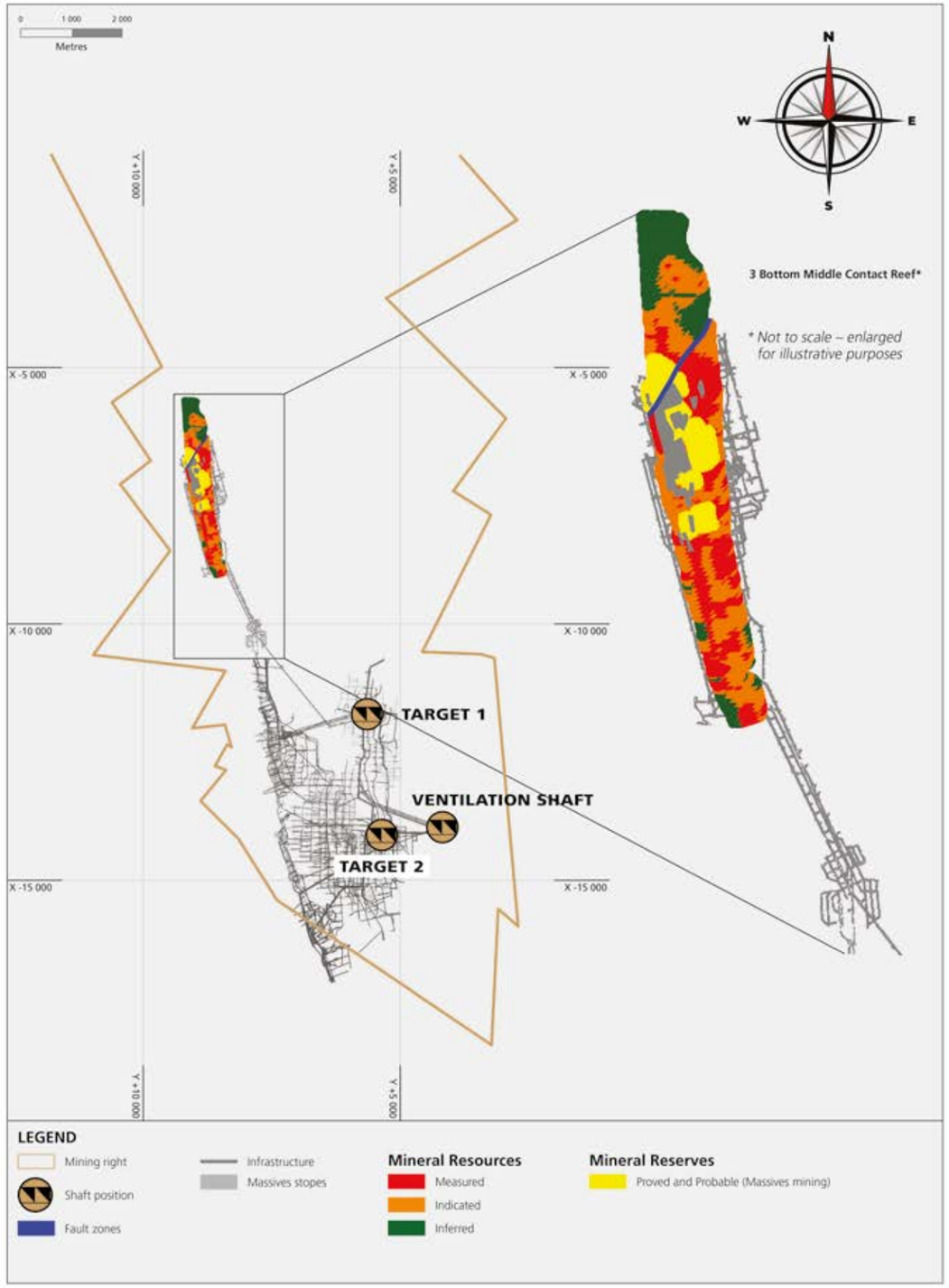
Target 1: Schematic of Target shafts and mining layout

Not to scale



Target 1

3 Bottom Middle Contact Reef: Mineral Resources and Mineral Reserves – June 2024



SOUTH AFRICA

SURFACE SOURCES

Mineral Resources (inclusive)

13.8Moz

Mineral Reserves

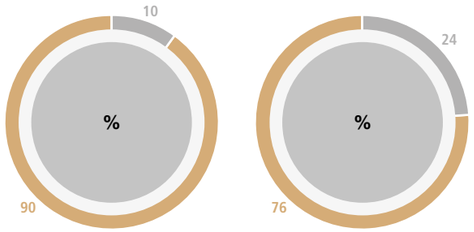
9.6Moz

Harmony has one open-pit mine and several surface retreatment facilities in South Africa. As at 30 June 2024, their combined estimated Mineral Resource (inclusive) was 13.8Moz and their combined estimated Mineral Reserve was 9.6Moz.

Harmony's surface sources in South Africa include:

- **Kalgold, an open-pit mine located in the North West province on the Kraaipan Greenstone Belt**
- **Various surface sources in the Free State including several tailings retreatment operations and waste rock dumps, located largely in the vicinity of Welkom**
- **Mine Waste Solutions, located approximately 160km from Johannesburg, near Klerksdorp in the North West province of South Africa. Savuka gold plant is situated near Carletonville in the province of Gauteng, approximately 70km, south-west of Johannesburg**
- **West Wits, located at Mponeng.**

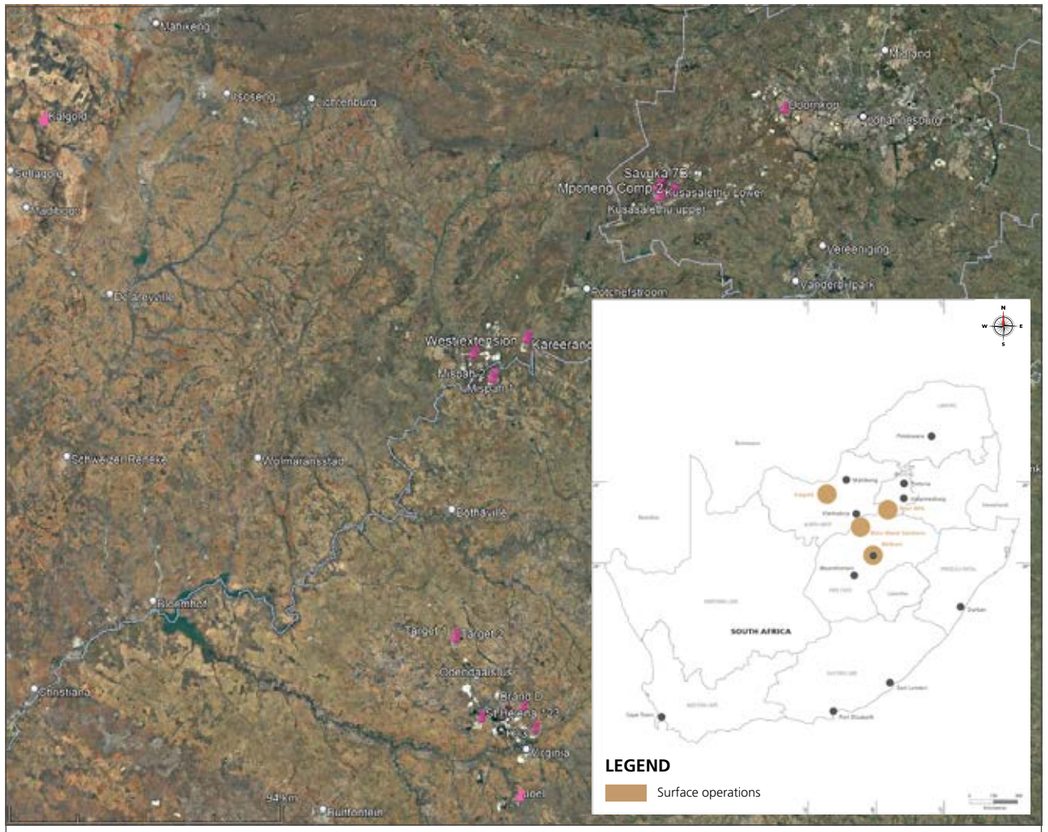
Gold and Gold equivalents
Contribution to Harmony



MINERAL RESOURCES AND MINERAL RESERVES BY OPERATION

Surface sources	**142 – 159**
Kalgold	**144**
Tailings retreatment facilities – Free State	**151**
Surface sources – West Rand/Klerksdorp goldfields	**155**

Location of Harmony's Surface sources in South Africa



LEGEND
Surface operations

	Latitude	Longitude
Kalgold	26°10'12.85"S	25°14'02.70"E
Saaiplaas plant	28°3'37.68"S	26°53'14.59"E
Central plant	28°2'8.36"S	26°52'8.99"E
Mponeng	26°26'15.60"S	27°25'41.24"E

0 150 300
Kilometres

KALGOLD

SOUTH AFRICA – **SURFACE SOURCES**

Mineral Resources (inclusive)
2.2Moz

Mineral Reserves
0.6Moz

Detailed Mineral Resource and Mineral Reserve estimates are presented in this section.

Location
Kalgold is located on the Kraaipan Greenstone Belt, 55km south-west of Mahikeng, between Mahikeng and Stella, along the Mahikeng Vryburg road (N18) in the North West province, South Africa. The mine is surrounded by farm land. The closest community is at Kraaipan, approximately 15km to the south of the mine.

History
Exploration of the Kraaipan Greenstone belt, by the Shell minerals division, began in 1980. The D-Zone one area was discovered in 1991 on the farm Goldridge. In 1994, West Rand Consolidated Exploration acquired the orebody and mining started in December 1995. Ore was treated by heap leaching until the installation of the first two mills in 1997. Harmony acquired the mine in 1999. In 2003, a third mill was added to increase treatment capacity. The D-Zone pit was mined out in 2009.

Nature of operation
Kalgold is an open-pit mining operation. The mine extracts ore from a series of satellite orebodies, situated along a six Kilometre North-south striking BIF deposit zones.

Geology
The Kraaipan Greenstone Belt forms part of the Kaapvaal Craton and is overlain by late Archaean Ventersdorp lavas and tertiary sediments. The Kraaipan Group consists of three formations: the Khunwana, Ferndale and Gold Ridge formations. The Gold Ridge formation is the oldest and contains banded iron formations, which is the host rock of gold mined in the Kalahari Goldridge deposits.

The Kalgold operation is located within the geological terrain of the Archaean Kraaipan Greenstone Belt. This greenstone environment is exposed in discontinuous outcrops of steeply dipping rocks, which define three narrow, sub-parallel belts that strike approximately north-south. The Goldridge deposits occur within the central belt, which comprises banded iron formations, magnetite quartzite, chert, greywacke, shale and schist. The greenstones are surrounded by intrusive granites and gneisses. These rocks have a complex history of deformation, which includes folding, faulting and shearing.

Younger cover rocks include isolated patches of lavas of the Ventersdorp Supergroup with much of the area blanketed by Aeolian Kalahari sands. Sparse outcrops of quartz porphyry belonging to the Makwasie formation occur in the region. Several large dykes with a predominant east-west trend have intruded the region.

The geology of the lease area and its immediate vicinity is characterised by ferruginous chemical and clastic sediments inter-bedded with meta-lavas and non-ferruginous meta-sedimentary rocks. Outcrops in the area are sparse and generally restricted to ferruginous rock types, which are more resistant to erosion. Magnetite quartzite and clastic sediments form a low ridge to the west of the lease area. Eastwards of this unit, the iron-rich rocks generally comprise chemical sediments represented by magnetite-rich banded iron formations, cherty banded iron formations and banded chert. These units are interbedded with mafic schist, greywacke and sparse black shale. The geology of the D-Zone is used as a benchmark at Kalgold. The new pits are well established at the A-Zone and Watertank areas, and the blast hole database is now significant. The geology consists of mafic schist, which forms the immediate footwall, a banded iron formation horizon as the main orebody and a succession of clastic sediments consisting of shale, greywacke and volcanic conglomerates as the hanging wall.

Gold mineralisation is hosted by steeply dipping banded iron formations interbedded with schist, shale and greywacke. Banded iron formations consist of rhythmically banded chemical sediments comprising alternating light and dark laminae, which vary from 10mm to 50mm in thickness.

The banded iron formations are oxidised to a depth of about 40m to 60m below surface. Near surface the material is red and porous, composed of quartz, hematite and goethite with minor magnetite. At depth, the unaltered banded iron formation consists of quartz, siderite, pyrite, pyrrhotite and magnetite with minor chlorite, calcite and stilpnomelane. In general, gold mineralisation has an erratic and localised distribution. Individual gold grains are on average less than 10µm in diameter and occur in clusters. Gold is generally associated with goethite in the weathered rocks and with pyrite and pyrrhotite in the fresh material.

Geological modelling has been completed using Leapfrog and Datamine software. Drill holes and blast holes have been surveyed and used to construct a series of west-east sections from north to south through the various pit areas. The A-Zone and Watertank areas have been modelled as a single contiguous area as the geology and data is continuous and contiguous.

A wireframe geological model has been constructed by modelling lithological packages in Leapfrog to define the outline boundaries.

The model includes outlines for the mineralised zones and waste zones. The definition of the mineralised zones is based primarily on the lithological contacts between the banded iron formations and waste material (volcanic/sedimentary schists).

The geological model is constructed in the form of a wireframe from exploration borehole intersections, blast hole information and geological mapping within the pit.

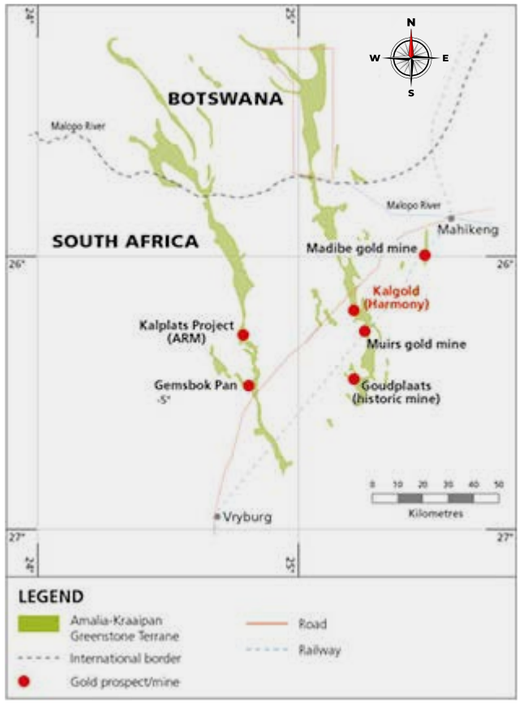
Mineral rights/legal aspects and tenure
Kalgold's current mining right encompasses an area of 4 595.3ha and was successfully converted, executed and registered as a new order mining right at the Mineral and Petroleum Titles Registration Office on 9 November 2010 under the Mining Right Protocol 574/2008. The DMRE reference number NW30/5/1/2/2/77MR is valid for a period of 30 years (from 28 August 2008 to 27 August 2038).

Mining methods and mine planning

Kalgold is an open-pit mining operation, applying 10m benches mining strategy.

The A-Zone and Watertank pits have merged to form one active pit situated to the north of the D-Zone at a similar stratigraphic position. The A-Zone-Watertank pit has an overall strike of ~2 300m and comprises two zones of mineralisation, which dip steeply towards the east. Reef widths range between 15m to 120m.

Kraaipan Greenstone Belt – Locality



Henry's and Windmill pits are the latest satellite pits to be added to the ongoing A-Zone-Watertank pit mining operations. Windmill pit is separate towards the north of the mining right area, while Henry's pit forms the southern extension of A-Zone pit.

The variable nature of the grade distribution in the orebody results in mining of multiple categories of rock, from waste to high grade, which occur in one mining pass. The mining operation is performed by mining contractors and is managed by Harmony. Current mining capacity is limited to approximately 950 000 tonnes per month. The low-grade and waste rock are transported to dedicated locations north of the N18 road, while the high-grade ore is transported to the processing plant which is south of the N18 road.

Mineral processing

Ore reception

The Kalgold plant receives ore from the pit at a rate of approximately 130 000 tonnes per month. The ore has an average moisture content of approximately 1%.

Ore is transported from the pit by truck and tipped into the plant run-of-mine pad. It is then fed into the pre-primary crusher for the first stage of comminution. Pre-primary product reports to the primary crusher before going through the final stage in the secondary and tertiary crushers. Tertiary crusher product is temporarily stored in the dome prior to milling.

Milling

Ore is fed from the dome to the A, B and C ball mills. The identical A and B mills are generally fed at 55tph. The C mill is the biggest with throughput of 105tph to 110tph. The mill product ranges from 75% to 80% passing 75 micron. The A and B mill cluster cyclone overflow gravitates into a vibrating screen for trash removal while the C mill uses a conventional linear screen. The cyclone overflow, which has a relatively low density, is pumped out to the thickeners for dewatering prior to leaching. Pebble lime is introduced in the system via the C14 conveyor belt for pH control.

Thickening

Lime and flocculant are the two main components of the thickening process. During thickening, lime acts as a coagulant and the flocculant binds the particles together to increase the settling rate of the particles. Lime addition generally ranges between 700g/t to 1 000g/t whereas flocculant addition usually ranges between 8g/t to 10g/t. The lime also maintains a protective level of alkalinity in the leach section to prevent generation of poisonous cyanide gas in the process. The two thickeners are equipped with two variable-speed underflow pumps to control the density in the cyanidation process. The thickener overflow gravitates to the mill process tanks for reuse in the milling process.

Leaching

The thickener underflow, which normally ranges from 50% to 55%, reports into the pre-aeration tank for precondition prior addition of the cyanide. The preconditioning is performed in order to render cynocides less reactive to cyanide. Cyanide is automatically added to either Leach 2 or Leach 3, depending on the degree of the pre-aeration stage. Kalgold ore requires large amounts of cyanide in order to complete the leaching process. Addition of cyanide generally ranges from 0.6kg/t to 1.8kg/t. Oxygen is injected into the leach tanks to improve the gold dissolution process. The leaching retention time generally varies from 30 to 40 hours. Generally, 75% dissolution takes places in the two leaching tanks. The slurry then gravitates to the carbon-in-leach (CIL) tanks for further leaching and adsorption.

Carbon-in-leach

The dissolved gold, still in pulp, is transferred to the CIL circuit where activated carbon is added to adsorb the gold in solution. The CIL tanks are fitted with rotary screens to allow movement of the carbon in a counter-current manner with the slurry. There are seven stages in the CIL process. The slurry, with 86% of the gold extracted, is pumped through a cyanide destruction circuit into D-Zone pit, which is currently the tailings storage facility. Once the carbon loading in the head tank reaches required gold loading, the carbon is pumped to the loaded make-up screen for the elution process.

Recovery process

The Kalgold plant employs the Zadra elution process for gold recovery. Carbon is treated with a hot caustic and cyanide solution. The pregnant solution is pumped into the electro-winning circuit for gold recovery. Eluted carbon then passes through the acid column to be treated with hydrochloric acid for the removal of inorganic material. Acid-treated carbon is rinsed with high-pH water to neutralise the acid. Acid-treated carbon is then transferred into the kiln for regeneration of the carbon. The regeneration process takes place at temperatures above 700 degrees in the absence of air in order to drive off the organic material.

The electro-winning cathodes are washed through the gold table and filtered through the press to retain the gold sludge, which is then dried, weighed and dispatched to Rand Refinery for the refinery process.

Mineral Resource estimation

Estimates are run using ordinary kriging. While the statistical analysis indicates that the estimate would benefit from a more local method such as macro-indicated kriging, a lack of data prevents this. The grade distribution indicates that more advanced forms of estimation such as uniform conditioning or log-normal uniform conditioning would not be recommended for this deposit, leaving ordinary kriging as the only robust option. The statistical analysis does, however, indicate that the deposit is amenable to ordinary kriging and as this is the method that has been used in the past it is believed the same process should continue to be used until significantly more data has been obtained. For more details on the estimation process, see Harmony standards.

