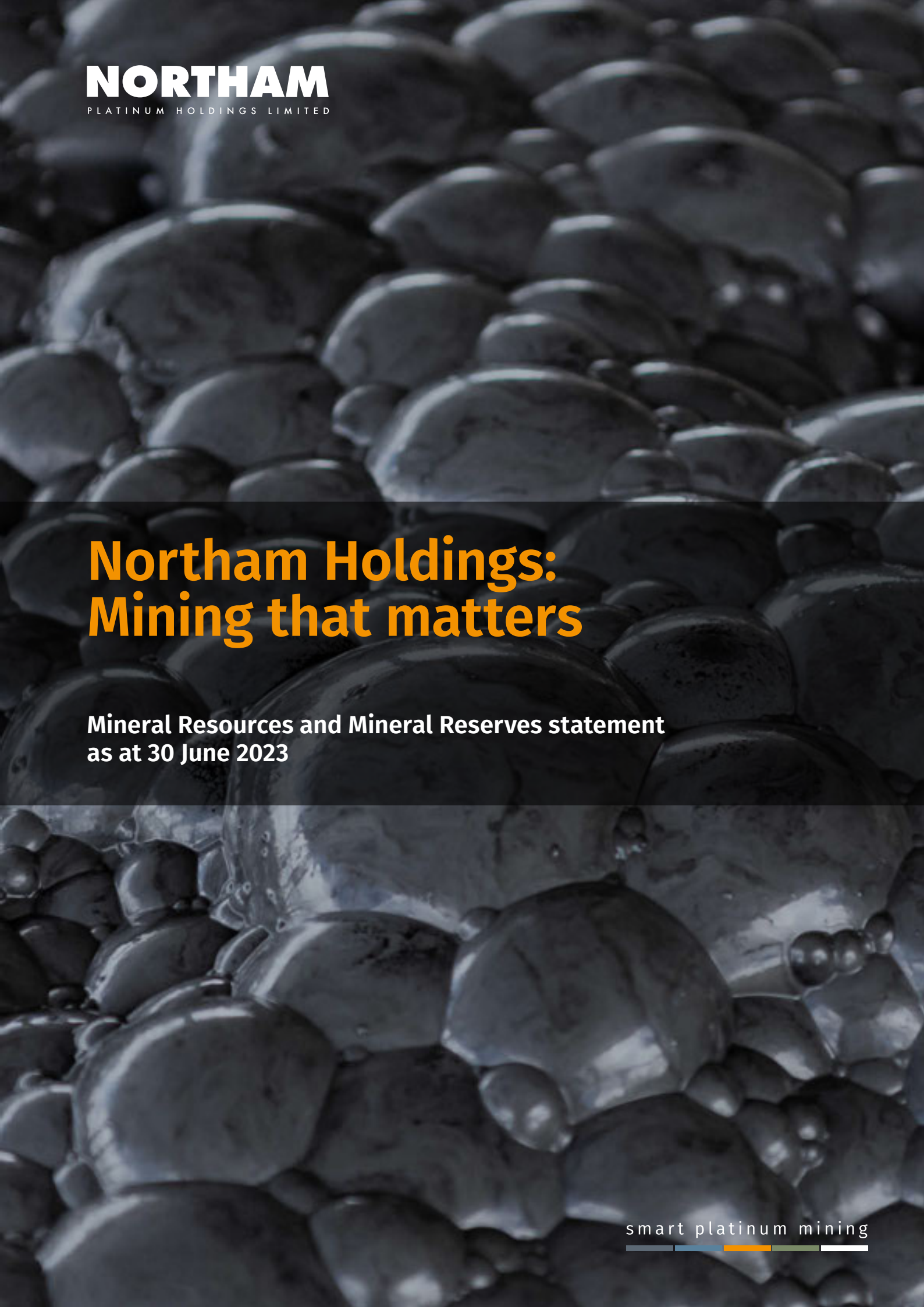


NORTHAM
PLATINUM HOLDINGS LIMITED

Northam Holdings: Mining that matters

Mineral Resources and Mineral Reserves statement as at 30 June 2023

smart platinum mining

Contents

2 Mineral Resources and Mineral Reserves statement
4 Highlights of the 2023 Mineral Resources and Mineral Reserves
18 Booysendal mine
30 Eland mine
40 Zondereinde mine
52 Dwaalkop joint venture
54 RBPlat mines
57 Kokerboom prospect
58 General notes on reporting criteria
60 Glossary of terms
62 Administration and contact information

A geotechnical observer using a borehole camera to check for parting surfaces in the hangingwall to the UG2 Reef at Booysendal

Core to the group's operational growth strategy has been the expansion and strengthening of our Mineral Resources and Mineral Reserves base. This has been facilitated through the acquisition of quality assets in strategic locations, backed up by robust and ongoing planning processes following best practice in line with the prescripts and principles of the SAMREC Code (2016).

We consider the group's current Mineral Resources and Mineral Reserves positions to be of a sufficient scale and quality to support a sustainable production profile in line with our strategic intent.

Mineral Resources are the product of mineral assets and exploration processes

224.14 Moz 4E

Group total attributable Mineral Resources
2022: 225.47 Moz 4E

Mineral Reserves are the outcome of mine planning and scheduling, as well as the consideration of capital

34.38 Moz 4E

Group total attributable Mineral Reserves
2022: 34.50 Moz 4E

Mineral Resources and Mineral Reserves statement

Northam Platinum Holdings Limited (Northam) is the parent company of Northam Platinum Limited, which is the operating entity in which Northam's wholly-owned operations as well as its stake in the Dwaalkop joint venture are held. Northam's stake in Royal Bafokeng Platinum Limited (RBPlat) is held by the parent company, Northam Platinum Holdings Limited.

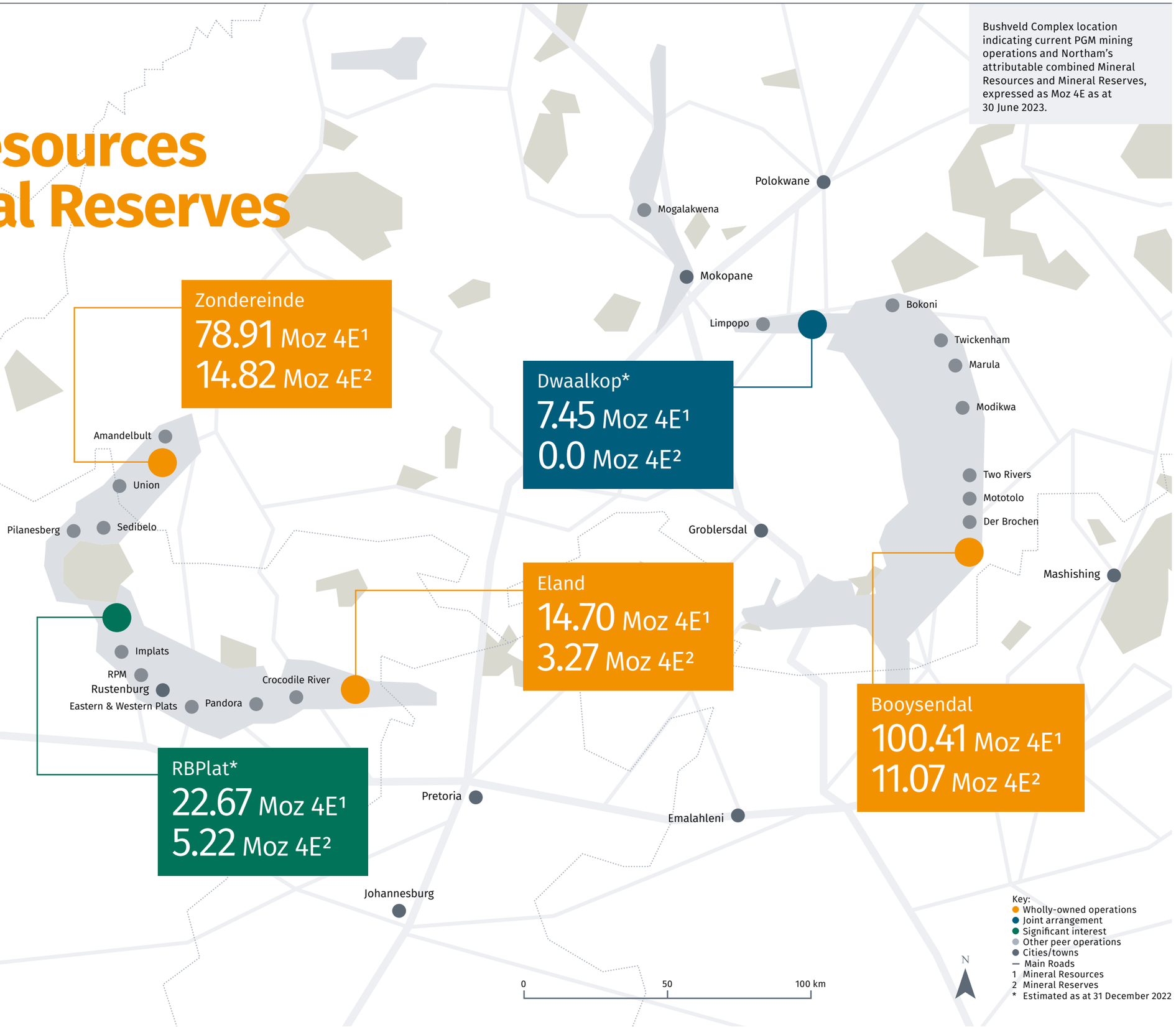
Northam's attributable combined Mineral Resources for 2023, expressed as metal content, comprise 224.14 Moz 4E. The corresponding combined Mineral Reserves comprise 34.38 Moz 4E.

The Mineral Resources and Mineral Reserves rest entirely within the Merensky and UG2 Reefs of the Bushveld Complex, South Africa, and estimates have been prepared using the guidelines of the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (2016), the (SAMREC Code (2016)). Mineral Resources are reported inclusive of Mineral Reserves. All Mineral Resources (total Measured, Indicated and Inferred) and Mineral Reserves (total Proved and Probable) are expressed as 4E, being the combined platinum, palladium, rhodium and gold grade or content.

Booysendal, Eland and Zondereinde are wholly-owned PGM mines of Northam, having a 100% attributable interest. The Zondereinde mine includes the Middeldrift section to the east, as well as the Western extension section to the west, formerly known as the "Tumela block", all being consolidated into a single mining right. The Eland mine includes the Maroelabult mine to the west, which was acquired in 2021 and has been incorporated into the Eland mining right.

Northam acquired a 34.52% interest in RBPlat in 2021, the attributable interest being unchanged this year. This interest has been disposed of subsequent to 30 June 2023. Northam also has a 50% attributable stake in the Dwaalkop joint venture through its wholly-owned subsidiary Mvelephanda Resources Proprietary Limited (Mvelaphanda). Dwaalkop is managed by Sibanye-Stillwater Limited (Sibanye-Stillwater).

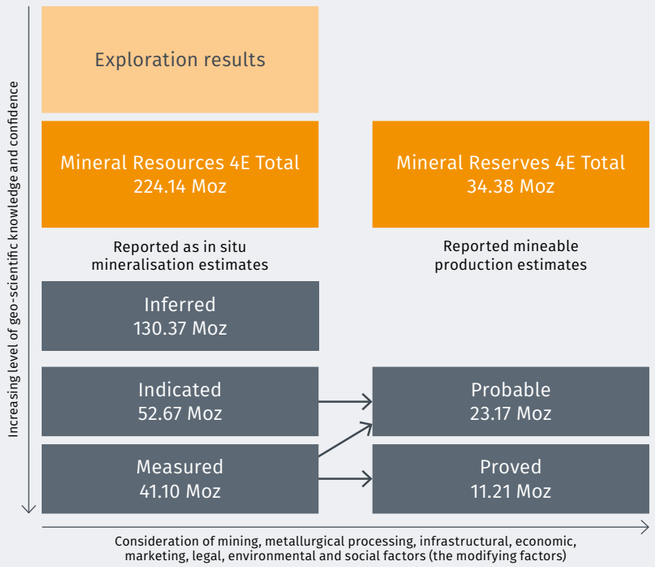
Bushveld Complex location indicating current PGM mining operations and Northam's attributable combined Mineral Resources and Mineral Reserves, expressed as Moz 4E as at 30 June 2023.



Highlights of the year 2023

Northam's attributable combined Mineral Resources as at 30 June 2023, expressed as metal content, comprises 224.14 Moz 4E, a decrease of 1.33 Moz 4E on the previous year.

Summary of the total Mineral Resources and Mineral Reserves
by confidence category



Combined Mineral Resources at the Booysendal mine totalled 100.41 Moz 4E, a decrease of 0.84 Moz 4E. This decrease is the net result of mining depletions (-0.77 Moz 4E), together with changes to metal content associated with re-evaluation of the orebodies (-0.07 Moz 4E).

Attributable combined Mineral Resources in the Dwaalkop joint venture totalled 7.45 Moz 4E, an increase of 0.33 Moz 4E. This increase is the result of the re-evaluation of the UG2 Reef cut to support mechanised mining extraction.

Combined Mineral Resources at the Eland mine totalled 14.70 Moz 4E, an increase of 0.27 Moz 4E. This increase is the result of the re-evaluation of Mineral Resources where the UG2 Reef cut was revised, and a geostatistical estimation method was applied.

Attributable combined Mineral Resources at the RBPlat mines totalled 22.67 Moz 4E, a decrease of 0.39 Moz 4E. This decrease is mainly the result of mining depletion.

Combined Mineral Resources at the Zondereinde mine totalled 78.91 Moz 4E, a decrease of 0.70 Moz 4E. This decrease is the net result of mining depletions (-0.55 Moz 4E) and re-evaluation of the orebodies (-0.15 Moz 4E).

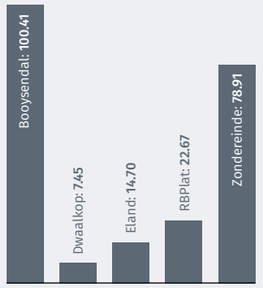
Northam's attributable combined Mineral Reserves as at 30 June 2023, expressed as metal content, comprise 34.38 Moz 4E, a decrease of 0.12 Moz 4E on the previous year.

Combined Mineral Reserves at the Booysendal mine totalled 11.07 Moz 4E, a decrease of 0.06 Moz 4E. This was the net result of an increase in the UG2 Reef (+0.18 Moz 4E), mainly due to mining depletion offset by an increase of the size of the mining block, together with a decrease in the Merensky Reef (-0.24 Moz 4E), due to mining depletion and orebody re-evaluation.

Combined Mineral Reserves at the Eland mine totalled 3.27 Moz 4E, an increase of 0.07 Moz 4E. This was the result of mining depletion (-0.05 Moz 4E), orebody re-evaluation (-0.02 Moz 4E) and an improvement in modifying factors (+0.14 Moz 4E).

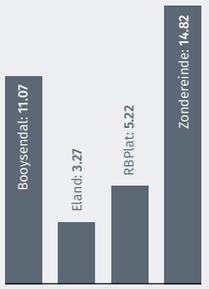
Attributable combined Mineral Reserves at the RBPlat mines totalled 5.22 Moz 4E. The decrease of 0.24 Moz 4E is mainly due to mining depletion.

Mineral Resources
Attributable total Mineral Resources Moz 4E

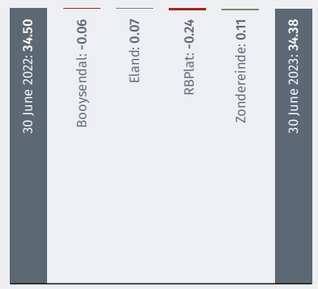


Mineral Resources
Annual attributable total change in Mineral Resources Moz 4E

Mineral Reserves
Attributable total Mineral Reserves Moz 4E



Mineral Reserves
Annual attributable total change in Mineral Reserves Moz 4E



Combined Mineral Reserves at the Zondereinde mine totalled 14.82 Moz 4E, an increase of 0.11 Moz 4E. This is the net result of mining depletion (-0.36 Moz 4E), extension of the Merensky Reef mining layout along strike (+0.23 Moz 4E), a change in orebody evaluation (-0.02 Moz 4E) and an improvement in modifying factors (+0.26 Moz 4E).

Northam undertook an internal review of the Mineral Resources and Mineral Reserves estimates for all of Northam's operating mines as at 30 June 2023. No external audit was conducted in 2023, there being no material changes to the Mineral Resources and Mineral Reserves estimated. The most recent independent review completed was as at 30 June 2021, in which Northam's managed Mineral Resources and Mineral Reserves were audited and endorsed by Competent Persons of the MSA Group, an independent external consultancy. Prior to this, independent audits on the Mineral Resources and Mineral Reserves for Booysendal and Eland mines were conducted by Pivot Mining Consultants in 2019 and 2020 respectively.

Compliance

In compliance with Section 12.13 of the JSE Listings Requirements, Northam confirms that the annual public reporting of Mineral Resources and Mineral Reserves is disclosed in compliance with the SAMREC Code (2016) and, where applicable, the relevant Section 12 and SAMREC Code (2016) Table 1 requirements.

Further, the company declares that it has written confirmation from the Lead Competent Person that the information disclosed in this report is compliant with the SAMREC Code (2016) and, where applicable, the relevant JSE Section 12 and SAMREC Code (2016) Table 1 requirements have been complied with, and that it may be published in the form and context in which it was intended.

Northam's Mineral Resources and Mineral Reserves estimates and statements for its managed operations in 2023 were prepared by the company's Competent Persons who are duly registered with their respective professional affiliations.

Northam has adopted the definitions of Mineral Resources, Mineral Reserves and their respective confidence categories as defined in the SAMREC Code (2016). These can be found at www.samcode.co.za.

Mineral Resources and Mineral Reserves for RBPlat are declared by RBPlat. Northam has consent from RBPlat's Lead Competent Persons for their managed PGM operations to publish these as at 31 December 2022, and does so on an attributable basis.

Mineral Resources for the Dwaalkop joint venture are declared by Sibanye-Stillwater. Northam has consent from Sibanye-Stillwater's Lead Competent Person for their SA PGM operations and projects to publish these as at 31 December 2022, and does so on an attributable basis.

Northam's board of directors confirms that it is not aware of any legal or arbitration proceedings, either pending or threatened, or other material conditions which may impact on the company, or any of its subsidiaries ability to continue mining or exploration activities. Further to this, the reader is referred to the risk management section on page 140 of the Northam annual integrated report 2023, which summarises management's analyses of the material risk factors which may impact the company's operations.

The company's environmental obligations are managed in terms of approved environmental management plans. Compliance with these plans is audited by independent external parties on a regular basis.

Details of the environmental liabilities and funding thereof are contained in Northam's annual financial statement on the Northam website www.northam.co.za.

Mineral rights

Mineral Resources and Mineral Reserves reflected in this statement include those of the Booysendal, Eland and Zondereinde mines, which are wholly-owned by Northam or its wholly-owned subsidiaries and for which the company has the legal entitlement to such minerals. In addition, Northam's declared Mineral Resources include the attributable content of the Dwaalkop joint venture, in which Northam holds a 50% stake and which is managed by Sibanye-Stillwater. Also, Northam's

Titration in the wet chemistry section of the Zondereinde assay laboratory

declared Mineral Resources and Mineral Reserves include the attributable content relating to its 34.52% interest in RBPlat. This interest has been disposed of subsequent to 30 June 2023.

Northam holds, either directly or through its subsidiaries, new order mining rights over the Booysendal, Eland and Zondereinde mines. All mineral rights are held in good order and Northam perceives no risk to its rights to continue prospecting for, and mining of minerals over any of its properties.

Northam applied for the renewal of the Booysendal South mining right (MP127MR) during 2021. The renewal was granted in October 2022 and is valid until October 2052.

In 2021, Northam purchased mining rights from Barplats Mines Proprietary Limited, a subsidiary of Eastern Platinum, relating to the Maroelabult mine. In terms of section 102 of the Mineral and Petroleum Resources Development Act, No 28 of 2002, Northam has concluded the consolidation of the individual mining rights of the Eland mine into a single mining right.

The Dwaalkop joint venture was granted a mining right (LP99MR) during 2021. The process of notarial execution of this grant is underway.

RBPlat report that they hold three mining rights for their Styldrift, BRPM and Maseve mines. These are held in good order and are valid until 2038, 2040 and 2042 respectively.

Northam further holds eight new order prospecting rights over the Kokerboom prospect, granted in 2009. Kokerboom is an iron oxide copper gold and massive sulphide copper zinc exploration prospect covering some 1 000 000 hectares in the Northern Cape Province, South Africa. A prospecting work programme was suspended in 2019 and applications for closure of these rights have been submitted to the DMRE and are currently in process.

Competent Persons

Several Competent Persons (CPs), as defined by the SAMREC Code (2016), have contributed to the estimation and tabulation of the Mineral Resources and Mineral Reserves within this statement.

Northam's Executive: New Business and Lead Competent Person, Mr. Damian Smith BSc (Hons), MSc, a Fellow of the Geological Society of South Africa and registered with the South African Council for Natural Scientific Professions, takes full accountability for the reporting of the Mineral Resources and the Mineral Reserves.

Northam group Mineral Rights

Operation	Holder	DMRE Reference number	New order right	Status
Booysendal mine	Booysendal Platinum Proprietary Limited	LP188MR	Mining right	Valid until 12 July 2039
		MP127MR	Mining right	Valid until 02 October 2052 Renewal granted, execution of renewal in progress
Eland mine	Eland Platinum Proprietary Limited	NW280MR	Mining Right	Valid until 20 December 2036 Mining Rights of NW341MR (Eland east) and NW78MR, NW151MR & NW363MR (Maroelabult mine) consolidated into NW280MR (Eland)
Zondereinde mine	Northam Platinum Limited	LP37MR	Mining Right	Valid until 12 July 2041
Dwaalkop joint venture	Dwaalkop JV, managed by Sibanye-Stillwater Limited	LP99MR	Mining Right	An application for a new order mining right was submitted in 2009 and was granted on 30 July 2021. Execution of the granted right is in process
Kokerboom Prospect	Mvelaphanda Resources Proprietary Limited	SNC848PR, SNC849PR, SNC850PR, SNC844PR, SNC845PR, NC1767PR, SNC847PR, NC1766PR	Prospecting Right	Applications for closure of these rights have been submitted and are in process

Competent Persons for the compilation of Mineral Resources and Mineral Reserves

Company	Operation	Responsibility	Name	Position/Title	Qualifications	Years of PGM experience	Affiliation	Member Number
Northam	Group	Mineral Resources & Mineral Reserves	Damian Smith	Executive: New Business	BSc (Hons) Geology; MSc Mining and Exploration Geology	27	SACNASP	400323/4
		Mineral Resources & Mineral Reserves	Dennis Hoffmann	Mineral Resources Manager	BSc (Hons) Geology; MSc Geology	19	SACNASP	400220/10
		Mineral Resources	Paula Preston	Group Geologist	BSc (Hons) Geology; MSc Geology	14	SACNASP	400429/04
	Booysendal	Mineral Resources	Meshack Mqadi	Chief Geologist	BSc (Hons) Geology	14	SACNASP	400703/15
		Mineral Reserves	Willie Swartz	Manager: Technical Services	NHD Mineral Resource Management	19	SAIMM	709852
	Eland	Mineral Resources	Mabule Modiba	Chief Geologist	BSc (Hons) Geology	11	SACNASP	400749/15
		Mineral Reserves	Robby Ramphore	Manager: Technical Services	NHD Mineral Resource Management	26	SAIMM	705482
	Zondereinde	Mineral Resources	Mpumelelo Thabethe	Chief Geologist	BSc (Hons) Geology	13	SACNASP	400309/14
		Mineral Reserves	Charl van Jaarsveld	Manager: Technical Services	BSc (Hons) Geology	18	SACNASP	400268/05
Sibanye-Stillwater[1]	Dwaalkop	Mineral Resources	Nicole Wansbury	Unit Manager Geology: Resources	MSc Geology	17	SACNASP	400060/11
RBPlat[2]	RBPlat	Mineral Resources	Jaco Vermuelen	Group Geologist	BSc (Hons) Geology	24	SACNASP	400232/12
		Mineral Reserves	Clive Ackhurst	Mineral Resource Manager – BRPM	BSc (Hons) Mining Engineering	31	ECSA	20090200
		Mineral Reserves	Sybrandt Byleveldt	Mineral Resource Manager – Styldrift	BTech Mineral Resource Management	27	SAIMM	706557

Notes:

[1] Mineral Resources for the Dwaalkop joint venture are declared by Sibanye-Stillwater. Northam has consent from Sibanye-Stillwater's Lead Competent Person for their SA PGM operations and projects to publish the Mineral Resources as at 31 December 2022.

