Mineral Resource and Mineral Reserve Statement as at 30 June 2020

Supplement to the Annual Integrated Report 2020

RESPECT, CARE
AND DELIVER

IMPLATS
EXCELLENCE IN PGMs

Strategy

OUR VISION

To be the world's best PGM producer, sustainably delivering superior value to all our stakeholders

OUR MISSION

To mine, process, refine and market high-quality PGM products safely, efficiently and at the best possible cost from a competitive asset portfolio through team work and innovation

OUR VALUES

We respect, care and deliver

STRATEGIC PILLARS

Responsible corporate stewardship

We develop, protect and strengthen our license to operate through industry leading ESG performance

Operational excellence in PGMs

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 portfolio aligned to market requirements

We seek to leverage and enhance our diverse resource base by growing our operational exposure to shallow, mechanisable orebodies

Market development and value chain optimisation

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

INTEGRATED REPORT

- Information about our stakeholders, their material matters, risk, strategy and performance
- Information about our operations, mineral reserves and mineral resources, business context, environment, business model, and intellectual capital contained in our risk and remuneration processes
- Overall assurance provided explained

ESG REPORT

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

ANNUAL FINANCIAL STATEMENTS

These annual financial statements were prepared according to International Financial Reporting Standards (IFRS) of the International Accounting Standards Board (IASB), the SAICA Financial Reporting Guides as issued by the Accounting Practices Committee and Financial Reporting Pronouncements as issued by the Financial Reporting Standards Council, the requirements of the South African Companies Act, Act 71 of 2008, the Listings Requirements of the JSE Limited and the recommendations of King IV™*.

ONLINE www.implats.co.za

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

@impalaplatinum.com

http://www.youtube.com/implats

http://www.linkedin.com/company/impalaplatinum limited

Contents

This report contains the 2020 Mineral Resource and Mineral Reserve statement of Impala Platinum Holdings Limited as at 30 June 2020.

The report provides updated estimates and reconciliation of Mineral Resources and Mineral Reserves and conforms to The South African code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (SAMREC Code (2016)). The report also conforms to Section 12.13 of the JSE Listings Requirements and has been signed off by the appointed competent persons.

Financial focus	Operational focus
R23.3 billion gross profit	**1%** increase in tonnes milled to 19.58 million tonnes
Cost of sales increased **11%**	**12%** higher unit costs per 6E ounce
2 075 cents headline earnings per share	**8.0%** decrease in gross refined 6E production
R5.7 billion cash net of debt	

HOW TO NAVIGATE THIS REPORT

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

Our strategies and strategic objectives to make referencing between our report suite easier. With this report we also include additional information relating to online topics.

Information available elsewhere in this report

Information available on our website

WE WELCOME YOUR FEEDBACK TO ENSURE WE COVER ALL ASPECTS THAT MATTER TO YOU

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 BECAUSE THEY RELATE TO EVENTS AND DEPEND ON CIRCUMSTANCES THAT OCCUR IN THE FUTURE. THERE ARE A NUMBER OF FACTORS BEYOND OUR CONTROL THAT 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 PRODUCERS OF PLATINUM GROUP METALS (PGMs). IMPLATS IS CURRENTLY STRUCTURED AROUND SIX MAIN OPERATIONS WITH A TOTAL OF 20 UNDERGROUND SHAFTS. OUR 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 listing on the JSE Limited (JSE) in South Africa. Our headquarters are based in Johannesburg and the six primary operations are Impala, Marula and Two Rivers in South Africa, Mimosa and Zimplats in Zimbabwe, and Lac des Iles in Canada.

The Mimosa and Two Rivers Platinum operations are both joint venture operations with Sibanye Stillwater and African Rainbow Minerals (ARM) respectively, with Mimosa being managed by an on-site mine team and overseen by a joint venture board, and Two Rivers by ARM. The structure of our operating framework allows for each of our operations to establish and maintain close relationships with their stakeholders, while operating within a Group-wide approach to managing the economic, social and environmental aspects of sustainability.

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 2020. An abridged version is included in the Implats integrated annual report for 2020, which is 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 that are considered to be material to stakeholders.

Implats Mineral Resource and Mineral Reserve Statement 2020 at a glance

The Mineral Resource and Mineral Reserve Statement as at 30 June 2020 reflects the benefit of an improved pricing outlook for the major PGMs and, both organic and acquisitive growth at the Group in the period under review. In December 2019, Implats completed the acquisition of Impala Canada and the statement reflects the inclusion of the Lac des Iles Mine in Canada at 100%. In addition, we benefit from the inclusion of our 15% attributable share of the mineral inventory of the Waterberg project. While both Lac des Iles Mine and the Waterberg project constitute Implats' maiden inclusion, our majority partner in the Waterberg Joint Venture has already effected historical reporting into the market – refer to Sedar, while Lac des Iles was historically reported on the TSX in compliance with the National Instrument 43-101 (NI43-101). Lac des Iles and Waterberg are characterised by palladium dominance and mechanised operations and in the latter case, a relatively short lead-time to production – reflecting delivery against the stated strategic objectives of the Group with a resultant increase of Implats' palladium Mineral Reserves and the total palladium:platinum ratio. This declaration also reflects the benefit of an adjustment to the life-of-mine of 1, 12 and 14 Shafts at Impala Rustenburg, which had previously been slated for closure as part of the 2018 restructuring announcements. A combination of sustained operational improvement and strong palladium and rhodium pricing have adjusted the economics of these operations such that they now project viability.

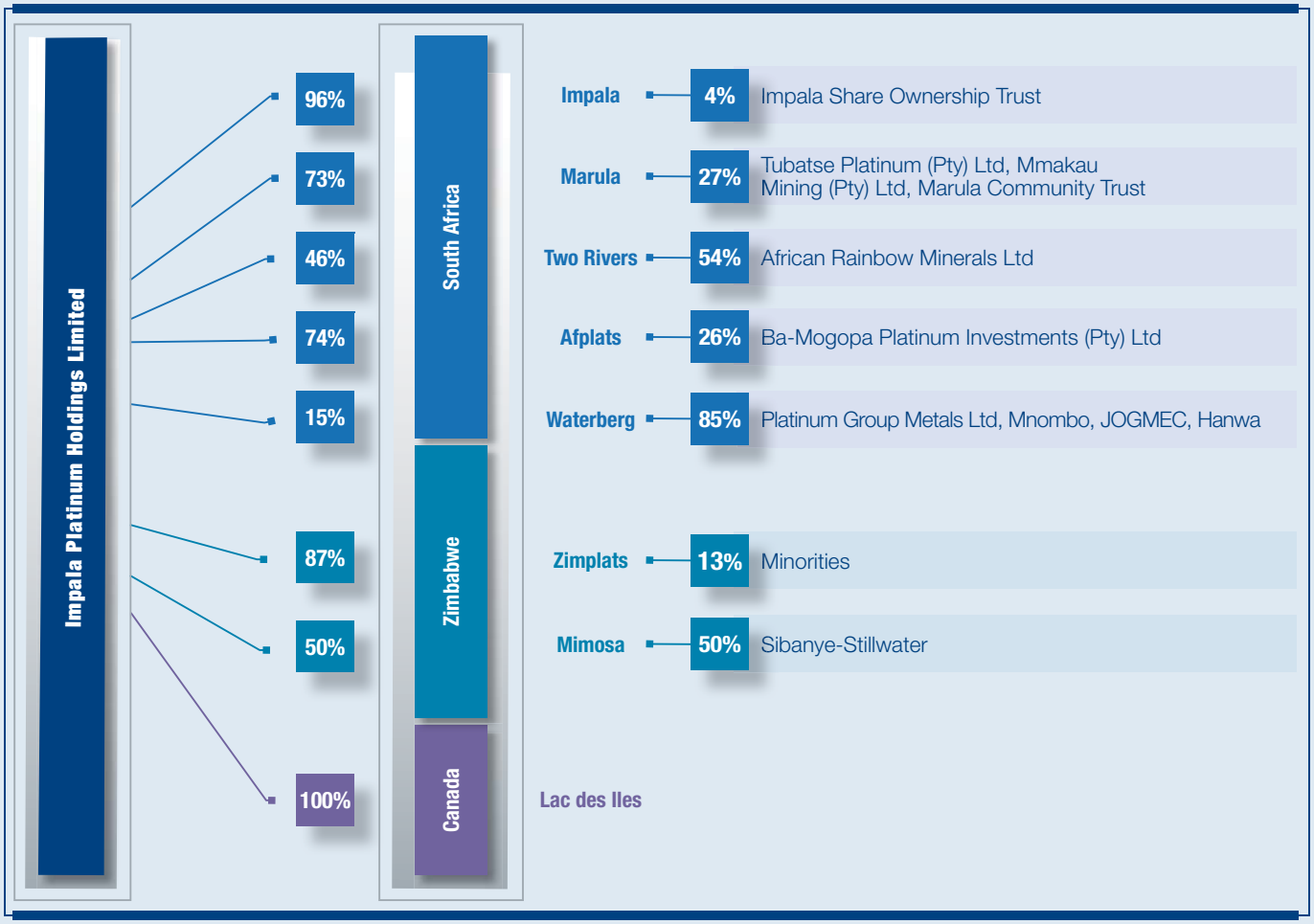
Greenfields exploration activities remain dormant at the South African and Zimbabwean operations, with a systematic reduction initiated at Lac des Iles in favour of brownfields consolidation aimed at life-of-mine optimisation at Impala Canada's Lac des Iles Mine. Shaft sinking activities at Impala's 17 and Afplats' Leeuwkop Shafts remain suspended.

Group operations

Implats is structured around six mining operations and Impala Refining Services (IRS), a toll-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 – and the Canadian Shield, a prominent igneous complex domain for PGMs. In South Africa, while our operations at Impala are located in the Rustenburg area of the North West province, each of the Marula and Two Rivers mines, together with the Waterberg Joint Venture project are located in the Limpopo province.

Implats Mineral Resource and Mineral Reserve Statement 2020 at a glance

Group structure



Headline numbers

Attributable estimates*		2020**	2019	2018	2017	2016
Mineral Resources	Moz Pt	**132**	132	134	192	194
	Moz Pd	**90**	82	83	128	129
	Moz 3E	**234**	228	228	337	342
	Moz 4E	**249**	240	244	360	365
	Moz 6E	**277**	268	273	403	407
	Mt	**1 819**	1 710	1 741	2 787	2 741
Mineral Reserves	Moz Pt	**21.8**	21.2	21.2	22.4	21.6
	Moz Pd	**17.3**	14.7	14.4	14.1	13.1
	Moz 3E	**41.2**	38.0	37.5	38.2	36.1
	Moz 4E	**43.6**	40.3	40.0	41.0	38.9
	Moz 6E	**47.8**	44.3	44.2	45.9	44.1
	Mt	**420**	371	365	358	329

* *Mineral Resources estimates are inclusive of Mineral Reserves.*

** *Total summation of 4E and 6E ounces for Lac des Iles Mineral Resource and Mineral Reserve estimates only includes the sum of platinum, palladium and gold and the summation of 6E ounces for the Waterberg project Mineral Resource estimates is the sum of platinum, palladium, rhodium and gold. This is a result of the inherent negligible rhodium, ruthenium and iridium content at Lac des Iles and available assay methodologies applied at those operations.*

Implats Mineral Resource and Mineral Reserve Statement 2020 at a glance

Summary Mineral Resources

For more detail see page 33.

The Group's Mineral Resource estimate as at 30 June 2020 sees the portfolio increasing by 8.7Moz 6E on an attributable basis to 277Moz 6E.

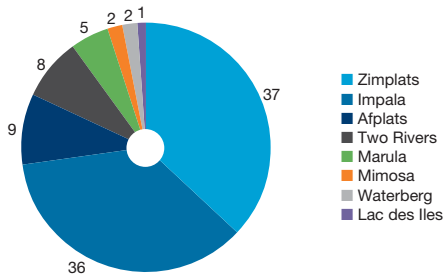
There has been no material change in the attributable platinum Mineral Resource estimate which increased by 0.9Moz platinum.

The acquisition of the palladium dominant Lac des Iles operation and the attributable portion of the Waterberg project resulted in increasing the attributable palladium Mineral Resource estimate by 8.4Moz palladium.

The estimate as at 30 June 2020 is dominated by Zimplats and Impala, which on a combined basis, contribute 73% of the total attributable platinum ounces and 67% of the total attributable palladium ounces of the Group Mineral Resources.

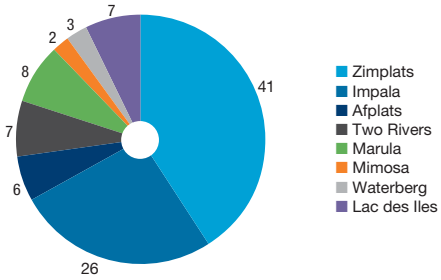
Attributable platinum Mineral Resource estimate of 132.4Moz Pt

as at 30 June 2020 (%)



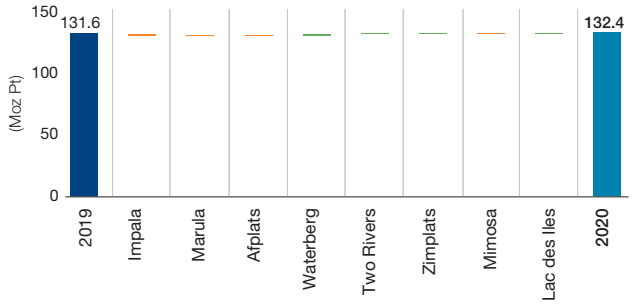
Attributable palladium Mineral Resource estimate of 89.9Moz Pd

as at 30 June 2020 (%)



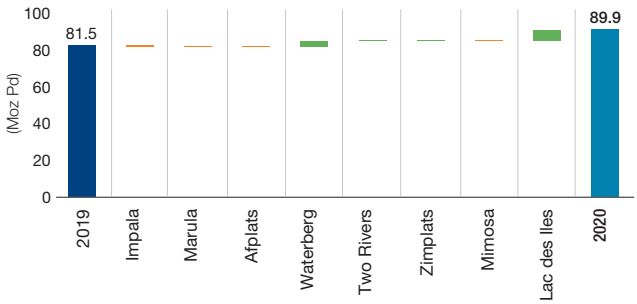
Attributable platinum Mineral Resource estimate

as at 30 June 2020 (variance Moz Pt)



Attributable palladium Mineral Resource estimate

as at 30 June 2020 (variance Moz Pd)



Marula Mine

Implats Mineral Resource and Mineral Reserve Statement 2020 at a glance

Summary Mineral Reserves

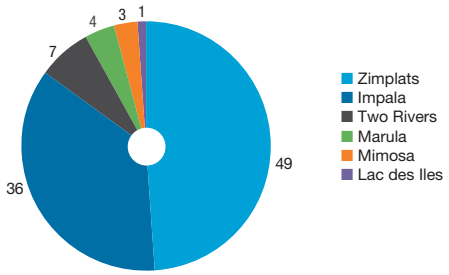
For more detail see page 35.

Overall, the Group Mineral Reserve estimate increased by 3.5Moz 6E on an attributable basis to 47.8Moz 6E, with platinum increasing to 21.8Moz and palladium to 17.3Moz. The resultant estimate as at 30 June 2020 is based on production depletion being offset by the acquisition of the palladium dominant Lac des Iles operation.

Some 49% of the attributable platinum Mineral Reserves is located at Zimplats and a further 36% at Impala and the attributable palladium Mineral Reserves is located at Zimplats (48%), Impala (22%) and Lac des Iles (16%).

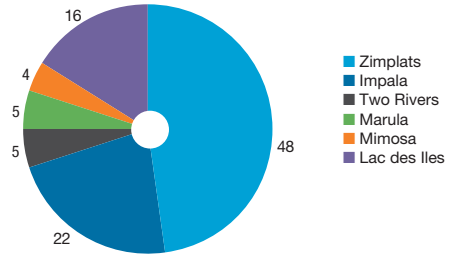
Attributable platinum Mineral Reserve estimate of 21.8Moz Pt

as at 30 June 2020 (%)



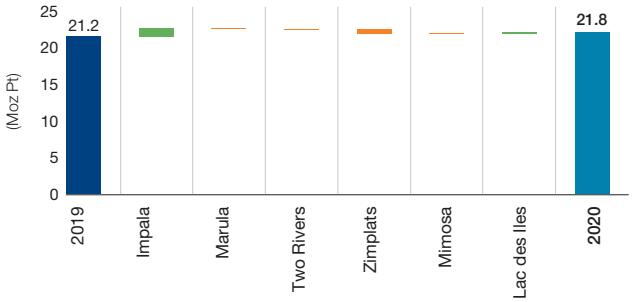
Attributable palladium Mineral Reserve estimate of 17.3Moz Pd

as at 30 June 2020 (%)



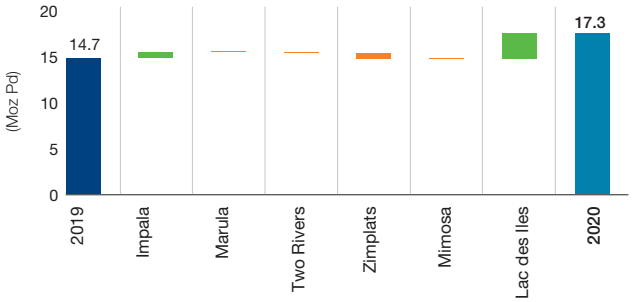
Attributable platinum Mineral Reserve estimate

as at 30 June 2020 (variance Moz Pt)



Attributable palladium Mineral Reserve estimate

as at 30 June 2020 (variance Moz Pd)



Compliance

For more detail see page 07.

The Mineral Resource and Mineral Reserve Statement is compiled in accordance with guidelines and principles of The South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (SAMREC Code (2016)), The South African Code for the Reporting of Mineral Asset Valuation (SAMVAL Code (2016)) and Section 12.13 of the JSE Listings Requirements as updated from time to time. Supporting documentation includes detailed internal reports, SAMREC Table 1 reports, and regular third-party reviews. A summary list of Competent Persons who compiled this report is included in this document on page 09. While Zimplats complies with guidelines and principles of The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code (2012)), the definitions are either similar or do not vary materially from the SAMREC Code (2016). The Zimplats estimates reflected in this report comply with the SAMREC Code (2016) and Section 12.13 of the JSE Listings Requirements.

Implats subscribes to the principles of transparency, materiality and competency as per the SAMREC Code (2016).

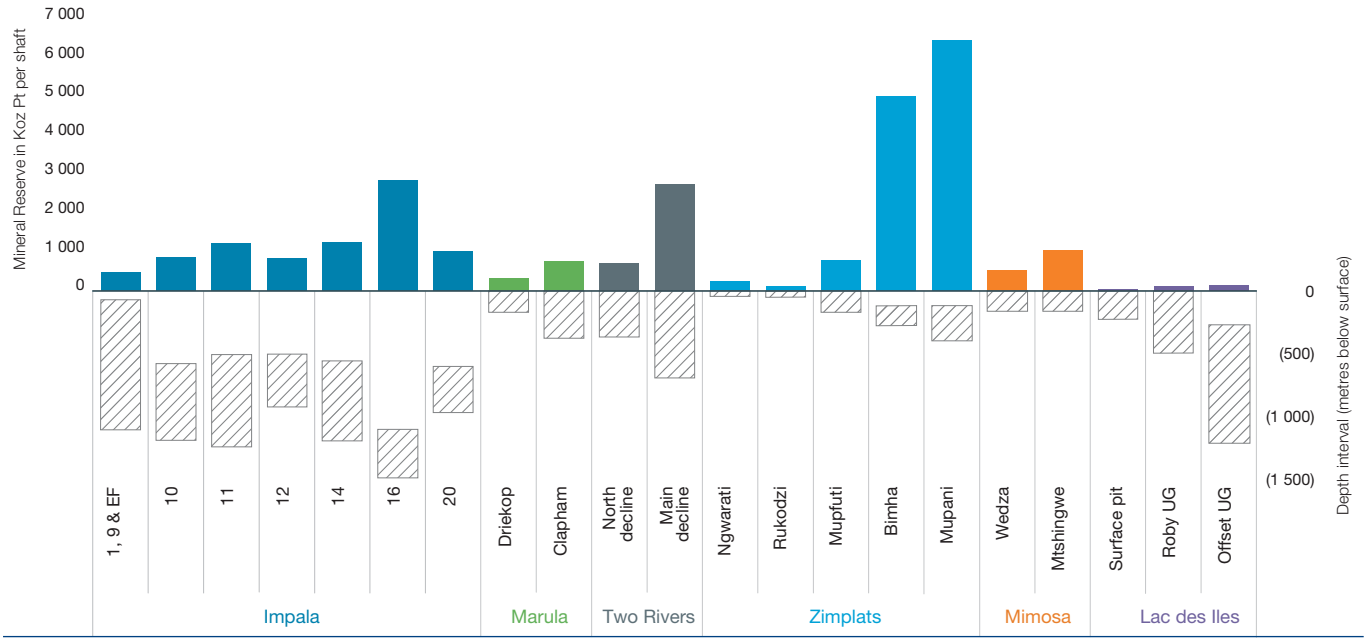
Note that:

- Mineral Resources are reported inclusive of Mineral Reserves unless otherwise stated
- There are no Inferred Mineral Resources included in any of the Mineral Reserve estimates or feasibility studies, other than incidental dilution at zero grade
- The Mineral Resource estimates remain, in principle, imprecise and must not be seen as calculations
- Rounding-off of figures may result in minor discrepancies
- All mineral rights are in good standing without any known impediments.

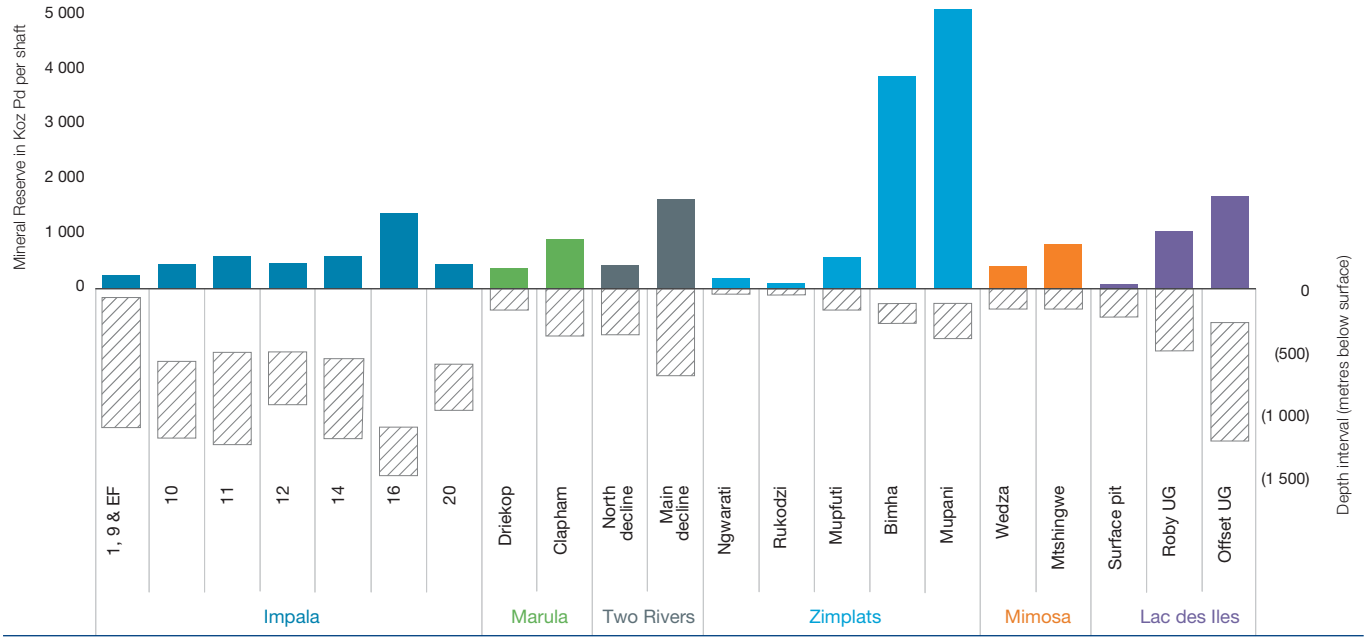
The updated allocation of Implats' platinum and palladium Mineral Reserves per shaft infrastructure as at 30 June 2020 is depicted in the accompanying graphic illustrations. The range in depth below surface and quantum relating to the infrastructure is shown below and depicts among others the advantage at Zimplats in this regard, both from a depth and a size perspective.

Implats Mineral Resource and Mineral Reserve Statement 2020 at a glance

Platinum Mineral Reserve estimate and depth range for individual Implats shafts
as at 30 June 2020



Palladium Mineral Reserve estimate and depth range for individual Implats shafts
as at 30 June 2020



Compliance

The reporting of 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) as well as Section 12.13 of the JSE Listings Requirements.

Zimplats, as an Australian Securities Exchange (ASX) listed company, reports its Mineral Resources and Mineral Reserves in accordance with the JORC Code (2012). The definitions contained in the SAMREC Code (2016) are either identical to or not materially different from the JORC Code (2012). The Zimplats processes, procedures and estimates are reviewed by Implats to ensure that Mineral Resource and Mineral Reserve estimates are fully compliant with the SAMREC Code (2016). Mimosa Investments Limited, a Mauritius-based company, does not fall under any regulatory reporting code, but has adopted the SAMREC Code (2016) for its reporting.

Impala Canada Limited under previous ownership reported Mineral Resources and Mineral Reserves in compliance with the Canadian Institute of Mining Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves and the Canadian National Instrument 43-101 (NI43-101) reporting standards. Since the acquisition by Implats, Impala Canada Limited has also adopted the SAMREC Code (2016). Reporting by the Waterberg Joint Venture complies with both the Canadian NI43-101 reporting standards and the SAMREC Code (2016). This report is compiled specially in compliance with the guidelines and principles of the SAMREC Code (2016).

SAMREC was established in 1998 and modelled its code on the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Mineral 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 in the same year.

The SAMREC Code has been under review since 2004 and was updated in the 2007 edition and amended in July 2009. The SAMREC Code was again updated in 2016 and this superceded the previous editions of the code; this was launched on 19 May 2016 at the JSE. Section 12 of the JSE Listings Requirements has been updated and the revised SAMREC and SAMVAL Codes came into effect on 1 January 2017.

The latest edition of the SAMREC Code (The South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves – 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. In the context of complying with the principles of the code, comments relating to the items in the relevant sections of Table 1 must be provided on an 'if not, why not' basis within the Competent Persons' report. The guidelines for the compilation of Table 1 is for (i) the first-time declaration of Exploration Results, a Mineral Resource or a Mineral Reserve, and (ii) in instances where these items have materially changed from when they were last publicly reported for significant projects. Reporting on an 'if not, why not' basis ensures that it is clear to an investor or other stakeholders whether items have been considered and deemed of low consequence or are not yet addressed or resolved. Implats has adopted the compilation and updating of Table 1 as a standard to complement internal reports. Table 1 of the SAMREC Code (2016) was amended in January 2020 with the addition of certain environmental, social and governance (ESG) guidelines. Internal Table 1 compilations are being aligned.

Concurrent with the evolution of the SAMREC Code, the Committee for Mineral Reserves International Reporting Standards (CRIRSCO) has, since 1994, been working to create a set of standard definitions for the reporting of Mineral Resources and Mineral Reserves. The definitions in the 2016 edition of the SAMREC Code are either identical to, or not materially different from, those existing standard definitions published in the updated CRIRSCO Reporting Template 2019.

Various Competent Persons (CPs), as defined by the SAMREC Code (2016) and JORC (2012) Codes, have contributed to the estimation and summary of the Mineral Resource and Mineral Reserve figures quoted in this report. As such, these statements reflect the estimates as compiled by teams of professional practitioners from the various operations and shafts. Gerhard Potgieter, Chief Operating Officer, PrEng, ECSA Registration No 20030236, a full-time employee of Implats, with 35 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 31 years' relevant experience, assumes responsibility for the Mineral Resource estimates for the Implats Group. He also assumes responsibility for the collation of the combined Mineral Resource and Mineral Reserve Statement for the Group. Implats has written confirmation from the Lead Competent Persons that the information disclosed in terms of this document are compliant with the SAMREC Code (2016) and, where applicable, the relevant JSE Section 12 Listings Requirements, (Section 12.13) and SAMREC Table 1 requirements, and that it may be published in the form, format and context in which it was intended.

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.

Mine geologist performing underground geological mapping at 11 Shaft, Impala

Compliance

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

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

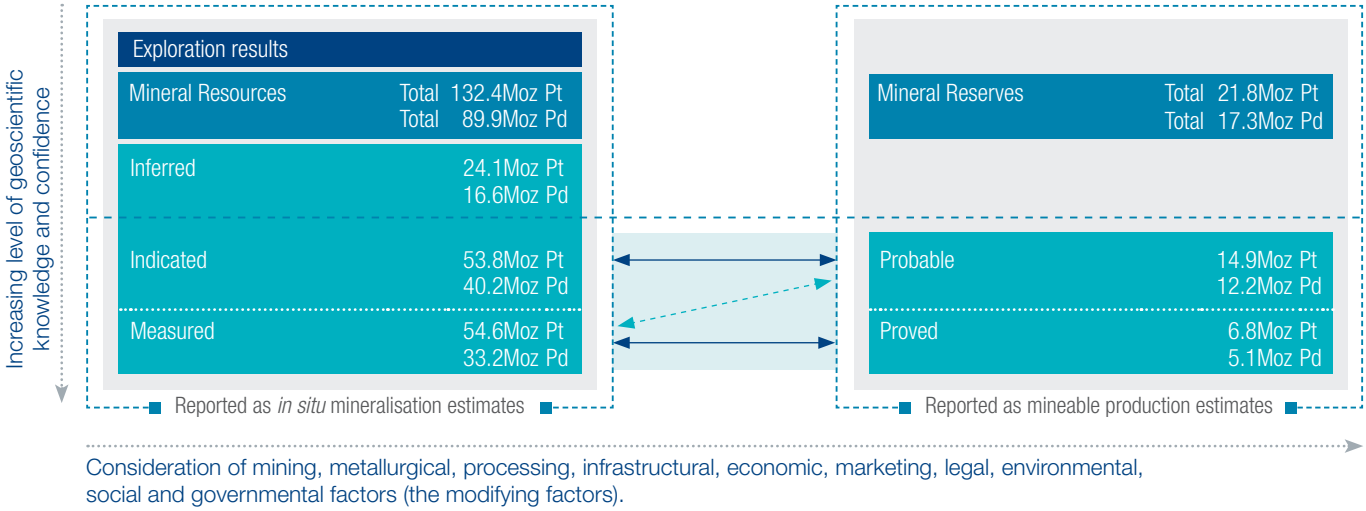
3 September 2020

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

3 September 2020

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. In addition, a Competent Valuator is a person who possesses the necessary qualifications, ability and relevant experience in valuing mineral assets. A person called upon to act as a Competent Valuator shall be clearly satisfied in their own mind that they are able to face their peers and demonstrate competence in the valuation undertaken. Nico Strydom, CA(SA), ACMA, Group strategy and business development manager, a full-time employee of Implats, takes full responsibility for the valuation of the Mineral Resources and Mineral Reserves for the Group.

Relationship between exploration results, Mineral Resources and Mineral Reserves showing Implats' attributable Mineral Resources and Mineral Reserves as at 30 June 2020 (Moz Pt and Moz Pd)



Compliance

Competent Person (CP) structure 2020

Lead CP Mineral Resources: Theodore Pegram, Executive – Mineral Resources (PrSciNat – SACNASP 400032/03), FGSSA, FSAIMM
Lead CP Mineral Reserves: Gerhard Potgieter – Chief Operating Officer (PrEng – ECSA 20030236), MSAIMM

Mine/ Project	Competent Person's (CP) name	Qualifications	Appointment	Registration
Implats	Theodore Pegram	BSc (Hons) (Geology), GDE (Mining)	Lead CP Mineral Resources	SACNASP, FGSSA, FSAIMM
	Gerhard Potgieter	BSc Eng (Mining)	Lead CP Mineral Reserves	ECSA, MSAIMM
	Nico Strydom	CA(SA), ACMA	Lead CV Valuation	SAICA, CIMA
Impala	Johannes du Plessis	MSc (Geology)	CP Mineral Resources and CP Audits	SACNASP, FGSSA
	David Sharpe	BSc (Hons) (Geology), BComm	CP Mineral Reserves	SACNASP, MGSSA
	Louise Fouché	MSc (Geology), Post-Grad Dipl (MRM)	CP Geostatistics and databases	SACNASP, MGSSA, MSAIMM
	Philip Fouché	MSc (MRM), BCompt	CP exploration	SACNASP, MGSSA
Marula	Sifiso Mthethwa	BSc (Hons) (Geology)	CP Mineral Resources and CP Mineral Reserves	SACNASP, MGSSA
Two Rivers	Juan Coetzee	BSc (Hons) (Geology)	CP Mineral Resources	SACNASP, MGSSA, MSAIMM
	Tobie Horak	NHD (Mine Surveying), GDE (Mining Engineering)	CP Mineral Reserves	IMSSA
Zimplats	Steven Duma	BSc (Hons) (Geology)	CP Mineral Resources	SACNASP, MAusIMM
	Wadzanayi Mutsakanyi	BSc (Hons) (Mining Engineering)	CP Mineral Reserves	MSAIMM, MAusIMM
Mimosa	Dumisayi Mapundu	BSc (Geology)	CP Mineral Resources	SACNASP
	Alex Mushonhiwa	BSc (Hons) (Mining Engineering)	CP Mineral Reserves	MSAIMM
Lac des Iles	Stuart Gibbins	MSc (Geology)	CP Mineral Resources	PGO
	Kris Hutton	B Applied Science and Engineering (Mineral Engineering)	CP Mineral Reserves	PEO
	David Benson	BSc (Geological Sciences)	CP exploration	PGO
Afplats	Louise Fouché	MSc (Geology), Post-Grad Dipl (MRM)	CP Mineral Resources	SACNASP, MGSSA, MSAIMM
Waterberg project	Charles Muller*	BSc (Hons) Geology	CP Mineral Resources	SACNASP, MGSSA, MGASA

* *Independent consultant.*

In addition to the CPs listed above, 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	General manager Technical Services Impala	27
Tshediso Mohase	General manager Impala 9 and 10 Shafts	34
Riaan Swanepoel	General manager Impala 11 Shaft	30
Benedict Ngesi	General manager Impala 20 Shaft	28
Joseph Tsiloane	General manager Impala EF, 6 and 12 Shafts	20
André Fryer	General manager Impala 14 Shaft	21
Hans Fourie	General manager Impala 16 Shaft	32
Mogale Mashilane	General manager Marula Mine	28
Alex Mushonhiwa*	General manager Mimosa Mine	30
Simbarashe Goto	Senior general manager Mining Ngezi Mine	23
JJ Joubert*	General manager Two Rivers Mine	28
Peter Gula	Technical director Lac des Iles Mine	33

* *Non-managed.*

The above listed CPs are all full-time employees of Implats, JVs or subsidiaries, with the exception of Charles Muller who is an independent consultant.

Details pertaining to the CPs and the professional organisations are provided in the appendices to this report on pages 145 and 146.

Relevant assessment and reporting criteria

The following key assumptions and parameters, unless otherwise stated, were used in the compilation of the estimates in this declaration:

- A Group-wide committee, the Implats Resource and Reserve Committee (IRRC), was constituted in 2009 with the objective of promoting standardisation, compliant and transparent reporting, continuous improvement and internal peer reviews. The committee meets quarterly with representatives from the various operations and MRM disciplines. As a result, Implats developed a Group-wide protocol for the estimation, classification and reporting of Mineral Resources and Mineral Reserves in 2010 to enhance standardisation and to facilitate consistency in auditing. This protocol is updated annually with the aim of improving and specifically guiding the classification of Mineral Resources and to ensure compliance with the SAMREC Code (2016)
- While Zimplats complies with the JORC Code (2012), the definitions are either identical or do not vary materially from the SAMREC Code (2016). This report is compiled in compliance with the guidelines and principles of the SAMREC Code (2016) and the JSE Listings Requirements
- Lac des Iles (formerly owned by North American Palladium), previously reported in compliance to the CIM definition standards for Mineral Resources and Mineral Reserves and Canadian National Instrument 43-101 (NI43-101) requirements. Since Implats acquired the company and formed Impala the Canada Limited, Lac des Iles adopted the SAMREC Code (2016). The sections and estimates relevant to Lac des Iles in this report was therefore compiled in compliance with the guidelines and principles of the SAMREC Code (2016) and Section 12.13 of the JSE Listings Requirements
- Reporting by the Waterberg Joint Venture complies with both the Canadian NI43-101 Standards of Disclosure for Mineral Projects and the SAMREC Code (2016). This report is compiled specially in compliance with the guidelines and principles of the SAMREC Code (2016) and Section 12.13 of the JSE Listings Requirements.

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

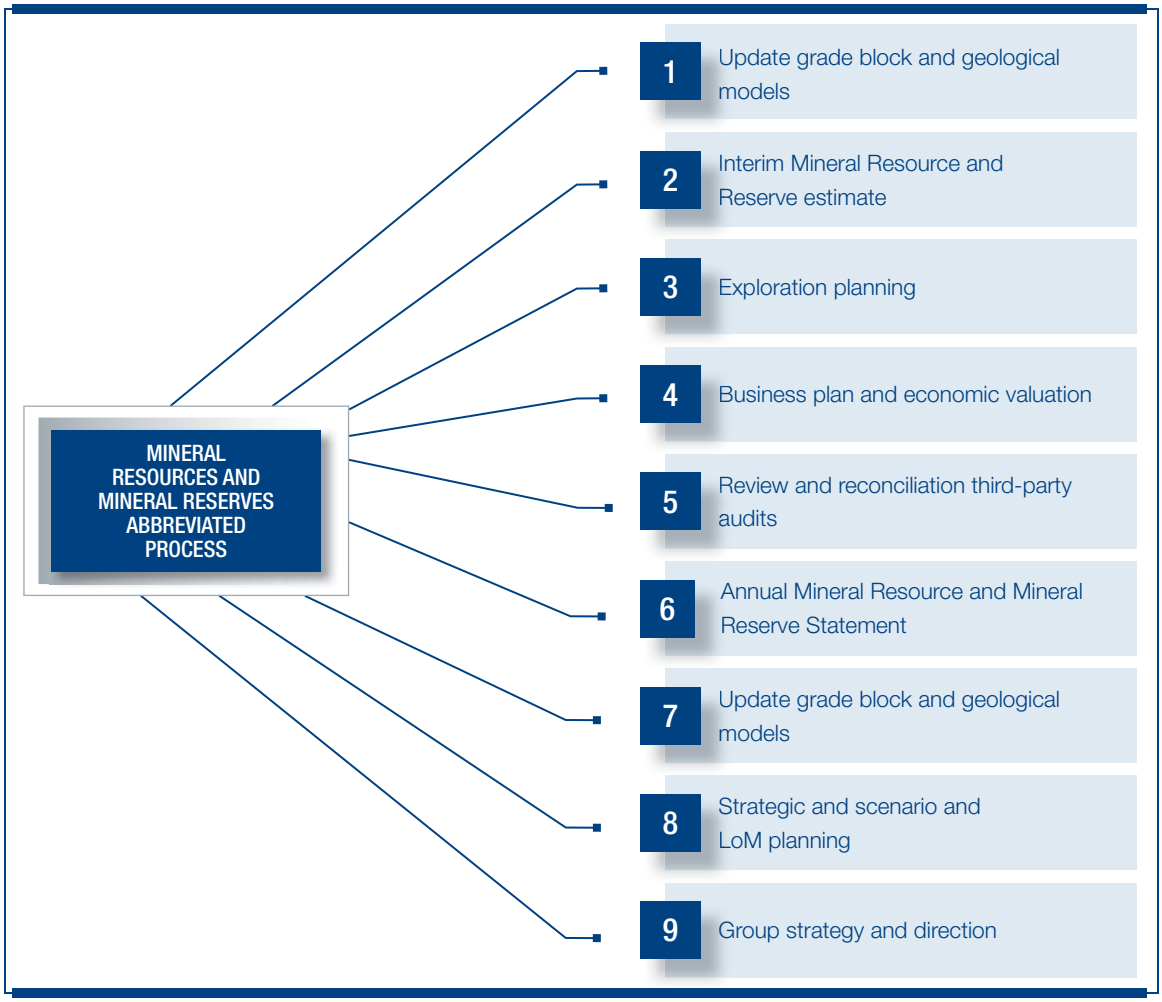
1. **THE SAMREC CODE (2016) AND TABLE 1**
   Generic code for the whole mining industry
2. **The JSE LISTINGS REQUIREMENTS**
   Section 12
3. **IMPLATS CODE OF PRACTICE ALIGNED WITH SAMREC AND JSE**
   Specific for Implats Group
4. **PROJECT FEASIBILITY STUDY OR DETAILED ANNUAL REPORT**
   Detailed assumptions, application, data and estimate for particular business unit

- A key aspect of the Group-wide protocol determines the standards for classification of Mineral Resources. The classification standard is a matrix process and measures both geological and grade continuity between points of observation
- Mineral Resource and Mineral Reserve evaluation is based on a systematic process of collecting and validating geological data as depicted in the Group-wide protocol. Updating of 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
- Quality, distribution and quantity of available data and the confidence thereof forms the basis of the Mineral Resource classification
- Geostatistical estimation is performed using different geostatistical software packages within the Implats Group. Different 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 within the Implats Group. More details relating to estimation methodologies are disclosed in the various sections per operation
- Implats introduced a depth cut-off in 2010 whereby mineralisation below a certain depth is excluded from the Mineral Resource estimate. A depth cut-off of 2 000m below surface was introduced in 2014. A depth cut-off of 1 250m was applied to the Waterberg project Mineral Resource estimates. In addition to the latest depth cut-off, various Mineral Resource blocks are considered on a case-by-case basis and this has resulted in areas where the reasonable prospect for eventual economic extraction (RPEEE) is in doubt. These areas are excluded from the summation of total Mineral Resources per area and the attributable Mineral Resources (see page 33)
- Mineral Resource tonnage and grades are estimated *in situ*. The Mineral Resources for the Merensky Reef are estimated at a minimum mining width, and may therefore 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 are based on optimal mining widths. Such mining widths are reviewed from time to time given 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 Mineral Resources exclusive of Mineral Reserves are provided on page 37)
- 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
- Mineral Reserve estimates include allowances for mining dilution and are reported as tonnage and grade delivered to the mill (see page 35)
- Mineral Reserve estimates take cognisance of all mine stability pillars and the content associated with pillars are excluded
- Rounding-off of figures in the accompanying summary estimates may result in minor computational discrepancies. Where this occurs it is not deemed significant
- It is important to note that the Mineral Resource Statements, in principle, remain imprecise estimates and cannot be referred to as calculations. All Inferred Mineral Resources should be read as 'approximations'
- Exploration samples are mainly assayed for all PGEs and Au, using the nickel sulphide fire assay collection method and determining the elements with an inductively coupled plasma mass spectrometer (ICPMS). Base metal content is determined by an atomic absorption (AA) spectrometer using partial digestion in order 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 results in near-total dissolution

Relevant assessment and reporting criteria

- Underground samples are mainly assayed for platinum, palladium, rhodium and gold using the lead collection method by the in-house laboratories at the respective mines. A partial digestion at the in-house laboratories is used at southern African operations to determine the base metal content of samples using atomic absorption. At Lac des Iles a four-acid near-total digestion is used
- Southern African operations report Mineral Resource and Mineral Reserve PGE estimates for both four metals (4E) and six metals (6E). Reporting on a 4E basis reflects the summation of platinum, palladium, rhodium and gold in the case of 6E this reflects the total of platinum, palladium, rhodium, gold as well as ruthenium and iridium. In the case of the South African Waterberg project only 4Es are reported in view of the available compliant data and the inherent negligible ruthenium and iridium concentration levels
- The Impala Canada 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 inherent negligible and low 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
- Mineral Reserves are that portion of the Mineral Resource which technical and economic studies have demonstrated that it can justify extraction at the time of disclosure. Historically, Implats has only converted Mineral Resources to Mineral Reserves on completion of a full feasibility study for a project with board approval of the full project capital and LoM I for an operating mine (as per SAMREC Code (2016)); accordingly, no Mineral Reserve estimates are included in this report for the Waterberg project in the absence of an approved mining right, board approval and funding. The conversion of Mineral Resources to Mineral Reserves for Zimplats has been aligned to the Implats standard since 2014; as per above, the Hartley Complex is not included in the Mineral Reserves, given that a twin drilling campaign towards validating the assay QA/QC results, will be completed by FY2023, at which point appropriate adjustments to the Mineral Resource estimate, will be evaluated
- The work processes and flow are fully integrated with the planning cycle and a structured approach has been adopted with activities aligned in a continuous sequence.

The simplified list of yearly sequential activities is illustrated below:



Relevant assessment and reporting criteria

No Inferred Mineral Resources, other than incidental dilution which is included at zero grade, have been converted into Mineral Reserves at any of the 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.

- There are only limited changes in the estimation principles and reporting style as at 30 June 2020 relative to the previous report
- The term Ore Reserve is interchangeable with the term Mineral Reserve.

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, Canada and the United States
  - Rand exchange rates – Rand/CA$ and Rand/US$
  - Metal prices
  - Capital expenditure
  - Operating expenditure
  - Production profile
  - Metal recoveries
- The outputs are net present value, the internal rate of return, annual free cash flow, project payback period and funding requirements. Metal price and exchange rate forecasts are regularly updated by the marketing department of Implats. As at 30 June 2020, a real long-term forecast for 6E basket revenue per 6E ounce sold of R16 737 (US$1 211) was used. Specific real long-term forecasts in today's money include:

Platinum	US$/oz	**827**
Palladium	US$/oz	**1 264**
Rhodium	US$/oz	**4 406**
Ruthenium	US$/oz	**172**
Iridium	US$/oz	**1 132**
Gold	US$/oz	**1 359**
Nickel	US$/t	**15 773**
Copper	US$/t	**6 133**
Exchange rate	R/US$	**13.82**

- The spot basket price calculated for Implats at a Group level as at 30 June 2020 was R28 138 (US$1 619) and the equivalent real long-term market consensus basket price is R17 881 (US$1 219) per 6E ounce
- The long-term market consensus metal price estimates are the mean of 17 broker companies' real term metal price estimates over the next three to five years
- Long-term basket price forecasts per operation vary in accordance with the metal ratios
- Rigorous profitability tests are conducted to test the viability of the Mineral Reserves, references to this 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 on the right.

An economic profitability test was conducted at each shaft. This process entails the determination of when a shaft is no longer profitable and no longer contributes to fixed overheads. Each shaft's processing, services and other costs are split between their relevant fixed and variable portions by virtue of a declining production profile. Once a shaft is no longer profitable (or contributing to fixed overheads), it is removed from the LoM I profile (and Mineral Reserves) and the fixed costs apportioned to the shaft are then re-allocated to the remaining operational shafts.

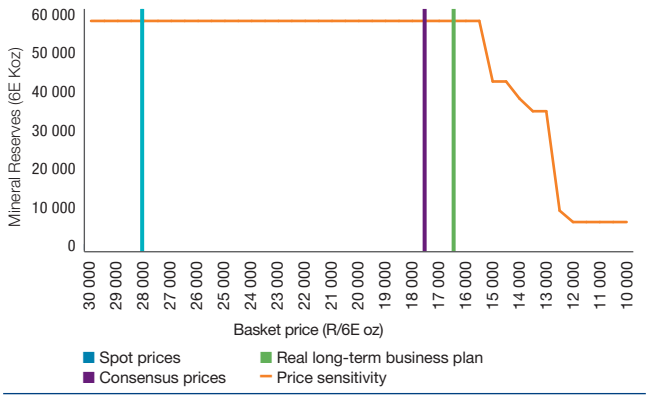
A Mineral Resource, by definition, is 'a concentration or occurrence of solid material of economic interest in or on the earth's crust in such form, grade, quality and quantity that there are reasonable prospects for eventual economic extraction (RPEEE)'. The interpretation of such 'eventual economics'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

On this basis Implats has excluded significant mineralisation from 2 000m below surface, and selected areas based on geology and potential infrastructure (see section 'Areas excluded from Mineral Resource estimates'). In total some 45.5Moz platinum have been excluded from current statements on this basis.

