



# Ore Reserves and Mineral Resources report 2024



PLATINUM



# Contents

We believe the actions we have taken in 2024 are vital to improve our competitive position and protect long-term returns from a commodity portfolio that is critical for future generations.

<b>INTRODUCTION</b>	<b>01</b>	<b>THE OPERATIONS – ESTIMATES AND RECONCILIATION</b>	<b>34</b>
Our approach to reporting	01	Mogalakwena	34
Who we are and how we performed	02	Amandelbult	43
Where we operate	03	Dishaba	47
Our approach to Ore Reserve and Mineral Resource reporting	05	Tumela	52
Group overview	08	Mototolo	59
		Unki	67
<b>REPORTING GOVERNANCE</b>	<b>10</b>	Twickenham	75
Reporting code	10	Modikwa	79
Competence and responsibility	10		
Internal controls and assurance	11		
<b>ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG)</b>	<b>13</b>	<b>APPENDIX</b>	<b>87</b>
		Mineralisation	87
<b>ORE RESERVE AND MINERAL RESOURCE RISK</b>	<b>14</b>	External audits assurance letters	88
		Definitions for SAMREC Code (2016) terminology	90
<b>THE REGIONAL GEOLOGICAL SETTING</b>	<b>17</b>	Definitions for reconciliation categories	92
		Glossary of terms	93
<b>EXPLORATION AND TECHNICAL STUDIES</b>	<b>21</b>	Recognised professional organisations	95
		Administration	96
<b>MINERAL RESOURCE AND ORE RESERVE PROCESS AND ESTIMATES SUMMARY</b>	<b>23</b>		

▶ Refers to other pages in this report

For more information, visit:  
[www.angloamericanplatinum.com/  
investors/annual-reporting](http://www.angloamericanplatinum.com/investors/annual-reporting)

Cover image: Mogalakwena underground project

# Our approach to reporting

In compliance with the three-year external review and audit schedule, the following detailed audits of data gathering, data transformation and reporting of Ore Reserves and Mineral Resources were carried out in 2024:

**Mogalakwena:** Platreef Ore Reserves and Mineral Resources – Snowden Optiro.

**Amandelbult:** Merensky and UG2 Reefs Ore Reserves and Mineral Resources – The MSA Group.

## Reporting framework

- International <IR> Framework of the International Integrated Reporting Council
- South African Companies Act 2008, as amended (Companies Act)
- JSE Listings Requirements
- King Report on Corporate Governance for South Africa 2016 (King IV™\*)
- GRI Standards 2016 guidelines
- Anglo American plc group safety and sustainable development (S&SD) indicators, definitions and guidance notes for non-financial indicators. These are available on request
- SAMREC Code 2016 edition
- Anglo American plc group Ore Reserves and Mineral Resources reporting policy. This is available on request.

## Our reporting suite



### Integrated report (IR)



**Aimed at financial stakeholders (investors, lenders and creditors)**

Account for our progress against strategic priorities and prospects, considering risks, opportunities and trade-offs, as well as sustainability matters material to creating enterprise value.

Financial materiality

### Annual financial statements (AFS)



**Aimed at financial stakeholders**

Audited financial statements reflecting effects on enterprise value that have already taken place at the reporting date or are included in future cash-flow projections.

Financial materiality

### Ore Reserves and Mineral Resources report (ORMR)



**Aimed at financial stakeholders**

Updated estimates and reconciliation of Ore Reserve and Mineral Resource statements for all assets in line with the SAMREC Code (2016) and section 12.13 of the JSE Listings Requirements.

Financial materiality

### Sustainability report (SR)



**Targets all stakeholders wanting to understand our sustainability impacts**

Disclosure on material sustainability topics, reflecting our most significant impacts (positive or negative) on our people, the environment and society, and their impacts on our business.

Double materiality

### Climate change report (CR)



**Aimed at all stakeholders**

Disclosure of climate-related aspects of our ESG strategy and sustainable mining plan against global best-practice benchmarks or standards.

Financial materiality

### Governance report (GR)



**Aimed at all stakeholders**

Disclosure of governance-related aspects, demonstrating how Anglo American Platinum conducts itself according to sound governance practices and the highest standards of ethics, integrity, transparency and accountability. Includes our King IV application and disclosure.

Double materiality

\* Copyright and trademarks are owned by the Institute of Directors in South Africa NPC and all of its rights are reserved. The board ensures that reports issued by the company enable stakeholders to make informed assessments of Anglo American Platinum's performance and its short, medium and long-term prospects.

# Who we are and how we performed

Anglo American Platinum is one of the world's leading primary producers of platinum group metals (PGMs). We provide a complete resource-to-market service, supplying our network of global customers with a range of responsibly mined, refined and traded products. Our business is at the heart of the broader southern African economic and social landscape and we are committed to working towards a safe, sustainable, competitive and profitable business that benefits the countries in which we operate, its communities, our people and shareholders.

We operate across the value chain to produce the complete range of PGMs (platinum, palladium, rhodium, iridium and ruthenium), with different process dedicated to each stage of the value chain as illustrated in the integrated report (see [page 13](#)).

## Percentage of global production:

33% Pt 19% Pd 35% Rh



Operating countries

2



Number of sites

10



TRIFR<sup>1</sup> up

4%



Total number of fatalities

3

(at Dishaba, Amandelbult)



Total contribution to society

R72 billion\*



Returns to shareholders  
(including dividends to Thobo employee trust)

R19 billion



The world's PGM Mineral Resources

~30%



Women in senior management  
(5% above target)

30%

\* Total group tax and economic contribution consists of Anglo American Platinum Limited companies, United Kingdom, Singapore and PGI (Platinum Group Investment) countries, bringing the total to R72 billion.

## Safety

- Tragically, three fatalities; TRIFR<sup>1</sup> of 1.67 per million hours worked.

## Fatality-free years

- Mogalakwena 12 years
- Mototolo 13 years
- Unki 13 years.

## Operational performance

- Robust performance in a difficult and evolving macro context
- M&C and refined production: 3.6 million oz and 3.9 million oz in line with 2024 guidance
- Record nickel production of 25,700 tonnes, 18% higher than 2023
- Copper production outperformed 2023 by 25%.

## Operating context

- Ongoing volatility in PGM prices from 2023 into 2024 and uncertain timing for price recovery
- PGM ZAR basket price down 13%
- Significant cost pressures and geopolitical tensions.

## Deliberate and decisive actions

- Successfully deploying measures to improve our competitive position, ensure we remain sustainable and protect our balance sheet while preserving long-term optionality.

## Markets

- Robust automotive production
- Sizeable 2024 PGM deficits reducing in future
- Potential long-term upside from market development.

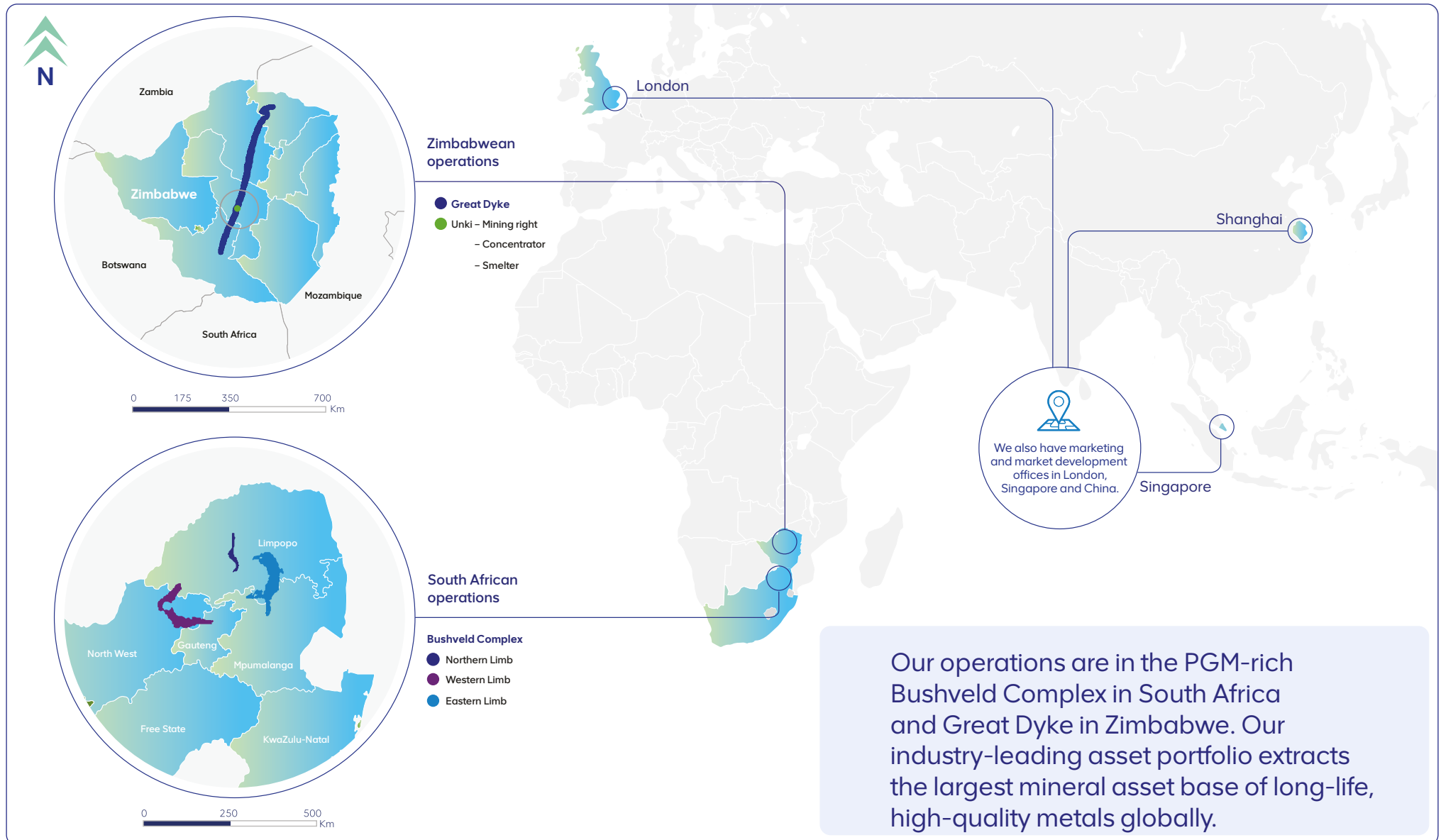
## Financial performance

- 2024 action plan delivered R7 billion in cost savings and R5 billion in stay-in-business capital savings
- Cash-operating unit cost of R17,540/PGM oz
- AISC US\$986/3E ounce
- EBITDA: R20 billion, mining margin: 27%
- Operating free cash flow R15 billion
- Total 2024 dividend of R71.75 per share or R19 billion
- Net cash position of R18 billion.

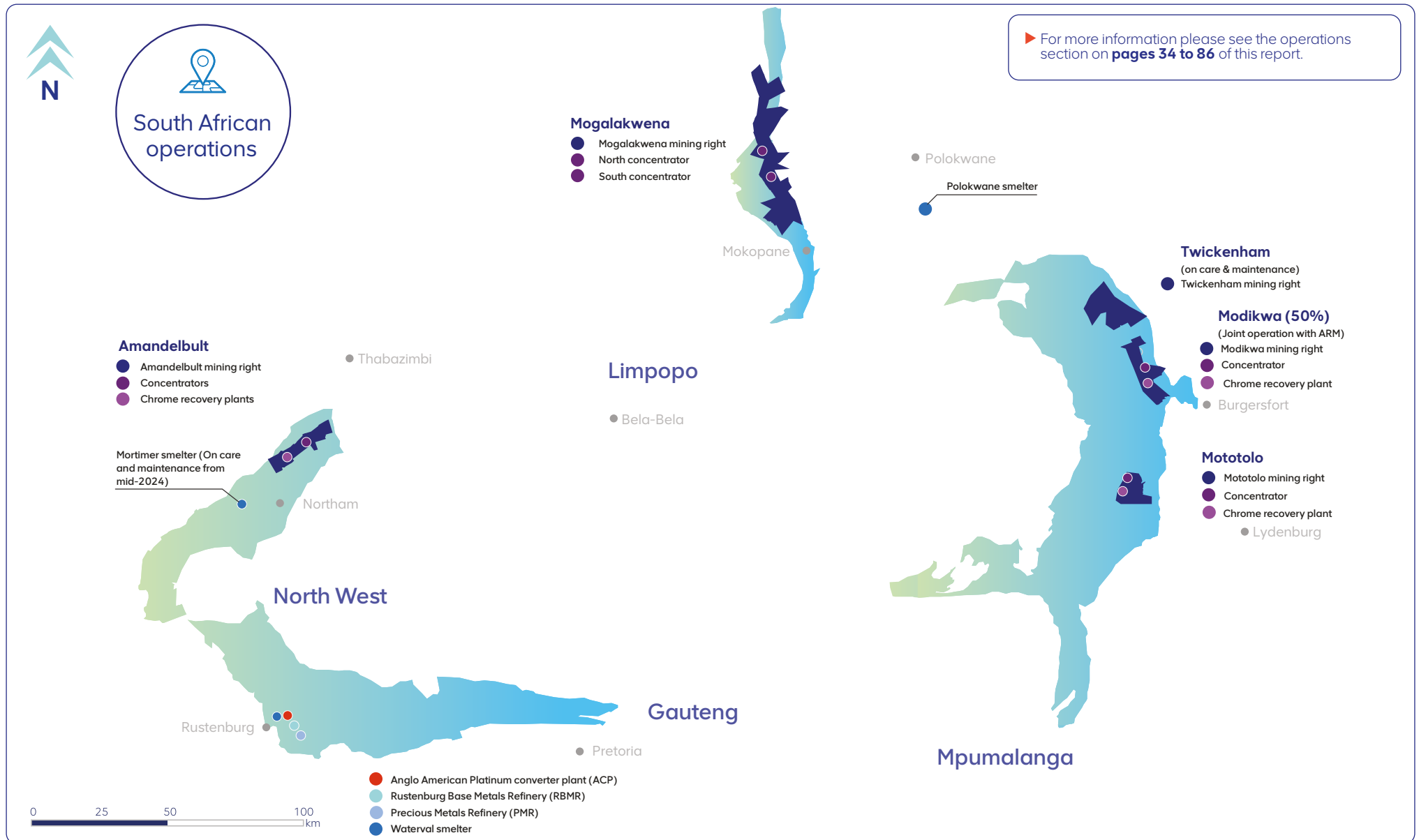
<sup>1</sup> Total recordable injury-frequency rate (TRIFR) increased to 1.67 per million hours at our operations, from 1.61 per million hours, predominantly due to fewer hours worked as we embarked on safety stoppages across our operations, as well as a lower number of employees compared to the prior period.



# Where we operate



# Where we operate continued





# Our approach to Ore Reserve and Mineral Resource reporting



**The Ore Reserves and Mineral Resources report is published annually to inform stakeholders, shareholders and potential investors of the mineral assets held by Anglo American Platinum Limited. An abridged version of this report is included in the Anglo American Platinum integrated report which, together with this report, is available on the company website at [www.angloamericanplatinum.com](http://www.angloamericanplatinum.com). This report should be read in conjunction with the integrated report 2024, sustainability report 2024, governance report 2024 and annual financial statements 2024.**

Anglo American Platinum has a primary listing on the Johannesburg Stock Exchange (JSE) in South Africa and we are planning a secondary listing on the London Stock Exchange in 2025.

Our method of reporting Ore Reserves and Mineral Resources is in accordance with the principles and minimum standards for public reporting as set out by the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (the SAMREC Code, 2016 Edition), the South African Code for the Reporting of Mineral Asset Valuation (the SAMVAL Code, 2016 edition) and section 12.13 of the JSE Listings Requirements.

Ore Reserves and Mineral Resources terminology appearing in this report adheres to the definitions of the SAMREC Code. Ore Reserves in the context of this report has the same meaning as Mineral Reserves as defined by the Code. Estimates (tonnes and content) for individual operations and summaries quoted in this report are on a **100% basis** and the attributable interest is referenced in tables and where relevant. Ore Reserve and Mineral Resource estimates are reported as at 31 December 2024.

This report is a summary of the Competent Persons' reports and technical reports on Ore Reserves and Mineral Resources for Anglo American Platinum managed operations and projects as well as a non-managed joint operation. Estimates are presented in this report by operating region, mine and reef. Topics for brief discussion include group overview, reporting governance, regional geological setting, exploration and technical studies, and reporting process summary. Additionally, the following information is provided per operation:

- Location maps
- Property description
- Brief history
- Mineral rights
- Brief geological description and schematic lithology diagram
- Reasonable prospects for eventual economic extraction considerations
- 4E metal split, base-metal grades and chromite grade (as applicable) distribution of the Mineral Resources inclusive of Ore Reserves
- Mining method and operational infrastructure
- Five-year run-of-mine production history
- Mineral Resource and Ore Reserve assumptions and modifying factors
- Ore Reserve and exclusive Mineral Resource estimates and year-on-year reconciliation

- Life-of-asset plan production profile
- Spatial distribution of the Ore Reserve and Mineral Resource classifications
- Details of appointed Competent Persons.

## Key reporting principles

The following key reporting principles and criteria apply to the reporting of our platinum group metals (PGMs) estimates.

## General

- 4E grade is the sum of platinum, palladium, rhodium and gold grades in grams per tonne (g/t)
- Tonnage is reported as million dry metric tonnes (Mt)
- Contained metal is reported as 4E million troy ounces with a 31.10348 grams per ounce factor applied (Moz). Contained metal is also reported in metric tonnes (t)
- The figures in the tables and charts have been rounded, and if used to derive totals and averages, minor differences may result
- Summary tabulations and reconciliations in this section of the report should be read in conjunction with the Ore Reserve and Mineral Resource statements in the subsequent sections
- Values reported as 0.0 represent estimates less than 0.05
- Definitions of reconciliation categories are on **▶ page 92** of this report

- There are no material legal proceedings or conditions that will impact the Ore Reserves and Mineral Resources reported for 2024, or Anglo American Platinum's ability to continue with exploration and mining activities as per life-of-asset plans
- Ore Reserves and Mineral Resources are reported for properties over which mineral tenure has been granted and are valid, or where applications have been submitted or will be submitted at the appropriate time and there is a reasonable expectation that the rights will be granted in due course (any associated comments appear in the individual operations' sections)
- Ore Reserve and Mineral Resource estimates were prepared by or under the supervision of Competent Persons (CPs) as defined in the SAMREC Code
- Information for the non-managed operation is provided by the joint operation
- For the 2024 reporting cycle, Mogalakwena and Amandelbult are reporting Ore Reserves and Mineral Resources from updated life-of-asset plans and Mineral Resource models, while the remaining operations are reporting by depletion.

# Our approach to Ore Reserve and Mineral Resource reporting continued

## Mineral Resources

- Mineral Resources reported are additional to (ie exclusive of) those converted to Ore Reserves
- Declared Mineral Resources satisfy the requirements of reasonable prospects for eventual economic extraction (RPEEE). Mineral Resources are quoted to a potential future surface or underground mining depth. A virgin rock temperature of 75°C is currently considered to be the limit to mining, given current technology, metal prices and energy costs, among other factors
- Mineral Resources are quoted after the appropriate geological losses are discounted
- Due to the uncertainty that may be attached to some Inferred Mineral Resources, it cannot be assumed that all or part of an Inferred Mineral Resource will necessarily be upgraded to an Indicated or Measured Mineral Resource after continued exploration
- Underground Mineral Resources are estimated over a practical minimum width known as the resource cut. The resource cut width takes cognisance of the mining method, potential economic viability and geotechnical aspects in the hanging wall or footwall of the reef. The conversion of the resource cut to an appropriate reserve cut would include additional dilution incurred as the result of appropriate geotechnical and mining considerations
- The Merensky Reef is estimated over an optimised resource cut
- The UG2 Reef is estimated over an optimised resource cut, which may include unavoidable dilution. The UG2 Reef, particularly in the Eastern Limb, may contain lenses of internal waste that are included as dilution
- The Main Sulphide Zone (MSZ) estimation is based on a multilayered approach and reported at an optimal minimum resource cut
- Underground Platereef Mineral Resources are confined to an underground target area identified through scoping and prefeasibility studies. The scoping study is preliminary in nature and includes Inferred Mineral Resources which are insufficient to provide certainty that the conclusions of the scoping study will be realised
- The 4E metal split percentage (%) distribution (platinum, palladium, rhodium and gold), base metal grades (copper and nickel) and chromite grade are modelled and evaluated, quoted over the resource cut width for Mineral Resources inclusive of Ore Reserves
- Only Tumela, Dishaba, Mototolo and Twickenham have evaluated the chromite content in the UG2 Reef resource cut.



Aerial view of the exploration drilling site in the Richmond Valley – Mototolo



# Our approach to Ore Reserve and Mineral Resource reporting continued

## Ore Reserves

- Ore Reserves are derived from value-based planning across all Anglo American Platinum-managed operations and are directly linked to the latest approved life-of-asset plan (LoAP). The plans take cognisance of all required modifying factors to ensure that the most value-accretive ore is sent to the processing plants over the life of the asset
- Ore Reserves are reported as run-of-mine (ROM) ore after modifying factors have been applied. The reported Ore Reserve grades are as delivered to the concentrator for processing
- Stockpile is mined ore stored on surface for future processing
- Ore Reserve stockpile reported at Mogalakwena does not include oxidised and calc-silicate material; this material is, however, included in the Mineral Resource statement
- Inferred Mineral Resources may be considered in technical studies and life-of-asset plans but are excluded from Ore Reserves declaration in accordance with the SAMREC Code (2016). These are referred to as modified Inferred Mineral Resources in the life-of-asset profiles. Assessments have indicated that the exclusion of these Inferred Mineral Resources will have no impact on the Reserve life at the affected mines
- Reserve life is the scheduled extraction or processing period in years for the total Ore Reserves (in situ and stockpiles) in the approved life-of-asset plan considering the combined reefs' production (as applicable). Where the current life-of-asset period exceeds the mining right period, an application to extend the mining right will be submitted at the appropriate time and there is reasonable expectation that such an extension will not be withheld
- The production/depletion figures for all operations represent measured production data aggregated with production forecast to 31 December, based on anticipated mining rates.

## Economic assumptions

- The economic assumptions are a set of forward-looking economic and planning parameters, which are applied in economic assessments, valuation projects, investment decisions, strategic planning and business planning. These parameters comprise metal prices, ZAR/US\$ exchange rates, inflation rates (USA and SA), cost escalation rates and corporate tax rates generated by a multidisciplinary team within the Anglo American group strategy and Anglo American finance
- The macro-economic and planning parameters (economic assumptions) applied to the valuation of Ore Reserves and Mineral Resources will impact decisions on overall viability and selection of the primary extraction horizon
- The economic parameters take into consideration revenue contributions from platinum group metals, base metals and chromite (where applicable), as well as 'cost 4', which consists of direct cash cost (on and off-mine), other indirect costs and stay-in-business capital (on and off-mine)
- The price of a commodity, including PGMs, in the long run, needs to account for the return needed for supply to be maintained, replenished (and, if needed, grow) to meet demand net of depletion. This implies that over the long run, price is set by the full cost structure of the industry, but this necessarily includes a return (on capital). The supply growth in any industry is set by the re-investment rate and the return that this investment generates (net of tax and depletion). Hence long-term price is set at a sufficient level where the appropriate industry ROCE, after accounting for operational and capital costs (including depreciation), can be achieved. To ensure an outlook that accounts for periods that include potential downside (as any cycle includes upside and downside) and hence is more conservative for Ore Reserve prices, we have looked at ROCE distribution of PGM and identified the implied price of having a ROCE that is a quarter of a standard deviation (on the ROCE distribution) below our expected long-term industry ROCE.

## These parameters comprise:



- Economic parameters, ie ZAR/US\$ exchange rates; inflation rates (USA and SA); cost escalation rates and corporate tax rates
- Although the Ore Reserves are declared on a 4E basis, the revenue is based on contributions from all metals:
  - PGMs (Pt, Pd, Rh, Ir, Ru), base metals (Ni, Cu, Co), gold and chromite concentrate
- The table below summarises the Anglo American Platinum long-term basket price and exchange rates assumptions used for the 31 December 2024 Ore Reserves and Mineral Resources estimation and reporting:

Exchange rates		2024
Basket price, real 2024	ZAR/4E oz	<b>36,643</b>
Basket price, real 2024	US\$/4E oz	<b>2,073</b>
Long-term exchange rate, real 2024	ZAR – US\$	<b>17.67</b>

- The basket price represents the revenue from all metals produced, expressed on a 4E ounce basis. Long-term basket metal price varies per operation, in accordance with individual operations metal ratios.

# Group overview

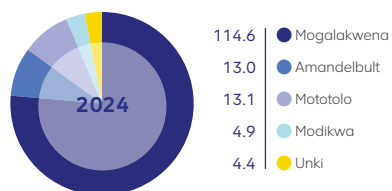
## Ore Reserves



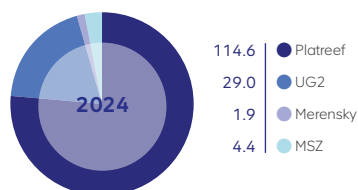
### Salient features: year-on-year changes

The combined South African and Zimbabwean Ore Reserves slightly increased in metal content by 0.1% from 149.8 4E Moz to 149.9 4E Moz in the 12-month period. The increase is due to updated life-of-asset plans at Mogalakwena and Amandelbult mines. The extent of the increase was primarily reduced by annual production and economic assumptions.

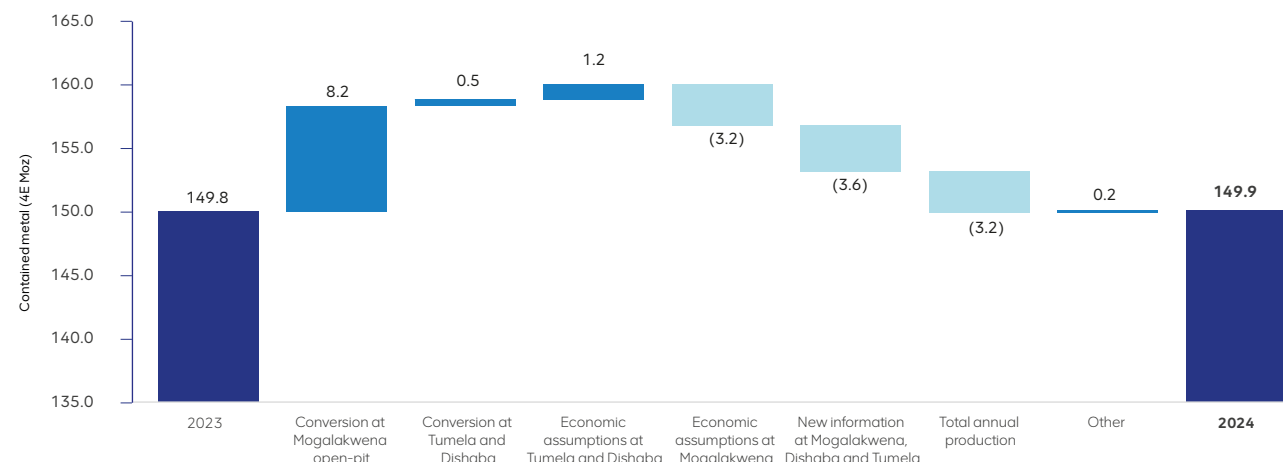
#### Ore Reserves per mine (4E Moz)



#### Ore Reserves per reef (4E Moz)



Anglo American Platinum Merensky, UG2, Platreef and Main Sulphide Zone (MSZ) total Ore Reserves – South Africa and Zimbabwe  
2023 – 2024 reconciliation (4E Moz)



Ore Reserves reflect the total Proved and Probable Ore Reserves.

	Mogalakwena	Amandelbult	Mototolo	Modikwa	Unki
	The Platreef open-pit Ore Reserve 4E ounces increased slightly primarily due to pit optimisation that resulted from a revised pit design. The extent of the increase was mostly offset by the reallocation of Sandsloot open-pit Ore Reserves to underground Mineral Resources, revised economic assumptions that resulted in increased cut-off grades, updated geological and Mineral Resource models within the life-of-mine pit shell, and annual production.	At Amandelbult Dishaba and Tumela, the UG2 Reef Ore Reserve 4E ounces increased due to conversion of Mineral Resources to Ore Reserves following improved economic assumptions and updated modifying factors. Dishaba and Tumela Reserve life increased by seven and three years, respectively. There was no mining of Merensky Reef at Tumela and Dishaba.	The UG2 Reef Ore Reserve 4E ounces decreased marginally due to annual production.	The UG2 Reef Ore Reserve 4E ounces decreased due to annual production.	The MSZ Ore Reserve 4E ounces decreased due to annual production.



# Group overview continued

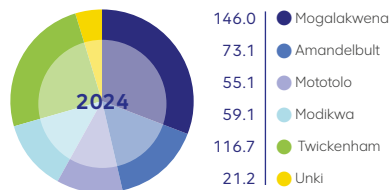
## Mineral Resources



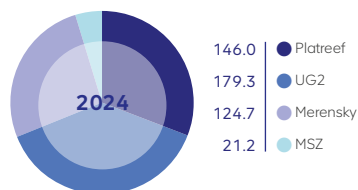
### Salient features: year-on-year changes

The combined South African and Zimbabwean Mineral Resources, exclusive of Ore Reserves, decreased by 2.8% from 484.9 4E Moz to 471.2 4E Moz in the 12-month period. This was primarily due to the conversion of Mineral Resources to Ore Reserves at Mogalakwena open pit and Amandelbult. The extent of the decrease was partially offset by conversion of underground Mineral Resources at Mogalakwena underground section.

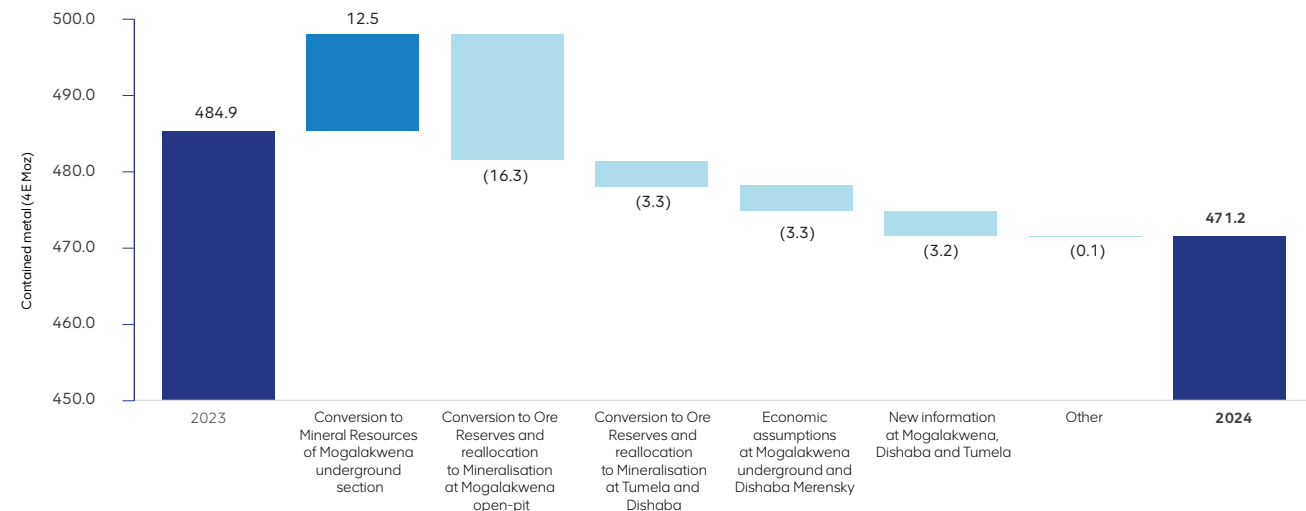
#### Exclusive Mineral Resources per mine (4E Moz)



#### Exclusive Mineral Resources per reef (4E Moz)



#### Anglo American Platinum Merensky, UG2, Platreef and Main Sulphide Zone (MSZ) exclusive Mineral Resources – South Africa and Zimbabwe 2023 – 2024 reconciliation (4E Moz)



Exclusive Mineral Resources reflect the total exclusive Measured, Indicated and Inferred Mineral Resources.

	Mogalakwena	Amandelbult	Other
	<p>The Platreef open-pit exclusive Mineral Resources 4E ounces decreased due to conversion of Mineral Resources to Ore Reserves following an updated life-of-asset plan and the reallocation of Mineral Resources to Mineralisation following RPEEE assessments.</p> <p>The Platreef underground exclusive Mineral Resources 4E ounces increased due to declaration of Mineral Resources at Mogalakwena South and Central areas after the completion and approval of a scoping study as well as the transfer of open-pit Mineral Resources to underground Mineral Resources at Sandsloot.</p>	<p>At Dishaba, the Merensky and UG2 Reefs exclusive Mineral Resources 4E content decreased due to the conversion of Mineral Resources to Ore Reserves after mining design changes.</p> <p>The Tumela UG2 Reef Mineral Resources 4E content decreased due to the conversion of Mineral Resources to Ore Reserves after mining design changes at the 15E DD project area.</p>	<p>At Mototolo, Modikwa and Unki, exclusive Mineral Resources 4E ounces decreased due to updated geological losses.</p>

## Recent developments

### Mogalakwena declaration of additional Platreef underground Mineral Resources

A scoping study was concluded in 2024 and targets an area of Platreef Mineral Resources suitable for underground mining in the Mogalakwena South and Central areas. Long-hole open-stoping design targeting the high-grade portions of the Platreef proved viable during the scoping study and provided support for reporting Platreef underground Mineral Resources. In addition to the Sandsloot underground Mineral Resources declared in 2023, the underground Mineral Resources increased by 65% from 19.2 4E Moz to 31.5 4E Moz, reported at cut-off grade of 2.00 4E g/t.

# Reporting governance

## Reporting code

Ore Reserves and Mineral Resources are reported in accordance with the principles and minimum standards for public reporting as set out by the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (the SAMREC Code, 2016), including Table 1 and section 12.13 of the Listings Requirements of the JSE Limited. The relationships between Ore Reserves and Mineral Resources are depicted in the SAMREC classification diagram below and the definitions are on [pages 90 and 91](#) of this report.

**Principles, guidelines,  
frameworks and benchmarks**  
Our reporting is guided and  
informed by the following:



## Competence and responsibility

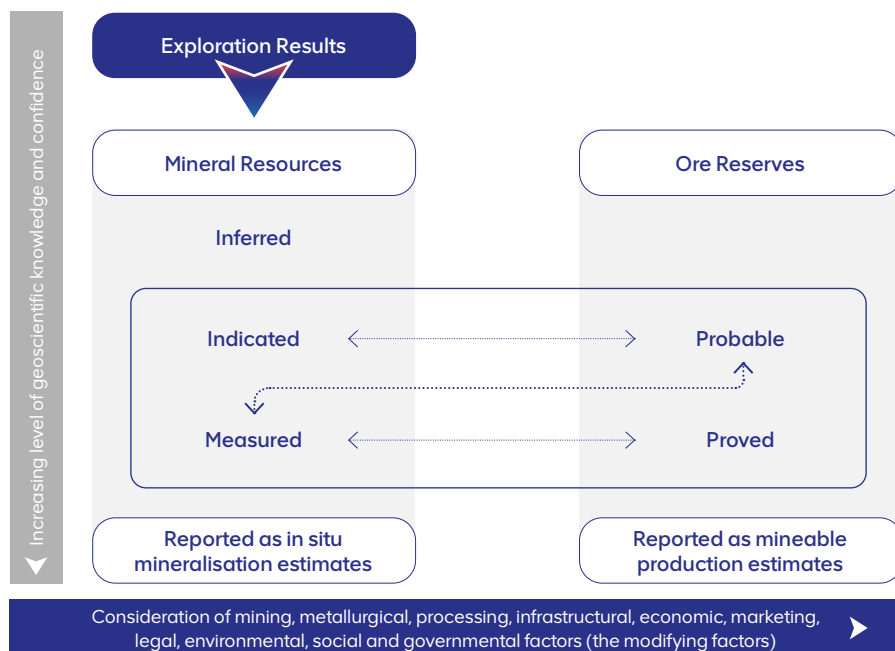
In line with the SAMREC Code and the Listings Requirements of the JSE, Competent Persons have been appointed to work on, and assume responsibility for the Ore Reserve and Mineral Resource statements for all operations and projects. The lead Competent Persons with overall responsibility for the Anglo American Platinum 2024 Ore Reserves and Mineral Resources statements are Andrew Smith and Kavita Mohanlal, respectively.

They have provided written confirmation that information disclosed in terms of this report is compliant with the SAMREC Code (2016), including Table 1 and the relevant JSE section 12 Listings Requirements (section 12.13).

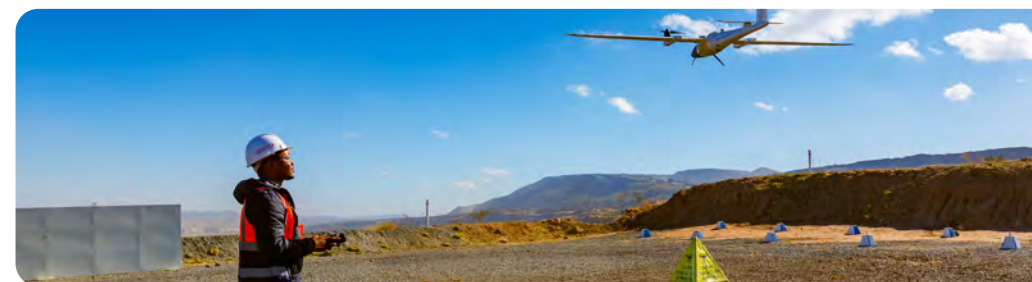
They have confirmed that the information may be published in the form, format and context in which it appears. They are permanent employees of the Anglo American plc technical function.

Competent Persons for the individual operations are listed in the relevant operations' sections of this report. All Competent Persons have sufficient experience relevant to the type of mineralisation and activity which they have undertaken. They have also provided written confirmation that the information disclosed in this report complies with the SAMREC Code (2016), including Table 1 and the relevant JSE section 12 Listings Requirements (section 12.13) and that it may be published in the form, format and context in which it appears. Externally appointed Competent Persons and their supporting teams have conducted independent site visits at Mogalakwena and Amandelbult, respectively.

### Relationships between Exploration Results, Mineral Resources and Ore Reserves



	Competent Persons	Role	RPO	Membership number	Relevant experience
<b>Mineral Resources</b>	Kavita Mohanlal	Principal: Mineral Resource estimation	SACNASP, PrNatSci	400003/05	21 years
<b>Ore Reserves</b>	Andrew Smith	Lead: Ore Reserves	SAIMM, fellow	702955	35 years



Using drone technology over the Central pit at Mogalakwena

# Reporting governance continued

Kavita Mohanlal has BSc (hons) and MSc Mineral Resources management qualifications from the University of the Witwatersrand and has 21 years of relevant mineral industry experience across precious metals operations. During this period, she has held various technical positions in Anglo American Platinum and Anglo American plc. She is a professional natural scientist member of The South African Council of Natural Scientific Professions (SACNASP), which is based at The Innovation Hub, Enterprise Building Suite L4, 1 Mark Shuttleworth Street, Lynwood, Pretoria, 0087, Gauteng, South Africa.

**Kavita Mohanlal**  
*Principal: Mineral Resources  
estimation*  
SACNASP – PrNatSci: 400003/05

Anglo American plc  
144 Oxford Road, Rosebank, Melrose  
South Africa

13 March 2025

Andrew Smith has a BEng (mining engineering) qualification from the University of Nottingham (UK) and has 35 years of relevant mineral industry experience across precious metals operations. During this period, he has held technical, managerial, and executive positions at Anglo American Platinum and Anglo American plc. He is a fellow with the Southern African Institute of Mining and Metallurgy (SAIMM), which is based at 7th floor, Rosebank Towers, 19 Biermann Avenue, Rosebank 2196, Gauteng, South Africa.

**Andrew Smith**  
*Lead: Ore Reserves*  
SAIMM – fellow: 702955, ECSA  
(20070176)


Anglo American plc  
17 Charterhouse Street, London,  
EC1N6SA  
United Kingdom

13 March 2025

## Internal controls

Well-established processes and protocols ensure reliable Ore Reserves and Mineral Resources reporting, as stipulated in the Anglo American group Ore Reserves and Mineral Resources reporting policy adopted by Anglo American Platinum. Aligned with internal standards and guidelines, as well as improvement initiatives, existing reporting processes encompass:

### Methodology

- Formal sign-off of the geological models and geological discount factors; drill hole and underground sampling databases; and the Mineral Resource estimation and classification processes
- Application of the signed-off Mineral Resource classification scorecard for consistent and robust classification statements
- The basic resource equation (BRE), an internal reconciliation of Mineral Resources for the various business plans and investment centres
- Various single and multiple disciplinary reviews within the framework of the business-planning and reporting processes respectively
- Updated LoAPs to define Ore Reserves on a two to three-year cycle
- In the years when Ore Reserves are declared by depletion (which considers annual production and a forecast adjustment for the previous year's mining), a validation assessment is conducted by applying a trigger action response plan (TARP) to determine if an out-of-cycle LoAP is required. Where deviations are deemed significant, an update to the LoAP is initiated
- Integrated risk assessments are considered. The process followed and the consolidated risks are discussed in detail in the risk section of this report
- Marketing studies (performance and outlook) are detailed on **pages 64 to 70** of the integrated report 
- Annual multistage internal reviews and sign-off of Ore Reserves and Mineral Resources statements
- Review of the internal control measures in place for reporting Ore Reserves and Mineral Resources, which forms part of a broader attestation process in terms of the JSE internal controls for financial reporting
- External independent audits, that are synchronised with the life-of-assets planning schedules and Mineral Resources models updates.

### Ore Reserves and Mineral Resources management database

- Anglo American Platinum makes use of a web-based data capture and reporting system called Resource Disclosure (RD) for the compilation, review and approval of Ore Reserves and Mineral Resources data
- The RD system allows the Competent Persons to capture the Ore Reserves and Mineral Resources estimates, year-on-year reconciliations and other supplementary information thus supporting this Ore Reserves and Mineral Resources publication
- RD enhances the compliance and governance of reporting and is underpinned by comprehensive audit trails, a centralised, encrypted database and is workflow-enabled.



# Reporting governance continued

## Attestation: Internal controls for financial reporting

From the attestation process, it is confirmed that:

- This report transparently represents all material aspects of the latest Ore Reserve and Mineral Resource estimates to conform to the SAMREC Code (2016), as well as section 12.13 of the JSE Listings Requirements
- No facts have been omitted or untrue statements made that would make the report false or misleading
- Estimation and reporting controls have been put in place to ensure that material information has been provided to effectively prepare the report
- The internal controls for financial reporting are adequate and effective as confirmed by the control owners, and can be relied on in compiling this report.

Where we are not satisfied, we have disclosed to the auditors as well as the audit and risk committee the deficiencies in design and operational effectiveness of the internal financial controls, and have taken the necessary remedial action. The key Ore Reserves and Mineral Resource reporting controls were validated and attested to be effective, adequate and fully executed for 2024 by the chief executive and chief financial officer on 12 February 2025.

## Assurance: External reviews

Anglo American Platinum operations are subject to a comprehensive three-year programme of external/third-party reviews aimed at providing assurance in respect of Ore Reserve and Mineral Resource estimates and reconciliations. The independent reviews are executed to ensure that our standards and procedures are aligned with world best practice, the SAMREC Code and include both process and numerical estimate reviews. The reviews were conducted on-site by suitably qualified Competent Persons and technical specialists.

To comply with the Anglo American Platinum external review and audit schedule, the following detailed audits of data gathering, data transformation and reporting of Mineral Resources and Ore Reserves processes were carried out in 2024:

- **Mogalakwena:** Platreef Ore Reserves and Mineral Resources – Snowden Optiro
- **Amandelbult:** Merensky and UG2 Mineral Resources and Ore Reserves – The MSA Group.

## External audits summary

It is both auditors' opinion that the Ore Reserves and Mineral Resources have been estimated using reasonable assumptions and techniques for the style of mineralisation and proposed mining methods at Mogalakwena and Amandelbult respectively. The Ore Reserves and Mineral Resources have been prepared by suitably qualified and experienced Competent Persons who were assisted by various experts. No material items were identified during the course of the audits, although necessary recommendations were made by the auditors for continuous improvement of the estimation and reporting process.

The auditors consider that the Ore Reserves and Mineral Resources have been prepared in accordance with 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) and are suitable for public disclosure in the Ore Reserves and Mineral Resources report.

Continuous improvement of items identified and detailed in the full audit reports will be addressed in the following Ore Reserves and Mineral Resources estimation and reporting cycle(s). Assurance letters for the auditors' summary of findings are on [page 88 and 89](#) of this report.



Haul trucks in Mogalakwena North pit

# Environmental, social and governance (ESG)

## Sustainability strategy

In 2024, we continued to work towards delivery of our commitments and strategy, while evolving our corporate strategy to support our independent future to protect and create value, focused on climate and energy, ethical value chains and resilient local communities. Our refreshed sustainability strategy underpins our corporate strategy, and ensures our sustainability initiatives are effectively focused, coordinated and supported across all our operations.

While much of our sustainability performance can be credited to our sustainable mining plan (SMP) framework, which has remained largely similar since its inception in 2018, we've recognised that a step-change is required to keep up with the evolving and added demands of our stakeholders in an ever-changing world. Primarily, to ensure that our targets and commitments are relevant and aimed at delivering the most targeted and impactful outcomes, that create or protect value for people, planet and the business.

We take a holistic approach to ESG, transforming how stakeholders experience Anglo American Platinum and through embedding in all aspects of our business model and stakeholder engagements, the principles of our revised sustainability strategy's focus areas.

We continue to improve our sustainability performance and management of material ESG issues. This, together with increased transparency, is demonstrated in continued improvements in our ESG scores and accolades from various ESG ratings agencies.

Our sustainability strategy has been revised based on learnings from the progress made to date, and continuous engagements with stakeholders, internally and externally. This is to ensure that the revised sustainability strategy is current, appropriate and suitably stretching, in line with our employees and stakeholders' ambition for the future of the business.