[2] Mineral Resources and Mineral Reserves for the RBPlat mines are declared by RBPlat. Northam has consent from RBPlat's Lead Competent Persons for their managed PGM operations to publish the Mineral Resources and Mineral Reserves as at 31 December 2022.

[3] SACNASP – South African Council for Natural Scientific Professions; IMSSA – Institute of Mine Surveyors of Southern Africa; SAIMM – The Southern African Institute of Mining and Metallurgy; ECSA – Engineering Council of South Africa.

[4] All Competent Persons other than those of Sibanye-Stillwater and RBPlat are employees of Northam.

Northam group total attributable Mineral Resources estimates

(Combined Measured, Indicated and Inferred)[1,2,3,4,5]

		30 June 2023 4E			30 June 2022 4E		
Reef	**Mine**	**Mt**	**g/t**	**Moz**	**Mt**	**g/t**	**Moz**
Merensky	Booysendal Extension	216.87	3.58	24.98	216.11	3.50	24.30
	Booysendal North Mine	21.01	2.87	1.94	19.55	3.15	1.98
	Booysendal South Mine	28.01	2.52	2.27	28.07	2.74	2.47
	Dwaalkop[6]	21.20	3.32	2.26	21.20	3.32	2.26
	Eland	4.82	1.05	0.16	4.82	1.05	0.16
	RBPlat[7]	49.50	7.31	11.63	50.54	7.36	11.96
	Zondereinde	171.32	7.31	40.27	172.00	7.33	40.56
	Total	**512.73**	**5.07**	**83.51**	**512.29**	**5.08**	**83.69**
UG2	Booysendal Extension	374.30	4.37	52.61	378.94	4.33	52.78
	Booysendal North Mine	47.50	3.32	5.07	50.64	3.20	5.21
	Booysendal South Mine	132.18	3.19	13.54	139.99	3.22	14.51
	Dwaalkop[6]	44.93	3.59	5.19	33.25	4.55	4.86
	Eland	116.41	3.89	14.54	112.33	3.95	14.27
	RBPlat[7]	67.50	5.09	11.04	67.99	5.08	11.10
	Zondereinde	230.79	5.21	38.64	232.96	5.21	39.05
	Total	**1013.61**	**4.32**	**140.63**	**1016.10**	**4.34**	**141.78**
Combined	Booysendal Extension	591.17	4.08	77.59	595.05	4.03	77.08
	Booysendal North Mine	68.51	3.18	7.01	70.19	3.19	7.19
	Booysendal South Mine	160.19	3.07	15.81	168.06	3.14	16.98
	Dwaalkop[6]	66.13	3.50	7.45	54.45	4.07	7.12
	Eland	121.23	3.77	14.70	117.15	3.83	14.43
	RBPlat[7]	117.00	6.03	22.67	118.53	6.05	23.06
	Zondereinde	402.11	6.10	78.91	404.96	6.11	79.61
	Total	**1526.34**	**4.57**	**224.14**	**1528.39**	**4.59**	**225.47**

Northam group total attributable Mineral Reserves estimates

(Combined Proved and Probable)[1, 2, 4, 5]

		30 June 2023 4E			30 June 2022 4E		
Reef	**Mine**	**Mt**	**g/t**	**Moz**	**Mt**	**g/t**	**Moz**
Merensky	Booysendal North Mine	10.19	2.44	0.80	11.99	2.59	1.00
	Booysendal South Mine	15.63	2.25	1.13	16.05	2.28	1.17
	Eland	0.00	0.00	0.00	0.00	0.00	0.00
	RBPlat[7]	23.72	4.37	3.33	24.49	4.46	3.51
	Zondereinde	33.22	5.60	5.99	31.74	5.48	5.59
	Total	**82.76**	**4.23**	**11.25**	**84.27**	**4.16**	**11.27**
UG2	Booysendal North Mine	37.96	2.82	3.44	39.73	2.69	3.44
	Booysendal South Mine	68.02	2.60	5.70	62.11	2.76	5.52
	Eland	30.10	3.38	3.27	30.91	3.22	3.20
	RBPlat[7]	15.20	3.87	1.89	15.89	3.82	1.95
	Zondereinde	61.79	4.44	8.83	64.59	4.39	9.12
	Total	**213.07**	**3.38**	**23.13**	**213.23**	**3.39**	**23.23**
Combined	Booysendal North Mine	48.15	2.74	4.24	51.73	2.67	4.44
	Booysendal South Mine	83.65	2.54	6.83	78.16	2.66	6.69
	Eland	30.10	3.38	3.27	30.91	3.22	3.20
	RBPlat[7]	38.92	4.17	5.22	40.38	4.21	5.46
	Zondereinde	95.01	4.85	14.82	96.33	4.75	14.71
	Total	**295.83**	**3.61**	**34.38**	**297.50**	**3.61**	**34.50**

Notes:

[1] Mineral Resources and Mineral Reserves estimates are reported on a Northam attributable basis. These include those which are either from properties wholly-owned by Northam or its wholly-owned subsidiaries (Northam Platinum Limited, Booysendal Platinum Proprietary Limited and Eland Platinum Proprietary Limited), or associates in which Northam holds an interest - this being RPBPlat in which Northam holds a 34.52% interest, and the Dwaalkop Joint Venture in which Northam holds a 50.00% interest.

[2] Mineral Resources and Mineral Reserves rest entirely within the Merensky and UG2 ore bodies of the Bushveld Complex, South Africa.

[3] Mineral Resources are reported inclusive of Mineral Reserves.

[4] PGM grade is expressed as 4E (combined platinum, palladium, rhodium and gold), this being synonymous with 3PGE+Au and 4E PGE.

[5] Rounding of numbers in the tables may result in minor computational discrepancies. Where this occurs, it is deemed insignificant.

[6] Current Mineral Resources for Dwaalkop are quoted as at 31 December 2022 while those of the previous year are as at 31 December 2021. There are no Mineral Reserves declared for Dwaalkop. Sibanye-Stillwater continue to review the economic potential of the project.

[7] Current Mineral Resources and Mineral Reserves for RBPlat are quoted as at 31 December 2022 while those of the previous year are as at 31 December 2021.

Group Mineral Resources and Mineral Reserves

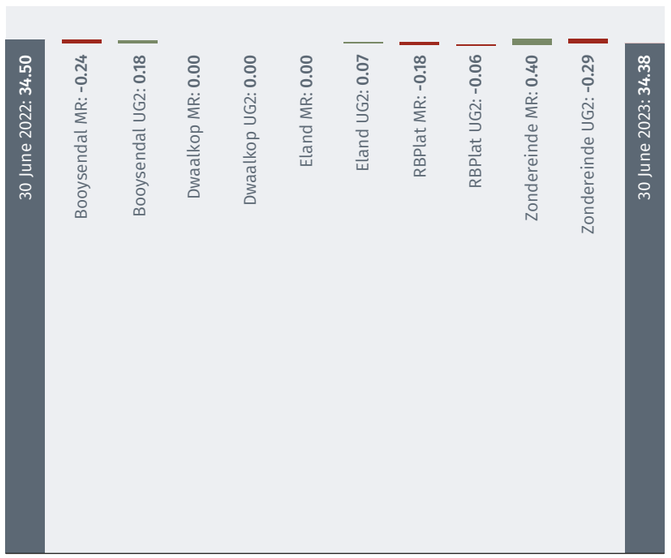
The tables on these two pages summarise the Mineral Resources and Mineral Reserves attributable to Northam for both the current and previous year. These are accompanied by graphs summarising annual changes in Mineral Resources and Mineral Reserves by operation and reef.

Applicable general notes on reporting criteria are given at the back of the document. More specific notes on the reporting criteria for each operation are found at the end of the individual sections.

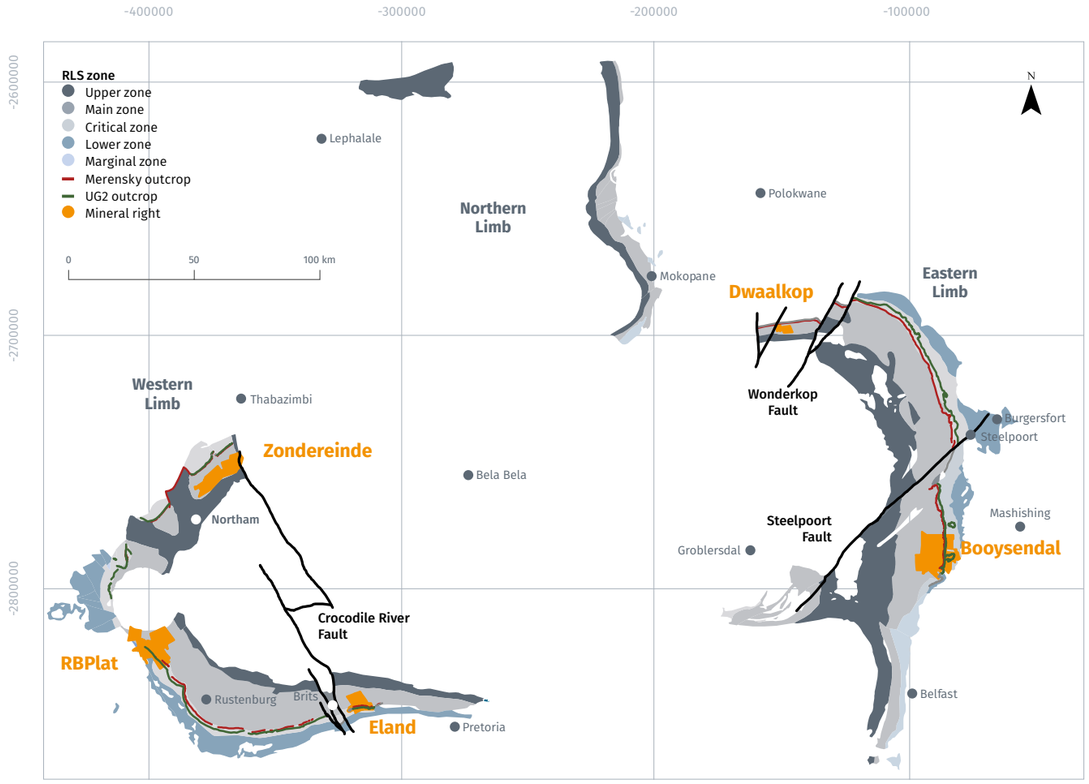
Breakdowns of the Mineral Resources and Mineral Reserves into their respective confidence categories are reported for each mining operation or exploration prospect.

Annual change in total attributable Mineral Resources

Annual change in total attributable Mineral Reserves



RLS outcrop and Northam mines



Geological setting – the Bushveld Complex

The two billion year old Bushveld Complex is the largest layered igneous complex in the world, and is the repository for circa 85% of known global PGM resources. Extending over an area of some 67 000 km² within the north-eastern portion of the Republic of South Africa, it contains the intrusive, mafic-ultramafic Rustenburg Layered Suite (RLS), which outcrops as three main acicular limbs, namely the western, eastern and northern limbs, and ranges in thickness from 7 km to 12 km.

The magmatic layering in the RLS is laterally persistent and can be correlated throughout most of the complex. Layering is generally shallow dipping towards the centre of the complex. The RLS stratigraphy is subdivided into five zones, which are, from base to top, the Marginal Zone, the Lower Zone, the Critical Zone (which is further subdivided into a lower and upper unit), the Main Zone and the Upper Zone.

Within the western and eastern limbs, PGMs and associated precious and base metal mineralisation are generally hosted in or adjacent to chromitite seams located within the Upper Critical Zone of the RLS. There are two significant ore bodies from which over 60% of global primary PGM production is derived, these being the UG2 and Merensky Reefs. The vertical separation between the UG2 and Merensky Reefs is variable across the Bushveld Complex, ranging from 20 m to 200 m on the western limb and between 170 m and 400 m on the eastern limb.

Historically, South African PGM production was concentrated on the western limb. However, over the past 20 years, the eastern and northern limbs have become the focus of new mine development.

The three wholly-owned Northam properties, the Booysendal, Eland and Zondereinde mines, contain Mineral Resources estimated in both the UG2 and Merensky Reefs.

Similarly, the properties where Northam has an attributable interest, the RBPlat mines and the Dwaalkop joint venture, contain Mineral Resources in both reefs.

Exploration & Evaluation

In 2023, Northam has continued extensive exploration at all three wholly-owned operations. This has included the upgrading of Mineral Resources through underground and surface infill drilling, specific delineation drilling to improve detail of geological anomalies, geotechnical evaluation drilling necessary for the placing of future mining infrastructure and continuing underground channel sampling. In particular, in the past year:

- ongoing infill surface drilling has been undertaken immediately ahead of mining at Booysendal to improve geological confidence. Mineral Resources extension drilling is underway down-dip of the North mine; a drilling campaign comprising 43 kms from 31 boreholes is in progress to evaluate the down-dip extension of both North and South mines;
- deep level evaluation drilling continued in the Western extension section of Zondereinde, in order to improve Mineral Resource confidence and allow for extension of Mineral Reserves;
- ongoing infill drilling at Eland mine has focussed on testing geological continuity and resolving structural geological domains.

20 589 m of surface drilling from 76 boreholes was completed together with 89 034 m of underground drilling from 822 boreholes. In addition, 1 347 underground channel sampled sections were cut, assayed and evaluated. This combined program carried a total cost of circa R166.8 million.

Northam continued to examine the longer-term exploration requirements for enhancing Mineral Resources confidence, in order to allow extension of the various life of mine schedules. Campaigns to support the improvement of Mineral Resources confidence have been identified and are being enacted at all three operations, where a total of 94 955 m of surface drilling is planned over the next two years. In addition, underground drilling and channel sampling is expected to continue at their current rates.

Summary of exploration drilling, underground drilling and channel sampling for the year

	Evaluation								
	Surface drilling[1]			Underground drilling[2]			Channel sampling & assay[3]		Total
Operation	Number of boreholes	metres drilled	Cost (R 000)	Number of boreholes	metres drilled	Cost (R 000)	Number of channel sections	Cost (R 000)	Cost (R 000)
Booysendal	63	12 845	21 932	480	44 162	40 571	467	5 027	67 530
Eland	9	3 691	7 107	36	2 397	2 677	166	2 875	12 659
Zondereinde[4]	4	4 053	19 823	306	42 475	45 108	714	21 712	86 643
Total	**76**	**20 589**	**48 862**	**822**	**89 034**	**88 356**	**1 347**	**29 614**	**166 832**

[1] drilling costs only
[2] drilling costs only
[3] includes labour & materials
[4] four surface boreholes currently in progress

Summary of exploration surface drilling planned for the next two years

Operation	Number of boreholes	Maximum depth (m)	Total drilling (m)	Number of deflections
Booysendal	76	1 800	71 000	182
Eland	15	1 375	16 495	60
Zondereinde	6	2 400	7 460	18
Total	**97**		**94 955**	**260**

Summary of recent mining studies concluded or in progress and their status

The conversion of Mineral Resources to Mineral Reserves proceeds either through a mining study at a minimum of pre-feasibility level of confidence or a life of mine plan.

The table below summarises the recent and current mining studies. In addition, life of mine planning at each operation is conducted annually as part of the business planning process.

Mine	Study name	Study level	Period	Status
Booysendal	BSU4	Mine Design	2022-2023	Execution
	BNM2 (far north Merensky)	PFS	2021-2023	In process
	BNU down-dip extension	Scoping	2022-2023	In process
	Shallow depth pillar optimisation (above 650 m)	Technical	2019-2020	Completed
	Intermediate depth pillar optimisation (below 650 m)	Technical	2023	Started
Eland	Kukama underground	FS	2018-2019	Execution
	Merensky open pit	PFS	2019-2020	Completed
	Kukama-Maroelabult underground	FS	2019-2021	Execution
	UG2 open pit review	Economic Assessment	2023	Completed
Zondereinde	Western extension underground	FS	2018-2021	Execution
	Middeldrift access	Scoping	2022-2023	Completed

Notes:
PFS = pre-feasibility study
FS = feasibility study

Historic Production: Summary five-year production statistics

Key production metrics for the group's operations over the past five-years are summarised in the table below. Overall, the combined group's own production of 4E metal in concentrate has increased from 534 693 oz 4E in 2019 to 832 730 oz 4E in 2023.

Metric	Units	F2023	F2022	F2021	F2020	F2019
Area Mined						
Eland	m²	27 948	5 756	2 520	–	–
Booysendal	m²	760 885	607 980	536 095	377 930	317 635
Zondereinde	m²	378 177	385 272	382 672	286 944	377 439
Tonnes Milled						
Eland[1]	t	2 075 597	1 292 809	1 520 548	1 063 139	–
Booysendal	t	6 358 905	5 294 274	4 496 146	3 013 141	2 868 282
Zondereinde	t	2 220 059	2 073 000	2 128 763	1 676 124	2 023 828
Mill head Grade						
Eland[1]	g/t 4E	1.45	2.00	2.45	2.73	–
Booysendal	g/t 4E	2.51	2.56	2.78	2.59	2.72
Zondereinde	g/t 4E	5.04	4.83	4.94	5.03	4.96
Metal in concentrate – own operations						
Platinum	oz	493 454	436 052	426 217	324 494	325 030
Palladium	oz	246 192	217 714	204 961	150 913	154 296
Rhodium	oz	81 888	73 336	70 061	47 894	48 171
Gold	oz	11 194	9 697	9 211	6 679	7 195
PGM (total 4E)	oz	832 730	736 798	710 450	529 979	534 693
Operating margin						
Eland	%	-4.1	-9.5	18.9	16.0	-121.00
Booysendal	%	44.3	55.6	58.3	41.5	25.3
Zondereinde	%	14.1	12.5	27.1	17.6	12.8

Notes:
[1] Includes reprocessing of tailings material

Assessment process: MRM focus areas

The compilation of the Mineral Resources and Mineral Reserves estimate at each operation is based on digital systems. There is ongoing development within the group towards an integrated approach to the management of its Mineral Resources and Mineral Reserves with the alignment and standardisation of the process and systems. This is being achieved by the compilation of group-wide policies, protocols and standard procedures. The Northam operations' Mineral Resources Management (MRM) process includes assessment of exploration results, updating of geological and grade models, evaluation of production data, compilation of mine production plans, reconciliation with previous estimates and the identification of optimisation opportunities for ore extraction.

There are several MRM focus areas, these being categorised into Geological, Mine Design & Scheduling, MRM Systems, Operational Controls and Opportunities.

Geological

- Drilling Strategy – timeous exploration drilling brought into execution with new drilling campaigns expanded at each mine from 2021
- Underground orebody delineation drilling continuing
- Routine geological mapping
- Channel sample optimisation ongoing
- QAQC processes used to validate Mineral Resources input data

Mine design & schedule

- Booysendal – extension of mine design down-dip and along strike, and revision of BSU4 mining layout
- Eland – integration of Maroelabult into life of mine and business plan together with limited access from Nyala incline shaft
- Zondereinde – optimisation of mining schedule & extension of mine design. Main focus is on extraction within the Western extension

MRM systems

- Group borehole and channel sample database implemented
- Borehole data integrity project nearing completion
- Introduced group wide internal audits on data acquisition to ensure compliance and alignment
- Development of Booysendal Evaluation system blue print in process
- Group wide grade model estimation process continuing with best practices being implemented

Operational controls

- Booysendal short interval mining control systems under review
- Hangingwall strata control & shear plane modelling using drillhole camera data
- Eland shear plane modeling using drill hole and mapping data
- Borehole radar scans continue with further test work at Booysendal and Eland planned

Opportunities

- Booysendal BNM2 (Far North Merensky) – impact study underway
- Eland – Maroelabult acquisition completed with mining activities now fully integrated with Kukama
- Eland – Future ventilation shaft under construction
- Eland – Access to Kukama through Nyala incline shaft to open additional ore reserves and facilitate ventilation
- Zondereinde – Review of the 3 Shaft complex is in process with the completion of a feasibility study for the rock hoisting shaft underway

Geological process

The process commences with the compilation of an integrated geological model. Geological information that informs the model are derived from the following sources:

- Surface and underground boreholes, as well as surface trenching;
- Aeromagnetic information, 2D and 3D seismic information (Zondereinde Western extension and Middellaagte Graben) and other geophysical data (TEMS at Eland);
- Underground geological mapping and channel sampling.

Through aligning these data to predicted geological structures within the underground exposures, a reliable geological model is developed. Underground mapping and channel sampling allows for detailed delineation of reef sub-types. For example, the differentiation of the Merensky Reef at Zondereinde mine into the Normal, P2, NP2 and FWP2 sub-types, allows for accurate ore accounting and grade estimation; whereas at Booysendal and Eland mines, these types of data are essential for grade control and Mineral Resources cut delineation.

Geological loss assessment process

Geological losses are categorised as known and unknown losses. The known geological loss assessment takes consideration of available geological mapping and geophysical data, in order to delineate areas of reef disruption as well as structural features. Unknown geological losses are informed by the historical actual losses, together with consideration of regional trends. In addition, at Zondereinde, mining losses are included with geological losses to generate an overall mining extraction. This modified geological loss is applied to discount the Mineral Resources.

Grade models

Estimation parameters are applied to discrete mining areas in order to estimate tonnage and metal content. These parameters are derived from the interrogation of extensive sampling databases. The resulting grade models are two-or three-dimensional representations of the *in situ* 4E grade, thickness and density of the Mineral Resources segregated into blocks. These are developed by interpolating the tenor of individual elements using a variety of estimation methods, with Ordinary Kriging of the elements being widely used at the Booysendal, Eland and Zondereinde mines.

The grade models are reviewed annually, these being informed by additionally acquired data and revised estimation parameters.

Mine design & scheduling

An initial mine design is captured in a Northam group approved mining study. Thereafter, modifications are applied to adjust the mining layout to suit the local varying conditions associated with geological structures. These modifications are influenced by mining method, depth of extraction and variability of the orebody. They typically include consideration of additional dilution to facilitate extraction, losses attributed to extraction such as pillars, together with mining efficiency.

The mine design criteria and modifying factors in subsequent reporting periods may also be adjusted to align with parameters derived from recent mining results. Northam's mines have considerable variability with respect to channel width, mining method and extraction depth. Selected mine design criteria used for the 2023 Mineral Reserves estimation process are reported in the table below.