The deeper Rustenburg Mineral Resources beyond current infrastructure investment require a real basket price of between R24 000 to R28 000 per 6E ounce (US$1 600). This suggests that future investments at Impala might at best be marginal under the current price assumptions. Notably, 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 R23 000 per 6E ounce (US$1 450).

It should be acknowledged that the commodity market remains fluid and the outlook has improved since 30 June 2020.

Implats Mineral Reserves versus real basket price
as at 30 June 2020



Auditing and risk

IMPLATS
EXCELLENCE IN PGMs

2020 INDEPENDENT AUDITS OF THE MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

Implats engaged a combination of consultancy firms (auditors) towards undertaking the external audits against the Mineral Resource and Mineral Reserve estimates and Life of Mine Plans (LoM I) which underpin the 2020 declaration. On a geological domain basis, SRK Consulting was assigned the audit of Impala Rustenburg and Marula Mines, with The MSA Group assigned the audit of the Great Dyke Mines, Zimplats and Mimosa, while Caracle Creek International Consulting-MinRes and Frazer-McGill Mining and Minerals Advisory undertook the combined audits at Two Rivers Platinum Mine and The Mineral Corporation undertaking the sequential audits of the Waterberg Project, Afplats Project and Lac des Iles Mine.

This concurrent deployment proved fortuitous in light of the impact of the Covid-19 pandemic. Considering the intensive historical audits undertaken to varying scope definition across the Group, the 2020 audits for the SADC operations were largely aimed at validating the newly derived Mineral Resource and Mineral Reserve estimates as well as compliance to defined Group standards for SAMREC (2016) compliance. In light of the incorporation of Waterberg Project and Lac des Iles Mine, more intensive scopes underlay the audits, while Afplats Project as a dormant project, entailed a validation of the historical Mineral Resource statement.

All audits, with the exception of the Waterberg Project which was effected prior to the Covid-19 lockdown, were undertaken at arm's length via the now commonplace Zoom and Microsoft Teams video conference platforms, with relevant data, models and evidence logging being exchanged by secured data transfer platforms including WeTransfer and Dropbox.

As additional assurance and for complete transparency, representatives of Deloitte as Financial Auditor for the Implats Group were invited to participate as observers during the scoping process to validate consistency and parity across all operations and were invited to attend the formal audit feedback sessions by the auditors, to the respective operations' technical teams. Deloitte were also transparently provided with the actual audit reports. Likewise, Implats Group Internal Audit Department were provided the external audit reports.

These audits endorse the Mineral Resource and Mineral Reserve estimates as at 30 June 2020, as contained in this report, confirming No Fatal Flaws and based on compliance to the SAMREC Code (2016), deriving 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 the course of FY21. Individual Audit Certificates under letterhead of each of the respective audit companies, are included in Appendices of the report.

……..... ……..

GS Potgieter (ECSA 20030236)

Lead CP – Mineral Reserves, Implats

THC Pegram (SACNASP 400032/03)

Lead CP – Mineral Resources, Implats

Auditing and risk

Implats is committed to independent third-party reviews to provide assurance regarding the Mineral Resource and Mineral Reserve estimates. Furthermore, these reviews assist with the principle of continuous improvement on the set internal processes in previous reporting cycles.

Individual Audit Certificates under letterhead of each of the respective audit companies, are included in the appendices of this report.

The Group's reported Mineral Resources and Mineral Reserves represent its estimate of quantities of PGMs that have the potential to be economically mined and refined under anticipated geological and economic conditions. There are numerous uncertainties and risks inherent in estimating quantities of Mineral Resources and Mineral Reserves as well as in projecting potential future rates of metal production, coupled with many factors beyond the Group's control. The accuracy of any Mineral Resources and Mineral Reserves estimate is a function of a number of factors, including the quality of the methodologies employed, the quality and quantity of available data, geological interpretation and judgement. This is also dependent on economic conditions that are in line with estimates. Further, estimates of different geologists and mining engineers may vary and the results of the Group's mining and production – subsequent to the date of an estimate – may lead to a revision of estimates. This can be due to fluctuations in the market price of ores and metals, reduced recovery rates or increased production costs due to inflation or other factors, which may render Mineral Resources and Mineral Reserves containing lower grades of mineralisation uneconomic and may ultimately result in a restatement of Mineral Resources and/or Mineral Reserves, which could then adversely impact future cash flows. Mineral Resource estimates are based on limited sampling and, consequently, are uncertain as the samples may not be representative of the entire orebody and Mineral Resource. As the understanding of the orebody improves, the estimates may also change. In addition, the Mineral Reserves which the Group ultimately exploits may not conform to geological, metallurgical or other expectations and the volume and grade of ore recovered may differ from the estimated levels. It is important to note that Mineral Resource data is not indicative of future production.

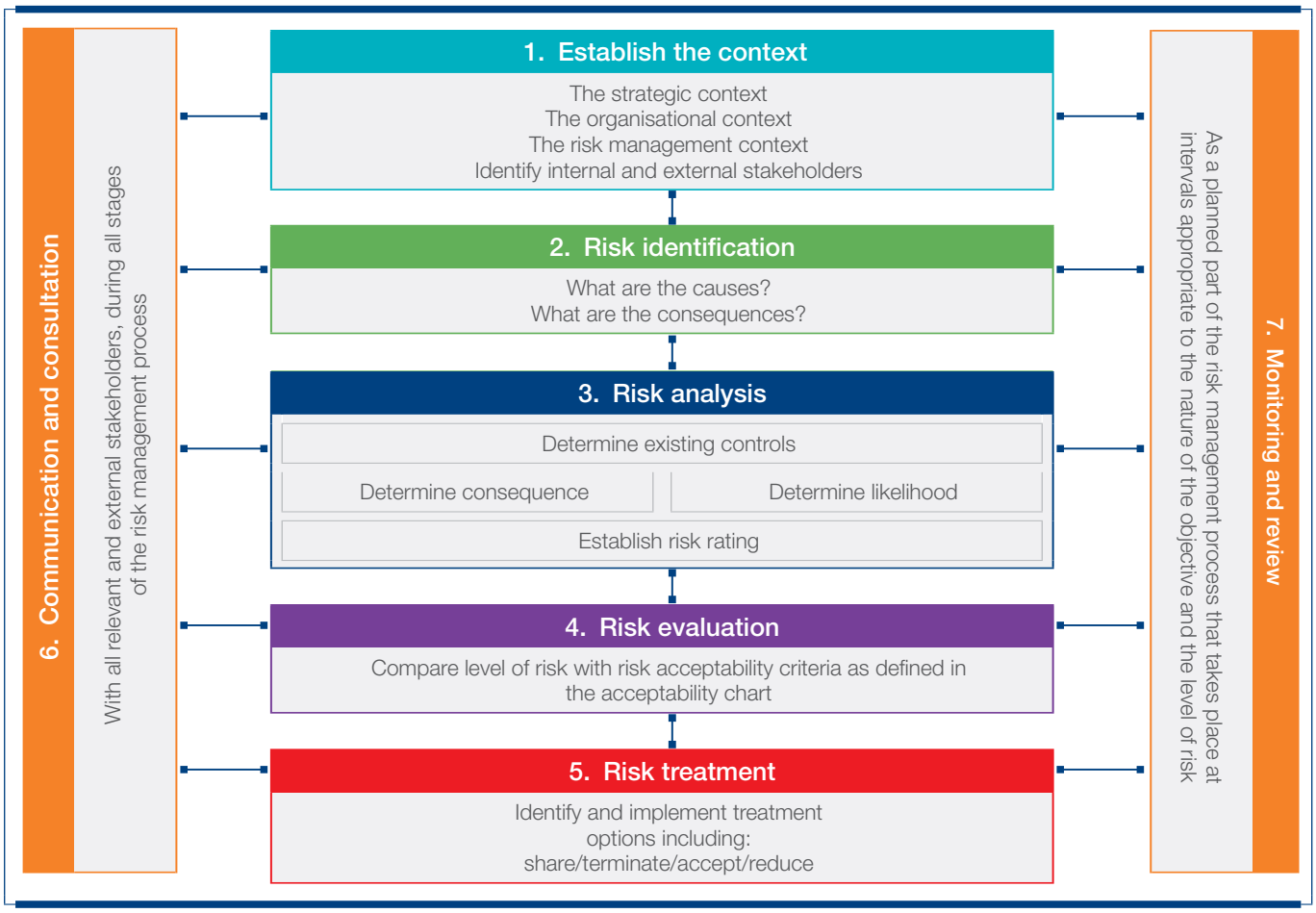
Substantial capital expenditure is required to identify and delineate Mineral Resources and Mineral Reserves through geological mapping and drilling, to identify geological features that may prevent or restrict the extraction of ore, to determine the metallurgical processes to extract the metals from the ore and, in the case of new properties, to construct mining and processing facilities.

The Mineral Resource Management (MRM) Department subscribes to a formal risk management process, which endeavours to systematically treat all risks relevant to the Mineral Resources and Mineral Reserves in line with the Implats risk appetite and tolerance framework that is reviewed and signed off by the board on an annual basis. Currently all of the risks that could affect the Mineral Resources and Mineral Reserves are within acceptable tolerance levels. Implats recognises that Mineral Resource and Mineral Reserve estimations are based on projections, which may vary as new information becomes available or specifically, if assumptions, modifying factors and market conditions change materially. This approach is consistent with our Group definitions of risk that have been revised in line with the updates published in terms of the International Risk Management Standard, ISO 31000:2018, defines risk as 'the effect of uncertainty on objectives'. The assumptions, modifying factors and market conditions therefore represent areas of potential risk. In addition, security of Mineral Right tenure or corporate activity could have a material impact on the future mineral asset inventory, as reflected in the Group and operating entities' 'top risks' dashboard and disclosures.

Lac des Iles mine, Ontario, Canada's surface infrastructure during winter

Auditing and risk

The Group risk management process is described in detail in the 2020 Implats integrated and ESG reports. The key steps in risk management are illustrated in the diagram below:



During the year under review, we enhanced our risk assessment process to ensure alignment with the requirements of ISO 31000:2018. Arising from this process we identify a set of objective-based risk assessments that cover the key aspects of the Implats business. Each identified risk, as well as its associated controls, has a clearly defined line management owner. This process aggregates into the identification of the prioritised Group strategic risks.

Group risks

- Impact of the Covid-19 pandemic on Implats operations
- Ability to reduce labour at 9 Shaft (Impala) (due to its closure) and those identified in the overhead cost reduction process in accordance with the restructuring programme without labour or community disruptions or without material regulator (DMRE) intervention/disruption. Their action/s might delay the execution of this programme and may result in cost escalations or disputes
- Ability to ramp up 16 Shaft and in particular, 20 Shaft in accordance with the business plan. Failure to execute the ramp up, could negatively impact the Impala balance sheet
- Ability to develop sufficient operational flexibility through increasing face length, improving productivity and meeting production targets in accordance with the business plans
- Impact of load shedding due to challenged electricity supply capacity resulting in business interruption. (RSA operations and Zimbabwe operations)
- Deterioration in safety performance due to failure of critical infrastructure and non-achievement of safety requirements
- Currency risk or exchange rate risk due to continued devaluation of the newly introduced Zimbabwe dollar
- Inability to secure/maintain a social licence to operate due to not being able to provide value enhancing sustainability initiatives and maintain stakeholder relations
- Impala Canada (IC): Delivery on the business case as at time of acquisition and integration of IC into Implats
- Ensuring regulatory compliance through the value stream as informed through key legislation
- Challenged capacity and efficiencies of management layers at SA operations
- The security of supply of water in South Africa (Bojanala and Rustenburg) and Zimplats operations.

Operationally specific risks are listed in each of the sections per individual operation, later in this report.

Mineral rights status

As at 30 June 2020, Implats has legal entitlement to the minerals being reported upon without any known impediments. There are no legal proceedings or other material matters that may impact on the ability of Implats to continue with 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 its 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 the transformation of the South African mining industry. The Act effectively transferred ownership of privately held mineral rights to the nation and is administered by the state to enable any third party to apply to the Department of Mineral Resources and Energy (DMRE) for new-order prospecting rights or mining rights over these previously privately held mineral rights. Implats continues to embrace the principles of transformation as a moral and strategic imperative to reinforce its position as a leading Southern African mining company. The Implats SA operational companies (Impala Rustenburg Mine, Afplats and Marula) submitted their annual Mining Charter reports to the DMRE for the 2019 calendar year, as per the Broad-Based Socio-Economic Empowerment Charter for the Mining and Minerals Industry, 2018 (Mining Charter, 2018) that was gazetted on 27 September 2018 (as amended).

Notwithstanding achieving a self-assessment score of above the required level of compliance as part of the Mining Charter reports, Impala Rustenburg Mine, Marula and Afplats' total scores are deemed to be non-compliant, due to the delays in implementation of the ring-fenced mine community Local Economic Development Social and Labour Plan projects; these were impacted by external delays. The Housing and Living Conditions Standard for the Mineral Industry, 2019, that relates to the reporting in terms of the Mining Charter 2018, was published on 11 December 2019, with the housing and living conditions plans due for submission by Impala, Afplats and Marula on 10 December 2020. The Implats Group will continue to strategically align its business, where economically viable, to comply or exceed all elements of the Mining Charter, 2018. Regular compliance audits are conducted by the DMRE in respect of the Implats Group's mining and prospecting rights. During FY2019, the Implats Group undertook a strategic review of its mining and exploration operations at Impala Rustenburg Mine, Marula Platinum Mine and Afplats Leeuwkop project and assessed the outlook, particularly in response to the prevailing market conditions. In line with the strategic review, with the exception of the Assegai Prospecting Right application, all exploration projects in South Africa have ceased and exit strategies from the relevant prospecting rights, as agreed with the affected stakeholders such as Black Economic Empowerment partners, were implemented. In FY2020, this process was concluded with the abandonment of the Inkosi Greater Prospecting Right and the Imbasa Prospecting Right as well as the expiry of the Afplats Wolvekraal/Kareepoort Prospecting Right. The DMRE is still processing the Section 102 application to include the Wolvekraal/Kareepoort prospecting right areas into the adjacent Afplats Leeuwkop project that was submitted in June 2013. The Implats Group is attending to the required closure obligations relating to former prospecting rights now cancelled, abandoned or expired. During the course of FY2020, various prospecting rights for which closure certificates have been issued previously, have been endorsed with the closure certificates by the Mineral and Petroleum Titles Registration Office.

On 27 November 2019, Impala obtained written notice of the grant of the Assegai prospecting right in the Mpumalanga Province.

In 2011, Impala reached 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. This is essentially a royalty agreement which will provide mining flexibility to these shafts. During FY2018, the parties have concluded two notarial mining right leases, subject to the Section 11 approval of the Minister of Mineral Resources and Energy, which applications were submitted in early FY2019. These notarial mining right leases will replace the current interim contractorship agreements between the parties, once approved. During FY2020, the dates to obtain the above mentioned Section 11 approvals as conditions precedent in the two notarial mining right leases, were extended and the RPM's interest in the agreements were ceded to RBR, in line with the transfer of the 33% interest of RPM in the BRPM mining right to RBR.

Following DMRE audit inspections in FY2020 relating to the Social and Labour Plans of Impala Rustenburg Mine and Afplats, Impala received a Section 93 notice in terms of the MPRDA and Afplats received a Section 93 notice and Section 29 directives to address the findings of the audits. Both Impala and Afplats have submitted its responses to the said notices and directives to the DMRE and are in continuous engagements with the DMRE to address these matters.

Furthermore, Impala submitted on 20 August 2019 a notice of appeal and an application to suspend the Section 93 notice issued in terms of the MPRDA to Impala on 27 June 2019 following a Mining Work Programme audit conducted by the DMRE in FY2019.

Waterberg

In FY2018, Implats purchased a 15% interest in the Waterberg project, situated in the Blouberg Municipal/Administrative District in the Limpopo province on the northern limb of the Bushveld Complex. Implats also acquired a right of first refusal for concentrate offtake. A mining right application was submitted in FY2019 under DMRE reference number LP30/5/1/1/2/10161MR, covering an area of 22 397.79 hectares, for the following minerals: PGMs, chrome, cobalt, copper, gold, iron, lead, molybdenum, nickel, rare earths, silver, vanadium and zinc. The application is still being processed by the DMRE. Furthermore, an application for a Water Use Licence has been submitted in FY2020 to the Department of Water and Sanitation, under reference number CT11919, which is still being processed. Implats elected in FY2020 not to exercise its option to increase its stake in the Waterberg project, but opted to retain its 15% ownership in the project.

Mineral rights status

Two Rivers

Details pertaining to the Two Rivers mineral rights can be found in the African Rainbow Minerals 2020 Mineral Resource and Mineral Reserve Statement **(www.arm.co.za)** and a summary is presented on page 74 in the Two Rivers chapter of this document.

Fully permitted mining rights are not specified by the SAMREC Code (2016) as a prerequisite for the conversion of Mineral Resources to Mineral Reserves. However, Implats is cognisant that a reasonable expectation must exist that such mining rights will be obtained.

Zimbabwe

Following the May 2018 release by Zimplats to the Government of Zimbabwe of land measuring 23 903 hectares within Zimplats' mining lease area, Zimplats now holds two mining leases covering two pieces of land measuring in aggregate 24 632 hectares valid for life-of-mine. The two mining leases are (i) Mining Lease Number 36 (ML36) measuring 6 605 hectares which covers the Hartley area and (ii) Mining Lease Number 37 (ML37) measuring 18 027 hectares which covers the Ngezi Mines (Portal 1 – Portal 10) including the Ngezi open pit blocks. These mining leases replaced the special mining lease which Zimplats previously held.

South Africa	Implats' interest %	Mining right (ha)	Prospecting right (ha)
Impala	96%	29 773	
Afplats	74%	4 602	1 065*
Marula	73%	5 494	
Two Rivers**	46%	11 349	
Waterberg**	15%	22 397*	75 050

* *Pending approvals.*
** *Non-managed.*

Zimbabwe	Implats' interest %	Mining leases (ha)
Zimplats	87%	24 632
Mimosa**	50%	6 594

** *Non-managed.*

Canada

Canada is a constitutional monarchy with a Westminster-style parliamentary democracy. Canada is also a federal state in which legislative authority is constitutionally divided between the federal government of Canada and the provincial governments of Canada's 10 provinces and three territories. Jurisdiction over mining in Canada is shared between the federal government of Canada and the provincial governments. Except for uranium, each province and territory has exclusive power over mineral exploration, development, conservation and management within its territory irrespective of who is the owner of the land or minerals.

Mining rights in Canada fall into two broad categories, namely 'claims' or exploration licences, and mining leases. A claim or exploration licence grants its holder the exclusive right for a limited period to carry out exploration work within a designated area. Exploration work may include overburden removal, exploratory drilling and 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 in the Province of Ontario is the provincial legislation that governs and regulates prospecting, mineral exploration, mine development and rehabilitation. The purpose of the Act is to encourage prospecting, online mining claim registration and exploration for the development of Mineral Resources, in a manner consistent with the recognition and affirmation of existing Aboriginal and treaty rights in section 35 of the Constitution Act, 1982, including the duty to consult, and to minimise the impact of these activities on public health and safety and the environment. In 2009, Bill 173 – An Act to Amend the Mining Act, was passed into law. The modernisation process promoted mineral exploration and development in a manner that recognises Aboriginal and treaty rights, introduced processes that are more respectful of private landowners, and minimised the impact of mineral exploration and development on the environment. While some changes came into effect upon Royal Assent, most of the changes were brought into effect over time. Relevant regulations and policies have been developed following extensive consultation and in collaboration with many representatives of the mineral exploration sector, the mining industry, Aboriginal communities and organisations, environmental groups as well as many other stakeholders, private citizens and other parties with an interest in the stewardship of Ontario's mining lands.

Implats holds 100% interest over all mining and property rights of Impala Canada Limited in Canada. Impala Canada Limited owns and operates the Lac des Iles Mine comprising Mining Leases and Mining Claims encompassing 78 234 hectares.

The Impala Canada Limited leases have a renewal date in 2027, at which time the company has the exclusive right to apply for renewal. The mining leases are currently subject to a 5% net smelter return (NSR) royalty, defined as the net proceeds receivable from the production and sale of the concentrates after deducting: costs of sampling, assaying, transportation and insuring of concentrate, smelting, processing, and refining charges. The royalty is in effect until the expiration of the leases.

Mineral rights status

Impala Canada Limited holds other mineral rights in Ontario. The company holds a 50% interest in the past-producing Shebandowan Mine Property (8 046 hectares) located approximately 75km north west of Thunder Bay, Ontario. The mine ceased production in 1998 and is currently under care and maintenance. Additionally, the company holds 100% interest in approximately 859 active mining claims, which consists of the amalgamation of 967 small mining claim cells to larger mining claim cells, covering the same extent and area, totalling 62 998 hectares in the Thunder Bay District; 51% interest in 174 mining claims (3 677 hectares) of the Sunday Lake Joint Venture Exploration Project. Finally, the company holds 51% in options to purchase both surface and mining rights for four private land parcels (totalling 140 hectares) in the Sunday Lake Joint Venture Exploration Project.

Summary of primary Impala Canada mining leases

Claim number	Parcel	Area (ha)	Lease number	Due date	Annual Taxes (CA$)	Comments
CLM251	2982L TB	235	107910	31 Aug 2027	705	Surface and mining rights
CLM252	2983L TB	341	107911	31 Aug 2027	1 024	Surface and mining rights
CLM253	2985L TB	395	107909	31 Aug 2027	1 187	Surface and mining rights
CLM254	2984L TB	497	107908	31 Aug 2027	1 492	Mining rights only
CLM430	2531L TB	384	108139	30 Sep 2027	1 045	Surface and mining rights
CLM431	2532L TB	1 695	108138	30 Sep 2027	5 086	Surface and mining rights
Total	6	3 513			10 539	

Summary of Impala Canada Mineral Rights

Project	Type	Ownership	Units	Hectares
Impala Canada Limited (Lac des Iles)	Mining Leases	100%	6	3 513
Impala Canada Limited (Thunder Bay District)	Mining Claims	100%	890	62 998
Shebandowan	Mining Leases	50%	109	8 046
Sunday Lake Joint Venture	Mining Claims	51%	174	3 677
Total			1 179	78 234

As at 30 June 2020, Impala Canada has legal entitlement to the minerals being reported upon without any known impediments. There are no legal proceedings or other material matters that may impact on the ability of Impala Canada to continue with exploration and mining activities.

Haul truck operating at Lac des Iles Mine

Summary of ESG management and funding

ESG management

Responsible corporate stewardship is one of the key strategic pillars of the Implats group, as such we are committed to develop, protect and strengthen our licence to operate through industry-leading Environmental, Social and Governance (ESG) performance. Our ESG programmes aim to deliver against the following strategic objectives:

- Compliance with statutory and other requirements including Mining Charter and Social and Labour Plans (SLPs)
- Strengthening of stakeholder engagement
- Promotion of host community employment and procurement
- Aiming for zero level 4 and 5 environmental incidents
- Strengthened security of utilities and effective air quality, waste, water, energy, land and biodiversity management
- Improved occupational health, safety and wellbeing of our staff.

The ESG considerations are not only important modifying factors for the estimation and reporting of Mineral Resources and Mineral Reserves, but these are also important for stakeholders and investors alike. ESG matters are dealt with in more detail in the Implats 2020 ESG report (see **www.implats.co.za**). Table 1 of the SAMREC Code (2016) was amended in January 2020 to include additional ESG disclosure requirements. These were extracted from the South African guideline for the reporting of Environmental, Social and Governance Parameters within the Solid Minerals and Oils and Gas Industries (The SAMESG Guideline, 2017). In addition to the Implats ESG report, internal operation-specific Table 1 format reports are being aligned for each operation. Compliance with the guideline and ESG aspects supports the RPEEE and valuation of the Mineral Resource and Mineral Reserve estimates for each of the Implats' operations.

Environmental management

Our activities associated with the exploration, extraction and processing of Mineral Resources result in the unavoidable disturbance of land, the consumption of natural resources and the generation of waste and atmospheric and water pollutants. Growing regulatory and social pressure, increasing demands for limited natural resources and the rising costs of energy and water all highlight the business imperative of responsible environmental management, particularly as our underground operations become deeper and consume more energy and water. This involves taking measures to address security of resource supply (for example through efficiency, recycling and alternative energy initiatives) and to actively minimise our impact on natural resources and on the host communities.

These measures have direct benefits in terms of reduced costs and liabilities, enhanced resource security and the improved levels of societal acceptance. Implats has a board approved environmental policy that commits the Company to conducting its exploration, mining, processing and refining operations in an environmentally responsible manner and to ensure the wellbeing of its stakeholders. The policy also commits to integrating environmental management into all aspects of the business with the aim of achieving world class environmental performance in a sustainable manner. We endeavour to apply industry best practice standards and guidelines and are a signatory to a number of voluntary codes and social compacts.

Voluntary codes and social compacts

1	2	3	4	5	6	7	8
Our tailings management practices follow the International Council on Mining and Metals (ICMM) Guidelines	We subscribe to the United Nations Guiding Principles on Business and Human Rights	We are committed to the United Nations Global Compact	We support the Extractive Industries Transparency Initiative (EITI)	We participate in the annual climate change and water disclosures of the CDP	Our initiatives support the United Nations Sustainable Development Goals	We voluntarily disclose our ESG performance to the Dow Jones Sustainability Index (DJSI)	We report our ESG performance in accordance with the Global Reporting Initiative (GRI) Sustainability Reporting Standards

ESG compliance

The ESG reporting by Implats has been compiled in accordance with the GRI Sustainability Reporting Standards, the FTSE/JSE SRI requirements, and internally developed guidelines on reporting guidelines. We have provided a separate more detailed response to the GRI Standards in a comprehensive GRI response table, available at **(www.implats.co.za)**. Implats is a signatory to the principles of the United Nations Global Compact (UNGC) and the ESG report serves as our advanced level UNGC Communication on Progress (CoP), outlining our support for its broader development objectives and our work on implementing the principles. Our integrated reporting process has also been guided by the principles and requirements contained in the International Financial Reporting Standards (IFRS), the IIRC's International <IR> Framework, the King Code on Corporate Governance 2016 (King IV), the JSE Listings Requirements and the Companies Act, 71 of 2008.

Climate-related risks

The identified climate-risks include: (1) the potential impact on security of water supply for our operations and host communities; (2) failure to comply with climate-related laws, regulations and policies; and (3) the impact on energy supply models to our operations. We are progressively integrating climate change mitigation and adaptation measures into our core business activities, and are aligning our climate-related laws, regulations and business processes with climate change and GHG emission reduction policies and legislation, and recycling water before discharge.

We monitor and review the potential physical implications of climate change for our operations and neighbouring communities and implement appropriate adaptation responses. The main risks relate to temperature and precipitation changes and in particular, impacts on water security. In parallel with our carbon management strategy we implement a water management strategy to respond to climate change impacts. We are active participants in industry associations to influence policy developments in our various regions. We continue to assess and respond to product risks and opportunities, as demand for platinum from the re-emergence of fuel cell and hydrogen sectors continue to rise in the global transition to a low-carbon future through the drive for lower vehicle GHG emissions standards and cost-competitive renewable energy technologies stimulate production of green hydrogen.

Summary of ESG management and funding

Energy management

The state-owned power utility's inability to maintain reliable electricity supply continues to be a risk to our South Africa and Zimbabwe operations. The introduction of a carbon tax in fossil fuel levy in South Africa may increase our operational costs. While our Zimbabwe and Canada operations are supplied electricity largely from hydro-power schemes, South Africa's operations are supplied predominately coal-generated electricity. Our short-term strategy and management approach focuses on investing in energy savings and carbon emissions reduction initiatives throughout our business. We are committed to playing our part in the global effort to reduce greenhouse gas (GHG) emissions.

Water management

Water is our most significant environmental concern as the majority of our operations are in water-scarce countries, South Africa and Zimbabwe. The principal risks we face are increased water stress leading to potential operational disruptions, uncontrolled dirty water discharges into the environment, increasing costs associated with water supply and management, local community discontent and reputational risks. Our strategy focuses on water consumption and quality management and proposes a framework for operation-specific water conservation strategies, in line with our strategic commitment to reduce our levels of potable water usage and to increase recycled water usage. Progress in implementing our strategy is driven through our water management programme which includes a focus on driving operational excellence and engaging and partnering with our stakeholders.

Environmental certification

All our operations, except Lac des Iles, have environmental management systems that are certified against the ISO 14001: 2015 standard. Implats has an established incident and non-conformity procedure to manage reporting, reviewing and remediating environmental impacts from incidents or substandard acts and conditions. During the year, no fines or non-monetary sanctions for non-compliance with environmental regulations, licences or permits were imposed by authorities at any of our operations.

The Covid-19 lockdown measures delayed several regulatory and audit inspections at Impala and Marula, in South Africa. These operations will submit audit reports for their environmental management programmes (EMPR) in December 2020 (required every two years). Impala Rustenburg has continued to engage with the Department of Water and Sanitation (DWS) regarding its Water Use Licence (WUL) amendment application. The operation's amended WUL received in 2019 regrettably did not address certain requested amendments. Impala Springs has commenced the renewal process for its WUL, which expires in September 2021. In improving compliance with WULs, our South African operations continue to focus on improving storm water management and clean and dirty water separation systems. Marula is also seeking to address excess water, optimise its metering system in order to update its water balance and implement methods to remedy a contamination plume.

Our Zimbabwe operations complied with the conditions stipulated in the various permits and licences issued, which include EIA licences, effluent and waste disposal licences, radiation licences, water permits and agreements. Impala Canada has not undertaken any compliance audits against approved authorisations since the operation was acquired in December 2019. Regulatory authorities conduct compliance audits against Environmental Compliance Approvals (ECA) and against permits. In addition, Impala Canada engages a third-party to conduct an annual internal compliance audit against all environmental permits.

At the Waterberg project, an Environmental Authorisation (EA) application was submitted to the DMRE (reference number LP 30/5/1/2/2/2/10161EM). Included in the EA are the Environmental Impact Assessment (EIA), Environmental Management Programme (EMPr) and mine closure plan and the 2020 Implats ESG report. The findings of the Environmental Assessment Practitioner and specialists' assessments have shown that the Waterberg project may result in both negative and positive impacts to the environment; however, adequate mitigation measures are included into the EMPr to reduce the significance of the identified negative impacts.

ESG audits and assurance

Independent assurance over selected ESGs key performance indicators has been provided by Nexia SAB&T (which is a 90% black-owned and 48% black women-owned South African assurance firm). The scope of the assurance, the selected performance information and the independent statement of assurance are provided in the 2020 Implats ESG report **(www.implats.co.za)**.

Closure funding

Rehabilitation provision is further discussed in the 2020 Implats annual financial statements (refer in particular to note 14) and the 2020 Implats ESG report. These reports will be published at **(www.implats.co.za)** in September 2020.

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

	Current cost estimates*		Financial provisions**	
	2020 Rm	2019 Rm	**2020 Rm**	2019 Rm
Impala Rustenburg	**1 342**	1 278	**759**	805
Impala Springs	**275**	268	**228**	226
Marula	**334**	300	**148**	157
Afplats	**20**	19	**20**	19
Zimplats	**668**	565	**352**	285
Impala Canada	**297**	—	**312**	—
	2 936	2 430	**1 819**	1 492

* *The current expected cost to restore the environmental disturbances as estimated by third-party experts for purposes of regulatory compliance is R2 936 million for the Group. The amounts in the table above for accounting purposes exclude VAT, preliminary and general costs and contingencies. The Zimplats estimates include preliminary and general costs and contingencies.*

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

Guarantees, an insurance policy and the funds in the Impala Pollution Control, Rehabilitation and Closure Trust Fund are available to the Department of Mineral Resources and Energy to satisfy the requirements of the National Environmental Management Act with respect to environmental rehabilitation (note 30). The third-party expert that conducts these assessments is E-Tek Consulting.

In compliance with the DMRE, the South African liabilities are secured through trust funds, insurance policies and bank guarantees. Similar arrangements are in place for the other regions.

Further details relating to the materiality of environmental aspects, management processes, performance and commitments are reported in the 2020 ESG report.

Integrated Mineral Resource Management

Implats embraces an integrated Mineral Resource management (MRM) function. To this end, systems, procedures and practices are aligned and are continuously being improved to achieve this objective. MRM includes exploration, geology, geostatistical modelling and evaluation, mine surveying, sampling, mine planning, ore accounting and reconciliation as well as the MRM information systems. The MRM function is the custodian of the mineral assets and specifically strives to optimise these assets – in terms of both Mineral Resources and Mineral Reserves – and to unlock value through a constant search for optimal extraction plans which yield returns in line with the corporate and business objectives.

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

- Safe production, which is the first principle underpinning all Mineral Reserve estimates
- 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
- Seeking optimal solutions to ensure sustainable and profitable operations.

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

Present focus areas include:

- Timeous exploration drilling to support sustainable operations and LoM planning
- Improved Mineral Reserve flexibility, measured as mineable face length in conventional mining sections
- Improvement in the quality of mining
- Revisiting optionality of long-term planning in view of present constraints
- Scenario planning for LoM II and III Mineral Resources to ensure a sustainable business model
- Transitioning from a 2D to appropriate 3D platform as part of the optimisation of our spatial mine planning, based on 3D spatial geological models at Impala and Marula
- Work streams to ensure optionality to sustain operations.

Strategic thrusts

MMR FOCUS AREAS

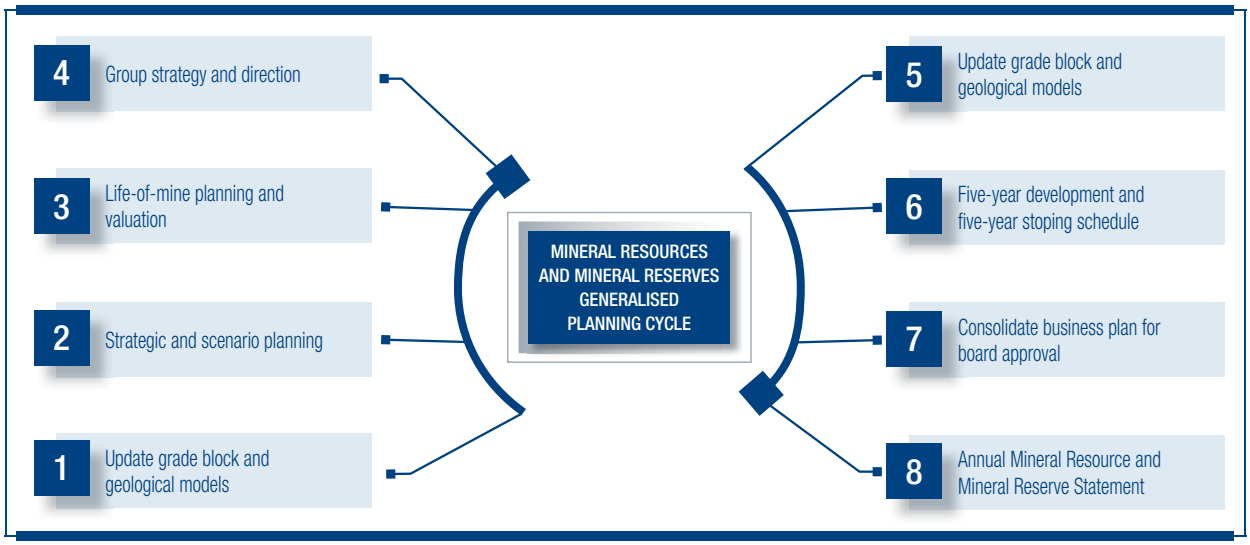
Geological information	Quality mining	Mining flexibility	Systems	Optionality
• Timeous brownfields exploration • Cost-effective infill surface drilling • Optimal underground drilling • Observation tools • Optimal underground sampling for geological risk mitigation	• Grade reviews, action plans • Face observations, issue stop notes • Grade control observers • Improved dashboards	• Detailed development scheduling • Development tracking • Redevelopment and panel establishment • Face length management at Impala • Matched capital allocation to fund LoM II pipeline	• Utilise appropriate systems to suit orebody • Strive for full implementation of 3D geological and planning tools	• Optimal utilisation of current infrastructure • Expanding the footprint of current shafts • Scenarios for future sustainability • M&A opportunities • Sequential upgrade of LoM II and LoM III pipeline • Compliance with LoM classification

Mine planning

The integrated Implats planning cycle, spanning across the whole financial year, has the main objective of allowing for the integration of the different levels of planning, to provide continuity of plans and cycles and to populate the cycle with appropriate review processes, linked to associated business reporting periods. Emphasis is placed on risk mitigation, optimisation of plans and compliance with standards and consolidation as a platform for tracking delivery against plans. The planning process is iterative, with top-down goals flowing through to operational planning and vice versa, with the ability to adjust the plan, as conditions change.

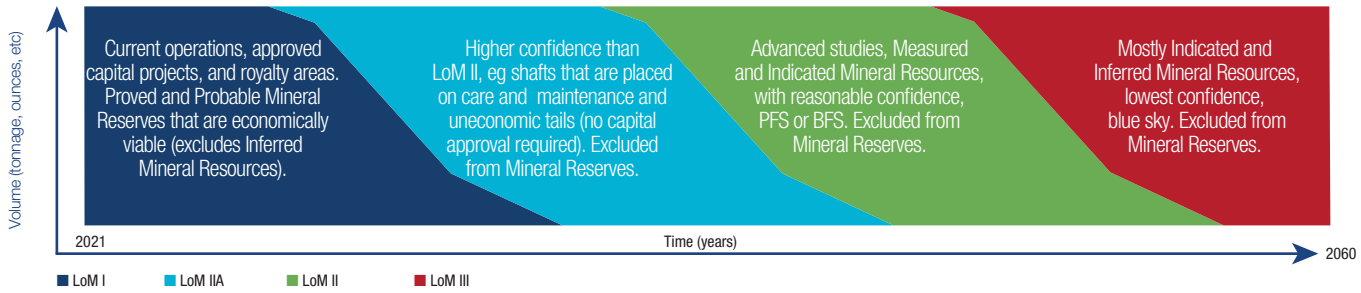
The embedded planning cycle gives due consideration to the sequence of planning, the duration of the business planning period and the entrenching of long-term strategic planning, spanning the full calendar year. The generalised planning cycle is shown below. It must be noted that rework or new activities are accommodated out of the normal cycle. It commences with Scenario and LoM planning in August until October, followed by a detailed business planning (BP) phase in February until May, with a five-year focus.

The planning process is completely integrated with costing, outlook on commodity prices and financial valuation.



Implats has defined three levels of life-of-mine (LoM) planning, these being classified as levels III, II and I. The three levels are linked to increasing levels of confidence from III to I, and the conversion of Mineral Resources to Mineral Reserves. LoM level III includes 'Blue Sky' and scoping studies and therefore focuses mainly on Inferred Resources and exploration results. It also includes contiguous areas and opportunities outside existing lease boundaries and ownership. This will be excluded from the Mineral Reserve estimate. LoM level II includes planned, but as yet unapproved projects, which have a reasonable chance of future board approval. LoM level IIA can be defined as those Mineral Reserves that fail the valuation test of LoM level I. These uneconomic volumes are removed from LoM I, ie Mineral Reserves, but are retained as Mineral Resources. In addition, most of the Mineral Reserves removed through the tail-cutting process fall in the LoM level IIA category. Likewise, operations that are deemed uneconomic under the current LoM considerations, also fall in this category. It should be noted that no capital approval is required for these operations. These areas in LoM II & IIA 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. To this effect no Inferred Mineral Resources are included in LoM I, other than incidental dilution which is included at zero grade.

LoM levels



12 Shaft, Impala

Regional geological settings

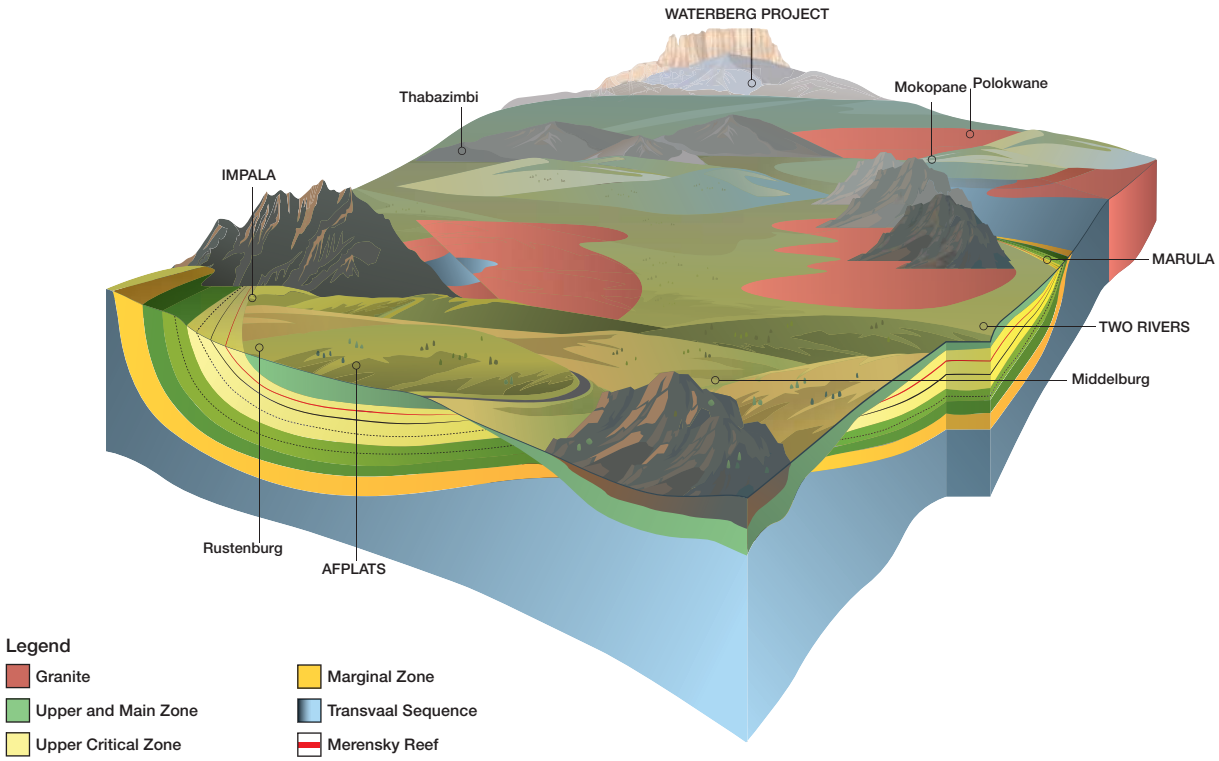
IMPLATS EXPLOITS PLATINIFEROUS HORIZONS WITHIN THE BUSHVELD COMPLEX (BC) IN SOUTH AFRICA AND THE GREAT DYKE IN ZIMBABWE AS WELL AS THE PALLADIUM-DOMINANT OREBODY LOCATED IN THE LAC DES ILES INTRUSIVE COMPLEX IN CANADA.

The Bushveld Complex and Great Dyke layered intrusions are unique in terms of size and geological continuity. Mining mostly takes place as underground operations, 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 000km^2), two billion year old layered igneous intrusion occurring in the northern part of South Africa. Rock types range in composition from ultramafic to felsic. The complex is not only unique in size, but also in the range and economic significance of its contained mineral wealth. In addition to the PGMs and associated base metals, vast quantities of chromium, vanadium, tin, fluorine and dimension stone are also produced.

Schematic diagram of the Bushveld Complex



Regional geological settings

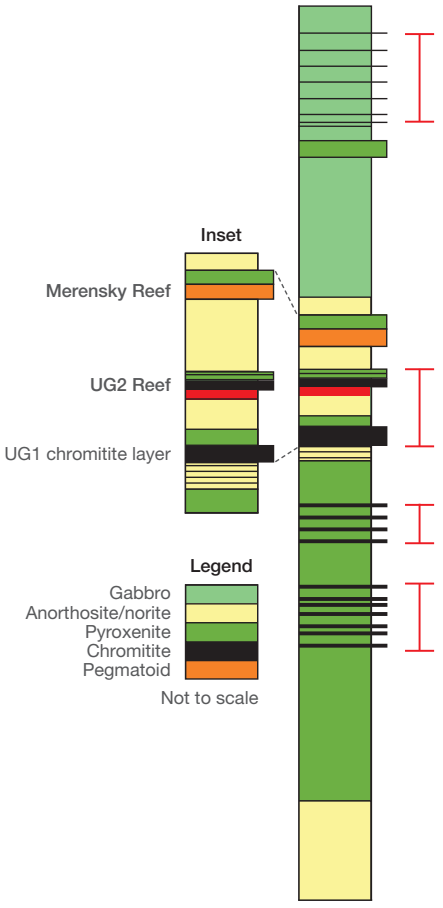
The accompanying map (page 26) and schematic diagram (page 24) show the extent of the Bushveld Complex. The layered sequence, the Rustenburg Layered Suite, comprises five major sub-divisions. These are from the bottom upwards, the Marginal, Lower, Critical, Main and Upper Zones as indicated in the generalised stratigraphic column below.

Three horizons within the Critical Zone, namely the Merensky Reef, the Upper Group 2 (UG2) Reef and the Platreef, host extensive economically exploitable quantities of PGMs. Two of these horizons, which can be traced for hundreds of kilometres around the complex, are the focus of the current Implats' operations. The PGMs – platinum, palladium, rhodium, ruthenium and iridium – as well as the associated gold, copper, nickel, cobalt, chromium and other minor metals and compounds, are mined concurrently, but recovered by different processes.

Chromitite layers present below the UG2 Reef contain little to no PGM mineralisation and are mined by other operators for their chromium content. The economic potential of the Waterberg PGM deposit at the northern extremity of the Northern Limb is the focus for feasibility and optimisation studies as part of the upfront work prior to commencing with potential mining. There are two PGE Cu-Ni-Au mineralised intervals in the Waterberg deposit, a lower F-Zone and an upper T-Zone. Both these contain palladium dominant mineralisation.

Implats' operations on the Bushveld Complex comprise Impala Mine north of Rustenburg, Marula Mine northwest of Burgersfort and the Two Rivers Mine, a joint venture between Implats and African Rainbow Minerals Limited (ARM) situated southwest of Steelpoort. The Afplats Leeuwkop Project is situated in the western limb of the Bushveld Complex, west of Brits. Implats acquired a 15% interest in the Waterberg Joint Venture project during the course of 2017.