### Our revised sustainability strategy has

#### three key focus areas:

- **Climate and energy**
- **Local communities**
- **Ethical value chains.**

Furthermore, it is founded on responsible mining and operating principles aligned to the Initiative for Responsible Mining Assurance (IRMA) standard.



For more detail, see the sustainability report 2024 and the governance report 2024.

## ESG factors for exploration Mineral Resources and Ore Reserves

Our approach to responsible geological exploration is defined first and foremost by our critical foundations. Our commitment to legal compliance means that all exploration is carried out within legislative requirements. To maintain our legal and social licence to operate, thorough stakeholder engagement occurs with land owners, occupants and other key stakeholders at every point of the exploration process so that effective impact mitigation plans can be co-created and effectively implemented to minimise any impacts from exploration.

In addition to responsible exploration, ESG considerations are important inputs in determining reasonable prospects for eventual economic extraction and modifying factors for estimating and reporting Ore Reserves and Mineral Resources. Items related to environmental and social aspects outlined in Table 1 of the SAMREC Code (2016) are incorporated into our life-of-asset planning, Ore Reserves and Mineral Resources estimation processes, to ensure responsible mining and a sustainable future for all our stakeholders. All the legal and regulatory requirements applicable to our operations as well as corporate governance aspects are aligned to the King IV requirements.

We integrate sustainability into all facets of plans, decisions and task assigns towards responsible closure. The purpose of mine-closure planning in Anglo American Platinum is to deliver value through integrated, risk and opportunities-based closure planning and execution. This will establish safe, stable and non-polluting post-mining landscapes that leave a sustainable legacy for all stakeholders.

The closure liabilities of all Anglo American Platinum operations are assessed annually through a rigorous process. Financial provisions are made annually, reviewed and audited in line with internal and external requirements.

Anglo American Platinum has approximately R6.2 billion in financial guarantees and environmental rehabilitation trust funds with the Department of Mineral Resources and Energy (DMRE) to cover the premature closure liability of all its South African mining operations.

A financial provision against closure liability is not a legal requirement in Zimbabwe. However, similar to the South African process operations, Anglo American Platinum makes an accounting provision for the restoration liability of Unki.

Closure liability estimates are in the biodiversity, rehabilitation, closure and regeneration section on **pages 85 to 92**

# Ore Reserve and Mineral Resource risk

## Our approach to risk management


The effective management of risk is integral to good management practice and fundamental to living up to our purpose and delivering our strategy. By understanding, prioritising and managing risk, Anglo American Platinum safeguards our people, our assets, our values and reputation, the environment, and identifies opportunities to best serve the long-term interest of all our stakeholders. As understanding our risks and developing appropriate responses are critical to our future success, we are committed to an effective, robust system of risk identification, and an effective response to such risks, to support the achievement of our objectives.

Risk management is integrated across the organisation and embedded in critical business processes to ensure it supports day-to-day activities and decision-making at an operational and business level. Anglo American Platinum's integrated risk management framework ensures the effective governance of operational and strategic risks. The risk management process is aligned with ISO 31000 international risk management standards and King IV requirements.

Risks are defined as situations or actions with the potential to threaten our ability to deliver on our strategic priorities and our ability to extract the declared Ore Reserves and Mineral Resources. Risks to our Mineral Resources and Ore Reserves estimates are managed through comprehensive risk assessments undertaken in support of the annual reporting cycle. Risks are identified and managed by assessing the likelihood and impact of threats.

We assess the severity of consequences should the risk materialise, any relevant internal or external factors influencing the risk, and the status of management actions to mitigate or control the risk.

This approach to risk management enables the executive committee and the board to establish a baseline level of risks and manage risks appropriately. We also consider opportunities as part of our risk management process, aligned with King IV requirements.

Anglo American Platinum's material risks and opportunities are outlined on **pages 19 to 28** of the integrated  report 2024.

## Ore Reserves and Mineral Resources risk management

Ore Reserve and Mineral Resource estimations may vary as new information becomes available. Risks to Ore Reserves and Mineral Resources are uncertainties that have the potential to impact the published estimates. All assumptions applied during the derivation of the Mineral Resource estimates, life-of-asset planning and resultant Ore Reserves are considered when assessing the risk associated with the declared estimates.

If a risk threatens the achievement of the plan beyond acceptable limits, a revised plan is required per our life-of-asset planning process. Risks that are approaching the limit of our risk appetite may require management actions to be accelerated or enhanced to ensure the achievement of the plan.

We assess areas of uncertainty that have the potential to materially impact our Ore Reserve and Mineral Resource estimates across 14 categories with due consideration to the estimated timeframe within which a risk is expected to impact the estimates:

- Natural catastrophes
- Macro-economic uncertainty
- Political
- Community and social relations
- Regulatory and permitting
- Orebody knowledge
- Operational performance
- Technical
- Climate change
- Infrastructure and services
- Future demand
- Governance
- Environmental
- Other considerations.



# Ore Reserve and Mineral Resource risk continued

Risk ranking is conducted according to the Anglo American risk matrix, a standard adopted by all disciplines and functions within the group as part of our risk management process, to allow for a uniform approach to the assessment and comparisons of risks across the value chain. A scale is used to help determine the limit of appetite for each risk, recognising that risk appetite will change over time. All risks, notwithstanding their risk level, are assessed and recorded with pre-mitigation and post-mitigation risk rankings.

Our geoscience and life-of-asset planning functions form part of multidisciplinary teams comprising the technical, financial and ESG specialists involved in the estimation and planning process. They assess the risks and generate an integrated schedule of the actions required to mitigate and subsequently reduce risks to the declared Ore Reserves and Mineral Resources. Risk registers related to Ore Reserves and Mineral Resources are maintained for each operation.

Risks identified per operation are rolled up to a business level to consider their potential impact on the declared Ore Reserves and Mineral Resources.

## Anglo American Platinum Ore Reserves and Mineral Resources risk matrix

		Consequence				
		1 – Rare	2 – Minor	3 – Moderate	4 – High	5 – Almost certain
Risk matrix for exclusive mineral Resource and Ore Reserve estimates		Increasing impacts to exclusive Mineral Resource/Ore Reserve estimates if the event occurs				
Likelihood		RISK RATING				
5 – Almost certain	Decreasing time period within which the impact of the risk will occur	11	16	20	23	25
4 – Likely		7	12	17	21	24
3 – Possible		4	8	13	18	22
2 – Unlikely		2	5	9	14	19
1 – Rare		1	3	6	10	15

Risk rating	Risk level	Guidelines for risk matrix
21 to 25		Risk impact must be brought to attention of the company executive
13 to 20		Risk impact must be brought to attention of the company senior management at business level
6 to 12		Risk impact must be brought to attention of the company senior management at asset level
1 to 5		Monitor risk at asset level

# Ore Reserve and Mineral Resource risk continued

The following risk classes are considered the most relevant to our Ore Reserves and Mineral Resources:

## Macro-economic uncertainty

### Brief description

Current global macro-economic uncertainties include weaker basket prices for PGMs, volatile exchange rates, escalating costs due to inflation (energy, labour, etc), constrained global economy outlook and future capital availability.

In addition, the current environment may impact access to capital and therefore investment in certain projects.

### Mitigation

- Strategy to position company in first half (H1) of cost curve, ensuring sustainable returns
- Integrated planning process
- Regular updates of economic analysis and commodity price
- RPEEE assumptions of Mineral Resources, business plans and LoAPs, including sensitivity analysis
- Continued focus on operational improvements, cost control, disciplined capital allocation and cash generation.

## Operational performance

### Brief description

Achieved equipment efficiencies not in line with assumptions, leading to overall higher costs and lower production volumes. Current equipment not adequate to achieve the planned production volumes. Poor compliance to mine plan, especially within the short to medium-term plans, with potential for sterilisation of ore.

### Mitigation

- Management of critical controls through operational programmes
- Implementation of the Anglo American operating model philosophies
- Periodic review and reconciliation of the modifying factors and inputs to the mine plan
- Monthly and quarterly review of the business plans.

## Regulatory and permitting

### Brief description

Permitting is a key prerequisite, sometimes requiring assumptions to be made decades into the future. Given the dynamic state of permitting and licensing, this is a complex area with potential risks.

Current plans are based on the reasonable expectation that mineral tenure and other regulatory approvals will be renewed once the current mining rights and permits expire.

### Mitigation

- Timeous submission of the relevant applications as required
- Compliance with current and timeous updates of mine works programmes and social and labour plans
- Stakeholder management including regular communication with the DMRE.

## Infrastructure and services

### Brief description

Access to land within the existing tenure for mining operations, future tailings storage facilities and waste-dumping activities, as well as restrictions caused by growth of communities have a potential impact on assumptions that underpin the declared Ore Reserves and Mineral Resources.

### Mitigation

- Transitioning from open-pit mining to underground mining
- Technologies that would minimise waste generated during processing through the technical improvement initiatives
- Various internal strategies, mechanisms and plans to enable community engagement and participation, relocations and livelihoods restoration programmes.

## Orebody knowledge

### Brief description

The geological complexity within the Mineral Resources exclusive of Ore Reserves have inherent risks emanating from major structural uncertainty, grade variability, geotechnical properties, geometallurgical properties and deleterious attributes.

### Mitigation

- Exploration drilling, including infill drilling
- Update of geological models and Mineral Resources estimates
- Continuous development and infill drilling including the collection of grade, geotechnical and geometallurgical data
- Monthly and annual review of the mine performance against the geological models and Mineral Resource estimates.

## Climate change: long-term water availability

### Brief description

Sites with significant exclusive Mineral Resources and Reserve life are impacted by the consequences of climate changes, including water availability. Failure to obtain and sustain the level of water security needed to support our operations due to southern Africa being a water-stressed region and growth in the demand for water from communities.

### Mitigation

- On-site water conservation, demand management and increased water reuse and recycling
- Assist municipalities, water boards and national government through relevant forums to achieve sustainability goals
- Adhering to internal water management standards, plans and targets
- The sustainability strategy.

## Future demand of PGM

### Brief description

Future demand for PGMs is at risk from potentially slower growth in combustion-engine vehicle manufacturing, technological developments resulting in greater competition from battery to electric vehicles, and suppressed jewellery sales. The potential impact on Ore Reserves and Mineral Resources is loss of revenue, loss of markets and increase in cut-off grades that could lead to sterilisation of the orebody.

### Mitigation

- Develop and sustain markets for PGMs through market development activities, which include investing in priority areas such as hydrogen economy, jewellery and batteries
- Identify new trends through market intelligence
- Strategy to position company in H1 of cost curve, ensuring sustainable returns.

## Communities and social relations

### Brief description

Our ability to operate could be threatened if local communities and wider society actively oppose the presence of our operations. This opposition could emanate from unresolved legacy issues and less-than-expected benefits from mining. This may impact our ability to extract and explore the Ore Reserves and Mineral Resources as planned and affect our social licence to operate.

### Mitigation

- Various internal strategies, mechanisms and plans to manage stakeholder engagement, community participation, grievances, livelihoods restoration programmes and municipal capacity-building programmes
- Implementation of the Anglo American operating model philosophies
- Periodic internal and external reviews to identify any missing stakeholder improvement initiatives.

# The regional geological setting



Aerial view of Mogalakwena Central pits

## The geological setting

Our platinum group metals Mineral Resources occur exclusively in southern Africa and are hosted by two layered intrusions: the Bushveld Complex in South Africa and the Great Dyke in Zimbabwe.

PGM Mineral Resources present in these two geological entities currently account for approximately 85% of the world's known platinum and 55% of the world's known palladium.

## The Bushveld Complex

Formed over two billion years ago as a result of multiple injections of magma into the earth's crust many kilometres below the surface, the Bushveld Complex is geologically unique due to its size, uniformity of its layering and extent of known mineral content. This saucer-shaped intrusion is over 350km wide, 250km long and up to 12km thick. Over time, the rim of the intrusion has been exposed by erosion, revealing three major separate segments known as the Western, Eastern and Northern Limbs. The Western Limb is split into two lobes (north-western and south-western) by the Pilanesberg Complex, a remnant of an alkaline volcanic plug that intruded into the Bushveld Complex about 1.2 billion years ago. The north/east trending Steelpoort fault divides the Eastern Limb into two lobes: north-eastern and south-eastern. The exposed segments exhibit layering of pyroxenites, norites, gabbros, anorthosites and chromitites across the entire extent of the complex.

The Bushveld Complex comprises three main suites, namely the Rooiberg Group, Lebowa Granite Suite and Rustenburg Layered Suite. The Rustenburg Layered Suite comprises four major subdivisions: the upper zone, main zone, critical zone and lower zone. Economic concentrations of PGMs occur mainly in three distinct units within the critical zone: Merensky Reef; Upper Group 2 (UG2) chromitite; and Platreef. The Merensky Reef and UG2 Reef occur along the Eastern (EL) and Western (WL) Limbs of the complex, while the Platreef is restricted to the eastern edge of the Northern Limb (NL). The UG2 and Merensky Reefs are extracted at Amandelbult, Mototolo, Twickenham and Modikwa while the Platreef is extracted at Mogalakwena.

The Merensky and UG2 Reefs are narrow tabular orebodies that extend laterally over hundreds of square kilometres, resulting in extensive mineralisation. Their continuity, established over decades of exploration and mining, allows for the long-range extrapolation of data.



# The regional geological setting continued

## The Merensky Reef

The Merensky Reef has been the principal source of PGMs since it was first mined in 1925. The reef contains economically important PGMs and base metal sulphide mineralisation.

It is extensively developed in both the EL and WL of the Bushveld Complex. The reef typically consists of a pegmatoidal feldspathic pyroxenite layer, bound at the top and bottom by thin chromitite layers (stringers) that range from 5mm to 20mm in thickness. Mineralisation of the reef generally occurs within the pegmatoidal feldspathic pyroxenite and, to a limited extent, in the hanging wall and footwall, with the highest PGM concentration peaking in the chromitite stringers.

## The UG2 Reef

With the depletion of shallow Merensky Mineral Resources, the UG2 Reef has grown steadily in importance to the point where it now accounts for most of the PGM-bearing ore processed in South Africa. The UG2 Reef, which is consistently developed throughout the EL and WL, is rich in chromitite, with lower gold and base metal but slightly higher rhodium grades compared to the Merensky Reef.

The UG2 Reef occurs vertically below the Merensky Reef and the separation distance varies between 12m and 150m in the WL and averages at 350m to 400m in the EL. The UG2 Reef normally comprises a 0.6m to 1.0m main chromitite layer overlain by three to five chromitite layers (UG2 leaders) varying in thickness from 5cm to 30cm, separated by feldspathic pyroxenite. The immediate footwall of the UG2 is usually a pegmatoidal feldspathic pyroxenite, which varies in thickness from a few centimetres to over 1m. The separation distances between these UG2 leader

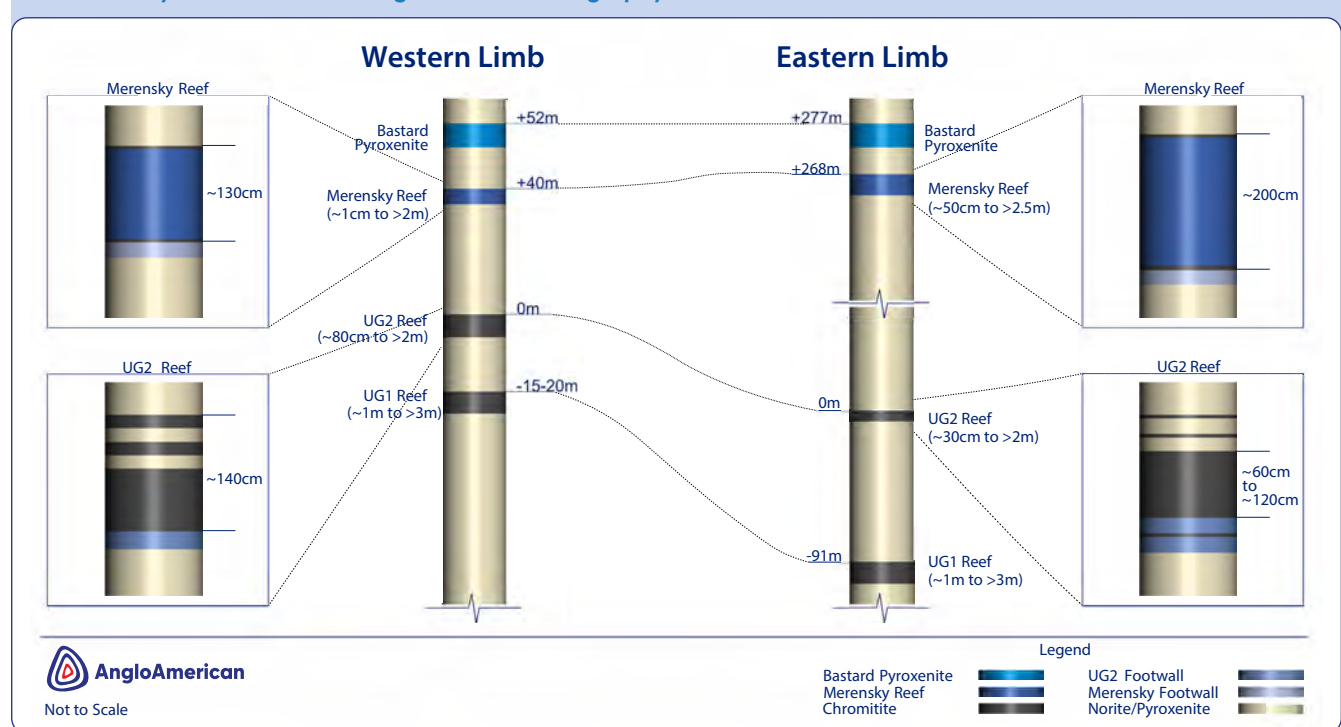
chromitite layers and the UG2 main layer has important implications for geotechnical considerations for mining across the Bushveld Complex.

## The structural setting

The structural setting is characterised by dykes, faults and fractures. Most dykes comprise dolerites of Karoo and post-Karoo age and can be correlated to the Karoo tectonic

extension period. They are generally vertical or steeply dipping and the widths range from several centimetres to more than 30m. The Merensky Reef and UG2 Reef horizons are affected by these structural features and other geological occurrences, such as potholes and typically iron-rich replacement pegmatites, which result in geological losses and have an impact on Mineral Resource estimations and life-of-asset planning.

## The Merensky Reef and UG2 Reef generalised stratigraphy in the Eastern and the Western Limbs



# The regional geological setting continued

## Platreef

The Platreef is developed in the NL of the Bushveld Complex and, for most of the current mining area at Mogalakwena, comprises a thick heterogeneous unit of mafic rocks, dominated by pyroxenite and norite. It averages 150m in thickness, with a prominently top-loaded grade profile. The highest-grade mineralisation is typically located in the upper 30m to 40m of the package which strikes approximately north/south, dipping at an average of 40° to 50° to the west.

In comparison to the Merensky and UG2 Reefs, the Platreef is a far thicker and more variable orebody, typified by extensive contact with metasedimentary and granitic floor rocks and assimilation of footwall fragments. The variability of lithology and thickness along strike is attributed to underlying structures and assimilation of local country rocks. This assimilation ranges from shales and banded ironstones in the south, through to dolomites in the centre of the mining area, to granites in the northern portion of the property.

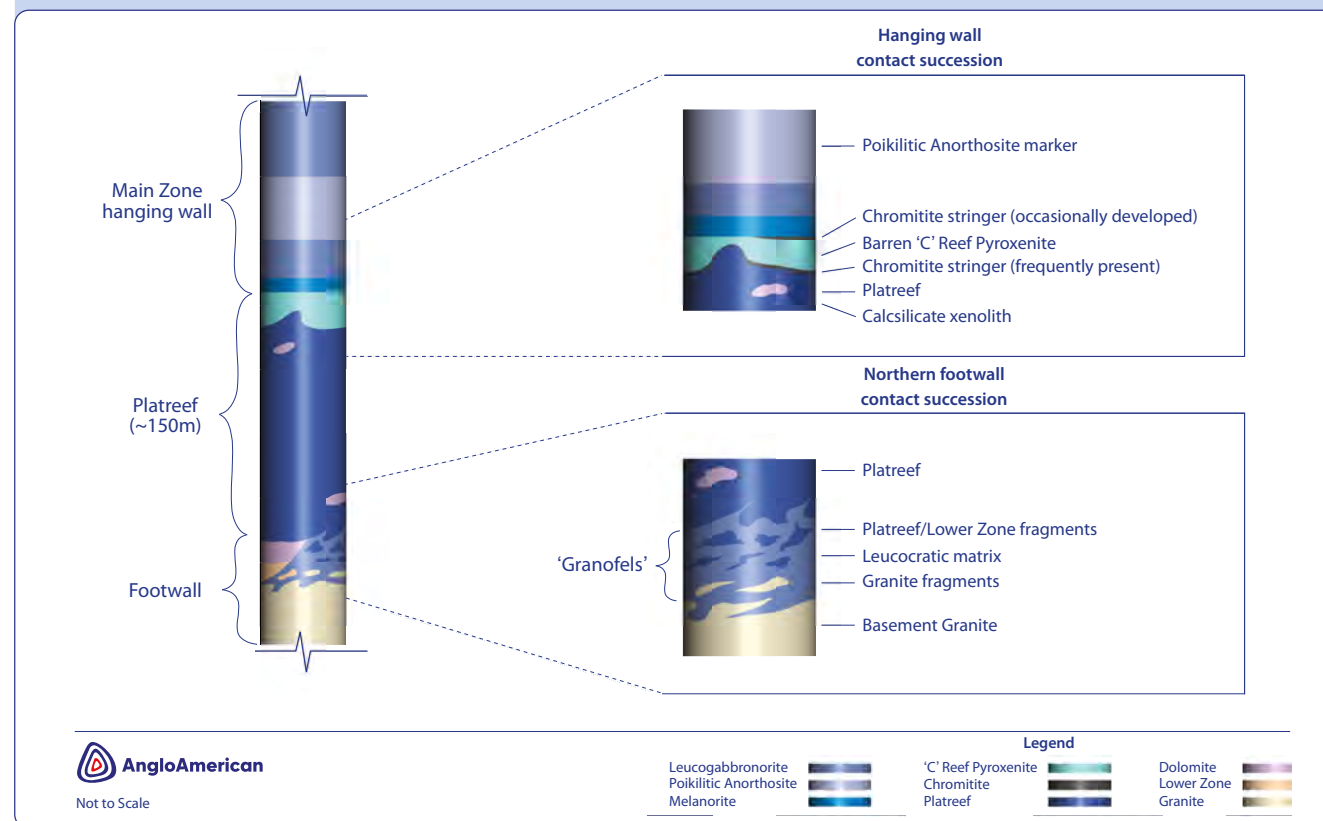
Carbonate floor rocks incorporated into the basal Platreef have been altered to mineralised parapyroxenites and calcsilicates formed during extensive synmagmatic interaction with high magnesium silicate melts. Towards the north, where the Platreef footwall rock is Archaean basement granite, partial melting of this protolith has resulted in the formation of a metamorphic rock referred to as granofels. The granofels is present in a prominent interaction zone developed between the base of the Platreef and the underlying basement granite. As a result, the mineralised horizon defined for the Platreef orebody often incorporates significant portions of the immediate footwall.

At Mogalakwena, the Platreef is structurally affected by dolerite dykes and several lateral fault systems orientated in a north-east/south-west direction. Zones adjacent to major fault systems are discounted as geological losses. The fault systems display normal to reverse fault displacements ranging between 50m and 600m, with up-thrown blocks proving favourable to mine design. The Platreef hosts significant dolomite inclusions in the southern region of the mining area and these also constitute geological loss zones.

## Base metal mineralisation in the Bushveld Complex

The Merensky Reef and Platreef in particular yield meaningful quantities of nickel, copper and cobalt as by-products. While the UG2 Reef has relatively low concentrations of these metals, beneficiation for chromium as a by-product has contributed considerable economic value more recently. Copper, nickel, cobalt and chromium are accounted for in the relevant economic evaluations.

### The Platreef generalised stratigraphy at Mogalakwena (Northern Limb)



# The regional geological setting continued

## The Great Dyke

The Great Dyke in Zimbabwe is a 2.5 billion-year-old mafic to predominantly ultramafic layered intrusion that is approximately 550km long and between 3km and 11km wide. The Great Dyke is trending in a north-north-easterly direction cutting across the Archaean rocks of the Zimbabwe Craton, which are dominated by granite and greenstone belt rocks. The Great Dyke is longitudinally subdivided into a series of four contiguous layered chambers and subchambers. Unki Mine is located in the Selukwe (Shurugwi) subchamber of the Great Dyke. The subchamber is 90km long, and up to about 7km wide. The shape of the subchamber has to some extent been controlled by the proximity of the Selukwe greenstone belt, in that it has been deflected and constricted in places. The Great Dyke has been preserved within a narrow graben structure; the layering of the intrusive rocks is synclinal in shape, with essentially the same mafic and ultramafic lithological successions being exposed on both sides of the longitudinal axis. The dyke comprises an upper mafic unit of alternating sequences of pyroxenite and dunite-harzburgerites and a lower ultramafic zone of dunite. The layers are dipping and flattening towards the axis of the intrusion and the dip decreases from outcrops to the central near-axis area, varying from 14° to 0°. The PGMs and associated base metal mineralisation are developed within the uppermost pyroxenite horizon, the Main Sulphide Zone (MSZ).

## The Main Sulphide Zone (MSZ)

The mineralisation occurs at the same stratigraphic horizon throughout the Great Dyke within the uppermost pyroxenite layer, the P1 unit, and follows the igneous layering. The MSZ occurs some 10m below the mafic-ultramafic contact and is within the P1 unit of the ultramafic sequence. The P1 unit consists of a thin upper unit of websterite and a lower thick unit of plagioclase pyroxenite where the MSZ occurs near the base of the websterite unit. Based on geochemistry, the MSZ has two distinguishable subzones – the base metal subzone (BMSZ), which is dominated by nickel and copper, and the

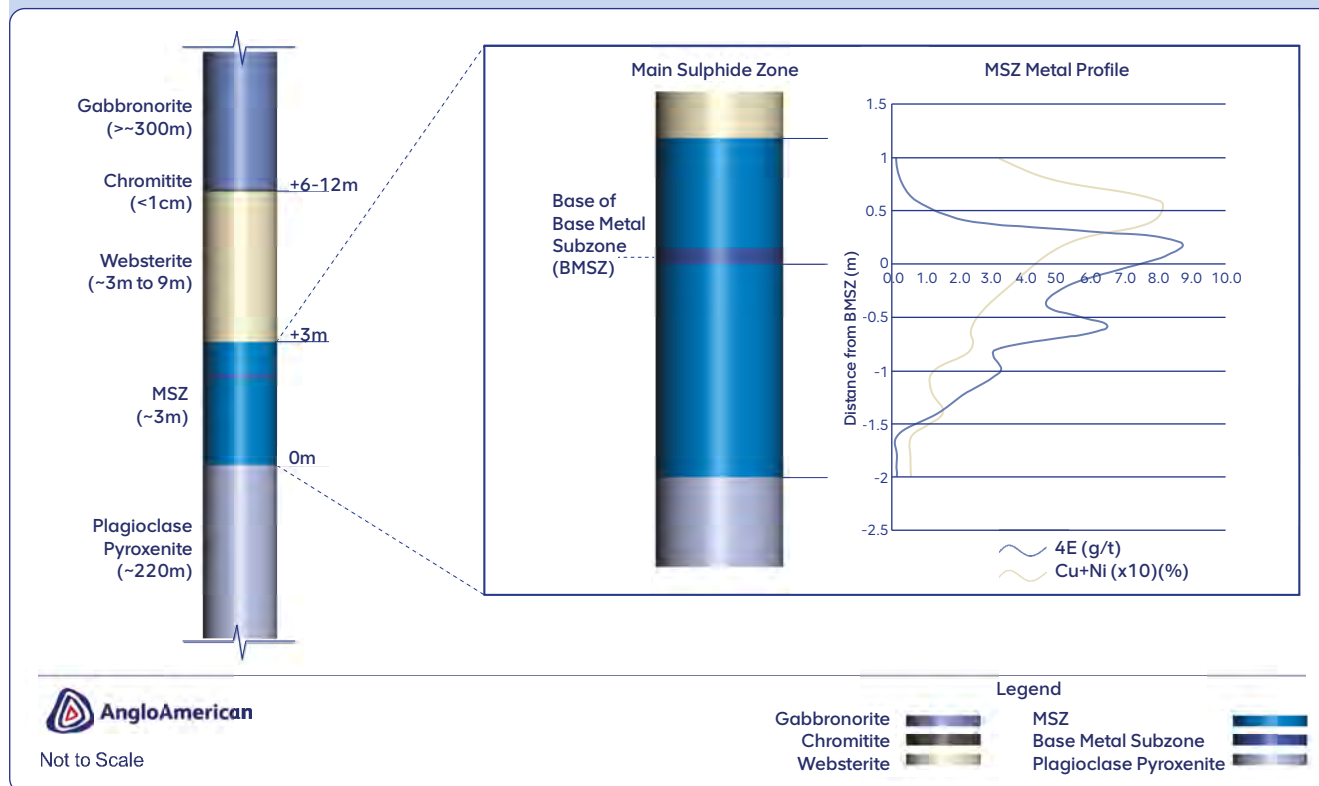
PGMs subzone. The transition from the upper zone to lower zone is marked by a reduction in iron-nickel-copper sulphides disseminated in the pyroxenite. The base of the upper zone is an important stratigraphic horizon, referred to as the BMSZ.

The base metals occur as disseminated inter-cumulus iron-nickel-copper sulphides. Although the mineralised zone is characterised by the absence of identifiable markers, this risk has been successfully mitigated by using handheld X-ray fluorescence (XRF) technology, as well as regular

underground sampling of the mineralised horizon, enabling optimal extraction.

The MSZ is structurally affected by faults, xenoliths and replacement pegmatites. The most prominent is the Footwall fault, which occurs at an average stratigraphic distance of 1.6m below the BMSZ, with this distance ranging from approximately 1m to 2.5m. This fault is localised over a small section of the eastern section of the mine.

## The Main Sulphide Zone generalised stratigraphy quality at Unki (Selukwe subchamber)





# Exploration and technical studies



Drilling cores at an exploration site

Exploration activities at Anglo American Platinum remain fundamental to sustaining and enhancing the company's long-term operational and strategic objectives. The 2024 programmes focused on advancing Mineral Resources conversion and development, leveraging innovative approaches aligned with the FutureSmart Mining™ initiatives. This includes the integration of advanced technologies and methodologies to improve data accuracy, enhance modelling capabilities and ensure robust planning aligned with sustainability and value-creation goals. Rigorous quality assurance and quality control (QA/QC) processes underpin all exploration activities, ensuring data integrity and reliability for decision-making.

The exploration strategy incorporates a balanced approach to immediate operational needs and long-term growth, focusing on brownfields and on-mine opportunities to optimise existing Mineral Resources while discovering new potential. These activities are critical for maintaining compliance with prospecting works programmes and advancing sustainable mining practices. Results from these exploration activities will be incorporated with geological and Mineral Resource model updates.

## Mogalakwena

Mogalakwena continues to be the focal point of Anglo American Platinum's exploration efforts, reflecting its status as a Tier-1 asset. The operation received 80% of the company's 2024 exploration budget, highlighting its strategic importance in delivering value and ensuring operational longevity. The 2024 drilling concentrated on:

- Orebody replacement: The drilling supported Mineral Resources conversion, focusing on both open-pit and underground mining operations. This work aligns with the company's broader strategy for orebody sustainability
- Model integration: Continuous refinement of geological and geo-metallurgical models enabled the alignment of long-term and short-term operational plans. The incorporation of predictive downstream performance metrics has allowed for more accurate forecasting and optimisation of orebody utilisation.

The second phase of the Sandsloot underground prefeasibility study is ongoing, with progression to feasibility study level planned for 2025 pending the approval by the Anglo American Platinum board. This phase includes further detailed delineation of existing and new underground Mineral Resources.

The 2024 drilling programme continued to support the project and confirmed anticipated mineralisation styles and concentrations, substantiating previous geological models and enhancing

confidence in the asset's long-term potential. The approval of the Sandsloot feasibility study is expected in 2025.

## Amandelbult

Exploration at Amandelbult focused on unlocking the potential of two key projects: Tumela 1 subshaft and the Middellaagte graben. These initiatives aim to expand the current Mineral Resource base while addressing structural complexities that pose risks to long-term planning.

The 2024 programme included:

- Prefeasibility study completion: The first phase of prefeasibility studies for both projects was finalised, providing critical insights into their viability
- Structural risk mitigation: Drilling activities identified and addressed key structural complexities, ensuring a robust understanding of subsurface conditions.

Looking forward:

- The Tumela 1 subshaft project will advance to the next phase in 2025, focusing on detailed planning and operational readiness
- A revised budget has been allocated for the Middellaagte graben project, with drilling activities scheduled to commence in 2026.

## Mototolo

At Mototolo, exploration efforts were closely aligned with operational and infrastructure development goals, particularly within the Der Brochen South project and Borwa shaft.

Key achievements in 2024 include:

- Infrastructure de-risking: Geotechnical drilling supported infrastructure stability and mitigated risks associated with complex geological structures near the St George Fault.

While the UG2 Reef remains the primary target, the exploration programme also collected valuable data on the Merensky Reef and chromitite layers within the Critical Zone. This data will inform future mine planning and strategic resource allocation, ensuring a comprehensive approach to asset optimisation.

## Unki

Exploration on Zimbabwe's Great Dyke is central to Unki's long-term growth strategy. The 2024 programme aimed to support the mine's extraction strategy while addressing key geotechnical and infrastructural considerations.

Notable activities included:

- Diamond drilling: Targeted drilling enhanced the understanding of Mineral Resources distribution and structural geology, providing critical data for future development, especially in the Unki North and Paarl East sections
- Bulk sampling: A bulk sample was taken to assess the economic viability of open-pit mining. The results, which are expected in 2025, will inform strategic decisions regarding open-pit mining at Unki South section.

# Exploration and technical studies continued

Looking ahead, the exploration budget for 2025 has been adjusted to reflect the mine's growth priorities, with expanded activities planned to unlock further potential at Unki North and Paarl East sections.

## Twickenham

Twickenham has been under care and maintenance since 2016. The completion of prefeasibility studies shows that the Mineral Resource can be economically extracted (RPEEE).

Twickenham entered a pivotal phase in 2024, with the initiation of a feasibility study aimed at evaluating the economic viability of resuming operations. This study, set for completion in 2025, will provide critical insights into whether the orebody can be mined sustainably and profitably under current market conditions.

Key considerations:

- The study evaluates the capital requirements for constructing a concentrator and associated infrastructure
- Market analyses focus on commodity price trends and their impact on project feasibility
- Exploration remains on hold, reflecting the strategic shift towards comprehensive economic evaluation.

## Modikwa joint operation

Exploration at Modikwa faced challenges in 2024 due to ongoing community-related constraints affecting surface-related

activities. These were mitigated through underground drilling and geophysical surveys, which focused on improving confidence in the UG2 Reef structure and advancing the operation's strategic objectives.

Key developments:

- Underground drilling: A total of 169 drill holes were completed, intersecting critical geological features such as faults, dykes and reef potholes. This data has been instrumental in refining short-term operational plans and updating geological models
- Merensky Reef trial mining: Progress continued on the trial mining of the

Merensky Reef, with economic viability results expected in 2025. A successful outcome would mark the first conversion of Merensky Resources to Ore Reserves in Modikwa's history

- Open-pit studies: Completed studies have paved the way for bulk sampling in legislatively approved areas, with exploration drilling planned for UG2 Reef outcrops to evaluate open-pit mining potential.

## Prospecting rights

Exploration on prospecting right areas is in line with the work programme schedules and environmental management programmes submitted to the government's

DMRE. A further reduction of the remaining prospecting right holdings is envisaged in alignment with Anglo American Platinum's portfolio focus on long-term, high-quality core assets.

## Exploration expenditure – managed operations

Total Anglo American Platinum surface exploration expenditure for 2024 was R503 million. The projected exploration expenditure for 2025 is expected to increase to R787 million.

## 2024 exploration expenditure

Mine/project	Mineral Resource conversion and near-mine			Underground exploration and in-pit ore control drilling		
	Number of drill-holes	Length (m)	Expenditure (Rm)	Number of drill-holes	Length (m)	Expenditure (Rm)
Mogalakwena	99	63,732	171.1	1,039	46,795	42.6
Northern Limb exploration and near mine	63	47,094	219.0	78	30,274	165.5
Dishaba	6	6,804	16.8	72	4,696	6.4
Tumela	6	8,214	22.0	63	4,572	8.0
Mototolo	29	11,989	12.1	51	5,149	6.2
Unki	78	17,538	62.1	108	9,104	10.4
Modikwa				169	23,145	17.7
Prospecting rights	—	—	—	—	—	—
<b>Total 2024 exploration expenditure</b>	<b>281</b>	<b>155,371</b>	<b>503.0</b>	<b>1,580</b>	<b>123,735</b>	<b>257.0</b>
<b>Planned 2025 exploration budget – Northern Limb</b>			<b>368.0</b>			
<b>Planned 2025 exploration budget – other</b>			<b>419.0</b>			
<b>Total planned 2025 exploration budget</b>			<b>787.0</b>			

# Mineral Resources process and estimates summary

as at 31 December 2024

## Mineral Resources estimation process

**We construct Mineral Resources models as a multiskilled team led by suitably qualified and experienced Competent Persons who assume overall responsibility for the Mineral Resources estimates.**



Estimates of grade and tonnage are classified based on the confidence in the Mineral Resource model. This includes considering the spacing and quality of the underlying sample data, various geological features that influence the continuity of mineralisation, the uncertainty and variability of grade and density estimates.

We are transforming our Mineral Resource estimation process through a new integrated approach called rapid resource modelling, which offers a significant time reduction from drilling to model when compared to the traditional process.

Mineral Resources are constructed in the form of block models, which are digital data structures describing the geometry and properties of the subsurface rock mass hosting mineralisation and the surrounding waste. The modelled properties enable estimation of recoverable value after mineral processing, including the grade of the targeted metals, the grade of deleterious components, the in situ bulk density of the rock, the contained quantity of specific metals required to understand the extractive process efficiency and the comminution characteristics of the rock.

### Data collection and validation



Data sources that feed the Mineral Resource model are grouped into:

- Data derived from analysis of physical samples of drill holes, underground reef sampling and other sampling techniques
- Data collected using remote sensing activities such as geophysical surveys, scanning sensors, and surface and subsurface mapping by geologists.

A range of quality assurance/quality control (QA/QC) processes are employed to ensure that the data used in the estimation of Mineral Resources is valid, correct and fit-for-purpose. This includes, but is not limited to, monitoring the material mass recovery from reverse circulation drilling, twinning reverse circulation and diamond drill holes to compare sampling techniques, checks on the sample granulometry at various stages in the sampling and subsampling steps, inclusion of blank samples, submission of Certified Reference Samples and blind resubmission of duplicate samples to monitor analytical accuracy and precision.

There may be routine replication of a subset of drill hole surveys to test the reproducibility of the sample locations in space and the drill hole collar coordinates may also be subject to re-survey. Drill hole logging data is compared between peers to ensure data consistency, and database validations are conducted to ensure that data-capture practices are accurate and reliable.



# Mineral Resources process and estimates summary continued

as at 31 December 2024

## Geological modelling



The collective data set available over a mineral deposit supports the creation and subsequent maintenance of two-dimensional (2D) and three-dimensional (3D) digital geological interpretation. The block model is built on the geological interpretation and forms the basis of the Mineral Resources estimates for the deposit.

This model relies on a basic understanding of the relevant mineralisation processes within the deposit, as well as extraction methods, particularly for key geological features that exert control on the mineralisation and subsequent extraction.

The geoscience teams at operations assess and quantify geological losses from various sources, including historical mining, surface exposure, and geophysical and geological exploration data. The precise location and size of some features such as faults, potholes and iron-rich pegmatoids are not always known ahead of mining as the drill hole spacing is typically too wide to precisely delineate the size, shape and extent of these features. The total known and

unknown geological losses are reported per domain, as defined by similar geological attributes related to structural characteristics, complexity, geological loss feature frequency, size or distribution.

These geological loss estimates are reconciled with current production data and are signed off by a team of Competent Persons to ensure the best possible input into Mineral Resources models and LoAP processes.

### Mineralisation

Implicit modelling is frequently used to generate the complex 3D shapes representing key rock unit volumes within the geological block model. Manual wireframing and 2D geological block modelling are also used for this task at underground operations, where it is more appropriate for mine planning.

The mineralisation may be hosted exclusively within a specific rock unit (ie UG2 and Merensky Reefs) or may be subject to more complex controls (ie Platreef and MSZ). The mineralisation envelope is based on data generated

from all possible sources, including surface and underground diamond drilling, open-pit reverse circulation drilling, underground reef sampling and geological mapping.

The mineralised envelope for the Platreef is delineated on an incremental cut-off grade. Mineral Resources for the MSZ, Merensky and UG2 Reefs report 4E PGM grades that are all above marginal cut-off grades which are determined during RPEEE assessments.

The tabular PGM orebodies lend themselves to a three-component subdivision, comprising the mineralised envelope, hanging wall and footwall intervals. Separate estimation models are prepared for each of these components. The mineralised interval represents the most consistently mineralised unit and dominates the defined Mineral Resources. The margins of the mineralised interval may be defined exclusively by grade cut-offs (ie Platreef) by a combination of geological features and grade cut-offs (ie Merensky Reef and MSZ) or by geology (ie UG2 Reef).



Ore sorter at Mogalakwena North concentrator

# Mineral Resources process and estimates summary continued

as at 31 December 2024

## Grade estimation



Grade data is derived by analysis of subsamples of the drill hole core, underground sampling, or reverse circulation drill cuttings. Exploratory data analysis is performed on this data to understand the relationships between different grade variables and their spatial variability. These analyses are typically performed for each variable in each geological domain that is identified within the deposit.

The Mineral Resource models are prepared as 2D block models for the underground operations and 3D block models for the open-pit operations within applicable modelling software. Ordinary kriging is the estimation method mostly applied, together with semi-variogram analysis, to quantify the spatial continuity and data variance. The estimation parameters are defined using a kriging neighbourhood analysis (KNA) and the variogram models defined by the Merensky, UG2, MSZ and Platreef geozones, respectively. KNA tests the impact of different parameters on the estimate by interpreting changes, mainly in the kriging efficiency and kriging variance parameters.

The traditional resource modelling workflow is a mature and stable industry standard, typically executed annually (or following the completion of a major drilling campaign). These previously linear series of sequential steps usually use different software packages that are not cloud-deployable and are reaching their limits for handling large models. Redefinition of the workflows (which are tailored for each deposit style and mining context) involving reassessment of all existing processes, understanding the constraints and running processes in parallel are underway for all Anglo American Platinum assets.

All processes previously run manually, or partially scripted, are now automated within a rapid resource modelling framework (RRM), offering enhancement and agility as well as significant time reduction compared to the traditional estimation processes. RRM is transforming how orebodies are evaluated by using digital technologies like machine learning and cloud computing. This allows for the delivery of richer models, beyond grade and thickness estimation, with shorter timescales, leading to efficient decision making.

## Reasonable prospects of eventual economic extraction



The declared Mineral Resources estimates are not an inventory of all mineral occurrences identified, but an estimate of those, which under assumed and justifiable modifying factors have RPEEE.

The Competent Persons and their supporting teams undertake an assessment of the RPEEE criteria. These include, but are not limited to, mining method, depth, geological complexity, geotechnical, and other modifying factors. The factors are appropriate to the definition of Mineral Resources in terms of precision, accuracy, degree of confidence and variability.

For open-pit mining activities, pit optimisation studies are completed using approved long-term economic assumptions and approved geotechnical input parameters to derive a RPEEE pit shell. The RPEEE pit shell may be derived via pit-optimisation methods and is based on agreed forecast economic assumptions. This shell attempts to define a limit beyond which it is considered unlikely that reasonable prospects exist for extraction under the current state of knowledge of the deposit and the technologies available for potential extraction.

For underground mining activities, additional factors such as distance to the shaft, depth below surface, virgin rock temperatures and ventilation capacity limitations influence the definition of the RPEEE boundary. A virgin rock temperature of 75°C is still considered to be the practical limit to mining (given current technology constraints, economic assumptions and energy costs), and continues to form the perimeter of declared Inferred Mineral Resources within the mining rights areas. Anglo American Platinum will continue to review mineralisation down-dip of this limit based on changing geological information, mining technology and metal prices.

Anglo American Platinum has maintained the basic resource equation (BRE) to establish a consistent and auditable process for tracking and reconciling movements in Mineral Resources and Mineralisation. This is underpinned by the RPEEE criteria specified in the SAMREC Code as well as Anglo American Platinum's RPEEE criteria for Mineral Resources guidelines document.

# Mineral Resources process and estimates summary continued

as at 31 December 2024

## Risk assessment



Once the modelling and grade-estimation process has been completed, the team assesses the risk associated to the mineralisation with consideration of technical, financial and ESG factors. Areas not meeting the criteria for RPEEE are removed and barrier zones are left around identified features or infrastructure, where relevant. The assessment focuses on any significant risks and/or uncertainties that could reasonably be expected to affect the reliability or confidence in the Mineral Resources estimates.

As understanding our risks and developing appropriate responses are critical to our future success, we are committed to an effective, robust system of risk identification and effective mitigation of risks to the declared Mineral Resources. An integrated schedule of the actions required to mitigate the risks is created and monitored to ensure that the risks can be managed. The risk assessment is shared with the life-of-asset planning team.

## Mineral Resources classification criteria

Non-statistical parameters	Statistical parameters
Aeromagnetic survey	Search volume
Seismic survey (where applicable)	Number of samples
Structural model	Kriging efficiency
Facies interpretation	Kriging variance
Historical data/mining history	Slope of regression
Geological loss	
Quality assurance and quality control	

## Mineral Resource classification and reporting



Classification of a Mineral Resource is the assignment of confidence categories to the model. Classification considers the potential sources of uncertainty within the model, including the reliability of base data, spatial distribution of data, accuracy and precision of assayed sample databases, nature of the geological environment including the presence of post-mineralisation features like faults and dykes that disrupt the continuity of mineralisation. The confidence associated with estimates is gauged through analysis of various estimation quality metrics such as swath plots that compare estimates to the supporting data and regression analyses between data values and the values of enclosing block estimates, or derived more directly if conditional simulation techniques are employed.

