

Mineral Resource and Mineral Reserve Statement

as at 30 June 2023



Supplement to the Annual Integrated Report 30 June 2023

RESPECT, CARE
AND DELIVER



Impala Platinum Holdings Limited

Tel: +27 (11) 731 9000, Email: investor@implats.co.za
2 Fricker Road, Illovo, 2196, Private Bag X18, Northlands, 2116

www.implats.co.za

Contents

1 – 21	INTRODUCTION, GROUP OVERVIEW AND GOVERNANCE
2	The report
2	Headline summary
3	Group structure
4	Attributable Mineral Resources and Mineral Reserves
11	Reconciliation of estimates
12	Governance and compliance
14	Reporting principles and framework
16	Mineral rights and legal tenure
18	ESG in Mineral Resource and Mineral Reserve reporting
19	Mineral Resource and Mineral Reserve risk management
20	Managing Mineral Resources, Mineral Reserves and life-of-mine
22 – 33	TECHNICAL SYNOPSIS
22	Anniversary of platinum discovery
24	Regional geological settings
29	Exploration
30	Group production
32	Group life-of-mine outlook
33	Valuation and sensitivities
34 – 89	THE OPERATIONS – MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES
34	Impala Rustenburg
44	Marula
53	Two Rivers
62	Zimplats
71	Mimosa
80	Impala Canada
90 – 99	THE PROJECTS – MINERAL RESOURCE ESTIMATES AND CHROMIUM ORE
90	Afplats project
94	Waterberg project
99	Chromium ore
100 – 107	APPENDICES
100	Mineral Resource and Mineral Reserve definitions
102	Third-party assurance
103	Glossary of terms
105	Appointed Competent Persons and recognised professional organisations' details
107	Contact details and administration

How to navigate this report

For easy navigation and cross-referencing, we have included the following icons within this report:

Information available on our website www.implats.co.za

Information available elsewhere in this report

Follow us online at www.implats.co.za

- Direct access to all our reports available on release
- Our website has detailed investor, sustainability and business information.

<https://twitter.com/Implats>

<https://www.linkedin.com/company/impala-platinum/>

<https://www.youtube.com/channel/UCGshehAJCYUeox7lCZw6bw/featured>

<https://www.facebook.com/implats/>

Our 2023 suite

Annual Integrated Report

- Reports to providers of financial capital how Implats creates, preserves or erodes value over time.



Audited Annual Financial Statements

- Financial statement assurance, including the audit and risk committee report and directors' report
- Consolidated financial statements
- Company financial statements.



ESG Report

- Detail on material economic, social and environmental performance and governance
- GRI G4 core compliance
- Internal reporting guidelines in line with the UN Global Compacts
- Independent assurance report.



Climate Change Report

- Climate change risks and adaptations, decarbonisation plans and adoption of renewable energy
- Prepared in accordance with the recommendations of the TCFD and the Johannesburg Stock Exchange (JSE) Climate Change Disclosure Guidance.



Remuneration Report

- Background statement
- Remuneration philosophy and policy
- Implementation report.



Notice to Shareholders

- Notice and proxy.



Tax Transparency and Economic Contribution Report

Prepared in accordance with GRI 207 and provides information on Implats'

- Approach to tax
- Tax governance and risk management
- Tax numbers and performance
- Country-by-country tax and economic contribution.



Welcome to our Mineral Resource and Mineral Reserve Statement

Our vision

To be the most valued and responsible metals producer, creating a better future for our stakeholders

Our purpose

To create a better future

Our values

RESPECT

- We believe in ourselves
- We work together as a team
- We take ownership of our responsibilities
- We are accountable for our actions.

CARE

- We set each other up for success
- We care for the environment
- We work safely and smartly
- We make a positive contribution to society.

DELIVER

- We play our A-game every day
- We go the extra mile
- We learn, adapt and grow
- We create a better future.

Strategic objectives

Sustainable development

We aspire to deliver an industry-leading sustainability performance, producing metals that sustain livelihoods through and beyond mining, creating a cleaner and better future for all.



Operational excellence

We generate superior value for all stakeholders through modern, safe, responsible, competitive and consistent operational delivery.



Organisational effectiveness

We place people at the centre of our organisation, and engender a shared culture founded on our values to respect, care and deliver.



Optimal capital structure

We pursue value creation by sustaining and leveraging a strong and flexible balance sheet within a prudent capital allocation framework.



Competitive asset portfolio

We seek to leverage, strengthen and grow our diverse asset base through operational exposure to shallow, mechanisable orebodies.



Future focus

We sustain and grow value by supporting present and future demand drivers, creating strong customer relationships and aligning our production to evolving demand.



This report provides updated estimates and reconciliations of the Implats Group's Mineral Resources and Mineral Reserves as at 30 June 2023. It conforms to the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves, SAMREC Code (2016) and section 12.13 of the JSE Listings Requirements.

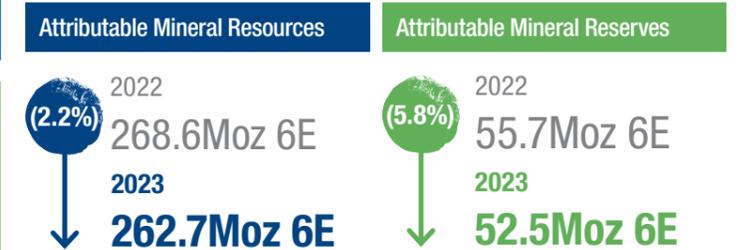
Implats is pleased to report a stable inventory of Mineral Resources and Mineral Reserves.

At 30 June 2023, the end of the Group's financial year, Implats held 56.41% of the outstanding shares in Royal Bafokeng Platinum Limited (RBPlat). In July 2023, post financial year-end, its shareholding increased to 98.73%.

Given the timing of this acquisition, Implats was not able to apply its established governance oversight to review and sign off RBPlat's historical Mineral Resource and Mineral Reserve Statements for inclusion in Implats' financial year 2023 (FY2023) Mineral Resource and Mineral Reserve Report. As a result, RBPlat's maiden contribution to Implats' Mineral Resource and Mineral Reserve inventory will be declared in February 2024 when Implats releases its interim results for the half year ending 31 December 2023.

Please visit the RBPlat website (www.bafokengplatinum.co.za) to view RBPlat's Mineral Resource and Mineral Reserve statements and the interim results released on 1 August 2023. These reports are also available on Implats' website (www.implats.co.za).

Key take-away 2023



Prominent changes (Moz 6E)	Prominent changes (Moz 6E)
<p>Zimplats decreased by 4.3Moz</p> <ul style="list-style-type: none"> • Production depletion, Hartley re-estimation offset by pillar reclamation. 	<p>Impala Rustenburg decreased by 3.0Moz</p> <ul style="list-style-type: none"> • Production depletion, model update and economic tail-cut.
<p>Impala Rustenburg decreased by 2.0Moz</p> <ul style="list-style-type: none"> • Production depletion and update of models. 	<p>Lac des Iles decreased by 1.0Moz</p> <ul style="list-style-type: none"> • Production depletion, model update and economic tail-cut.
<p>Two Rivers increased by 1.5Moz</p> <ul style="list-style-type: none"> • Merensky Reef model update partially offset by production depletion. 	<p>Zimplats increased by 1.2Moz</p> <ul style="list-style-type: none"> • Pillar reclamation and model updates partially offset by production depletion.

We welcome your feedback to ensure we cover all aspects

Go to www.implats.co.za or email investor@implats.co.za to provide us with your feedback.

The report

FORWARD-LOOKING STATEMENTS

This report contains certain forward-looking statements and forecasts, which involve risk and uncertainty as they relate to events and rely on, or may be influenced by, future events. Several factors beyond our control could cause actual results or developments to differ materially from those expressed or implied by these forward-looking statements.

Impala Platinum Holdings Limited (Implats) is one of the world's foremost Platinum Group Metals (PGMs) producers. Implats is structured around seven mining operations, with 25 underground shafts, one open pit and refining operations.

Our mining operations are located within the Bushveld Complex in South Africa, the Great Dyke in Zimbabwe and the Lac des Iles Intrusive Complex in Ontario, Canada.

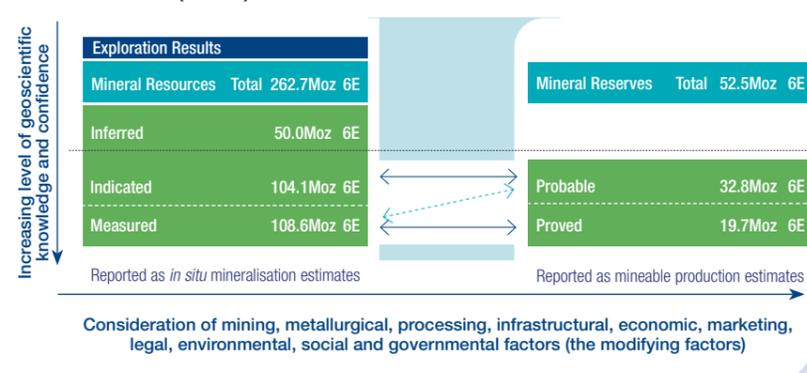
Implats has its primary listing on the JSE Limited (JSE) in South Africa and a secondary listing on the A2X Markets (A2X), also in South Africa. Our headquarters are based in Johannesburg. The six primary mining operations are Impala Rustenburg, Marula and Two Rivers in South Africa, Mimosa and Zimplats in Zimbabwe, and Lac des Iles in Canada. The Mimosa and Two Rivers operations are joint venture operations with Sibanye-Stillwater and African Rainbow Minerals (ARM) respectively, with Mimosa managed by an on-site mine team and overseen by a joint venture board, and Two Rivers by ARM.

The structure of our operating model allows each operation to establish and maintain close relationships with its stakeholders, while operating within a Group-wide framework to manage the economic, social and environmental (ESG) aspects of their sustainability performances.

The report relates to the Mineral Resource and Mineral Reserve Statement, compiled for Implats and its subsidiaries, and provides the status of estimates as at 30 June 2023.

An abridged version is included in the Implats integrated annual report for 2023, published annually and available at (www.implats.co.za). The report seeks to provide transparent and compliant details relating to the Mineral Resources and Mineral Reserves considered material to stakeholders.

Relationship between Exploration Results, Mineral Resources and Mineral Reserves showing Implats' attributable Mineral Resources and Mineral Reserves as at 30 June 2023 (Moz 6E)



Headline summary

MINERAL RESOURCE AND MINERAL RESERVE STATEMENT

The Mineral Resource and Mineral Reserve Statement as at 30 June 2023 reflects the benefit of the positive long-term pricing outlook for the significant PGMs Implats produces, as well as the capital investment in material projects in the period under review. Based on JSE dispensation, the RBPlat Mineral Resource and Mineral Reserve estimates will be included in Implats' interim results released as at 31 December 2023. RBPlat Mineral Resource and Mineral Reserve statement can be found on the RBPlat website (www.bafokengplatinum.co.za) as at 31 December 2022 and the latest interim release dated 1 August 2023.

The attributable Group Mineral Resource estimate decreased by 5.9Moz 6E to 262.7Moz 6E, while the attributable Group Mineral Reserve estimate decreased by 3.2Moz 6E to 52.5Moz 6E.

Greenfields exploration activities remain dormant at the South African and Zimbabwean operations, with some activity undertaken by Impala Canada in the Ontario province. Shaft sinking activities at Impala Rustenburg's 17 Shaft and Afplats' Leeuwkop Shaft remain suspended.

GROUP OPERATIONS

Implats is structured around six mining and processing operations and Impala Refining Services (IRS), a refining business. Group operations are located on the Bushveld Complex in South Africa, the Great Dyke in Zimbabwe – the two most significant PGM orebodies in the world – as well as the Canadian Shield, a prominent igneous complex domain for PGMs in Canada. In South Africa, our operations at Impala Rustenburg and the Afplats project are located in the Bojanala Platinum district of the North West province. RBPlat is located contiguous to Impala Rustenburg. The Marula and Two Rivers operations, together with the Waterberg joint venture project, are located in the Limpopo province.

Group structure

as at 30 June 2023



In November 2021, Implats announced the acquisition of 24.5% of the RBPlat shares and increased this to 56.41% as at 30 June 2023. Details regarding the RBPlat mineral assets can be viewed at (www.bafokengplatinum.co.za), or (www.implats.co.za). Summary details regarding the attributable RBPlat Mineral assets will be included in the Implats interim results as at 31 December 2023.

HEADLINE NUMBERS

The headline summary for the Group is shown below. Combined estimates as at 30 June 2023 show a decrease of 2.2% in the Mineral Resource estimates and a decrease of 5.8% in the Mineral Reserve estimates. The estimates are reported in the following section and the various chapters per operation and project, where changes are discussed in more detail. RBPlat is excluded from this declaration, pending conclusion of the transaction. The consolidation and impact on the Group Mineral Resource and Mineral Reserve status will be included in the Implats interim results publication effective 31 December 2023.

Attributable estimates*		2023	2022	2021	2020	2019
Mineral Resources	Moz Pt	127.1	128.2	132.3	132.4	131.6
	Moz Pd	85.4	87.7	90.2	89.9	81.5
	Moz 3E	223.3	227.7	234.4	233.9	228.0
	Moz 4E	237.7	242.4	249.7	249.1	239.5
	Moz 6E	262.7	268.6	277.3	277.1	268.3
	Mt	1 800.2	1 834.6	1 885.9	1 818.8	1 710.1
Mineral Reserves	Moz Pt	24.3	25.5	24.6	21.8	21.2
	Moz Pd	18.4	19.7	18.8	17.3	14.7
	Moz 3E	45.3	47.8	46.0	41.2	38.0
	Moz 4E	48.0	50.7	48.7	43.6	40.3
	Moz 6E	52.5	55.7	53.4	47.8	44.3
	Mt	506.0	528.2	512.4	419.7	370.7

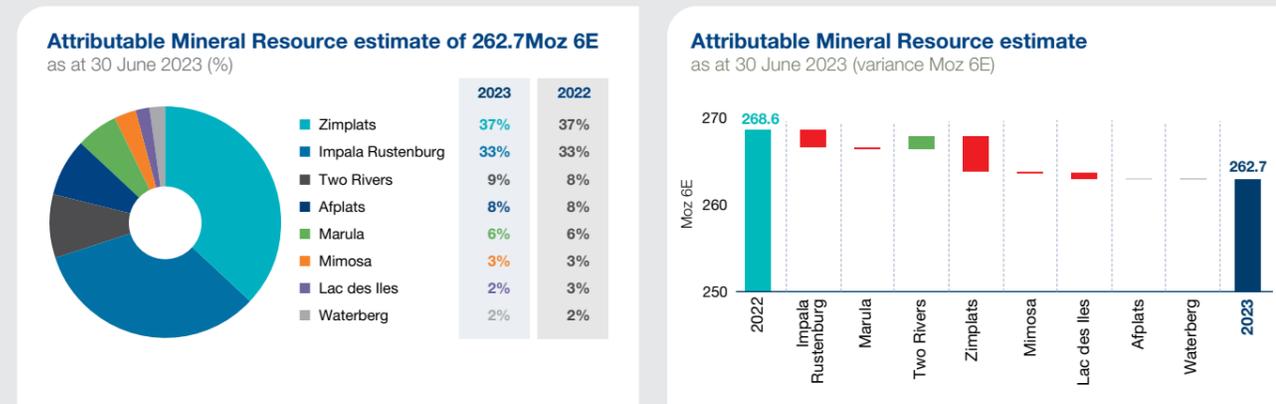
* Mineral Resource estimates are inclusive of Mineral Reserves.

Attributable Mineral Resources and Mineral Reserves

Summary Mineral Resources

Overall, the attributable Group Mineral Resource estimate decreased by 5.9Moz 6E to 262.7Moz 6E. Zimplats accounts for 37% of the Group's Mineral Resource base, Impala Rustenburg accounts for 33%, and the balance of 30% comprises Marula, Mimosa, Two Rivers, Lac des Iles, Waterberg and Afplats. RBPlat is excluded from this declaration, pending conclusion of the transaction.

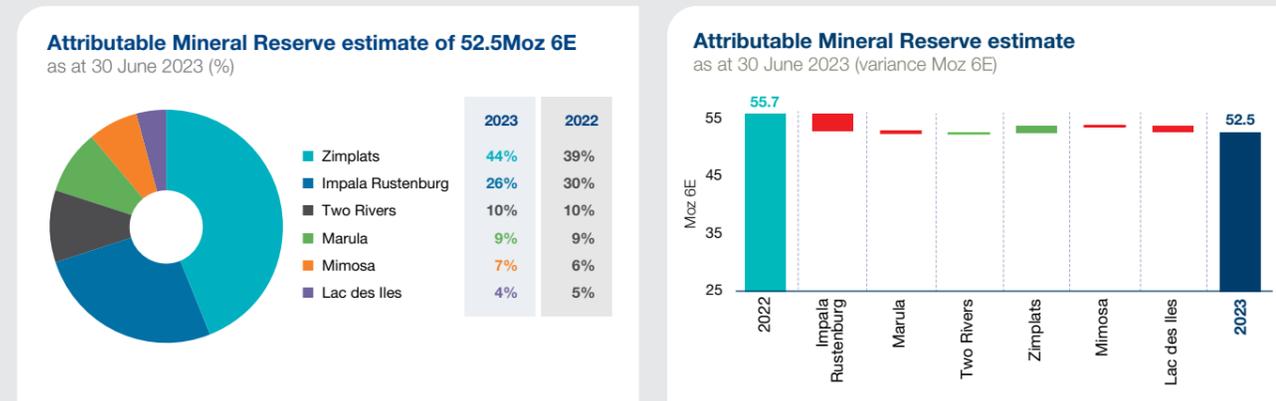
For more detail, see page 5.



Summary Mineral Reserves

Overall, the attributable Group Mineral Reserve estimate decreased by 3.2Moz 6E to 52.5Moz 6E. Zimplats accounts for 44% of the attributable 6E Mineral Reserve estimate base and Impala Rustenburg accounts for 26%. RBPlat is excluded from this declaration, pending conclusion of the transaction.

For more detail, see page 7.



Implats adopted the inclusive reporting style for Mineral Resources, where Mineral Reserves are included in the estimates. All Mineral Resource estimates are reported inclusive of Mineral Reserves, unless otherwise stated. A summary table with the estimated Mineral Resources, exclusive of Mineral Reserves, is provided on page 9.

Attributable Mineral Resources and Mineral Reserves (continued)

ATTRIBUTABLE MINERAL RESOURCE ESTIMATES INCLUSIVE OF MINERAL RESERVES AS AT 30 JUNE 2023 Based on Implats' equity interest

Operations and projects	Implats' share-holding %	Attributable Mineral Resource estimates, inclusive of Mineral Reserves																
		Orebody	Category	Tonnes Mt	3E grade g/t	4E grade g/t	6E grade g/t	Moz										
				Pt	Pd	Rh	Ru	Ir	Au	3E	4E	6E						
Impala Rustenburg South Africa	96	Merensky	Measured	98.2	6.19	6.53	7.21	13.18	5.61	1.08	1.64	0.49	0.76	19.5	20.6	22.8		
			Indicated	63.8	5.97	6.31	6.96	8.26	3.51	0.68	1.03	0.31	0.48	12.2	12.9	14.3		
			Inferred	11.9	6.13	6.47	7.14	1.58	0.67	0.13	0.20	0.06	0.09	2.3	2.5	2.7		
		UG2	Measured	132.4	5.15	5.72	6.68	14.06	7.56	2.44	3.03	1.04	0.28	21.9	24.3	28.4		
			Indicated	67.5	5.02	5.58	6.52	7.01	3.77	1.21	1.51	0.52	0.14	10.9	12.1	14.2		
			Inferred	11.9	4.72	5.24	6.12	1.16	0.63	0.20	0.25	0.09	0.02	1.8	2.0	2.3		
Total			385.7	5.54	6.01	6.83	45.25	21.74	5.75	7.67	2.51	1.76	68.8	74.5	84.7			
Marula South Africa	73.26	Merensky	Measured	25.1	4.14	4.26	4.56	1.99	1.09	0.10	0.20	0.03	0.26	3.3	3.4	3.7		
			Indicated	5.6	4.08	4.20	4.50	0.44	0.24	0.02	0.04	0.01	0.06	0.7	0.8	0.8		
			Inferred	3.8	3.71	3.82	4.10	0.27	0.15	0.01	0.03	0.00	0.04	0.5	0.5	0.5		
		UG2	Measured	31.7	5.69	6.26	7.29	2.72	2.99	0.58	0.85	0.19	0.09	5.8	6.4	7.4		
			Indicated	15.8	5.74	6.32	7.37	1.40	1.48	0.29	0.44	0.10	0.05	2.9	3.2	3.8		
			Inferred	4.2	5.75	6.33	7.36	0.37	0.40	0.08	0.11	0.03	0.01	0.8	0.9	1.0		
Total			86.2	5.06	5.45	6.19	7.18	6.35	1.09	1.67	0.37	0.50	14.0	15.1	17.2			
Two Rivers South Africa	46	Merensky	Indicated	41.9	2.97	3.07	3.35	2.47	1.26	0.14	0.31	0.06	0.27	4.0	4.1	4.5		
			Inferred	35.4	3.92	4.06	4.40	2.65	1.52	0.16	0.33	0.06	0.29	4.5	4.6	5.0		
			UG2	Measured	7.0	4.10	4.58	5.56	0.58	0.33	0.11	0.18	0.04	0.01	0.9	1.0	1.3	
		UG2	Indicated	34.7	4.29	4.78	5.77	2.91	1.84	0.54	0.89	0.22	0.05	4.8	5.3	6.4		
			Inferred	37.2	4.06	4.51	5.38	2.84	1.96	0.53	0.84	0.21	0.06	4.9	5.4	6.4		
			Total	156.3	3.79	4.08	4.71	11.45	6.91	1.48	2.56	0.59	0.69	19.0	20.5	23.7		
Zimplats Zimbabwe	87	MSZ	Measured	220.3	3.23	3.36	3.55	11.98	9.17	0.96	0.87	0.44	1.70	22.9	23.8	25.1		
			Indicated	431.0	3.25	3.39	3.57	24.20	17.72	1.89	1.69	0.87	3.10	45.0	46.9	49.5		
			Inferred	187.6	3.25	3.39	3.58	10.64	7.38	0.83	0.74	0.39	1.61	19.6	20.5	21.6		
		Total			838.9	3.24	3.38	3.57	46.82	34.27	3.68	3.30	1.70	6.41	87.5	91.2	96.2	
		Mimosa Zimbabwe	50	MSZ	Measured	35.5	3.37	3.52	3.74	1.97	1.55	0.17	0.17	0.08	0.33	3.8	4.0	4.3
					Indicated	12.4	3.35	3.50	3.73	0.69	0.53	0.06	0.06	0.03	0.12	1.3	1.4	1.5
Inferred	14.4				3.27	3.42	3.64	0.79	0.60	0.07	0.07	0.03	0.13	1.5	1.6	1.7		
Total					62.3	3.34	3.49	3.71	3.44	2.67	0.30	0.30	0.15	0.58	6.7	7.0	7.4	
Lac des Iles Canada	100			LDI Intrusive Complex	Measured	24.6	2.84	2.84	2.84	0.18	1.93	–	–	–	0.14	2.2	2.2	2.2
					Indicated	46.1	2.50	2.50	2.50	0.31	3.17	–	–	–	0.23	3.7	3.7	3.7
		Inferred	5.5		2.43	2.43	2.43	0.04	0.37	–	–	–	0.03	0.4	0.4	0.4		
		Total			76.2	2.61	2.61	2.61	0.53	5.46	–	–	–	0.39	6.4	6.4	6.4	
		Afplats South Africa	74	UG2	Measured	58.9	4.68	5.29	6.58	6.09	2.72	1.15	1.98	0.46	0.05	8.9	10.0	12.4
					Indicated	6.8	4.61	5.22	6.48	0.70	0.31	0.13	0.23	0.05	0.01	1.0	1.1	1.4
Inferred	35.3				4.52	5.15	6.35	3.53	1.58	0.66	1.15	0.27	0.03	5.1	5.8	7.2		
Total					101.0	4.62	5.24	6.49	10.31	4.61	1.94	3.36	0.78	0.08	15.0	17.0	21.1	
Waterberg South Africa	15			T-Zone	Measured	0.7	4.16	4.20	4.20	0.03	0.05	0.00	–	–	0.02	0.1	0.1	0.1
					Indicated	2.6	4.58	4.61	4.61	0.11	0.19	0.00	–	–	0.07	0.4	0.4	0.4
		Inferred	3.3		3.83	3.86	3.86	0.12	0.20	0.00	–	–	0.08	0.4	0.4	0.4		
		F-Zone	Measured	8.1	3.31	3.36	3.36	0.25	0.57	0.01	–	–	0.04	0.9	0.9	0.9		
			Indicated	25.0	3.19	3.24	3.24	0.77	1.68	0.04	–	–	0.12	2.6	2.6	2.6		
			Inferred	6.7	2.94	2.98	2.98	0.19	0.41	0.01	–	–	0.03	0.6	0.6	0.6		
Total			46.4	3.31	3.36	3.36	1.46	3.11	0.07	–	–	0.37	4.9	5.0	5.0			
Implats	Total underground			1 753.0	3.94	4.20	4.64	126.4	85.1	14.3	18.8	6.1	10.8	222.3	236.7	261.6		
Impala Rustenburg South Africa	96	TSF1 and 2	Indicated	47.2	0.65	0.67	0.76	0.61	0.24	0.04	0.11	0.03	0.12	1.0	1.0	1.2		
Implats	Total surface			47.2	0.65	0.67	0.76	0.61	0.24	0.04	0.11	0.03	0.12	1.0	1.0	1.2		
Implats	Grand total			1 800.2	3.86	4.11	4.54	127.1	85.4	14.3	19.0	6.1	10.9	222.3	237.7	262.7		

Estimated values that are less than 0.01 are reported as 0.00.

Implats reports a summary of total attributable ounces, as sourced from all categories of Mineral Resources for the Implats Group of companies and its other strategic interests, on a percentage equity-interest basis. The tabulation above reflects estimates for 3E, 4E and 6E ounces, based on the percentage equity interest. For clarity, both attributable Mineral Resources, inclusive of Mineral Reserves, and attributable Mineral Resources, exclusive of Mineral Reserves, are shown separately in different sections of this report. Note that these are not additive to each other. This tabulation excludes RBPlat; the summary table will be updated in the Implats interim results publication effective 31 December 2023, with the inclusion of the RBPlat estimates.

Attributable Mineral Resources and Mineral Reserves (continued)

Summary of attributable Mineral Resource estimate

Operations and projects	Attributable Moz 6E				
	2019	2020	2021	2022	2023
Impala Rustenburg	93.5	90.2	89.9	87.8	85.8
Marula	18.2	18.0	17.9	17.4	17.2
Two Rivers*	22.3	22.4	22.7	22.2	23.7
Zimplats	102.3	102.8	101.4	100.5	96.2
Mimosa*	6.9	6.8	7.9	7.6	7.4
Lac des Iles	–	6.8	7.4	7.1	6.4
Afplats	25.1	25.1	25.1	21.1	21.1
Waterberg*	–	5.0	5.0	5.0	5.0
Total	268.3	277.1	277.3	268.6	262.7

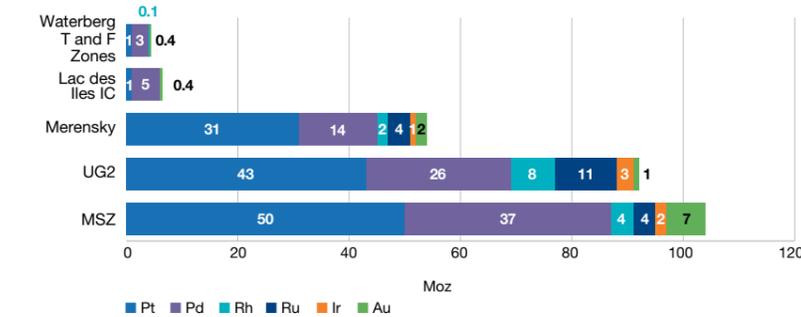
* Non-managed.

The accompanying graphs illustrate the following:

- The comparison based on 6E ounces shows that the Impala Rustenburg and Zimplats Mineral Resources comprise the bulk of the Group's Mineral Resources (70% of the total Implats inventory) (see page 4)
- The 6E ounces per reef grouping show that the Main Sulphide Zone (MSZ) in Zimbabwe's Great Dyke hosts 40% of the attributable Implats Mineral Resources
- The five-year statistics for the estimated attributable platinum, palladium, rhodium, ruthenium, gold and iridium Mineral Resources indicate an overall stable inventory.

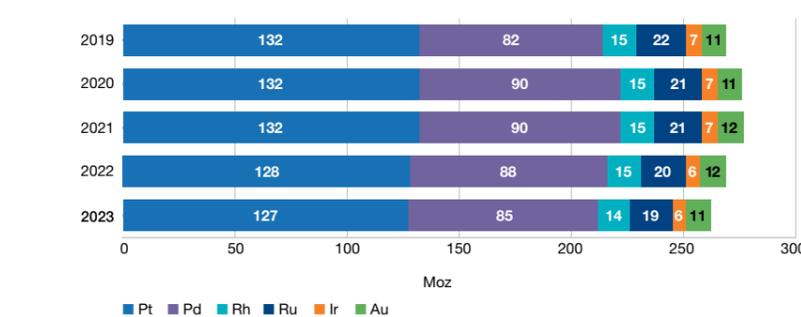
Attributable Mineral Resource estimate per reef inclusive of Mineral Reserves

as at 30 June 2023 (Moz)



Attributable Mineral Resource estimate inclusive of Mineral Reserves

as at 30 June 2023 (Moz per annum)



Exploration drilling at Marula

Attributable Mineral Resources and Mineral Reserves (continued)

ATTRIBUTABLE MINERAL RESERVE ESTIMATES AS AT 30 JUNE 2023
Based on Implats' equity interest

Operations	Implats' share-holding %	Attributable Mineral Reserve estimates														
		Orebody	Category	Tonnes Mt	3E grade g/t	4E grade g/t	6E grade g/t	Moz								
								Pt	Pd	Rh	Ru	Ir	Au	3E	4E	6E
Impala Rustenburg South Africa	96	Merensky	Proved	12.3	3.43	3.62	3.99	0.91	0.39	0.07	0.11	0.03	0.05	1.4	1.4	1.6
			Probable	28.7	3.34	3.52	3.89	2.08	0.88	0.17	0.26	0.08	0.12	3.1	3.3	3.6
		UG2	Proved	13.3	3.39	3.77	4.40	0.93	0.50	0.16	0.20	0.07	0.02	1.5	1.6	1.9
			Probable	43.0	2.97	3.30	3.85	2.63	1.41	0.46	0.57	0.19	0.05	4.1	4.6	5.3
		Total		97.3	3.19	3.47	3.95	6.56	3.19	0.86	1.14	0.38	0.24	10.0	10.9	12.4
Marula South Africa	73.26	UG2	Proved	2.4	3.95	4.35	5.04	0.14	0.16	0.03	0.04	0.01	0.00	0.3	0.3	0.4
			Probable	31.6	3.32	3.67	4.27	1.59	1.73	0.35	0.49	0.12	0.05	3.4	3.7	4.3
		Total		33.9	3.36	3.71	4.32	1.73	1.89	0.38	0.54	0.13	0.06	3.7	4.1	4.7
Two Rivers South Africa	46	Merensky	Proved	0.2	1.88	1.95	2.12	0.01	0.00	0.00	0.00	0.00	0.00	0.0	0.0	0.0
			Probable	25.7	2.44	2.53	2.75	1.23	0.65	0.07	0.16	0.03	0.14	2.0	2.1	2.3
		UG2	Proved	5.1	2.30	2.57	3.13	0.24	0.14	0.04	0.07	0.02	0.00	0.4	0.4	0.5
			Probable	26.7	2.46	2.75	3.33	1.31	0.77	0.25	0.41	0.10	0.02	2.1	2.4	2.9
		Total		57.8	2.43	2.63	3.05	2.79	1.57	0.36	0.64	0.15	0.17	4.5	4.9	5.7
Zimplats Zimbabwe	87	MSZ	Proved	114.2	3.04	3.17	3.35	5.73	4.58	0.48	0.44	0.22	0.83	11.2	11.6	12.3
			Probable	103.2	2.97	3.10	3.27	5.06	4.05	0.43	0.38	0.19	0.74	9.9	10.3	10.9
		Total		217.5	3.00	3.13	3.31	10.79	8.64	0.91	0.82	0.41	1.58	21.0	21.9	23.1
Mimosa Zimbabwe	50	MSZ	Proved	22.2	3.32	3.46	3.67	1.22	0.94	0.10	0.10	0.05	0.20	2.4	2.5	2.6
			Probable	8.2	3.29	3.43	3.65	0.45	0.34	0.04	0.04	0.02	0.08	0.9	0.9	1.0
		Total		30.4	3.31	3.45	3.66	1.67	1.29	0.13	0.14	0.07	0.28	3.2	3.4	3.6
Lac des Iles Canada	100	LDI	Proved	4.8	2.61	2.61	2.61	0.03	0.35	–	–	–	0.02	0.4	0.4	0.4
			Probable	17.2	2.65	2.65	2.65	0.10	1.26	–	–	–	0.10	1.5	1.5	1.5
		Total		22.0	2.64	2.64	2.64	0.14	1.62	–	–	–	0.12	1.9	1.9	1.9
Implats Total underground			458.8	3.00	3.18	3.48	23.7	18.2	2.6	3.3	1.1	2.4	44.3	46.9	51.3	
Impala Rustenburg South Africa	96	TSF	Proved	–	–	–	–	–	–	–	–	–	–	–	–	–
			Probable	47.2	0.65	0.67	0.76	0.61	0.24	0.04	0.11	0.03	0.12	1.0	1.0	1.2
		Total surface		47.2	0.65	0.67	0.76	0.61	0.24	0.04	0.11	0.03	0.12	1.0	1.0	1.2
Implats Grand total			506.0	2.78	2.95	3.23	24.3	18.4	2.7	3.4	1.2	2.6	45.3	48.0	52.5	

This tabulation excludes RBPlat, which will be accounted for in the summary Mineral Reserve table in the Implats interim results report, effective 31 December 2023.

Summary of attributable Mineral Reserve estimates

Operations	Attributable Moz 6E				
	2019	2020	2021	2022	2023
Impala Rustenburg	12.8	15.1	17.7	16.5	13.5
Marula	2.3	2.2	2.0	5.2	4.7
Two Rivers*	3.4	3.3	5.8	5.6	5.7
Zimplats	23.9	22.4	22.6	21.9	23.1
Mimosa*	1.9	1.6	2.0	3.6	3.6
Lac des Iles	–	3.2	3.3	2.9	1.9
Total	44.3	47.8	53.4	55.7	52.5

* Non-managed.

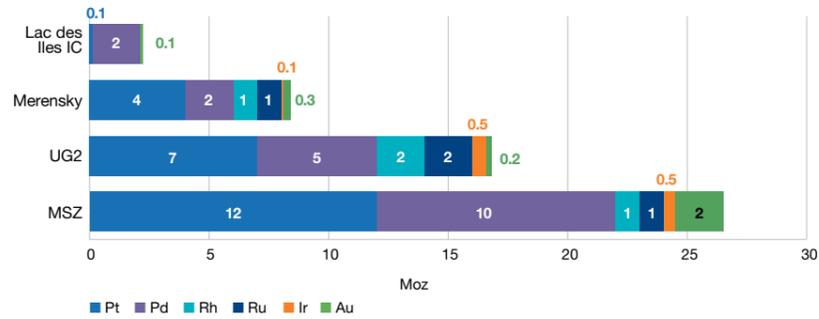
The attendant graphs compare the past few reporting periods and indicate an overall increase in attributable Mineral Reserves, in line with depletion and the changes mentioned above:

- Comparisons based on 6E ounces show that the Zimplats Mineral Reserves comprise 44% of the Implats Mineral Reserves (see page 4)
- The estimates per reef show that the MSZ hosts some 51% of the attributable 6E Implats Mineral Reserves at the Zimplats and Mimosa mines
- The five-year statistics for the estimated attributable 6E Mineral Reserves indicate an increase as at 30 June 2023 compared with the previous reporting period
- The updated allocation of Implats' 6E Mineral Reserves per operation is shown on the next page. The advantage at Zimplats, related to the operating depth and size, is clearly illustrated.

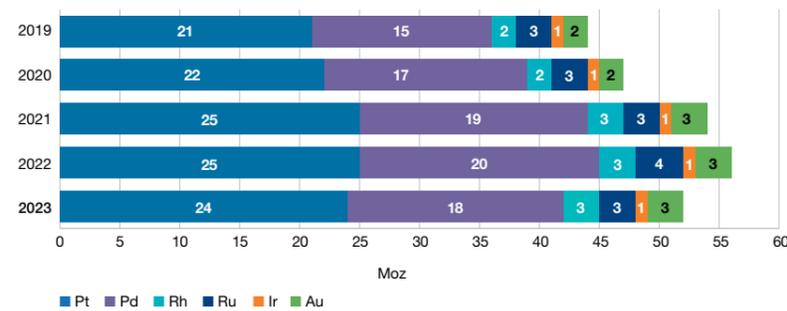
Attributable Mineral Resources and Mineral Reserves (continued)



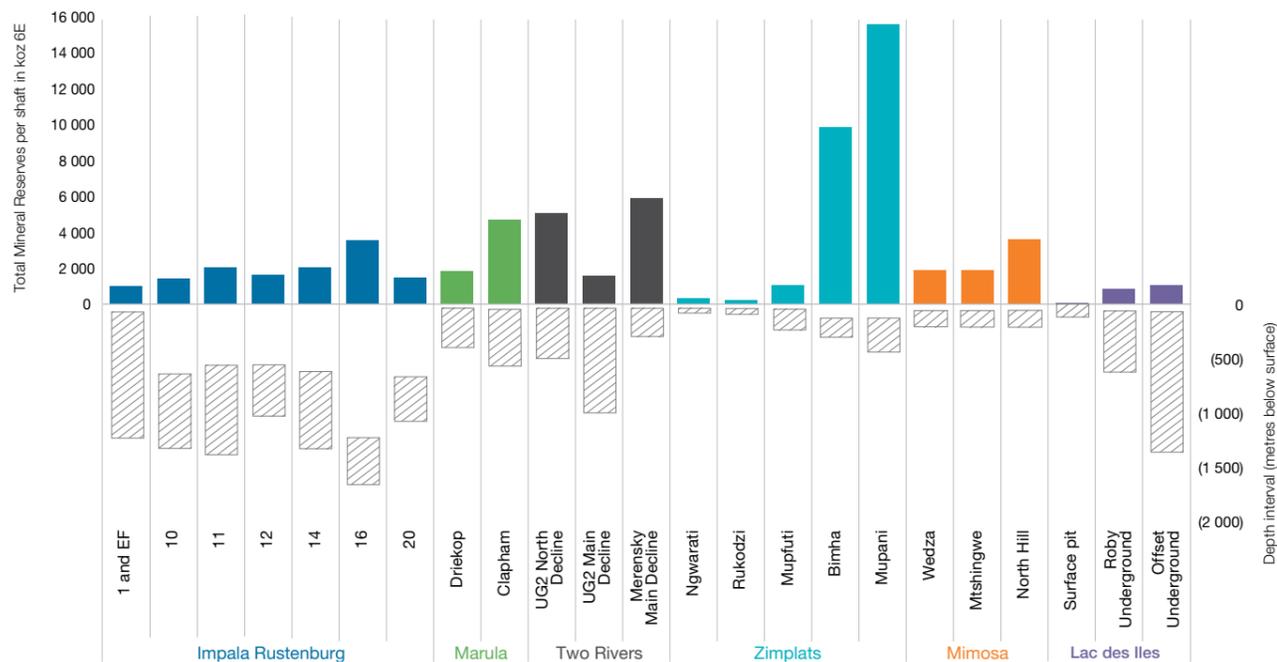
Attributable Mineral Reserve estimate per reef as at 30 June 2023 (Moz)



Attributable Mineral Reserve estimate as at 30 June 2023 (Moz per annum)



6E Mineral Reserve estimate and depth range for individual Implats operations and Joint Venture operations



Attributable Mineral Resources and Mineral Reserves (continued)

Various international reporting codes permit both inclusive and exclusive methods of reporting Mineral Resources. Implats has adopted inclusive reporting for consistency and alignment with its strategic partners. A collation of the Mineral Resource estimates, exclusive of Mineral Reserves, is presented below, allowing for additional transparency.

ATTRIBUTABLE MINERAL RESOURCE SUMMARY, EXCLUSIVE OF MINERAL RESERVES AS AT 30 JUNE 2023
Based on Implats' equity interest

Operations and projects	Implats' shareholding %	Orebody	Category	Total Mineral Resource estimates, exclusive of Mineral Reserves				Attributable Mineral Resource estimates, exclusive of Mineral Reserves												
				Tonnage Mt	3E grade g/t	4E grade g/t	6E grade g/t	Tonnage Mt	Pt	Pd	Rh	Ru	Ir	Au	3E	4E	6E			
Impala Rustenburg South Africa	96	Merensky	Measured	60.9	6.33	6.68	7.38	58.5	8.03	3.42	0.66	1.00	0.30	0.46	11.9	12.6	13.9			
			Indicated	66.4	5.97	6.31	6.96	63.8	8.26	3.51	0.68	1.03	0.31	0.48	12.2	12.9	14.3			
			Inferred	12.4	6.13	6.47	7.14	11.9	1.58	0.67	0.13	0.20	0.06	0.09	2.3	2.5	2.7			
		UG2	Measured	76.9	5.04	5.60	6.54	73.8	7.68	4.13	1.33	1.66	0.57	0.15	12.0	13.3	15.5			
			Indicated	67.2	5.02	5.58	6.51	64.5	6.68	3.59	1.16	1.44	0.49	0.13	10.4	11.6	13.5			
			Inferred	12.4	4.72	5.24	6.12	11.9	1.16	0.63	0.20	0.25	0.09	0.02	1.8	2.0	2.3			
Total					296.3	5.54	6.00	6.81	284.5	33.40	15.95	4.16	5.58	1.82	1.34	50.7	54.8	62.2		
Marula South Africa	73.26	Merensky	Measured	34.3	4.14	4.26	4.56	25.1	1.99	1.09	0.10	0.20	0.03	0.26	3.3	3.4	3.7			
			Indicated	7.6	4.08	4.20	4.50	5.6	0.44	0.24	0.02	0.04	0.01	0.06	0.7	0.8	0.8			
			Inferred	5.2	3.71	3.82	4.10	3.8	0.27	0.15	0.01	0.03	0.00	0.04	0.5	0.5	0.5			
		UG2	Measured	5.4	5.53	6.10	7.14	3.9	0.34	0.34	0.07	0.11	0.02	0.01	0.7	0.8	0.9			
			Indicated	15.5	5.82	6.40	7.45	11.3	1.00	1.09	0.21	0.31	0.07	0.03	2.1	2.3	2.7			
			Inferred	5.8	5.75	6.33	7.36	4.2	0.37	0.40	0.08	0.11	0.03	0.01	0.8	0.9	1.0			
Total					73.7	4.68	4.97	5.53	54.0	4.41	3.31	0.49	0.81	0.17	0.41	8.1	8.6	9.6		
Two Rivers South Africa	46	Merensky	Indicated	15.2	2.60	2.70	2.95	7.0	0.36	0.18	0.02	0.05	0.01	0.04	0.6	0.6	0.7			
			Inferred	77.0	3.92	4.06	4.40	35.4	2.65	1.52	0.16	0.33	0.06	0.29	4.5	4.6	5.0			
			Measured	3.9	4.42	4.95	6.00	1.8	0.17	0.08	0.03	0.05	0.01	0.00	0.3	0.3	0.3			
		UG2	Indicated	21.1	4.47	4.96	5.95	9.7	0.83	0.55	0.15	0.25	0.06	0.02	1.4	1.5	1.9			
			Inferred	80.9	4.06	4.51	5.38	37.2	2.84	1.96	0.53	0.84	0.21	0.06	4.9	5.4	6.4			
			Measured	198.1	3.94	4.25	4.89	91.1	6.85	4.30	0.89	1.52	0.35	0.41	11.6	12.5	14.3			
Total					198.1	3.94	4.25	4.89	91.1	6.85	4.30	0.89	1.52	0.35	0.41	11.6	12.5	14.3		
Zimplats Zimbabwe	87	MSZ	Measured	52.9	3.45	3.60	3.79	46.0	2.71	2.00	0.21	0.19	0.10	0.40	5.1	5.3	5.6			
			Indicated	314.1	3.35	3.49	3.68	273.2	16.17	11.36	1.22	1.09	0.57	1.94	29.5	30.7	32.4			
			Inferred	215.6	3.25	3.39	3.58	187.6	10.64	7.38	0.83	0.74	0.39	1.61	19.6	20.5	21.6			
		Total					582.5	3.33	3.47	3.65	506.8	29.52	20.73	2.26	2.02	1.06	3.95	54.2	56.5	59.5
			Mimosa Zimbabwe	Measured	6.6	3.28	3.43	3.64	3.3	0.18	0.14	0.02	0.02	0.01	0.03	0.3	0.4	0.4		
				Indicated	3.7	3.46	3.61	3.84	1.8	0.11	0.08	0.01	0.01	0.00	0.02	0.2	0.2	0.2		
Inferred	28.8	3.27		3.42	3.64	14.4	0.79	0.60	0.07	0.07	0.03	0.13	1.5	1.6	1.7					
Total					39.1	3.29	3.44	3.66	19.6	1.07	0.82	0.09	0.09	0.05	0.18	2.1	2.2	2.3		
Lac des Iles Canada	100	LDI Intrusive Complex	Measured	13.1	2.70	2.70	2.70	13.1	0.10	0.97	-	-	-	0.07	1.1	1.1	1.1			
			Indicated	32.5	2.41	2.41	2.41	32.5	0.22	2.14	-	-	-	0.16	2.5	2.5	2.5			
			Inferred	5.1	2.47	2.47	2.47	5.1	0.04	0.34	-	-	-	0.02	0.4	0.4	0.4			
		Total					50.7	2.49	2.49	2.49	50.7	0.36	3.45	-	-	-	0.25	4.1	4.1	4.1
			Afplats South Africa	Measured	79.5	4.68	5.29	6.58	58.9	6.09	2.72	1.15	1.98	0.46	0.05	8.9	10.0	12.4		
				Indicated	9.2	4.61	5.22	6.48	6.8	0.70	0.31	0.13	0.23	0.05	0.01	1.0	1.1	1.4		
Inferred	47.7	4.52		5.15	6.35	35.3	3.53	1.58	0.66	1.15	0.27	0.03	5.1	5.8	7.2					
Total					136.5	4.62	5.24	6.49	101.0	10.31	4.61	1.94	3.36	0.78	0.08	15.0	17.0	21.1		
Waterberg South Africa	15	T-Zone	Measured	4.4	4.16	4.20	4.20	0.7	0.03	0.05	0.00	-	-	0.02	0.1	0.1	0.1			
			Indicated	17.0	4.58	4.61	4.61	2.6	0.11	0.19	0.00	-	-	0.07	0.4	0.4	0.4			
			Inferred	21.8	3.83	3.86	3.86	3.3	0.12	0.20	0.00	-	-	0.08	0.4	0.4	0.4			
		F-Zone	Measured	54.1	3.31	3.36	3.36	8.1	0.25	0.57	0.01	-	-	0.04	0.9	0.9	0.9			
			Indicated	166.9	3.19	3.24	3.24	25.0	0.77	1.68	0.04	-	-	0.12	2.6	2.6	2.6			
			Inferred	44.8	2.94	2.98	2.98	6.7	0.19	0.41	0.01	-	-	0.03	0.6	0.6	0.6			
Total					309.1	3.31	3.36	3.36	46.4	1.46	3.11	0.07	-	-	0.37	4.9	5.0	5.0		
All Mineral Resources, exclusive of Mineral Reserves	Measured					392.0	4.52	4.86	5.49	293.2	27.6	15.5	3.6	5.2	1.5	1.5	44.6	48.2	54.8	
	Indicated					736.4	3.78	3.97	4.27	503.9	35.6	24.9	3.7	4.4	1.6	3.1	63.6	67.3	73.3	
	Inferred					557.7	3.69	3.92	4.33	356.9	24.2	15.8	2.7	3.7	1.1	2.4	42.4	45.2	50.0	
Implats Grand total					1 686.1	3.92	4.16	4.58	1 154.0	87.4	56.3	9.9	13.4	4.2	7.0	150.6	160.6	178.1		

Estimated values that are less than 0.01 are reported as 0.00.

This tabulation excludes RBPlat, which will be included in the tabulations in the forthcoming Implats interim results report, effective 31 December 2023.

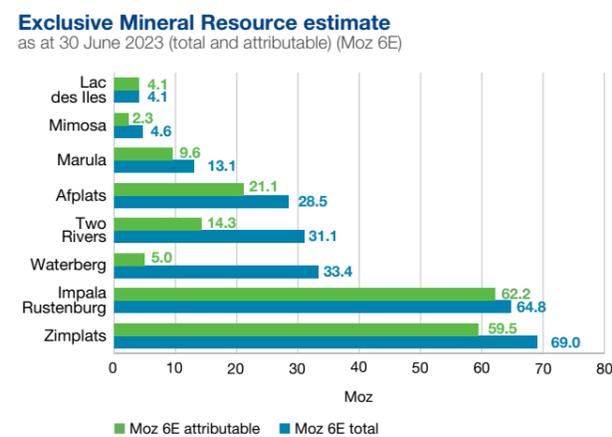
Summary of attributable Mineral Resource estimates, exclusive of Mineral Reserves

Operations and projects	Attributable Moz 6E				
	2019	2020	2021	2022	2023
Impala Rustenburg	75.9	67.0	63.4	63.7	62.2
Marula	15.1	15.1	15.2	9.5	9.6
Two Rivers*	16.1	15.9	14.0	13.9	14.3
Zimplats	62.4	64.3	61.1	61.1	59.5
Mimosa*	4.1	4.2	4.9	2.4	2.3
Lac des Iles	-	3.0	3.5	3.4	4.1
Afplats	25.1	25.1	25.1	21.1	21.1
Waterberg*	-	5.0	5.0	5.0	5.0
Total	198.7	199.6	192.2	180.0	178.1

* Non-managed.

NOTES

- The figures in the accompanying table reflect the Mineral Resources which have not been converted to Mineral Reserves – these are the Mineral Resources exclusive of Mineral Reserves
- The tabulation should be read in conjunction with the Mineral Reserve statement in the preceding sections
- A direct comparison of tonnes and grade is not possible between inclusive and exclusive reporting, owing to mixing Mineral Resource figures with production estimates
- The year-on-year comparison reflects a stable inventory with a small combined decrease. The reduction can mostly be ascribed to movements at Impala Rustenburg and Zimplats.



Exploration drilling at Mimosa

Reconciliation of estimates

The consolidated high-level reconciliations of attributable Mineral Resources and Mineral Reserves, for both managed and non-managed operations, are shown below, excluding RBPlat attributable Mineral Resources and Mineral Reserves. These high-level variances are relatively small. In addition to depletion, the particulars of these variances are illustrated in more detail in the operational sections. Rounding may result in computational discrepancies, specifically in these high-level comparisons.

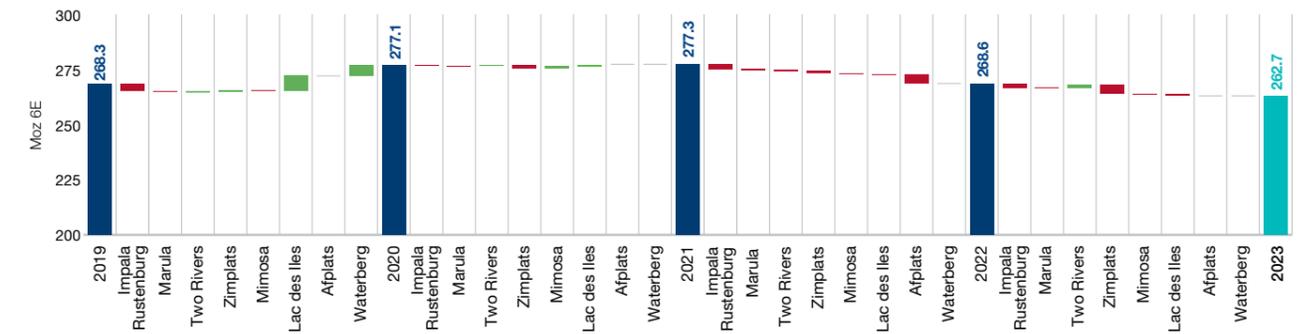
MINERAL RESOURCE RECONCILIATION

The significant variances in the estimated attributable Group Mineral Resources during the past five years are:

- 2019 to 2020: An effective year-on-year increase due to the inclusion of the Lac des Iles operations and the Waterberg project Mineral Resource estimates
- 2020 to 2021: A minor increase year-on-year, mainly due to an increase at Two Rivers, Mimosa and Lac des Iles
- 2021 to 2022: Minor variances, mostly due to depletion at the mining operations and a decrease in the Afplats Mineral Resources due to the exclusion of the expired prospecting rights
- 2022 to 2023: A modest combined decrease of 5.9Moz 6E, mostly related to depletion and updated models.

Attributable Mineral Resource estimate

as at 30 June 2023 (variance Moz 6E)



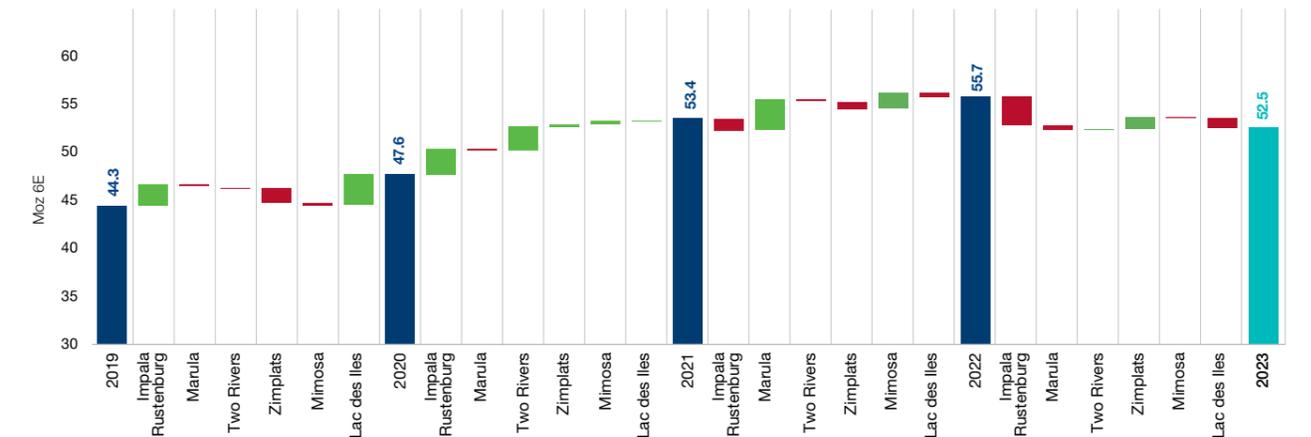
MINERAL RESERVE RECONCILIATION

The significant variances in the estimated Group Mineral Reserves during the past five years are:

- 2019 to 2020: An effective increase in Mineral Reserve estimates, due to the inclusion of Lac des Iles Mineral Reserves and the extensions to the life-of-mine (LoM) I at Impala Rustenburg
- 2020 to 2021: An increase due to the growth of LoM I at Impala Rustenburg, the addition of Merensky Reef Mineral Reserves at Two Rivers and, at Mimosa, the acquisition of Wedza West (the Anglo American Platinum claims)
- 2021 to 2022: An increase following approval of the Marula Phase II and Mimosa North Hill projects. The year-on-year comparison is impacted by the depletion of Mineral Reserves
- 2022 to 2023: A combined decrease of 3.2Moz 6E, due to depletion, updated models and increased tail-cutting at Impala Rustenburg and Impala Canada. The decrease is offset by increases at Zimplats and Two Rivers.

Attributable Mineral Reserve estimate

as at 30 June 2023 (variance Moz 6E)



Governance and compliance

Reporting Mineral Resources and Mineral Reserves for Implats' South African, Zimbabwean and Canadian operations is undertaken in accordance with the principles and guidelines of the SAMREC Code (2016), including Appendices and Table 1, and Section 12.13 of the JSE Listings Requirements.

All operations' Mineral Resources and Mineral Reserves report to the SAMREC Code (2016), except Zimplats, which uses the JORC Code (2012) as required by the Australian Securities Exchange (ASX). This code is either identical to SAMREC Code (2016), or not materially different. Implats reviews the Zimplats' processes, procedures and estimates to ensure its Mineral Resource and Mineral Reserve estimates fully comply with the SAMREC Code (2016). Mimosa, a Mauritius-based company, has no regulatory reporting code and adopted the SAMREC Code (2016).

The SAMREC Code was last updated in 2016, which superseded the previous editions of the code, and this iteration was launched on 19 May 2016 at the JSE. Section 12 of the JSE Listings Requirements was updated, and the revised SAMREC and SAMVAL Codes were enacted on 1 January 2017.

The latest edition of the SAMREC Code (2016 Edition) includes an updated Table 1 template, which provides an extended list of the main criteria that must be considered and reported when reporting on Exploration Results, Mineral Resources and Mineral Reserves.

Various Competent Persons (CPs), as defined by the SAMREC Code (2016) and JORC Code (2012), contributed to the estimation of the Mineral Resource and Mineral Reserve figures quoted in this report. Implats has written confirmation from the CPs that the information disclosed in this document complies with the SAMREC Code (2016) and, where applicable, the relevant SAMREC Table 1, Appendices and JSE Section 12 Listings Requirements (Section 12.13), and that it may be published in the form,

The contact details of the Lead Competent Persons are as follows:



Gerhard Potgieter
ECSA 20030236, MSAIMM
Lead Competent Person – Mineral Reserves
Group Chief Operating Officer
Impala Platinum Holdings Limited
2 Fricker Road
Illovo, 2196
Private Bag X18
Northlands, 2116



Theodore Pegram
SACNASP 400032/03, FGSSA, FSAIMM
Lead Competent Person – Mineral Resources
Executive: Mineral Resources
Impala Platinum Holdings Limited
2 Fricker Road
Illovo, 2196
Private Bag X18
Northlands, 2116



Nico Strydom
SAICA 03141381, CIMA
Lead Competent Valuator
Group Manager: Project Finance
Impala Platinum Holdings Limited
2 Fricker Road
Illovo, 2196
Private Bag X18
Northlands, 2116

format and context in which it was intended. A list detailing the appointed CPs per operation and project is reported in the appendices of this report (see [page 105](#)).