Environmental impact

Kalgold's environmental aspects and impacts are managed in line with the amended 2022 environmental management programme (EMPr) approved by the Department of Mineral Resources and Energy (DMRE) in terms of the Mineral and Petroleum Resources by the Development Act (MPRDA) and by the Department of Rural Environment and Agricultural Development in terms of the National Environmental Management Act (NEMA). All environmental aspects and impacts emanating from mining activities are documented in the approved EMPr and the environmental aspect register, as required by the MPRDA and ISO 14001:2015.

Annual environmental performance monitoring and compliance audits are conducted by the DMRE and Department of Environmental Affairs to verify compliance with the following legislation:

- Mine Health and Safety Act
- National Water Act
- National Environmental Management Act
- MPRDA
- National Heritage Resources Act
- National Forests Act
- National Environmental Management: Air Quality Act.

Environmental performance assessments are conducted every second year as per the commitments stipulated in the approved EMPr amended in 2022 and environmental authorisations in terms of Regulation 55 of the MPRDA regulations and by an independent environmental consultant and the report is submitted to the DMRE. Environmental legal compliance audits are also conducted every two years to verify compliance with all relevant legal requirements. An online-based Kalgold environmental legal register at **www.dreyer-legal.co.za** is updated to include changes in applicable and relevant environmental legislation and associated regulations.

Biomonitoring surveys are conducted on an annual basis to determine the status of surrounding surface water streams close to the operation. The status quo of the water bodies is monitored for water quality in relation to guidelines within the water use licence conditions and in terms of the National Water Act.

In addition to the biomonitoring surveys, a groundwater and dust monitoring programme is implemented quarterly and monthly to determine the status of groundwater quality and quantity, as well as levels of dust fallout in terms of the National Water Act and National Environmental Management: Air Quality Act, and to determine compliance with the conditions stipulated in the water use licence and provisional atmospheric emissions licence.

Kalgold is ISO 14001 accredited and has been recertified to conform to the requirements of ISO 14001:2015 for which it is audited annually. The operation attained its accreditation in 2010 and remains accredited to eliminate or minimise the effects of mining activities on the environment and adjacent communities.

In February 2021, the mine received a water use licence from the Department of Water and Sanitation. Approval of the D-Zone open-pit closure plan from the DMRE was received in September 2016.

Material risk

Material risks that may impact Kalgold's Mineral Resource and Mineral Reserve statement:

Significant risk	Remedial action
» Slope failure.	» Pre-split blasting to protect high walls.

Competent person

Ore Reserve manager

Rebaone Gaelejwe
BSc Hons (Geology), EMBA, SACNASP
23 years' mining experience.

Kalgold

Gold – Mineral Resource estimates at 30 June 2024 (inclusive)

	Measured				Indicated				Inferred				Total			
	Tonnes		Gold		Tonnes		Gold		Tonnes		Gold		Tonnes		Gold	
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Open-pit	18.7	1.09	20	657	22.6	1.30	29	945	7.9	1.60	13	405	49.2	1.27	62	2 007
Tailings dam	—	—	—	—	—	—	—	—	23.8	0.26	6	201	23.8	0.26	6	201
Total	18.7	1.09	20	657	22.6	1.30	29	945	31.7	0.60	19	606	73.0	0.94	69	2 208

Modifying factors

Open-pit	MCF (%)	Dilution (%)	PRF (%)	Cut-off (g/t)
2023	100	9	86	0.60
2024	100	7	86	0.58

Gold – Mineral Reserve estimates at 30 June 2024

	Proved				Probable				Total			
	Tonnes		Gold		Tonnes		Gold		Tonnes		Gold	
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Open-pit	10.3	0.99	10	328	8.4	1.18	10	317	18.7	1.07	20	645

Operational performance

Kalgold: Key operating statistics

	Unit	FY24	FY23	FY22	FY21	FY20
Operation						
Volumes milled	000t (metric)	**1 492**	1 377	1 432	1 507	1 541
	000t (imperial)	**1 645**	1 519	1 579	1 662	1 700
Gold produced	kg	**1 425**	1 175	1 137	1 109	1 153
	oz	**45 815**	37 778	36 555	35 655	37 070
Grade	g/t	**0.96**	0.85	0.79	0.74	0.75
	oz/t	**0.028**	0.025	0.023	0.021	0.022
Financial						
Average gold price received	R/kg	**1 216 047**	1 041 891	900 713	859 070	742 533
	US$/oz	**2 023**	1 824	1 842	1 735	1 474
Capital expenditure	Rm	**263**	219	203	208	99
	US$m	**14**	12	13	14	6
Cash operating cost	R/kg	**741 469**	778 997	762 547	699 546	584 218
	US$/oz	**1 233**	1 364	1 559	1 413	1 160
All-in sustaining cost	R/kg	**949 112**	986 677	964 678	905 253	690 239
	US$/oz	**1 579**	1 728	1 973	1 828	1 371

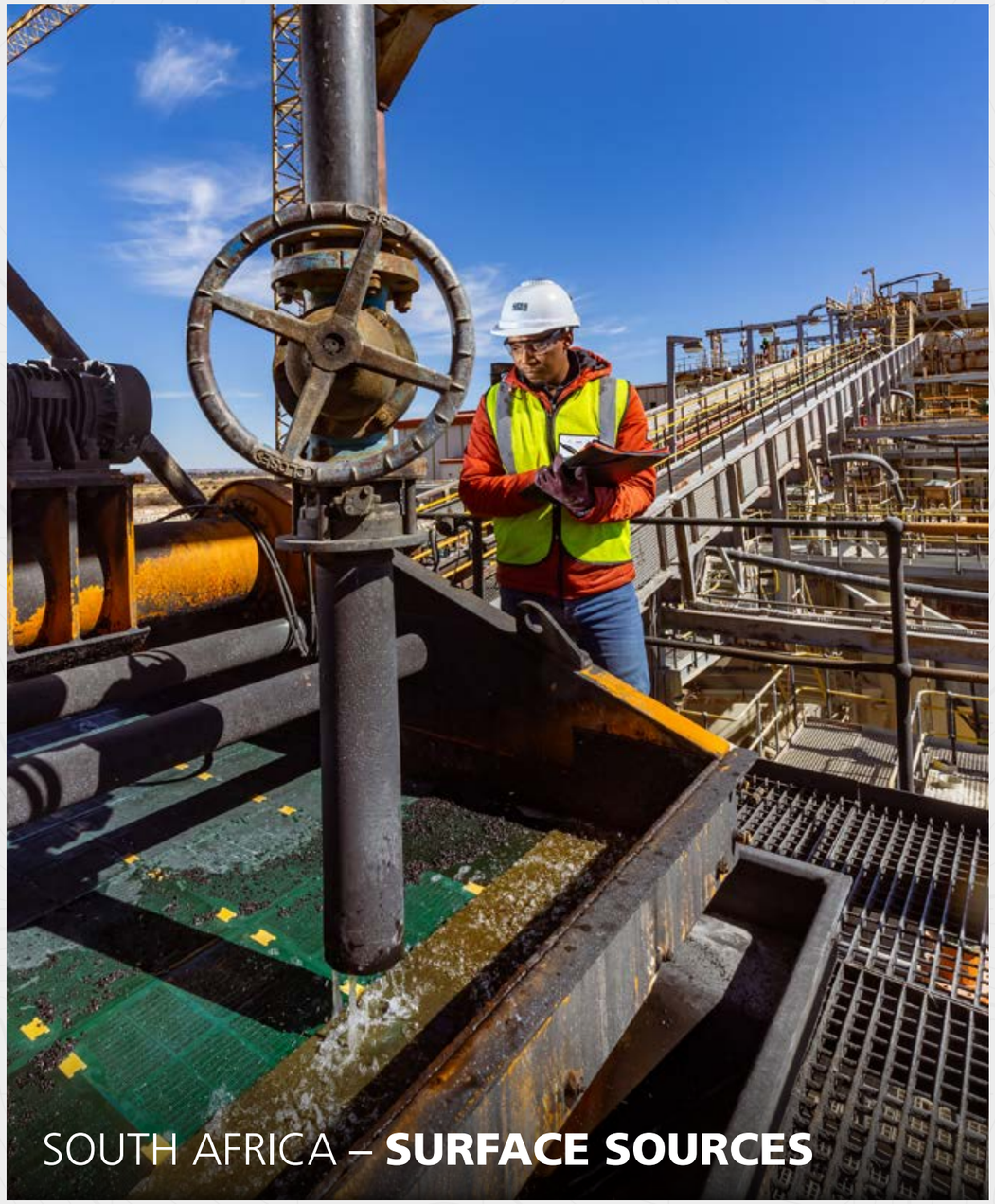
Kalgold

Kraaipan Greenstone Belt Magisterial district of Vryburg – 2024

Working pit areas of Kalgold

TAILINGS RETREATMENT FACILITIES

FREE STATE



Mineral Resources (inclusive)
6.7Moz

Mineral Reserves
5.5Moz

Detailed Mineral Resource and Mineral Reserve estimates are presented in this section.

Free State

The Free State surface source operations comprise the following:

- **The Phoenix (Tswelopele beneficiation) operation** – Located adjacent to Harmony's current and historical operations in the Free State, re-treats tailings from TSFs in the region to extract any residual gold. The Phoenix operation makes use of the Saaiplaas plant, located close to the historic Saaiplaas 2 shaft area and in close proximity to Masimong 4 shaft. Phoenix began operating in 2007
- **Central plant retreatment project** – Tailings reclaimed from the FSS5 TSF are processed at Central plant which was adapted for tailings retreatment. Plant commissioning began in June 2017 with ramp-up to a capacity of 300 000 tonnes per month achieved by the end of July 2017
- **Free State tailings** – All the remaining Free State TSFs not planned at Saaiplaas and Central plants in the current business plan are planned under Other Free State Tailings and will be processed at any plant where a replacement source is needed
- **Rock dumps** – Around 0.078Mt of Indicated and 11.591Mt of Inferred Resources are available in rock dumps in the vicinity of the Free State operations. A programme, run by Harmony's Metallurgical Services, to mill and process these dumps as and when there is spare plant capacity available, began in FY10
- **Tailings material** – 858.225Mt of tailings material contained in TSFs in the Free State is estimated to contain around 6.536Moz of gold.

Phoenix

The Phoenix operation, or the Tswelopele beneficiation operation, is a low-cost, high-profit margin, low-grade tailings reprocessing operation.

Phoenix uses Harmony's Saaiplaas gold plant, which was built in 1954. Most of the original structures and equipment were broken down around 1990 and removed with the exception of the thickeners and pachuca tanks, which are still in use. The plant was expanded in 1980 with the addition of a run-of-mine (RoM) milling section, additional pachucas and filters. While the old sections have been decommissioned and progressively demolished since the 1990s, the newer sections remain in operation. The plant, with a design capacity of 330 000 tonnes per month, initially formed part of Anglo American's Free State gold mining operations.

The Saaiplaas plant originally processed ore from Saaiplaas 1, 2 and 3 shafts. Saaiplaas 1 closed around 1980, Saaiplaas 2 around 1996, and Saaiplaas 3 around 2000. The Saaiplaas plant once also processed ore from the Erfdeel (now Masimong) shafts. With the decline of mining in the area, the plant was relegated to processing unmilled surface source material (waste) at a rate of 110 000 tonnes per month until July 2007. As all material currently processed by the plant is recovered by hydro-mining from old, desiccated slimes dams in the area, crushing or milling is not required. The ore-receiving silos were demolished in July 2007 when milling ceased.

The original design life of the Phoenix slimes retreatment project was five years (to end 2011). The short operating life was due to the restricted deposition capacity for the residues generated at the planned processing rate of 500 000 tonnes per month. Given the stability concerns of the TSFs being deposited at the time, this rate was reduced further to 424 000 tonnes per month from September 2011.

A major capital project was undertaken to build a replacement cyclone-deposition TSF at St Helena 1, 2 and 3 that would allow the deposition of 500 000 tonnes per month, again extending the operating life. The deposition dams compartments have since been combined into one TSF and is now called St Helena 123.

Central Plant Reclamation

Plant commissioning began in June 2017 with ramp-up to a capacity of 319 000 tonnes per month. The plant commenced tailings production at the beginning of 2018. Central plant, which had previously processed waste rock dumps, was converted into a tailings retreatment operation during 2016.

Nature of the operation

Hydro-mining on two TSFs, Brand A and Dam 21, for the Phoenix operation and one TSF, FSS5 for the Central plant retreatment project, is conducted under contract. Material is reclaimed using high-pressure water on the TSF, from where the material is pumped to the Saaiplaas plant in separate rubber-lined pipelines from Brand A and Dam 21, and to Central plant from FSS5.

Two additional carbon-in-leach tanks have been installed in the Saaiplaas plant to increase leach residence time to improve dissolution and reduce soluble loss.

Location

The Saaiplaas plant is located in the heart of the Free State goldfields near Welkom in the Free State province of South Africa, at latitude 28°02'00"S and longitude 26°52'18"E and Central plant is located some 7km south east of Saaiplaas plant near the town of Virginia.

Description of hydro-mining and mineral processing operations

Production plans

The current planned processing rate for the Phoenix operation is 507 000 tonnes per month with residue disposal at the St Helena 123 cyclone TSF. The current life of the Phoenix operation has been extended to FY2028.

The current planned processing rate for the Central Reclamation Plant is 319 000 tonnes per month with residue disposal at the Dam 23 and Brand D TSFs. The current life of the Central plant reclamation has been extended to FY2035.

Three surface sources are currently being mined (two at Phoenix (Brand A & Dam 21) and one at Central Plant (FSS 5):

- The Brand A TSF has more than 75% of its material removed already. It has a grade of 0.311g/t Au at about 45% recovery
- The Dam 21 TSF (which replaced the Harmony One TSF as a source from end-2011) has a grade of 0.282g/t Au at 45% recovery
- FSS 5 has a grade of 0.281g/t AU at about 48% recovery
- All the material from the Harmony One TSF has been reprocessed with only the clean-up remaining.

Residue deposition onto the FSS6, FSS4 and FSS1 TSFs replaced the old Saaiplaas deposition TSFs at the end of 2011. Deposition onto these TSFs and the Brand D TSF stopped with the commissioning of the St Helena 1, 2 and 3 cyclone TSF which can accept the full monthly production of 500 000 tonnes from the Saaiplaas plant. However, Central Plant has since started depositing at Brand D from 2017 and St Helena 1,2 and 3 compartments have been combined into one TSF called St Helena 123.

Saaiplaas plant began depositing material on the St Helena 1, 2 and 3 TSF in February/March 2013. This TSF is now the sole deposition site for the Saaiplaas plant. Commissioning of the St Helena 1, 2 and 3 TSF allowed the planned increase in plant throughput to the required 500 000 tonnes per month until 2029.

As the St Helena 1, 2 and 3 cyclone TSF was constructed on an existing deposition site, it did not require the environmental permitting that a new site would have needed.

Hydro-mining from Brand A, Dam 21 and FSS5

The Saaiplaas Plant currently reclaims slimes at an average in situ grade of 0.293g/t. with a plant recovery of 45% of the contained grade in the recovered pulped material received, yielding and average of 67kg of gold per month (planned).

The Central plant retreatment operation reclaims slimes at an average in situ grade of 0.276g/t with a recovery rate of around 48%, yielding 41kg per month.

The operating unit cost of the Phoenix operation is R98.01/t at 507ktpm and for the Central plant retreatment operation it is R99.55/t at 319ktpm. These reclamation projects are positioned as safe, low-risk, low-cost, profitable, low-grade tailings reprocessing operations.

Hydro-mining

The hydro-mining (monitoring) process uses 100mm and 150mm diameter high-pressure water monitors (cannons) to re-pulp the consolidated slimes to a relative density of around 1.4. The re-pulped slime flows under gravity to an in-dam finger screen where large trash is removed and then to the sump from where a transfer pump delivers it to one of two vibrating screens for secondary screening to remove oversize and smaller trash material. The screen underflow falls into the transfer sump. A separate pump station at each reclamation TSF pumps the reclaimed screened pulp via rubber-lined pipelines to the plant.

The transfer pumping of slimes to Saaiplaas and Central plants is done by Envirotech D-frame with three to five pumps in series (depending upon the distance to be pumped).

Oxygen is injected into the transfer pipeline at the reclamation site to neutralise cyanide-consuming components which improves gold dissolution and reduces cyanide consumption in the plant.

The reclaimed tailings pulp is delivered to the thickener distribution tower at both the Saaiplaas and Central plants where hydrated lime is added to raise the pH to 10.5. The pulp is distributed to the thickeners where the relative density is increased to 1.45 prior to the addition of cyanide for the leaching process.

The thickened pulp is pumped to linear screens with 800µm apertures where any residual trash is removed prior to the addition of cyanide for the leach and adsorption stages in both plants.

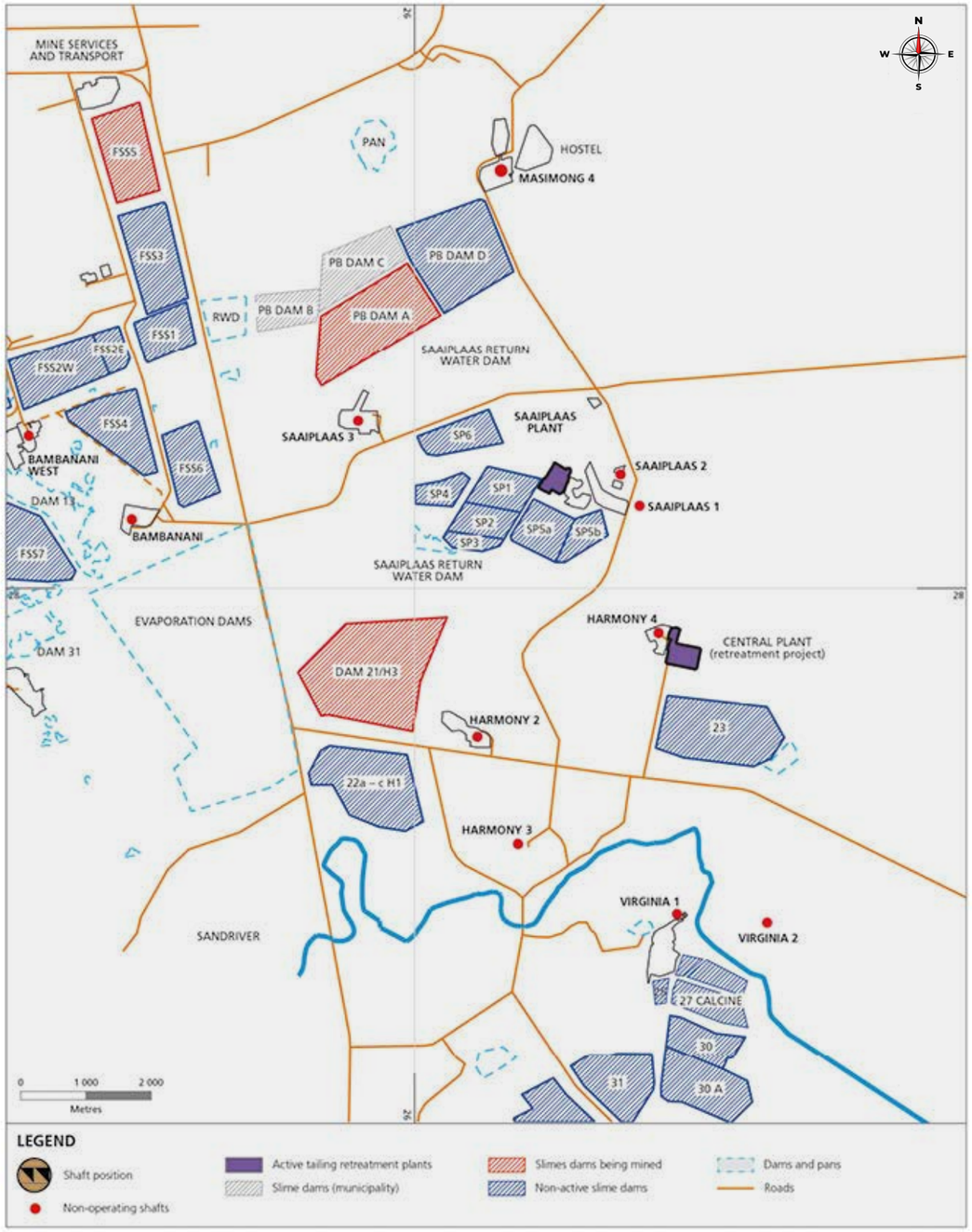
Central plant uses six mechanically agitated leach tanks and eight mechanically agitated carbon-in-pulp tanks with cascade flow between the tanks, while the Saaiplaas plant has two parallel circuits with six air agitated pachuca tanks operated in carousel mode. Two tanks in each circuit are used for leaching and four for the carbon-in-leach process.