Selected mine design criteria and modifying factors used in the 2023 mine planning

Metric

Reef	Reef	Booysendal		Eland		Zondereinde	
Mineral Resources Cut (channel width)	Merensky	North Mine	210 cm		300 cm	Pothole facies	120 cm
		South Mine	210 cm			Normal facies	160 cm
	UG2	UT3 cut	247 cm		156 cm		148 cm
		FW210 cut	210 cm				
Mining method	Merensky	Mechanised bord & pillar			—	Scattered breast	
	UG2	Mechanised bord & pillar		Conventional hybrid & open pit		Scattered breast	
Stoping back length	Merensky	9-12 bords per rig section	135-180 m		—		120 cm
	UG2	9-12 bords per rig section	135-180 m		220m		160 cm
Panel length	Merensky		8 m		—		148 cm
	UG2		8 m		20m		25-36 m
Stoping dilution	Merensky		10 cm		—	Pothole facies	5%
						Normal facies	2%
	UG2	North Mine	25 cm	20 cm in footwall			1%
		South Mine	25 cm				
		BS4	50 cm				
In-stope extraction	Merensky		80%		—	Pothole facies	64%
						Normal facies	77%
	UG2		77%		71%		64%
Mining efficiency (m^2 per panel/per section per month)	Merensky	Per section	1 397		—	Per panel	269
	UG2	Per section	1 600	Per panel	250	Per panel	323

Reasonable prospects for eventual economic extraction

As per the prescripts of the SAMREC Code (2016), estimated Mineral Resources for the Northam operations reflected in this statement include only that mineralisation that has demonstrated reasonable prospects for eventual economic extraction (RPEEE). In addition, the Competent Persons of RBPlat and Sibanye-Stillwater have stated that Mineral Resources and Mineral Reserves estimated for the RBPlat mines and Dwaalkop joint venture demonstrate RPEEE.

Demonstration of RPEEE has given appropriate forward-looking consideration of all factors that are likely to influence the prospect of economic extraction. These include; geological, mining engineering, metallurgy and the processing to saleable product, legal, infrastructural, environmental, marketing, political and economic factors. More specific notes on RPEEE for each operation are found within the individual relevant sections.

Where it is possible to take forward-looking views on external factors, such as those relating to the legal, marketing, socio-political and economic environment in which we operate, Northam's Competent Persons are informed by the company's views towards the intrinsic need for the metals produced and the consequent enabling environment for ongoing production. Where this is not possible it is assumed that the current environment persists and is stated as such.

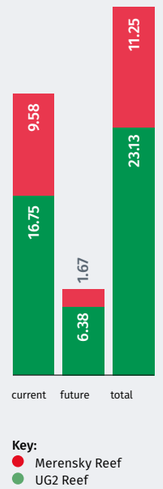
Consideration of internal technical factors affecting Northam's operations, particularly for mineralisation residing within the deeper portions of our mineral rights, draws on our extensive experience of successful mining at depth at the Zondereinde operation. Systems employed at Zondereinde have been extensively tested and refined, and are considered to be applicable up to mining depths in excess of 3 000 m. Within the deeper portions of Booysendal and Eland, mining layouts, extractions and costs in line with those of Zondereinde, inform cut-off grades applied in the discounting of Mineral Resources.

Mineral Reserves relative to infrastructure

The location of the Mineral Reserves relative to key infrastructure at the various operations provides insight into current access and some indication of what contained metal will likely require future capital investment.

The Northam Mineral Reserves occur at a wide range of depths, these being shallow at Booysendal and Eland mines, shallow to intermediate at the RBPlat mines, and deeper at the Zondereinde mine. The varying mining depths have necessitated differing mining extraction strategies and mine designs. These are dealt with in detail in the subsequent sections.

Mineral Reserves relationship to key infrastructure Moz 4E



Mineral Reserves depth range Moz 4E

UG2 Reef at Zondereinde mine consists of three chromitite seams separated by narrow pyroxenite partings, with a mining width of between 140 cm and 160 cm

Booysendal mine

Booysendal is an established multi-modular mining complex, with overall ore production approaching planned steady state over the next two years

Total Mineral Resources

100.41 Moz 4E

Total Mineral Reserves

11.07 Moz 4E

Current year production

452 903 oz 4E

Surface infrastructure of Booysendal North mine

The Booysendal mining right covers some 17 950 hectares and hosts both the Merensky and UG2 Reefs, which outcrop over a strike length of 14.5 km and dip at 10° to the west.

Business overview

The Booysendal complex is separated into the North and South mines, with UG2 and Merensky mining modules currently either in production or development and mining ramp up. The currently unplanned extension to these mining areas, down-dip and along strike is known collectively as Booysendal extension, and is available for future mine planning. Separate concentrator plants process ore from the North and South mines, producing PGM-bearing and chromite-bearing concentrates. The PGM-bearing concentrate is transported to Northam's smelter and base metal removal complex at Zondereinde for further down-stream processing. Chromite-bearing concentrate is sold through a third party to customers.

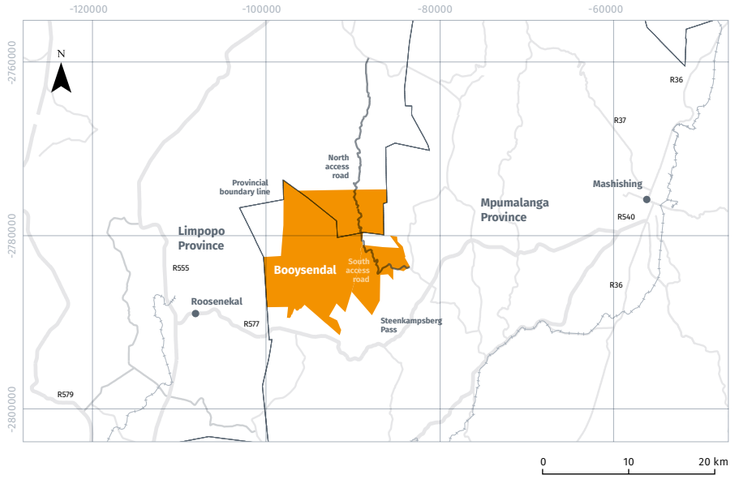
Initial production was from the Booysendal North mine. This was the outcome of a feasibility study in 2009, which favoured the extraction of the UG2 Reef within the north-eastern portion of the mining right. The development of the first mining module, North UG2 mine (BNU), extracting from a Mineral Resources block extending over approximately 4 km on strike and 2 km on dip from outcrop, commenced in May 2010 and reached its original steady state production rate of 2.1 Mt per annum in October 2015. A mine expansion program was initiated during the latter part of 2015. This achieved the planned new production rate of 2.4 Mt, generating circa 185 000 oz of 4E metal in concentrate per annum, in October 2018. This has subsequently been further optimised to currently produce 200 000 oz of 4E metals in concentrate per annum.

In December 2015, a feasibility study of mining Merensky Reef over a similar footprint to BNU was completed – these two modules collectively comprise Booysendal North mine. The development of the Phase 1 Merensky module (BNM) commenced immediately following conclusion of the feasibility study. Steady state production of 0.3 Mt per annum was achieved in April 2017, annually generating 25 000 oz of 4E metal in concentrate. A Phase 2 extension was completed during the 2023 financial year, increasing annual production to approximately 0.65 Mt per annum, or 50 000 oz of 4E metal in concentrate.

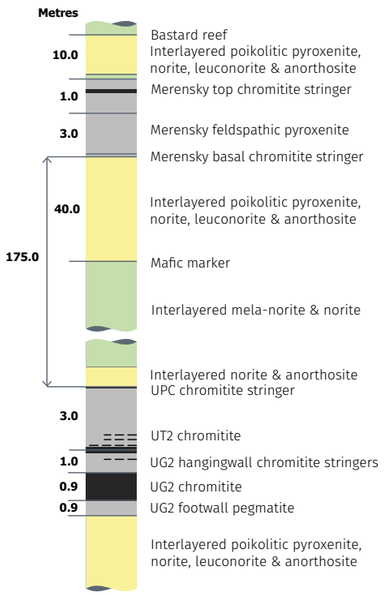
A further study to determine the feasibility of mining both UG2 and Merensky Reefs from four mining modules in the central and southern portions of Booysendal was completed in 2016. These modules comprise the Booysendal South mine. Development of all four modules; BSU1, BSU2 and BSU4 (South UG2 modules) and BSM1 (South Merensky module) has been progressed, and they achieved their planned steady state of a combined monthly production rate of approximately 2.8 Mt, equating to 250 000 oz of 4E metals in concentrate per annum in June 2023. The BSM1 module was temporarily suspended during the early stages of the Covid-19 pandemic, and restarted in 2021.

Booysendal location and access routes

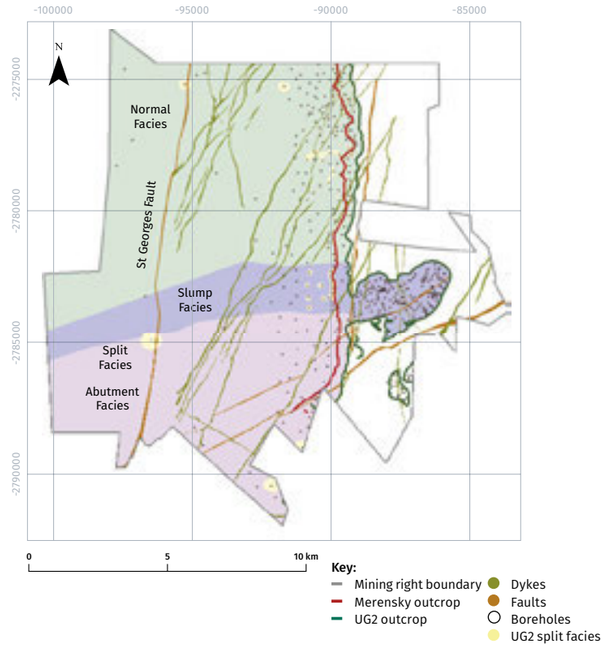
The Booysendal mining complex, comprising two contiguous mining rights (LP188MR & MP127MR), is located in the southern compartment of the eastern limb of the Bushveld Complex, approximately 35 km west of the town of Mashishing (formerly Lydenburg), straddling the border of Limpopo and Mpumalanga Provinces of South Africa.



Booysendal stratigraphy between UG2 and Merensky Reefs



Booysendal general geology



Booysendal reef-types

Geological setting

The Bushveld Complex stratigraphic sequence at Booysendal is similar to that found across the southern compartment of the eastern limb. The Critical Zone stratigraphy is fully developed and the middling between the UG2 and Merensky Reefs is in the order of 175 m in the northern and central portions of the property. The sequence is, however, subject to thinning in the far southern portion, which is linked to the RLS strata abutting onto a basement high. The impact of this "abutment" is further manifested in localised zones of disruption to the surface morphology and internal structure of the two reefs. This has led to the characterisation of three geozones within the Booysendal site, these being the Normal, Slump and Abutment geozones. Despite this progressive disruption to the south, the reef surfaces are interpreted to be continuous across the property.

The internal structure of the UG2 Reef is similar to that found on the western limb, whereas the Merensky Reef is typical of the thick pyroxenite-type unit of the northern portion of the eastern limb as well as that of the south-eastern portion of the western limb.

Merensky Reef

The Merensky Reef rests in the upper mineralised portion of the Merensky pyroxenite unit, generally extending over 110 cm. It is immediately overlain by a sequence of competent, norite bearing strata. A stringer chromitite layer may be present approximately 10 cm below the top of the Merensky pyroxenite. PGM and base metal mineralisation is uni-modal, generally with highest concentrations occurring just below the elevation of the stringer chromitite, tailing off rapidly into the overlying norite and more gradually into the underlying pyroxenite. In the absence of the stringer chromitite, the grade peak amplitude is generally reduced and the stratigraphic extent of appreciable mineralisation extended.

UG2 Reef

The UG2 Reef consists of the upper Leader and lower Main chromitite layers with a combined average thickness of approximately 1.4 m. These seams are generally juxtaposed or merged, but can display variable internal silicate partings. Where juxtaposed the UG2 Reef is termed “Normal”. Where this combined parting is >10 cm, the UG2 Reef is termed “Split facies”. Overlying this is a pyroxenite of variable thickness, up to 3.5 m, containing up to five narrow chromitite layers. The middling between these narrow layers and the top of the Leader chromitite gradually increases down-dip towards the west. PGM and base metal mineralisation is distributed across the chromitite layers, with the highest concentrations towards the base of each layer.

Geological discounts

Geological losses were discounted from the Mineral Resources for both reefs. Geological losses are reviewed annually with updated information from mapping of the mining blocks and re-assessment of the extension blocks.

Within the mining blocks there is a higher degree of geological confidence on the losses due to closer spaced drilling and mining exposure. Geological losses are circa 12% and 15% for the UG2 and Merensky Reefs respectively.

The geological losses applied to the Booysendal extension, comprising pothole and structural features, have an average of 20% loss for the UG2, and 23% loss for the Merensky Reef. Additional geological losses for the Booysendal extension blocks are applied as a contingency where drilling data is sparse.

Exploration and evaluation

Prior to mining, exploration drilling comprised 520 earlier generation boreholes within the mining right, totaling over 140 kms. Since the onset of mining, Northam has conducted three surface drilling campaigns, completing 65 113 m of drilling. 108 boreholes were completed in the first two drilling campaigns. The third campaign started in January 2021 and has thus far completed 103 boreholes and 237 deflections with a total of 29 192 m drilled. During the year, 63 surface boreholes have been completed, totalling 12 845 m of drilling.

Infill evaluation drilling of at least 38 surface boreholes with a total of 36 000 m is planned for the following year. This will include drilling to inform; a pre-feasibility study for a BSU3 module, mine design of down-dip extensions to the BNU, BSU1 and BSU2 modules, together with enhancement of the geological understanding of complex UG2 Split facies areas within the five-year business plan.

Underground drilling at the operations during the year totalled 480 boreholes, generating 44 162 m of drill core. This assisted the delineation of potholes, rolling reef surface, dykes, jointing and any other features expected immediately ahead of mining.

A total of 467 underground channel sections were cut and sent for assaying at the Booysendal mine internal laboratory during the year. The results of this are used to inform the evaluation of the monthly mining grades.

Reasonable prospects for eventual economic extraction

The Booysendal mine will continue with the current mechanised bord and pillar mining to a depth of 1 150 m. The currently considered future mining method immediately down-dip of this depth is through a hybrid approach, with conventional breast stoping and mechanised strike drive and decline development.

At depths below 1 150 m, a Zondereinde mining approach will be adopted, including refrigeration. At depths below 1 600 m backfilling of stoping areas will be introduced.

Cut-off grades were calculated using long term real metal price forecasts, together with current mining costs modified to take account of the additional technical requirements from mining deeper areas. Mining costs relative to current costs have been increased by 52% below 1 150 m depth and by 68% below 1 600 m depth. Corresponding cut-off grades for the respective depth intervals are; 1.1 g/t 4E for UG2 and 1.5 g/t 4E for Merensky up to 1300 m, 1.6 g/t 4E for UG2 and 2.2 g/t 4E for Merensky to 1 600 m and 1.7 g/t 4E for UG2 and 2.4 g/t 4E for Merensky below this.

Mining studies

In 2021, a pre-feasibility study for the integration of South mine's BSU3 and BSU4 modules commenced. The study included infill evaluation drilling, geotechnical assessment and mine planning. Specific to BSU3, the geological interpretation from borehole data indicates a combination of hybrid and bord and pillar mining is better suited for mining extraction. Development of BSU4 module is in progress.

Also in 2021, a pre-feasibility study of the viability of a second North Merensky module commenced. The study included infill evaluation drilling, mine planning and vibration monitoring. Environmental authorisation within the study area has been granted. This study remains in process.

In 2022, a conceptual study of the requirements for mining down-dip of the current BNU mining module was initiated. This included the commencement of resource evaluation drilling and mine planning. This study will expand into a pre-feasibility study and is necessary for the extension of BNU's life of mine.

A technical study of pillar size optimisation for the UG2 Reef to a depth of 650 m was completed in 2021. This study defined a pillar strength formula that informs current mine design and will provide guidance for down-dip mining extension. Similar work for UG2 Reef below 650 m has now commenced, and for the Merensky Reef will be progressed in the coming years.

Mining configuration

The relatively large vertical separation of the reefs leads to separate districts for the UG2 and Merensky mining, accessed via separate development tunnels. The Booysendal North and South mines are underground, mechanised bord and pillar mines, accessed from surface via ramp decline systems.

The North UG2 mine decline system comprises three declines on the plane of reef and one decline situated 20 m into the footwall of the reef, containing a belt for ore handling. This footwall belt decline extends to 1 300 m in the down-dip direction from the UG2 outcrop, after which all decline development is on the plane of reef. An ore silo decouples the footwall and on-reef belt systems. Decline systems for the South UG2 mines comprise four declines on the plane of reef.

Mining sections extend over a dip length of 144 m, equating to a vertical interval of 25 m. Strike drives are inclined at 5° above the line of strike. Mechanised boom rigs and LHDs are employed in mining and development. Strike belts within the drives transport ore to the central decline dip belt system for hoisting to surface. From there, transport to the respective concentrator plant is via terrestrial or aerial rope conveyor (Ropecon™) belts or trucking.

North UG2 mine is planned, with a current remaining life of 18 years (F2041), to produce 2.5 Mt of ore per annum at steady state up to F2033, generating in the order of 200 000 oz 4E metals in concentrate, together with associated precious and base metal by-products. After F2033, the production rate curtails to an average of 1.4 Mt of ore per annum.

The two initial UG2 mining modules of South mine have estimated lives of greater than 20 years at a combined steady state production rate of 2.5 Mt of ore per year, generating circa 210 000 oz 4E metals in concentrate, together with associated precious and base metal by-products.

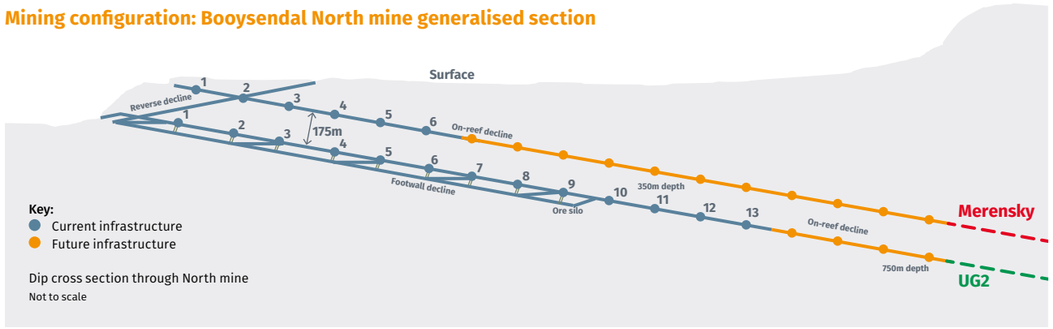
A Ropecon™ is used to transport ore produced at the two South mining modules from their portals in the Dwars River valley to the Booysendal South concentrator located 4.8 km away on higher topography. This ore transportation system was carefully chosen to unlock the orebody potential in an environmentally sensitive area with efficiency, safety and lower cost. A second Ropecon™ between North and South mines was commissioned at the end of 2021. This allows overspill production from North mine to be transported to the South concentrator.

The North and South Merensky mines are essentially analogues of the South UG2 mine, with all development on-reef. The North Merensky mine is producing at a steady state of 0.65 Mt of ore per annum, generating in the order of 50 000 oz 4E metals in concentrate, together with associated precious and base metal by-products. The South Merensky mine is planned to produce at 0.6 Mt per annum and 45 000 oz 4E metals in concentrate.

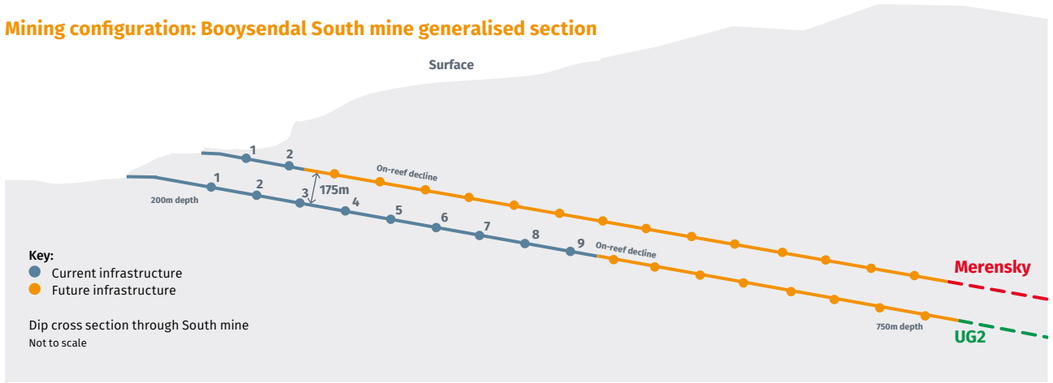
Mineral Resources and Mineral Reserves

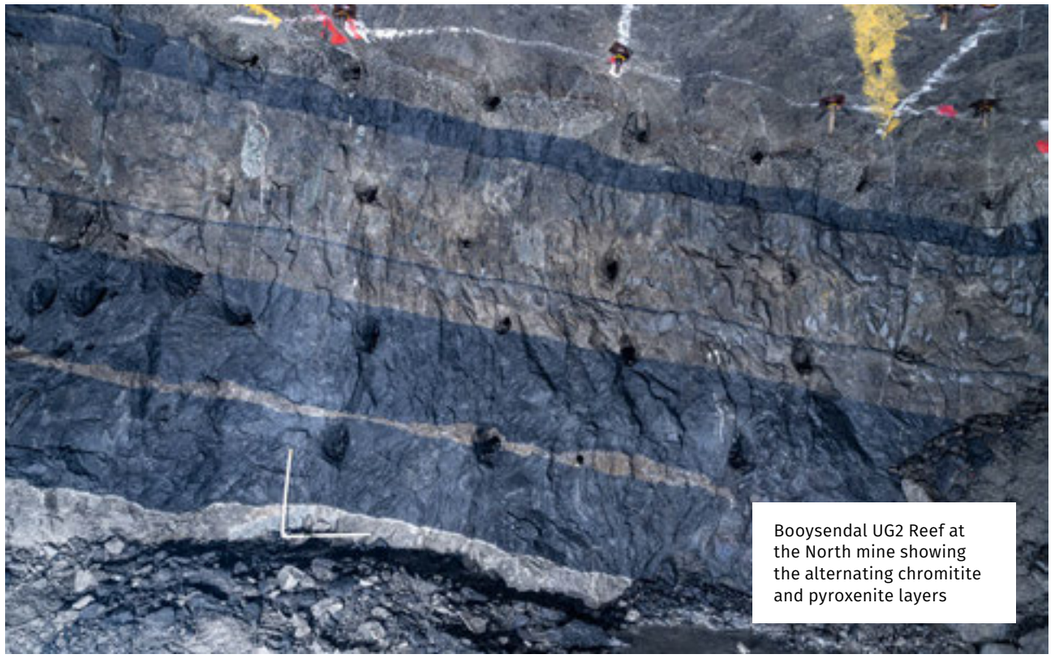
The Mineral Resources estimate for the Booysendal mining complex has three major components, these being; the combined North UG2 and Merensky mines (North mine), the combined South UG2 and Merensky mines (South mine), and the remainder enclosing area of the property for which no Mineral Reserves have been declared (Booysendal extension). Mineral Reserves estimates are presented for the North and South mines.