Gerhard Potgieter, Group Chief Operating Officer, PrEng, ECSA Registration No 20030236, a full-time employee of Implats with 38 years' relevant mining experience, takes full responsibility for the Mineral Reserve estimates for the Group.

Theodore Pegram, Executive: Mineral Resources, PrSciNat, SACNASP Registration No 400032/03, a full-time employee of Implats with 34 years' relevant experience, assumes responsibility for the Mineral Resource estimates for the Group. He also assumes responsibility for collating the combined Mineral Resource and Mineral Reserve Statement for Implats.

Nico Strydom, Group Manager: Project Finance, BCompt (Hons), CA(SA), ACMA, a full-time employee of Implats with 29 years' relevant experience, takes full responsibility for the Mineral Resources and Mineral Reserves' valuation.

The address for ECSA is:
Engineering Council of South Africa (ECSA)
Private Bag X691, Bruma, 2026, Gauteng,
South Africa.

The address for SACNASP is:
South African Council for Natural Scientific Professions (SACNASP)
Private Bag X540, Silverton, 0127
Gauteng, South Africa.

The address for SAICA is:
The South African Institute of Chartered Accountants (SAICA)
Private Bag X32, Northlands, 2116
Gauteng, South Africa.

Governance and compliance (continued)



2023 AUDITS OF THE MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

Implats has exhausted all reasonable means of oversight towards ensuring the integrity of the 2023 Mineral Resource and Mineral Reserve Statement.

In line with the mandate from the Group Audit & Risk Committee, the Zimplats Operations were subjected to an external audit of its Mineral Resources and Mineral Reserves this year, on the back of two years of Internal Technical Compliance Reviews, undertaken by a functionally appointed team of professionals. A local Zimbabwean company, Virimai Projects, were assigned the appointment for the Zimplats audit, on the back of an impressive audit of Mimosa the previous year.

Impala Rustenburg, Marula, Two Rivers Platinum as well as Impala Canada's Lac des Iles Mine were subjected to an Internal Compliance Review this year. In the case of TRP, this year's review was again undertaken jointly with the African Rainbow Minerals (ARM) Technical Team, with full endorsement of the outcomes, while our joint venture partners Sibanye Stillwater, are fully sighted on the outcomes of our internal review of Mimosa.

The combined external audits and internal reviews endorse the integrity of the Mineral Resource and Mineral Reserve estimates as at 30 June 2023 as contained in this report, confirming:

- No Fatal Flaws,
- No Material Findings,
- SAMREC Code (2016) and JSE Listings Requirements compliance, and
- No impediments for inclusion towards public domain year-end reporting.

The individual Operations' audit findings have been shared with the respective mines' Chief Executives and will be progressed with each mine's technical staff via the Implats Resources and Reserves Committee (IRRC) during FY2024 and have also been shared with the Implats Internal Audit Department, as well as the Group's external financial auditors, Deloitte for transparency.

An audit certificate under letterhead of Virimai Projects, the external assigned external auditors for the Zimplats audit, is included in the Appendices of this report.

Implats has secured JSE dispensation for the exclusion of RBPlat from this reporting cycle, in acknowledgement of the protracted transaction, which scuppered technical review towards sign-off of the RBPlat mineral assets. Implats will accordingly publish its maiden reporting of the RBPlat mineral assets in February 2024.

GS Potgieter (ECSA 20030236)
Lead CP – Mineral Reserves, Implats

THC Pegram (SACNASP 400032/03)
Lead CP – Mineral Resources, Implats

Impala Platinum Holdings Limited Reg. No. 1957/001979/06
2 Fricker Road, Illovo, 2196 • Private Bag X18, Northlands, 2116, South Africa
Tel: +27 11 731 9000 • Fax: +27 11 731 9254 • www.implats.co.za

Directors: NDB Orleyn (Chairman) • NJ Muller (Chief Executive Officer) • M Kerber (Chief Financial Officer)
D Earp • R Havenstein • BT Koshane • B Mawasha • MJ Moshe
FS Mufamadi • MEK Nkeli • LN Samuel • PE Speckmann • ZB Swanepoel

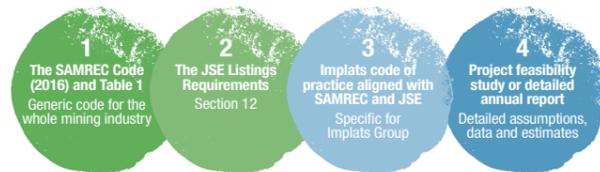
Secretary: TT Liale

Reporting principles and framework

Unless otherwise stated, the following key assumptions and parameters were used in compiling the 2023 estimates:

- A Group-wide committee, the Implats Resource and Reserve Committee (IRRC), was constituted in 2009 to promote standardised, compliant and transparent reporting, continuous improvement and internal peer reviews. As a result, in 2010, Implats developed a Group-wide protocol for estimating, classifying and reporting Mineral Resources and Mineral Reserves to enhance standardisation and facilitate auditing consistency. This protocol is updated annually to improve and guide the classification of Mineral Resources and ensure compliance with the SAMREC Code (2016).

Structural hierarchy of principles, requirements, standards, assumptions and estimates



- A vital aspect of the Group-wide protocol is that it determines the standards for classifying Mineral Resources. The classification standard is a matrix process, which measures geological and grade continuity between observation points. This is a detailed decision-tree structure that considers legal, ESG, economic and reasonable prospects for eventual economic extraction (RPEEE) aspects, as a precursor to technical evaluation. The quality, distribution and quantity of available data, and the confidence thereof, form the basis of the Mineral Resource classification
- Mineral Resource and Mineral Reserve evaluation is based on a systematic process of collecting and validating geological data according to the Group-wide protocol. Updating geological and geostatistical models with data from exploration and underground drilling, mapping and sampling, forms the basis of the Mineral Resource and Mineral Reserve Statements
- Geostatistical estimation is performed using different geostatistical software packages within the Implats Group. Various interpolation methods and geostatistical parameters are used, depending on the orebody and sampling density. Ordinary kriging and inverse distance weighting are the primary interpolation methods used
- The Mineral Resources for the Merensky Reef are estimated at a minimum mining width and may include mineralisation below the selected cut-off grade. Mineral Resource estimates for the UG2 Reef reflect the minimum mineable width and may include dilution
- Mineral Resource estimates for the Main Sulphide Zone on the Great Dyke are based on optimal mining widths. These mining widths are reviewed from time to time, given the varying economic and operational considerations
- Mineral Resource estimates at Lac des Iles and the Waterberg project consider the suitable mining method, and an economic grade cut-off is applied

- Mineral Resource estimates are reported inclusive of Mineral Reserves, unless otherwise stated. A summary table with the estimated attributable Mineral Resources, exclusive of Mineral Reserves, is provided on [page 9](#)
- Mineral Resource estimates allow for estimated geological losses, but not for anticipated pillar losses during eventual mining, except where these pillars will never be extracted, such as legal, boundary and shaft pillars
- Rounding-off in the accompanying summary estimates may result in minor computational discrepancies. Where this occurs, it is not deemed significant
- Mineral Resource Statements, in principle, remain imprecise and estimates cannot be referred to as calculations. All Inferred Mineral Resources should be read as approximations
- The nickel sulphide fire assay collection method is used at southern African operations to assay for all PGEs and gold by using an inductively coupled plasma mass spectrometer (ICP-MS). Lac des Iles analyses for platinum, palladium and gold by using an inductively coupled plasma-atomic emission spectrometry (ICP-AES). Base metal content is determined by atomic absorption (AA) spectrometer, using partial digestion to state metal in sulphide that is amenable to recovery by flotation processes. Base metal assays at Lac des Iles and the Waterberg project are based on four-acid digestions, which result in the near-total dissolution
- Southern African operations report Mineral Resource and Mineral Reserve Platinum Group Elements (PGE) estimates for four metals (4E) and six metals (6E). Reporting on a 4E basis reflects the total of platinum, palladium, rhodium and gold, while 6E reflects the total of platinum, palladium, rhodium, gold, ruthenium and iridium. For the South African Waterberg project, only 4Es are reported, given the available compliant data and the negligible ruthenium and iridium concentration levels
- Impala Canada's Lac des Iles Mineral Resource and Mineral Reserve PGE estimates are reported on a 3E basis. This reflects the summation of platinum, palladium and gold. The other PGE metals, such as rhodium, iridium and ruthenium, occur in negligible concentrations and are not considered material
- All references to tonnage are to the metric unit
- All references to ounces (oz) are troy, with the factor used being 31.10348 metric grams per ounce
- The Mineral Resources and Mineral Reserves reported for the individual operations and projects are reflected as the total estimate (100%). The corresponding estimates relating to attributable Mineral Resources and Mineral Reserves are only given as combined summary tabulations (see [pages 5 and 7](#))
- Mineral Reserves constitute that portion of the Mineral Resource for which techno-economic studies have confirmed economic viability at the time of disclosure, have secured board approval and for which funding has been provided
- Accordingly, no Mineral Reserve estimates are included in this report for the Afplats and Waterberg projects in the absence of board approval and funding
- The RBPlat planning, Mineral Resource and Mineral Reserve cycle differs from the Implats cycle; this and other reporting principles will be aligned in the forthcoming year.

Reporting principles and framework (continued)

The modifying factors considered for converting Mineral Resources to Mineral Reserves include the full spectrum, as defined by the SAMREC Code (2016). This includes metallurgical, processing, infrastructural, economic, marketing, legal, environmental, social and governmental considerations in addition to mining considerations. These factors inform the reasonable prospects for eventual economic extraction, as illustrated below:

- Mining parameters and modifying factors used to convert a Mineral Resource to a Mineral Reserve are derived from historical performance, while considering future anticipated conditions
- Mineral Reserve estimates include allowances for mining dilution and are reported as tonnage and grade delivered to the mill
- Mineral Reserve estimates take cognisance of all mine stability pillars and exclude the content associated with pillars
- Effective mining losses captured in the Mineral Reserve estimates combine geological losses, pillar losses, dilution parameters and the mine-call factor as key considerations
- Implats' long-term price assumptions in today's money are considered a modifying factor supporting Mineral Reserve estimates. These are shown on [page 33](#)
- The declaration of Mineral Reserves is predicated on the completion of a bankable feasibility study, and subsequent board approval and release of funding to execute the project in line with the study
- Allowances for estimated rehabilitation and mine closure costs and obligations are incorporated in the economic models
- Work processes and flow are fully integrated with the planning cycle, and the Group adopts a structured approach with activities aligned in a continuous sequence
- No Inferred Mineral Resources, other than insignificant incidental dilution at Lac des Iles, included at zero grade, have been converted into Mineral Reserves at any Implats operations reported. No Inferred Mineral Resources were considered in feasibility studies. According to the SAMREC Code (2016), Inferred Mineral Resources may be included in mine design, mine planning and economic studies only if a mine plan exists. SAMREC requires that a comparison of the results with and without the Inferred Mineral Resources must be shown, and the rationale behind including it must be explained
- In summary, Mineral Reserve estimates result from the planning process applied against the Measured and Indicated Mineral Resources only, by applying detailed modifying factors. Importantly, this process is subjected to rigorous economic viability testing at given market conditions.

REASONABLE PROSPECTS FOR EVENTUAL ECONOMIC EXTRACTION (RPEEE)

Rigorous RPEEE testing is based on the Group standard. Among others, the Implats standard considers:

- Security of tenure
- Relevant legal aspects
- Exclusion due to ESG considerations

- Infrastructure
- Technical constraints (for example, virgin rock temperature (VRT))
- Data quality and distribution
- Confidence in estimation
- Geological complexity
- Feasible mining method
- Potential metallurgical constraints
- Economic testing for RPEEE
- Combined risk assessment.

All Mineral Resources reported for the Group are considered for RPEEE. Various Mineral Resource blocks are considered on a case-by-case basis, and this has resulted in areas where the RPEEE is in doubt. The following examples impact the Mineral Resource estimates:

- Impala Rustenburg applies a depth cut-off of 2 000m below surface for all Mineral Resources considering RPEEE. These excluded Mineral Resources will be evaluated from time to time, on an economic basis, to test the validity of the applied depth cut-off. Complex geological structures, among others, derived from 3D vibroseis geophysical surveys, have been excluded due to the lack of RPEEE
- The Waterberg project Mineral Resource estimates applied a depth cut-off of 1 250m given the limit of the orebody defined by current exploration
- At Marula, the shallow weathered areas have been excluded due to the impact of surface infrastructure, environmental considerations and economic testing. In addition, certain geologically complex areas at Marula are not included in the Mineral Resource estimates
- At Two Rivers, a substantial area on the Buffelshoek farm was excluded from the Merensky Reef Mineral Resource due to reducing the economic channel width and doubt about its RPEEE. The Merensky and UG2 Mineral Resources to the west of the Kalkfontein Fault are currently excluded due to the depth of the reef intersections
- At Zimplats, a sizeable area between the Mupfuti and Bimha portals is excluded from Mineral Resource and Mineral Reserve estimates, given the inherent disruption of the normal mineralisation profile in that area
- Similarly, Mimosa estimates are impacted due to the lack of RPEEE in selected areas of inherent low grades at South Hill and North Hill
- At Afplats, the UG2 Reef has also been subjected to the 2 000m below surface depth cut-off and excluded from Mineral Resources. This will be evaluated from time to time, on an economic basis, to test the validity of the applied depth cut-off. The Merensky Reef has been excluded, given the RPEEE consideration of the underlying modest-to-low *in situ* grade
- At the Lac des Iles operation and the Waterberg project, mineralised material is excluded based on the prevailing cut-off grade.

Mineral rights and legal tenure

Implats has legal entitlement, without any known impediments, to the minerals reported on in the period under review. There are no legal proceedings or other material matters that may impact the Implats Group's ability to continue exploration and mining activities.

SOUTH AFRICA

The Mineral and Petroleum Resources Development Act, No 28 of 2002 (MPRDA), governing mineral extraction in South Africa, came into effect on 1 May 2004. The MPRDA, with the associated broad-based socio-economic empowerment charter for the mining industry and its attendant scorecard, as revised and amended from time to time, has played a significant role in transforming the South African mining industry. Implats embraces the principles of transformation as a moral and strategic imperative, and continues to cement its position as a leading southern African precious metals producer.

The Broad-Based Socio-Economic Empowerment Charter for the Mining and Minerals Industry, 2018 (Mining Charter, 2018), was declared in 2021 an instrument of policy, and not binding subordinated legislation, with certain clauses being set aside. Implats continues to strive to achieve the transformation objectives of the MPRDA, to the extent possible, using the residual clauses as well as the clauses set aside as guiding principles.

Implats' South African operating companies (Impala Rustenburg Mine, Afplats and Marula) submitted their annual Mining Charter reports to the Department of Mineral Resources and Energy (DMRE) for the 2022 calendar year. Each operation submitted self-assessment scores, as guided by the Mining Charter, 2018.

The DMRE conducts regular compliance audits concerning Implats' mining and prospecting rights. The Group attended to the required closure obligations and closure applications relating to former prospecting rights now cancelled, abandoned or expired, of which the issuing of closure certificates for seven prospecting rights are pending. No prospecting rights are active within the Group.

Impala Rustenburg

The mining rights at Impala Rustenburg were converted into new-order rights in 2008 and Converted Mining Rights 130, 131 and 133 MR were awarded for 30 years.

Converted Mining Right 132MR was awarded for 10 years. The renewal application for Converted Mining Right 132MR was submitted on 18 September 2018 and is still pending approval. Impala Rustenburg holds four contiguous mining rights over 29 773ha across 16 farms or portions of farms.

In 2011, Impala Rustenburg reached an agreement with the Royal Bafokeng Resources (Pty) Ltd (RBR) and Rustenburg Platinum Mines Limited (RPM) unincorporated joint venture to access certain of its mining areas at Bafokeng Rasimone Platinum Mine (BRPM) from 6, 8 and 20 shafts. Subsequently, the RPM's interest in the agreements was ceded in line with the transfer of a 33% interest of RPM in the BRPM mining right to RBR. This is essentially a royalty agreement that provides mining flexibility to these shafts. During FY2018, the parties concluded two notarial mining right leases, subject to the Section 11 approval of the DMRE, the applications for which were submitted in early FY2019. Once approved, these notarial mining right leases will replace the current interim contractors' agreements between the parties. During FY2023, the dates to obtain the above-mentioned Section 11 approvals, as conditions precedent in the two notarial mining right leases, were extended. Impala Rustenburg Mine and RBR continue to engage with the DMRE.

Marula

Marula holds two contiguous Converted Mining Rights 61 and 63 MR covering 5 494ha across farms or portions of farms Winnaarshoek 250 KT, Clapham 118 KT, Driekop 253 KT and Forest Hill 117 KT. The converted mining rights were awarded for 30 years in 2008. In terms of the MPRDA, mining rights can be renewed on expiry, until mined out.

Afplats

Afplats holds Mining Right 256 MR, in respect of the Leeuwkop 402 JQ farm, extent of about 4 602ha. The project remain deferred with the Implats view to exit from the project.

On 6 June 2013, an application was lodged, under Section 102 of the MPRDA, to amend the Leeuwkop mining right by incorporating the Kareepoort/Wolvekraal prospecting area into the existing mining right, which underlying prospecting right expired and its closure application is pending. Based on a third-party prospecting right granted over these farms, Implats adjusted the inclusive Afplats Mineral Resource Statement, by excluding the contribution from Kareepoort 407 JQ and Wolvekraal 408 JQ. Afplats will proceed to withdraw the Section 102 application from the DMRE.

Mineral rights and legal tenure (continued)

Non-managed South African project and operation

Details about the Waterberg mineral rights can be found on the Platinum Group Metals (PGM) website: www.platinumgroupmetals.net.

Details about Two Rivers' mineral rights can be found in the African Rainbow Minerals (ARM) 2023 Mineral Resource and Mineral Reserve Statement www.arm.co.za.

South Africa	Implats' interest (%)	Mining right (ha)	Prospecting right (ha)
Impala Rustenburg	96	29 773	–
Marula	73.26	5 494	–
Two Rivers*	46	11 349	–
Afplats	74	4 602	–
Waterberg*	15	20 532	4 207

* Non-managed.

ZIMBABWE Zimplats

Zimplats now holds two mining leases, ML 36 and ML 37, covering two areas of land measuring a total of 24 632ha, which are valid for the LoM, after previously releasing 23 903ha to the Zimbabwean government. These mining leases replaced the special mining lease that Zimplats previously held, and there are no material issues arising on either that could affect Zimplats' activities related to the total mineral rights.

Mimosa

The Mimosa mining rights are covered by a contiguous mining lease, individual mining claims, and a special grant amounting to 7 691ha. Lease No 24 was granted to Mimosa on 5 September 1996. In 2021 Mimosa acquired mining claims adjacent to the Mimosa mining lease from Anglo American Platinum (Southridge (Pvt) Ltd).

Zimbabwe	Implats' interest (%)	Mining leases (ha)	Mining claims** (ha)	Special grant (ha)
Zimplats	87	24 632	–	–
Mimosa*	50	6 594	854	68

* Non-managed.

** Excluding chrome claims.

CANADA

Mining rights in Canada fall into two broad categories: 'claims' (or exploration licences), and mining leases. A claim grants its holder the exclusive right to carry out exploration work, for a limited period and within a designated area. Exploration work may include overburden removal, exploratory drilling, test-ore extraction and milling. A mining lease allows its holder to carry out extractive and processing activities on a commercial scale.

The Mining Act is the provincial legislation that governs and regulates prospecting, mineral exploration, mine development and rehabilitation in the province of Ontario, where Impala Canada's operations are located. The purpose of the act is to encourage prospecting, online mining claim registration and exploration, to develop Mineral Resources in a way that recognises and affirms existing indigenous and treaty rights in section 35 of the Constitution Act, 1982. This includes the duty to consult and to minimise the impact on public health and safety and the environment.

In 2009, Bill 173 – an act to amend the Mining Act – was passed into law. This modernising legislation sought to promote the recognition of indigenous and treaty rights in mineral exploration and development, introduce processes that are more respectful of private landowners, and minimise the environmental impact of mineral exploration and development. While some changes came into effect upon Royal Assent, most were brought into effect over time.

Impala Canada's leases have a renewal date in 2027, with the exception of a newly converted claim to lease CLM 568, encompassing 2 557ha, with a renewal date of 2041. The company has the exclusive right to apply for renewal at these dates. The mining leases are currently subject to a 5% net smelter return (NSR) royalty.

Impala Canada holds 100% in mining leases encompassing 6 070ha and active mining claims totalling 57 092ha in the Thunder Bay district. It also holds a 50% interest in the past-producing 8 046ha Shebandowan Mine property, located approximately 75km northwest of Thunder Bay, Ontario. The mine ceased production in 1998 and is currently under care and maintenance. Finally, Impala Canada holds 64.99% in 174 mining claims (3 677ha) related to the Sunday Lake Joint Venture Exploration Project and holds 64.99% in options to purchase surface and mining rights for two private land parcels (totalling 82ha) within this joint venture.

Summary of Impala Canada mineral rights

Operations and projects	Type	Ownership	Hectares
Impala Canada Limited (Lac des Iles)	Mining leases	100%	6 070
Impala Canada Limited (Thunder Bay district)	Mining claims	100%	57 092
Shebandowan	Mining leases	50%	8 046
Sunday Lake Joint Venture	Mining claims	64.99%	3 677
Total			74 885

Appropriate locality, Mineral Resource and Mineral Reserve maps illustrating the context and extent of the mineral rights, are included in the relevant operations and projects sections of this report.

ESG in Mineral Resource and Mineral Reserve reporting

ESG MANAGEMENT

Effectively managing environmental, social and governance (ESG) risks remains a key strategic pillar. Implats has a comprehensive ESG framework guiding its sustainability programmes, from exploration, through projects and operations. The Group aspires to deliver an industry-leading sustainability performance, producing metals that sustain livelihoods beyond mining and create a better future. This section should be read in conjunction with the Implats 2023 ESG report for more detail (www.implats.co.za).

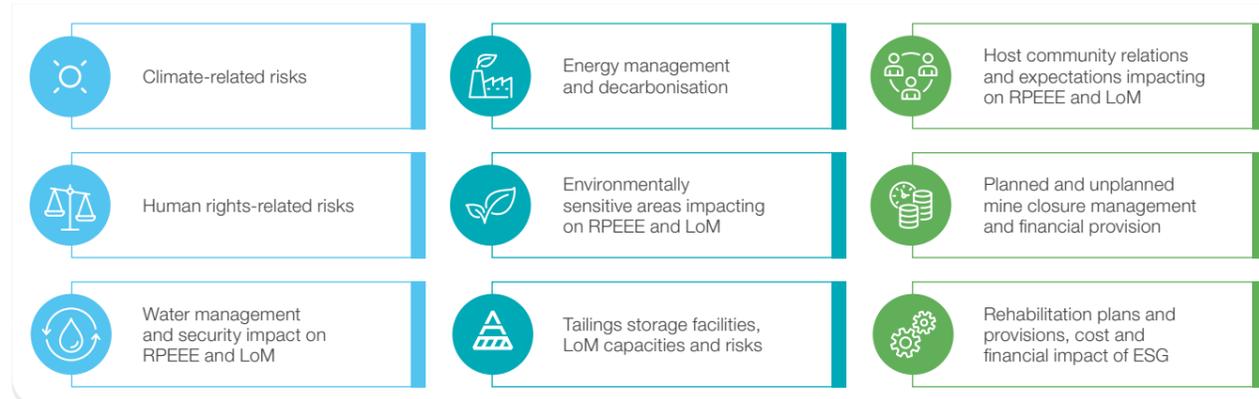
ESG modifying factors for Mineral Resources and Mineral Reserves

In South Africa, reporting ESG factors within the solid minerals and oil and gas industries is informed by extensive guidelines for disclosing ESG parameters when reporting Exploration Results, Mineral Resources and Mineral Reserves (the SAMESG guideline 2017). Both the SAMREC Code (2016) and the JSE Sustainability Disclosure Guidelines (2022) cover some of the ESG parameters. The SAMESG guideline is being redrafted to align with converging

global disclosure frameworks while the industry seeks clarity on responsible and compliant ESG disclosure requirements.

Implats has mature risk and corporate governance structures in place which promote and safeguard the long-term success of the business, while considering the interests of its various stakeholders. Implats adheres to the highest ethics standards as per King IV, the Companies Act, the JSE Listings Requirements as well as the environmental, human rights, labour and social laws and regulations in its operating jurisdictions. These guide Implats' policies and enterprise risk management framework (ERM) as well as the Group's approach to exploration.

As such, Implats has adopted a risk-based approach when evaluating the impact of ESG on the RPEEE of Mineral Resources, Mineral Reserves and LoM. The ESG modifying factors that Implats considers as potential risks in estimating Mineral Resources and Mineral Reserves are illustrated in the diagram below. Subject matter technical experts take responsibility for managing these aspects and mitigating related risks.



The current rehabilitation cost estimates and financial provisions are tabulated as follows:

Operations	Current cost estimates*		Financial provisions**	
	2023 Rm	2022 Rm	2023 Rm	2022 Rm
Impala Rustenburg – mining operation	1 906	1 719	1 004	931
Impala Refineries – Springs	1 008	934	464	429
Marula	436	431	84	87
Zimplats	902	754	366	423
RBPlat	654	–	210	–
Impala Canada	593	411	500	379
Afplats	27	25	26	25
	5 526	4 274	2 654	2 274

* The current expected Group cost to restore the environmental disturbances for regulatory compliance purposes, as estimated by third-party experts, is R5 526 million. The amounts in the table exclude VAT.

** Future value of the current cost estimates, discounted to current balance sheet date, as provided in the Group annual financial statements.

Financial guarantees concerning environmental rehabilitation are submitted to the DMRE for the South African operations and projects, to satisfy the requirements of the National Environmental Management Act. Third-party consultants, E-Tek Consulting conducted these assessments for Impala Rustenburg and Marula, while SRK for RBPlat.

In line with DMRE mine-closure requirements, the South African liabilities are secured through insurance policies and bank guarantees. Only bank and insurance guarantees are currently used as financial provisions. Similar arrangements are in place in Zimbabwe and Canada.

Mineral Resource and Mineral Reserve risk management

The Group's reported Mineral Resources and Mineral Reserves represent the estimated quantity of PGMs that have the potential to be economically mined and refined under anticipated geological, environmental, social, governance and economic conditions. Several uncertainties and risks are inherent in estimating Mineral Resources and Mineral Reserves and projecting potential future rates of metal production, coupled with many factors beyond the Group's control. The 2023 Mineral Resources and Mineral Reserves Statement strives to capture specific Mineral Resource Management (MRM) related risks.

The MRM function adopts a formal risk management process that systematically covers all Mineral Resources and Mineral Reserves. Implats recognises that Mineral Resource and Mineral Reserve estimations are based on projections, which may vary as new information becomes available, or if assumptions, modifying factors and market conditions change materially. This approach is consistent with the Group definitions of risk, which are aligned with the updates published in the International Risk Management Standard, ISO 31000:2018. This standard defines risk as 'the effect of uncertainty on objectives'.

The Group has developed a matrix to measure the relative severity and likelihood of risks related to Mineral Resources and Mineral Reserves. This risk-rating tool is applied to highlight risks and implement key management interventions to mitigate perceived risks. The risk approach is integral to all the components of Mineral Resource and Mineral Reserve estimation, classification and modifying factors, such as ESG risks and reporting.

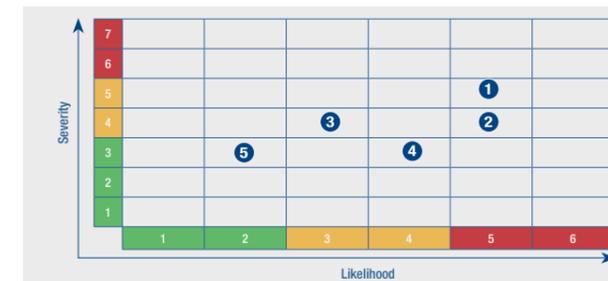
The residual risk matrices at an Implats Group level for the Mineral Resources and Mineral Reserves estimates are illustrated below, highlighting the respective top five residual risks.

The top residual risks identified for the Implats Group Mineral Resources are (1) market conditions: costs and basket metal price sensitivity; (2) challenges in the retention of skills; (3) limitations in data support; (4) geological complexities; and (5) tenure and permits – loss of mineral rights.

The top residual risks identified for the Implats Group Mineral Reserves are (1) market conditions costs and: basket metal price sensitivity; (2) availability of electricity; (3) technical challenges; (4) tenure and permits; and (5) challenges in retention of skills.

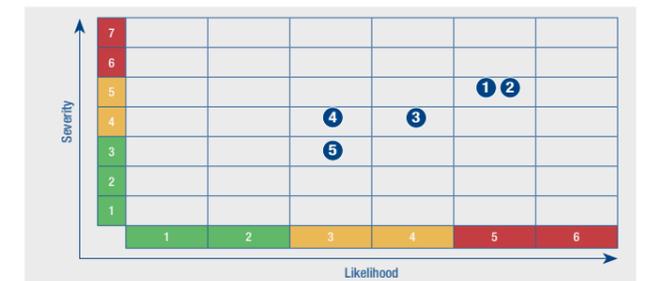
Management interventions are in place to mitigate these risks listed above at Group and operational level.

Summary details are illustrated in the various sections per individual operation.



- Mineral Resources**
- Residual risks
 - 1 Market conditions
 - 2 Skills retention
 - 3 Data support
 - 4 Geological complexities
 - 5 Security of tenure

- Legend**
- Likelihood**
- 1 – 2 Ongoing monitoring
 - 3 – 4 Special focus areas, implement initiatives
 - 5 – 6 Immediate action required by management



- Mineral Reserves**
- Residual risks
 - 1 Market conditions
 - 2 Electricity supply
 - 3 Technical challenges
 - 4 Security of tenure
 - 5 Skills retention

- Severity**
- 1 – 3 Maintain risk level
 - 4 – 5 Ongoing monitoring of risk mitigations
 - 6 – 7 Independent assessment and/or risk financing

All the risks identified as relevant to Mineral Resources and Mineral Reserves are acceptable to management. Where risks are identified, management mitigation interventions are put in place. Details about the Group's risks are published in the 2023 Implats Annual Integrated Report (www.implats.co.za).

Managing Mineral Resources, Mineral Reserves and life-of-mine

Implats embraces an integrated MRM function. Systems, procedures and practices are aligned and continuously improved to achieve this objective.

MRM includes exploration, geology, geostatistical modelling and evaluation, mine surveying, sampling, mine planning, ore accounting and reconciliation, and the MRM information systems.

The MRM function is the custodian of the mineral assets and strives explicitly to optimise these assets through a constant search for optimal extraction plans that yield returns in line with the Group's business objectives.

The main objective of the MRM function is to support strategic intent and add value to the organisation through:

- Safe production, which is the first principle underpinning all Mineral Reserve estimates
- The appropriate investigation, interpretation and understanding of the orebodies
- Integrated short-, medium- and long-term plans
- Technically appropriate and proven management information systems
- Accurate and reconcilable Mineral Resource and Mineral Reserve estimates

- Compliant and transparent reporting of Mineral Resource and Mineral Reserve estimates
- Seeking optimal solutions to ensure sustainable and profitable operations.

Continuous improvement is embedded in the MRM function. Specific focus is given to new learnings, standardisation and protocols, and collaboration with the industry.

Present focus areas include:

- Embedding a standardised risk analysis framework, specific to Mineral Resource and Mineral Reserve estimates, across all projects and operations
- Timeous exploration drilling, to support sustainable operations and LoM planning
- Improved Mineral Reserve flexibility, measured as mineable face length in conventional mining sections
- Improving the quality of mining
- Revisiting optionality of long-term planning
- Scenario planning for LoM II and III Mineral Resources to ensure a sustainable business model (see [page 21](#))
- Transitioning from a 2D to an appropriate 3D platform to optimise spatial mine planning, based on 3D spatial geological models at Impala Rustenburg and Marula
- Workstreams to ensure optionality to sustain operations.

MRM focus areas				
Geological information	Quality mining	Mining flexibility	Systems	Optionality
<ul style="list-style-type: none"> • Structural geology model updates • Grade block model updates • Timeous brownfields exploration • Cost-effective infill surface drilling • Optimal underground drilling • Mapping and observation tools • Optimal underground sampling for geological risk mitigation. 	<ul style="list-style-type: none"> • Grade reviews, action plans • Face observations, issue stop notes • Grade control by geology observers • Improved dashboards • Cross-functional oversight. 	<ul style="list-style-type: none"> • Detailed development scheduling • Development tracking • Redevelopment and panel establishment • Face length management at Impala Rustenburg • Matched capital allocation to fund the LoM II pipeline. 	<ul style="list-style-type: none"> • Utilise appropriate systems to suit orebody • Strive for full implementation of 3D geological and mine planning tools. 	<ul style="list-style-type: none"> • Optimal use of current infrastructure • Expanding the footprint of current shafts and infrastructure • Scenarios for future sustainability • M&A opportunities • Sequential upgrade of LoM II and LoM III pipeline projects • Compliance with LoM classification.

Managing Mineral Resources, Mineral Reserves and life-of-mine (continued)

The integrated Implats planning cycle seeks to integrate the different planning levels to provide continuity, and it incorporates review processes linked to business reporting periods. There is a strong emphasis on risk mitigation, optimising plans, ensuring compliance with industry and Group standards, and consolidation to track delivery. The planning process is iterative, with top-down goals flowing through to operations and vice versa, which allows for any adjustments needed as conditions change.

The embedded planning cycle considers the sequence and the duration of the business planning period, and it entrenches long-term strategic planning. A summarised planning cycle is shown below. It starts with data consolidation, geological model and spatial Mineral Resource estimate updates in August until November, followed by a detailed business planning phase in January until May, with a five-year focus. The life-of-mine (LoM) profiles are then derived as a continuation of the business plan for the remainder of the respective mining right areas, while considering metal price forecasts and operating costs.

The planning process is integrated with Group costing, the outlook for commodity prices and financial valuations. The Mineral Reserve estimates are therefore the product of the planning process, applied against the Measured and Indicated Mineral Resource estimates only. The Mineral Reserve estimates are classified as Proved and Probable Mineral Reserves, based on confidence and risk considerations.

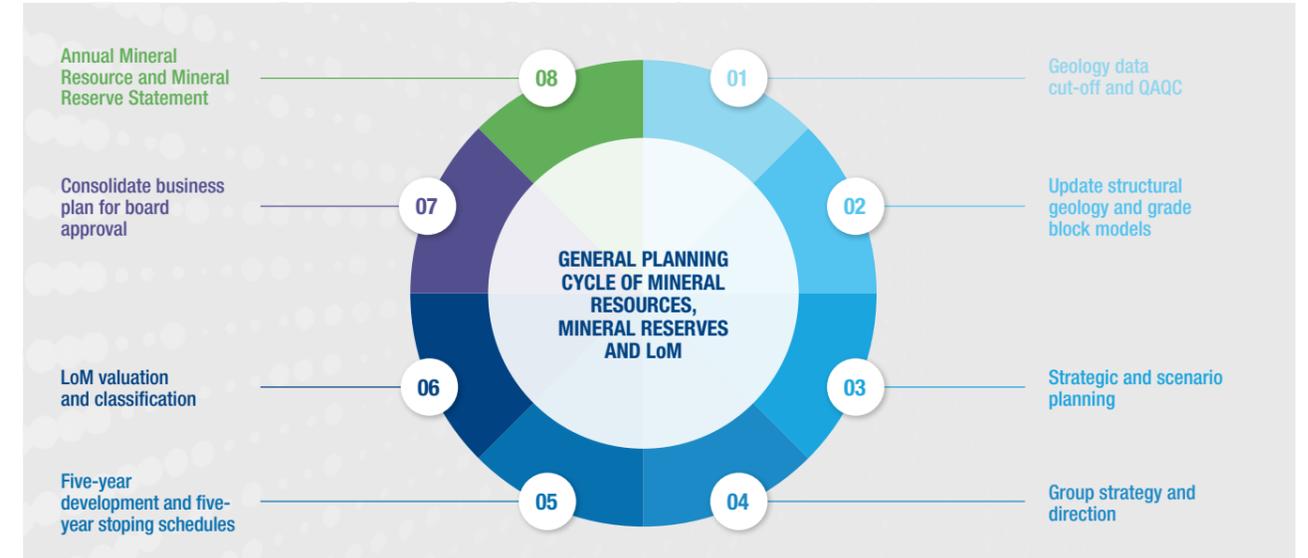
Implats has defined four LoM planning levels, classified as levels III, II, IA and I. The four levels are linked to increased confidence levels from III to I, and the conversion of Mineral Resources to Mineral Reserves.

LoM level III includes 'Blue Sky' and scoping studies, focusing mainly on Inferred Mineral Resources and Exploration Results. It may also include contiguous areas and opportunities outside existing mining right boundaries and ownership. LoM III is excluded from the Mineral Reserve estimate.

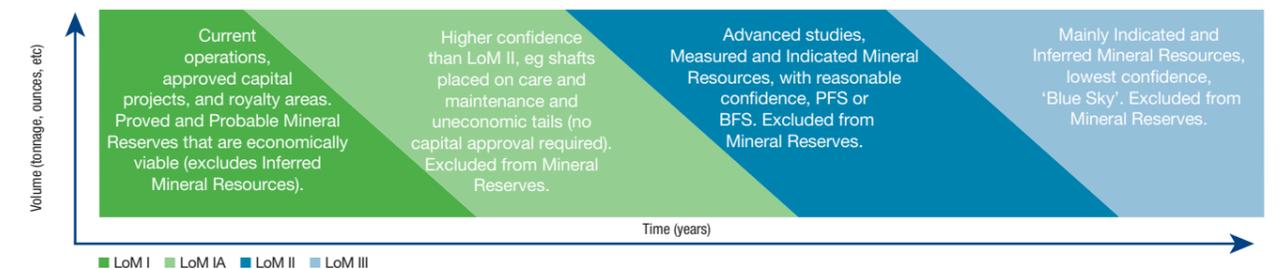
LoM level II includes planned and unapproved projects, with a reasonable chance of future board approval.

LoM level IA can be defined as those Mineral Reserves that fail the economic valuation of LoM level I. These uneconomic volumes are removed from LoM I, but are retained as Mineral Resources. Likewise, operations deemed uneconomic under the current LoM considerations also fall in the LoM IA category. No capital approval is required for these operations. LoM II and IA areas will be excluded from the Mineral Reserve estimate.

LoM level I includes operational shafts and approved capital projects where a portion of Mineral Resources is converted to Mineral Reserves, and sufficient confidence exists for the declaration of Mineral Reserves in a public report. No Inferred Mineral Resources are included in LoM I, other than incidental dilution, which is included at zero grade.



LoM levels and definitions

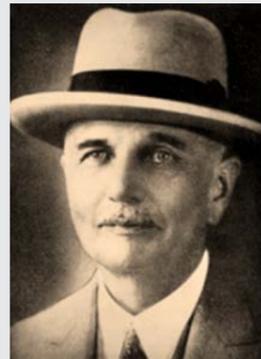


Anniversary of platinum discovery

Centenary anniversary of platinum discovery in the Bushveld Complex

– Tribute to Dr Hans Merensky

The year 2024 marks the centenary anniversary of the profound discovery of platinum in the Bushveld Complex of South Africa by Dr Hans Merensky.



DISCOVERY OF PLATINUM

The presence of PGMs in South Africa was noted in 1892 in concentrates from the Witwatersrand gold mines and the chromitite layers of the Bushveld Complex in 1908; none of these were considered of economic interest¹. Adolphus Erasmus made the first discovery to be considered economic in the Rooiberg felsite near Mookgophong in the Limpopo Province; however, these were not substantial.

The exciting story of Hans Merensky started in June 1924, when farmer Andries Lombaard collected a few specks of heavy white metal while panning in a dry riverbed on the farm Maandagshoek¹. The concentrate was sent on 7 June 1924 to Hans Merensky, who confirmed this as platinum by an assay laboratory². Merensky immediately raced to the area. It is recorded that within three days, they could trace platinum to a pyroxenite on the Mooihoek and Maandagshoek farms. A hive of activity followed, and in early September 1924, the team located the now world-famous PGM-bearing horizon, which was labelled the Merensky Reef. After a few weeks, they worked extensively along the hills in the area and could confirm that the PGM layer extended for about 160km. Merensky pegged three prospecting areas on the farm Driekop; the secret was out, and shortly after that, FW Blaine discovered the platinumiferous dunite Onverwacht pipe. These discoveries became an overnight sensation, and hundreds of fortune seekers rushed to the new mineral field.

Merensky realised the opportunity of finding PGM mineralisation in the northern limb of the Bushveld Complex. In March 1925, the momentous discovery strike was made on the farm Zandsloot (present-day Mogalakwena). Hans followed his scientific knowledge to predict that PGMs would be present in the Rustenburg area. He commenced his new efforts in the late summer of 1925 and, by June of the same year, discovered the Merensky Reef on the farm Elandsfontein near the town of Brits; he quickly extended westward with several other locations opened in trenches on the farms such as Waterval and Turffontein. Remarkably, by the end of 1925, the initial prospecting phase was over, and the broad extent of the Bushveld Complex and the presence of PGMs was established.

HANS MERENSKY

Merensky was born on 16 March 1871 at his father's mission station, Botshabelo, north of Middelburg in Mpumalanga. He was schooled in Silesia, Germany, from the age of 11. After military training, he became a reserve officer in the Prussian Army. Hans worked as a mine overseer in the coal mines of Silesia and the Saar. He studied geology at the Technical High School in Breslau

and the University of Berlin. He qualified with distinction as a mining engineer, after which he was appointed to the Prussian Department of Mines. Hans returned to South Africa on study leave in 1904³. He soon set up a practice in Johannesburg as a consulting geologist. He took great pains to establish good relationships with farmers that often forwarded geological samples². His life was not always without hurdles, as he became insolvent after some heavy speculation on the stock exchange in the early 1910s. Given his financial woes, he lost the family farms in the Ermelo district. He was interned for five years as a German Officer during WWI in Pietermaritzburg. It is said that he suffered from health issues and an ill spirit during these times.

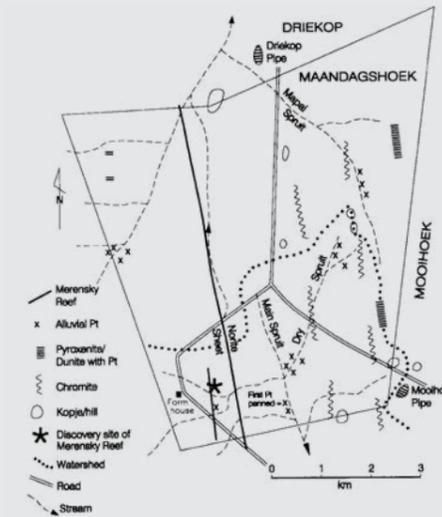
The amazing story of Hans Merensky does not end with the remarkable PGM achievements. He found the extremely rich so-called oyster line/trench diamond hoard near Alexander Bay; he is credited with discovering vermiculite, phosphates, and copper in the Looлекop Phalaborwa district. In addition, he continued to discover the large chrome deposits in the Jagdlost area south of Polokwane. Merensky also contributed significantly to discovering the rich gold fields in the Free State. Much of the work continued in his later years despite Merensky suffering from ill health from time to time.

Merensky enjoyed great esteem for his incredible achievements and, at times, was pestered by journalists and would-be prospectors. Given his acquired riches and known generous persona, he was often approached for financial assistance by people in need and virtually always obliged in one way or another⁴. In 1929 he bought the run-down farm Westfalia near Tzaneen and created a prize forestry and agricultural estate with his typical scientific approach. Hans Merensky could observe detail and possibly had the best training available at the time⁵. The combination stood him in good stead, with his visionary ability to assess future possibilities.

Hans Merensky is South Africa's most famous geologist, a great humanitarian and devoted to nature. He spent his later years in the unpretentious Top House on his farm Westphalia where he entertained many. He appointed Trustees in his will to continue his work, and the bulk of his assets was allotted to the Hans Merensky Trust, specifically to continue his work in agriculture, horticulture and forestry, but also to benefit the South African people. In his speech at the launch of the Hans Merensky Library donated to the University of Pretoria, he pledges his debt to South Africa: "This country has given me so much that I am only too happy to be allowed to help it to develop and to be able to give back to it a fraction of what it has given to me..."⁶

Anniversary of platinum discovery (continued)

Discovery map on the farm Maandagshoek¹



Hans Merensky died on 21 October 1952; he did not witness the significant social and economic impact of his PGM discovery and also not the vast contribution to the environmental wellbeing of our planet. Percy Wagner⁷ captured the discovery as "transcend(s) in magnitude and importance, anything that has hitherto been dreamt of in the way of primary platinum occurrences". His peers credited him with almost superhuman ability, and his contribution to the economy is extraordinary. Whilst most of his discoveries were initially prompted by others, his contributions stemmed from his scientific geological expertise, observation power, thoroughness, and inexhaustible energy. The platinum story in South Africa is often told, but all credit must go to Dr Hans Merensky for his part in the epic saga of mineral exploration. He discovered the rich dunite-pipe deposits and the Merensky Reef in the eastern lobe of the Bushveld Complex. He traced the important deposits in the Mokopane area, and it was also up to him when all hope was lost to find the Merensky Reef in the Rustenburg area.

ROLLER-COASTER PGM RIDE

The discovery sparked a mining boom on the back of initial high platinum prices. Numerous companies were floated; these typically had gold mining backgrounds with unlimited market and fixed prices but with little or no thought to the more complex extraction

of the minerals⁶. Some 50 companies were floated, and extremely high prices were paid for the shares, with an estimated aggregate market capitalisation of some £13 million at the time. This boom was restricted to the Johannesburg Stock Exchange and not absorbed by overseas bourses⁸. The speed with which the syndicates were formed remains astounding.

At the time of Hans Merensky's discoveries, platinum was sourced from alluvial placer deposits with straightforward recovery processes or as a byproduct in base metal mines. Consequently, experience was limited. Platinum ores had never before been crushed, milled, and treated commercially. The difficulty in engineering effective processing solutions was foremost in those early years. The minerals were not typical of ores known to metallurgists, and the property of ores varied. Flotation processes were readily developed, but it proved more challenging to transform the concentrate into refined metals³. It took several years of research and development to master this; the UG2 Reef only became commercially viable in the 1980s after the development of new metallurgical processes.

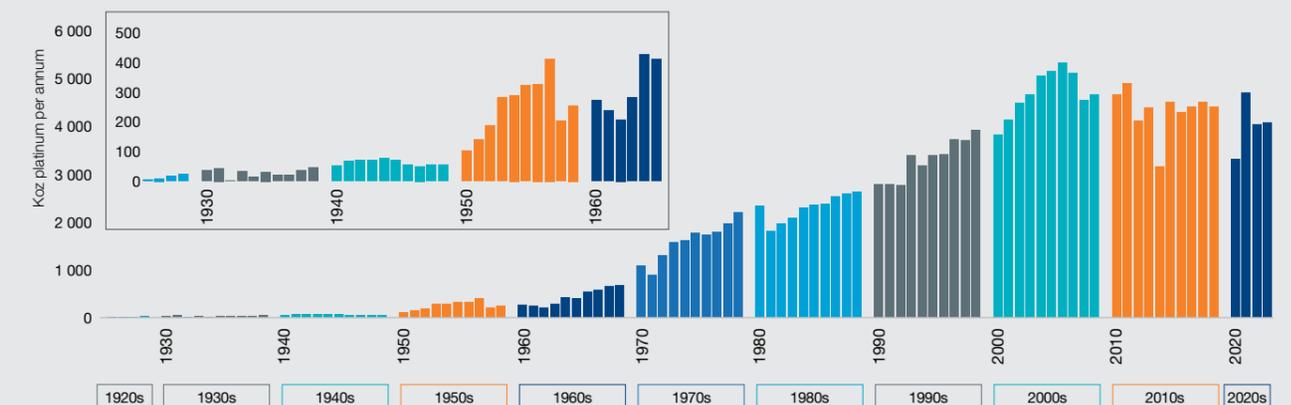
The market sensation of the 1920s did not last long. Given the prevailing global economic market, by 1932, all mining effectively ceased in the Bushveld Complex. This was the first of many PGM market roller-coaster cycles to follow. The subsequent development of the worldwide PGM market saw South African production growing from the humble 5koz Pt in 1926 to the present day 4Moz Pt per annum.

Today, PGMs play a significant role in the autocatalyst industry, the jewellery market, fuel cells and the hydrogen revolution, medical applications, and various nitrous oxide abatement programmes. It was clear from the onset in the 1920s that the Bushveld Complex and, specifically, the hoard of PGMs were seriously special, a treasure trove unimaginable to humanity. After a century, vast Mineral Resources remain untapped, a real Pandora's box.

References

- Cawthorn, R.G. (1999) *The Discovery of the platinumiferous Merensky Reef in 1924*, S. Afr. J. Geol. 1999 pp178 – 183.
- Davenport, J. (2013) *Digging Deep*, 537pp.
- Sander, I (2000) *Development, Diamonds, Gold and Platinum, The Story of JCI*, 392pp.
- Lehmann, O. (1955) *Look beyond the wind*, 183pp.
- Machens, E. W. (2009) *Platinum, Gold and Diamonds, The adventures of Hans Merensky's discoveries*, 308pp.
- www.hansmerensky.co.za, www.hmfoundation.co.za.
- Wagner, P.A. (1929) *Platinum Deposits & Mines of South Africa*, 338pp.
- McDonald, D., Hunt, L.B. (1982) *A History of Platinum and its Allied Metals*, 461pp.

Platinum production in South Africa



Regional geological settings

Implats explores and mines the platiniferous horizons in the Bushveld Complex in South Africa and the Great Dyke in Zimbabwe, and the palladium-dominant orebody located in the Lac des Iles Intrusive Complex in Canada.

The Bushveld Complex and Great Dyke layered intrusions are unique in size and geological continuity. Mining mostly takes place underground, with specific mining methods adapted to suit the local geology and morphology of the mineralised orebodies.

THE BUSHVELD COMPLEX

The Bushveld Complex is an extremely large (65 000km²), two billion-year-old layered igneous intrusion, located in the northern part of South Africa. Rock types range in composition from ultramafic to felsic. The complex is unique due to its size and the economic significance of its mineral wealth. In addition to the PGMs and associated base metals found in the complex, it also produces vast quantities of chromium, vanadium, tin, fluorine and dimension stone.

The accompanying map (page 25) and schematic diagram below show the extent of the Bushveld Complex. The layered sequence, the Rustenburg Layered Suite, comprises five significant subdivisions. These are, from the bottom upwards, the Marginal, Lower, Critical, Main and Upper Zones, as indicated in the generalised stratigraphic column on page 25.

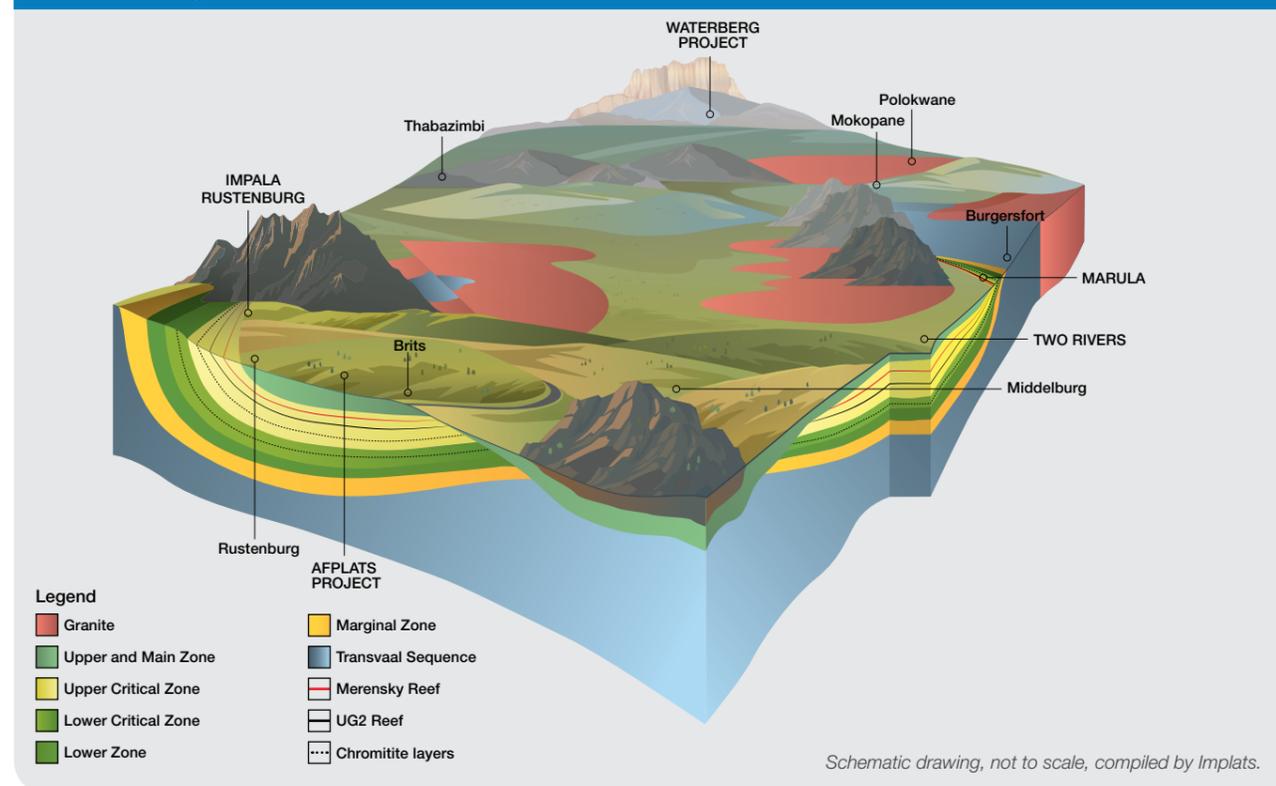
Three horizons within the Critical Zone, namely the Merensky Reef, the Upper Group 2 (UG2) Reef and the Platereef, host extensive economically exploitable quantities of PGMs. Two of these horizons – the Merensky and UG2 Reefs – are the focus of Implats' current operations. The PGMs – platinum, palladium, rhodium, ruthenium, iridium and osmium – and the associated gold, copper, nickel, cobalt, chromium and other minor metals and compounds, are mined concurrently but recovered by different processes.

The chromitite layers present below the UG2 Reef contain little to no PGM mineralisation and are mined by other operators for their chromium content. Some PGEs are recovered as a by-product from these chromitite layers. The economic potential of the Waterberg PGM deposit at the northern extremity of the Northern Limb is the focus of optimisation studies before the potential commencement of mining. There are two PGE copper-nickel-gold mineralised intervals in the Waterberg deposit, a lower F-Zone and an upper T-Zone. Both these contain palladium-dominant PGE mineralisation.

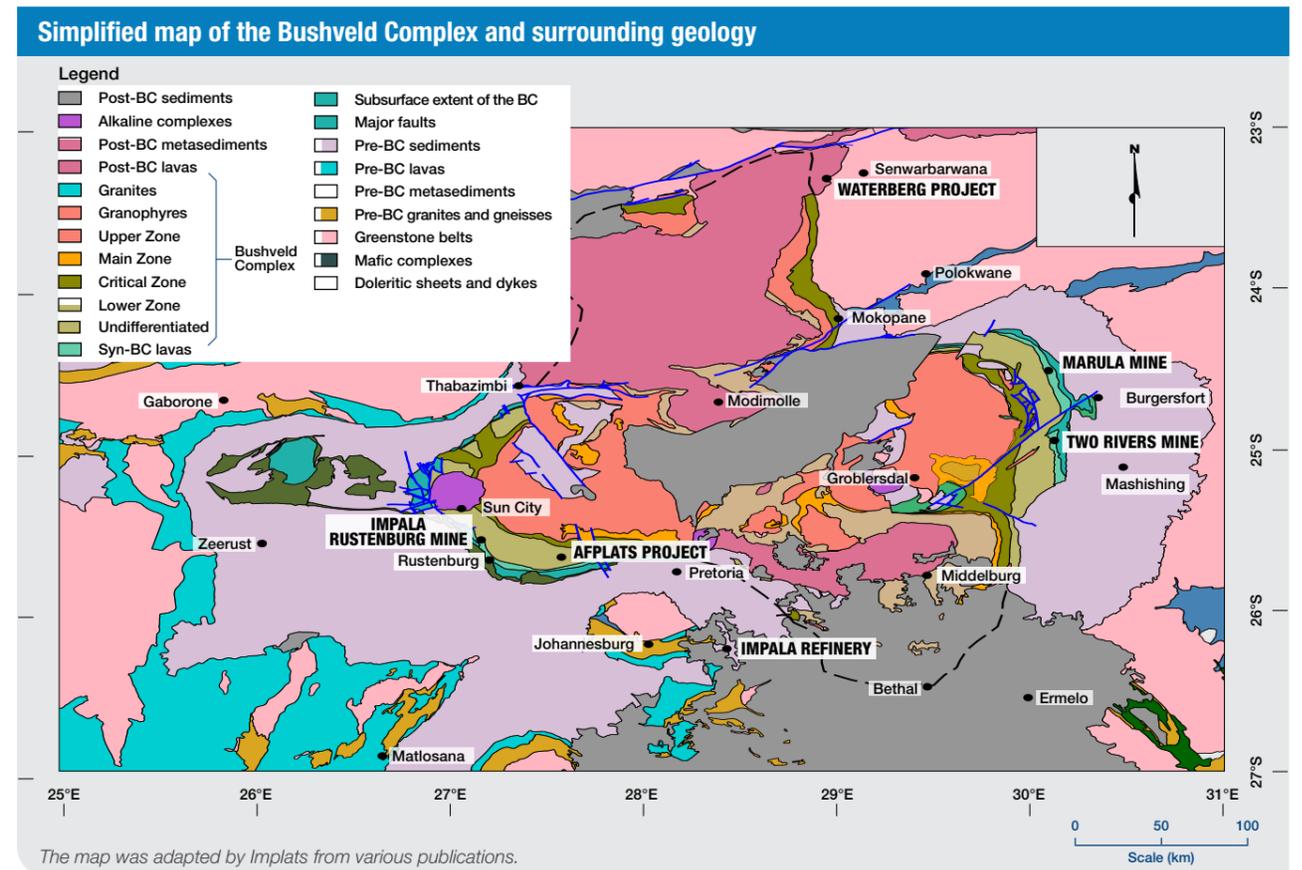
Implats' mining operations on the Bushveld Complex comprise Impala Rustenburg north of Rustenburg, RBPlat adjacent to Impala Rustenburg, Marula northwest of Burgersfort, and Two Rivers, a joint venture between Implats and ARM, situated southwest of Steelport. The Afplats Leeuwkop project is located in the western limb of the Bushveld Complex, west of Brits. Implats acquired a 15% interest in the Waterberg joint venture project in 2017, which is located in the northern limb.