The final product of both the Saaiplaas and Central plants is loaded carbon.

Carbon elution for the recovery of gold is carried out at Central plant for both the Central plant retreatment and the Phoenix operations.

■ Welkom TFS Hydraulic Remining

Location of Harmony's Free State Surface Operations – 2024



WEST RAND/KLERKSDORP

Mineral Resources (inclusive)
4.8Moz

Mineral Reserves
3.5Moz

Detailed Mineral Resource and Mineral Reserve estimates are presented in this section.

History

Harmony Gold acquired the remaining AngloGold Ashanti Ltd South African assets, Mponeng and surface operations, in October 2020. The acquisition of surface operations in the Vaal River region in Klerksdorp includes the MWS and Kopanang plant operations. The Kopanang plant has since been put on care and maintenance The West Wits operation near Carletonville includes the Savuka plant.

The MWS operation uses the Chemwes plant, which commenced production in 1952 for the Stilfontein Gold Mine. Following the rise in the uranium price in the 1970s, the operation investigated the uranium recovery from the Stilfontein gold tailings dams and later commissioned the uranium plant in mid-1979. The plant operated until 1989 processing 29.4Mt of tailings and recovery of 4.560 tonnes of U3O8. In 2003, the plant was later converted into a gold tailings treatment operation and no uranium was produced. In 2007, First Uranium Proprietary Limited (South Africa) acquired MWS with the purpose of treating the tailings dams for both gold and uranium. The operation commissioned the second and third plant between 2007 and 2012 treating tailings. Changes were made in the configuration of the flotation and uranium processes after which the float plant was recommissioned in July 2016 and the uranium plant in October 2016. As part of the optimisation, the uranium and flotation plants were discontinued in 2017 resulting in MWS producing gold only.

Savuka gold plant was commissioned in 1961 and originally designed to treat ore material from Savuka and TauTona shafts. Upon closure of the aforementioned shafts, the plant was then subjected to treating tailings material, Savuka and Mponeng waste rock dumps in 2015.

Kopanang plant was a twin stream process that exploited waste rock dumps and environmental clean-ups in the Vaal River area. Originally the plant was commissioned in 1984 to process reef ore from Kopanang shaft. Harmony Gold acquired the plant together with the rest of AGA South African assets in October 2020. The plant has, however, been placed on care and maintenance from August/September 2021.

Nature of the operation

Surface operations are reprocessing low-grade material from TSFs and waste rock dump scattered across the Vaal River, Stilfontein and West Wits area into one area, in efforts to reduce the tailings and waste rock dumps footprint. In the Klerksdorp region, the company utilises the Kareerand dam to redeposit retreated residues. In the Carletonville area, the company utilises the Savuka New North TSF for the retreated residue material residue.

The MWS operation consists of three plants namely Stream 1, Stream 2 and Stream 3 processing seven sources at the beginning of FY25 and 1 more source starting later in the year. Stream 4 will start in November 2024. The plants' capacities were considered when the plan was done and planned accordingly.

Mineral Resource

The material contained in the TSF and waste rock dumps originates from the historic ore-bearing reefs mined by the Vaal River, Buffelsfontein, Hartebeestfontein, Stilfontein and Carletonville gold mines. These gold mines are deep-level gold mines, which predominantly extract the tabular, oligomictic pebbly conglomerate. In the Vaal River the predominant reef is the Vaal Reef (VR) ore situated within the Krugersdorp formation of the Central Rand Group, in the upper unit of the Witwatersrand Supergroup. The VR has been predominantly mined for gold in the past, although the reef also contains uranium oxide. The dominant reef residue deposited on the Carletonville TSF is from the oligomictic conglomerate from the Ventersdorp Contact Reef (VCR) found at the bottom of the Ventersdorp Supergroup and Carbon Leader Reef (CLR) of the lower Johannesburg sub-group of the Central Rand Group.

The marginal ore dumps consist of waste rock mined from underground workings, hoisted, transported to surface and deposited via conveyor belts. The gold contained within these dumps was sourced from minor reef intersected while accessing the primary reef, gold-bearing reef contained within small fault blocks that were exposed by off-reef development, and from cross-tramming of gold-bearing reef material to the waste tips.

The TSFs consist of fine-grained residue material that originates from the processing of the underground ore from the various operations.

Mineral rights/legal aspects and tenure

The MWS Operation's licence to operate is covered by the Environmental Authorisation under the National Environmental Management Act No 107 of 1998. In terms of the current legislation, the MPRDA, a mining right is not required to reclaim TSFs.

Following the acquisition of MWS Operation, all relevant permits and licences were acquired by Harmony, including the approved EMP, the financial provision for rehabilitation liabilities for the MWS Operation mining rights, as well as the historic surface rights permits for MWS Operation. All these permits are still valid.

The current mining rights for the South African operations cover multiple horizons, ie both underground and surface for West Wits (West Mining Right (01MR) and Magnum Farm (248MR). The TSFs falling outside the mining right are accommodated in the approved EMPr and financial provision for rehabilitation for the West Wits Mining Rights, as well as under historic surface rights permits for West Wits, which are still valid.

Mining methods and mine planning

The tailings are reclaimed using several hydraulic (high-pressure water) monitoring guns to deliver water at pressure, typically 27 to 30 bar, to the face. The tailings material is reclaimed by blasting the TSF face with the high-pressure water, resulting in the slurry gravitating towards pumping stations. These monitoring guns can be positioned to selectively reclaim required areas from the TSFs. Bench heights are constrained by the force delivered from the monitoring gun nozzle and safety constraints. With enough pressure, face advance of up to 25m can be reclaimed per cut. Typical bench heights are between 10m to 15m. The pump stations are located at the lowest point of the dams to ensure that the slurry from the dams will gravitate towards the pump station from where the slurry will be pumped to the processing plants.

For marginal ore dumps, bulldozers are used to create safe loading faces. The material is then loaded from the face onto trucks by means of front-end loaders and transported to the relevant gold plants for processing.

Mineral processing

The MWS gold plant processes hydraulically re-mined slurry from several TSFs. The ore is reclaimed by means of high-pressure monitor guns into a pump station that feeds the plant. In the plant, the ore gets processed through a carbon-in-leach circuit for the dissolution of gold and adsorption of the aurocyanide complex onto the activated carbon using cyanide, oxygen and lime as the principal reagents for the dissolution reaction and activated carbon as the adsorbent. Once loaded with gold, the carbon proceeds to the elution circuit to strip the adsorbed gold into a more concentrated solution that proceeds to the electrowinning step for electrolytic gold recovery and smelting.

The Savuka plant is a hydro-metallurgical plant. The mineral process is dependent on the source material: tailings material is pumped directly from the re-mining site to the leach circuit, then dewatering process to improve the density required for the leach circuit. At leach, lime is added for pH adjustment and sodium cyanide for the gold dissolution. The leach product goes to the carbon-in-pulp section for dissolved gold recovery by use of activated granular carbon.

Infrastructure

All tailings material in the Vaal River and MWS areas is processed through the three metallurgical streams at the MWS metallurgical operations, with the fourth stream planned to be added in FY25. In the Carletonville area, the tailings material is currently processed through the Savuka plant. Savuka plant is solely dedicated to tailings reclamation and Kusasalethu plant used for both tailings material and waste rock dumps.

Adequate deposition capacity for the surface operations to cater for the BP2025 life-of-mine exists in all areas. Operational infrastructure such as road, rail, offices, security service, water and power supply is adequate, and is shared with the operations in the relevant areas.

Mineral Resource estimation

Prior to 2011 for the Vaal River operations, the grade estimations for the TSFs were based on the residue grades obtained from the different process plants, as well as various ad hoc sampling projects in selected areas. Post-2011, the majority of the Vaal River and MWS TSFs have since been re-sampled by means of an extensive drilling exercise which commenced in 2011. The auger drilling typically took place on a 150m x 150m grid (Mineral Resource model) as well as a minimum of 50m x 50m grid (grade control model). The vertical sampling interval of 1.5m was implemented and where possible all holes were drilled into the underlying strata to allow the estimation of the base of the TSF.

The drill hole sampling information was then utilised to generate 3D grade models (block model) using the ordinary kriging estimation method. The variograms used for the grade estimation consist of both horizontal and downhole variograms. The methodology used for the construction of the grade model constitutes well-defined 3D wireframes that are constructed using the drill holes and the results from monthly surveys on currently reclaimed TSFs and aerial surveys carried out on an annual basis for TSFs that are planned to be reclaimed. These models are regularly updated during the grade control process. A stringent QA/QC process was applied to the sampling and assay processes to ensure a high level of confidence in the results.

Environmental impact

MWS manages its environmental impacts through an accredited ISO 14001:2014 Environmental Management System. The operation first obtained its environmental certification in 2015 under ISO 14001:2004. In 2018 it got recertified under ISO 14001:2015. In conformance to the standard requirements MWS has identified and risk ranked the significant aspects and impacts of its activities and determined measures to minimise its aspects and associated impacts. This is documented in the relevant ISO 14001:2015 documents and managed accordingly. The operations are audited by an external certification body every second year, and the operation has maintained its certification since it was recertified in 2018.

The following environmental authorisations have been issued to MWS by the relevant regulators:

- Atmospheric emissions licence – issued 30/09/2020
- Water use licence – issued 18/09/2023
- Environmental authorisation for expansion of Kareerand – issued 21/11/ 2022.

The local authorities have also issued the operations with a permit to store hazardous and flammable material as required by the local by-laws.

Annual internal audits are conducted as part of the ISO 14001:2015 management standard and depending on the conditions of the authorisations. Periodically, depending on the frequency stipulated in the authorisations, external audits are conducted by independent auditors. The regulators also do periodic assessments on the operations based on their jurisdiction.

Legal environmental audits are also conducted on a regular basis to determine the level of compliance to South African environmental legislation applicable to the operations.

Material risk – Kareerand project has been approved so this is not a risk anymore

Material risk that may impact Mineral Resource and Mineral Reserve statement:

Significant risk	Remedial action
» If the expansion of Kareerand is not completed.	» The project has been approved and is currently being executed.

Competent person

Mineral Resource Manager

Bareng Joseph Selebogo
Plato: GTgMS 0151
MSCC: 1900

Years of experience:
- In industry – 38 years
- Reporting of Reserves – 14 years.

Dumps

Operational performance

Surface operations: Key operating statistics

	Unit	FY24	FY23	FY22	FY21	FY20
Operation						
Volumes milled	000t (metric)	**4 162**	3 935	5 813	8 411	4 476
	000t (imperial)	**4 590**	4 339	6 409	9 275	4 936
Gold produced	kg	**1 724**	1 541	2 319	3 295	1 753
	oz	**55 429**	49 544	74 557	105 927	56 630
Grade	g/t	**0.41**	0.39	0.40	0.39	0.39
	oz/t	**0.012**	0.011	0.012	0.011	0.011
Financial						
Average gold price received	R/kg	**1 222 494**	1 052 903	903 464	871 323	779 835
	US$/oz	**2 034**	1 844	1 847	1 760	1 549
Capital expenditure	Rm	**4**	12	7	39	2
	US$m	**—**	1	—	3	—
Cash operating cost	R/kg	**809 415**	852 146	710 022	606 358	486 792
	US$/oz	**1 346**	1 492	1 452	1 225	967
All-in sustaining cost	R/kg	**810 746**	859 974	705 642	632 528	484 507
	US$/oz	**1 349**	1 506	1 443	1 278	962

Surface sources

Gold – Mineral Resource estimates at 30 June 2024 (inclusive)

	Measured				Indicated				Inferred				Total			
	Tonnes		Gold		Tonnes		Gold		Tonnes		Gold		Tonnes		Gold	
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Phoenix	44.9	0.27	12	393	—	—	—	—	—	—	—	—	44.9	0.27	12	393
Central plant	—	—	—	—	43.0	0.27	11	368	—	—	—	—	43.0	0.27	11	368
Other:																
–Waste rock dumps	—	—	—	—	0.1	0.55	0.04	1	11.6	0.44	5	163	11.7	0.44	5	165
–Tailings	169.3	0.27	46	1 476	585.5	0.22	131	4 205	15.5	0.19	3	94	770.3	0.23	180	5 775
Mispah	—	—	—	—	66.3	0.31	20	652	4.8	0.21	1	32	71.1	0.30	21	684
Kop Paydam	—	—	—	—	11.2	0.21	2	76	—	—	—	—	11.2	0.21	2	76
Moab MOD	—	—	—	—	1.9	0.30	1	18	—	—	—	—	1.9	0.30	1	18
Vaal River tailings	—	—	—	—	180.6	0.28	51	1 649	74.8	0.13	10	306	255.4	0.24	61	1 955
Mine Waste Solutions	59.8	0.21	13	405	161.5	0.25	40	1 290	—	—	—	—	221.3	0.24	53	1 696
West Wits tailings	—	—	—	—	38.0	0.32	12	394	—	—	—	—	38.0	0.32	12	394
Vaal River WRD	—	—	—	—	—	—	—	—	2.5	0.24	1	20	2.5	0.24	1	20
West Wits WRD	—	—	—	—	0.2	0.37	0.1	2	—	—	—	—	0.2	0.37	0.1	2
Grand total	274.1	0.26	71	2 274	1 088.2	0.25	269	8 654	109.1	0.18	19	615	1 471.4	0.24	359	11 544

■ Orkney MWS 4 and 5 pump station project.

Modifying factors

Surface Sources		MCF (%)	PRF (%)	Cut-off (g/t)
Phoenix	2 023	100	45	0.18
	2 024	100	45	0.21
Central plant	2 023	100	49	0.18
	2 024	100	48	0.21
Other tailings	2 023	100	51	0.16
	2 024	100	50	0.19
Vaal River tailings	2 023	100	46	0.24
	2 024	100	45	0.22
Mine Waste Solutions	2 023	100	46	0.24
	2 024	100	45	0.22
West Wits tailings	2 023	100	42	0.27
	2 024	100	43	0.22

Gold – Mineral Reserve estimates at 30 June 2024

	Proved				Probable				Total			
	Tonnes		Gold		Tonnes		Gold		Tonnes		Gold	
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Phoenix	24.3	0.29	7	224	—	—	—	—	24.3	0.29	7	224
Central plant	—	—	—	—	41.2	0.28	11	366	41.2	0.28	11	366
Mispah	—	—	—	—	66.3	0.31	20	651	66.3	0.31	20	651
Vaal River tailings	—	—	—	—	139.3	0.30	41	1 324	139.3	0.30	41	1 324
Mine Waste Solutions	7.5	0.28	2	67	161.4	0.25	40	1 285	168.9	0.25	42	1 352
West Wits tailings	—	—	—	—	12.3	0.32	4	126	12.3	0.32	4	126
Other:												
–Tailings	86.5	0.27	23	753	585.5	0.22	131	4 205	672.0	0.23	154	4 957
Total	**118.4**	**0.27**	**32**	**1 044**	**1 006.1**	**0.25**	**247**	**7 957**	**1 124.5**	**0.25**	**280**	**9 001**

■ Mponeng TSF.

Our focus on zero harm is an investment in our business and in our people.

Harmony's Papua New Guinea assets include The Hidden Valley open-pit gold-silver mine, a 50% interest in the Wafi-Golpu Project, the Kerimenge deposit and several exploration prospects. Combined, these account for gold and gold equivalent Mineral Resources of 38.2Moz and Mineral Reserves of 17.7Moz. These are equivalent to 28% and 44% respectively of total group gold and gold equivalent Mineral Resources and Mineral Reserves. Our copper Mineral Resources (inclusive) in Papua New Guinea was 4.3Mt and Mineral Reserves of 2.3Mt.

PAPUA NEW GUINEA

PAPUA NEW GUINEA

Copper

Mineral Resources (inclusive)

4.3Mt

Mineral Reserves

2.3Mt

Gold and Gold equivalent

Mineral Resources (inclusive)

38.2Moz

Mineral Reserves

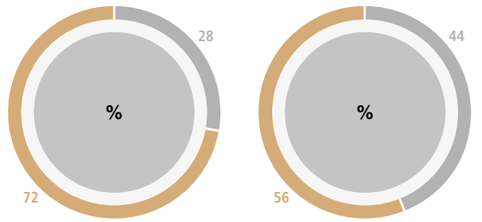
17.7Moz

In Papua New Guinea, Harmony has one wholly owned open-pit, gold and silver mine – Hidden Valley, the Kerimenge deposit – and a 50% interest in the Wafi-Golpu Project, which encompasses the Golpu, Wafi and Nambonga deposits. The Hidden Valley Mine, Kerimenge deposit and the Wafi-Golpu Project are located in the Morobe Province.

As at 30 June 2024, our copper Mineral Resources in Papua New Guinea was 4.3Mt and the combined estimated Mineral Reserves was 2.3Mt.

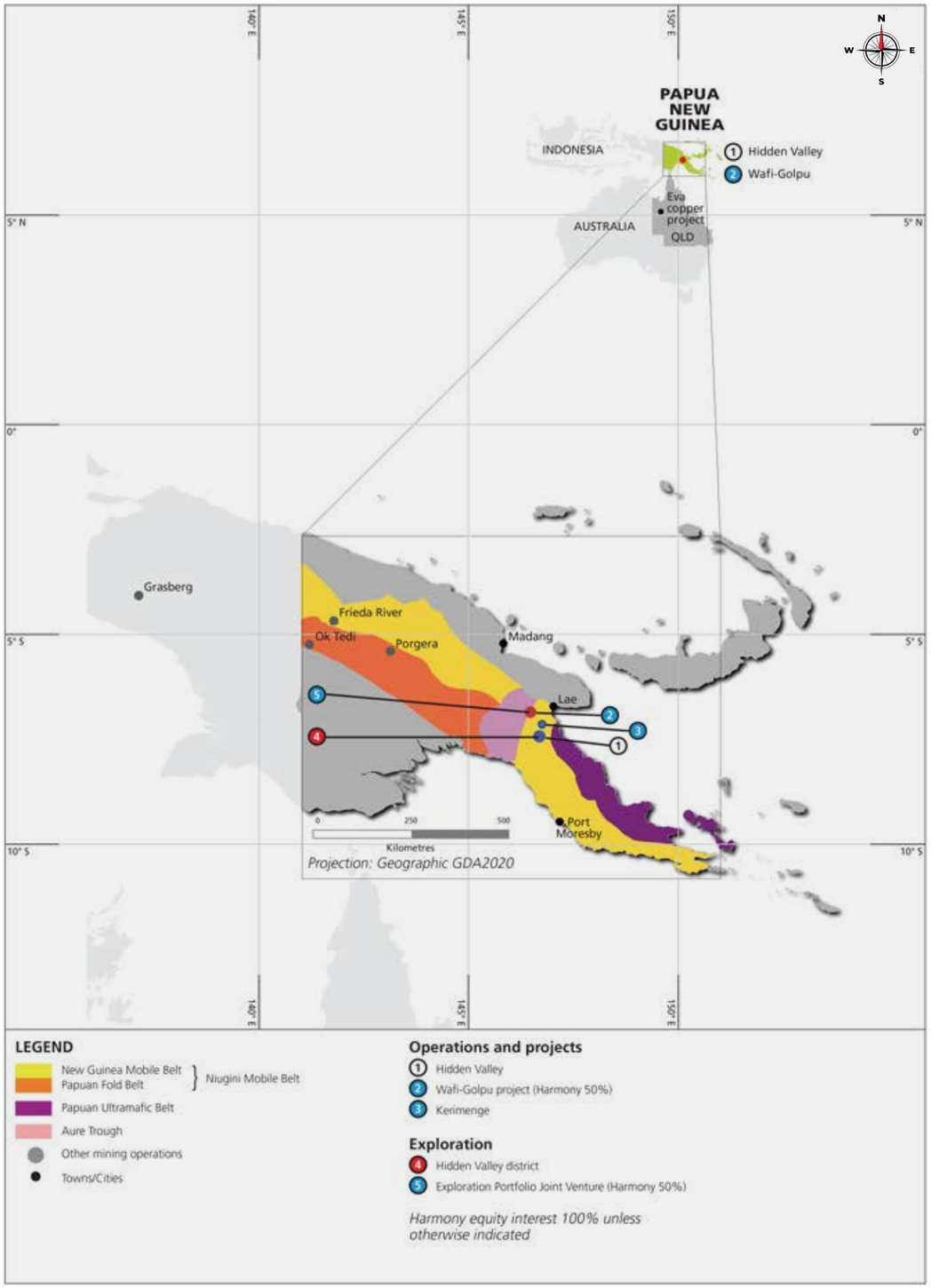
As at 30 June 2024, our combined estimated gold and gold equivalent Mineral Resources (inclusive) in Papua New Guinea was 38.2Moz and the combined estimated Mineral Reserves was 17.7Moz.