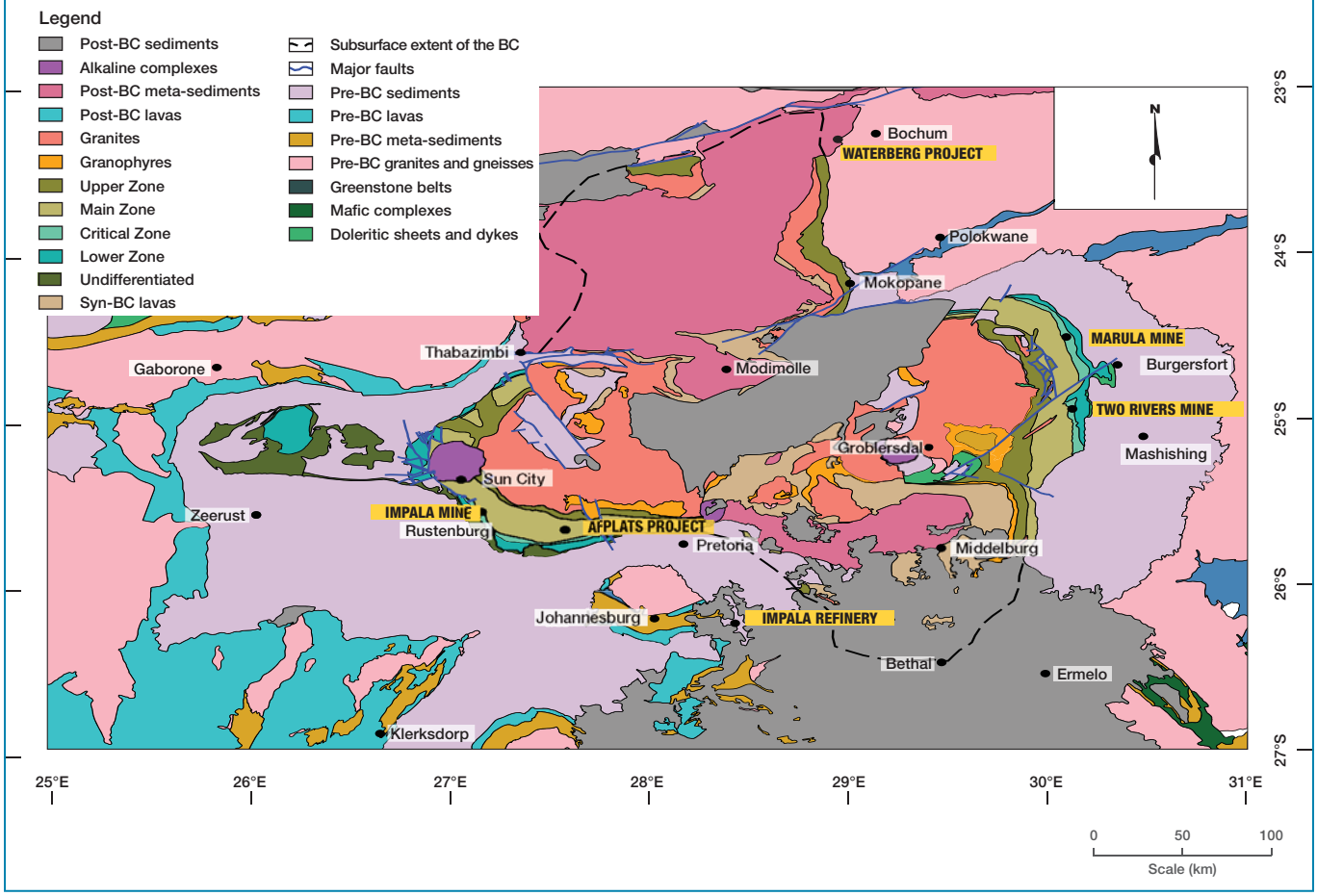
Generalised stratigraphic column of the Bushveld Complex



	Sub-division	Main rock type
Magnetite layers	UPPER ZONE	Anorthosite Gabbro Olivine diorite Magnetite
Pyroxenite marker	MAIN ZONE	Anorthosite Gabbro Norite Pyroxenite
Merensky Reef		
Upper group chromitites	UPPER CRITICAL ZONE	Anorthosite Norite Pyroxenite Chromitite
Middle group chromitites		
Lower group chromitites	LOWER CRITICAL ZONE	Pyroxenite Chromitite Harzburgite Dunite
	LOWER ZONE	Pyroxenite Harzburgite Dunite
	MARGINAL ZONE	Norite

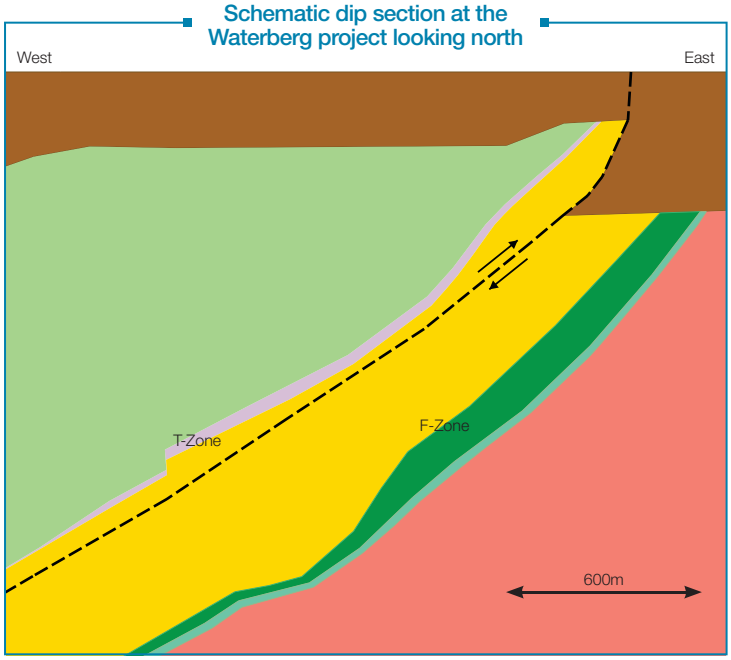
Regional geological settings

Simplified map of the Bushveld Complex and surrounding geology

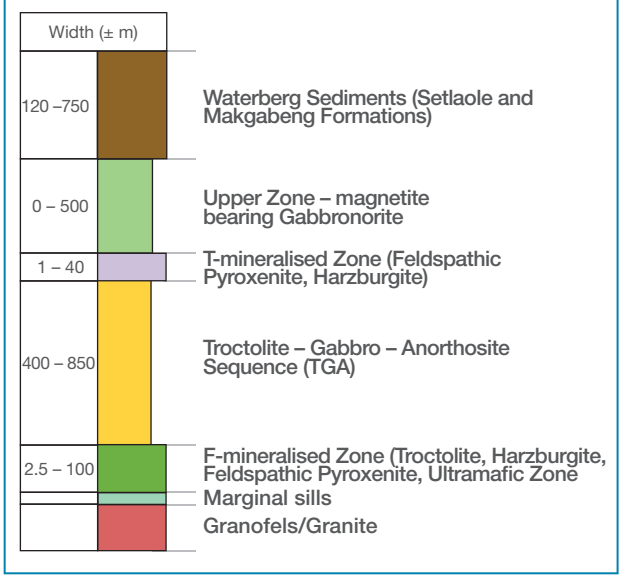


A detailed geological description of the various reef types and facies is provided under the relevant operational sections. It is well understood that the grade distribution varies materially from area to area. The UG2 Reef morphology and associated vertical grade distribution also differs significantly between regions, specifically in terms of the width of the main PGM bearing chromitite layer, as well as in the number of layers. In general the grade increases if the chromitite layer width becomes thinner.

Schematic dip section at the Waterberg project looking north



Generalised geological succession of the Bushveld Complex at the Waterberg project



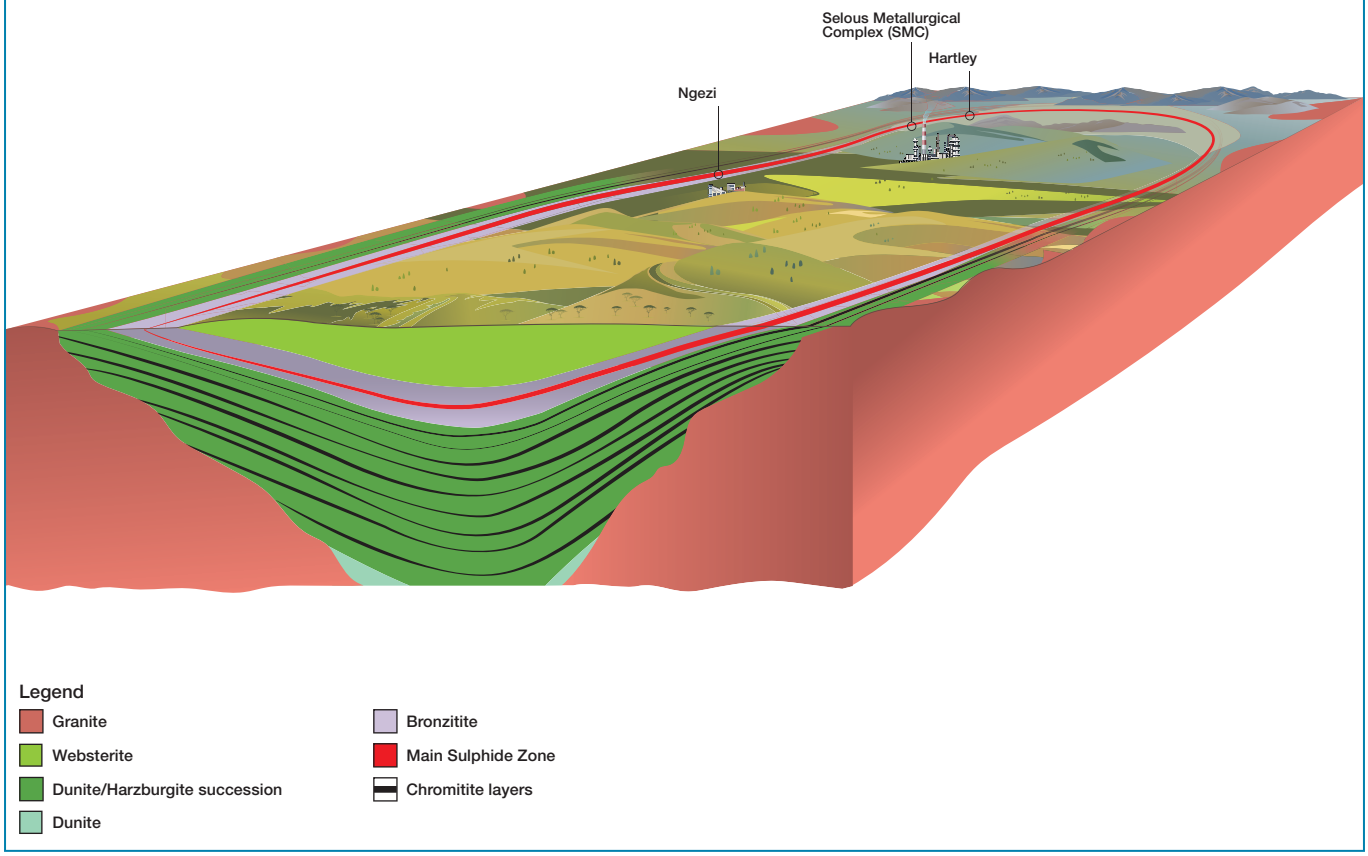
Regional geological settings

The Great Dyke

The Great Dyke is a 2.5 billion-year-old layered mafic-ultramafic body intruded into Archaean granites and greenstone belts of Zimbabwe. 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 trend and 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. The accompanying schematic diagram and map (pages 27 and 29) show the extent of the Great Dyke. It is U-shaped in section 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 Dyke is exposed as a series of narrow, contiguous layered complexes or chambers. These are, from north to south, Musengezi, Hartley (comprising the Darwendale and Sebakwe sub-chambers) and a southern chamber (comprising the Selukwe and Wedza sub-chambers).

The Main Sulphide Zone (MSZ), host to economically exploitable PGMs and associated base metal mineralisation, is located 10m to 50m below the ultramafic/mafic contact in the P1 pyroxenite. The PGMs, along with gold, copper and nickel, occur in the MSZ. A detailed description of the MSZ and the value distributions is provided in the relevant operations sections. Examples comparing different areas indicate that the grade profiles vary between areas and that the platinum and palladium peaks are somewhat offset. Typically, the MSZ consists of a 2m to 10m-thick zone containing 2% to 8% of iron-nickel-copper sulphides disseminated in pyroxenite. The base of this nickel copper rich layer is straddled by a 1m to 5m-thick zone of elevated precious metals (Pt, Pd, Rh and Au). 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 related to the metal distribution in a consistent manner and is used as a mining marker. It can normally be located visually in 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.

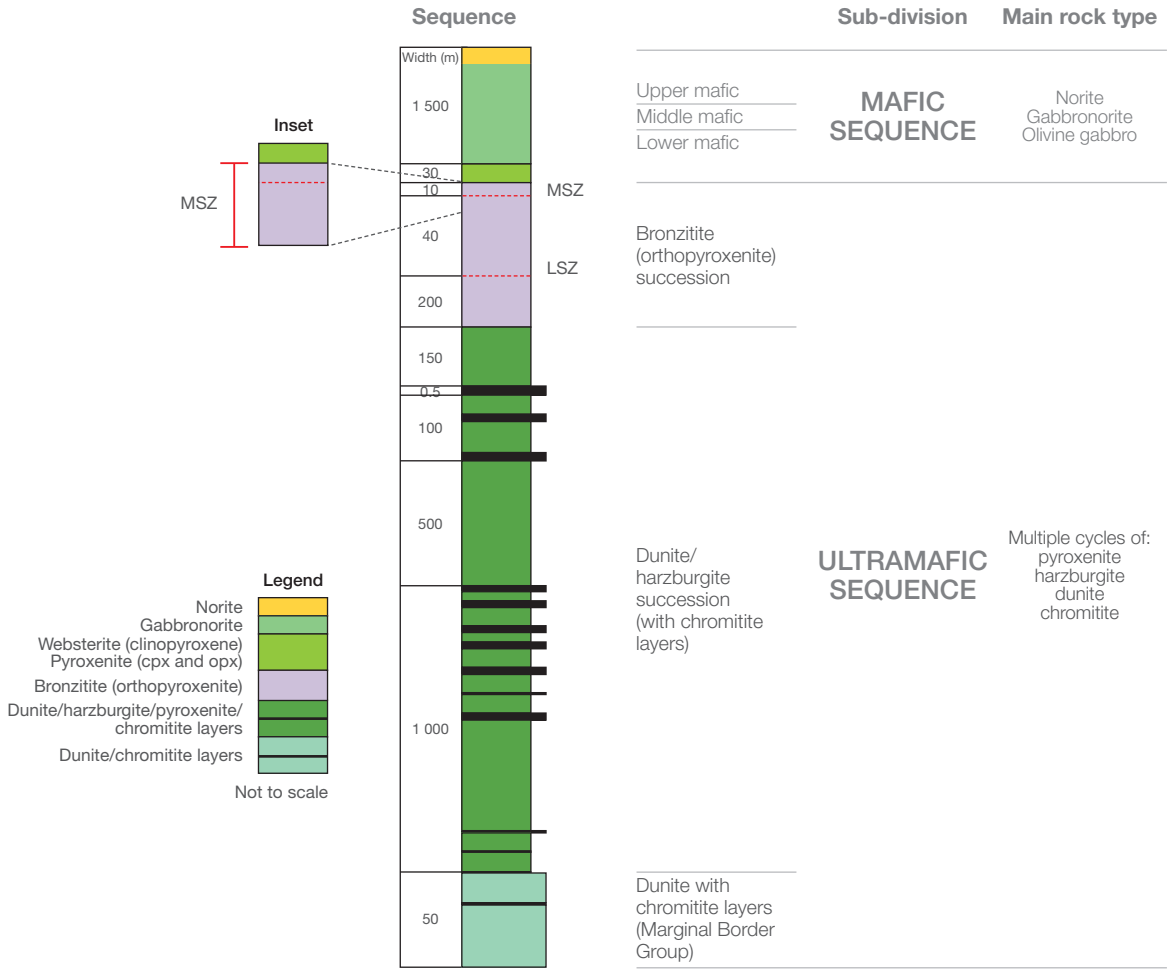
Schematic diagram of the northern portion of the Great Dyke



Regional geological settings

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.

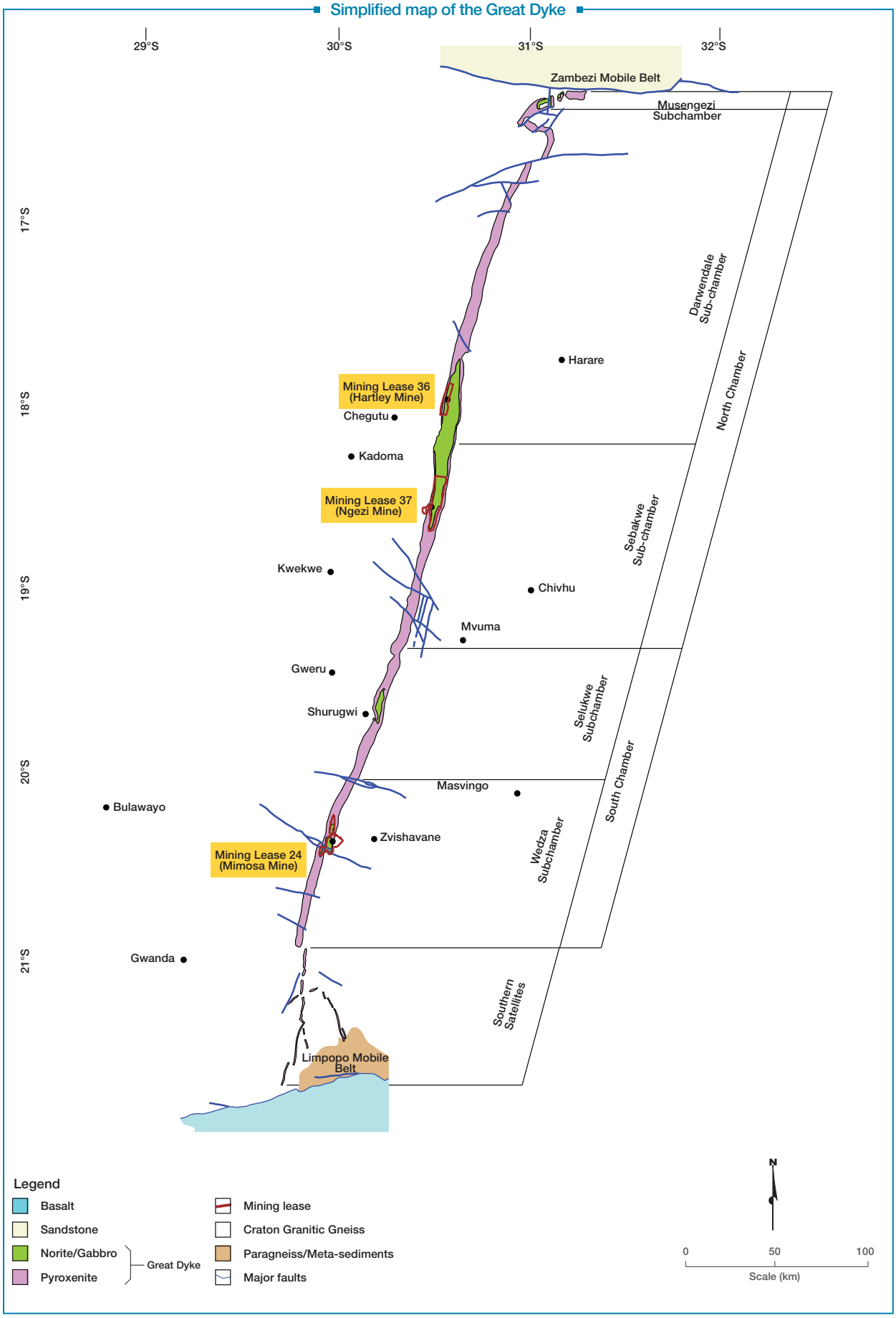
Generalised stratigraphic column of the Great Dyke



Geology discussion at 20 Shaft, Impala

Regional geological settings

Simplified map of the Great Dyke



Regional geological settings

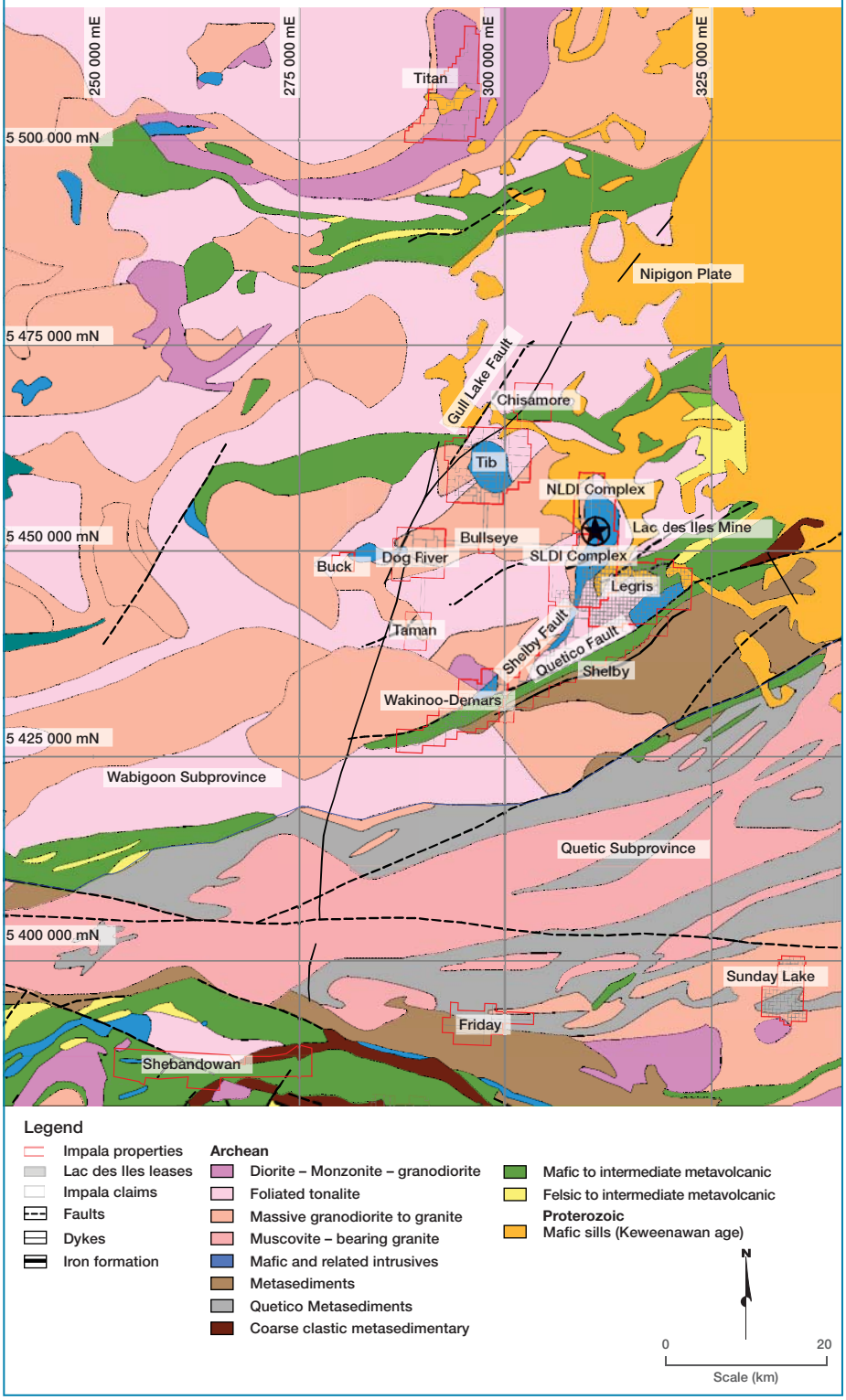
The Lac des Iles Intrusive Complex

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. They occur immediately to the north of the Quetico Sub-province and directly west of the Nipigon embayment of the Mid-continent Rift System. 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. Both the LDI-IC and the Legris Lake Complex appear to have been emplaced along 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 3.01 to 2.89 billion-year old granite-greenstone basement rocks designated as the Marmion Terrane and representing an older slice of magmatic arc-related crustal rocks.

Most of the known Lac des Iles suite intrusions host economically interesting (eg greater than 1g/t combined palladium + platinum) PGE ± copper-nickel sulphide mineralisation in the form of surface showings and/or shallow drilling intersections. The LDI-IC remains the only member of the suite in which PGE Mineral Resources have been delineated.

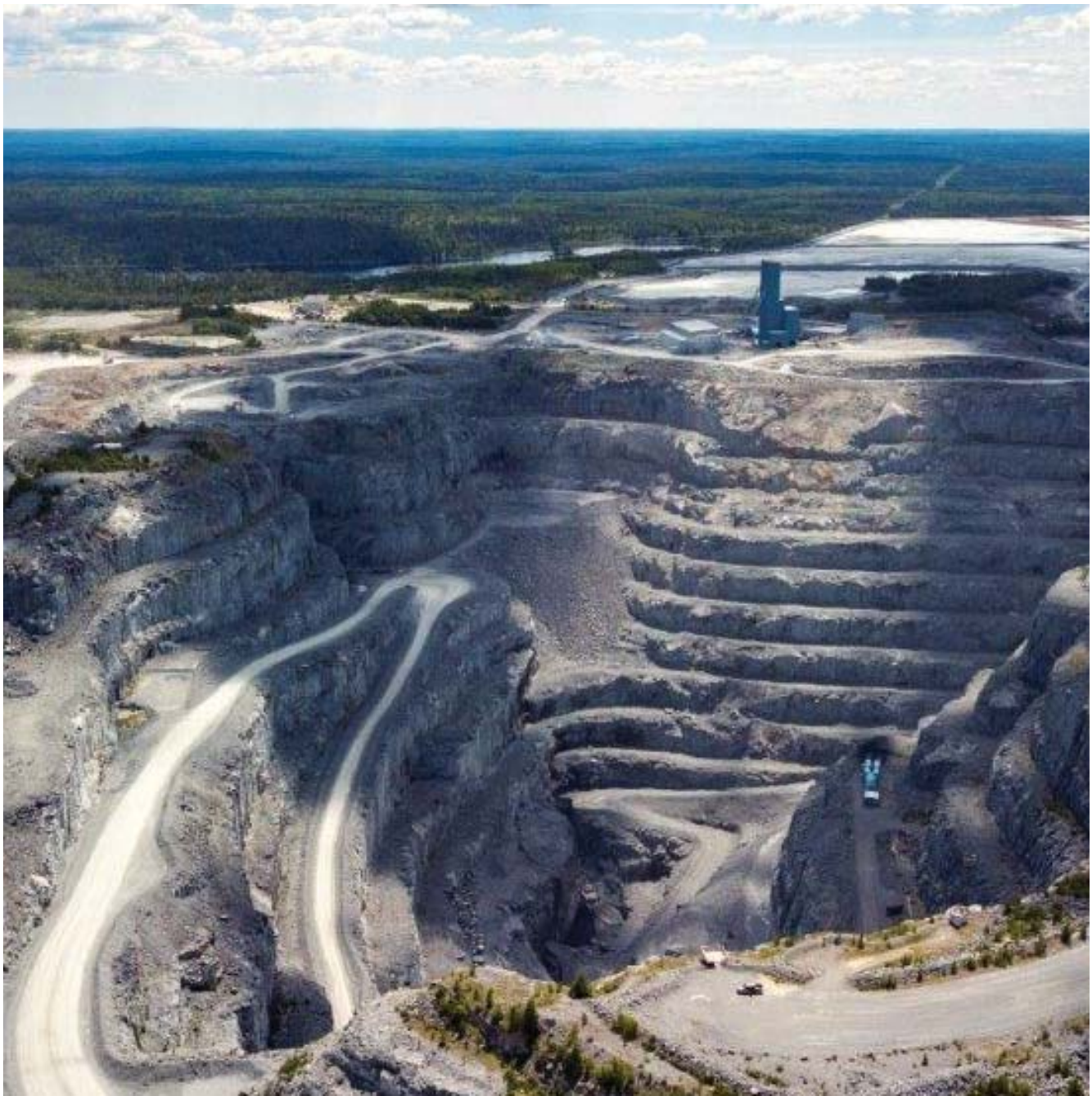
Simplified regional geology of the Lac des Iles area showing location of Lac des Iles suite intrusions (dark blue), Lac des Iles mine and mill (star) and Lac des Iles mineral properties (red claim outlines)



Regional geological settings

The Lac des Iles Mine property hosts the North Lac des Iles Complex, that mainly comprises ultramafic rocks and the South Lac des Iles Complex that are dominated by mafic rocks. The North Lac des Iles Complex is a polyphase intrusive body consisting of a series of nested to locally cross-cutting intrusions. It is approximately coeval with the South Lac des Iles Complex. Most of the North Lac des Iles Complex consists of layered ultramafic rocks that are distributed within two types of cyclic units including an orthopyroxene-bearing cyclic unit and, an orthopyroxene-free cyclic unit. Historical surface prospecting, mapping and limited trenching and diamond drilling have identified several areas in the North Lac des Iles Complex hosting PGE occurrences exceeding 1g/t of combined Pd+Pt+Au. They are commonly hosted by orthopyroxene-bearing cyclic units and have Pd:Pt ratios of approximately 3:1, in contrast to the characteristic ≥10:1 Pd:Pt ratios observed in the mineralised zones of the South Lac des Iles Complex.

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 2.689 to 2.693 billion years. Four major intrusive sequences (series) are now recognised in the complex. The oldest series is referred to as the gabbronorite series. This was succeeded by a major period of noritic magmatism that produced both the norite series and breccia series. In highly strained areas, the altered norite is strongly foliated with aligned chlorite grains defining a pervasive schistosity. The youngest magmatism to occur 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 in textures and grain sizes.



Roby pit of Lac des Iles Mine in summer, Canada

Exploration review

Given the constrained economic situation of the past few years in the PGM industry, Implats' exploration focus is limited to current operations. The Group exploration strategy remains unchanged insofar as the main focus is brownfields activities in support of ongoing mining at existing operations. In general, surface drillhole spacing during feasibility studies are 500m or greater apart and infill drilling is required on an ongoing basis to better define geological structures, specific local complexities, ground conditions and grade variations to inform mine planning and direct medium-term layouts. The target remains to gather information timeously towards allowing, directing and supporting the five-year Mineral Reserve development plans and minimise the impact of geological risk on operations. Accordingly, Marula and Impala Rustenburg are currently catering for further tightening of their surface drillhole spacing to a targeted 400m collar spacing.

Underground geotechnical core-recovering drilling activities are routinely being undertaken at Impala to assist with detecting potential hazardous geological features. As such, brownfields exploration plans are annually revisited and subjected to scrutiny at various management levels in order to ensure optimised spend in mitigation of operational risks.

Annual Group exploration expenditure from surface as well as underground operations for the past year amounted to some R167.3 million (excluding the CY2019 expenditure at Lac des Iles). This reflects a significant increase compared with the 2019 total of R109.8 million. The higher expenditure can be directly related to the need to acquire detailed geological information to support the Lac des Iles LoM. It is projected that 2021 will increase in levels of expenses to some R341.7 million.

	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	11	13 892	19 706	685	37 115	41 237	–	–	–
Marula	–	–	–	34	1 131	685	–	–	–
Two Rivers	4	1 129	3 353	183	10 340	6 662	1	136	174
Zimplats[1]	53	7 966	11 221	67	6 683	8 188	–	–	–
Mimosa[1]	22	3 183	7 456	62	3 832	2 241	11	1 304	2 780
Afplats	–	–	–	–	–	–	–	–	–
Lac des Iles CY2019[2]	65	36 300	110 887	99	32 170	90 793	12	3 512	8 339
Lac des Iles since Q3 FY2020[2]	12	7 791	36 287	34	14 202	27 323	–	–	–
Total excluding Lac des Iles CY2019	102	33 961	78 022	1 065	73 303	86 336	12	1 440	2 954

[1] *R17.34 per US dollar as at 30 June 2020.*
[2] *R12.75 per Canadian dollar/CA$ as at 30 June 2020.*

Notes:
Totals exclude the CY2019 expenditure and figures at Lac des Iles.

Details pertaining to the ongoing brownfields exploration are described in more detail in the individual operations' sections.

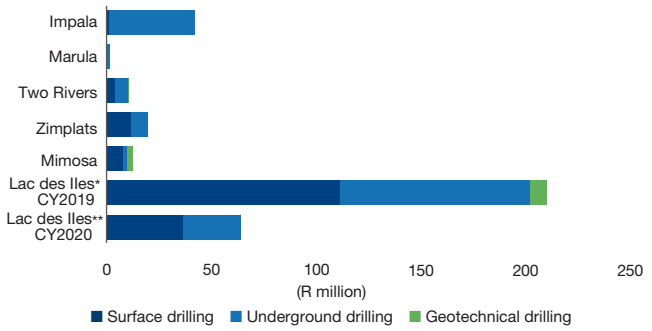
The Waterberg project has seen no active exploration programme during the last year, largely on account of the initial planned drilling having been completed to plan. A definitive Feasibility Study (DFS) was completed during the past year and further optimisation work is presently underway.

Offshore projects

All offshore exploration activities are currently managed by Impala Canada. Prior to the acquisition by Implats, NAP deployed exploration resources to upgrading the life-of-mine of the Lac des Iles Mine (LDI) as well as developing potential new sources of mill feed within the greater region. This included successful drilling campaigns on the Sunday Lake PGM-Cu-Ni prospect 60km south of Lac des Iles which was part of earn-in option agreement with Implats. The Exploration team developed new prospects and targets for future exploration and exploitation including Titan, Friday, Shelby, Legris, Wakinoo and Tib prospects. Delineation and discovery drilling at the Sunday Lake Property continued with an exceptional drillhole intersection of 5.51 g/t (3E) over 41.2m from the 'Big Red' target. Post the acquisition by Implats, Impala Canada continued with the greenfields exploration programme. A 3-drillhole delineation at the Big Red Target at Sunday Lake (4 300m) and airborne gravity surveys over newly acquired grassroots properties, Titan and Friday were undertaken. Due to the Covid-19 pandemic, all exploration drilling by Lac des Iles ceased on 12 April 2020 and resumed on 26 May 2020.

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

Annual exploration expenditure
as at 30 June 2020 (R million)



** Lac des Iles exploration expenditure from January 2019 to 12 December 2019.*
*** Lac des Iles exploration expenditure from 13 December 2019 to 30 June 2020.*

Attributable Mineral Resources and Mineral Reserves

Attributable Mineral Resource estimates inclusive of Mineral Reserves as at 30 June 2020

Based on Implats' equity interest

	Implats' share-holding %	Attributable Mineral Resources inclusive of Mineral Reserves						Attributable ounces						
								Moz						
		Orebody	Category	Att Tonnes Mt	3E Grade g/t	4E Grade g/t	6E Grade g/t	Pt	Pd	Rh	Au	3E	4E	6E
Impala	96	**Merensky**	Measured	111.6	5.96	6.29	7.02	14.32	6.24	1.21	0.80	21.4	22.6	25.2
			Indicated	66.1	6.09	6.43	7.18	8.67	3.78	0.73	0.48	12.9	13.7	15.2
South Africa			Inferred	10.8	6.94	7.33	8.18	1.61	0.70	0.14	0.09	2.4	2.5	2.8
		UG2	Measured	142.1	5.00	5.55	6.61	14.62	7.92	2.55	0.29	22.8	25.4	30.2
			Indicated	67.7	4.96	5.51	6.56	6.91	3.75	1.21	0.14	10.8	12.0	14.3
			Inferred	11.9	4.82	5.36	6.38	1.19	0.64	0.21	0.02	1.9	2.1	2.4
		Total		**410.2**	**5.47**	**5.93**	**6.84**	**47.32**	**23.03**	**6.04**	**1.82**	**72.2**	**78.2**	**90.2**
Marula	73	**Merensky**	Measured	25.0	4.14	4.26	4.56	1.99	1.08	0.10	0.26	3.3	3.4	3.7
			Indicated	5.6	4.08	4.20	4.50	0.44	0.24	0.02	0.06	0.7	0.8	0.8
South Africa			Inferred	3.8	3.71	3.82	4.10	0.27	0.15	0.01	0.04	0.5	0.5	0.5
		UG2	Measured	34.6	5.71	6.28	7.28	2.94	3.33	0.63	0.10	6.4	7.0	8.1
			Indicated	16.3	5.64	6.21	7.23	1.41	1.51	0.30	0.05	3.0	3.3	3.8
			Inferred	4.7	5.75	6.32	7.36	0.40	0.45	0.09	0.01	0.9	1.0	1.1
		Total		**90.0**	**5.08**	**5.48**	**6.21**	**7.45**	**6.75**	**1.14**	**0.51**	**14.7**	**15.8**	**18.0**
Afplats	74	**UG2**	Measured	72.8	4.60	5.19	6.46	7.40	3.31	1.39	0.06	10.8	12.1	15.1
			Indicated	8.0	4.52	5.11	6.36	0.80	0.36	0.15	0.01	1.2	1.3	1.6
South Africa			Inferred	41.3	4.45	5.06	6.25	4.07	1.82	0.77	0.03	5.9	6.7	8.3
		Total		**122.2**	**4.54**	**5.14**	**6.38**	**12.27**	**5.48**	**2.31**	**0.09**	**17.8**	**20.2**	**25.1**
Two Rivers	46	**Merensky**	Indicated	34.8	3.03	3.13	3.42	2.09	1.07	0.12	0.23	3.4	3.5	3.8
			Inferred	28.2	3.84	3.98	4.32	2.07	1.19	0.12	0.23	3.5	3.6	3.9
South Africa		**UG2**	Measured	6.6	4.18	4.66	5.65	0.56	0.32	0.10	0.01	0.9	1.0	1.2
			Indicated	38.5	4.29	4.77	5.73	3.21	2.04	0.59	0.05	5.3	5.9	7.1
			Inferred	36.9	4.03	4.47	5.33	2.78	1.91	0.51	0.05	4.7	5.2	6.2
Non-managed		**Total**		**145.1**	**3.83**	**4.14**	**4.80**	**10.72**	**6.53**	**1.45**	**0.57**	**17.7**	**19.2**	**22.3**
Waterberg	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
South Africa			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
Non-managed		**Total**		**46.4**	**3.31**	**3.36**	**3.36**	**1.46**	**3.11**	**0.07**	**0.37**	**4.9**	**5.0**	**5.0**
Zimplats	87	**MSZ**	Measured	194.5	3.33	3.48	3.67	10.87	8.42	0.73	1.23	20.5	21.7	22.9
			Indicated	489.9	3.36	3.50	3.70	28.10	20.71	2.40	4.43	53.2	55.2	58.3
Zimbabwe			Inferred	185.4	3.29	3.43	3.61	10.52	7.51	0.79	1.57	19.6	20.4	21.5
		Total		**869.8**	**3.34**	**3.48**	**3.67**	**49.49**	**36.64**	**3.93**	**7.23**	**93.4**	**97.4**	**102.8**
Mimosa	50	**MSZ**	Measured	26.7	3.50	3.65	3.87	1.55	1.23	0.19	0.17	2.9	3.1	3.3
			Indicated	15.1	3.41	3.57	3.79	0.86	0.67	0.10	0.11	1.6	1.7	1.8
Zimbabwe			Inferred	13.4	3.37	3.52	3.74	0.76	0.57	0.09	0.09	1.4	1.5	1.6
Non-managed		**Total**		**55.2**	**3.44**	**3.60**	**3.82**	**3.17**	**2.46**	**0.37**	**0.38**	**6.0**	**6.4**	**6.8**
Lac des Iles	100	**IC**	Measured	8.9	2.95	2.95	2.95	0.06	0.72	–	0.05	0.8	0.8	0.8
			Indicated	59.0	2.58	2.58	2.58	0.40	4.19	–	0.30	4.9	4.9	4.9
Canada			Inferred	12.0	2.84	2.84	2.84	0.08	0.96	–	0.05	1.1	1.1	1.1
		Total		**79.9**	**2.66**	**2.66**	**2.66**	**0.55**	**5.88**	**–**	**0.41**	**6.8**	**6.8**	**6.8**
Implats		**Total***		**1 819**	**4.00**	**4.26**	**4.74**	**132**	**90**	**15**	**11**	**234**	**249**	**277**

* *Total summation of 4E and 6E grade and ounces for Lac des Iles Mineral Resources estimates only includes the sum of platinum, palladium and gold and the summation of 6E grade and ounces for the Waterberg project Mineral Resource estimates is the sum of platinum, palladium, rhodium and gold. This is a result of the inherent negligible rhodium, ruthenium and iridium content at Lac des Iles and available assay methodologies applied at those operations.*

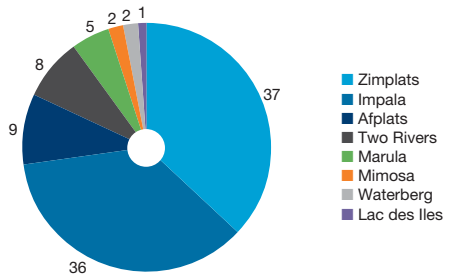
Implats reports a summary of total attributable platinum and palladium ounces as sourced from all categories of Mineral Resources of the Implats Group of companies and its other strategic interests on a percentage equity-interest basis. The tabulation above reflects estimates for 3E, 4E and 6E, based 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. These are summary estimates and any potential inaccuracy is derived from rounding of numbers. Where this happens it is not deemed significant.

Attributable Mineral Resources and Mineral Reserves

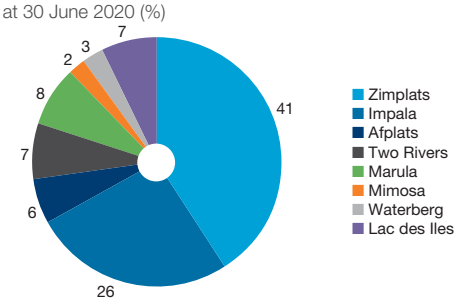
Notes

- Mineral Resources are quoted inclusive of Mineral Reserves
- Mineral Resource estimates allow for estimated geological losses but not for anticipated pillar losses during eventual mining
- In addition to the depth cut-off for the reporting of Mineral Resources as previously reported, various Mineral Resource blocks are considered on a case-by-case basis and this has resulted in areas where the eventual economic extraction is in doubt. These areas are excluded from the summation of total Mineral Resources per area and the attributable Mineral Resources
- The UG2 Mineral Resource estimates for Impala and Marula are based on a minimum mining width rather than the main UG2 chromitite layer width only. Two Rivers and Afplats report the UG2 Mineral Resource as the main UG2 chromitite layer width, which is wider than a minimum mining width
- Implats has elected not to publish Merensky Reef Mineral Resource estimates for Afplats as the reasonable prospect for eventual economic extraction (RPEEE) is presently in doubt
- During October 2017 Implats announced a strategic investment in the Waterberg Joint Venture project. In terms of the agreement, Implats holds a 15% attributable interest as at 30 June 2020 and these estimates are included in this year's reporting of Mineral Resources
- In December 2019, Implats announced the acquisition of North America Palladium Limited and these estimates are currently reported under Impala Canada Limited with a 100% attributable interest as at 30 June 2020
- Rounding of numbers may result in minor computational discrepancies. Mineral Resource estimates are inherently imprecise in nature. The results tabulated in this report must be read as estimates and not as calculations. Inferred Mineral Resources in particular, are qualified as approximations.

Attributable platinum Mineral Resource estimate of 132.4Moz Pt
as at 30 June 2020 (%)



Attributable palladium Mineral Resource estimate of 89.9Moz Pd
as at 30 June 2020 (%)



Summary of attributable Mineral Resource estimate

	Attributable Moz Pt				
	2016	2017	2018	2019	2020
Impala	53.1	52.6	48.9	48.7	**47.3**
RBR JV	1.4	1.5	–	–	**–**
Marula	7.9	7.8	7.8	7.6	**7.4**
Afplats	12.3	12.3	12.3	12.3	**12.3**
Imbasa and Inkosi	8.6	8.6	–	–	**–**
Two Rivers*	12.3	11.0	11.7	10.7	**10.7**
Waterberg*	–	–	–	–	**1.5**
Zimplats	94.8	94.4	49.8	49.2	**49.5**
Mimosa*	3.6	3.4	3.3	3.2	**3.2**
Lac des Iles	–	–	–	–	**0.5**
Total	**194.0**	**191.6**	**133.8**	**131.6**	**132.4**

	Attributable Moz Pd				
	2016	2017	2018	2019	2020
Impala	25.6	25.6	23.8	23.6	**23.0**
RBR JV	0.7	0.7	–	–	**–**
Marula	6.8	6.7	6.6	6.8	**6.7**
Afplats	5.5	5.5	5.5	5.5	**5.5**
Imbasa and Inkosi	3.9	3.9	–	–	**–**
Two Rivers*	7.6	6.6	7.1	6.6	**6.6**
Waterberg*	–	–	–	–	**3.1**
Zimplats	76.3	75.9	37.4	36.5	**36.6**
Mimosa*	2.8	2.7	2.6	2.5	**2.5**
Lac des Iles	–	–	–	–	**5.9**
Total	**129.1**	**127.5**	**83.0**	**81.5**	**89.9**

* *Non-managed.*

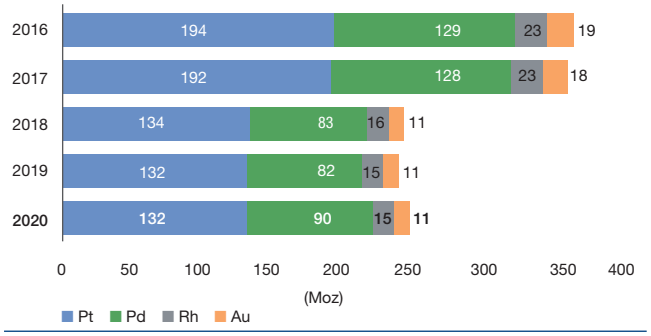
Attributable Mineral Resources and Mineral Reserves

There have not been material changes in the attributable platinum Mineral Resource estimate in comparison with the previous annual Mineral Resources Statement. The updated estimate as at 30 June 2020 increase by 0.6% at 132.4Moz platinum compared to 131.6Moz platinum in June 2019. Minor changes can be attributed to newly acquired data, depletion and updated estimations. The attributable palladium Mineral Resource estimate increased by 8.4Moz palladium in comparison with the previous annual Mineral Resources Statement. The updated palladium estimate as at 30 June 2020 increased by a notable 9% to 89.9Moz palladium. The change in the total palladium estimate is directly related to the addition of the Waterberg and Lac des Iles Mineral Resources, which are both palladium dominant.

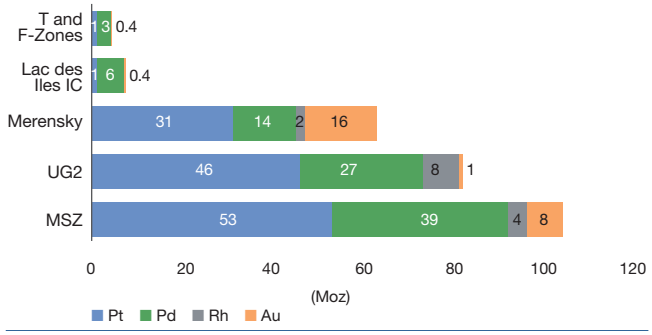
A series of accompanying graphs illustrate the following:

- The total estimated attributable 4E Mineral Resources showing 132Moz Pt, 90Moz Pd, 15Moz Rh and 11Moz Au
- The five-year statistics for the estimated attributable platinum, palladium, rhodium and gold Mineral Resources indicating no material change during 2019 and minor increase in the platinum estimate and a notable increase in the palladium estimate for 2020
- A comparison based on platinum ounces shows that the Impala and Zimplats Mineral Resources make up the bulk of the Group's Mineral Resources (73% of the total Implats inventory)
- A comparison based on palladium ounces shows that the Impala and Zimplats Mineral Resources make up the bulk of the Group's Mineral Resources (67% of the total Implats inventory)
- The grouping of the platinum and palladium ounces per reef shows that some 40% and 44%, respectively of the attributable Implats Mineral Resources are hosted by the MSZ.