The relevant operational sections in this report provide geological descriptions of the various reef types and facies. The grade distribution varies materially from area to area.

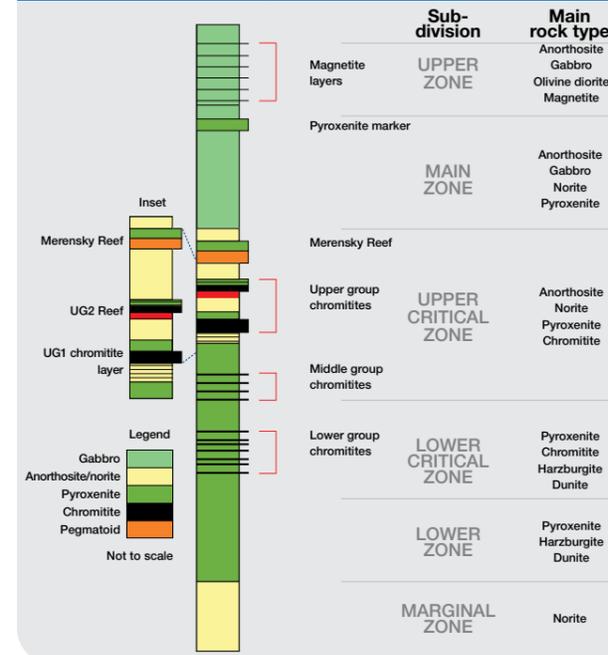
Schematic diagram of the Bushveld Complex



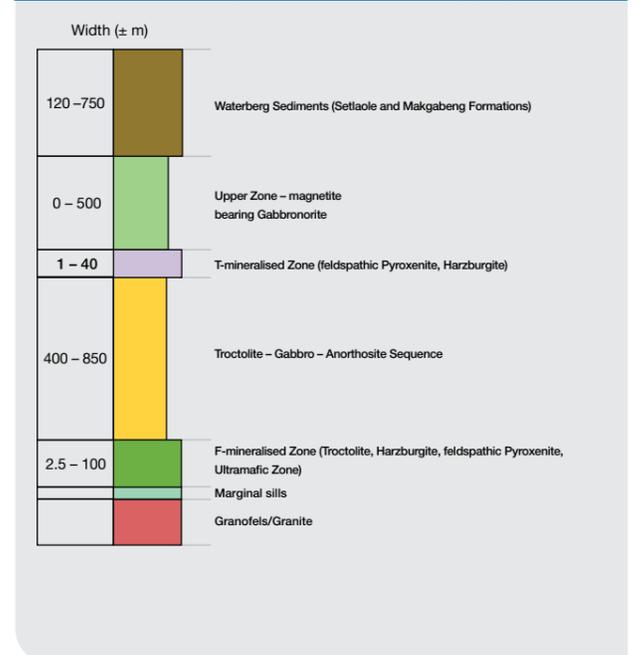
Regional geological settings (continued)



Generalised stratigraphic column of the Bushveld Complex



Generalised geological succession of the Bushveld Complex at the Waterberg project



Regional geological settings (continued)

THE GREAT DYKE

The Great Dyke is a 2.5 billion-year-old layered mafic-ultramafic body that intruded into Zimbabwe's Archaean granites and greenstone belts. It is highly elongated, slightly sinuous, 550km long, north-northeast trending with a maximum width of 12km. It bisects Zimbabwe in a north-north easterly direction. It is divided vertically into a lower ultramafic sequence, comprising cyclic repetitions of pyroxenite, harzburgite, dunite and chromitite, and an upper mafic sequence consisting mainly of norite, gabbronorite and olivine gabbro. It is U-shaped, with layers dipping and flattening towards the axis of the intrusion. Much of the mafic sequence has been removed by erosion and, at the present plane of erosion, the Great Dyke is exposed as a series of narrow, contiguous layered complexes or chambers. From north to south, these are Musengezi, Hartley (comprising the Darwendale and Sebakwe sub-chambers) and a southern chamber (comprising the Selukwe and Wedza sub-chambers) (page 27).

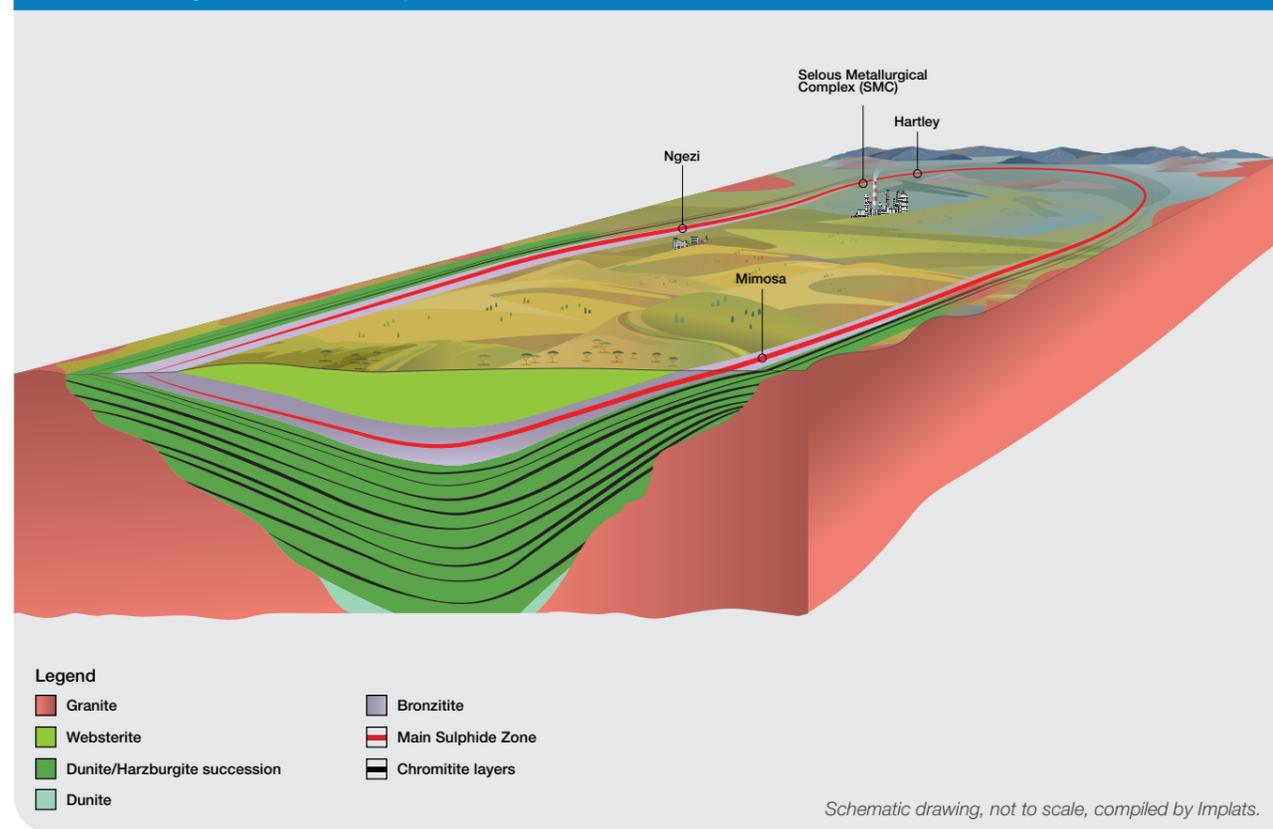
The Main Sulphide Zone (MSZ), which hosts the economically exploitable PGMs and associated base metal mineralisation, is located 10m to 50m below the ultramafic/mafic contact in the P1 pyroxenite. PGMs, gold, copper and nickel, occur in the MSZ. The relevant operational sections in this report provide descriptions

of the MSZ and the value distributions. The grade profiles vary between areas and the platinum and palladium peaks are somewhat offset. Typically, the MSZ consists of a 2m to 10m thick zone containing 2% to 8% iron-nickel-copper sulphides disseminated in pyroxenite. This nickel- and copper-rich layer base is straddled by a 1m to 5m thick zone of elevated precious metals (platinum, palladium, rhodium and gold). The base metal zone contains up to 5% sulphides, while the sulphide content of the PGM Zone is less than 0.5%. This change in sulphide content is consistently related to the metal distribution and is used as a mining marker. It can usually be located visually in the drillhole core and, with careful observation, it can also be visually identified underground. Therefore, careful monitoring, supported by channel sampling and XRF scanning, is required to guide mining.

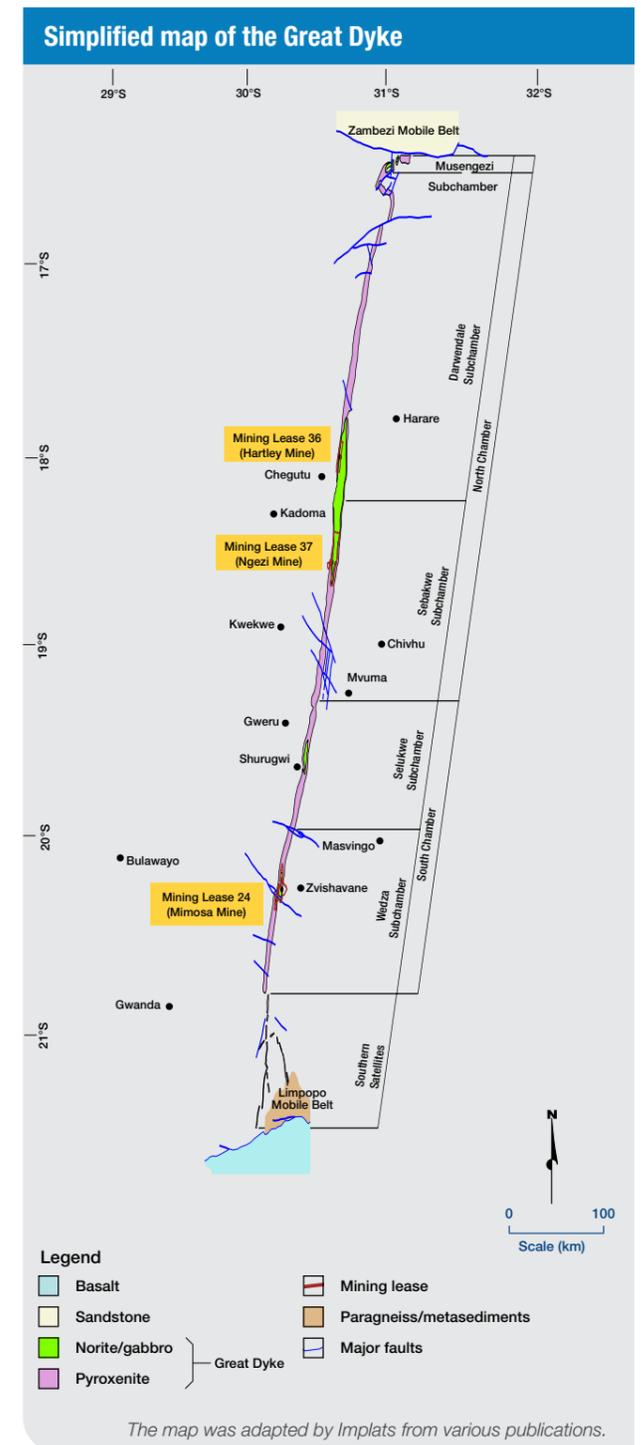
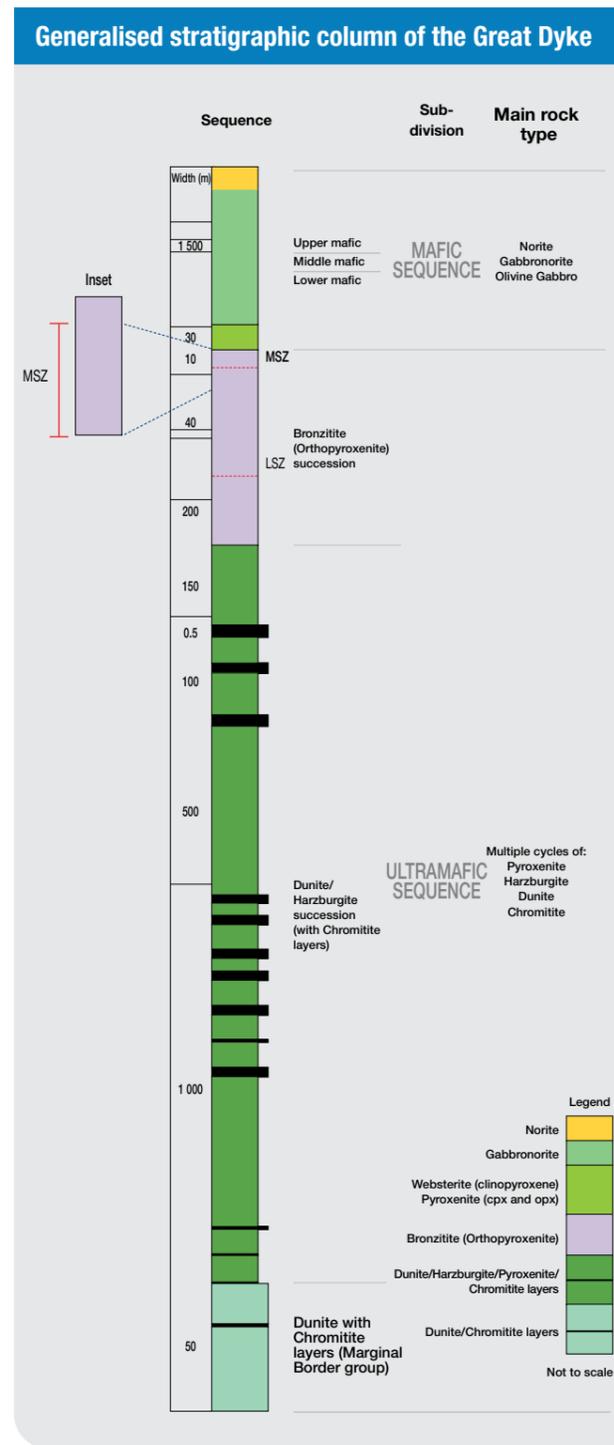
The chromitite layers present below the MSZ contain little to no PGM mineralisation and are mined by other operators for their chromium content only.

Implats' operations on the Great Dyke comprise Zimplats' Ngezi Mine southwest of Harare and the Mimosa Mine, a joint venture between Implats and Sibanye-Stillwater, situated east of Bulawayo.

Schematic diagram of the Great Dyke



Regional geological settings (continued)



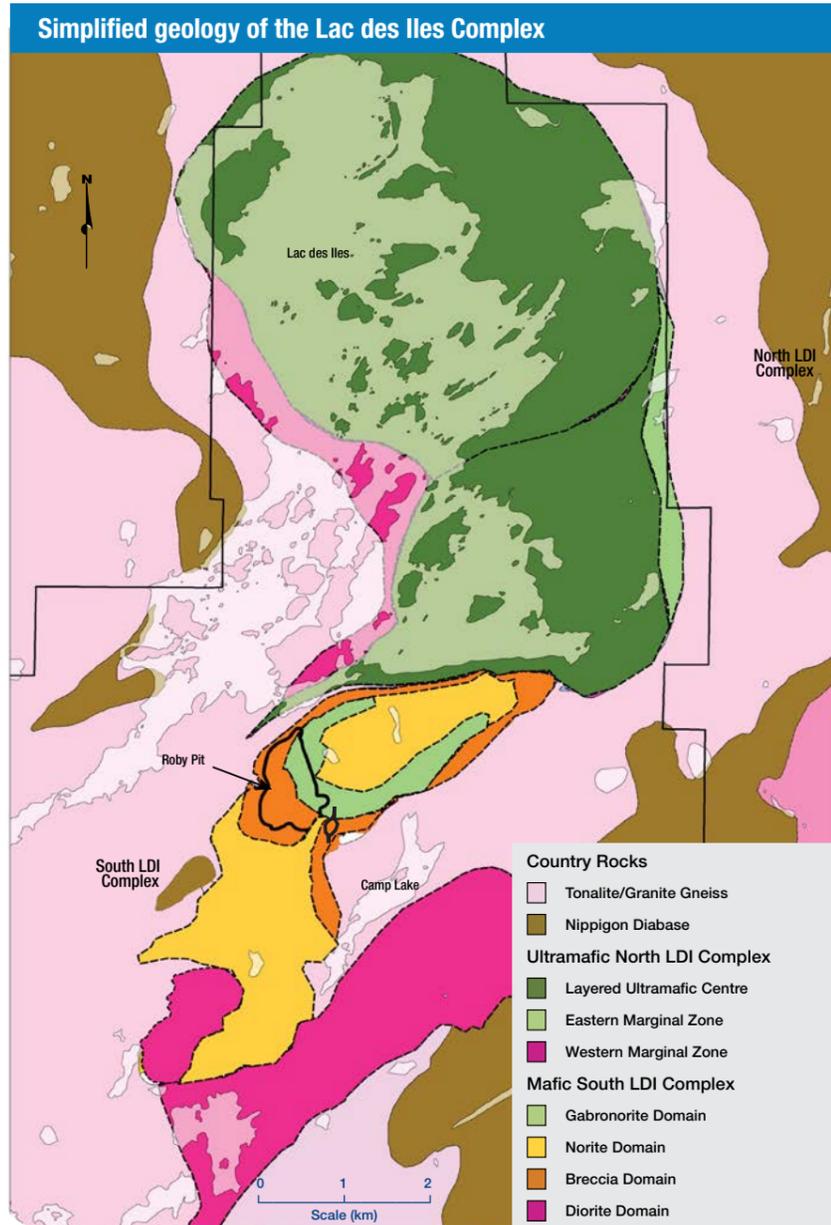
THE LAC DES ILES INTRUSIVE COMPLEX

The Lac des Iles property is underlain by mafic to ultramafic rocks of the Archean Lac des Iles Intrusive Complex (LDI-IC). The LDI-IC is the best documented of a suite of mafic to ultramafic intrusive bodies occurring within 30km of the Lac des Iles mine. The intrusions are hosted by the Central Wabigoon Subprovince of the Wabigoon Terrane in the northwestern Superior Province of the Canadian Shield. Impala Canada holds title to active mineral claims covering most of the known Lac des Iles suite intrusions.

The easternmost bodies of the Lac des Iles suite of intrusions are the LDI-IC and the Legris Lake Complex. The LDI-IC and the Legris Lake Complex appear along with northeast-trending splay structures (eg, Shelby Lake Fault) emanating from the Quetico Fault Zone. The Quetico Fault Zone is a collisional structural boundary between the Quetico Subprovince and the Wabigoon Terrane. The Lac des Iles suite intrusions were emplaced into the 3.0 to 2.9 billion-year-old granite-greenstone basement rocks designated as the Marmion Terrane, representing an older slice of magmatic arc-related crustal rocks.

The Lac des Iles mine property hosts the North Lac des Iles Complex, which mainly comprises ultramafic rocks, and the South Lac des Iles Complex, which is dominated by mafic rocks.

The South Lac des Iles Complex, which hosts the Lac des Iles mine, was emplaced into predominantly intermediate composition orthogneiss basement rocks. The emplacement age of the main block intrusion has been established as 2.6 billion years. Four major intrusive sequences (series) are now recognised in the complex. The oldest is referred to as the gabbronorite series. This was succeeded by a significant period of noritic magmatism that produced both the norite and breccia series. The altered norite is strongly foliated with aligned chlorite grains in highly strained areas, defining a pervasive schistosity. The youngest magmatism in the South Lac des Iles Complex produced the diorite series, comprising more evolved hornblende-bearing mafic to intermediate intrusive rocks with a wide range of textures and grain sizes.



The map was adapted by Implats from various publications.



Exploration

EXPLORATION SYNOPSIS

Implats’ exploration focus is limited to its current operations – the Group’s exploration strategy focuses on brownfields activities supporting ongoing mining at existing operations.

For the Bushveld Complex operations, infill drilling at a targeted 250m to 400m drillhole collar spacing is routinely provided for as part of the annual budget process, to better define geological structures, specific local complexities, ground conditions and grade variations, which informs mine planning and direct medium-term layouts. The target remains to gather information timeously to enable, direct and support the five-year Mineral Reserve development plans and minimise the impact of geological risk. Accordingly, Marula and Impala Rustenburg are tightening their surface drillhole spacing. Several brownfields feasibility opportunities require additional supporting geological information. As such, brownfields exploration plans are revisited annually and

subjected to scrutiny at various management levels to ensure optimised spend in mitigating operational risks.

Underground geotechnical core-recovering drilling activities are routinely undertaken at the different operations to detect potential hazardous geological features.

Annual Group exploration expenditure from surface and underground operations increased 46% to R543.7 million (FY2022: R370.2 million). This significantly increased expenditure was incurred to provide detailed geological information to support the Lac des Iles LoM, the brownfields projects in southern Africa and Hartley drilling at Zimplats. Exploration expenditure for the forthcoming year is projected to be R448.5 million to continue the Implats’ commitment to bolstering its confidence in both LoM I and pipeline LoM II and LoM III projects to ensuring operational sustainability.

Exploration expenditure incurred during the past year

Operations and projects	Surface drilling			Underground drilling			Geotechnical drilling		
	Total number	Length (m)	Amount (R'000)	Total number	Length (m)	Amount (R'000)	Total number	Length (m)	Amount (R'000)
Impala Rustenburg	46	28 127	73 928	762	40 376	68 246	–	–	–
Marula	14	10 882	15 123	65	4 117	4 601	–	–	–
Two Rivers	–	–	–	242	17 236	13 519	–	–	–
Zimplats ¹	160	60 295	155 836	58	5 795	8 625	18	1 620	7 834
Mimosa ¹	22	3 160	12 267	62	6 249	5 063	–	–	–
Waterberg	33	12 106	26 393	–	–	–	15	2 005	4 162
Lac des Iles ²	4	2 556	10 374	63	41 075	170 760	–	–	–
Total	279	118 926	260 920	1 252	114 848	270 814	33	3 625	11 995

¹ R18.84 per US dollar /US\$ as at 30 June 2023.
² R14.23 per Canadian dollar/C\$ as at 30 June 2023.

Brownfields exploration activities are described in more detail in the individual operations’ sections.

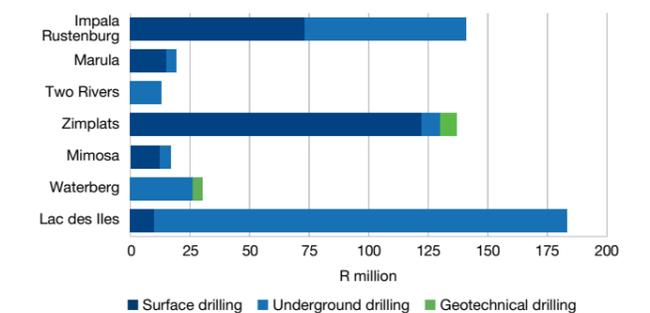
Thirty-three drillholes was drilled at the Waterberg project, mainly for geotechnical and metallurgical studies.

OFFSHORE PROJECTS

The Group has secured financial provision to conduct limited surface exploration activities at the Titan project, some 50km north of the Lac des Iles operation. Geophysical surveys will be undertaken, along with physical prospecting and in-loco mapping and sampling, as well as surface drilling. Geophysical surveys are earmarked for North Lac des Iles, where exploration activities are typically seasonally constrained. No additional surface exploration activities are envisaged for Sunday Lake at this stage, and Impala Canada, as the operator, will ensure that all leases are maintained in good standing.

Implats continues to monitor PGM exploration worldwide to maintain intelligence concerning Mineral Resource developments and exploration opportunities.

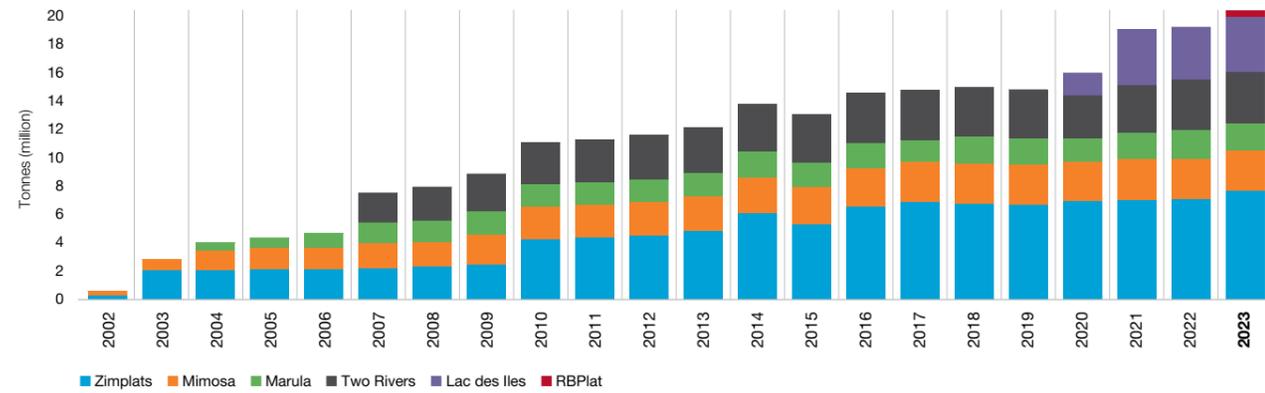
Annual exploration expenditure
as at 30 June 2023 (R million)



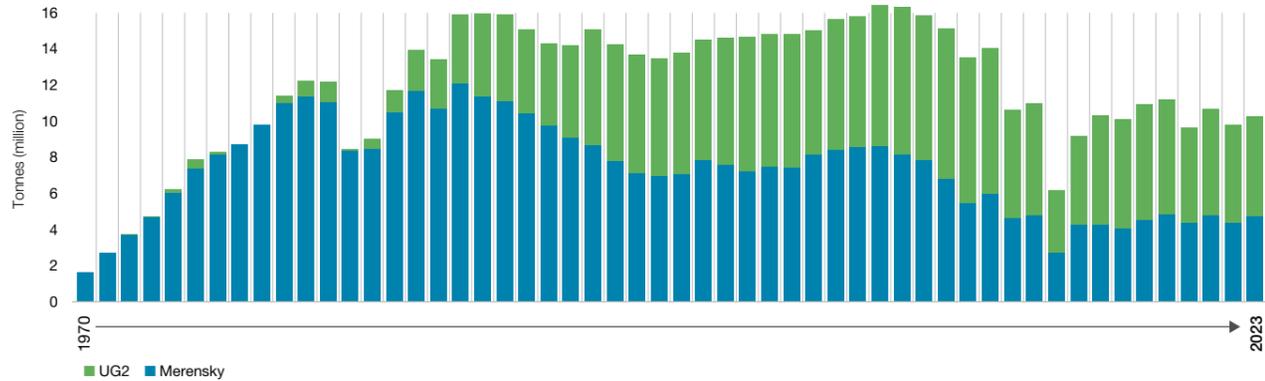
Group production

Summary statistics relating to the Implats' production are indicated in the accompanying graphs and table. Overall, gross refined ounces decreased to 2 959koz 6E from 3 087koz 6E, compared with the previous financial year.

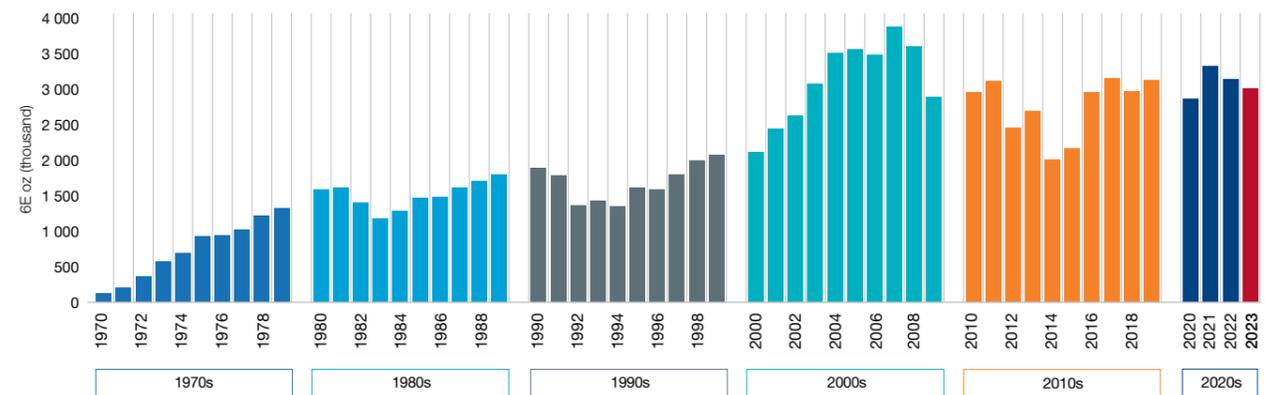
Production at Zimplats, Mimosa, Marula, Two Rivers, Lac des Iles and RBPlat operations



Historic annual production at Impala Rustenburg operation as at 30 June 2023 (million tonnes)



Gross Implats 6E production as at 30 June 2023 (thousand ounces)



Group production (continued)

	units	FY2023	FY2022	FY2021	FY2020	FY2019
Tonnes milled						
Impala Rustenburg	kt	10 248	9 801	10 686	9 635	11 211
RBPlat	kt	403	–	–	–	–
Marula	kt	1 935	1 995	1 802	1 636	1 772
Two Rivers	kt	3 558	3 458	3 283	3 016	3 405
Zimplats	kt	7 500	6 882	6 821	6 751	6 486
Mimosa	kt	2 735	2 816	2 861	2 701	2 814
Lac des Iles	kt	3 798	3 685	3 901	1 553	–
Mill head grade						
Impala Rustenburg	g/t 6E	3.88	3.86	4.05	3.91	3.99
RBPlat	g/t 6E	4.09	–	–	–	–
Marula	g/t 6E	4.39	4.53	4.37	4.70	4.40
Two Rivers	g/t 6E	3.09	3.22	3.43	3.45	3.52
Zimplats	g/t 6E	3.33	3.42	3.44	3.48	3.48
Mimosa	g/t 6E	3.77	3.82	3.87	3.85	3.83
Lac des Iles	g/t 3E	2.93	2.68	2.59	2.45	–
Production ex Impala Rustenburg Mine						
Platinum refined	koz	647.8	608.4	696.4	638.3	753.8
Palladium refined	koz	304.9	291.1	344.3	343.2	332.0
Rhodium refined	koz	80.3	78.1	96.4	100.0	86.9
Nickel refined	t	3 708	3 372	3 945	4 720	3 439
6E refined	koz	1 206.6	1 137.5	1 334.4	1 270.1	1 390.8
Production ex RBPlat Mine*						
Platinum in concentrate	koz	23.9	–	–	–	–
Palladium in concentrate	koz	10.3	–	–	–	–
Rhodium in concentrate	koz	2.5	–	–	–	–
Nickel in concentrate	t	202	–	–	–	–
6E in concentrate	koz	42.7	–	–	–	–
Production ex Marula Mine*						
Platinum in concentrate	koz	92.2	99.2	88.3	80.5	83.0
Palladium in concentrate	koz	94.9	101.5	90.5	82.6	84.7
Rhodium in concentrate	koz	18.8	20.3	18.2	16.6	17.3
Nickel in concentrate	t	284	310	297	270	270
6E in concentrate	koz	241.0	259.4	231.3	210.5	216.9
Production ex Two Rivers Mine*						
Platinum in concentrate	koz	137.8	140.3	139.2	122.4	147.2
Palladium in concentrate	koz	82.5	84.8	84.5	73.2	86.0
Rhodium in concentrate	koz	23.9	24.5	24.0	21.2	25.6
Nickel in concentrate	t	713	609	609	481	552
6E in concentrate	koz	295.4	301.9	300.2	261.0	313.4
Production ex Zimplats Mine*						
Platinum in matte	koz	282.0	266.6	266.0	266.9	269.9
Palladium in matte	koz	237.7	227.9	226.5	228.0	223.0
Rhodium in matte	koz	23.4	23.8	23.7	23.4	23.9
Nickel in matte	t	5 787	5 338	4 925	4 991	5 295
6E in matte	koz	611.2	583.5	579.0	580.2	579.6
Production ex Mimosa Mine*						
Platinum in concentrate	koz	115.1	116.3	122.8	116.6	122.1
Palladium in concentrate	koz	89.7	90.5	96.2	91.7	96.7
Rhodium in concentrate	koz	9.5	9.5	10.2	9.8	10.5
Nickel in concentrate	t	3 549	3 610	3 680	3 421	3 567
6E in concentrate	koz	245.1	246.4	261.1	247.8	260.6
Production ex Lac des Iles Mine*, ***						
Platinum in concentrate	koz	21.8	18.7	16.5	6.4	–
Palladium in concentrate	koz	250.0	212.9	227.5	84.7	–
6E in concentrate	koz	290.9	248.7	260.5	97.4	–
Gross margin						
Impala Rustenburg	%	22.3	35.8	49.0	29.5	6.9
Marula	%	38.8	51.8	63.0	45.7	10.1
Two Rivers	%	38.6	51.7	62.9	45.5	23.9
Zimplats	%	35.2	52.6	58.0	48.7	29.7
Mimosa	%	26.6	46.1	58.1	34.8	17.4
Lac des Iles	%	7.8	24.9	45.7	27.0	–
Gross Implats refined production**						
6E	koz	2 959	3 087	3 271	2 813	3 074
Platinum	koz	1 360	1 426	1 517	1 349	1 526
Palladium	koz	1 051	1 071	1 121	892	910
Rhodium	koz	169	181	193	181	206
Nickel	kt	15.0	16.5	15.4	15.4	16.0

* Numbers reflect 100% of production, not the portion attributable to Implats. RBPlat only reflects June 2023 production.

** Includes IRS production from other sources.

*** Nickel is forfeited at Lac des Iles as part of the off-take agreement with Glencore.

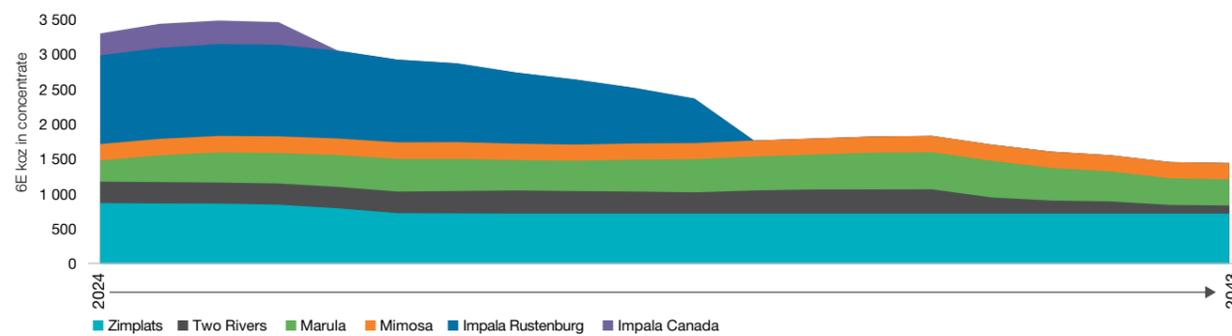
Group life-of-mine outlook

The high-level LoM (20-year) plans are depicted in the detailed sections per operation in planning LoM levels I, IA, II and III. These graphs reflect 100% of the annual production forecasts and not the portion attributable to Implats, and they include the two RBPlat royalty areas at Impala Rustenburg. The plans do not include all the 'Blue Sky' opportunities – some of this potential is explicitly excluded at this early stage. Caution should be exercised when considering the LoM plans, as these may vary if assumptions, modifying factors, exchange rates or metal prices change materially. The LoM profiles should be read in conjunction with Mineral Resource estimates to determine the long-term potential.

The graph below shows the consolidated high-level LoM I plans collated from the individual profiles per operation. The profiles represent the Mineral Reserve estimates as at 30 June 2023 and reflect the current infrastructure. All LoM I profiles were subjected to economic testing and unprofitable production was excluded and classified as LoM IA. This is referred to as tail-cutting. No Inferred Mineral Resources are included in the LoM I and Mineral Reserve estimates, other than minor incidental dilution in isolated cases, which is included at zero grade.

Implats is committed to an increased strategic thrust to evaluate LoM scenarios and options to optimise current infrastructure and Mineral Resources. This relates to the Group's brownfields opportunities, but does not exclude mergers or new acquisitions.

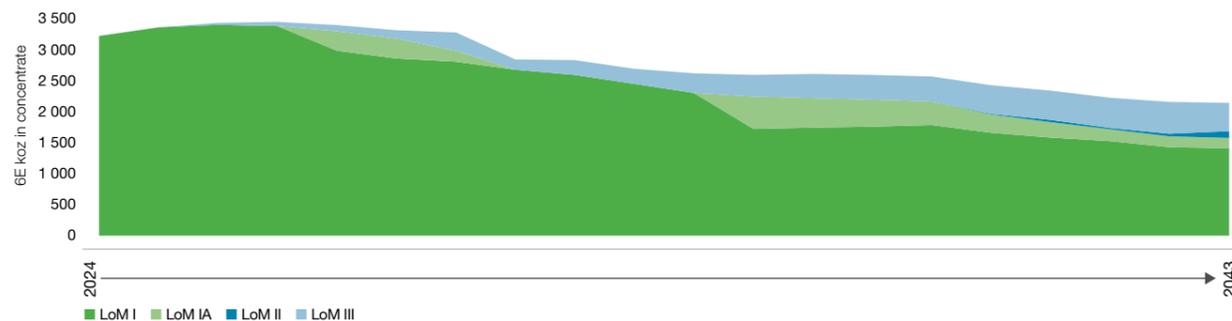
Implats estimated 20-year 6E LoM ounce profile (excluding RBPlat)
as at 30 June 2023



The pictorial 20-year profile in this chapter is shown below as a combination of level I with selected level IA, II and III LoM profiles. Only LoM I is based on Mineral Reserves, while LoM II and III have not been converted to Mineral Reserves. Therefore, this combined graph shows a similar low profile from 2036 onwards compared to the profile published on 30 June 2022.

It is clear from a combined Group perspective that a proportion of the 20-year plan is still at levels II and III and would require an improved financial outlook, further studies, funding and capital approval by the board. Feasibility studies are continuing at Impala Rustenburg, Two Rivers, Zimplats, Marula, Lac des Iles, Mimosa and the Waterberg project to evaluate future opportunities.

Implats estimated 20-year 6E LoM ounce profile (excluding RBPlat)
as at 30 June 2023



Valuation and sensitivities

Implats uses a discounted cash flow model that embodies economic, financial and production estimates in the valuation of mineral assets. Forecasts of key inputs are:

- Relative rates of inflation in South Africa, Zimbabwe, Canada and the United States
- Rand exchange rates – R/C\$ and R/US\$
- Metal prices
- Capital expenditure
- Operating expenditure
- Production profile
- Metal recoveries.

The outputs are a net present value, an internal rate of return, annual free cash flow, project payback period and funding requirements. Implats' marketing department regularly updates metal price and exchange rate forecasts. As at 30 June 2023, the Group used a real long-term forecast of R27 072 (US\$1 732) for the 6E basket revenue per 6E ounce sold. Specific real long-term forecasts in today's money include:

	Units	2023	2022
Platinum	US\$/oz	1 359	1 159
Palladium	US\$/oz	1 223	1 281
Rhodium	US\$/oz	6 667	6 292
Ruthenium	US\$/oz	408	298
Iridium	US\$/oz	4 302	3 138
Gold	US\$/oz	1 571	1 479
Nickel	US\$/t	19 145	17 442
Copper	US\$/t	8 163	7 551
Exchange rate	R/US\$	15.63	14.79

The Group's spot basket price as at 30 June 2023 was calculated at R25 655 (US\$1 362), and the equivalent real long-term market consensus basket price is R27 112 (US\$1 679) per 6E ounce. The long-term market consensus estimates for metal prices are the mean of between 11 and 17 broker companies' real term metal price estimates over the next three to five years, depending on the metal concerned. Long-term basket price forecasts per operation vary according to the metal ratios.

The Group conducts rigorous profitability tests to assess the viability of the Mineral Reserves. References to these are listed in the sections per operation, and highlight the spot price scenarios. A summary graph showing the price sensitivity of the total Group Mineral Reserves is depicted alongside.

It is important to note that the basket price is materially impacted by the characteristics of the orebody, specifically the individual 6E metal proportions. These ratios vary significantly from area to area and from orebody to orebody, as illustrated in the operational sections of this report.

Economic profitability tests were conducted at each operation. This process entails determining when an operation is no longer profitable and no longer contributes to fixed overheads. Each operation's processing, services and other costs are split between their relevant fixed and variable portions by virtue of a declining production profile. Once an operation is no longer profitable (or contributing to fixed overheads), it is removed from the LoM I profile (and Mineral Reserves). The fixed costs apportioned to the operation are then reallocated to the remaining operations.

A Mineral Resource, as defined by SAMREC Code (2016), is 'a concentration or occurrence of solid material of economic interest in or on the earth's crust in such form, grade, quality and quantity that there are RPEEE'. The interpretation of such 'eventual economics' varies significantly. However, it implies some form of high-level view regarding either 'yard-stick comparisons' or high-level scenario models.

On this basis, Implats excluded significant mineralisation due to its depth below surface at Impala Rustenburg and Afplats UG2 (2 000m) and Two Rivers (1 000m), considering geology and potential infrastructure. The Afplats Merensky Mineral Resources are excluded on the basis of no RPEEE. In total, some 100.0Moz 6E was excluded from current statements.

Beyond current infrastructure investment, the deeper-level Mineral Resources in the Western Bushveld require a real basket price of R35 415 to R39 000 per 6E ounce (US\$2 289). In the Eastern Bushveld the investment into Mineral Resources beyond current infrastructure require a real basket price of R25 000 to R28 000 per 6E ounce (US\$1 665).

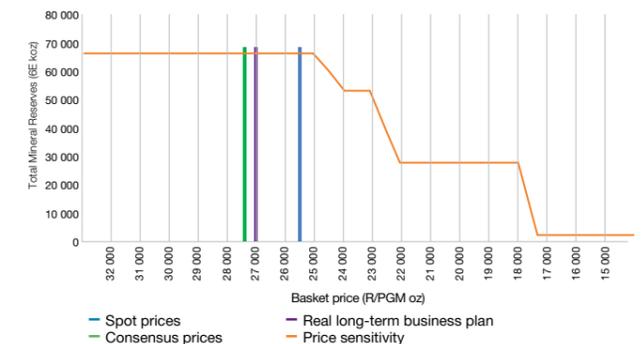
This suggests that future investments in the deeper-level Mineral Resources of the Western Bushveld might at best be marginal under the current long-term price assumptions.

The Zimbabwean Mineral Resources are reasonably robust in terms of RPEEE. Mineral Resources beyond current infrastructure investment will require a real long-term basket price in the order of R25 000 to R28 000 per 6E ounce (US\$1 703).

It should be acknowledged that the commodity market remains fluid.

Further details can be seen in the Marketing section of the Implats 2023 Integrated Annual Report (www.implats.co.za).

Implats Mineral Reserves versus real basket price (excluding RBPlat)
as at 30 June 2023



Impala Rustenburg

South Africa

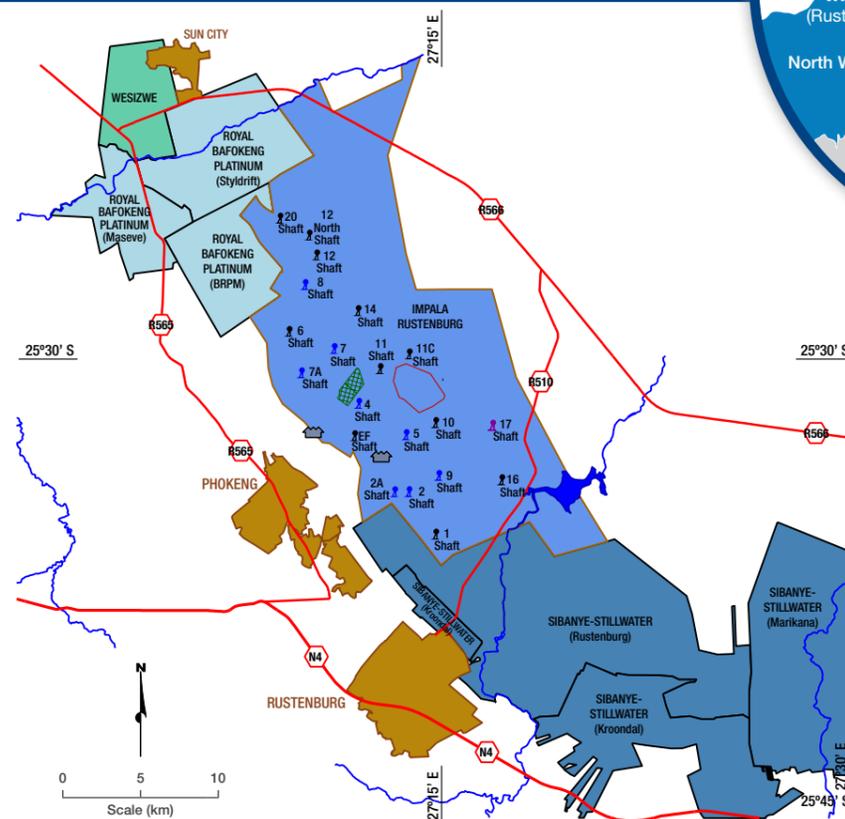
Impala Rustenburg was established on 29 April 1968 as a subsidiary of Union Corporation. Mining production started on 22 July 1969.

Mining right
29 773ha

Implats' interest
96% managed



Impala Rustenburg regional locality map



- Legend**
- Town
 - Mining right boundary
 - Public road
 - River
 - Dormant tailings storage facility – TSF1 and TSF2
 - Current tailings storage facility – TSF3 and TSF4
 - Dam
 - Operational shafts
 - Care and maintenance shaft
 - Mined-out shafts
 - Processing plant

LOCATION

Impala Rustenburg is located 25km northwest of the city of Rustenburg in the North West province, and 140km west of South Africa's administrative capital city, Pretoria. The Rustenburg region is known as the 'platinum belt', which produces vast proportions of global platinum supply. Royal Bafokeng Platinum (RBPlat) is located adjacent to Impala Rustenburg's northern boundary, while Sibanye-Stillwater has mining operations to the immediate south of Impala Rustenburg.

BRIEF HISTORY

In 1965, Union Corporation purchased a company called Impala Prospecting Company. The first vertical shaft (62m) was developed in 1967 to obtain a bulk Merensky Reef sample. Impala Platinum Limited was created on 26 April 1968 as a subsidiary of Union Corporation. Production started on 22 July 1969. Initially, only the Merensky Reef was mined at Impala Rustenburg. UG2 Reef mining started in the early 1980s when the technology was developed to smelt

Impala Rustenburg (continued)

ore containing chromitite at a higher temperature. By the early 1990s, 13 vertical shafts were in operation and Impala Rustenburg produced some one million platinum ounces per annum. Sinking of 16 and 20 shafts started in the mid-2000s. Sinking operations at 17 Shaft started in 2008, but the shaft was subsequently placed on care and maintenance.

GEOLOGICAL SETTING

Impala Rustenburg explores and mines the Merensky and UG2 Reefs, which are separated by a sequence of primarily anorthositic and noritic layered units, ranging from 45m in the northern part of the mining right area and thickening to 125m in the south.

The Merensky Reef is generally composed of an upper feldspathic pyroxenite, overlying a thin basal chromitite stringer, followed by an anorthosite to norite footwall. Locally, this is termed a 'pyroxenite reef'. In some areas a pegmatoidal pyroxenite and a second chromitite stringer may be developed between the feldspathic pyroxenite and the footwall units. Locally this pegmatoidal pyroxenite can exceed 2m in thickness. This is termed a 'pegmatoid reef'.

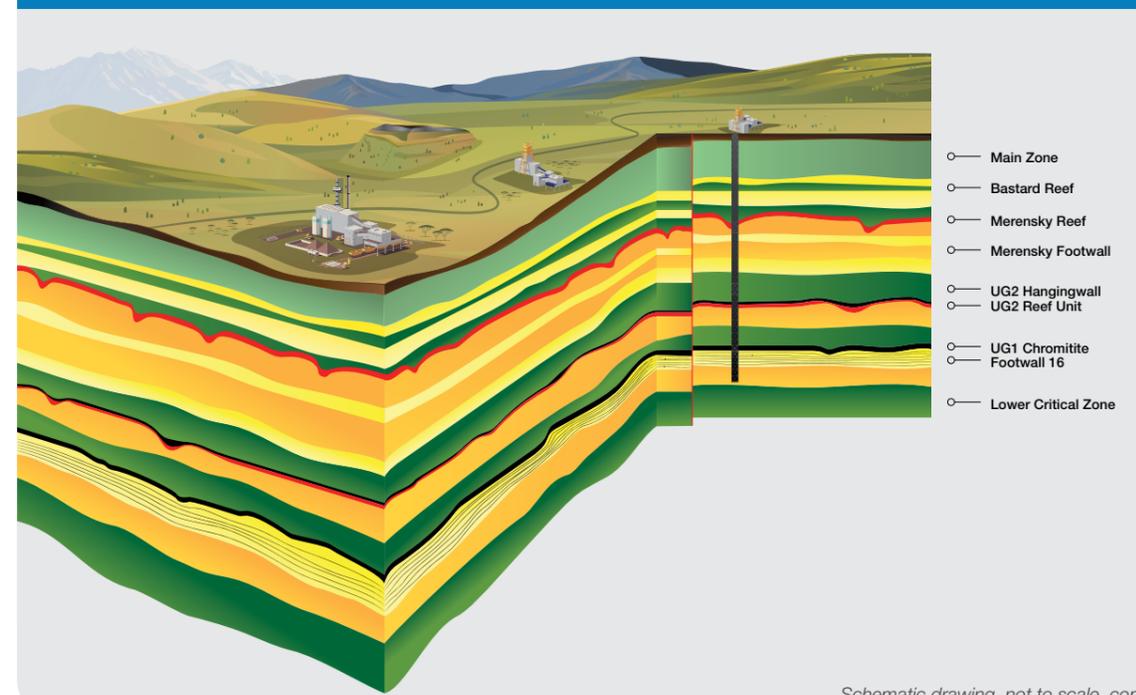
The UG2 Reef is defined as the main chromitite layer, with most PGM and base metal mineralisation confined to this unit, with a poorly mineralised pegmatoidal pyroxenite footwall. The main chromitite layer's hangingwall is a feldspathic pyroxenite containing up to four thin and poorly mineralised chromitite layers. The vertical grade distribution is depicted in the accompanying graphs, showing peak values at reef contacts associated with chromitite. Examples of typical vertical-grade profiles at Impala Rustenburg are illustrated on page 37. The average 6E ratios show the differences between the Merensky and UG2 Reefs, particularly the higher platinum to palladium ratio in the Merensky Reef and the relatively high proportion of rhodium in the UG2 Reef.

Both mineralised horizons dip gently away from the sub-outcrop in a north-easterly direction at 10° to 12°. The reefs may be disrupted by minor and major faults, lamprophyre, syenite and dolerite dykes, late-stage ultramafic replacement pegmatoid bodies and potholes. The potholes are generally circular and represent 'erosion' of, or slumping into the footwall units. They vary from a few metres to tens of metres across and up to tens of metres in depth. These features are accounted for in the Mineral Resource and Mineral Reserve estimates as geological losses, contributing to dilution or absence of the mineralised horizons.

EXPLORATION AND STUDIES

Exploration activities at Impala Rustenburg have typically comprised geological mapping (surface and underground), geophysical surveys (aeromagnetics, 3D vibroseis) and core-recovering drilling (surface and underground).

Generalised schematic section of the stratigraphic sequence at Impala Rustenburg

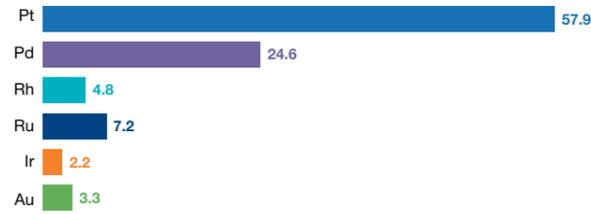


Schematic drawing, not to scale, compiled by Implats.

Impala Rustenburg (continued)

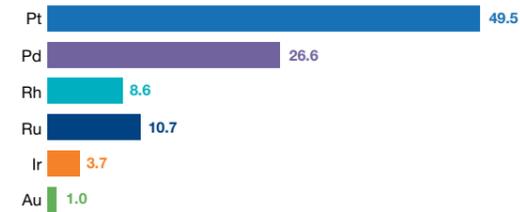
Impala Rustenburg Merensky Reef 6E ratio

as at 30 June 2023 (%)



Impala Rustenburg UG2 Reef 6E ratio

as at 30 June 2023 (%)



Merensky and UG2 Reef 6E ratios derived from the estimated five-year historic mill feed control samples.

Surface drilling is a combination of infill work, to supplement a broader grid completed during the original feasibility studies, and work to support ongoing LoM extension studies. This work assists with detailed geological structural interpretations. Underground geotechnical core-recovering drilling is routinely undertaken at Impala Rustenburg to detect hazardous geological features and guide mining operations. Underground drilling is often used to keep the footwall drives at the ideal elevation and resolve geological structural complexities. Summary statistics about the work conducted in the past year are reported in the exploration overview section of this report.

During the past year, exploration at the Impala Rustenburg mining area focused on providing information for ongoing brownfields feasibility studies – infill drilling from the surface at 11, 12, 14, 16 and 20 shafts, where 46 drillholes were completed. In addition, some 762 underground drillholes were completed across the various shafts, primarily aimed at guiding the spatial placement of development at the ideal elevation, while also providing geotechnical information. The result of this work yielded critical geological information required for short- and medium-term planning. Other studies are in progress to assess the potential to exploit additional Merensky Reef areas at 14 Shaft and also possible extensions at 10 Shaft and additional UG2 Reef Mineral Resources at 12 and 20 shafts.

GENERAL INFRASTRUCTURE

A well-established operation, Impala Rustenburg's infrastructure includes tarred roads, shaft areas, buildings, offices, railway lines, powerlines, pipelines, concentrators, a smelter, a chromite recovery plant, and sewage, rock and tailings storage facilities. The size of the servitude area that constitutes the infrastructure, roads, rails and dumps, is 46.23km². A 92km electrified rail network connects shafts to two concentrating complexes.

Electricity is supplied to Impala Rustenburg operations by Eskom, primarily from its Ararat Main Transmission sub-station (MTS), which has a total installed capacity of 945MVA. There are eight main intake points at Impala Rustenburg, all of which have adequate redundancy. An alternate source of electricity is the Marang Main Transition substation, connected to 16 Shaft, to provide electricity during emergencies.

Rand Water supplies water to the city of Rustenburg and Impala Rustenburg from the Vaal River system (Vaal Dam) and the Magalies Water system. The total allocation is 42MI per day, 2MI of which is allocated to the Platinum Village. In addition, Impala Rustenburg has a contract to receive 10MI treated effluent (greywater) per day from the Rustenburg municipal water care works for the two processing plants. Impala Rustenburg's three water care works supply about 3MI to 5MI of treated effluent per day to the Mineral Processes operations.

MINERAL RESOURCE ESTIMATION AND CLASSIFICATION

The Mineral Resources for the Merensky Reef are estimated at a minimum mining width and may include mineralisation below the selected cut-off grade. The UG2 Reef Mineral Resources have been estimated using a minimum mining cut of 95cm. The Mineral Resource estimation method is ordinary kriging. The evaluation is conducted using on-reef development sampling and drillhole samples to establish a Mineral Resource estimate for short- and long-term planning. Grade block models are developed using Datamine software.

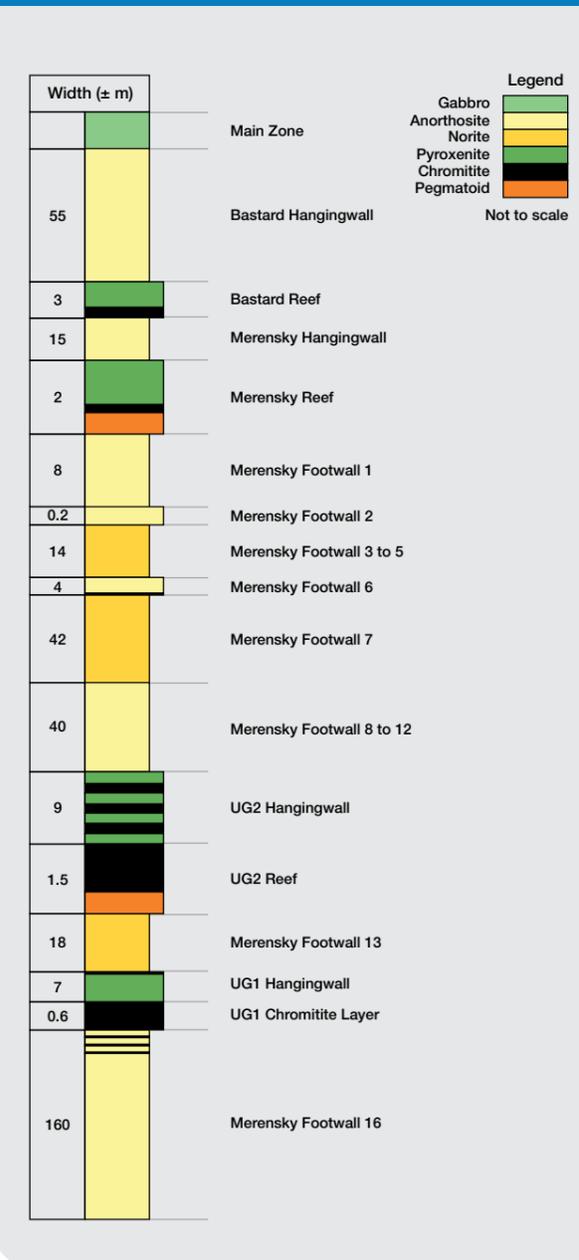
The Mineral Resource classification is based on the Group's standard practice (see page 14). In the case of Impala Rustenburg, classification is primarily informed by the confidence in the geological continuity and structural interpretation, drillhole and underground reef intersection populations, as well the geostatistical confidence.