Gold and Gold equivalents
Contribution to Harmony

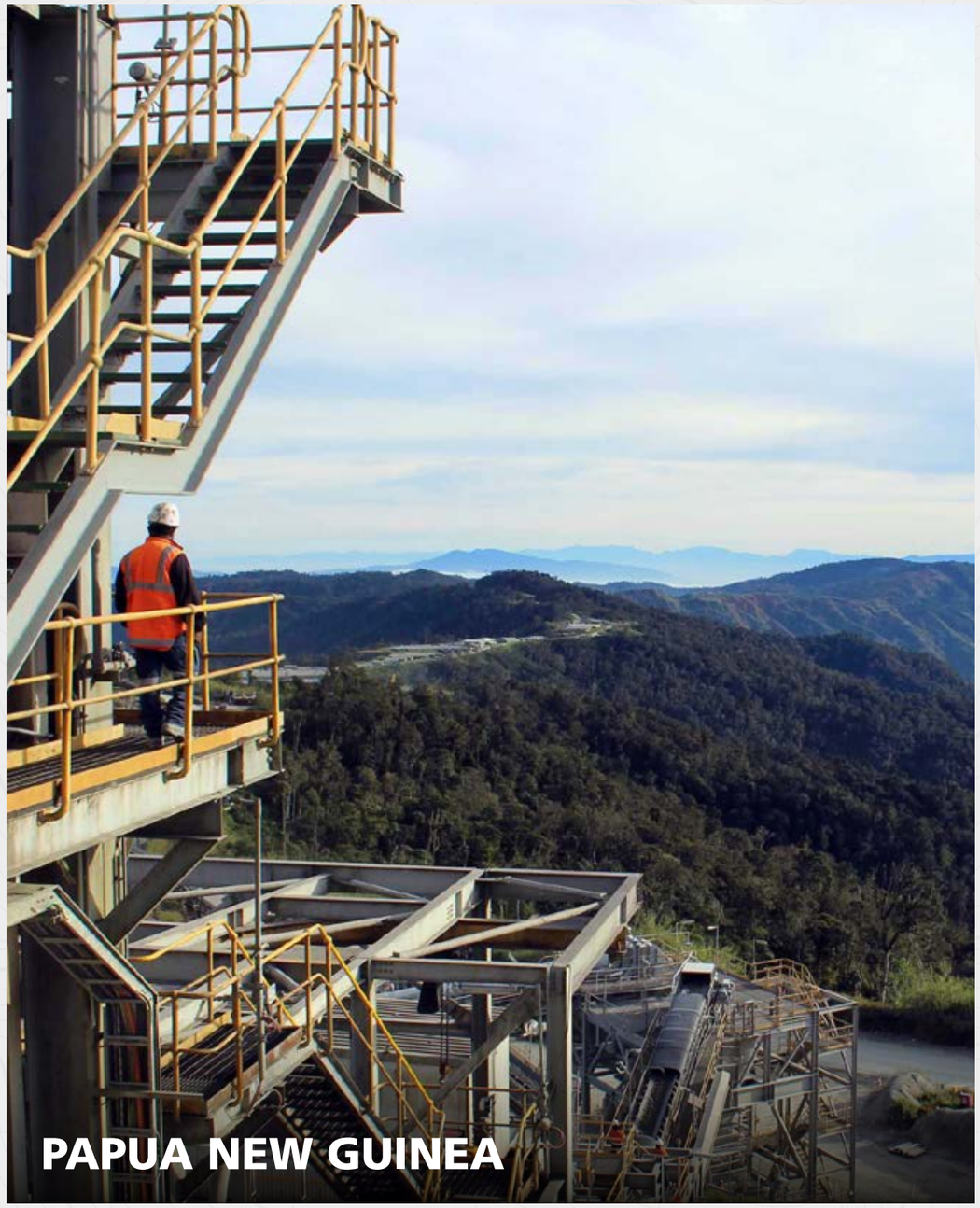


MINERAL RESOURCES AND MINERAL RESERVES BY OPERATION	
Papua New Guinea	**160 – 175**
Hidden Valley	**163**
Golpu, Wafi and Nambonga	**168**
Kerimenge	**173**

Harmony – Papua New Guinea – 2024



HIDDEN VALLEY



Gold and Gold equivalent

Mineral Resources (inclusive)
2.6Moz

Mineral Reserves
1.0Moz

Detailed Mineral Resource and Mineral Reserve estimates are presented in this section.

Description and location
The Hidden Valley Mine is located at latitude 7°22"S and longitude 146°39"E, approximately 15km south-south-east of the township of Wau and approximately 90km south-south-west from Lae, the capital of Morobe Province in Papua New Guinea. The closest major towns to the project are Wau and Bulolo. Lae, the nearest maritime port in the region, is connected to Bulolo by a two-lane main road.

The mine is located at elevations between 1 700m and 2 800m above sea level within steep mountainous and forested terrain that experiences approximately 3m of rainfall per year.

History
The Hidden Valley deposits were discovered by CRA in the 1980s. Ownership of the deposits was held by various exploration companies before being acquired by Harmony.

Mine construction commenced in 2007 with the 40km road access from Bulolo to the mine site. First gold was poured in May 2009 with the mine being officially opened in September 2010.

Nature of operations
The Hidden Valley Mine is an operating open-pit gold and silver mine. Two separate open-pit mines feed a 4.0Mtpa processing plant. Silver and gold doré bars are produced. Current life-of-mine is to 2029, with further opportunities for extension.

Geology
The deposit is a structurally controlled vein-stockwork gold-silver deposit located in the Morobe Granodiorite of the Wau Graben. Gold-silver mineralisation is contained in carbonate-adularia-quartz-sulphide vein-stockworks and in a few instances in hydrothermal breccias. Discrete zones of intense stockwork fracture and mineralised veining comprise individual lodes. At the Hidden Valley deposit gold and silver are related to steeply to moderately dipping sheeted vein swarms associated with an underlying shallow thrust.

Mineral rights/legal aspects and tenure
The Hidden Valley Mine comprises mining lease ML 151, lease for mining purposes LMP 80, and mining easement ME 82. These tenements are 100% owned and managed by Morobe Consolidated Goldfields Limited, a subsidiary of Harmony Gold Mining Company Limited and registered in Papua New Guinea.

The deposits are situated within ML151 which was granted in 2005 for a 20-year term. An extension was granted by the Minister for Mining on 21 May 2021, extending ML151's validity until March 2030, which incorporates the current life-of-mine.

Morobe Consolidated Goldfields Limited holds environment permit EP L3(578). In March 2021, a minor amendment to the permit was approved, allowing the conversion of the Hamata open-pit into a second tailings storage facility. This amendment also accommodates the development of the Kaveroi waste rock dump for the extension.

Mining methods and mine planning
Mining operations are conducted across two open-pits, Hidden Valley-Kaveroi and Hamata, separated by a distance of six kilometres. The Hidden Valley-Kaveroi open-pit stands as the larger of the two. These mining activities follow conventional open-pit techniques, employing back-hoe excavators and rigid dump trucks as the primary load and haul equipment. Front-end loaders take charge of crusher feeding and stockpile reclamation. Additionally, smaller articulated dump trucks contribute to construction efforts and mining operations at Hamata.

Mining bench configuration generally consists of 18m inter-berm heights, blasted in 2m x 9m benches with 3m mining flitches.

Engineered valley fill waste dumps serve as the designated disposal sites for waste. These dumps are fortified through strategic keying and buttressing with stable, non-acid forming rock. Specifically, waste generated from the Hidden Valley-Kaveroi open-pit is presently directed to the engineered valley fill Western Sector, Niekywe, and Kaveroi Creek waste dumps. These dumps are designed to offer ample capacity throughout the mine's operational lifespan.

Mineral processing
A crushing facility is located near the Hidden Valley pit with the crushed ore conveyed via a 3.8km long overland pipe conveyor. Ore from the Hamata pit is trucked to the Hamata crushing station, located next to the ore processing plant.

The Hidden Valley process plant treats 4.0Mtpa of gold-silver bearing ore. The process uses a two-stage crushing circuit followed by a SAG mill, gravity, CCD/Merril Crowe circuit for silver and carbon-in-leach circuit for the gold. A silver-gold ore bar is produced and flown off site for refining and sale.

Tailings are disposed of in a terrestrial TSF located to the south-west of the process plant. A second TSF (TSF2) will occupy the Hamata Pit once mining is completed there. These facilities are designed, built and operated to the Australian National Committee on Large Dams (ANCOLD) guidelines. Dam wall construction of the tailings storage facility is ongoing and largely constitutes placement of suitable oxide and fresh competent material sourced from mining in the Hamata pit and nearby quarry. The processing inventory in this Mineral Reserve estimate is constrained by the remaining storage capacity in TSF1 and TSF2. An extension study considering expansion on the current TSFs plus potential TSF3 are underway.

Infrastructure
Hidden Valley is a well-established mine serviced from the port of Lae by a partially sealed 100km road to Bulolo and then a well-maintained gravel road for the remaining 40km to site. All goods are transported to site via this route with some emergency goods flown in via Bulolo.

There is an airstrip at Bulolo from where international and domestic fly-in and fly-out workers commute. However, the bulk of employees are from the local area and are bussed to and from their towns and villages. The mining camp on-site houses all employees and provides accommodation, messing, health and recreation facilities. Power is provided by the State-owned PNG Power which is generated in part by renewable (predominantly hydro-power). 100% contingency is provided by a bank of diesel generators.

Mineral Resource estimation
Both the Hidden Valley and the Hamata models have been estimated using a localised multiple indicator kriged method using 12m x 12m x 3m standard mining units (SMU) and constrained within broad three-dimensional wireframe domains based on gold and silver grade, alteration and structure. This method accommodates the large panels required for a robust estimate using a long-standing well-known estimation method, but also allows the estimation of localised SMU-sized blocks for mine planning purposes. The local multiple indicator kriging (LMIK) model was last updated in 2022. Australian Mining Consultants (AMC) and Derisk reviewed the 2022 Hidden Valley-Kaveroi model and found the model is fit for purpose. Checks against historical production indicate that the models are robust when appropriate modifying factors are applied. In 2024, an ordinary kriged model was run for the stage 8 Hidden Valley pit. The stage 8 OK estimate was run into the 12m x 12m x 3m SMU block size of the planning model using updated versions of the domains used in the LMIK estimate. All blocks outside the stage 8 pit shell retained the 2022 LMIK resource update.

Pit optimisations that inform designs are run on Measured and Indicated Resource categories only. All Mineral Resource classifications are maintained and converted to Mineral Reserve classifications inside pit designs. There is no measured material classified in either pit. The Measured Resources reported comprise stockpile material only.

Environmental impact
In accordance with the Environment Act 2000, an environmental impact statement (EIS) was submitted to the Department of Environment and Conservation (DEC) (now the Conservation and Environment Protection Authority – CEPA) in February 2004. Waste discharge and water extraction permits were subsequently issued to Hidden Valley Services Limited which were amalgamated as Environment Permit EP-L3(578) in October 2017. The mine presently operates under EP-L3(578) which was amended in April 2021 to reflect changes to the mine configuration associated with the extension.

Consistent with Conditions 4 and 5 of EP-L3(578), an environmental management plan (EMP) has been developed which identifies potential environmental impacts associated with the operation of the mine and management strategies to reduce these impacts. The EMP is updated every three years, with the current version (2021 – 2024) submitted to CEPA on 31 March 2021. Approval of this document is pending. The EMP describes Hidden Valley's approach to environmental management and outlines the standards, procedures and systems developed to meet the objectives set out in the mine's approvals and permits, as required under Papua New Guinea legislation. The EMP also details the environmental monitoring requirements and reporting commitments of Hidden Valley to CEPA.

The environmental monitoring regime presented in the EMP includes surface water, groundwater, sediment and air quality monitoring, hydrological studies, land clearance assessment and aquatic biota studies. Water quality monitoring within the Watut River and its major tributaries forms a critical component of the programme in order to monitor the potential for impacts on the downstream environment as a result of the mining operation.

Material risks

Material risks that may impact Hidden Valley's Mineral Resource and Mineral Reserve statement:

Significant risks	Remedial actions
» Overestimation of gold grade due to the nature of the orebody » Pit wall stability causing pit redesign and/or slow mining rates » Availability of critical fixed plant in the crusher, conveyor and process plant.	» Use of ordinary krigging resource estimation to smooth grade and application of appropriate ore loss and dilution figures » Advanced drilling programme » Softening of wall angles » Proactive geotechnical activities and monitoring programme » Maintaining stocks on hand of critical spares » Planned maintenance schedule.

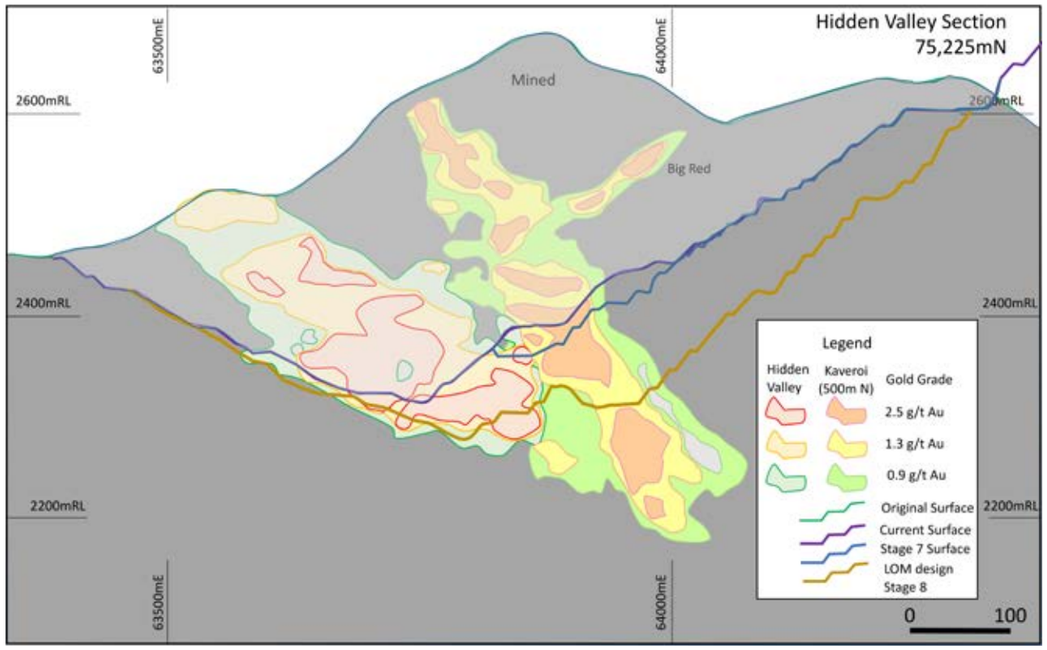
Competent person

Mineral Resources – Group Resource Geologist, Harmony Australasia

Ronald Reid
Australian Institute of Geoscientists (AIG)
29 years' experience in copper, gold and base metals mines, exploration and Resource modelling in Australia, PNG, Central America and Africa.

Mineral Reserves – Group Manager Mine Planning, Harmony Australasia

Daniel Ross
AusIMM (CP) RPEQ
17 years' experience in gold and copper mines in Australia, PNG and West Africa.



Hidden Valley and Hamata

Gold – Mineral Resource estimates at 30 June 2024 (inclusive)

	Measured				Indicated				Inferred				Total			
	Tonnes		Gold		Tonnes		Gold		Tonnes		Gold		Tonnes		Gold	
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Hidden Valley	1.8	0.86	2	49	45.3	1.34	61	1 955	1.0	1.12	1	37	48.1	1.32	63	2 040
Hamata	—	—	—	—	1.9	1.91	4	115	0.2	1.49	0.3	9	2.0	1.87	4	123
Total	**1.8**	**0.86**	**2**	**49**	**47.1**	**1.37**	**64**	**2 070**	**1.2**	**1.18**	**1**	**45**	**50.1**	**1.34**	**67**	**2 164**

Modifying factors

	MCF (%)	Dilution (%)	PRF (%)	Cut-off (g/t)
Hidden Valley				
2023	95	—	93	0.65
2024	94	—	88	0.65
Hamata				
2023	100	5	93	0.65
2024	90	—	88	0.65

Gold – Mineral Reserve estimates at 30 June 2024

	Proved				Probable				Total			
	Tonnes		Gold		Tonnes		Gold		Tonnes		Gold	
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Hidden Valley	1.0	0.92	1	30	15.4	1.68	26	832	16.4	1.63	27	862
Hamata	—	—	—	—	0.1	1.68	0.2	7	0.1	1.68	0.2	7
Grand total	**1.0**	**0.92**	**1**	**30**	**15.5**	**1.68**	**26**	**839**	**16.5**	**1.63**	**27**	**869**

Silver – Mineral Resource estimates at 30 June 2024 (inclusive)

	Measured				Indicated				Inferred				Total			
	Tonnes		Ag		Tonnes		Ag		Tonnes		Ag		Tonnes		Ag	
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Hidden Valley	1.8	18.96	34	1 078	45.3	19.28	873	28 068	1.0	26.29	27	856	48.1	19.42	933	30 002

Silver – Mineral Resources as gold equivalent estimates at 30 June 2024 (inclusive)

	Measured	Indicated	Inferred	Total
	(000oz)	(000oz)	(000oz)	(000oz)
Hidden Valley	14	364	11	390

Modifying factors

Hidden Valley	MCF (%)	Dilution (%)	PRF (%)	Cut-off (g/t)
2023	100	—	70	0.65
2024	100	—	70	0.65

Silver – Mineral Reserve estimates at 30 June 2024

	Proved				Probable				Total			
	Tonnes		Ag		Tonnes		Ag		Tonnes		Ag	
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Hidden Valley	1.0	19.58	20	649	15.4	26.02	400	12 870	16.4	25.62	420	13 519