Attributable Mineral Resource estimate inclusive of Mineral Reserves (4E per annum)
as at 30 June 2020 (Moz)



Attributable Mineral Resource estimate per reef inclusive of Mineral Reserves (platinum, palladium, rhodium and gold)
as at 30 June 2020 (Moz)



Attributable Mineral Reserve estimate as at 30 June 2020

Based on Implats' equity interest

	Implats share-holding %	Attributable Mineral Reserve estimates as at 30 June 2020							Attributable ounces						
									Moz						
		Orebody	Category	Att Tonnes Mt	3E Grade g/t	4E Grade g/t	6E Grade g/t		Pt	Pd	Rh	Au	3E	4E	6E
Impala	96	**Merensky**	Proved	7.8	3.28	3.47	3.87		0.55	0.24	0.05	0.03	0.8	0.9	1.0
South Africa			Probable	44.4	3.55	3.75	4.19		3.40	1.48	0.29	0.19	5.1	5.4	6.0
		UG2	Proved	13.1	3.23	3.59	4.27		0.87	0.47	0.15	0.02	1.4	1.5	1.8
			Probable	47.5	3.13	3.48	4.14		3.06	1.66	0.53	0.06	4.8	5.3	6.3
		Total		**112.8**	**3.32**	**3.60**	**4.15**		**7.88**	**3.85**	**1.02**	**0.30**	**12.0**	**13.1**	**15.1**
Marula	73	**UG2**	Proved	2.9	3.95	4.34	4.99		0.17	0.20	0.04	0.01	0.4	0.4	0.5
South Africa			Probable	11.4	3.64	4.00	4.62		0.60	0.71	0.13	0.02	1.3	1.5	1.7
		Total		**14.3**	**3.70**	**4.07**	**4.70**		**0.77**	**0.90**	**0.17**	**0.03**	**1.7**	**1.9**	**2.2**
Two Rivers	46	**UG2**	Proved	2.1	2.50	2.79	3.41		0.11	0.06	0.02	0.00	0.2	0.2	0.2
South Africa			Probable	26.9	2.64	2.95	3.57		1.41	0.85	0.26	0.02	2.3	2.6	3.1
Non-managed		**Total**		**29.1**	**2.63**	**2.94**	**3.55**		**1.52**	**0.92**	**0.28**	**0.03**	**2.5**	**2.7**	**3.3**
Zimplats	87	**MSZ**	Proved	89.9	3.06	3.19	3.37		4.60	3.61	0.38	0.65	8.9	9.2	9.7
Zimbabwe			Probable	116.8	3.07	3.20	3.37		5.97	4.69	0.49	0.85	11.5	12.0	12.7
		Total		**206.7**	**3.07**	**3.20**	**3.37**		**10.57**	**8.30**	**0.87**	**1.51**	**20.4**	**21.2**	**22.4**
Mimosa	50	**MSZ**	Proved	9.2	3.37	3.51	3.76		0.51	0.40	0.04	0.08	1.0	1.0	1.1
Zimbabwe			Probable	4.6	3.19	3.34	3.58		0.25	0.19	0.02	0.04	0.5	0.5	0.5
Non-managed		**Total**		**13.8**	**3.31**	**3.45**	**3.70**		**0.76**	**0.59**	**0.06**	**0.11**	**1.5**	**1.5**	**1.6**
Lac des Iles	100	**IC**	Proved	2.4	2.46	2.46	2.46		0.02	0.16	–	0.01	0.2	0.2	0.2
Canada			Probable	40.7	2.30	2.30	2.30		0.23	2.57	–	0.20	3.0	3.0	3.0
		Total		**43.0**	**2.31**	**2.31**	**2.31**		**0.25**	**2.74**	**–**	**0.21**	**3.2**	**3.2**	**3.2**
All		**Total***		**419.7**	**3.06**	**3.23**	**3.54**		**21.8**	**17.3**	**2.40**	**2.18**	**41.2**	**43.6**	**47.8**

* *Total summation of 4E and 6E grade and ounces for Lac des Iles Mineral Reserve estimates only includes the sum of platinum, palladium and gold. This is a result of the inherent negligible rhodium, ruthenium and iridium content at Lac des Iles and available assay methodologies applied at those operations.*

Attributable Mineral Resources and Mineral Reserves

Summary of attributable Mineral Reserve estimate

	Attributable Moz Pt				
	2016	2017	2018	2019	2020
Impala	13.5	12.1	7.6	6.7	**7.9**
Marula	1.1	1.0	1.0	0.9	**0.8**
Two Rivers*	1.1	0.8	1.7	1.5	**1.5**
Zimplats	5.1	7.5	10.0	11.2	**10.6**
Mimosa*	0.9	1.0	0.9	0.9	**0.8**
Lac des Iles	–	–	–	–	**0.2**
Total	**21.6**	**22.4**	**21.2**	**21.2**	**21.8**

	Attributable Moz Pd				
	2016	2017	2018	2019	2020
Impala	6.6	5.9	3.7	3.2	**3.9**
Marula	1.1	1.1	1.0	0.9	**0.9**
Two Rivers*	0.6	0.5	1.1	0.9	**0.9**
Zimplats	4.1	5.9	7.9	8.9	**8.3**
Mimosa*	0.7	0.8	0.7	0.7	**0.6**
Lac des Iles	–	–	–	–	**2.7**
Total	**13.1**	**14.1**	**14.4**	**14.7**	**17.3**

* *Non-managed.*

Notes

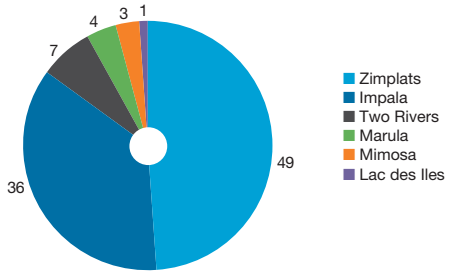
- The modifying factors used to convert a Mineral Resource to a Mineral Reserve are derived from historical performance while taking future anticipated conditions into account
- Mineral Reserves quoted reflect the grade delivered to the mill
- Impala Mineral Reserves increased since 2019 due to the changed basket prices which resulted in the inclusion of 1, 12 and 14 Shaft LoM production estimates
- The acquisition of North American Palladium Limited added an additional 0.2Moz Pt and 2.7Moz Pd to the Implats inventory
- Rounding of numbers may result in minor computational discrepancies. The results tabulated in this report must be read as estimates and not as calculations
- Implats reported a minor increase in the attributable Mineral Reserves of 21.8Moz Pt at 30 June 2020 compared to 21.2Moz Pt in June 2019. The palladium Mineral Reserves increased by 2.6Moz Pd due to the addition of the Lac des Iles operation from 14.7Moz Pd in June 2019 to 17.3Moz Pd at 30 June 2020
- The economic assessment resulted in effective tail-cutting of the production profiles at all the southern African operations.

The attendant series of graphs compare the last few reporting periods and indicate an overall increase in attributable Mineral Reserves in line with depletion and the aforementioned changes:

- The total estimated attributable Mineral Reserves showing 21.8Moz Pt, 17.3Moz Pd, 2.4Moz Rh and 2.2Moz Au
- The five-year statistics for the estimated attributable platinum, palladium, rhodium and gold Mineral Reserves indicate an increase as at 30 June 2020 compared with the previous reporting period, due to the increase in palladium estimate
- A comparison based on platinum and palladium ounces shows that the Zimplats Mineral Reserves make up the bulk of these (49% Pt and 48% Pd of the total Implats inventory)
- The grouping of the platinum and palladium ounces per reef shows that some 52% and 51%, respectively, of the attributable Implats Mineral Reserves is hosted by the MSZ at the Zimplats and Mimosa Mines
- 29% of the total Group platinum estimate and 23% of the total palladium estimate is hosted by the UG2 Reef at the combined Impala, Marula and Two Rivers operations. The Lac des Iles Intrusive Complex represents an estimated 1% of the total Group platinum estimate and some 16% of the total Implats palladium inventory.

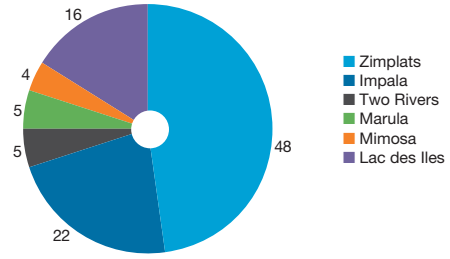
Attributable platinum Mineral Reserve estimate of 21.8Moz

as at 30 June 2020 (%)



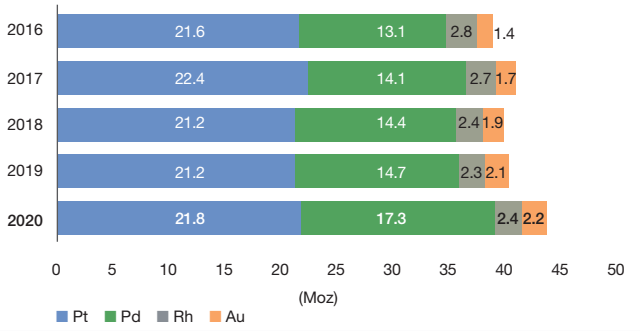
Attributable palladium Mineral Reserve estimate of 17.3Moz

as at 30 June 2020 (%)



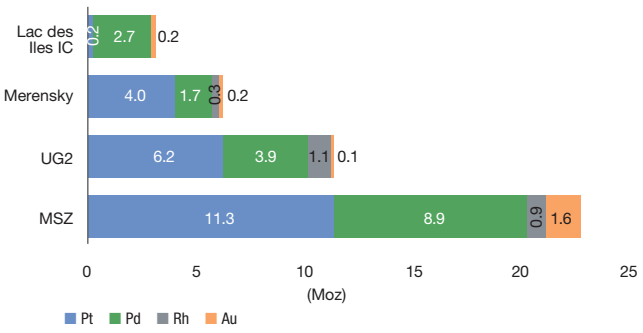
Attributable Mineral Reserve estimate (4E)

as at 30 June 2020 (Moz)



Attributable Mineral Reserve estimate (Moz) per reef

as at 30 June 2020 (Moz)



Attributable Mineral Resources and Mineral Reserves

Attributable Mineral Resource summary, exclusive of Mineral Reserves

Both inclusive and exclusive methods of reporting Mineral Resources are permitted by various international reporting codes. Implats has adopted inclusive reporting for consistency purposes and to be aligned with its strategic partners. A collation of the Mineral Resources estimates exclusive of Mineral Reserves is presented below and allows for additional transparency. Note that this format is not adhered to by Implats' strategic partners and the corresponding estimates have been derived from details provided to Implats.

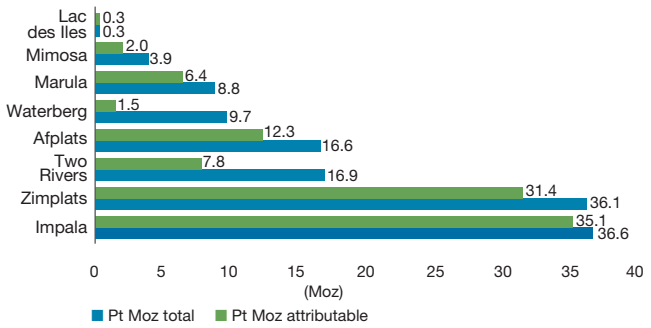
Summary of Mineral Resource estimate, exclusive of Mineral Reserves as at 30 June 2020

	Implats share-holding %	Mineral Resource estimates, exclusive of Mineral Reserves		Total estimate				Attributable estimate							
		Orebody	Category	Tonnage Mt	3E Grade g/t	4E Grade g/t	6E Grade g/t	Tonnage Mt	Pt	Pd	Rh	Moz Au	3E	4E	6E
Impala	96	**Merensky**	Measured	61.6	6.12	6.47	7.22	59.1	7.80	3.40	0.66	0.44	11.6	12.3	13.7
			Indicated	68.8	6.09	6.43	7.18	66.1	8.67	3.78	0.73	0.48	12.9	13.7	15.2
South Africa			Inferred	11.2	6.94	7.33	8.18	10.8	1.61	0.70	0.14	0.09	2.4	2.5	2.8
		UG2	Measured	92.1	4.92	5.47	6.51	88.4	8.96	4.85	1.56	0.18	14.0	15.6	18.5
			Indicated	70.5	4.96	5.51	6.56	67.7	6.91	3.75	1.21	0.14	10.8	12.0	14.3
			Inferred	12.4	4.82	5.36	6.38	11.9	1.19	0.64	0.21	0.02	1.9	2.1	2.4
		Total		**316.7**	**5.49**	**5.95**	**6.86**	**304.0**	**35.14**	**17.12**	**4.50**	**1.35**	**53.6**	**58.1**	**67.0**
Marula	73	**Merensky**	Measured	34.3	4.14	4.26	4.56	25.0	1.99	1.08	0.10	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	0.06	0.7	0.8	0.8
South Africa			Inferred	5.2	3.71	3.82	4.10	3.8	0.27	0.15	0.01	0.04	0.4	0.5	0.5
		UG2	Measured	30.4	5.74	6.31	7.34	22.2	1.91	2.11	0.41	0.06	4.1	4.5	5.2
			Indicated	22.4	5.64	6.21	7.23	16.3	1.41	1.51	0.30	0.05	3.0	3.3	3.8
			Inferred	6.4	5.75	6.32	7.36	4.7	0.40	0.45	0.09	0.01	0.9	1.0	1.1
		Total		**106.2**	**4.99**	**5.36**	**6.06**	**77.5**	**6.42**	**5.53**	**0.92**	**0.48**	**12.4**	**13.4**	**15.1**
Afplats	74	**UG2**	Measured	98.4	4.60	5.19	6.46	72.8	7.40	3.31	1.39	0.06	10.8	12.1	15.1
			Indicated	10.8	4.52	5.11	6.36	8.0	0.80	0.36	0.15	0.01	1.2	1.3	1.6
South Africa			Inferred	55.9	4.45	5.06	6.25	41.3	4.07	1.82	0.77	0.03	5.9	6.7	8.3
			Total	**165.1**	**4.54**	**5.14**	**6.38**	**122.2**	**12.27**	**5.48**	**2.31**	**0.09**	**17.8**	**20.2**	**25.1**
Two Rivers	46	**Merensky**	Indicated	75.7	3.03	3.13	3.42	34.8	2.09	1.07	0.12	0.23	3.4	3.5	3.8
			Inferred	61.4	3.84	3.98	4.32	28.2	2.07	1.19	0.12	0.23	3.5	3.6	3.9
South Africa		**UG2**	Measured	2.9	4.39	4.92	5.92	1.3	0.13	0.06	0.02	0.00	0.2	0.2	0.3
			Indicated	18.7	4.35	4.83	5.78	8.6	0.72	0.47	0.13	0.01	1.2	1.3	1.6
			Inferred	80.3	4.03	4.47	5.33	36.9	2.78	1.96	0.51	0.05	4.8	5.3	6.3
Non-managed		**Total**		**239.0**	**3.70**	**3.95**	**4.51**	**110.0**	**7.79**	**4.75**	**0.91**	**0.52**	**13.1**	**14.0**	**15.9**
Waterberg	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
South Africa			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
Non-managed		**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**
Zimplats	87	**MSZ**	Measured	67.1	3.59	3.74	3.95	58.4	3.50	2.70	0.29	0.53	6.7	7.0	7.4
			Indicated	333.0	3.45	3.59	3.80	289.7	17.38	12.14	1.34	2.60	32.1	33.5	35.4
Zimbabwe			Inferred	213.1	3.29	3.43	3.61	185.4	10.52	7.51	0.82	1.59	19.6	20.4	21.5
		Total		**613.2**	**3.41**	**3.55**	**3.75**	**533.5**	**31.40**	**22.35**	**2.45**	**4.72**	**58.5**	**60.9**	**64.3**
Mimosa	50	**MSZ**	Measured	23.4	3.36	3.51	3.72	11.7	0.65	0.51	0.05	0.10	1.3	1.3	1.4
			Indicated	19.3	3.47	3.62	3.85	9.7	0.56	0.43	0.05	0.08	1.1	1.1	1.2
Zimbabwe			Inferred	26.7	3.37	3.52	3.74	13.4	0.76	0.57	0.06	0.11	1.4	1.5	1.6
Non-managed		**Total**		**69.5**	**3.39**	**3.54**	**3.76**	**34.7**	**1.97**	**1.51**	**0.16**	**0.29**	**3.8**	**4.0**	**4.2**
Lac des Iles	100	**IC**	Measured	4.2	2.85	2.85	2.85	4.2	0.03	0.33	–	0.02	0.4	0.4	0.4
			Indicated	23.7	2.30	2.30	2.30	23.7	0.16	1.49	–	0.10	1.8	1.8	1.8
Canada			Inferred	8.9	2.85	2.85	2.85	8.9	0.06	0.71	–	0.04	0.8	0.8	0.8
		Total		**36.8**	**2.50**	**2.50**	**2.50**	**36.8**	**0.25**	**2.53**	**–**	**0.17**	**3.0**	**3.0**	**3.0**
All Mineral Resources exclusive of Mineral Reserves			Measured*	473	4.62	4.97	5.67	347	32.6	19.0	4.5	1.7	53	58	67
			Indicated*	835	4.04	4.23	4.56	531	40.0	27.1	4.1	4.0	71	75	82
			Inferred*	548	3.75	3.98	4.41	343	24.0	16.3	2.7	2.3	43	45	50
		Total*		**1 856**	**3.96**	**4.20**	**4.65**	**1 222**	**96.7**	**62.4**	**11.3**	**8.0**	**167**	**178**	**200**

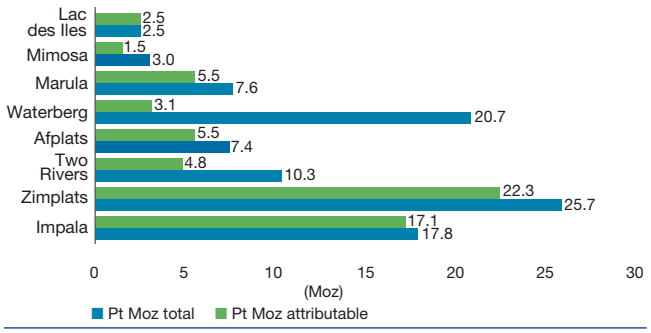
* *Total summation of 4E and 6E grade and ounces for Lac des Iles Mineral Resources estimate, exclusive of Mineral Reserves only includes the sum of platinum, palladium and gold and the summation of 6E grade and ounces for the Waterberg project Mineral Resource estimates, exclusive of Mineral Reserves is the sum of platinum, palladium, rhodium and gold. This is a result of the inherent negligible rhodium, ruthenium and iridium content at Lac des Iles and available assay methodologies applied at those operations.*

Attributable Mineral Resources and Mineral Reserves

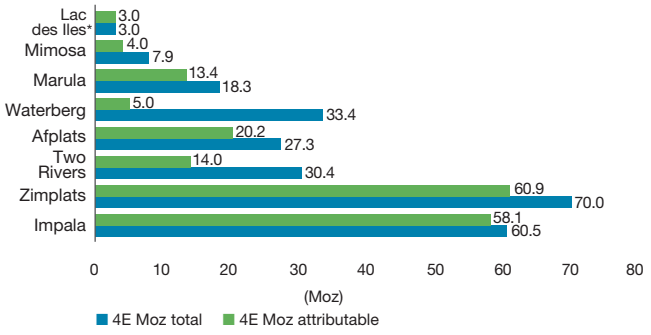
Exclusive platinum Mineral Resource estimate Moz
as at 30 June 2020 (total and attributable)



Exclusive palladium Mineral Resource estimate Moz
as at 30 June 2020 (total and attributable)



Exclusive 4E Mineral Resource estimate Moz
as at 30 June 2020 (total and attributable)



** Lac des Iles estimate includes 3E only.*

Notes

- The figures in the accompanying table reflect those Mineral Resources that have not been converted to Mineral Reserves, ie 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 the mixing of Mineral Resource figures with production estimates
- Mineral Resource estimates allow for estimated geological losses but not for anticipated pillar losses during eventual mining.

Note that similar to previous reports, certain areas have been excluded from the Mineral Resource estimates and are now reported in a standalone section at the end of this report. Implats has chosen not to publish Merensky Reef Mineral Resource estimates for Afplats as the eventual economic extraction is presently in doubt

- The major contributor to the decrease in the platinum estimate of the Mineral Resources exclusive of Mineral Reserves is Impala. With the change in economic basket prices, 1, 12 and 14 Shafts were included in LoM I which resulted in the removal of these from the exclusive Mineral Resources. The decrease at Impala is slightly off-set by the addition of Waterberg and Lac des Iles exclusive Mineral Resources and the tail-cutting applied to the Mimosa and Zimplats' Mineral Reserves
- The major attributors to the increase in the palladium Mineral Resources exclusive of Mineral Reserves are the addition of Waterberg and Lac des Iles which are palladium dominant and the tail-cutting applied to the Mimosa and Zimplats' Mineral Reserves. At Impala the same decrease in the palladium estimate is noticed as in the case of platinum, with the change in economic basket prices. 1, 12 and 14 Shafts were included in LoM I which resulted in the removal from the exclusive Mineral Resources
- The exclusive Mineral Resources summary excluded the dormant storage facilities of Tailings Complex 1 and 2 at Impala. This is reported under the Impala section
- Rounding of numbers may result in minor computational discrepancies. Mineral Resource estimates are inherently imprecise in nature. The results tabulated in this report must be read as estimates and not as calculations. Inferred Mineral Resources in particular are qualified as approximations.

Summary of attributable Mineral Resource estimate exclusive of Mineral Reserves

	Attributable Moz Pt				
	2016	2017	2018	2019	2020
Impala	34.6	35.6	38.0	39.4	**35.1**
RBRJV	1.4	1.5	–	–	**–**
Marula	6.9	6.5	6.5	6.4	**6.4**
Afplats	12.3	12.3	12.3	12.3	**12.3**
Imbasa/Inkosi	8.6	8.6	–	–	**–**
Two Rivers*	10.8	9.7	9.1	7.8	**7.8**
Waterberg*	–	–	–	–	**1.5**
Zimplats	87.8	83.5	33.1	30.3	**31.4**
Mimosa*	2.3	2.0	1.9	1.9	**2.0**
Lac des Iles	–	–	–	–	**0.3**
Total	**164.7**	**159.7**	**100.9**	**98.2**	**96.7**

	Attributable Moz Pd				
	2016	2017	2018	2019	2020
Impala	17.2	17.2	18.6	19.2	**17.1**
RBRJV	0.7	0.7	–	–	**–**
Marula	6.0	5.4	5.3	5.6	**5.5**
Afplats	5.5	5.5	5.5	5.5	**5.5**
Imbasa/Inkosi	3.9	3.9	–	–	**–**
Two Rivers*	6.7	5.8	5.4	4.8	**4.8**
Waterberg*	–	–	–	–	**3.1**
Zimplats	70.9	67.5	24.4	21.7	**22.3**
Mimosa*	1.8	1.5	1.5	1.5	**1.5**
Lac des Iles	–	–	–	–	**2.5**
Total	**112.8**	**107.6**	**60.7**	**58.3**	**62.4**

** Non-managed.*

Reconciliation of estimates

The consolidated high-level reconciliation of total Mineral Resources and Mineral Reserves for both managed and non-managed operations is shown below. These high-level variances are relatively small. Particulars of these variances, in addition to depletions, are illustrated in more detail in the sections by operation. Rounding of numbers may result in computational discrepancies, specifically in these high-level comparisons.

Total Mineral Resource tonnage estimate (million) – inclusive of Mineral Reserves

	2016	2017	2018	2019	Variance	2020	Attributable 2020
Impala*	442	502	453	441	(13)	**427**	410
Marula	106	127	126	125	(1)	**123**	90
Afplats	165	165	165	165	–	**165**	122
Imbasa/Inkosi	175	175	–	–	–	**–**	–
Two Rivers	350	317	353	314	1	**316**	145
Waterberg	–	–	–	–	309	**309**	46
Zimplats	2 068	2 060	1 002	1 003	(4)	**1 000**	870
Mimosa	125	120	116	112	(2)	**110**	55
Lac des Iles	–	–	–	–	80	**80**	80
Total	**3 432**	**3 466**	**2 215**	**2 161**	**370**	**2 530**	**1 819**

* *Includes the RBR JV 2014 – 2017.*

Total platinum Mineral Resource ounce estimate (million) – inclusive of Mineral Reserves

	2016	2017	2018	2019	Depletion	Gains and other changes	2020	Attributable 2020
Impala*	58.2	57.9	50.9	50.7	(0.84)	(0.6)	**49.3**	47.3
Marula	10.8	10.7	10.6	10.4	(0.10)	(0.1)	**10.2**	7.4
Afplats	16.6	16.6	16.6	16.6	–	–	**16.6**	12.3
Imbasa/Inkosi	16.3	16.3	–	–	–	–		–
Two Rivers	25.1	22.4	25.5	23.2	(0.16)	0.3	**23.3**	10.7
Waterberg	–	–	–	–	–	9.7	**9.7**	1.5
Zimplats	109.0	108.5	57.3	56.5	(0.55)	0.9	**56.9**	49.5
Mimosa	7.2	6.9	6.7	6.4	(0.22)	0.1	**6.3**	3.2
Lac des Iles	–	–	–	–		0.5	**0.5**	0.5
Total	**243.2**	**239.1**	**167.6**	**163.8**	**(1.9)**	**11.0**	**172.9**	**132.4**

* *Includes the RBR JV 2014 – 2017.*

Total palladium Mineral Resource ounce estimate (million) – inclusive of Mineral Reserves

	2016	2017	2018	2019	Depletion	Gains and other changes	2020	Attributable 2020
Impala*	28.1	28.1	24.8	24.6	(0.45)	(0.2)	**24.0**	23.0
Marula	9.3	9.2	9.0	9.3	(0.10)	(0.0)	**9.2**	6.7
Afplats	7.4	7.4	7.4	7.4	–	–	**7.4**	5.5
Imbasa/Inkosi	7.3	7.3	–	–	–	–	**–**	–
Two Rivers	15.5	13.5	15.4	14.3	(0.10)	(0.0)	**14.2**	6.5
Waterberg	–	–	–	–	–	20.7	**20.7**	3.1
Zimplats	87.7	87.3	43.0	42.0	(0.43)	0.5	**42.1**	36.6
Mimosa	5.6	5.4	5.2	5.0	(0.17)	0.1	**4.9**	2.5
Lac des Iles	–	–	–	–	–	5.9	**5.9**	5.9
Total	**160.8**	**158.1**	**104.8**	**102.6**	**(1.2)**	**27.1**	**128.5**	**89.9**

* *Includes the RBR JV 2014 – 2017.*

Reconciliation of estimates

Notes

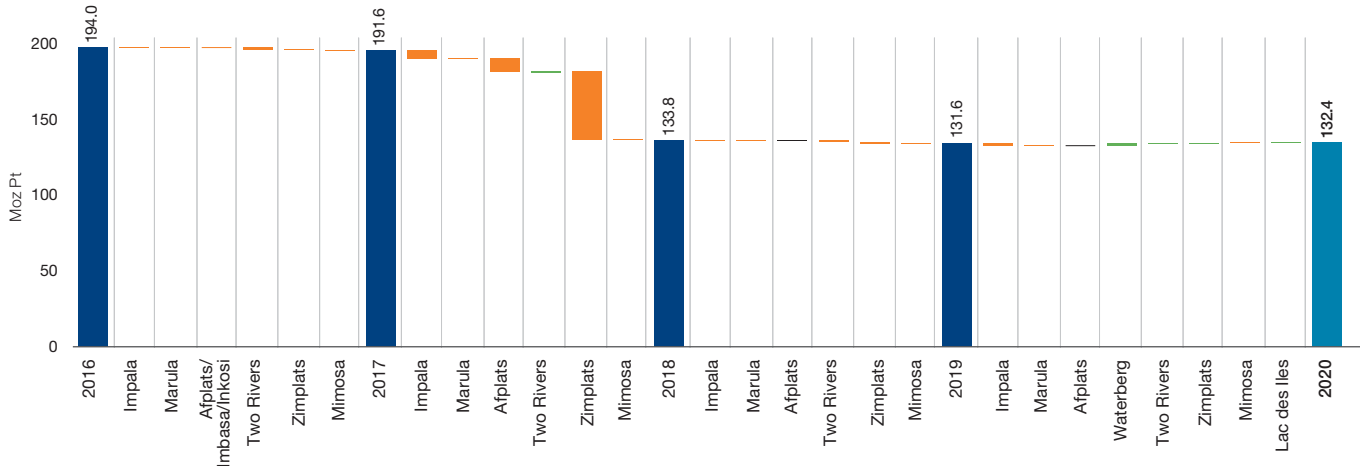
- The Impala estimate in the above table includes the contiguous Impala/RBR JV estimate from 2014 to 2017 and relates to the prospecting JV over deeper seated down-dip prospecting rights at Impala; the project was terminated by mutual agreement in 2018
- Depletion was adjusted by global concentrator and mine-call factors
- Potential impact of pillar factors was taken into account
- Imbasa and Inkosi Mineral Resources are excluded from 2018 further to the decision to dispose of Implats' interest
- Smaller variances are mostly due to depletion and updates to the estimation models
- The Group Mineral Resources increased by some 370 million tonnes, 8.9Moz platinum and 25.8Moz palladium since 30 June 2019.

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

- 2016 to 2017: No material change, mostly depletion
- 2017 to 2018: At Impala, as the RBR JV prospecting rights were not renewed; The disposal of the Imbasa and Inkosi areas; the release of the Zimplats gazetted land, impacted the Mineral Resources negatively. The increase in the Two Rivers Mineral Resources had a minor positive effect on the overall Group Mineral Resources
- 2018 to 2019: The major decrease in Mineral Resources was at Two Rivers with the exclusion of a portion of the Buffelshoek Merensky Mineral Resources due to an update in the Mineral Resource classification based on consideration for RPEEE
- 2019 to 2020: Effective year-on-year increase due to the inclusion of the Lac des Iles and Waterberg project Mineral Resource estimates.

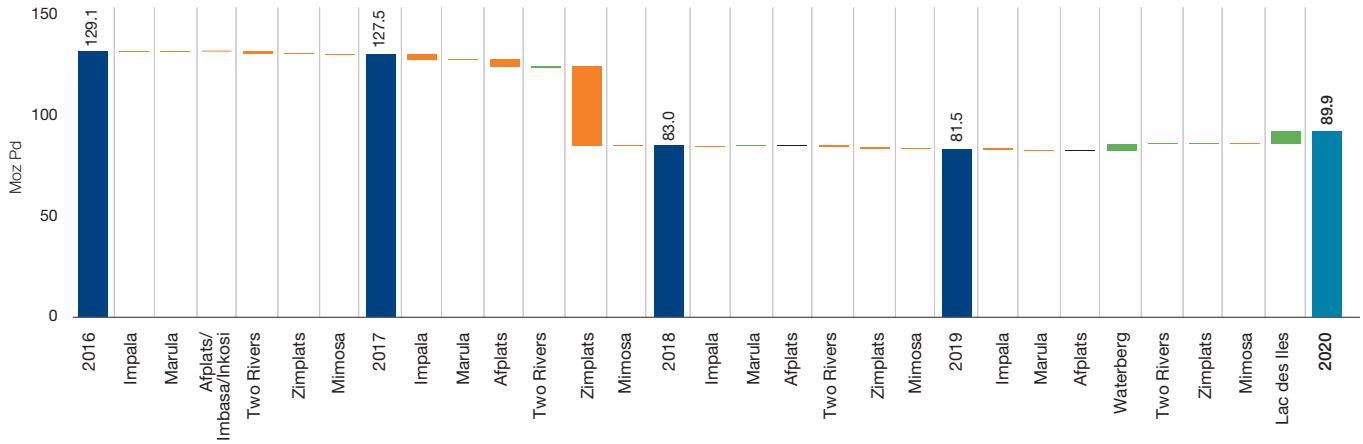
Attributable platinum Mineral Resource estimate as at 30 June 2020*

(variance Moz Pt)



Attributable palladium Mineral Resource estimate as at 30 June 2020*

(variance Moz Pd)



* *The historical material reduction at Zimplats in 2018 relates to the release of ground to the Zimbabwean Government.*

Reconciliation of estimates

Total Mineral Reserves tonnage estimate (million)

	2016	2017	2018	2019	Depletion	Gains and other changes	2020	Attributable 2020
Impala	184	168	107	95	(9,6)	31,7	**118**	113
Marula	26	25	22	21	(1,6)	0,6	**20**	14
Two Rivers	43	33	71	65	(3,0)	1,3	**63**	29
Zimplats	111	165	226	251	(6,8)	(6,6)	**238**	207
Mimosa	30	37	34	32	(2,7)	(1,3)	**28**	14
Lac des Iles					–	43,0	**43**	43
Total	**395**	**429**	**461**	**464**	**(23,7)**	**68,7**	**509**	**420**

Total platinum Mineral Reserve ounce estimate (million)

	2016	2017	2018	2019	Depletion	Gains and other changes	2020	Attributable 2020
Impala	14,0	12,6	7,9	7,0	(0,73)	1,9	**8,2**	7,9
Marula	1,5	1,4	1,3	1,2	(0,09)	(0,0)	**1,1**	0,8
Two Rivers	2,3	1,7	3,7	3,3	(0,14)	0,1	**3,3**	1,5
Zimplats	5,9	8,6	11,5	12,8	(0,33)	(0,4)	**12,1**	10,6
Mimosa	1,7	2,1	1,9	1,7	(0,15)	(0,1)	**1,5**	0,8
Lac des Iles					–	0,2	**0,2**	0,2
Total	**25,4**	**26,3**	**26,3**	**26,1**	**(1,44)**	**1,8**	**26,5**	**21,8**

Total palladium Mineral Reserve ounce estimate (million)

	2016	2017	2018	2019	Depletion	Gains and other changes	2020	Attributable 2020
Impala	6,8	6,1	3,8	3,4	(0,39)	1,0	**4,0**	3,9
Marula	1,5	1,5	1,3	1,3	(0,09)	0,0	**1,2**	0,9
Two Rivers	1,3	1,0	2,3	2,0	(0,08)	0,1	**2,0**	0,9
Zimplats	4,7	6,7	9,1	10,2	(0,28)	(0,4)	**9,5**	8,3
Mimosa	1,4	1,6	1,5	1,4	(0,12)	(0,0)	**1,2**	0,6
Lac des Iles					–	2,7	**2,7**	2,7
Total	**15,8**	**16,9**	**18,1**	**18,3**	**(0,97)**	**3,4**	**20,7**	**17,3**

Notes

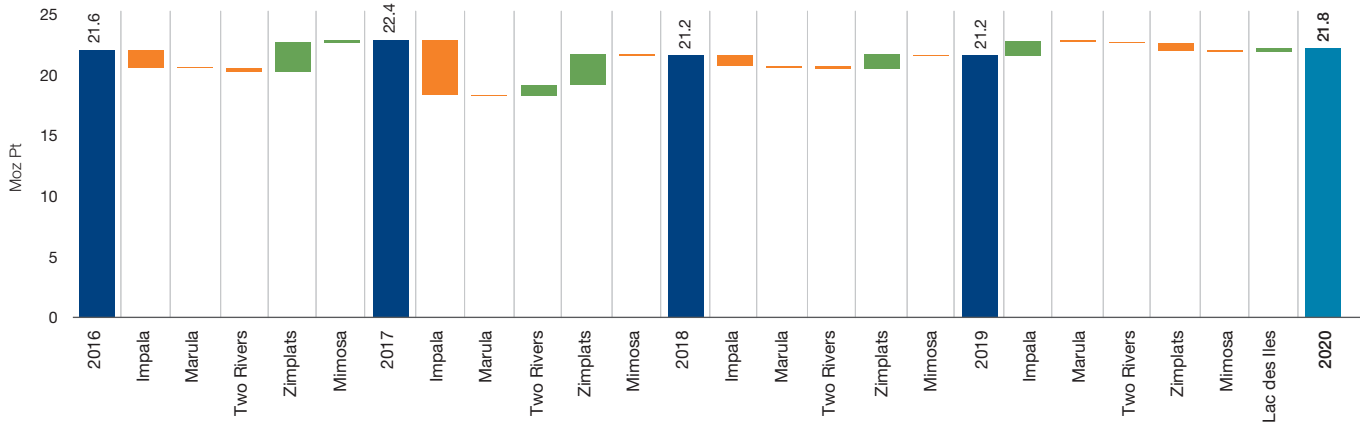
- Depletion was adjusted by global concentrator factors
- The Mineral Reserve estimate decreased at Zimplats due to RPEEE considerations where economic tail–cutting impacted on the estimate
- The minor decreases in the Marula, Two Rivers and Mimosa Mineral Reserves estimates are due to mining depletion
- At Impala the Mineral Reserves estimate increased due to the progression of certain LoM IIA areas to LoM I based on RPEEE and economic considerations
- Smaller changes over the past few years are mostly related to depletion.

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

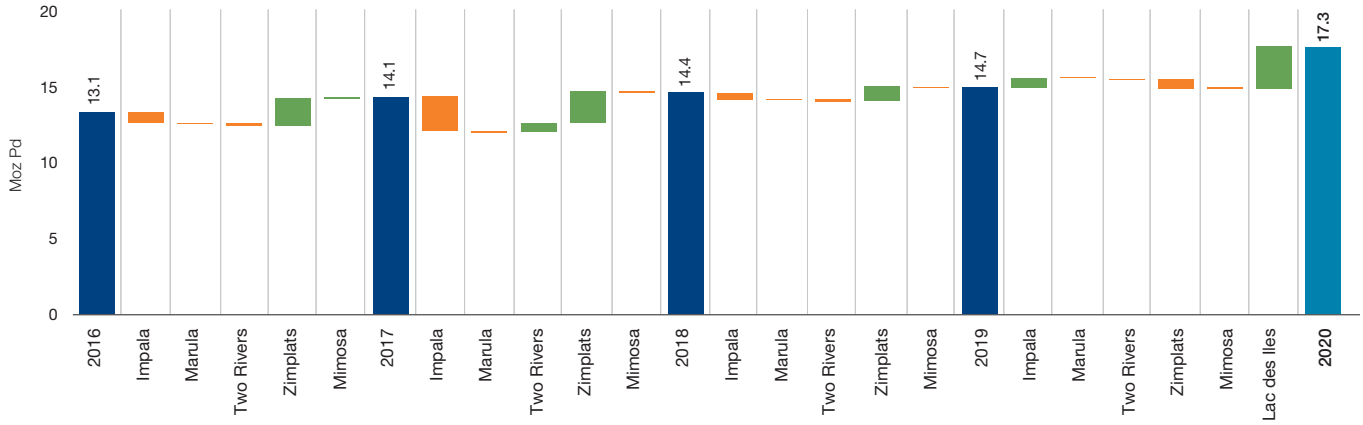
- 2016 – 2017: At Impala the economic tail–cut impacted negatively, while the addition of the Mupani Mine (Portal 6) at Zimplats effectively increased the Mineral Reserve estimate
- 2017 – 2018: At Impala the strategic review and economic valuation of the individual shafts and tail–cutting impacted negatively, while the addition of some Upper Ores at Bimha Mine and Mupani Mine at Zimplats and the Kalkfontein RE portion at Two Rivers effectively increased the Mineral Reserve estimate
- 2018 – 2019: Mining depletions were off–set by the addition of Mineral Reserves at Mupani Mine (Portal 6) after the conversion of a portion of Portal 8 Mineral Resources to Mineral Reserves; this follows from a footprint reallocation of Portal 8 ground to Mupani and Portal 10 either side of the Manzamunyama fault respectively
- 2019 – 2020: Effective increase in Mineral Reserve estimates due to the inclusion of Lac des Iles Mineral Reserves as well as the extensions to the LoM I at Impala.

Reconciliation of estimates

Attributable platinum Mineral Reserve estimate as at 30 June 2020
(variance Moz Pt)



Attributable palladium Mineral Reserve estimate as at 30 June 2020
(variance Moz Pd)



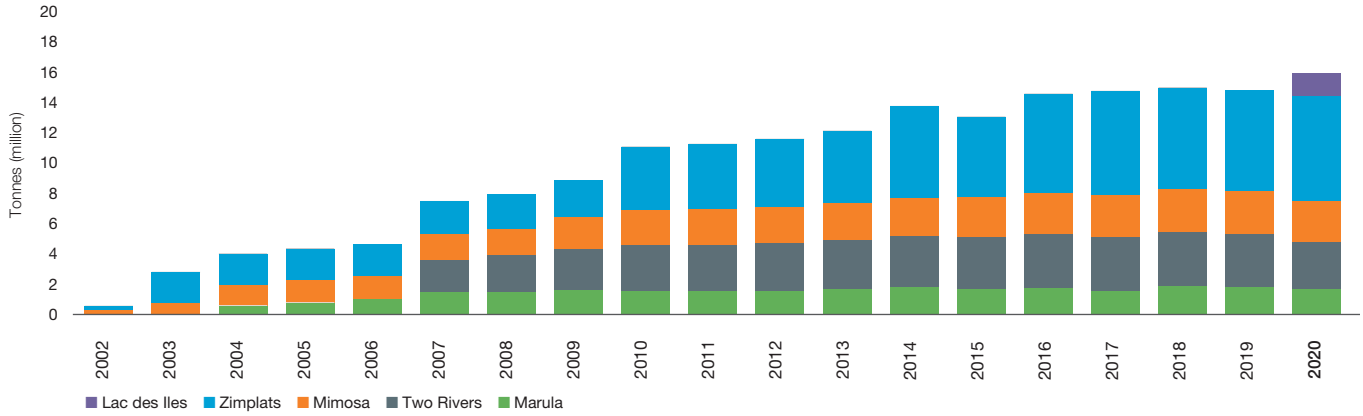
3D geology modelling, Impala

Historic production

SUMMARY STATISTICS RELATING TO THE HISTORIC PRODUCTION OF THE GROUP IS INDICATED IN THE ACCOMPANYING GRAPHS AND TABLE. OVERALL THE GROSS REFINED PLATINUM OUNCES FOR THE GROUP REDUCED FROM 1 526KOZ PLATINUM TO 1 349KOZ PLATINUM AND FROM 910KOZ PALLADIUM TO 892KOZ PALLADIUM.