Mineral Resources in the dormant tailings storage facilities (TSF1 and TSF2) are reported separately. Reprocessing of the facilities is ongoing.

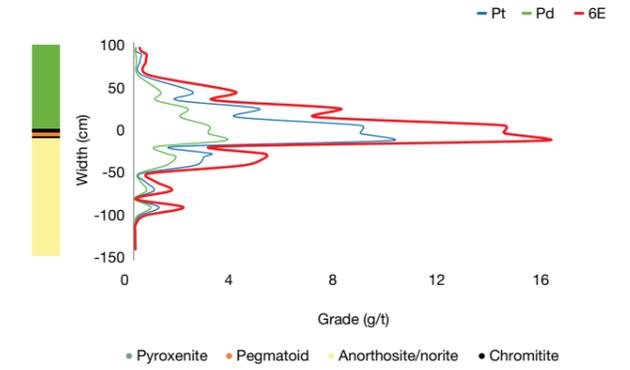
Mineral Resource estimates are based on mining faces as at 31 December 2022. The Mineral Resource estimates have been non-spatially depleted per shaft and reef horizon for six months until 30 June 2023.

Impala Rustenburg (continued)

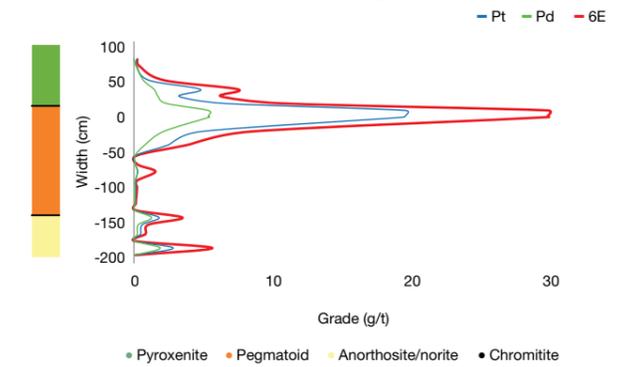
Generalised geological succession of the upper portion of the Critical Zone at Impala Rustenburg



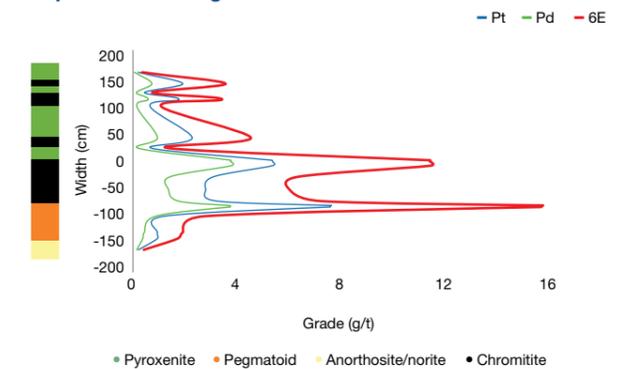
Impala Rustenburg – Merensky Pyroxenite Reef



Impala Rustenburg – Merensky Pegmatoid Reef



Impala Rustenburg – UG2 Reef



Impala Rustenburg Mineral Resource estimate (inclusive reporting)

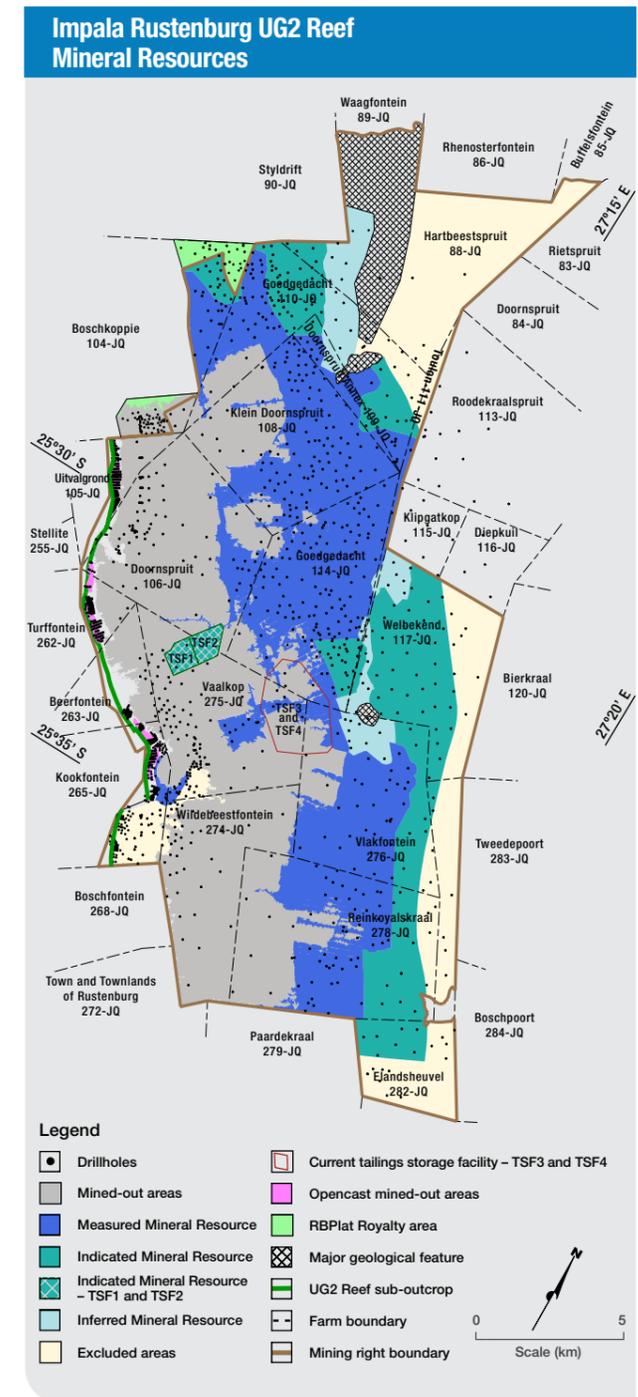
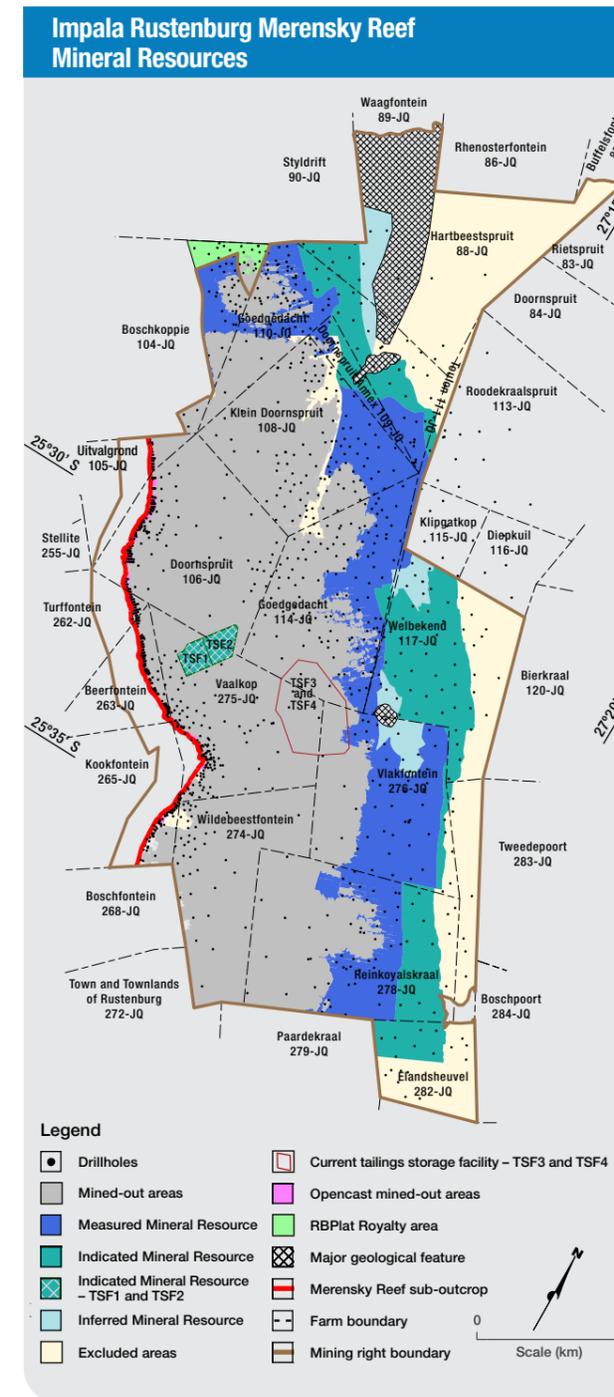
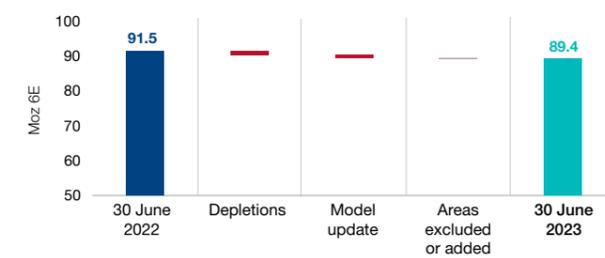
As at 30 June 2023															
Orebody		Merensky Reef				UG2 Reef				Tailing Storage Facility					
Category	Units	Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	Total	Measured	Indicated	Inferred	Total	Total
Tonnes	Mt	102.3	66.4	12.4	181.1	137.9	70.3	12.4	220.7	401.8	–	49.1	–	49.1	450.9
Width	cm	118	104	111	–	95	95	95	–	–	–	–	–	–	–
4E grade	g/t	6.53	6.31	6.47	6.44	5.72	5.58	5.24	5.65	6.01	–	0.67	–	0.67	5.43
6E grade	g/t	7.21	6.96	7.14	7.11	6.67	6.51	6.12	6.59	6.83	–	0.76	–	0.76	6.17
Ni	%	0.16	0.17	0.15	0.16	0.04	0.04	0.04	0.04	0.09	–	0.02	–	0.02	0.09
Cu	%	0.09	0.09	0.08	0.09	0.01	0.01	0.01	0.01	0.04	–	0.01	–	0.01	0.04
4E oz	Moz	21.5	13.5	2.6	37.5	25.3	12.6	2.1	40.1	77.6	–	1.1	–	1.1	78.7
6E oz	Moz	23.7	14.9	2.8	41.4	29.6	14.7	2.4	46.8	88.2	–	1.2	–	1.2	89.4
Pt oz	Moz	13.7	8.6	1.6	24.0	14.6	7.3	1.2	23.1	47.1	–	0.6	–	0.6	47.8
Pd oz	Moz	5.8	3.7	0.7	10.2	7.9	3.9	0.7	12.4	22.6	–	0.3	–	0.3	22.9

As at 30 June 2022															
Orebody		Merensky Reef				UG2 Reef				Tailing Storage Facility					
Category	Units	Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	Total	Measured	Indicated	Inferred	Total	Total
Tonnes	Mt	110.7	65.4	11.5	187.5	149.1	63.6	12.4	225.1	412.6	–	51.8	–	51.8	464.4
Width	cm	122	104	103	–	95	95	95	–	–	–	–	–	–	–
4E grade	g/t	6.21	6.38	6.98	6.31	5.62	5.57	5.47	5.60	5.92	–	0.67	–	0.67	5.34
6E grade	g/t	6.90	7.09	7.76	7.02	6.64	6.59	6.47	6.62	6.80	–	0.75	–	0.75	6.13
Ni	%	0.16	0.16	0.16	0.16	0.04	0.04	0.04	0.04	0.10	–	0.02	–	0.02	0.09
Cu	%	0.09	0.09	0.09	0.09	0.01	0.01	0.01	0.01	0.04	–	0.01	–	0.01	0.04
4E oz	Moz	22.1	13.4	2.6	38.1	26.9	11.4	2.2	40.5	78.6	–	1.1	–	1.1	79.7
6E oz	Moz	24.6	14.9	2.9	42.3	31.8	13.5	2.6	47.9	90.2	–	1.3	–	1.3	91.5
Pt oz	Moz	14.0	8.5	1.6	24.2	15.5	6.6	1.3	23.3	47.5	–	0.7	–	0.7	48.2
Pd oz	Moz	6.1	3.7	0.7	10.5	8.4	3.6	0.7	12.7	23.1	–	0.3	–	0.3	23.4

MINERAL RESOURCE RECONCILIATION

The year-on-year reconciliation of both the Impala Rustenburg Merensky and UG2 Reef 6E Mineral Resource estimates reduced marginally, based on depletion, updates to the geological and geostatistical models.

Total Impala Rustenburg 6E Mineral Resources
as at 30 June 2023 (variance Moz 6E)



MINING METHODS

Both the Merensky and UG2 Reefs are mined across the Impala Rustenburg operations. Stopping at the operations is predominantly carried out through conventional double-sided breast mining following best-practice principles. Access haulages are developed in opposite directions from cross-cuts, following the two reef horizons on strike in the reef footwall, and are defined as half levels. Footwall drives are developed approximately 18m to 30m below the reef horizon, with on-reef raise/winze connections between 180m and 250m apart. Panel face lengths vary from 15m to 28m for Merensky and UG2 Reefs, with panels typically separated by 6m x 3m grid pillars with 2m ventilation holes. Stopping widths are approximately 1.3m and 1.1m for conventional Merensky and UG2 Reefs, respectively, depending on the width of the economic reef horizon. In addition, bord and pillar mining (trackless) occurs in selected Merensky Reef areas at 14 Decline and 12 North Decline. The average stopping width of the bord and pillar panels is about 1.9m.

The hydro-mining activities at TSF1 and TSF2 use high-pressure water directed in a concentrated beam towards the surface of the dam, gradually undercutting high walls within the trench to ensure loosened soils are properly mixed with the water. This forms a high load stream of concentrated solids slurry, which is gravity fed via a trench to a collection point.

MINING PLANNING PROCESS

Mine design and scheduling of operational shafts are undertaken using Studio UG software and geological models were updated using Datamine software. The planning process commences with a five-year development schedule. The stopping schedule is done monthly per crew for the first two years, which is then reduced to annually thereafter. This is followed by the LoM plan to the extent of the mining right area.

MINERAL RESERVE ESTIMATION AND CLASSIFICATION

The conversion and classification of Mineral Reserves at Impala Rustenburg are informed by:

- Feasible mine plan and project studies, board approval and available funding
- Economic testing at given market conditions (price deck)
- Measured Mineral Resources are converted to Proved and Probable Mineral Reserves. In contrast, Indicated Mineral Resources are only converted to Probable Mineral Reserves, subject to confidence and economic viability
- Proved Mineral Reserves are those areas where the main development has been completed
- The 2023 Mine Plan was based on the survey faces of December 2022 with a spatial mine design and schedule forecast of six months until 30 June 2023
- The Mineral Reserves in the dormant tailings storage facilities (TSF1 and TSF2) are reported separately.

MODIFYING FACTORS

The table below summarises the significant modifying factors impacting on the Mineral Resource and Mineral Reserve estimates (see pages 15, 33, 38, 41 and 42 for further details).

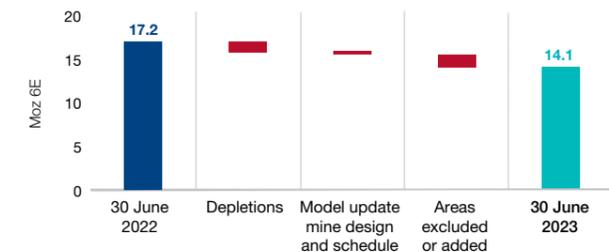
Mineral Resource Key assumptions	Merensky Reef	UG2 Reef
Geological losses	25 – 35%	37 – 47%
Area	55 million ca	64 million ca
Average resource cut	112cm	95cm

Mineral Reserve Modifying factors	Merensky Reef	UG2 Reef
Dilution	9 – 12%	9 – 12%
Pillars	8 – 10%	8 – 10%
Planning factor	90 – 92%	88 – 90%
Relative density	2.9 – 3.2	3.1 – 4.0
Average stopping width	139cm	115cm
Concentrator recoveries	88 – 89%	79 – 82%

MINERAL RESERVE RECONCILIATION

Depletions, tail-cutting and model updates impacted the year-on-year reconciliation of the Impala Rustenburg Merensky and UG2 Reef 6E Mineral Reserves.

Total Impala Rustenburg 6E Mineral Reserves
as at 30 June 2023 (variance Moz 6E)

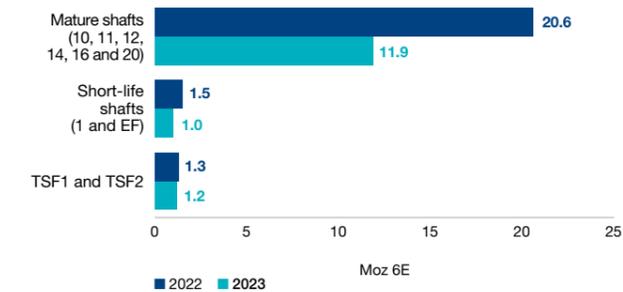


Impala Rustenburg Mineral Reserve estimate

As at 30 June 2023												
Orebody		Merensky Reef			UG2 Reef			Total	Tailings Storage Facility			Total
Category	Units	Proved	Probable	Total	Proved	Probable	Total		Proved	Probable	Total	
Tonnes	Mt	12.8	29.9	42.7	13.9	44.7	58.6	101.3	–	49.1	49.1	150.5
Width	cm	140	139	–	115	114	–	–	–	–	–	–
4E grade	g/t	3.62	3.52	3.55	3.77	3.30	3.41	3.47	–	0.67	0.67	2.56
6E grade	g/t	3.99	3.89	3.92	4.40	3.85	3.98	3.95	–	0.76	0.76	2.91
4E oz	Moz	1.5	3.4	4.9	1.7	4.7	6.4	11.3	–	1.1	1.1	12.4
6E oz	Moz	1.6	3.7	5.4	2.0	5.5	7.5	12.9	–	1.2	1.2	14.1
Pt oz	Moz	0.9	2.2	3.1	1.0	2.7	3.7	6.8	–	0.6	0.6	7.5
Pd oz	Moz	0.4	0.9	1.3	0.5	1.5	2.0	3.3	–	0.3	0.3	3.6

As at 30 June 2022												
Orebody		Merensky Reef			UG2 Reef			Total	Tailings Storage Facility			Total
Category	Units	Proved	Probable	Total	Proved	Probable	Total		Proved	Probable	Total	
Tonnes	Mt	11.3	40.3	51.6	12.8	53.2	66.0	117.5	–	51.8	51.8	169.3
Width	cm	136	137	–	115	114	–	–	–	–	–	–
4E grade	g/t	3.67	3.78	3.75	3.68	3.57	3.59	3.66	–	0.67	0.67	2.75
6E grade	g/t	4.08	4.20	4.17	4.36	4.22	4.25	4.22	–	0.75	0.75	3.16
4E oz	Moz	1.3	4.9	6.2	1.5	6.1	7.6	13.8	–	1.1	1.1	14.9
6E oz	Moz	1.5	5.4	6.9	1.8	7.2	9.0	15.9	–	1.3	1.3	17.2
Pt oz	Moz	0.8	3.1	4.0	0.9	3.5	4.4	8.3	–	0.7	0.7	9.0
Pd oz	Moz	0.4	1.3	1.7	0.5	1.9	2.4	4.1	–	0.3	0.3	4.4

Impala Rustenburg Mineral Reserve distribution
as at 30 June 2023 (Moz 6E)



PROCESSING

Mineral Processes receives ore from the shafts, which is allocated to either the UG2 Plant for the higher chromium grade material or the Central Concentrator for Merensky ore. Between 89% and 91% of the PGMs from the Merensky ore are recovered at mass pulls ranging from 5% to 7%, using 10 primary mills, and feeding two, nine-stage, tank cell flotation banks. Approximately 79% to 81% of the PGMs are recovered from the UG2 ore at a mass pull of 2% to 3%. The PGM

recovery from UG2 ore is performed using a more complex circuit configuration to reduce chromium reporting to the concentrate stream. The MF2 Plant, also situated at the Central Concentrator, operates three primary mills that can accommodate any Merensky ore spillover and the old tailings from TSF1 and TSF2. This allows for flexibility in the ore split received from the mining operations, without significantly impacting the recovery of valuable material.

Tailings from both concentrators are further processed at the Tailings Scavenging Plant to improve overall recovery. The UG2 Plant tailings are also treated at two chromite recovery plants.

The smelter operation treats the concentrate from the Central Concentrator and UG2 plants as well as third-party material. The concentrate is dried to reduce moisture content and then treated through one of three electric arc furnaces to produce a copper, nickel, iron sulphide-rich molten matte at a mass pull of 8% to 10%. The remaining 90% produces a low-grade furnace slag. The furnace matte is then treated in the converter operation. Granulated converter matte is transported to the refinery operations. The refineries, comprising a base metal refinery and a precious metal refinery, are located in Springs, east of Johannesburg. Both furnace and converter slag are retreated at the Springs Slag Plant using a flotation process to enhance the recovery of valuable metals.

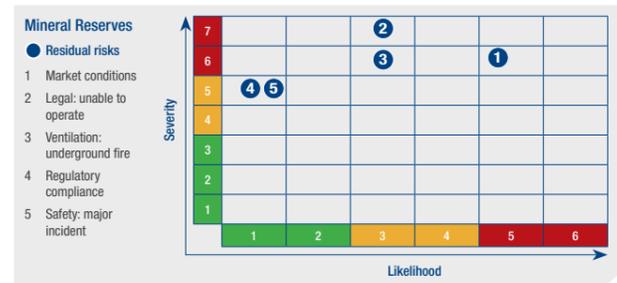
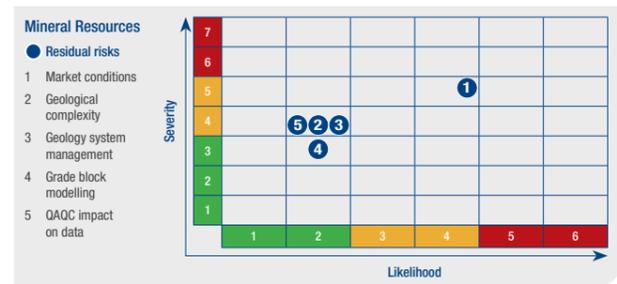
RISK ASSESSMENT

The residual risk matrices for the Impala Rustenburg Mineral Resources and Mineral Reserves are illustrated below, highlighting the respective top five residual risks.

The top residual risks identified for the Impala Rustenburg Mineral Resources are (1) market conditions: basket metal price sensitivity; (2) geology: structural complexity; (3) geology: systems management; (4) grade: interpretation of grade in grade block model; and (5) grade: QAQC impact on data.

The top residual Impala Rustenburg Mineral Reserve risk are (1) market conditions: basket metal price sensitivity; (2) legal: unable to operate; (3) ventilation: underground fire, conveyor fire; (4) regulatory compliance; and (5) safety: major incident.

Management interventions are in place to mitigate these risks listed above. Further details regarding the formal risk management process are discussed on [page 19](#).



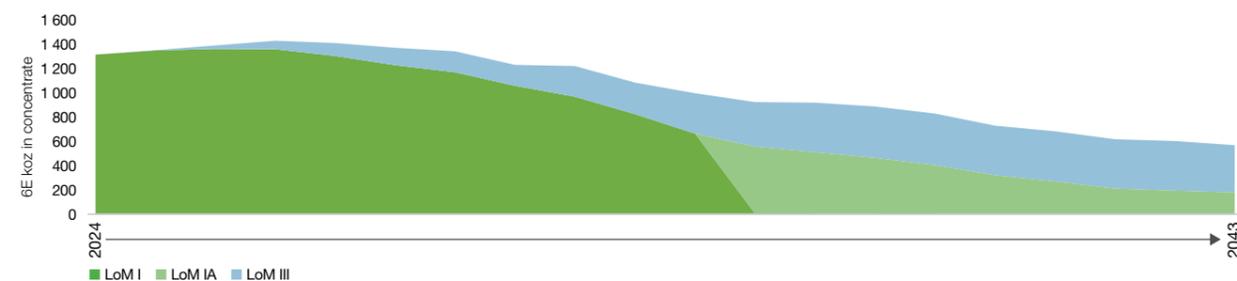
LoM, VALUATION AND SENSITIVITY

The strategic outlook remains under review, given the declining LoM production outlook and cost pressures. Several studies are being undertaken to optimise the Mineral Resource and infrastructure assets to extend the LoM profile. An economic profitability test was conducted at each shaft, mainly to conduct tail-cutting at the end of a shaft's life, where a shaft cannot contribute to its overhead cost. The impact varies from shaft to shaft. On average, 26% of the estimates have been excluded based on such economic reviews. The effect of tail-cutting is more pronounced on the UG2 Reef estimates.

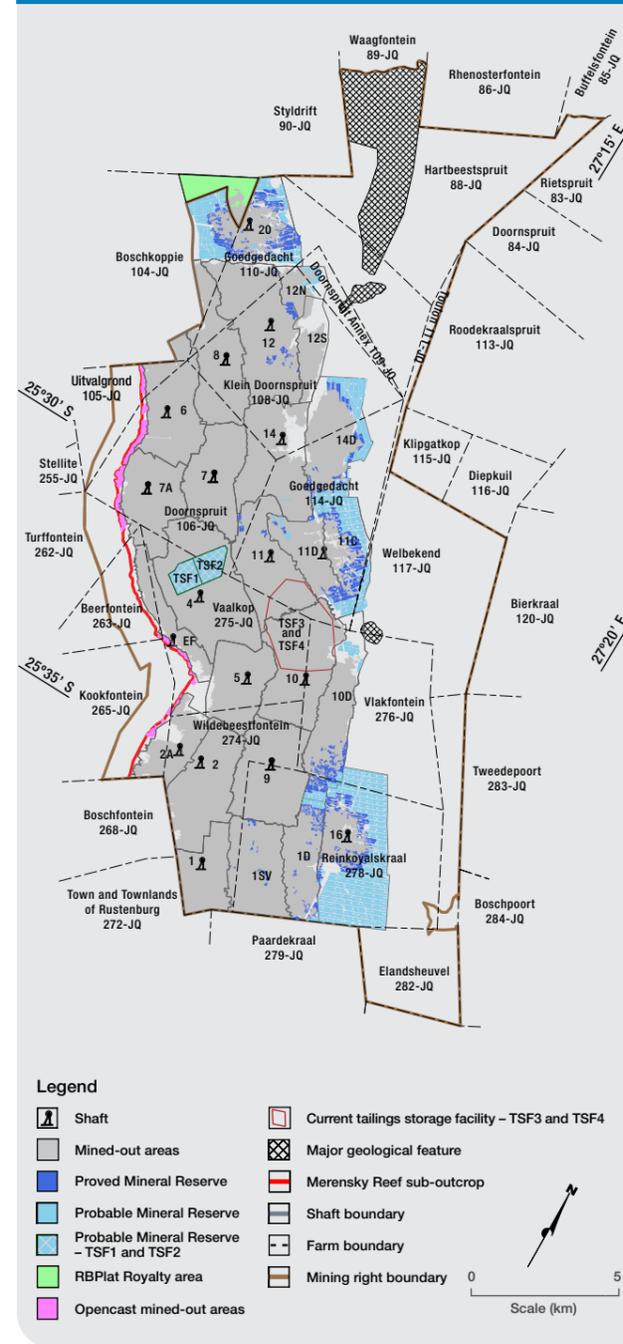
The economic viability of Impala Rustenburg's Mineral Reserves is tested using net present value calculations over the LoM of the Mineral Reserve, determining the lowest real rand basket price which would still render the Mineral Reserve viable. These calculations generate basket prices based on the local 6E ratios, and differ from the overall Group basket prices. This is then tested against the internal Impala Rustenburg estimate of the real long-term basket price and the spot price as at 30 June 2023. These tests indicate that the Impala Rustenburg operation requires a real long-term basket price of between R23 000 and R25 000 per 6E ounce to be economically viable. The real spot basket price for Impala Rustenburg as at 30 June 2023 was R27 121 (US\$1 395), and its internal long-term real basket price per 6E ounce is R28 660 (US\$1 772).

To address the declining LoM outlook and associated overhead cost structures, the Group is considering investment in maintaining current production levels well into the future, through prudent capital allocation on selected projects from existing infrastructure within the mining right area. The commodity market remains fluid. Statistics relating to the historical production are shown on [pages 30 and 31](#).

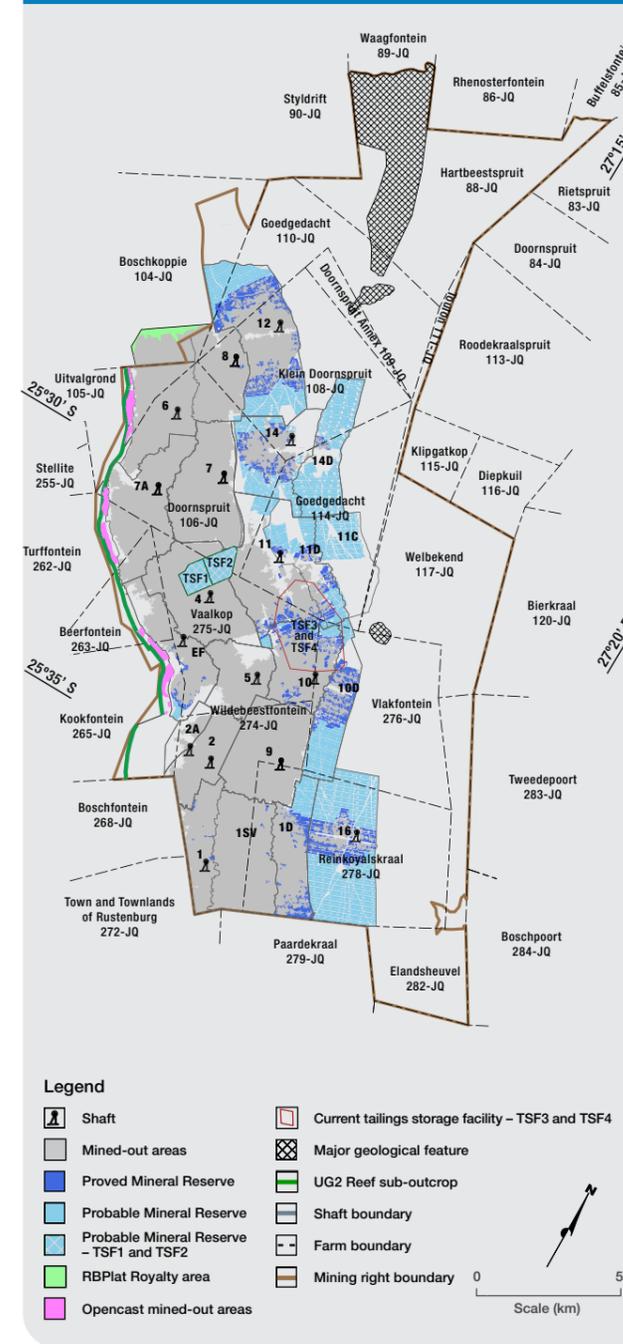
Impala Rustenburg estimated 20-year 6E LoM ounce profile
as at 30 June 2023



Impala Rustenburg Merensky Reef Mineral Reserves



Impala Rustenburg UG2 Reef Mineral Reserves



South Africa

Renowned exploration geologist, Dr Hans Merensky, first recognised platinum from this area on the nearby farm Maandagshoek in 1924. In June 1998, Implats acquired the Winnaarshoek property from Platexco.

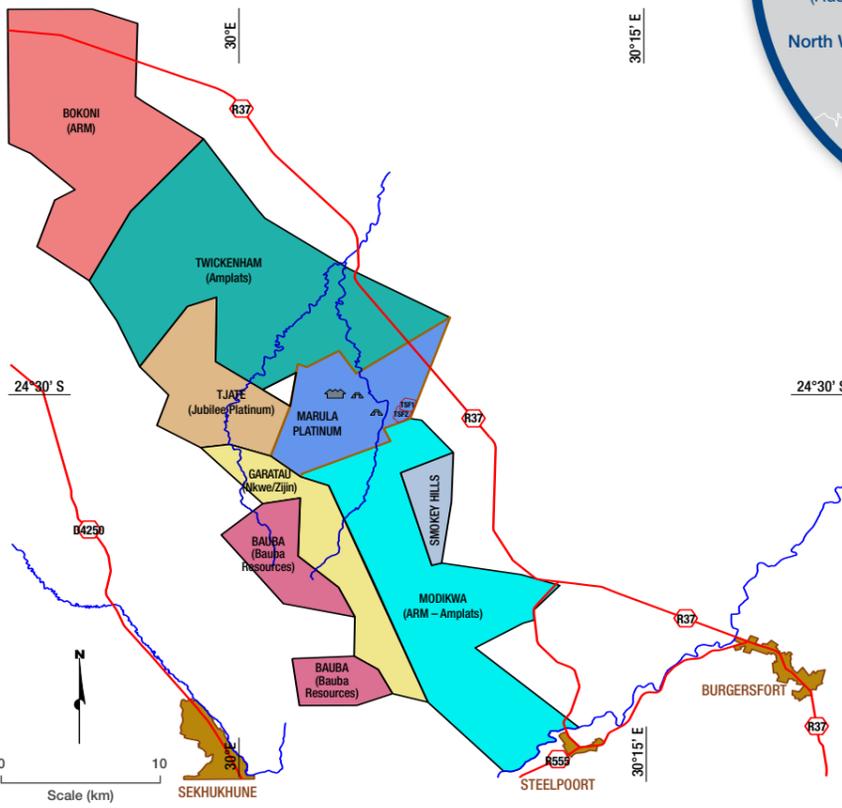
Mining right

5 494ha

Implats' interest

73.26% managed

Marula regional locality map



Legend	
	Town
	Mining right boundary
	Public road
	Current tailings storage facility - TSF1 and TSF2
	River/stream
	Portal
	Processing plant

LOCATION

Marula is located within the Fetakgomo-Tubatse Local Municipality of the Limpopo province of South Africa, approximately 35km northwest of Burgersfort. Marula is situated on the Eastern Bushveld Complex, located south of Anglo American Platinum's Twickenham Mine and north of the Anglo American Platinum-ARM joint venture at Modikwa Mine. Jubilee Platinum and Garatau (Nkwe/Zijin) share the western, down-dip boundaries.

BRIEF HISTORY

Exploration activities in the region started in the 1920s, following the discovery of PGMs by Hans Merensky on the nearby Maandagshoek 254 KT (now Modikwa Mine). Most of the prospecting activities focused on the Merensky Reef rather than the UG2 Reef. This early work included trenching, excavating adits and sampling outcrops. In June 1998, Implats acquired the Winnaarshoek 250 KT property from Platexco, a Canadian-based company. The mineral rights to portions of the adjacent farms of Clapham 118 KT and Forest Hill 117 KT, and a

Marula (continued)

sub-lease to Driekop 253 KT, were subsequently obtained from Anglo American Platinum in exchange for Hendriksplaats 281 KT (now part of Modikwa Mine). The establishment and development of the mine started in October 2002. Marula is a managed operation within the Implats portfolio.

GEOLOGICAL SETTING

Both the Merensky and UG2 Reefs are present at Marula, but only the UG2 Reef is currently exploited.

The Merensky and UG2 Reefs are separated by a sequence of primarily anorthositic and noritic layered units of 400m in combined vertical thickness. The UG2 Reef is defined as the main chromitite layer, with most of the mineralisation confined to this unit, followed by a poorly mineralised pegmatoidal footwall. The Merensky Reef comprises the upper portion of a pyroxenite layer, with a chromitite stringer close to the hangingwall contact. Mineralisation peaks over the chromitite stringer and decreases into the hangingwall and footwall. Examples of typical vertical grade profiles at Marula are included on page 47. The average 6E ratios show the differences between the Merensky and UG2 Reefs, particularly the high proportions of palladium and rhodium associated with the UG2 Reef at Marula.

Both mineralised horizons sub-outcrop on the Marula mining rights area and dip in a west-southwest direction at 10° to 14°. The reefs are relatively undisturbed by faults and dykes, with one prominent dolerite dyke traversing the mining area. Potholes represent most of the geological losses encountered underground, while a small dunite pipe also disrupts the reef horizons. These geological features are accounted for in the Mineral Resource and Mineral Reserve estimates as geological losses.

EXPLORATION AND STUDIES

Exploration activities that led to the discovery of PGMs at Marula started in the 1920s after Hans Merensky recognised PGMs in the region. Follow-up exploration in the 1960s and 1980s by Anglo American Platinum entailed exploration drilling targeting the Merensky and the UG2 Reefs.

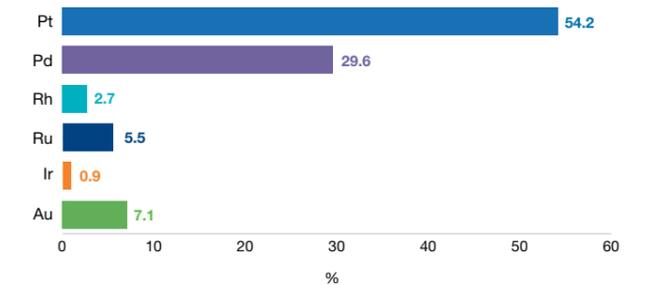
Several exploration techniques have been employed at Marula by historical explorers and Implats, with the most notable being surface geological mapping, aeromagnetic surveys and surface exploration drilling. Core drilling is the primary drilling technique employed. Ongoing surface drilling is typically infill work to supplement the grid completed during feasibility stages, and is mainly targeted to assist with detailed structural interpretations. In addition, underground geotechnical core-recovering drilling

activities are routinely undertaken. This forms part of a proactive safety strategy to detect flammable gas, gas pockets, water-bearing features, possible geological anomalies and related phenomena ahead of current mining operations. Summary statistics about the work conducted in the past year are reported in the exploration overview section of this report.

Fourteen surface drillholes were completed during the past year to add to the geological confidence in the deeper extensions for the Marula Phase II project mining area. A total of 65 underground drillholes – mainly for water and gas intersection cover and geological delineation – were drilled at the Clapham and Driekop declines. An additional 10 surface drillholes are planned for the forthcoming year, aimed at increasing the geological confidence in the deeper Marula Phase II area. Results from the 2023 surface exploration campaign were integrated with the structural geology model, with density measurements and analytical sampling of those drillholes underway.

Marula Merensky Reef 6E ratio

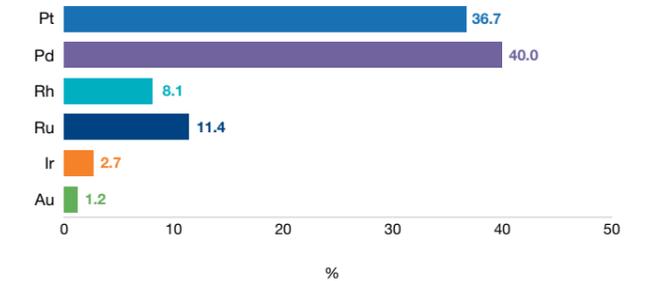
as at 30 June 2023 (%)



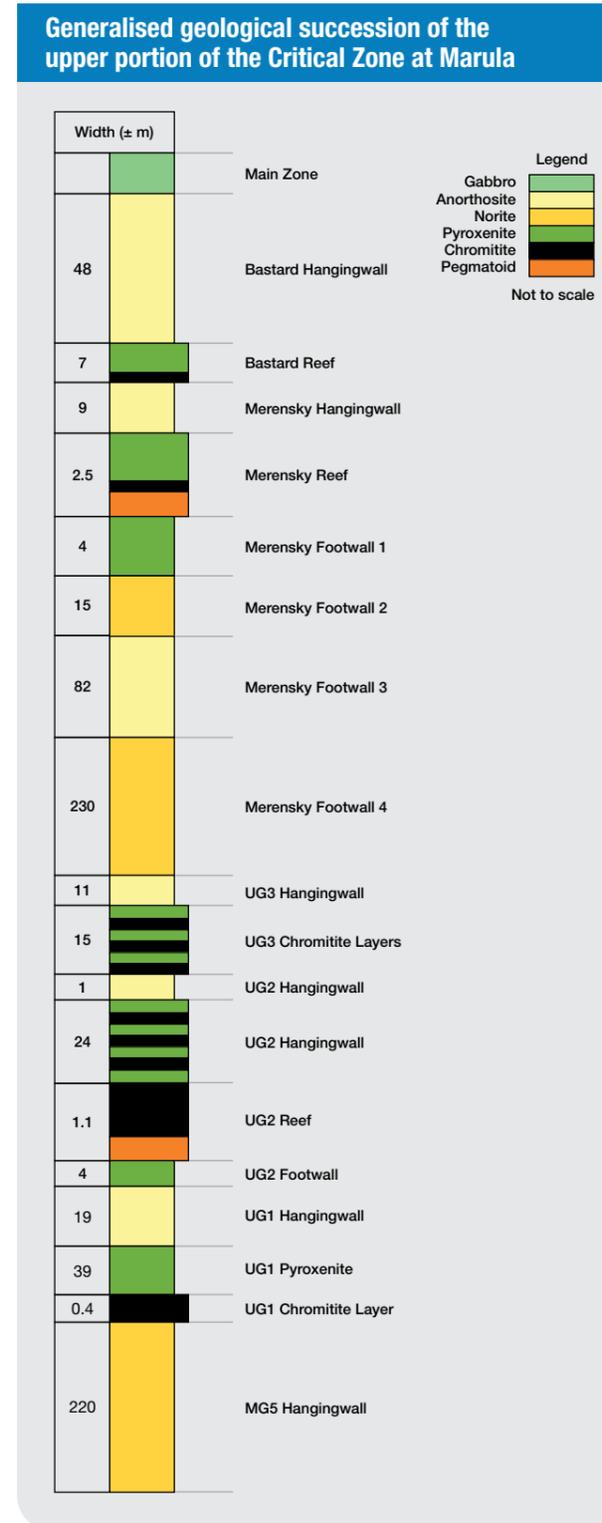
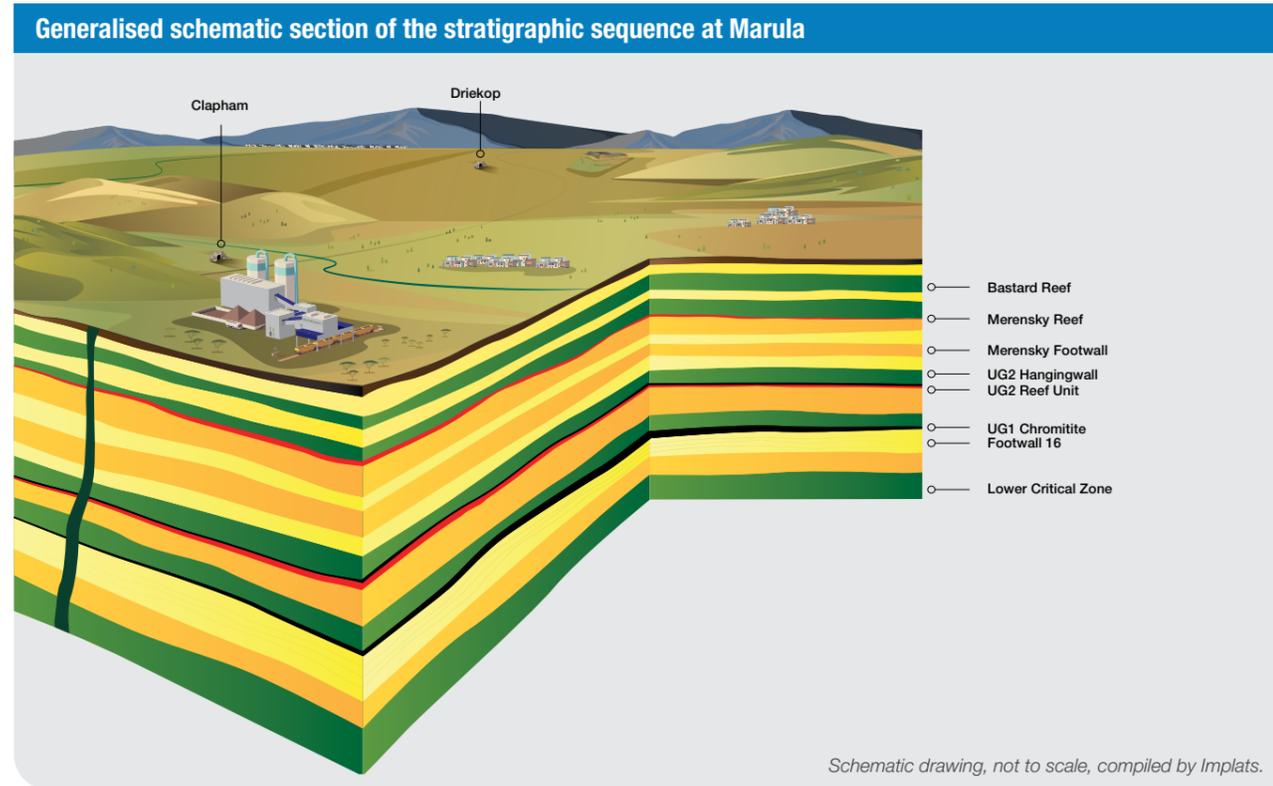
Merensky Reef 6E ratios derived from Mineral Resource estimate.

Marula UG2 Reef 6E ratio

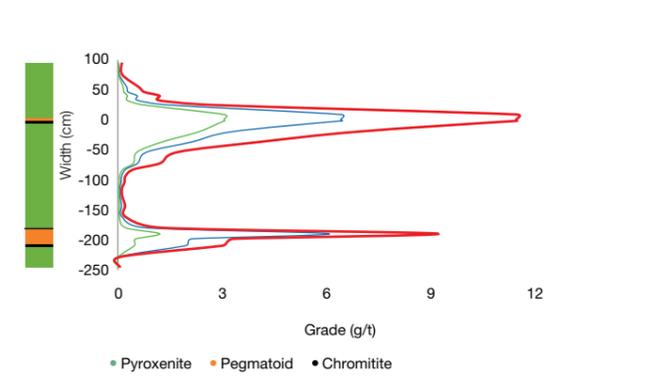
as at 30 June 2023 (%)



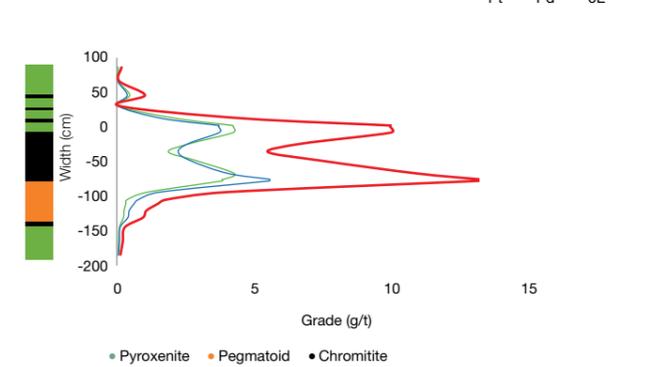
UG2 Reef 6E ratios derived from Mineral Reserve estimate.



Marula – Merensky Reef



Marula – UG2 Reef



GENERAL INFRASTRUCTURE

The region is well developed, partly due to other nearby mining activities. The R37 tarred road from Burgersfort to Polokwane passes through the area, while a secondary tarred road links the R37 to Marula's main office and other infrastructure. The existing mines and villages are supplied with electricity by Eskom. Marula has an adequate electricity supply and distribution network with two independent 132kV Eskom power lines providing electricity. Water is supplied through the Lebalelo Water Scheme, from which Marula has an allocation of 13.8MI per day, which is more than adequate for planned production levels. Mining infrastructure includes two decline shafts, offices, stores, a concentrator plant, a chromite recovery plant, TSFs and overland ore conveyance.

Marula (continued)

MINERAL RESOURCE ESTIMATION AND CLASSIFICATION

The Mineral Resource estimates for the Merensky and UG2 Reefs are shown at a minimum mining width. The estimate has been conducted using the Datamine[®] software. A multi-pass search was used for the estimation, and capping of extreme values was applied for UG2 Reef data. Estimated geological losses have been accounted for in the Mineral Resource estimation varying from 20% to 25%, using the geological model constructed in CADSmine[™] software as the basis.

The Mineral Resource classification is based on the Group standard practice (see page 14). In broad terms, confidence is derived from various aspects such as geophysical surveys, mapping, underground exposures and surface drillholes, sampling and QAQC assurance. The spacing of the economic reef intersections and the geostatistical confidence have the largest weighting on the classification of Mineral Resources at Marula.

Mineral Resource estimates are based on mining faces at 31 December 2022 and have been non-spatially depleted per shaft for six months until 30 June 2023.

Marula Mineral Resource estimate (inclusive reporting)

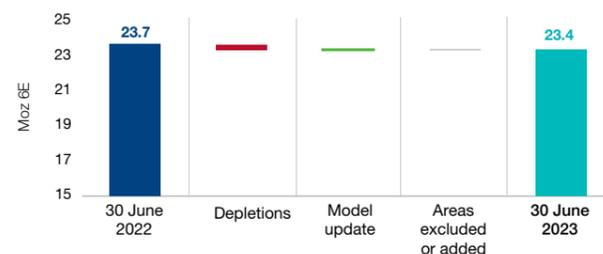
As at 30 June 2023										
Orebody		Merensky Reef				UG2 Reef				Total
Category	Units	Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	
Tonnes	Mt	34.3	7.6	5.2	47.0	43.2	21.6	5.8	70.6	117.7
Width	cm	100	100	100	–	97	98	96	–	–
4E Grade	g/t	4.26	4.20	3.82	4.21	6.26	6.32	6.33	6.29	5.45
6E grade	g/t	4.56	4.50	4.10	4.50	7.29	7.37	7.36	7.32	6.19
Ni	%	0.20	0.19	0.19	0.20	0.05	0.05	0.04	0.05	0.11
Cu	%	0.11	0.11	0.10	0.11	0.02	0.02	0.02	0.02	0.06
4E oz	Moz	4.7	1.0	0.6	6.4	8.7	4.4	1.2	14.3	20.6
6E oz	Moz	5.0	1.1	0.7	6.8	10.1	5.1	1.4	16.6	23.4
Pt oz	Moz	2.7	0.6	0.4	3.7	3.7	1.9	0.5	6.1	9.8
Pd oz	Moz	1.5	0.3	0.2	2.0	4.1	2.0	0.6	6.7	8.7

As at 30 June 2022										
Orebody		Merensky Reef				UG2 Reef				Total
Category	Units	Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	
Tonnes	Mt	34.3	7.6	5.2	47.0	42.7	22.3	6.4	71.5	118.5
Width	cm	100	100	100	–	96	103	104	–	–
4E Grade	g/t	4.26	4.20	3.82	4.21	6.37	6.24	6.32	6.33	5.48
6E grade	g/t	4.56	4.50	4.10	4.50	7.40	7.28	7.37	7.36	6.22
Ni	%	0.20	0.19	0.19	0.20	0.05	0.05	0.05	0.05	0.11
Cu	%	0.11	0.11	0.10	0.11	0.02	0.02	0.02	0.02	0.06
4E oz	Moz	4.7	1.0	0.6	6.4	8.7	4.5	1.3	14.5	20.9
6E oz	Moz	5.0	1.1	0.7	6.8	10.2	5.2	1.5	16.9	23.7
Pt oz	Moz	2.7	0.6	0.4	3.7	3.7	1.9	0.6	6.2	9.9
Pd oz	Moz	1.5	0.3	0.2	2.0	4.1	2.1	0.6	6.8	8.8

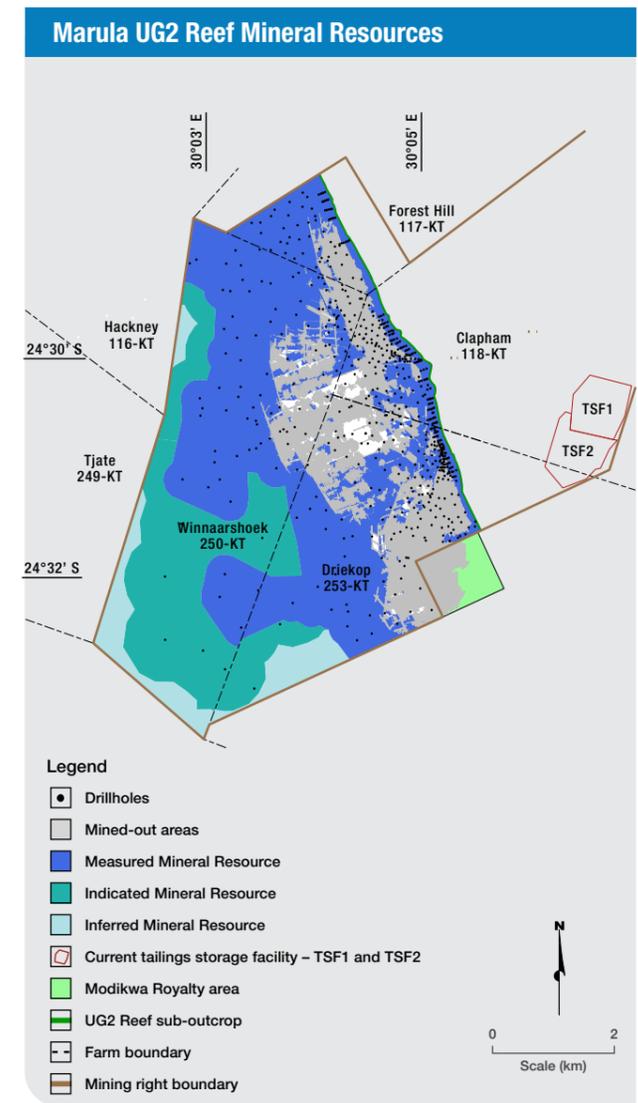
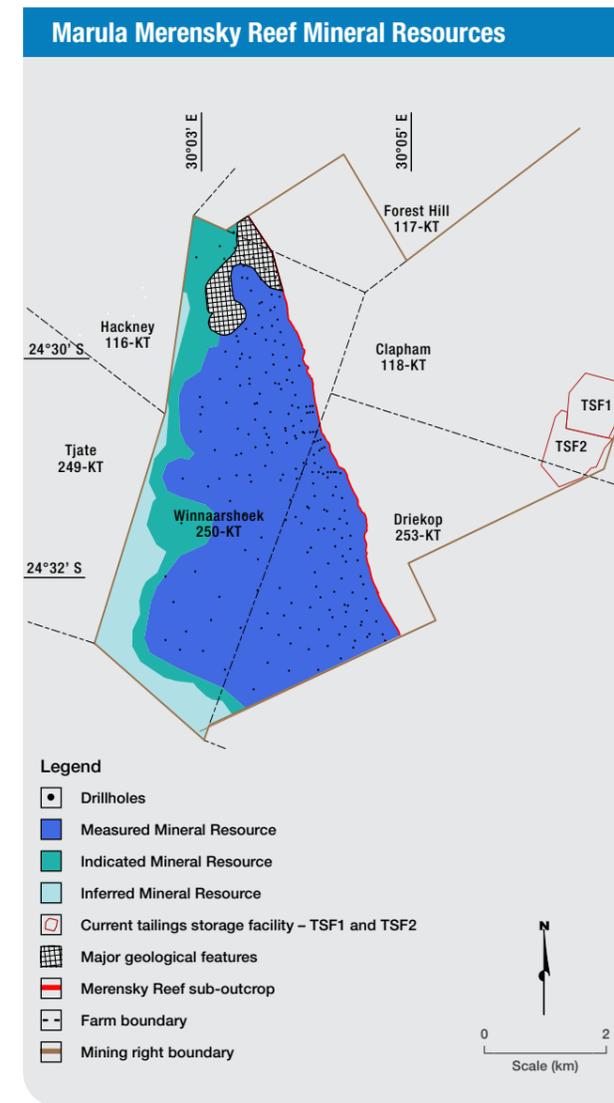
MINERAL RESOURCE RECONCILIATION

The year-on-year reconciliation of Marula's Mineral Resource estimate shows marginal variance relative to the previous year, primarily due to depletion, some model updates and minor areas excluded.

Total Marula 6E Mineral Resources
as at 30 June 2023 (variance Moz 6E)



Marula (continued)



MODIFYING FACTORS

The table below summarises the significant modifying factors impacting on the Mineral Resource and Mineral Reserve estimates (see pages 15, 33, 48, 50 and 52 for further details).

Mineral Resource Key assumptions	Merensky Reef	UG2 Reef
Geological losses	20 – 25%	20 – 25%
Area	16 million ca	18.7 million ca
Average resource cut	100cm	97cm

Mineral Reserve Modifying factors	Merensky Reef	UG2 Reef
Dilution	–	10 – 12%
Pillars	–	10 – 12%
Mine call factor	–	95 – 100%
Relative density	–	3.4 – 3.9
Average stopping width	–	118cm
Concentrator recoveries	–	86 – 88%

MINING METHODS

Marula Mine has two decline shaft systems exploiting the UG2 Reef. At Driekop Shaft, a hybrid mining method is used, while at Clapham Shaft, both hybrid and conventional mining methods are used. All main development is undertaken on-reef for the two hybrid sections, and the stoping is carried out through conventional single-sided breast mining from a centre gully. Panel face lengths are approximately 16m to 28m, with panels separated by 6m x 4m grid pillars with 2m ventilation holings. The stoping width averages 125cm. The footwall drives are developed on strike approximately 25m below the reef horizon, with cross-cut breakaways about 220m apart for the conventional operation. This development is undertaken with drill rigs and dump trucks. Stope face drilling takes place with hand-held pneumatic rock drills with airlegs.

MINE PLANNING PROCESS

Mine design and scheduling are carried out using CADSmine™ and Studio UG software. Geological models and ore blocks are updated and validated using G-Blocks and boundaries in the MRM information system. Mineral Reserves are converted upon proved economic viability, board approval and secured funding, and not simply on the basis of Measured and Indicated Mineral Resource classification.