Mining configuration: Booysendal North mine generalised section



Mining configuration: Booysendal South mine generalised section

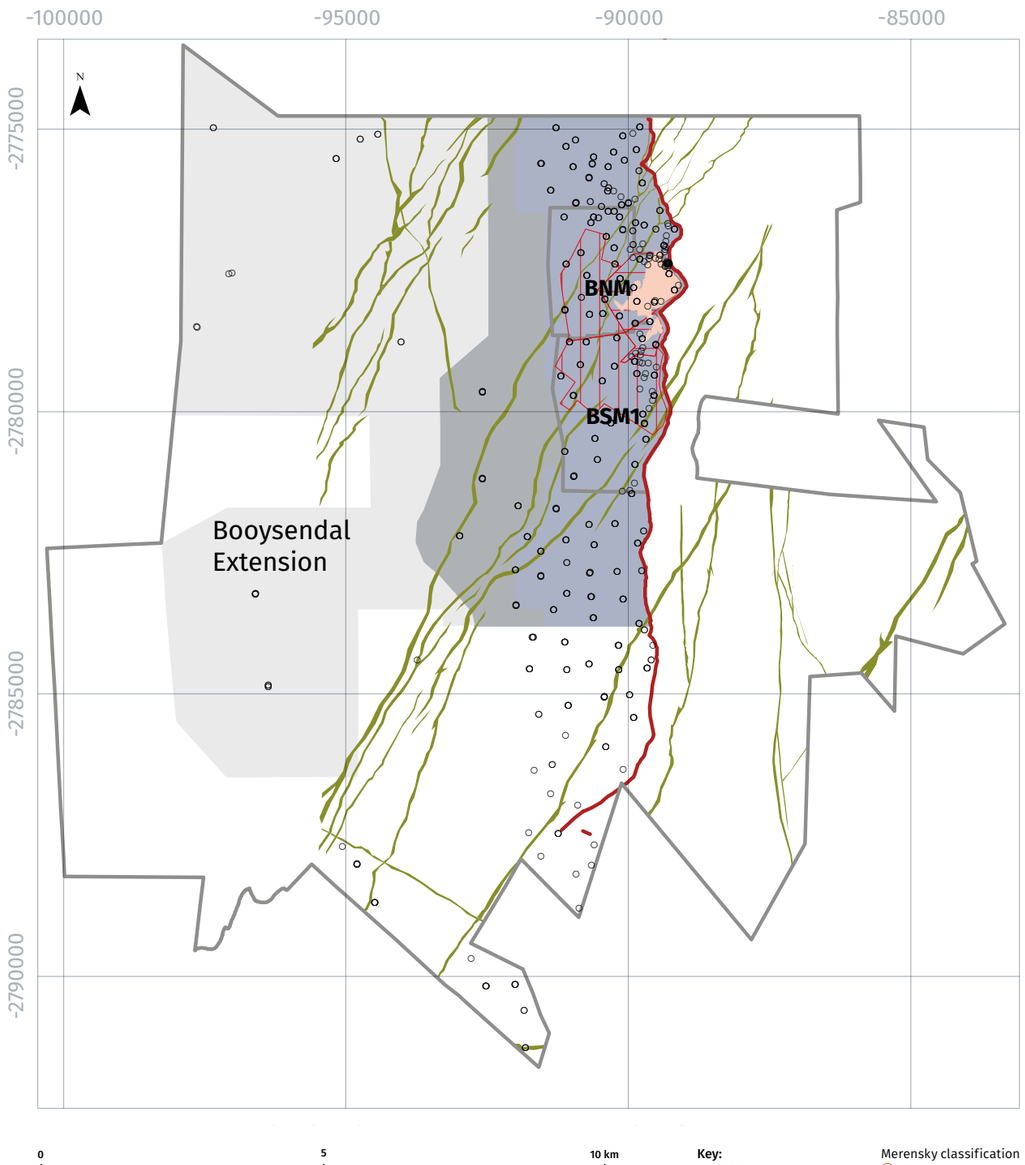




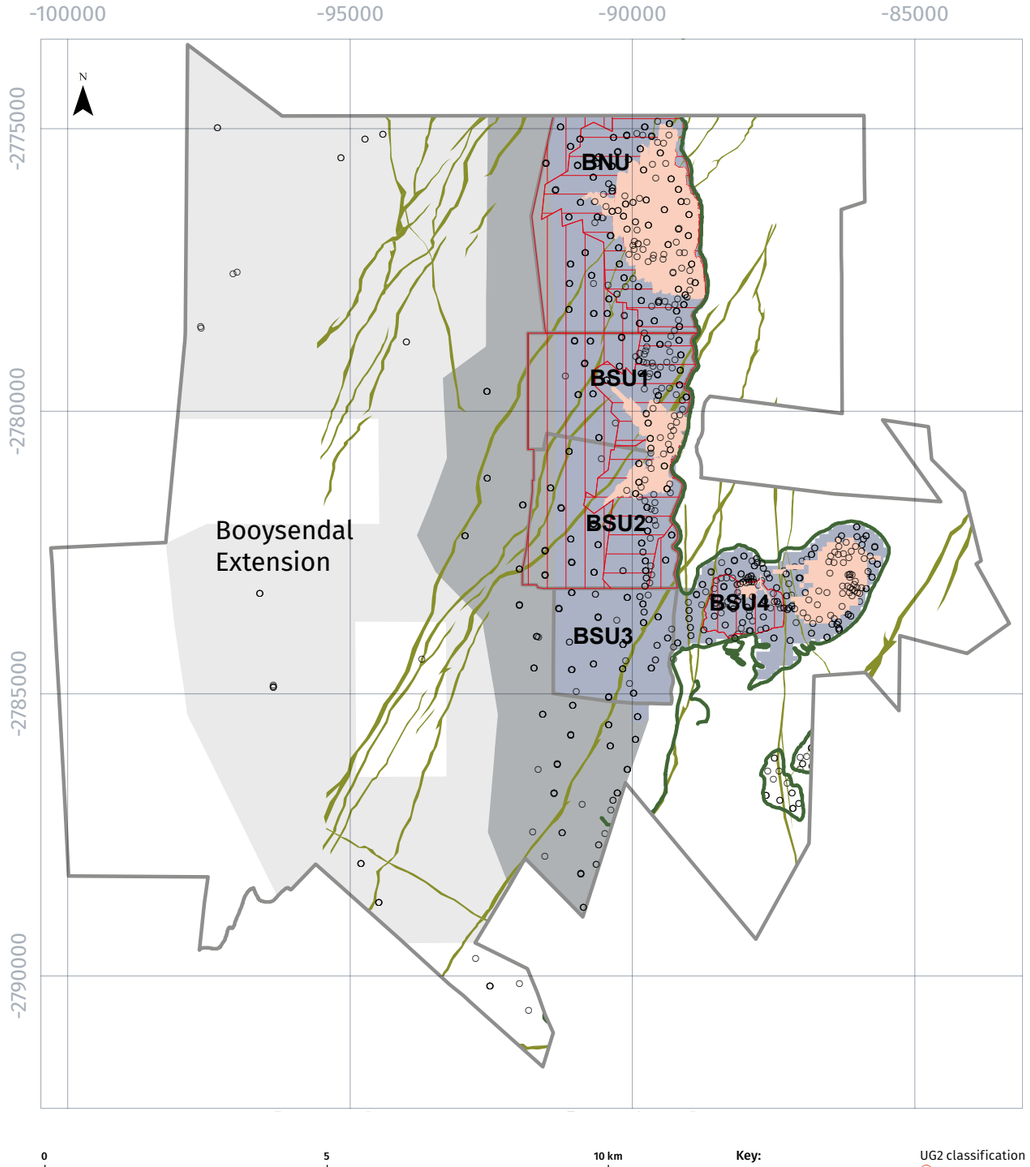
Booysendal UG2 Reef at the North mine showing the alternating chromitite and pyroxenite layers

Mineral Resources and Mineral Reserves

Booysendal Merensky Reef confidence plan



Booysendal UG2 Reef confidence plan



Total Booysendal

Total Booysendal Mineral Resources estimates [1,2,3,4,5,6,7]

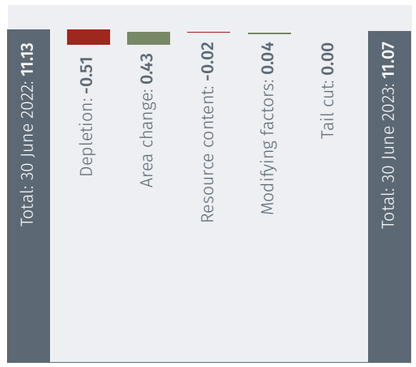
Reef	Category	30 June 2023 4E Mt	g/t	Moz	30 June 2022 4E Mt	g/t	Moz
Merensky	Measured	77.07	2.87	7.12	75.53	3.03	7.36
	Indicated	39.91	3.47	4.46	39.86	3.44	4.41
	Inferred	148.91	3.68	17.61	148.34	3.56	16.99
	Total	**265.89**	**3.41**	**29.19**	**263.73**	**3.39**	**28.75**
UG2	Measured	160.67	3.19	16.46	172.05	3.20	17.69
	Indicated	122.17	4.09	16.06	119.94	4.10	15.81
	Inferred	271.14	4.44	38.70	277.58	4.37	39.00
	Total	**553.98**	**4.00**	**71.22**	**569.57**	**3.96**	**72.50**
Combined	Measured	237.74	3.09	23.58	247.58	3.15	25.05
	Indicated	162.08	3.94	20.52	159.80	3.93	20.22
	Inferred	420.05	4.17	56.31	425.92	4.09	55.98
	Total	**819.87**	**3.81**	**100.41**	**833.30**	**3.78**	**101.25**

Total Booysendal Mineral Reserves estimates [8]

Reef	Category	30 June 2023 4E Mt	g/t	Moz	30 June 2022 4E Mt	g/t	Moz
Merensky	Proved	4.49	2.18	0.31	5.54	2.22	0.40
	Probable	21.32	2.36	1.62	22.50	2.46	1.78
	Total	**25.81**	**2.32**	**1.93**	**28.04**	**2.41**	**2.17**
UG2	Proved	57.23	2.58	4.74	58.43	2.70	5.06
	Probable	48.75	2.80	4.40	43.42	2.79	3.90
	Total	**105.98**	**2.68**	**9.14**	**101.84**	**2.74**	**8.96**
Combined	Proved	61.72	2.55	5.05	63.97	2.66	5.46
	Probable	70.07	2.73	6.02	65.91	2.73	5.67
	Total	**131.79**	**2.61**	**11.07**	**129.88**	**2.67**	**11.13**

Changes in the Booysendal total Mineral Resources Moz 4E

Changes in the Booysendal total Mineral Reserves Moz 4E



North mine

Booysendal North mine Mineral Resources estimates [1, 2, 4, 5, 6, 7]

Reef	Category	30 June 2023 4E Mt	g/t	Moz	30 June 2022 4E Mt	g/t	Moz
Merensky	Measured	21.01	2.87	1.94	19.55	3.15	1.98
	Indicated	0.00	0.00	0.00	0.00	0.00	0.00
	Inferred	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**21.01**	**2.87**	**1.94**	**19.55**	**3.15**	**1.98**
UG2	Measured	42.60	3.31	4.53	45.79	3.21	4.72
	Indicated	4.90	3.42	0.54	4.85	3.15	0.49
	Inferred	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**47.50**	**3.32**	**5.07**	**50.64**	**3.20**	**5.21**
Combined	Measured	63.61	3.16	6.47	65.34	3.19	6.70
	Indicated	4.90	3.43	0.54	4.85	3.14	0.49
	Inferred	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**68.51**	**3.18**	**7.01**	**70.19**	**3.19**	**7.19**

Booysendal North mine Mineral Reserves estimates [8]

Reef	Category	30 June 2023 4E Mt	g/t	Moz	30 June 2022 4E Mt	g/t	Moz
Merensky	Proved	2.94	2.19	0.21	3.25	2.34	0.24
	Probable	7.25	2.55	0.59	8.74	2.70	0.76
	Total	**10.19**	**2.44**	**0.80**	**11.99**	**2.59**	**1.00**
UG2	Proved	26.19	2.72	2.29	26.19	2.64	2.22
	Probable	11.77	3.04	1.15	13.54	2.79	1.22
	Total	**37.96**	**2.82**	**3.44**	**39.73**	**2.69**	**3.44**
Combined	Proved	29.13	2.67	2.50	29.45	2.60	2.46
	Probable	19.02	2.85	1.74	22.28	2.76	1.98
	Total	**48.15**	**2.74**	**4.24**	**51.73**	**2.67**	**4.44**

Booysendal North mine Merensky Reef

The estimated Merensky Measured Mineral Resources have increased from 19.55 Mt (1.98 Moz 4E) in June 2022 to 21.01 Mt (1.94 Moz 4E) in June 2023. The tonnage increase is the result of increasing the cut from 190 cm to 210 cm, which was offset by mining depletion.

The estimated Merensky Mineral Reserves have decreased from 11.99 Mt (1.00 Moz 4E) in June 2022 to 10.19 Mt (0.80 Moz 4E) in June 2023 as a result of mining depletion (-0.04 Moz 4E), adjustment of the mining layout (-0.11 Moz 4E), re-evaluation of the orebody (-0.07 Moz 4E) and an improvement in the modifying factors (+0.02 Moz 4E). The Proved confidence category is defined as the first five-years of mining production and contains 26% of the Mineral Reserves.

Booysendal North mine UG2 Reef

The estimated UG2 total Measured and Indicated Mineral Resources have decreased from 50.64 Mt (5.21 Moz 4E) in June 2022 to 47.50 Mt (5.07 Moz 4E) in June 2023. This is the net result of mining depletion, orebody re-evaluation and adjustment of the crown-pillar adjacent to the mined out areas.

The estimated UG2 Mineral Reserves tonnage has decreased with no change to the metal content, from 39.73 Mt (3.44 Moz 4E) in June 2022 to 37.96 Mt (3.44 Moz 4E) in June 2023. The decrease in tonnage (-1.77 Mt) is the net result of mining depletion (-2.60 Mt) and an improvement in modifying factors (+0.83 Mt). The metal content of 3.44 Moz 4E is unchanged on the previous year, this being the net result of depletion (-0.21 Moz 4E) being offset by increases from orebody evaluation (+0.13 Moz 4E) and modifying factors (+0.08 Moz 4E). The Proved confidence category is defined as the first ten years of mining production and contains 66% of the Mineral Reserves.

South mine

Booysendal South mine Mineral Resources estimates [1,2,4,5,6,7]

		30 June 2023 4E			30 June 2022 4E		
Reef	**Category**	**Mt**	**g/t**	**Moz**	**Mt**	**g/t**	**Moz**
Merensky	Measured	28.01	2.52	2.27	28.07	2.73	2.47
	Indicated	0.00	0.00	0.00	0.00	0.00	0.00
	Inferred	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**28.01**	**2.52**	**2.27**	**28.07**	**2.73**	**2.47**
UG2	Measured	117.99	3.14	11.92	125.60	3.19	12.89
	Indicated	14.19	3.56	1.62	14.39	3.48	1.61
	Inferred	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**132.18**	**3.19**	**13.54**	**139.99**	**3.22**	**14.51**
Combined	Measured	146.00	3.02	14.19	153.67	3.11	15.36
	Indicated	14.19	3.56	1.62	14.39	3.48	1.61
	Inferred	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**160.19**	**3.07**	**15.81**	**168.06**	**3.14**	**16.97**

Booysendal South mine Mineral Reserves estimates[8]

		30 June 2023 4E			30 June 2022 4E		
Reef	**Category**	**Mt**	**g/t**	**Moz**	**Mt**	**g/t**	**Moz**
Merensky	Proved	1.55	2.10	0.10	2.29	2.12	0.16
	Probable	14.08	2.26	1.03	13.76	2.30	1.02
	Total	**15.63**	**2.25**	**1.13**	**16.05**	**2.28**	**1.17**
UG2	Proved	31.04	2.46	2.45	32.24	2.74	2.84
	Probable	36.98	2.73	3.25	29.87	2.79	2.68
	Total	**68.02**	**2.60**	**5.70**	**62.11**	**2.76**	**5.52**
Combined	Proved	32.59	2.44	2.55	34.52	2.70	3.00
	Probable	51.06	2.60	4.28	43.63	2.63	3.69
	Total	**83.65**	**2.54**	**6.83**	**78.16**	**2.66**	**6.69**

Booysendal South mine Merensky Reef

The estimated Measured Mineral Resources for the Merensky Reef decreased from 28.07 Mt (2.47 Moz 4E) in June 2022 to 28.01 Mt (2.27 Moz 4E) in June 2023 mainly as a result of orebody re-evaluation.

The estimated Merensky Mineral Reserves have decreased from 16.05 Mt (1.17 Moz 4E) in June 2022 to 15.63 Mt (1.13 Moz 4E) in June 2023. This is a result of mining depletion (-0.02 Moz 4E) and orebody re-evaluation (-0.02 Moz 4E). The Proved confidence category is defined as the first five-years of mining production and contains 10% of the Mineral Reserves.

Booysendal South mine UG2 Reef

The estimated total UG2 Measured and Indicated Mineral Resources tonnes have decreased from 139.99 Mt (14.51 Moz 4E) in June 2022 to 132.18 Mt (13.54 Moz 4E) in June 2023. This is the combined result of mining depletion and orebody re-evaluation specific to BSU3 and BSU4. Re-evaluation has taken cognisance of new data from surface drilling, together with re-assessment of all borehole data.

The estimated UG2 Mineral Reserves have increased from 62.11 Mt (5.52 Moz 4E) in June 2022 to 68.02 Mt (5.70 Moz 4E) in June 2023. This is attributed to the extension of the mine designs at BSU1 and BSU4 mines (+0.54 Moz 4E) being offset by mining depletion (-0.24 Moz 4E), orebody re-evaluation (-0.06 Moz 4E) and modifying factors (-0.06 Moz 4E). The Proved confidence category is defined as the first ten years of mining production and contains 46% of the Mineral Reserves.

Booysendal extension

Booysendal extension Mineral Resources estimates [1, 3, 4, 5, 6, 7]

		30 June 2023 4E			30 June 2022 4E		
Reef	**Category**	**Mt**	**g/t**	**Moz**	**Mt**	**g/t**	**Moz**
Merensky	Measured	28.05	3.22	2.91	27.91	3.24	2.91
	Indicated	39.91	3.47	4.46	39.86	3.44	4.41
	Inferred	148.91	3.68	17.61	148.34	3.56	16.99
	Total	**216.87**	**3.58**	**24.98**	**216.10**	**3.50**	**24.31**
UG2	Measured	0.08	4.96	0.01	0.66	3.73	0.08
	Indicated	103.08	4.19	13.90	100.70	4.23	13.70
	Inferred	271.14	4.44	38.70	277.58	4.37	39.00
	Total	**374.30**	**4.37**	**52.61**	**378.94**	**4.33**	**52.78**
Combined	Measured	28.13	3.23	2.92	28.57	3.25	2.99
	Indicated	142.99	3.99	18.36	140.55	4.01	18.12
	Inferred	420.05	4.17	56.31	425.92	4.09	55.98
	Total	**591.17**	**4.08**	**77.59**	**595.04**	**4.03**	**77.09**

Booysendal extension Merensky and UG2 Reefs

The estimated total combined Merensky and UG2 Mineral Resources for the Booysendal extension have decreased from 595.04 Mt in June 2022 to 591.17 Mt in June 2023. The corresponding metal content increased over the same period from 77.09 Moz 4E to 77.59 Moz 4E. This is the result of re-evaluation of the orebodies based on additional surface borehole data. No Mineral Reserves have been estimated for the Booysendal extension.

Notes on Mineral Resources and Mineral Reserves

1. The Mineral Resources estimates are informed by exploration data, including 731 surface boreholes located within the mining right, together with 3 763 UG2 channel sections from on-reef development and stoping within the Booysendal North and South mines. A further 679 Merensky channel sections from on-reef development and stoping within the Booysendal North and South mines have been included in the estimation database. The greater part of the exploration drilling (circa 90%) has been conducted within 2.5 km down-dip of the outcrop. Drill hole spacing in this area ranges from 130 m to 300 m. Channel samples are located at 15m to 60m intervals within on-reef development and stoping.
2. Within the mining modules, Mineral Resources were estimated over a mineable cut. Within the North and South mine areas, Mineral Resource channels for both the UG2 and Merensky Reefs have been selected to support mechanised mining. The UG2 Mineral Resources cut has a minimum thickness of 210 cm and encompasses both the UG2 Leader and Main chromitite seams together, where applicable, with the overlying chromitite layers in areas where the middling between these represents both dilution and geotechnical constraints. A geotechnical cut is applied to the UG2 Reef at the BSU4 mine, where the presence of a hangingwall shear necessitates the addition of diluting material. The Merensky Mineral Resources cuts are 210 cm thick for the North mine and for the South mine. The Mineral Resource cut extends 20 cm above the top contact of the Merensky Pyroxenite, such that all appreciable mineralisation can be captured.
3. Within the Booysendal extension, the UG2 Mineral Resource cut is defined from the top of the Leader chromitite to the base of the Main chromitite unit with a maximum of 3 m thickness in the Split facies, whereas that of the Merensky Reef extends from 20 cm above the top of the Merensky pyroxenite contact to a fixed channel thickness of 120 cm.
4. The Mineral Resources were derived from surface borehole and underground channel sampled composites, cut over the vertical length of the reef intersection. The surface borehole assays were conducted at a number of commercial laboratories, these including SGS, Mintek and Anglo American Research Laboratory. The channel samples were assayed at the on-site mine laboratory. QAQC programmes are in place to assess and accept data into the estimation databases.
5. Cut-off grades of between 1.1 to 1.7 g/t 4E and between 1.5 to 2.3 g/t 4E for the UG2 and Merensky reefs respectively, have been applied to estimated blocks in the Booysendal extension. The cut-off grades vary and are dependent on depth of mining. Blocks with lower grades have been excluded from the Mineral Resources. No Mineral Resource blocks from the mining districts have been excluded, these all having grades above the cut-off of 1.1 g/t 4E for the UG2 and 1.5 g/t 4E for the Merensky.
6. The extraction of Mineral Resources from all five established mining modules over the past five-years has been demonstrated to meet the Northam investment criteria. Further extraction of Mineral Resources from the Merensky South mine and the UG2 BSU4 mine commenced in 2022. Future extraction is considered by extending the modules at depth and along strike of the orebody.
7. The Mineral Resources confidence classification is based upon a combination of quantitative geostatistical parameters, together with a qualitative appreciation of ore body continuity informed by data from within the property and data from surrounding properties. A scoring template using weighted criteria comprising; minimum number of composites, search distance, degree of geological and mining confidence and estimation variance, inform the model. This is used to separate Measured from Indicated confidence categories. Beyond the Measured category, the Indicated category is limited to an extrapolation of 1 000 m from the last sampled borehole. The Inferred category is informed by sparse data to the limit of 1 600 m from nearest sampled borehole. Locally, the Competent Person may apply discretion to assume continuity where the spacing is further.
8. Mineral Reserves for Booysendal relate to the current and planned mining modules, the Booysendal North and South mines. No Inferred Mineral Resources were used to inform the mining production schedule and consequently the Mineral Reserves estimate.

Eland mine

Eland is a shallow hybrid UG2 mine, ramping up to planned steady state over the next five years

Total Mineral Resources

14.70 Moz 4E

Total Mineral Reserves

3.27 Moz 4E

Current year production

48 800 oz 4E

PGM and chrome concentrators at Eland mine

Eland comprises a consolidated mining right (NW280MR) that covers some 4 291 hectares and hosts both the Merensky and UG2 Reefs which sub-outcrop over the entire 9.0 km east-west strike of the property and dip at approximately 19° to the north. The vertical separation between the Merensky and UG2 Reefs is approximately 200 m.

Business overview

Northam purchased the mine in late 2017 from Glencore, who had placed the operation on care and maintenance in 2015. A study for restarting operations commenced immediately following acquisition.

Operations at Eland originally commenced in 2007 and focussed solely on UG2 Reef, with open pit mining from sub-outcrop to a depth of 80 m continuing until mid-2009. Thereafter, sinking of the Kukama decline was started from the pit high-wall, followed a year later by the Nyala decline. Underground mining from the two declines was progressed using mechanised bord and pillar methods. Mining ceased in 2015.