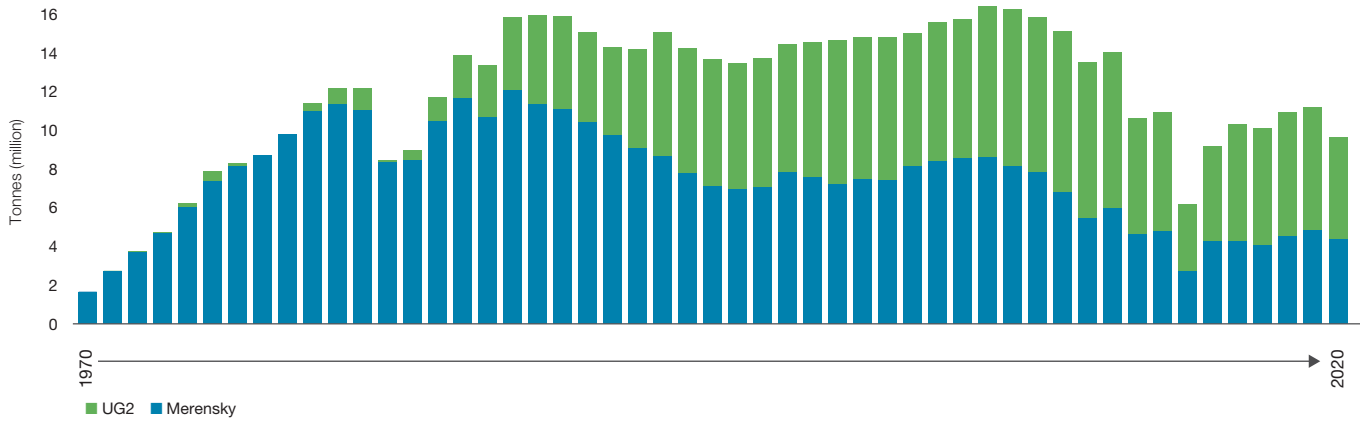
Historic annual production at Marula, Two Rivers, Mimosa, Zimplats and Lac des Iles

as at 30 June 2020 (million tonnes)



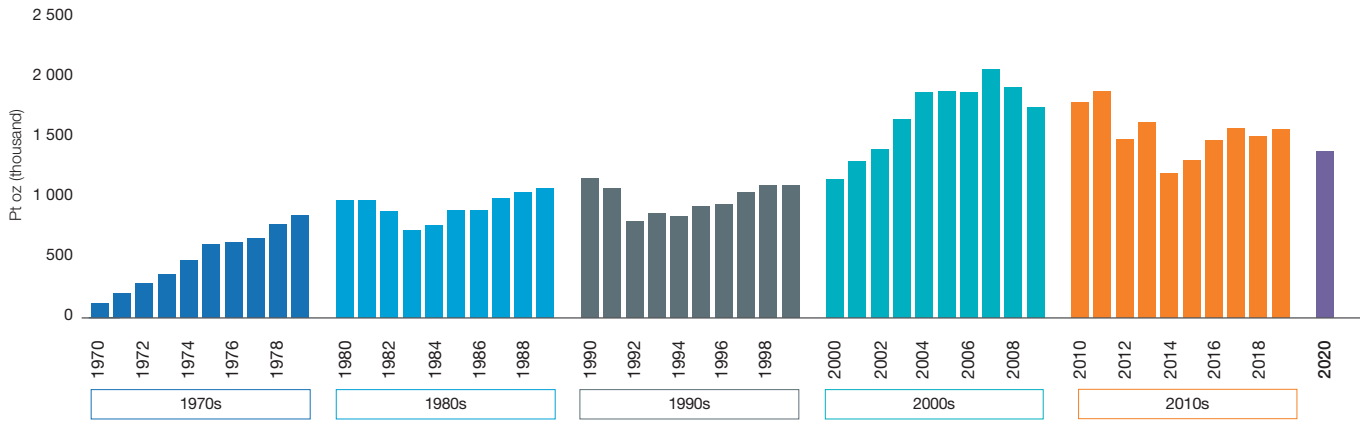
Historic annual production at Impala

as at 30 June 2020 (million tonnes)



Gross Implats platinum production

as at 30 June 2020 (kilo-ounces)



Historic production

	units	2020	2019	2018	2017	2016
Tonnes milled						
Impala	Kt	**9 635**	11 211	10 947	10 121	10 316
Marula	Kt	**1 636**	1 772	1 838	1 495	1 703
Two Rivers	Kt	**3 016**	3 405	3 455	3 501	3 511
Zimplats	Kt	**6 751**	6 486	6 570	6 716	6 406
Mimosa	Kt	**2 701**	2 814	2 802	2 729	2 641
Lac des Iles	Kt	**1 553**	–	–	–	–
Mill head grade						
Impala	g/t 6E	**3.91**	3.99	4.09	4.06	4.16
Marula	g/t 6E	**4.70**	4.40	4.33	4.26	4.25
Two Rivers	g/t 6E	**3.45**	3.52	3.63	3.90	4.06
Zimplats	g/t 6E	**3.48**	3.48	3.48	3.49	3.48
Mimosa	g/t 6E	**3.85**	3.83	3.84	3.83	3.88
Lac des Iles	g/t 3E	**2.45**	–	–	–	–
Production ex Impala Mine						
Platinum refined	Koz	**638.3**	753.8	580.8	654.6	626.9
Palladium refined	Koz	**343.2**	332.0	300.4	308.1	299.6
Rhodium refined	Koz	**100.0**	86.9	88.5	88.7	81.1
Nickel refined	t	**4 720**	3 439	3 895	3 609	3 331
6E refined production	Koz	**1 270.1**	1 390.8	1 126.8	1 246.6	1 219.6
Production ex Marula Mine*						
Platinum in concentrate	Koz	**80.5**	83.0	85.1	67.9	77.7
Palladium in concentrate	Koz	**82.6**	84.7	87.5	69.3	80.3
Rhodium in concentrate	Koz	**16.6**	17.3	17.8	14.1	16.4
Nickel in concentrate	t	**270**	270	252	213	277
6E in concentrate	Koz	**210.5**	216.9	223.5	177.6	204.6
Production ex Two Rivers Mine*						
Platinum in concentrate	Koz	**122.4**	147.2	162.5	181.9	185.9
Palladium in concentrate	Koz	**73.2**	86.0	96.6	107.1	110.9
Rhodium in concentrate	Koz	**21.2**	25.6	28.6	31.8	33.1
Nickel in concentrate	t	**481**	552	606	602	648
6E in concentrate	Koz	**261.0**	313.4	348.4	390.2	400.7

Historic production

	units	2020	2019	2018	2017	2016
Production ex Zimplats Mine*						
Platinum in matte	Koz	**266.9**	269.9	270.8	281.1	289.8
Palladium in matte	Koz	**228.0**	223.0	223.2	233.0	235.8
Rhodium in matte	Koz	**23.4**	23.9	23.9	25.4	27.1
Nickel in matte	t	**4 991**	5 295	4 931	5 111	5 434
6E in matte	Koz	**580.2**	579.6	578.3	601.7	616.9
Production ex Mimosa Mine*						
Platinum in concentrate	Koz	**116.6**	122.1	125.0	121.6	119.7
Palladium in concentrate	Koz	**91.7**	96.7	98.7	96.9	94.0
Rhodium in concentrate	Koz	**9.8**	10.5	10.8	10.5	9.9
Nickel in concentrate	t	**3 421**	3 567	3 651	3 441	3 461
6E in concentrate	Koz	**247.8**	260.6	265.6	258.9	253.7
Production ex Lac des Iles Mine*						
Platinum in concentrate	Koz	**6.4**	–	–	–	–
Palladium in concentrate	Koz	**84.7**	–	–	–	–
6E in concentrate	Koz	**97.4**	–	–	–	–
Gross margin						
Impala	%	**29.5**	6.9	(22.2)	(22.6)	(15.8)
Marula	%	**45.7**	10.1	(0.4)	(39.0)	(26.7)
Two Rivers	%	**45.3**	23.9	23.3	23.8	22.7
Zimplats	%	**48.7**	29.7	25.5	16.6	6.5
Mimosa	%	**34.8**	17.4	16.5	0.1	(9.2)
Lac des Iles	%	**27.0**	–	–	–	–
Gross Implats refined production**						
6E	Koz	**2 813**	3 074	2 925	3 100	2 908
Platinum	Koz	**1 349**	1 526	1 468	1 530	1 438
Palladium	Koz	**892**	910	849	932	885
Rhodium	Koz	**181**	206	199	204	185
Nickel	Kt	**15.4**	16.0	16.2	17.5	17.0

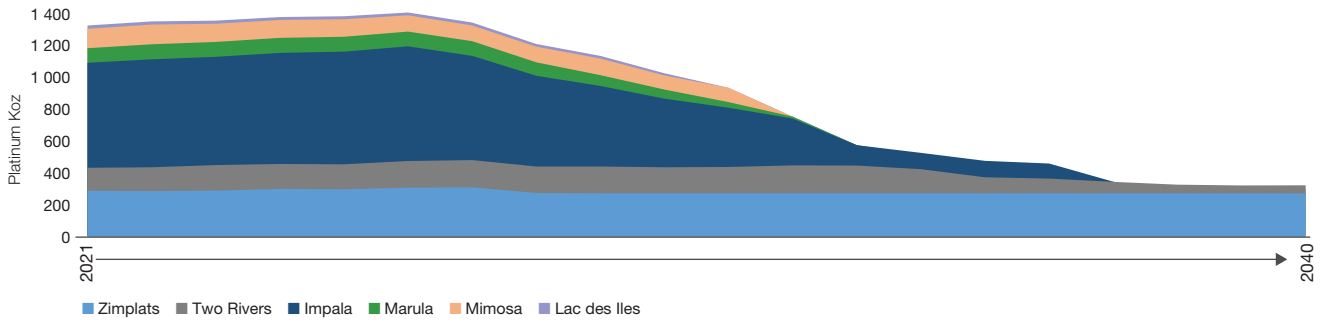
** Numbers reflect 100% of production and not the portion attributable to Implats.*
*** Includes IRS production from other sources.*
**** The nickel at Las des Iles is not reported as this is part of the offtake agreement with Glencore that remains in place until 2021.*

Life-of-mine production

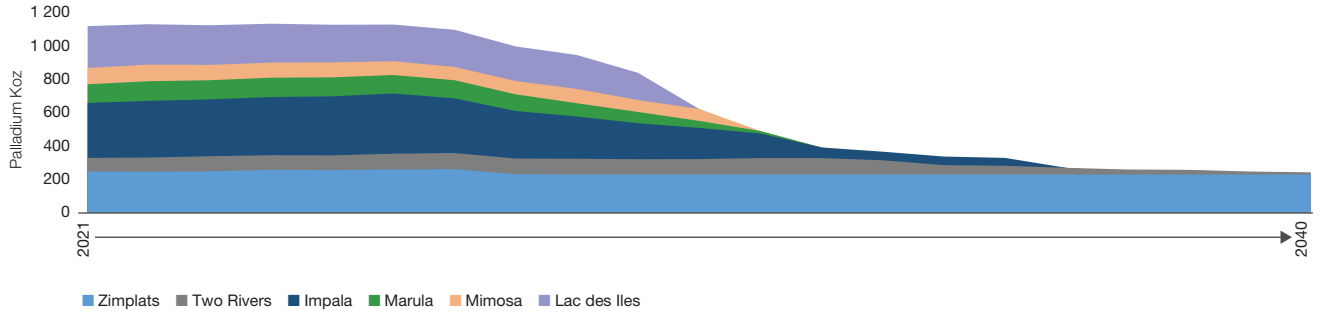
The high-level LoM (20-year) plan is depicted in the detailed sections per operation in terms of planning levels I, II and III. These graphs reflect 100% of the annual production forecasts and not the portion attributable to Implats. These do not include all the 'Blue Sky' opportunities – some of this potential is specifically 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. These 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. This represents the Mineral Reserve estimates as at 30 June 2020 and only reflects current infrastructure. There are no Inferred Mineral Resources included in the LoM I and Mineral Reserve estimates, other than minor incidental dilution which is included at zero grade. The impact of the 2018 strategic review at Impala where a number of shafts are earmarked for closure due to profitability reasons is still evident in the Impala and Group LoM profile, with the 2020 LoM profile being largely similar to 2019, however with some LoM I enhancements at Impala due to the transfer of some LoM IIA to LoM I in view of RPEEE and the improved outlook. At the same time going forward, Implats is committed to an increased strategic thrust to evaluate LoM scenarios and options in the effort to optimise current infrastructure and Mineral Resources.

Estimated Group 20-year platinum production profile LoM I
as at 30 June 2020 (100%)



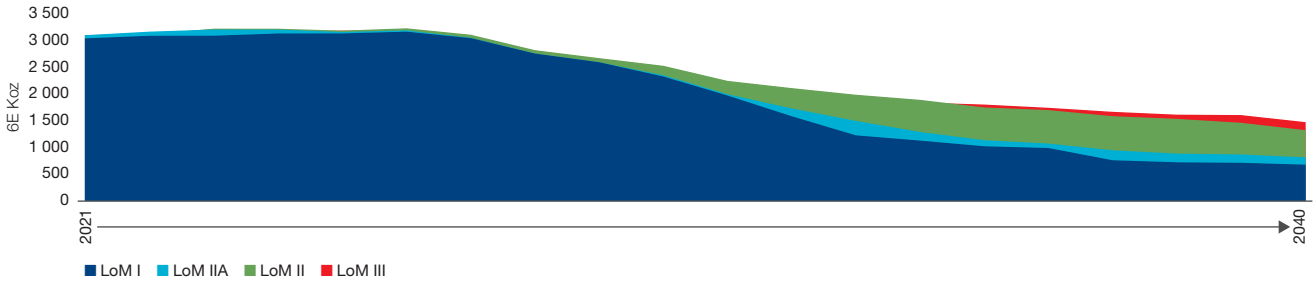
Estimated Group 20-year palladium production profile LoM I
as at 30 June 2020 (100%)



The pictorial 20-year profiles in this chapter are shown on the next page as a combination of level I with selected Level II, IIA and III profiles. Only LoM I is based on Mineral Reserves while LoM II and III have not been converted to Mineral Reserves. This combined graph therefore shows a similar low profile from 2036 onwards compared with the profile published as at 30 June 2019. It is clear from a combined Group perspective that a large 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. At Impala a large portion of the 2018 LoM level I production profile are classified still under LoM IIA and deemed uneconomic under current valuation testing despite some upgrading in the past year. Feasibility studies are continuing at Impala, Two Rivers, Zimplats, Marula, Mimosa and the Waterberg project to evaluate future opportunities

Life-of-mine production

Estimated Group 20-year 6E production profile LoM I, IIA, II and III*
as at 30 June 2020



** Lac des Iles included on a 3E basis.*

Mupani Mine, Zimplats

Impala

HANS MERENSKY FIRST RECOGNISED PLATINUM ON THE EASTERN LIMB OF THE BUSHVELD COMPLEX IN 1924. IN 1925 MERENSKY FURTHER DISCOVERED THE MERENSKY REEF IN AN ARC FROM BRITS THROUGH RUSTENBURG TO THABAZIMBI. THIS ARC BECAME THE WESTERN BUSHVELD COMPLEX AND IS WHERE IMPALA PLATINUM IS LOCATED.

History

In 1965 Union Corporation purchased a Company called Impala Prospecting Company. The first six test drillholes were drilled during 1965. The first vertical shaft (62m) was developed in 1967 to obtain a bulk Merensky sample. Impala Platinum Limited was created on 26 April 1968, as a subsidiary of Union Corporation.

Initial production commenced on 22 July 1969 after a mining lease over land predominantly owned by the then Bafokeng Tribe (now the Royal Bafokeng Nation (RBN)) was originally granted in 1968. Initially Impala mined the Merensky Reef and the mining of the UG2 Reef only began in the early 1980s as the technology to smelt ore containing chromitite at a higher temperature was developed. By the early 1990s, 13 vertical shafts were in operation and Impala was producing in the region of one million platinum ounces per annum. Shaft sinking at the new generation shafts (16 and 20) commenced in the mid-2000s. 17 Shaft also started in the early 2010s but has subsequently been placed on care and maintenance prior to equipping of the shaft having commenced.

Mineral rights

A landmark agreement securing Impala's access to these mineral rights for a period of 40 years was signed with the RBN in February 1999. In terms of this agreement, the RBN was entitled to royalties from metals mined in areas over which they held mineral rights. A new agreement, finalised in early March 2007, resulted in the royalty being converted into equity, making the RBN the Group's largest shareholder with board representation at the time. In terms of the March 2007 agreement, Impala agreed to pay RBN all royalties due to them from 1 July 2007 onwards. This amounted to R12.5 billion. Effectively, through this transaction, Impala discharged its future obligation to pay royalties to the RBN. The RBN, through Royal Bafokeng Holdings Limited (RBH), used the R12.5 billion to subscribe for 75.1 million Implats shares giving them a 13.2% share in the holding Company at the time. During FY2016 the RBH sold 5% of the Implats shares and subsequently in 2019, sold their remaining shareholding. In 2015, 4% of the Impala shares were issued to employees (ESOP transaction), leaving Implats with a 96% attributable interest in Impala.

Mining right
29 773ha

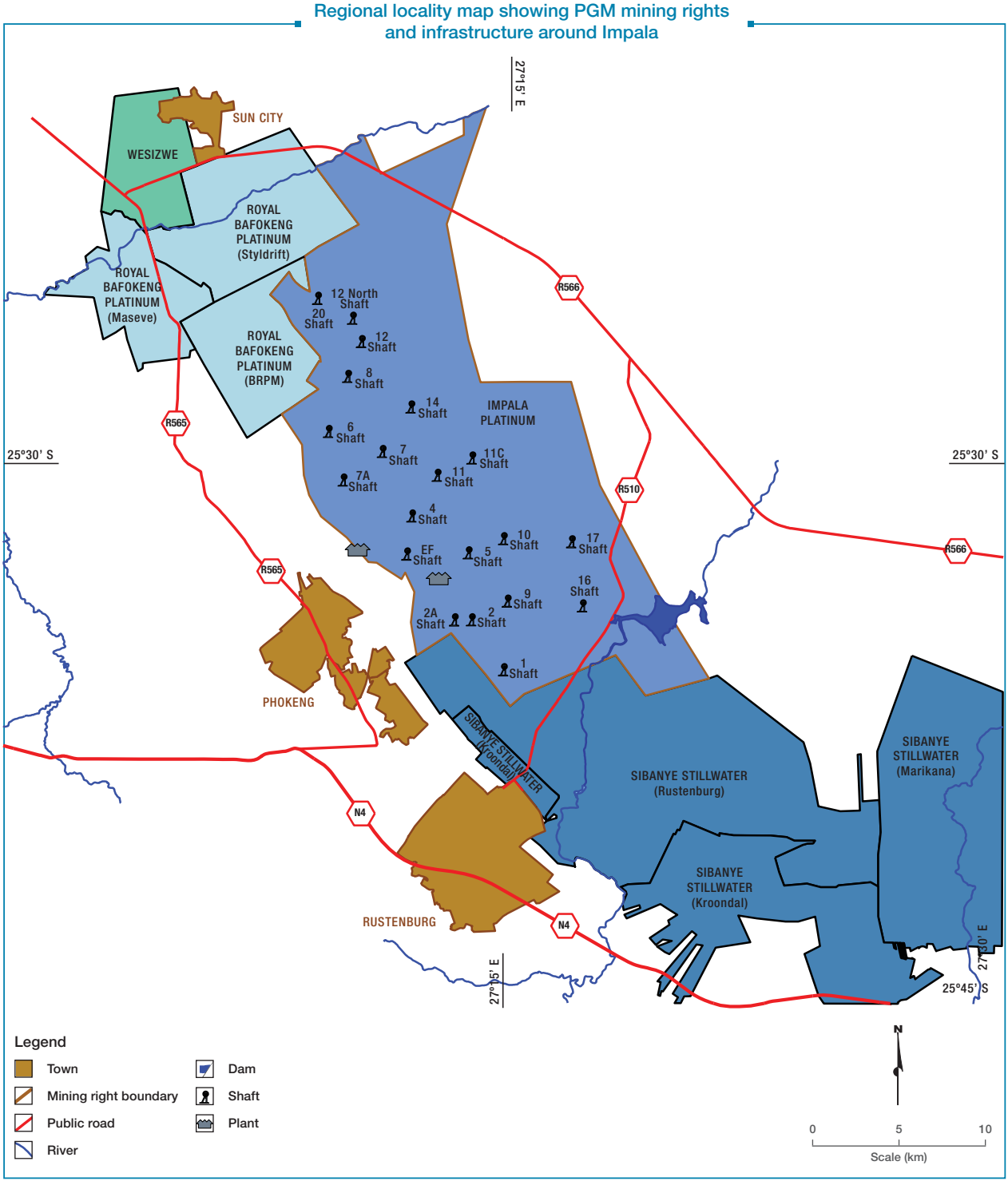
Implats' interest
96% managed

SOUTH AFRICA

Location

Impala Platinum is located 25km northwest of the town of Rustenburg in the North West province and 140km west of Pretoria, which is situated in the Gauteng province. The Rustenburg region is known as the so-called platinum belt with vast proportions of worldwide platinum production traditionally being produced from this area. Sibanye Stillwater is located to the immediate south of the Impala operation and Royal Bafokeng Platinum is situated adjacent to the northern boundary of the Impala operation.

Regional locality map showing PGM mining rights and infrastructure around Impala



Impala

The mining rights at Impala were converted into new-order rights in 2008 and awarded for a 30-year period, at which time the MPRDA allows for an extension. Impala holds contiguous mining rights over a total area of 29 773ha across 16 farms, or portions of farms.

Impala has legal entitlement to the minerals being reported upon without any known impediments. There are no legal proceedings or other material matters that may impact on the ability of Impala to continue with exploration and mining activities.

Infrastructure

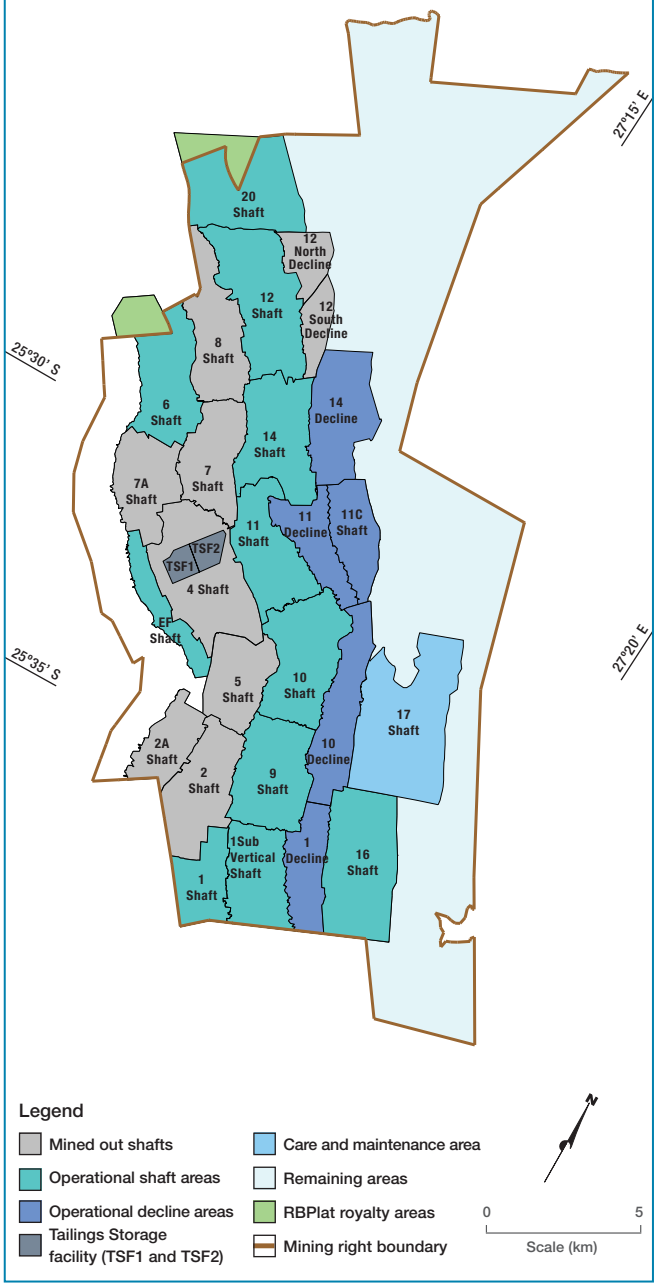
Impala Platinum is an established mine with infrastructure that includes tarred roads, shaft areas, buildings, offices, railway lines, powerlines, pipelines, sewage and rock and tailings storage facilities. The extent of the servitude area that constitutes the infrastructure, roads, rails and dumps is 46.23km^2. The network of surface rail infrastructure between the various shaft heads, two concentrators and a smelter consists of about 92km of rail.

The Impala operations are supplied with electricity by Eskom primarily from its Ararat Main Transmission sub-station (MTS). The total installed capacity at Ararat MTS amounts to 945MVA. The operations have an adequate and firm electricity supply and distribution network. At present, there are eight main intake points on Impala, all of which have adequate redundancy. These intake points are supplied by Eskom at 88kV. The voltage is then transformed to 33kV and 6.6kV for surface and underground distributions. Eskom also has dedicated transformers at some of these sub-stations to convert the voltage to 11kV to supply electricity to the neighbouring communities. An alternate source of electricity for Impala is the Marang MTS, connected to the Impala 16 Shaft, to provide electricity during emergency conditions. Rand Water supplies water to Rustenburg and Impala from the Vaal River system (Vaal Dam). The licence allocation is 32Ml per day. Rand Water is also supplying 3Ml water per day to Impala from the Magalies Water system. Magalies Water supplies water to Rustenburg and Impala from the Crocodile River system (Vaalkop Dam). Impala also has a contract with Magalies Water to supply 5Ml of potable water per day from the Kanana take-off. The total allocation was 42Ml per day but 2Ml per day is now allocated to the new Platinum village. Impala has a contract to receive 10Ml treated effluent (grey water) per day from the Rustenburg municipal water care works for the two processing plants. The three water care works at Impala also supply about 3 to 5Ml of treated effluent per day to the Mineral Processes operations. Impala does not have major reservoirs and is dependent on the direct feed from the two providers.

Environmental

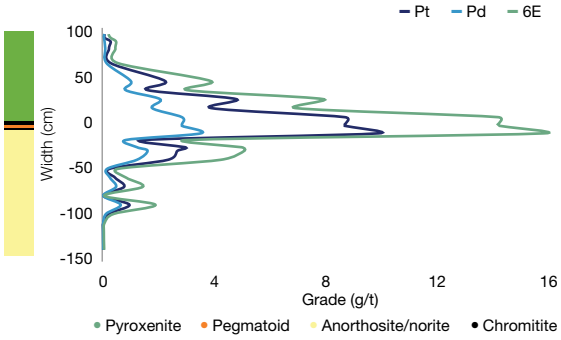
Summary details pertaining to the Group environmental management and policy are listed on page 19. This includes the focus areas such as compliance, water stewardship, air quality, managing waste streams and promoting land management practices. Impala is ISO 14001 certified and aligned with the 2015 standard. All of the tailings currently produced by the concentrator plants are deposited on the No 4 tailing storage facility, which is one of the largest in South Africa with a base area of about 750 hectares. The projected life of the TSF is at least another 30 years. The height of the walls vary between 40m at the lowest part to 72m at the highest. At closure, it is expected that the highest wall will reach 120m. Water is decanted for recycling back to the concentrators via two concrete penstock towers. The towers are 5.5m in diameter and are currently 40m above the pool. They are connected to two decant pipes of 1.25m diameter that route the water to the north and south return water pump stations.

Impala location of shafts, declines and tailings storage facilities

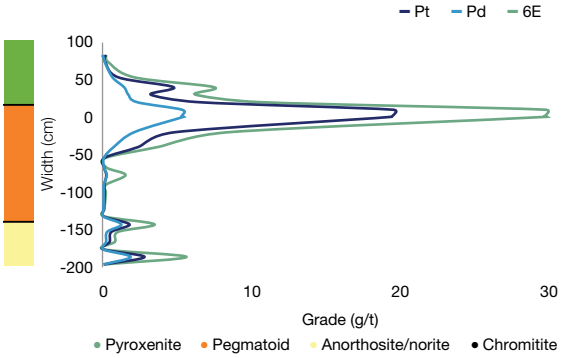


Impala

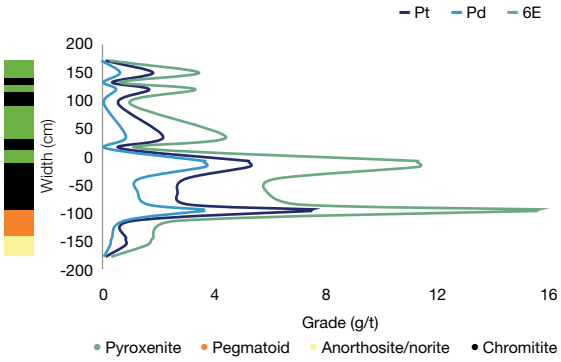
Impala – Merensky Pyroxenite – Reef



Impala – Merensky Pegmatoid – Reef



Impala – UG2



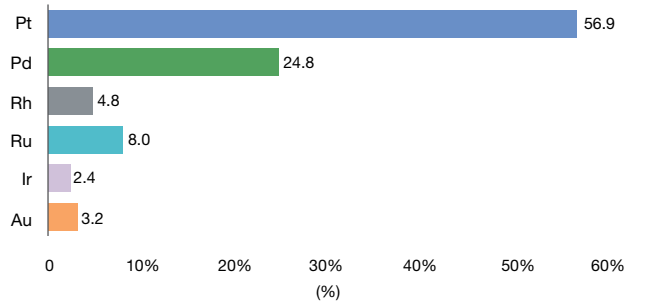
Geology

The geological succession is illustrated in the generalised stratigraphic column on page 52. The Merensky and UG2 Reefs are separated by a sequence of mostly anorthositic and noritic layered units from 45m in the northern part of the lease area and thickens to 125m in the southern part of the lease area. Both the Merensky and UG2 Reefs are exploited at Impala. 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'. Occasionally a pegmatoidal pyroxenite and a second chromitite stringer may be developed between the feldspathic pyroxenite and the footwall units. This is termed a 'pegmatoid reef'. As an aid to mining operations the Merensky Reef is further defined as being 'A', 'B', 'C' or 'H' Reef where it rests on specific footwall units – locally called Footwall 1, 2 and 3, respectively.

The UG2 Reef is defined as a main chromitite layer, with most of the PGM and base metal mineralisation confined to this unit, followed by a poorly mineralised pegmatoidal pyroxenite footwall. The hangingwall to the main chromitite layer is a feldspathic pyroxenite containing up to four thin, poorly mineralised chromitite layers. The vertical grade distribution is depicted in the accompanying graphs, notably showing peak values at reef contacts in association with chromitite. The average 6E metal ratios show the distinct differences between the Merensky and UG2 Reefs, in particular the higher Pt:Pd ratio associated with the Merensky Reef and the relative high proportion of rhodium in the UG2 Reef, as shown below.

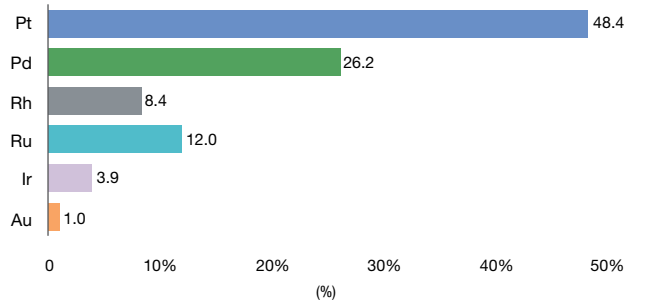
Impala Merensky 6E metal ratio

as at 30 June 2020 (%)



Impala UG2 6E metal ratio

as at 30 June 2020 (%)



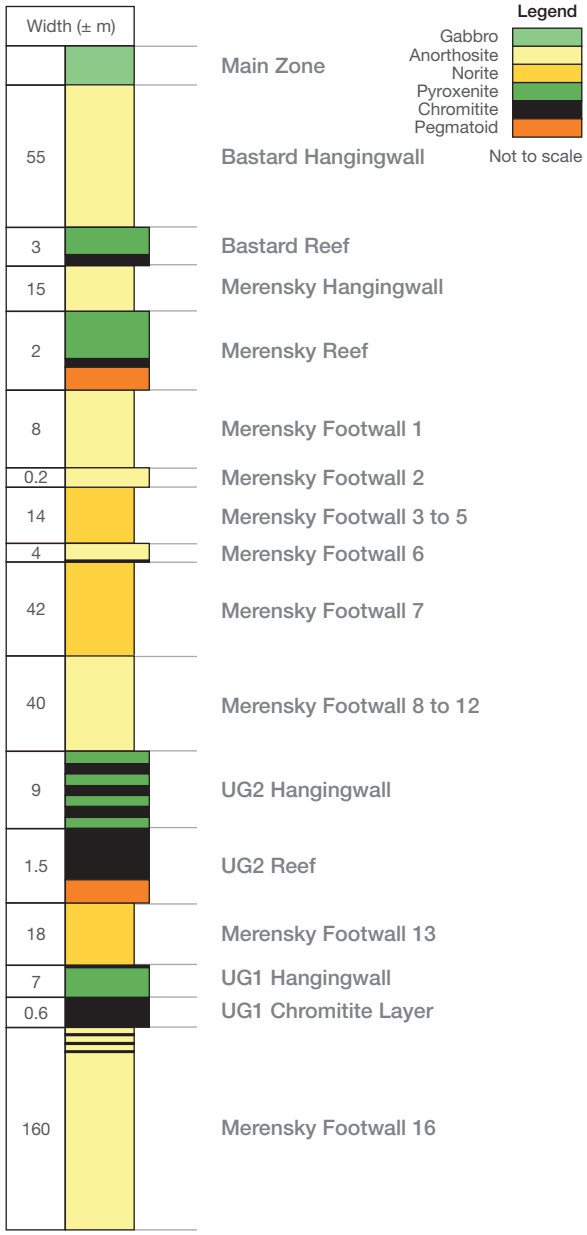
Merensky and UG2 metal ratios derived from the estimated five-year historic mill feed control samples.

Impala

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 latter features are generally circular in shape and represent 'erosion' or 'slumping' into the footwall units. They vary in size from a few metres to tens of metres across and up to tens of metres in depth. All of these features are accounted for in the Mineral Resource and Mineral Reserve estimates as geological losses and they contribute to dilution or absence of the mineralised horizons.

Underground survey in the trackless section, 14 Shaft Impala

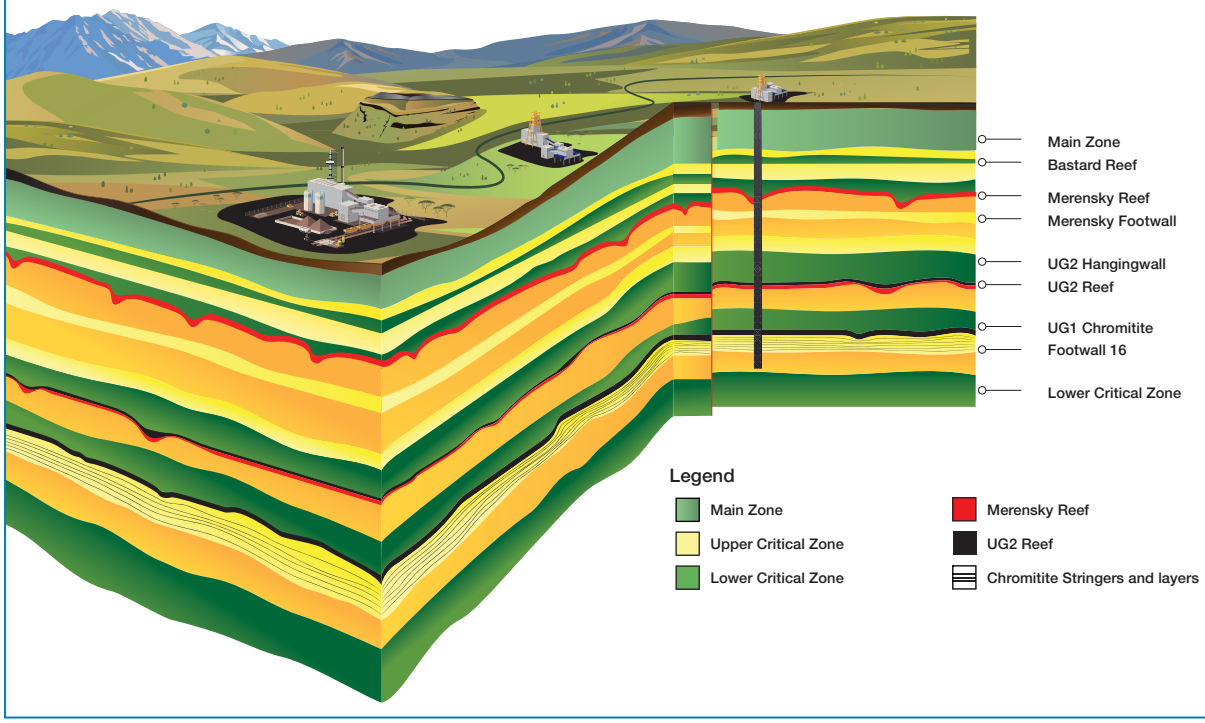
Generalised geological succession of the upper portion of the Critical Zone at Impala



Impala

A schematic diagram illustrating the broader geological succession relative to major shaft infrastructure is shown below.

Generalised schematic section of the stratigraphic sequence at Impala



Exploration

Exploration activities at Impala have typically comprised geological mapping (surface and underground), geophysical surveys (aeromagnetics, 3D vibroseis) and core-recovering drilling (surface and underground). Surface drilling is typically infill work to supplement a broader grid of 500m spacing completed during feasibility stages. Such work is mostly targeted to assist with detailed geological structural interpretations. Underground geotechnical core-recovering drilling activities are routinely being undertaken at Impala to assist with detecting potential hazardous geological features and to assist with guiding mining operations. Underground drilling is typically employed to keep the footwall drives at the ideal elevation and to resolve geological structural complexities. Summary statistics pertaining to the work conducted in the past year are summarised in the exploration overview section of this report.

During FY2020 exploration on the Impala mining area focused on infill drilling from surface at 16 and 20 Shafts where 11 drillholes were completed. Some 685 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.

Mineral Resource estimation and reconciliation

Mineral Resources are reported inclusive of Mineral Reserves. Mineral Resource grades are shown for both 4E and 6E. Mineral Resource estimates allow for estimated geological losses but not for anticipated pillar losses during eventual mining. The introduction of a depth cut-off was noted in previous reports and no Mineral Resources deeper than 2 000m below surface are reported. In addition to the depth cut-off areas, various Mineral Resource blocks are considered on a case-by-case basis and this has resulted in the identification of areas where the eventual economic extraction is in doubt. The Mineral Resource estimation method is ordinary kriging. The evaluation is conducted using on-reef development sampling as well as drillholes samples which are defined by an optimal grid. The geostatistical evaluation is done to establish a Mineral Resource estimate for both short- and long-term planning. The Mineral Resource classification is based on a Group standard practice that considers the quality of the data, the continuity of the reef, if a seismic survey covers the area or not, the data spacing, and the geostatistical parameters.

Mineral Resource estimates are based on mining faces at 31 December 2020. The Mineral Resources estimates have been non-spatially depleted per shaft and per reef horizon per shaft for six months until 30 June 2020.

Mineral Resource estimates are inherently imprecise in nature. The results tabulated in this report must be read as estimates and not as calculations. Inferred Mineral Resources, in particular are qualified as approximations.

Impala

Impala Mineral Resource estimate (inclusive reporting)

As at 30 June 2020										
Orebody		Merensky				UG2				
Category		Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	Total
Tonnes	Mt	116.2	68.8	11.2	**196.2**	148.1	70.5	12.4	**231.0**	**427.3**
Width	cm	121	104	99		95	95	95		
4E grade	g/t	6.29	6.43	7.33	**6.40**	5.55	5.51	5.36	**5.53**	**5.93**
6E grade	g/t	7.02	7.18	8.18	**7.14**	6.61	6.56	6.38	**6.58**	**6.84**
Ni	%	0.16	0.16	0.15	**0.16**	0.04	0.05	0.04	**0.04**	**0.10**
Cu	%	0.09	0.09	0.08	**0.09**	0.01	0.01	0.01	**0.01**	**0.04**
4E oz	Moz	23.5	14.2	2.6	**40.4**	26.4	12.5	2.1	**41.1**	**81.5**
6E oz	Moz	26.2	15.9	3.0	**45.1**	31.5	14.9	2.6	**48.9**	**93.9**
Pt oz	Moz	14.9	9.0	1.7	**25.6**	15.2	7.2	1.2	**23.7**	**49.3**
Pd oz	Moz	6.5	3.9	0.7	**11.2**	8.3	3.9	0.7	**12.8**	**24.0**

As at 30 June 2019										
Orebody		Merensky				UG2				
Category		Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	Total
Tonnes	Mt	121.2	66.6	14.4	**202.2**	155.8	70.2	12.6	**238.5**	**440.7**
Width	cm	121	103	115		95	95	95		
4E grade	g/t	6.37	6.43	6.37	**6.39**	5.53	5.47	5.34	**5.50**	**5.91**
6E grade	g/t	7.16	7.23	7.16	**7.19**	6.63	6.57	6.41	**6.60**	**6.87**
Ni	%	0.16	0.16	0.15	**0.16**	0.04	0.05	0.04	**0.04**	**0.10**
Cu	%	0.09	0.09	0.08	**0.09**	0.01	0.01	0.01	**0.01**	**0.04**
4E oz	Moz	24.8	13.8	2.9	**41.5**	27.7	12.3	2.2	**42.2**	**83.7**
6E oz	Moz	27.9	15.5	3.3	**46.7**	33.2	14.8	2.6	**50.6**	**97.4**
Pt oz	Moz	15.7	8.7	1.9	**26.3**	16.0	7.1	1.2	**24.4**	**50.7**
Pd oz	Moz	6.9	3.8	0.8	**11.5**	8.6	3.8	0.7	**13.1**	**24.6**

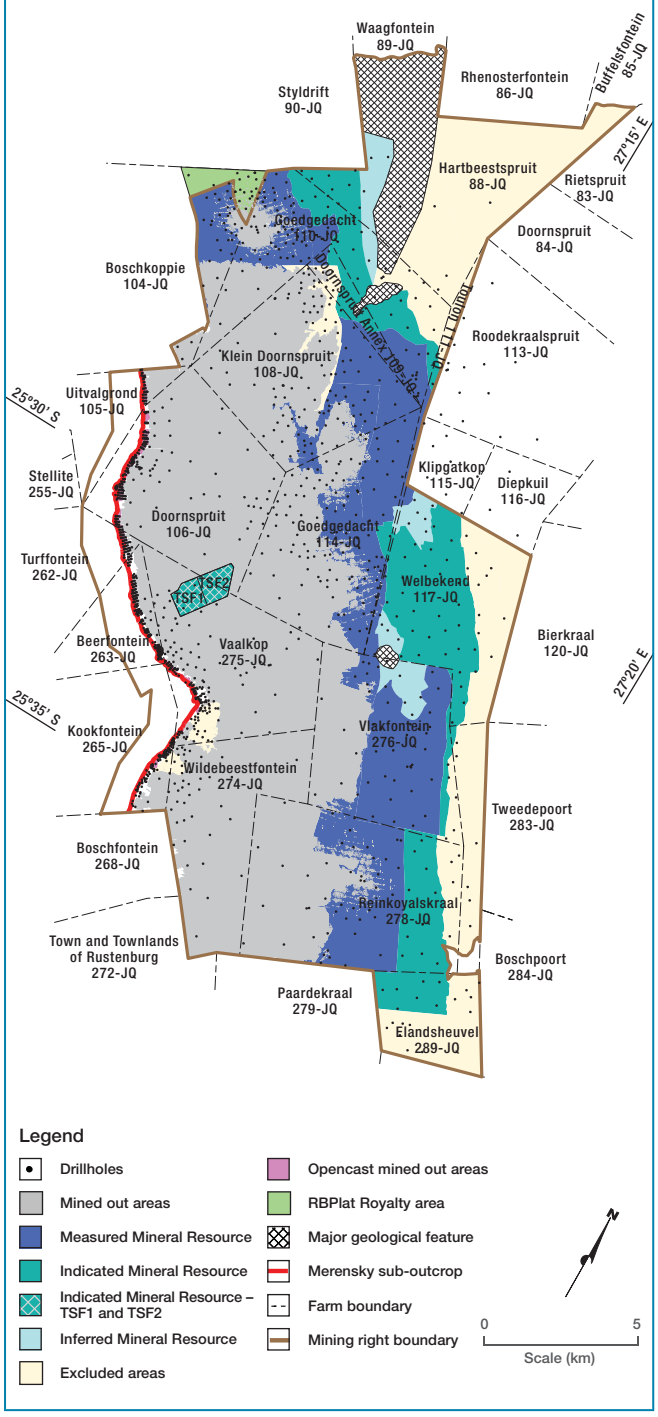
TSF1 and TSF2 Mineral Resource estimate

As at 30 June 2020					
Orebody		TSF1 and TSF2			
Category		Measured	Indicated	Inferred	Total
Tonnes	Mt		50.1		**50.1**
4E grade	g/t		0.71		**0.71**
6E grade	g/t		0.81		**0.81**
4E oz	Moz		1.1		**1.1**
6E oz	Moz		1.3		**1.3**
Pt oz	Moz		0.6		**0.6**
Pd oz	Moz		0.3		**0.3**

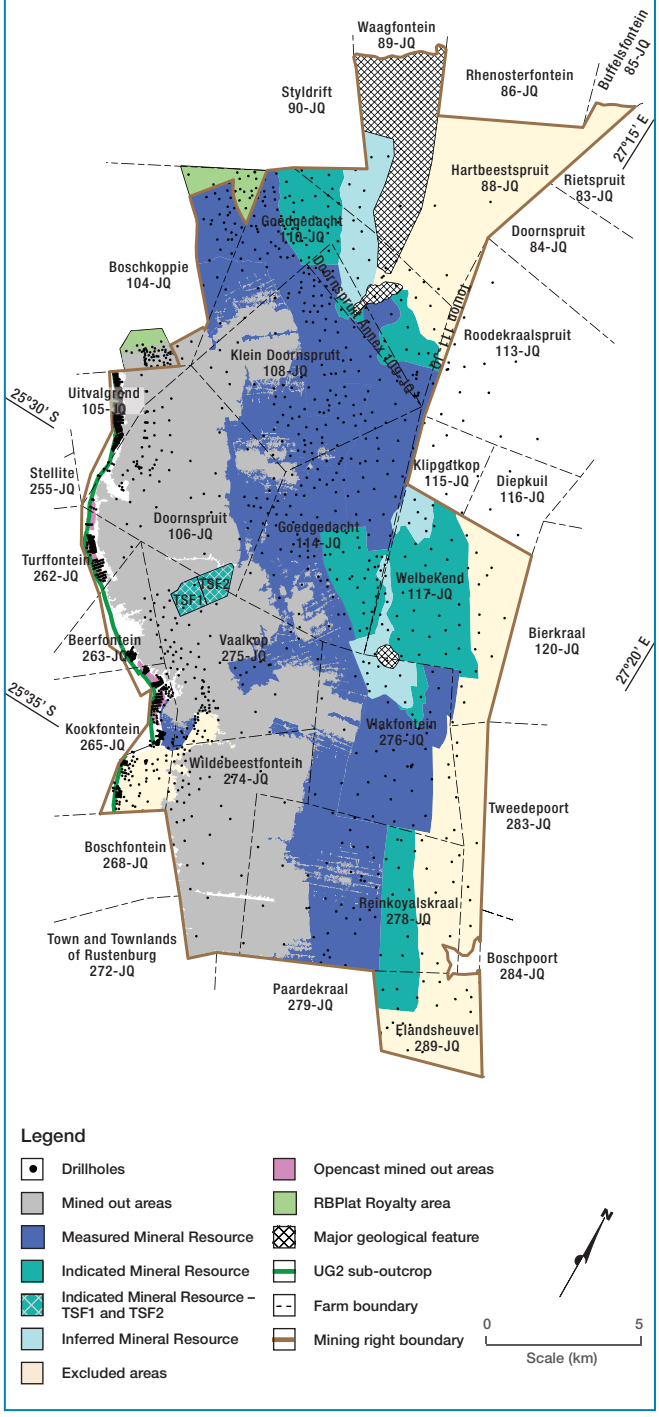
As at 30 June 2019					
Orebody		TSF1 and TSF2			
Category		Measured	Indicated	Inferred	Total
Tonnes	Mt		51.5		**51.5**
4E grade	g/t		0.71		**0.71**
6E grade	g/t		0.81		**0.81**
4E oz	Moz		1.2		**1.2**
6E oz	Moz		1.3		**1.3**
Pt oz	Moz		0.7		**0.7**
Pd oz	Moz		0.3		**0.3**

Impala

Impala Merensky Mineral Resources



Impala UG2 Mineral Resources



The UG2 Mineral Resources have been estimated using a minimum mining cut of 95cm and not only the main chromitite layer of 65cm. It adds significant dilution but very little metal is added.

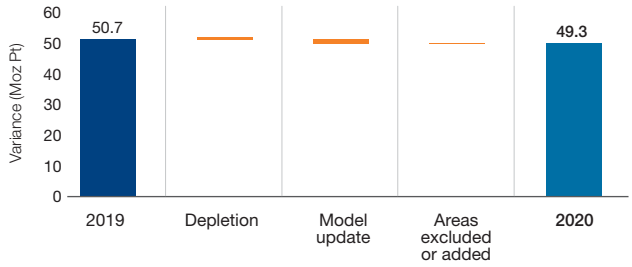
Year-on-year the Impala Mineral Resource estimate reduced an effective 1.4 Moz Pt; this was impacted by 0.8Moz Pt due to depletion and reduced by 0.6 Moz Pt through updates in the geological and geostatistical models.

Impala

The Indicated Mineral Resources contained in the dormant tailings storage facilities (TSF1 and TSF2) are reported separately. Historically 64 drillholes were drilled at TSF1 and TSF2. In FY2019 an additional 11 drillholes were completed on TSF1 to confirm the Mineral Resource estimation, which was updated by means of ordinary kriging. Trial mining operations will be tracked to validate the operational parameters.

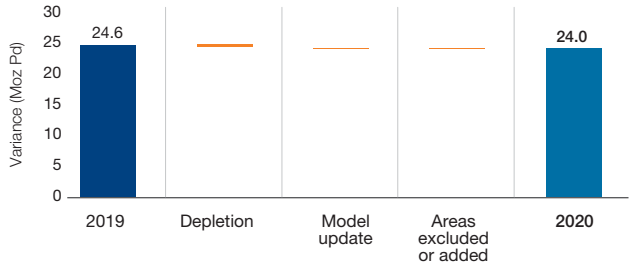
Total Impala platinum Mineral Resources

as at 30 June 2020 (variance Moz Pt)



Total Impala palladium Mineral Resources

as at 30 June 2020 (variance Moz Pd)



Modifying factors

Key modifying factors such as overbreak, underbreak, off-reef mining, on-reef development dimensions, sweepings and planning factors are applied to the mining area (centare profile) to generate tonnage and grade profiles. The modifying factors used to convert the Mineral Resource to a Mineral Reserve are derived from historical performance while taking future anticipated conditions into account. Implats' long-term price assumptions in today's money (supporting Mineral Reserve estimates) are shown on page 12.

Mineral Resource Key assumptions	Merensky Reef	UG2 Reef
Geological losses	25 – 28%	37 – 42%
Area	58 million ca	66 million ca
Channel width	113cm	95cm

Mineral Reserve Modifying factors	Merensky Reef	UG2 Reef
Dilution	9 – 12%	9 – 12%
Pillars	8 – 10%	8 – 10%
Mine call factor	90 – 92%	88 – 90%
Relative density	3.05 – 3.25	3.7 – 3.8
Stoping width	140cm	113cm
Concentrator recoveries	88 – 89%	79 – 82%

Mining methods and mine planning

The Merensky and UG2 Reefs are mined concurrently at Impala. Stoping at the operations is carried out through conventional double-sided breast mining in accordance with Impala's best practice principles. The access haulages are developed in opposite directions from cross-cuts connected to a central shaft position, following the two reef horizons on strike in the footwall of the reefs and are defined as half levels. Footwall drives are developed at approximately 18m to 30m below the reef horizon with on-reef raise/winze connections being between 180m and 250m apart. Panel face lengths vary from 15m to 28m for both Merensky and UG2 Reefs, with panels being typically separated by 6m x 3m grid pillars with 2m ventilation holes. Stoping widths are approximately 1.4m and 1.1m for conventional Merensky and UG2 Reefs, respectively, depending on the width of the economical reef horizon. Mechanised (trackless) bord and pillar mining occurs in selected Merensky Reef areas at 14 Shaft. The average stoping width of the mechanised panels is about 1.9m.

Mine design and scheduling of operational shafts is undertaken using CADSmine™ software, while the mine design and scheduling for project shafts are undertaken using Mine 2-4D™ software. Geological models/ore blocks are updated and validated using G-Blocks and boundaries in the MRM information system. Grade block models are developed using Isatis™ software. The mine design for the first two years is monthly per crew. This is extended on an annual basis for the remaining period of the LoM. The planning sequence allows for a cycle that starts with a comprehensive review of the LoM plan followed by the detailed scheduling of a five-year development schedule and a two-year detailed month-by-month stoping schedule.

It should be noted that the Mineral Reserve estimate is the result of the planning process applied to Indicated and Measured Mineral Resources only, the application of detailed modifying factors; but importantly, are subjected to rigorous economic testing at given market conditions.