Silver – Mineral Reserves as gold equivalents estimates at 30 June 2024

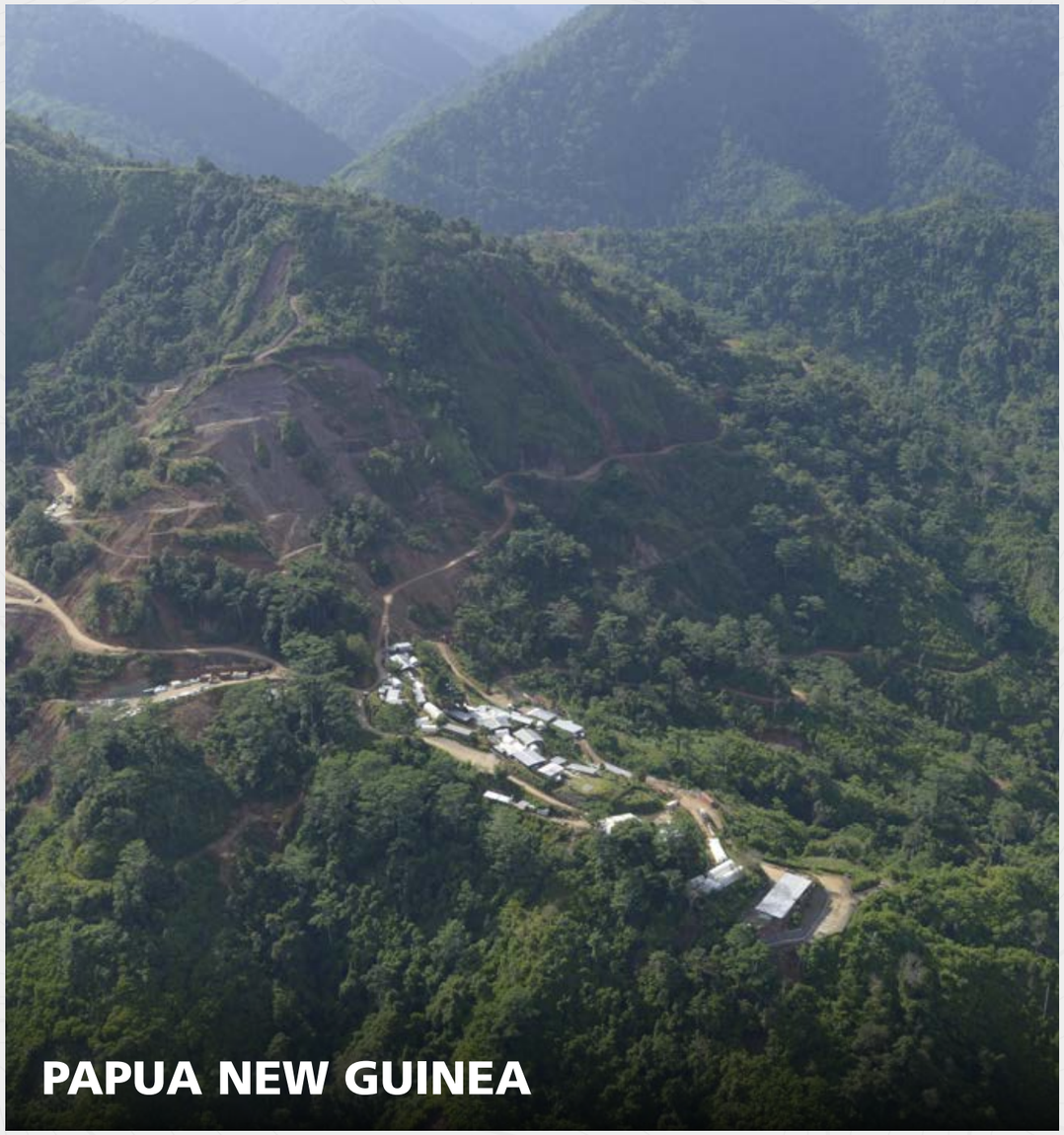
	Proved	Probable	Total
	(000oz)	(000oz)	(000oz)
Hidden Valley	8	167	175

Operational performance

Hidden Valley: Key operating statistics

	Unit	FY24	FY23	FY22	FY21	FY20
Operation						
Volumes milled	000t (metric)	**3 360**	3 846	3 229	3 420	3 906
	000t (imperial)	**3 705**	4 240	3 561	3 772	4 307
Gold produced	kg	**5 101**	4 370	3 707	4 689	4 872
	oz	**164 000**	140 498	119 182	150 755	156 639
Grade	g/t	**1.52**	1.14	1.15	1.37	1.25
	oz/t	**0.044**	0.033	0.033	0.040	0.036
Financial						
Average gold price received	R/kg	**1 223 409**	1 053 611	862 505	847 027	757 348
	US$/oz	**2 035**	1 845	1 764	1 711	1 504
Capital expenditure	Rm	**1 541**	1 737	1 249	1 260	959
	US$m	**82**	98	82	82	61
Cash operating cost	R/kg	**477 360**	486 754	591 551	356 233	348 054
	US$/oz	**794**	852	1 210	719	691
All-in sustaining cost	R/kg	**814 375**	1 014 228	1 007 986	677 659	562 648
	US$/oz	**1 352**	1 785	2 067	1 383	1 120

GOLPU, WAFI AND NAMBONGA



Copper

Mineral Resources (inclusive)
4.3Mt

Mineral Reserves
2.3Mt

Gold and Gold equivalent

Mineral Resources (inclusive)
35.1Moz

Mineral Reserves
16.7Moz

Detailed Mineral Resource and Mineral Reserve estimates are presented in this section.

Property description and location

The Golpu, Wafi and Nambonga deposits are located in eastern Papua New Guinea (PNG), approximately 60km south-west of Lae in Morobe Province. Access to the Wafi-Golpu Project site from Lae is via a combination of sealed and unsealed roads with a travel time of four hours.

History

The Wafi area mineralisation was first identified in 1979 by CRA Exploration with the discovery of the underlying Golpu Porphyry by Elders Resources Limited in 1990. Since then, several companies have completed exploration and Mineral Resource definition drilling programmes with associated mine development studies.

Nature of operations

The Wafi-Golpu Project has completed a feasibility study and is in the permitting phase, with mining tenement and environment permit applications submitted by the Wafi-Golpu joint venture participants to the respective regulatory authorities, commencing in 2016.

The Conservation and Environment Protection Authority has concluded its assessment of the environment permit application, and an environment permit was granted to the project in December 2020.

The mining tenement application (being the Wafi-Golpu Project's proposal for development underpins its application for Special Mining Lease 10 and associated tenements) is ongoing. A Special Mining Lease (SML) application including a Proposal for Development was made in 2016. Amendments to these tenement applications were made in March 2018, where the location and/or nature of facilities and infrastructure was refined through the 2018 Feasibility Study Update. The Proposal for Development was also updated. The grant of the SML remains subject to the completion of successful negotiations with the State, which is ongoing. No mining has taken place.

Geology

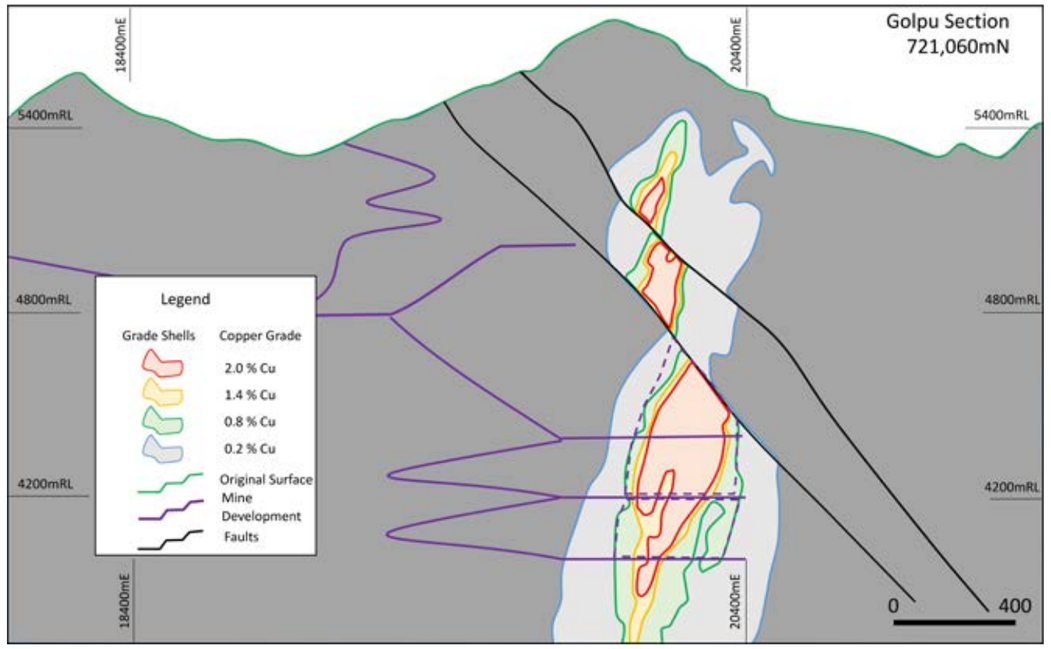
The projects fall within New Guinea Mobile Belt of Papua New Guinea which is one of the world's pre-eminent geological terrains for porphyry copper-gold and epithermal gold mineralisation.

Wafi-Golpu includes the Golpu copper-gold porphyry deposit (ranked as a world-class deposit in terms of its size and grade), the Nambonga copper-gold porphyry deposit, and the Wafi high-sulphidation epithermal gold deposit. Knowledge of the Wafi-Golpu system is limited by the extent of drilling and surface mapping and the deposit remains open for future expansion.

Golpu project

In May 2019, the permitting process was injuncted pursuant to a stay order given in an action for judicial review of the MoU brought by the Governor of the Morobe Province, which injunction remained in place until February 2020 when the State withdrew from the MoU and the judicial review was dismissed on that basis.

In December 2020, CEPA concluded its assessment of the Wafi-Golpu Project's environment permit application and granted an environment permit approving deep-sea tailings placement as the project's tailings management method. In March 2021, the Governor of Morobe Province and the Morobe Provincial Government commenced legal proceedings seeking judicial review of the grant of the environment permit, and for interim orders to stay the environment permit and restrain the State of PNG from granting a special mining lease for the Wafi-Golpu Project.



The legal proceedings are continuing, but do not prevent the conduct of the SML 10 negotiations, which resumed in early 2022 and are ongoing.

Since 2009, the mining regime in PNG has been the subject of a comprehensive review involving various PNG government agencies. Legislation on the subject of the review includes the Mining Act 1992, the Mining (Safety) Act 1997, the Income Tax Act 1959 and the Environment Act 2000. In July 2020, a proposed Organic Law on Ownership and Development of Hydrocarbons and Organic Law on Minerals and the Commercialisation of State Businesses was tabled for comment. The Organic Law (if adopted) will materially alter the legislative and regulatory regime governing mining in Papua New Guinea, including the ownership of Minerals by the Government and the transformation of the methodology of its participation in mining operations from a concessionary to a production-sharing regime.

In April 2023, the Wafi-Golpu joint-venture participants entered into a Framework Memorandum of Understanding (FMoU) with the State of PNG, setting out the key terms and principles to guide the negotiation and preparation of the formal agreements relating to the permitting, development and operation of the project. The negotiation of those agreements is ongoing.

Initial activities once permitting is granted to the satisfaction of the joint-venture participants will be to focus on the re-establishment of project delivery capacity and capability. This will be followed by the validation and update of the existing feasibility study, ahead of project execution.

Environmental impact

During the permitting phase, the Golpu, Wafi and Nambonga deposits are in various stages of exploration and feasibility study and as such have only minor environmental impacts. Environmental aspects are regulated by CEPA and the Wafi-Golpu joint venture participants report regularly to this authority.

Material risks

Material risks that may impact the Wafi, Golpu and Nambonga Mineral Resource and Mineral Reserves statement:

Significant risks

- Permitting delays which could impact the project's capital, operational cost and economic assumptions
- Changes to legislation
- Geotechnical conditions impact production and/or total amount of ore recoverable
- Objection to the proposed tailings management solution (deep-sea tailing placement).

Remedial actions

- Negotiating team in place
- Secure agreement with the State for the project to be permitted and grandfathered under the current mining and fiscal regime
- Demonstrate to various stakeholders the economic benefits of the project per current proposal for development. Detailed geotechnical studies and monitoring systems to be implemented including further drilling from underground drill platforms
- Ongoing data collection on deep-sea tailings placement and related modelling, demonstrating quality of scientific work and confidence in modelled outcomes, and communication and engagement with relevant stakeholders.

Competent person

Golpu – Mineral Resource

Group Resource geologist, Harmony Australasia

Ronald Reid
Australian Institute of Geoscientists (AIG)
29 years' experience in copper, gold and base metals mines, exploration and Resource modelling in Australia, PNG, Central America and Africa.

Golpu – Mineral Reserve

Director, Caveman Consulting

Geoff Dunstan
AusIMM
33 years' hard rock (gold and copper) mining experience in Australia, Asia, Africa and Americas.

Wafi and Nambonga – Mineral Resource

Executive General Manager: Growth and Resource Development, Harmony Australasia

Greg Job
AusIMM
36 years' experience in underground and open-pit gold mining and gold and copper Resource estimation.

WAFI (Harmony 50% portion)

Gold – Mineral Resource estimates at 30 June 2024 (inclusive)

	Measured				Indicated				Inferred				Total			
	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)
Wafi	—	—	—	—	54.0	1.66	89	2 800	20.0	1.37	26	800	74.0	1.58	114	3 600

GOLPU (Harmony 50% portion)

Gold – Mineral Resource estimates at 30 June 2024 (inclusive)

	Measured				Indicated				Inferred				Total			
	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)
Golpu	—	—	—	—	345.0	0.72	249	8 000	70.0	0.62	44	1 400	415.0	0.70	292	9 400

Modifying factors

Golpu	MCF (%)	Dilution (%)	PRF (%)	Cut-off (% Cu)
2023	100	—	61	0.30
2024	100	—	61	0.30

Gold – Mineral Reserve estimates at 30 June 2024

	Proved				Probable				Total			
	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)
Golpu	—	—	—	—	190.0	0.83	159	5 100	190.0	0.83	159	5 100

Silver – Mineral Resource estimates at 30 June 2023 (inclusive)

	Measured				Indicated				Inferred				Total			
	Tonnes (Mt)	(g/t)	Ag (000kg)	Ag (000oz)	Tonnes (Mt)	(g/t)	Ag (000kg)	Ag (000oz)	Tonnes (Mt)	(g/t)	Ag (000kg)	Ag (000oz)	Tonnes (Mt)	(g/t)	Ag (000kg)	Ag (000oz)
Golpu	—	—	—	—	345.0	1.30	435	14 000	70.0	1.10	72	2 300	415.0	1.30	507	17 000

Copper – Mineral Resource estimates at 30 June 2024 (inclusive)

	Measured				Indicated				Inferred				Total			
	Tonnes (Mt)	(%)	Cu (Mkg)	Cu (Mlb)	Tonnes (Mt)	(%)	Cu (Mkg)	Cu (Mlb)	Tonnes (Mt)	(%)	Cu (Mkg)	Cu (Mlb)	Tonnes (Mt)	(%)	Cu (Mkg)	Cu (Mlb)
Golpu	—	—	—	—	345.0	1.10	3 800	8 300	70.0	0.86	600	1 300	415.0	1.10	4 300	9 600

Copper – Mineral Resources as gold equivalents estimates at 30 June 2024 (inclusive)

	Measured (000oz)	Indicated (000oz)	Inferred (000oz)	Total (000oz)
Golpu	—	18 408	2 985	21 393

Modifying factors

Golpu	MCF (%)	Dilution (%)	PRF (%)	Cut-off (% Cu)
2023	100	—	92	0.30
2024	100	—	92	0.30

Copper – Mineral Reserve estimates at 30 June 2024

	Proved				Probable				Total			
	Tonnes (Mt)	(%)	Cu (Mkg)	Cu (Mlb)	Tonnes (Mt)	(%)	Cu (Mkg)	Cu (Mlb)	Tonnes (Mt)	(%)	Cu (Mkg)	Cu (Mlb)
Golpu	—		—	—	190.0	1.23	2 330	5 135	190.0	1.23	2 330	5 135

Copper – Mineral Reserves as gold equivalents estimates at 30 June 2024

	Proved	Probable	Total
	Au (000oz)	Au (000oz)	Au (000oz)
Golpu	—	11 592	11 592

Molybdenum – Mineral Resource estimates at 30 June 2024 (inclusive)

	Measured				Indicated				Inferred				Total			
	Tonnes (Mt)	(ppm)	Mo (Mkg)	Mo (Mlb)	Tonnes (Mt)	(ppm)	Mo (Mkg)	Mo (Mlb)	Tonnes (Mt)	(ppm)	Mo (Mkg)	Mo (Mlb)	Tonnes (Mt)	(ppm)	Mo (Mkg)	Mo (Mlb)
Golpu	—	—	—	—	345.0	94	32	71	70.0	72.00	5	11	415.0	90	37	82

NAMBONGA (Harmony 50% portion)

Gold – Mineral Resource estimates at 30 June 2024 (inclusive)

	Measured				Indicated				Inferred				Total			
	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)	Tonnes (Mt)	(g/t)	Gold (000kg)	Gold (000oz)
Nambonga	—	—	—	—	—	—	—	—	24.0	0.69	16	500	24.0	0.69	16	500

Copper – Mineral Resource estimates at 30 June 2024 (inclusive)

	Measured				Indicated				Inferred				Total			
	Tonnes (Mt)	(%)	Copper (Mkg)	Copper (Mlb)	Tonnes (Mt)	(%)	Copper (Mkg)	Copper (Mlb)	Tonnes (Mt)	(%)	Copper (Mkg)	Copper (Mlb)	Tonnes (Mt)	(%)	Copper (Mkg)	Copper (Mlb)
Nambonga	—		—	—	—		—	—	24.0	0.20	47	104	24.0	0.20	47	104

Copper – Mineral Resources as gold equivalents estimates at 30 June 2024 (inclusive)

	Measured	Indicated	Inferred	Total
	(000oz)	(000oz)	(000oz)	(000oz)
Nambonga	—	—	234	234

Rounding of figures may cause some slight computational discrepancies in totals.

■ Wafi-Golpu explorations

KERIMENGE

Gold and Gold equivalent

Mineral Resources (inclusive)
0.6Moz

Mineral Reserves
0.0Moz

Detailed Mineral Resource and Mineral Reserve estimates are presented in this section.

Description and location

Kerimenge is located at latitude 7°25"S and longitude 146°43"E, approximately 8km south-south-east of the township of Wau and approximately 90km south-southwest from Lae, the capital of Morobe Province in Papua New Guinea. The closest major towns to the prospect are Wau and Bulolo. Lae, the nearest maritime port in the region, is connected to Bulolo by a two-lane main road.

The prospect is located at elevations of 1 700m above sea level within steep mountainous and forested terrain that experiences approximately 2m of rainfall per year.

History

Gold was first discovered at Kerimenge by RGC personnel during regional reconnaissance exploration in 1983. In 1984, a diamond drill hole testing an anomalous zone defined by geologic mapping, trenching, rock chip and soil sampling returned favourable results of 24m at 1.92 g/t Au. The deposit was then investigated as a possible ore source for the RGC's Upper Ridges mine in Wau but was not pursued as RGC's interests were diverted to the much larger Porgera Operation.

Nature of operations

Kerimenge has a historic resource and sufficient drilling to construct an updated Resource that can inform further study; additional drilling is ongoing with completion expected within the first quarter of 2024. The Kerimenge project is subject to ongoing studies and is currently going through prefeasibility.

Geology

The Kerimenge deposit is a structurally controlled vein-stockwork gold deposit located in the Morobe Granodiorite of the Wau Graben. A porphyry sill hosts the deposit, a tabular body approximately 300m thick, that intrudes into intercalated pelitic schists, phyllites and marble of the Kaindi Metamorphics. The mineralisation comprises a series of crackle breccias and silicified fractures within the porphyry.

Mineral rights/legal aspects and tenure

Kerimenge lies on Exploration Licence EL2751. The tenement expired on 25/08/2024 and the renewal application has been accepted and expected to be renewed as per normal process in late 2024. Licences lapse before renewal as the company is allowed to continue work on a renewal application.

Mining methods and mine planning

Kerimenge is a Resource only. However, the study is contemplating an open-pit mining operation using conventional excavator and trucks with ore treatment via heap leach methods.

Mineral Resource estimation

The Kerimenge Resource model was modelled using ordinary kriging, using a 20m x 20m x 10m block size with 10m x 10m x 5m sub-blocks and constrained within broad three-dimensional wireframe domains based on gold, alteration and structure. Given the early stage of the modelling and the global nature of the model, this methodology is acceptable. The estimate used locally varying anisotropy in order to accommodate the change in strike and dip of the mineralisation. Brett Gossage of EGRM Pty Ltd reviewed the 2022 model and found the estimate to be robust. The 2022 model will be updated in 2024 following a successful drill programme.