Following the mine purchase, a feasibility study to bring the Kukama shaft to a steady state of 1.6 Mt per year, producing 150 000 oz 4E metal in concentrate, was completed in August 2019. The study allows for extending the mining infrastructure down-dip and along strike of the orebody and is based on a hybrid mining method. This comprises standard conventional stoping with semi-mechanised primary development and ore transport along strike using conveyor belts. Mine development via the Kukama decline commenced immediately following conclusion of the feasibility study.

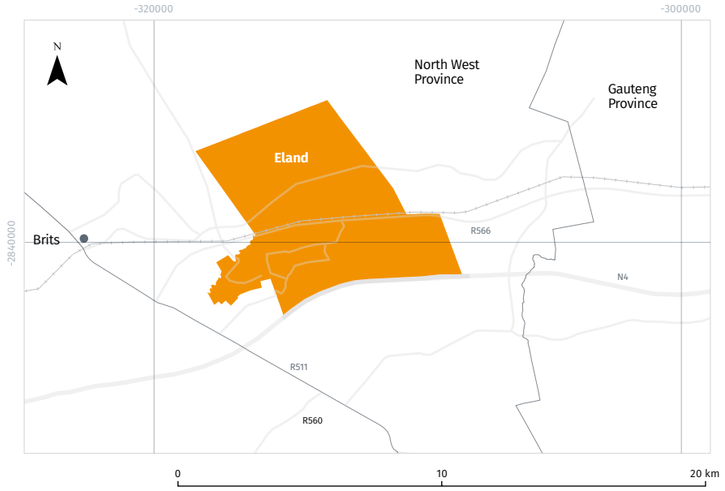
An agreement to purchase the adjacent Maroelabult mine from Barplats Mines Proprietary Limited, a subsidiary of Eastern Platinum Limited, was entered into during 2020. The transfer and integration of the Maroelabult mining right into the Eland mining right was finalised during 2022. Mine development is currently being progressed via both the Kukama and Maroelabult declines.

A feasibility study to assess the extraction of UG2 Reef through open pit mining in the eastern portion of the property was completed during 2021. The pit design allows mining of 1.1 Mt of ore with 60 000 oz 4E of metal in concentrate to be mined along a 1 km strike length over the period up until 2026 and to a maximum depth of 70 m. Mining commenced during 2022.

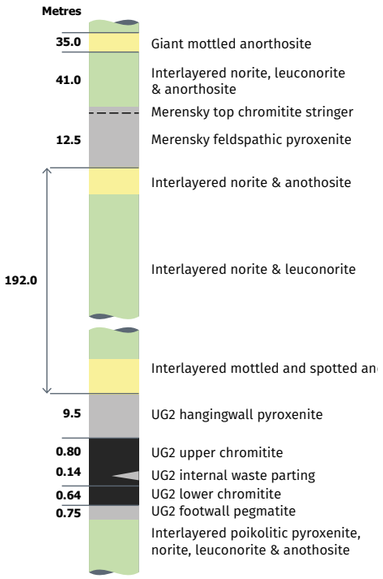
Mining production build-up continues at both the Kukama and Maroelabult shafts. Access to future Mineral Reserves is progressing well through the development of nine half levels together with the continuation of the Kukama decline.

Eland location and access routes

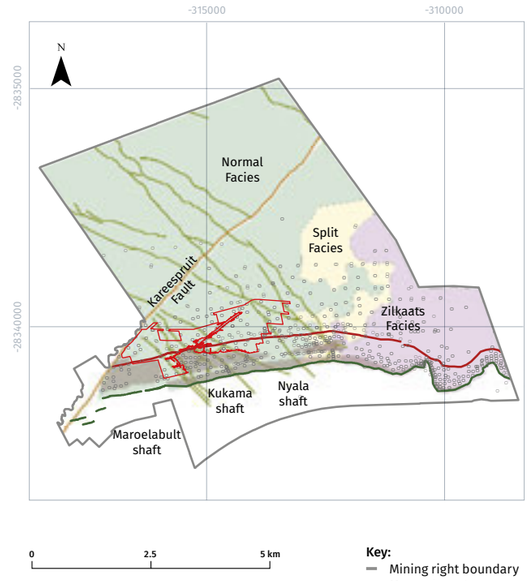
Eland mine is located in the south-eastern portion of the western limb of the Bushveld Complex, some 70 km north of Johannesburg and 12 km east of Brits, in the North-West Province of South Africa.



Eland stratigraphy between UG2 and Merensky Reefs



Eland UG2 general geology



Underground geological mapping at Eland

Geological setting

The Rustenburg Layer Suite of the Bushveld Complex at Eland mine is similar to that within the broader south-eastern portion of the western limb but shows stratigraphic variation from west to east. The Critical Zone sequence, being fully developed in the west, thins within the far eastern portion of the property. This is similar to the southern portions of Booysendal and is also related to the Bushveld sequence abutting onto basement highs. The impact of this abutment manifests itself in disruption to the morphology and internal structure of the UG2 Reef. Despite this, both reefs are continuous across the property. This has led to the characterisation of three UG2 Reef sub-types (facies) transitioning from west to east as the Normal, Split and Zilkaats sub-type domains.

Merensky Reef

The Merensky Reef is the upper mineralised portion of the 13 m thick Merensky pyroxenite, generally extending over 2 m to 3 m. The Merensky pyroxenite is immediately overlain by a sequence of competent norites. No facies have been defined, but surface morphology disruption is evident in the far east of the property. The Mineral Resource channel is defined as a fixed cut of 3 m below the hangingwall contact.

UG2 Reef

The internal structure of the UG2 Reef is similar to that found in the remainder of the western limb, albeit thicker and lacking continuous chromitite stringers or leaders in the immediate hangingwall. Three reef facies have been defined; Normal, Split and Zilkaats. The UG2 Normal and Split facies consist of massive, upper Leader and lower Main seam chromitite layers with an average combined thickness of 160 cm. In the case of the Normal facies, these seams are vertically juxtaposed or merged. In the Split facies, the seams are separated by a 4E metal-barren, silicate waste parting of up to 120 cm thickness. The Zilkaats facies is defined where a massive Leader seam, with a mean thickness of 95 cm, overlies a lower, Main seam that comprises either a multitude of chromitite stringers or disseminated chromite within a variable interval of silicate rocks. This generally renders the lower seam sub-economic. The Mineral Resource channels applied are variable and dependent on both the facies and the UG2 chromitite thickness.

UG1 Reef

No Mineral Resources have been declared for the UG1 Reef. However, the reef comprises two chromitite seams of between 180 cm to 200 cm thickness separated by an internal silicate parting of between 20 cm and 370 cm. The UG1 Reef is bound by massive norite units in the hangingwall and footwall. The PGE grade across the chromitite seams is below 1 g/t 4E and concentrated along the top and basal contacts.

Geological discounts

Gross Mineral Resources at Eland are defined outside of zones of known geological loss which comprise mapped dykes, faults and potholes. Gross Mineral Resources are then discounted by unknown geological losses that average 12% and 20% for the Merensky and UG2 Reefs respectively. These are unchanged from the prior year.

Exploration

Eland exploration comprises 677 earlier generation surface boreholes over the property which were drilled between the late 1980's and 2013, prior to Northam's acquisition. Northam has drilled a further 40 surface boreholes, of which 9 were drilled in the past year. These were drilled to improve; delineation of UG2 elevation down-dip of the main decline development, evaluation across the entire mine and structural interpretation at Maroelabult.

Reasonable prospects for eventual economic extraction

The Eland mine was progressed from initial opencast, mechanised and then hyrbid stoping to a current underground mining depth of 480 m. The future mining method will continue down-dip through a hybrid approach with conventional breast stoping and mechanised strike drive and decline development. At depths below 1 300 m, a Zondereinde mining approach will be adopted, including refrigeration. At depths below 1 600 m, backfilling of stoping areas will be introduced.

Cut-off grades were calculated using long term real metal price forecasts, together with current mining costs modified to take account of the costs of the additional technical requirements from mining deeper areas. Mining costs relative to current costs have been increased by 34% between 1 300 m and 1 600 m depth and by 45% below 1 600 m depth. Corresponding UG2 Reef cut-off grades for the respective depth intervals are; 1.5 g/t 4E up to 1300 m, 2.1 g/t 4E up to 1 600 m and 2.3 g/t 4E below this. The Merensky Reef cut-off grade for open pit mining is 0.9 g/t 4E.

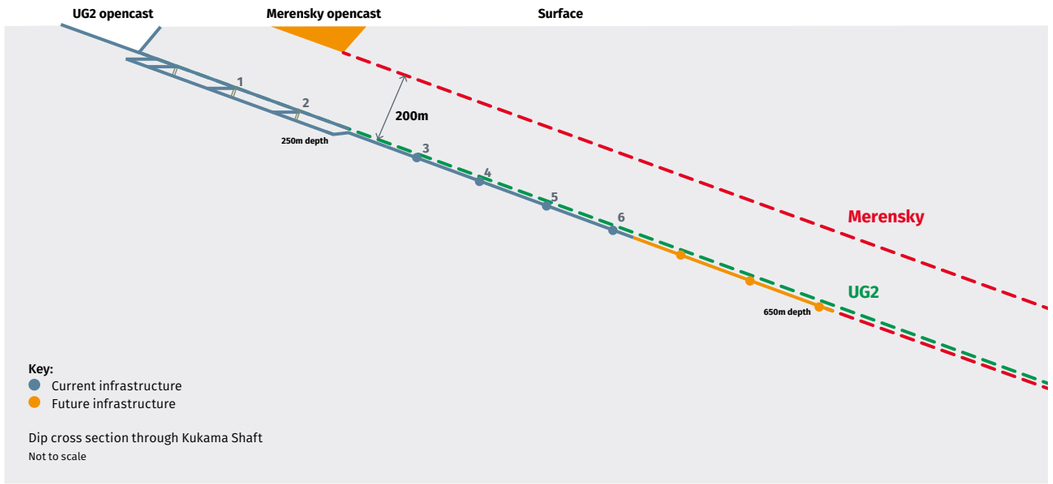
Mining studies

A feasibility study for the extraction of UG2 Reef in the Kukama shaft that extends the existing mining infrastructure down-dip and along strike of the orebody was completed in 2019. The study was based on a hybrid mining method, which allows for standard conventional stoping with semi-mechanised primary development along strike. The removal and transport of the ore material to the central decline system will continue with strike conveyors. The Kukama mine's primary infrastructure consists of a three decline system, initially on the reef horizon, it has now been converted to an off-reef system. Ore is transported out of the mine by dip conveyors; employees are transported using chairlifts.

The decline system combined with a hybrid mining approach would enable steady state production of 1.8 Mt of ore per annum from a maximum of 12 half levels and an annual metal output of around 150 000 oz 4E metal in concentrate.

In 2021, the feasibility study was extended to include ground from the adjacent Maroelabult mine. This was following the conclusion of an agreement to purchase the mine.

Eland mine generalised section



Dip cross section through Kukama Shaft
Not to scale

The results of the feasibility study have been used to augment the Kukama mining layout.

Furthermore, in 2021, a study regarding the feasibility of open pit mining of UG2 Mineral Resources in the eastern portion of the Eland mine property was completed. Subsequently, a contract mining company was engaged and mining is underway producing circa 20 000 ore tonnes per month. In 2023, the Proved Mineral Reserves for the open pit section have been removed.

Mining configuration

Initial underground mining of the UG2 Reef at Eland, prior to 2015, employed a mechanised bord and pillar method. Both the Kukama and Nyala mines were accessed via a system of three declines, two on the plane of reef and the third, containing a belt for ore handling, situated approximately 25 m into the footwall of the reef. These footwall belt declines extended to distances of 1 700 m and 850 m down-dip of the outcrop for Kukama and Nyala respectively.

This mining method proved unsuccessful, due mainly to the excessive regional dip. The feasibility study completed in August 2019, and the subsequent current mine plan has adopted a conventional hybrid mining method, in which ore generated from conventional breast stoping panels feeds onto strike conveyors along on-reef strike drives, which is then transferred to the decline belt system for hoisting to the concentrator plant on surface. Mining sections extend over a dip length of 225 m, equating to a vertical interval of 70 m.

The breast stoping layout allows for 9 panels of 24 m each per raise, including grid pillars. Raises are spaced up to 200 m apart along strike, with stoping planned predominantly single-sided. In-stope, strike gullies are inclined at 20°-25° above strike. Hydro-powered rock drilling is employed. Ore is moved by scrapers from the mining panel, via the strike gullies, to a center dip gully from which the ore is pulled by scrapers into a muck-bay. The ore is then loaded with a Load Haul and Dump machine (LHD) onto a strike conveyor.

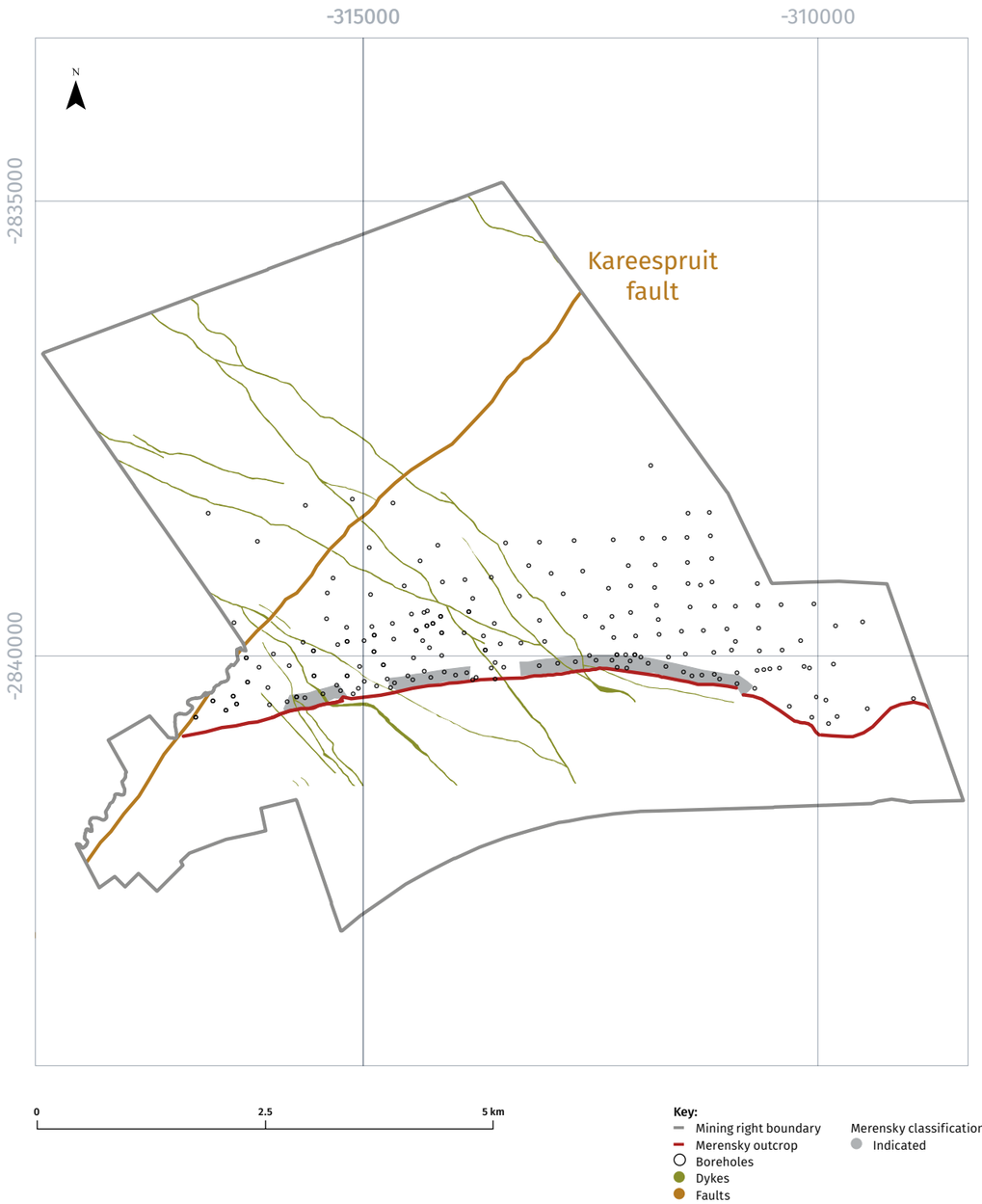
Strike drive development utilises twin drives, one for the strike conveyor and personnel, the other for trackless machinery. The strike drives are developed with drill rigs and cleaned with LHDs onto the tail end of the strike conveyors.

The dip decline system has been redesigned and is being advanced as a three barrel array situated in the immediate footwall (between 5 m to 15 m) to the UG2 Reef.

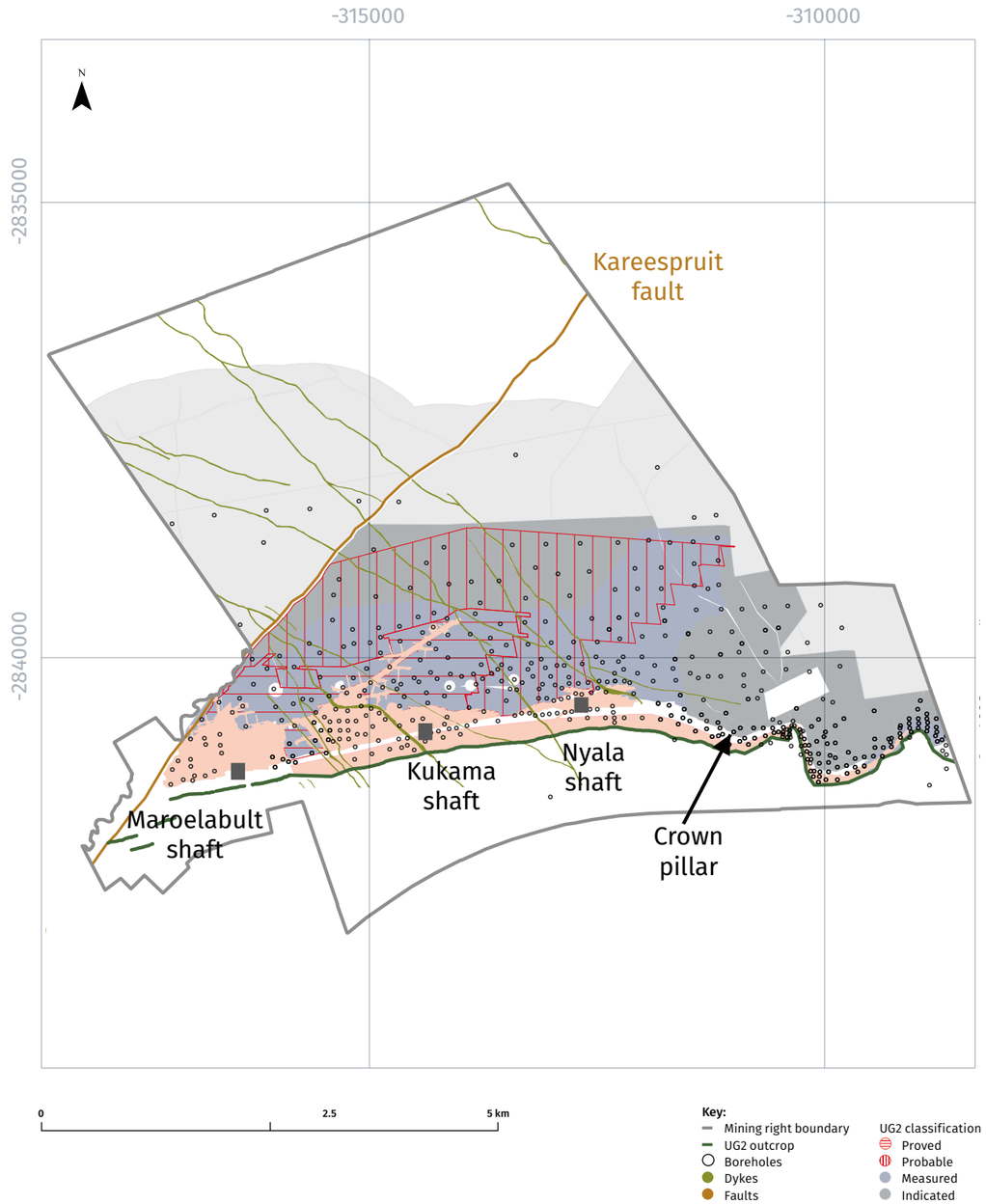
Normal UG2 Reef at Eland mine consists two juxtaposed chromitite seams

Mineral Resources and Mineral Reserves

Eland Merensky Reef confidence plan



Eland UG2 Reef confidence plan



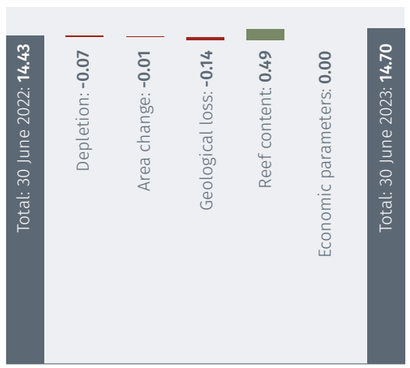
Eland Mineral Resources estimates [1,2,3,4,5,6,7]

Reef	Category	30 June 2023 4E Mt	g/t	Moz	30 June 2022 4E Mt	g/t	Moz
Merensky	Measured	0.00	0.00	0.00	0.00	0.00	0.00
	Indicated	4.82	1.05	0.16	4.82	1.05	0.16
	Inferred	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**4.82**	**1.05**	**0.16**	**4.82**	**1.05**	**0.16**
UG2	Measured	33.08	3.93	4.18	33.45	3.95	4.25
	Indicated	27.54	3.62	3.21	26.37	3.76	3.19
	Inferred	55.79	3.99	7.15	52.51	4.05	6.83
	Total	**116.41**	**3.89**	**14.54**	**112.33**	**3.95**	**14.27**
Combined	Measured	33.08	3.93	4.18	33.45	3.95	4.25
	Indicated	32.36	3.24	3.37	31.19	3.34	3.35
	Inferred	55.79	3.99	7.15	52.51	4.05	6.83
	Total	**121.23**	**3.77**	**14.70**	**117.15**	**3.83**	**14.43**

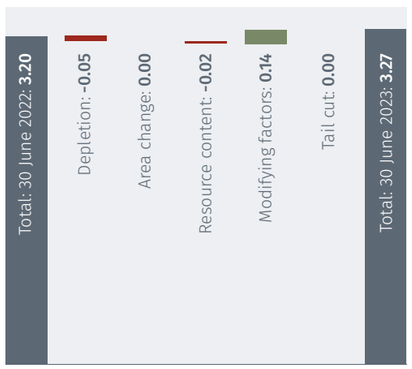
Eland Mineral Reserves estimates [8,9]

Reef	Category	30 June 2023 4E Mt	g/t	Moz	30 June 2022 4E Mt	g/t	Moz
Merensky	Proved	0.00	0.00	0.00	0.00	0.00	0.00
	Probable	0.00	0.00	0.00	0.00	0.00	0.00
	Total	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**
UG2	Proved	6.67	3.36	0.72	7.37	2.87	0.68
	Probable	23.43	3.38	2.55	23.54	3.33	2.52
	Total	**30.10**	**3.38**	**3.27**	**30.91**	**3.22**	**3.20**
Combined	Proved	6.67	3.36	0.72	7.37	2.87	0.68
	Probable	23.43	3.38	2.55	23.54	3.33	2.52
	Total	**30.10**	**3.38**	**3.27**	**30.91**	**3.22**	**3.20**

Changes in the Eland total Mineral Resources Moz 4E



Changes in the Eland total Mineral Reserves Moz 4E



Merensky Reef

The estimated Merensky Mineral Resources are reported only in the Indicated category and are unchanged from the previous year at 4.82 Mt (0.16 Moz 4E).