Mineral Reserve estimation and reconciliation

The updated Mineral Reserve estimates are tabulated in the statement on the following page and reflect the total Mineral Reserve estimate for Impala as at 30 June 2020. Mineral Reserve grades are quoted after applying mine to mill modifying factors. Current Mineral Reserve estimates have included the latest drillhole information, assay results, revised mine design and updated modifying factors. The Mineral Reserves quoted reflect anticipated grades delivered to the mill and estimations are aligned to the business plan by estimating tonnes and grades at an average 114cm mining width for the Merensky Reef and an average 111cm mining width for the UG2 Reef. Rounding of numbers may result in minor computational discrepancies. The results tabulated in this report must be read as estimates and not as calculations. The conversion and classification of Mineral Reserves at Impala is informed by:

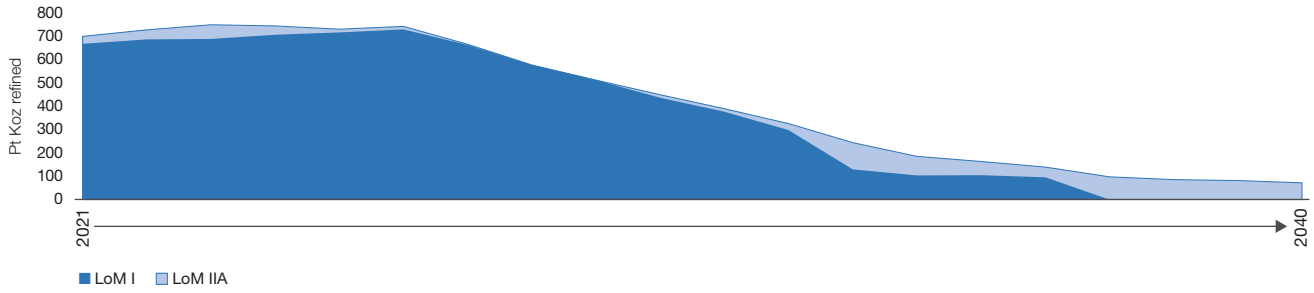
- Feasible mine plan and project studies, board approval and available funding
- Economic testing at given market conditions (price deck)
- Measured Mineral Resources are classified as Proved and Probable Mineral Reserves if the mine plan passed economic testing and is approved for funding
- Proved Mineral Reserves are those areas where the main development has been completed
- No Inferred Mineral Resources are converted to the Mineral Reserve category
- The BP2021 Mine Plan was based on the survey faces of December 2019 with a spatial mine design and schedule forecast of six months until 30 June 2020.

Impala

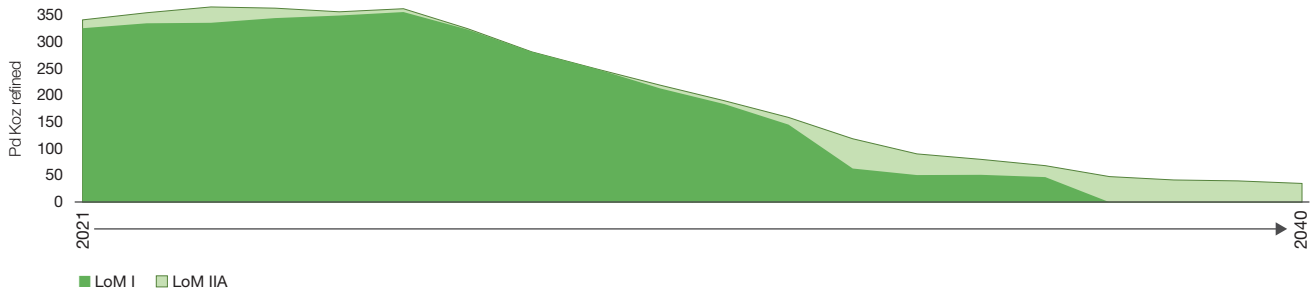
Mineral Reserve grades are shown for both 4E and 6E. The Mineral Reserves quoted reflect the grade delivered to the mill. The Mineral Resources and Mineral Reserves involved with the royalty agreement with RBPlat are excluded in this report as the ownership vests with RBPlat. This refers to the agreement with RBPlat to access certain of its mining areas at BRPM from the Impala 6 and 20 Shafts. An economic profitability test was conducted at each shaft, in particular also to conduct so-called tail-cutting at the end of a shaft's life. This excludes the last tonnages that fall below the economic volume cut-off at the shaft as determined from the forecast economic factors. The impact varies from shaft to shaft, on average some 10% of the Mineral Reserves have now been excluded in the accompanying statement based on such economic reviews with the impact being more pronounced on the UG2 estimates at Impala.

The year-on-year reconciliation of the total Impala Mineral Reserve is depicted in the accompanying maps and graphs. There has been a notable change in the Mineral Reserve estimate since June 2019, other than depletion and economic tail-cutting. The main changes occurred at 1, 12 and 14 Shafts. The areas at 1, 12 and 14 Shaft that were previously considered as LoM IIA in 2019 have now been progressed to LoM I after the economic valuation was done. The Mineral Reserve grade decreased due to the inclusion of these lower grade tonnages from the 14 Shaft Merensky Reef trackless area and the 14 and 12 Shaft UG2 Reef areas. The previous decision, based on economic conditions at the time, to cease mining at these shafts after a year, has been reviewed. They will remain open as long as they remain profitable, using the latest price forecast. The tail-cut areas that did not survive the economic valuation of LoM I have been regressed to LoM IIA. A combined graph of the attributable Mineral Resources and Mineral Reserves are also included.

Impala 20-year estimated LoM platinum ounce profile
as at 30 June 2020



Impala 20-year estimated LoM palladium ounce profile
as at 30 June 2020



Impala Mineral Reserve estimate

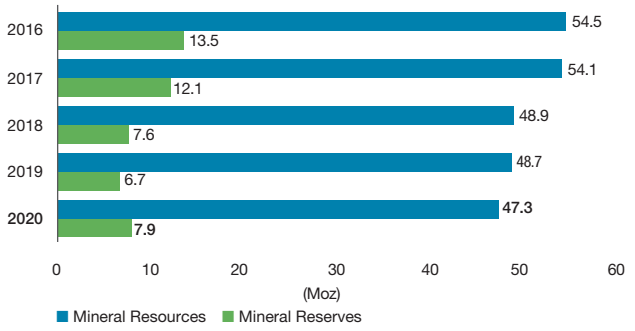
As at 30 June 2020								
Orebody		Merensky			UG2			
Category		Proved	Probable	Total	Proved	Probable	Total	Total
Tonnes	Mt	8.2	46.2	**54.4**	13.7	49.5	**63.1**	**117.5**
Width	cm	142	139		115	114		
4E grade	g/t	3.47	3.75	**3.71**	3.59	3.48	**3.50**	**3.60**
6E grade	g/t	3.87	4.19	**4.14**	4.27	4.14	**4.17**	**4.15**
4E oz	Moz	0.9	5.6	**6.5**	1.6	5.5	**7.1**	**13.6**
6E oz	Moz	1.0	6.2	**7.2**	1.9	6.6	**8.5**	**15.7**
Pt oz	Moz	0.6	3.5	**4.1**	0.9	3.2	**4.1**	**8.2**
Pd oz	Moz	0.3	1.5	**1.8**	0.5	1.7	**2.2**	**4.0**

Impala

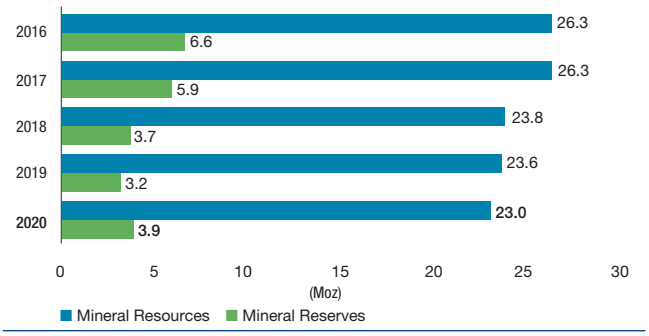
Impala Mineral Reserve estimate (continued)

As at 30 June 2019								
Orebody		Merensky			UG2			Total
Category		Proved	Probable	Total	Proved	Probable	Total	
Tonnes	Mt	8.6	42.8	**51.4**	8.2	35.8	**44.0**	**95.5**
Width	cm	137	130		112	111		
4E grade	g/t	3.75	3.90	**3.87**	3.63	3.63	**3.63**	**3.76**
6E grade	g/t	4.21	4.38	**4.35**	4.36	4.35	**4.35**	**4.35**
4E oz	Moz	1.0	5.4	**6.4**	1.0	4.2	**5.1**	**11.5**
6E oz	Moz	1.2	6.0	**7.2**	1.2	5.0	**6.2**	**13.4**
Pt oz	Moz	0.7	3.4	**4.1**	0.6	2.4	**3.0**	**7.0**
Pd oz	Moz	0.3	1.5	**1.8**	0.3	1.3	**1.6**	**3.4**

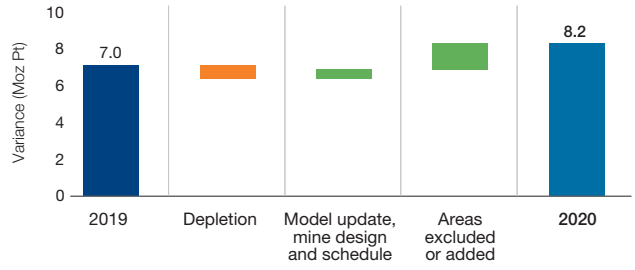
Impala attributable platinum Mineral Resources and Mineral Reserves
as at 30 June 2020 (Moz Pt)



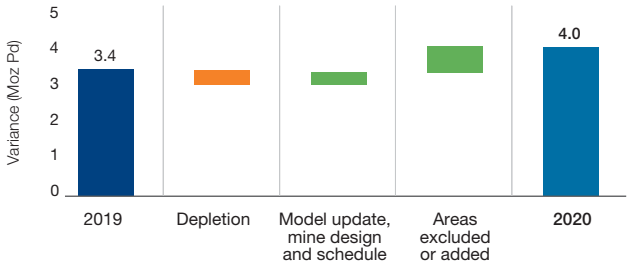
Impala attributable palladium Mineral Resources and Mineral Reserves
as at 30 June 2020 (Moz Pd)



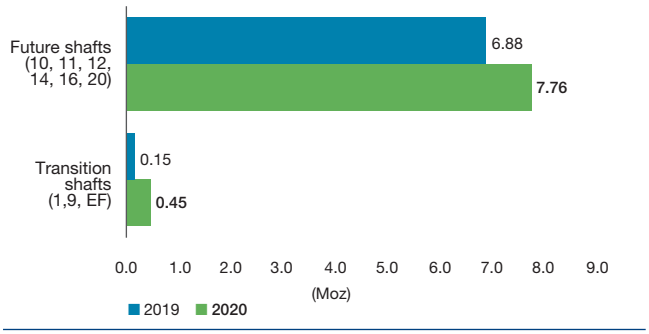
Total Impala platinum Mineral Reserves
as at 30 June 2020 (variance Moz Pt)



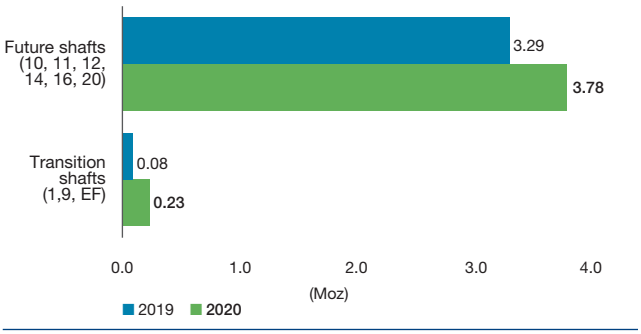
Total Impala palladium Mineral Reserves
as at 30 June 2020 (variance Moz Pd)



Impala platinum Mineral Reserve distribution
as at 30 June 2020 (Moz Pt)

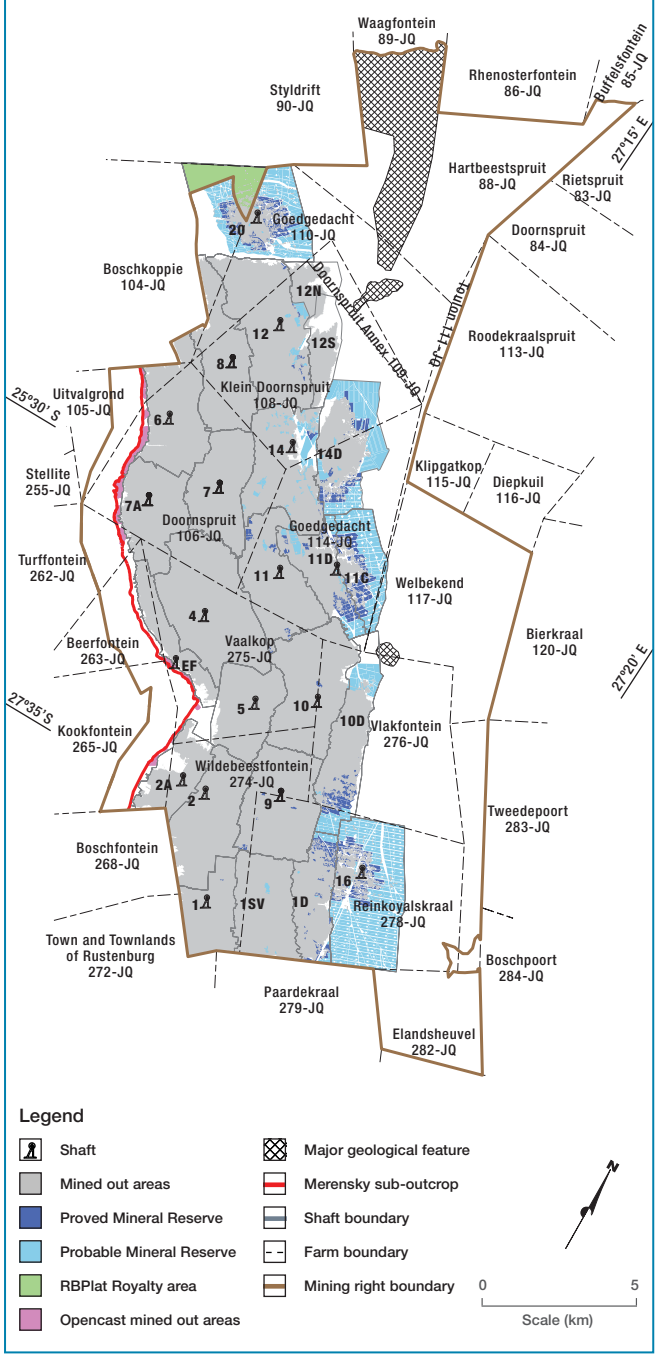


Impala palladium Mineral Reserve distribution
as at 30 June 2020 (Moz Pd)

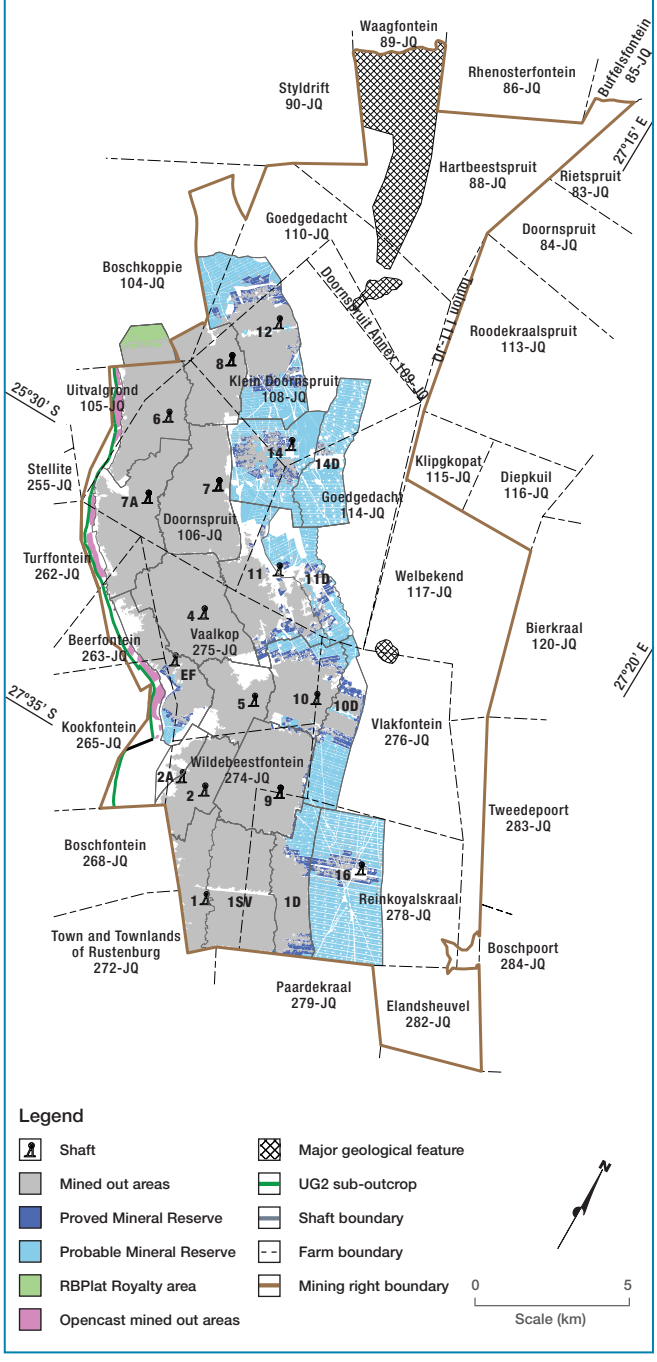


Impala

Impala Merensky Mineral Reserves

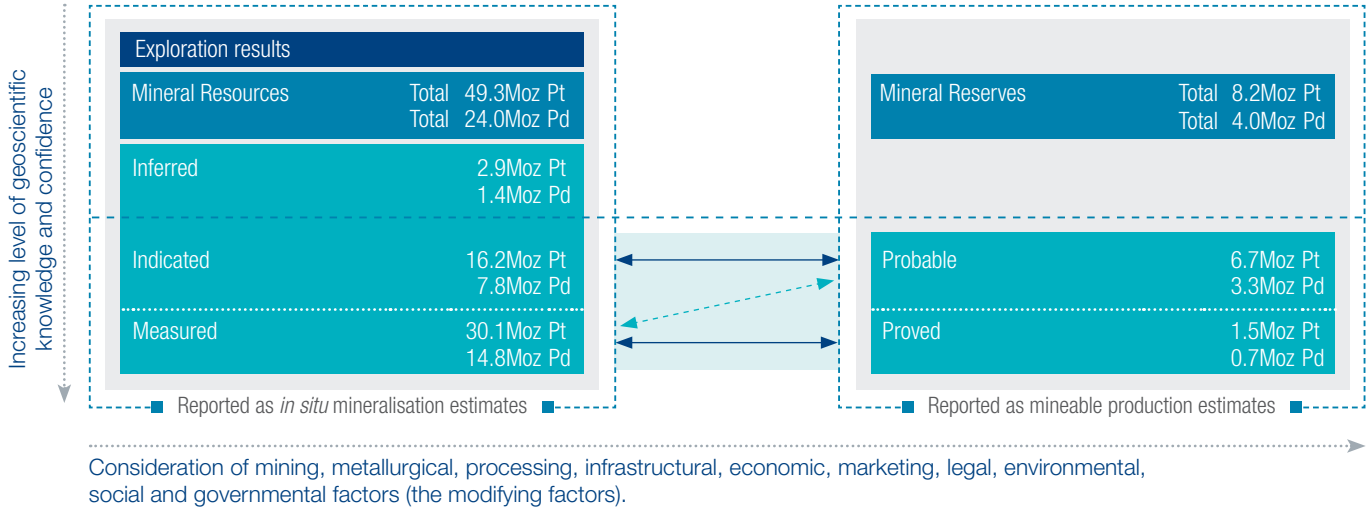


Impala UG2 Mineral Reserves



Impala

Relationship between exploration results, Mineral Resources and Mineral Reserves (100%)



Processing

Processing 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% utilising 10 primary mills, feeding two, nine stage, tank cell flotation banks. Tailings from this section are milled for further liberation and floated in conventional cells to achieve the aforementioned recovery.

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 utilising a more complex circuit configuration in order to reduce the amount of chromium reporting to the concentrate stream. The MF2 plant, also situated at the Central Concentrator, utilises three primary mills that can accommodate any Merensky ore spill over, as well as UG2 ore. This allows for flexibility in the ore split received from the mining operations, without significantly impacting recovery of valuable material. This plant will also be utilised to treat any non-mining material such as tailings retreatment and any potential third-party RoM offtakes.

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

The smelter operation treats the concentrate from both the Central Concentrator and UG2 Plant, as well as third-party material. The concentrate is first dried in order to reduce moisture content to below 0.5%, and is then treated through one of three electric arc furnaces to produce a copper, nickel, iron sulphide rich matte, at a mass pull of 8% to 10%. The remaining 90% produces a low grade furnace slag. The maximum power utilisation capacity of the three furnaces is in the order of 105MW.

The furnace matte is then treated in the converter operation which further reduces the tonnage by around 70% to 80%, in order to reduce the iron content to below 1%, as per refinery specification. Granulated converter matte is transported to the refinery operations in Springs utilising road infrastructure. Both furnace and converter slag are retreated at the Slag Plant utilising a flotation process in order to further enhance the recovery of valuable metals.

During the smelting operation, off gasses are treated at either the acid plant to produce sulphuric acid, or the Sulfacid™ plant which produces gypsum. While these operations do not have a direct value add, they are essential in retaining our operating licence by complying with emissions regulations. The refineries, including both the base metal and precious metal refineries, are located in Springs, east of Johannesburg.

Impala top risks

The Group risk management process is described on page 15 where the top Group risks are listed.

In this context the top additional operations risks identified at Impala in order of priority are:

- Impact of the Covid-19 pandemic on Impala Platinum operation
- Ability to reduce labour at 9 Shaft (due to its closure) and those identified in the overhead cost reduction process in accordance with the restructuring programme without labour or community disruptions or without material regulator (DMRE) intervention/ disruption. Their action/s might delay the execution of this programme and may result in cost escalations or disputes
- Ability to ramp up 16 Shaft and in particular, 20 Shaft in accordance with the business plan. Failure to execute the ramp up could negatively impact the Impala balance sheet
- Ability to develop sufficient operational flexibility through increasing face length, improving productivity and meeting production targets in accordance with the business plans
- Impact of load shedding due to challenged electricity supply capacity resulting in business interruption
- Deterioration in safety performance due to failure of critical infrastructure and non-achievement of safety requirements
- Ability to secure/maintain a social licence to operate due to not being able to provide value enhancing sustainability initiatives and maintain stakeholder relations. Uneconomical Impala Mine Community Leadership Engagement Forum (MCLEF) demands (procurement and employment opportunities)
- Ensuring regulatory compliance through the value stream as informed through key legislation
- Challenged capacity and efficiencies of management layers at Impala Platinum operation
- The security of supply of water in Rustenburg (Bojanala).

Impala

Valuation and sensitivity

Economic testing is undertaken for each shaft, including tail-cutting where a shaft cannot contribute to the overhead cost. The economic viability of the Impala Mineral Reserves is tested by means of 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 PGM metal ratios and differs from the overall Group basket prices. This is then tested against the internal Impala estimate of the real long-term basket price and the spot price as at 30 June 2020. These tests indicate that the Impala operation requires a real long-term basket price of between R14 000 and R15 000 per 6E ounce to be economically viable. The real spot basket price for the Impala operation as at 30 June 2020 was R32 460 (US$1 790) and the Impala internal long-term real basket price per 6E ounce is R16 850 (US$1 200). Investment in maintaining current production levels well into the future through prudent capex on selected projects from current infrastructure within the lease area is under consideration.

The commodity market remains fluid and the outlook has improved since 30 June 2020.

Compliance

Impala has adopted the SAMREC Code (2016) for its reporting. The Competent Person for the Impala Mineral Reserves is David Sharpe, a full-time employee of Impala, who holds a BSc (Hons) (Geology) and a BComm degrees and is registered with SACNASP, with registration number 400018/91 and has 32 years' relevant experience. The Competent Person for the Impala Mineral Resources is Johannes du Plessis, also a full-time employee of Impala, who holds a MSc (Geology) degree and is registered with SACNASP, with registration number 4000284/07 and has 19 years' relevant experience. Implats has written confirmation from the Competent Persons that the information disclosed in terms of these paragraphs are compliant with the SAMREC Code (2016) and, where applicable, the relevant SAMREC Table 1 and JSE Section 12 Listings Requirements and that it may be published in the form, format and context in which it was intended.

Implats appointed SRK to undertake the 2020 independent review of the Mineral Resources and Mineral Reserves as at 30 June 2020. SRK concluded that they could not find any fatal flaws in the estimation of Impala Rustenburg Mine's Mineral Resources and Mineral Reserves based on the data provided. SRK also noted that there are no impediments for publishing the Mineral Resource and Mineral Reserve Statement as SAMREC Code (2016) compliant (page 140).

Key operating statistics

		FY2020	FY2019	FY2018	FY2017	FY2016
Production						
Tonnes milled ex mine*	(000t)	**9 635**	11 211	10 947	10 121	10 316
Head grade 6E	(g/t)	**3.91**	3.99	4.09	4.06	4.16
Platinum refined	(000oz)	**638**	754	581	655	627
Palladium refined	(000oz)	**343**	332	300	308	300
6E refined	(000oz)	**1270**	1 391	1 127	1 247	1 220
Cost of sales		**(21 302)**	(20 045)	(16 204)	(17 909)	(16 857)
On-mine operations	(Rm)	**(12 414)**	(12 878)	(11 909)	(11 703)	(10 600)
Processing operations	(Rm)	**(2 165)**	(2 096)	(2 092)	(1 957)	(1 762)
Smelting operations	(Rm)	**(934)**	(993)	(905)	(939)	(772)
Refining operations	(Rm)	**(957)**	(826)	(689)	(615)	(571)
Other	(Rm)	**(4 832)**	(3 252)	(609)	(2 695)	(3 152)
Total cost	(Rm)	**16 753**	17 045	15 788	15 411	13 879
Per tonne milled*	(R/t)	**1 739**	1 520	1 442	1 523	1 345
	(US$/t)	**111**	107	112	112	93
Per 6E oz refined	(R/oz)	**13 190**	12 256	14 011	12 362	11 380
	(US$/oz)	**842**	864	1 090	906	789
Financial ratios						
Gross margin ex mine	(%)	**29.5**	6.9	(22.2)	(22.6)	(15.8)
Capital expenditure	(Rm)	**1 758**	2 006	2 767	2 472	2 490
	(US$m)	**112**	141	215	181	173

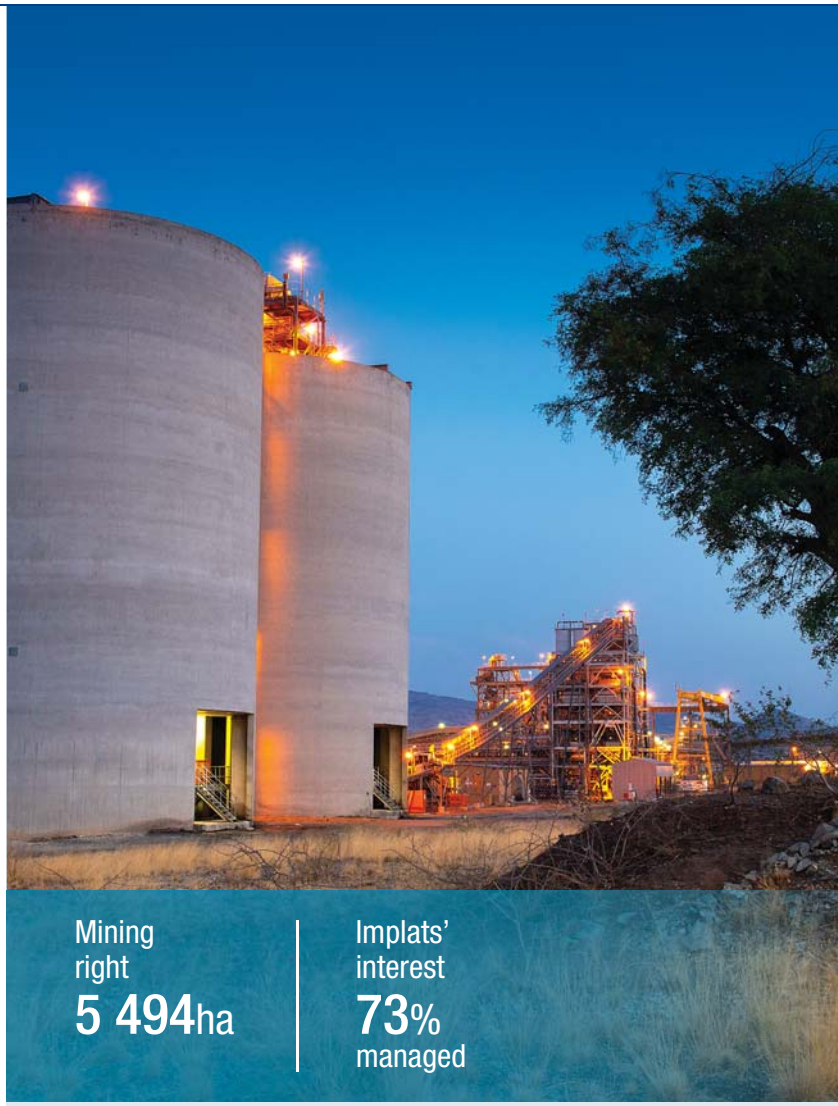
* *The mined tonnage and grade statistics above exclude the low-grade material from surface sources.*

Between FY2019 and FY2020 Impala has realised a decrease in tonnes milled by 1 576kt and the refined platinum by 116Koz.

The year-on-year production performance and outlook is discussed in the Implats 2020 Annual Integrated Report **(www.implats.co.za)**.

Marula

PLATINUM FROM THIS AREA WAS FIRST RECOGNISED BY RENOWNED EXPLORER HANS MERENSKY ON THE NEARBY FARM MAANDAGSHOEK IN 1924. IN JUNE 1998 IMPLATS ENTERED INTO AN ARRANGEMENT TO ACQUIRE THE WINNAARSHOEK PROPERTY FROM PLATEXCO, A CANADIAN-BASED COMPANY.



Mining right
5 494ha

Implats' interest
73% managed

History

Exploration activities, which led to the discovery of PGM mineralisation at the Marula operations, started in the 1920s, following the discovery of PGMs by Hans Merensky on the nearby Maandagshoek 254KT (now Modikwa Mine). Most of the prospecting activities at that time were prioritised on the Merensky Reef in preference to the UG2 Reef. This early work included trenching, the excavation of adits and sampling of outcrops. In June 1998 Implats entered into an arrangement to acquire the Winnaarshoek property from Platexco, a Canadian-based company. After acquiring Winnaarshoek, the mineral rights to portions of the adjacent farms of Clapham and Forest Hill and a sub-lease to Driekop were subsequently acquired from Anglo Platinum in exchange for Hendriksplaats (now part of Modikwa Platinum Mine), thus consolidating the Marula Mine area. The initial exploration programme commenced in the 1960s by Anglo Platinum. Platexco and Implats explored extensively, with a total of some 760 surface drillholes drilled to date. The establishment and development of the mine commenced in October 2002. Marula is a managed operation within the Implats portfolio.

Mineral rights

Marula holds two contiguous converted mining rights covering 5 494ha across the farms Winnaarshoek and Clapham, as well as portions of the farms Driekop and Forest Hill. Mining of the adjacent area in terms of the historically held royalty agreement with Modikwa has ceased, with the parties in the process of finalising a closure agreement. Implats manages the operation and has a 73% interest in Marula with each of the three empowerment groupings (Mmakau Mining, the Marula Community Trust and Tubatse Platinum) holding a 9% interest each. The Black Economic Empowerment transaction is in the process of being refinanced and will result in a decrease in the current BEE shareholders ownership percentage, with the difference being made up with the establishment of an Employee Share Ownership Trust. The new-order mining right was awarded for a 30-year period in 2008. In terms of the MPRDA holders of the mining rights may apply for more than one renewal period of a maximum of 30 years each as per the supporting mining work programme, 60 working days before the relevant expiry date.

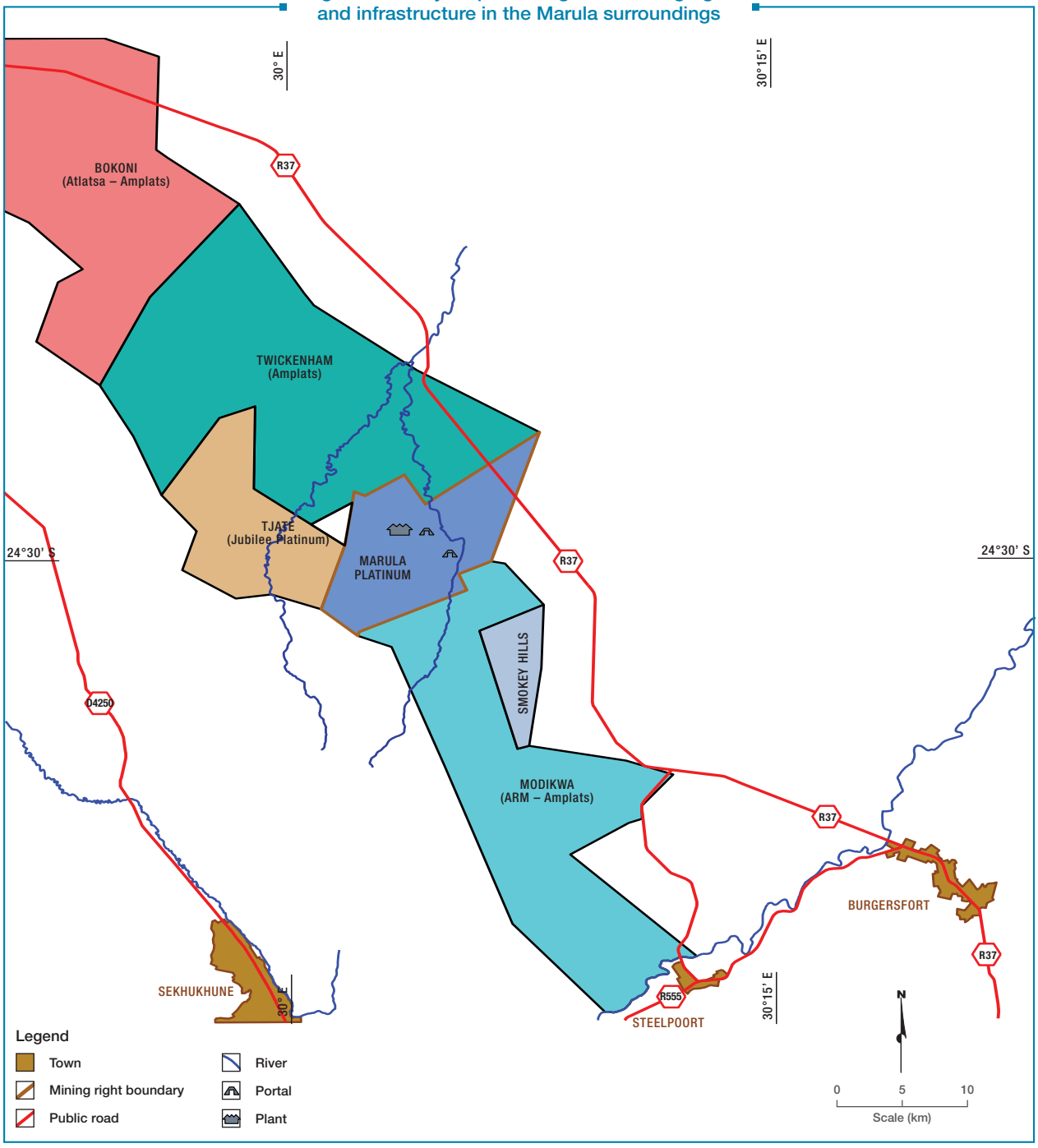
Marula has legal entitlement to the minerals being reported upon without any known impediments. There are no legal proceedings or other material matters that may impact on the ability of Marula to continue with exploration and mining activities.

SOUTH AFRICA

Location

Marula Mine is located within the Greater Tubatse Local Municipality of the Limpopo province of the Republic of South Africa, approximately 35km northwest of the town of Burgersfort, 120km southeast of Polokwane. The mine is accessible from a well-developed network of national and provincial tarred roads, with the closest public airport located in Polokwane. Marula Platinum is situated in the Eastern Bushveld Complex, located south of the Anglo Platinum Twickenham Mine and north of the Anglo Platinum-ARM Modikwa Mine. The western (down-dip) boundary is shared by Jubilee Platinum and its Tjate project.

Regional locality map showing PGM mining rights and infrastructure in the Marula surroundings



Marula

Infrastructure

The region is well developed, partly due to other mining activities in the vicinity. The R37 tarred road from Burgersfort to Polokwane passes through the area, while a secondary tarred road, built by Marula, links the R37 to the main office and other infrastructure at Marula. The existing mines and villages are supplied with electricity by Eskom. Marula has an adequate and firm electricity supply and distribution network. The site is supplied by two independent 132kV Eskom power lines. Two 40MVA transformers (one operating and one on standby) convert the voltage to 33kV for surface and underground distribution. Water is provided through the Lebalelo Water Scheme from which Marula has an allocation of 13.8Ml 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, a tailings storage facility and overland ore conveyance.

Environmental

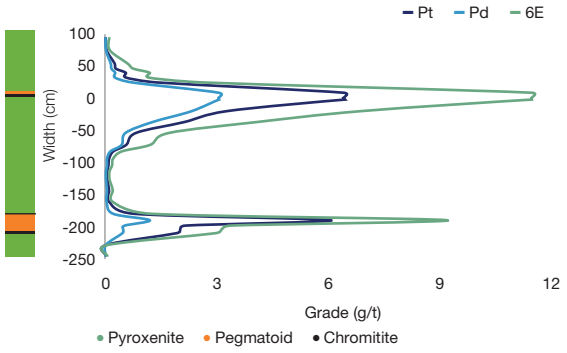
Summary details pertaining to the Group environmental management and policy are listed on page 19. This includes the focus areas such as compliance, water stewardship, air quality, managing waste streams and promoting land management practices. Marula's ISO 14001 certification lapsed in 2017 but was successfully re-certified in 2019. In line with our environmental management system expectations, all areas are required to identify and report on environmental incidents. Systems are in place to investigate and determine the direct and root causes of high-severity incidents and to address and close out these incidents.

Geology

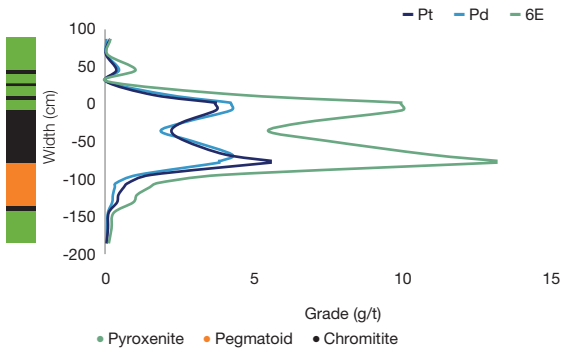
The geological succession is illustrated in the generalised stratigraphic column on page 65 The Merensky and UG2 Reefs are separated by a sequence of mostly anorthositic and noritic layered units of some 400m in combined thickness. Both the Merensky and UG2 Reefs are present but only the UG2 is currently exploited. The geological succession is broadly similar to that of the western limb. The UG2 Reef is defined as a 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 hanging wall contact. Mineralisation peaks over the chromitite stringer and decreases into the hangingwall and footwall. The average 6E metal ratios show the distinct differences between the Merensky and UG2 Reefs, in particular the high proportion of palladium associated with the UG2 at Marula and also the relative high proportion of rhodium in the UG2 Reef, as shown on the this page.

Both mineralised horizons sub-outcrop on the Marula mining rights area and dip in a west-southwest direction at 12° to 14°. The reefs are relatively undisturbed by faults and dykes with one major dolerite dyke traversing the mining area. Potholes represent the majority 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 Statements as geological losses.

Marula – Merensky

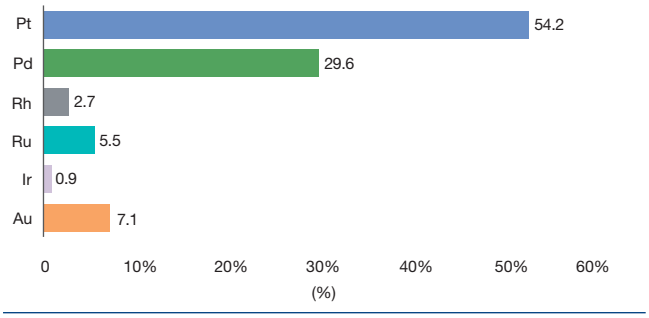


Marula – UG2



Marula Merensky 6E metal ratio

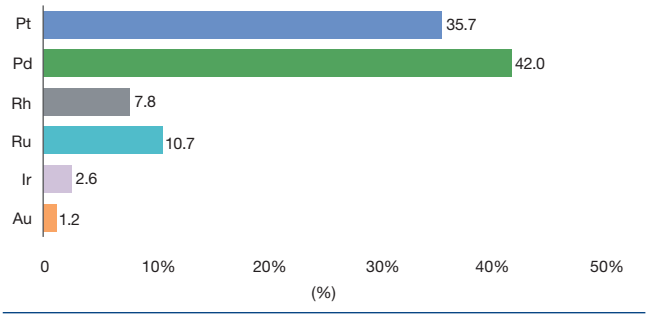
as at 30 June 2020 (%)



Merensky metal ratios derived from the Mineral Resource estimate.

Marula UG2 6E metal ratio

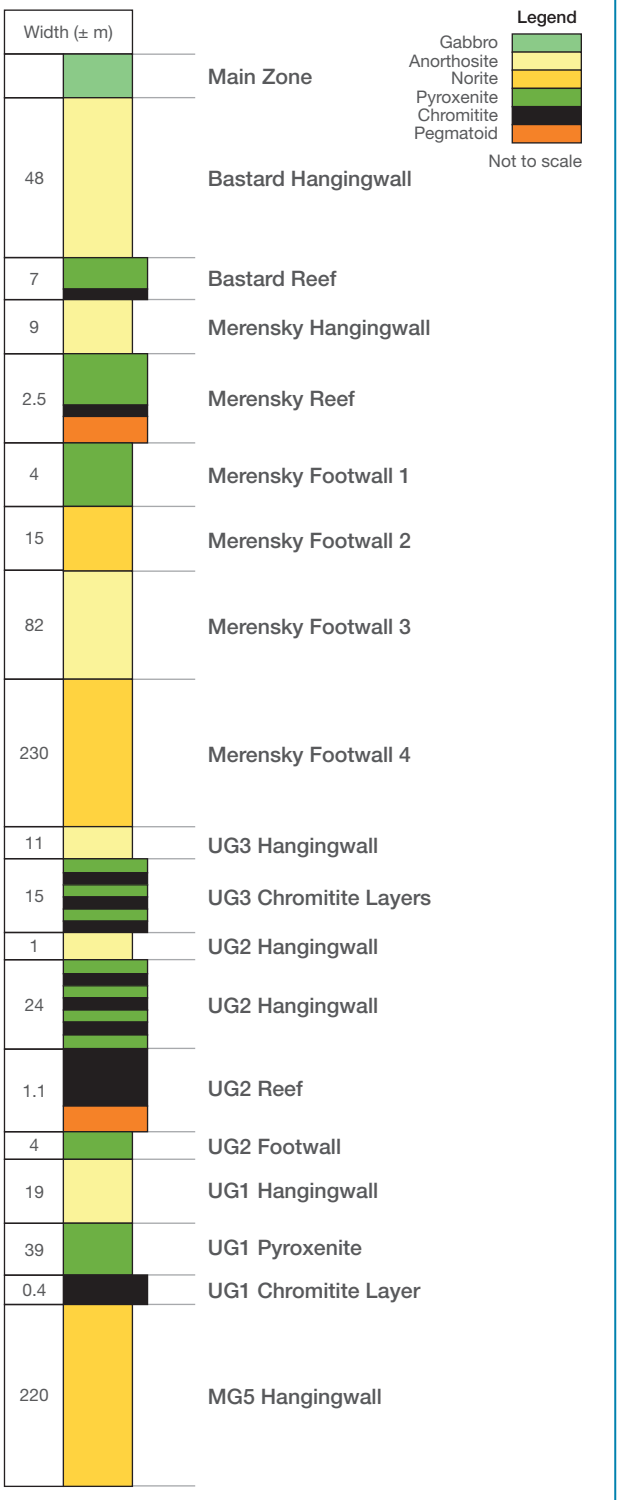
as at 30 June 2020 (%)



UG2 metal ratios derived from the Mineral Reserve estimate.

Marula

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



Exploration

Exploration activities which led to the discovery of PGMs at Marula Mine started in the 1920s following the recognition of PGMs by Hans Merensky on the nearby Maandagshoek farm (now Modikwa Mine). Follow-up exploration in the 1960s and 1980s by Anglo American Platinum Limited (Anglo Platinum) entailed exploration drilling targeting both the Merensky and the UG2 Reefs. There is limited data relating to these historical exploration initiatives. 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 main drilling technique employed although limited reverse circulation drilling was also undertaken to refine the structural model in areas of potential open-pit mining. Ongoing surface drilling is typically infill work to supplement a broader grid completed during feasibility stages. Such work is mostly targeted to assist with detailed structural interpretations. Underground geotechnical core-recovering drilling activities are routinely being undertaken at Marula. 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 pertaining to the work conducted in the past year are summarised in the exploration overview section of this report. Two surface drillholes were drilled at Marula during the past year. At the two mining shafts at Marula, 34 underground drillholes were drilled, mainly for water cover, as well as geological delineation. The reduced number of underground drillholes were due to contract complications with suppliers. Two significant supplementary surface exploration campaigns are earmarked for FY21 towards bolstering geological confidence for the Marula Deep's Phase I.