Environmental impact

Kerimenge is an exploration and study site only with minimal environmental impact. However, artisanal miners are active on site and causing erosion of the steep hillsides and increased sedimentation of the local creeks.

Material risks

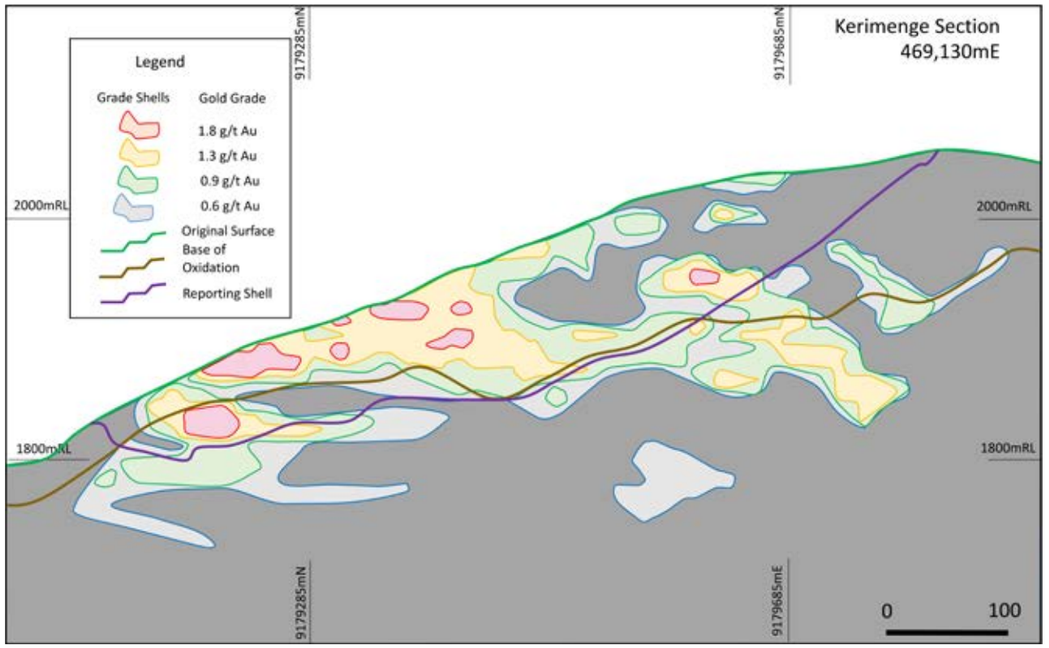
Material risks that may impact Kerimenge's Mineral Resource and Mineral Reserve statement:

Significant risks	Remedial actions
» Metallurgical recoveries of the transitional ores are lower than expected	» Detail drilling campaign with geomet sampling and test work
» Infrastructure cost to develop the Resource to Reserve become economically prohibitive.	» Early phase engineering works to provide options for Infrastructure
» Surrounding communities object to the mine development.	» Community engagement and consultation.

Competent person

Mineral Resources – Group Resource geologist, Harmony Australasia

Ronald Reid
Australian Institute of Geoscientists (AIG)
29 years' experience in copper, gold and base metals mines, exploration and Resource modelling in Australia, PNG, Central America and Africa.



■ Kerimenge helicopter arriving

AUSTRALIAN ASSETS

AUSTRALIAN ASSETS

Copper

Mineral Resources (inclusive)

1.5Mt

Mineral Reserves

0.0Mt

Gold and Gold equivalent

Mineral Resources (inclusive)

7.8Moz

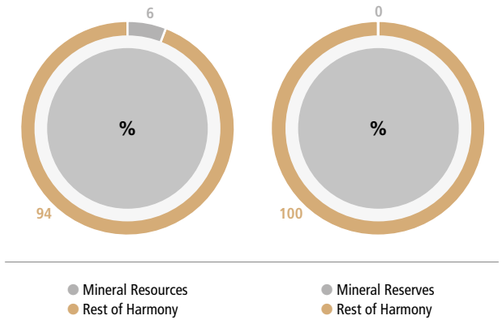
Mineral Reserves

0.0Moz

The company's Mineral Resources at the Australian operations as at 30 June 2024 are 1.5Mt copper and 440koz gold (expressed as gold equivalent is 7.8Moz). The company's Mineral Reserves at the Australian operations will be declared once the feasibility study is concluded.

Gold and Gold equivalents

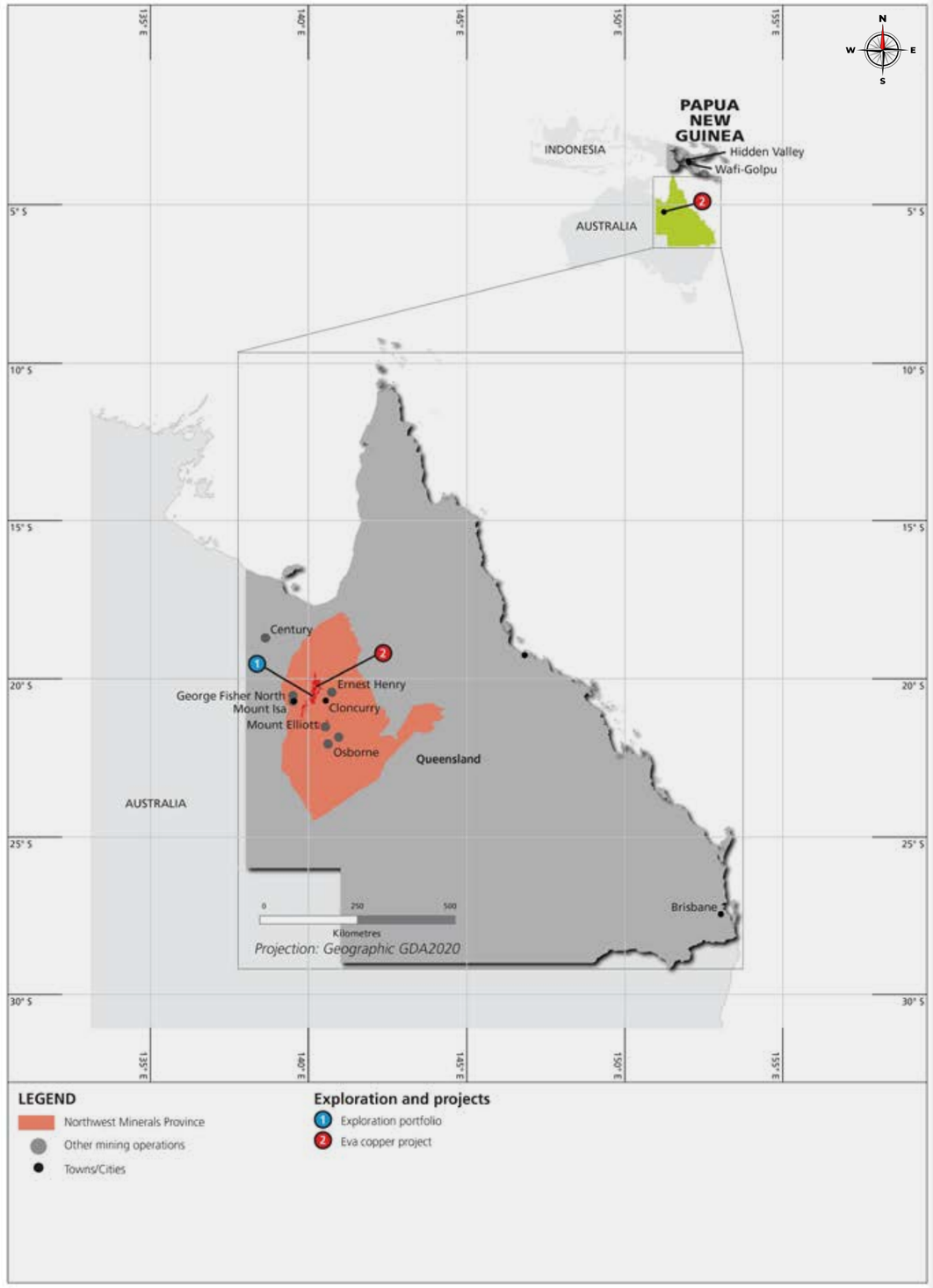
Contribution to Harmony



MINERAL RESOURCES AND MINERAL RESERVES BY OPERATION

Australian assets	**176 – 182**
Eva	**178**

Harmony – Australia



EVA

Gold and Gold equivalent

Mineral Resources (inclusive)	Mineral Reserves
7.8Moz	**0.0Moz**

Detailed Mineral Resource and Mineral Reserve estimates are presented in this section.

Description and location

The Eva Copper Project is located in Queensland, Australia, 76km by road north-west of Cloncurry (population 3 000), and 194km by road from the regional mining centre of Mount Isa (population 22 000). Access to the project from Cloncurry is via the sealed Burke Developmental Road which passes 8.5km to the east of the proposed plant site, current access is via cattle station and exploration tracks. The planned site for the plant and major infrastructure is also 11km north of the major Dugald River Zinc Mine, which is owned by MMG Limited (MMG).

History

There are numerous active mines in the Mount Isa-Cloncurry area. In addition to the Mount Isa Pb-Zn-Cu mine, there are five major active mines: the Ernest Henry copper-gold mine owned by Evolution Mining; the Lady Loretta lead-zinc-silver mine owned by Glencore; the Cannington silver-lead mine owned by South 32; the Dugald River zinc-lead-silver mine owned by MMG; and the Capricorn Copper copper-gold mine owned by Capricorn Copper. Smaller operations in the area (both active and on care and maintenance) include Osborne copper-gold mine; Mount Colin copper mine; Lady Annie copper-gold mine; Mount Cuthbert Copper mine; Rocklands copper-gold mine; and the Eloise copper-gold mine. Closed major mines include the Mary Kathleen uranium mine.

Early work on the project area was undertaken by Ausminda (Pty) Ltd and CRA Exploration (CRAE) between 1990 and 1996. In 1996, Pasminco Limited (Pasminco) acquired the property and undertook further exploration and drilling on the copper-only deposits. Pasminco excised and retained the Dugald River zinc deposit and sold the remainder of the tenements to Universal Resources (URL) in 2001. From 2001 to 2004, exploration work on the copper-only deposits was carried out under a joint venture (JV) between Universal Resources and Bolnisi Logistics. URL focused its own 2001–2004 drilling on the Little Eva and Bedford copper-gold deposits. In 2004, URL acquired Bolnisi Logistics and completed a 2005 Feasibility Study on mining and processing a blend of sulphide ore from the Little Eva and Bedford deposits with native copper ore from the Blackard and Scanlan deposits.

In 2005 URL entered into a joint venture option agreement with Xstrata, where Xstrata had the right to explore the central area of the tenements. Xstrata completed some significant work but Xstrata elected not to proceed in January 2013. URL completed a second feasibility study between 2007 and 2009 based on the same blend of sulphide ore and native copper ore used in the 2005 study.

In December 2009, Universal Resources merged with Vulcan Resources Limited, and changed their name to Altona Mining Limited (Altona). In 2012 Altona completed a Definitive Feasibility Study (DFS) based on the copper-gold sulphide deposits, but excluding the native copper deposits. Mining leases (ML) and an EA were granted in 2012 based on the 2009 DFS mine plan. Altona completed additional drilling at the Bedford, Lady Clayre, Ivy Ann, Blackard, Legend, and Scanlan deposits, and discovered and delineated major prospects at Turkey Creek, Anzac, Whitcher, Matchbox, and Quamby from 2015 to 2016. An EA amendment was granted in 2016 based on the revised 2012 DFS mine plan and the integration of Turkey Creek into that mine plan.

In 2018, Altona became a wholly owned subsidiary of the Canadian company Copper Mountain Mining Company (CMMC) and was renamed CMMPL. Harmony Gold subsequently purchased the project from CMMC in 2022.

Nature of operations

All operations on site at this stage are exploratory in nature with no mining having yet commenced. The operation is proposed as a large, open-pit copper-gold mining operation with an associated gravity and flotation processing plant. The project comprises the main Little Eva and Blackard open pits and four smaller satellite pits, expected to deliver an ore mixture with a maximum of 25% native copper ore to a processing plant adjacent to the Little Eva and Turkey Creek pits.

Geology

The project is situated in the Mary Kathleen (MK) domain of the Mount Isa Province of Queensland, Australia, an area that has a history of mining dating back to the 1860s. In addition to the Eva Copper Projects copper-gold deposits, the Mary Kathleen (MK) domain hosts the Dugald River zinc deposit, the Tick Hill gold deposit, the Mary Kathleen uranium deposit, and the Phosphate Hill phosphate deposit. The Quamby Conglomerate, a relatively undeformed Neoproterozoic polymictic conglomerate and medium- to coarse-grained sandstone unit, also contains gold mineralisation and was initially mined by prospectors in the 1920s and later in the 1990s. Economic accumulations of various other commodities occur throughout the area, including gold, molybdenum, rare earth elements, uranium and phosphate.

The MK domain is a late Palaeoproterozoic Eastern Fold Belt, comprising metamorphosed marine sedimentary and volcanic rocks some 1 590Ma to 1 790Ma in age. The province has undergone extensive geological activity, including polyphase deformation and metasomatism during the Isan Orogeny around 1 500 to 1 600 million years ago. This orogeny led to the formation of major structural features and mineralisation, including IOCG deposits like those found in the project area. Crustal-scale faulting, particularly north and north-easterly trending faults, plays a pivotal role in shaping the geology and hosting valuable metal deposits. The Rose Bee Fault, a significant structural feature, has played a role in the development of the region's mineralisation and has been subject to reactivation over time.

Little Eva

The Little Eva deposit is a significant hydrothermal iron-oxide-copper gold (IOCG) deposit within the Eva Copper Project area, and is the largest single copper deposit in the project, sharing similarities with the Ernest Henry copper-gold deposit nearby. Spanning 1.4km in length, varying from 20m to 370m in width, the deposit's mineralisation is open below 350m (165mRL) vertically and extends beyond the current drilling extents, with additional potential both to the north and south.

The mineralisation is hosted by faulted subvolcanic porphyritic and amygdaloidal intermediate volcanic or intrusive rocks within intercalated folded calc-silicate, marble, quartzite, and biotite-scapolite schists. The mineralisation is structurally controlled, occurring within breccias, fracture fill, and veinlet stock works. Complex folding, faulting, and extensive cross-faulting have contributed to intricate fracturing and stock work veining within the deposit. Higher-grade mineralization is found in the north, contained in stacked breccia, vein, and fracture zones, while the southern part features more moderate grades with greater width. The dominant copper mineral is chalcopyrite with minor bornite, chalcocite and copper oxide minerals such as minor malachite, chrysocolla, covellite, azurite, neotocite and cuprite. The deposit displays multiple stages of alteration, shifting from amphibole, magnetite, and biotite assemblages to albite, hematite, magnetite, and carbonate ± chalcopyrite. The shallow oxidation profile has a distinct shallow transition zone from oxide to sulphide copper.

Recoveries of over 93% – 95% for copper have been demonstrated through metallurgical tests, with minimal presence of deleterious elements. The mineralisation is coarse and easily recoverable through flotation concentration.

Turkey Creek

The Turkey Creek deposit is located 1.5km east of the Little Eva deposit. The deposit is sub-cropping in a relatively flat, gently undulating area with thin (<0.5m) in situ soils and alluvium cover. The deposit is over 1.8km in length, with mineralisation is open at depth extending from surface to drilled depths of 150m. The deposit displays excellent continuity along strike and down-dip with true widths varying from 10m to 30m at the southern end, to 30m to 50m at the northern end. The main part of the deposit strikes north and dips 60 degrees to the east. At the northern end, the mineralisation and host stratigraphy are folded sharply eastwards into a curved synform that dips steeply south. The northern zone is slightly offset by faulting from the main southern zone.

The tabular, strata bound deposit has an upper and lower zone of significant copper mineralisation with a more sporadically mineralised central core, hosted within a sequence of interbedded meta sediments of biotite schists, biotite scapolite schists, and carbonate-rich rocks or marble which are variably altered to carbonate and albite-hematite assemblages.

A weathering and oxide zone with a thickness of between 25m to 90m occurs over the deposit, deepening to the north but is consistently 20m to 30m thick over the southern end. It includes a zone of complete oxidation and a thin transition zone with minor secondary and remnant primary copper sulphides. Copper oxide mineralisation comprises minor malachite, rare occurrences of azurite, and native copper, with most of the native copper thought to be associated with hydro biotite similar to the Blackard deposit. Primary copper mineralisation comprises finely disseminated chalcocite, with subordinate bornite and chalcopyrite, sulphides also occur within minor carbonate veinlets. Copper sulphide minerals in the upper zone are dominated by chalcopyrite, and in the lower zone by chalcocite and bornite. Gangue minerals primarily consist of quartz, calcite, scapolite, white mica and minor biotite. Mineralisation at Turkey Creek is very low in gold.

Blackard and Scanlan

The Blackard and Scanlan deposits are located approximately 5km and 17km, respectively, south of the Eva deposit and form a 7km long trend of mineralisation that follows the stratigraphy as it curves around the east side of the Knapdale Quartzite. The Blackard deposit morphology is a function of folded stratigraphy and/or faulting having a strike length of 3.5km, a maximum plan width of 350m, and a stratigraphic width of only 60m to 90m. A series of parasitic folds and/or fault repetitions result in a much wider deposit. The Scanlan deposit has a strike length of 1 500m and a maximum width in plan of 500m. Scanlan comprises a 10m to 50m thick horizon in the southern half, with the thicker part folded into a "V" shaped synform on the eastern side and the thinner part forming a nearly flat antiform to the east.

The Blackard and Scanlan deposits are hosted by the Mount Roseby Schist, a unit comprising intercalated marls and carbonaceous sediments, that have been metamorphosed to calc-silicates, and variable scapolite, biotite and/or muscovite schists. The host rocks have undergone polyphase deformation and amphibolite grade metamorphism, with the most significant folding event forming northerly-trending folds. Fold geometry has been described as isoclinal, through tight to open.

The deep weathering profiles have resulted in extensive modification of the host rock and caused localised remobilisation of copper. Four zones defined by weathering and copper speciation have been determined for the deposits. From upper to lower, the zones are:

- Oxide Zone: An upper 20m to 30m thick, weathered, ferruginous zone. Almost all copper has been leached in some areas, but other areas still contain significant copper, occurring as malachite, azurite, hydro biotite, and Fe-Mn-Cu mineraloids known as neotocite. The copper in this zone is not currently economically extractable.
- Copper Zone: The Copper Zone comprises native copper with lesser cuprite, copper-bearing hydro biotite, and chalcocite. Weathering and leaching of carbonates have reduced the mass and created a very soft rock. The Copper Zone has a variable thickness, reaching a maximum of 120m. The oxidation of sulphide copper minerals has mostly formed very fine-grained native copper particles. Some of the copper occurs as ultra-fine particles (<10µm) within altered biotite and is termed hydro biotite, which is considered unrecoverable.
- Transition Zone: A relatively narrow zone ranging from 1m to 15m in thickness that marks the transition from the Copper Zone to the Copper Sulphide Zone and contains mineral phases of both adjacent zones. Copper grades tend to be high due to the presence of supergene chalcocite. The base of this zone is defined as the "top of fresh rock".
- Sulphide Zone: The unweathered (fresh) rock containing copper sulphide species of bornite, chalcocite, chalcopyrite, and pyrite. This zone comprises sulphide disseminations and clots strongly associated with carbonate veinlets. Metallurgical recoveries from this zone are favourable.

Mineral rights/legal aspects and tenure

The Eva Copper Project has extensive exploration potential in the approximately 2 500km² land package. The project consists of five Mining leases (ML) and one Exploration Permit for Minerals (EPM). All six of the planned pits are located within the MLs. Harmony has an extensive package of exploration tenure throughout the Cloncurry area and the Eastern Fold belt.

Queensland state legislation requires that, where significant disturbance will occur from exploration and mining activities, the licence holder must reach an agreement for "Conduct and Compensation" with the pastoral leaseholder. Such agreements have been secured for all the MLs, and those portions of the EPM where ground disturbance has occurred or is anticipated.