Marula Mineral Reserve estimate

As at 30 June 2023				
Orebody		UG2 Reef		Total
Category	Units	Proved	Probable	
Tonnes	Mt	3.2	43.1	46.3
Width	cm	126	118	–
4E grade	g/t	4.35	3.67	3.71
6E grade	g/t	5.04	4.27	4.32
4E oz	Moz	0.4	5.1	5.5
6E oz	Moz	0.5	5.9	6.4
Pt oz	Moz	0.2	2.2	2.4
Pd oz	Moz	0.2	2.4	2.6

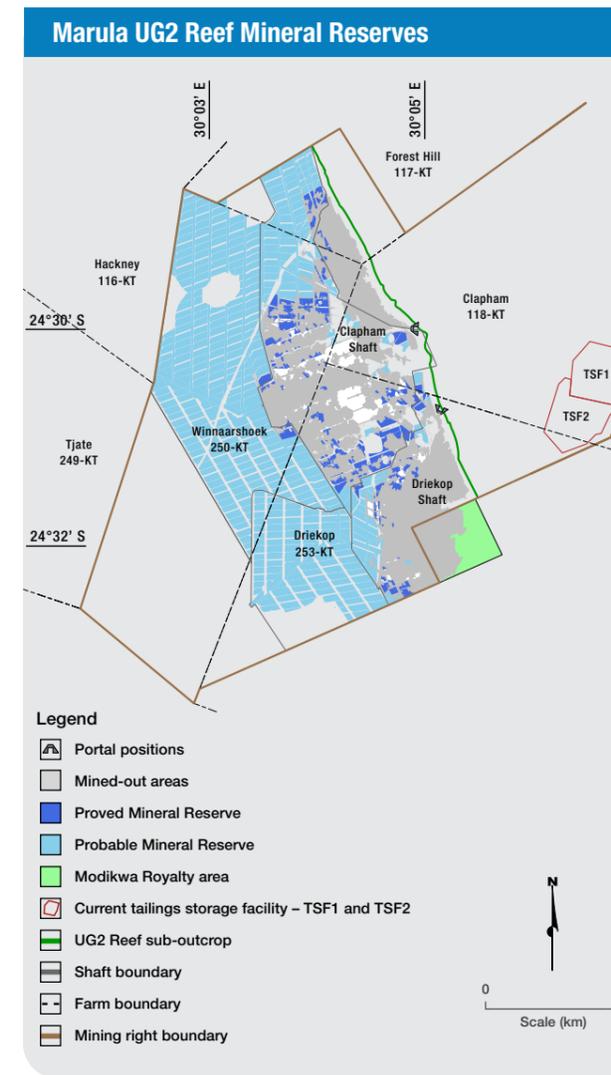
MINERAL RESERVE ESTIMATION AND CLASSIFICATION

The updated Mineral Reserve estimate as at 30 June 2023 is tabulated below. The modifying factors used in the UG2 Mineral Reserve estimate are based on the mine plan, which envisages hybrid and conventional breast mining operations. An economic profitability test was conducted at each shaft to verify the economic viability at the end of the shaft's life and the need for tail-cutting.

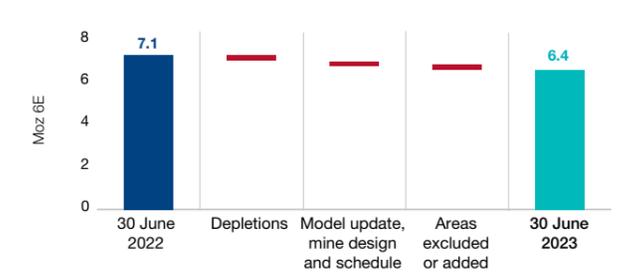
The conversion and classification of Mineral Reserves at Marula are informed by:

- Feasible mine plan and project studies, board approval and available funding
- Economic testing at given market conditions (price deck)
- Measured Mineral Resources are classified as Proved and Probable Mineral Reserves
- Proved Mineral Reserves are those areas where the main development has been completed
- The Mine Plan used for generating the Mineral Reserves was based on the survey faces of December 2022 with a spatial mine design and schedule forecast of six months until 30 June 2023.

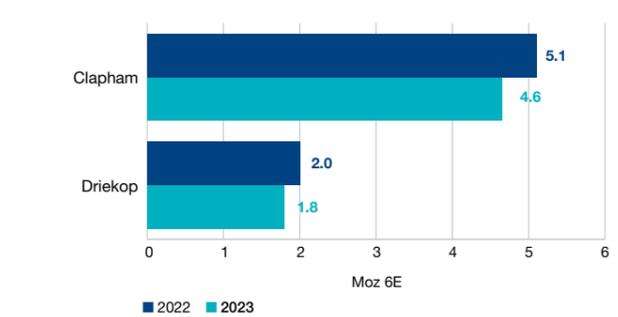
As at 30 June 2022				
Orebody		UG2 Reef		Total
Category	Units	Proved	Probable	
Tonnes	Mt	3.7	45.8	49.5
Width	cm	126	123	–
4E grade	g/t	4.40	3.79	3.84
6E grade	g/t	5.08	4.41	4.46
4E oz	Moz	0.5	5.6	6.1
6E oz	Moz	0.6	6.5	7.1
Pt oz	Moz	0.2	2.4	2.6
Pd oz	Moz	0.3	2.6	2.9



Total Marula 6E Mineral Reserves
as at 30 June 2023 (variance Moz 6E)



Marula Mineral Reserve distribution
as at 30 June 2023 (Moz 6E)



MINERAL RESERVE RECONCILIATION

The year-on-year reconciliation of Marula's Mineral Reserves estimate shows marginal variance relative to the previous year. The changes are primarily due to depletion, tail-cutting, model updates and minor areas excluded.



Marula (continued)

PROCESSING

Marula has a concentrator plant where initial processing is conducted. The concentrate is transported by road to Impala's Mineral Processes operation in Rustenburg in terms of a LoM offtake agreement with Impala Refining Services (IRS). A new TSF facility was commissioned in the past year.

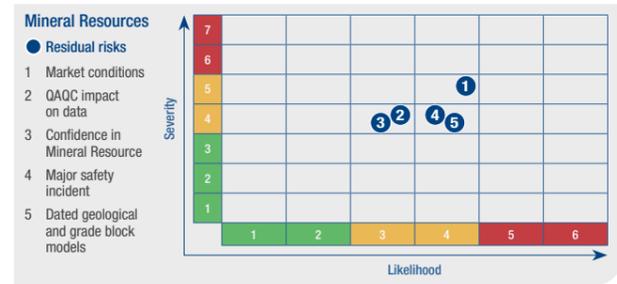
RISK ASSESSMENT

The residual risk matrices for the Impala Rustenburg Mineral Resources and Mineral Reserves are illustrated below, highlighting the top five residual risks for both.

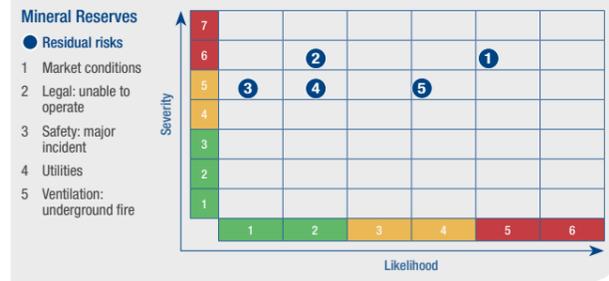
The top residual risks identified for the Mineral Resources at Marula are (1) market conditions: basket price sensitivity; (2) grade: the impact of QAQC on data; (3) geology: confidence in Mineral Resources; (4) major safety incident; and (5) dated geological and grade block models.

The top residual Mineral Reserve risks identified at Marula are (1) market conditions: basket price sensitivity; (2) legal tenure: unable to operate; (3) safety: major incidents; (4) utilities: unavailability of water and electricity; and (5) ventilation: underground fire.

Management interventions are in place to mitigate these risks listed above. Further details regarding the formal risk management process are discussed on [page 19](#).



Marula estimated 20-year 6E LoM ounce profile
as at 30 June 2023



LoM, VALUATION AND SENSITIVITY

The LoM I encompasses the UG2 Reef at the Clapham Shaft down to 11 level and the Driekop Hybrid areas. Note that the indicative LoM profile is based on a range of assumptions, which could change in future. An economic profitability test was conducted to determine at which year Marula's shafts cannot contribute to its overhead cost. On average, 3% of the estimates have been excluded based on such economic reviews – these are excluded from Mineral Reserves and re-classified as LoM IA.

The economic viability of Marula's Mineral Reserves is tested using net present value calculations over the LoM of the Mineral Reserve, determining the lowest real rand basket price which would still render the Mineral Reserve economically viable. These calculations generate basket prices based on the local 6E ratios and differ from the overall Group basket prices. This is then tested against the internal Marula estimate of the real long-term basket price and the spot price as at 30 June 2023. These tests indicate that Marula requires a real long-term basket price of between R24 000 and R26 000 per 6E ounce to be economically viable. The real spot basket price for the Marula operations as at 30 June 2023 was R27 382 (US\$1 408) per 6E ounce, and its internal long-term real basket price is R28 553 (US\$1 769), reflecting the influence of currently high rhodium prices. The commodity market remains fluid. Statistics relating to the historical production are shown on [pages 30 and 31](#).

Two Rivers

South Africa

Two Rivers is located within the southern sector of the eastern limb of the Bushveld Complex.

Mining right

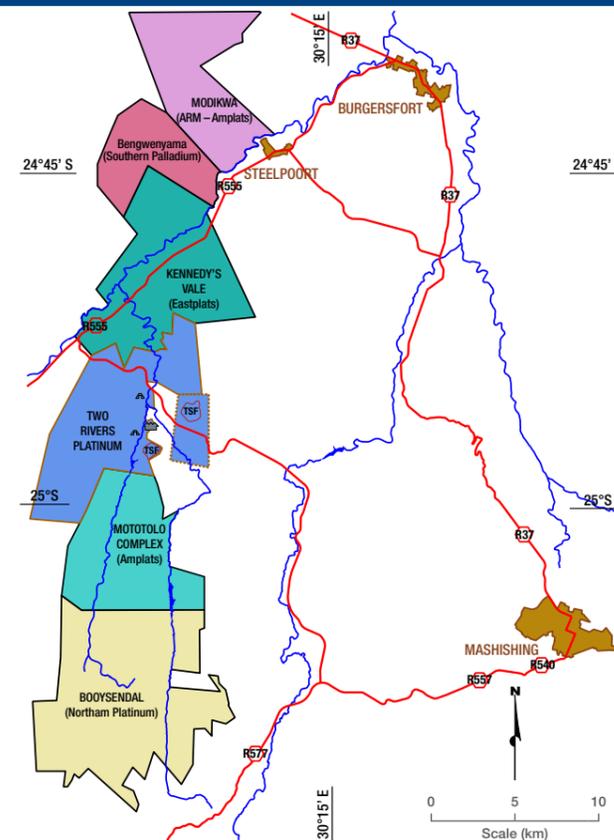
11 349ha

Implats' interest

46% non-managed



Two Rivers regional locality map



LOCATION

Two Rivers is located on the farm Dwarsrivier 372 KT and extends to the farm Kalkfontein 367 KT, as well as portions of the farms Tweefontein 360 KT and Buffelshoek 368 KT. The mine is situated in the Limpopo province, South Africa, approximately 30km from Steelpoort and 60km from Mashishing. Two Rivers is neighbored by Anglo American Platinum's Mototolo Platinum Mine, as well as the Dwarsrivier, Tweefontein and Thorncliffe chromite mines.

BRIEF HISTORY

During 2001, Assmang elected to dispose of its platinum interests at the Dwarsrivier Chrome Mine. Two Rivers, which at that time was the incorporated joint venture between Avmin and Implats, secured the platinum rights in December 2001. Subsequent corporate activity involving Avmin, ARM and Harmony resulted in the transfer of Avmin's share in Two Rivers to a new, empowered platinum entity, ARM Platinum, a division of ARM. The joint venture partners began developing the Two Rivers project in June 2005. The concentrator plant was commissioned in 2006 and, in 2008, the mine successfully transitioned from a project to a mechanised operation. Two Rivers is a non-managed operation in the Implats portfolio.

GEOLOGICAL SETTING

The area's geological structure is dominated by the regional north-northeast to south-southwest trending Kalkfontein Fault, which has an apparent vertical displacement of 1 200m down thrown to the west. A series of sub-parallel faults occur to the southeast adjacent to the Kalkfontein Fault, which affect both the Merensky and UG2 Reefs. These faults exhibit variable apparent vertical displacements of between 20m and 110m.

The Merensky and UG2 Reefs are separated by a sequence of primarily anorthositic and noritic layered units of some 140m to 160m in combined thickness. Both the Merensky and UG2 Reefs are present — however, no Merensky Reef is present on Tweefontein 360 KT, and the UG2 Reef only occurs on a small portion of this farm. The UG2 Reef outcrops in the Klein Dwarsrivier valley over a north-south strike of 7.5km and dips to the west at 7° to 10°. Due to the extreme topography, the Merensky Reef outcrops further up the mountain slope. Steelpoortpark granite, which is unique to this area, occurs in the southwest part of the project. Three distinct reef types have been defined for the UG2 Reef, namely the 'normal' reef with a thick main chromitite layer; a 'split' reef characterised by an internal pyroxenite/norite lens within the main chromitite layer; and a 'multiple-split' reef with numerous pyroxenite/norite lenses occurring within the main chromitite layer. The multiple-split reef predominates in the southern portion of the mining area. The Merensky Reef is a pyroxenite layer with a chromitite stringer close to the hangingwall contact and at the basal contact. Mineralisation is primarily associated with the upper and lower chromitite stringers. Typical vertical grade profiles are illustrated on page 55.

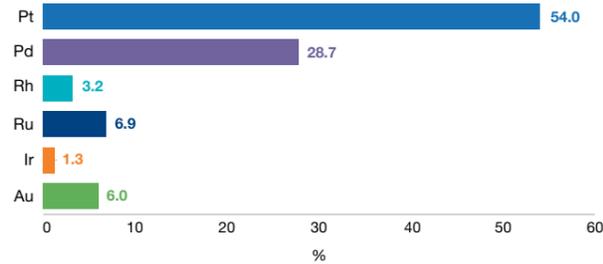
The schematic section for Two Rivers (see page 56) demonstrates the approximate 8km north-south striking Merensky and the UG2 orebodies dipping 7° to 10° towards the



Merensky Decline at Two Rivers

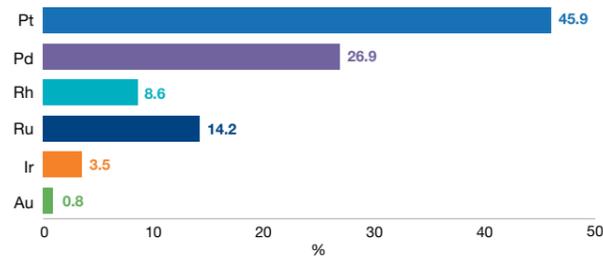
west, relative to the extreme mountain topography of the Main Zone sequence. Surface exploration drilling and geological fieldwork were challenged by the mountainous terrain that overlays the two economic orebodies. A flatter area on the mountain's eastern side is used for the mine's general infrastructure and can be accessed from the tar road that connects with the R555 and R540. The mining area is bounded by the St George's Fault on the eastern side, where it cuts through a portion of the UG2 Reef that can be accessed and mined by Anglo American Platinum's Mototolo operation, where a royalty agreement is in place.

Two Rivers Merensky Reef 6E ratio
as at 30 June 2023 (%)



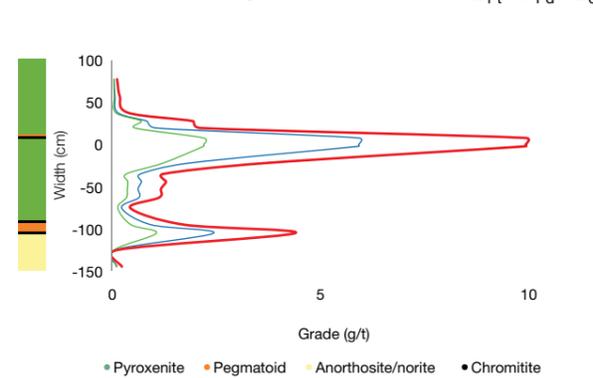
Merensky Reef 6E ratios derived from Mineral Resource estimate.

Two Rivers UG2 Reef 6E ratio
as at 30 June 2023 (%)

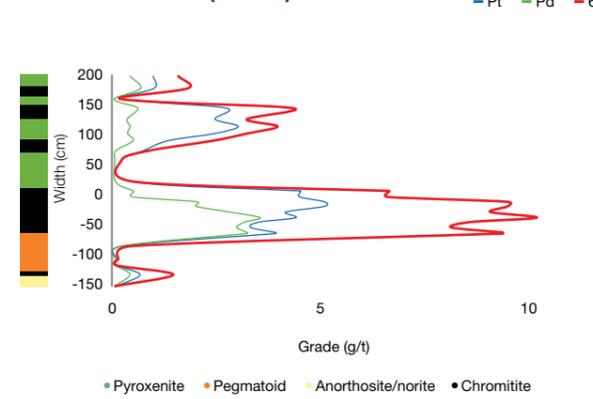


UG2 Reef 6E ratios derived from Mineral Reserve estimate.

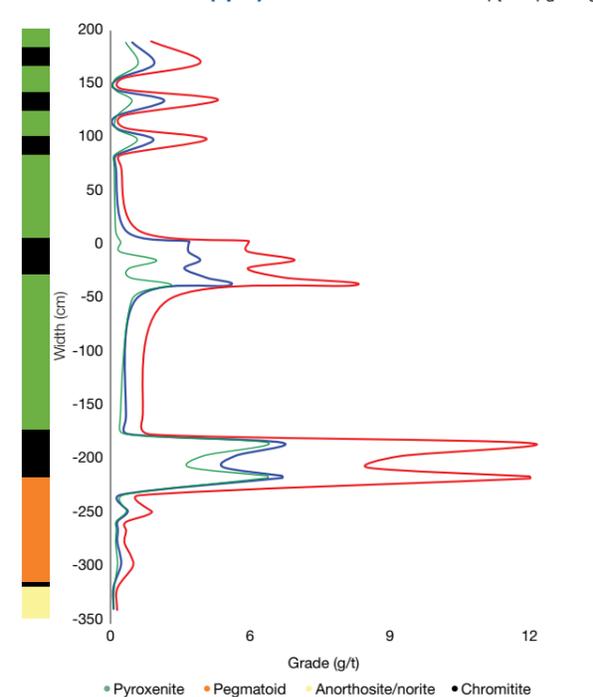
Two Rivers – Merensky Reef



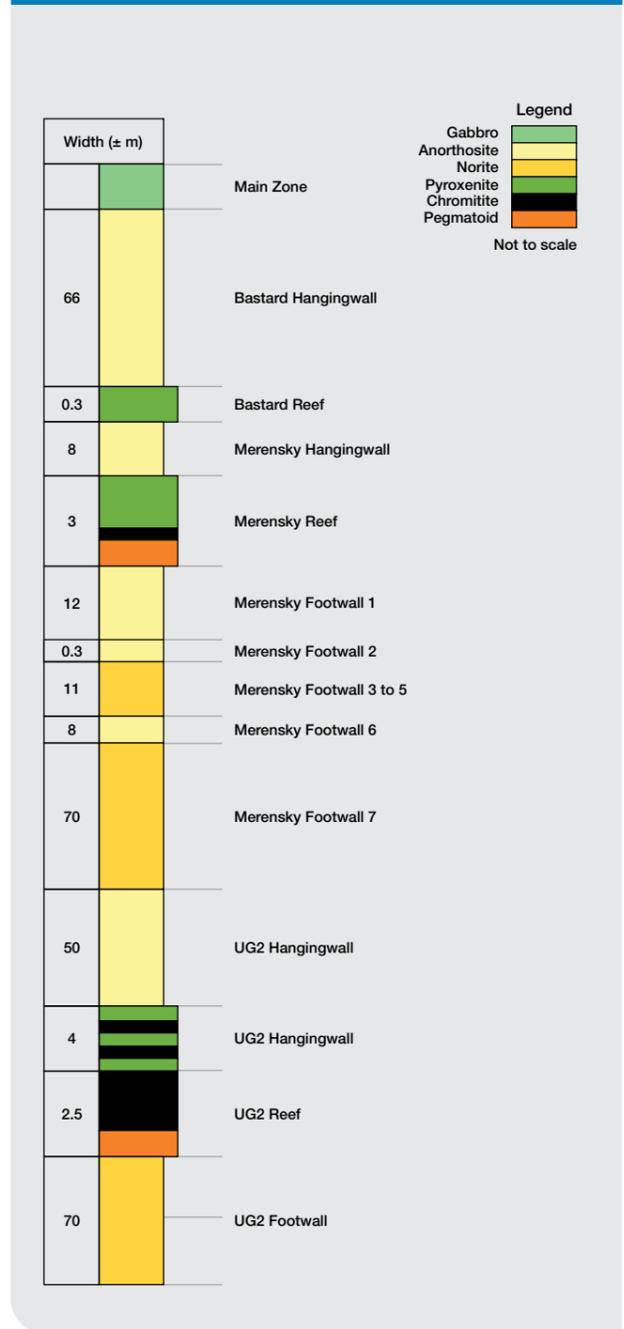
Two Rivers – UG2 (normal) Reef

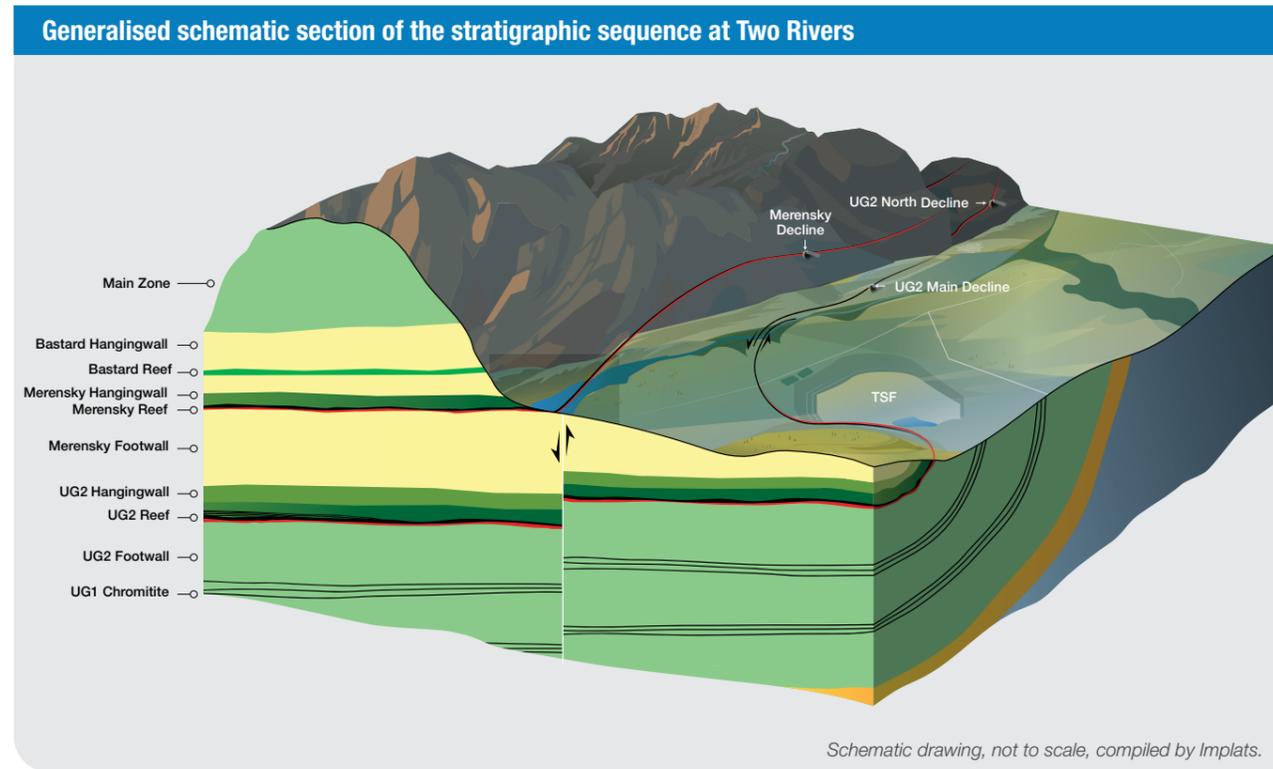


Two Rivers – UG2 (split) Reef



Generalised geological succession of the upper portion of the Critical Zone at Two Rivers





EXPLORATION AND STUDIES

Some 242 cover and geological delineation drilling activities were undertaken from underground to mitigate geological risks during the mining process.

GENERAL INFRASTRUCTURE

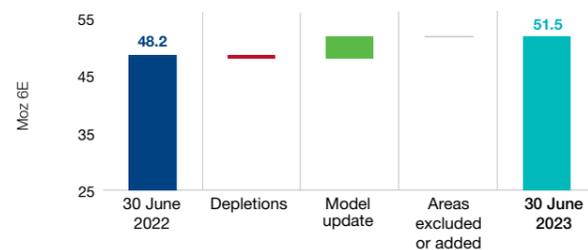
A tar road provides access to Two Rivers, which has a water-use licence (WUL) to obtain its water from the Groot and Klein Dwars rivers and underground dewatering. Electricity is provided by Eskom via one of two 40MVA transformers at the Uchoba sub-station, with an allocation of 35MVA for Two Rivers fed from a 132kV line from the Merensky sub-station. Mining infrastructure includes three decline shafts, offices, stores, a concentrator plant, a chromite recovery plant, TSFs and overland ore conveyance.

MINERAL RESOURCE ESTIMATION AND CLASSIFICATION

Grade estimates were obtained using ordinary kriging of UG2 and Merensky Reef drillhole intersections. The UG2 Reef model was updated with additional data. Six underground sampling sections and the major geological structure changes observed on the UG2 Reef mining horizon were included in the Merensky Reef model revision. The Mineral Resource classification for UG2 and Merensky Reefs is based on geological and grade continuity, drillhole spacing, geostatistical parameters and historical classification.

The Mineral Resource estimate reflects the actual depletion as at 31 May 2023 and the non-spatial depletion to 30 June 2023 as per planned mining. More information regarding the Mineral Resources and Mineral Reserves can be found in the 2023 ARM annual report (www.arm.co.za).

Total Two Rivers 6E Mineral Resources
as at 30 June 2023 (variance Moz 6E)



MINERAL RESOURCE RECONCILIATION

The year-on-year reconciliation of Two Rivers' Mineral Resource estimate shows an increase in the Merensky Reef estimates relative to the previous year, primarily due to model updates and updating the geoloss for the Merensky Reef from 30% to 14%. The UG2 Mineral Resource estimate was impacted by depletion and model updates, resulting in a minor change since 2022.

Two Rivers Mineral Resource estimate (inclusive reporting)

As at 30 June 2023									
Orebody	Units	Merensky Reef			UG2 Reef				Total
		Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	
Tonnes	Mt	91.1	77.0	168.2	15.3	75.5	81.0	171.7	339.9
Width	cm	192	137	–	142	142	117	–	–
4E grade	g/t	3.07	4.06	3.52	4.58	4.78	4.51	4.63	4.08
6E grade	g/t	3.35	4.40	3.83	5.56	5.77	5.38	5.57	4.71
Ni	%	0.13	0.17	0.15	0.04	0.04	0.04	0.04	0.09
Cu	%	0.08	0.09	0.08	0.01	0.01	0.01	0.01	0.05
4E oz	Moz	9.0	10.0	19.1	2.2	11.6	11.7	25.6	44.6
6E oz	Moz	9.8	10.9	20.7	2.7	14.0	14.0	30.7	51.5
Pt oz	Moz	5.4	5.8	11.1	1.3	6.3	6.2	13.8	24.9
Pd oz	Moz	2.7	3.3	6.0	0.7	4.0	4.3	9.0	15.0

As at 30 June 2022									
Orebody	Units	Merensky Reef			UG2 Reef				Total
		Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	
Tonnes	Mt	75.7	61.4	137.1	17.8	77.2	80.7	175.7	312.8
Width	cm	210	145	–	150	144	121	–	–
4E grade	g/t	3.13	3.98	3.51	4.53	4.76	4.51	4.62	4.13
6E grade	g/t	3.42	4.32	3.82	5.52	5.74	5.38	5.56	4.80
Ni	%	0.14	0.16	0.15	0.04	0.04	0.04	0.04	0.09
Cu	%	0.08	0.09	0.08	0.01	0.01	0.01	0.01	0.04
4E oz	Moz	7.6	7.9	15.5	2.6	11.8	11.7	26.1	41.6
6E oz	Moz	8.3	8.5	16.8	3.2	14.3	14.0	31.4	48.2
Pt oz	Moz	4.6	4.5	9.1	1.5	6.4	6.1	14.0	23.1
Pd oz	Moz	2.3	2.6	4.9	0.8	4.1	4.3	9.2	14.1

MODIFYING FACTORS

The table below summarises the significant modifying factors impacting on the Mineral Resource and Mineral Reserve estimates (see pages 15, 33, 56, 58, 59 and 60 for further details).

Mineral Resource Key assumptions	Merensky Reef	UG2 Reef
Geological losses	14%	18%
Area	38.3 million ca	49.3 million ca
Average resource cut	167cm	130cm

Mineral Reserve Modifying factors	Merensky Reef	UG2 Reef
Dilution	20%	23 – 30%
Pillars	15 – 25%	15 – 25%
Mine call factor	95%	95 – 99%
Relative density	3.2 – 3.3	3.6 – 3.8
Average stoping width	258cm	246cm
Concentrator recoveries	82%	81%

MINING METHODS

The UG2 Reef is accessed via two decline shaft systems situated 3km apart, namely the Main Decline and the North Decline. Production of the UG2 Reef is through a fully mechanised bord and pillar stoping method. A mining section consists of 6m, 8m and 10m bords, with pillar sizes increasing with depth below the surface. The pillars are 6m x 6m to 12m x 12m in size. The bords are mainly mined on strike.

Construction of the new Merensky mine has commenced and the mining method will be based on fully mechanised bord and pillar mining.

MINE PLANNING PROCESS

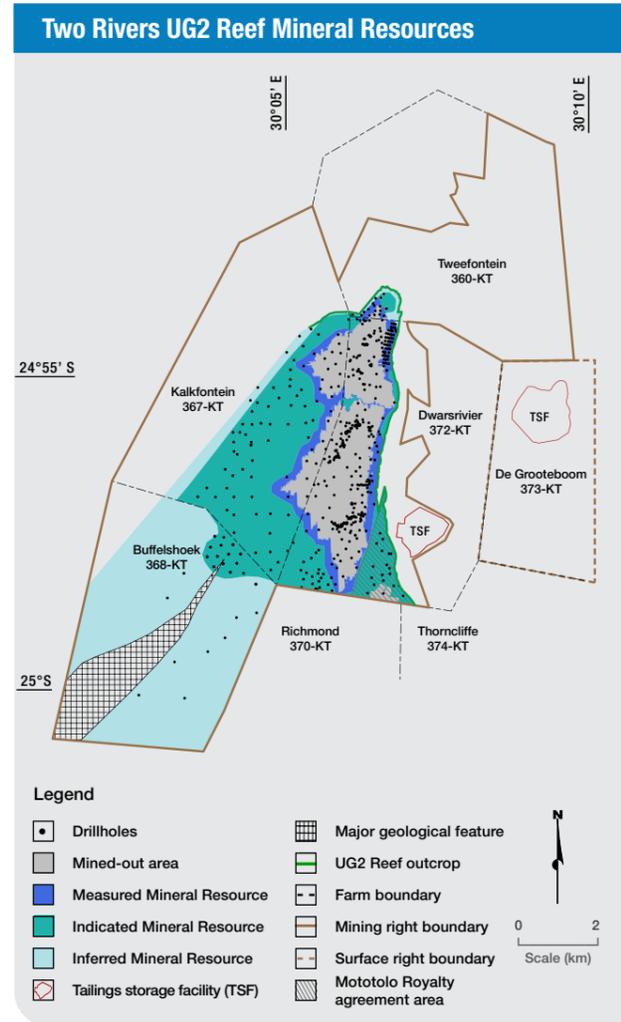
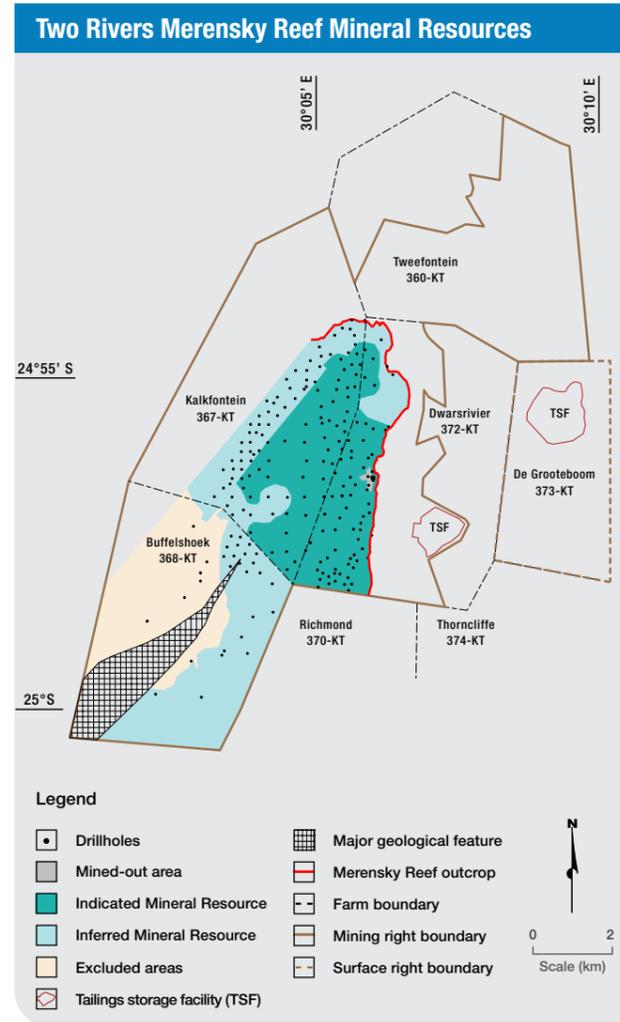
A 3D geological model, with layer grades and widths per stratigraphic unit, is used in the mine planning. Mine scheduling is applied in Studio UG and the schedule is evaluated against the grade and thickness block model. The three distinct reef types, including normal, split reef and multiple-split reef facies, significantly impact the UG2 Reef mine plan. Dilution calculations are based on the specific reef type. Hangingwall and footwall overbreak, percentage off-reef, ore remaining (mining losses), geological losses (potholes, faults, dykes and replacement pegmatoid) and a shaft-call factor are applied to the planned areas to generate the tonnage and grade profiles.

MINERAL RESERVE ESTIMATION AND CLASSIFICATION

The modifying factors used in the UG2 and Merensky Reef Mineral Reserve estimates are based on the mine plan, which envisages a mechanised bord and pillar layout. More details regarding the Mineral Resources and Mineral Reserves can be found in the 2023 ARM annual report (www.arm.co.za).

The conversion and classification of Mineral Reserves at Two Rivers are informed by:

- Economic testing at given market conditions (price deck)
- Most of the Indicated Mineral Resources can be classified as Probable Mineral Reserves
- Most of the Measured Mineral Resources can be classified as Proved Mineral Reserves.



Two Rivers Mineral Reserve estimate

As at 30 June 2023								
Orebody	Units	Merensky Reef			UG2 Reef			Total
		Proved	Probable	Total	Proved	Probable	Total	
Tonnes	Mt	0.5	55.9	56.4	11.2	58.0	69.2	125.6
Width	cm	–	258	–	247	246	–	–
4E grade	g/t	1.95	2.53	2.52	2.57	2.75	2.72	2.63
6E grade	g/t	2.12	2.75	2.75	3.13	3.33	3.30	3.05
4E oz	Moz	0.03	4.5	4.6	0.9	5.1	6.0	10.6
6E oz	Moz	0.03	4.9	5.0	1.1	6.2	7.3	12.3
Pt oz	Moz	0.02	2.7	2.7	0.5	2.9	3.4	6.1
Pd oz	Moz	0.01	1.4	1.4	0.3	1.7	2.0	3.4

As at 30 June 2022								
Orebody	Units	Merensky Reef			UG2 Reef			Total
		Proved	Probable	Total	Proved	Probable	Total	
Tonnes	Mt	–	50.4	50.4	12.2	58.5	70.7	121.1
Width	cm	–	305	–	246	246	–	–
4E grade	g/t	–	2.65	2.65	2.61	2.74	2.72	2.69
6E grade	g/t	–	2.89	2.89	3.18	3.33	3.30	3.13
4E oz	Moz	–	4.3	4.3	1.0	5.2	6.2	10.5
6E oz	Moz	–	4.7	4.7	1.2	6.3	7.5	12.2
Pt oz	Moz	–	2.6	2.6	0.6	2.9	3.5	6.0
Pd oz	Moz	–	1.3	1.3	0.3	1.7	2.0	3.3

MINERAL RESERVE RECONCILIATION

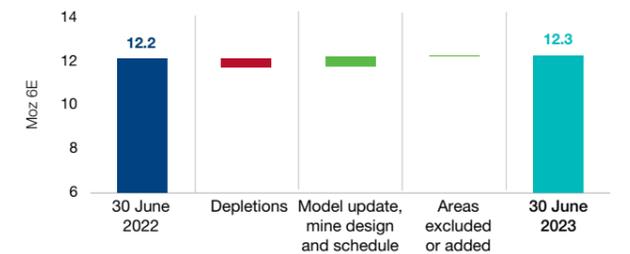
The UG2 Mineral Reserve estimate was impacted by depletion and model updates, resulting in a minor change since 2022. The Merensky Reef Mineral Reserve estimate shows a slight increase since 30 June 2022, due to model updating. Some 40% of the Two Rivers' 6E Mineral Reserves are from the Merensky Reef.

A 0.5Mt stockpile represents the Proved Mineral Reserves for Merensky Reef awaiting the commissioning of the new Merensky concentrator.

PROCESSING

Two Rivers has an on-site concentrator plant where initial processing is undertaken, comprising a standard MF2 design as generally used in the industry for UG2 Reef ore. A new concentrator will process the Merensky Reef ore. Concentrate is transported by road to Impala Mineral Processes in Rustenburg, where further processing occurs in terms of an agreement with IRS.

Total Two Rivers 6E Mineral Reserves
as at 30 June 2023 (variance Moz 6E)



Two Rivers Mineral Reserve distribution
as at 30 June 2023 (Moz 6E)



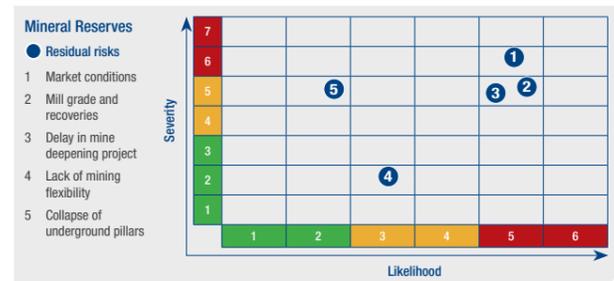
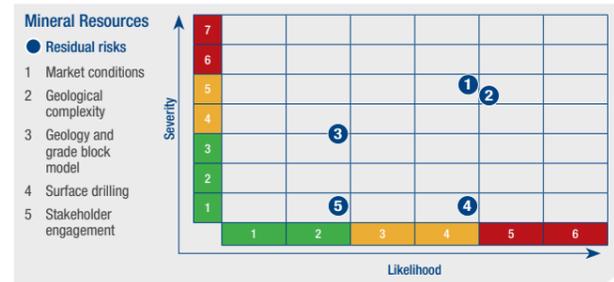
RISK ASSESSMENT

The residual risk matrices for Two Rivers Mineral Resources and Mineral Reserves are illustrated below, highlighting the top five residual risks for both.

The top residual risks identified for the Mineral Resources at Two Rivers are (1) market conditions: basket price sensitivity; (2) geology: complexity; (3) geology and grade block models; (4) surface drilling: challenging topography; and (5) stakeholder engagement

The top residual Mineral Reserve risks identified at Two Rivers are (1) market conditions: basket price sensitivity; (2) mill grade and recoveries; (3) delay in mine deepening project; (4) lack of mining flexibility; and (5) the collapse of underground pillars.

Management interventions are in place to mitigate these risks listed above. Further details regarding the formal risk management process are discussed on [page 19](#).



LoM, VALUATION AND SENSITIVITY

The estimated 20-year LoM profile for Two Rivers is shown below. LoM I constitutes production from the Main and North Decline shafts and the Merensky Reef. LoM II is an extension of the Main Decline infrastructure into the Kalkfontein RE and portions 1 and 2. The UG2 Reef at Buffelshoek is excluded and does not form part of LoM II. The profile is based on assumptions and may change in future. In 2012/13, trial mining and a feasibility study were conducted on the Merensky Reef and the feasibility study was revisited and completed in 2021. The study confirmed a LoM of 23 years for the Merensky Reef at 245koz 6E per annum at steady state.

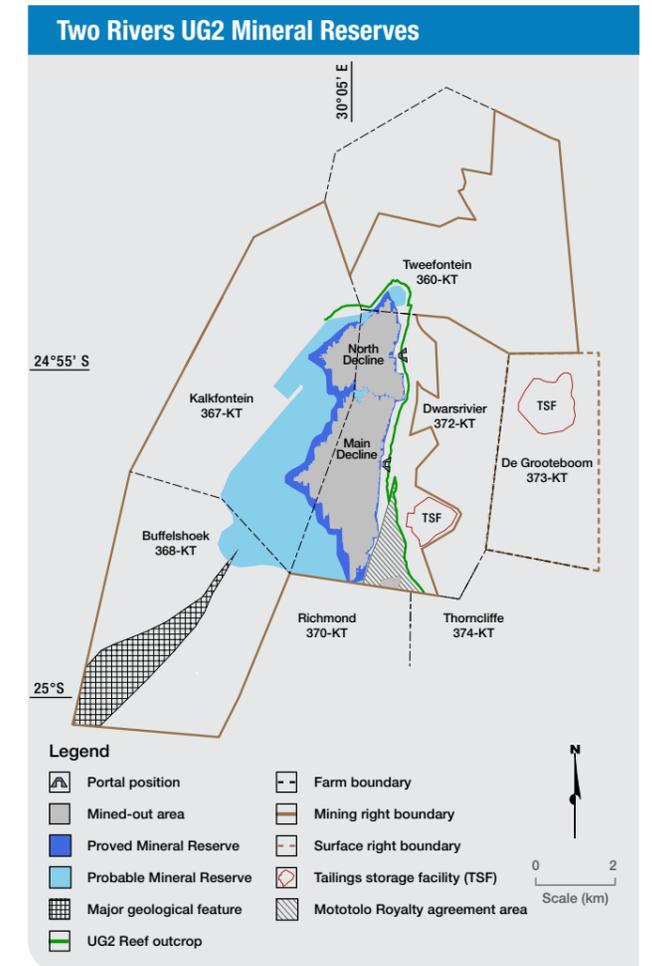
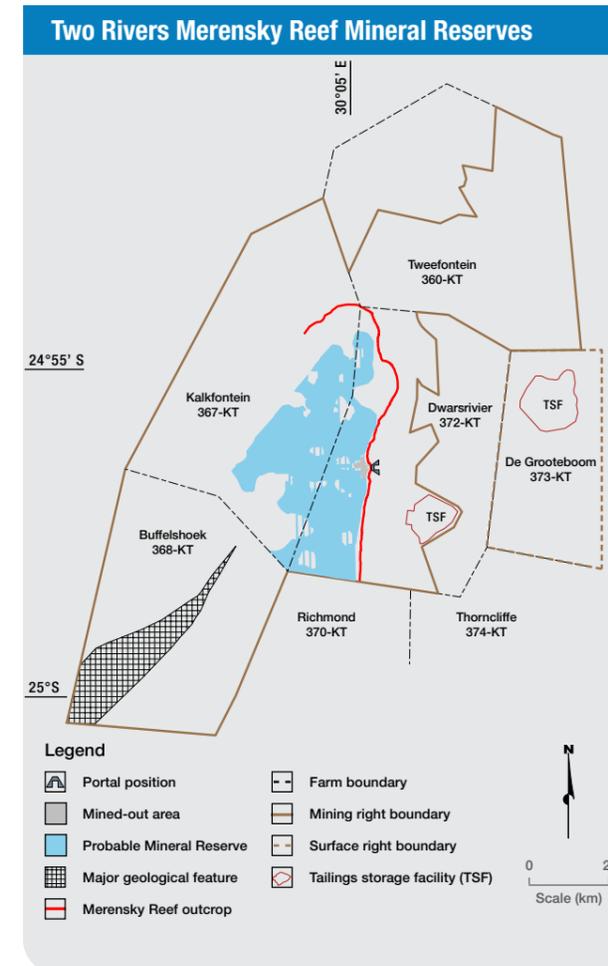
The economic viability of Two Rivers' Mineral Reserves is tested by Implats using net present value calculations over the LoM of the Mineral Reserve, determining the lowest real rand basket price that would still render the Mineral Reserve viable. These calculations generate basket prices based on the local 6E ratios and differ from the overall Group basket prices. This is then tested against the internal estimate of the real long-term basket price and the spot price as at 30 June 2023. These tests by Implats indicate that the Two Rivers requires a real long-term basket price of between R22 000 and R23 000 per 6E ounce to be economically viable. While the real spot basket price for Two Rivers as at 30 June 2023 was R27 695 (US\$1 425) per 6E ounce, Two Rivers' internal long-term real basket price is R29 132 (US\$1 805). Statistics relating to the historical production are shown on [pages 30 and 31](#).



Two Rivers estimated 20-year 6E LoM ounce profile as at 30 June 2023



Core logging at Two Rivers



Zimplats

Zimbabwe

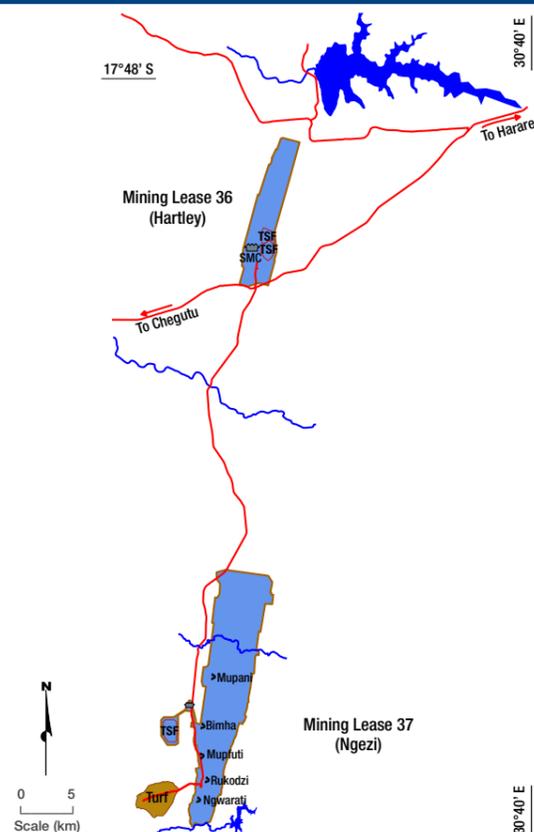
Zimplats' operations are located on the Hartley Complex of the Great Dyke, in Zimbabwe's Mashonaland West province.

Mining right
24 632ha

Implats' interest
87% managed



Zimplats regional locality map



Legend

Mining lease	Rivers
Tailings storage facility (TSF)	Portal
Town	Lake
Processing plant	Public roads

LOCATION

The Zimplats mines at Ngezi are located on Mining Lease 37, approximately 150km southwest of Harare, at the southern end of the Sebakwe sub-chamber of the Hartley Complex on the Great Dyke. Hartley Mine and the Selous Metallurgical Complex (SMC) are located on Mining Lease 36, in the Darwendale sub-chamber of the Great Dyke's Hartley Complex, approximately 80km west-southwest of Harare and 77km north of the Ngezi mines.

BRIEF HISTORY

Development at Hartley Platinum Mine began in 1994 after Delta Gold brought BHP into a joint venture (66.7% BHP and 33.3% Delta Gold) to develop the asset. By 1998, Delta Gold had extended its cover to include interests in all the platinum Mineral Resources of the Hartley Complex. By 1999 it became apparent that Hartley Platinum Mine had failed to meet its development targets and BHP placed it on care and maintenance. Zimplats took over BHP's share in Hartley and the SMC and, in 2001, initiated the Ngezi/SMC project with assistance from Implats and ABSA Investment Bank. A 2.2 million tonne per year open-pit mine was established at Ngezi.

Implats progressively increased its shareholding in Zimplats until 2003, when it successfully made an unconditional cash offer to Zimplats' minority shareholders. In 2003, Zimplats began developing underground operations at Ngezi to replace the east and west open pits. Over the years, production volumes from the operations have increased to the current 7.1 million tonnes of ore per year from five underground mines, all of which feed the two concentrator modules at Ngezi and the SMC concentrator. A third concentrator was commissioned in August 2022. Zimplats is one of Implats' managed operations, with Implats holding 87% and minority shareholders holding the remaining 13%.

Zimplats (continued)

GEOLOGICAL SETTING

The Great Dyke of Zimbabwe developed as a series of initially discrete magma chamber compartments, which coalesced as the chambers filled.

The Great Dyke has been sub-divided into five sub-chambers, namely the Wedza, Selukwe (Shurugwi), Sebakwe, Darwendale and Musengezi sub-chambers. The stratigraphic units in each sub-chamber are classified into the ultramafic (lower) and the mafic (upper) sequence. The ultramafic rocks are dominated from the base upwards by dunite, harzburgite and pyroxenite, while the mafic rocks consist mainly of gabbro and gabbro-norite. Thin layers of chromitite occur at the bottom of cyclic units throughout the ultramafic sequences.

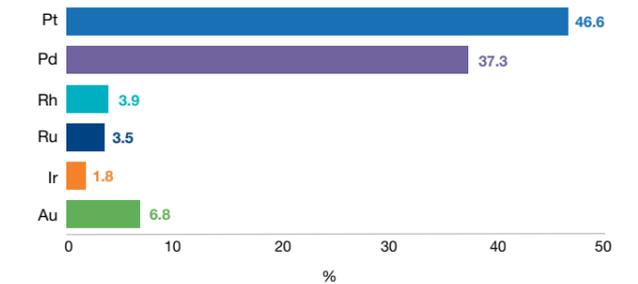
The PGM-bearing horizon is known as the Main Sulphide Zone (MSZ), which is part of the lower sequence and is located below the contact with the mafic sequence. The MSZ is located in the P1 pyroxenite, from 5m to about 50m below the ultramafic/mafic contact. The MSZ is a continuous layer, 2m to 10m thick, and forms an elongated basin. The zone strikes north-northeast, dips between 5° and 20° on the margins, and flattens towards the axis (centre) of the basin. Peak base metal and PGM values are offset vertically, with palladium peaking at the base, platinum in the centre and nickel towards the top (see typical vertical grade profiles on page 64). Visual identification of the MSZ is difficult and systematic monitoring of the reef, using various sampling methods, is needed to guide mining.

Mining occurs in areas where the dip is less than 9°, referred to as the MSZ 'Flats', and areas with dips between 9° and 14°, which are referred to as the 'MSZ Upper Ores I' areas (UOR I). Currently no mining takes place in areas with a dip above 14°, which are referred to as the 'MSZ Upper Ores II' (UOR II).

The schematic of the Zimplats operation on page 67 cuts obliquely across the 2m to 10m thick platinum-bearing MSZ orebody with an approximate north-northeast strike distance of 16km at Ngezi in the south, where the Mupani, Bimha, Mupfuti, Rukodzi and Ngwarati portals are located. Further to the north, at the Hartley Complex, the MSZ orebody extends over a 9km north-northeast strike distance. It is evident on the schematic that the MSZ orebody is a continuous layer within the Great Dyke. East-west striking fault structures form natural boundaries between the portal areas at Ngezi. The MSZ lithologies dip at between 5° and 20° near the margins and flatten towards the central part of the Great Dyke to form a flat-lying floor. The general mining infrastructure at Ngezi is located on the western side of the Great Dyke, where the orebody is accessed by portals.

Zimplats MSZ 6E ratio

as at 30 June 2023 (%)



MSZ 6E ratios derived from Mineral Reserve estimate.

EXPLORATION AND STUDIES

During the year, the Company conducted exploration activities to evaluate the Mineral Resources on existing mines and projects at both mining leases. The primary focus was on Mupfuti, Bimha and Mupani mines and at Hartley.

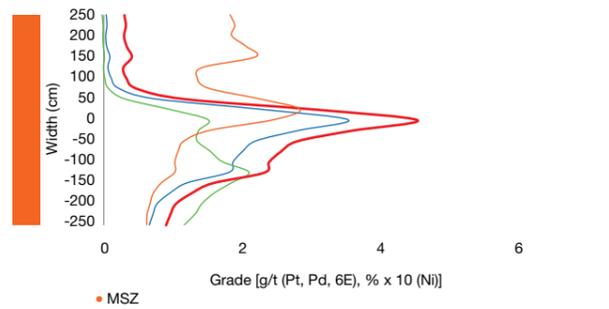
Surface exploration drilling was aimed at increasing the geological confidence in the orebodies, upgrading the relevant Mineral Resources categories in drilled areas, and enhancing the geotechnical interpretation to manage the risk posed to operations and development projects by the ground conditions and geological structures. Routine underground core drilling continued throughout the year. This essential strategy is critical to improving the efficiency of the short-term mining plan as it allows the mines to interpret smaller-scale geological structures, which would not be captured by the surface drilling campaigns. All drillholes were sampled on the reef horizon and the half-core split was dispatched for analysis at external laboratories.

Underground core drilling for reef profiling and geotechnical assessment was completed in all the active mines. The information obtained from logging and sampling the holes has improved the characterisation of the orebody ahead of mining. Completed surface and underground core drilling work during the past year is shown in the table below.

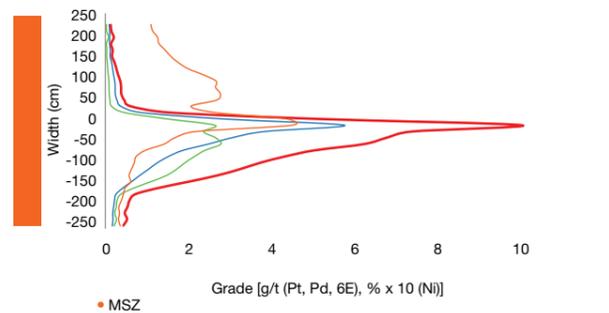
Operation	Surface drilling		Underground drilling	
	Number of drillholes	Total drilling (m)	Number of drillholes	Total drilling (m)
Ngwarati Mine	–	–	10	973
Mupfuti Mine	–	–	12	1 140
Bimha Mine	23	4 978	23	2 320
Mupani Mine	35	8 647	13	1 362
Portal 10	57	25 529	–	–
Hartley Mine	45	22 941	–	–
Total	160	62 095	58	5 795

Zimplats (continued)

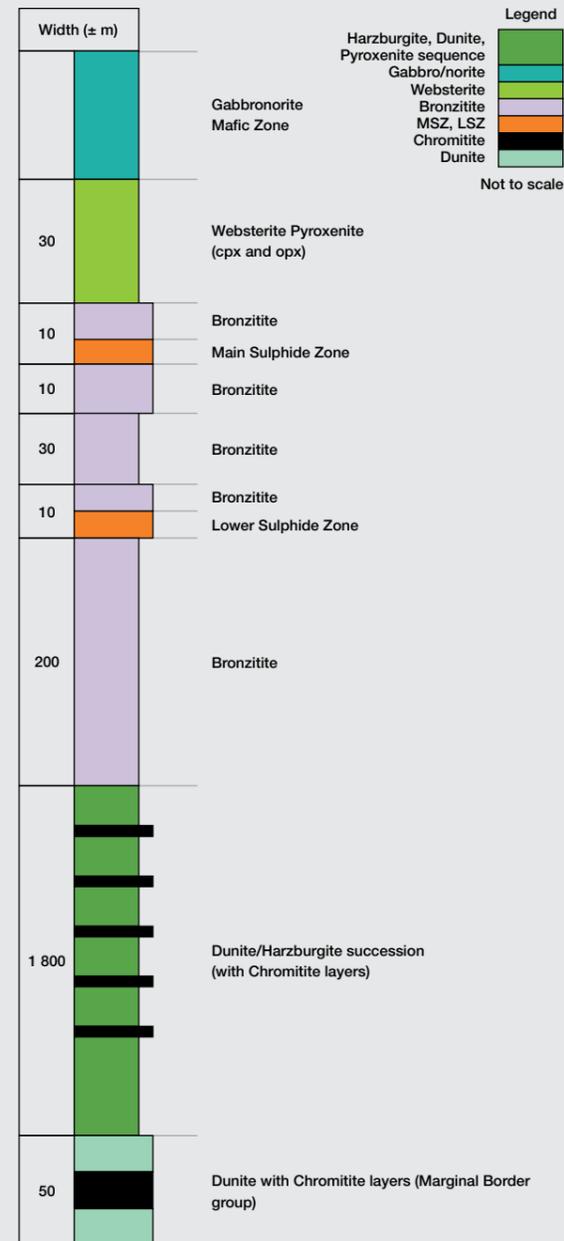
Ngezi – MSZ — Pt — Pd — 6E — Ni



Hartley – MSZ — Pt — Pd — 6E — Ni



Generalised geological succession of the upper portion of the Great Dyke at Zimplats



Zimplats (continued)

The recent Hartley exploration campaign has improved the density of the drilling around the existing old workings to inform ongoing preliminary feasibility studies (PFS) for mining. This work is coupled with confirmatory drilling, aimed at improving confidence in the historical database inherited by Zimplats from BHP, which targeted specific blocks of the mining lease. The additional data from the Hartley exploration campaign confirms orebody continuity and clarifies the general attitude of the major geological structures in the area, mainly dolerite sills and large-scale faults.

Following approval of the Mupfuti replacement bankable feasibility study (BFS) in 2021, Bimha Mine's shaft capacity was increased from the current design capacity of 2Mtpa to 3.1Mtpa in FY2023. Mining and construction work to upgrade Mupani Mine's infrastructure from its design capacity of 2.2Mtpa to 3.6Mtpa is underway, with a target completion date of 2028. The development, aimed at creating more underground face-length to accommodate new teams at these two mines, was incorporated into the business plan and production ramp-up will start while Mupfuti Mine is still on full production. This will allow the operations to achieve higher production rates during the five-year period, along with the benefits of ongoing productivity improvements. Rukodzi Mine was depleted at the end of the year ending 30 June 2022.

Additional milling capacity at the Ngezi concentrator site became available from a new 0.9Mtpa concentrator module to treat excess ore from the mines, which was commissioned in the past year.