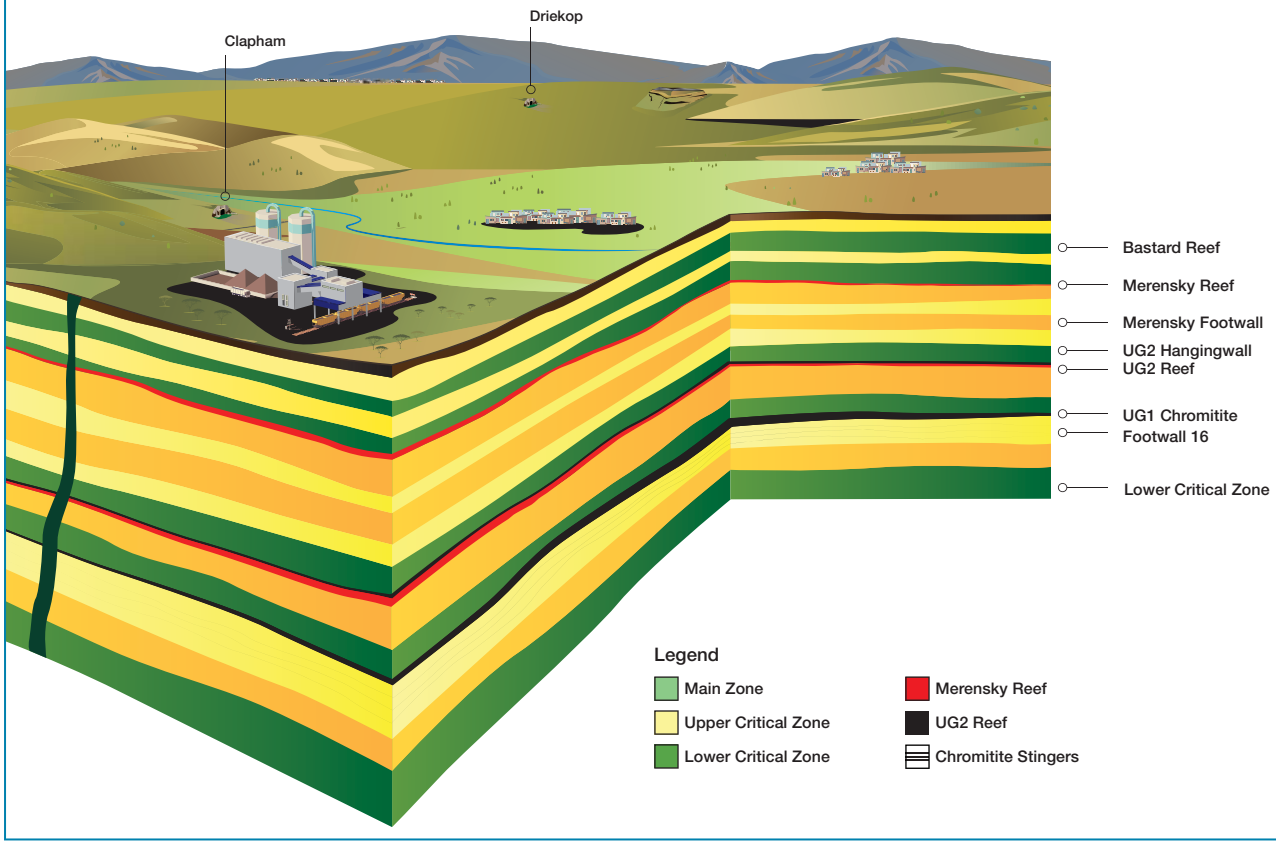
Mineral Resource estimation and reconciliation

The statement on page 67 reflects total estimates for Marula as at 30 June 2020. The corresponding estimated attributable Mineral Resources are summarised on page 33. Note that Mineral Resources quoted are inclusive of Mineral Reserves. Estimated geological losses have been accounted for in the Mineral Resource estimate. Changes in the UG2 and Merensky Mineral Resource estimates since last year reflect an updated estimation using limited additional data. The Mineral Resource estimate for the UG2 Reef is shown at a minimum mining width. The Mineral Resource estimates are reflected in both 4E and 6E formats. Rounding of numbers may result in minor computational discrepancies. Mineral Resource estimates are inherently imprecise in nature and the results tabulated in this report must be read as estimates and not as calculations. Inferred Mineral Resources in particular are qualified as approximations. The average nickel and copper grades based on exploration samples are 0.20% Ni and 0.11% Cu for the Merensky Reef channel and 0.05% Ni and 0.02% Cu for the UG2 Reef channel. The estimate has been conducted using the Isatis™ software. A multi-pass search was used for the estimation and capping of extreme values was applied for UG2 Reef data. Estimated losses have been accounted for in the Mineral Resource calculation varying from 20% – 25%, using the geological model, constructed in CADSmine™ software as the basis. The Mineral Resource classification is based on a Group standard practice that considers the quality of the data, the continuity of the reef, if a seismic survey covers the area or not, the data spacing, and the geostatistical parameters. The year-on-year reconciliation of the Mineral Resources estimate of Marula shows mostly depletion, some model update and minor areas excluded.

Mineral Resource estimates are based on mining faces at 31 December 2020. The Mineral Resources estimates have been non-spatially depleted per shaft for six months until 30 June 2020.

Marula

Generalised schematic section of the stratigraphic sequence at Marula



Mine design and scheduling discussion at Marula Mine

Marula

Marula Mineral Resource estimate (inclusive reporting)

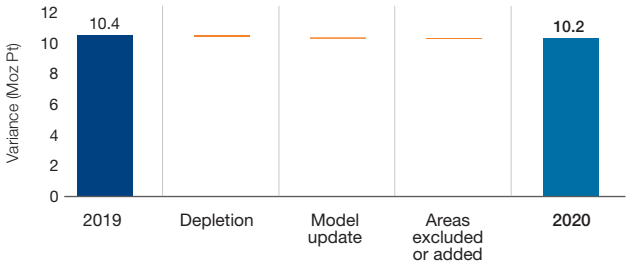
As at 30 June 2020

Orebody		Merensky				UG2				
Category		Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	Total
Tonnes	Mt	34.3	7.6	5.2	**47.0**	47.5	22.4	6.4	**76.2**	**123.3**
Width	cm	100	100	100		96	102	103		
4E grade	g/t	4.26	4.20	3.82	**4.21**	6.28	6.21	6.32	**6.26**	**5.48**
6E grade	g/t	4.56	4.50	4.10	**4.50**	7.28	7.23	7.36	**7.27**	**6.21**
Ni	%	0.20	0.19	0.19	**0.20**	0.04	0.05	0.05	**0.05**	**0.10**
Cu	%	0.11	0.11	0.10	**0.11**	0.02	0.02	0.02	**0.02**	**0.05**
4E oz	Moz	4.7	1.0	0.6	**6.4**	9.6	4.5	1.3	**15.3**	**21.7**
6E oz	Moz	5.0	1.1	0.7	**6.8**	11.1	5.2	1.5	**17.8**	**24.6**
Pt oz	Moz	2.7	0.6	0.4	**3.7**	4.0	1.9	0.6	**6.5**	**10.2**
Pd oz	Moz	1.5	0.3	0.2	**2.0**	4.6	2.1	0.6	**7.2**	**9.2**

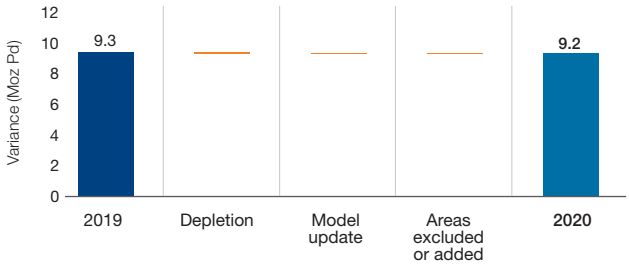
As at 30 June 2019

Orebody		Merensky				UG2				
Category		Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	Total
Tonnes	Mt	34.3	7.6	5.2	**47.0**	48.9	22.4	6.4	**77.7**	**124.8**
Width	cm	100	100	100		96	102	103		
4E grade	g/t	4.26	4.20	3.82	**4.21**	6.28	6.27	6.36	**6.29**	**5.50**
6E grade	g/t	4.56	4.50	4.10	**4.50**	7.26	7.24	7.35	**7.26**	**6.22**
Ni	%	0.20	0.19	0.19	**0.20**	0.04	0.05	0.05	**0.05**	**0.10**
Cu	%	0.11	0.11	0.10	**0.11**	0.02	0.02	0.02	**0.02**	**0.05**
4E oz	Moz	4.7	1.0	0.6	**6.4**	9.9	4.5	1.3	**15.7**	**22.1**
6E oz	Moz	5.0	1.1	0.7	**6.8**	11.4	5.2	1.5	**18.2**	**25.0**
Pt oz	Moz	2.7	0.6	0.4	**3.7**	4.2	1.9	0.6	**6.7**	**10.4**
Pd oz	Moz	1.5	0.3	0.2	**2.0**	4.6	2.1	0.6	**7.3**	**9.3**

Total Marula platinum Mineral Resources
as at 30 June 2020 (variance Moz Pt)

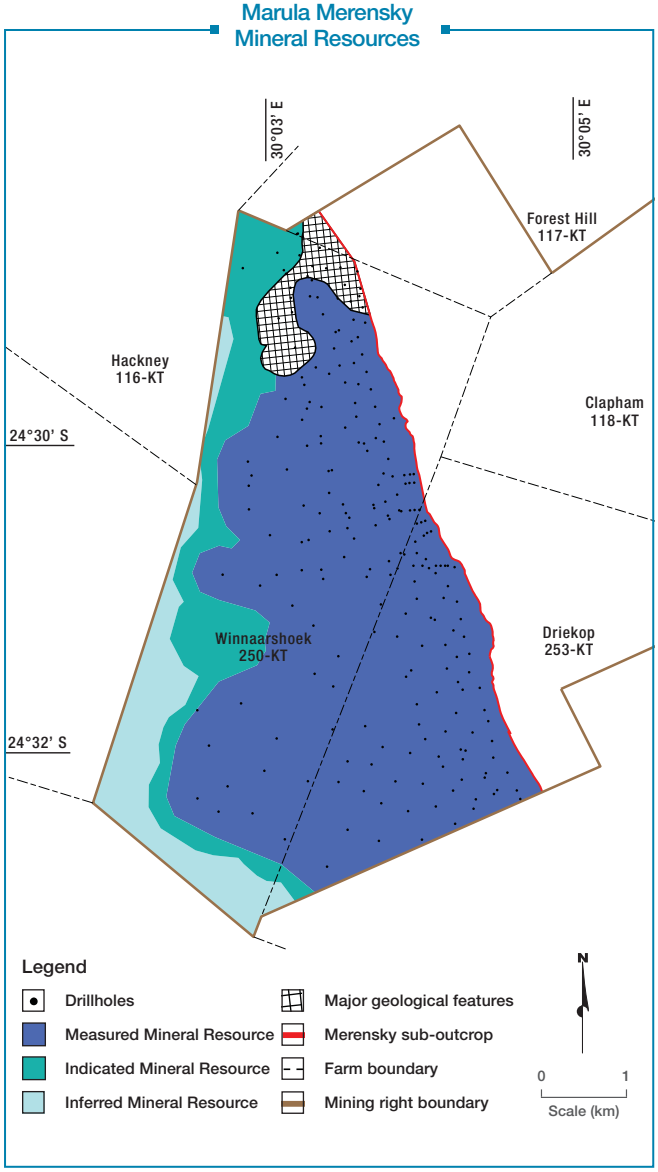


Total Marula palladium Mineral Resources
as at 30 June 2020 (variance Moz Pd)

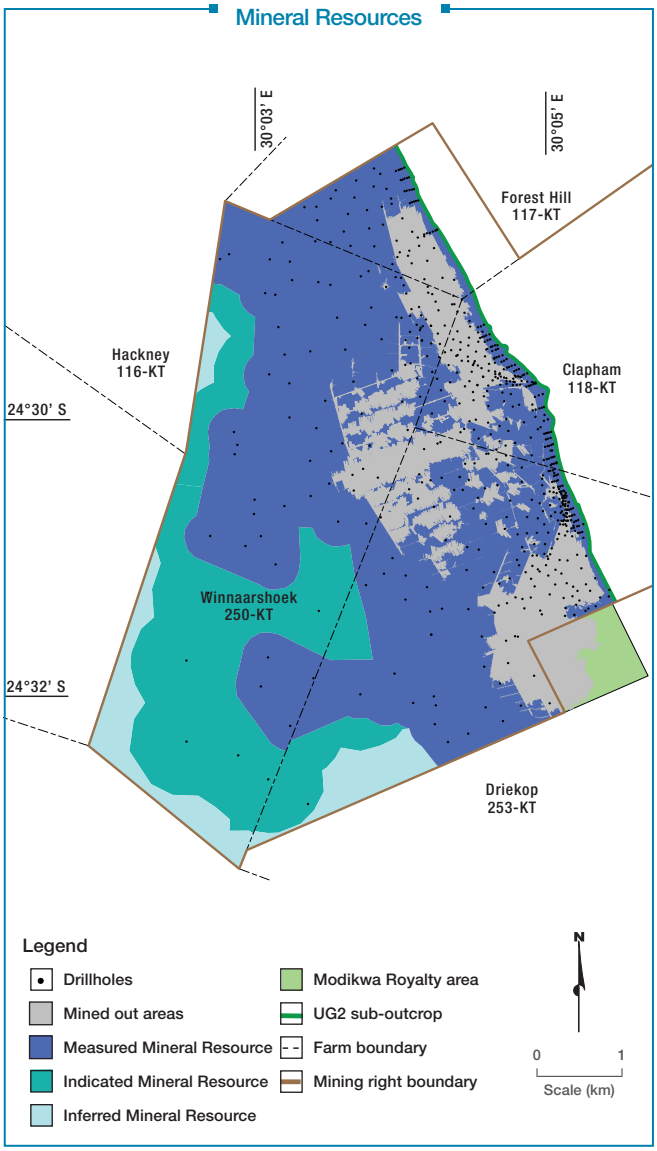


Marula

Marula Merensky Mineral Resources



Marula UG2 Mineral Resources



Modifying factors

Key modifying factors, such as overbreak, underbreak, off-reef mining, development dimensions, sweepings and mine call factors, are applied to the mining area (centare profile) to generate tonnage and grade profiles. The modifying factors used to convert a Mineral Resource to a Mineral Reserve are derived from historical performance while taking future anticipated conditions into account. Implats' long-term price assumptions in today's money (supporting Mineral Reserve estimates) are shown on page 12. Key factors are tabulated alongside.

Mineral Resource Key assumptions	Merensky Reef	UG2 Reef
Geological losses	20 – 25%	20 – 25%
Area	16 million ca	20 million ca
Channel width	100cm	98cm

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
Stoping width	–	125cm
Concentrator recoveries	–	86 – 88%

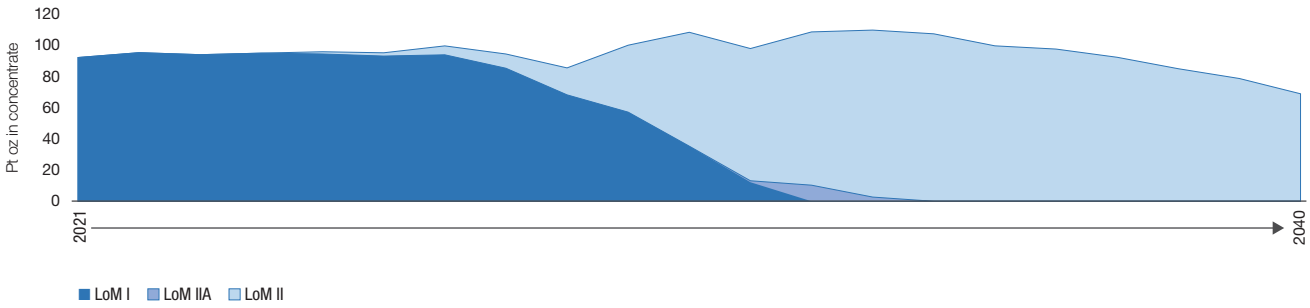
Marula

Mining methods and mine planning

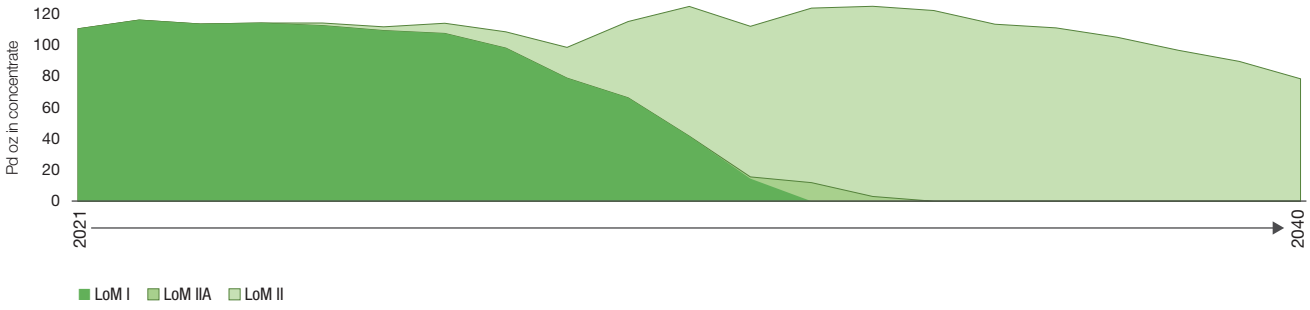
Marula Mine has two decline shaft systems. Driekop Shaft is exploiting the UG2 Reef by means of a hybrid mining method, while at Clapham Shaft, both a hybrid and conventional mining methods are being used to exploit the UG2 Reef. For the two hybrid sections, all main development is undertaken on-reef and the stoping is carried out through conventional single-sided breast mining from a centre gully. Panel face lengths are approximately 16m to 26m, with panels being separated by 6m x 4m grid pillars with 2m ventilation holings. The stoping width averages 125cm. For the conventional operation, the footwall drives are developed on strike approximately 25m below the reef horizon with cross-cut breakaways about 220m apart. This development is undertaken with drill rigs and dump trucks. Stope face drilling takes place with hand-held pneumatic rock drills with air legs. Mine design and scheduling of the operational shafts is carried out using CADSmine™ software. Geological models and ore blocks are updated and validated using G-Blocks and boundaries in the MRM information system. Grade block models are developed using Isatis™ software. The planning process starts with the compilation of the LoM plan (August to October) followed by a detailed two-year budget plan (February to April). The LoM I encompasses the UG2 Reef at the Clapham Shaft down to 5 level and the Driekop Hybrid areas. There are various options to optimise LoM IIA and II, these are subjects of studies going forward. The comparison between the Mineral Resource Statement and the 20-year LoM profile clearly illustrates Marula's potential to expand operations in future if economically viable. Note that the indicative LoM profile is based on a range of assumptions, which could change in future.

It should be noted that the Mineral Reserve estimate is the result of the planning process applied against the Measured and Indicated Mineral Resources only, through the application of detailed modifying factors; importantly, it should be noted that this process is subjected to rigorous economic viability testing at given market conditions.

Marula 20-year estimated LoM platinum ounce profile
as at 30 June 2020



Marula 20-year estimated LoM palladium ounce profile
as at 30 June 2020



Mineral Reserve estimation and reconciliation

The updated Mineral Reserve estimate for Marula as at 30 June 2020 is tabulated on page 70. The corresponding estimated attributable Mineral Reserves are summarised on page 35. The Mineral Reserves quoted reflect the grade delivered to the mill rather than the *in situ* channel grade quoted in respect of the Mineral Resources. 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, in particular also to conduct so-called tail-cutting at the end of a shaft's life.

The Mineral Reserves are reflected in both 4E and 6E formats. Rounding of numbers may result in minor computational discrepancies. The conversion and classification of Mineral Reserves at Marula is 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 if the mine plan passed economic testing and is approved for funding
- Proved Mineral Reserves are those areas where the main development has been completed

Marula

- No Inferred Mineral Resources are converted to the Mineral Reserve category
- The BP2021 Mine Plan was based on the survey faces of December 2019 with a spatial mine design and schedule forecast of six months until 30 June 2020.

There is no material change in the Mineral Reserve estimate when compared with the 30 June 2019 statement. The variances can be attributed to normal mining depletions, local geological impact and updated mine design in selected areas as well as tail-cutting.

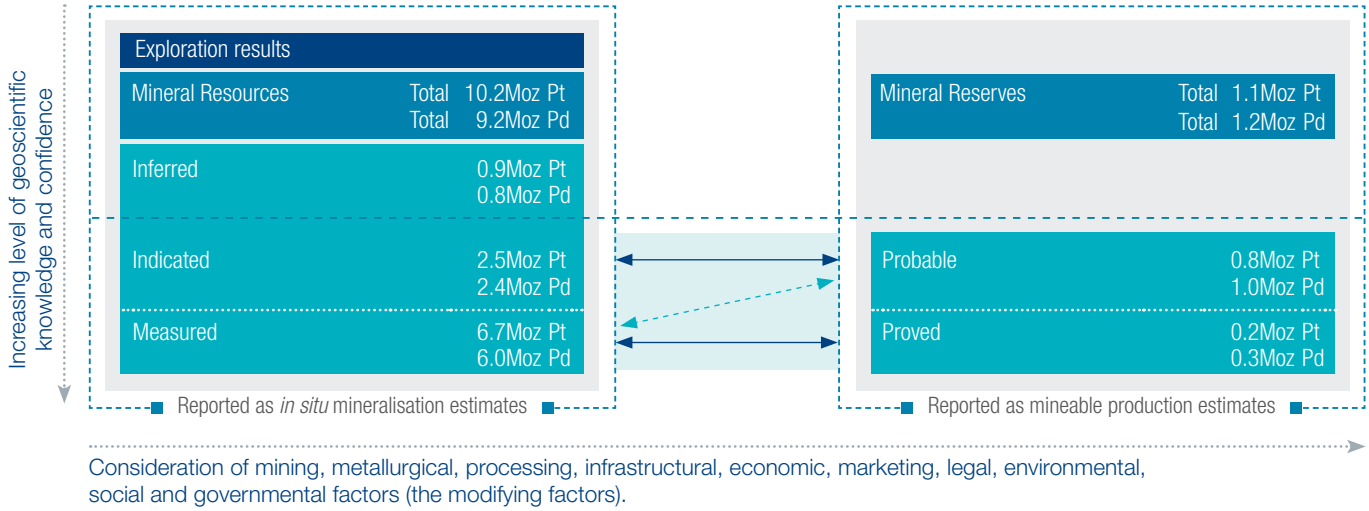
The distribution of the Mineral Reserves is depicted in the accompanying graph. It is clear that a significant proportion (66%) of the Mineral Reserves is located in the Clapham Shaft.

Marula Mineral Reserve estimate

As at 30 June 2020				
Orebody		UG2		
Category		Proved	Probable	Total
Tonnes	Mt	4.0	15.6	**19.6**
Width	cm	125	126	
4E grade	g/t	4.36	4.00	**4.07**
6E grade	g/t	4.99	4.62	**4.70**
4E oz	Moz	0.6	2.0	**2.6**
6E oz	Moz	0.6	2.3	**3.0**
Pt oz	Moz	0.2	0.8	**1.1**
Pd oz	Moz	0.3	1.0	**1.2**

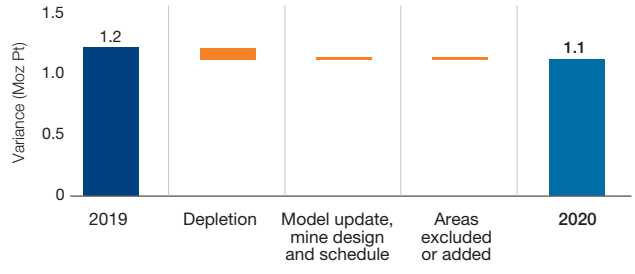
As at 30 June 2019				
Orebody		UG2		
Category		Proved	Probable	Total
Tonnes	Mt	3.1	17.5	**20.6**
Width	cm	126	126	
4E grade	g/t	4.39	4.14	**4.17**
6E grade	g/t	5.08	4.78	**4.82**
4E oz	Moz	0.4	2.3	**2.8**
6E oz	Moz	0.5	2.7	**3.2**
Pt oz	Moz	0.2	1.0	**1.2**
Pd oz	Moz	0.2	1.1	**1.3**

Relationship between exploration results, Mineral Resources and Mineral Reserves (100%)



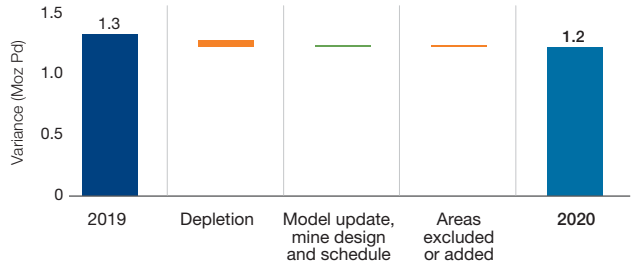
Total Marula platinum Mineral Reserves

as at 30 June 2020 (variance Moz Pt)



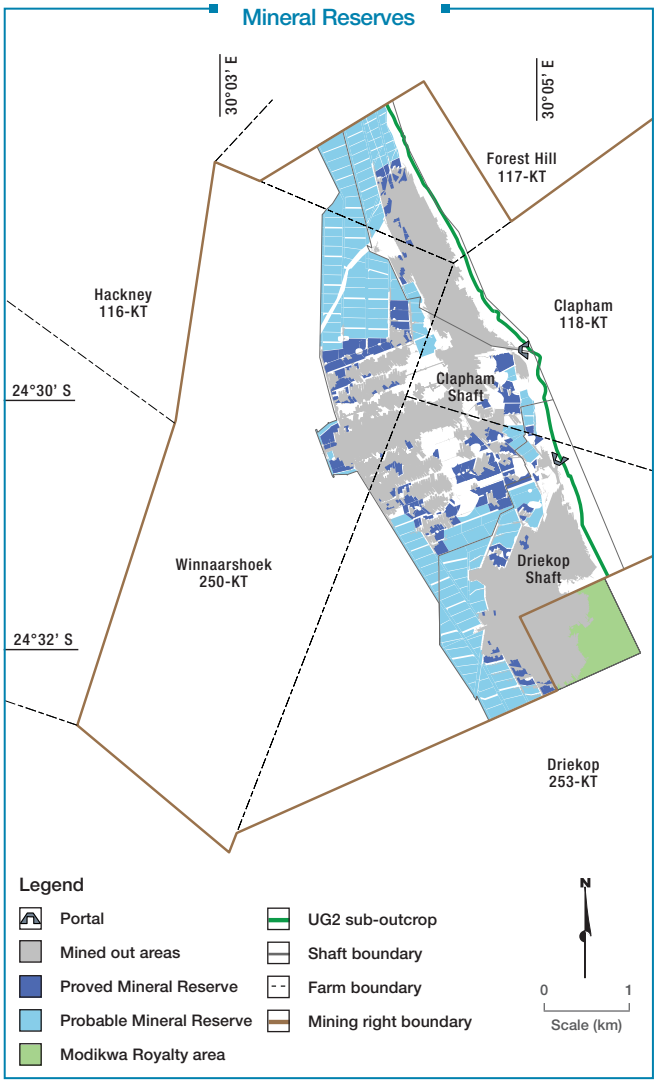
Total Marula palladium Mineral Reserves

as at 30 June 2020 (variance Moz Pd)



Marula

Marula UG2 Mineral Reserves



Processing

Marula has a concentrator plant where initial processing is conducted. Concentrate is transported by road to Impala's Mineral Processes in Rustenburg in terms of a LoM offtake agreement with Impala.

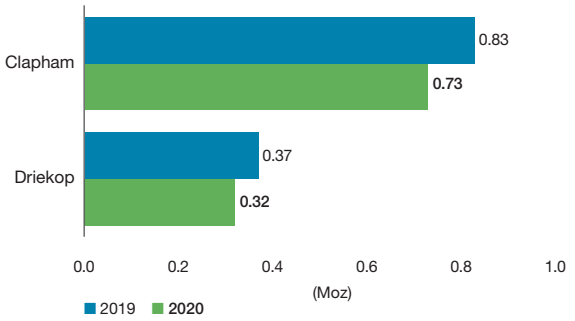
Marula top risks

The Group risk management process is briefly described on page 15, where the top 10 Group risks are listed. In this context the top additional risks identified at Marula are:

- Impact of Covid-19 on Marula operations
- Business interruptions due to community unrests
- Inability to retain key/critical skills
- Non-completion of TSF 2 project
- Non-compliance to regulatory governance
- Disruption to the supply of utilities
- Deterioration in safety compliance
- Non-compliance to HSE rules and standards
- Depletions of Mineral Resources and Mineral Reserves
- Physical disaster (fire, flooding and damage to major infrastructure and equipment).

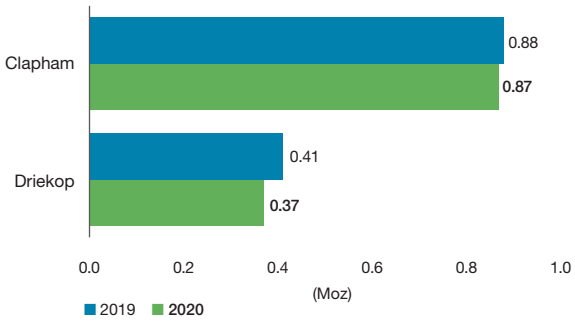
Marula platinum Mineral Reserve distribution

as at 30 June 2020 (Moz Pt)



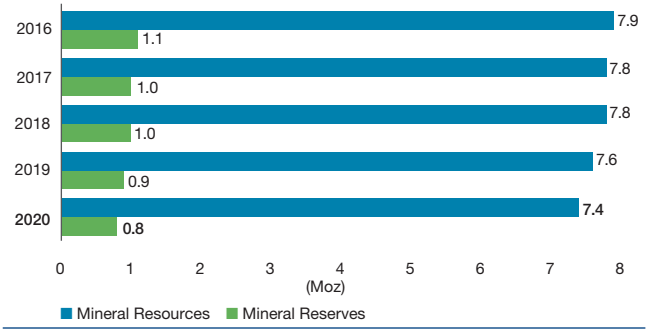
Marula palladium Mineral Reserve distribution

as at 30 June 2020 (Moz Pd)



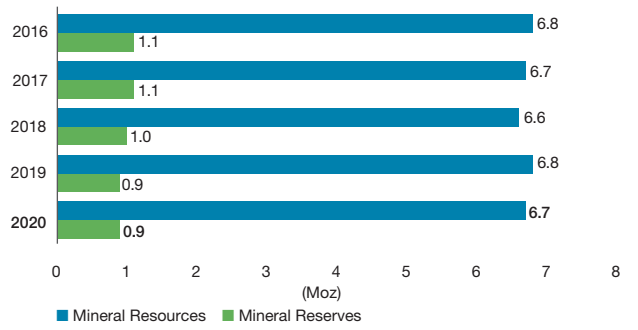
Marula attributable platinum Mineral Resources and Mineral Reserves

as at 30 June 2020 (Moz Pt)



Marula attributable palladium Mineral Resources and Mineral Reserves

as at 30 June 2020 (Moz Pd)



Marula

Valuation and sensitivity

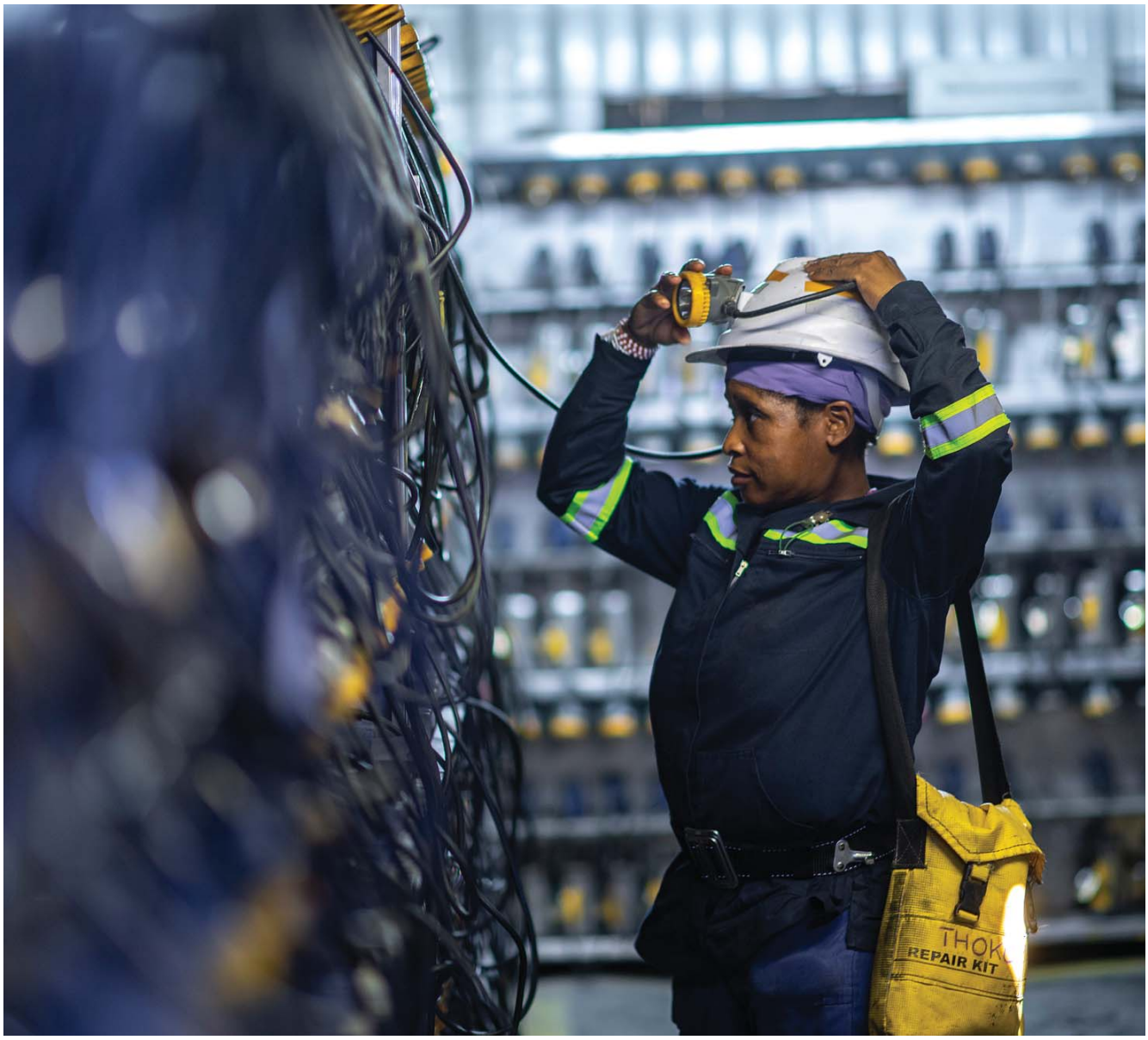
The economic viability of the Marula Mineral Reserves is tested by means of net present value calculations over the LoM of the Mineral Reserve, determining the lowest real rand basket price that would still render the Mineral Reserve viable. These calculations generate basket prices based on the local PGM metal ratios and differs 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 2020. These tests indicate that the Marula operation requires a real long-term basket price of between R12 000 and R13 000 per 6E ounce to be economically viable. The real spot basket price for the Marula operations as at 30 June 2020 was R38 200 (US$2 110) per 6E ounce and the Marula internal long-term real basket price is R18 380 (US$1 330) reflecting the influence of currently high rhodium prices.

The commodity market remains fluid and the outlook improved post 30 June 2020.

Compliance

Marula has adopted the SAMREC Code (2016) for its reporting. The Competent Person for Marula's Mineral Resources and Mineral Reserves is Sifiso Mthethwa, a full-time employee of Marula, who holds a BSc (Hons) (Geology) degree and is registered with SACNASP, with registration number 400163/13 and has 17 years' relevant experience. Implats has written confirmation from the Competent Person that the information disclosed in terms of these paragraphs is compliant with the SAMREC Code (2016) and, where applicable, the relevant SAMREC Table 1 and JSE Section 12 Listings Requirements, and that it may be published in the form, format and context in which it was intended.

Implats appointed SRK to undertake the 2020 independent review of the Mineral Resources and Mineral Reserves as at 30 June 2020. SRK concluded that they could not find any fatal flaws in the estimation of Marula Mine's Mineral Resources and Mineral Reserves based on the data provided. SRK also noted that there are no impediments for publishing the Mineral Resource and Mineral Reserve Statement as SAMREC Code (2016) compliant (page 140).



Lamp room at Marula Mine

Marula

Mechanised equipment at mechanical workshop, Marula Mine

Key operating statistics

		FY2020	FY2019	FY2018	FY2017	FY2016
Production						
Tonnes milled ex mine	(000t)	**1 636**	1 772	1 838	1 495	1 703
Head grade 6E	(g/t)	**4.70**	4.40	4.33	4.26	4.25
Platinum in concentrate	(000 oz)	**80.5**	83.0	85.1	67.9	77.7
Palladium in concentrate	(000 oz)	**82.6**	84.7	87.5	69.3	80.3
6E in concentrate	(000 oz)	**210.5**	216.9	223.5	177.6	204.6
Cost of sales	(Rm)	**(2 865)**	(2 676)	(2 367)	(2 246)	(2 126)
On-mine operations	(Rm)	**(2 004)**	(2 027)	(1 870)	(1 810)	(1 669)
Concentrating operations	(Rm)	**(251)**	(264)	(247)	(212)	(206)
Other	(Rm)	**(610)**	(385)	(250)	(224)	(251)
Total cost	(Rm)	**2 255**	2 291	2 117	1 988	1 875
Per tonne milled	(R/t)	**1 378**	1 293	1 152	1 330	1 101
	(US$/t)	**88**	91	90	98	76
Per 6E oz in concentrate	(R/oz)	**10 713**	10 562	9 472	11 385	9 164
	(US$/oz)	**683**	744	737	835	635
Financial ratios						
Gross margin ex mine	(%)	**45.7**	10.1	(0.4)	(39.0)	(26.7)
Capital expenditure	(Rm)	**340**	152	101	113	89
	(US$/m)	**22**	11	8	8	6

The year-on-year production performance and outlook is discussed in the Implats 2020 Annual Integrated Report **(www.implats.co.za)**.

Two Rivers

TWO RIVERS PLATINUM MINE IS LOCATED WITHIN THE SOUTHERN SECTOR OF THE EASTERN LIMB OF THE BUSHVELD COMPLEX.

History

During 2001, Assmang elected to dispose of its platinum interests at the Dwarsrivier Chrome Mine. Two Rivers, the incorporated joint venture between Avmin and Implats, secured the platinum rights in December 2001. Subsequent corporate activity involving Avmin, African Rainbow Minerals (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 development of the Two Rivers project in June 2005. The concentrator plant was commissioned in 2006 and in 2008 the mine successfully made the transition from a project to a mechanised operation. The Two Rivers platinum mine is a non-managed operation in the Implats portfolio.

Mineral rights

The operation is managed by ARM and Implats has a 46% stake in the joint venture. Two Rivers was granted a new-order mining right in 2013 over 2 140ha on the western portion of the farm Dwarsrivier. The mining rights were awarded for a 25-year period at which time the MPRDA allows for an extension. In 2015, portions 4, 5 and 6 of the adjoining farm, Kalkfontein, as well as portions of the farm Tweefontein held by Impala, were incorporated into the Two Rivers mining right. An agreement was also reached for the remaining Implats-owned mineral rights on portions of the farm Kalkfontein and the farm Buffelshoek in exchange for a royalty payment. The transfer of the additional Tamboti area on the RE portion of the farm Kalkfontein was concluded in November 2017. A Royalty Mining Agreement was concluded between Two Rivers and Rustenburg Platinum mines (Anglo Platinum) to mine the UG2 Reef on portion of portion 6 of the farm Dwarsrivier 372KT from the adjacent Mototolo Mine. This ground is currently not accessible from Two Rivers Main Decline due to the St Georges Fault. Two Rivers has legal entitlement to the minerals being reported upon without any known impediments. There are no legal proceedings or other material matters that may impact on the ability of Two Rivers to continue with exploration and mining activities.

Mining right
11 349ha

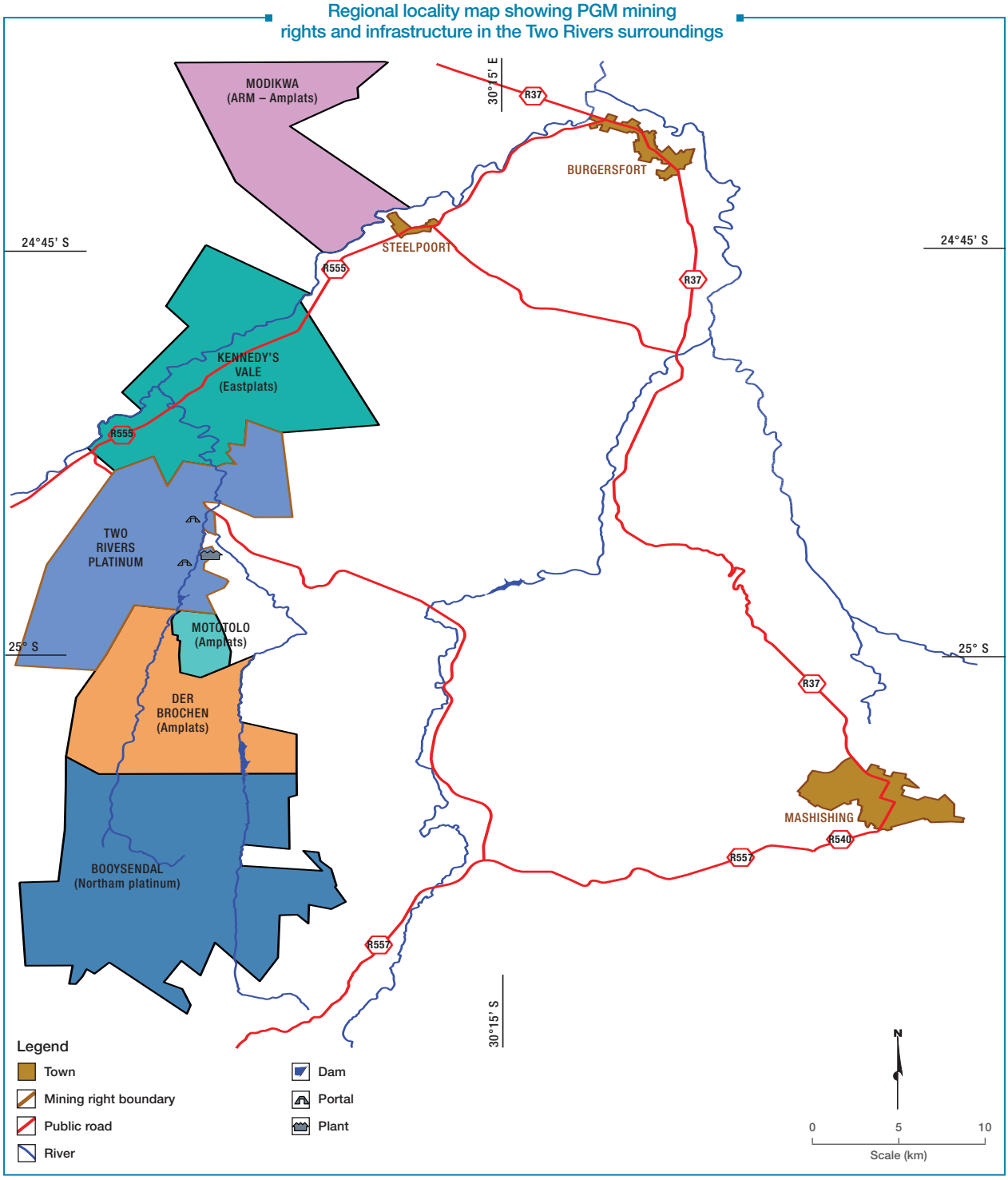
Implats' interest
46%
non-managed

SOUTH AFRICA

Location

The mine is located on the farm Dwarsrivier 372KT and extends to the farm Kalkfontein 367KT and portions of the farm Tweefontein 360KT and the farm Buffelshoek 368KT. The mine is situated at longitude 30°07'E and latitude 24°59'S in the Limpopo province, South Africa, approximately 30 kilometres from Steelpoort and 60 kilometres from Lydenburg. Two Rivers Platinum Mine is neighboured by Mototolo Platinum Mine (Amplats) and Dwarsrivier, Tweefontein and Thorncliffe chromite mines.

Regional locality map showing PGM mining rights and infrastructure in the Two Rivers surroundings



Two Rivers

Infrastructure

The tarred access road constructed by Two Rivers to the mine is in a good condition and well maintained. The nearest railway station at Steelpoort is 28km from the mine. Two Rivers has a Water Use Licence (WUL) to obtain its water from the Groot and Klein Dwars Rivers and from underground dewatering. The annual WUL (January to December) allocation is 2 926Ml. Electricity is obtained from Eskom via one of two 40MVA transformers at the Uchoba sub-station with an allocation of 35MVA for Two Rivers, which is fed from a 132kV line from the Merensky sub-station. Mining infrastructure includes two decline shafts, offices, stores, a concentrator plant, a chromite recovery plant, tailings storage facility and overland ore conveyance.

Environmental

Summary details pertaining to the Group environmental management and policy are listed on page 19. This includes the focus areas such as compliance, water stewardship, air quality, managing waste streams and promoting land management practices. Two Rivers is currently ISO 14001 certified. Environmental management activities include monitoring the status of Environmental Management Programme Reports (EMPRs), WUL applications and Environmental Impact Assessments (EIAs). More details can be found in the 2020 ARM suite of annual reports **(www.arm.co.za)**.

Geology

The geological succession is illustrated in the generalised stratigraphic column on page 77. The Merensky and UG2 Reefs are separated by a sequence of mostly anorthositic and noritic layered units of some 140m to 160m in combined thickness. Both the Merensky and UG2 Reefs are present but only the UG2 is currently exploited. However, no Merensky Reef is present on Tweefontein 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. The topography also means that the UG2 occurs at approximately 1 650m below surface on the southwestern boundary. The geological succession is broadly similar to other areas of the eastern limb of the Bushveld Complex. An exception is the presence of the Steelpoortpark granite in the southwestern part of the project, which is unique to this area. 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 also at the basal contact. Mineralisation is primarily associated with the upper and lower chromitite stringers. The graphical illustration of the profiles is shown on the next page. The geological structure of the area is dominated by the regional north-northeast to south-southwest trending Kalkfontein fault, which has an apparent vertical displacement of 1 200m down throw to the west. A series of sub-parallel faults occur to the south-east 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.

Exploration

Surface exploration drilling approach is to address the paucity of historical drilling on the farm Buffelshoek 368KT and to conduct a phased surface infill drilling programme to further evaluate the Merensky and UG2 Reefs which are both currently classified as Inferred Resources. During FY2020 five drillholes were drilled on the farm Dwarsrivier for a total of 1 265m at an all-inclusive cost of R3.53 million. The drilling was targeted to assist in the understanding of the UG2 Split Reef facies. Cover and geological delineation drilling was done from underground. In total 183 drillholes were drilled underground (10 339m) at a cost of R6.66 million. Exploration drilling planned for FY2021 includes an additional four drillholes on the farm Dwarsrivier and 145 underground drillholes for cover and geological delineation drilling.

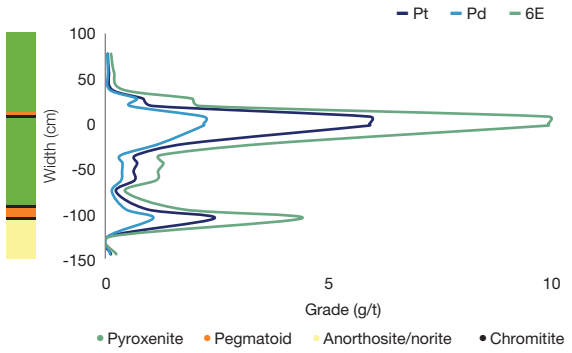
Mineral Resource estimation and reconciliation

The updated Mineral Resource estimates are tabulated on page 78 and reflect total estimates for Two Rivers as at 30 June 2020. Corresponding estimated attributable Mineral Resources are summarised on page 33. Mineral Resources are quoted inclusive of Mineral Reserves and estimated geological losses have been accounted for in the Mineral Resource estimation. Grade estimates were obtained by means of ordinary kriging of UG2 and Merensky Reef drillhole intersections. The UG2 Reef model has been updated and the classification was based on the consideration geological and geostatistical parameters as Measured, Indicated and Inferred Mineral Resources. No changes were made to the Merensky Reef Model. A substantial area on the farm Buffelshoek was excluded from the Merensky Mineral Resource due to a reduction in the economic channel width and doubt on its RPEEE. Both the Merensky and UG2 Mineral Resources to the west of the Kalkfontein fault are currently excluded due to the depth of the reef intersections. The Mineral Resources classification for UG2 and Merensky is based on several factors. These include the geological and grade continuity, drillhole spacing, geostatistical parameters and the historical classification.

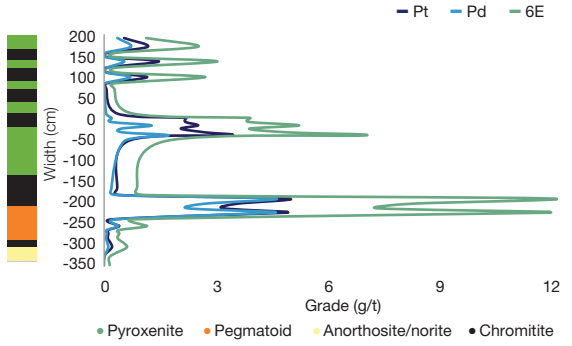
Rounding of numbers may result in minor computational discrepancies. Mineral Resource estimates are inherently imprecise in nature. The results tabulated in this report must be read as estimates and not as calculations. Inferred Mineral Resources in particular are qualified as approximations. The Mineral Resource estimate reflects the actual spacial depletion as at 31 May 2020 and the spacial depletion to 30 June 2020 as per the planned mining. More information regarding the Mineral Resources and Mineral Reserves can be found in the 2020 ARM annual report **(www.arm.co.za)**.