Mining methods and mine planning

There is currently no mining occurring on the leases with all activities confined to exploratory and Resource confirmation drilling. Additional work comprises geotechnical, metallurgical and hydrological drilling.

Mining is to be via open-pit methods using conventional drill and blast, excavators and trucks, servicing a copper concentrator located close to the Little Eva deposit. Mine planning and scheduling is ongoing with the aim to redeclaring a Reserve upon completion of a successful feasibility study update.

Mineral Resource estimation

The Little Eva Resource has been estimated using ordinary kriging to create an estimate for gold and copper using Micromine software. The estimation domains were based on geological and structural models built using Leapfrog Geo.

The Turkey Creek Resource was estimated using ordinary kriging using Isatis.Neo software. The estimation domains were based on geological and structural models built using Leapfrog Geo. The search was controlled using variable anisotropy to ensure robust mapping of the folded surfaces.

The Blackard Resource was estimated using ordinary kriging using Isatis.Neo software. The estimation domains were based on geological and structural models built using Leapfrog Geo. The search was controlled using variable anisotropy to ensure robust mapping of the folded surfaces.

The Scanlan, Bedford, Lady Clayre and Ivy Ann deposits were estimated in Gemcom Gems software using Inverse Distance Weighting.

Environmental impact

Activities on site have been drilling and access roads only with minimal environmental impact.

Material risks

Significant risk	Remedial action
» Density measurements at Little Eva are low compared to the variability observed (due to variable magnetite content).	» Increase data density measurements and spatial representativity with current drill programme.

Competent person

Mineral Resources – Group Resource Geologist, Harmony Australasia

Ronald Reid
Australian Institute of Geoscientists (AIG)
29 years' experience in copper, gold and base metals mines, exploration and Resource modelling in Australia, PNG, Central America and Africa.

Australia

Gold – Mineral Resource estimates at 30 June 2024 (inclusive)

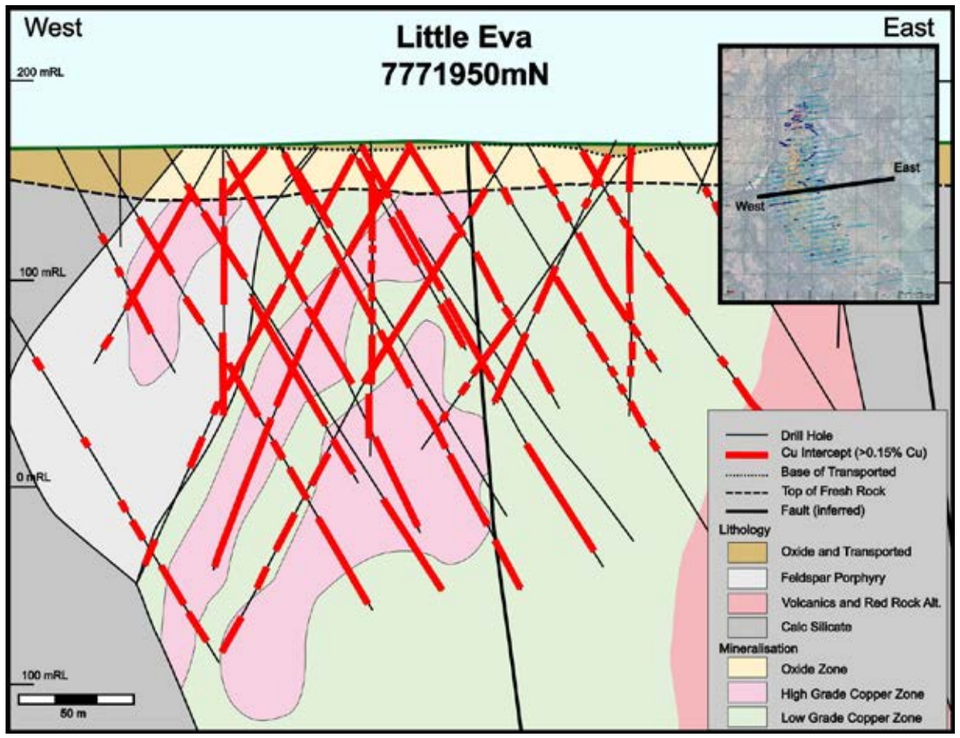
	Measured				Indicated				Inferred				Total			
	Tonnes		Gold		Tonnes		Gold		Tonnes		Gold		Tonnes		Gold	
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Little Eva	—	—	—	—	155.9	0.06	10	325	24.1	0.07	2	57	180.0	0.07	12	382
Bedford	—	—	—	—	2.1	0.15	0.3	10	1.3	0.13	0.2	5	3.4	0.14	0.5	16
Lady Clayre	—	—	—	—	5.1	0.15	1	24	1.1	0.08	0.1	3	6.2	0.14	1	28
Ivy Anne	—	—	—	—	5.2	0.07	0.4	12	1.2	0.07	0.1	3	6.4	0.07	0.5	15
Total	—	—	—	—	168.3	0.07	12	372	27.7	0.08	2	68	196.0	0.07	14	440

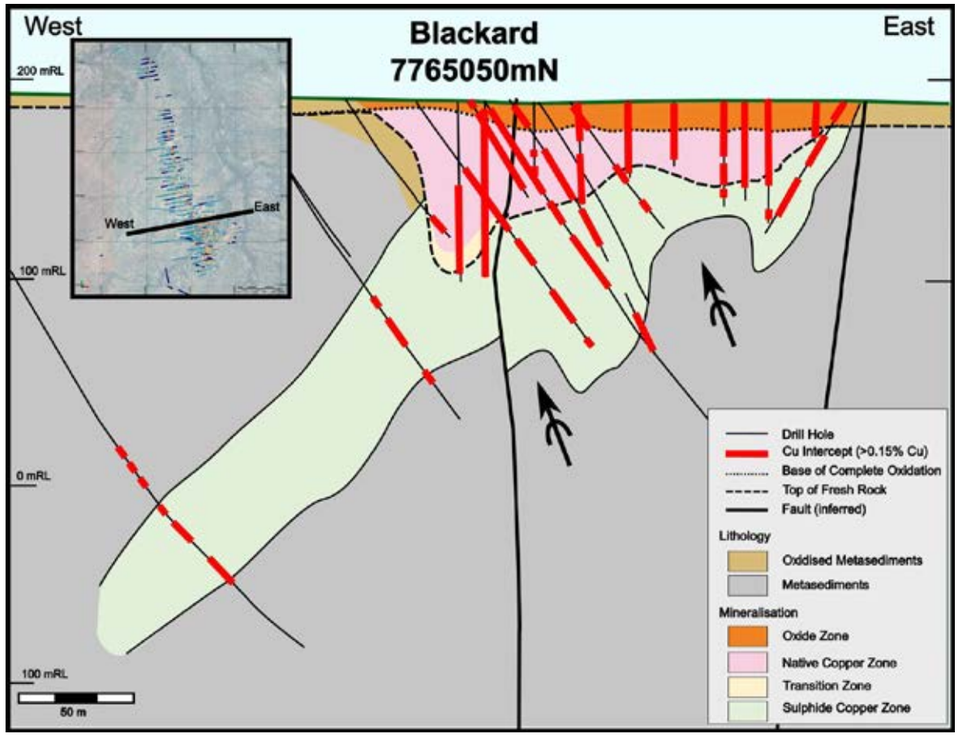
Copper – Mineral Resource estimates at 30 June 2024 (inclusive)

	Measured				Indicated				Inferred				Total			
	Tonnes		Cu		Tonnes		Cu		Tonnes		Cu		Tonnes		Cu	
	(Mt)	(%)	(Mkg)	(Mlb)	(Mt)	(%)	(Mkg)	(Mlb)	(Mt)	(%)	(Mkg)	(Mlb)	(Mt)	(%)	(Mkg)	(Mlb)
Little Eva	—	—	—	—	155.9	0.34	531	1 170	24.1	0.34	81	180	180.0	0.34	612	1 350
Turkey Creek	—	—	—	—	22.4	0.42	95	208	3.6	0.43	15	34	26.0	0.42	110	243
Blackard	—	—	—	—	79.0	0.48	375	828	40.3	0.44	176	388	119.2	0.46	551	1 215
Scanlan	—	—	—	—	17.4	0.58	101	222	7.6	0.45	34	76	25.1	0.54	135	298
Bedford	—	—	—	—	2.1	0.57	12	27	1.3	0.46	6	13	3.4	0.53	18	40
Lady Clayre	—	—	—	—	5.1	0.38	19	42	1.1	0.37	4	9	6.2	0.38	23	52
Ivy Anne	—	—	—	—	5.2	0.34	18	39	1.2	0.33	4	9	6.4	0.34	22	48
Total	—	—	—	—	287.2	0.40	1 150	2 536	79.1	0.41	321	708	366.3	0.40	1 472	3 244

Copper – Mineral Resources as gold equivalents estimates at 30 June 2024 (inclusive)

	Measured	Indicated	Inferred	Total
	(000oz)	(000oz)	(000oz)	(000oz)
Little Eva	—	2 640	406	3 046
Turkey Creek	—	470	77	547
Blackard	—	1 868	875	2 743
Scanlan	—	500	171	671
Bedford	—	60	30	89
Lady Clayre	—	96	21	116
Ivy Anne	—	89	19	108
Total	—	5 722	1 599	7 321





HARMONY STANDARDS

For SAMREC compliance reporting

Definitions as per the SAMREC Code 2016

Exploration results include data and information generated by Mineral exploration programmes that might be of use to investors but which do not form part of a declaration of Mineral Resources or Mineral Reserves.

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.

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.

An **Inferred Mineral Resource** is that part of a Mineral Resource for which quantity and grade or quality are estimated based on limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of an Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.

An **Indicated Mineral Resource** is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of modifying factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation.

A **Measured Mineral Resource** is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of modifying factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated or an Inferred Mineral Resource. It may be converted to either a Proved Mineral Reserve or a Probable Mineral Reserve.

Mineral Reserves

Modifying factors are considerations used to convert Mineral Resources to Mineral Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.

A **Mineral Reserve** is the economically mineable 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 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.

A **Probable Mineral Reserve** is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the modifying factors applying to a Probable Mineral Reserve is lower than that applying to a Proved Mineral Reserve.

A **Proved Mineral Reserve** is the economically mineable part of a Measured Mineral Resource. A Proved Mineral Reserve implies a high degree of confidence in the modifying factors.

A **scoping study** is an order of magnitude technical and economic study of the potential viability of Mineral Resources that includes appropriate assessments of realistically assumed modifying factors together with any other relevant operational factors that are necessary to demonstrate at the time of reporting that progress to a prefeasibility study can be reasonably justified.

A **prefeasibility study** is a comprehensive study of a range of options for the technical and economic viability of a mineral project that has advanced to a stage where a preferred mining method, in the case of underground mining, or the pit configuration, in the case of an open-pit, is established and an effective method of mineral processing is determined. It includes a financial analysis based on reasonable assumptions on the modifying factors and the evaluation of any other relevant factors which are sufficient for a competent person, acting reasonably, to determine if all or part of the Mineral Resource may be converted to a Mineral Reserve at the time of reporting. A prefeasibility study is at a lower confidence level than a feasibility study.

A **feasibility study** is a comprehensive technical and economic study of the selected development option for a mineral project that includes appropriately detailed assessments of applicable modifying factors together with any other relevant operational factors and detailed financial analysis that are necessary to demonstrate at the time of reporting that extraction is reasonably justified (economically mineable). The results of the study may reasonably serve as the basis for a final decision by a proponent or financial institution to proceed with, or finance, the development of the project. The confidence level of the study will be higher than that of a prefeasibility study.

Mineral Resource estimation

To meet SAMREC's requirements that this solid material reported as a Mineral Resource should have "reasonable and realistic prospects for eventual economic extraction", Harmony has determined an appropriate cut-off grade which has been applied to the quantified mineralised body according to a process incorporating a long-term view on future economic modifying factors. In applying this process, Harmony uses a gold price of R1 100 000/kg to derive a cut-off grade to determine the Mineral Resources at each of its South African underground operations.

The estimation of Mineral Resources is based on geoscientific knowledge and borehole and sampling data (obtained by means of chip sampling on the reef horizon in a shaft-specific grid), with input from the company's Ore Reserve managers, geologists and geostatistical staff. All sampling done is subject to quality assurance and quality control, as prescribed by SAMREC, to ensure data quality and accuracy. Each mine's Mineral Resource is categorised – based on similarities in geology, facies, grade and structure, the orebody is divided into geozones. It is then blocked-out and ascribed an estimated value. A computerised geostatistical estimation process is used at all our mines.

To define that portion of a Measured and Indicated Mineral Resource that can be converted to a Proved and Probable Mineral Reserve, Harmony applies the concept of a cut-off grade. At our underground South African mines, this is done by defining the optimal cut-off as the lowest grade at which an orebody can be mined such that the total profits, under a specified set of mining parameters, are maximised.

The cut-off grade is determined using the company's Optimiser software, which requires the following as input:

- The database of Measured and Indicated Resource blocks (per shaft section)
- An assumed gold price which, for this Mineral Reserve statement, was taken as R1 040 000/kg
- Planned production rates
- The mine recovery factor which is equivalent to the mine call factor multiplied by the plant recovery factor
- Planned cash operating costs (rand per tonne).

Rand per tonne cash operating costs are historically based but take cognisance of distinct changes in the cost environment such as restructuring, right-sizing, and other cost-reduction initiatives and, for below-infrastructure ounces, an estimate of capital expenditure.

In Papua New Guinea, the block cave reserve at Golpu uses proprietary block cave optimisation software to define the optimal mine plan and sequencing. The open-pit reserve at Hidden Valley is determined using the Whittle optimisation programme to guide the most efficient mine design given the commodity prices and cost inputs assumed.

Mineral Reserves represent that portion of the Measured and Indicated Mineral Resources above the cut-off grade in the life-of-mine plan and are estimated after consideration of the factors affecting extraction, including mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors.

At our underground mines, the reported Mineral Reserves are accessible from existing infrastructure and/or infrastructure that is in the process of being developed.

A range of disciplines, including health and safety, geology, survey, planning, mining engineering, rock engineering, metallurgy, financial management, human resources management and environmental management, are involved at each mine in the life-of-mine planning process and the conversion of Mineral Resources into Mineral Reserves.

The modifying factors related to the ore flow that are used to convert Mineral Resources to Mineral Reserves through the life-of-mine planning process are stated for each shaft. For these factors, historical information is used, except if there is a valid reason to do otherwise. As a result of the depth at which mining occurs and the resulting rock engineering requirements at our South African underground mines, some shafts include stope support pillars into the design of their mining layouts which accounts for discounts of 7% to 10%. A further 15% discount is applied as a life-of-mine factor to provide for unpay and off-reef mining. In general, life-of-mine plan extraction factors do not exceed 85% and are reflected in Mineral Reserves.

APPENDIX
HARMONY SAMPLING STANDARD
For SAMREC compliance reporting

The following standards, processes and procedures are followed and adhered to at all underground mines in South Africa.

Sampling standard

A standard procedure for the sampling of stopes and development ends is used to ensure quality of sampling information and safety in its collection. All samplers and sampling crews are trained based on the rules of the sampling standard. The standard specifies all the steps and rules involved in the preparation of the face and the collection of samples, as well as all safety aspects of sampling. Particular attention is given to quality of information captured, and planned task observations are routinely carried out to ensure adherence to the standard.

Quality assurance and quality control (QAQC)

Assessment of assaying accuracy and precision is carried out through the use of certified Standard Reference Materials, blanks and duplicates. Standard Reference Materials, blank samples and duplicate samples are added with the actual underground chip samples and drill-hole samples sent to the assay laboratory. For analysis of underground chip-samples, the total number of Standard Reference Materials, blank samples and duplicate samples to be added to the daily underground samples will equal approximately 5% of the total underground samples submitted for that day. Generally, this equates to approximately 2% of each type of QAQC sample. For analysis of underground/surface drill holes, QAQC is required to be more stringent in terms of numbers of Standard Reference Materials, blank samples and duplicate samples submitted. For every 20 drill hole samples submitted, include one gold standard reference material, one uranium (for certain operations only), one blank, and one duplicate. In other words, QAQC material will equate to approximately 15% of the total drill-hole samples analysed. If the Standard Reference Materials or blank samples have been deemed to have failed, the entire batch of samples assayed with this failed QAQC sample must be identified. A request must then be sent to the laboratory requesting them to repeat the assay procedure on all samples within this batch. If the failed Standard Reference Material is insufficient for the repeat a second Standard Reference Material or blank sample must be provided to the laboratory to be included with the batch of samples. Should the batch of samples fail the QAQC standards again, these samples will be excluded from the sampling database (not captured in the sampling system), and the sampling will be repeated if necessary.

Assay laboratory

Fire assay is the oldest and, in most circumstances, still the best method for determining the concentration of precious metals in ores and metallurgical products. Essentially, the method consists of two consecutive pyrochemical separations. The finely ground sample is fused with a suitable flux, under reducing conditions which promote the separation of the precious metals from the gangue, with simultaneous collection, normally as a lead alloy. Subsequently, the lead is removed by oxidising fusion (cupellation) and the precious metals, thus isolated, are available for measurement.

Harmony's assay laboratory performs various types of analysis, but the laboratory is only ISO 17025 accredited for the analysis of gold and uranium. Underground ore samples are received and prepared for fire assay gold and relative density analysis. Plant samples, eg residues, head samples, carbons and solutions, are also analysed for gold. Determination of gold fines is determined on bullion samples and sludge. The laboratory undertakes precious metal determinations on SAPS (exhibits) and securities recovered samples.

Water samples are also analysed to determine the quality. Tests are conducted for the presence of cyanide and trace metals as is bacteriological testing.

The laboratory is accredited to ISO/IEC 17025 for all gold analysis. This means that it is competent in meeting international and national laboratory standards and provides reliable testing services. In terms of the ISO/IEC 17025 laboratory systems accreditation, feedback is provided to the laboratory on whether it is conducting its work in accordance with international criteria for technical competence. This feedback assists the laboratory in continually improving its performance in terms of data quality and laboratory effectiveness.

Société Générale de Surveillance (SGS) – Performance Laboratories Randfontein is a fully equipped laboratory providing analytical services using fire assay, instrumental and classical techniques for precious and base metal ores. The laboratory provides services to the major mining houses, including Harmony, in South Africa as well as exploration companies currently active in Africa.

The laboratory is ISO 17025:2005 accredited for the analysis of gold, uranium and the platinum group metals. This international standard confirms that the laboratory operates a quality system, is technically competent and is able to generate valid results. The quality system is applied across the entire laboratory, irrespective of the accreditation status of the method. This is critical in providing results on which major decisions regarding mining and plant operations are based.

Sample preparation plant

To determine the grade of the ore hoisted at the mines, we make use of go-belt sampling.

A belt sample of up to 1 000kg is received at the plant from the shaft. The sample is first put through a 300mm screen prior to drying with infra-red heaters. Primary crushing to <70mm is then followed by a secondary crushing to <25mm, after which the sample is reduced. At the primary splitter 7/8 of the sample is discarded via a conveyor belt and 1/8 of the sample progresses to final drying. Tertiary crushing to <6mm is then followed by secondary splitting. Again 7/8 of the sample is discarded and 1/8 of the sample is pulverised to 85% <106 micron. At the final splitting, all eight sub-samples are packaged and sent to the laboratory for analyses.

The sample ticket with the necessary information from the shaft, accompanies the sample throughout the process. Empty bins are hosed out, while cleaning continues as part of the procedure to avoid contamination. At regular intervals grading analyses are done at the assay laboratory. A quartz sample is done to monitor any possible contamination.

We ensure that a high standard of preparation is maintained at each step of the process, which includes adherence to safety standards and is checked by a supervisor.

The following standards, processes and procedures are followed and adhered to at the Kalgold opencast operation.