There are no Mineral Reserves reported for the Merensky Reef, these being removed in 2021 when the open pit shells underwent a re-assessment of their economic viability.

UG2 Reef

The estimated total UG2 Mineral Resources increased from 112.33 Mt (14.27 Moz 4E) in June 2022 to 116.41 Mt (14.54 Moz 4E) in June 2023. This is the net result of mining depletion and the re-evaluation of the orebody.

The estimated total UG2 Mineral Reserves decreased in tonnage from 30.91 Mt in June 2022 to 30.10 Mt in June 2023. The corresponding metal content increased from 3.20 Moz 4E in June 2022 to 3.27 Moz 4E in June 2023, mainly due to amended modifying factors. Proved Mineral Reserves of 6.67 Mt (0.72 Moz 4E) have been defined to within the first five-years of underground mining. Probable Mineral Reserves of 23.43 Mt (2.55 Moz 4E) extend to the limit of the currently accessed half levels, circa 2 km to 3 km from the main decline system along strike of the orebody.

Notes on Eland Mineral Resources and Mineral Reserves

1 The geological model and Mineral Resources estimate are informed by validated exploration data including 201 surface borehole intersections and 16 trenches for the Merensky Reef, and 571 borehole intersections and 80 trenches for the UG2 Reef, together with interpreted aeromagnetic & TEM surveys and geological mapping of the underground and surface mining excavations.

2 Mineral Resources were estimated over the mineable reef channels (Mineral Resource cuts), considering practical mining requirements.

3 The UG2 Mineral Resource channel is dependent upon facies. In the case of Normal and Split facies, this extends from the top of the Leader chromitite to 15 cm below the base of the Main chromitite seam, this being a variable thickness with a maximum of circa 2.3 m. The Zilkaats facies Mineral Resource channel extends from the top of the Leader chromitite to 20 cm below the base of the Leader chromitite, with an average channel width of 95 cm applied.

4 The Mineral Resources estimates were derived from the interpolation of surface borehole composites, these being a sampled cut over the reef intersection. The assays were conducted at a number of commercial laboratories, these including ALS Chemex, Anglo American Research Laboratory and SGS Analytical Services. QAQC programs are in place to assess and accept data into the estimation databases.

5 The Merensky Reef Mineral Resources are currently limited to five open pit mining blocks extending over a combined strike length of 4.1 km, and a dip extent of 170 m, representing a high-wall limit of 50 m. The Merensky Mineral Resource channel is 3 m in thickness extending below the top the Merensky pyroxenite.

6 Mineral Resources were derived from the estimation of 4E grade, channel thickness and density by interpolation of these values into 100 m blocks using Ordinary Kriging.

7 Mineral Resources classification is based upon a combination of quantitative parameters, including; borehole spacing, data quality, UG2 facies and structural complexity, together with a qualitative appreciation of reef continuity informed by data from within the property. The Measured confidence category has boreholes spaced 250 – 400 m apart. The Indicated confidence category extends to borehole spacing of 800 m and Inferred is then extrapolated to a maximum of 1 600 m.

8 Mineral Reserves for Eland relate to the planned UG2 mining modules; Kukama and Maroelabult underground. The first five-years of the production build-up within the Measured Mineral Resources on Kukama and Maroelabult have been classified as Proved Mineral Reserves. The subsequent half levels opened and established within the ten-year window within the Measured and Indicated Mineral Resources confidence categories are classified as Probable Mineral Reserves.

9 Inferred Mineral Resources were used in the mining production schedule for the Kukama feasibility study completed in 2019. A further assessment was conducted excluding the Inferred Mineral Resources, there being no material impact on the results of the mining study. No Inferred Mineral Resources were converted to Mineral Reserves.

Zondereinde mine

Zondereinde is a mature mine, which has successfully mined PGM ores from the Merensky and UG2 Reefs since 1992

Total Mineral Resources

78.91 Moz 4E

Total Mineral Reserves

14.82 Moz 4E

Current year production

321 901 oz 4E

Number 3 shaft headgear erected.

Zondereinde comprises a consolidated mining right (LP37MR) that covers some 9 257 hectares and is underlain by both the Merensky and UG2 reefs, which strike northwest-southeast and dip at approximately 20° to the southeast. The vertical separation between the reefs varies from 20 m and 40 m.

Business overview

The Merensky and UG2 Reefs are accessed via a twin vertical shaft system, where mining occurs between depths of 1 100 m and 2 000 m below surface, with deeper access via a decline system to a depth of 2 400 m. Mine development started in 1986, with ore production commencing in the early 1990s.

The mine originally exploited only the Merensky Reef but the commissioning of a UG2 concentrator in 2000, together with the necessary underground ore handling systems, allowed mining and processing of UG2 Reef from this time onwards. The mine produces approximately 2.0 Mt of ore per annum, generating circa 300 000 oz 4E metal in concentrate, together with associated precious and base metal by-products. The commissioning of a second smelter furnace at the adjoining Zondereinde metallurgical complex in 2017 has added additional downstream processing capacity, specifically for chromite bearing, UG2 concentrates.

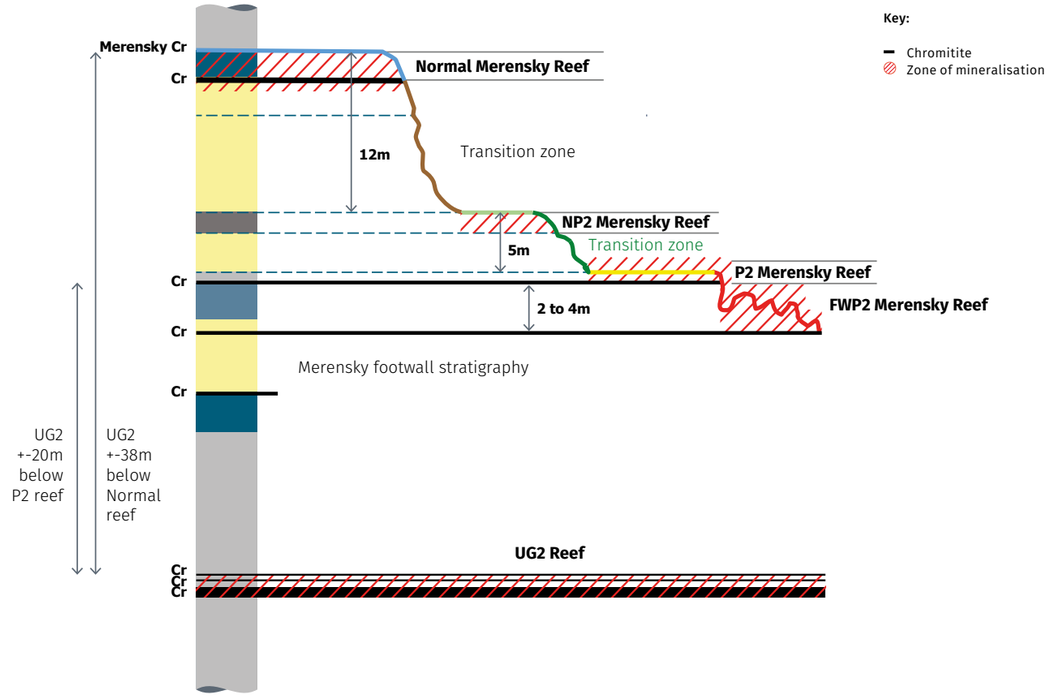
Also in 2017, the Tumela block, now referred to as the Western extension section, was acquired. This is an approximately 4 km contiguous extension of the Merensky and UG2 Reef horizons along strike towards the west. The development of additional vertical shaft access from surface, to aid mining of the Western extension, is in progress. The first shaft will be commissioned in 2024. This will enhance access for people, material and services.

The current annual ore production is approximately 0.9 Mt Merensky Reef and 1.1 Mt UG2 Reef. Merensky Reef production is planned to increase to 1.0 Mt over the next five-years.

Zondereinde location and access routes

The Zondereinde mine is situated in the northern portion of the western limb of the Bushveld Complex, approximately 30 km south of the town of Thabazimbi in the Limpopo Province.

Zondereinde stratigraphy between UG2 and Merensky Reefs



Geological setting

The Bushveld stratigraphic sequence at Zondereinde is typical of the northern portion of the western limb. The Critical Zone stratigraphy is compressed and dominated by mafic lithologies, with the vertical separation between the Merensky and UG2 Reefs ranging between 20 m and 40 m. Both reefs dip at 20˚ towards the south-east and extend from a depth of 1 100 m to 3 000 m below surface.

While there is lateral continuity of both reefs across the mine property, the Merensky Reef displays a variety of reef sub-types. The distribution of these is determined from a combination of surface exploration boreholes, ongoing prospect drilling from underground development and on-reef mapping in mine excavations.

Merensky Reef

The Merensky Reef is a zone of mineralisation that straddles the base of the Merensky cyclic unit. In the area of Zondereinde mine, the Merensky Reef consists of two sub-facies of the Zwartklip facies, namely the Normal and Regional Pothole sub-facies. The latter may be further subdivided into three sub-types, each of which occurs at a specific stratigraphic level below that of the Normal sub-facies. Sub-types include NP2 and P2, which constitute the main sources of ore, and FWP2 which, whilst not historically considered a primary mining target due to its undulating morphology in the central portions of the mine, is now successfully exploited in the western portion of the current mining area where it displays lesser disruption. This trend is expected to continue throughout the Western extension section.

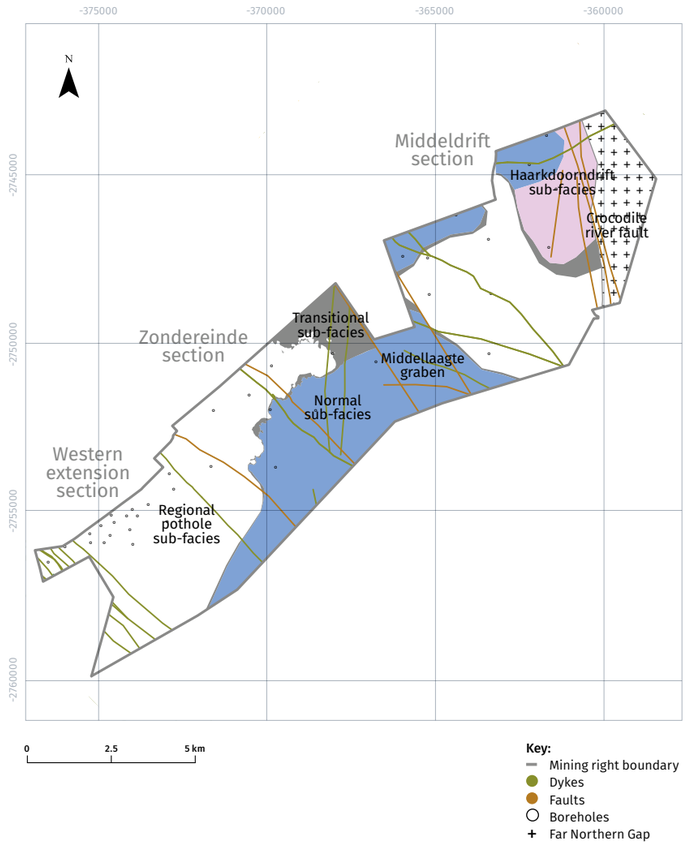
The Mineral Resource channel is the planned mining cut on the Merensky Reef and is dependent upon the reef sub-type mined and the geozone in which it is located. In all mining cuts, the Merensky chromitite is exposed with a minimum of 10 cm of the overlying mineralised Merensky pyroxenite as hangingwall.

UG2 Reef

The UG2 Reef at Zondereinde mine is remarkably conformable when compared with the Merensky Reef. Disruption, in the form of potholes and reef rolls, is extremely limited and localised. The reef consists of three chromitite seams separated by narrow pyroxenite partings. The lower seam, termed the Main member, is generally in the order of 85 cm thick, and is overlain by two Leader seams, each in the order of 15 cm thick. The Mineral Resource channel, comprising these seams, inclusive of a 10 cm portion of mineralised reef footwall, which is the planned mining cut, is in the order of 140 cm to 160 cm thickness. There is no basis for subdividing the UG2 Reef into sub-types.

Historically, UG2 mining was limited to de-stressed areas underlying previously mined Merensky Reef. A full reef mining cut enhances metal output, hangingwall stability and safe working practices. UG2 operations are migrating to areas where there has been no previous Merensky mining. In these areas, support regimes and layouts similar to those employed on the Merensky Reef are adopted.

Geological setting of Zondereinde



Geological discounts

Combined geological and extraction losses are discounted from the Mineral Resources for both reefs. These comprise pothole and structural losses as well as other barrier pillar losses. Discount losses vary per reef type and Mineral Resources confidence class, with an average of 29% for the Merensky Reef. Discount losses for the UG2 Reef average 36% and are largely contained in regional support pillars designed to counter stress concentration resulting from mining in proximity to previously mined overlying Merensky Reef.

Exploration and evaluation

Estimation of Mineral Resources is informed by significant exploration data, including; 65 boreholes drilled from surface, 9 159 boreholes drilled from underground, 110 394 Merensky and 38 931 UG2 channel section samples cut on a 15 m grid in on-reef development and stoping. Between 2018 and 2023, five geotechnical boreholes averaging 1 500 m in length were drilled from surface to test the ground conditions in the Western extension section in proximity to an area under investigation for a potential future shaft development (Number 3 shaft). More recently, an exploration drilling programme, primarily centred on the Western extension section was initiated in 2021. Two boreholes have been completed; their data being integrated into the Mineral Resources during the year. Currently, four boreholes with target depths ranging from 2 000 m to 2 600 m are in progress.

Reasonable prospects for eventual economic extraction

The Zondereinde mine has progressively extended its mining depth over the past ten years through the central decline section, from 2 000 m to 2 400 m below surface. Management systems and strategies in place have demonstrated the capability of successfully mining at these depths and deeper. Northam anticipates extending the maximum mining depth to 3 000 m below surface in the future, this being applicable to all sections, including Middeldrift.

This will require the continuing application of refrigerated ventilation, chilled water cooling from ice plants, together with a mining sequence employing additional regional stability pillars.

Cut-off grades were calculated using long term real metal price forecasts, together with current mining costs modified to take account of the costs of the additional technical requirements from mining deeper areas. Mining costs for the 2 400 m to 3 000 m mining depths are increased by; 5% for additional cooling and an additional 5% for hangingwall support. Corresponding cut-off grades are 4.0 g/t 4E for the Merensky Reef and 2.8 g/t 4E for the UG2 Reef.

Mining studies

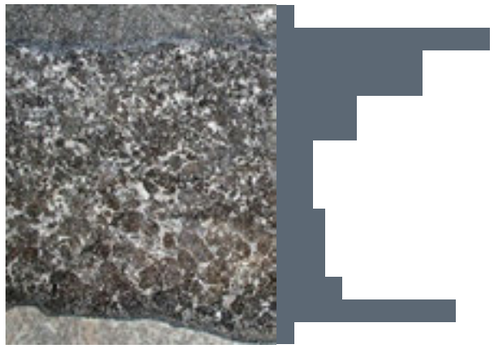
A feasibility study investigating access to and the economic viability of mining of the Western extension section of Zondereinde was concluded during 2021. Amongst the technical considerations of this study were the provisions of employee access, rock hoisting, services and ventilation. An extension of the feasibility study is underway to improve the confidence for rock hoisting and underground material transport. This study is scheduled to be completed in the year ahead.

The 2021 study determined that optimal access is afforded via a combination of the continuation of underground strike development from the existing Zondereinde shaft system, together with a new combined vertical shaft and decline system situated in the Western extension section.

Zondereinde reef-types, with Merensky sub-types

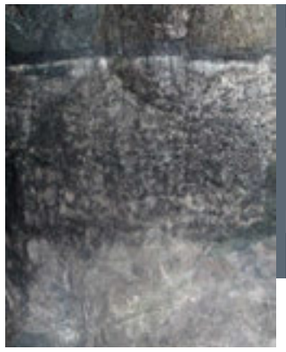
Merensky Reef

Normal facies



4E PGE tenor

NP2 facies



4E PGE tenor

P2 facies

FWP2 facies

UG2 Reef

ICP_MS analysis at the Eland assay laboratory

Capital has been committed to this plan, strike development into the Western extension section is already well advanced and development of the planned three Western extension vertical shafts is in progress. The employee access and material raise-bored shaft is being equipped, the ventilation raise-bored shaft is being reamed and piloting of the rock hoisting shaft is underway.

The feasibility study further concluded that mining within the Western extension section should follow the same configuration as that applied over the course of Zondereinde's history. Stoping will initially exploit the Merensky Reef, followed by later UG2 extraction.

The positive outcome of the feasibility study, together with the commitment of capital to the plan has allowed the estimation of Mineral Reserves within the full strike extent of appropriate Mineral Resources categories of the Western extension.

Mining configuration

Mining of the narrow tabular orebodies in the intermediate to deep level mining environment is successfully conducted using a conventional mining method. The mining layout is a breast configuration on both the Merensky and UG2 Reefs. The Merensky Reef excavation is backfilled, which has, historically, then been followed by the extraction of UG2 Reef in a de-stressed mining zone. UG2 operations are migrating to areas where there has been no previous Merensky mining. In these areas, support regimes and layouts similar to those employed on the Merensky Reef are adopted.

The underground workings are accessed from a twin vertical shaft system. The Number 1 Shaft extends below 13 level (2 102 m below surface) and Number 2 Shaft serves workings down to 8 level (1 724 m below surface). The shafts have a lateral separation of 90 m and are interconnected at an intermediate pump chamber (IPC) at 1 019 m below surface, as well as on mining levels 2, 4, 6, 7, 8 and 9. Workings below 13 Level are serviced by decline access ways, designed to accommodate both people and materials, and equipped with a conveyor belt system that transports the ore and waste rock. The relatively narrow vertical separation between the two reef horizons allows for both of these to be accessed via the same primary tunnel development.

The vertical interval between levels is 63 m. With the ore body dipping at 20°, this provides a raise back length of 180 m and allows for six stoping panels of 30 m length each to be established either side of the central raise. Strike gullies are aligned at 10° above the strike direction. A dip gully handles the ore transported via the strike gullies to three ore passes situated in the original raise, all of which are fitted with radial-door control chutes. Ore is transported to the main shaft ore passes via strike drives located below the two reefs, using battery powered, rail bound, locomotives pulling spans of eight hoppers. Broken ore is tipped into a conventional shaft ore-pass system, with separate rock handling facilities

Zondereinde mine continued

Zondereinde mine generalised section

for Merensky Reef, UG2 Reef and waste rock, and then hoisted to surface in skips. At surface, the ore is transported by conveyor belts to the separate Merensky and UG2 concentrator plants, whilst waste rock is transported to a waste rock pile.

A key success component of mining is the use of hydro-powered equipment such as rock drills and high-pressure water jets in conjunction with electric scraper winches. This hydropower equipment was developed and engineered from the outset of mining at Zondereinde and continues to function successfully

Mineral Resources and Mineral Reserves

At Zondereinde, the Mineral Resources and Mineral Reserves confidence classification centres on a well-established understanding of the geological continuity and mining conditions acquired over an extensive period of almost 30 years.

Access to the Mineral Resources and Mineral Reserves is through the continuation of mining development along strike into the Western extension section, together with progressive development of the Central Decline system into the deeper portions of the Zondereinde section.

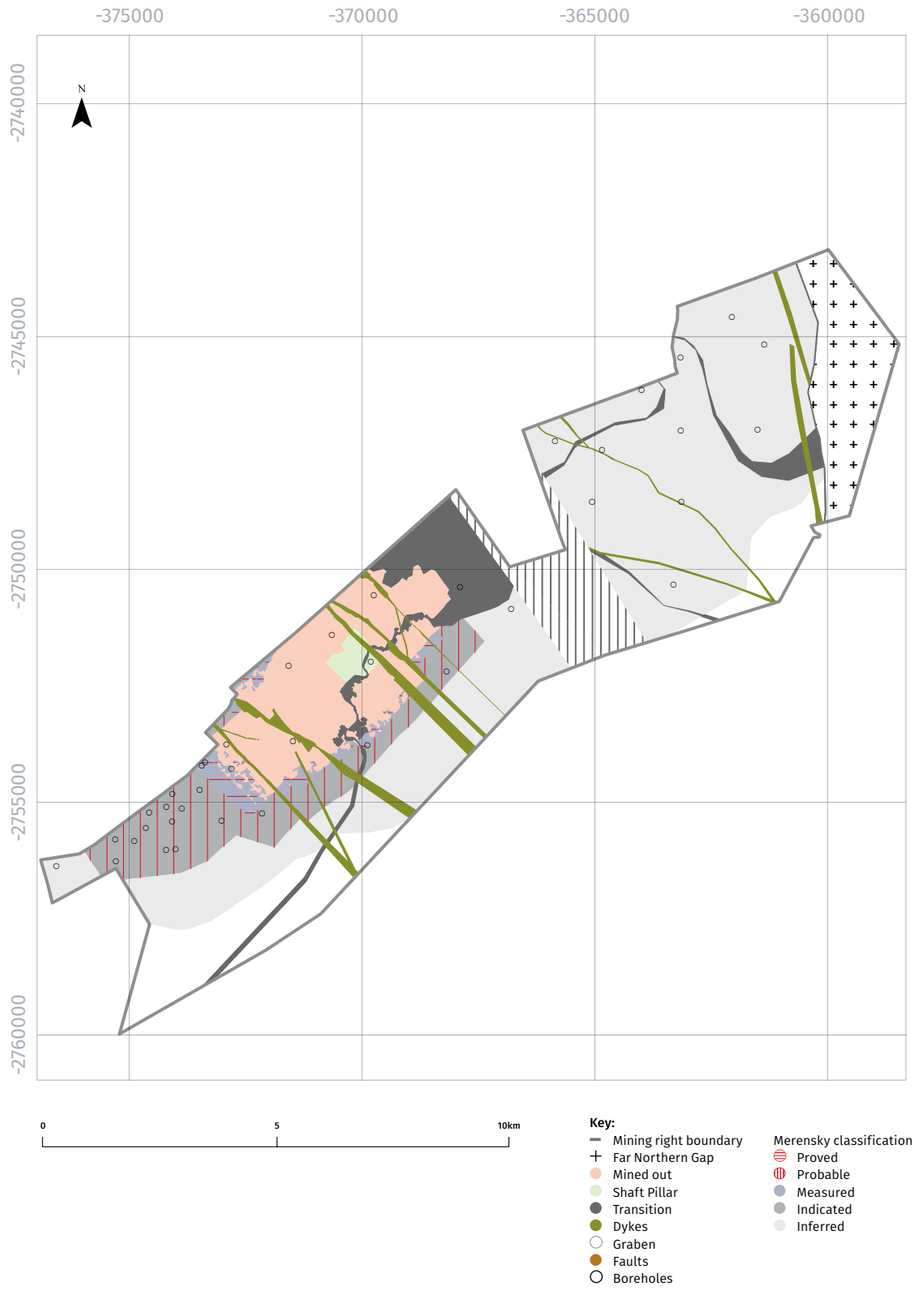
Estimation of the Mineral Reserves within the Western extension have been supported by a feasibility study concluded in 2021. The Central Decline system accessing the mining levels 13 to 18 unlocks deeper resting Mineral Reserves in the central part of the mine.

Mineral Resources in the Middeldrift section in the far east of the property are part of future Mineral Reserves potential and do not form part of the current life of mine plan.