The consideration of multiple sources of uncertainty is addressed using a weighted scorecard approach, evaluating both geological (non-statistical) and geostatistical criteria. Under this framework, the Competent Person and team consider the risks associated with data quality, orebody knowledge, mineralisation geometry and continuity, as well as statistical outputs. The geostatistical and geological considerations for the classification procedure are shown below. These factors are sequentially considered and aggregated to yield a weighted score value that is used to assign a classification to each block in the model.

## Model delivery to LoAP



The Mineral Resources model is reviewed and signed off by the Competent Person and supporting teams before handover to the LoAP teams for planning purposes.



# Mineral Resources process and estimates summary continued

as at 31 December 2024

## Summary exclusive Mineral Resource estimates

The estimates below are reported on a 100% basis and our attributable interests are noted in the tables. Tonnes or contained metal values reported as 0.0 represent numbers less than 0.05. Mineral Resources reported are additional to (ie exclusive of) those converted to Ore Reserves.

		Tonnes Mt		Grade 4E g/t		Contained metal 4E tonnes		Contained metal 4E Moz	
Mine	Classification	2024	2023	2024	2023	2024	2023	2024	2023
Mogalakwena (100%)*									
Platreef open-pit	Measured	159.7	188.4	2.20	2.22	351	418	11.3	13.4
	Indicated	1,179.4	1,451.2	2.35	2.33	2,775	3,381	89.2	108.7
	Measured and Indicated	1,339.2	1,639.5	2.33	2.32	3,126	3,799	100.5	122.2
	Inferred	263.6	264.9	1.62	1.63	427	432	13.7	13.9
	Total	1,602.8	1,904.4	2.22	2.22	3,553	4,231	114.2	136.0
Platreef underground**	Measured	1.1	—	6.57	—	7	—	0.2	—
	Indicated	52.8	43.0	5.52	4.78	291	205	9.4	6.6
	Measured and Indicated	53.8	43.0	5.54	4.78	298	205	9.6	6.6
	Inferred	157.4	101.3	4.34	3.85	683	390	22.0	12.5
	Total	211.2	144.3	4.65	4.13	981	595	31.5	19.2
Platreef stockpile	Measured	—	2.7	—	3.28	—	9	—	0.3
	Indicated	2.7	—	3.00	—	8	—	0.3	—
	Measured and Indicated	2.7	2.7	3.00	3.28	8	9	0.3	0.3
	Inferred	—	—	—	—	—	—	—	—
	Total	2.7	2.7	3.00	3.28	8	9	0.3	0.3
Total Mogalakwena	Measured	160.8	191.1	2.23	2.24	358	427	11.5	13.7
	Indicated	1,234.9	1,494.1	2.49	2.40	3,074	3,586	98.8	115.3
	Measured and Indicated	1,395.7	1,685.3	2.46	2.38	3,432	4,013	110.3	129.0
	Inferred	421.0	366.3	2.64	2.24	1,110	822	35.7	26.4
	Total	1,816.7	2,051.5	2.50	2.36	4,542	4,835	146.0	155.5

			Tonnes Mt		Grade 4E g/t		Contained metal 4E tonnes		Contained metal 4E Moz	
Mine	Classification	2024	2023	2024	2023	2024	2023	2024	2023	
Tumela (100%)										
Merensky Reef	Measured	23.3	23.4	6.74	6.68	157	156	5.1	5.0	
	Indicated	46.7	46.7	7.07	7.05	330	329	10.6	10.6	
	Measured and Indicated	70.0	70.1	6.96	6.93	487	485	15.7	15.6	
	Inferred	44.8	44.9	7.01	7.01	314	315	10.1	10.1	
	Total	114.8	115.0	6.98	6.96	801	800	25.8	25.7	
UG2 Reef	Measured	64.1	76.0	5.39	5.36	345	407	11.1	13.1	
	Indicated	69.9	70.3	5.51	5.51	385	387	12.4	12.4	
	Measured and Indicated	134.0	146.2	5.45	5.43	730	794	23.5	25.5	
	Inferred	49.6	47.6	5.78	5.76	287	274	9.2	8.8	
	Total	183.6	193.8	5.54	5.51	1,017	1,068	32.7	34.3	
Dishaba (100%)										
Merensky Reef	Measured	6.8	9.4	7.15	7.00	48	66	1.6	2.1	
	Indicated	9.8	11.6	6.71	6.64	66	77	2.1	2.5	
	Measured and Indicated	16.6	21.0	6.89	6.80	114	143	3.7	4.6	
	Inferred	10.4	12.6	6.73	6.03	70	76	2.3	2.4	
	Total	27.0	33.6	6.83	6.51	184	219	5.9	7.0	
UG2 Reef	Measured	14.6	20.7	5.30	5.26	77	109	2.5	3.5	
	Indicated	24.0	25.6	5.70	5.72	137	146	4.4	4.7	
	Measured and Indicated	38.6	46.3	5.55	5.51	214	255	6.9	8.2	
	Inferred	10.1	9.2	5.54	5.50	56	50	1.8	1.6	
	Total	48.8	55.4	5.55	5.51	271	305	8.7	9.8	
Total Amandelbult	Measured	108.8	129.5	5.78	5.70	628	738	20.2	23.7	
	Indicated	150.4	154.1	6.10	6.10	918	939	29.5	30.2	
	Measured and Indicated	259.2	283.6	5.97	5.92	1,546	1,677	49.7	53.9	
	Inferred	114.9	114.2	6.32	6.26	727	715	23.4	23.0	
	Total	374.1	397.8	6.08	6.01	2,273	2,392	73.1	76.9	

\* For Platreef open-pit Mineral Resources a cut-off grade of 1.00 4E g/t is applied and for Platreef underground Mineral Resources a cut-off grade of 2.00 4E g/t is applied except for calc-silicate and oxidised material where a cut-off grade of 3.0 4E g/t is applied.

\*\* The Mogalakwena South and Central Platreef underground Mineral Resources are confined to an underground target area identified through a scoping study. The scoping study is preliminary in nature and include Inferred Mineral Resources, which are insufficient to provide certainty that the conclusions of the scoping study will be realised. The Sandsloot Platreef underground Mineral Resources declaration is supported by a prefeasibility study (see ► pages 9 and 21).

# Mineral Resources process and estimates summary continued

as at 31 December 2024

## Summary exclusive Mineral Resource estimates continued

		Tonnes Mt		Grade 4E g/t		Contained metal 4E tonnes		Contained metal 4E Moz	
Mine	Classification	2024	2023	2024	2023	2024	2023	2024	2023
Mototolo (100%)									
Merensky Reef	Measured	41.3	41.3	4.75	4.75	196	196	6.3	6.3
	Indicated	57.4	57.4	4.55	4.55	261	261	8.4	8.4
	Measured and Indicated	98.7	98.7	4.64	4.63	457	457	14.7	14.7
	Inferred	73.7	73.7	4.51	4.51	332	332	10.7	10.7
	Total	172.4	172.4	4.58	4.58	789	789	25.4	25.4
UG2 Reef									
	Measured	37.6	38.6	3.91	3.81	147	147	4.7	4.7
	Indicated	71.0	71.0	3.97	3.96	282	281	9.1	9.0
	Measured and Indicated	108.6	109.5	3.95	3.91	429	428	13.8	13.8
	Inferred	123.4	124.0	4.02	4.02	496	499	15.9	16.0
	Total	232.0	233.5	3.98	3.97	925	927	29.7	29.8
Unki (100%)									
Main Sulphide Zone	Measured	8.5	8.6	3.74	3.74	32	32	1.0	1.0
	Indicated	118.9	119.3	4.19	4.19	498	500	16.0	16.1
	Measured and Indicated	127.4	127.9	4.16	4.16	530	532	17.0	17.1
	Inferred	32.6	32.6	3.96	3.96	129	129	4.1	4.2
	Total	160.0	160.5	4.12	4.12	659	661	21.2	21.3
Twickenham (100%)									
Merensky Reef	Measured	48.4	48.4	4.75	4.75	230	230	7.4	7.4
	Indicated	87.3	87.3	4.97	4.97	434	434	14.0	14.0
	Measured and Indicated	135.7	135.7	4.89	4.89	664	664	21.3	21.3
	Inferred	165.7	165.7	5.26	5.26	872	872	28.0	28.0
	Total	301.4	301.4	5.09	5.09	1,536	1,536	49.4	49.4
UG2 Reef									
	Measured	54.6	54.6	6.29	6.29	344	344	11.1	11.1
	Indicated	145.4	145.4	6.05	6.05	879	879	28.3	28.3
	Measured and Indicated	200.0	200.0	6.12	6.12	1,223	1,223	39.3	39.3
	Inferred	148.2	148.2	5.88	5.88	871	871	28.0	28.0
	Total	348.2	348.2	6.02	6.02	2,094	2,094	67.3	67.3

		Tonnes Mt		Grade 4E g/t		Contained metal 4E tonnes		Contained metal 4E Moz	
Mine	Classification	2024	2023	2024	2023	2024	2023	2024	2023
Modikwa (50%)									
Merensky Reef	Measured	18.0	18.1	3.14	3.14	57	57	1.8	1.8
	Indicated	50.5	51.1	2.85	2.86	144	146	4.6	4.7
	Measured and Indicated	68.5	69.2	2.93	2.93	201	203	6.4	6.5
	Inferred	130.0	130.3	2.82	2.82	367	368	11.8	11.8
	Total	198.6	199.5	2.86	2.86	567	571	18.2	18.3
UG2 Reef	Measured	47.2	46.2	5.91	5.91	279	273	9.0	8.8
	Indicated	90.6	88.8	5.90	5.90	534	524	17.2	16.9
	Measured and Indicated	137.8	135.0	5.90	5.90	813	797	26.2	25.6
	Inferred	73.5	77.0	6.22	6.21	457	478	14.7	15.4
	Total	211.3	212.0	6.01	6.01	1,270	1,275	40.8	41.0
South Africa									
Merensky, UG2, Platreef	Measured	516.7	567.6	4.33	4.25	2,239	2,412	72.0	77.5
	Indicated	1,887.5	2,149.3	3.46	3.28	6,527	7,050	209.8	226.7
	Measured and Indicated	2,404.2	2,716.9	3.65	3.48	8,766	9,462	281.8	304.3
	Inferred	1,250.4	1,199.4	4.18	4.13	5,232	4,957	168.2	159.4
	Total	3,654.6	3,916.3	3.83	3.68	13,997	14,419	450.0	463.6
Zimbabwe									
Main Sulphide Zone	Measured	8.5	8.6	3.74	3.74	32	32	1.0	1.0
	Indicated	118.9	119.3	4.19	4.19	498	500	16.0	16.1
	Measured and Indicated	127.4	127.9	4.16	4.16	530	532	17.0	17.1
	Inferred	32.6	32.6	3.96	3.96	129	129	4.1	4.2
	Total	160.0	160.5	4.12	4.12	659	661	21.2	21.3
South Africa and Zimbabwe									
All reefs: Merensky, UG2, Platreef, Main Sulphide Zone	Measured	525.3	576.2	4.32	4.24	2,271	2,444	73.0	78.6
	Indicated	2,006.3	2,268.5	3.50	3.33	7,025	7,550	225.9	242.8
	Measured and Indicated	2,531.6	2,844.8	3.67	3.52	9,296	9,994	298.9	321.4
	Inferred	1,283.0	1,232.0	4.18	4.13	5,360	5,086	172.3	163.5
	Total	3,814.6	4,076.8	3.84	3.70	14,656	15,080	471.2	484.9

4E grade is the sum of platinum, palladium, rhodium and gold grades in grams per tonne (g/t).

Due to the uncertainty that may be attached to some Inferred Mineral Resources, it cannot be assumed that all or part of an Inferred Mineral Resource will necessarily be upgraded to an Indicated or Measured Mineral Resource after continued exploration.

# Ore Reserves process and estimates summary

as at 31 December 2024

## Life-of-asset planning

**We optimise the responsible extraction of Mineral Resources within the portfolio for the benefit of all our stakeholders by embracing the principles of our sustainable mining plan, incorporating FutureSmart Mining™ and applying value-based approaches.**

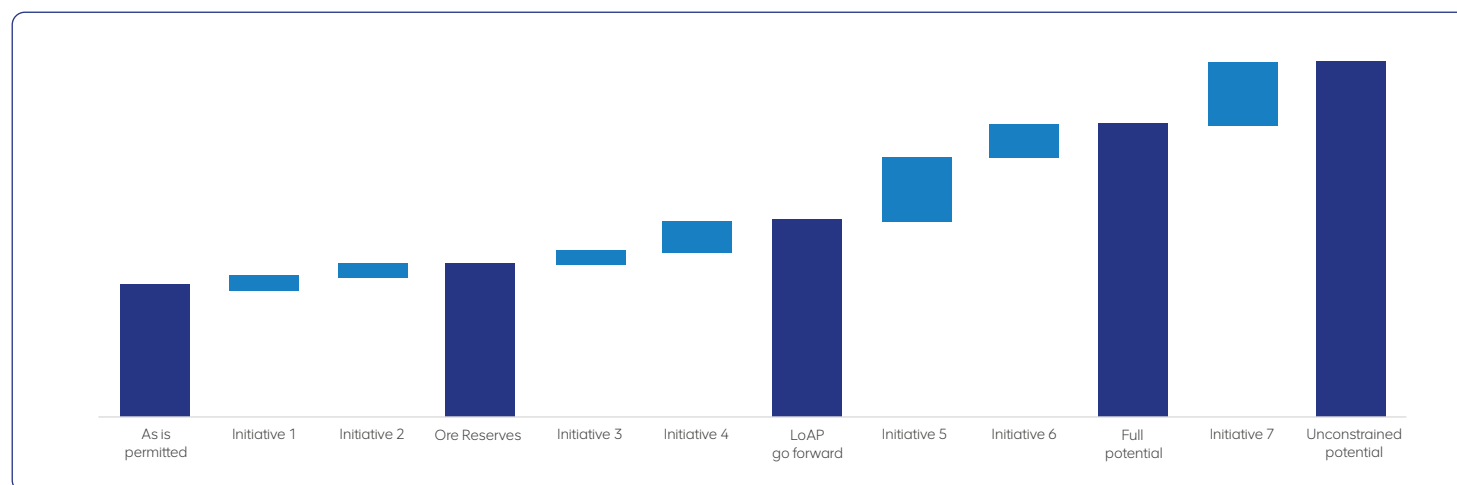
The integrated planning process (IPP) is a guided and purposeful approach to identifying, confirming and planning the work, resources and costs required to deliver the company's strategic and financial objectives. The planning framework is an integrated process from resource development plans (RDPs) and asset strategy through to the life-of-asset plans (LoAPs), culminating in the budget plan and the declared Ore Reserves. The RDP provides the unconstrained development and evaluation of the strategic options for each asset, applying consideration to products and product mix, FutureSmart Mining™ technology implementation and timelines, portfolio positions and marketing strategies, including demand forecasts. The RDP is followed by the asset strategy, which prioritises the strategic options for each asset within the portfolio.

Taking direction from the RDP and asset strategy cases, the LoAP defines the implementation pathway for the various initiatives included the planning process while incorporating value-based planning considering current orebody knowledge. The LoAP covers the complete value chain from resource model to post-closure options and uses the extensive specialist knowledge within the group to develop these plans. The plan will transition strategy into tangible actions to enable integration into the business plan.

Following the life-of-asset planning pathway, an array of plans is built from the 'as is permitted' plan, which considers only the approved permits. 'Ore Reserves' include initiatives such as projects in execution and projects which have advanced to a feasibility study within the year of declaration. There is a reasonable expectation that any required legislative approvals will be timeously obtained for the production and initiatives within the 'Ore Reserves' plan. Ore Reserves are declared from this plan and reflect the anticipated tonnage and grades delivered to the processing plant.

The 'LoAP go-forward', 'full potential' and 'unconstrained potential' cases build on the 'Ore Reserves' and indicate the pathway to value by introducing new technologies, projects in prefeasibility or scoping study phases and other initiatives where more technical studies are required to increase the level of confidence in the inputs before inclusion into the 'Ore Reserves' case. The inputs, assumptions and constraints from the LoAP provide guidance to the budget plan created on an annual basis for each mine.

## Illustrated life-of-asset planning pathway

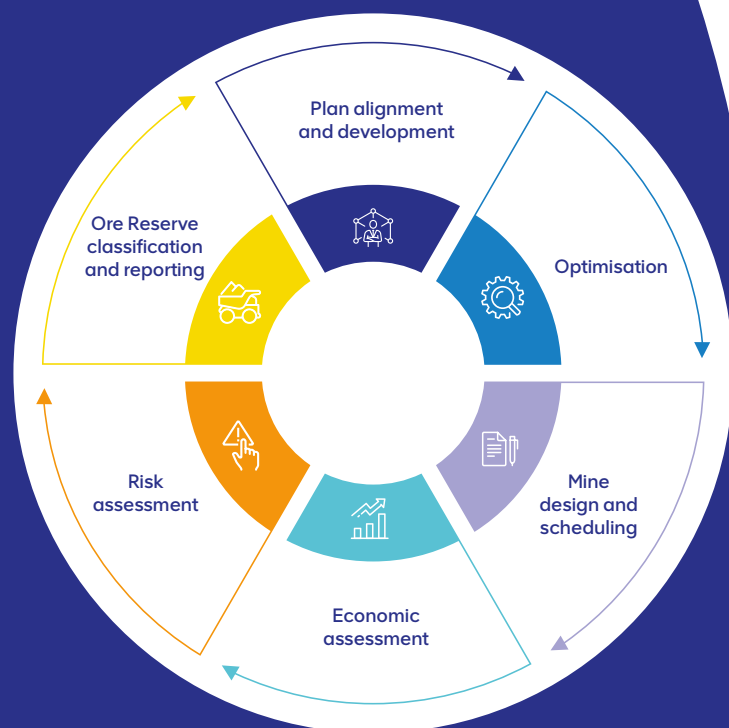




# Ore Reserves process and estimates summary continued

as at 31 December 2024

## Life-of-asset planning process



### Plan alignment and development



A review and rework of the LoAP are triggered either by a significant change within the conditions and/or assumptions of the incumbent LoAP, or in the course of a regular scheduled update. During this phase, there will be a proactive engagement with all stakeholders with the objectives of having a comprehensive understanding of the asset, defining the terms of reference and collating the input parameters for consideration in the development of the plan. The modifying factors that are included in the preparation of the mine plan include mining method, geotechnical, processing and recovery, financial, legal, marketing, infrastructure, and environmental, social, governance (ESG) and governmental considerations. These inputs are collated from, and reconciled with, the recent performance and benchmarked against improvement potential. Once agreed, they are signed off and accepted for application in the mine plan.

### Optimisation



Based on inputs collated and discussions by the technical specialists, mine optimisation studies are undertaken to define the economically extractable areas, seeking to optimise net present value (NPV) while incorporating the ESG targets and commitments, and addressing any previously highlighted risks. The principles of value-based planning are utilised to delineate the highest value-accretive ore.

This process takes account of revenue streams for all the metals/minerals and products, throughput and bottleneck constraints, as well as the costs over time. A destination for each block within the mine plan is defined to either crushing/milling, stockpile for later treatment or waste, enabling mining to deliver the most value-accretive ore for processing at any point of the LoAP.

Optimisation for open-pit operations delivers the most value-accretive sequence of mining and processing from the ultimate pit shell. The optimisation which delivers the best product mix to the plant complies with the marketing requirements for the commodity being mined.

Optimisation for underground operations delivers the most value-accretive sequence of mining and processing from each area associated with the defined boundaries installed infrastructure or project.

Optimisation phase identifies any additional infrastructure or relocation of current infrastructure required to deliver the Ore Reserve case as well as the full potential case. These requirements are included in the inputs for the mine design and scheduling phase.

# Ore Reserves process and estimates summary continued

as at 31 December 2024

## Mine design and scheduling



After selecting the optimal mining area, detailed mine design and production scheduling follows. The mine design considers the agreed inputs for the mining method to create a layout which can be scheduled to produce a mining plan. These inputs include, but are not limited to, geological losses, geotechnical parameters, access methodologies, ventilation, equipment type, processing facilities, environmental restrictions and permits.

The schedule incorporates the modifying factors for mining and processing parameters, as well as losses and dilution, into the mining sequence. Processing factors considered include throughput capacity, recoveries, mass pull, recovery potential and blending of ore from different sources, resulting in a mineable schedule. This sequence is tested for operability to ensure the plan can be delivered as scheduled. This is an iterative process and sequencing of mining activities must be such that consistent output is achieved over time. The scheduling includes optimal timing of the inclusion of additional infrastructure or relocation thereof as identified in the optimisation phase.

## Risk assessment



Once the plan has been completed, a multidisciplinary team comprising technical, financial, regulatory and ESG specialists involved in the planning process, assesses the risk of delivery of the plan and creates an integrated schedule of the actions required to deliver the plan. The assessment focuses on any significant risks and/or uncertainties that could reasonably be expected to affect the reliability or confidence in the Ore Reserve estimates or forecast economic outcomes.

As understanding our risks and developing appropriate responses are critical to our future success, we are committed to an effective, robust system of risk identification and effective mitigation of risks to the declared Ore Reserves. The schedule of actions cover the entire value chain, from permitting to mine closure. The action plan is subsequently included in the budget and monitored for ongoing delivery of the LoAP.

## Economic assessment



The resultant schedule is assessed for economic viability – first by applying the global economic assumptions for price, exchange rates and inflation to define the revenue from all product streams; and second, by applying the costs to the schedule to determine expenditure. Costs include mining, processing, indirect costs, overheads and stay-in-business capital. See [page 7](#) of this report.

Once the cash flow has been analysed, material that is uneconomic at the end of life of the asset is removed from the production profile. This material, known as the 'uneconomic tail', reverts to Mineral Resources to be considered in subsequent planning processes.

Medium to long-term market analysis and outlook assessments are periodically conducted at various levels of technical studies and within the mine plan. For an in-depth analysis of our markets, see the relevant section in the integrated report.



Cutting of drillhole core at Mogalakwena coreyard

# Ore Reserves process and estimates summary continued

as at 31 December 2024

## Ore Reserve classification and reporting



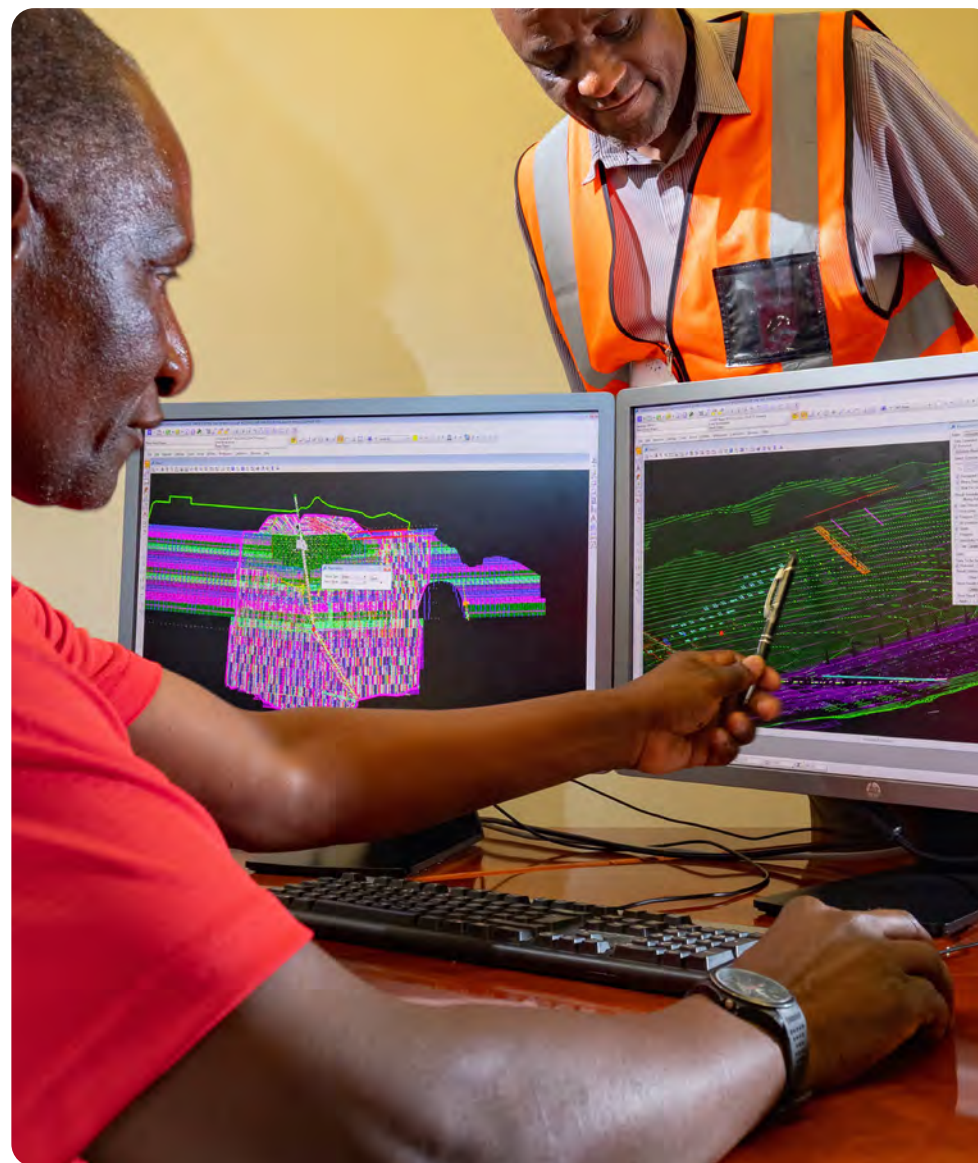
Material in the mine plan defined as Ore Reserves is above the economic cut-off value based on technical, financial, regulatory and ESG considerations, and includes in situ and stockpiled material. On completion of a viable mine plan, having applied the modifying factors, the classification of Ore Reserves is guided by:

- Measured Mineral Resources contained in the economically viable plan are converted to Proved or Probable Ore Reserves. Indicated Mineral Resources are converted to Probable Ore Reserves
- Inferred Mineral Resources in the LoAP are not converted to Ore Reserves and should not represent more than 10% of the material considered in the first 15 years of the life-of-asset period
- For a capital project to be included in the Ore Reserves, the project must have passed a prefeasibility level of study, meet the economic criteria as set by the company, and have board approval and funding to proceed to a feasibility study
- The scheduled Ore Reserves are subjected to peer review by a panel consisting of Competent Persons and technical specialists. Once the reviews and validations have been passed, the resultant plan is signed off by the Competent Person(s) and declared as the Ore Reserves.

The LoAP used to define the Ore Reserves is updated on a two-to-three-year cycle, depending on the mine. In the intervening years, the Ore Reserves are declared by depletion, which takes annual production and a forecast adjustment for the previous year's mining into account.

In the years when Ore Reserves are reported by depletion, a validation assessment is done to verify that the budget has not significantly deviated from the last LoAP, from either a production, revenue or cost perspective. An update to the LoAP is initiated where deviations have occurred and are deemed to be significant.

We continue to use a three-stage reconciliation of year-on-year changes as well as a consistent and auditable process for tracking and reconciling year-on-year changes in Ore Reserves. The first stage is a spatial reconciliation that defines the impact of boundary changes, face-position adjustments, mine design changes, as well as areas that are no longer economically viable for current price forecasts. The second stage of the reconciliation defines changes due to updated Mineral Resources models, which incorporated new drilling and sampling data. The final stage defines changes in the modifying factors being applied to mine design to produce the production profile.



Integration and analysis of mine planning data at Unki

# Ore Reserves process and estimates summary continued

as at 31 December 2024

## Summary Ore Reserve estimates

The estimates below are reported on a 100% basis and our attributable interest is noted in the tables. Tonnes or contained metal values reported as 0.0 represent estimates less than 0.05.

Mine	Reserve life*	Classification	Tonnes (ROM) Mt		Grade 4E g/t		Contained metal 4E tonnes		Contained metal 4E Moz	
			2024	2023	2024	2023	2024	2023	2024	2023
<b>Mogalakwena (100%)</b>	<b>86</b>									
Platreef open-pit		Proved	792.9	813.1	3.04	2.91	2,414	2,366	77.6	76.1
		Probable	341.9	332.9	3.14	3.34	1,074	1,112	34.5	35.8
		<b>Total</b>	<b>1,134.8</b>	<b>1,146.0</b>	<b>3.07</b>	<b>3.04</b>	<b>3,488</b>	<b>3,478</b>	<b>112.2</b>	<b>111.9</b>
Platreef primary stockpile		Proved	—	14.6	—	1.09	—	16	—	—
		Probable	57.3	40.9	1.33	1.47	76	60	2.4	1.9
		<b>Total</b>	<b>57.3</b>	<b>55.5</b>	<b>1.33</b>	<b>1.37</b>	<b>76</b>	<b>76</b>	<b>2.4</b>	<b>2.4</b>
<b>Total Mogalakwena</b>		Proved	792.9	827.7	3.04	2.88	2,414	2,382	77.6	76.6
		Probable	399.2	373.8	2.88	3.14	1,150	1,172	37.0	37.7
		<b>Total</b>	<b>1,192.0</b>	<b>1,201.5</b>	<b>2.99</b>	<b>2.95</b>	<b>3,564</b>	<b>3,554</b>	<b>114.6</b>	<b>114.3</b>
<b>Tumela (100%)</b>	<b>14</b>									
Merensky Reef		Proved	0.1	0.1	5.72	5.74	0	0	0.0	0.0
		Probable	1.3	0.2	5.87	3.33	7	1	0.2	0.0
		<b>Total</b>	<b>1.3</b>	<b>0.3</b>	<b>5.86</b>	<b>3.95</b>	<b>8</b>	<b>1</b>	<b>0.2</b>	<b>0.0</b>
UG2 Reef		Proved	18.4	26.7	4.86	4.66	89	125	2.9	4.0
		Probable	7.3	0.2	3.91	3.39	29	1	0.9	0.0
		<b>Total</b>	<b>25.7</b>	<b>27.0</b>	<b>4.59</b>	<b>4.65</b>	<b>118</b>	<b>126</b>	<b>3.8</b>	<b>4.0</b>
<b>Dishaba (100%)</b>	<b>32</b>									
Merensky Reef		Proved	5.4	1.9	5.12	4.28	27	8	0.9	0.3
		Probable	4.7	4.1	5.28	5.82	25	24	0.8	0.8
		<b>Total</b>	<b>10.1</b>	<b>6.0</b>	<b>5.19</b>	<b>5.34</b>	<b>52</b>	<b>32</b>	<b>1.7</b>	<b>1.0</b>
UG2 Reef		Proved	44.2	44.3	4.34	4.38	192	194	6.2	6.2
		Probable	7.6	6.5	4.45	4.58	34	30	1.1	1.0
		<b>Total</b>	<b>51.7</b>	<b>50.8</b>	<b>4.36</b>	<b>4.40</b>	<b>225</b>	<b>224</b>	<b>7.2</b>	<b>7.2</b>
<b>Total Amandelbult</b>		Proved	67.9	73.0	4.54	4.48	309	327	9.9	10.5
		Probable	20.9	11.1	4.53	4.99	95	56	3.0	1.8
		<b>Total</b>	<b>88.8</b>	<b>84.0</b>	<b>4.54</b>	<b>4.55</b>	<b>403</b>	<b>383</b>	<b>13.0</b>	<b>12.3</b>

Mine	Reserve life*	Classification	Tonnes (ROM) Mt		Grade 4E g/t		Contained metal 4E tonnes		Contained metal 4E Moz	
			2024	2023	2024	2023	2024	2023	2024	2023
<b>Mototolo (100%)</b>	<b>50</b>									
UG2 Reef		Proved	68.9	71.1	3.40	3.39	234	241	7.5	7.7
		Probable	55.3	55.4	3.13	3.13	173	173	5.6	5.6
		<b>Total</b>	<b>124.2</b>	<b>126.5</b>	<b>3.28</b>	<b>3.27</b>	<b>407</b>	<b>414</b>	<b>13.1</b>	<b>13.3</b>
<b>Unki (100%)</b>	<b>18</b>									
MSZ		Proved	22.1	23.4	3.20	3.23	71	76	2.3	2.4
		Probable	20.0	21.2	3.29	3.32	66	71	2.1	2.3
		<b>Total</b>	<b>42.1</b>	<b>44.6</b>	<b>3.25</b>	<b>3.27</b>	<b>137</b>	<b>147</b>	<b>4.4</b>	<b>4.7</b>
<b>Modikwa (50%)</b>	<b>24</b>									
UG2 Reef		Proved	7.8	9.4	4.41	4.44	34	42	1.1	1.3
		Probable	28.4	28.4	4.15	4.15	118	118	3.8	3.8
		<b>Total</b>	<b>36.2</b>	<b>37.8</b>	<b>4.21</b>	<b>4.22</b>	<b>152</b>	<b>160</b>	<b>4.9</b>	<b>5.1</b>
<b>South Africa</b>										
Merensky, UG2, Platreef		Proved	937.4	981.1	3.19	3.05	2,991	2,992	96.2	96.2
		Probable	503.7	468.6	3.05	3.24	1,536	1,519	49.4	48.9
		<b>Total</b>	<b>1,441.2</b>	<b>1,449.8</b>	<b>3.14</b>	<b>3.11</b>	<b>4,527</b>	<b>4,511</b>	<b>145.5</b>	<b>145.1</b>
<b>Zimbabwe</b>										
Main Sulphide Zone (MSZ)		Proved	22.1	23.4	3.20	3.23	71	76	2.3	2.4
		Probable	20.0	21.2	3.29	3.32	66	71	2.1	2.3
		<b>Total</b>	<b>42.1</b>	<b>44.6</b>	<b>3.25</b>	<b>3.27</b>	<b>137</b>	<b>147</b>	<b>4.4</b>	<b>4.7</b>
<b>South Africa and Zimbabwe</b>										
All reefs: Merensky, UG2, Platreef, MSZ		Proved	959.6	1,004.5	3.19	3.05	3,062	3,068	98.4	98.6
		Probable	523.7	489.9	3.06	3.24	1,601	1,590	51.5	51.1
		<b>Total</b>	<b>1,483.3</b>	<b>1,494.4</b>	<b>3.14</b>	<b>3.11</b>	<b>4,663</b>	<b>4,658</b>	<b>149.9</b>	<b>149.8</b>

4E grade is the sum of platinum, palladium, rhodium and gold grades in grams per tonne (g/t).

\* Anglo American Platinum uses value-based planning for the creation of the life-of-asset plans. The plans take cognisance of all modifying factors which underpin the eventual economic extraction over a period equal to the Reserve life.



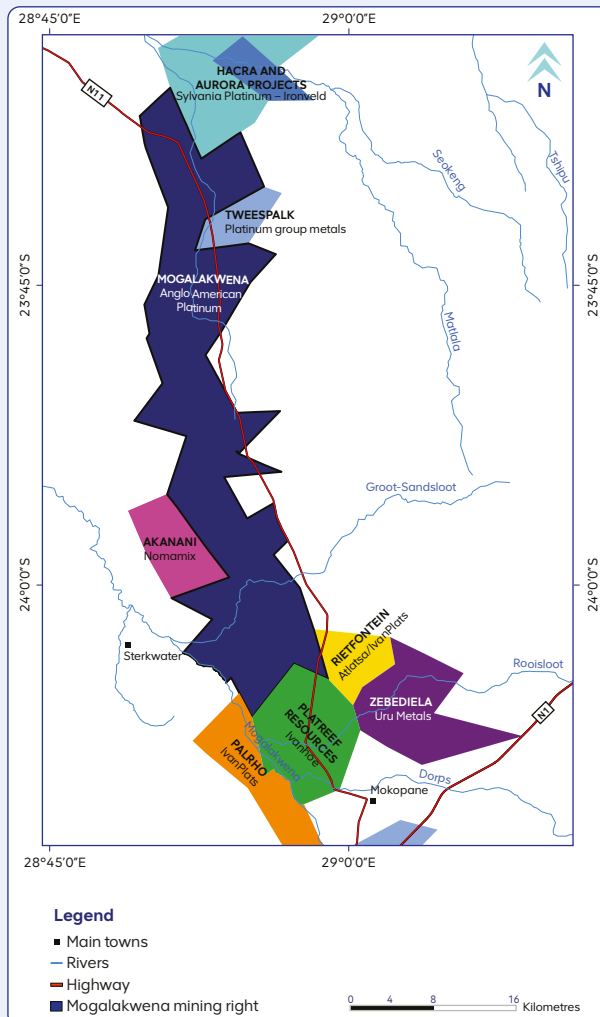
# The operations – estimates and reconciliation

as at 31 December 2024



## Mogalakwena

**Anglo American Platinum Limited interest: 100%**  
**Management structure: managed**



### Location

Mogalakwena is located 30km north-west of the town of Mokopane in the Limpopo province, South Africa.

It is wholly owned and managed by Anglo American Platinum, with a consolidated mining right that stretches along multiple farms extending over 50km.

### Property description

The mine is at steady-state production and is well positioned for optimised organic growth to deliver maximum value. The mine strategy is focused on delivering value from its world-class polymetallic orebody, delivering safe and sustainable production, targeting to be the lowest-cost producer, and setting up strong stakeholder relationships. Mogalakwena extracts the Platreef, the primary PGM-bearing horizon developed in the Northern Limb of the Bushveld Complex.



### Competence

	Mineral Resources	Ore Reserves
<b>Competent Persons</b>	Ian Glacken*	Michael Seymour**
<b>Role</b>	Executive consultant	Mining engineer
<b>Relevant qualifications</b>	BSc (hons) (geology), MSc (mining geology and geostatistics)	BSc Eng (mining engineering), GDE (mineral economics)
<b>Professional organisation</b>	AusIMM, Fellow CP	IOM3, member
<b>Membership number</b>	107194	0482718
<b>Relevant experience</b>	15 years	20 years

\* Employed by Snowden Optiro.

\*\* Associate of Snowden Optiro.

# The operations – estimates and reconciliation continued

as at 31 December 2024

## Mogalakwena continued

### Brief history

The earliest recorded mining activity commenced on the farms Tweefontein and Sandsloot in 1926. Trenching, drilling and bulk sampling preceded the start of mining activities on the Zwartfontein, Sandsloot and Vaalkop farms. This was accompanied by construction and commissioning of the beneficiation plant.

Mining and production stopped after the 1929 Great Depression and only resumed in 1968 by Johannesburg Consolidated Investments (JCI), now Anglo American Platinum. Between 1968 and 1989, building on a comprehensive field mapping and sampling programme, significant volumes of exploration drilling were completed along the strike extent on the Northern Limb. The results of this exploration allowed for effective target assessment and vectored focus on the originally identified properties of Sandsloot, Tweefontein and Vaalkop, along with Overysel immediately to the north.

In the late 1980s and early 1990s, evaluation activities were undertaken, including bulk sampling and underground trial mining. The outcome of these activities became key drivers in adopting a high-tonnage, low-grade extractive method for the extraordinarily thick and variable Platreef orebody. Bulk open-pit was selected as the preferred mining method, with primary production beginning at Sandsloot in 1992. This was followed by extensive exploration programmes and development of the Zwartfontein South pit in the early 2000s. This expansion continued with development of the Central and North pits in 2006 and 2008, respectively, now the primary mining areas of Mogalakwena.

In 2019, Anglo American Platinum acquired Central Block and Kwanda North prospecting rights from Atlatsa Resources. The Central Block and Kwanda North areas have been incorporated into the Mogalakwena mining right but have not been classified as Mineral Resources. Further exploration and evaluation work is underway.

Underground Mineral Resources were declared in 2022 following the completion of a scoping study in the Sandsloot area, with additional Mineral Resources from the Mogalakwena South and Central area declared in 2024.

### Mineral rights

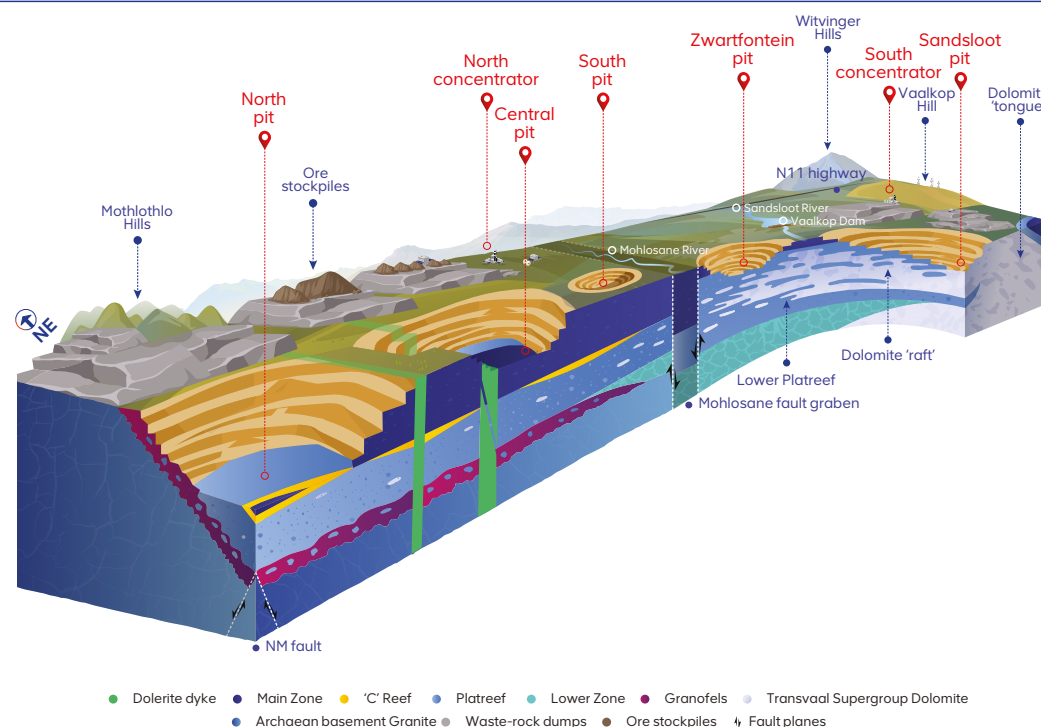
The Mogalakwena mining right covers an area of 37,211 ha (including the Central Block and Kwanda North mineral rights). Anglo American Platinum holds a converted mining right under the DMRE reference LP 50 MR, valid from July 2010 to July 2040.

There are no known impediments to the mining right. Application to extend the mining right will be submitted at the appropriate time and there is reasonable expectation that such extension will not be withheld.

### Brief geological description

The Platreef orebody occurs in the Northern Limb of the Bushveld Complex. In broad terms, the orebody can be described as a multiple pulse mafic magmatic horizon, dominated by pyroxene-rich rock types, overlain by main zone gabbro-norites. It is underlain by a succession of sedimentary units of the Transvaal Supergroup ranging from shales and banded ironstones in the south, to dolomites in the centre, on-lapping onto Archaean basement granites and gneisses in the northern parts.

### Schematic diagram of the Bushveld Complex at Mogalakwena (Northern Limb)



Schematic drawing compiled by Mogalakwena geology team, not to scale

# The operations – estimates and reconciliation continued

as at 31 December 2024

## Mogalakwena continued

The interaction between the Platreef and the footwall lithologies has resulted in an array of hybrid lithologies observed throughout the Northern Limb. It is locally typified by the extensive assimilation of Transvaal Supergroup sedimentary footwall fragments, known as xenoliths and the generation of the granofelsic interaction horizon along the bottom contact in the north.

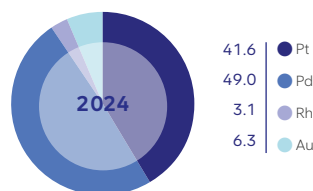
The Platreef strikes north-north-west/south-south-east across the length of the Mogalakwena mineral right, dipping at an average angle of 40° to 50° to the west with local flattening occurring. Within the mining right, the Platreef is structurally affected by dolerite dykes ranging between 5m and 40m in width and several predominantly lateral fault

systems such as the Drenthe, Mohlosane, NM and Pit fault systems, which are orientated in a north-east/south-west direction and are dipping between 60° and 85° towards the south-east.

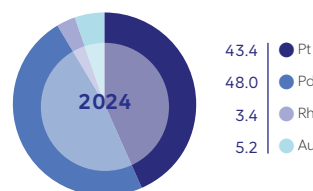
The fault systems display normal to reverse fault displacements ranging between 50m and 600m, with the up-thrown blocks proving favourable to mine design. The dykes and Platreef adjacent to major fault systems constitute areas of no mineralisation and are discounted as geological loss zones. The Platreef hosts significant dolomite inclusions in the southern region of the mining area, which also constitute geological loss zones.

► For a description of the Mineral Resources estimation and classification process see **pages 23 to 26** of this report.