Sampling standard

A standard procedure for open-pits drill sampling is used to ensure quality of sampling information and safety in its collection. Drill sampling adheres to the Harmony logging and sampling procedures developed and amended over time to ensure consistency across the group. The sampling practice varies from drill type to drill type; however, the practice conforms to best practice at all times. All geologists and sampling assistants are trained to observe the standard sampling procedures. The standard specifies all the steps and rules involved in the collection and preparation of the samples for the reversed circulation percussion drilling and diamond drilling as well as the safety aspect of sampling. Particular attention is given to quality of information captured, and planned task observations are routinely carried out to ensure adherence to the standard.

Quality assurance and quality control (QAQC)

Assessment of assaying accuracy and precision is carried out through the use of Certified Standard Reference Materials, blanks and duplicates. Standard Reference Materials, blank samples and duplicates are added with the actual drill samples sent to the laboratory. For analysis of the drill samples, the total number of Standard Reference Materials, blank samples and duplicate samples to be added equals 10% of the total samples sent for analysis. If the Standard Reference Materials or blank sample have been deemed to have failed, the range of the samples with the failed QAQC sample is identified and a repeat analysis is done of that range of samples. A second Standard Reference Material or blank sample is provided to the laboratory to be included with that batch of samples. Should the re-assayed batch of samples fail the QAQC standards again, these samples are not used in the Resource estimate.

Assay laboratory

Fire assay is the oldest and, in most circumstances, still the best method for determining the concentrations of precious metals in ores and metallurgical products. Essentially the method consists of two consecutive pyrochemical separations. The finely ground sample is fused with a suitable flux, under reducing conditions, which promotes the separation of the precious metals from the gangue, with simultaneous collection, normally as lead alloy. Subsequently, the lead is removed by oxidising fusion (cupellation) and the precious metals, thus isolated, are available for measurement.

Assaying of all drill samples for the recent drilling programme at Kalgold (2017/2019) was completed at SGS Randfontein laboratory. This laboratory is accredited by the South African National Accreditation System (SANAS) and conforms to the requirements of ISO/IEC 17025 for specific tests. The facility accreditation number is T0265. The method used for gold assay is FAA303 (Au by lead fusion followed by AAS finish). It is an accredited method and conforms to ISO/IEC 17025. Feedback is provided to the laboratory on whether it is conducting its work in accordance with international criteria for technical competence. This feedback assists the laboratory in continually improving its performance in terms of data quality and laboratory effectiveness.

The following standards, processes and procedures are followed and adhered to at the Hidden Valley opencast operation.

Assay laboratory

Assaying of all drill samples for the recent drilling programme at Hidden Valley (2017/2020) was completed at the ITS Hidden Valley/ITS Lae laboratories. This laboratory is accredited by the PNG National Institute of Standards and Industrial Technology and conforms to the requirements of ISO/IEC 17025 (2005) for specific tests. The facility accreditation number is 46. The method used for gold assay is FA25_ AAS (Au by lead fusion followed by AAS finish) and the method used for silver assay is AR_AAS (Ag by Aqua Regia digest followed by AAS finish). These are accredited methods and conform to ISO/IEC 17025 (2005). Feedback is provided to the laboratory on whether it is conducting its work in accordance with international criteria for technical competence. This feedback assists the laboratory in continually improving its performance in terms of data quality and laboratory effectiveness.

GLOSSARY OF TERMS

Term Definition
Acidic Descriptor for silica-rich igneous rocks (containing greater than 65% silica) such as rhyolite or granite.
AHIA Association of Healthcare Internal Auditors.
Alluvium Relatively recent deposits of sedimentary material laid down in riverbeds, flood plains, lakes, or at the base of mountain slopes.
Alteration Any physical or chemical change in a rock resulting from fluids moving through the rock.
Anticline An arch or fold in layers of rock.
Assay An analysis to determine the presence and concentration of one or more chemical components.
Basalt An extrusive mafic volcanic rock.
Basic Descriptor for silica-poor igneous rocks such as basalt or gabbro.
Below infrastructure That part of a company's Mineral Reserve that can only be accessed following certain capital expenditure which has yet to be approved.
BIF Banded iron formation.
Block caving A mining method suited for large low-grade orebodies that are unsuitable for open-cut mining. In development a series of evenly spaced cross-cuts are made at the bottom of the ore block from which raises are driven up into the ore. The ore block is then undercut so that it begins to collapse (or cave) into the raises. The weight of the material above provides the force to fracture and crush the underlying ore which is drawn from the drawpoints on the cross-cuts. As ore is withdrawn the cave progresses up through the orebody.
Bornite A copper iron sulphide that commonly defines the core of porphyry copper-gold deposits.
Breccia Fractured and broken rock that results from structural, volcanic or sedimentary processes.
Bulk mining Any large-scale mechanised method of mining involving significant volumes of material being extracted on a daily basis.
Caldera A large, basin-shaped volcanic depression, more or less circular in form, that results from the collapse of the Earth's surface into an exhausted magma chamber.
Chalcocite A copper sulphide mineral common in zones of secondary enrichment.
Chalcopyrite A copper iron sulphide that comprises the bulk of ore in many copper mines.
Concentrate The product of the milling process that contains a high percentage of the valuable metals. The concentrate is commonly the final product produced on-site and is sent to a third party for separation or smelting.
Conglomerate A sedimentary rock consisting of rounded, water-worn pebbles or boulders cemented into a solid mass.
Contact A geological term used to describe the line or plane along which two different rock types meet.
Contact metamorphism Metamorphism of country rocks adjacent to an intrusion caused by heat and fluids from the intrusion.
Country rocks The surrounding 'host' rocks into which an igneous intrusion or orebody is emplaced.
Craton A part of the earth's crust that has attained stability and has been little deformed for a long period of geological time.

Term Definition
Cross-cut An opening underground that is cut at right angles from the main level drive or shaft that generally links to and cuts the orebody. May also refer to a link between different drives.
Cut-off grade The lowest grade of copper or gold ore that is considered economic to mine.
Datamine™ Software.
Decline A tunnel below the horizontal that allows access to the orebody.
Deposit A concentration of mineral matter, sedimentary or volcanic material. Commonly refers to an accumulation of mineralised material that need not be economic to extract.
Diamond drilling A method of obtaining samples of rock that uses a diamond-encrusted drill bit to cut long cylindrical sticks of core.
Diatreme A long vertical pipe or plug filled with volcanic breccia formed by explosive release of energy from a gas-charged magma.
Dilution Unmineralised rock that is by necessity removed along with ore during the mining process that effectively lowers the overall grade of the ore.
Diorite Plutonic or intrusive rocks of intermediate composition between acidic and basic.
Dip The angle at which a bed, stratum, or vein is inclined from the horizontal, measured perpendicular to the strike and in the vertical plane.
Disseminated ore Ore carrying small distributed particles or valuable minerals distributed more or less uniformly through the rock.
Drawpoint An underground opening at the bottom of the stope through which broken ore is extracted.
Dyke A long and relatively thin body of igneous rock that, while in the molten state, intruded a fissure in older rocks.
Enrichment The process of upgrading the concentrations of various elements into more concentrated deposits.
Epithermal deposit A mineral deposit consisting of veins and replacement bodies containing precious metals or, more rarely, base metals, that form close to the Earth's surface at high levels in the crust.
Exploration Prospecting, sampling, mapping, drilling and other work involved in the search for ore.
Fault A break in the continuity of a body of rock. It is accompanied by a movement on one side of the break relative to the other so that what were once parts of one continuous rock stratum or vein are now separated. The amount of displacement of the parts may range from a few inches to thousands of feet. Various descriptive names have been given to different kinds of faults, including but not limited to: closed fault, dip fault, dip-slip fault, distributive fault, flaw fault, gravity fault, heave fault, hinge fault, horizontal fault, longitudinal fault, normal fault, oblique fault, oblique slip fault, open fault, overthrust fault, parallel displacement fault, pivotal fault, reverse fault, rotary fault, step fault, strike fault, strike-slip fault, thrust fault, transcurrent fault, translatory fault, underthrust and vertical fault.
Felsic An igneous rock having abundant light-coloured minerals and enriched in lighter elements such as silica and aluminium.
Flotation A milling process in which valuable particles are induced to become attached to bubbles and float where they are more easily separated.
Fold A curve or bend of a planar structure such as rock strata, bedding planes, foliation, or cleavage. A fold is usually a product of deformation, although its definition is descriptive and not genetic and may include primary sedimentary structures.
Gabbro A dark, coarse-grained mafic igneous rock.

Term Definition
Gangue The commercially worthless material that surrounds, or is closely mixed with, the ore.
GN Great Noligwa shaft
Gold equivalent ounces In instances where individual deposits may contain multiple valuable commodities with a reasonable expectation of being recovered; for example gold + copper in the one deposit, Harmony computes a gold equivalent to more easily assess the value of the deposit against gold-only mines. Harmony does this by calculating the value of each of the deposits' commodities then divides the product by the price of gold. For example ((gold ounces x gold price per ounce) + (copper pounds x copper price per pound))/gold price per ounce; this will return the gold equivalent of a gold and copper deposit. All calculations are done using metal prices as stipulated in attached documentation. Harmony assumes a 100% metallurgical recovery in its calculations unless otherwise stated.
Graben A block of rock bound by faults that has moved downward to form a depression between adjacent fault blocks.
Granite A light coarse-grained felsic intrusive rock.
Granodiorite A light coarse-grained intermediate intrusive rock.
Greenstone A field term for any compact dark green altered or metamorphosed basic igneous rock that owes its colour to chlorite.
Head grade The average grade of ore fed into the mill.
Horst An elongated, relatively uplifted crustal unit or block that is bounded by faults, the opposite of a graben. It is a structural form and may or may not be expressed geomorphologically.
Hydrothermal Relating to hot fluids circulating in the Earth's crust; generally the source of metals found in mineral deposits.
Igneous rock Rocks formed by the solidification of molten material below the Earth's crust.
IHAS Integrated Hazard Awareness System.
Intrusive A body of igneous rock formed by the consolidation of magma intruded into country rock, in contrast to lava which is extruded onto the earth's surface.
Lava A general name for the molten rock ejected by volcanoes.
LoM or Life-of-Mine Life-of-Mine or "LoM" means the time in which, through the employment of the available capital, the Mineral Reserves, or such reasonable extension of the Mineral Reserves as conservative geological analysis may justify, will be extracted.
Mafic An igneous rock composed chiefly of dark, ferromagnesium minerals and enriched in heavier elements such as iron.
Magma The molten material within the earth from which igneous rocks are formed.
Maramuni arc A part of the New Guinea Mobile Belt, an arc across the island of Papua New Guinea within which a large portion of economic deposits are found.
Matrix The finer-grained material between the larger particles of a rock or the material surrounding a fossil or mineral.
Mesozoic An era of geologic time, from the end of the Paleozoic to the beginning of the Cenozoic, or from about 225 million years to about 65 million years ago.
Metallurgy The study of extracting metals from their ores.

Term Definition
Mine call factor (MCF) Is the ratio, expressed as a percentage, which the specific product accounted for in "recovery plus residue" bears to the corresponding product 'called for' by the mine's measuring and valuation methods.
Mobile belt A belt of folded and mountainous terrain that defines the core of the island of Papua New Guinea, considered to define the leading edge of the Australian content where it is in collision with the pacific ocean plate.
MW Milling width is a calculated width expressing the relationship between the total reef area excavated and the total tonnes milled from underground sources.
Non-refractory Gold or copper ore that is easily extracted using standard and well-tested mill and plant technologies.
Ophiolite A section of the earth's oceanic crust and the underlying mantle that has been uplifted and often emplaced (or obducted) onto the edge of a continental plate, commonly the product of subduction systems. The material comprises mafic and ultramafic rocks and minerals.
Ore A mixture of minerals and gangue from which at least one of the minerals can be extracted at a profit.
Ore Reserves Ore Reserve means, according to the JORC Code, the economically mineable part of a Measured and/or Indicated Mineral Resource.
Orogeny A period of mountain building characterised by compression and folding within the earth's crust.
Oxidation Generically refers to a chemical reaction of the rock when exposed to oxygen and surface water, resulting in oxide material in a mining environment.
Plunge The inclination and orientation of a fold axis or other linear feature, measured in the vertical plane.
Porphyry An igneous rock of any composition that contains conspicuous phenocrysts in a fine-grained groundmass that has intruded into the upper crust rapidly. A rock name descriptive of the groundmass composition usually precedes the term, e.g. diorite porphyry.
Porphyry copper A specific deposit type associated with the intrusion of multiple phases of porphyry. The heat and associated fluids commonly carry and precipitate metals such as gold, copper, molybdenum and silver.
PRF Plant recovery factor is the ratio, expressed as a percentage, of the mass of the specific mineral product actually recovered from ore treated at the plant to its total specific mineral content before treatment.
Pyrite Iron sulphide that usually occurs in veins, as magmatic segregation, as an accessory in igneous rocks, and in metamorphic rocks, in sedimentary rocks including coal seams. It is commonly associated with gold.
Quartzite A very hard metamorphosed sandstone, consisting chiefly of quartz grains that are so completely cemented with secondary silica that the rock breaks across or through the grains rather than around them.
Raise Any tunnel having an inclination above the horizontal in the direction of workings.
Recovery The percentage of valuable metal in the ore that can be recovered by metallurgical treatment.
Refractory Ore type that contains gold or copper that is 'locked up' and difficult to extract without specialised processing equipment.
Resource The estimated amount of material in a mineral deposit, based on limited drilling but considered to be available for eventual economic extraction.
Rhyolite A fine-grained extrusive igneous rock with the same chemical composition as granite.
SASS5 South African Scoring System Version 5.

Term Definition
Schist A foliated metamorphic rock that has undergone sufficient strain so as to align all the mineral components into a roughly parallel arrangement.
Shaft A vertical or inclined excavation in rock for the purpose of accessing the orebody, usually equipped with a hoist and winder to move miners and materials between the surface and various levels underground.
Silica Fine-grained silicon dioxide (such as quartz).
Siliceous An alteration type where a large portion of the original rock has been replaced by silica.
Skarn Lime-bearing silicates of any geologic age derived from nearly pure limestone or dolomite with the introduction of large amounts of silica, aluminium, iron and magnesium.
Stockwork A mineral deposit in the form of a network of veinlets diffused in the country rock.
Stope An excavation in a mine from which ore is, or has been, removed.
Strike The bearing from north of a geological structure such as a bed, fault or orebody, defined as a horizontal line measured across the surface perpendicular to the dip.
Strip To remove the overburden and waste to reveal the ore underneath.
Stripping ratio The ratio of tonne of waste removed to tonnes of ore recovered in an open-pit mine.
Subduction The process in plate tectonics whereby a portion of one of the earth's plates is drawn down below another.
Sub-level A level in an underground mine between two main working levels.
Sub-outcrop A rock stratum that unconformably underlies another rock stratum.
Syncline Concave fold in stratified rock, in which strata dip down to meet in a trough.
SW Stoping width is the width of the excavation made during stoping operations.
Tailings Material rejected from the milling process from which much of the economic material has been removed.
TSF Tailings storage facility (or tailings pond) – where the tailings are stored until the end of mining when the facility is capped and rehabilitated.
Unconformity The structural relationship between rock strata in contact, characterised by a lack of continuity in deposition due to a period of non-deposition, weathering, or erosion prior to the deposition of the younger beds. An unconformity is often marked by absence of parallelism between the strata where the younger overlying stratum does not conform to the dip and strike of the older underlying rocks.
Volcanic Derived from volcanoes.
VCR The Ventersdorp Contact Reef (VCR) is an Archaean conglomeratic gold placer, mined in the Carletonville, West Rand and Klerksdorp area of the Republic of South Africa.
Waste Unmineralised or low-grade material that cannot be mined at a profit.
Winze Any tunnel having an inclination below the horizontal in the direction of workings.

FORWARD-LOOKING STATEMENTS

This report contains forward-looking statements within the meaning of the safe harbour provided by section 21E of the Exchange Act and section 27A of the Securities Act of 1933, as amended (the Securities Act), with respect to our financial condition, results of operations, business strategies, operating efficiencies, competitive positions, growth opportunities for existing services, plans and objectives of management, markets for stock and other matters.

These forward-looking statements, including, among others, those relating to our future business prospects, revenues, and the potential benefit of acquisitions (including statements regarding growth and cost savings) wherever they may occur in this booklet, are necessarily estimates reflecting the best judgement of our senior management and involve a number of risks and uncertainties that could cause actual results to differ materially from those suggested by the forward-looking statements. As a consequence, these forward-looking statements should be considered in light of various important factors, including those set forth in our integrated report.

Important factors that could cause actual results to differ materially from estimates or projections contained in the forward-looking statements include, without limitation:

- Overall economic and business conditions in South Africa, Papua New Guinea, Australia and elsewhere
- The impact from, and measures taken to address, Covid-19 and other contagious diseases, such as HIV and tuberculosis
- High and rising inflation, supply chain issues, volatile commodity costs and other inflationary pressures exacerbated by the geopolitical risks
- Estimates of future earnings, and the sensitivity of earnings to gold and other metals prices
- Estimates of future gold and other metals production and sales
- Estimates of future cash costs
- Estimates of future cash flows, and the sensitivity of cash flows to gold and other metals prices
- Estimates of provision for silicosis settlement
- Increasing regulation of environmental and sustainability matters such as greenhouse gas emission and climate change, and the impact of climate change on our operations
- Estimates of future tax liabilities under the Carbon Tax Act (South Africa)
- Statements regarding future debt repayments
- Estimates of future capital expenditures
- The success of our business strategy, exploration and development activities and other initiatives
- Future financial position, plans, strategies, objectives, capital expenditures, projected costs and anticipated cost savings and financing plans
- Estimates of reserves statements regarding future exploration results and the replacement of reserves
- The ability to achieve anticipated efficiencies and other cost savings in connection with past and future acquisitions, as well as at existing operations
- Fluctuations in the market price of gold and other metals
- The occurrence of hazards associated with underground and surface gold mining
- The occurrence of labour disruptions related to industrial action or health and safety incidents
- Power cost increases as well as power stoppages, fluctuations and usage constraints
- Ageing infrastructure, unplanned breakdowns and stoppages that may delay production
- Increase costs and industrial accidents
- Supply chain shortages and increases in the prices of production imports and the availability, terms and deployment of capital
- Our ability to hire and retain senior management, sufficiently technically-skilled employees, as well as our ability to achieve sufficient representation of historically disadvantaged persons in management positions or sufficient gender diversity in management positions or at board level
- Our ability to comply with requirements that we operate in a sustainable manner and provide benefits to affected communities
- Potential liabilities related to occupational health diseases
- Changes in government regulation and the political environment, particularly tax and royalties, mining rights, health, safety, environmental regulation and business ownership including any interpretation thereof
- Court decisions affecting the mining industry, including, without limitation, regarding the interpretation of mining rights
- Our ability to protect our information technology and communication systems and the personal data we retain
- Risks related to the failure of internal controls
- Our ability to meet our environmental, social and corporate governance targets
- The outcome of pending or future litigation or regulatory proceedings
- Fluctuations in exchange rates and currency devaluations and other macro-economic monetary policies, as well as the impact of South African exchange control regulations
- The adequacy of the group's insurance coverage
- Any further downgrade of South Africa's credit rating
- Socio-economic or political instability in South Africa, Papua New Guinea, Australia and other countries in which we operate
- Changes in technical and economic assumptions underlying our mineral reserves estimates
- Geotechnical challenges due to the ageing of certain mines and a trend toward mining deeper pits and more complex, often deeper underground deposits
- Actual or alleged breach or breaches in governance processes, fraud, bribery or corruption at our operations that leads to censure, penalties or negative reputational impacts.

The foregoing factors and others described in the **Integrated report** under the **Risks and opportunities** section and our Form 20-F (accessed via our FY24 reporting landing page **here**) should not be construed as exhaustive. We undertake no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after the date of this annual report or to reflect the occurrence of unanticipated events, except as required by law. All subsequent written or oral forward-looking statements attributable to Harmony or any person acting on its behalf, are qualified by the cautionary statements herein.

Any forward-looking statements contained in our reports have not been reviewed or reported on by Harmony's external auditors.

ADMINISTRATIVE AND CONTACT DETAILS

Harmony Gold Mining Company Limited

Harmony was incorporated and registered as a public company in South Africa on 25 August 1950
Registration number: 1950/038232/06

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