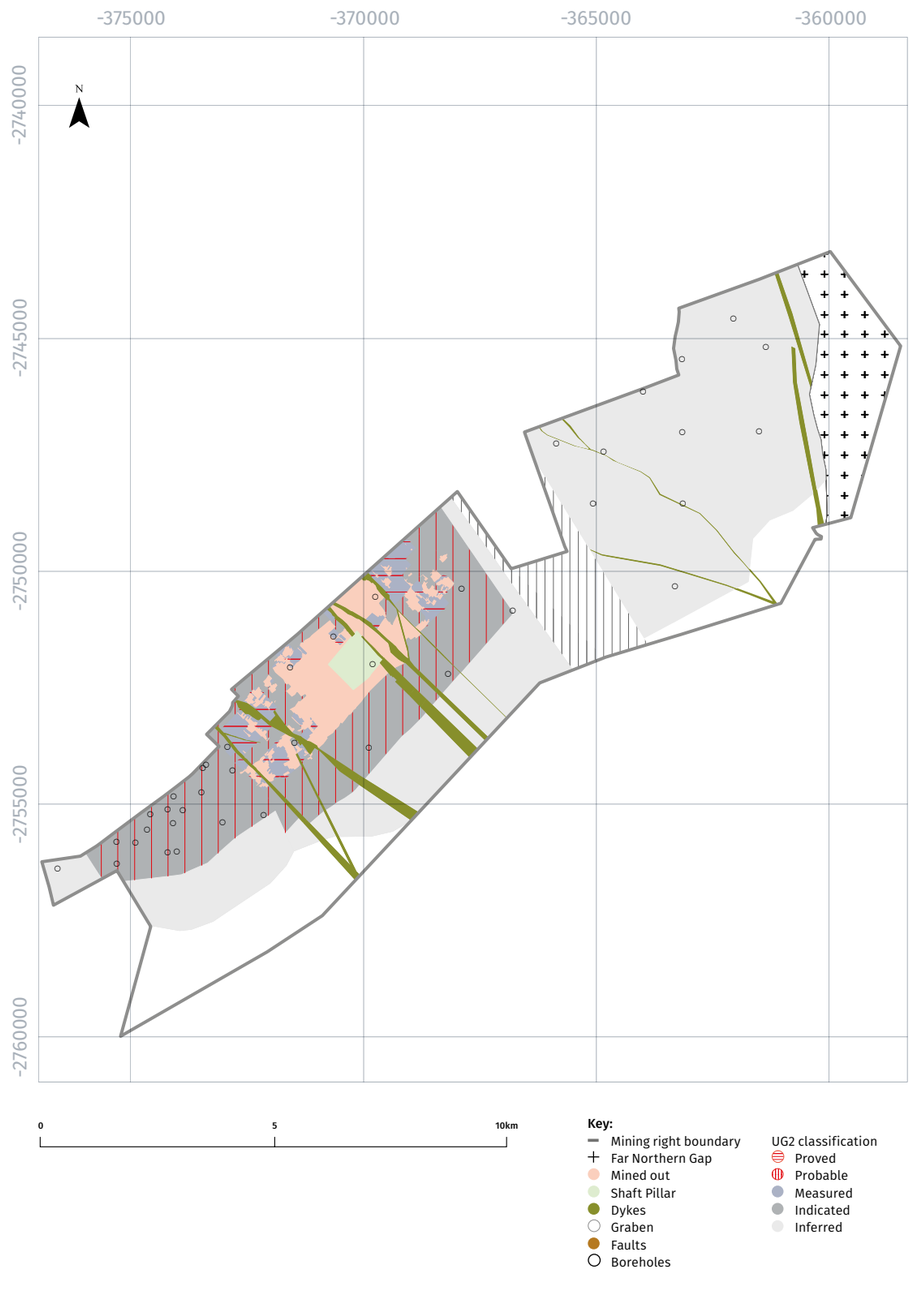
Raise boring the new 3a vent shaft at Zondereinde mine

Mineral Resources and Mineral Reserves

Zondereinde Merensky Reef confidence plan



Zondereinde UG2 Reef confidence plan



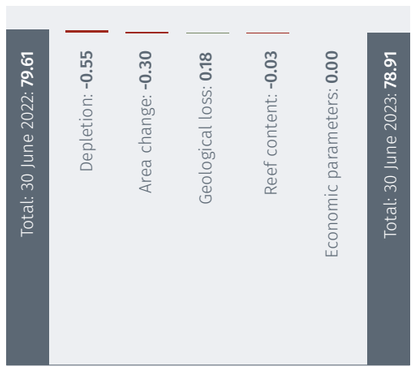
Zondereinde Mineral Resources estimates [1,2,3,4,5]

Reef	Category	30 June 2023 4E Mt	g/t	Moz	30 June 2022 4E Mt	g/t	Moz
Merensky	Measured	4.34	7.17	1.00	4.21	7.00	0.95
	Indicated	26.37	6.95	5.89	26.41	7.12	6.05
	Inferred	140.61	7.38	33.38	141.38	7.38	33.56
	Total	**171.32**	**7.31**	**40.27**	**172.00**	**7.33**	**40.56**
UG2	Measured	8.75	4.98	1.40	8.05	4.95	1.28
	Indicated	63.98	5.11	10.51	65.33	5.11	10.74
	Inferred	158.06	5.26	26.73	159.58	5.27	27.03
	Total	**230.79**	**5.21**	**38.64**	**232.96**	**5.21**	**39.05**
Combined	Measured	13.09	5.70	2.40	12.26	5.65	2.23
	Indicated	90.35	5.65	16.40	91.74	5.69	16.79
	Inferred	298.67	6.26	60.11	300.96	6.26	60.59
	Total	**402.11**	**6.10**	**78.91**	**404.96**	**6.11**	**79.61**

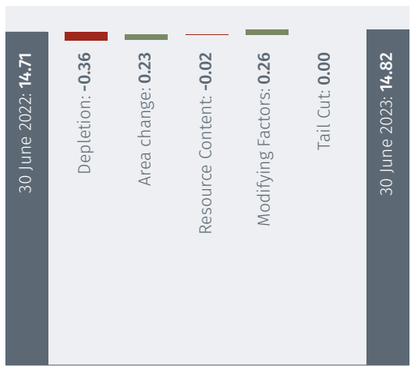
Zondereinde Mineral Reserves estimates [1,4,6]

Reef	Category	30 June 2023 4E Mt	g/t	Moz	30 June 2022 4E Mt	g/t	Moz
Merensky	Proved	3.07	5.97	0.59	2.66	5.80	0.50
	Probable	30.15	5.57	5.40	29.08	5.45	5.09
	Total	**33.22**	**5.60**	**5.99**	**31.74**	**5.48**	**5.59**
UG2	Proved	6.66	4.15	0.89	5.74	4.39	0.81
	Probable	55.13	4.48	7.94	58.85	4.39	8.31
	Total	**61.79**	**4.44**	**8.83**	**64.59**	**4,39**	**9.12**
Combined	Proved	9.73	4.73	1.48	8.40	4.84	1.31
	Probable	85.28	4.86	13.34	87.93	4.74	13.40
	Total	**95.01**	**4.85**	**14.82**	**96.32**	**4.75**	**14.71**

Changes in the Zondereinde total Mineral Resources Moz 4E



Changes in the Zondereinde total Mineral Reserves Moz 4E



Merensky Reef

The total Merensky Mineral Resources have decreased from 172.00 Mt (40.56 Moz 4E) in June 2022 to 171.32 Mt (40.27 Moz 4E) in June 2023. The change was the result of mining depletion (-0.28 Moz 4E) and orebody re-evaluation (-0.01 Moz 4E).

The Measured Mineral Resources have increased from 4.21 Mt (0.95 Moz 4E) in June 2022 to 4.34 Mt (1.00 Moz 4E) in June 2023, the net result of mining development in the Western extension section offset by mining depletion. The increase in the 4E grade is due to a change in the estimated relative proportions of the Merensky Reef sub-types.

The Indicated Mineral Resources have decreased from 26.41 Mt (6.05 Moz 4E) in June 2022 to 26.37 Mt (5.89 Moz 4E) in June 2023. The decrease of 0.04 Mt (0.16 Moz 4E) is attributed to the net effect of transfer of Indicated to Measured confidence categories and orebody re-evaluation.

The total Merensky Mineral Reserves have increased from 31.74 Mt (5.59 Moz 4E) in June 2022 to 33.22 Mt (5.99 Moz 4E) in June 2023. The increased content is the net result of Mineral Reserve extension (+0.21 Moz 4E) and improved modifying factors (+0.37 Moz 4E) being offset by mining depletion (-0.18 Moz 4E).

The increase in the Proved Mineral Reserves grade is attributed to improvements in the Mineral Resource grade and modifying factors.

UG2 Reef

The total UG2 Mineral Resources have decreased from 232.96 Mt (39.05 Moz 4E) in June 2022 to 230.79 Mt (38.64 Moz 4E) in June 2023. This is the net result of mining depletion (-0.27 Moz 4E) and orebody re-evaluation (-0.14 Moz 4E).

The Measured Mineral Resources have increased from 8.05 Mt (1.28 Moz 4E) in June 2022 to 8.75 Mt (1.40 Moz 4E) in June 2023. This is the net result of mining depletion in the Zondereinde section offset by the transfer of Mineral Resources from the Indicated category in the Western extension attributed to mining development.

The total UG2 Mineral Reserves have decreased from 64.59 Mt (9.12 Moz 4E) in June 2022 to 61.79 Mt (8.83 Moz 4E) in June 2023. This is the net result of mining depletion (-0.18 Moz 4E) and changes to the modifying parameters (-0.11 Moz 4E).

Notes on Zondereinde Mineral Resources and Mineral Reserves

1 Mineral Resources include those from the Zondereinde, Middeldrift and Western extension sections of the property. Mineral Reserves are estimated for the Zondereinde and Western extension sections. No Mineral Reserves are declared for the Middeldrift section.

2 The Merensky Reef Mineral Resources channels are based on a fixed mining width for each reef sub-type, that being 160 cm for Normal, 120 cm for P2, 110 cm for NP2 and 120 cm for FWP2. The Merensky Reef at Middeldrift has fixed channels of 140 cm for all reef sub-types. The UG2 Reef Mineral Resources width is based on the exposure of the Main chromitite and the overlying Leaders and 10 cm from the footwall, averaging 138 cm, this being the mining cut.

3 The Mineral Resources were derived from sampled surface borehole reef intersections and underground channel samples, cut perpendicular to the reef dip. The surface boreholes comprise two generations of data, the older being acquired by Gold Fields of South Africa in the 1980's for the Zondereinde and Middeldrift sections, and the more recent data from Anglo American Platinum for the Western extension section in the 1990-2008 period. The borehole assays were conducted at several of laboratories over time that include Gold Fields Laboratories, Anglo American Research Laboratories and Setpoint Laboratory. The channel sample assays are conducted at the on-site mine laboratory. The QAQC of the older borehole and most of the channel sample assay data are reliant on the respective laboratory's internal controls, with ad-hoc checks on the channel assay using SGS, an independent laboratory. Channel sample data from 2019 onwards have benefited from independent QAQC processes.

4 Mineral Resources in the Measured confidence class are estimated in the areas accessible from holed on-reef development and/or bounded by haulage borehole intersections and the nearest stope exposures where channel sampling has taken place. The Measured areas typically extend between 200 m and 400 m ahead of the stoped-out areas. The Indicated category extends between 400 m and 1 000 m down-dip from the last channel samples in the Zondereinde section where extensive mining up-dip has established continuity. The Indicated class in the Western extension has been extrapolated to a maximum of 400 m down-dip of the borehole reef intersections where no mining has occurred. Inferred Mineral Resources extend from the Indicated category and have been extrapolated 1 600 m from the boreholes or channel samples. No Inferred Mineral Resources were used to inform the mining production schedule and consequently the Mineral Reserves estimate.

5 An average of 29.2% combined geological and extraction losses have been applied to the Mineral Resources estimate of the Merensky Reef and 35.6% to that of the UG2 Reef. Geological losses include those from dykes, faults, potholes and iron rich ultramafic pegmatitic intrusions (IRUP), whereas extraction losses allow for pillars.

6 All Mineral Reserves occur between 1 150 m and 2 400 m below surface, these being the upper and lower limits of current and planned mining access.

Dwaalkop joint venture

The Dwaalkop joint venture is an advanced exploration project, being the eastern extension along strike of the Baobab mine

Total attributable Mineral Resources

7.45 Moz 4E

Nature of interest and reference for further information

Northam, through its wholly-owned subsidiary Mvelaphanda, holds a 50% interest in the Dwaalkop joint venture, the managing partner of which being Western Platinum, a subsidiary of Sibanye-Stillwater. Mineral Resources and Mineral Reserves contained in this statement are reported on a Northam attributable basis.

Business Overview

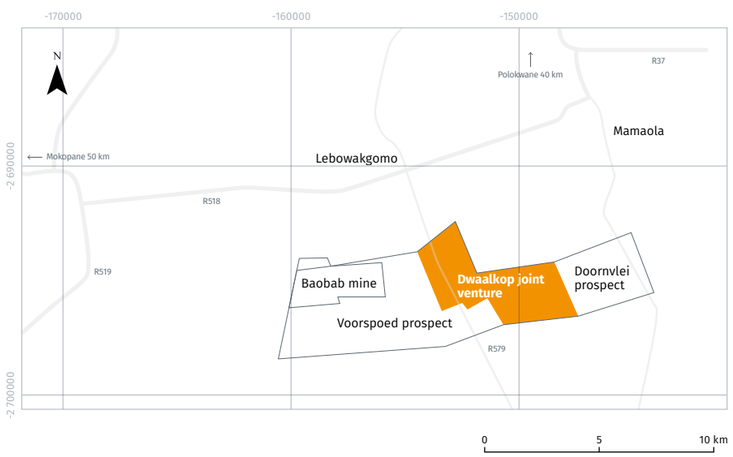
Dwaalkop is a joint venture between Western Platinum Limited, a subsidiary of Sibanye-Stillwater and Mvelaphanda, a wholly-owned subsidiary of Northam. Northam, through Mvelaphanda holds a 50% attributable interest. The Dwaalkop joint venture is one of the modules of the greater Limpopo mining complex which also includes the Voorspoed prospect that hosts the Baobab mine. Mineral Resources have been established by the joint venture partner, Western Platinum Limited. The adjacent Baobab mine was placed on care and maintenance in 2009. A mining right was granted over the Dwaalkop joint venture during 2021. Execution of this mining right is currently in progress.

The steep orebody dip and width of the Merensky and UG2 Reefs makes these ore bodies potentially attractive to mechanisation. The ore bodies are located near to existing mining infrastructure and the UG2 Reef prill split, containing a high palladium proportion with concomitant elevated nickel and copper base metal sulphides, is attractive for future mining.

For more comprehensive information relating to the Dwaalkop joint venture and its declared Mineral Resources, the reader is referred to the Mineral Resources and Reserves statement 2022 for Sibanye-Stillwater, which can be found at: https://reports.sibanyestillwater.com/2022/download/ssw-RR22.pdf

Dwaalkop location and access routes

The Dwaalkop joint venture is located next to the town of Lebowakgomo, approximately 50 km south of the city of Polokwane and 50 km south-east of the town of Mokopane in the Limpopo Province of South Africa.



Geological setting

The Dwaalkop joint venture is situated within the northern compartment of the eastern limb of the Bushveld Complex. The Merensky and UG2 Reefs are steeply dipping at approximately 60° to the south and have a stratigraphic middling of approximately 65 m. This equates to a horizontal separation of 130 m. Both reefs sub-crop below thin surface cover. Copper and nickel grades in the UG2 Reef are elevated and in line with those of the Merensky Reef.

Exploration and evaluation

Between the 1960s and 2009 numerous phases of drilling were conducted by various mining companies. The depths of the drillholes vary from a few metres to 1 500 m below surface. No exploration or evaluation data acquisition work has been conducted over the Dwaalkop joint venture between 2010 and 2023.

Reasonable prospects for eventual economic extraction

Prospects for eventual economic extraction are reviewed annually by Sibanye-Stillwater. The RPEEE is based on Sibanye-Stillwater's metal price and exchange rate assumptions of USD1 500 for Pt and Pd, USD10 000 for Rh, USD1 800 for Au and R15.00 : USD1.00. Operating costs are benchmarked against Sibanye-Stillwater's Rustenburg, Kroondal and Marikana mines, resulting in a cut-off grade of 1.78 g/t 4E being applied.

Mining studies

No mining studies have been undertaken during the financial year.

A feasibility study of the viability of mining the Dwaalkop prospect through a series of incline shafts in conjunction with the adjacent Baobab mine was undertaken by then owners Lonmin PLC in 2012, which was again updated in 2017. The Sibanye-Stillwater Competent Person reports that a review and update of the project economics was undertaken during 2020, the outcome of which supports the RPEEE, and the project remains subject to further economic assessment.

Mineral Resources and Mineral Reserves

The Merensky and UG2 Mineral Resources are reported on revised and updated geological and grade models, also incorporating adjustments based on external audit findings. The key change relates to a geotechnical consideration for the UG2 Reef where the inclusion of mineralised hangingwall material has been included in the Mineral Resource channel.

No Mineral Reserves are declared for the Dwaalkop joint venture.

Northam has consent from Sibanye-Stillwater's Lead Competent Person for SA PGM operations and projects to publish the Mineral Resources.

Dwaalkop attributable Mineral Resources estimates [1,2,3,4,5,6,7,8]

		30 June 2023 4E			30 June 2022 4E		
Reef	**Category**	**Mt**	**g/t**	**Moz**	**Mt**	**g/t**	**Moz**
Merensky	Measured	0.00	0.00	0.00	0.00	0.00	0.00
	Indicated	15.05	3.40	1.65	15.05	3.40	1.65
	Inferred	6.15	3.10	0.61	6.15	3.10	0.61
	Total	**21.20**	**3.32**	**2.26**	**21.20**	**3.31**	**2.26**
UG2	Measured	0.00	0.00	0.00	0.00	0.00	0.00
	Indicated	26.97	3.45	3.00	19.05	4.50	2.76
	Inferred	17.96	3.80	2.19	14.20	4.60	2.10
	Total	**44.93**	**3.59**	**5.19**	**33.25**	**4.55**	**4.86**
Combined	Measured	0.00	0.00	0.00	0.00	0.00	0.00
	Indicated	42.02	3.43	4.65	34.10	4.01	4.40
	Inferred	24.11	3.62	2.80	20.35	4.15	2.71
	Total	**66.13**	**3.50**	**7.45**	**54.45**	**4.07**	**7.12**

Notes on Dwaalkop Mineral Resources

1 Mineral Resources for Dwaalkop reflect Northam's 50% attributable interest and are quoted as at the end of 31 December 2022 as provided by Sibanye-Stillwater.
2 Mineral Resources are estimated from the results of surface diamond drilling. For the surface drillhole deflections, typically three of these intersections are sampled and assayed at a commercial laboratory.
3 The grades and/or metal accumulations, density and thicknesses of the individual reef layers are estimated into block models using Ordinary Kriging. The Mineral Resource channel is selected from the individual reef layers and therefore may include some diluting material.
4 Mineral Resources estimates are based on a practical mining cut of not less than 90 cm. The widths of the individual layers that comprise the reef vary across the property and the Mineral Resource channel widths also vary according to the layers incorporated into the reef cut. The average width of the UG2 Reef varies between approximately 1.90 m and 2.72 m and the average width of the Merensky Reef varies between approximately 1.50 m and 2.41 m, depending on the cut-applied.
5 Mineral Resources confidence categorisation is based on; confidence in the geological model, reef continuity, drilling density and geostatistical analysis.
6 Indicated Mineral Resources at Dwaalkop are typically declared in areas where drill spacing is less than 600 m. Inferred Mineral Resources are extrapolated to a maximum distance of 800 m from the last down-dip boreholes in the plane of reef. The Mineral Resources at Dwaalkop occur from surface to an average depth of 1 500 m for the Merensky Reef and 1 775 m for the UG2 Reef.
7 Total geological losses of 17.0% and 16.3% have been discounted from the respective Merensky and UG2 Reef Mineral Resources estimates.
8 Geological losses include known and unknown losses from dykes, faults, potholes and IRUP.

RBPlat mines

RBPlat's operating assets include the Bafokeng Rasimone and Styldrift 1 mines, which host Merensky and UG2 Mineral Resources and Mineral Reserves.

Total attributable Mineral Resources

22.67 Moz 4E

Total attributable Mineral Reserves

5.22 Moz 4E

Nature of interest and reference for further information

Northam acquired a 34.52% shareholding in RBPlat during 2021. Mineral Resources and Mineral Reserves contained in this statement are reported on a Northam attributable basis. Northam has divested its interest subsequent to 30 June 2023.

Business overview

The RBPlat operations comprise the contiguous Bafokeng Rasimone (BRPM), Styldrift 1 and Maseve mines.

BRPM is a decline accessed conventional mine, comprising North and South sections, separately accessed via decline shafts. The mine has been operating since 1998, initially mining the Merensky Reef and currently transitioning to mining the UG2 Reef. Merensky ore from BRPM is treated at the BRPM PGM concentrator. UG2 ore is being treated at the recently upgraded Maseve PGM concentrator. The BRPM mining right has tenure until 2040.

Styldrift 1 is a mechanised bord and pillar mine accessed via the Styldrift 1 vertical shaft system. It mines Merensky Reef that is treated at the BRPM PGM concentrator. Mine development commenced in 2010, with first ore mined in 2012. The Styldrift mining right has tenure until 2038.

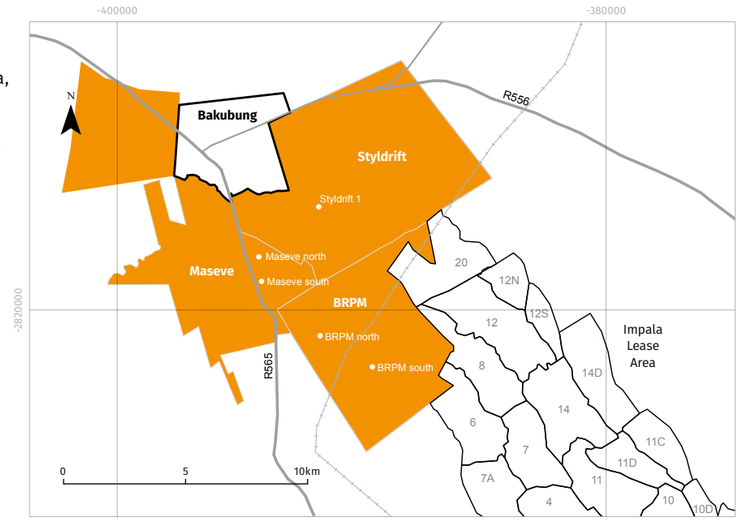
Maseve is currently on care and maintenance. It previously operated briefly as a mechanised bord and pillar mine, accessed via two separate decline systems. The Maseve mining right has tenure until 2042.

Current annual combined ore production is approximately 3.2 Mt Merensky Reef and 1.4 Mt UG2 Reef.

For more comprehensive information relating to the RBPlat operations and their declared Mineral Resources and Mineral Reserves, the reader is referred to the Mineral Resources and Mineral Reserves Statement 2022 for RBPlat, which can be found at: https://www.bafokengplatinum.co.za/reports/integrated-report-2022/pdf/royal-bafokeng-platinum-mmr.pdf

RBPlat location and access routes

The RBPlat operations are located in the North West Province of South Africa, immediately south of the Pilanesberg National Park and approximately 25 km to the north of the town of Rustenburg.



Geological setting

The RBPlat mines are situated at the northern extent of the southern compartment of the western limb. The mines' host both the Merensky and UG2 Reefs which vary in dip from flat-lying in the central portion of the Styldrift 1 mining block, to 12° in the south shaft of the BRPM mine. Stratigraphic middling between the reefs is approximately 40 m.