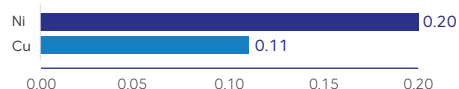
Mogalakwena open-pit Platreef 4E metal split (%)



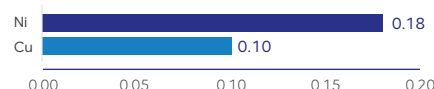
Mogalakwena underground Platreef 4E metal split (%)



Mogalakwena open-pit Platreef base metal grades (%)



Mogalakwena underground Platreef base metal grades (%)



## Reasonable prospects for eventual economic extraction

The following factors are considered when assessing reasonable prospects for eventual economic extraction of the declared Mineral Resources:

- Legal: Mogalakwena adheres to regulatory requirements and has the requisite permits and licences for exploration and mining
- Environmental, social and governance: Our sustainability strategy framework considers the local communities, the environment and land use as well as corporate governance, as inputs for the RPEEE assessment. Mogalakwena will need to obtain the surface rights for the properties that could be affected by future surface infrastructure. Environmental authorisations will be applied for as and when required
- Geology: The declared Mineral Resources are supported by well-informed geological and Mineral Resource models that have considered the key geological features that exert control on mineralisation
- Mining method: The operation comprises both open-pit and underground mining methods. Open-pit mining is conducted using conventional drill, blast, load and haul surface-mining methods. Underground mining is based on long-hole open-stope mine designs supported by techno-economic studies indicating long-term economic viability
- Metallurgical and processing: Sufficient geo-metallurgical and mineralogical test work has been carried out on the Platreef and recovery potential is considered. Material is currently processed on and off-mine
- Economics: Open-pit Mineral Resources are reported at 1.00 4E g/t grade cut-off. The Mineral Resources reported are confined within a factored revenue pit-shell, using the latest pit optimisation revenue factor shells, corresponding to the 1.5 revenue factor basket metal prices. Underground Mineral Resources are reported at a 2.00 4E g/t grade cut-off confined to techno-economic studies target areas. The parameter inputs are based on stable, long-term economic assumptions, metal prices and exchange rates catering for historical, actual and forecast metal prices

# The operations – estimates and reconciliation continued

as at 31 December 2024

## Mogalakwena continued

- Mining infrastructure: The current mining infrastructure will be sufficient to continue mining. Mining of the Mineral Resources below the current planned open-pit and underground limits will require additional access infrastructure
- Other factors such as market assessments are adequately assessed in various levels of technical studies.

	Units	Platreef open-pit	Platreef underground
<b>Mineral Resource assumptions</b>			
Grade cut-off 4E	4E g/t	1.0	2.0
Average density	g/cm <sup>3</sup>	3.1	3.2
<b>Ore Reserve modifying factors</b>			
Mining dilution	%	5.2	—
Stripping ratio (waste:ore)		7.7	—
4E concentrator recoveries	%	80.3	—
Mine call factor	%	100.0	—

### Mining method and infrastructure

The current mining of the orebody is by open-pit methods whereby material is extracted in vertical benches to create a large open excavation. Benches are mined from top to bottom and are accessed by means of haul roads in the hanging wall and footwall to connect multiple benches to surface entry and exit points. Open-pit mining is a widely used surface-mining method to extract minerals relatively close to surface by means of drilling, blasting, loading-and-hauling operations. Material is moved by means of truck-and-shovel to the processing plants, stockpiles and waste-rock dumps along a network of constructed surface roadways.

The walls of the open-pit excavation are mined at the maximum allowable slope angle achievable within the specified geotechnical constraints, and berm-offsets are created between benches to reduce the potential risk of rock falls along the overall slope. The final shape of the excavation is determined by the overall economics of the extraction process and is generally subdivided into three-dimensional phases expanding

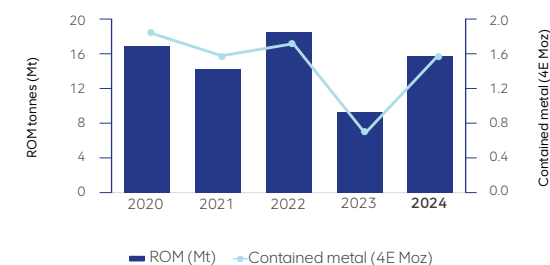
the open-pit to maximise the potential net present value of the mine within specified constraints.

The mining infrastructure comprises all necessary surface facilities to support mining operations and concentrate production. Current mining areas comprise the Zwartfontein South pit and Mogalakwena Main pit (combined Central, North and South pits). Pit depths vary from 128m in the South pit to 283m in the North pit. The underground mining section is currently under prefeasibility and scoping studies.

Ore is milled on-mine at the North and South concentrators as well as at Baobab concentrator, which is located some 90km off-site. Deposition from the on-site concentrators is on two active tailings storage facilities (TSFs). The disposal of waste rock is undertaken at the five existing waste-rock dump (WRD) facilities, for material produced during all the development phases of the open-pit and exploration declines. The concentrate is transported to the Anglo American Platinum Polokwane smelter for further processing.

► For a description of the Ore Reserves estimation and classification process, see **pages 29 to 32** of this report.

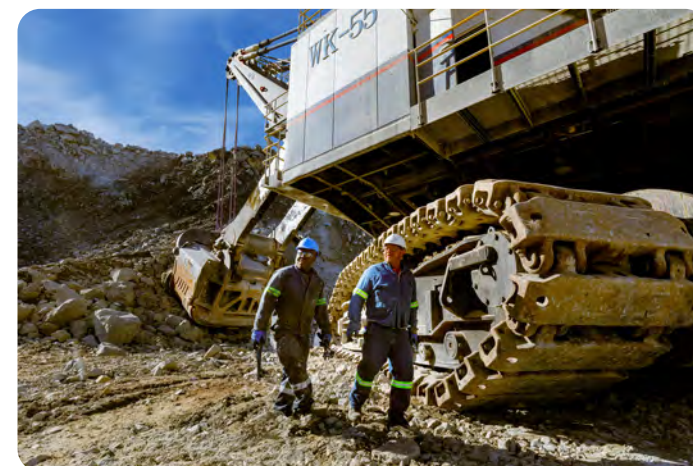
Mogalakwena Platreef production history (ROM)\*



\* In addition to the 2024 ROM production, 2.4Mt and 0.2 4E Moz were processed from the primary stockpile.



For additional details on the 2024 production information, see the operations review section, on **pages 72 and 73** of the integrated report.



MNC condition monitoring at Mogalakwena



# The operations – estimates and reconciliation continued

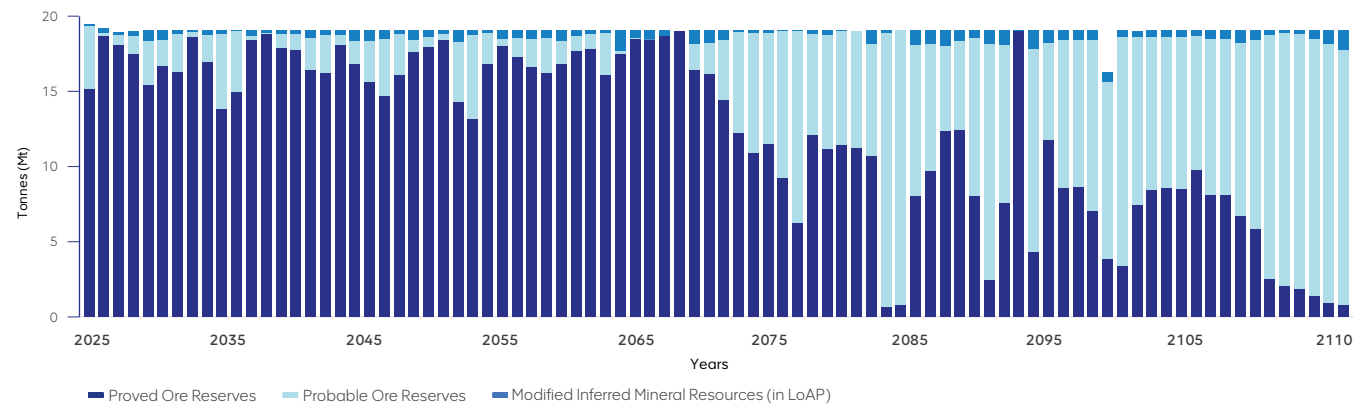
as at 31 December 2024

## Mogalakwena continued

### Mogalakwena life-of-asset profile

The life-of-asset schedule for Mogalakwena reflects the planned Platreef open-pit production in the approved life-of-asset plan and includes open-pit projects that have the necessary approvals that underpin the Ore Reserve declaration. The Reserve life increased to 86 years (2023: 74 years) and exceeds the current mining right expiry date of 2040 (16 years). The increase is an outcome of the net effect of pit optimisation and slightly reduced mining rates. An application to extend the mining right will be submitted at the appropriate time and there is reasonable expectation that such an extension will not be withheld.

The modified Inferred Mineral Resources in the life-of-asset plan are excluded from the Ore Reserves declaration, and assessments conducted indicate that the exclusion of these Inferred Mineral Resources has no impact on the current life of asset.

**Mogalakwena total ROM (milling) tonnes in life-of-asset plan**

### Ore Reserve estimates

		Tonnes (ROM) Mt		Grade 4E g/t		Contained metal 4E tonnes		Contained metal 4E Moz	
Mogalakwena (100%)	Classification	2024	2023	2024	2023	2024	2023	2024	2023
Platreef open-pit	Proved	792.9	813.1	3.04	2.91	2,414	2,366	77.6	76.1
	Probable	341.9	332.9	3.14	3.34	1,074	1,112	34.5	35.8
	<b>Total</b>	<b>1,134.8</b>	1,146.0	<b>3.07</b>	3.04	<b>3,488</b>	3,478	<b>112.2</b>	111.9
Platreef primary stockpile*	Proved	—	14.6	—	1.09	—	16	—	0.5
	Probable	57.3	40.9	1.33	1.47	76	60	2.4	1.9
	<b>Total</b>	<b>57.3</b>	55.5	<b>1.33</b>	1.37	<b>76</b>	76	<b>2.4</b>	2.4

\* The primary stockpiles are scheduled for future treatment.

# The operations – estimates and reconciliation continued

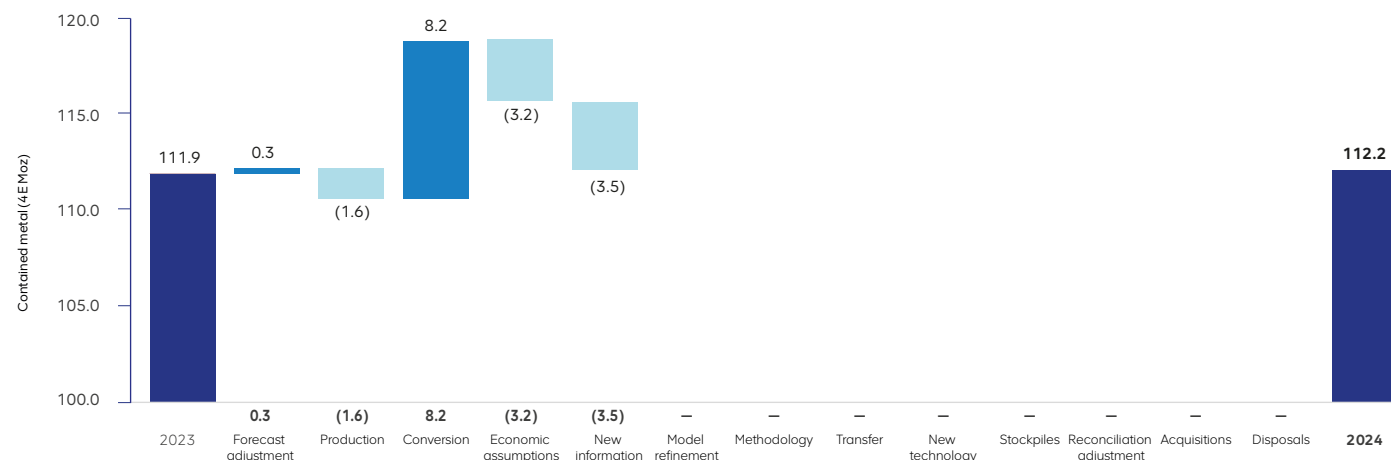
as at 31 December 2024

## Mogalakwena continued

### Platreef open-pit Ore Reserves reconciliation

The Platreef open-pit Ore Reserve 4E ounces increased slightly due to the net effect of pit optimisation that resulted from a slightly larger pit design. The extent of the increase was mostly offset by the reallocation of Sandsloot open-pit Ore Reserves to underground Mineral Resources, revised economic assumptions that resulted in increased cut-off grades, updated geological and Mineral Resources models within the life-of-asset pit shell, as well as annual production.

**Mogalakwena Platreef open-pit Ore Reserves**  
2023 – 2024 reconciliation (4E Moz)

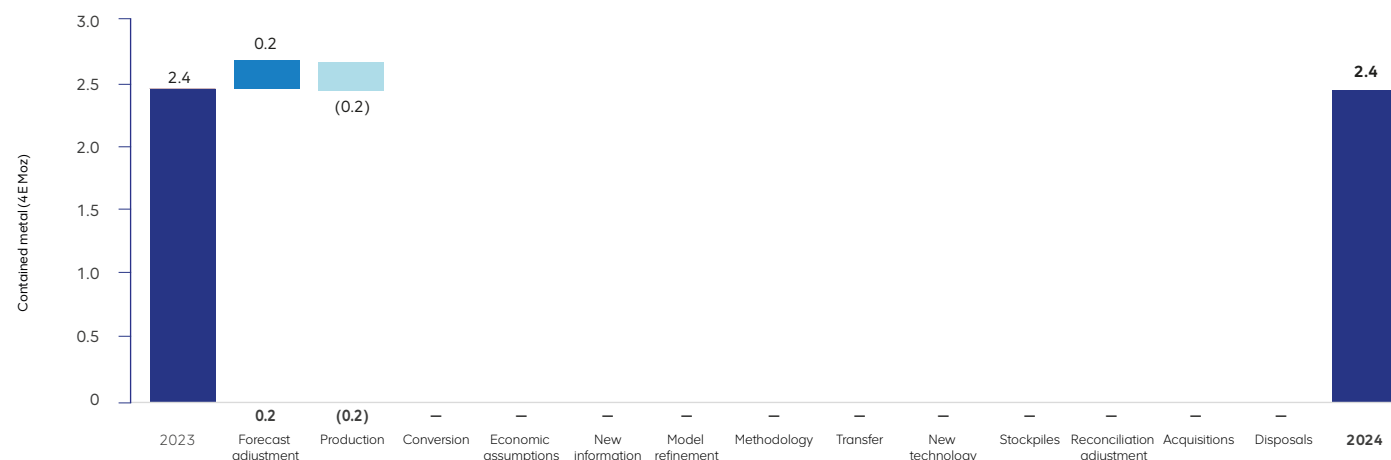


### Platreef primary stockpile Ore Reserves reconciliation\*

The Platreef primary stockpile Ore Reserve 4E ounces decreased slightly due to depletion and adjustment of the 2023 forecast adjustment stockpile movement.

\* Rounding of figures may cause computational discrepancies.

**Mogalakwena Platreef primary stockpile Ore Reserves**  
2023 – 2024 reconciliation (4E Moz)



# The operations – estimates and reconciliation continued

as at 31 December 2024

## Mogalakwena continued

### Exclusive Mineral Resource estimates

		Tonnes Mt		Grade 4E g/t		Contained metal 4E tonnes		Contained metal 4E Moz	
Mogalakwena* (100%)	Classification	2024	2023	2024	2023	2024	2023	2024	2023
Platreef open-pit	Measured	159.7	188.4	2.20	2.22	351	418	11.3	13.4
	Indicated	1,179.4	1,451.2	2.35	2.33	2,775	3,381	89.2	108.7
	Measured and Indicated	1,339.2	1,639.5	2.33	2.32	3,126	3,799	100.5	122.2
	Inferred	263.6	264.9	1.62	1.63	427	432	13.7	13.9
	Total	1,602.8	1,904.4	2.22	2.22	3,553	4,231	114.2	136.0
Platreef underground**	Measured	1.1	—	6.57	—	7	—	0.2	—
	Indicated	52.8	43.0	5.52	4.78	291	205	9.4	6.6
	Measured and Indicated	53.8	43.0	5.54	4.78	298	205	9.6	6.6
	Inferred	157.4	101.3	4.34	3.85	683	390	22.0	12.5
	Total	211.2	144.3	4.65	4.13	981	595	31.5	19.2
Platreef stockpile	Measured	—	2.7	—	3.28	—	9	—	0.3
	Indicated	2.7	—	3.00	—	8	—	0.3	—
	Measured and Indicated	2.7	2.7	3.00	3.28	8	9	0.3	0.3
	Inferred	—	—	—	—	—	—	—	—
	Total	2.7	2.7	3.00	3.28	8	9	0.3	0.3

\* A 1.00 4E g/t cut-off grade is used to define Platreef open-pit Mineral Resources and a 2.00 4E g/t cut-off grade is used to define Platreef underground Mineral Resources (excluding oxidised and calc-silicate stockpile material for which a 3.00 4E g/t cut-off grade is applied).

\*\* The Mogalakwena South and Central Platreef underground Mineral Resources are confined to an underground target area identified through scoping studies. The scoping studies are based on technical and economic assumptions that are preliminary in nature and include Inferred Mineral Resources which are insufficient to provide certainty that the conclusions of the scoping studies will be realised. The Sandsloot Platreef underground Mineral Resources declaration is supported by a prefeasibility study. (See ► [pages 9 and 21](#)).

# The operations – estimates and reconciliation continued

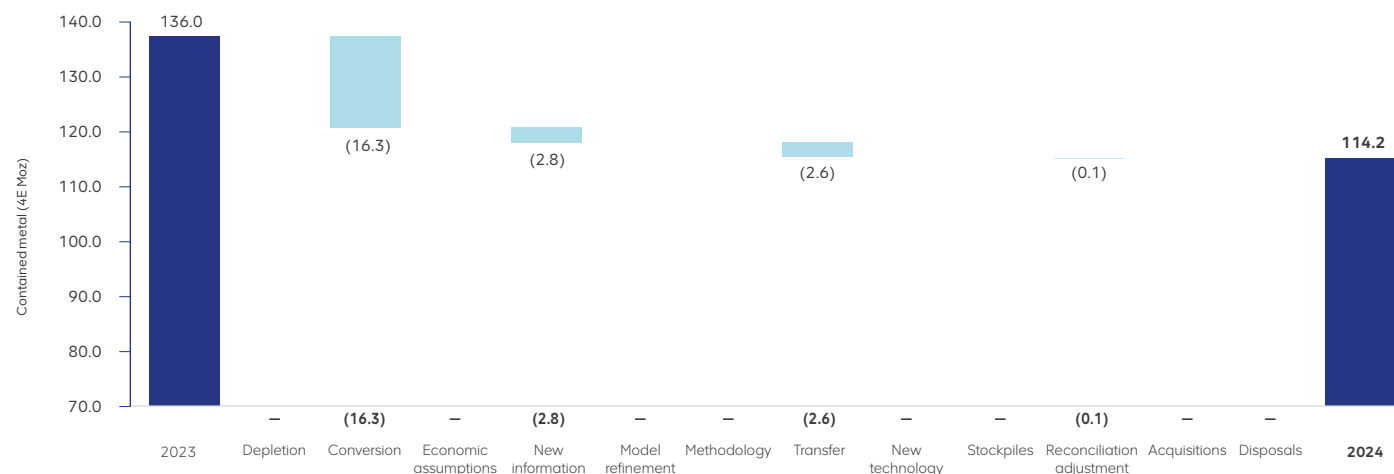
as at 31 December 2024

## Mogalakwena continued

### Platreef open-pit exclusive Mineral Resources reconciliation

The Platreef open-pit exclusive Mineral Resources 4E ounces decreased due to conversion of Mineral Resources to Ore Reserves following an updated life-of-asset plan, the reallocation of Mineral Resources to Mineralisation following reasonable prospects for eventual economic extraction assessments, as well as the transfer of open-pit Mineral Resources to underground Mineral Resources at Sandsloot.

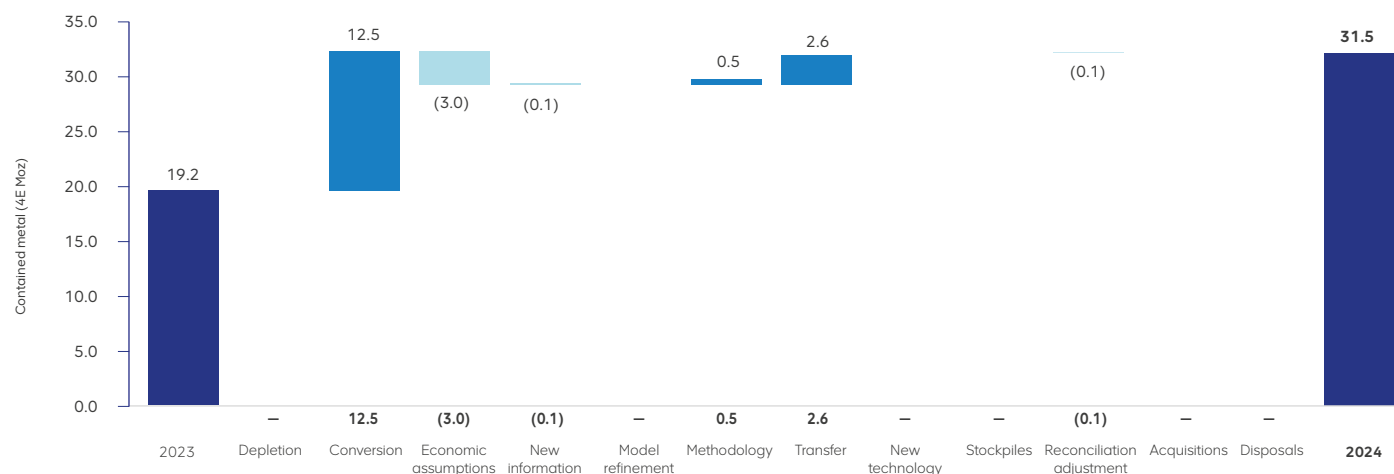
**Mogalakwena Platreef open-pit exclusive Mineral Resources**  
2023 – 2024 reconciliation (4E Moz)



### Platreef underground exclusive Mineral Resources reconciliation

The Platreef underground exclusive Mineral Resources 4E ounces increased substantially due to the declaration of Mineral Resources at Mogalakwena South and Central areas after the completion and approval of a scoping study as well as the transfer of open-pit Mineral Resources to underground Mineral Resources at Sandsloot. The extent of the increase was reduced by the reallocation of Mineral Resources to Mineralisation due to increase in cut-off grades (1.30 4E g/t to 2.00 4E g/t) following reasonable prospects for eventual economic extraction assessments.

**Mogalakwena Platreef underground exclusive Mineral Resources**  
2023 – 2024 reconciliation (4E Moz)



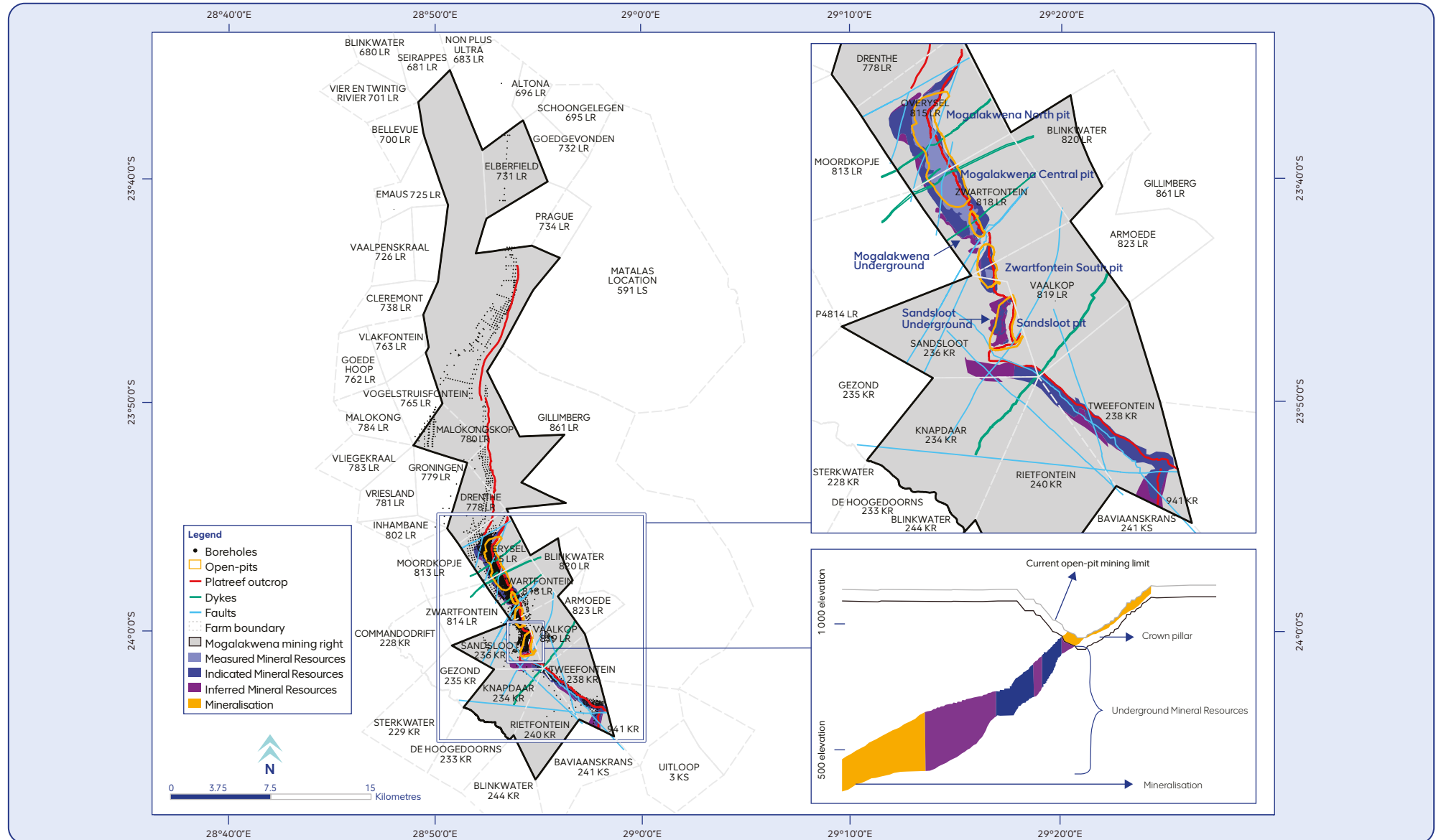


# The operations – estimates and reconciliation continued

as at 31 December 2024

## Mogalakwena continued

### Mogalakwena Platreef Mineral Resources classification map



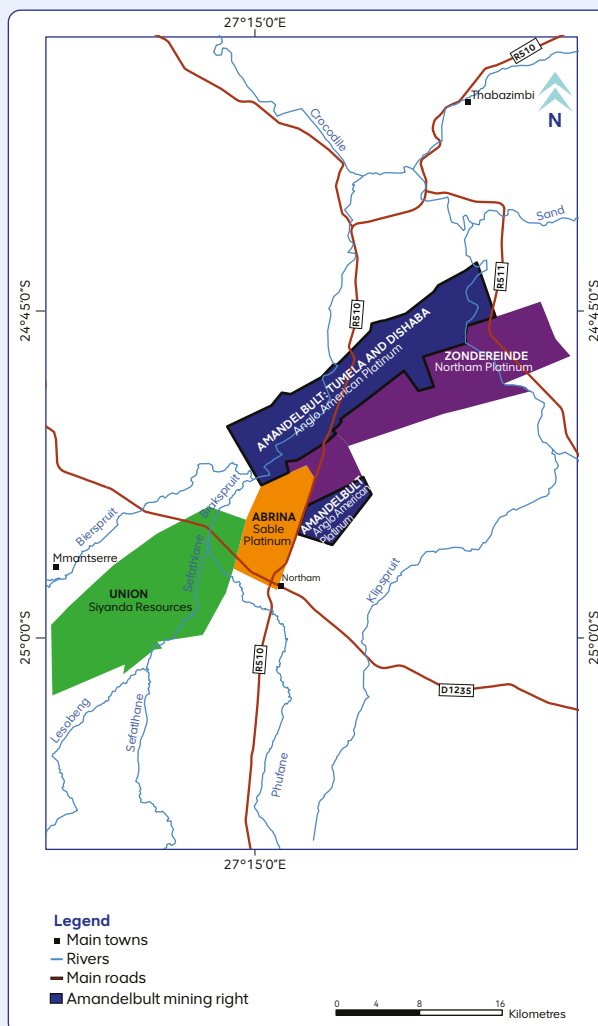
# The operations – estimates and reconciliation continued

as at 31 December 2024



## Amandelbult

Anglo American Platinum Limited interest: 100%  
Management structure: managed

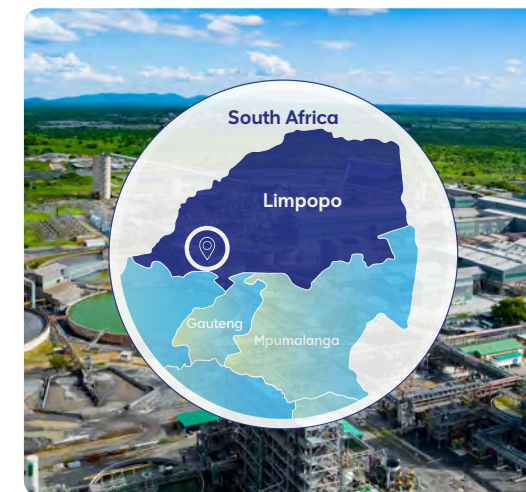


## Location

Amandelbult is located in the Limpopo province, between the towns of Northam and Thabazimbi, on the North-western Limb of the Bushveld Complex.

## Property description

Amandelbult comprises two mines: Dishaba and Tumela. The primary reef mined is the UG2 Reef, with limited mining of the Merensky Reef. It is at a steady-state phase, with specific focus on modernising its conventional mining activities to enable an improvement on the cost curve.



## Competence

	Mineral Resources	Ore Reserves
Competent Persons	Jeremy Witley*	Jon Hudson**
Role	Head of Mineral Resources	Associate principal mining engineer
Relevant qualifications	BSc (hons) (geology), MSc (mining engineering)	BEng (hons) (mining), MBA
Professional organisation	SACNASP, PrSciNat	ECSA, member
Membership number	400181/05	20060042
Relevant experience	23 years	20 years

\* Employed by The MSA Group.

\*\* Associate of the MSA Group.

# The operations – estimates and reconciliation continued

as at 31 December 2024

## Amandelbult continued

### Brief history

Soon after the discovery of PGMs in the eastern Bushveld Complex in the 1920s, attention was focused on the geologically similar, but further exposed, western Bushveld Complex. The discovery of the Merensky Reef near Rustenburg in 1925 prompted exploration in other parts of the western Bushveld Complex, including the Amandelbult area.

Rustenburg Platinum Mines Limited (Anglo American Platinum) acquired the mineral rights to the farm Amandelbult in 1964, and in 1974 the farm Elandskuil from Amcor. A mining lease was applied for in 1974.

Mining operations at Amandelbult started on the farm Schilpadsnest, but due to reduced PGM demand, operations were curtailed in January 1975, with only essential maintenance work continuing. Production resumed on a small scale in March 1976 due to improvements in the market, building up to current levels of production.

Mining was initially focused on the Merensky Reef, which is shallower than the UG2 Reef and contains more gold and base metal credits compared with the UG2 Reef. With the depletion of the Merensky Reef, the mine transitioned to mining the UG2 Reef, which is rich in chromitite, with a lower gold and base metal content but slightly higher rhodium grades compared with the Merensky Reef.

In 2009, Amandelbult was split into two mines, Dishaba and Tumela, for which Ore Reserves and Mineral Resources are reported separately. In line with the UG2 Reef mining strategy, the feasibility study for two chromite recovery plants was approved in 2013. The plants were commissioned in 2016 and are currently in operation.

In 2017, Amandelbult disposed of a portion of the Mineral Resources south-west of Tumela to Northam Platinum as part of a strategic repositioning. Amandelbult acquired the block of ground from Northam Platinum strategic to its project expansion in 2021.

### Mineral rights

The mining right covers an area of 12,504ha. Anglo American Platinum holds a converted mining right under the DMRE reference LP 48 MR, valid from July 2010 to July 2040.

There are no known impediments to the mining right. Application to extend the mining right will be submitted at the appropriate time and there is reasonable expectation that such extension will not be withheld.

### Brief geological description

Amandelbult is located in the North-western Limb of the Bushveld Complex, where the Merensky and UG2 Reefs strike north-east/south-west over approximately 22km and dip at 16° to 30° in a south-easterly direction. The Merensky Reef is variable in thickness, ranging from 1 cm (contact reef facies) to greater than 140cm, over large areas. The reef comprises up to five different facies, namely Normal Merensky Reef (NMR), Near Pseudo-Reef (NP2), Pothole Reef on Pseudo-Reef (PHR), Pothole Contact (including transition zone and contact zone) and Haakdoorndrift Merensky Reef (HDD) facies. Each facies type exhibits unique geological, geochemical and mineralisation characteristics and plays a fundamental role in geozone delineations for Mineral Resource estimation.

The UG2 Reef occurs between 15m and 60m below the Merensky Reef and dips at 18° to 27° in a south-easterly direction. The UG2 Reef commonly comprises a 60cm to 100cm main chromitite layer overlain by up to three chromitite layers (UG2 leaders) of varying thickness from 5cm to 30cm, separated by feldspathic pyroxenite. The immediate footwall of the UG2 is usually a pegmatoidal feldspathic pyroxenite, which varies in thickness from a few centimetres up to 100cm.

The Upper Zone transgression to the west of the Amandelbult (known as the northern gap) onto Main Zone, Critical Zone and Transvaal Supergroup floor, results in a rapid steepening of the dip toward the extreme north-eastern portion of the mining area as well as an abrupt change in the strike of the reefs in the south-western portion of the mining area. Dolerite dykes and sills of the Pilanesberg and Karoo-aged lamprophyre dykes occur within the mining area. These typically trend north-west/south-east and their thicknesses vary from centimetres up to approximately 50m. Potholes of variable sizes as well as a range of often iron-rich ultramafic pegmatites (locally termed IRUPs), are present. Faults of various sizes occur throughout the lease area.

The largest faults occur in the Middellaagte area, trending north-west/south-east with associated throws of up to 500m confining a 2.5km wide graben.

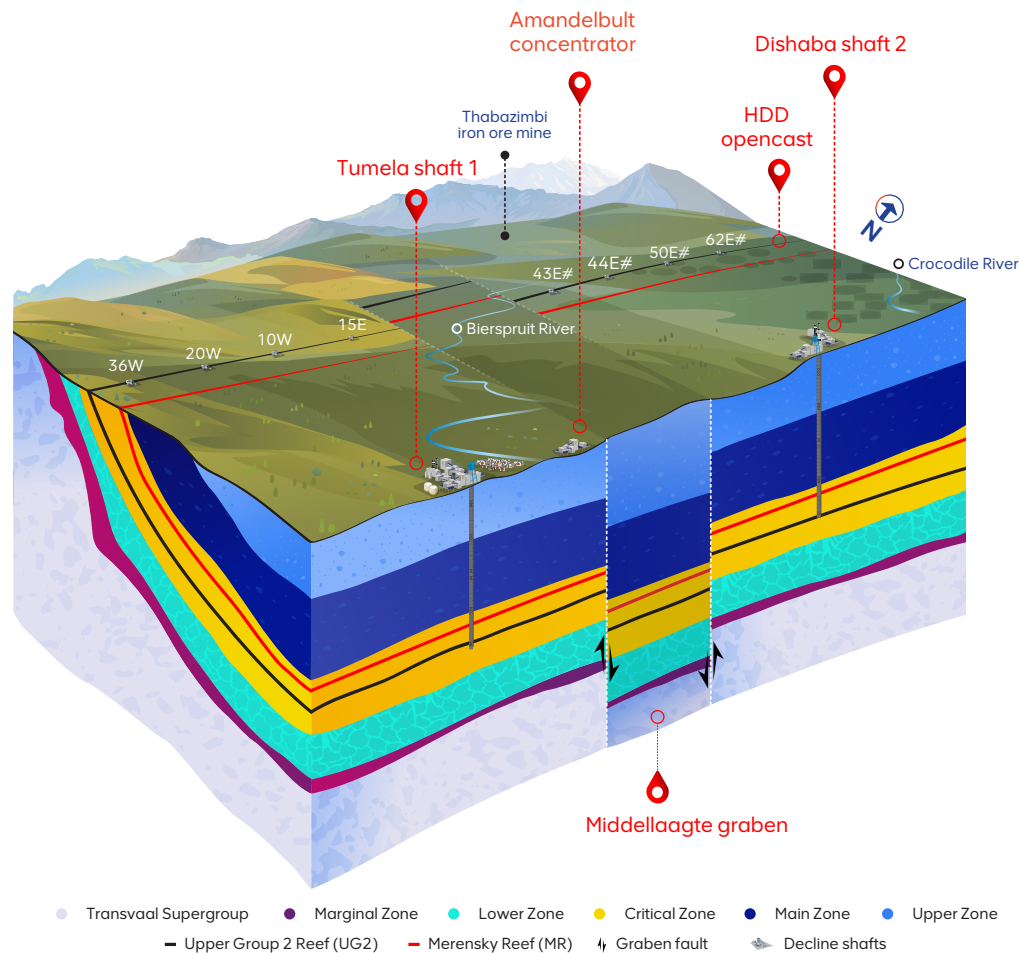
► For a description of the Mineral Resources estimation and classification process see **pages 23 to 26** of this report.

# The operations – estimates and reconciliation continued

as at 31 December 2024

## Amandelbult continued

### Schematic diagram of the Bushveld Complex at Amandelbult (Western Limb)



### Reasonable prospects for eventual economic extraction

The following factors are considered when assessing reasonable prospects for eventual economic extraction of the declared Mineral Resources:

- Legal: Amandelbult adheres to all regulatory requirements and has the requisite permits and licences for exploration and mining
- Environmental, social and governance: Our sustainability strategy framework considers the local communities, the environment and land use as well as corporate governance, as inputs for the RPEEE assessment
- Geology: The declared Mineral Resources are supported by well-informed geological and Mineral Resource models that have considered the key geological features that exert control on mineralisation. Merensky Reef is estimated over an optimised resource cut, while the resource cut for the UG2 Reef may include unavoidable dilution
- Mining method: The operation mainly utilises an underground conventional (scattered breast) mining method, with a portion of the mine utilising mechanised (narrow reef and low profile) mining
- Metallurgical and processing: Sufficient geo-metallurgical and mineralogical test work has been carried out for the reefs declared and recovery potential is considered. The mine has sufficient plant data to predict recovery potential
- Economics: The economic parameter inputs are based on stable, long-term economic assumptions, metal price and exchange rates catering for historical, and actual and forecast metal prices. Cut-off grades were calculated from input assumptions on current costs and the revenue based on the long-term price forecast, with a revenue factor applied. Contact reef facies of Merensky Reef did not meet the required RPEEE cut-off grade for the 2024 reporting assessments and was excluded from the Mineral Resources

Schematic drawing compiled by Amandelbult geology team, not to scale.



# The operations – estimates and reconciliation continued

as at 31 December 2024

## Amandelbult continued

- Mining infrastructure: The current mining infrastructure will be sufficient to continue mining. Mining of the Tumela Merensky Pothole Reef and underlying UG2 in the subshaft block as well as deeper areas of Dishaba below current infrastructure will require additional access infrastructure
- Technology: Current technology is deemed inadequate for mining any material below the 75°C isotherm line, and this material has been excluded from the declared Mineral Resources
- Other factors such as market assessments and are adequately assessed in various levels of technical studies.

### Mining method and infrastructure

The primary mining method at Amandelbult is scattered breast mining for both Dishaba and Tumela mines and has been used since mining began in 1973.

Conventional scattered breast mining is preceded by haulage development below reef, parallel to strike. Access to the reef horizon is developed via south or north cross-cuts. On-reef true dip raises or winzes connect to cross-cuts on different levels via step overs and travelling ways. The ore passes are generally done by inverse drilling from the reef horizon down to the cross-cut. Roll-out of modernised equipment on the stoping horizon is ongoing to address safety and efficiency concerns, including the introduction of cycle

mining, split panels using throw blasting and water-jet cleaning to eliminate the use of scraper winches.

Narrow reef and low profile mechanised mining methods have been implemented at the 15E dropdown project area since 2019. The mechanised section represents a small proportion of the current production at Tumela.

The operation has two primary vertical shafts, Dishaba and Tumela. Current access infrastructure includes three vertical secondary shafts and seven decline shaft systems to transport rock, employees and material, with mining on the Merensky and UG2 Reef horizons. The operating depth for current workings extends from surface to 1.3km. The opencast section is now on care and maintenance and undergoing rehabilitation.

The UG2 Reef ore extracted is beneficiated at the two on-site concentrating facilities. The residue from the concentrators is further processed in the two chromite recovery plants. The final tails produced are pumped into the two active tailings storage facilities. The Merensky concentrator is currently on care and maintenance. The concentrate is transported to various Anglo American Platinum smelters for further processing.

► For a description of the Ore Reserves estimation and reporting process, see **pages 29 to 32** of this report.



Sample preparation in the x-ray instrumentation room at the Eastern Bushveld Regional Laboratory (EBRL) – Polokwane Metallurgical Complex

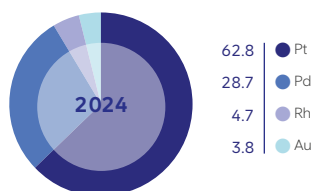
# The operations – estimates and reconciliation continued

as at 31 December 2024

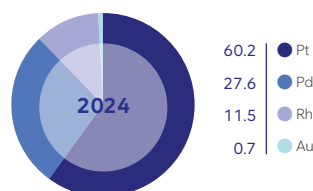
## Amandelbult continued

### Dishaba Mine (100%)

Dishaba Merensky Reef 4E metal split (%)

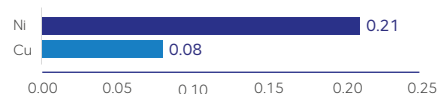


Dishaba UG2 Reef 4E metal split (%)

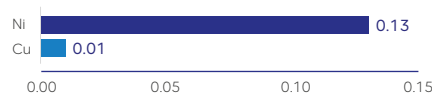


UG2 Reef chromite grade: 31.2%

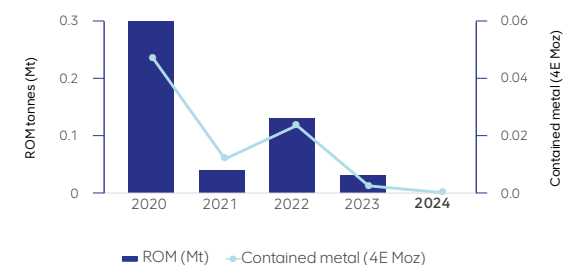
Dishaba Merensky Reef base metal grades (%)



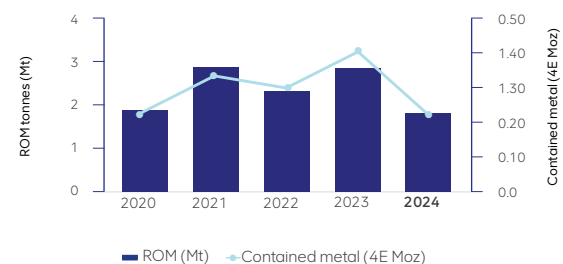
Dishaba UG2 base metal grades (%)



Dishaba Merensky Reef production history (ROM)



Dishaba UG2 Reef production history (ROM)



	Units	Merensky	UG2
<b>Mineral Resource assumptions</b>			
Average geological loss	%	24.3	19.3
Minimum resource cut	cm	120.0	120.0
Average density	g/cm <sup>3</sup>	3.1	4.0
<b>Ore Reserve modifying factors</b>			
Mining loss factor	%	5.4	4.9
Mining dilution	%	32.1	17.4
Planned stoping width	cm	145.7	160.2
4E concentrator recoveries	%	83.4	85.0
Mine call factor	%	100	100



For additional details on the 2024 production information, see the operations review section, on **pages 74 and 75** of the integrated report.

# The operations – estimates and reconciliation continued

as at 31 December 2024

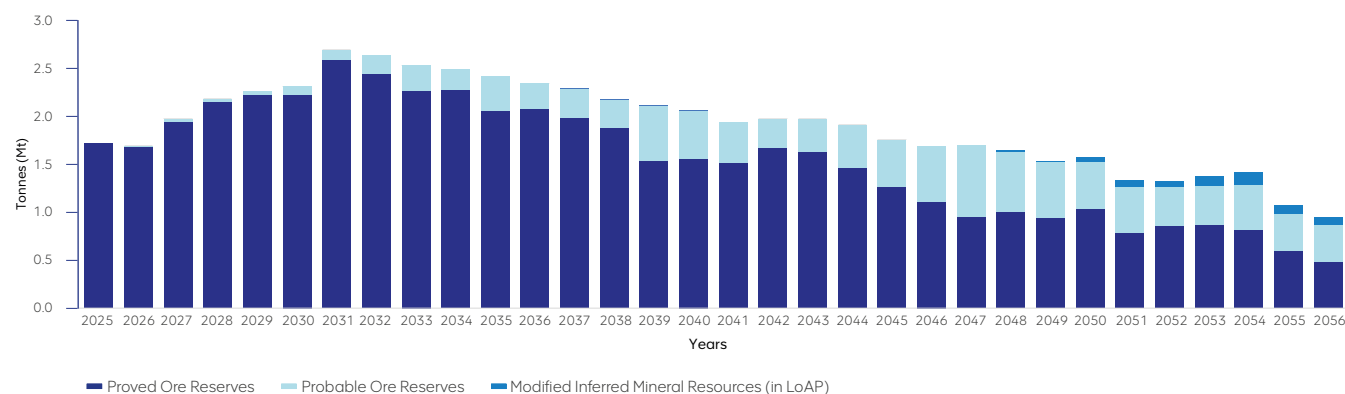
## Amandelbult continued

### Dishaba life-of-asset profile

The life-of-asset schedule for Dishaba reflects the combined reefs' planned production in the approved life-of-asset plan and includes projects that have the necessary approvals that underpin the Ore Reserve declaration. The anticipated Reserve life increased to 32 years (2023: 25 years) and exceeds the current mining right expiry date of 2040 (16 years). The increase is due to updated economic assumptions that resulted in the tail cut extending from year 2048 to 2056.

An application to extend the mining right will be submitted at the appropriate time and there is reasonable expectation that such an extension will not be withheld.