GENERAL INFRASTRUCTURE

Infrastructure to support production consists of integrated road networks, five production declines, conveyor networks and ore load-out facilities for road trains. Ore processing infrastructure consists of three concentrator modules at Ngezi, with an additional concentrator and a smelter at SMC. Refurbishment of the mothballed Base Metal Refinery (BMR) was completed. Water for the Ngezi operations is drawn from the Ngezi and Chitsuwa dams. Zimplats' annual allocation from the two dams is 11 000MI, which exceeds current requirements. The SMC processing infrastructure includes a concentrator, a smelter, TSFs, stores and offices. Water for the SMC operations is abstracted from the Manyame Dam, where Zimplats has an annual allocation of 5 000MI. Power from the Zimbabwe Electricity Supply Authority's (ZESA) Selous sub-station is fed to the transformers at Ngezi and SMC via the 132kV overhead lines. These assets, and the wide network of information and communication technology equipment, provide services to the business.

MINERAL RESOURCE ESTIMATION AND CLASSIFICATION

The Mineral Resources and Mineral Reserves for ML 37 (Ngezi) are based on external nickel sulphide collection fire assays with an ICP-MS finish. The twin drilling campaign resulted in a decision that the updated ML 36 (Hartley) Mineral Resources should, as for ML 37 (Ngezi), be based on only external nickel sulphide collection fire assays with an ICP-MS finish. This resulted in a new estimation and reclassification of the ML 36 Mineral Resources and a total of 9% decrease in the Mineral Resource 6E ounces.

Oxide ores on the Great Dyke are defined as the weathered to semi-weathered material near the sub-outcrop of the MSZ. These oxide ores have lower metallurgical recoveries than unweathered sulphide ore using conventional extraction technology and are currently marginal to sub-economic. Mineral Resources are estimated using kriging techniques on assay data derived from surface drillholes. Estimates are derived from composite widths, which are based on appropriate economic parameters.

The classification of Mineral Resources at Zimplats is informed by a matrix of factors, which incorporate geological complexity and the confidence in the geostatistical estimation. In broad terms, confidence is derived from surface drillhole spacing, which has the largest weighting on the classification of Mineral Resources. For Ngezi (ML 37), the following applies:

- Drillhole spacing of 250m or less supports Measured Mineral Resources
- Drillhole spacing between 250m and 1 000m supports Indicated Mineral Resources
- Drillhole spacing greater than 1 000m supports Inferred Mineral Resources.

For Hartley (ML 36), the drillhole density in the Measured Mineral Resources is generally tighter than for ML 37 with 150m spacing being the target. The interpretation of existing data shows geological continuity of the orebody and grade consistency in these areas. The modelling remains consistent with the known characteristics of the mined footprint at Hartley.

The Mineral Resource estimate reflects the actual spatial depletion as at 31 May 2023 and the non-spatial forecast depletion to 30 June 2023. More details regarding the Mineral Resources and Mineral Reserves can be obtained from the 2023 Zimplats annual report (www.zimplats.com).

Zimplats Mineral Resource estimate (inclusive reporting)

As at 30 June 2023													
Orebody		Ngezi MSZ				Hartley MSZ				MSZ Oxides – all areas			Total
Category	Units	Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	Indicated	Inferred	Total	
Tonnes	Mt	238.0	337.6	124.0	699.6	15.2	127.9	55.7	198.8	29.9	35.8	65.7	964.2
Width	cm	245	227	208	–	180	180	180	–	250	240	–	–
4E grade	g/t	3.33	3.35	3.29	3.33	3.89	3.53	3.72	3.61	3.20	3.25	3.23	3.38
6E grade	g/t	3.51	3.53	3.47	3.51	4.09	3.72	3.91	3.80	3.38	3.43	3.41	3.57
Ni	%	0.10	0.11	0.09	0.11	0.13	0.12	0.12	0.12	0.10	0.11	0.10	0.11
Cu	%	0.08	0.08	0.08	0.08	0.10	0.09	0.10	0.09	0.08	0.09	0.08	0.08
4E oz	Moz	25.5	36.3	13.1	74.9	1.9	14.5	6.7	23.1	3.1	3.7	6.8	104.8
6E oz	Moz	26.9	38.3	13.9	79.1	2.0	15.3	7.0	24.3	3.3	4.0	7.2	110.6
Pt oz	Moz	12.8	18.4	6.9	38.2	0.9	7.9	3.4	12.3	1.5	1.9	3.4	53.8
Pd oz	Moz	9.80	13.7	4.6	28.1	0.7	5.4	2.4	8.6	1.2	1.5	2.7	39.4

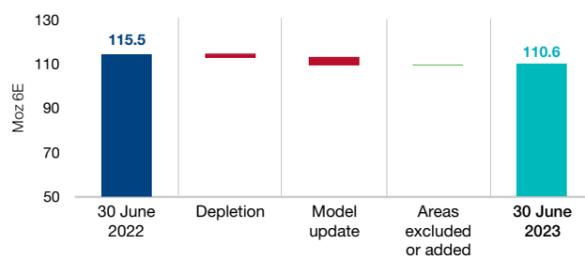
As at 30 June 2022													
Orebody		Ngezi MSZ				Hartley MSZ				MSZ Oxides – all areas			Total
Category	Units	Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	Indicated	Inferred	Total	
Tonnes	Mt	211.5	381.2	122.1	714.9	32.1	138.0	43.6	213.8	16.0	39.3	55.4	984.0
Width	cm	245	230	207	–	180	180	180	–	250	216	–	–
4E grade	g/t	3.37	3.38	3.33	3.37	4.05	3.78	3.44	3.75	3.42	3.55	3.51	3.46
6E grade	g/t	3.56	3.57	3.51	3.56	4.28	3.99	3.62	3.96	3.61	3.75	3.71	3.65
Ni	%	0.11	0.12	0.12	0.12	0.13	0.12	0.11	0.12	0.10	0.12	0.11	0.12
Cu	%	0.08	0.09	0.09	0.08	0.11	0.10	0.09	0.10	0.07	0.10	0.09	0.09
4E oz	Moz	22.9	41.4	13.1	77.4	4.2	16.8	4.8	25.8	1.8	4.5	6.3	109.5
6E oz	Moz	24.2	43.8	13.8	81.7	4.4	17.7	5.1	27.2	1.9	4.7	6.6	115.5
Pt oz	Moz	11.4	20.7	6.8	38.8	2.0	8.8	2.6	13.5	0.9	2.2	3.1	55.5
Pd oz	Moz	8.9	15.9	4.7	29.5	1.6	5.9	1.6	9.2	0.7	1.7	2.4	41.2

MINERAL RESOURCE RECONCILIATION

The 19.8Mt year-on-year reduction can largely be attributed to the updated model for Hartley and mining depletion. Some 10Mt have been reclassified as MSZ Oxides. The year-on-year reconciliation of the PGE Mineral Resource estimate shows an overall decrease from 115.5Moz 6E to 110.6Moz 6E.

Total Zimplats 6E Mineral Resources

as at 30 June 2023 (variance Moz 6E)

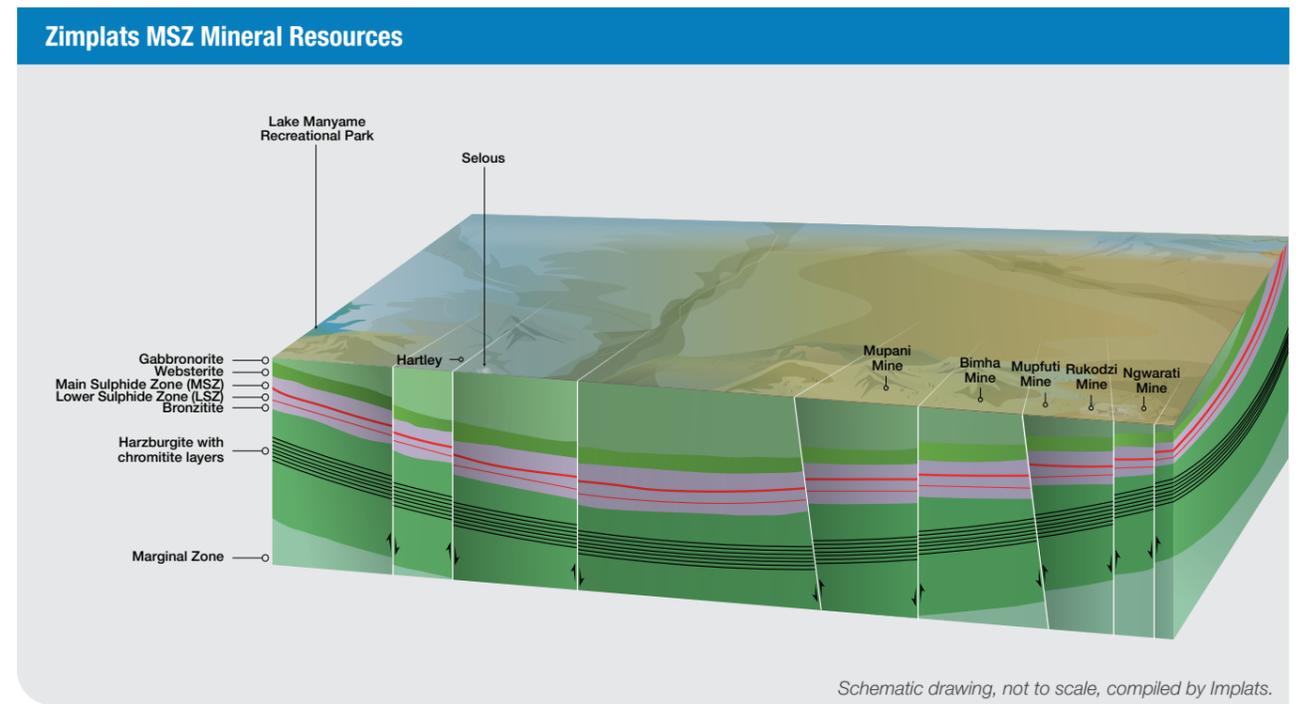


MODIFYING FACTORS

The table below summarises the significant modifying factors impacting the Mineral Resource and Mineral Reserve estimates (see pages 15, 33, 65, 67, 68 and 69 for further details).

Mineral Resource Key assumptions	Main Sulphide Zone
Geological losses	5 – 20%
Area	147 million ca
Resource cut	180 – 250cm

Mineral Reserve Modifying factors	Main Sulphide Zone
Dilution	5 – 7.5%
Pillars	19 – 35%
Mine call factor	97%
Relative density	3.18 – 3.25
Stoping width	250 – 265cm
Concentrator recoveries	78 – 81%



MINING METHODS

A mechanised bord and pillar mining method is employed to extract ore from stopes, whose nominal stope width is 2.5m. Mine access is through declines, which are generally located centrally in each Mineral Resource block. Any asymmetry is accounted for in the mine production scheduling. The main production suite of equipment includes a single boom face rig for drilling, a roof bolter for support drilling and a 10t loader (LHD) and a dump truck, which are deployed into specialised functional teams in each of the underground production sections.

The productivity per crew varies from approximately 16 500t to greater than 23 000t per month, depending on the particular mine, the dip of the reef and the existing pillar layout. The typical design comprises 7m panels with a minimum of 4m x 4m size in-stope pillars, which are determined by depth below surface, and these are surrounded by large barrier pillars which form paddocks. The paddocks are to arrest pillar unravelling in the event of a collapse. Ngwarati Mine does not have barrier pillars or paddocks due to its relatively shallow depth below surface. At all the mines, the room spans may decrease and pillar dimensions may increase in bad ground. Roof bolts and tendons are integral to the support design.

MINE PLANNING PROCESS

Zimplats' planning function seeks to strategically plan and direct the mining operations' activities to maximise the Company's production efficiency and cost-effectiveness targets. While all MSZ 'Flats', MSZ 'Upper Ores I and II' are included in the Mineral Resource estimate,

only the MSZ 'Flats' and MSZ 'Upper Ores I' are progressed to the Mineral Reserve estimate, based on the currently viable mining methods and economic considerations. Zimplats has a fleet of extra-low profile (XLP) equipment currently on trial in the 'Upper Ores II' to test for a viable mining method.

Mine planning and scheduling for all operations at Ngezi are undertaken as per the Group cycle, using software such as Datamine and Vulcan.

MINERAL RESERVE ESTIMATION AND CLASSIFICATION

The Mineral Reserve estimates are based on the updated Mineral Resource estimates, mine design and modifying factors. The Mineral Reserves reported reflect anticipated feed grades delivered to the mill. The estimates align with the business plan by scheduling ore tonnages and grades at a 265cm stoping width. The conversion and classification of Mineral Reserves at Zimplats are informed by:

- Feasible mine plan and project studies, board approval and available funding
- Economic testing at given market conditions
- Indicated Mineral Resources can be classified as Probable Mineral Reserves if the above hurdles are met
- Similarly, Measured Mineral Resources can be classified as Proved Mineral Reserves
- In certain exceptional circumstances, the Competent Person may elect to convert Measured Mineral Resources to Probable Mineral Reserves if confidence in the modifying factors is confirmed.

Zimplats (continued)



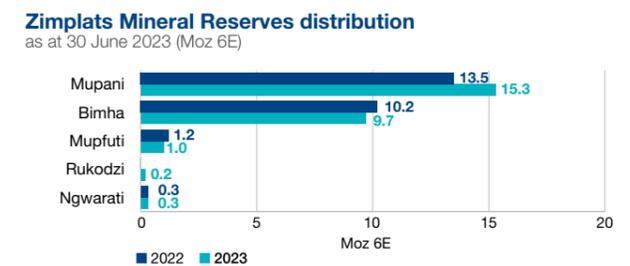
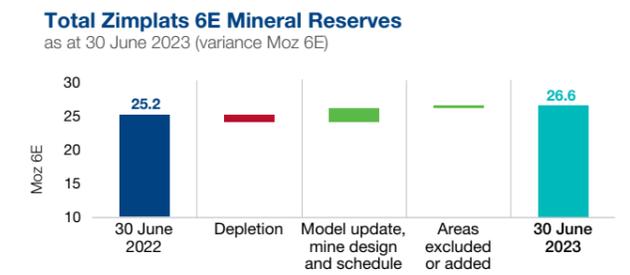
Zimplats Mineral Reserve estimate

As at 30 June 2023				
Orebody	Ngezi MSZ			Total
Category	Units	Proved	Probable	
Tonnes	Mt	131.3	118.7	249.9
Width	cm	265	265	–
4E grade	g/t	3.17	3.10	3.13
6E grade	g/t	3.35	3.27	3.31
Ni	%	0.10	0.10	0.10
Cu	%	0.07	0.07	0.07
4E oz	Moz	13.4	11.8	25.2
6E oz	Moz	14.1	12.5	26.6
Pt oz	Moz	6.6	5.8	12.4
Pd oz	Moz	5.3	4.7	9.9

As at 30 June 2022				
Orebody	Ngezi MSZ			Total
Category	Units	Proved	Probable	Total
Tonnes	Mt	109.3	123.8	233.2
Width	cm	265	265	–
4E grade	g/t	3.19	3.17	3.18
6E grade	g/t	3.37	3.35	3.36
Ni	%	0.10	0.10	0.10
Cu	%	0.08	0.08	0.08
4E oz	Moz	11.2	12.6	23.8
6E oz	Moz	11.8	13.3	25.2
Pt oz	Moz	5.6	6.3	11.8
Pd oz	Moz	4.4	5.0	9.3

MINERAL RESERVE RECONCILIATION

A 16.8Mt net increase in Mineral Reserves is reported, mainly attributable to the inclusion of additional MSZ Upper Ores I, pillar reclamation areas at Rukodzi and Ngwarati and model updates. This was offset by mining depletion. The declared Mineral Reserves subsequently increased by 1.4Moz 6E from 25.2Moz 6E to 26.6Moz 6E.



Zimplats (continued)

PROCESSING

Two concentrators, at Ngezi and SMC, process ore from the mines. The Ngezi concentrator has two similar modules, which have a capacity of 2.1Mtpa each, and a third module with a capacity of 0.9Mtpa to make up a total of about 5.1Mtpa. The SMC concentrator has an upgraded design capacity of about 2.4Mtpa.

Approximately 43% (3.3Mt) of the mined ore is transported via road trains to SMC and Ngezi third concentrators. An overland conveyor transports the rest to the Ngezi concentrator modules. Concentrates from both the Ngezi and SMC concentrators are then smelted in an arc furnace and converted to matte at SMC. The resulting matte is dispatched to Impala's refinery in Springs under a LoM agreement with IRS.

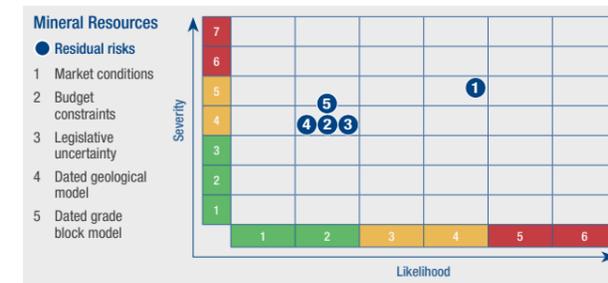
RISK ASSESSMENT

The residual risk matrices for the Zimplats Mineral Resources and Mineral Reserves are illustrated below, highlighting the top five residual risks.

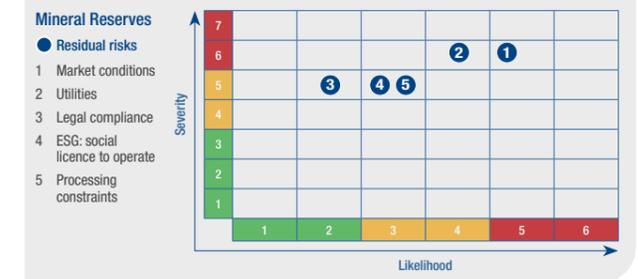
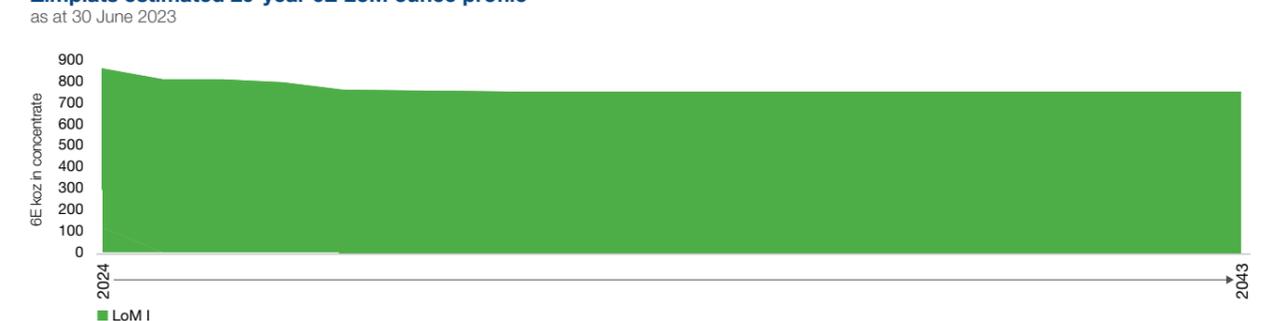
The top residual risks identified for the Mineral Resources at Zimplats are (1) market conditions: basket price sensitivity; (2) financial: budgetary constraints; (3) legislative uncertainty; (4) geology: version control of geological models; and (5) geology: version control of grade block models.

The top residual Mineral Reserve risks identified at Zimplats are (1) market conditions: basket price sensitivity; (2) utilities: unavailability of water and electricity; (3) legal: non-adherence to legal requirements; (4) ESG: loss of social license to operate; and (5) metallurgical: inability to recover minerals optimally.

Management interventions are in place to mitigate these risks listed above. Further details regarding the formal risk management process are discussed on page 19.



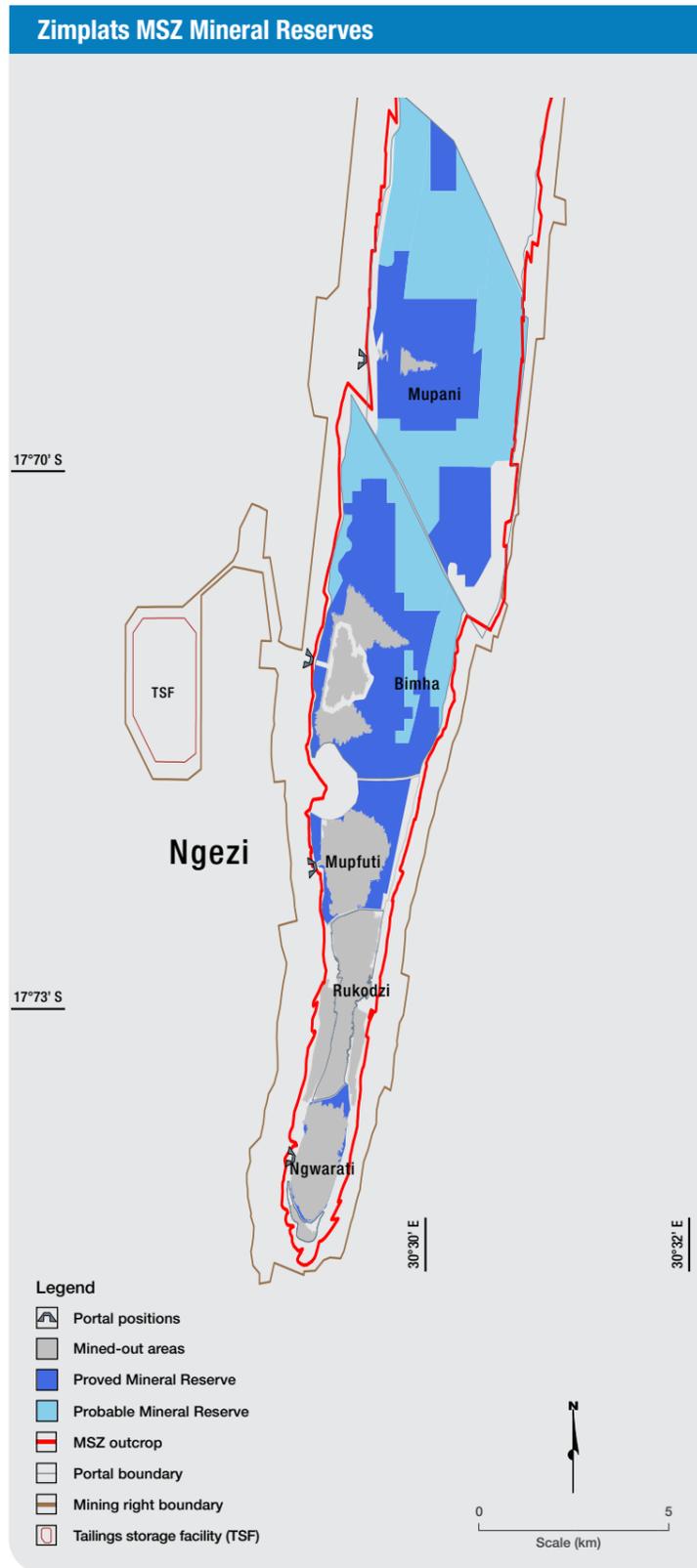
Zimplats estimated 20-year 6E LoM ounce profile



LoM, VALUATION AND SENSITIVITY

The LoM plan for Zimplats is a design and costing study of an existing or future operation, in which the following aspects have been realistically assessed: geological, mining, metallurgical, engineering, operational, economic, marketing, legal, environmental, social, governmental, and all other modifying factors, to demonstrate that at the time of reporting, extraction is reasonably justified. The high-level LoM profile is depicted in the graph below.

The economic viability of Zimplats' Mineral Reserves is tested by Implats using net present value calculations of the Mineral Reserve, determining the lowest real rand basket price that would still render the Mineral Reserve viable. These calculations generate basket prices based on the local 6E ratios and differ from the overall Group basket prices. This is then tested against the internal Zimplats estimate of the real long-term basket price and the spot price as at 30 June 2023. These tests indicate that Zimplats requires a real long-term basket price of between R21 000 and R22 000 per 6E ounce to be economically viable. While the real spot basket price for Zimplats as at 30 June 2023 was R29 155 (US\$1 500) per 6E ounce, its internal long-term real basket price is R28 498 (US\$1 766). The commodity market remains fluid. Statistics relating to the historical production are shown on pages 30 and 31.



Mimosa

Zimbabwe

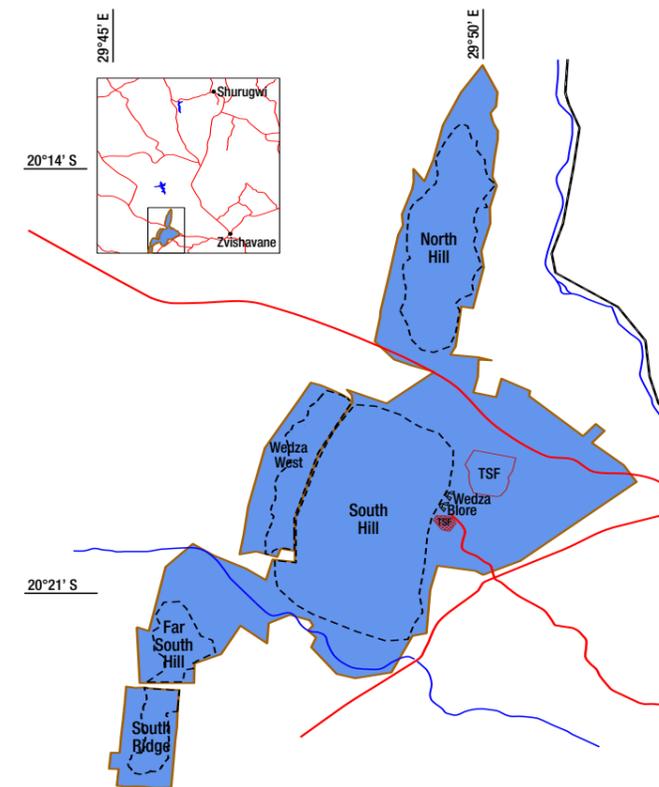
Mimosa is situated 32km west of Zvishavane town, approximately 340km southwest of Zimbabwe's capital city, Harare.

Mining right
7 691ha

Implats' interest
50% non-managed



Mimosa regional locality map



LOCATION

Mimosa is located on the Wedza Geological complex of the Great Dyke, about 150km east of Bulawayo in the southern part of Zimbabwe's Midlands province. The mine is situated some 80km south-southwest of the Unki Platinum Mine, operated by Anglo American Platinum.

BRIEF HISTORY

Mining operations started in 1926 at North Hill and lasted approximately two years, with some 60 Oz of platinum recovered. In 1962, Union Carbide Zimbabwe secured an Exclusive Prospecting Order (EPO) in the Wedza area over the Mimosa deposit and conducted periodic exploration and trial mining for 30 years. Zimasco acquired Mimosa in 1993 and piloted platinum mining in Zimbabwe by resuscitating Mimosa and steadily increasing production to 1 000t per day by 1998. In July 2001, Implats acquired 35% in Mimosa, increasing this stake to 50% the following year, with Aquarius acquiring the remaining 50% in Mimosa in the same year. In 2016, Sibanye-Stillwater acquired all the shares which formerly belonged to Aquarius. Mimosa is managed by Mimosa Investments Limited, a Mauritius-based company, held by Implats and Sibanye-Stillwater, and is a non-managed operation in the Implats portfolio.

GEOLOGICAL SETTING

PGM mineralisation at Mimosa is located in four isolated and fault-bounded blocks — from north to south they are the North Hill, South Hill, Mtshingwe Fault Block and Far South Hill mineralised bodies.

Each block is host to a pyroxenite layer known as the P1 pyroxenite layer, overlain by a gabbro layer. The platinum-bearing Main Sulphide Zone (MSZ) is located in the P1 pyroxenite, some 10m below the ultramafic/mafic contact. The MSZ is a continuous layer, 2m to 6m thick, and forms an elongated basin. The mineralised zone strikes in a north-northeasterly trend and dips at about 14° on the margins, flattening towards the central part of the orebody. The MSZ at Mimosa has a well-defined grade profile where peak base metal and PGM values are offset vertically, with palladium dominant towards the base, platinum in the centre and nickel towards the top (see typical grade profile on page 73). The MSZ is visually identified using pyroxene and sulphide mineralisation. Minor faults and dykes are present and although no potholes have been identified, low-grade areas and areas of no mineralisation, or 'washout channels', have been intersected.

EXPLORATION AND STUDIES

The lease area has been explored by 605 exploration core-recovering drillholes, surface mapping and trenching. The drillholes were drilled and assayed over a series of campaigns spanning the life of the mine. The drill core is largely NQ size, though the upper unconsolidated part of the hole is drilled HQ size. All drillholes are logged lithologically and geotechnically, with borehole data verified for integrity before being imported into the database. The exploration results assist with ongoing mining operations and contribute to the geological modelling of the various project areas and related feasibility studies. In the past year, 22 surface drillholes totalling 3 160m were completed. In addition, 62 underground drillholes totalling 6 249m, were drilled to provide coverage ahead of mining operations.

A Bankable Feasibility Study was completed in 2021 for the exploitation of the North Hill Mineral Resource. The study demonstrated economic viability. This study was revalidated in quarter 4 of FY2023, confirming economic viability. Execution was approved subject to a memorandum of understanding being signed with the Government of Zimbabwe.

GENERAL INFRASTRUCTURE

The mining operation is well established with a mature infrastructure. The mine currently extracts 2 900MI raw water per annum from the Khumalo Weir, which is served by the upstream Palawan Dam. Power supply to the mine is via a 132kV overhead powerline feeder teeing off the Mberengwa switching station some 15km south of the Mimosa consumer sub-station, which is equipped with two 20MVA, plus one 40MVA 132/11kV transformers. The maximum load capacity of the line feeding the mine consumer sub-station is 118MVA, which is adequate to accommodate an additional load. The access surface tarred road to the mine is well maintained. The nearest railway station, Bannockburn, is 16km from the mine. General infrastructure includes offices, stores, canteen, two declines, workshops, a concentrator and a TSF facility.

MINERAL RESOURCE ESTIMATION AND CLASSIFICATION

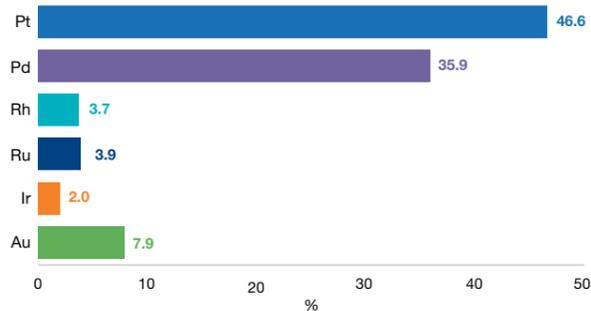
The Mineral Resource estimates are computed with Surpac™ software, using inverse distance techniques. The estimation block model cut-off for incorporating additional drillhole data was in December 2022. The Mineral Resource estimate reflects the actual spatial depletion as at 31 March 2023 and the non-spatial forecast depletion to 30 June 2023.

The classification of Mimosa's Mineral Resources is informed by a matrix considering geological complexity and the confidence in the geostatistical estimation. In broad terms, confidence is derived from surface drillhole spacing, and this has the largest weighting on the classification of Mineral Resources:

- Drillhole spacing less than 250m apart supports Measured Mineral Resources
- Drillhole spacing between 250m and 500m supports Indicated Mineral Resources
- Drillhole spacing greater than 500m supports Inferred Mineral Resources.

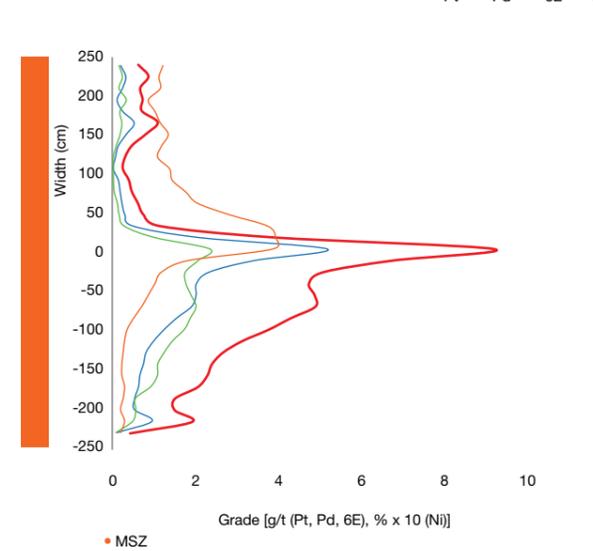
Mimosa MSZ 6E ratio

as at 30 June 2023 (%)

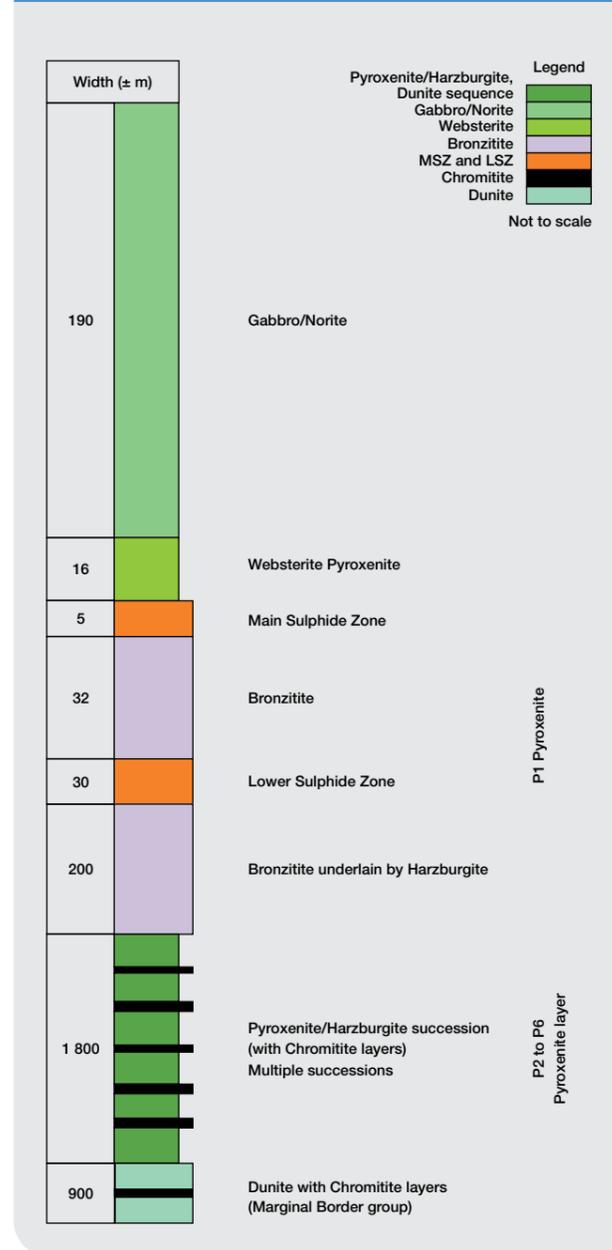


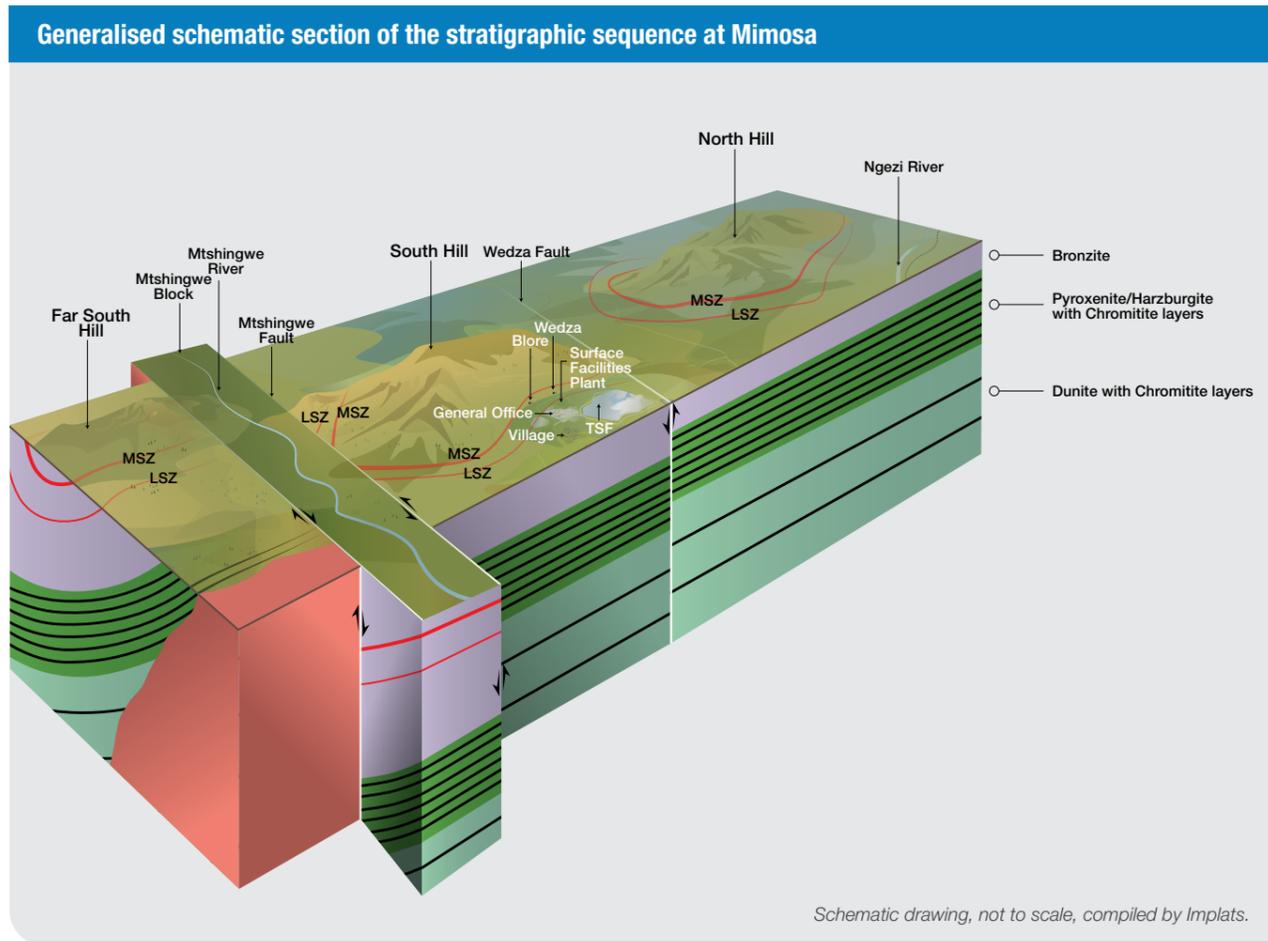
MSZ 6E ratios derived from the Mineral Reserve estimate.

Mimosa – MSZ



Generalised geological succession of the upper portion of the Great Dyke at Mimosa





The schematic section of Mimosa above demonstrates the geology of the north-north-easterly striking platinum-bearing MSZ relative to the four fault-bounded blocks – Far South Hill, Mtshingwe Block, South Hill and North Hill – in this area of the Great Dyke. The continuous elongated basin of the MSZ layer is 2m to 6m thick and dips about 14° on the margins and flattens towards the axis of the orebody. Mimosa’s general mining infrastructure is located on the eastern side of the South Hill orebody, where the underground operation is accessed through the Wedza and Blore declines.



Mimosa Mineral Resource estimate (inclusive reporting)

As at 30 June 2023

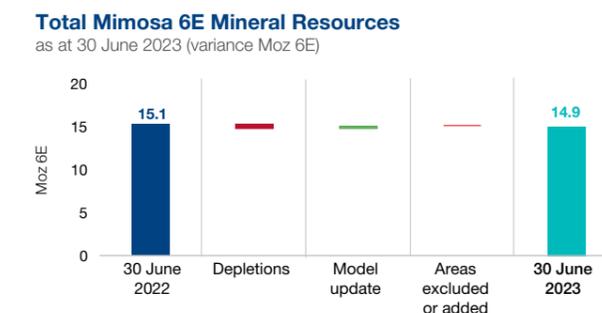
Orebody	Category	Units	South Hill MSZ				North Hill MSZ				Far South Hill MSZ				Total
			Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	
Tonnes	Mt		38.4	8.3	16.3	63.0	28.7	14.4	7.2	50.2	3.9	2.1	5.4	11.4	124.6
Width	cm		210	210	210	–	210	210	210	–	210	210	210	–	–
4E grade	g/t		3.59	3.37	3.44	3.53	3.43	3.55	3.45	3.46	3.49	3.72	3.30	3.44	3.49
6E grade	g/t		3.83	3.61	3.68	3.76	3.63	3.76	3.66	3.67	3.71	3.95	3.51	3.66	3.71
Ni	%		0.15	0.15	0.15	0.15	0.16	0.17	0.15	0.16	0.15	0.16	0.14	0.15	0.15
Cu	%		0.12	0.12	0.12	0.12	0.12	0.13	0.12	0.12	0.13	0.13	0.12	0.12	0.12
4E oz	Moz		4.4	0.9	1.8	7.1	3.2	1.6	0.8	5.6	0.4	0.2	0.6	1.3	14.0
6E oz	Moz		4.7	1.0	1.9	7.6	3.3	1.7	0.8	5.9	0.5	0.3	0.6	1.3	14.9
Pt oz	Moz		2.2	0.4	0.9	3.5	1.5	0.8	0.4	2.8	0.2	0.1	0.3	0.6	6.9
Pd oz	Moz		1.7	0.3	0.7	2.8	1.2	0.6	0.3	2.1	0.2	0.1	0.2	0.5	5.3

As at 30 June 2022

Orebody	Category	Units	South Hill MSZ				North Hill MSZ				Far South Hill MSZ				Total
			Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	
Tonnes	Mt		38.7	9.8	17.1	65.7	26.8	14.6	8.5	49.9	3.9	2.1	5.4	11.4	126.9
Width	cm		210	210	210	–	210	210	210	–	210	210	210	–	–
4E grade	g/t		3.61	3.41	3.40	3.52	3.41	3.52	3.43	3.45	3.49	3.72	3.30	3.44	3.49
6E grade	g/t		3.85	3.65	3.63	3.76	3.61	3.74	3.64	3.65	3.71	3.95	3.51	3.66	3.71
Ni	%		0.15	0.15	0.15	0.15	0.16	0.17	0.16	0.16	0.15	0.16	0.14	0.15	0.16
Cu	%		0.12	0.12	0.13	0.13	0.12	0.13	0.12	0.13	0.13	0.13	0.12	0.12	0.12
4E oz	Moz		4.5	1.1	1.9	7.4	2.9	1.7	0.9	5.5	0.4	0.2	0.6	1.3	14.2
6E oz	Moz		4.8	1.2	2.0	7.9	3.1	1.8	1.0	5.9	0.5	0.3	0.6	1.3	15.1
Pt oz	Moz		2.2	0.5	0.9	3.6	1.4	0.8	0.5	2.7	0.2	0.1	0.3	0.6	7.0
Pd oz	Moz		1.7	0.4	0.7	2.9	1.1	0.6	0.3	2.1	0.2	0.1	0.2	0.5	5.4

MINERAL RESOURCE RECONCILIATION

The 30 June 2023 Mineral Resources were impacted by normal mining depletion. Model updates resulted in an increased estimated Measured Mineral Resource at North Hill.



MODIFYING FACTORS

The table below summarises the more significant modifying factors impacting the Mineral Resource and Mineral Reserve estimates (see pages 15, 33, 76, 77 and 78 for further details).

Mineral Resource Key assumptions	Main Sulphide Zone
Geological losses	7 – 26%
Area	23 million ca
Resource cut	210cm

Mineral Reserve Modifying factors	Main Sulphide Zone
Lashing losses	1 – 2.5%
Pillars	21 – 27%
Relative density	3.18
Stoping width	210cm
Concentrator recoveries	78 – 80%

MINING METHOD

Mimosa is a shallow underground mine, accessed by two declines, the Wedza Decline and Blore Shaft. A mechanised bord and pillar mining method is used to extract ore over an average stoping width of 2.1m. Historically, the bord widths have varied from 15m to 6m, depending on the ground control district. Minimum pillar sizes are dependent on depth to give a safety factor greater than 1.6. Current mining consists of 5.5m to 7m bord sizes with 8m by 4m pillars for the entire mine.

The mining cycle involves mechanised support drilling and installation, MSZ channel definition and marking, mechanised face drilling, charging and blasting, followed by mechanised lashing onto a conveyor network which feeds an underground bunker. The ore is then conveyed to a surface stockpile ahead of feeding into the processing plant. Optimum stoping widths and mining cut selection are regularly reviewed. The currently planned mining horizon is a 2.1m slice defined by the hangingwall at 0.60m above, and the footwall at 1.5m below the platinum peak. This overbreaks to an average actual mining width of 2.14m. The reported mined grade is based on inverse distance block modelling of drillhole values using Surpac™.

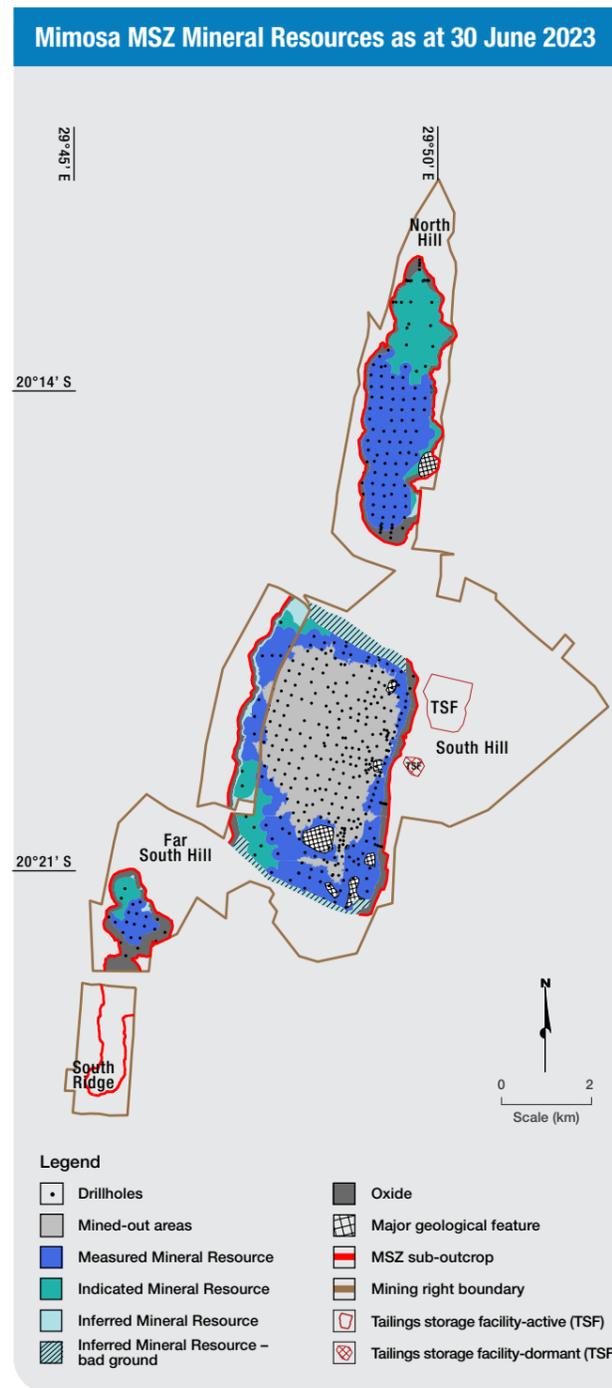
MINE PLANNING PROCESS

Mine design and scheduling are computer-aided using MineShed™ software. The mine plan is derived from a target milling throughput, which provides for a strategic surface stockpile. Losses due to mining modifying and geological factors are applied in production scheduling to produce a LoM tonnage and grade production profile.

MINERAL RESERVE ESTIMATION AND CLASSIFICATION

Current Mineral Reserve estimates have included the latest drilling, assay results, mine design and updated modifying factors. The Mineral Reserves quoted reflect anticipated feed grades delivered, fully diluted, to the mill. The estimations align with the business plan by scheduling ore tonnages and grades at a 210cm stoping width. The conversion and classification of Mineral Reserves at Mimosa are informed by:

- Feasible mine plan and project studies, board approval and available funding
- Economic testing at given market conditions (price deck)
- Indicated Mineral Resources can be classified as Probable Mineral Reserves
- Measured Mineral Resources can be classified as Proved Mineral Reserves
- In certain exceptional circumstances, the Competent Person may elect to convert Measured Mineral Resources to Probable Mineral Reserves if confidence in the modifying factors is confirmed.



Mimosa Mineral Reserve estimate

As at 30 June 2023									
Orebody		South Hill MSZ			North Hill MSZ			Total	
Category	Units	Proved	Probable	Total	Proved	Probable	Total	Total	
Tonnes	Mt	24.0	6.6	30.7	20.3	9.7	30.1	60.7	
Width	cm	210	210	–	210	210	–	–	
4E grade	g/t	3.54	3.33	3.50	3.36	3.49	3.40	3.45	
6E grade	g/t	3.77	3.57	3.73	3.55	3.70	3.60	3.66	
Ni	%	0.14	0.14	0.14	0.15	0.16	0.15	0.14	
Cu	%	0.11	0.12	0.11	0.11	0.13	0.12	0.12	
4E oz	Moz	2.7	0.7	3.4	2.2	1.1	3.3	6.7	
6E oz	Moz	2.9	0.8	3.7	2.3	1.2	3.5	7.2	
Pt oz	Moz	1.4	0.3	1.7	1.1	0.5	1.6	3.3	
Pd oz	Moz	1.1	0.3	1.3	0.8	0.4	1.2	2.6	

As at 30 June 2022									
Orebody		South Hill MSZ			North Hill MSZ			Total	
Category	Units	Proved	Probable	Total	Proved	Probable	Total	Total	
Tonnes	Mt	24.1	8.8	32.9	18.3	9.7	27.9	60.8	
Width	cm	210	210	–	210	210	–	–	
4E grade	g/t	3.58	3.40	3.53	3.35	3.47	3.40	3.47	
6E grade	g/t	3.82	3.64	3.77	3.55	3.69	3.60	3.69	
Ni	%	0.13	0.15	0.14	0.15	0.16	0.15	0.14	
Cu	%	0.11	0.12	0.12	0.11	0.13	0.12	0.12	
4E oz	Moz	2.8	1.0	3.7	2.0	1.1	3.1	6.8	
6E oz	Moz	3.0	1.0	4.0	2.1	1.1	3.2	7.2	
Pt oz	Moz	1.4	0.5	1.8	1.0	0.5	1.5	3.3	
Pd oz	Moz	1.1	0.4	1.4	0.8	0.4	1.2	2.6	

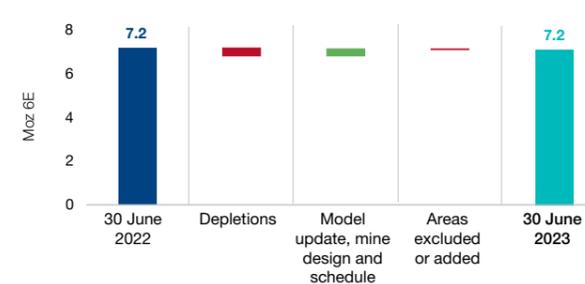
MINERAL RESERVE RECONCILIATION

The 30 June 2023 Mimosa Mineral Reserve estimate is impacted by normal mining depletion and model updates. The updated model at North Hill resulted in an increased Proved Mineral Reserve at North Hill. Overall the year-on-year Mineral Reserve estimate at Mimosa decreased marginally by 0.1Mt, net of depletion.

PROCESSING

Mimosa has an on-site concentrator plant where initial processing is undertaken to produce a concentrate. The concentrate is transported by road to Impala Mineral Processing facility in Rustenburg, in line with an off-take agreement with IRS. An alternative option for local beneficiation is being investigated.

Total Mimosa 6E Mineral Reserves
as at 30 June 2023 (variance Moz 6E)



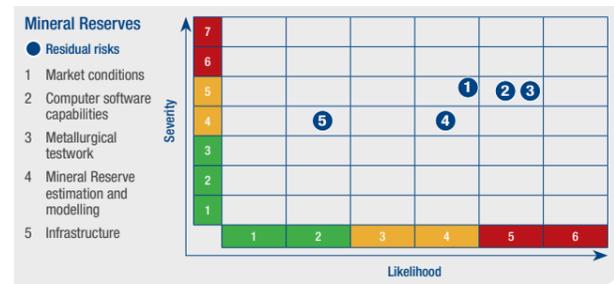
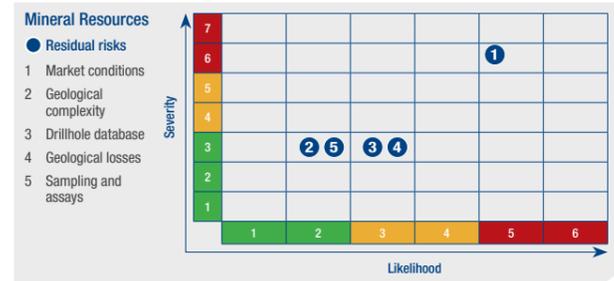
RISK ASSESSMENT

The residual risk matrices for the Mimosa Mineral Resources and Mineral Reserves are illustrated below, highlighting the top five residual risks.

The top residual risks identified for the Mineral Resources at Mimosa are (1) market conditions: basket price sensitivity; (2) geological complexity: anomalous areas in the Mtshingwe section; (3) drillhole database software; (4) estimation of geological loss factors; and (5) sampling and assay confidence.

The top residual risks identified for the Mineral Reserves at Mimosa are (1) market conditions: basket price sensitivity; (2) use of computer software with limited validation capabilities; (3) metallurgical testwork, failure to meet business plan objectives; (4) Mineral Reserve estimation and modelling, project viability challenges; and (5) infrastructure, inability to maintain mine extraction strategy.

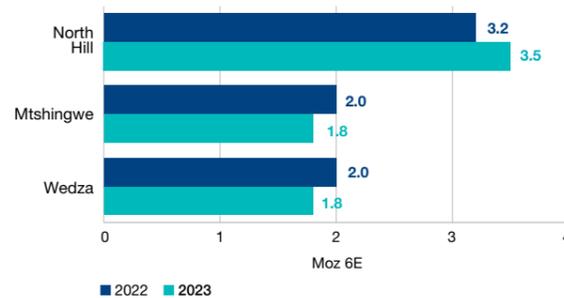
Management interventions are in place to mitigate these risks listed above. Further details regarding the formal risk management process are discussed on [page 19](#).



Mimosa estimated 20-year 6E LoM ounce profile
as at 30 June 2023



Mimosa Mineral Reserves distribution
as at 30 June 2023 (Moz 6E)

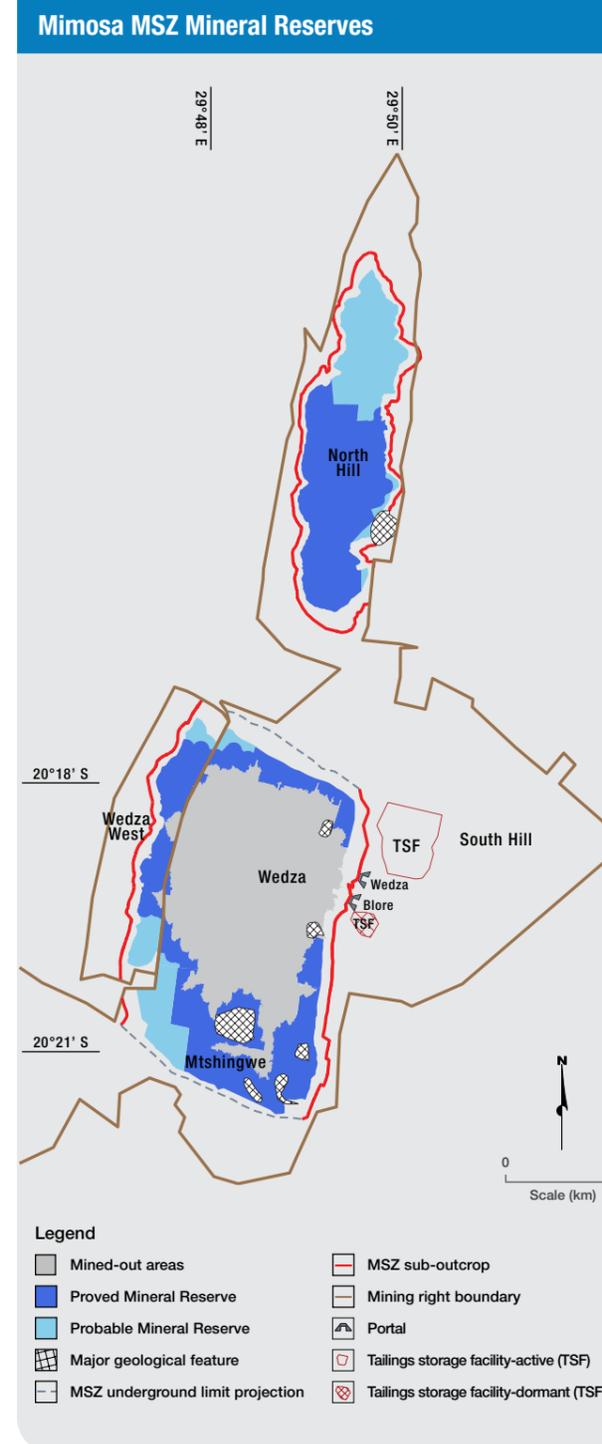


Wedza Mineral Reserves includes Wedza West.

LoM, VALUATION AND SENSITIVITY

LoM I comprises the extraction from the Mineral Reserves at South Hill and the capital project, North Hill. The economic valuation of the LoM in this reporting cycle considered a tailcut, deriving a LoM I terminating in 2044. The three mining areas at South Hill comprise Wedza, Wedza West and Mtshingwe. Work will continue to assess various options to optimise extraction from different ore sources from Mimosa's remaining Mineral Resources.

The economic viability of the Mimosa Mineral Reserves is tested by Implats using net present value calculations over the LoM of the Mineral Reserve, determining the lowest real rand basket price that would still render the Mineral Reserve viable. These calculations generate basket prices based on the local 6E ratios and differ from the overall Group basket prices. This is then tested against the internal Mimosa estimate of the real long-term basket price and the spot price as at 30 June 2023. These tests by Implats indicate that Mimosa requires a real long-term basket price of between R23 000 and R25 000 per 6E ounce to be economically viable. In comparison, the real spot basket price for Mimosa as at 30 June 2023 was R31 051 (US\$1 597) per 6E ounce, and Mimosa's internal long-term real basket price is R30 128 (US\$1 867) per 6E ounce. The commodity market remains fluid. Statistics relating to the historical production are shown on [pages 30 and 31](#).