Both reefs display multiple reef sub-types with highly variable channel widths and metal contents. Copper and nickel grades for both the Merensky and UG2 Reefs are in line with western limb norms.

Exploration and evaluation

Focussed exploration of the BRPM area commenced in the 1990s, initially under the auspices of Anglo-American Platinum Limited. Exploration of the Styldrift area commenced in 2009, initially to support the feasibility study that led to the development of Styldrift 1 mine.

Historical exploration has exploited the full suite of exploration activities, including; surface mapping, satellite imagery, Lidar, aerial and ground based geophysics including aeromagnetic and 3D seismic surveys, together with surface and underground exploration drilling and sampling.

Exploration activities during the 2022 calendar year comprised the drilling of 18 boreholes to improve the geological models to enhance the Mineral Resources confidence within the five-year mining footprint of the Styldrift 1 mine and to assess the orebody continuity of the Merensky and UG2 reefs in the south-eastern portion of the Maseve mining block.

Planned exploration for the calendar year 2023 comprises drilling of a further 18 boreholes focussing on the Styldrift 1 and Maseve mines. A 3D seismic survey is planned to proceed after the exploration drilling programme has been completed.

Reasonable prospects for eventual economic extraction

The Competent persons of RBPlat have declared that reasonable prospects for eventual economic extraction have been assessed in the compilation of the Competent Persons Report supporting their Mineral Resources and Mineral Reserves declaration.

Mining studies

A pre-feasibility study reviewing the mining method of the Merensky Reef Terrace sub-type for the Styldrift 1 mining block, employing hybrid mining in place of conventional mining was continued during the year.

Studies aimed at determining the most optimal method of future mining at Maseve are being undertaken. No results from these studies are currently available to the Northam Lead Competent Person.

Mineral Resources and Mineral Reserves

Mineral Resources and Mineral Reserves estimates for the Merensky and UG2 ore bodies are declared on a Northam attributable basis, following the acquisition during 2022 of a 34.52% shareholding in RBPlat.

Mineral Resources and Mineral Reserves for the RBPlat mining rights were prepared and assessed by RBPlat and have been reported using the guidelines of the SAMREC Code (2016) as at 31 December 2022, and are declared in the RBPlat Mineral Resources and Mineral Reserves Statement 2022.

Northam has consent from RBPlat's Lead Competent Persons for their managed PGM operations to publish the Mineral Resources and Mineral Reserves.

Following the divestment of Northam's interest in RBPlat subsequent to 30 June 2023, attributable Mineral Resources and Mineral Reserves will be removed from future statements.

RBPlat attributable Mineral Resources estimates [1,2,3,4,5,6,7,8]

		30 June 2023 4E			30 June 2022 4E		
Reef	**Category**	**Mt**	**g/t**	**Moz**	**Mt**	**g/t**	**Moz**
Merensky	Measured	23.65	7.49	5.69	23.72	7.52	5.73
	Indicated	16.38	6.98	3.68	16.68	7.06	3.79
	Inferred	9.47	7.43	2.26	10.14	7.48	2.44
	Total	**49.50**	**7.31**	**11.63**	**50.54**	**7.36**	**11.96**
UG2	Measured	31.40	5.20	5.25	31.43	5.20	5.25
	Indicated	25.31	4.99	4.06	25.33	4.99	4.06
	Inferred	10.79	4.99	1.73	11.23	4.96	1.79
	Total	**67.50**	**5.09**	**11.04**	**67.99**	**5.08**	**11.10**
Combined	Measured	55.05	6.18	10.94	55.15	6.19	10.98
	Indicated	41.69	5.77	7.74	42.01	5.81	7.85
	Inferred	20.26	6.13	3.99	21.37	6.16	4.23
	Total	**117.00**	**6.03**	**22.67**	**118.53**	**6.05**	**23.06**

RBPlat attributable Mineral Reserves estimates[1]

		30 June 2023 4E			30 June 2022 4E		
Reef	**Category**	**Mt**	**g/t**	**Moz**	**Mt**	**g/t**	**Moz**
Merensky	Proved	17.00	4.47	2.44	17.13	4.57	2.52
	Probable	6.72	4.10	0.89	7.37	4.17	0.99
	Total	**23.72**	**4.37**	**3.33**	**24.49**	**4.46**	**3.51**
UG2	Proved	12.20	3.88	1.52	12.48	3.81	1.53
	Probable	3.00	3.85	0.37	3.42	3.83	0.42
	Total	**15.20**	**3.87**	**1.89**	**15.89**	**3.82**	**1.95**
Combined	Proved	29.20	4.22	3.96	29.60	4.26	4.05
	Probable	9.72	4.03	1.26	10.78	4.07	1.41
	Total	**38.92**	**4.17**	**5.22**	**40.38**	**4.21**	**5.46**

Notes on RBPlat Mineral Resources and Mineral Reserves

1. Mineral Resources and Mineral Reserves for RBPlat reflect Northam's 34.52% attributable interest and are quoted as at the end of 31 December 2022 as provided in RBPlat's annual 2022 Mineral Resource and Mineral Reserve statement.
2. Mineral Resources are estimated from the results of surface diamond drilling, together with underground channel sampling. For both, intersections are sampled and assayed at a commercial laboratory.
3. The grades, density and thicknesses of the composites are estimated into block models using Ordinary Kriging.
4. The Merensky Reef Mineral Resource channel composites are selected over a variable thickness mineralised zone with a minimum of 90 cm. The UG2 Mineral Resource channel is a geotechnical cut dependant on the hangingwall stratigraphy and the proximity of overlying chromitite layers. The variable thickness UG2 Reef channel may also extend into the footwall where no additional hangingwall is required within the cut.
5. A weighted score card approach which quantifies the reef geology, geometry and estimation statistics has been used to classify the Mineral Resources. The weighting considers two broad categories these being geological and geostatistical categories. The resulting score is used by the Competent Person to assign the Measured, Indicated and Inferred categories to each block cell.
6. Geological losses include those from known dykes, faults, potholes and IRUP. These, together with unknown estimates are discounted from the Mineral Resources. Mineral Resources have variable geological losses between the mines, which range from 22% to 28% loss for the Merensky Reef and from 22% to 33% for the UG2 Reef
7. No Mineral Resources are excluded as a result of cut-off grade from the 2022 declaration.
8. Mineral Resources are quoted as inclusive of Mineral Reserves.

Kokerboom prospect

Kokerboom is an iron oxide copper gold and massive sulphide copper zinc exploration prospect, which comprises several prospecting rights covering some 1 000 000 hectares of the Northern Cape Province

Exploration conducted to date included; airborne magnetic and radiometric surveys, compilation and reviews of existing geochemical and surface mapping data, together with some limited surface mapping. No Mineral Resources nor Mineral Reserves have been estimated or reported.

The prospecting work program was suspended in 2019. Closure applications for these prospecting rights have been submitted to the DMRE and are in process.

Kokerboom location and access routes

General notes on reporting criteria

1. Mineral Resources tonnages and metal content for Zondereinde are reported as estimates discounted for geological and mining pillar losses. All other Mineral Resources are reported as estimates discounted for geological losses.

2. Mineral Resources tonnages and grades are *in situ* estimates inclusive of internal waste dilution but exclusive of external waste dilution necessary for mining, unless otherwise stated.

3. Mineral Resources are reported inclusive of Mineral Reserves.

4. PGM grade and content are expressed as 4E (combined platinum, palladium, rhodium and gold) grade or 4E PGE this being synonymous with 3PGE+Au or 4E PGE.

5. Structural losses due to faults, dykes and joints for Zondereinde include the volumes of expected bracket pillars required to be placed on such features.

6. Kriging estimation parameters are applied to discrete mining areas in order to estimate tonnage and metal content and are derived from the interrogation of extensive sampling databases. Estimation is done through the interpolation of the parameters of sampled assayed composites to blocks through a variety of techniques which include Ordinary Kriging, Inverse Distance Squared, and Averaging.

7. Rounding of numbers in the tables may result in minor computational discrepancies. Where this occurs, it is deemed insignificant.

8. The most reasonable mining widths are applied to the Mineral Resources channels, based on practical mining considerations. 4E grade, together with bulk density are calculated for these channels. The sampled intersection lengths are represented by either true thickness (channel sections) or vertical thickness (boreholes and channel sections), specific to each deposit and sample type, and appropriately applied to obtain the correct tonnes.

9. Total Mineral Resources and Mineral Reserves attributable to Northam are listed in the summary tables.

10. Measured and Indicated Mineral Resources are reported separately and include those Mineral Resources modified to estimate Proved and Probable Mineral Reserves.

11. While Mineral Resources are quoted as *in situ*, all Mineral Reserves are quoted at run-of-mine (ROM) grades and tonnages as delivered to the concentrator plants on site and are therefore, fully diluted.

12. Modification of Mineral Resources to Mineral Reserves for Northam's operations is based on parameters derived from historical operating performance, current conditions and future planning criteria.

13. In compliance with the SAMREC Code (2016), Inferred Mineral Resources are not included in the reporting of Mineral Reserves. Inferred Mineral Resources have not been used in the Booysendal and Zondereinde mining feasibility studies. At Eland, Inferred Mineral Resources were used to inform the mining study. These were not used to declare Mineral Reserves.

14. All references to tonnage are to the metric unit.

15. All references to ounces are troy with a conversion factor of 31.103475 used to convert from metric grams to ounces.

16. Decimal separators are full stops. Thousand separators are spaces.

17. Plans of mine location, geology and Mineral Reserves and Mineral Resources confidence use the WGS 84 Lo 27 coordinate system.

18. Quality assurance and control programs are undertaken to ensure the integrity of raw data.

19. Mineral Resources are estimated from sampling results of validated boreholes and channel sections considered to be representative of the nature of the deposit and its associated mineralisation.

20. Risks that could impact on the Mineral Resources and the Mineral Reserves are assessed and mitigated in the classification.

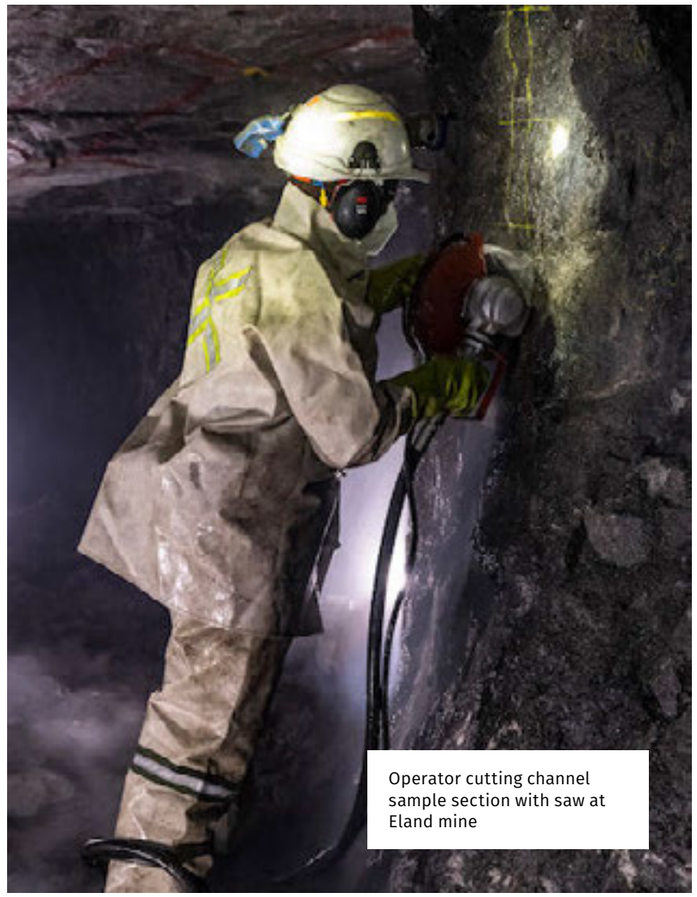
21. For economic studies and the determination of pay limits, consideration was made of both short and long term revenue drivers. Metal prices, exchange rates and inflation indices are periodically forecasted by the Northam Pricing Committee. Metal pricing forecasts take cognisance of historical and current pricing together with Northam's in-house view of future metal supply and demand. Forecasting of other parameters is informed by fundamental economic principles. A range of external independent analyst's views are also considered. The Northam Pricing Committee reconciles previous forecasts with historical actual metal prices, exchange rates and inflation indices to improve confidence in future forecasts. The following long term global assumptions (stated in F2023 real terms) were used for the estimation of the Mineral Resources and Mineral Reserves reported in this statement:

Base metals		
Ni	USD/metric tonne	20 907
Cu	USD/metric tonne	8 711
Chromite	USD/metric tonne	174

Precious metals		
Pt	USD/troy ounce	1 180
Pd	USD/troy ounce	1 307
Rh	USD/troy ounce	11 797
Au	USD/troy ounce	1 481
Ru	USD/troy ounce	523
Ir	USD/troy ounce	3 920

Average exchange rate	
USD:ZAR	16.28

22. PGM metal prill splits (platinum, palladium, rhodium and gold) are expressed as percentages of the combined 4E value. These are indicative of the global value. Base metal contents (chromite, copper and nickel) are expressed as average grades in weight percentage. These grades represent total concentrations rather than acid soluble percentages of nickel and copper. Indicative PGM metal prill splits and base metal contents per reef type for each operation are tabulated below:



Operator cutting channel sample section with saw at Eland mine

PGM metal prill splits and base metal contents
Merensky

Mine	% Pt	% Pd	% Rh	% Au	% Cr2O3	% Cu	% Ni
Booysendal total	58.4	31.4	2.6	7.7	<1	0.096	0.220
Dwaalkop	56.8	31.9	4.2	7.1	no data	0.110	0.170
Eland	55.3	30.9	3.2	10.6	<1	0.042	0.104
RBPlat	64.7	26.7	4.4	4.2	no data	0.130	0.230
Zondereinde	60.9	28.2	7.4	3.5	0.8	0.072	0.164

PGM metal prill splits and base metal contents
UG2

Mine	% Pt	% Pd	% Rh	% Au	% Cr2O3	% Cu	% Ni
Booysendal	58.0	31.4	9.6	1.0	20.3	0.010	0.078
Dwaalkop	47.1	42.8	7.9	2.2	no data	0.090	0.140
Eland	61.2	27.8	10.1	0.8	29.8	0.008	0.097
RBPlat	59.3	29.2	11.0	0.6	no data	0.010	0.110
Zondereinde	60.4	27.5	11.4	0.7	27.6	0.021	0.123

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Glossary of terms

4E	Northam reports Mineral Resources, Mineral Reserves, production and grades in terms of combined platinum, palladium, rhodium and gold, collectively expressed as 4E this is synonymous with 3PGE & Au or 4E PGE.
Aeromagnetic (airborne magnetic survey)	An airborne geophysical survey performed using a magnetometer. It measures the local magnetic field to discern structural features and strata with differing magnetic properties.
Average exchange rate	The average exchange rate achieved by the group for the purpose of converting USD sales to ZAR over a period/year, amounting to the sum of the daily close ZAR/USD exchange rate over a period/year divided by the number of days in that period/year.
Backfill	Deposition of classified (size sorted) tailings (or waste products) from a concentrator plant into underground stoping panels as a support method.
Bord and pillar	A mining layout generally supported by extraction using mechanised equipment, in which ore is extracted in a checkerboard pattern, with intervening support pillars.
Breast stoping	A stoping layout in which mining panels are developed from a raise and advanced parallel to reef strike.
Bushveld complex	The largest layered igneous complex in the world, and the repository for circa 85% of known global PGM resources.
Care and maintenance	Temporary closure of a mine when it has stopped production for various technical, environmental, financial or labour related reasons, where the holder of the mining right awaits improved economic conditions and not declared intent on mine closure.
Channel sampling	The collection of sample material cut from a narrow 5-7 cm slot, 3-4 cm deep, in an underground excavation, taken vertically or perpendicular across the reef intersection. Sample interval lengths vary depending upon rock-type and mode of known mineralisation. The assayed results thereof are composited across the selected Mineral Resources or Mining cuts.
Competent person	As defined in the SAMREC Code (2016), a person with sufficient expertise and relevant experience, who is registered with a recognised professional organisation, to estimate Mineral Resources and/or Mineral Reserves.
Composite	The weighted mean of a variety of attributes (generally length, grade, density, metal content) from a number of contiguous samples describing a Mineral Resource cut that have been acquired from boreholes, trenches or channel sampled intersections. The composite includes a spatial reference.
Conventional mining	A mining layout to support extraction from narrow tabular orebodies (reefs) where access is through rail bound haulages and cross-cuts often located in the footwall. The on-reef development is through smaller raises and gulley excavations that support various stope configurations. This mining is more labour intensive than mechanised mining.
Converted mining right	A converted mining right, is a new order mining right issued in terms of the Mineral and Petroleum Resources Development Act, No 28 of 2002, which entitles the holder to the exclusive right to mine for prescribed minerals over a prescribed area of land. A mining right may be granted for a period of up to 30 years and may be renewed for further periods, each of which may not exceed 30 years.
Decline	An inclined tunnel, generally developed in a down-dip direction from surface to provide access to underground workings.
Dilution	Low or zero grade material that is mined during the course of mining operations and thereby forms part of the Mineral Reserve.
DMRE	Department of Mineral Resources and Energy of South Africa.
ECSA	Engineering Council of South Africa - 1st Floor, Waterview Corner Building, 2 Ernest Oppenheimer Avenue, Bruma Lake Office Park, Bruma, Johannesburg, Gauteng +27 861 225 555 www.ecsa.co.za
Environmental liability	The assessed cost of rehabilitating a mining sight post-closure, as defined in section 41 of Mineral and Petroleum Resources Development Act, No 28 of 2002.
Estimation	The process by which parameters such as thickness, density, grades and metal accumulation over part or full mining cut, has been interpolated into either blocks or nodes, from a valid estimation dataset using a defined technique (e.g. ordinary kriging or inverse distance squared). The process is done often within homogeneous domains (geozones).
Feasibility study	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).
Footwall	Strata immediately underlying the orebody to be mined.
Geological loss	Assessment and quantification of geological disturbances on the reef horizons, which include potholes, faults, dykes and iron replacement pegmatite that renders the proportion that are unlikely to be extracted.
Hangingwall	Immediate strata overlying the orebody to be mined.
Hydro-power	Pressurised water used to power mechanised equipment such as rock drills.
IMSSA	The Institute of Mine Surveyors of Southern Africa - The Chamber of Mines Building, Room 509, 5 Hollard Street, Marshalltown, Johannesburg, 2000 011 498 7682 www.ims.org.za
JSE	JSE Limited (registration number 2005/022939/06), a public company incorporated in accordance with the laws of South Africa and licensed to operate an exchange under the Financial Markets Act, or the securities exchange operated by the JSE Limited, as the context may require.
Life of mine (LoM) plan	The outcome of the scheduled areas of the Mineral Resources, expressed as tonnes and metal content delivered to the concentrator which can be done profitably beyond the first five-years of production (Business Plan).
Mafic	Category of igneous rock-type (also referred to as basic) where dark minerals comprising olivine and pyroxenes, with a very low silica (less than 45%) generally high magnesium and iron and low potassium contents.
Merensky reef	A regular layer of predominantly pyroxenite, mineralized by sulphides of nickel, iron and copper, together with narrow bands or concentrations of chromite, containing economic concentrations of platinum group metals over part or the entire pyroxenite-rich unit.
Metal in concentrate	Metal produced from mining operations during the reporting period, that has been concentrated ahead of smelting.
Mine design criteria	Factors that influence the mine design process, which includes parameters from the mineral resource, mining technical, logistical and economic.
Mineral Reserves	An estimate of mineable mineralisation as defined in the South African Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves (2016), the SAMREC Code (2016).
Mineral Resources	An estimate of *in situ* mineralisation as defined in the South African Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves (2016), the SAMREC Code (2016).
Mineral Resource channel cut	The width (thickness) of the selected mineralisation to sustain a practical mining cut, this being dependent on the mining method, geotechnical conditions and the distribution of the PGM, base metal and chromite mineralisation. This is often used synonymously with Mineral Resources cut unless otherwise stated. The cut will include internal diluting material, but depending on the selection definition, it may not include additional diluting material necessary for mining extraction.
Mineral right	The collective term for mining, prospecting and reconnaissance rights. In South Africa, these are governed by Mineral and Petroleum Resources Development Act, No 28 of 2002.
Mining cut	The width (thickness) of the selected mineralisation to sustain a practical mining cut, this being dependent on the mining method, geotechnical conditions and the distribution of the PGM, base metal and chromite mineralisation. This is often used synonymously with Mineral Resources cut unless otherwise stated.
Modifying factors	Factors applied to Mineral Resources, including mining dilutions, losses and extractions, to convert them to Mineral Reserves.
New order mining right	A right to mine and process ore granted in terms of section 23(1) of the Mineral and Petroleum Resources Development Act, No 28 of 2002.
Open pit mining	Mining method, also known as open cast mining, is a surface mining technique that extracts minerals from an open pit in the ground, with no underground tunnelling or activities.
Ounces (oz)	Troy ounces – one ounce equals 31.103475 grams.
Outcrop	Similar to subcrop, this is the trace of a dipping, tabular surface or orebody intersecting the earth's surface.
PGE	Platinum group elements, synonymous with PGM.
Pothole	Potholes are near circular to elongate depressions or slumps on the reef horizon normally existing as severe disruptions which prevent economic extraction. Within the pothole, the reef may either be attenuated, has lithological layers that are missing or highly deformed, this being the result of the overlying hangingwall strata having slumped down.
Pre-feasibility study	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 is established and an effective method of mineral processing is determined. It includes a financial analysis based on reasonable assumptions. It has a lower confidence than a feasibility study.
Prill split	The percentage by mass of individual PGEs within the 4E or 6E content.
Prospecting right	A prospecting right is a permit issued by the State, which allows for the exclusive right to survey or investigate an area of land for the purpose of identifying an actual or probable mineral deposit. A prospecting right is valid for five-years.
Radiometric survey	A geophysical survey performed using a radiometer to measure radioactive emanations from rock to discern underlying rock types.
Ropecon™	An aerial rope conveyor to transport run of mine ore material from the mine to the concentrator.
SACNASP	The South African Council for Natural Scientific Professionals -The Innovation Hub Management Company, 1 Mark Shuttleworth Street, Lynwood, Pretoria, Gauteng +27 12 748 6500 www.sacnasp.org.za
SAIMM	The Southern African Institute of Mining and Metallurgy - The Minerals Council South Africa, 5th Floor, 5 Hollard Street, Cnr Sauer & Marshall Street, Johannesburg, Gauteng +27 11 834 1273 www.saimm.co.za
SAMREC Code (2016)	South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (2016).
Seismic survey	A geophysical exploration technique in which sound waves are transmitted through the ground, are reflected off rock layers and measured at surface. Its usefulness is to confirm continuity of the reefs and define large scale geological structures.
Stoping	The process of extracting ore from an underground mine when the strength of the rock mass and the pillar design is such that it permits extraction without immediate collapse.
Stringer	A narrow discrete layer, generally comprising chromitite.
Subcrop	Similar to outcrop, this is the trace of a dipping, tabular surface or orebody intersecting the base of soil or other cover near surface.
TEMS	Transient electromagnetics – a geophysical exploration technique in which electric and magnetic fields are induced by transient pulses of electric current and the subsequent decay response measured. It is used for discerning depth of overburden/soil cover and structural features in the underlying strata.
Trenching	Excavating a trench through soil cover to expose the underlying rock, with a view to mapping and sampling an orebody.
UG2 Reef	The upper group number two chromitite unit of the critical zone of the Bushveld Complex, containing elevated PGE and associated base metal content.

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