Dishaba total ROM tonnes in life-of-asset plan



## Ore Reserve estimates

		Tonnes (ROM) Mt		Grade 4E g/t		Contained metal 4E tonnes		Contained metal 4E Moz	
Amandelbult – Dishaba (100%)	Classification	2024	2023	2024	2023	2024	2023	2024	2023
Merensky Reef	Proved	5.4	1.9	5.12	4.28	27	8	0.9	0.3
	Probable	4.7	4.1	5.28	5.82	25	24	0.8	0.8
	<b>Total</b>	<b>10.1</b>	<b>6.0</b>	<b>5.19</b>	<b>5.34</b>	<b>52</b>	<b>32</b>	<b>1.7</b>	<b>1.0</b>
UG2 Reef	Proved	44.2	44.3	4.34	4.38	192	194	6.2	6.2
	Probable	7.6	6.5	4.45	4.58	34	30	1.1	1.0
	<b>Total</b>	<b>51.7</b>	<b>50.8</b>	<b>4.36</b>	<b>4.40</b>	<b>225</b>	<b>224</b>	<b>7.2</b>	<b>7.2</b>

# The operations – estimates and reconciliation continued

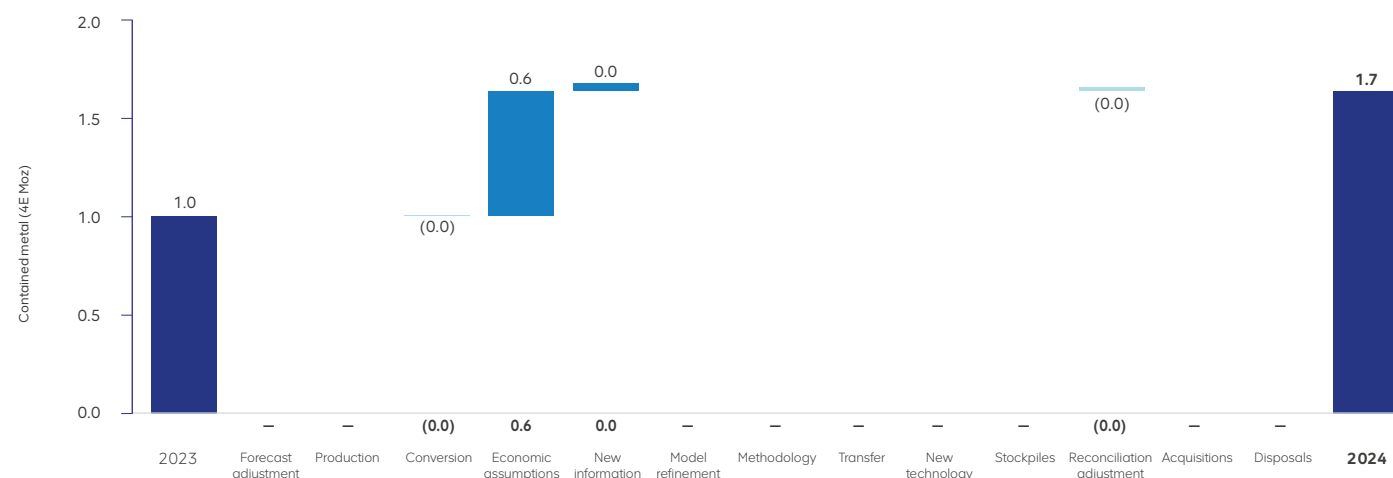
as at 31 December 2024

## Amandelbult continued

### Merensky Reef Ore Reserves reconciliation

The Merensky Reef Ore Reserve 4E content increased due to the conversion of Mineral Resources to Ore Reserves following the application of revised economic assumptions.

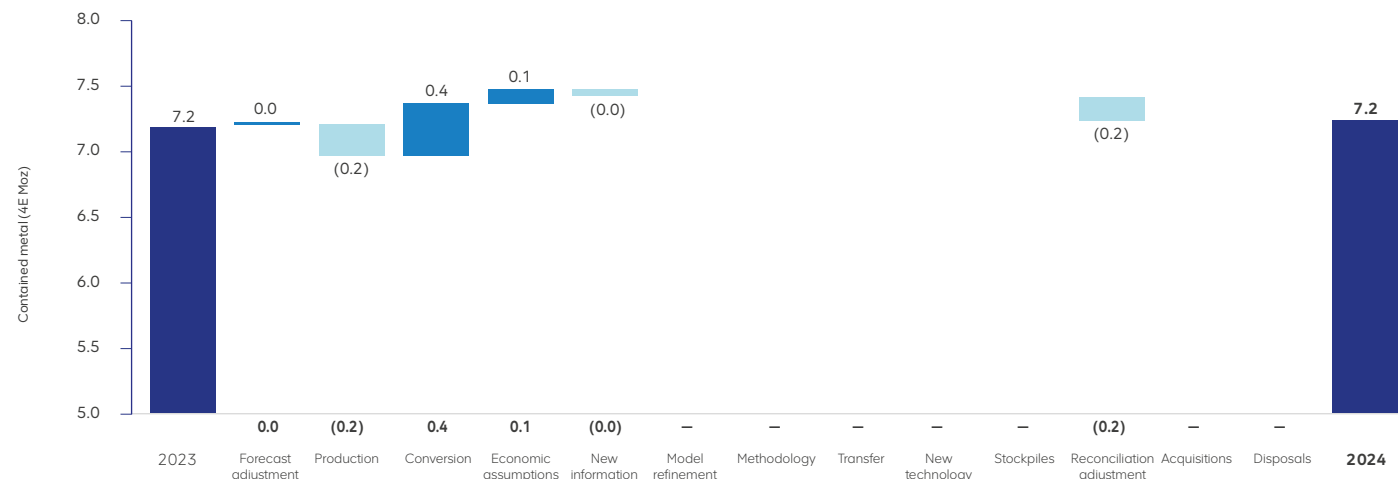
**Dishaba Merensky Reef Ore Reserves**  
2023 – 2024 reconciliation (4E Moz)



### UG2 Reef Ore Reserves reconciliation

The UG2 Reef Ore Reserve 4E content remained largely unchanged. The minor changes are due to conversion of Mineral Resources to Ore Reserves following the application of revised economic assumptions and mine design changes, which were offset by annual production.

**Dishaba UG2 Reef Ore Reserves**  
2023 – 2024 reconciliation (4E Moz)





# The operations – estimates and reconciliation continued

as at 31 December 2024

## Amandelbult continued

### Exclusive Mineral Resource estimates

		Tonnes Mt		Grade 4E g/t		Contained metal 4E tonnes		Contained metal 4E Moz	
Amandelbult – Dishaba (100%)	Classification	2024	2023	2024	2023	2024	2023	2024	2023
Merensky Reef	Measured	6.8	9.4	7.15	7.00	48	66	1.6	2.1
	Indicated	9.8	11.6	6.71	6.64	66	77	2.1	2.5
	Measured and Indicated	16.6	21.0	6.89	6.80	114	143	3.7	4.6
	Inferred	10.4	12.6	6.73	6.03	70	76	2.3	2.4
	<b>Total</b>	<b>27.0</b>	<b>33.6</b>	<b>6.83</b>	<b>6.51</b>	<b>184</b>	<b>219</b>	<b>5.9</b>	<b>7.0</b>
UG2 Reef	Measured	14.6	20.7	5.30	5.26	77	109	2.5	3.5
	Indicated	24.0	25.6	5.70	5.72	137	146	4.4	4.7
	Measured and Indicated	38.6	46.3	5.55	5.51	214	255	6.9	8.2
	Inferred	10.1	9.2	5.54	5.50	56	50	1.8	1.6
	<b>Total</b>	<b>48.8</b>	<b>55.4</b>	<b>5.55</b>	<b>5.51</b>	<b>271</b>	<b>305</b>	<b>8.7</b>	<b>9.8</b>



Inspection of the Amandelbult chrome recovery plant spirals

# The operations – estimates and reconciliation continued

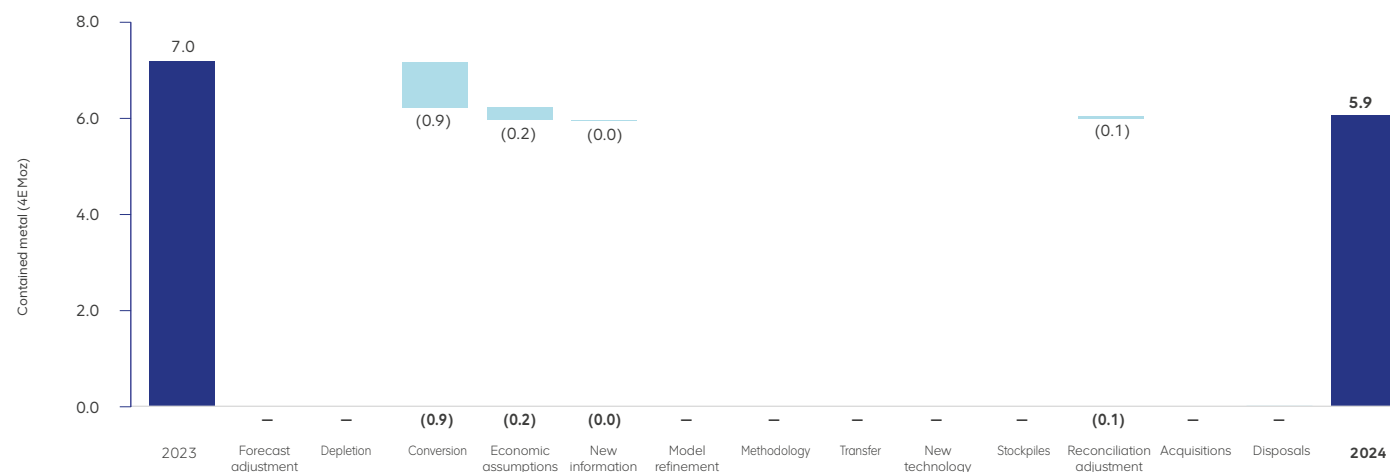
as at 31 December 2024

## Amandelbult continued

### Merensky Reef exclusive Mineral Resources reconciliation

The Merensky Reef Mineral Resources 4E content decreased due to the conversion of Mineral Resources to Ore Reserves after mining design changes as well as reallocation of the contact reef facies to Mineralisation following reasonable prospects for eventual economic assessments.

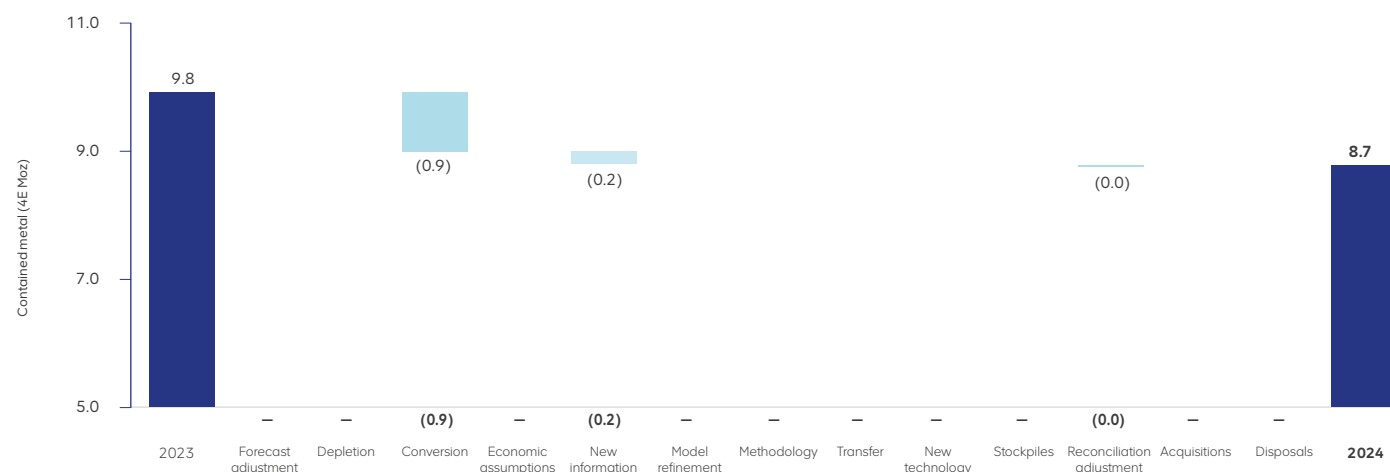
Dishaba Merensky Reef exclusive Mineral Resources  
2023 – 2024 reconciliation (4E Moz)



### UG2 Reef exclusive Mineral Resources reconciliation

The UG2 Reef Mineral Resource 4E content decreased due to conversion of Mineral Resources to Ore Reserves after mining design changes as well as reallocation of the pillars in the mined out areas to Mineralisation following reasonable prospects for eventual economic assessments.

Dishaba UG2 Reef exclusive Mineral Resources  
2023 – 2024 reconciliation (4E Moz)



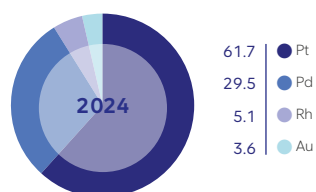
# The operations – estimates and reconciliation continued

as at 31 December 2024

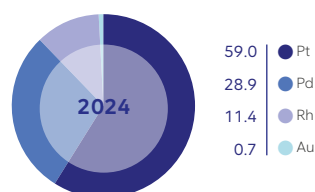
## Amandelbult continued

### Tumela Mine

Tumela Merensky Reef 4E metal split (%)

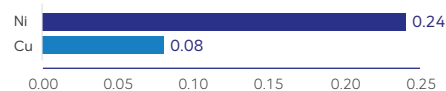


Tumela UG2 Reef 4E metal split (%)



UG2 Reef chromite grade: 30.8%

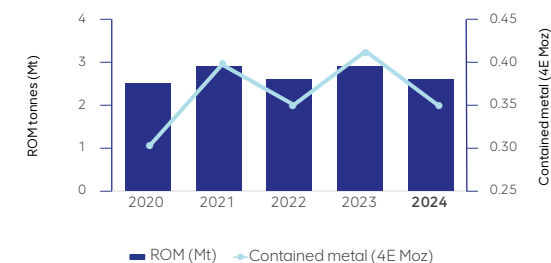
Tumela Merensky Reef base metal grades (%)



Tumela UG2 Reef base metal grades (%)



Tumela UG2 Reef production history (ROM)



For additional details on the 2024 production information, see the operations review section, on **pages 74 and 75** of the integrated report.

	Units	Merensky	UG2
<b>Mineral Resource assumptions</b>			
Average geological loss	%	35.6	25.6
Minimum resource cut	cm	120.0	120.0
Average density	g/cm <sup>3</sup>	3.3	4.1
<b>Ore Reserve modifying factors</b>			
Mining loss factor	%	1.3	5.0
Mining dilution	%	15.0*	25.2
Planned stoping width	cm	133.1*	148.2
4E concentrator recoveries	%	83.4	85.0
Mine call factor	%	100	100

\* Underground conventional scattered breast mining method only.

# The operations – estimates and reconciliation continued

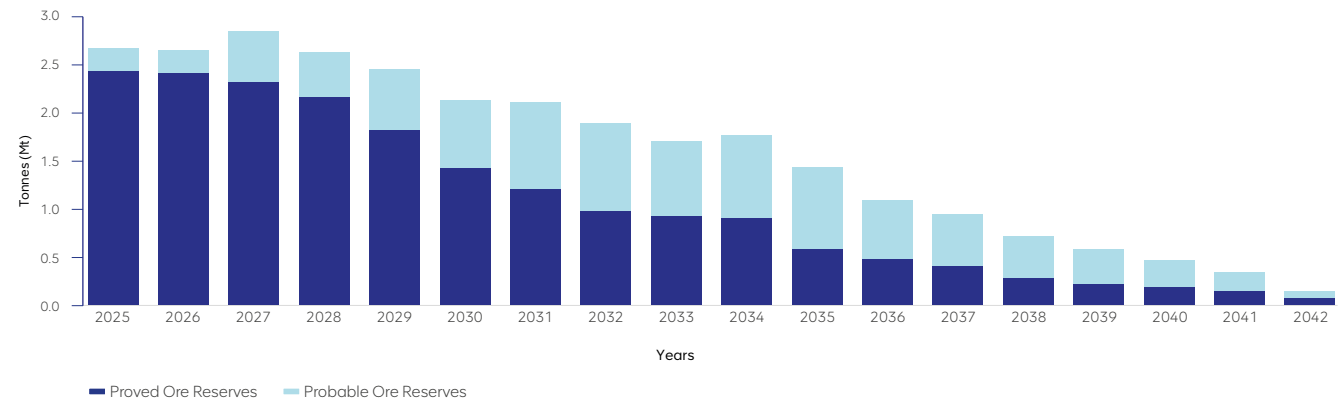
as at 31 December 2024

## Amandelbult continued

### Tumela life-of-asset profile

The life-of-asset schedule for Tumela reflects the combined reefs' planned production in the approved LoAP and includes projects that have the necessary approvals that underpin the Ore Reserve declaration. The anticipated Reserve Life increased to 14 years (2023: 11 years) and is within the current mining right expiry date of 2040.

Tumela total ROM tonnes in life-of-asset plan



### Ore Reserve estimates

		Tonnes (ROM) Mt		Grade 4E g/t		Contained metal 4E tonnes		Contained metal 4E Moz	
Amandelbult – Tumela (100%)	Classification	2024	2023	2024	2023	2024	2023	2024	2023
Merensky Reef	Proved	0.1	0.1	5.72	5.74	0	0	0.0	0.0
	Probable	1.3	0.2	5.87	3.33	7	1	0.2	0.0
	<b>Total</b>	<b>1.3</b>	<b>0.3</b>	<b>5.86</b>	<b>3.95</b>	<b>8</b>	<b>1</b>	<b>0.2</b>	<b>0.0</b>
UG2 Reef	Proved	18.4	26.7	4.86	4.66	89	125	2.9	4.0
	Probable	7.3	0.2	3.91	3.39	29	1	0.9	0.0
	<b>Total</b>	<b>25.7</b>	<b>27.0</b>	<b>4.59</b>	<b>4.65</b>	<b>118</b>	<b>126</b>	<b>3.8</b>	<b>4.0</b>



# The operations – estimates and reconciliation continued

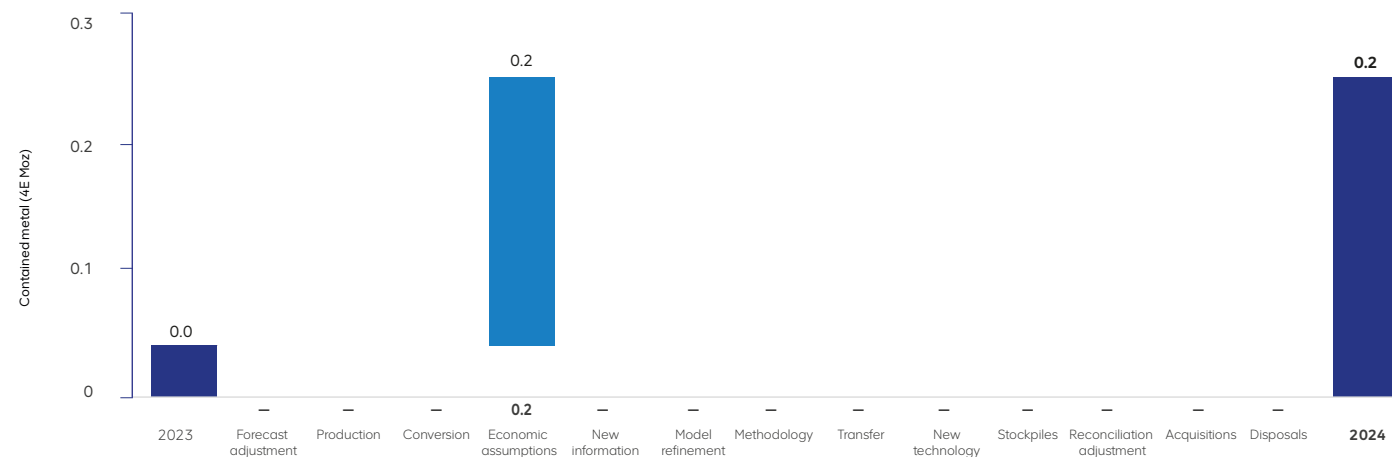
as at 31 December 2024

## Amandelbult continued

### Merensky Reef Ore Reserves reconciliation

The Merensky Reef Ore Reserves 4E content increased due to the conversion of Mineral Resources to Ore Reserves following the application of revised economic assumptions.

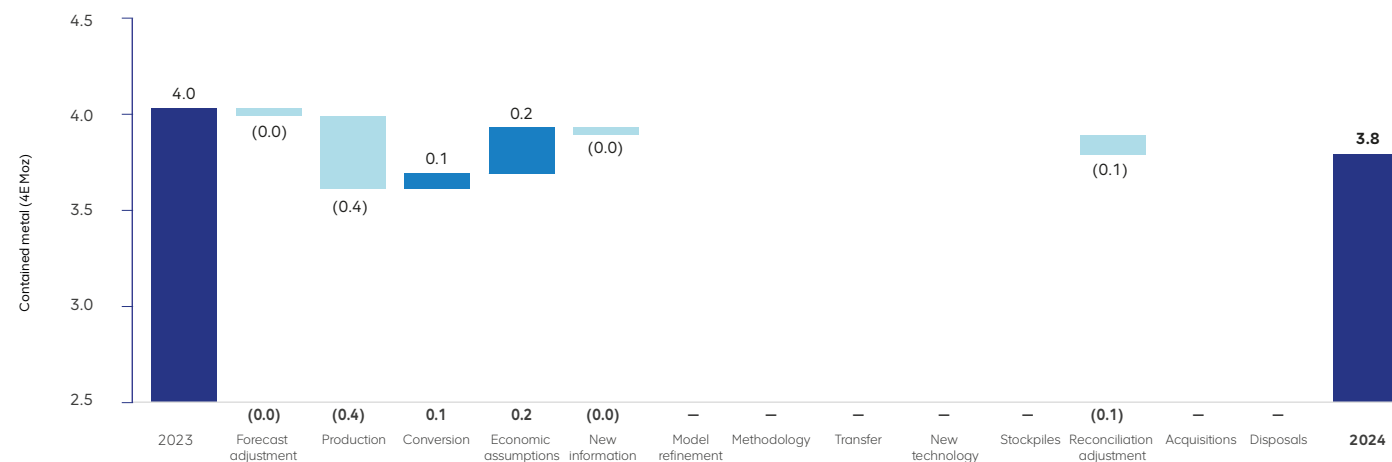
#### Tumela Merensky Reef Ore Reserves 2023 – 2024 reconciliation (4E Moz)



### UG2 Reef Ore Reserves reconciliation

The UG2 Reef Ore Reserves 4E content decreased due to annual production. The extent of the decrease was offset by conversion of Mineral Resources to Ore Reserves following the application of revised economic assumptions and mine design changes.

#### Tumela UG2 Reef Ore Reserves 2023–2024 reconciliation (4E Moz)



# The operations – estimates and reconciliation continued

as at 31 December 2024

## Amandelbult continued

### Exclusive Mineral Resource estimates

		Tonnes Mt		Grade 4E g/t		Contained metal 4E tonnes		Contained metal 4E Moz	
Amandelbult – Tumela (100%)	Classification	2024	2023	2024	2023	2024	2023	2024	2023
Merensky Reef	Measured	23.3	23.4	6.74	6.68	157	156	5.1	5.0
	Indicated	46.7	46.7	7.07	7.05	330	329	10.6	10.6
	Measured and Indicated	70.0	70.1	6.96	6.93	487	485	15.7	15.6
	Inferred	44.8	44.9	7.01	7.01	314	315	10.1	10.1
	Total	114.8	115.0	6.98	6.96	801	800	25.8	25.7
UG2 Reef	Measured	64.1	76.0	5.39	5.36	345	407	11.1	13.1
	Indicated	69.9	70.3	5.51	5.51	385	387	12.4	12.4
	Measured and Indicated	134.0	146.2	5.45	5.43	730	794	23.5	25.5
	Inferred	49.6	47.6	5.78	5.76	287	274	9.2	8.8
	Total	183.6	193.8	5.54	5.51	1,017	1,068	32.7	34.3



Maintenance at Amandelbult 15E-10-16 East dropdown

# The operations – estimates and reconciliation continued

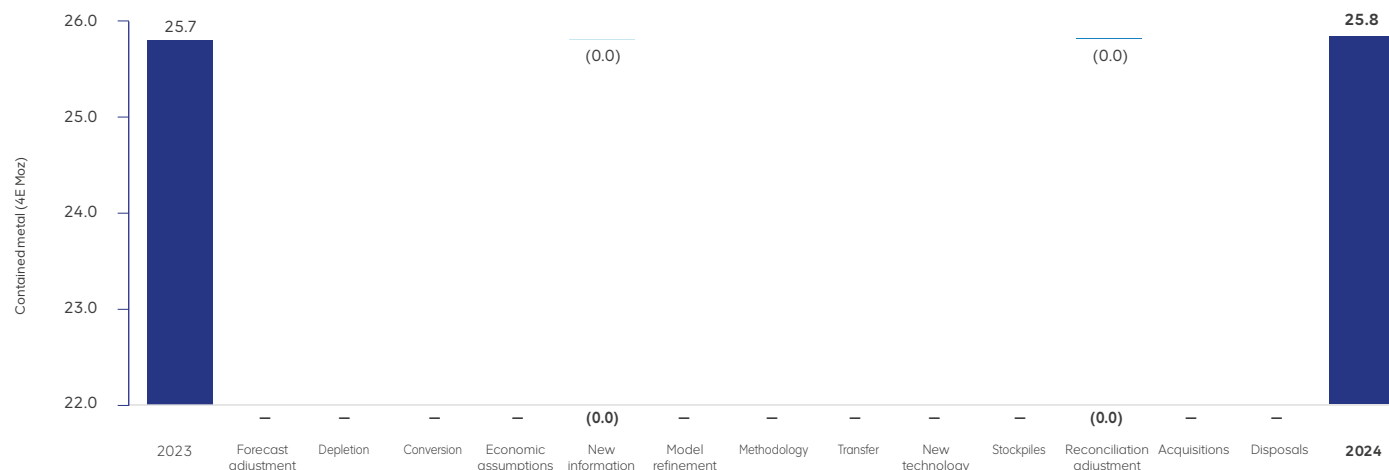
as at 31 December 2024

## Amandelbult continued

### Merensky Reef exclusive Mineral Resources reconciliation

The Merensky Reef Mineral Resources 4E content increased slightly due to structural and Mineral Resources model update.

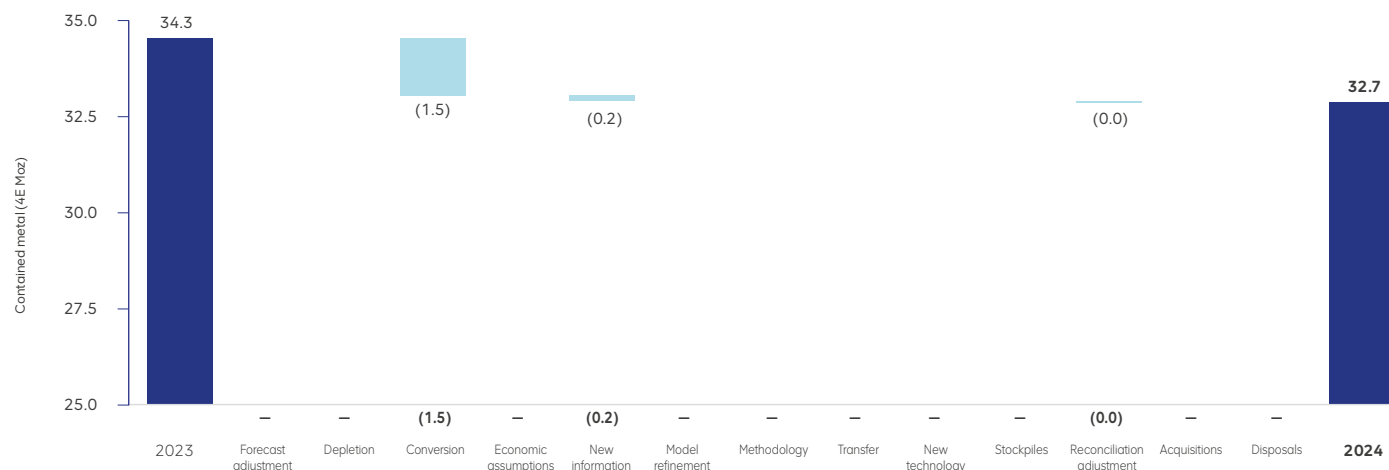
#### Tumela Merensky Reef exclusive Mineral Resources 2023 – 2024 reconciliation (4E Moz)



### UG2 Reef exclusive Mineral Resources reconciliation

The UG2 Reef Mineral Resources 4E content decreased due to the conversion of Mineral Resources to Ore Reserves after mining design changes in the 15E DD project area as well as reallocation of the pillars in the mined-out areas to Mineralisation following reasonable prospects for eventual economic assessments.

#### Tumela UG2 Reef exclusive Mineral Resources 2023 – 2024 reconciliation (4E Moz)

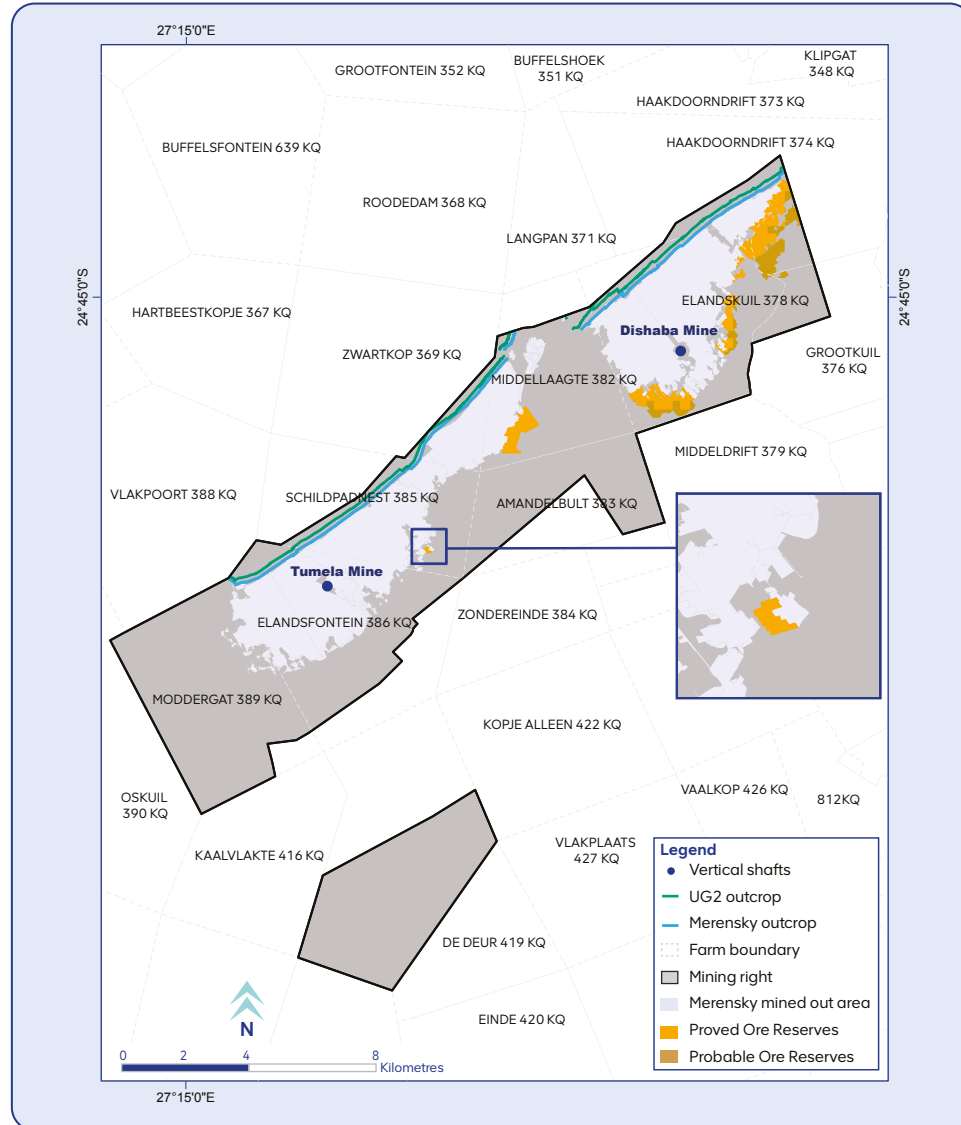


# The operations – estimates and reconciliation continued

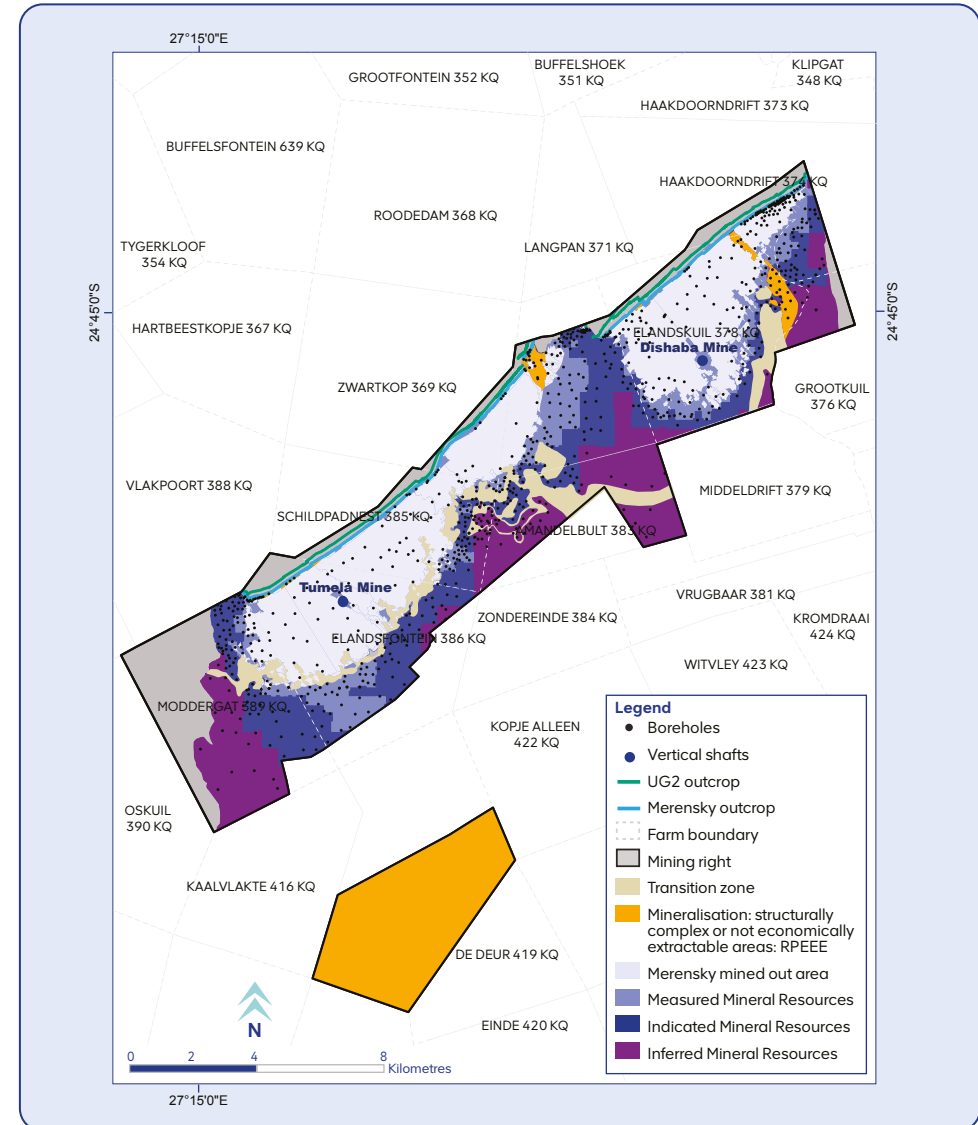
as at 31 December 2024

## Amandelbult continued

**Amandelbult Merensky Reef Ore Reserves classification map**



**Amandelbult Merensky Reef Mineral Resources classification map**



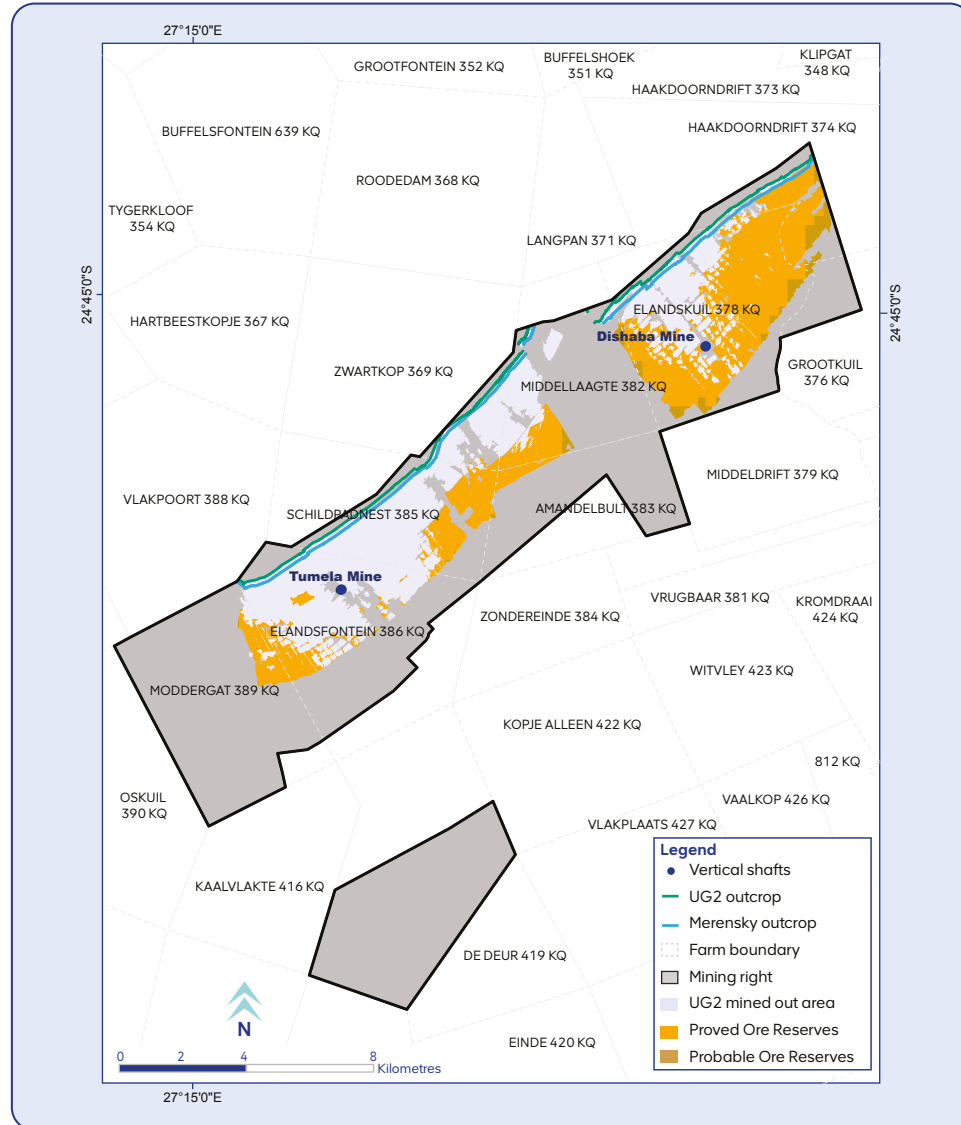


# The operations – estimates and reconciliation continued

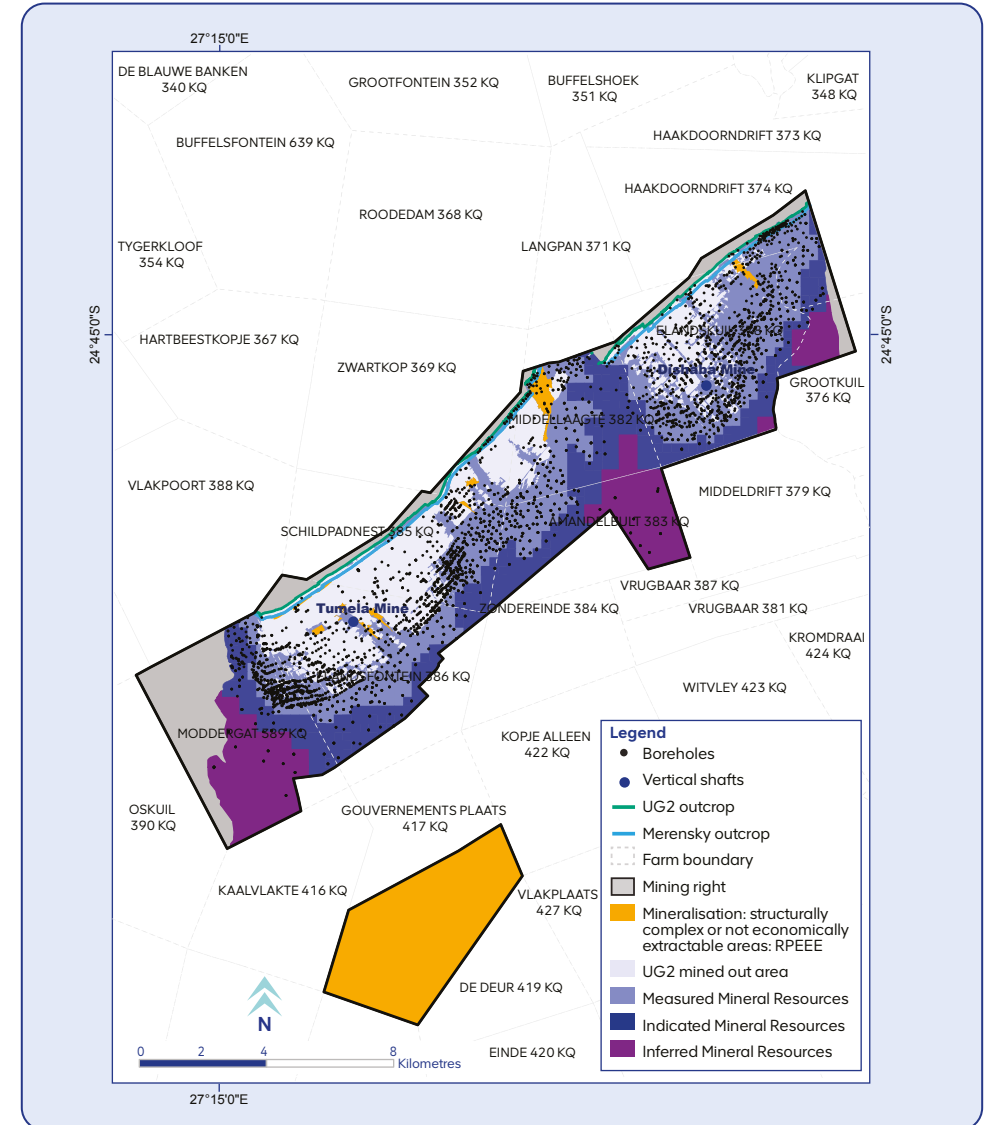
as at 31 December 2024

## Amandelbult continued

**Amandelbult UG2 Reef Ore Reserves classification map**



**Amandelbult UG2 Reef Mineral Resources classification map**



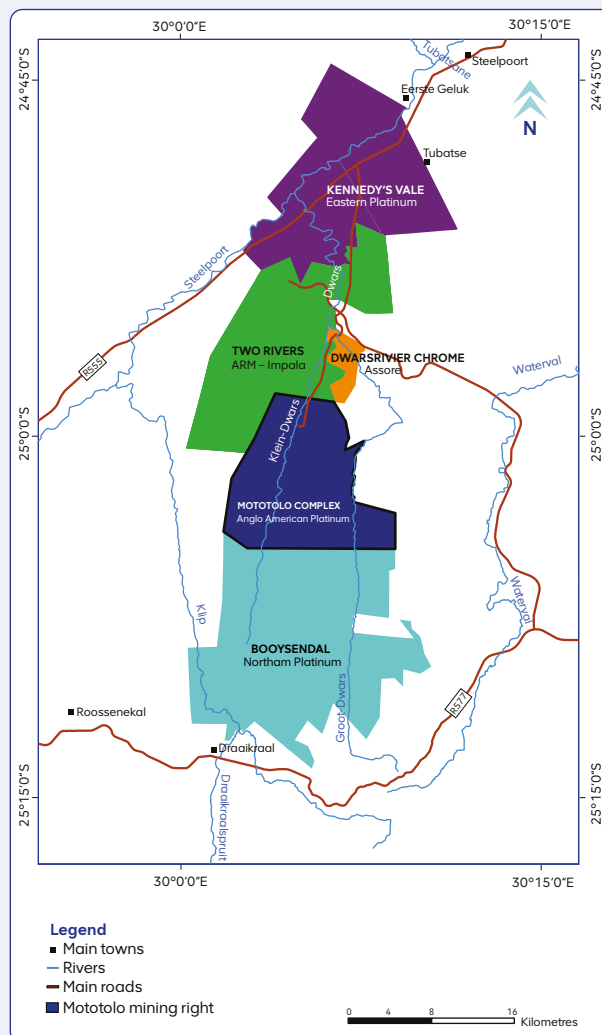
# The operations – estimates and reconciliation continued

as at 31 December 2024



## Mototolo

**Anglo American Platinum Limited interest: 100%**  
**Management structure: managed**



## Location

Mototolo is located in the Limpopo province, 50km south-west of the town of Burgersfort, in the southern sector of the Eastern Limb of the Bushveld Complex. The Mototolo Mine and Der Brochen project are reported as a consolidated mine.

## Property description

The operation was consolidated and the life of asset extended following the approval of the Der Brochen feasibility study and the subsequent LoAP update in 2021. Mototolo is focused on extending the life of the mine through the development of Der Brochen and remaining in the first half of the cost curve. The UG2 Reef is the primary reef being mined.



## Competence

	Mineral Resources	Ore Reserves
<b>Competent Persons</b>	Kavita Mohanlal	Dion Hanekom
<b>Role</b>	Principal: Mineral Resource estimation	Specialist Ore Reserves – platinum
<b>Relevant qualifications</b>	BSc (hons) (geology), MSc (Mineral Resources management)	Higher national diploma (MRM)
<b>Professional organisation</b>	SACNASP, PrNatSci	SAGC
<b>Membership number</b>	400003/05	PMS 0242
<b>Relevant experience</b>	21 years	19 years

# The operations – estimates and reconciliation continued

as at 31 December 2024

## Mototolo continued

### Brief history

The Eastern Limb of the Bushveld Complex has seen numerous exploration programmes since the 1920s. Exploration in the Groot and Klein Dwarsrivier valleys also dates from 1924, with Platinum Proprietary exploring Richmond and Helena between 1924 and 1930. At the same time, Transvaal Consolidated Land and Exploration Company explored the Der Brochen farm, opening up adits and winzes on the Merensky Reef.