Impala Canada

Canada

Impala Canada owns and operates the Lac des Iles Mine, has shareholding in exploration properties, and operates a corporate office in Toronto and an exploration and finance office in Thunder Bay, all in Canada's province of Ontario.

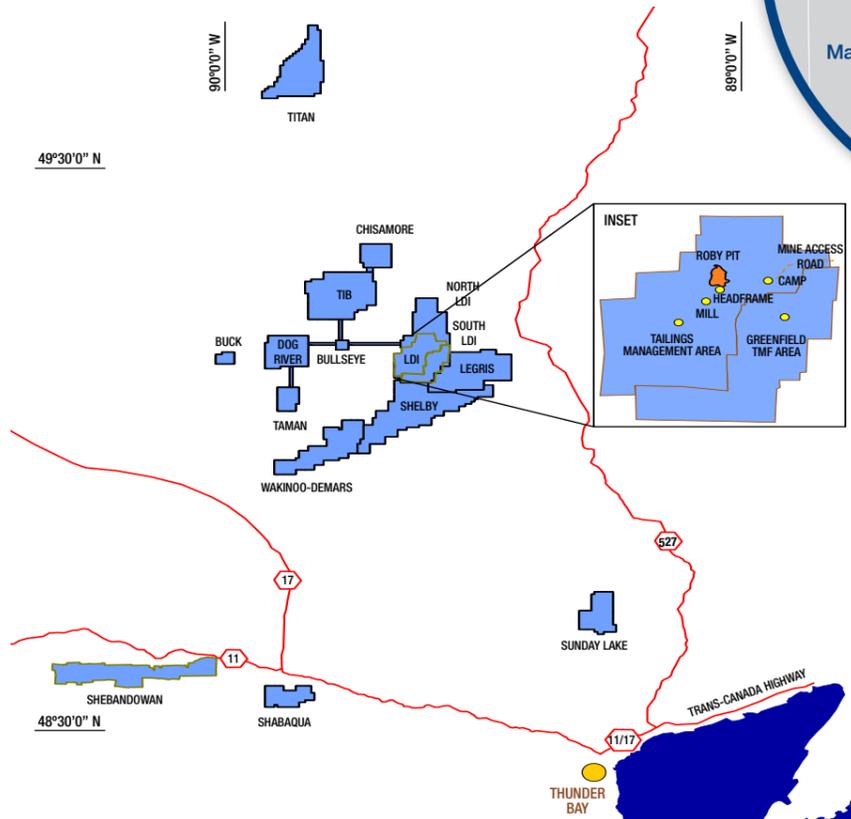
Mining leases and mining claims

74 885ha

Implats' interest

100% managed

Regional locality map



LOCATION

Lac des Iles is located 106km northwest of the city of Thunder Bay in Northwestern Ontario. The mine properties comprise approximately 74 885ha of mining leases and mining claims.

BRIEF HISTORY

Geological investigations at Lac des Iles began with reconnaissance mapping in the early 1930s, and again in the late 1960s after discovering aeromagnetic anomalies in the late 1950s. Various exploration programmes by several companies were undertaken over the next 25 years. In 1993, the property became North American Palladium Limited and open-pit production commenced. Mining initially concentrated on the Roby Zone by open-pit methods. In 2006, underground mining started via ramp access. In 2010, a significant mine expansion began, including sinking a shaft and extending the ramp system to access the Offset Zone for underground mining. From 2016 to 2017, a transition from a longhole stoping to a sub-level shrinkage (SLS) mining method commenced in the main Offset Zone. From 2018 to 2022, a transition from remnant mining to a sub-level caving (SLC) mining method commenced in the main Roby Zone. Implats acquired North American Palladium in 2019 to form Impala Canada Limited (Impala Canada), a wholly owned subsidiary.

Impala Canada (continued)

GEOLOGICAL SETTING

The Lac des Iles property captures the known extents of two discrete intrusive complexes.

These complexes include the South Lac des Iles Intrusive Complex (IC) — comprising the former Mine block, South Lac des Iles and Camp Lake intrusions — and the North Lac des Iles Intrusive Complex (IC). Intrusive contacts between the two complexes suggest that the southern part of the North Lac des Iles IC is younger than the northern margin of the South Lac des Iles IC.

The North Lac des Iles IC consists of layered ultramafic rocks distributed within two types of cyclic units, including an orthopyroxene-bearing cyclic unit and an orthopyroxene-free cyclic unit. Historical surface prospecting, mapping, limited trenching and diamond drilling have identified several areas in the North Lac des Iles IC which host PGE occurrences exceeding 1.0g/t of combined Pd+Pt+Au. These PGM occurrences are interpreted to represent stratiform or reef-type magmatic PGM mineralisation.

The South Lac des Iles IC was emplaced into a predominantly intermediate composition of orthogneiss basement rocks. Four major intrusive sequences (series) are recognised in the complex. Mapping and drilling have shown that the central-east part of the South Lac des Iles IC is an upright, homoclinal sequence (south-facing igneous stratigraphy), with a general north-easterly strike direction and steep southerly dips. In contrast, the major units in the western end of the complex, which hosts most of the palladium mineralisation on the property, display a general northerly strike direction and steep easterly to vertical dips. Both domains are believed to reflect the influence of pre-Lac des Iles structures on magma emplacement. The Shelby Lake structure is visible as a linear, positive magnetic anomaly to the south of the property. It is visible in the Roby pit and underground workings as an intensely recrystallised schistose melanorite unit that hosts the most mined-out and remaining higher-grade palladium Mineral Resources at Lac des Iles.

A second important pre-intrusion feeder structure to the South Lac des Iles IC has been inferred from geological and remote sensing data, drillhole logging, lineament analysis, and metal grade trends. It is referred to as the Roby Central Fault and has an east-northeast strike, moderate to steep south dip and bisects the northeastern part of the complex. The intersection of these two structures corresponds to the thicker, central parts of the Roby and Offset Zones.

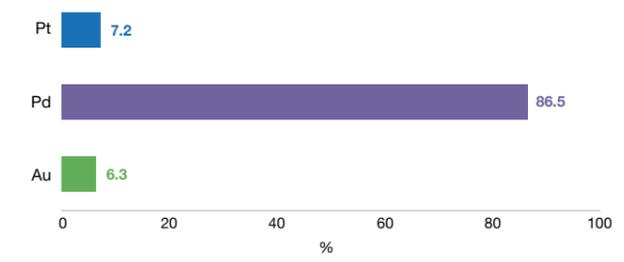
The South Lac des Iles IC is one of several 2.68 billion-year-old mafic-ultramafic intrusions in the region, most of which are covered by mineral claims held by Impala Canada. In contrast to most of the Bushveld Complex PGE deposits, the Lac des Iles orebodies show extreme palladium enrichment over platinum and appear to have formed within or directly adjacent to feeder structures, resulting in near-vertical orientations and true widths locally exceeding 100m.

Mineral Resources on the property are classified as palladium-rich magmatic sulphide deposits, located in the northwestern part of the noritic South Lac des Iles IC.

The two principal ore zones at Lac des Iles are the Roby Zone and the Offset Zone, separated by the Offset Fault. Previous surface mining included production from the Roby and Twilight Zones, from the now-dormant Roby open pit. In late 2017, ongoing open-pit mining recommenced at surface in the area around the Twilight Zone. In 2006, underground mining started, focused on the central portions of the Roby Zone beneath the Roby pit, and in 2010 transitioned to the deeper Offset Zone Mineral Resources. A third ore zone, the Camp Lake Zone, was recognised from deep drilling of the lower part of the Offset Zone. Camp Lake Zone is separated from the Offset Zone by the east-northeast striking and northwest dipping Camp Lake Fault and is actively being exploratory drilled.

The average ratio of Pt:Pd:Au, based on the combined 2023 Mineral Reserve estimate, is shown below. The dominance of palladium is clearly illustrated, representing some 86.5% of the combined average PGE grade. Historic internal reviews and academic studies show that the other PGE grades are negligible compared to Pd, Pt and Au.

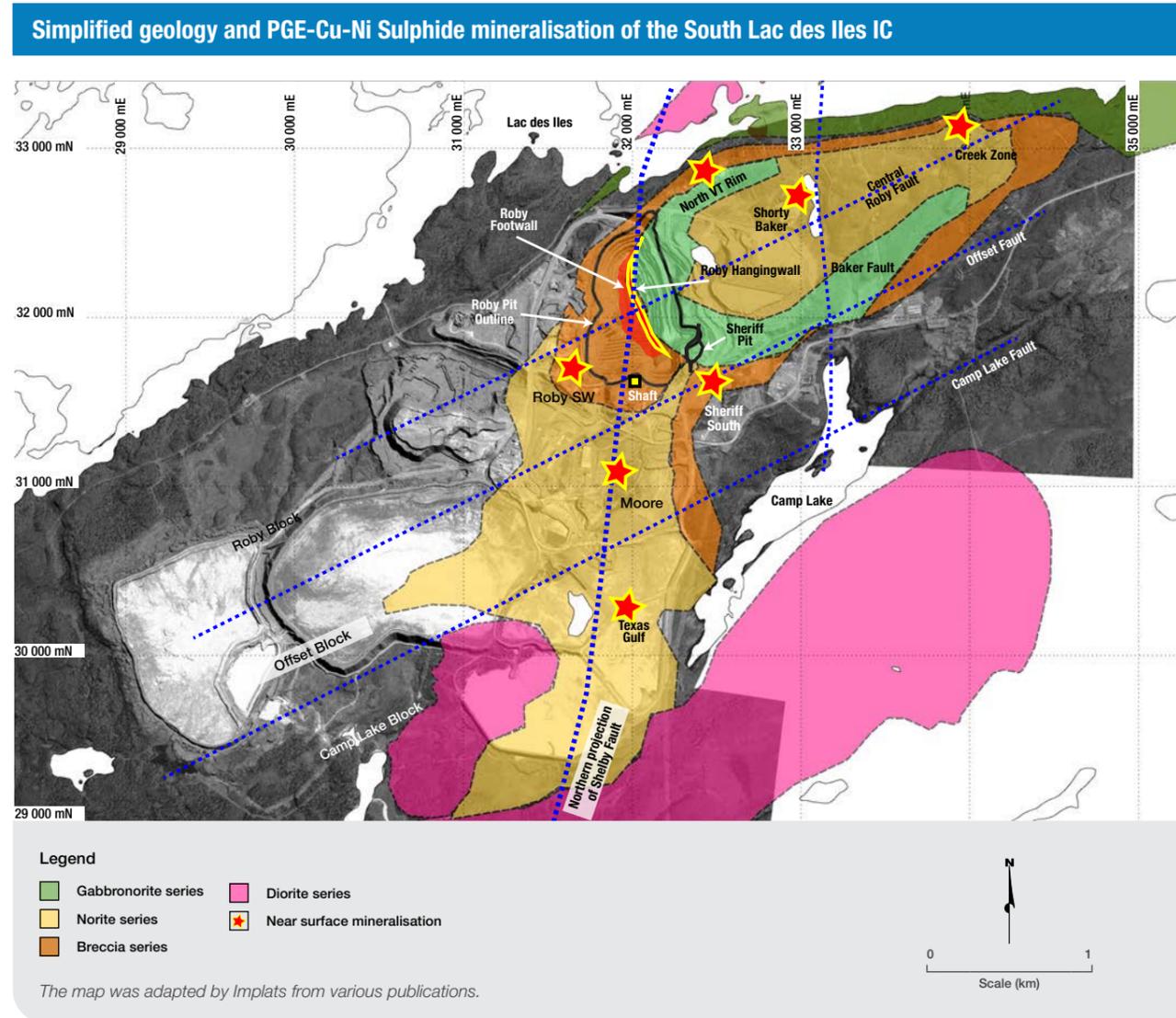
Lac des Iles 3E ratio as at 30 June 2023 (%)



3E ratios derived from the Mineral Reserve estimate.



Core logging at Lac des Iles



EXPLORATION AND STUDIES

Exploration activities at Impala Canada focus on near-mine targets and key regional properties located within 50km of the Lac des Iles mill. Near-mine exploration continues to be the Company's primary vehicle to expand its Mineral Resources and extend the life of Lac des Iles. In addition, work was conducted on exploring the greenfields properties to identify and evaluate their growth potential.

Impala Canada's exploration effort for the past year was focused on supporting the conversion of Mineral Resources to extend the LoM. Increased efforts to explore the deeper-seated Camp Lake Zone, along with the other brownfield targets, were conducted to discover areas that could generate additional LoM value.

Underground drilling in the past year was concentrated on the conversion of Offset Zone Mineral Resources (930m), the delineation of C-Zone, Sheriff South, and Roby Mineral Resources (22 042m) and exploratory Camp Lake drilling (20 623m). Exploratory drilling of the Camp Lake Target was further encouraging, with recent significant intersections.

The exploration expenditure for the past year is illustrated below.

Exploration drilling and surveys 2023			
Location	Total (number)	Length (m)	Amount C\$m
Underground Lac des Iles	63	41 075	12.0
Surface Lac des Iles	4	2 556	0.7
Total	67	43 631	12.7

Exploration drilling 2022			
Location	Total (number)	Length (m)	Amount C\$m
Underground Lac des Iles	86	45 021	12.5
Surface Lac des Iles	0	0	0.1
Total	86	45 021	12.6

GENERAL INFRASTRUCTURE

The Lac des Iles mine has been in operation for several years and has well-established permanent infrastructure. Due to its distance from the nearest city, Thunder Bay, Ontario, the mine operates on a 'remote mine' basis, in which most employees work a '14 day in/14 day out' rotation.

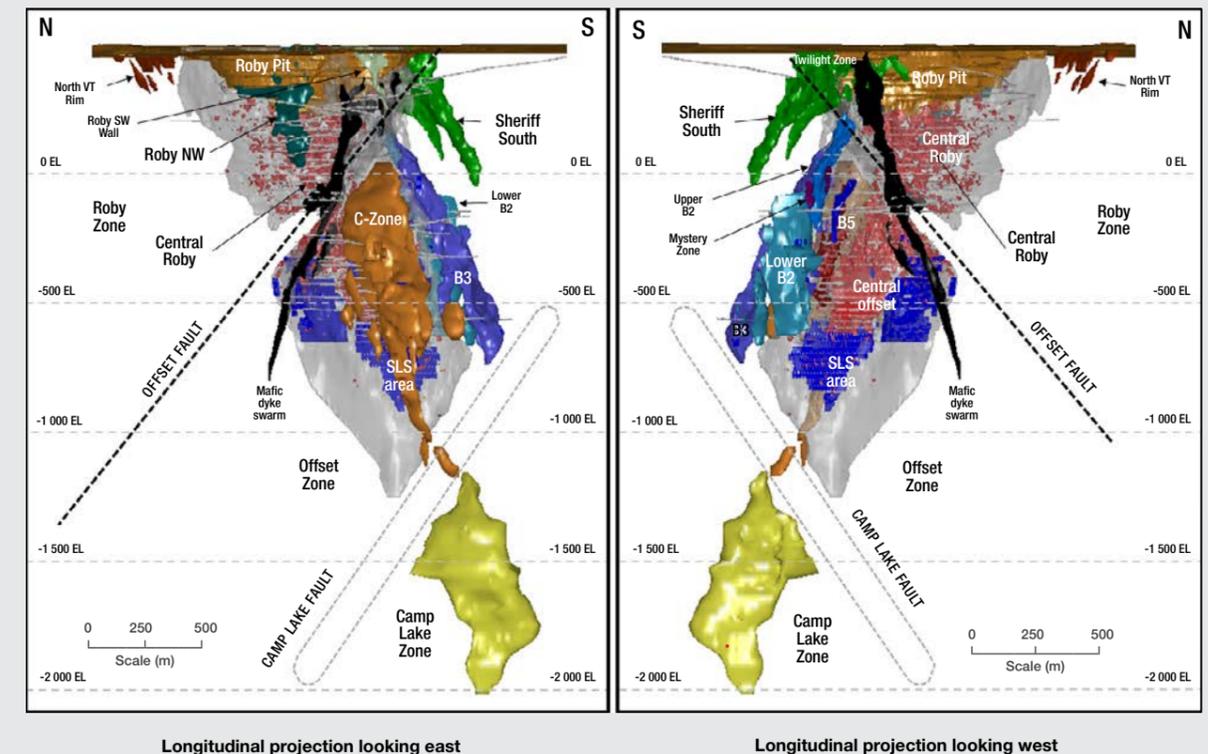
Site infrastructure includes: 15km gravel access road; main camp accommodation and a separate construction camp; a potable water treatment plant; an exploration office; a core storage area and core-shack; an open-pit maintenance facility and warehouse; a fuel farm; No 1 Shaft, headframe, hoist house, two workshops and compressor building; intake and exhaust fans; administration and mine dry buildings; the concentrator and mill complex; an assay lab and the TSF.

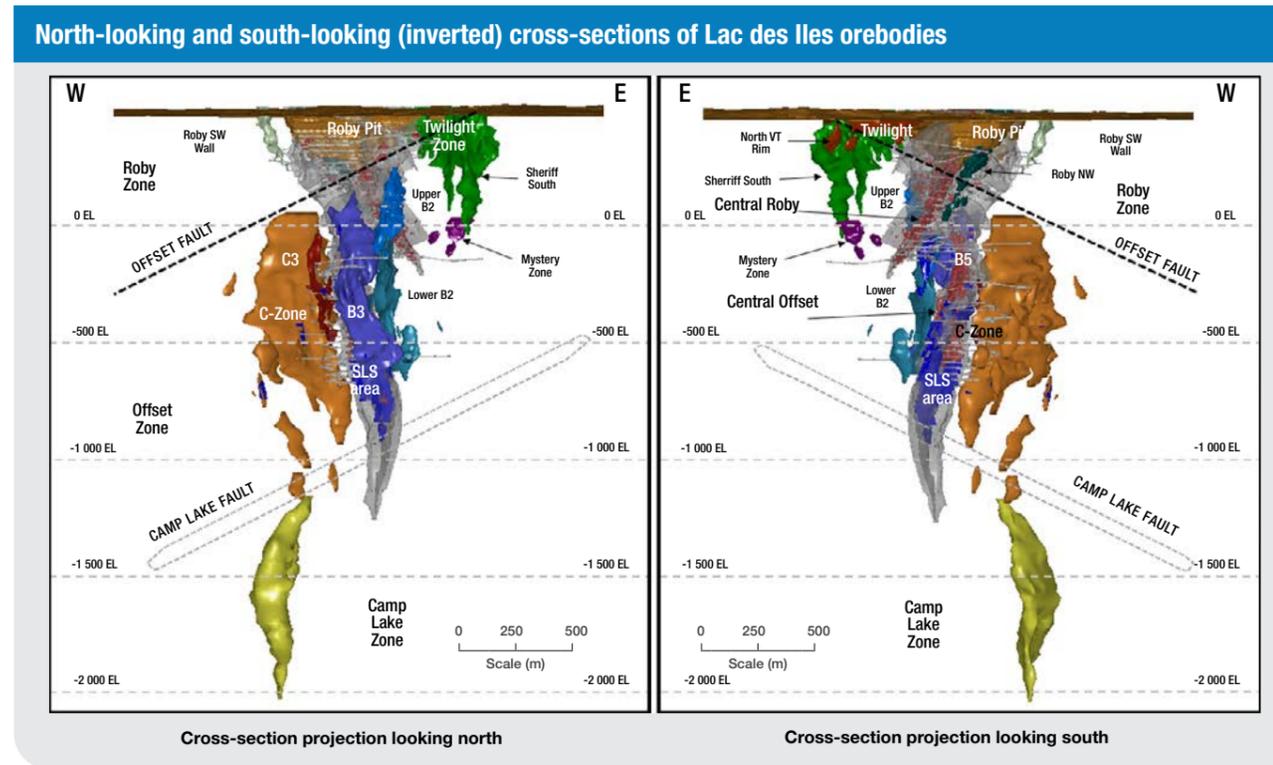
The site has an electrical power capacity of 47MW supplied by Hydro One via a 115kV line.

MINERAL RESOURCE ESTIMATION AND CLASSIFICATION

Mineral Resource estimates are reported for five metals at Lac des Iles – palladium, platinum, gold, copper and nickel.

East-looking and west-looking (inverted) cross-sections of Lac des Iles orebodies





Base metal assays are based on four-acid digestion, using perchloric, nitric, hydrofluoric and hydrochloric acids. This procedure results in near-total digestion. The grades are estimated from block models interpolated using a combination of ordinary kriging and inverse distance squared estimation methods, where domains have inadequate data density or inconclusive variography. Dynamic anisotropy has been applied in some domains to better control the search ellipse orientation based on the domain geometry. Data included in the block model-based estimation of Mineral Resources has been restricted to only diamond drilling data that meets the guidelines of the SAMREC Code (2016). However, boundaries of mineralisation domains have been created in consideration of the data from definition diamond drilling, underground chip and pit blast hole samples.

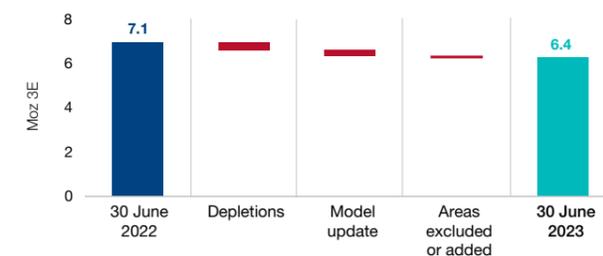
The selection of Mineral Resources was attained through a combination of engineering design shapes (including Deswik shells for surface Mineral Resources) and using Datamine RM Studio's 'Mineable Reserve Optimizer®' (MRO) to identify areas with sufficient grade and tonnage for potential mining. The Mineral Resources take into consideration, variable palladium grade cut-offs that reflect the identified mining method, and the consideration of existing underground excavations and other mining-related challenges. The cut-off grades range from 0.68g/t Pd for surface deposits and 1.0g/t Pd to 1.8g/t Pd for underground deposits. Evaluation is undertaken to ensure reasonable prospects for eventual economic extraction (RPEEE) of the estimated Mineral Resource.

The classification of Mineral Resources is directly tied to the estimation ellipse and search strategy for each domain and is based on the continuity of mineralisation and data density. In some domains, where interpretation of the geology is still in the early stages, classifications have been post-processed and downgraded, awaiting further information.

MINERAL RESOURCE RECONCILIATION

The combined Measured, Indicated and Inferred Inclusive Mineral Resource estimate as at 30 June 2023 is 6.38Moz 3E and 5.46Moz Pd, net of depletion.

Total Lac des Iles 3E Mineral Resources
as at 30 June 2023 (variance Moz 3E)

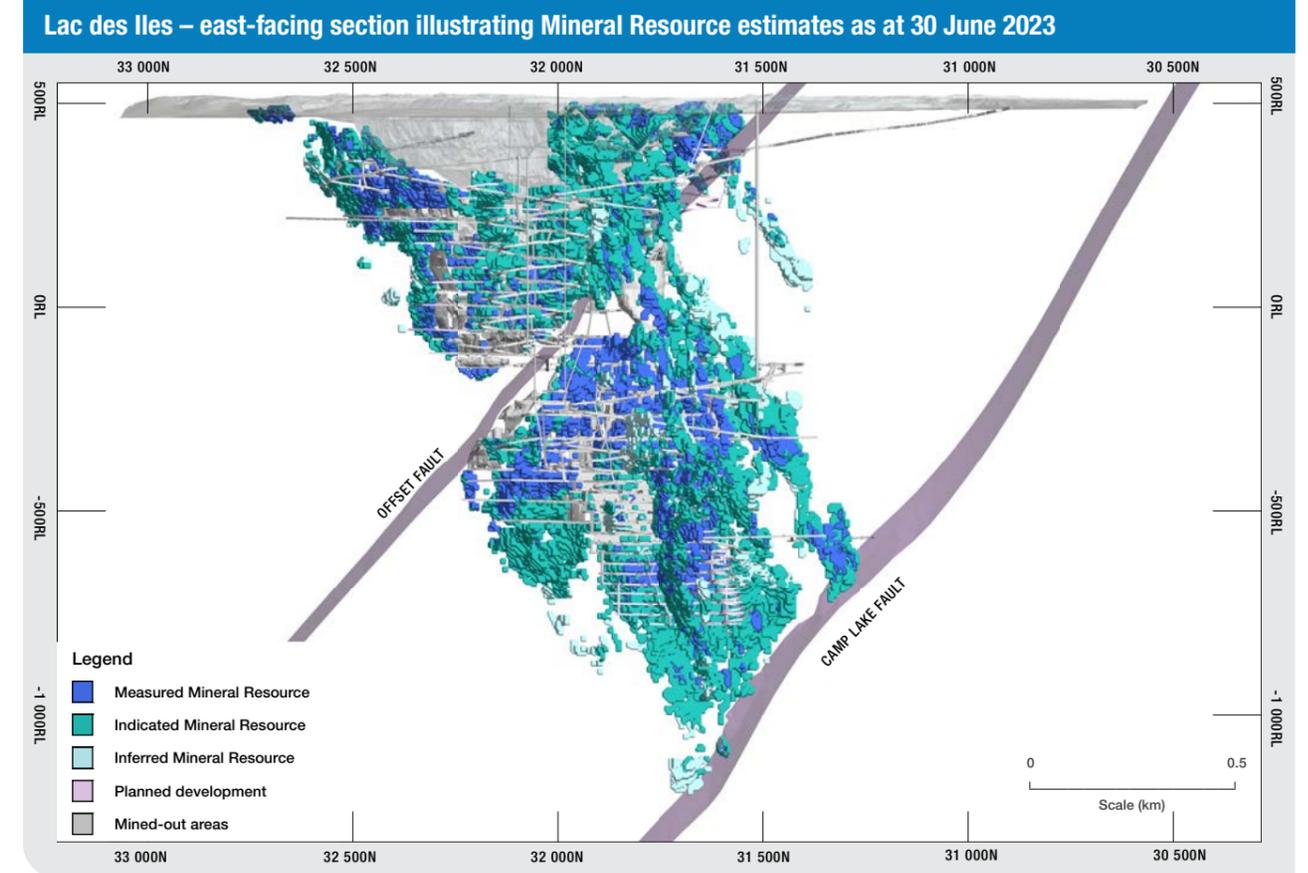


Lac des Iles Mineral Resource estimate (inclusive reporting)

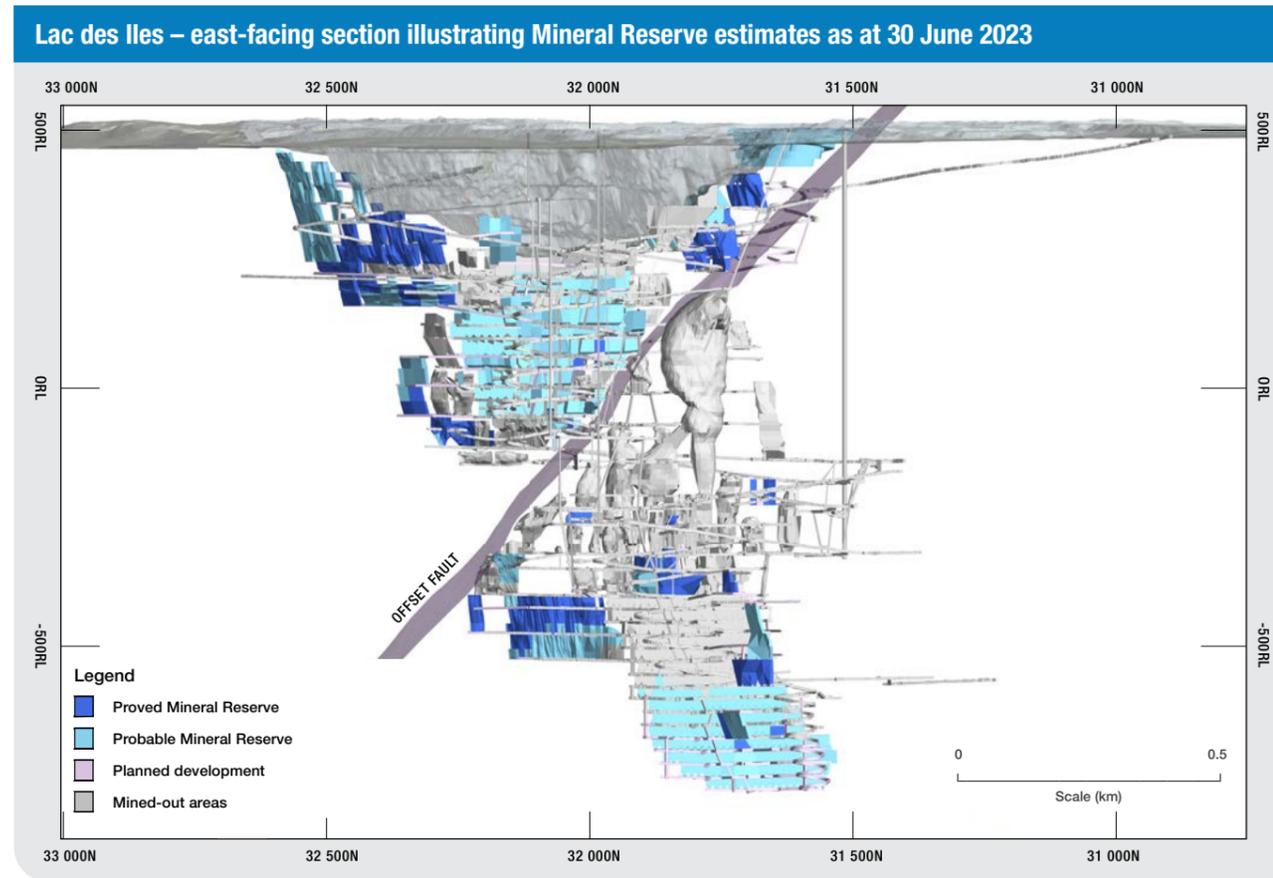
As at 30 June 2023														
Orebody		Surface Pit				Roby Underground				Offset Underground				Total
Category	Units	Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	
Tonnes	Mt	1.7	3.6	0.1	5.4	8.9	17.5	1.1	27.5	14.0	25.0	4.3	43.3	76.2
3E grade	g/t	1.51	1.50	1.36	1.50	2.48	2.05	1.91	2.18	3.23	2.96	2.59	3.01	2.61
Ni	%	0.05	0.06	0.06	0.06	0.05	0.05	0.04	0.05	0.08	0.07	0.07	0.08	0.07
Cu	%	0.06	0.06	0.05	0.06	0.06	0.05	0.05	0.06	0.10	0.09	0.08	0.09	0.08
3E oz	Moz	0.08	0.17	0.00	0.26	0.71	1.15	0.07	1.93	1.45	2.39	0.36	4.20	6.38
Pt oz	Moz	0.01	0.02	0.00	0.03	0.06	0.11	0.01	0.18	0.11	0.18	0.03	0.32	0.53
Pd oz	Moz	0.07	0.14	0.00	0.22	0.61	0.97	0.06	1.64	1.25	2.05	0.30	3.61	5.46

As at 30 June 2022														
Orebody		Surface Pit				Roby Underground				Offset Underground				Total
Category	Units	Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	
Tonnes	Mt	1.6	5.4	0.2	7.1	5.8	25.9	1.7	33.3	10.5	34.4	5.8	50.7	91.2
3E grade	g/t	1.55	1.48	1.50	1.49	2.29	2.00	1.68	2.03	2.99	2.83	2.31	2.80	2.42
Ni	%	0.06	0.05	0.05	0.05	0.06	0.05	0.04	0.05	0.09	0.09	0.06	0.08	0.07
Cu	%	0.05	0.06	0.06	0.05	0.05	0.05	0.04	0.05	0.07	0.07	0.06	0.07	0.06
3E oz	Moz	0.08	0.26	0.01	0.34	0.42	1.67	0.09	2.18	1.01	3.13	0.43	4.57	7.09
Pt oz	Moz	0.01	0.03	0.00	0.04	0.04	0.16	0.01	0.20	0.08	0.24	0.04	0.35	0.59
Pd oz	Moz	0.07	0.21	0.01	0.29	0.36	1.41	0.08	1.84	0.87	2.70	0.38	3.94	6.07

Estimated values less than 0.01 are reported as 0.00.



Impala Canada (continued)



MODIFYING FACTORS

When determining the appropriate external dilution and mining recovery factors to apply, consideration was given to the size, sequence and whether the shape would be open or full of cave/unconsolidated backfill material during mucking operations. Consideration was also given to draw control strategy and where and how the cave material would enter into the shape – from one, two or multiple directions.

Power Geotechnical Cellular Automata® (PGCA®) software was used to estimate the recovered and diluted material from the Offset SLS production mining and the Roby SLC. Dilution for these cave mining areas was determined as part of the PGCA® flow modelling. The flow model for the Offset SLS Zone incorporates all Measured and Indicated Offset Mineral Resource blocks, less depletions, as well as an estimated ore blanket of rockfill and blasted pillar material. The Roby Central (SLC) Zone model incorporates all Roby Block Measured and Indicated Mineral Resources and the estimated grades and tonnes for the historically backfilled stopes, less depletion of all mining before the start of sub-level caving. Any material in either of these two cave mining areas that is not rockfill from historical mining, is not part of the ore blanket or is not of the Measured or Indicated Mineral Resource category, has a default grade of zero for all metals.

A summary of the weighted average modifying factors for the various mining zones is shown below (see pages 15, 33, 87 and 89 for further details).

Weighted average modifying factors by mining zone

Mining zone	Dilution factor (%)	Recovery factor (%)
Roby SLC	20 ¹	80 ¹
Roby Central OHS	30	97
Roby SW Floor	11	85
Roby S	16	84
Roby NW	15	85
Roby NE	16	85
Offset SLS	20 ¹	80 ¹
Offset Central OHS	40	46
Offset NE	15	85
Offset C-Zone	15	85
Offset S	15	85
B2	20	50
Sheriff Pit	8	89

¹ Offset SLS and Roby SLC recovery and dilution are estimates; particle flow modelling was used to determine recovery.

Impala Canada (continued)

MINING METHODS

Mine production at Lac des Iles occurs from three areas: Surface Pit, Roby Zone and the Offset Zone. These areas are broken down further by mining method, mineralisation zone and/or spatial location.

Most of the Roby Zone's planned production involves sub-level caving (SLC) targeting ore below and southwest of the current dormant pit. Production from these near-surface zones will involve a gradual ramping up of the caving operations, culminating in steady-state production in 2024. Ore tonnes from the Roby Zone are transported via haul truck, through a ramp, to the South portal.

Production from the Offset Zone includes production by open hole stoping (OHS) and sub-level shrinkage (SLS) methods. The SLS production represents the bulk of the Offset Zone production. Production from each of the lower mine zones will remain relatively constant, as hoisting to the surface through the shaft is maximised. The ore is typically hoisted to the surface through the shaft.

MINE PLANNING PROCESS

Mine design and scheduling are undertaken using Deswik.CAD® and Deswik.Sched® software, with all geological Mineral Resource block models generated using Datamine software. The planning sequence allows for a cycle that starts with a comprehensive

review of the LoM mine plan, followed by detailed scheduling of a five-year development schedule and a two-year detailed month-by-month stoping schedule.

MINERAL RESERVE ESTIMATION AND CLASSIFICATION

The updated Mineral Reserve estimates are tabulated below and reflect the total Mineral Reserve estimate for Lac des Iles (Impala Canada) as at 30 June 2023. Mineral Reserve grades are quoted after applying mine-to-mill modifying factors. Current Mineral Reserve estimates include the latest drillhole information, assay results, revised mine design and updated modifying factors. The conversion and classification of Mineral Reserves at Lac des Iles (Impala Canada) are informed by:

- Feasible mine plan and project studies, board approval and available funding
- Economic testing at given market conditions (price deck)
- Due to the bulk nature of the SLS and SLC mining methods, all Measured Mineral Resources included in the caving zone/ footprint are classified as Probable Mineral Reserves
- No Inferred Mineral Resources are converted to the Mineral Reserve category. Due to the disseminated nature of the orebody and the mass mining methods, some incidental Inferred Mineral Resources (mineralised waste) are contained within the stope designs but are treated as waste dilution material with all metal grades set to zero. This is deemed insignificant.

Impala Canada Mineral Reserve estimate

As at 30 June 2023											
Orebody		Surface Pit			Roby Underground			Offset Underground			Total
Category	Units	Proved	Probable	Total	Proved	Probable	Total	Proved	Probable	Total	
Tonnes	Mt	0.5	0.4	0.9	3.1	8.2	11.4	1.2	8.5	9.7	22.0
3E grade	g/t	1.23	1.24	1.24	2.51	2.09	2.20	3.42	3.28	3.29	2.64
Ni	%	0.04	0.04	0.04	0.04	0.05	0.05	0.07	0.08	0.08	0.06
Cu	%	0.05	0.05	0.05	0.05	0.05	0.05	0.09	0.10	0.10	0.07
3E oz	Moz	0.02	0.02	0.04	0.25	0.55	0.81	0.13	0.89	1.03	1.87
Pt oz	Moz	0.00	0.00	0.00	0.02	0.05	0.06	0.01	0.06	0.07	0.14
Pd oz	Moz	0.02	0.02	0.03	0.22	0.47	0.69	0.12	0.77	0.89	1.62

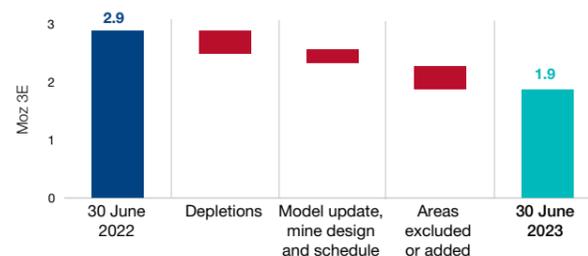
As at 30 June 2022											
Orebody		Surface Pit			Roby Underground			Offset Underground			Total
Category	Units	Proved	Probable	Total	Proved	Probable	Total	Proved	Probable	Total	
Tonnes	Mt	0.5	1.7	2.3	2.6	18.2	20.8	1.8	15.5	17.3	40.4
3E grade	g/t	1.38	1.19	1.23	2.10	1.74	1.78	2.77	2.89	2.88	2.22
Ni	%	0.05	0.04	0.04	0.05	0.04	0.04	0.08	0.09	0.09	0.06
Cu	%	0.05	0.05	0.05	0.05	0.04	0.04	0.07	0.08	0.08	0.06
3E oz	Moz	0.02	0.07	0.09	0.18	1.02	1.19	0.16	1.44	1.60	2.88
Pt oz	Moz	0.00	0.01	0.01	0.02	0.09	0.11	0.01	0.10	0.11	0.23
Pd oz	Moz	0.02	0.06	0.08	0.15	0.86	1.01	0.14	1.25	1.39	2.48

Estimated values less than 0.01 are reported as 0.00.

MINERAL RESERVE RECONCILIATION

The reconciliation with the Mineral Reserve estimate as at 30 June 2023 is shown below. There was a decrease in the 3E Mineral Reserves, net of depletion, primarily driven by mining depletion and the updated mine plan.

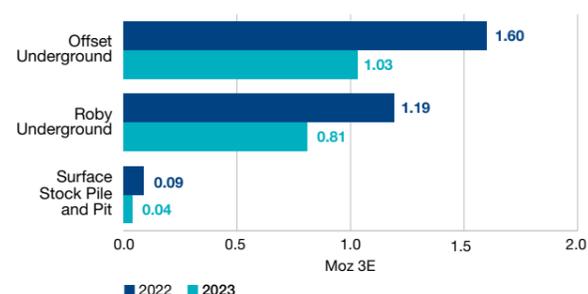
Total Lac des Iles 3E Mineral Reserves
as at 30 June 2023 (variance Moz 3E)



PROCESSING

The Lac des Iles mill has a nominal capacity of 525t per hour and an 85% utilisation to produce at 3 910 000t per year (tpa). Commissioning of the mill decoupling project is underway. Ramp-up of the decoupling project is expected to increase nominal capacity to 600t per hour at an 87% utilisation for a design capacity of 4 579 000tpa. High-grade polymetallic sulphide concentrate is produced and shipped via trucks. The concentrate's principal value is generated from palladium, with lesser values from platinum, gold and copper. The concentrate produced is currently sold under contract to Glencore. Nickel credits are forfeited as part of the off-take agreement with Glencore. This current off-take agreement will remain in effect through 31 December 2024 and includes an evergreen clause to extend the contract on mutual agreement.

Lac des Iles Mineral Reserve distribution
as at 30 June 2023 (Moz 3E)



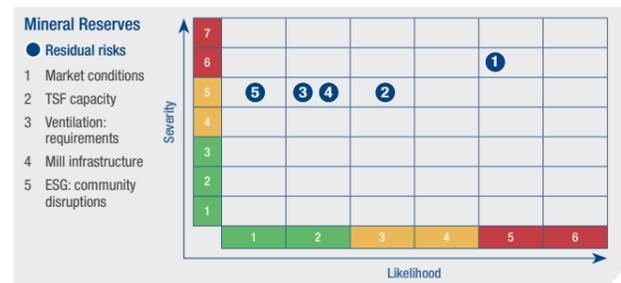
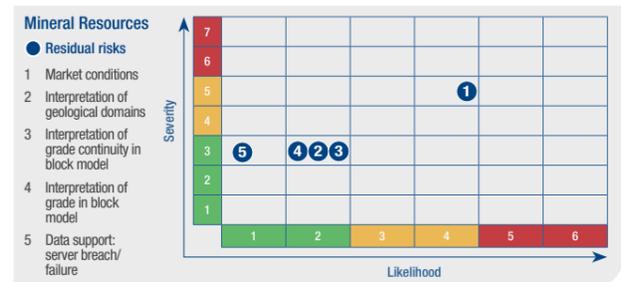
RISK ASSESSMENT

The residual risk matrices for the Impala Canada Mineral Resources and Mineral Reserves are illustrated below, highlighting the respective top five residual risks.

The top residual risks identified for the Mineral Resources at Impala Canada are (1) market conditions: basket price sensitivity; (2) geology: interpretation of geological domains; (3) classification: interpretation of grade continuity in block model; (4) grade: interpretation of grade in block model; and (5) data support: server breach/failure.

The top residual Mineral Reserve risks identified at Impala Canada are (1) market conditions: basket price sensitivity; (2) TSF capacity: tight construction timeline and/or delayed permitting, insufficient and constrained LoM profile; (3) ventilation: new regulatory requirements; (4) mill infrastructure: ageing equipment requiring investment; and (5) ESG: community disruptions.

Management interventions are in place to mitigate these risks listed above. Further details regarding the formal risk management process are discussed on page 19.



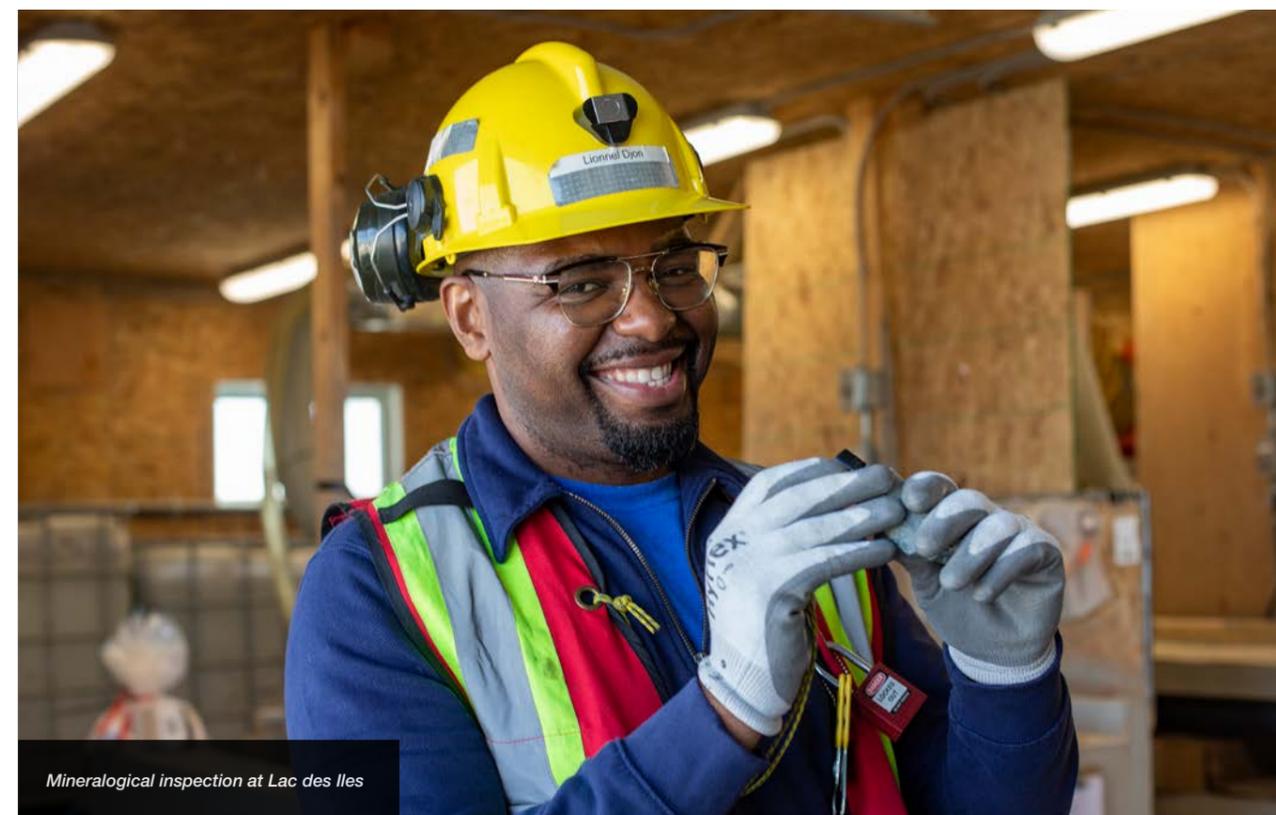
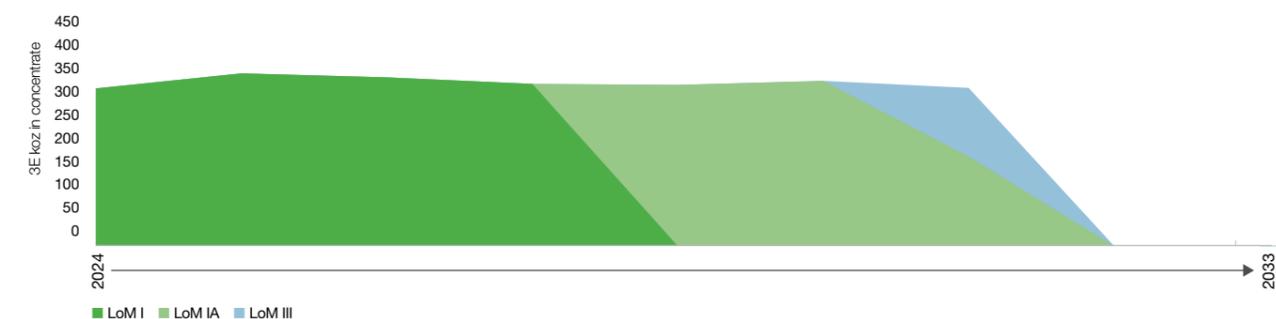
LoM AND VALUATION AND SENSITIVITY

The Lac des Iles LoM I currently extends for five years, supported by the available geological information, Mineral Resource estimates, mine design and schedule. Work continues to expand the footprint.

The economic viability of the Lac des Iles Mineral Reserves is tested by Implats using net present value calculations over the LoM of the Mineral Reserve, determining the lowest real rand basket price that would still render the Mineral Reserve viable. These calculations generate basket prices based on the local

3E ratios and differ from the overall Group basket prices. This is then tested against the internal estimate of the real long-term basket price and the spot price as at 30 June 2023. These tests by Implats indicate that Lac des Iles requires a real long-term basket price of between R16 000 and R18 000 per 3E ounce to be economically viable. While the real spot basket price for Lac des Iles as at 30 June 2023 was R24 489 (US\$1 300) per 3E ounce, its internal long-term real basket price is R20 572 (US\$1 316). The commodity market remains fluid. Statistics relating to the historical production are shown on pages 30 and 31.

Impala Canada estimated 3E LoM ounce profile
as at 30 June 2023



Mineralogical inspection at Lac des Iles

Afplats project

South Africa

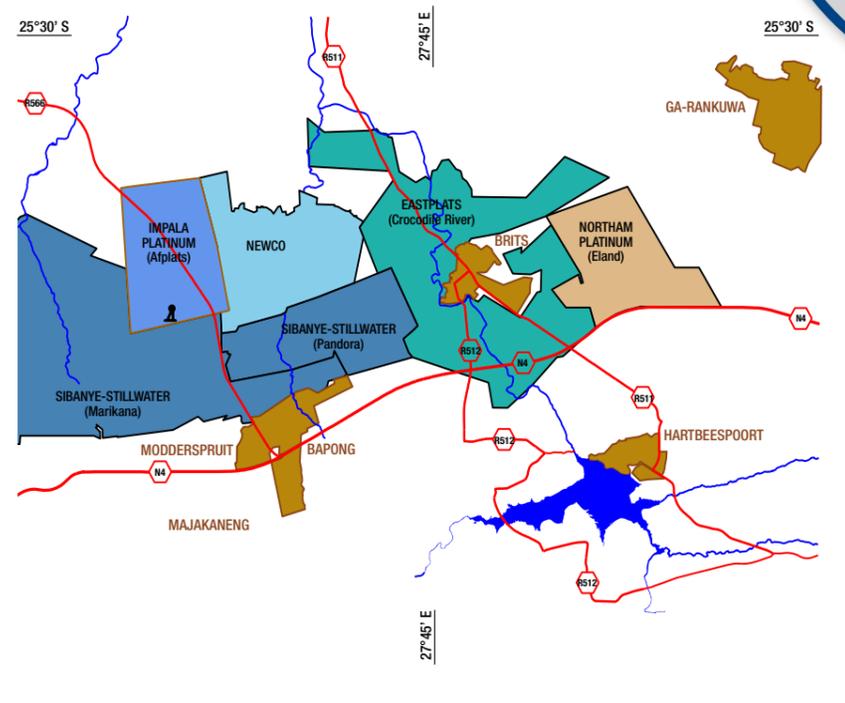
The Afplats project is situated in the Bojanala Platinum district, in South Africa's North West province.

Mining right
4 602ha

Implats' interest
74% managed



Afplats regional locality map



LOCATION

The Afplats Leeuwkop project is located approximately 23km west of the town of Brits in the North West province and some 2km due west of the R566 road to Sun City. The area is bordered to the west and south by Sibanye-Stillwater's Marikana operation.

BRIEF HISTORY

The Afplats project is situated on the farm Leeuwkop 402 JQ, and is jointly owned by Implats (74%) and the Bakwena community (Ba-Mogopa Platinum Investments (Pty) Ltd, 26%). In November 2010, the respective boards approved the commencement of a feasibility study with a conventional mine design. The early work to pre-sink the Leeuwkop Main Shaft started on 1 April 2011. In November 2013, a decision was made to conduct another feasibility study that would convert the conventional mining layout into a bord and pillar layout. This work was completed by December 2014, when the Main Shaft had been sunk to 1 198m below the surface, at which depth sinking was suspended due to the economic considerations negating viability at that time.

Afplats project (continued)

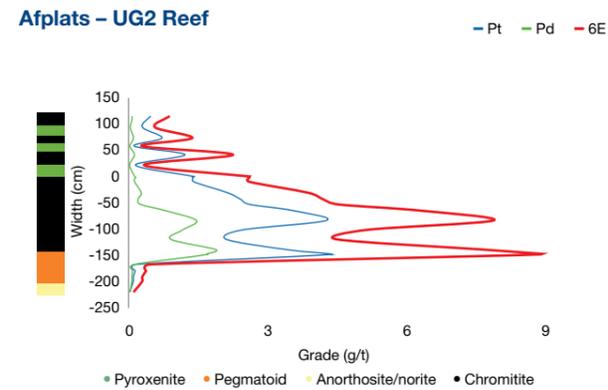
GEOLOGICAL SETTING

The Merensky and UG2 Reefs have been explored at Afplats, but only the UG2 Reef is considered economically exploitable at the site.

The Merensky Reef is the upper portion of the pyroxenite layer, with a very thin chromitite stringer close to the hangingwall contact. Mineralisation peaks over the chromitite stringer and decreases into the footwall. The UG2 Reef occurs about 1 050m below the surface at the southern boundary of the Leeuwkop farm. The vertical separation between the Merensky and UG2 Reefs averages 200m, and both reefs dip northwards at 9°. The UG2 Chromitite Layer at Afplats consists of two layers of chromitite, separated by thin layers of pyroxenite, and is on average 1.30m thick. The two UG2 Chromitite Layers were combined in the grade estimation and reported as the Mineral Resource width. The reefs are disrupted by faults, dolerite dykes, late-stage ultramafic replacement pegmatoid bodies and potholes. The global extraction rate for Afplats is estimated at 78%.

EXPLORATION AND STUDIES

During the past year, no exploration was undertaken.



GENERAL INFRASTRUCTURE

Afplats' Leeuwkop Shaft is accessed by an existing tarred road from the R556 provincial road. The current infrastructure includes the shaft sinking headgear and winder houses, electricity supply from Eskom via the Big Horn sub-station, potable water supply from the Madibeng Municipality, offices, change houses for the sinking contractor and Afplats employees and the exploration core yard. All infrastructure is in a secured, fenced-off area. Due to the surface infrastructure being vandalised in recent times, salvaged core was moved to Impala Rustenburg for safekeeping.

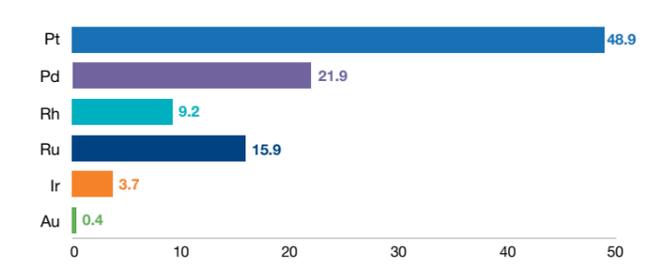
MINERAL RESOURCE ESTIMATION, CLASSIFICATION AND RECONCILIATION

No data was added to the Mineral Resource estimation. The following notes should be read in conjunction with the Mineral Resource table:

- The statement below reflects the total estimate for Afplats
- The Mineral Resource estimate is based on the UG2 Chromitite Layer width, and this exceeds a practical minimum mining width
- The estimate has been conducted using the Isatis™ software
- The Mineral Resource estimate for Afplats as at 30 June 2023 remained unchanged from the previous year.

The Mineral Resource classification is based on a Group standard practice (see page 14). The drillhole spacing has the largest effective weighting at Afplats.

Afplats UG2 Reef 6E ratio as at 30 June 2023 (%)



UG2 Reef 6E ratios derived from Mineral Resource estimate.

Afplats project (continued)

Afplats Mineral Resource estimate (inclusive reporting)

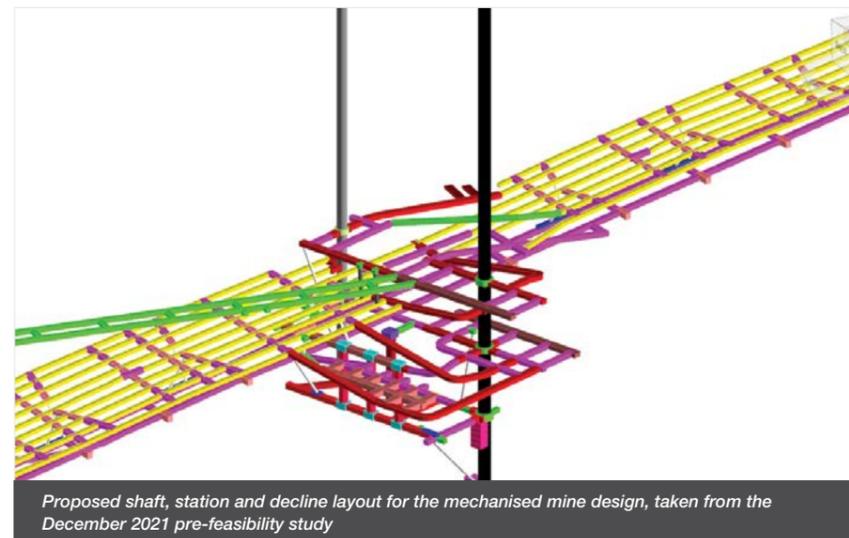
As at 30 June 2023					
Orebody		UG2 Reef			Total
Category	Units	Measured	Indicated	Inferred	
Tonnes	Mt	79.5	9.2	47.7	136.5
Width	cm	134	135	129	–
4E grade	g/t	5.29	5.22	5.15	5.24
6E grade	g/t	6.58	6.48	6.35	6.49
Ni	%	0.03	0.04	0.03	0.03
Cu	%	0.01	0.01	0.01	0.01
4E oz	Moz	13.5	1.5	7.9	23.0
6E oz	Moz	16.8	1.9	9.7	28.5
Pt oz	Moz	8.2	0.9	4.8	13.9
Pd oz	Moz	3.7	0.4	2.1	6.2

As at 30 June 2022					
Orebody		UG2 Reef			Total
Category	Units	Measured	Indicated	Inferred	
Tonnes	Mt	79.5	9.2	47.7	136.5
Width	cm	134	135	129	–
4E grade	g/t	5.29	5.22	5.15	5.24
6E grade	g/t	6.58	6.48	6.35	6.49
Ni	%	0.03	0.04	0.03	0.03
Cu	%	0.01	0.01	0.01	0.01
4E oz	Moz	13.5	1.5	7.9	23.0
6E oz	Moz	16.8	1.9	9.7	28.5
Pt oz	Moz	8.2	0.9	4.8	13.9
Pd oz	Moz	3.7	0.4	2.1	6.2

PROPOSED MINING METHODS AND MINE PLANNING

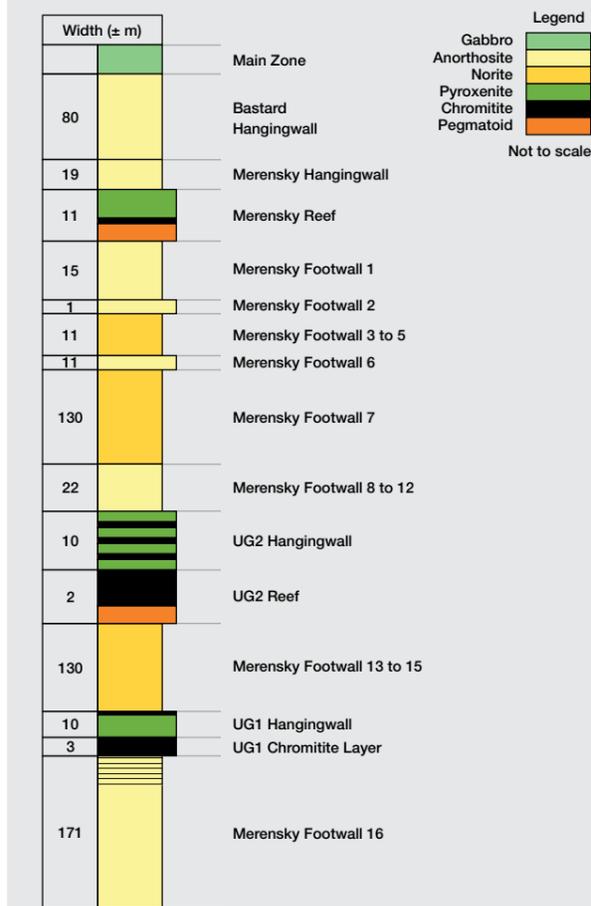
A feasibility study was completed in 2011, based on a conventional method layout, and approved by the Implats board. In November 2013, it was decided to conduct another feasibility study that would convert the conventional mining layout into a bord and pillar layout. The mine planning was completed in a 3D spatial environment and the shaft sinking layout was updated to suit the mining method and completed in December 2014, but was not approved by the Implats board. Therefore, the Mineral Resource estimate was not converted to the Mineral Reserve category pending full project approval and funding, in line with Implats' practice. The vertical shaft sinking project was stopped and the Leeuwkop project deferred while studies continue. By December 2014, the Main Shaft had progressed to a depth of 1 198m below surface, above the planned shaft bottom position of 1 396m below surface. The Main Shaft offers flexibility to function as a ventilation shaft, should circumstances or alternative planning considerations change.