In 1999, Xstrata Alloys purchased Consolidated Metallurgical Industries (CMI) and acquired rights for chromium and PGMs on the Thorncliffe farm. At the time, Thorncliffe was viewed as a chromium orebody. In 2002, drilling was conducted to target the UG2 and Merensky Reefs, and this exploration programme resulted in Mineral Resource declaration for the Merensky and UG2 Reefs at the Thorncliffe farm and subsequent feasibility studies resulted in the declaration of UG2 Ore Reserves.

In 2005, Anglo American Platinum and Xstrata (later acquired by Glencore) entered a pool-and-sharing agreement whereby Xstrata was responsible for developing and operating the underground mine, while Anglo American Platinum constructed and managed the PGM concentrator. Xstrata constructed a beneficiation plant to process the UG2 chrome tailings arising from the PGM concentrator. Each company contributed individual portions of mining rights and formed the 50:50 Mototolo joint operation. Anglo American Platinum contributed mining rights (MR) over the Richmond farm and Glencore contributed rights over the Thorncliffe farm. The first blast in November 2005 marked the start of 2 x 4 barrel, on-reef, shaft clusters that eventually reached steady-state production in June 2009.

In 2018, Anglo American Platinum acquired a 50% interest in Mototolo from Glencore and minority shareholders. The 100% acquisition of Mototolo and the subsequent transfer

of the mining rights to Anglo American Platinum allowed for the approval and execution of the Der Brochen South project feasibility study in 2021. This project substantially increased the UG2 Reef Ore Reserves and extended the life of the mine beyond 50 years.

Mototolo has a standing royalty mining agreement with Two Rivers Platinum Mine to access UG2 Reef mining areas from Mototolo's Lebowa shaft to the north, adjacent to the Thorncliffe farm boundary.

In 2024, another royalty agreement was established, whereby Two Rivers is planning to mine the UG2 Reef on the north-western side of the St George fault, adjacent to the Richmond farm. Ore Reserves from this agreement are not part of this disclosure and will only be reflected in 2025.

### Mineral rights

The Der Brochen mining right covers an area of 9,628ha. Anglo American Platinum holds a converted mining right under DMRE reference LP 182 MR, valid from July 2010 to July 2040. A section 102 application to consolidate the Mototolo and Der Brochen mineral rights was granted on 3 August 2022. The notarial execution of the deed of amendment was executed on 25 May 2023 and registered by the Mineral and Petroleum Titles Registration Office (MPTRO) on 17 August 2023 under MPT 11/2023.

There are no known impediments to the mining right. Application to extend the mining right will be submitted at the appropriate time and there is reasonable expectation that such extension will not be withheld.

### Brief geological description

Mototolo is located in the Eastern Limb of the Bushveld Complex, where the Merensky and UG2 Reefs outcrops strike north to south over approximately 13km and dip at an average of 10° to the west. The UG2 Reef is

characterised by a single thick chromitite layer known as the main band, followed by an overlying poikilitic feldspathic pyroxenite and a series of chromitite layers. These narrow chromitite layers that occur in the hanging wall of the UG2 main band are collectively termed the triplets. The three chromitite stringers vary in thickness from 2cm to 5cm (triplet 1), 10cm to 25cm (triplet 2), and approximately 5mm (triplet 3). The immediate footwall of the UG2 is usually a pegmatoidal feldspathic pyroxenite, which varies in thickness from a few centimetres to over 1m. Localised internal pyroxenite or anorthosite-rich layers can occur within the UG2 main chromitite band, creating areas of 'split-reef' facies. The vertical separation between the Merensky Reef and UG2 Reef horizons is approximately 170m.

The north/south trending St George's fault traverses through the mine and represents a natural boundary that divides the mine into a 'shallow' eastern, and an up-thrown 'deep' (offset of 30m to 60m from north to south) western portion. A 100% geological loss has been assigned to the highly fractured zone (interpreted from 3D seismic surveys), ranging from 80m to 300m in width in the proximity of the fault. The Helena pothole is located immediately south of Borwa shaft and represents an area of severe slumping and destructive potholing. Karoo-aged dykes, predominantly dolerite/diabase in composition with little variation in strike directions and steep dips, are present, with the Caracle dyke swarm traversing the Der Brochen South area. While the main structural trends north-north-east/south-south-west, most small-scale faulting in the mining operation trends north-west/south-east. A regional depression is currently interpreted west of the St George fault on Richmond farm.

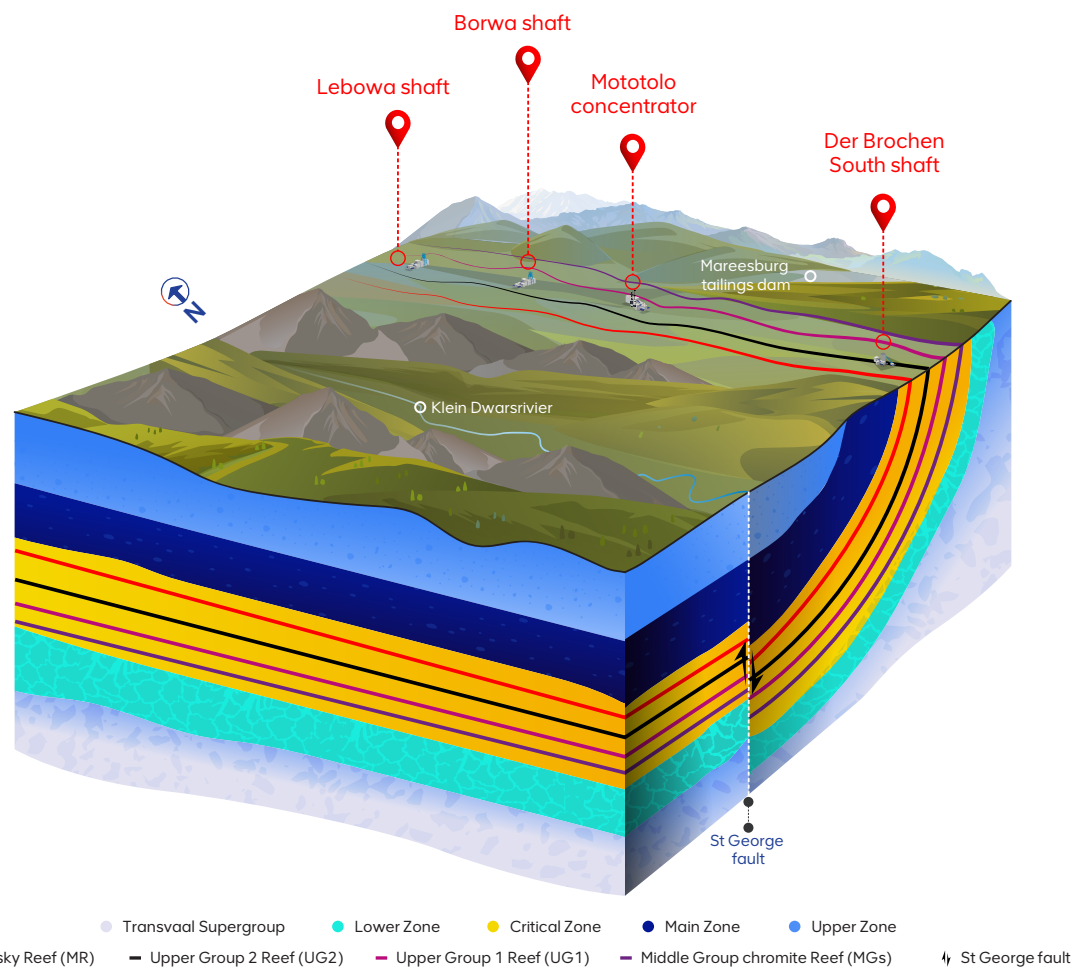
▶ For a description of the Mineral Resource estimation and classification processes, see **pages 23 to 26** of this report.

# The operations – estimates and reconciliation continued

as at 31 December 2024

## Mototolo continued

### Schematic diagram of the Bushveld Complex at Mototolo (Eastern Limb)



Schematic drawing compiled by Mototolo exploration team, not to scale.

### Reasonable prospects for eventual economic extraction

The following factors are considered when assessing reasonable prospects for eventual economic extraction of the declared Mineral Resources:

- Legal: Mototolo adheres to all regulatory requirements and has the requisite permits and licences for exploration and mining
- Environmental, social and governance: Our sustainability strategy framework considers the local communities, the environment and land use as well as corporate governance, as inputs for the RPEEE assessment
- Geology: The declared Mineral Resources are supported by well-informed geological and Mineral Resource models that have considered the key geological features that exert control on mineralisation. The Merensky Reef is estimated over a fixed resource cut of 90cm while the UG2 Reef is estimated over an optimised resource cut which may contain dilution
- Mining method: The operation utilises underground mechanised bord-and-pillar mining method
- Metallurgical and processing: Sufficient geo-metallurgical and mineralogical test work has been carried out for the reefs declared and recovery potential is considered. The mine has sufficient plant data to predict recovery potential. Existing processing facilities are suitable for processing future ore over the remaining life of mine
- Economics: The economic parameter inputs are based on stable, long-term economic assumptions, metal prices, and exchange rates catering for historical, actual and forecast metal prices. Cut-off grades were calculated from input assumptions on current costs and the revenue based on the long-term price forecast, with a revenue factor applied. The current mining method is known to be viable at depth as currently applied
- Mining infrastructure: The current mining infrastructure will be sufficient to continue mining. Mining of the Merensky Reef and UG2 west of St George fault below current infrastructure will require additional access infrastructure
- Other factors such as market assessments are adequately assessed in various levels of technical studies.

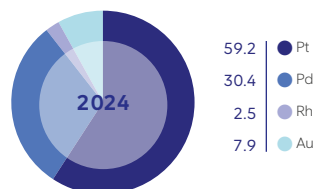


# The operations – estimates and reconciliation continued

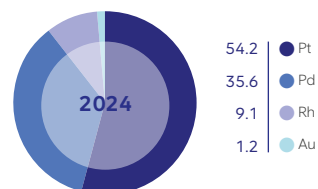
as at 31 December 2024

## Mototolo continued

Mototolo Merensky Reef 4E metal split (%)

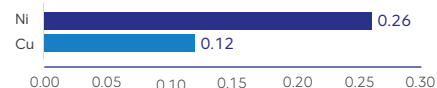


Mototolo UG2 Reef 4E metal split (%)



UG2 Reef chromite grade: 18.3%

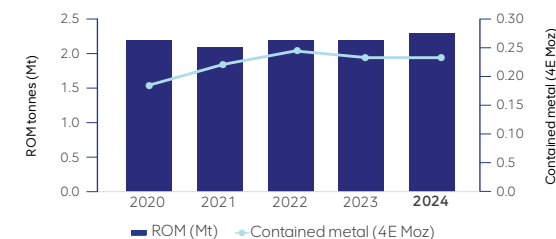
Mototolo Merensky Reef base metal grades (%)



Mototolo UG2 base metal grades (%)



Mototolo UG2 production history (ROM)\*



\* Production figures exclude production from the Two Rivers Mine royalty mining area.



For additional details on the 2024 production information, see the operations review section, on **pages 76 and 77** of the integrated report.

	Units	Merensky	UG2
<b>Mineral Resource assumptions</b>			
Average geological loss	%	17.1	19.4
Minimum resource cut	cm	90	180
Average density	g/cm <sup>3</sup>	3.3	3.6
<b>Ore Reserve modifying factors</b>			
Mining loss factor	%	—	25.1
Mining dilution	%	—	13.5
Mine extraction factor	%	—	54.0 – 74.8
Planned stoping width	cm	—	217.1
4E concentrator recoveries	%	—	83.5
Mine call factor	%	—	96.5

### Mining method and infrastructure

Mototolo is a mechanised, trackless, bord-and-pillar underground operation which extracts the UG2 Reef from near outcrop, extending to over 450m below surface. The low-profile underground mining equipment

utilised is designed to extract narrow reef orebodies (>1.8m width) with dip less than 22°. It maximises reef extraction by placing the primary development (main infrastructure) on-reef. Access to the orebody is by means of a four-barrel decline system that accounts for trackless mining equipment – one decline for downward travel and one decline for upward travel, one decline equipped with a conveyor belt for ore handling, and one for the use of a chairlift system. Development on-reef is at an apparent angle of 9°. Strike development provides machine access, rock handling, as well as all the necessary services and infrastructure to the panels.

The strike development incorporates one transport drive and one belt drive connected by laterals every 75m. The ledging layout consists of 16 panels on the north and south, developing the panels on strike from the decline cluster.

Current mining infrastructure consists of two decline shafts, Lebowa and Borwa. The Der Brochen decline shaft is currently being developed. As mining decreases from the Lebowa shaft, the Der Brochen shaft will ramp up by using the mining crews from the Lebowa shaft to build up an initial production of 120kt per month, and thereafter to 200 kt per month once Borwa is depleted.

Run-of-mine ore is transported by overland conveyor belts to the on-site concentrator and the residue from the concentrator is further processed in the chromite recovery plant. The final tails produced are pumped to the tails treatment facility where process water is recovered to be reused in the circuit and the residue is pumped into the tailings storage facility. The concentrate is transported to the Anglo American Platinum Polokwane smelter for further processing.

► For a description of the Ore Reserve estimation and classification processes, see **pages 29 to 32** of this report.

# The operations – estimates and reconciliation continued

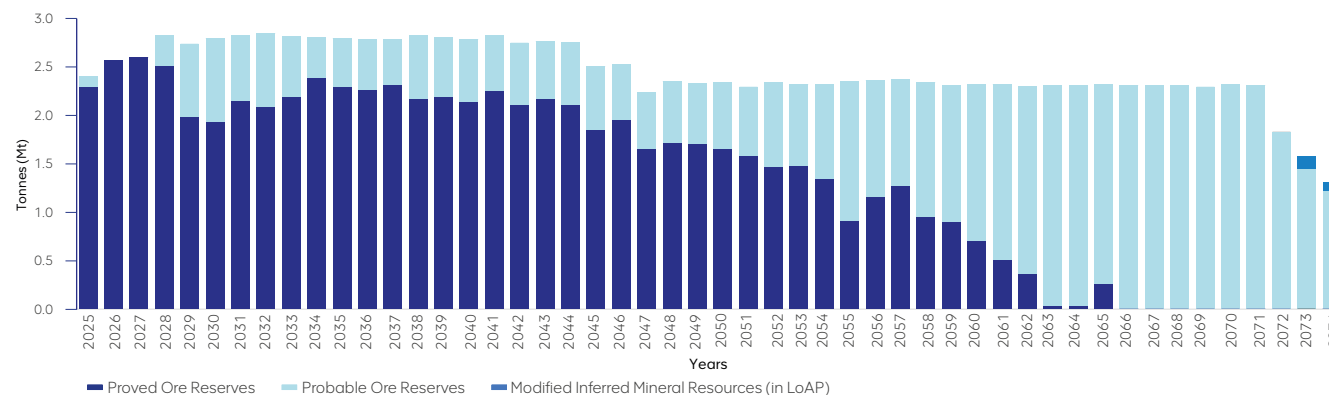
as at 31 December 2024

## Mototolo continued

### Mototolo life-of-asset profile

The life-of-asset schedule for Mototolo reflects the UG2 Reef planned production in the approved life-of-asset plan and includes the projects that have the necessary approvals that underpin the Ore Reserve declaration. The anticipated mining is for 50 years (2023: 51 years) and exceeds the current mining right expiry date of 2040 (16 years). An application to extend the mining right will be submitted at the appropriate time and there is reasonable expectation that such an extension will not be withheld.

The modified Inferred Mineral Resources in life-of-asset plan are excluded from Ore Reserves declaration and assessments conducted indicate that the exclusion of these Inferred Mineral Resources has no impact on the current life of asset.

**Mototolo total ROM tonnes in life-of-asset plan**

### Ore Reserve estimates

		Tonnes (ROM) Mt		Grade 4E g/t		Contained metal 4E tonnes		Contained metal 4E Moz	
Mototolo (100%)	Classification	2024	2023	2024	2023	2024	2023	2024	2023
UG2 Reef	Proved	68.9	71.1	3.40	3.39	234	241	7.5	7.7
	Probable	55.3	55.4	3.13	3.13	173	173	5.6	5.6
	<b>Total</b>	<b>124.2</b>	<b>126.5</b>	<b>3.28</b>	<b>3.27</b>	<b>407</b>	<b>414</b>	<b>13.1</b>	<b>13.3</b>

# The operations – estimates and reconciliation continued

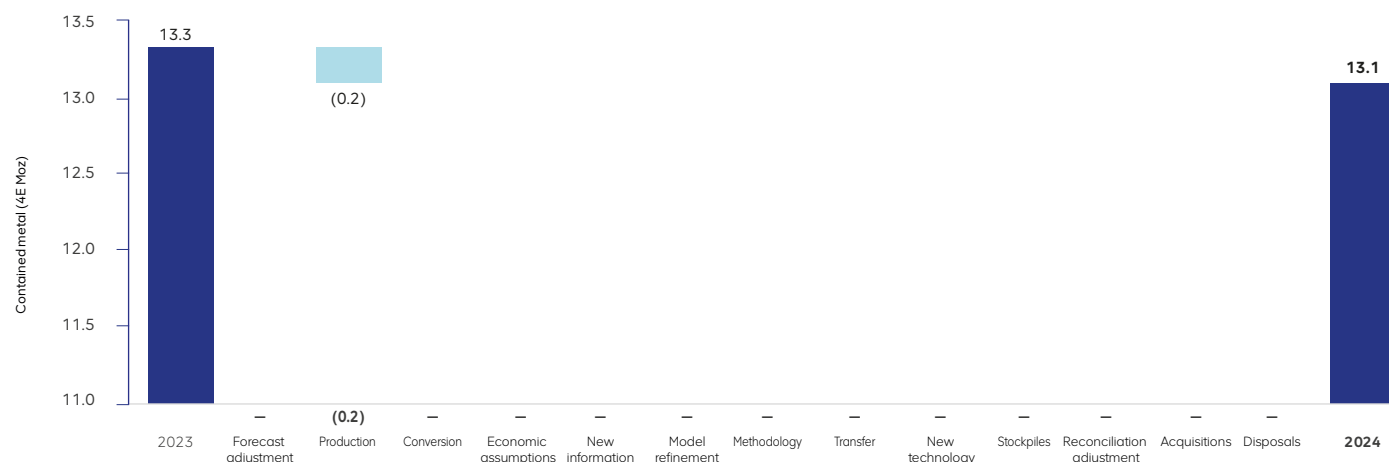
as at 31 December 2024

## Mototolo continued

### UG2 Reef Ore Reserves reconciliation

The UG2 Ore Reserves 4E content decreased slightly due to annual production.

Mototolo UG2 Reef Ore Reserves  
2023 – 2024 reconciliation (4E Moz)



Production figures exclude production from the Two Rivers Mine royalty mining area.

### UG2 Reef Ore Reserves reconciliation

The Merensky Reef Mineral Resources 4E content is unchanged from previous reporting.

### UG2 Reef exclusive Mineral Resources reconciliation

The UG2 Reef Mineral Resources 4E decreased slightly due to updated geological losses.

## Exclusive Mineral Resource estimates

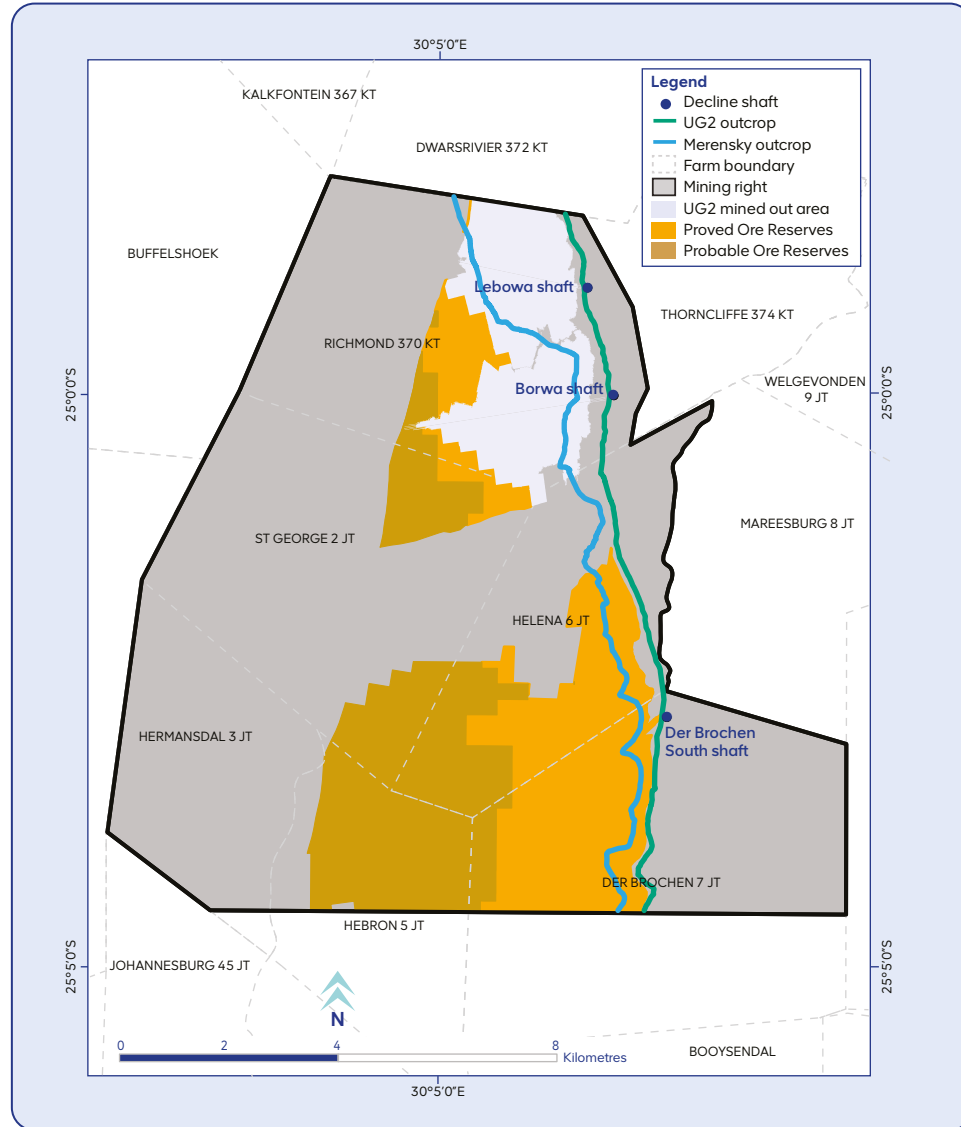
Mototolo (100%)	Classification	Tonnes Mt		Grade 4E g/t		Contained metal 4E tonnes		Contained metal 4E Moz	
		2024	2023	2024	2023	2024	2023	2024	2023
Merensky Reef	Measured	41.3	41.3	4.75	4.75	196	196	6.3	6.3
	Indicated	57.4	57.4	4.55	4.55	261	261	8.4	8.4
	Measured and Indicated	98.7	98.7	4.64	4.63	457	457	14.7	14.7
	Inferred	73.7	73.7	4.51	4.51	332	332	10.7	10.7
	<b>Total</b>	<b>172.4</b>	<b>172.4</b>	<b>4.58</b>	<b>4.58</b>	<b>789</b>	<b>789</b>	<b>25.4</b>	<b>25.4</b>
UG2 Reef	Measured	37.6	38.6	3.91	3.81	147	147	4.7	4.7
	Indicated	71.0	71.0	3.97	3.96	282	281	9.1	9.0
	Measured and Indicated	108.6	109.5	3.95	3.91	429	428	13.8	13.8
	Inferred	123.4	124.0	4.02	4.02	496	499	15.9	16.0
	<b>Total</b>	<b>232.0</b>	<b>233.5</b>	<b>3.98</b>	<b>3.97</b>	<b>925</b>	<b>927</b>	<b>29.7</b>	<b>29.8</b>

# The operations – estimates and reconciliation continued

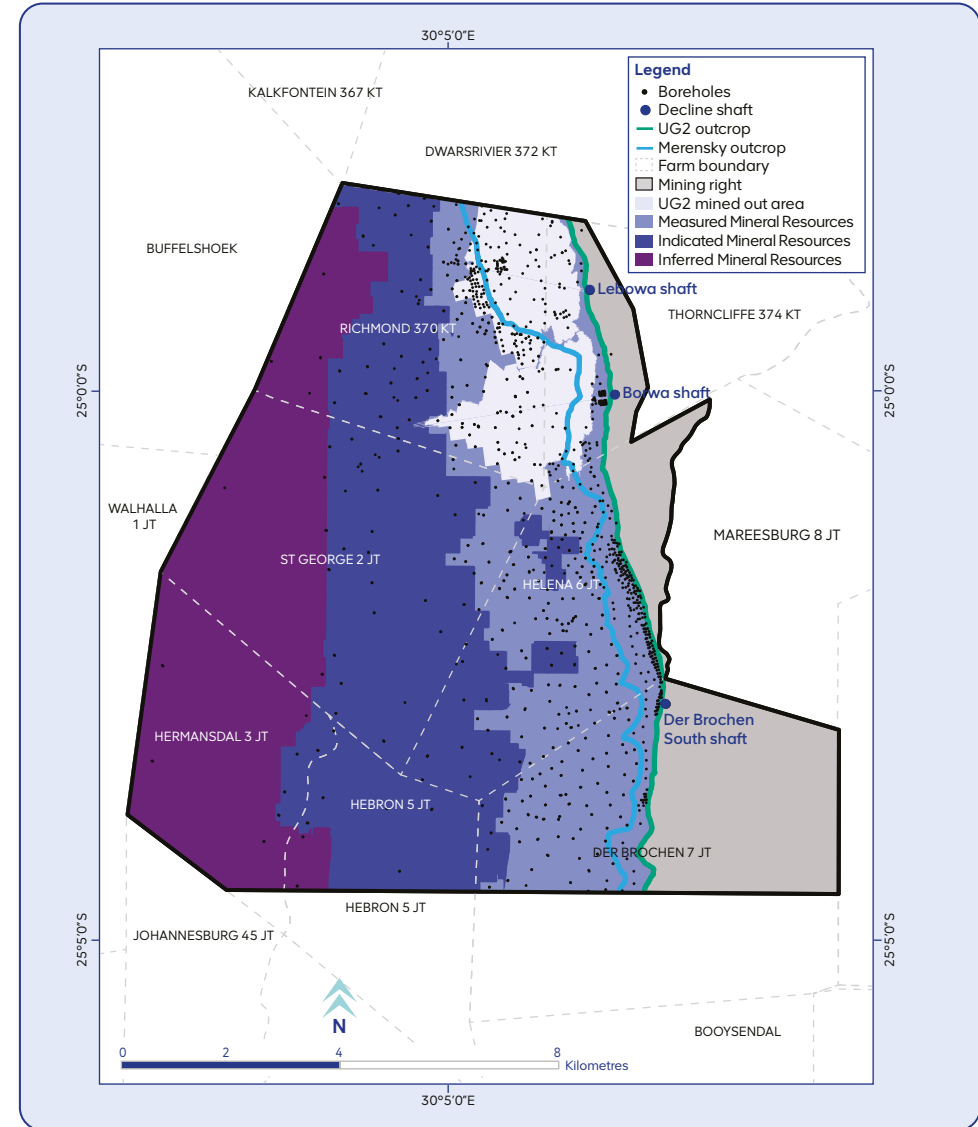
as at 31 December 2024

## Mototolo continued

**Mototolo UG2 Reef Ore Reserves classification map**



**Mototolo UG2 Reef Mineral Resources classification map**



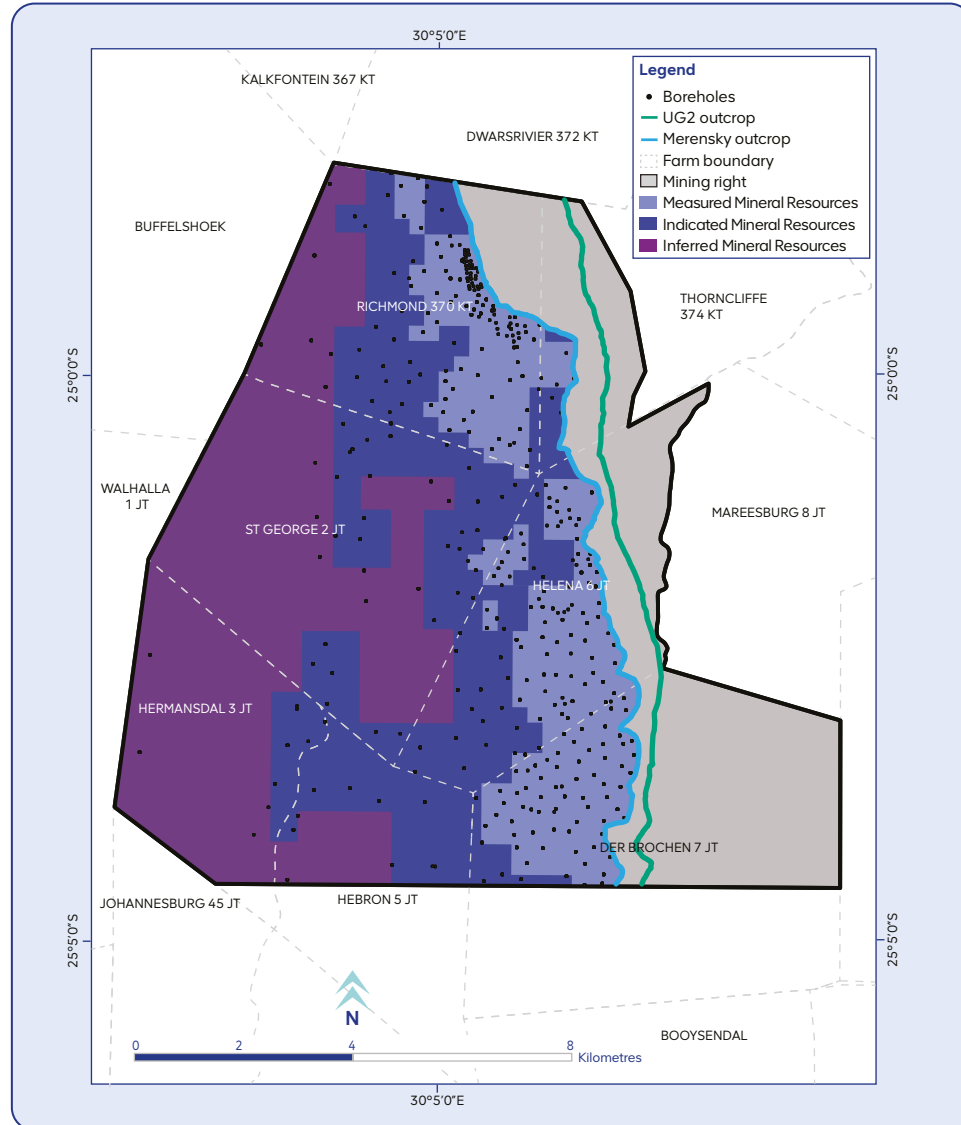


# The operations – estimates and reconciliation continued

as at 31 December 2024

## Mototolo continued

### Mototolo Merensky Reef Mineral Resources classification map



An aerial view of the Der Brochen underground declines project

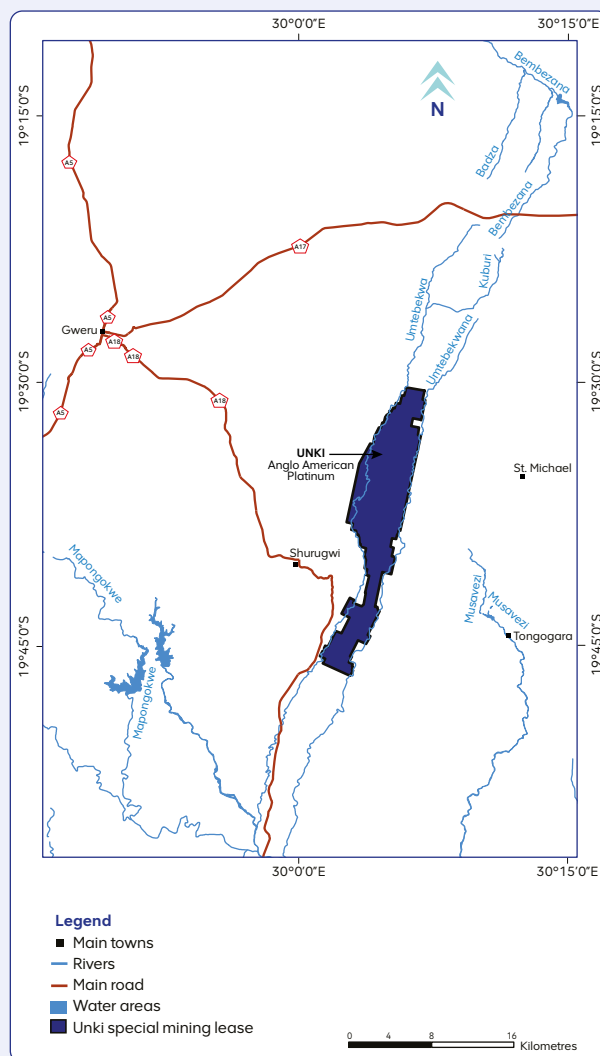
# The operations – estimates and reconciliation continued

as at 31 December 2024



## Unki

**Anglo American Platinum Limited interest: 100%**  
**Management structure: managed**



## Location

Unki Mine is located on the Great Dyke in Zimbabwe, 60km south-east of the town of Gweru and 15km north-east of Shurugwi.

## Property description

Unki Mine is situated in the Selukwe subchamber of the Great Dyke. The mine extracts the Main Sulphide Zone (MSZ) and is at steady-state production, with long-dated strategic growth potential. The strategic approach of the mining operation emphasises the consistent achievement of safe and profitable production, the implementation of innovative technologies, and management of costs.



## Competence

	Mineral Resources	Ore Reserves
Competent Persons	Kavita Mohanlal	Nico Nel
Role	Principal: Mineral Resource estimation	Principal Ore Reserves – platinum
Relevant qualifications	BSc (hons) (geology), MSc (Mineral Resources management)	National diploma (Survey), higher national diploma (MRM)
Professional organisation	SACNASP, PrNatSci	SAIMM, member
Membership number	400003/05	706878
Relevant experience	21 years	25 years



# The operations – estimates and reconciliation continued

as at 31 December 2024

## Unki continued

### Brief history

Exploration for PGMs and associated base metals in the Great Dyke dates back over 50 years when PGMs and base metal zones were delineated from soil geochemical surveys. The first phase of drilling began in 1967 near the Paarl area and expanded to cover the rest of the Middleridge claims. In 1969, trial mining started at Paarl where a winze was developed on-reef and two mining levels were established.

Attention shifted to the Unki area in 1972 due to its higher grades of PGMs compared to Paarl. A prospect shaft was sunk in 1974 in the Unki area for trial mining initiatives. Exploration and feasibility studies were conducted intermittently on the Unki project prior to 2005. The project faced obstacles, including fluctuating metal prices and difficulties in MSZ Reef identification techniques. However, as knowledge of the MSZ improved over time, mining in the area ultimately proved to be a success.

The development of Unki began in 2006 after the approval of the 2005 feasibility study. A special mining lease (SML) was applied for by Southridge Limited, an Anglo American Platinum holding company and was granted in October 2009 covering the Middleridge claims to the SML.

By late 2011, Unki had successfully increased its production to reach the designated capacity of 120,000 tonnes per month. Further production increases were achieved through efficiency enhancements and a subsequent debottlenecking exercise, which resulted in the current milling capacity of 210,000 tonnes per month.

The KV-SR claims were sold to Mimosa Platinum Mine in 2020.

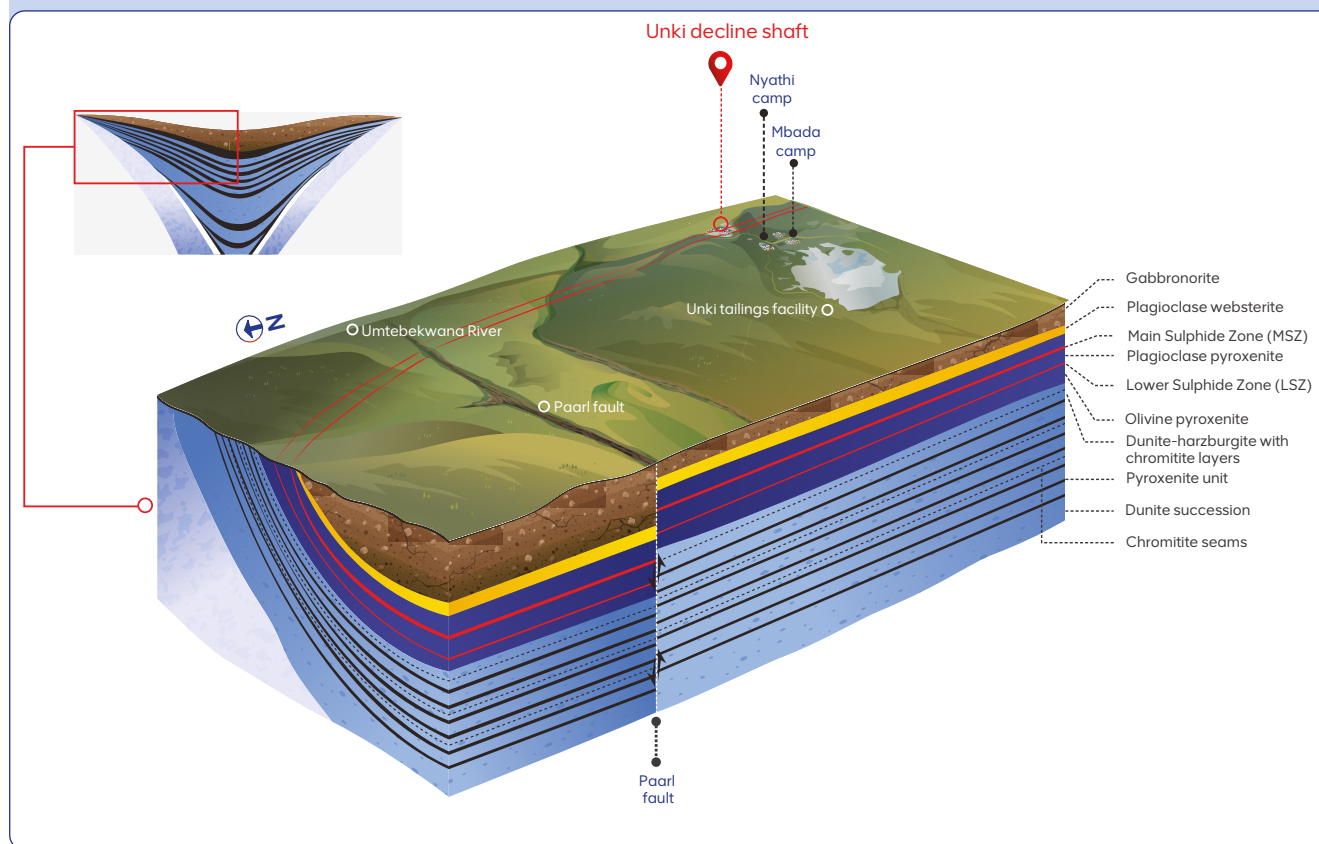
### Mineral rights

The Unki special mining lease (SML) number 2 currently holds all the mineral rights, encompassing a total area of 10,386ha. This lease was established by combining various individual claims and was granted on 5 October 2009, with an initial duration of 25 years, valid until October 2034.

Following that, the lease can be extended for 10-year periods until the mine ceases operations.

There are no known impediments to the special mining lease. An application to extend the mining lease will be submitted at the appropriate time and may only be denied if there is cession of works or failure to pay inspection fees, in which case the special mining lease will revert back to individual mining claims.

### Schematic diagram of the Great Dyke at Unki (Selukwe subchamber)



Schematic diagram compiled by Unki geology team, not to scale.

# The operations – estimates and reconciliation continued

as at 31 December 2024

## Unki continued

### Brief geological description

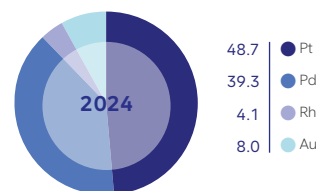
Unki is located in the Selukwe subchamber of the Great Dyke in Zimbabwe. In transverse section, the subchamber is synclinal in shape, with essentially the same lithological succession being exposed on both sides of the longitudinal axis. The general dip decreases from outcrops to the central area varying from 14° to 0°. Within the special mining lease, the intrusion strikes north-north-east/south south-west and extends for approximately 26km.

The PGMs and associated base metal mineralisation are developed within the uppermost pyroxenite horizon, the Main Sulphide Zone (MSZ). The main rock types are gabbro-norites, websterites and pyroxenites of the mafic and ultramafic succession. Based on geochemistry, the MSZ has two distinguishable subzones – the base metal subzone, which is dominated by nickel and copper, as well as the PGM subzone. The transition from the upper zone to lower zone is marked by a reduction in iron-nickel-copper sulphide dissemination in the pyroxenite.

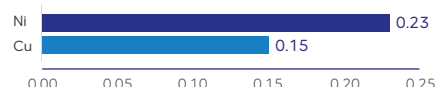
The MSZ is affected by structural disturbances which include faults, dykes, xenoliths and replacement pegmatites. The two most prominent structural disturbances are the Paarl fault and reef-parallel footwall fault. The Paarl fault is a transverse, steeply dipping fault truncating the Unki area from Paarl. The magnitude of the Paarl fault displacement is estimated at just over 100m. The footwall fault occurs over a localised area in the eastern section of the mine at an average stratigraphic distance of 1.6m below the base of the MSZ.

► For a description of the Mineral Resource estimation and classification processes, see **pages 23 to 26** of this report.

Unki MSZ 4E metal split (%)



Unki MSZ base metal grades (%)



### Reasonable prospects for eventual economic extraction

The following factors are considered when assessing reasonable prospects for eventual economic extraction of the declared Mineral Resources:

- Legal: Unki adheres to all regulatory requirements and has the requisite permits and licences for exploration and mining
- Environmental, social and governance: Our sustainability strategy framework considers the local communities, the environment and land use as well as corporate governance, as inputs for the RPEEE assessment

- Geology: The declared Mineral Resources are supported by well-informed geological and Mineral Resource models that have considered the key geological features that exert control on mineralisation. MSZ estimation is based on a multilayered approach and reported at an optimal minimum resource cut
- Mining method: The mine utilises the underground mechanised bord-and-pillar mining method
- Metallurgical and processing: Sufficient geo-metallurgical and mineralogical test work has been carried out for the MSZ and recovery potential is considered. The mine has sufficient plant data to predict recovery potential. Existing processing facilities are suitable for processing future ore over the remaining life of mine
- Economics: The economic parameter inputs are based on stable, long-term economic assumptions, metal prices and exchange rates catering for historical, actual and forecast metal prices. Cut-off grades were calculated from input assumptions on current costs and the revenue based on the long-term price forecast, with a revenue factor applied. The current mining method is known to be viable at the deepest point of the orebody
- Mining infrastructure: The current mining infrastructure will be sufficient to continue mining. Mining of the Paarl and Helvetia areas will require additional access infrastructure
- Other factors such as market assessments are adequately assessed in various levels of technical studies.



# The operations – estimates and reconciliation continued

as at 31 December 2024

## Unki continued

	Units	MSZ
<b>Mineral Resource assumptions</b>		
Average geological loss	%	6.0
Minimum resource cut	cm	200.0/120.0*
Average density	g/cm <sup>3</sup>	3.2
<b>Ore Reserve modifying factors</b>		
Mining loss factor	%	3.0
Mining dilution	%	11.6
Mine extraction factor	%	80.0 – 83.0
Planned stoping width	cm	200.0
4E concentrator recoveries	%	81.5
Mine call factor	%	95.0

\* The current mining areas at Unki East and West sections are estimated over a resource cut of 200cm. The remaining area is estimated over a resource cut of 120cm.

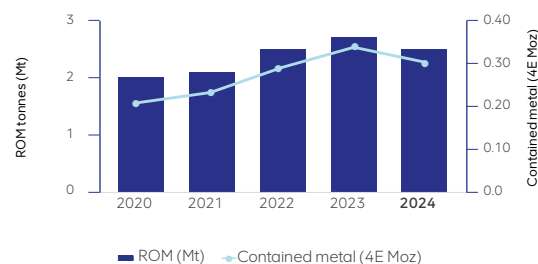
### Mining method and infrastructure

Unki is a fully mechanised, trackless, bord-and-pillar underground operation. Development is mainly on-reef and comprises roadways for ore transport and travelling ways for personnel. Excavation of roadways is combined with ore production. Parts of the mined-out stopes are utilised as transport routes while ore is collected from strike section by means of lateral conveyor belts.

A twin-decline shaft system provides access to underground workings for employees and material, as well as ore conveyance. Currently the declines are 3,200m from the surface portal and there are 17 established mining sections that have fully equipped strike belts for transferring ore directly to the main incline shaft conveyor.

Run-of-mine ore is processed at an on-site concentrator plant, which was commissioned in 2011. The final tails produced are pumped to the tails treatment facility where process water is recovered to be reused in the circuit and the residue is pumped into the tailings storage facility. The concentrate is further processed at the on-site smelter which was commissioned in 2018.

► For a description of the Ore Reserves estimation and classification processes, see **pages 29 to 32** of this report.

**Unki MSZ production history (ROM)**

For additional details on the 2024 production information, see the operations review section, on **pages 78 to 79** of the integrated report.



Discussing the results of a water quality test at Unki

# The operations – estimates and reconciliation continued

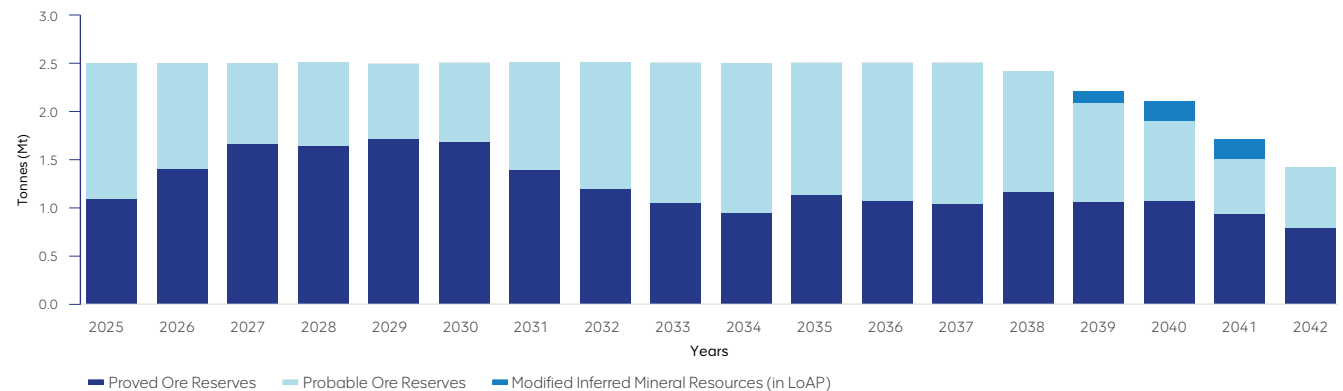
as at 31 December 2024

## Unki continued

### Unki life-of-asset profile

The life-of-asset plan schedule for Unki reflects the MSZ planned production in the approved life-of-asset plan and includes projects that have the necessary approvals that underpin the Ore Reserve declaration. The Reserve life is 18 years (2023: 19 years) and is within the special mining lease conditions. An application to extend the mining lease will be submitted at the appropriate time and may only be denied if there is cession of works or failure to pay inspection fees, in which case the mining lease will revert back to individual mining claims.

The modified Inferred Mineral Resources in the life-of-asset plan are excluded from Ore Reserves declaration and assessments conducted indicate that the exclusion of these Inferred Mineral Resources has no impact on the current life of asset.

**Unki total ROM tonnes in life-of-asset plan**

### Ore Reserve estimates

Unki (100%)	Classification	Tonnes (ROM) Mt		Grade 4E g/t		Contained metal 4E tonnes		Contained metal 4E Moz	
		2024	2023	2024	2023	2024	2023	2024	2023
MSZ	Proved	22.1	23.4	3.20	3.23	71	76	2.3	2.4
	Probable	20.0	21.2	3.29	3.32	66	71	2.1	2.3
	<b>Total</b>	<b>42.1</b>	<b>44.6</b>	<b>3.25</b>	<b>3.27</b>	<b>137</b>	<b>147</b>	<b>4.4</b>	<b>4.7</b>

# The operations – estimates and reconciliation continued

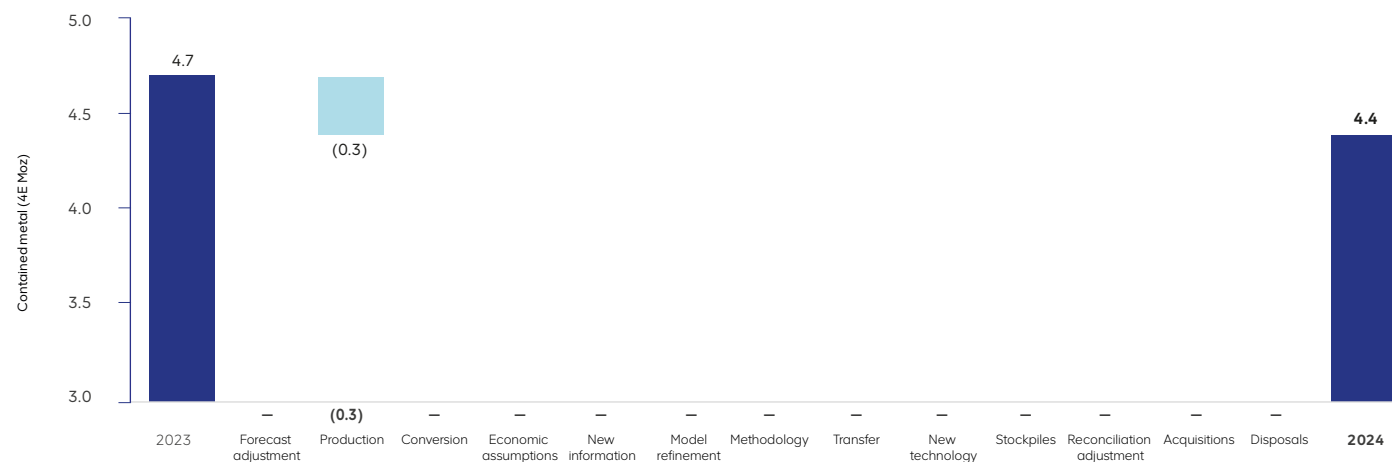
as at 31 December 2024

## Unki continued

### MSZ Ore Reserves reconciliation

The MSZ Ore Reserves 4E ounces decreased due to annual production.

**Unki Main Sulphide Zone Ore Reserves**  
2023 – 2024 reconciliation (4E Moz)



Drilling the face at an underground mining section at Unki

# The operations – estimates and reconciliation continued

as at 31 December 2024

Unki continued

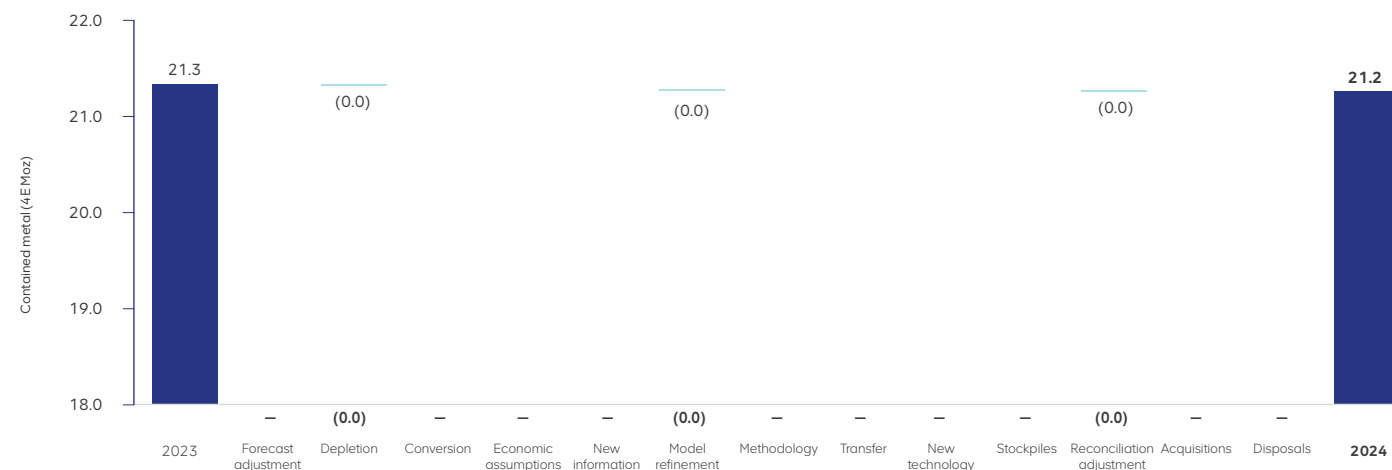
## Exclusive Mineral Resource estimates

Unki (100%)	Classification	Tonnes Mt		Grade 4E g/t		Contained metal 4E tonnes		Contained metal 4E Moz	
		2024	2023	2024	2023	2024	2023	2024	2023
MSZ	Measured	8.5	8.6	3.74	3.74	32	32	1.0	1.0
	Indicated	118.9	119.3	4.19	4.19	498	500	16.0	16.1
	Measured and Indicated	127.4	127.9	4.16	4.16	530	532	17.0	17.1
	Inferred	32.6	32.6	3.96	3.96	129	129	4.1	4.2
	<b>Total</b>	<b>160.0</b>	<b>160.5</b>	<b>4.12</b>	<b>4.12</b>	<b>659</b>	<b>661</b>	<b>21.2</b>	<b>21.3</b>

### MSZ exclusive Mineral Resources reconciliation

The MSZ exclusive Mineral Resources 4E ounces decreased due to the updated geological losses.

Unki Main Sulphide Zone exclusive Mineral Resources\*  
2023 – 2024 reconciliation (4E Moz)



\* Values reported as 0.0 represent estimates less than 0.05.

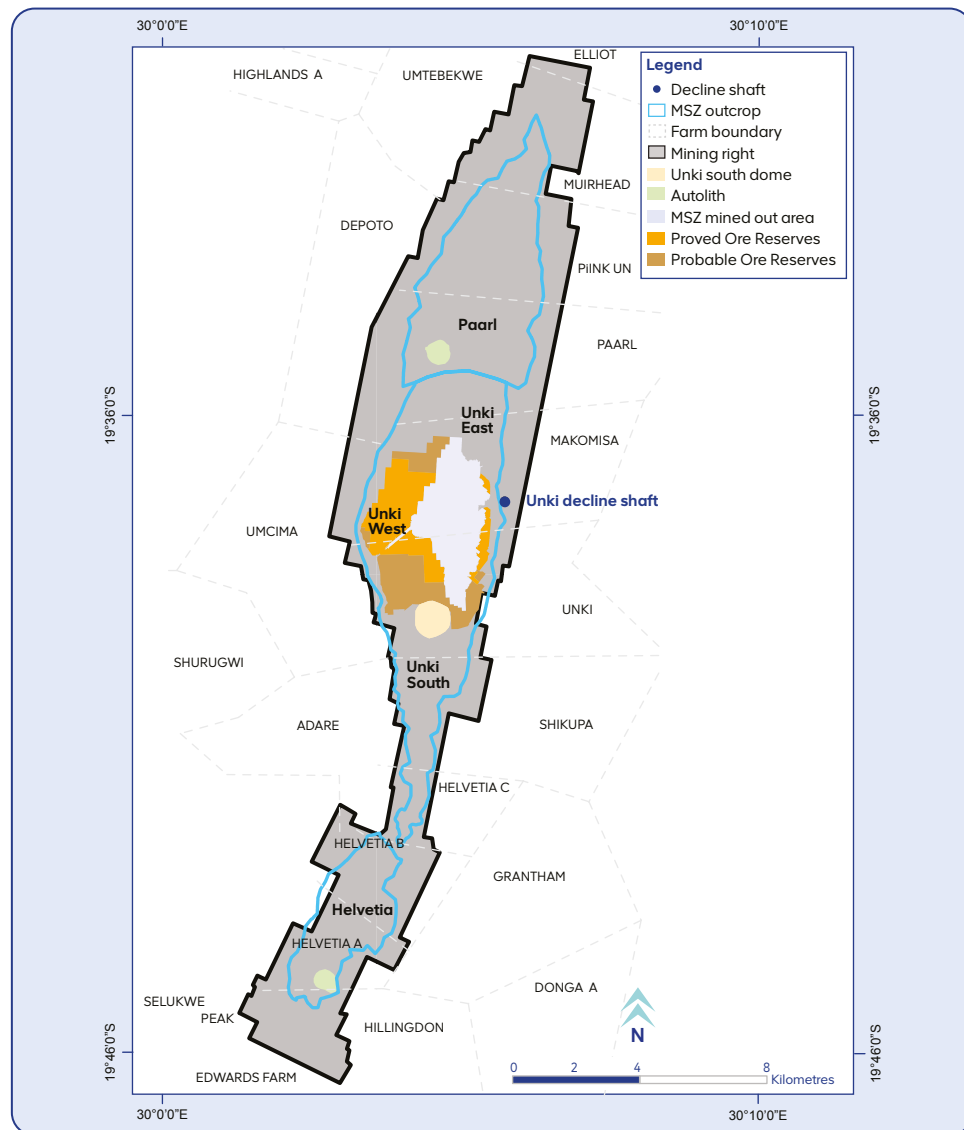


# The operations – estimates and reconciliation continued

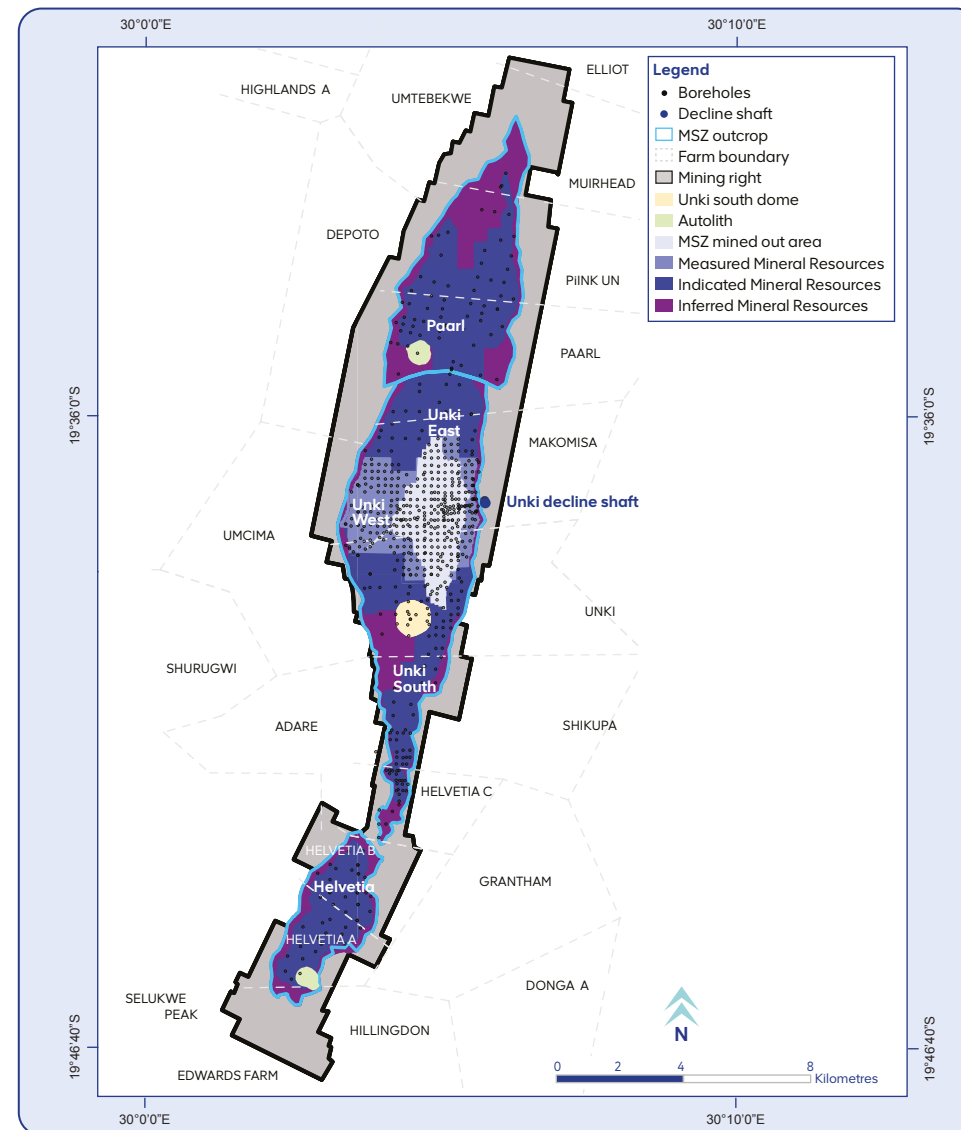
as at 31 December 2024

## Unki continued

**Unki MSZ Ore Reserves classification map**



**Unki MSZ Mineral Resources classification map**



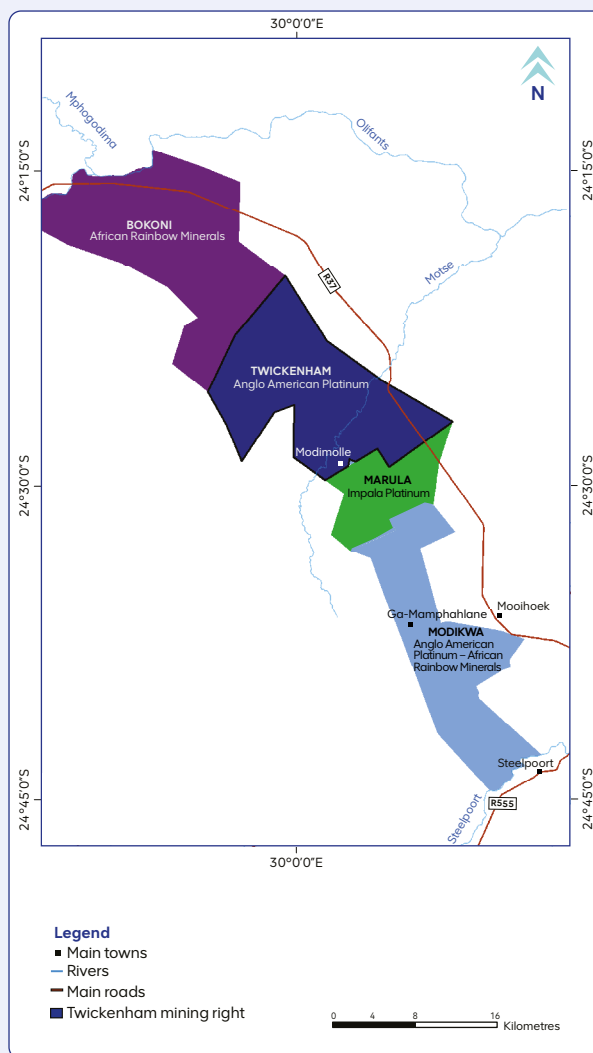
# The operations – estimates and reconciliation continued

as at 31 December 2024



## Twickenham

**Anglo American Platinum Limited interest: 100%**  
**Management structure: managed**



### Location

Twickenham is located in the Eastern Limb of the Bushveld Complex approximately 35km north-west of the town of Burgersfort.

### Property description

Twickenham was placed on care and maintenance in 2016.

The mine offers prospects for shallow mechanised mining on both the Merensky Reef and UG2 Reef horizons. Anglo American Platinum is evaluating options through technical studies that will provide insights on how the orebody can be mined to ensure sustainability of the operation in the future.



### Competence

	Mineral Resources
Competent Person	Martha Setuke
Role	Mineral Resources and Reserves reporting specialist – platinum
Relevant qualifications	BSc (hons) (geology), GDE (mining)
Professional organisation	SACNASP, PrSciNat
Membership number	400300/12
Relevant experience	19 years

# The operations – estimates and reconciliation continued

as at 31 December 2024

## Twickenham continued

### Brief history

After the Merensky Reef was discovered in the mid-1920s on Maandagshoek farm in the Eastern Limb, the Twickenham area has been the subject of different exploration programmes. Trenches and numerous small adits were excavated in both the Merensky and UG2 Reef horizons on the eastern side of the area. In the 1960s, diamond drilling programmes were undertaken with Hackney being the focus of extensive exploration from 1966 to 1982. Trial mining of the UG2 Reef at Hackney was conducted between 1977 and 1979.

In 1988 and 1989, further diamond drilling was carried out. Renewed interest sparked further drilling in 1996 and 1997. At the same time, detailed mineralogical and metallurgical studies of the UG2 and Merensky Reefs were conducted to better define the treatment characteristics of the orebody.

Since 2001, exploration by Anglo American Platinum included several major drilling programmes and related activities. The UG2 was identified as the primary target at the mine based on geological continuity, grade consistency and precious metal values. The development of the mine started in 2001.

Due to economic and operational conditions at the time, Twickenham has been on care and maintenance since 2016.

### Mineral rights

The current mining right covers an area of 17,747ha. Anglo American Platinum holds a converted mining right under DMRE reference LP 89 MR, valid from March 2011 to March 2041.

There are no known impediments to the mining right. An application to extend the mining right will be submitted at the appropriate time and there is reasonable expectation that such an extension will not be withheld.

### Brief geological description

Twickenham is located in the Eastern Limb of the Bushveld Complex, north of the Steelpoort fault. The main economic horizons and PGMs mineralisation are the UG2 and Merensky Reefs. Both reefs subcrop on the property, striking approximately north-north-west/south-south-east at an average dip of 15° to the south-west over a strike length of 16km. The UG2 and Merensky Reefs are separated by approximately 400m of mafic cumulate rocks.

The Merensky Reef thickness ranges from 100cm to 200cm, with an average thickness of 140cm. The mineralisation occurs mainly in a poikilitic plagioclase pyroxenite bound by thin chromitite stringers and associated pegmatoidal textures, which contain the highest PGM grades. The UG2 Reef chromitite layer varies in thickness from 30cm to 110cm (average of 62cm), overlain by up to five chromitite stringers varying in thickness from 2mm to 1cm. The immediate footwall of the UG2 Reef is usually a pegmatoidal feldspathic pyroxenite, which varies in thickness from a few centimetres to 200cm, with an average of 60cm.

The topography consists of a long valley between the fairly rugged Leolo mountain range, comprising main zone gabbro and gabbro-norites. The tectonic setting is characterised by north-north-east/south-south-west striking dolerite dykes of post-Karoo age and faults. A fairly prominent dyke swarm exists on Paschaskraal farm with individual dyke widths reaching 30m to 40m. Other geological discontinuities impacting the mining horizon are potholes, with rare occurrences of replacement pegmatites of various compositions (sometimes iron rich).

► For a description of the Mineral Resource estimation and classification processes, see **pages 23 to 26** of this report.

### Reasonable prospects for eventual economic extraction

The following factors are considered when assessing reasonable prospects for eventual economic extraction of the declared Mineral Resources:

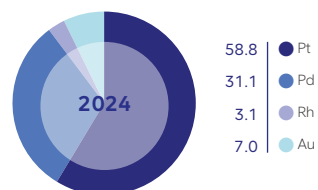
- Legal: Twickenham adheres to all regulatory requirements and has the requisite permits and licences for exploration and mining
- Environmental, social and governance: Our sustainability strategy framework considers the local communities, the environment and land use as well as corporate governance as inputs for the RPEEE assessment
- Geology: The declared Mineral Resources are supported by well-informed geological and Mineral Resource models that have considered the key geological features that exert control on mineralisation. The Merensky Reef is estimated over an optimised resource cut while the UG2 Reef optimised cut includes unavoidable dilution. The Inferred Mineral Resources are interpolated from drill hole sample points within our boundary and additional drill hole sample points down-dip that are outside the boundary
- Mining method: The operation considers the mining methods as previously utilised on the mine and as currently utilised on adjacent mines
- Metallurgical and processing: Sufficient geo-metallurgical and mineralogical test work has been carried out for the reefs declared and the mine has sufficient plant data to predict recovery potential. Viable options are available for restarting the mine, including construction of an on-site concentrator
- Economics: Using current global economic assumptions (prices and costs), current mining methods are known to be viable when considering adjacent mining operations. Internal valuations from prefeasibility studies have indicated positive value over long and consistent production profiles
- Technology: Current technology is deemed to be inadequate for mining any material below the 75°C isotherm line, excluding this material from the declared Mineral Resources
- Other factors such as market assessments and infrastructure requirements are adequately assessed in various levels of technical studies.

# The operations – estimates and reconciliation continued

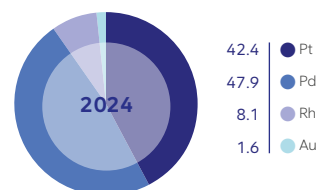
as at 31 December 2024

## Twickenham continued

Twickenham Merensky Reef 4E metal split (%)

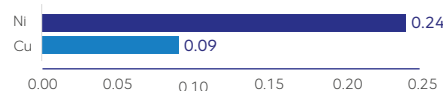


Twickenham UG2 Reef 4E metal split (%)

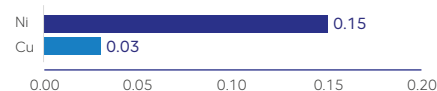


UG2 Reef chromite grade: 24.6%

Twickenham Merensky Reef base metal grades (%)



Twickenham UG2 base metal grades (%)



	Units	Merensky	UG2
<b>Mineral Resource assumptions</b>			
Average geological loss	%	22.0	20.9
Minimum resource cut	cm	105.0	95.0
Average density	g/cm <sup>3</sup>	3.4	4.0

### Merensky and UG2 reefs exclusive Mineral Resources reconciliation

Twickenham is on care and maintenance. Estimates are unchanged from previous reporting.

## Exclusive Mineral Resource estimates

		Tonnes Mt		Grade 4E g/t		Contained metal 4E tonnes		Contained metal 4E Moz	
Twickenham (100%)	Classification	2024	2023	2024	2023	2024	2023	2024	2023
Merensky Reef	Measured	48.4	48.4	4.75	4.75	230	230	7.4	7.4
	Indicated	87.3	87.3	4.97	4.97	434	434	14.0	14.0
	Measured and Indicated	135.7	135.7	4.89	4.89	664	664	21.3	21.3
	Inferred	165.7	165.7	5.26	5.26	872	872	28.0	28.0
	<b>Total</b>	<b>301.4</b>	<b>301.4</b>	<b>5.09</b>	<b>5.09</b>	<b>1,536</b>	<b>1,536</b>	<b>49.4</b>	<b>49.4</b>
UG2 Reef	Measured	54.6	54.6	6.29	6.29	344	344	11.1	11.1
	Indicated	145.4	145.4	6.05	6.05	879	879	28.3	28.3
	Measured and Indicated	200.0	200.0	6.12	6.12	1,223	1,223	39.3	39.3
	Inferred	148.2	148.2	5.88	5.88	871	871	28.0	28.0
	<b>Total</b>	<b>348.2</b>	<b>348.2</b>	<b>6.02</b>	<b>6.02</b>	<b>2,094</b>	<b>2,094</b>	<b>67.3</b>	<b>67.3</b>

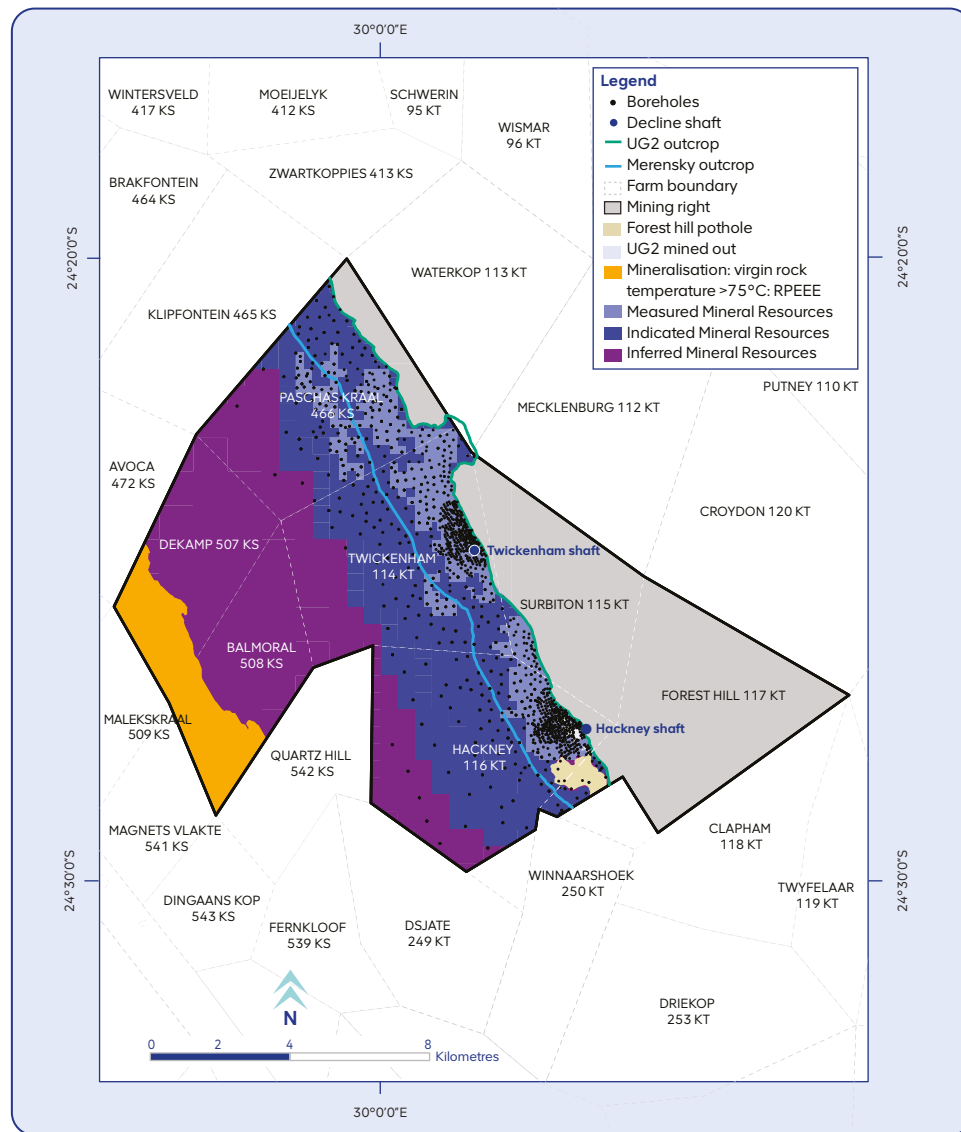


# The operations – estimates and reconciliation continued

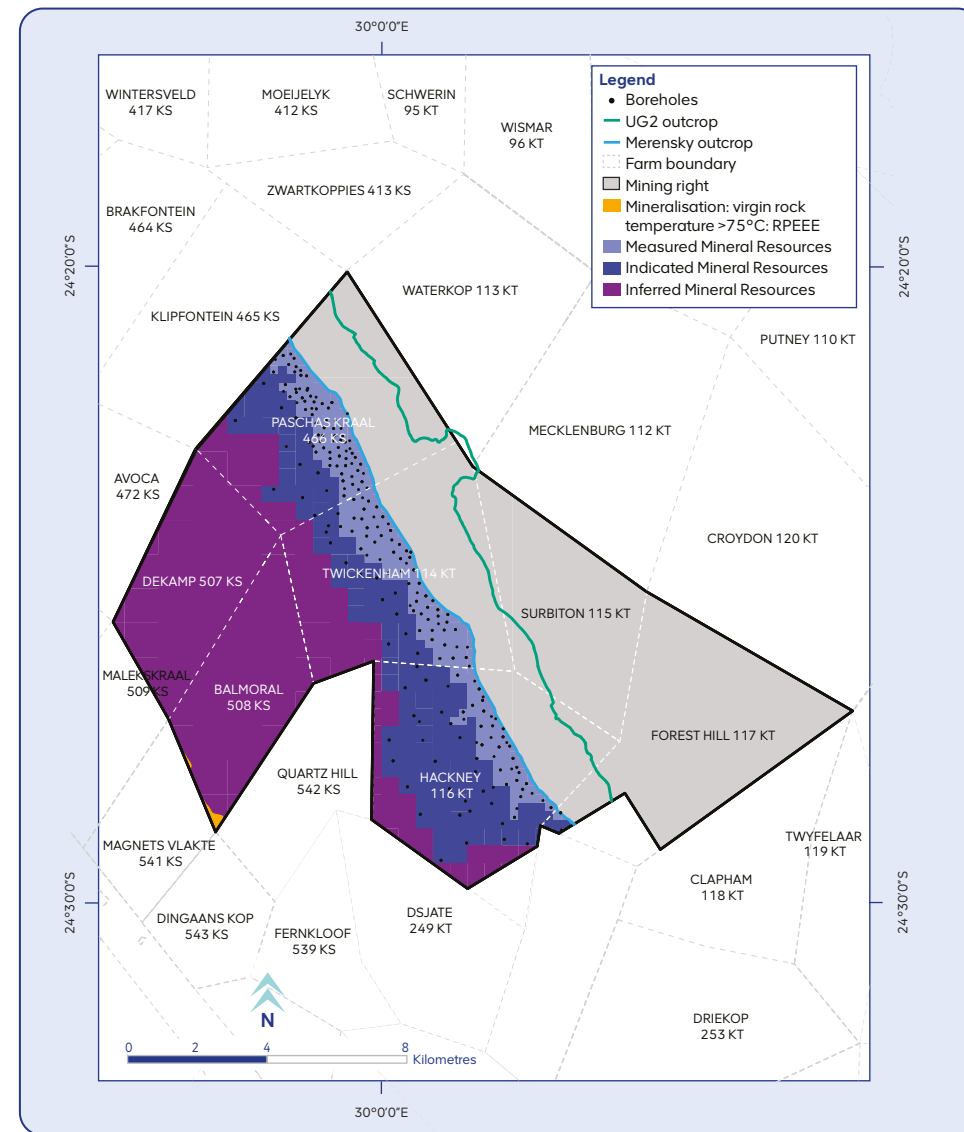
as at 31 December 2024

## Twickenham continued

**Twickenham UG2 Mineral Resources classification map**



**Twickenham Merensky Mineral Resources classification map**

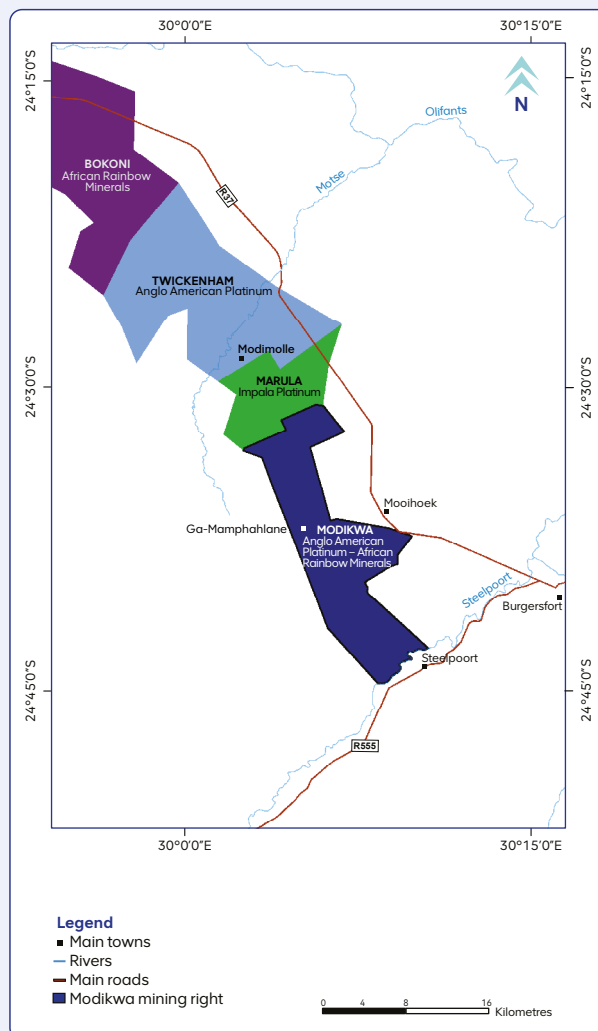


# The operations – estimates and reconciliation continued

as at 31 December 2024



## Modikwa

**Anglo American Platinum Limited interest: 50%****Management structure: non-managed**

### Location

Modikwa is located 25km north-west of the town of Burgersfort and 15km north of Steelport, along the border of the Mpumalanga and Limpopo provinces. It is an independently managed joint operation between Anglo American Platinum (50%), African Rainbow Minerals (41.5%) and Modikwa communities (8.5%).

### Property description

Modikwa is located in the Eastern Limb of the Bushveld Complex, with UG2 and Merensky Reefs present. The mine extracts UG2 Reef from surface to over 600m below surface and extract the Merensky Reef on a trial mining basis. The Modikwa strategy focuses on delivering safe, profitable production and controlling costs to remain competitive.



### Competence

	Mineral Resources	Ore Reserves
<b>Competent Persons</b>	Martha Setuke*	Alpheus Lesufi**
<b>Role</b>	Mineral Resources and Reserves reporting specialist – platinum	Resource leader: survey
<b>Relevant qualifications</b>	BSc (hons) (geology), GDE (mining)	BTech (survey)
<b>Professional organisation</b>	SACNASP, PrSciNat	SAIMM, member
<b>Membership number</b>	400300/12	706902
<b>Relevant experience</b>	19 years	12 years

\* Employed by Anglo American plc.

\*\* Employed by Modikwa Mine.

# The operations – estimates and reconciliation continued

as at 31 December 2024

## Modikwa continued

### Brief history

The discovery of the Merensky Reef on the Eastern Limb of the Bushveld Complex occurred in the mid-1920s on Maandagshoek farm. The area has since been the subject of different exploration programmes. Trenches and numerous small adits were excavated in both the Merensky and the UG2 Reef horizons on the eastern side of the area. This was followed by diamond drilling programmes in the 1960s throughout the area to determine the basic characteristics of the orebody.

In the late 1970s to early 1980s, several limited underground operations were established, which included the development of a vertical shaft at the Driekop pipe, and a number of inclined winzes on the Maandagshoek farm.

The UG2 Reef was identified as the primary target in the vicinity of the Modikwa lease based on geological continuity, grade consistency and precious metal values. The Anglo American Platinum and African Rainbow Minerals 50:50 joint partnership culminated in the inception of the mine in the early 2000s. Both the North 1 and South 1 decline shafts started simultaneously in 2001 and the South 2 shaft was established in 2013.

### Mineral rights

The mining right covers an area of 14,136ha and is held in equal shares by Anglo American Platinum and African Rainbow Minerals. The converted mining right held under DMRE reference LP129 MR is valid from November 2013 to November 2043.

There are no known impediments to the mining right. An application to extend the mining right will be submitted at the appropriate time and there is reasonable expectation that such an extension will not be withheld.

### Brief geological description

Modikwa is in the Eastern Limb, north of the Steelpoort fault. The main economic horizons and PGM mineralisation are the UG2 and Merensky Reefs. Both reefs subcrop on the property, striking approximately north-north-west/south-south-east at dips ranging from 10° to 12° to the south-west over a strike length of 25km. The UG2 and Merensky Reefs are separated by approximately 245m to 360m of mafic cumulate rocks.

The Merensky Reef thickness is approximately 2.5m and mineralisation occurs mainly in a poikilitic plagioclase pyroxenite bound by thin chromitite stringers and associated pegmatoidal textures, which contain the highest PGMs grades. The UG2 chromitite layer varies in thickness from 55cm to 65cm, overlain by three chromitite stringers which vary in thickness from 2mm to 1cm. The immediate footwall of the UG2 is usually a pegmatoidal feldspathic pyroxenite, which varies in thickness from a few centimetres to 20cm. Gentle undulations of the UG2 Reef with amplitudes of less than 2m are developed across the mine area.

Potholes are randomly distributed within the North shaft area but are less abundant in the South shaft area. The dolerite dykes are generally vertical or steep dipping, varying between 70° and 90° and are several centimetres to approximately 30m in thickness. The Onverwacht Hill and Driekop areas in the southern portion of the mine are characterised by the presence of several large ultramafic pegmatoidal intrusions that disrupt and locally replace the UG2 Reef.

► For a description of the Mineral Resources estimation and classification processes, see **pages 23 to 26** of this report.

### Reasonable prospects for eventual economic extraction

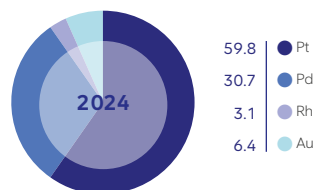
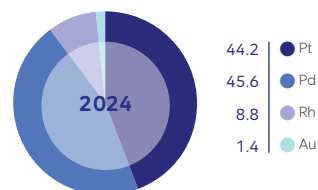
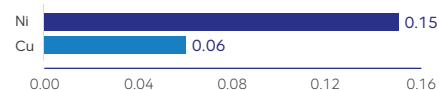
The following factors are considered when assessing reasonable prospects for eventual economic extraction of the declared Mineral Resources:

- Legal: Modikwa adheres to all regulatory requirements and has the requisite permits and licences for exploration and mining
- Environmental, social and governance: Modikwa's ESG framework considers local communities, the environment and land use as well as current legislation as inputs for the RPEEE assessment
- Geology: The declared Mineral Resources are supported by well-informed geological and Mineral Resource models that have considered the key geological features that exert control on mineralisation. The Merensky Reef is estimated over an optimised resource cut while the UG2 Reef optimised cut may include unavoidable dilution. The Inferred Mineral Resources are interpolated from drill hole sample points within our boundary and additional drill hole sample points down-dip that are outside the boundary
- Mining method: The mine utilises the conventional breast stoping mining method
- Metallurgical and processing: Sufficient geo-metallurgical and mineralogical test work has been carried out for the reefs declared and the mine has sufficient plant data to predict recovery of the UG2 Reef potential. Existing processing facilities are suitable for processing future ore
- Economics: Using current global economic assumptions (prices and costs), the applicable mining methods are known to be viable as utilised on the current mining operations
- Mining infrastructure: The current mining infrastructure will be sufficient. Future infrastructure will be established when required
- Other factors such as market assessments are adequately assessed in various levels of technical studies.

# The operations – estimates and reconciliation continued

as at 31 December 2024

## Modikwa continued

**Modikwa Merensky Reef 4E metal split (%)****Modikwa UG2 Reef 4E metal split (%)****Modikwa Merensky Reef base metal grades (%)****Modikwa UG2 base metal grades (%)**

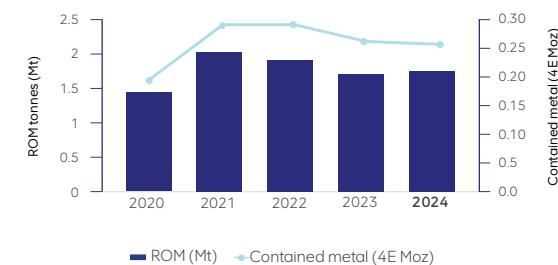
The current access infrastructure comprises three primary decline shafts (North 1, South 1 and South 2), three adits on Onverwacht Hill. Run-of-mine ore is transported by conveyor belts to the on-site concentrator and the residue from the concentrator is further processed in the chromite recovery plant. The final tails produced are pumped to the tails treatment facility where process water is recovered to be reused in the circuit and the residue is pumped into the tailings storage facility. The concentrate is transported to the Anglo American Platinum Polokwane smelter for further processing.

► For a description of the Ore Reserves estimation and classification processes, see **pages 29 to 32** of this report.

	Units	Merensky	UG2
<b>Mineral Resources assumptions</b>			
Average geological loss	%	<b>20.7</b>	<b>18.3</b>
Minimum resource cut	cm	<b>180.0</b>	<b>103.0</b>
Average density	g/cm <sup>3</sup>	<b>3.4</b>	<b>3.9</b>
<b>Ore Reserve modifying factors</b>			
Mining loss factor	%	—	<b>1.2</b>
Mining dilution	%	—	<b>33.0</b>
Planned stoping width	cm	—	<b>119.0</b>
4E concentrator recoveries	%	—	<b>86.6</b>
Mine call factor	%	—	<b>95.0</b>

### Mining methods and infrastructure

The mine is a hybrid operation using conventional breast stoping mining method with strike pillars, supported by mechanised development and ore clearance. On-reef mining/stoping is supported by on-reef infrastructure which is developed ahead of on-reef operations by means of trackless mechanised mining equipment. Underground bord-and-pillar trial mining activities are conducted along the outcrop of the Merensky Reef through the J adit in the Onverwacht Hill area.

**Modikwa UG2 Reef production history (ROM)**

For additional details on the 2024 production information, see the operations review section, on **pages 80 and 81** of the integrated report.



# The operations – estimates and reconciliation continued

as at 31 December 2024

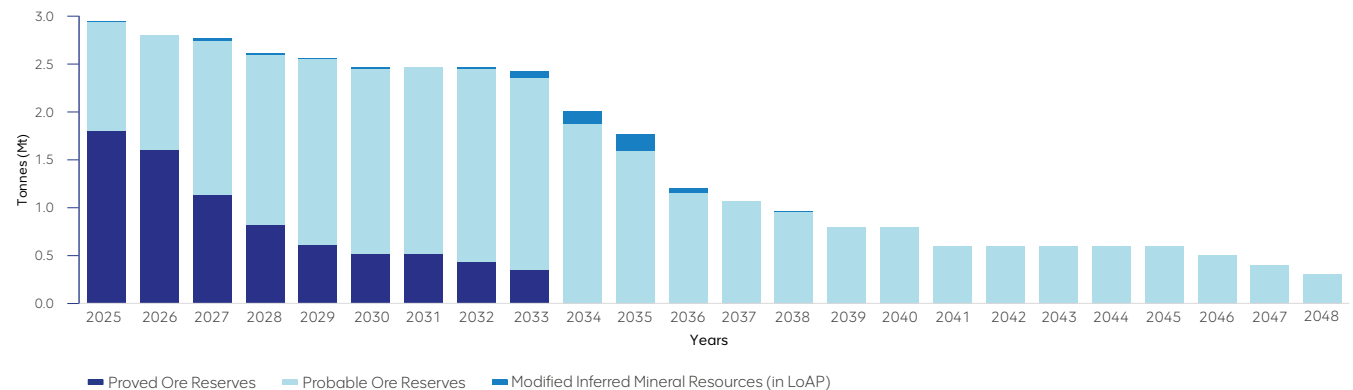
## Modikwa continued

### Modikwa life-of-asset profile

The life-of-asset plan schedule for Modikwa reflects the UG2 Reef planned production in the approved life-of-asset plan and includes projects that have the necessary approvals that underpin the Ore Reserve declaration. The anticipated Reserve life is 24 years (2023: 25 years) and exceeds the current mining right expiry date of 2043 (19 years). An application to extend the mining right will be submitted at the appropriate time and there is reasonable expectation that such an extension will not be withheld.

The modified Inferred Mineral Resources in life-of-asset plan are excluded from Ore Reserves declaration and assessments conducted indicate that the exclusion of these Inferred Mineral Resources has no impact on the current life of asset.