Total Afplats 6E Mineral Resources
as at 30 June 2023 (variance Moz 6E)

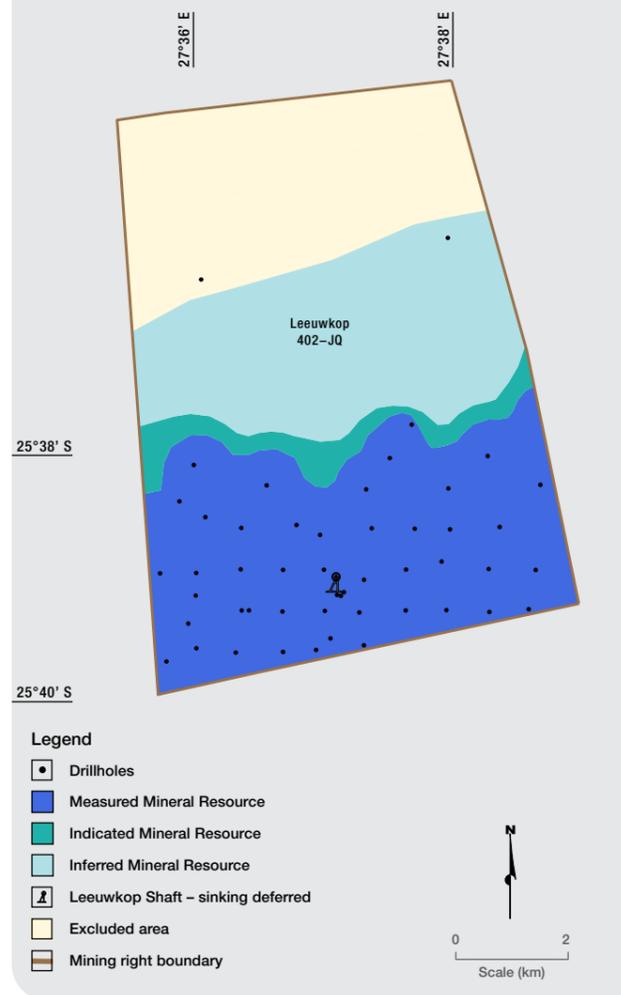


Afplats project (continued)

Generalised geological succession of the upper portion of the Critical Zone at Afplats



Afplats UG2 Mineral Resources



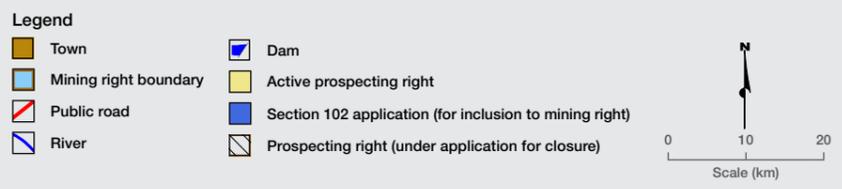
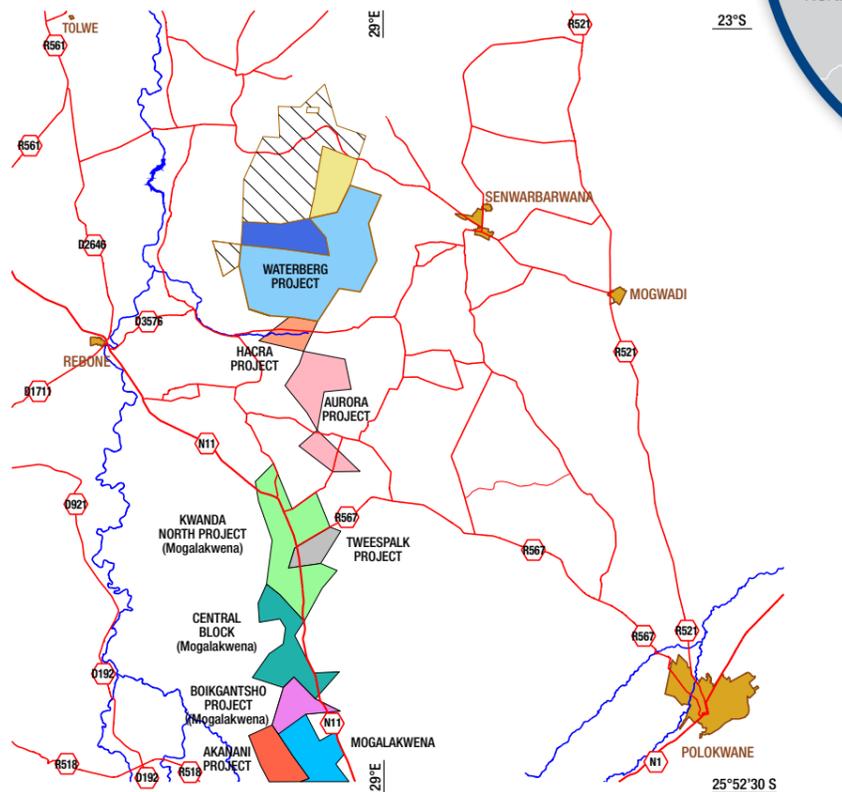
South Africa

A sub-level, highly mechanised longhole stoping mining method with backfilling is envisaged. Transverse and longitudinal longhole approaches are planned to extract Mineral Resources from the T-Zone and F-Zone.

Mining right
20 532ha

Implats' interest
15% non-managed

Waterberg project regional locality map



LOCATION

The Waterberg project is located 85km north of the town of Mokopane in the Limpopo province, South Africa, approximately 330km north-northeast from Johannesburg. The total project area — comprising the prospecting rights under application for closure, the active prospecting right, the mining right, and mining right application area — cover 48 328ha. The elevation ranges from approximately 880m to 1 365m above sea level.

BRIEF HISTORY

The Waterberg project resulted from a regional target generation initiative by Platinum Group Metals (RSA) (Pty) Ltd (PTM RSA). In 2007, PTM RSA targeted the area off the north end of the mapped Northern Limb of the Bushveld Complex, based on its own detailed geophysical, geochemical and geological work. The original prospecting area was enlarged over time, and PTM RSA entered into agreements with the Japan Organization for Metals and Energy Security (JOGMEC) and the B-BBEE entity, Mnombo Wethu Consultants (Pty) Ltd (Mnombo).

Waterberg project (continued)

On 16 October 2017, definitive agreements were signed with Implats, which saw Implats purchase 15% of Waterberg JV shares from PTM RSA (8.6%) and JOGMEC (6.4%).

Implats also acquired a purchase and development option to increase its stake in the Waterberg JV to 50.01% through additional share purchases and earn-in arrangements. The agreement included a right of first refusal to smelt and refine Waterberg project concentrate. Current ownership of the Waterberg project is held by Implats (15%), JOGMEC (12.195%), Hanwa (9.755%) and PTM RSA (50.02%, inclusive of the interest held in Mnombo), and the remainder by Mnombo.

Since the initial prospecting rights were acquired, significant exploration activities were undertaken by PTM RSA. These were supplemented by various Mineral Resource estimates as published by PTM RSA and available on (www.sedar.com). A definitive feasibility study (DFS) was completed in October 2019.

In June 2020, Implats decided not to exercise the option to increase its shareholding from 15% to 50.01% based on the prevailing economic, balance sheet and funding considerations. At the same time, Implats confirmed its support for the project. With a 15% equity stake in the project, this represents a non-managed project within the Implats portfolio.

GEOLOGICAL SETTING

The Waterberg project is situated off the northern end of the Northern Limb of the Bushveld Complex.

In the Waterberg project area, the Bushveld Complex has intruded across a pre-existing, craton scale lithological and structural boundary between two geological zones. The known Northern Limb has a north-south orientation to the edge contact that makes an abrupt strike change to the northeast, coincident with the projection of the east-west trending Hout River Shear system. This major shear marks the southern boundary of the South Marginal Zone (SMZ). The footwall to the Bushveld on the Waterberg project is interpreted to comprise facies of the SMZ.

The geology consists predominantly of the Bushveld Main Zone gabbros, gabbronorites, norites, pyroxenites and anorthositic rock types with more mafic rock material, such as harzburgite and troctolites, that partially grade into dunites towards the base of the package. The Bushveld succession strikes southwest to northeast with a general dip of 34° to 38° towards the west as observed from the drillhole core. The Bushveld Upper Zone is overlain by a 120m to 760m thick Waterberg Group, a sedimentary package predominantly comprised of sandstones, and within the project area where sedimentary formations known as the Setlaole and Makgabeng Formations constitute the Waterberg Group. The Waterberg package is flat-lying with dip angles ranging from 2° to 5° towards the west.

PGM mineralisation within the Bushveld package underlying the Waterberg project is hosted in two main layers: the T-Zone and the F-Zone. The T-Zone occurs within the Main Zone, just beneath the contact of the overlying Upper Zone. Three potential economic layers were identified: TZ, T1, and T0. These are composed mainly of anorthosite, pegmatoidal gabbros, pyroxenite, troctolite, harzburgite, gabbronorite and norite. The F-Zone is hosted in a cyclic unit of olivine-rich lithologies near the base of the Main Zone, towards the bottom of the Bushveld Complex. This zone consists of alternating units of harzburgite, troctolite and pyroxenites. The 4E ratios differ significantly between the T- and F-Zones. Both zones show high palladium ratios. However, the T-Zone is relatively enriched in gold and copper compared to the F-Zone.

EXPLORATION AND STUDIES

Waterberg is an advanced project, which has undergone extensive exploration, preliminary economic evaluations and a pre-feasibility study (PFS), with the definitive feasibility study completed in October 2019.

Data used in the Mineral Resource estimate was derived from a total of 362 293m of diamond drilling to inform the mineralised horizons structure model and estimated grade values. The drillhole dataset consists of 441 drillholes and 583 deflections at the date of drill data cut-off (1 December 2018).

During the past year, 33 additional surface drillholes and 15 geotechnical drillholes were completed as part of an optimisation study as well as a step-out drilling programme.

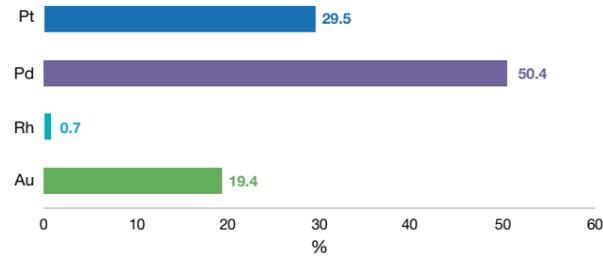
From an environmental and social perspective, the most significant impacts from potential mining are anticipated in the eastern (plant footprint) and southeast-central areas of the proposed mining right area. This delineates the area where surface infrastructure is planned, as it marks the shallowest access for underground mining and is topographically relatively flat. The Environmental Assessment Practitioner and specialists' assessments have found that the Waterberg project may result in both negative and positive impacts on the environment. Adequate mitigation measures are included in the Environmental Management Programme to reduce identified adverse effects.

GENERAL INFRASTRUCTURE

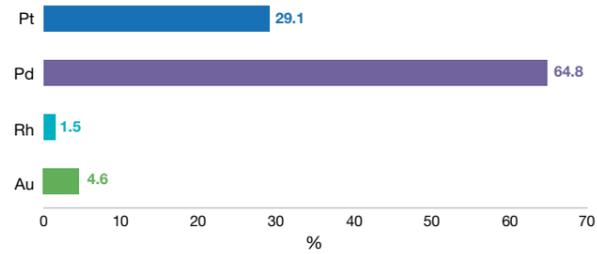
The Waterberg project is located 85km north of the town of Mokopane in Seshego and Mokerong, districts of the Limpopo province, and 56km from the N11 national road that links Mokopane with the Grobler's Bridge border post to Botswana. Current access to the project area from Mokopane and Polokwane includes approximately 34km of unpaved roads. The project is located in a rural area with limited existing infrastructure, apart from gravel roads, borehole water, and 22kV rural power distribution with limited capacity. Upgrades are planned for all existing infrastructure, including the 37km gravel (Matala) road leading to the R567 regional road to Polokwane.

In addition to the three planned mining complexes and one processing facility, the infrastructure required for a successful Waterberg operation would include constructing a new 132kV electrical supply from the Eskom Burotho 400/132kV main transmission station 74km south of the site. This development, and equipping a local well field spread over 20km to provide water, is envisaged.

Waterberg T-Zone 4E ratio
as at 30 June 2023 (%)

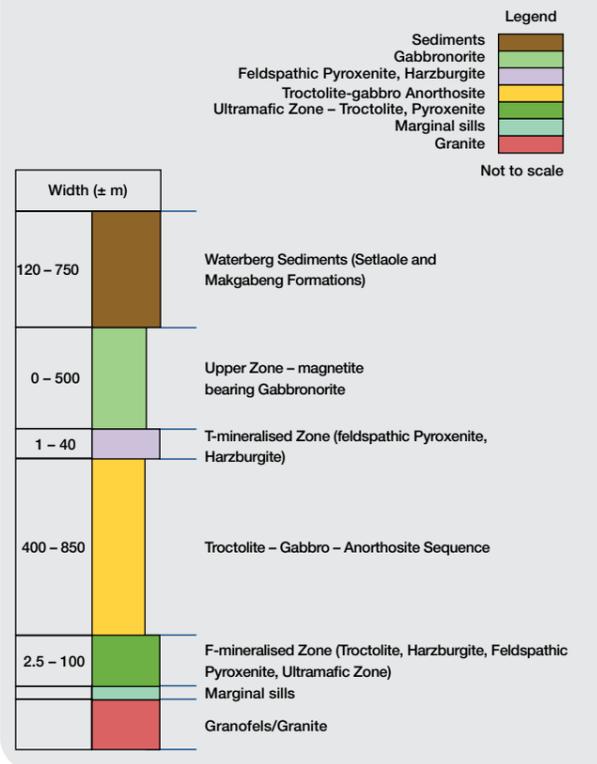


Waterberg F-Zone 4E ratio
as at 30 June 2023 (%)



T-Zone and F-Zone 4E ratios derived from the Mineral Resource estimate.

Generalised geological succession of the Bushveld Complex at the Waterberg project



MINERAL RESOURCE ESTIMATION AND CLASSIFICATION

Mineral Resources are reported inclusive of Mineral Reserves and are reflected on a 100% project basis. Mineral Resource grades are shown for 4E only, given the lack of available details about ruthenium and iridium. The nickel and copper estimates for the Waterberg project are based on the four-acid digestion method. This results in a near-total assay, while the nickel and copper reported for all Implats' other southern African operations and projects are based on a partial three-acid digestion method. Mineral Resources were estimated using ordinary kriging (OK) and simple kriging (SK) methods in Datamine Studio3. A process of geological modelling and the creation of grade shells using indicating kriging (IK) was applied in the estimation process.

The cut-off grade for the T-Zone and the F-Zone considered costs, smelter discounts and concentrator recoveries from the previous and ongoing engineering work completed on the property by the Waterberg JV and its independent engineers. Two Mineral Resource estimates were compiled based on cut-off grades of 2.0 and 2.5g/t 4E, respectively. A cut-off grade of 2.5g/t 4E was used for the Mineral Resource estimate shown below.

The Waterberg project Mineral Resources are currently classified according to the combined criteria for sampling (QA/QC), geological confidence, number of samples in each block, semi-variogram range, kriging efficiency and regression slope.

The Mineral Resource estimate comprises 19% Measured, 60% Indicated and 21% Inferred Mineral Resources.

MODIFYING FACTORS

The table below summarises the more significant modifying factor impacting the Mineral Resource estimates (see pages 15, 33, 97 and 98 for further details).

Mineral Resource Key assumptions

Geological losses (in addition to known structures)	T- and F-Zones
	5 – 7%



Waterberg Mineral Resource estimate (inclusive reporting)

As at 30 June 2023

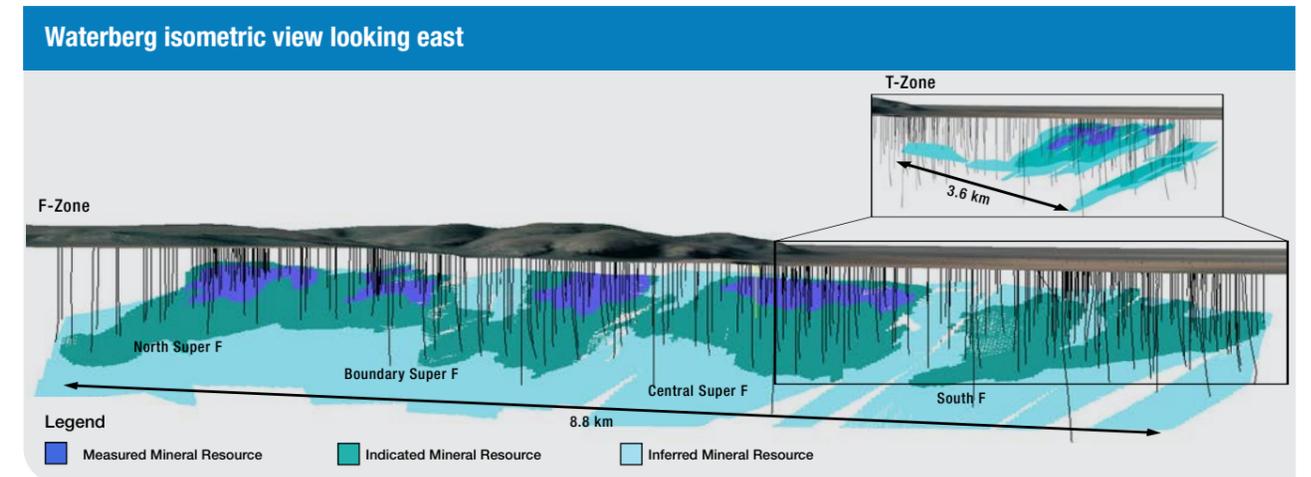
Orebody	Category	Units	T-Zone				F-Zone				Total
			Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	
Tonnes	Mt		4.4	17.0	21.8	43.3	54.1	166.9	44.8	265.8	309.1
4E grade	g/t		4.20	4.61	3.86	4.19	3.36	3.24	2.98	3.22	3.36
Ni	%		0.08	0.09	0.10	0.09	0.20	0.19	0.17	0.19	0.17
Cu	%		0.15	0.20	0.20	0.19	0.09	0.09	0.06	0.08	0.10
4E oz	Moz		0.6	2.5	2.7	5.8	5.8	17.4	4.3	27.5	33.4
Pt oz	Moz		0.2	0.7	0.8	1.7	1.7	5.1	1.3	8.0	9.7
Pd oz	Moz		0.3	1.3	1.3	2.9	3.8	11.2	2.8	17.8	20.7

As at 30 June 2022

Orebody	Category	Units	T-Zone				F-Zone				Total
			Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	
Tonnes	Mt		4.4	17.0	21.8	43.3	54.1	166.9	44.84	265.8	309.1
4E grade	g/t		4.20	4.61	3.86	4.19	3.36	3.24	2.98	3.22	3.36
Ni	%		0.08	0.09	0.10	0.09	0.20	0.19	0.17	0.19	0.17
Cu	%		0.15	0.20	0.20	0.19	0.09	0.09	0.06	0.08	0.10
4E oz	Moz		0.6	2.5	2.7	5.8	5.8	17.4	4.3	27.5	33.4
Pt oz	Moz		0.2	0.7	0.8	1.7	1.7	5.1	1.3	8.0	9.7
Pd oz	Moz		0.3	1.3	1.3	2.9	3.8	11.2	2.8	17.8	20.7

MINERAL RESOURCE RECONCILIATION

The Mineral Resource estimate for the Waterberg project was reported as at 4 September 2019 as part of the Waterberg definitive feasibility study. This estimate remains in place and is valid as at 30 June 2023.



Waterberg project (continued)

PROPOSED MINING METHODS AND MINE PLANNING

The Waterberg project, as per the DFS completed in October 2019, is planned as a 400ktpm mechanised underground mining operation accessed via declines. The DFS mine design is based on the sub-level longhole stoping (longhole) mining method and backfilling the mined voids with paste backfill. Additional mining methods could be considered in future.

A combination of transverse and longitudinal longhole approaches is currently planned to extract the Mineral Resource. Longhole stoping requires dividing the Mineral Resource targeted for production into individual stopes, and establishing mining sub-levels to access the stopes and position development to drill, blast and extract the blasted material from between the sub-levels. Once mining of a stope is complete, the stope will be backfilled with paste backfill.

A transverse approach, consisting of primary and secondary stopes, will be applied to areas where the average true thickness (perpendicular to the dip) of the Mineral Resource is 15m or greater. In the transverse approach, stopes are accessed and developed perpendicular to the strike of the orebody. A longitudinal system requiring less waste rock development will be used for areas where the true thickness is less than 15m. In the longitudinal approach, stopes are developed along (parallel to) the strike of the orebody.

The Waterberg project is divided into the following three mining complexes.

- The South Complex, which includes T-Zone and F-South
- The Central Complex, which includes F-Central
- The North Complex, which includes F-North, F-Boundary North and F-Boundary South.

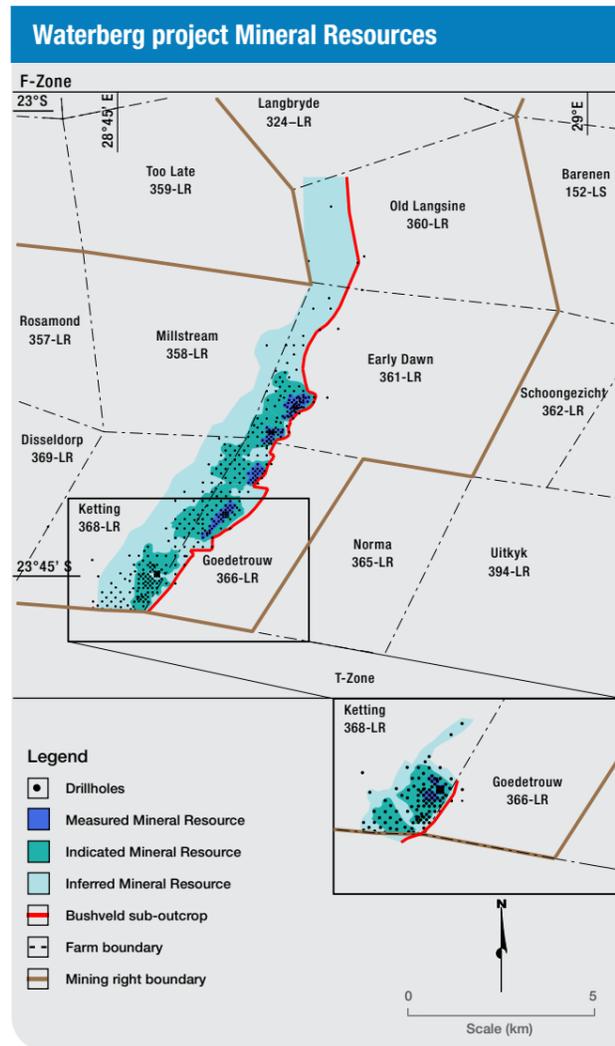
The mine plan includes a box cut and portal at each complex, each with twin declines (service decline and conveyor decline) developed to access and service the complex for the LoM.

MINERAL RESERVE ESTIMATION, CLASSIFICATION AND RECONCILIATION

On completion of the DFS in October 2019, a Mineral Reserve estimate for the Waterberg project was published in a NI43-101 report entitled 'Independent Technical Report, Waterberg Project Definitive Feasibility Study and Mineral Resource Update, Bushveld Complex, South Africa, effective date 4 September 2019' (www.sedar.com). While the Mineral Reserve estimate is in the public domain, Implats has elected not to include the estimate in this report. In essence, the internal Implats' Group-wide protocol for the estimation, classification and reporting of Mineral Resources and Mineral Reserves requires, among others, that a mining right must be in place, that the board has approved the project and that funding is in place.

PROCESSING

The process design for the Waterberg Concentrator Plant was developed based on the extensive metallurgical test work results and studies. The test work programme, developed during the PFS and the DFS, identified that the mill-float-mill-float (MF2) configuration following three-stage crushing is the most appropriate recovery technique for the PGE and base metals from the F-Zone and the T-Zone ores. The plant design provides for controlled blending of the two ore types in the crushing circuit. The ore blending does not require a conceptual change to the MF2 flowsheet, but controlled blending is considered advantageous in providing a consistent feed composition to the process. Further optimising reagent addition during operation, to achieve the optimal concentrate grade and recovery, can be completed. The tailings will be directed to either the backfill plant, to be placed as cemented fill underground, or to a potential TSF.



Chromium ore

Chromium ore is produced from the mineral chromite (a chromium-iron oxide), which is found in rock called chromitite. Most of the world's chromium Mineral Resources are in South Africa's Bushveld Complex and Zimbabwe's Great Dyke, where it occurs as numerous thin and laterally continuous stratiform chromitite layers, interlayered with mafic and ultramafic rock.

Up to 11 chromitite layers are known in the Great Dyke, named from the top down as Seams 1 to 11. Thirteen chromitite layers are known in the Bushveld Complex, which are clustered into three groups, the lower, middle and upper groups. Named from the bottom up, these layers are termed LG1 to LG7, MG1 to MG4 and the UG1 and UG2. In places, individual chromitite layers may comprise multiple layers of subsidiary chromitite units, separated by intercalated silicate units.

Although some of the chromitite layers have been known since 1865, limited mining only started in 1916 in the Bushveld Complex and in 1919 on the Great Dyke. Chromium mining and use escalated after the Second World War, with approximately half of the world's chromium ore production mined from the Bushveld Complex.

In the Bushveld Complex, only the LG6, MG1 and UG2 chromitite layers are generally amenable to underground mining. The uppermost chromitite layer (UG2 Reef) occurs at a depth range of 50m and 400m below the Merensky Reef and hosts economically exploitable quantities of PGMs within the chromitite. The UG2 chromitite layer is mined at Implats' Impala Rustenburg, Marula and Two Rivers operations, principally for the PGMs. Chromium can consequently be seen as a by-product of the UG2 Reef in South Africa. The LG6 and MG1 layers, with an average Cr₂O₃ grade of between 40% and 50%, occur more than 250m below the UG2 Reef. As such, these units cannot be mined from Implats' existing infrastructure and are mined by other operators, close to the surface in opencast and underground mining operations, for the chromium content only.

The UG2 Reef at **Impala Rustenburg** has an average *in situ* Cr₂O₃ grade of approximately 33%, and a mined grade of about 14%. The mined ore from the UG2 Reef is milled and processed to recover the PGMs at the mine's two PGM concentrator plants. The tailings from the central concentrator are pumped directly to the tailings dams, as they are predominantly Merensky Reef tailings. Some of the tailings generated by the UG2 PGM recovery plant are reprocessed at two metallurgical plants to recover the chromite.

Impala Rustenburg has an offtake agreement with Merafe Resources and sells approximately 160kt of chromite concentrate a year, recovered at one of the chromite recovery plants. The second chromite recovery plant, owned by Impala Chrome, is operated by Glencore Operations South Africa (Pty) Ltd.

Currently, 195kt chromite concentrate is produced per annum by Impala Chrome, and the remainder is pumped to the tailings dams. The retrieved chromite from the UG2 Reef tailings has an average Cr₂O₃ grade of approximately 40.5%. The number 3 and number 4 tailings dams at Impala Rustenburg currently contain some 520Mt of milled and processed material, with an average Cr₂O₃ grade of less than 8%.

At **Marula**, material from the UG2 Reef is milled and processed to retrieve the PGMs at the mine's concentrator. The Makgomo Chrome recovery plant subsequently reprocesses the UG2 Reef tailings generated by the concentrator to extract the chromite. The plant has been in operation since 2010 and is currently operated by Chrome Traders, which has an offtake agreement whereby all the concentrate produced is purchased on a free carrier basis. Makgomo Chrome is 50% owned by Marula Community Chrome (Pty) Ltd, 30% by Implats and 20% by Marula Platinum Mine. In recent years, some 222kt of chromium concentrate has been produced per annum, and the remainder is pumped to the tailings dams. The *in situ* grade of the UG2 chromitite layer at Marula has not been determined, but the chromite concentrate has an average Cr₂O₃ grade of approximately 41%. The tailings dam at Marula currently contains some 27Mt of milled and processed UG2 Reef material at an average Cr₂O₃ grade of roughly 12%.

At **Two Rivers**, managed by ARM, material from the UG2 Reef is milled and processed to recover the PGMs at the mine's MF2 PGM concentrator. The chromite recovery plant then reprocesses the UG2 Reef tailings generated by the concentrator to recover the chromite. The chromite recovery plant was commissioned in 2013 and is owned and operated by Two Rivers, which has an offtake agreement with Chrome Traders whereby all concentrate produced is purchased on a free carrier basis from Two Rivers. Currently, some 192kt per annum of chromite is produced at a Cr₂O₃ grade of 40.1% and a silica content of less than 3.9%, with the remainder pumped to the tailings dams. The tailings dams at Two Rivers currently contain some 51Mt of milled and processed material, at an average Cr₂O₃ grade of 15%. The UG2 Reef in this area has an average *in situ* Cr₂O₃ grade of 20.7%.

No mining has taken place at **Afplats**. The UG2 Reef in this area has an average *in situ* Cr₂O₃ grade of 31%.

At **Zimplats**, the uppermost chromitite layer (Seam 1) occurs 220m below the MSZ and outcrops in a few places within Zimplats' mining leases (ML 36 and ML 37). It cannot be mined from Zimplats' existing infrastructure but is mined by other operators and artisanal miners, close to the surface outcrop, for its chromium content only. The lower seams do not outcrop within Zimplats' mining leases. This is also the case at Mimosa.

The available information is insufficient to support a comprehensive Mineral Resource or Mineral Reserve Statement for Implats' chromium ore production. Where relevant, chromium is accounted for in the financial valuation.

Mineral Resource and Mineral Reserve definitions

SAMREC Code (The South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves) – The Code sets out a required minimum standard for the Public Reporting of Exploration Results, Mineral Resources and Mineral Reserves. References in the Code to Public Report or Public Reporting pertain to those reports detailing Exploration Results, Mineral Resources and Mineral Reserves and which are prepared as information for investors or potential investors and their advisers. SAMREC was established in 1998 and is modelled on the Australasian Code for reporting of Mineral Resources and Ore Reserves (JORC Code). The first version of the SAMREC Code was issued in March 2000 and adopted by the JSE in its Listings Requirements later that same year. The Code has been adopted by the SAIMM, GSSA, SACNASP, ECSA, IMSSA and SAGC, and it is binding on members of these organisations. For background information and the history of the development of the code, please refer to the SAMREC Code, March 2000. A second edition of the SAMREC Code was issued in 2007 with an amendment issued in 2009 and the latest edition was released in May 2016. This supersedes the code's previous editions.

A Competent Person (CP) is a person who is registered with SACNASP, ECSA or SAGC, or is a Member or Fellow of the SAIMM, the GSSA, IMSSA or a Recognised Professional Organisation (RPO). These organisations have enforceable disciplinary processes, including the powers to suspend or expel a member. A complete list of recognised organisations will be promulgated by the SAMREC/SAMVAL Committee (SSC) from time to time. The CP must comply with the provisions of the relevant promulgated acts. A CP must have a minimum of five years' relevant experience in the style of mineralisation or type of deposit under consideration and in the activity that person is undertaking. If the CP is estimating, or supervising the estimation of Mineral Resources, the relevant experience must be in the estimation, assessment and evaluation of Mineral Resources. If the CP is estimating, or supervising the estimation of Mineral Reserves, the relevant experience must be in the estimation, assessment, evaluation and assessment of the economic extraction of Mineral Reserves. Persons being called upon to sign as a CP must be clearly satisfied in their own minds that they are able to face their peers and demonstrate competence in the commodity, type of deposit and situation under consideration.

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

Inferred, Indicated or Measured categories. Geological evidence and knowledge required for the estimation of Mineral Resources must include sampling data of a type, and at spacings, appropriate to the geological, chemical, physical, and mineralogical complexity of the mineral occurrence, for all classifications of Inferred, Indicated and Measured Mineral Resources.

An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing, and is sufficient to assume geological and grade or quality continuity between points of observation. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve. An Indicated Mineral Resource has a higher level of confidence than that applying to an Inferred Mineral Resource.

A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Mineral Reserve or to a Probable Mineral Reserve.

A Mineral Reserve is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted, and is defined by studies at pre-feasibility or feasibility level, as appropriate, that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.

Mineral Resource and Mineral Reserve definitions (continued)

The reference point at which Mineral Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.

A Probable Mineral Reserve is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Mineral Reserve is lower than that applying to a Proved Mineral Reserve.

A Proved Mineral Reserve is the economically mineable part of a Measured Mineral Resource. A Proved Mineral Reserve implies a high degree of confidence in the Modifying Factors.

SAMVAL Code – The South African Code for the reporting of Mineral Asset Valuation sets out minimum standards and guidelines for Reporting of Mineral Asset Valuation in South Africa. The process for establishing the SAMVAL Code was initiated through an open meeting at a colloquium convened by the Southern

African Institute of Mining and Minerals (SAIMM) in March 2002. The first edition of the SAMVAL Code was released in April 2008, with further amendments in July 2009. After various discussions it became apparent that a review process was required, and this was initiated in September 2011 at an open meeting at which participants were invited to express their opinions on matters that were unclear, or that required inclusion/exclusion or modification in the 2008 edition. This process resulted in the SAMVAL Code update, released in May 2016.

A Competent Valuator (CV) is a person who is registered with ECSA, SACNASP, or SAGC, or is a Member or Fellow of the SAIMM, the GSSA, SAICA, or a Recognised Professional Organisation (RPO) or other organisations recognised by the SSC on behalf of the JSE Limited. A CV is a person who possesses the necessary qualifications, ability, and relevant experience in valuing mineral assets. A person called upon to sign as a CV shall be clearly satisfied in their own mind that they are able to face their peers and demonstrate competence in the valuation undertaken.

The respective codes and related details can be found at the SAMCODES website (www.samcode.co.za).



Exploration drilling camp at Mimosa

Third-party assurance



Block 4, Tunsgate Office Park, 30 Tunsgate Road, Mount Pleasant
 P.O. Box 1022, Mount Pleasant, Harare, Zimbabwe,
 Tel: +263 4 853 271/2 Mobile: +263 77 225 9821
 Email: vpinfo@virimaiprojects.co.zw

June 19, 2023
Mr Theodore Pegram
Executive: Mineral Resources
 Impala Platinum Holdings Limited
 2 Fricker Road, Illovo
 Johannesburg, 2196, South Africa

Dear Mr Pegram
AUDIT OF THE ZIMPLATS MINES MINERAL RESOURCE AND MINERAL RESERVE STATEMENT FOR AS AT 30 JUNE 2023

Virimai Projects carried out an Independent Audit of the Mineral Resources and Mineral Reserves and Life of Mine Plans for Zimplats Mines following the guidelines of the SAMREC Code (2016) and the JSE Listing Rules Section 12.13. The audit entailed a systematic and detailed inspection of the key elements of the Minerals Resource and Mineral Reserve estimation and Life of Mine valuation process undertaken to validate adherence to Zimplats standards and procedures, and to identify material errors and/or omissions or improvements that could be necessary.

Two site visits were made in May 2023 by Competent Persons from Virimai Projects.

Virimai Projects found no fatal flaws or material issues in the preparation of the Mineral Resources and Mineral Reserves and Life of Mine Plans reported in the Zimplats Mineral Resources and Mineral Reserve Statements as at June 30, 2023. There were just a few minor report improvement issues were identified, which should be addressed for future estimations.

Virimai Projects is satisfied that the Mineral Resources and Mineral Reserves and Life of Mine are a correct reflection of the economic value of Zimplats and has cleared it of any impediment to include the said Mineral Resources and Mineral Reserves and Life of Mine for public reporting purposes.

This opinion does not mean though that Virimai Projects has accepted the role of Competent Person for the purpose of the Mineral Resources and Mineral Reserves and Life of Mine and sign-off for Implats. Such role would remain with the nominated personnel of Implats.

Yours sincerely,

Wenceslaus Kutekwatekwa
Consulting Director
 BSc (Hon) Mining Engineering MBA, FSAIMM

Arimon Ngilazi
Principal Resource Geologist
 BSc (Geology) MBA, MSAIMM, MAusIMM

Glossary of terms

3E (equivalent to 2PGE+Au)	Refers to the sum of platinum, palladium and gold content
4E (equivalent to 3PGE+Au)	Refers to the sum of platinum, palladium, rhodium and gold content
6E (equivalent to 5PGE+Au)	Refers to the sum of platinum, palladium, rhodium, ruthenium, iridium and gold content
A2X	A2X Markets, stock exchange in South Africa
AA	Atomic absorption spectroscopy
Anorthosite	Igneous rock composed almost entirely of plagioclase feldspar
ASX	Australian Securities Exchange
AusIMM	Australasian Institute of Mining and Metallurgy
B-BBEE	Broad-based black economic empowerment
BFS	Bankable Feasibility Study
BMR	Base Metal Refinery
Bord and pillar	Underground mining method in which ore is extracted from rectangular shaped rooms, leaving parts of the ore as pillars to support the roof
Bronzite	Igneous rock composed mainly of orthopyroxene
Ca	Centiare is a metric unit of area measurement, equal to one square metre
Chromitite	A rock composed mainly of the mineral chromite
CIMA	Chartered Institute of Management Accountants
CRIRSCO	Committee for Mineral Reserves International Reporting Standards
CY	Calendar year (1 January – 31 December)
DMRE	Department of Mineral Resources and Energy, Republic of South Africa
Diorite	Igneous rock composed of amphibole, plagioclase feldspar, pyroxene and small amounts of quartz
Dip	The inclination of a planar surface, measured in the vertical plane perpendicular to its strike
Dunite	Igneous rock consisting predominantly of olivine
Dyke	A wall-like body of igneous rock that intruded (usually vertically) into the surrounding rock in such a way that it cuts across the stratification (layering) of this rock
ECSA	Engineering Council of South Africa
ERM	Enterprise Risk Management framework
EPO	Exclusive Prospecting Order (Zimbabwe)
ESG	Environmental, social and governance
Felsic rock	Igneous rock composed mainly of a light-coloured minerals such as feldspar (or plagioclase) and usually quartz, which is more than 60% by volume
FSAIMM	Fellow of the South African Institute of Mining and Metallurgy
FGSSA	Fellow of the Geological Society of South Africa
FY	Financial year (1 July – 30 June)
Gabbro	Igneous rock composed predominantly of plagioclase feldspar and clinopyroxene occurring in approximately equal proportions
g/t	Metric grams per metric tonne. The unit of measurement of metal content or grade, which is equivalent to parts per million
GSSA	Geological Society of South Africa
ha	Hectare is a metric unit of area measurement, equal to 10 000 square metres
Harzburgite	Igneous rock composed mainly of olivine and pyroxene
HQ drill core size	Diamond drill core outer diameter of 63.5mm
IC	Intrusive Complex
ICL	Impala Canada Limited
ICP-MS	Inductively Coupled Plasma Mass Spectrometry
IMSSA	Institute of Mine Surveyors of Southern Africa
in situ	In its natural position or place
IRS	Impala Refining Services
ISO 31000:2018	International Organisation for Standardisation sets the international standards for risk management
ISO 14001:2015	International Organisation for Standardisation sets the international standards for environmental management
JOGMEC	Japan Organization for Metals and Energy Security
JORC Code	The Australasian Code for Reporting of Mineral Resources and Ore Reserves. This was updated and reissued as the JORC Code (2012)
JSE Limited	The South African securities exchange based in Johannesburg. Formerly the JSE Securities Exchange and prior to that the Johannesburg Stock Exchange
koz	Thousand troy ounces. All references to ounces are troy ounces with the factor being 31.10348 metric grams per ounce
Kriging	A geostatistical estimation method which determines the best unbiased linear estimates of point values or of averages

LoM	Life-of-mine
Mafic	Igneous rock composed mainly of dark ferromagnesium minerals which is less than 90% by volume
Merensky Reef	A horizon in the Critical Zone of the Bushveld Complex often containing economic grades of PGM and associated base metals. The 'Merensky Reef' as it is generally known, refers to that part of the Merensky unit, which is economically exploitable, regardless of the rock type
MGSSA	Member of the Geological Society of South Africa
Mill grade	The value, usually expressed in parts per million, or grams per tonne, of the contained material delivered to the mill
Moz	Million troy ounces. All references to ounces are troy ounces with the factor being 31.10348 metric grams per ounce
MPRDA	Mineral and Petroleum Resources Development Act of South Africa
MSAIMM	Member of the South African Institute of Mining and Metallurgy
MSZ	Main Sulphide Zone is the PGM bearing horizon hosted by the Great Dyke
MSZ 'Flats'	Main Sulphide Zone at dips ranging 0° to 9°
MSZ 'Upper Ores I'	Main Sulphide Zone at dips ranging 9° to 14°
MSZ 'Upper Ores II'	Main Sulphide Zone at dips greater than 14°
Mt	Million metric tonnes
Norite	Igneous rock composed mainly of plagioclase feldspar and orthopyroxenes in approximately equal proportions
NQ drill core size	Diamond drill core outer diameter of 47.6mm
OHS	Open hole stoping mining method
Pegmatoid	Igneous rock which has the coarse crystalline texture of a Pegmatite but lacks graphic intergrowths
PEO	Professional Engineers Ontario (the licensing and regulating body for professional engineering in the province of Ontario, Canada)
PFS	Pre-Feasibility Study
PGE	Platinum Group Elements, comprising the six elemental metals of the platinum group namely, platinum, palladium, rhodium, ruthenium, iridium and osmium
PGM	Platinum Group Metals, being the metals derived from PGE
PGO	Professional Geoscientists Ontario
Pyroxenite	Igneous rock composed predominantly of pyroxene and minor feldspar
QAQC	Quality Assurance and Quality Control
RBPlat	Royal Bafokeng Platinum
Reef	A local term for a tabular metalliferous mineral deposit
RPEEE	Reasonable Prospects for Eventual Economic Extraction, applicable to Mineral Resources
RPEE	Reasonable Prospects for Economic Extraction, applicable to Mineral Reserves
RPO	Recognised Professional Organisation
SACNASP	South African Council for Natural Scientific Professions
SAICA	South African Institute of Chartered Accountants
SAGC	South African Geomatics Council
SAIMM	Southern African Institute of Mining and Metallurgy
SAMESG Guideline	The South African guideline for the reporting of environmental, social and governance (ESG) parameters within the solid minerals and oil and gas industries (The SAMESG Guideline, 2017)
SAMREC	The South African Mineral Resource Committee
SAMREC Code	The South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves 2016 Edition
SAMVAL Code	The South African Code for the Reporting of Mineral Asset Valuation 2016 Edition
Seismic surveys	A geophysical exploration method whereby rock layers can be mapped based on the time taken for wave energy reflected from these layers to return to surface
SLC	Sub-level caving mining method
SLS	Sub-level shrinkage mining method
SLP	Social and Labour Plan
SSC	SAMREC/SAMVAL Committee
Stratigraphy	Study of stratified rocks in terms of time and space
Strike	The direction of a horizontal straight line constructed on an inclined planar surface, at a direction of 90° from the true dip direction
TSF	Tailings storage facility
UG2 Reef	A distinct chromitite horizon in the Upper Critical Zone of the Bushveld Complex, usually containing economic grades of PGE and limited associated base metals
Ultramafic rock	Igneous rock composed mainly of dark ferromagnesium minerals which constitutes more than 90% by volume
VRT	Virgin rock temperature
Websterite	Igneous rock composed almost entirely of clinopyroxene and orthopyroxene
WUL	Water-use licence
XLP	Extra low profile
ZESA	Zimbabwe Electricity Supply Authority

Appointed Competent Persons and recognised professional organisations' details

Implats has written confirmation from the Competent Persons listed below that the information disclosed in this document is compliant with the SAMREC Code (2016), and where applicable, SAMREC Table 1, Appendices and JSE Section 12.13 Listings Requirements. The CPs concur that the information may be published in the form, format and context in which it was intended.

Mine/Project	Competent Person's (CP) name	Employment	Title	Appointment	Qualifications	Registration RPO	Membership number	Years' experience	Contact details – Address (investor@implats.co.za)
Implats	Theodore Pogram	Full-time Implats	Implats Executive Mineral Resources	Lead CP Mineral Resources	BSc (Hons) (Geology), GDE (Mining)	SACNASP, FGSSA, FSAIMM	400032/03	34	Private Bag X18, Northlands, 2116, Gauteng, South Africa
	Gerhard Potgieter	Full-time Implats	Implats Chief Operating Officer	Lead CP Mineral Reserves	BSc: Eng (Mining)	ECSA, MSAIMM	200302/36	38	Private Bag X18, Northlands, 2116, Gauteng, South Africa
	Nico Strydom	Full-time Implats	Group Manager – Project Finance	Lead CV (Valuation)	CA(SA), ACMA	SAICA, CIMA	03141381	30	Private Bag X18, Northlands, 2116, Gauteng, South Africa
	Johannes du Plessis	Full-time Implats	Group Head MFRM Compliance	CP Mineral Resources & Audits	MSc (Geology)	SACNASP, FGSSA, MSAIMM	400284/07	22	Private Bag X18, Northlands, 2116, Gauteng, South Africa
Impala Rustenburg	Louise Fouché	Full-time Implats	Group Head Mineral Resource estimation	CP Geostatistics and databases	MSc (Geology), Post-Grad Dipl (MRM)	SACNASP, FGSSA, MSAIMM	400026/89	26	Private Bag X18, Northlands, 2116, Gauteng, South Africa
	David Sharpe	Full-time Impala	Group MFRM Manager	CP Mineral Resources	BSc (Hons) (Geology), BComm	SACNASP, MGSSA	400018/81	34	PO Box 5683, Rustenburg, 0300, Northwest Province, South Africa
	Emmanuel Acheampong	Full-time Impala	Executive: Technical Services	CP Mineral Reserves	MSc (Mining Engineering, MBA)	ECSA, MSAIMM	980778	30	PO Box 5683, Rustenburg, 0300, Northwest Province, South Africa
	Philip Fouché	Full-time Impala	Geology Manager Exploration	CP Exploration	MSc (MRM), B. Compt	SACNASP, MGSSA	400254/05	21	PO Box 5683, Rustenburg, 0300, Northwest Province, South Africa
Manula	Claudia Ngwekazi	Full-time Manula	Geology Manager	CP Mineral Resources	BSc (Hons) (Geology), GDE (Mineral Resource Estimation), Post Grad Dipl (Management)	SACNASP, MGSSA	400432/11	18	Private Bag X18, Northlands, 2116, Gauteng, South Africa
	Sifiso Mthethwa	Full-time Manula	Technical Services Manager	CP Mineral Reserves	BSc (Hons) (Geology)	SACNASP, MGSSA	400163/13	20	Private Bag X18, Northlands, 2116, Gauteng, South Africa
Two Rivers	Juan Coetzee	Full-time Two Rivers	Senior Resource Geologist	CP Mineral Resources	BSc (Hons) (Geology)	SACNASP, MGSSA, MSAIMM	114086	20	PO Box 786136, Sandton, 2146, Gauteng, South Africa
	Tobie Horak	Full-time Two Rivers	Chief Surveyor	CP Mineral Reserves	NHD (Mine Surveying), GDE (Mining Engineering)	INSSA	1113	24	PO Box 786136, Sandton, 2146, Gauteng, South Africa
Zimplats	Tarisa Marazani	Full-time Zimplats	Resource Evaluation Manager	CP Mineral Resources	BSc (Hons) (Geology)	MSAIMM	709092	19	PO Box 6380, Harare, Zimbabwe
	Waczanayi Musakanyi	Full-time Zimplats	General Manager Technical Services	CP Mineral Reserves	BSc (Hons) (Mining Engineering)	MSAIMM, MAusIMM	709309	27	PO Box 6380, Harare, Zimbabwe
Mimosa	Dumisayi Mapundu	Full-time Mimosa	Geology and Survey Manager	CP Mineral Resources	BSc (Geology)	SACNASP	200021/05	29	PO Box 638, Harare, Zimbabwe
	Paul Mankombe	Full-time Mimosa	Senior Manager Mining Technical Services	CP Mineral Reserves	BSc: Eng (Hons) Mining, MBA, (UZ) MMCC (Zim)	MSAIMM	705146	28	PO Box 638, Harare, Zimbabwe
Lac des Iles	Stuart Gibbins	Full-time Impala Canada	Chief Mine Geologist	CP Mineral Resources	MSc (Geology)	PGO	0754	24	PO Box 10547, Thunder Bay, Ontario, P7B 6T9, Canada
	Kris Hutton	Full-time Impala Canada	Technical Services Manager	CP Mineral Reserves	B Applied Science & Engineering (Mineral Engineering)	PEO	100195677	17	PO Box 10547, Thunder Bay, Ontario, P7B 6T9, Canada
	Lionel Djon	Full-time Impala Canada	Exploration Manager	CP Exploration	PhD (Geology)	PGO	2500	13	PO Box 10547, Thunder Bay, Ontario, P7B 6T9, Canada
Aplats project	Louise Fouché	Full-time Implats	Group Head Mineral Resource estimation	CP Geostatistics and databases	MSc (Geology), Post-Grad Dipl (MRM)	SACNASP, MGSSA, MSAIMM	400026/89	26	Private Bag X18, Northlands, 2116, Gauteng, South Africa
	Charles Muller	Independent Consultant	Director	CP Mineral Resources	BSc (Hons) Geology	SACNASP, MGSSA, MGASA	400051/05	34	CJM Consulting, Ruimsig Office Estate, 199 Hole-in-one Road, Ruimsig, Roodepoort, 1724 South Africa

Appointed Competent Persons and recognised professional organisations' details (continued)

The Mineral Reserve Statements are fully supported by an experienced team of general managers and technical services managers, who approve their respective business plans and take full responsibility for their Mineral Reserve Statements. These responsible people are listed below:

Name	Area of responsibility	Years' relevant experience
Emmanuel Acheampong	Executive Technical Services Impala Rustenburg	30
Tshediso Mohase	General manager Impala Rustenburg 10 Shaft	37
Riaan Swanepoel	General manager Impala Rustenburg 11 Shaft	33
Joseph Tsiloane	General manager Impala Rustenburg 20 Shaft	23
Arthur Kgatlane	General manager Impala Rustenburg EF, 6 and 12 Shaft	34
Eddie Mohlabi	General manager Impala Rustenburg 14 Shaft	30
Hans Fourie	General manager Impala Rustenburg 16 Shaft	35
Wayne Dietrich	General manager Impala Rustenburg 1 Shaft	36
Themba Ngobeni	General manager Marula Mine	25
Simbarashe Goto	Senior general manager Mining Ngezi Mine, Zimplats	26
Allison Henstridge	Vice President Technical Services & Projects, Impala Canada	20
Stephen Ndiyamba*	General manager Mimoso Mine	32
Kennedy Sengani*	Business Leader: Two Rivers Mine	18
Cindi Henderson*	Mineral Resource leader Two Rivers Mine	20

* Non-managed.

RECOGNISED PROFESSIONAL ORGANISATIONS Addresses and contact details

AusIMM	The Australasian Institute of Mining and Metallurgy PO Box 660, Carlton South, Victoria 3053, Australia Telephone: +61 (3) 9658 6100 Facsimile: +61 (3) 9662 3662 www.ausimm.com
ECSA	Engineering Council of South Africa Private Bag X691, Bruma, 2026, Gauteng, South Africa Telephone: +27 (11) 607 9500 Facsimile: +27 (11) 622 9295 www.ecsa.co.za
GSSA	The Geological Society of South Africa PO Box 91230, Auckland Park, 2006, Johannesburg, South Africa Telephone: +27 (11) 358 0028 www.gssa.org.za
IMSSA	The Institute for Mine Surveyors of Southern Africa PO Box 62339, Marshalltown, 2107, Johannesburg, Gauteng, South Africa Telephone: +27 (11) 498 7682 www.ims.org.za
PGO	Professional Geoscientists Ontario 25 Adelaide Street East, Suite 1100 Toronto, Ontario, Canada M5C 3A1 Telephone: +1 416-203-2746 Facsimile: +1 416-203-6181 www.pgo.ca
PEO (in progress)*	Professional Engineers Ontario 40 Sheppard Ave W, Suite 101 Toronto, Ontario, Canada M2N 6K9 Telephone: +1 416-224-1100 www.peo.on.ca
SACNASP	South African Council for Natural Scientific Professions Private Bag X540, Silverton, 0127, Gauteng, South Africa Telephone: +27 (12) 748 6500 Facsimile: +27 (86) 206 0427 www.sacnasp.org.za
SAIMM	The Southern African Institute of Mining and Metallurgy Postnet Suite #212 Private Bag X31, Saxonwold, 2132, Gauteng, South Africa Tel: +27 (11) 538 0231 www.saimm.co.za
SAICA	The South African Institute of Chartered Accountants Private Bag X32, Northlands, 2116, Gauteng, South Africa Telephone: +27 (86) 1072422 www.saica.co.za

* PEO is currently not on the list of RPOs on the SAMCODES website (www.samcode.co.za), however, the process to facilitate the potential inclusion has been initiated. Note that the Lead CP for Mineral Reserves at Implats, Gerhard Potgieter, takes full responsibility for the Lac des Iles Mineral Reserves.

Contact details and administration

REGISTERED OFFICE

2 Fricker Road
Illovo, 2196
Private Bag X18
Northlands, 2116
Telephone: +27 (11) 731 9000
Telefax: +27 (11) 731 9254
Email: investor@implats.co.za
Registration number: 1957/001979/06
Share codes: JSE: IMP ADRs: IMPUY
ISIN: ZAE000083648
ISIN: ZAE000247458
Website: <http://www.implats.co.za>

IMPALA PLATINUM LIMITED AND IMPALA REFINING SERVICES Head office

2 Fricker Road
Illovo, 2196
Private Bag X18
Northlands, 2116
Telephone: +27 (11) 731 9000
Telefax: +27 (11) 731 9254

Impala Platinum (Rustenburg)

PO Box 5683
Rustenburg, 0300
Telephone: +27 (14) 569 0000
Telefax: +27 (14) 569 6548

Marula Platinum

2 Fricker Road
Illovo, 2196
Private Bag X18
Northlands, 2116
Telephone: +27 (11) 731 9000
Telefax: +27 (11) 731 9254

Impala Platinum Refineries

PO Box 222
Springs, 1560
Telephone: +27 (11) 360 3111
Telefax: +27 (11) 360 3680

Royal Bafokeng Platinum

The Pivot
1 Monte Casino Boulevard
Block C
Fourth Floor
Fourways
Telephone: +27 (10) 590 4510
www.bafokengplatinum.co.za

Zimplats

1st Floor South Block
Borrowdale Office Park
Borrowdale Road
Harare
Zimbabwe
PO Box 6380
Harare
Zimbabwe
Telephone: +26 (34) 886 878/85/87
Fax: +26 (34) 886 876/7
Email: info@zimplats.com

Impala Canada

69 Yonge Street
Suite 700
Toronto, ON, Canada
M5E 1K3
Telephone: +1 (416) 360 7590
Email: info@impalacanada.com

SPONSOR

Nedbank Corporate and Investment
Banking
135 Rivonia Road
Sandton, 2196
Johannesburg

IMPALA PLATINUM JAPAN LIMITED

Uchisaiwaicho Daibiru, room number 702
3-3 Uchisaiwaicho
1-Chome, Chiyoda-ku
Tokyo
Japan
Telephone: +81 (3) 3504 0712
Telefax: +81 (3) 3508 9199

COMPANY SECRETARY

Tebogo Llale
Email: tebogo.llale@implats.co.za

UNITED KINGDOM SECRETARIES

St James's Corporate Services Limited
Suite 31, Second Floor
107 Cheapside
London EC2V 6DN
United Kingdom
Telephone: +44 (020) 7796 8644
Telefax: +44 (020) 7796 8645
Email: phil.dexter@corpserv.co.uk

PUBLIC OFFICER

Ben Jager
Email: ben.jager@implats.co.za

TRANSFER SECRETARIES

Computershare Investor Services (Pty) Ltd
Rosebank Towers
15 Biermann Avenue, Rosebank
Private Bag X9000, Saxonwold, 2132
Telephone: +27 (11) 370 5000

AUDITORS

Deloitte & Touche
Johannesburg Office
5 Magwa Crescent
Waterfall City
Johannesburg, 2090
Telephone: +27 (11) 806 5000

Cape Town Office
The Ridge
6 Marina Road
Portwood District
V&A Waterfront
Cape Town, 8000
Telephone: +27 (21) 427 5300

CORPORATE RELATIONS

Johan Theron
Investor queries may be directed to:
Email: investor@implats.co.za