Modikwa total ROM tonnes in life-of-asset plan



### Ore Reserve estimates

Modikwa (50%)*	Classification	Tonnes (ROM) Mt		Grade 4E g/t		Contained metal 4E tonnes		Contained metal 4E Moz	
		2024	2023	2024	2023	2024	2023	2024	2023
UG2 Reef	Proved	7.8	9.4	4.41	4.44	34	42	1.1	1.3
	Probable	28.4	28.4	4.15	4.15	118	118	3.8	3.8
	<b>Total</b>	<b>36.2</b>	<b>37.8</b>	<b>4.21</b>	<b>4.22</b>	<b>152</b>	<b>160</b>	<b>4.9</b>	<b>5.1</b>

\* Estimates are reported on a 100% basis.

# The operations – estimates and reconciliation continued

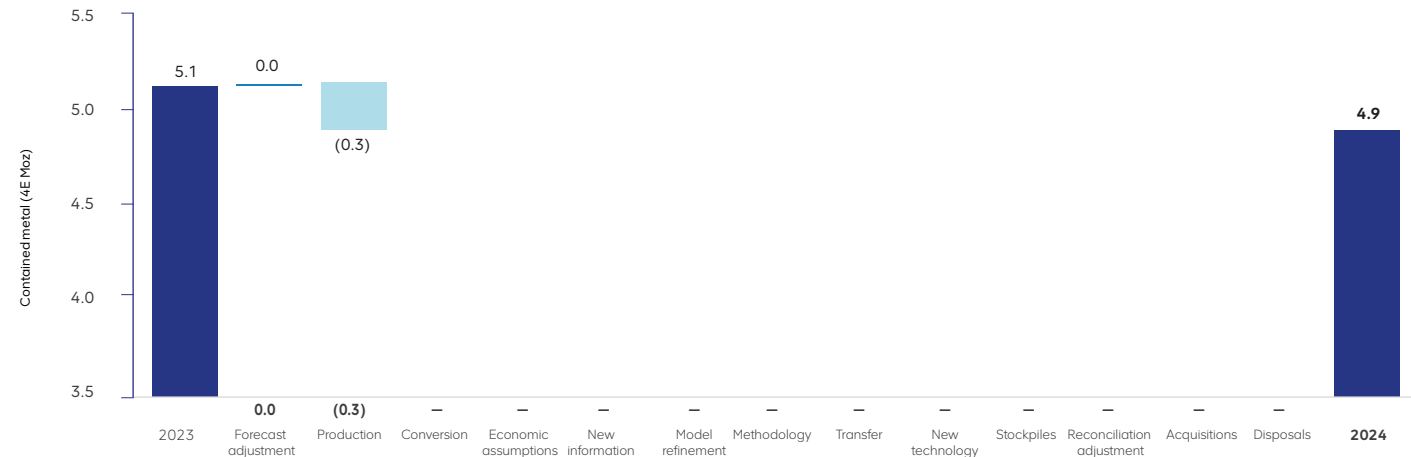
as at 31 December 2024

## Modikwa continued

### UG2 Reef Ore Reserves reconciliation

The UG2 Reef Ore Reserve 4E ounces decreased due to annual production.

Modikwa UG2 Reef Ore Reserves  
2023 – 2024 reconciliation (4E Moz)



## Exclusive Mineral Resource estimates

		Tonnes Mt		Grade 4E g/t		Contained metal 4E tonnes		Contained metal 4E Moz	
Modikwa (50%)*	Classification	2024	2023	2024	2023	2024	2023	2024	2023
Merensky Reef	Measured	18.0	18.1	3.14	3.14	57	57	1.8	1.8
	Indicated	50.5	51.1	2.85	2.86	144	146	4.6	4.7
	Measured and Indicated	68.5	69.2	2.93	2.93	201	203	6.4	6.5
	Inferred	130.0	130.3	2.82	2.82	367	368	11.8	11.8
	<b>Total</b>	<b>198.6</b>	<b>199.5</b>	<b>2.86</b>	<b>2.86</b>	<b>567</b>	<b>571</b>	<b>18.2</b>	<b>18.3</b>
UG2 Reef	Measured	47.2	46.2	5.91	5.91	279	273	9.0	8.8
	Indicated	90.6	88.8	5.90	5.90	534	524	17.2	16.9
	Measured and Indicated	137.8	135.0	5.90	5.90	813	797	26.2	25.6
	Inferred	73.5	77.0	6.22	6.21	457	478	14.7	15.4
	<b>Total</b>	<b>211.3</b>	<b>212.0</b>	<b>6.01</b>	<b>6.01</b>	<b>1,270</b>	<b>1,275</b>	<b>40.8</b>	<b>41.0</b>

\* Estimates are reported on a 100% basis.

# The operations – estimates and reconciliation continued

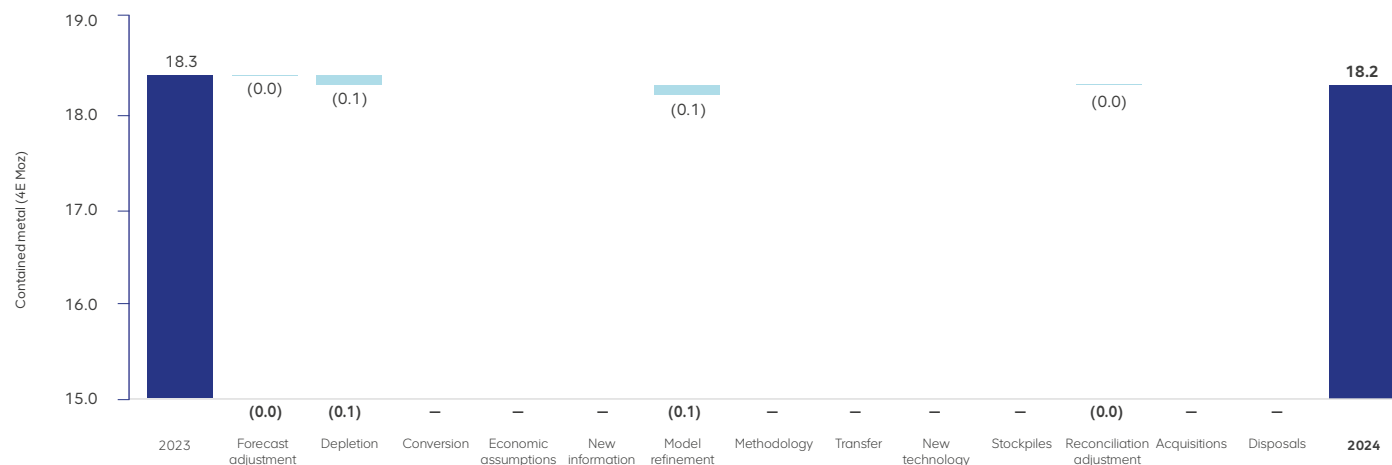
as at 31 December 2024

## Modikwa continued

### Merensky Reef exclusive Mineral Resources reconciliation

The Merensky Reef exclusive Mineral Resource 4E ounces decreased due to updated geological losses and trial mining depletion.

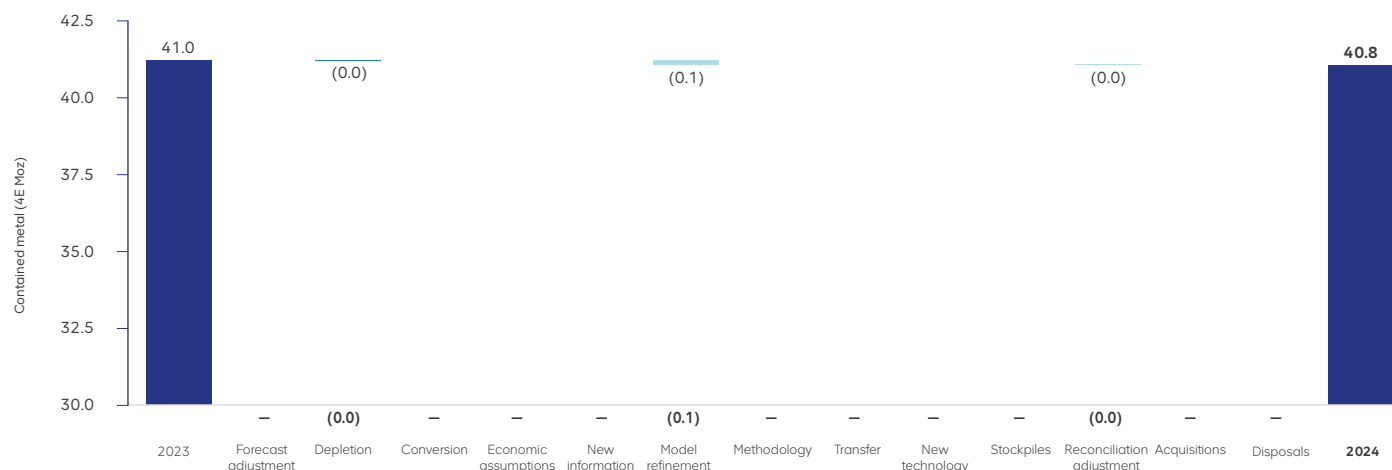
### Modikwa Merensky Reef exclusive Mineral Resources 2023 – 2024 reconciliation (4E Moz)



### UG2 Reef exclusive Mineral Resources reconciliation

The UG2 Reef exclusive Mineral Resource 4E ounces decreased due to updated geological losses.

### Modikwa UG2 Reef exclusive Mineral Resources 2023 – 2024 reconciliation (4E Moz)

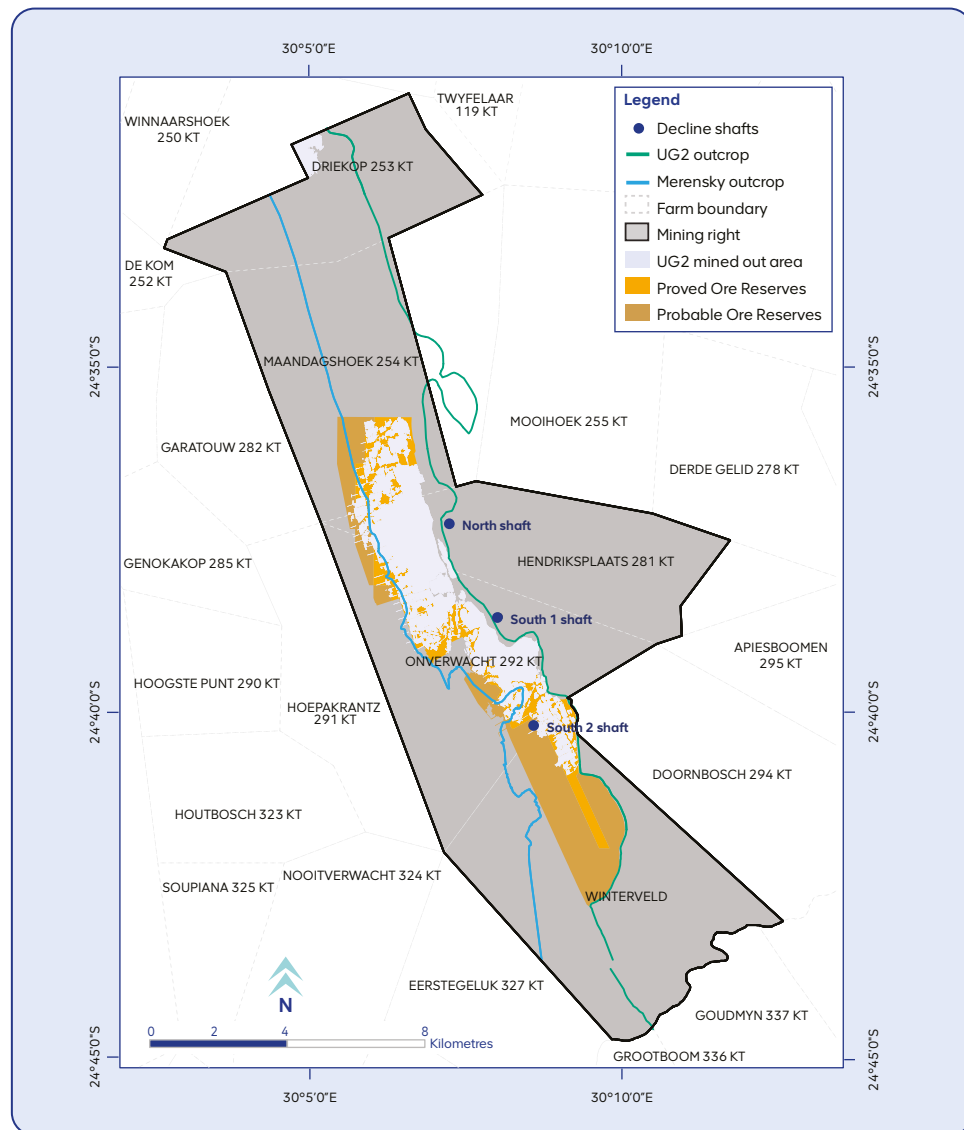


# The operations – estimates and reconciliation continued

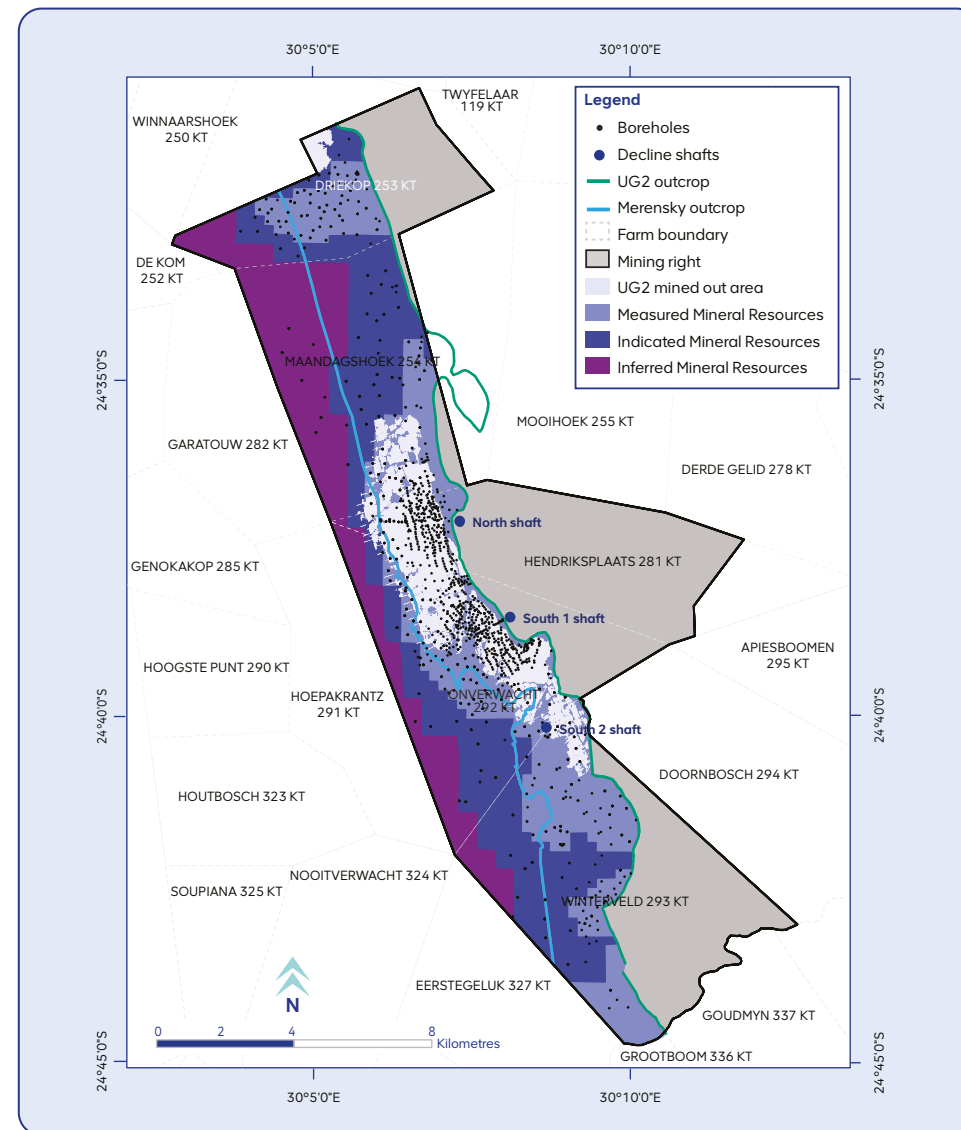
as at 31 December 2024

## Modikwa continued

**Modikwa UG2 Ore Reserves classification map**



**Modikwa UG2 Reef Mineral Resources classification map**

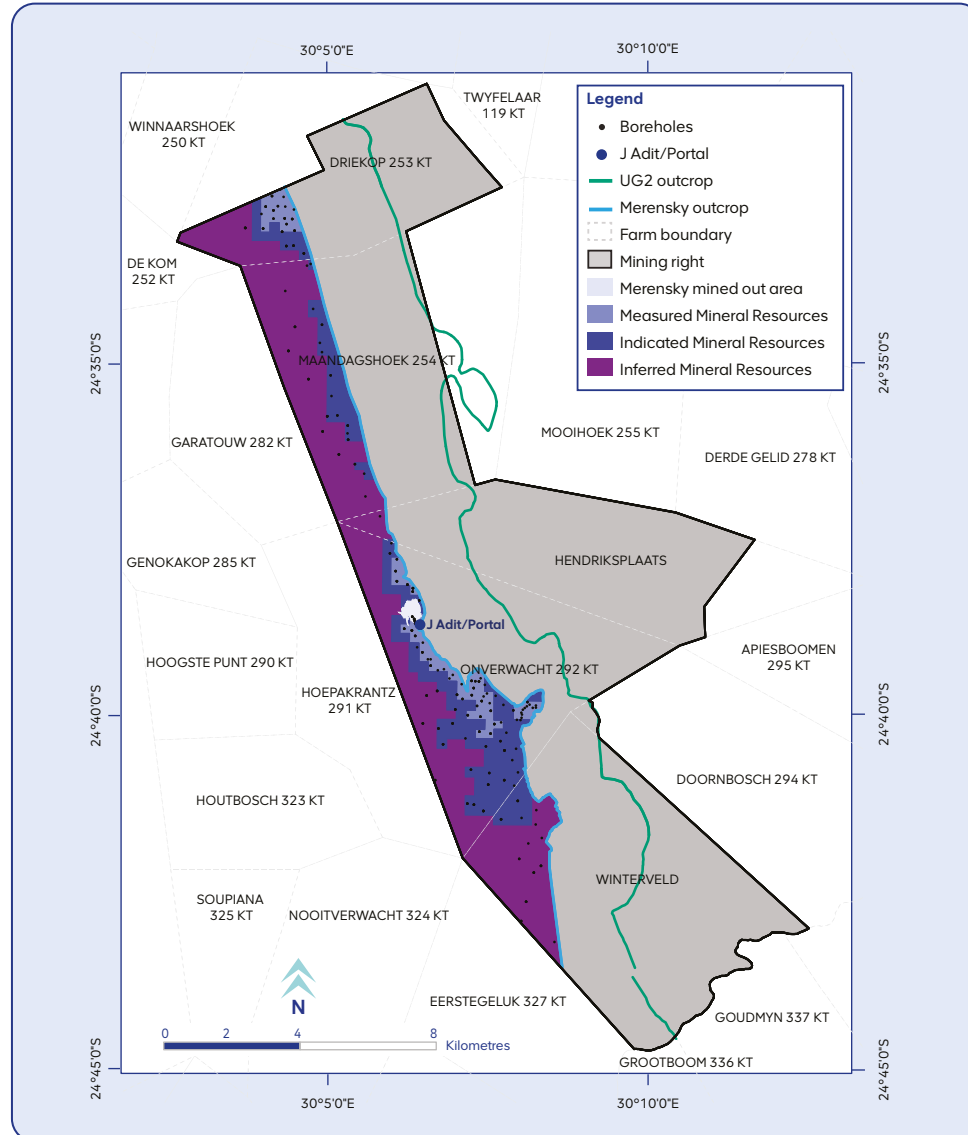


# The operations – estimates and reconciliation continued

as at 31 December 2024

## Modikwa continued

### Modikwa Merensky Mineral Resources classification map



Operations at Modikwa



# Mineralisation

as at 31 December 2024

<b>General</b>	<p>In addition to evaluated and reported Ore Reserves and Mineral Resources, Anglo American Platinum holds various Mineralisation that are not publicly reported.</p> <p>Different types of Mineralisation exist, either stockpiled material on surface or still in situ underground. This material requires studies to determine the potential economic value (RPEEE). Further understanding and quantification of the company's full mineral endowment potential on and around our current holdings is underway, including the endowment specified in the Central Block and Kwanda North in the greater Mogalakwena mining right.</p>
<b>Surface material</b>	<p><b>Tailings storage facilities (TSF)</b></p> <p>Tailings Mineralisation: operating (active) tailings facilities for current mining operations are not evaluated and therefore not reported as part of Mineral Resources. They contain residual amounts of PGMs, base metals, chromite and are registered internally in Anglo American Platinum's asset books. Currently, TSF Mineralisation is available at the following operations:</p> <ul style="list-style-type: none"> <li>– Amandelbult – Western Limb</li> <li>– Modikwa and Mototolo – Eastern Limb</li> <li>– Mogalakwena – Northern Limb</li> <li>– Unki – Great Dyke (Zimbabwe).</li> </ul>
<b>Chromite by-product from UG2 tailings</b>	<p>Under current market conditions, the recovery of saleable chromite concentrate as a by-product from UG2 Reef processing is economically viable. Recovery from inter-stage or final UG2 flotation tail streams produces saleable metallurgical and chemical grade concentrate. The contained monetary value of the chromite by-product is included when assessing UG2 Reef Ore Reserves where the chromite recovery plants are in production.</p> <p>Currently, chromite recovery plants are operating at Amandelbult, Mototolo and Modikwa. Chromite recoveries are between 12% and 17% at Amandelbult, 5.5% to 6% at Mototolo and 6% to 8% at Modikwa from every tonne of UG2 Reef ore processed (overall yield factor) when the Cr<sub>2</sub>O<sub>3</sub> content in the UG2 Reef ore is greater than 20%.</p>

# External audits assurance letters

## Mogalakwena: Platreef Ore Reserves and Mineral Resources audit



Mr Alastair Cornah  
Anglo American Platinum (Pty) Ltd  
Corporate Office  
144 Oxford Street  
Rosebank  
Johannesburg 2196  
South Africa

Via email: Martha.Hlangwane@angloamerican.com

15 January 2025

The Directors

### RE: Mineral Resource Update and Ore Reserve Audit

In December 2024 Snowden Optiro undertook a Mineral Resource audit update and a full Ore Reserve audit on Mogalakwena Mine.

#### Mineral Resources

Snowden Optiro has not identified any high risk issues associated with the Mogalakwena Mine Mineral Resources.

The Mineral Resources comprise the Mogalakwena north, central, and south active pits, the Zwartfontein pit, the Mogalakwena Mine underground resources, the Tweefontein opencast and underground project area and the Sandsloot underground development project. The Mogalakwena Mine has been in production since 1992.

Opencast mining of the Platreef at the Mogalakwena Mine provides the majority of the platinum group metals (PGMs) and nickel and copper-bearing ore which is treated at the North Concentrator and South Concentrator with the balance being derived from stockpiled ore and a small amount of mining from the Zwartfontein pit.

The geology of the Platreef is well understood through geological work, through exploration drilling, and through grade control activities, and these provide a firm basis for the geological models and for grade interpolation. The geological and structural models have been well-constructed and have been updated during 2024.

The data used in geological and grade modelling comprises surface diamond drilling and in-pit reverse circulation drilling. There is a negative grade bias in the grade in the reverse circulation holes versus the diamond drilling holes. Snowden Optiro supports the process applied in the correction that has been applied in the construction of the long term model through the construction and back transformation of trend surfaces. The processes applied in the estimation can be considered to be industry best practice.

The geometallurgical model has been introduced and now incorporates mineralogical data. This allows the delineation of lower recovery calc-silicate mineralisation and plant performance. The collection and analysis of geometallurgical data should be continued.

Snowden Optiro can reproduce Mogalakwena Mine's total 2024 inclusive Mineral Resources of 2.993 Bt at 2.74 g/t 4E (excluding stockpiles) to within an acceptable level of accuracy.

The final Mogalakwena Mine Competent Persons Report has been completed and complies with the SAMREC Code (2016 edition).



Anglo American Platinum  
Mineral Resource and Ore Reserve Audit

#### Ore Reserves

Snowden Optiro has not identified any high risk issues associated with the mine planning and Ore Reserves.

The declared Ore Reserves are dependent on the extension of mining rights, adjacent land acquisition, human settlement relocation and permitting of waste storage facilities. Snowden Optiro agrees that Anglo Platinum Mogalakwena operation has reasonable expectations of obtaining the necessary license extensions and permits during the LoM.

Ore Reserves have been delineated at the north, central and south pits, and at the Zwartfontein pit. The Anglo American Platinum life of asset planning occurs on a three year cycle with Ore Reserve declarations being by depletion between cycles. Snowden Optiro agrees with the optimisation and planning processes followed and in the selection of the smallest mining unit for open pit mining.

Geotechnical slope design considerations used for the Life of Asset Plan process have been developed by external specialist geotechnical consultants based on the modelling and analysis of geotechnical data and specialist site visits. Snowden Optiro agrees with the process followed and with the results that are being applied to the pit designs and recommends continued periodic geotechnical assessments for future hanging-wall pushbacks during the LoM.

Recent studies and modelling have resulted in the generation of a geometallurgical model that incorporates mineralogical data that allows the delineation of lower recovery calc-silicate mineralisation and plant performance for feed to the concentrator. Variable recoveries have not yet been incorporated into the concentrator performance.

Snowden Optiro notes that equipment productivities, availabilities and costs are derived through a process that analyses various data sources and are documented following various internal review processes for input into the mine planning process. Snowden Optiro recommends that future reviews reconcile planned equipment performances with actuals to identify any shortcomings of the new process.

Processing and central services costs are derived from analyses of previous actuals costs and the five-year budgeting process. Snowden Optiro considers the derivation of these costs appropriate, based on the planned 130–140 Mt/a scale of operation.

Long term metal price forecasts used in the pit optimisation process are supplied by the Anglo American Platinum Internal Marketing Department. Snowden Optiro considers the platinum price to be optimistic considering prevailing market conditions and considers this to be a risk to the Ore Reserves.

Anglo American Platinum has made improvements to their risk-based assessment of physical, technical and economic modifying factors identified in the 2021 Ore Reserve audit process. The impact and sensitivity analysis considered the Anglo American Platinum guidelines associated with the provision of adequate tailings/ waste rock dump storage facilities and has been completed at an acceptable optimisation level.

The Ore Reserve classification currently honours the resource classification.

Mogalakwena Mine's total Ore Reserves of 1.2 Bt at 2.97 g/t 4E (of which 57.3 Mt at 1.33 g/t 4E is existing stockpiled material). Snowden Optiro can reproduce the Mogalakwena Mine Ore Reserves to within an acceptable level of accuracy.

The final Mogalakwena Mine Competent Persons Report has been completed and complies with the SAMREC Code (2016 edition).

Kind Regards

Matt Mullins  
Executive Consultant

Mike Seymour  
Principal Consultant

Vince Agnello  
Principal Consultant

# External audits assurance letters continued

## Amandelbult: Merensky and UG2 Reefs Ore Reserves and Mineral Resources audit



Specialist Consultants to the Mining Industry

The MSA Group (Pty) Ltd  
Registration No: 2000/002800/07  
Tel: +27 (0)11 880 4209 Fax: +27 (0)11 880 2184  
email: info@msagroupservices.com  
Henley House, Greenacres Office Park:  
Cnr Victory and Rustenburg Roads, Victory Park, 2195  
PO Box 81356, Parkhurst, 2120, South Africa

Mr. Alastair Cornah,  
Head of Mineral Resources and Ore Reserves,  
Anglo American: Technical and Sustainability,  
144 Oxford Road, Rosebank,  
South Africa.

12 December 2024

Dear Sir

### Amandelbult Complex Mineral Resource and Mineral Reserve Audit 2024

At the request of Anglo American Platinum Limited ("AAPL"), The MSA Group (Pty) Ltd ("MSA") completed an Independent Audit of the 31 December 2024 Mineral Resources and Mineral Reserves for Amandelbult Platinum Mine Complex ("Amandelbult"). Amandelbult comprises two underground mines, Tumela and Dishaba, and processing facilities for the extraction of Platinum Group Metals ("PGMs") and associated minerals (chromite, nickel, copper and cobalt) from the UG2 and Merensky Reef of the Bushveld Complex in South Africa.

MSA's audit commenced with a site visit during which the Amandelbult underground workings, surface infrastructure and facilities were inspected. The processes used to gather data informing the Mineral Resources and Mineral Reserves were reviewed, followed by analysis of the input data, review of the underlying assumptions and estimation methodology, and checks on the resulting estimates.

It is MSA's opinion that the Amandelbult Mineral Resources and Mineral Reserves have been estimated using reasonable assumptions and appropriate techniques for the style of mineralisation and mining methods at Amandelbult. The Mineral Resource and Mineral Reserve estimation processes and inputs are guided by comprehensive procedures and governed by standards that are assured by stringent internal audit and review.

No significant or material items were identified during the audit. Major risks that could impact on the reported Mineral Resources and Mineral Reserves are well understood with appropriate mitigation measures in place. MSA has verified the quantum of Mineral Resources and Mineral Reserves reported for Amandelbult and considers that they have been prepared by suitably qualified and experienced Competent Persons in accordance with 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). The reported Mineral Resources and Mineral Reserves are considered suitable for public disclosure in Anglo American Platinum Limited's Annual Report.

The Mineral Resource audit was completed by Mr. Jeremy Witley (Pri. Sci. Nat.) and the Mineral Reserve audit was completed by Mr. Jonathan Hudson (Pr. Eng.), who are appropriately qualified and experienced in narrow tabular PGM deposits to carry out the audit. Neither MSA, Mr. Witley nor Mr. Hudson have any material interest in the assets concerned, and MSA is remunerated based on fees that are not contingent on the outcome of this independent external audit.

On behalf of The MSA Group (Pty) Ltd.

Jeremy Witley  
Head of Mineral Resources  
Pri. Sci. Nat., FGSSA, BSc (Hons), MSc (Eng.)

Jonathan Hudson  
Associate Principal Mining Engineer  
Pr. Eng., FSAIMM, BSc (Eng.), MBA



Surveying cores at Mogalakwena exploration drilling

# Definitions for SAMREC Code terminology

## Mineralisation

A concentration (or occurrence) of material of possible economic interest, in or on the earth's crust, for which quantity and quality cannot be estimated with sufficient confidence to be defined as a Mineral Resource. Mineralisation is not classified as a Mineral Resource or Mineral Reserves and can only be reported under Exploration Results. The data and information relating to it must be sufficient to allow a considered and balanced judgement of its significance.

## Mineral Resource

A 'Mineral Resource' is a concentration or occurrence of solid material of economic interest in or on the earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.

Mineral Resources are subdivided, and must be so reported, in order of increasing confidence in respect of geoscientific evidence, into Inferred, Indicated or Measured categories (SAMREC Code, clause 24).

<b>Measured Mineral Resource</b>	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 Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Mineral Reserve or to a Probable Mineral Reserve.	(SAMREC Code, clause 28)
<b>Indicated Mineral Resource</b>	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. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve. An Indicated Mineral Resource has a higher level of confidence than that applying to an Inferred Mineral Resource.	(SAMREC Code, clause 27)
<b>Inferred Mineral Resource</b>	That part of a Mineral Resource for which quantity, grade or quality are estimated on the basis of 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 Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.	(SAMREC Code, clause 25)



# Definitions for SAMREC Code terminology continued

## Mineral Reserve

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. (SAMREC Code, clause 35). Mineral Reserves are subdivided in order of increasing confidence into Probable and Proved Mineral Reserves. For the purposes of reporting under the SAMREC Code, the term Ore Reserves is considered to be synonymous with Mineral Reserves.

<b>Proved Mineral Reserves</b>	The economically mineable part of a Measured Mineral Resource. A Proved Mineral Reserve implies a high degree of confidence in the modifying factors.	(SAMREC Code, clause 37)
<b>Probable Mineral Reserves</b>	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.	(SAMREC Code, clause 36)



Bolting in stope with wire mesh netting at Amandelbult, Dishaba



# Definitions for reconciliation categories

<b>Opening balance</b>	As at 31 December 2023 – previous reporting year (as publicly reported in the Anglo American Platinum Ore Reserves and Mineral Resources report).
<b>Forecast adjustment</b>	Reconciliation of the previous year's estimated production for the months where actual production figures were forecast.
<b>Production</b>	The amount of material (expressed in terms of tonnage and content as applicable) removed by planned mining from the scheduled Ore Reserves, ie the areas actually mined in the reporting period which are removed from reserve model(s), includes material destined for plant and stockpile.
<b>Depletion</b>	The amount of material (expressed in terms of tonnage and content as applicable) removed by mining from Mineral Resources, ie the areas actually mined during the reporting period which are removed from Mineral Resource model(s). Material removed from the 'Inferred (in LoAP)' category is reported as depletion.
<b>Conversion</b>	<p>The effect of applying updated modifying factors to Ore Reserves and Mineral Resources. Includes changes to the mining method, mine plan and/or layout changes, eg changes in pit slope angles or mineable cut due to geotechnical reasons. The change can be positive or negative year on year.</p> <p>Subcategories:</p> <ul style="list-style-type: none"> <li>– Conversion is the process of upgrading Mineral Resources to Ore Reserves based on a change in confidence levels and/or modifying factors</li> <li>– Re-allocation is the process of downgrading of Ore Reserves to Mineral Resources or Mineral Resources to Mineralisation based on a change in confidence levels and/or modifying factors</li> <li>– Sterilisation is the process of removing material from Ore Reserves and/or Mineral Resources that no longer has RPEEE.</li> </ul>
<b>Economic assumptions</b>	The effect of economic assumptions based on the current or future price of a commodity and associated exchange rate estimates as determined by the corporate centre (economic assumptions) which has a direct impact on the Mineral Resources or Ore Reserves, particularly the cut-off grade (which can be affected by changes in costs).
<b>New information/ Exploration*</b>	The effect of additional resource definition information (with QA/QC information) which initiates an update to the geological models (facies, structural, grade, geotechnical) and results in an updated (re-classified) Mineral Resource model and subsequent determination of new Ore Reserve estimates. Includes orebodies (or portions of current orebodies) within the same project/operation not previously reported.
<b>Model refinement</b>	No additional resource definition drilling has been undertaken but the interpretation (geometry/ore-waste contacts) of the orebody has been refined or internal mine/lease boundaries changed, eg based on mapping information obtained during mining or a different structural model being applied. Changes to in situ tonnages as a result of new geological losses being applied or a change to the definition of the boundary of the Mineral Resources due to an updated 'economically mineable cut' being applied.
<b>Methodology</b>	Only valid for changes in estimation or classification methodologies applied to the Mineral Resource model evaluation, ie no new information available or model refinement taken place.
<b>Transfer</b>	Movement of Mineral Resources and/or Ore Reserves from one type of product/ore type facies to another due to internal contact changes/updates or from one mining/project area to another.
<b>New technology</b>	Changes to Mineral Resources or Ore Reserves in response to the application of new or improved mining and/or processing methods.
<b>Stockpiles</b>	Denotes material destined for long term stockpiles, to be used for blending or processed in the latter years of the LoAP. Reflects the movement of in situ material to stockpiles.
<b>Reconciliation adjustment</b>	Changes which cannot be allocated to a defined category. This should be limited to a maximum of 5% of the overall changes. A description of these changes must be supplied. Changes due to errors in the previously reported estimates.
<b>Acquisition</b>	Additional Ore Reserves and Mineral Resources due to acquisitions of assets or increased direct ownership in joint operation agreements/associate companies.
<b>Disposal</b>	Reduction in Ore Reserves and Mineral Resources due to disposals of assets or reduced direct ownership in joint operation agreements/associate companies, refusal/withdrawal/relinquishment of mining/prospecting rights or related permits, eg due to environmental issues or changes in policy.
<b>Closing balance</b>	As at 31 December 2024 – current reporting year.

\* Exploration – in this context, it is exploration applicable to greenfields drilling in a new project area for which a prefeasibility study has not yet been undertaken or does not form part of a current project area.

# Glossary of terms

<b>Anorthosite</b>	Igneous rock composed almost entirely of plagioclase feldspar
<b>Chromitite</b>	An igneous cumulate rock composed mostly of the mineral chromite
<b>Competent Person</b>	A person who is registered with SACNASP, ECSA or SAGC, or is a member or fellow of the SAIMM, the GSSA, IMSSA or a recognised professional organisation (RPO). A Competent Person must have a minimum of five years relevant experience in the style of mineralisation or type of deposit under consideration and in the activity which that person is undertaking
<b>DMRE</b>	Department of Mineral Resources and Energy
<b>Dolerite</b>	A dark, crystalline, igneous rock consisting predominantly of pyroxene with labradorite often emplaced as dykes
<b>Dunite</b>	Igneous rock consisting predominantly of olivine
<b>Dyke</b>	Bodies of magma that cut through and across the layering of adjacent rocks. They form when magma rises into an existing fracture or creates a new fracture forcing its way through existing rock, and then solidifies. Karoo-aged dykes are estimated to have been emplaced some 180 million years ago
<b>EBITDA</b>	Earnings before interest, tax, depreciation and amortisation
<b>Exclusive Mineral Resources</b>	Mineral Resources exclusive of the portion converted to Ore Reserves
<b>Feasibility study</b>	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
<b>Gabbro</b>	Igneous rock composed predominantly of plagioclase feldspar and clinopyroxene occurring in approximately equal proportions
<b>Gabbro-norite</b>	Igneous rock composed predominantly of a higher proportion of plagioclase feldspar and clinopyroxene
<b>Harzburgite</b>	Igneous rock composed mainly of olivine and pyroxene
<b>In situ</b>	In its natural position or place
<b>IRUP</b>	Iron-rich ultramafic pegmatite
<b>ISO 31000</b>	International Organization for Standardization sets the international standards for risk management
<b>Isotherm</b>	A line connecting points of equal temperature, in the context of this report, 75°C
<b>LoAP</b>	Life-of-asset plan is the most recent annual plan summarising a forecast of the development, operation and maintenance of the asset based on realistically assumed geological, mining, processing, metallurgical, economic, infrastructure, marketing, legal, environmental, social, governmental, engineering, operational and all other modifying factors. This plan covers a detailed mine design and schedule for ore tonnes and grade, waste movements, treatment schedule, production of saleable product, capital, operating, and reclamation costs, together with reasonable estimates of cash flows and other costs and expenses (including corporate costs), in sufficient detail to demonstrate at the time of reporting that extraction is reasonably justified
<b>Mafic</b>	Igneous rock composed mainly of dark ferromagnesium minerals which are less than 90% by volume
<b>Metal split</b>	A metal split in the context of PGM mining indicates the relative proportions of the various PGMs contained in a tonne of ore. The metal split is classified as a 4E metal split when it reports on the elements: platinum, palladium, rhodium and gold
<b>Mine call factor</b>	The ratio, expressed as a percentage, of the metals produced in recovery plus residue to the corresponding product (called for) by the mine's measuring and evaluation methods

# Glossary of terms continued

<b>Modified Inferred Mineral Resources</b>	A portion of Inferred Mineral Resources that is included in the approved LoAP and has been modified by the assumed modifying factors. They are, however, excluded in the declaration of Ore Reserves
<b>M&amp;C</b>	Metal in concentrate delivered to the smelters for onward processing
<b>Moz</b>	Contained metal in 4E million troy ounces with a 31.10348 gram per ounce factor applied
<b>Mt</b>	million dry metric tonnes
<b>Norite</b>	Igneous rock composed mainly of plagioclase feldspar and orthopyroxenes in approximately equal proportions
<b>Pegmatoid</b>	Igneous rock that has the coarse crystalline texture of a pegmatite (large interlocking crystals) but lacks the graphic appearance
<b>Prefeasibility study</b>	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 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
<b>Pyroxenite</b>	Igneous rock composed predominantly of pyroxene and minor feldspar
<b>Reef</b>	A geological or stratigraphic horizon that may contain economic levels of mineralisation
<b>Reserve life</b>	The scheduled extraction period in years for the total Ore Reserves (in situ and stockpiles) in the approved life-of-asset plan
<b>RPEEE</b>	Reasonable prospects for eventual economic extraction
<b>RPO</b>	A recognised professional organisation
<b>SAMREC Code</b>	The South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves 2016 Edition
<b>SAMVAL Code</b>	The South African Code for the Reporting of Mineral Asset Valuation 2016 Edition
<b>Scoping study</b>	An order of magnitude technical and economical study of the potential viability of Mineral Resources that includes appropriate assessments of realistically assumed modifying factor 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
<b>Stripping ratio</b>	An open-pit mining process measurement that represents the amount of waste material, also known as overburden, that must be moved to extract a given amount of ore
<b>Tailings</b>	Material left over after the process of separating the valuable fraction of mineralised material from uneconomic fraction (gangue) of the ROM. In some cases, tailings can be retreated to extract by-products
<b>Ultramafic</b>	Igneous rock composed mainly of dark ferromagnesium minerals which constitute more than 90% by volume
<b>Websterite</b>	Igneous rock composed of equal proportions of orthopyroxene and clinopyroxene
<b>ZAR</b>	South African Rand

# Recognised professional organisations

Organisations	Addresses and contact details
AusIMM	Australian Institute of Mining and Metallurgy Ground Floor, 204 Lygon Street, Carlton, Victoria, 3053, Australia <b>Website: <a href="http://www.ausimm.com">www.ausimm.com</a></b>
ECSA	Engineering Council of South Africa 1st Floor, Waterview Corner Building, 2 Ernest Oppenheimer Ave, Bruma Lake Office Park, Bruma, Johannesburg, 2198, Gauteng, South Africa <b>Website: <a href="http://www.ecsa.co.za">www.ecsa.co.za</a></b>
IOM3	Institute of Materials, Minerals and Mining 297 Euston Road, London NW1 3AD, United Kingdom <b>Website: <a href="http://www.iom3.org">www.iom3.org</a></b>
SACNASP	South African Council for Natural Scientific Professions The Innovation Hub, Enterprise Building Suite L4, 1 Mark Shuttleworth Street, Lynwood, Pretoria, 0087, Gauteng, South Africa <b>Website: <a href="http://www.sacnasp.org.za">www.sacnasp.org.za</a></b>
SAGC	South African Geomatics Council Unit 3, Building 2, Bruma Boulevard Office Park, 20 Zulberg Close, Bruma, Johannesburg, 2026, Gauteng, South Africa <b>Website: <a href="http://www.sagc.org.za">www.sagc.org.za</a></b>
SAIMM	The Southern African Institute of Mining and Metallurgy 7th Floor, Rosebank Towers, 19 Biermann Avenue, Rosebank, 2196, Gauteng, South Africa <b>Website: <a href="http://www.saimm.co.za">www.saimm.co.za</a></b>



# Administration

## Directors

### Executive directors

C Miller (chief executive officer)  
S Naidoo (chief financial officer)

### Independent non-executive directors

N Mbazima (chairman) (Zambian)  
S Kana (lead independent director)  
L Bam  
T Brewer  
R Dixon  
D Emmett  
H Faul  
S Phiri  
F Petersen-Cook

### Company secretary

Fiona Edmundson  
fiona.edmundson@angloamerican.com

### Financial, administrative, technical advisers

Anglo Corporate Services South Africa  
Proprietary Limited

## Corporate and divisional office, registered office and business and postal addresses of company secretary and administrative advisers

144 Oxford Road  
Melrose  
Rosebank  
2196

Postnet Suite 153  
Private Bag X31  
Saxonwold  
Gauteng  
2132  
Telephone +27 (0) 11 373 6111

## Sponsor

Merrill Lynch South Africa Proprietary  
Limited  
The Place  
1 Sandton Drive  
Sandton, 2196  
PO Box 651987  
Benmore 2010  
Telephone +27 (0) 11 305 5822  
letrisha.mahabeer@bofa.com

## Registrar

Computershare Investor Services  
Proprietary Limited Rosebank Towers  
15 Biermann Avenue  
Rosebank 2196  
Private Bag X9000  
Saxonwold 2132  
Telephone +27 (0) 11 370 5000  
Facsimile +27 (0) 11 688 5200

## Auditor

PricewaterhouseCoopers Inc.  
PwC Towers  
4 Lisbon Lane  
Waterfall City  
2090

## Investor relations

Theto Maake  
Theto.Maake@angloamerican.com  
Telephone +27 (0) 83 489 5215

Marcela Grochowina  
marcela.grochowina@angloamerican.com  
Telephone +27 (0) 82 400 3222

## Lead Competent Persons

Andrew Smith: Lead Ore Reserves  
Kavita Mohanlal: Principal Mineral  
Resources estimation

## Fraud line – YourVoice

Anonymous whistleblower facility  
087 232 5426 (South Africa)  
www.yourvoice.angloamerican.com



### Human resources-related queries

Job opportunities  
Bursaries  
Career information  
[www.angloamericanplatinum.com/careers](http://www.angloamericanplatinum.com/careers)

**Disclaimer**

Certain elements made in this annual report constitute forward-looking statements. Forward-looking statements are typically identified by the use of forward-looking terminology such as ‘believes’, ‘expects’, ‘may’, ‘will’, ‘could’, ‘should’, ‘intends’, ‘estimates’, ‘plans’, ‘assumes’, or ‘anticipates’ or the negative thereof or other variations thereon or comparable terminology, or by discussions of plans, present or future events, or strategy that involve risks and uncertainties. Such forward-looking statements are subject to a number of risks and uncertainties, many of which are beyond the company’s control and all of which are based on the company’s current beliefs and expectations about future events. Such statements are based on current expectations and, by their current nature, are subject to a number of risks and uncertainties that could cause actual results and performance to differ materially from any expected future results or performance, expressed or implied, by the forward-looking statement. No assurance can be given that such future results will be achieved; actual events or results may differ materially as a result of risks and uncertainties facing the company and its subsidiaries.



**Anglo American Platinum Limited**

Incorporated in the Republic of South Africa

Date of incorporation: 13 July 1946

Registration number: 1946/022452/06

JSE code: AMS – ISIN: ZAE000013181

## PLATINUM

[www.angloamericanplatinum.com](http://www.angloamericanplatinum.com)

A member of the Anglo American plc group

[www.angloamerican.com](http://www.angloamerican.com)