Two Rivers

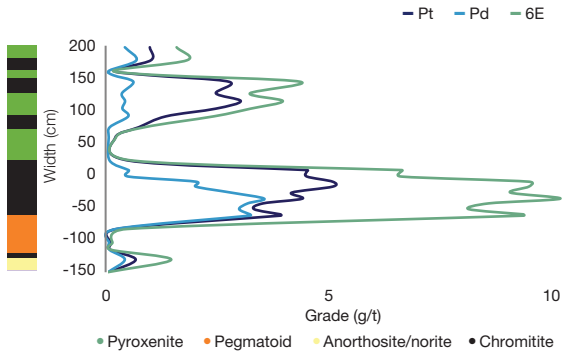
Two Rivers – Merensky



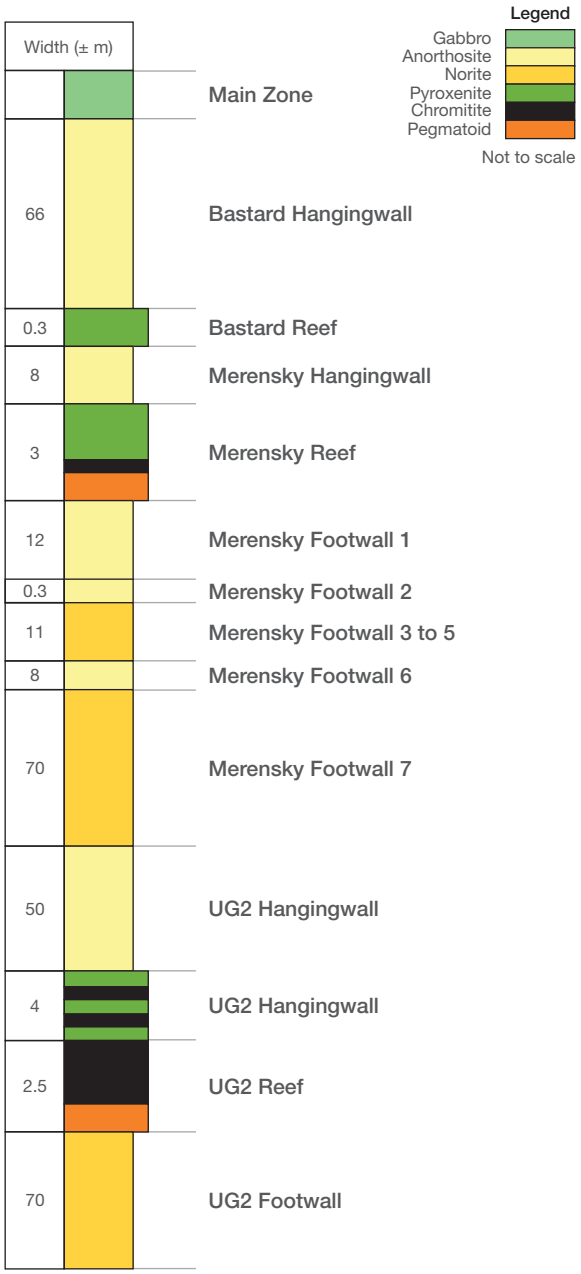
Two Rivers – UG2 (split)



Two Rivers – UG2 (normal)

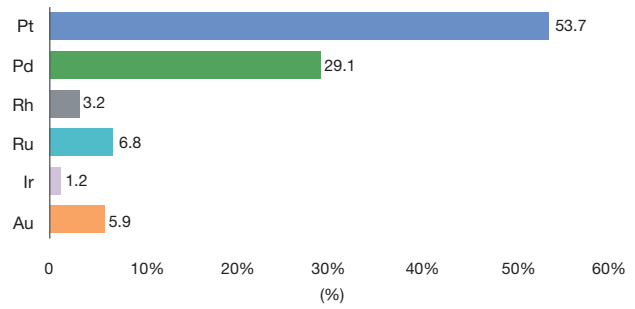


Generalised geological succession of the upper portion of the Critical Zone at Two Rivers



Two Rivers Merensky 6E metal ratio

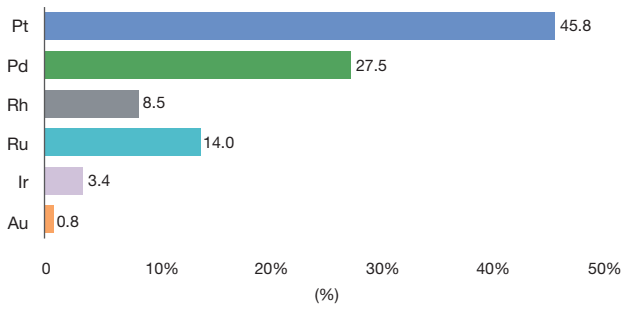
as at 30 June 2020 (%)



Merensky metal ratios derived from the Mineral Resource estimate.

Two Rivers UG2 6E metal ratio

as at 30 June 2020 (%)



UG2 metal ratios derived from the Mineral Reserve estimate.

Two Rivers

The year-on-year comparisons indicate a minor change in the Two Rivers Mineral Resource estimate since the 30 June 2019 statement; the main change can be attributed to an update of structural information and geological model with the addition of drillhole information.

Two Rivers Mineral Resource estimate (inclusive reporting)

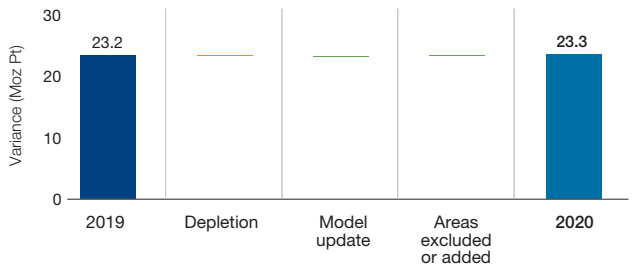
As at 30 June 2020

Orebody		Merensky			UG2				
Category		Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	Total
Tonnes	Mt	75.7	61.4	**137.1**	14.4	83.8	80.3	**178.4**	**315.5**
Width	cm	210	145		148	143	120		
4E grade	g/t	3.13	3.98	**3.51**	4.66	4.77	4.47	**4.62**	**4.14**
6E grade	g/t	3.42	4.32	**3.82**	5.65	5.73	5.33	**5.55**	**4.80**
Ni	%	0.14	0.16	**0.15**	0.03	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**	2.1	12.8	11.5	**26.5**	**42.0**
6E oz	Moz	8.3	8.5	**16.8**	2.6	15.4	13.8	**31.8**	**48.7**
Pt oz	Moz	4.6	4.5	**9.1**	1.2	7.0	6.0	**14.2**	**23.3**
Pd oz	Moz	2.3	2.6	**4.9**	0.7	4.4	4.3	**9.4**	**14.3**

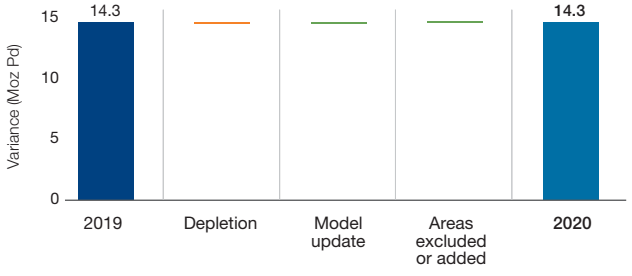
As at 30 June 2019

Orebody		Merensky			UG2				
Category		Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	Total
Tonnes	Mt	75.7	61.4	**137.1**	14.0	84.2	79.0	**177.2**	**314.3**
Width	cm	210	145		150	142	121		
4E grade	g/t	3.13	3.98	**3.51**	4.61	4.76	4.51	**4.64**	**4.15**
6E grade	g/t	3.42	4.32	**3.82**	5.58	5.71	5.40	**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**	2.1	12.9	11.5	**26.4**	**41.9**
6E oz	Moz	8.3	8.5	**16.8**	2.5	15.5	13.7	**31.7**	**48.5**
Pt oz	Moz	4.6	4.5	**9.1**	1.2	7.0	6.0	**14.2**	**23.2**
Pd oz	Moz	2.3	2.6	**4.9**	0.7	4.5	4.2	**9.4**	**14.3**

Two Rivers platinum Mineral Resources
as at 30 June 2020 (variance Moz Pt)

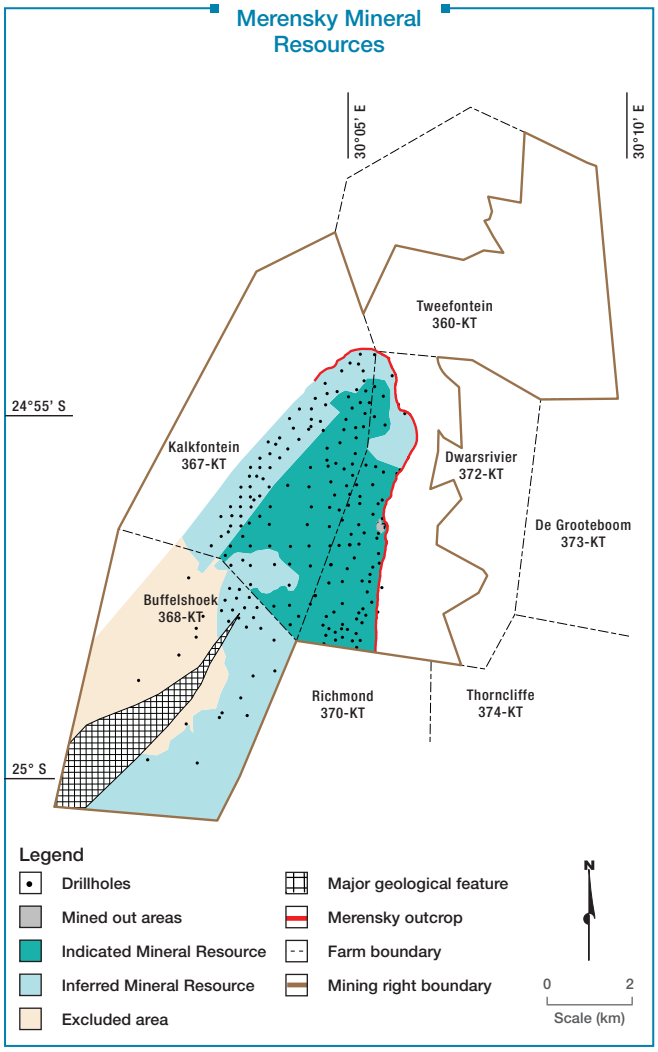


Two Rivers palladium Mineral Resources
as at 30 June 2020 (variance Moz Pd)

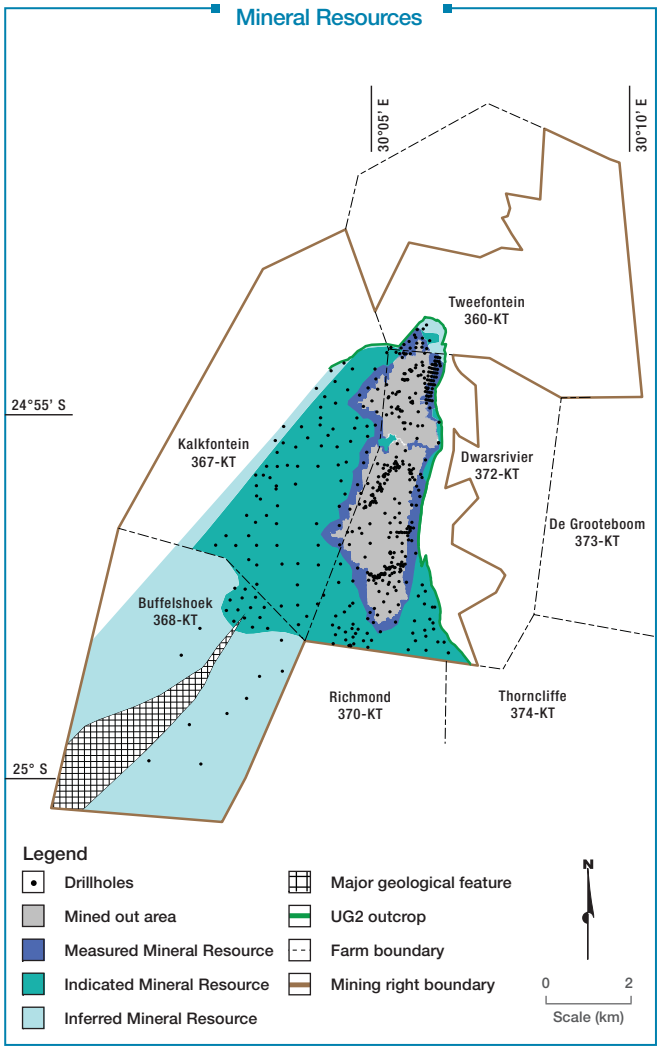


Two Rivers

Two Rivers Merensky Mineral Resources



Two Rivers UG2 Mineral Resources



Modifying factors

The modifying factors used to convert Mineral Resources to Mineral Reserves are derived from historical performance while taking future anticipated conditions into account. Implats' long-term assumptions in today's money (supporting Mineral Reserve estimates) are shown on page 12. The following other modifying factors were applied to the Mineral Resources:

Mineral Resource Key assumptions	Merensky Reef	UG2 Reef
Geological losses	30%	21 – 25%
Area	54 million ca	49 million ca
Channel width	158cm	133cm

Mineral Reserve Modifying factors	Merensky Reef	UG2 Reef
Dilution	–	23 – 30%
Pillars	–	15 – 25%
Shaft call factor	–	95 – 99%
Relative density	–	3.6 – 3.8
Stoping width	–	243cm
Concentrator recoveries	–	81%

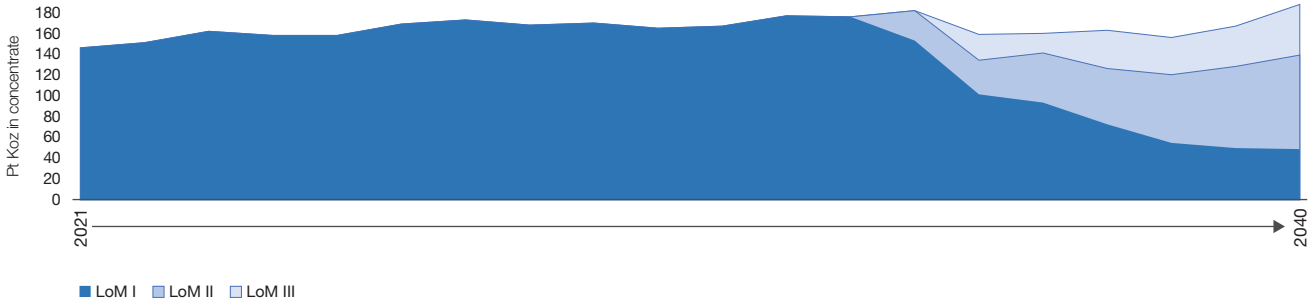
Dilution is impacted by the morphology of the UG2 Reef, in particular in the case of split reef facies.

Two Rivers

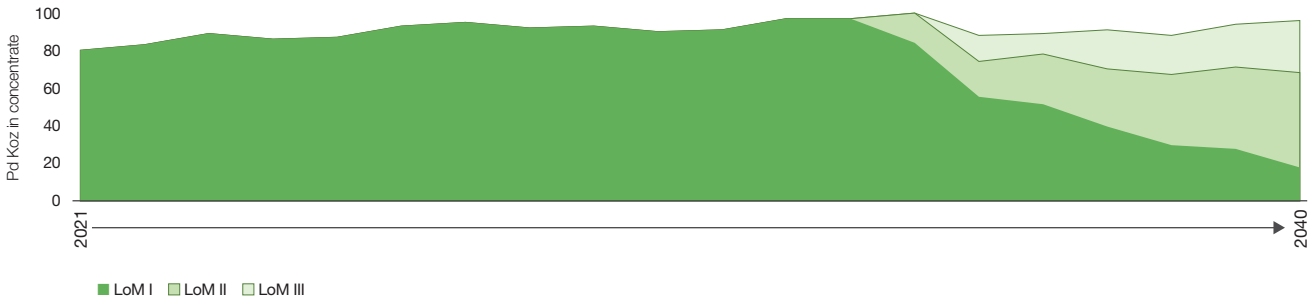
Mining methods and mine planning

The UG2 orebody is accessed via two decline shaft systems situated 3km apart, namely the Main Decline and the North Decline. Reef production 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 surface. The pillars are 6m x 6m to 12m x 12m in size. The bords are mined mainly on strike. A 3D geological model with layer grades and widths per stratigraphic unit is used in the mine planning. The mine scheduling of the two declines is done in Datamine Studio 5D Planner™. 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, impact significantly on the 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.

Two Rivers 20-year estimated LoM platinum ounce profile
as at 30 June 2020 (in concentrate)



Two Rivers 20-year estimated LoM palladium ounce profile
as at 30 June 2020 (in concentrate)



The estimated 20-year LoM profile for Two Rivers is shown above. LoM I constitutes production from the Main and North Decline Shafts. LoM II is an extension of the Main Decline infrastructure into the Kalkfontein RE and portions 1 and 2. The UG2 at Buffelshoek is excluded and does not form part of LOM II. The profile is based on assumptions and may change in future. Trial mining and a feasibility study was conducted in 2012/13 on the Merensky Reef. There is currently a feasibility study in progress on the Merensky Reef.

It should be noted that the Mineral Reserve estimate is the result of the planning process applied against the Measured and Indicated Mineral Resources only, through the application of detailed modifying factors; importantly, it should be noted that this process is subjected to rigorous economic viability testing at given market conditions.

Mineral Reserve estimation and reconciliation

The updated Mineral Reserve estimates reflect total estimates for Two Rivers as at 30 June 2020. Corresponding estimated attributable Mineral Reserve estimates are tabulated on page 35.

Mineral Reserves reflect the width and grade delivered to the mill rather than an *in situ* channel grade quoted in respect of the Mineral Resources. The modifying factors used in the UG2 Mineral Reserve estimate are based on the mine plan, which envisages a mechanised bord and pillar layout. No Inferred Mineral Resources have been converted into Mineral Reserves. The Mineral Reserve estimates are reflected in both 4E and 6E formats. Rounding of numbers may result in minor computational discrepancies. The results tabulated in this report must be read as estimates and not as calculations. More details regarding the Mineral Resources and Mineral Reserves can be found in the 2020 African Rainbow Minerals (ARM) annual report **(www.arm.co.za)**.

The conversion and classification of Mineral Reserves at Two Rivers is 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.

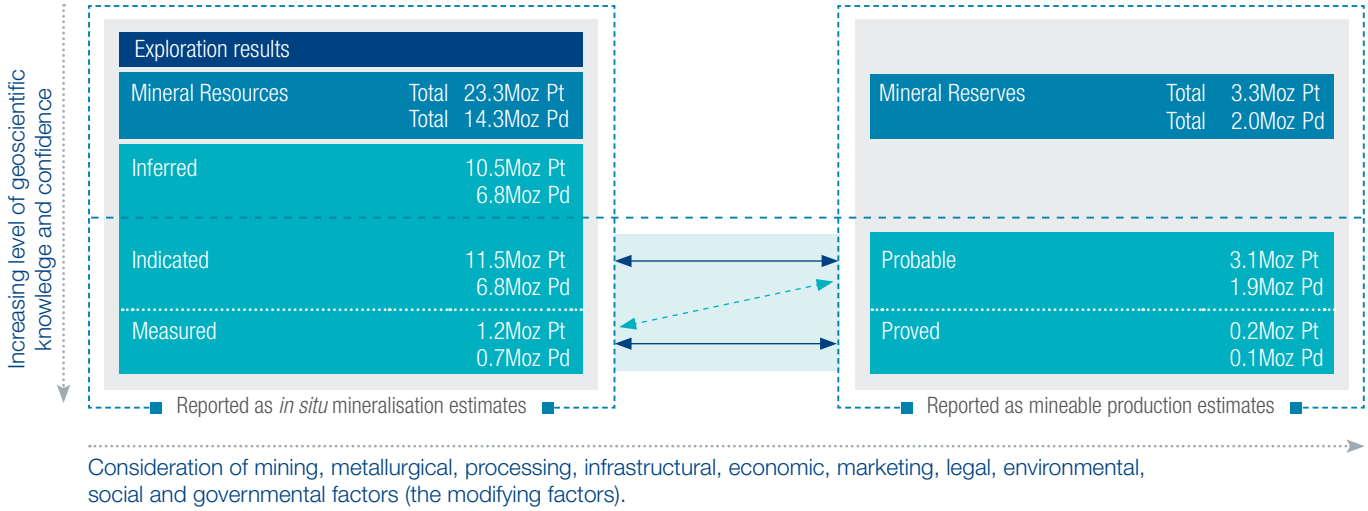
Two Rivers

Two Rivers Mineral Reserve estimate

As at 30 June 2020				
Orebody		UG2		
Category		Proved	Probable	Total
Tonnes	Mt	4.6	58.6	**63.2**
Width	cm	242	243	
4E grade	g/t	2.79	2.95	**2.94**
6E grade	g/t	3.41	3.57	**3.55**
4E oz	Moz	0.4	5.6	**6.0**
6E oz	Moz	0.5	6.7	**7.2**
Pt oz	Moz	0.2	3.1	**3.3**
Pd oz	Moz	0.1	1.9	**2.0**

As at 30 June 2019				
Orebody		UG2		
Category		Proved	Probable	Total
Tonnes	Mt	5.4	59.6	**65.0**
Width	cm	235	246	
4E grade	g/t	2.97	2.89	**2.89**
6E grade	g/t	3.57	3.49	**3.50**
4E oz	Moz	0.5	5.5	**6.0**
6E oz	Moz	0.6	6.7	**7.3**
Pt oz	Moz	0.3	3.1	**3.3**
Pd oz	Moz	0.2	1.8	**2.0**

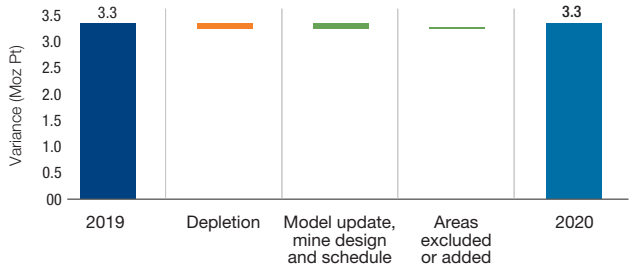
Relationship between exploration results, Mineral Resources and Mineral Reserves (100%)



The year-on-year comparison indicates that production depletion and model updates related to the split reef facies and associated decrease in mining width, are the primary reasons underpinning changes to the Mineral Reserve estimate as at 30 June 2020. In addition the five-year attributable estimated platinum and palladium ounces are shown for both Mineral Resources and Mineral Reserves. In total, 80% of Two Rivers Mineral Reserves are from the Main Decline block.

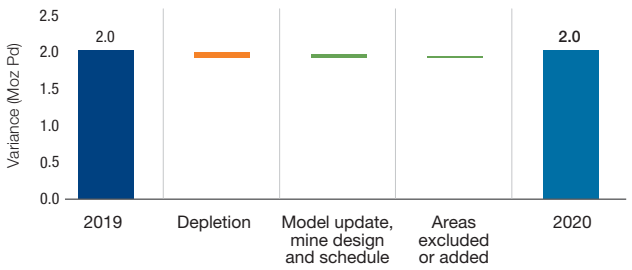
Total Two Rivers platinum Mineral Reserves

as at 30 June 2020 (variance Moz Pt)

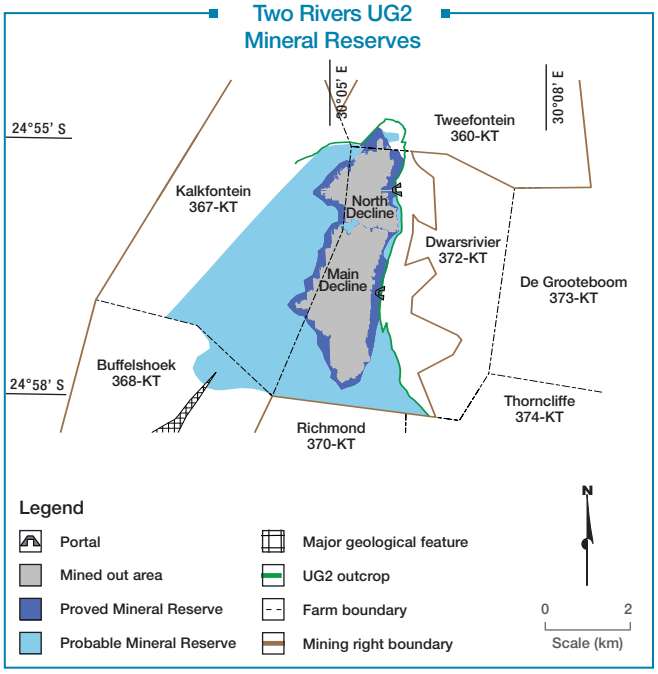


Total Two Rivers palladium Mineral Reserves

as at 30 June 2020 (variance Moz Pd)



Two Rivers



Processing

Two Rivers has a concentrator plant on site where initial processing is undertaken. It comprises a standard MF2 design as generally used in the industry. Concentrate is transported by road to Impala Mineral Processes in Rustenburg where further processing takes place in terms of an agreement with Impala.

Two Rivers top risks

The Group risk management process is described on page 15 where the top Group risks are listed. The top risks identified by Two Rivers Mine are:

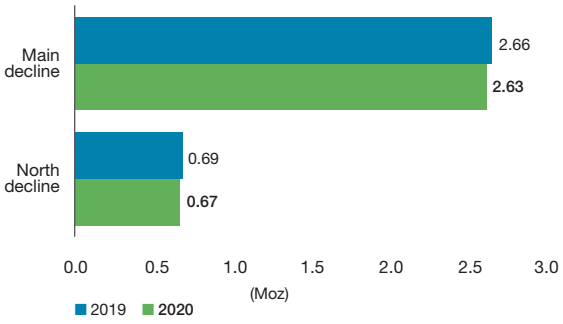
- Continued Covid-19 lockdown
- Prevention of Covid-19 infections at Two Rivers Mine
- Lack of clarity on Covid-19 amended regulations
- Negative impact of the economic downturn resulting in reduced revenue
- Delay in the completion of capital projects
- Infections at the customer and/or supplier premises
- Community disruption due to Covid-19 shutdown
- Decrease in safety performance
- Lower plant ounce output due to lower mill grades and recovery
- Lack of mining flexibility.

Valuation and sensitivity

The economic viability of the Two Rivers Mineral Reserves is tested by Implats by means of 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 PGM metal ratios and differs 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 2020. These tests by Implats indicate that the Two Rivers operation requires a real long-term basket price of between R12 000 and R13 000 per 6E ounce to be economically viable. While the real spot basket price for Two Rivers as at 30 June 2020 was R35 500 (US$1 900) per 6E ounce, the Two Rivers internal long-term real basket price is R17 300 (US$1 250). The commodity market remains fluid and the outlook improved post 30 June 2020.

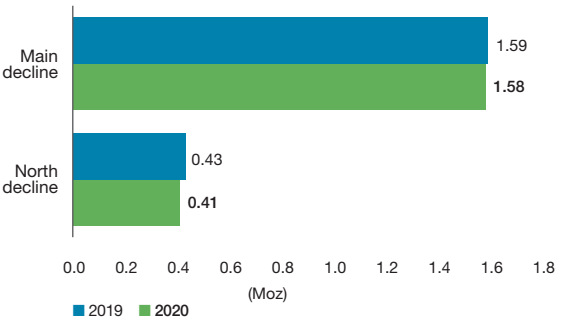
Two Rivers platinum Mineral Reserve distribution

as at 30 June 2020 (Moz Pt)



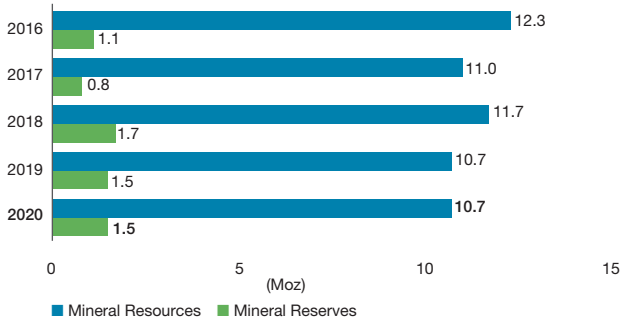
Two Rivers palladium Mineral Reserve distribution

as at 30 June 2020 (Moz Pd)



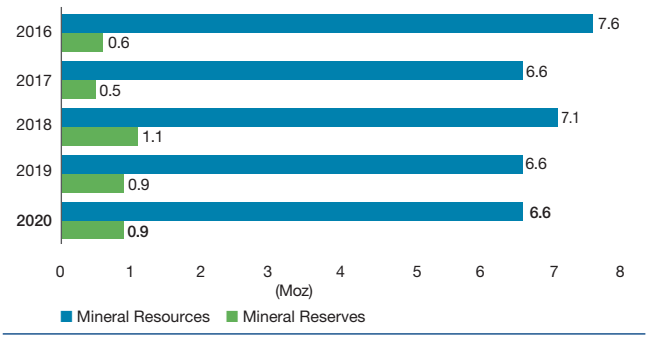
Two Rivers attributable platinum Mineral Resources and Mineral Reserves

as at 30 June 2020 (Moz Pt)



Two Rivers attributable palladium Mineral Resources and Mineral Reserves

as at 30 June 2020 (Moz Pd)



Two Rivers

Compliance

Two Rivers has adopted the SAMREC Code (2016) for its reporting. Caracle Creek International Consulting MinRes and Fraser McGill Mining and Minerals advisory were engaged for the 2020 external audit as part of Implats' governance process for the Mineral Resource and Mineral Reserve estimates, respectively. No critical issues/fatal flaws were found that could have a material impact on the Mineral Resource and Mineral Reserve estimates. In addition the auditors found the estimates to be SAMREC (2016) compliant and could not find any impediments which would prevent the inclusion of the results as part of Implats' annual declaration of Mineral Resources and Mineral Reserves (pages 141 and 142).

The Competent Person for Two Rivers Mineral Resources is Juan Coetzee, a full-time employee of Two Rivers, holds a BSc (Hons) (Geology) qualification, is registered as PrSciNat with SACNASP, with registration number 114086 and has 17 years' relevant experience. The Competent Person for Two Rivers Mineral Reserves is Tobias Horak, who holds NHD (Mine Surveying) and GDE (Mining) qualifications and is a member in good standing with IMSSA, with registration number 1113 and has 21 years' relevant experience. Implats has written confirmation from the Competent Persons that the information disclosed in terms of these paragraphs are compliant with the SAMREC Code (2016) and, where applicable, the relevant SAMREC Table 1 and JSE Section 12 Listings Requirements and that it may be published in the form, format and context in which it was intended.

Key operating statistics

		FY2019	FY2019	FY2018	FY2017	FY2016
Production						
Tonnes milled ex mine	(000t)	**3016**	3 405	3 455	3 501	3 511
Head grade 6E	(g/t)	**3.45**	3.52	3.63	3.9	4.06
Platinum in concentrate	(000 oz)	**122**	147	163	182	186
Palladium in concentrate	(000 oz)	**73**	86	97	107	111
6E in concentrate	(000 oz)	**261**	313	348	390	401
Cost of sales	(Rm)	**(3 394)**	(3 064)	(2 895)	(3 014)	(3 007)
On-mine operations	(Rm)	**(2 016)**	(2 103)	(1 940)	(1 927)	(1 785)
Concentrating operations	(Rm)	**(467)**	(448)	(419)	(424)	(404)
Other	(Rm)	**(911)**	(513)	(536)	(663)	(818)
Total cost	(Rm)	**2 483**	2 551	2 359	2 351	2 189
Per tonne milled	(R/t)	**823**	749	683	672	623
	(US$/t)	**53**	53	53	49	43
Per 6E oz in concentrate	(R/oz)	**9 513**	8 140	6 771	6 025	5 463
	(US$/oz)	**607**	574	527	442	379
Financial ratios						
Gross margin ex mine	(%)	**45.3**	23.9	23.3	23.8	22.7
Capital expenditure	(Rm)	**800**	571	454	293	282
	(US$m)	**51**	40	35	21	20

The year-on-year production performance and outlook is discussed in the Implats 2020 Annual Integrated Report **(www.implats.co.za)**.

Concentrator Plant – Two Rivers Platinum Mine

Afplats

THE AFPLATS LEEUWKOP PROJECT IS LOCATED APPROXIMATELY 15KM WEST OF THE TOWN OF BRITS.

History

The project area called Afplats comprises the farms Leeuwkop Kareepoort and Wolvekraal, 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, at Afplats, with the early work for the pre-sink of the Leeuwkop main shaft commencing on 1 April 2011. During November 2013, a decision was made that another feasibility study be undertaken that would convert the conventional mining layout into a bord and pillar layout. This work was completed by December 2014, by which time the main shaft had been sunk to 1 198m below surface, having traversed the Merensky Reef. The vertical shaft sinking project has been stopped and the Leeuwkop project has been deferred until December 2021.

Mineral rights

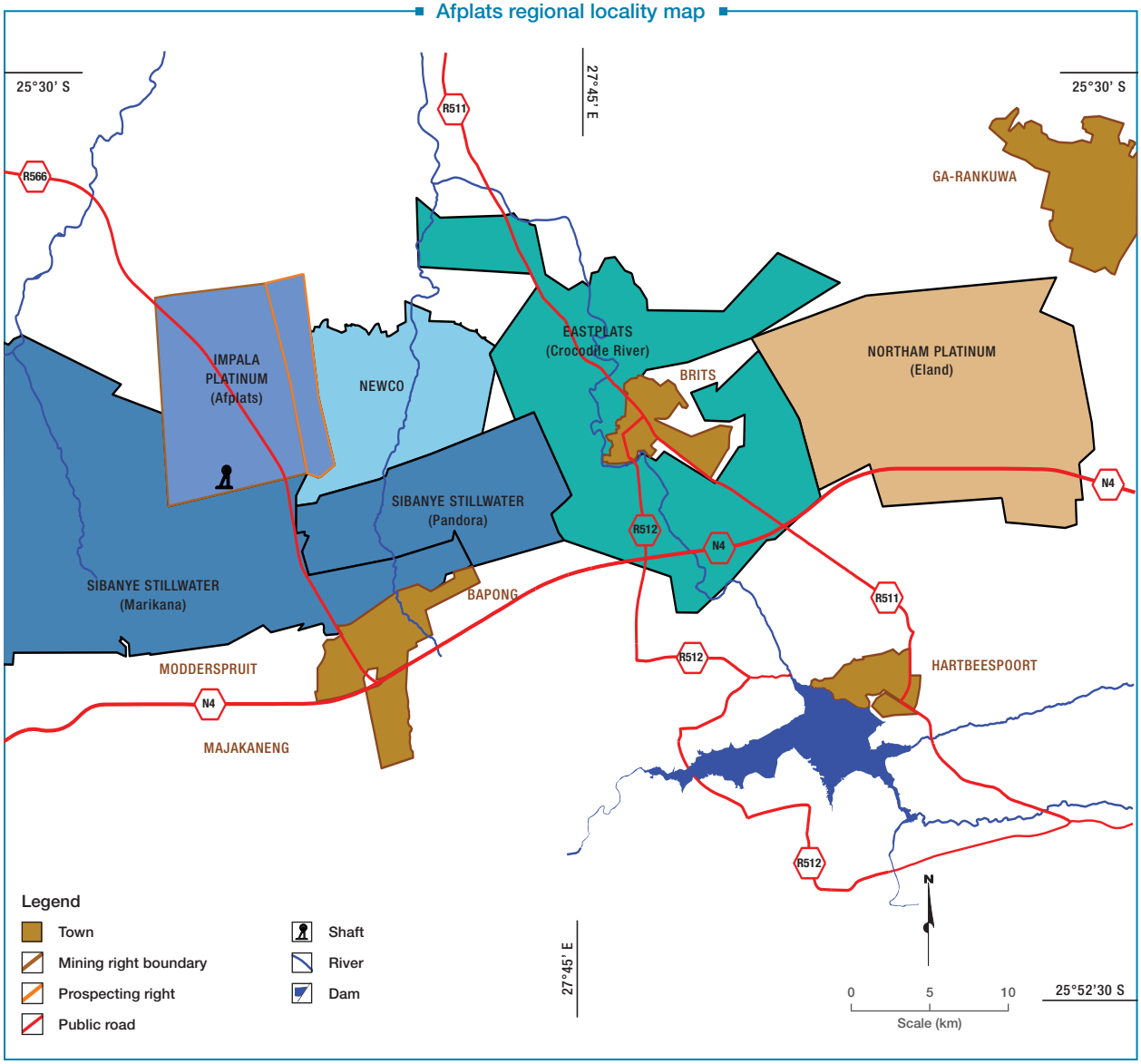
Afplats is currently the holder of the Leeuwkop mining right, under Mining Right number MR 40/2008 (DMRE Ref: No NW 30/5/1/2/2/256MR), in respect of the farm Leeuwkop 402 JQ to mine platinum group metals, base metals and by-products. Afplats furthermore the holder of the Kareepoort 407 JQ and Wolvekraal 408 JQ prospecting right 613/2007 PR (DMRE Ref: NW 30/5/1/1/2/1033PR) relating to all minerals, with emphasis on PGMs and associated minerals but excluding dimension stone. The prospecting right was awarded for a five-year period, and renewed for a further three years. The prospecting right expired on 7 February 2020, with no option to renew. A closure application is planned to be submitted within the prescribed legislative timeframes, which may be extended due to the delay in the required public participation process due to Covid-19 restrictions. An application was lodged on 6 June 2013, to obtain the written consent of the Minister, under Section 102 of the MPRDA to amend the Leeuwkop mining right by incorporating the Kareepoort/Wolvekraal prospecting area into the existing mining right. This application is pending approval by the DMRE. These rights form a natural extension of the existing mining right and would be exploited from the same mining infrastructure. As such, and given the pending Section 102 application, the Mineral Resource estimates for Kareepoort 407 JQ and Wolvekraal 408 JQ are still included in the Afplats estimates. It is noted that there will be no underlying right remaining in the event that the Section 102 is not approved, to secure the rights further.

Mining right	Prospecting right pending Section 102 to include in mining right	Implats' interest
4 602ha	1 065ha	74% managed

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 Western Platinum and Eastern Platinum, two of the operations of Sibanye Stillwater. The Inkosi and Imbasa prospecting areas ownership changed during 2017, and Implats has no remaining interest in this area.

Afplats regional locality map



Afplats

Infrastructure

Afplats' Leeuwkop Shaft is accessed by an existing tarred road, from the existing provincial road R556. The current infrastructure includes the shaft sinking headgear and winder houses, electricity supply by Eskom through the Big Horn sub-station, potable water supply from the Madibeng Municipality, offices and change houses for the sinking contractor and Afplats employees. The exploration core yard used by Afplats is also situated here. All infrastructure is in a secured fenced off area.

Environmental

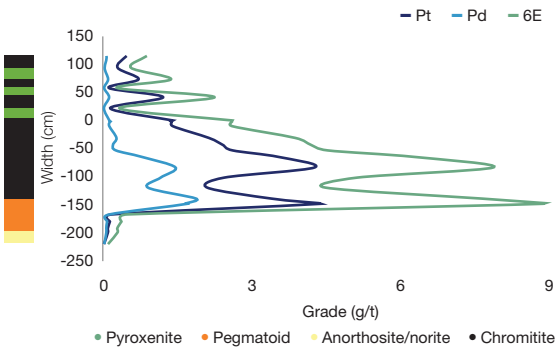
Summary details pertaining to the Group environmental management and policy are listed on page 19. This includes the focus areas such as compliance, water stewardship, air quality, managing waste streams and promoting land management practices. Surface topography, geohydrological reports and environmental study recommendations have been taken into account in positioning of the future surface infrastructure.
The location of known heritage sites have been identified and demarcated. Suitable positions have been identified for the future waste dump and tailings dam. Detailed drainage arrangements were designed to ensure that the separation of clean and dirty water takes place, as no uncontrolled water run-off is permitted. A noise berm of adequate dimension to the south of the Leeuwkop Shaft has been designed, that will minimise possible noise interference with the local village of Segwaelane some 800m away from the shaft.

Geology

Both the Merensky and UG2 Reefs have been explored at Afplats but only the UG2 Reef is currently considered to be economically exploitable. 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 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 reefs are disrupted by faults, dolerite dykes, late stage ultramafic replacement pegmatoid bodies and potholes. The UG2 Chromitite Layer consists of two layers of chromitite, separated by thin layers of pyroxenite and is on average 1.30m thick across the Afplats area. The two UG2 Chromitite Layers were combined in the grade estimation and reported as the Mineral Resource width. All the known geological losses are discounted from the Mineral Resources and a factor for the unknown geological losses is applied to the remainder of the areas. The global extraction rate for Afplats is 78%.

Afplats – UG2

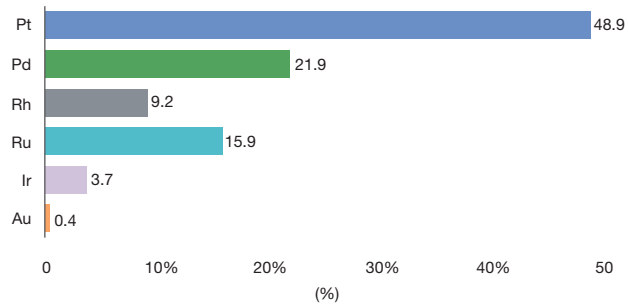


Mining methods and mine planning

A feasibility study was completed in 2011, based on a conventional mining method layout. This feasibility study was approved by the Implats board. During November 2013, a decision was made that another feasibility study be undertaken that would convert the conventional mining layout into a bord and pillar layout. The mine planning was completed in 3D spatial environment and the shaft sinking layout was updated to suit the mining method. This work was completed in December 2014, but not approved by the Implats board. The Mineral Resource estimate has therefore not been converted to the Mineral Reserve category pending the full project approval and funding in accordance with Implats' practice. The feasibility study area represents 42% of the Afplats Mineral Resource area. The vertical shaft sinking project has been stopped and the Leeuwkop project has been deferred until December 2021. By December 2014, the Main Shaft had progressed to a depth of 1 198m below surface, still above the planned shaft bottom position of 1 396m below surface.

Afplats UG2 6E metal ratio

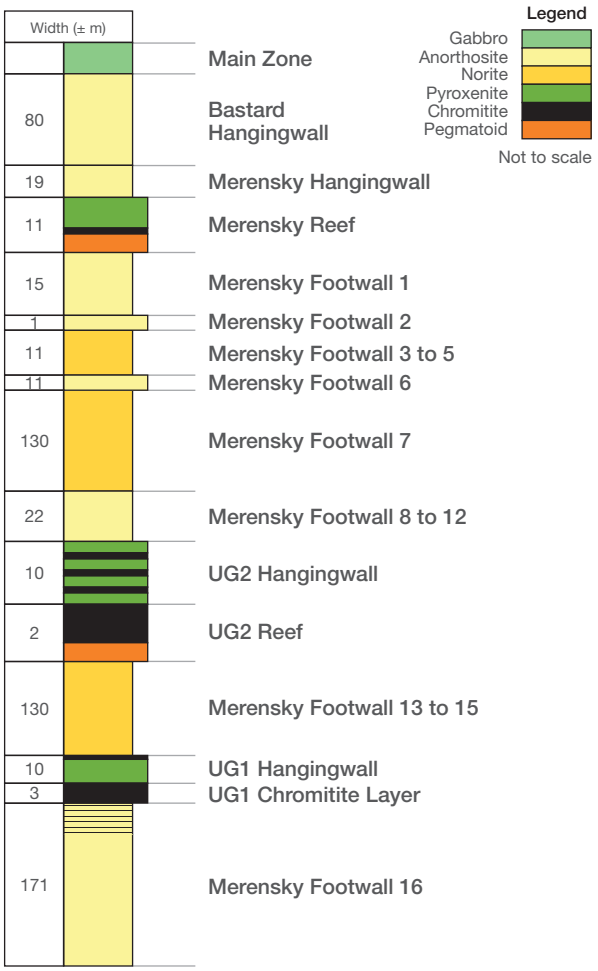
as at 30 June 2020 (%)



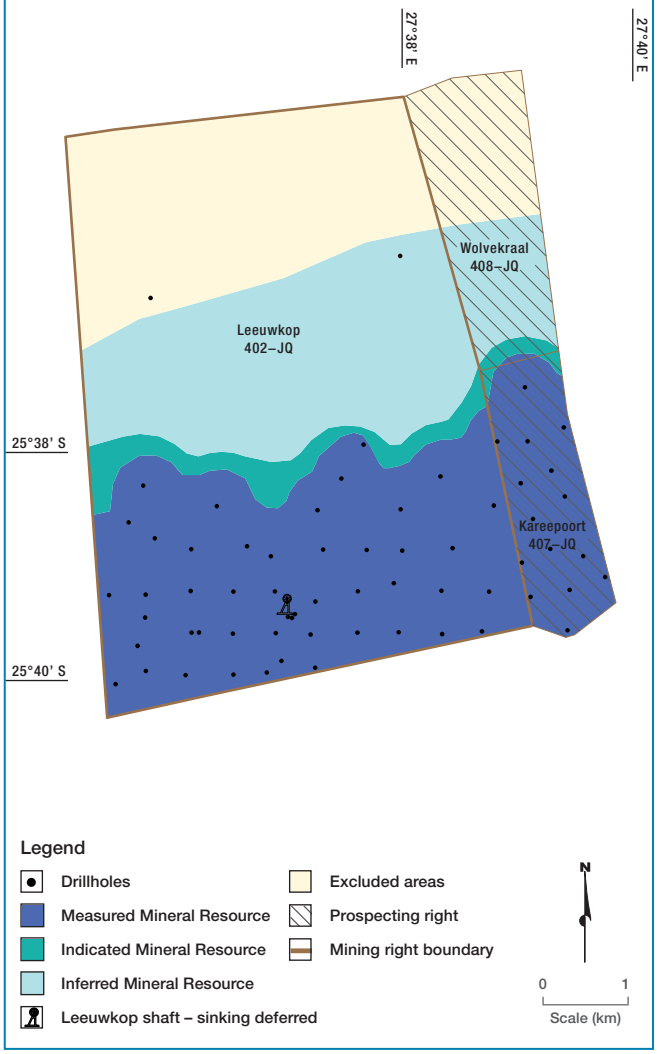
UG2 metal ratios derived from the Mineral Resource estimate.

Afplats

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



Afplats UG2 Mineral Resources



Surface exploration drill rig, Afplats

Afplats

Mineral Resource estimation 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 attributable Mineral Resources are reported in the summary sections of this report
- Implats has chosen not to publish Merensky Reef Mineral Resource estimates as the reasonable prospect for eventual economic extraction (RPEE) is presently in doubt
- The estimate has been conducted using the Isatis™ software. A multi-pass search was used for the estimation, capping of extreme values was applied for UG2 Reef data
- There is no change in the UG2 Reef Mineral Resource estimate since the previous statement, but the estimate has been reviewed in the past year as part of the external third-party audit
- The Mineral Resources are reflected in both 4E and 6E formats
- Rounding of numbers may result in minor computational discrepancies; Mineral Resource estimates are inherently imprecise in nature; the results tabulated in this report must be read as estimates and not as calculations; Inferred Mineral Resources in particular are qualified as approximations. The estimated base metals grades are also reflected in the Mineral Resource table below.

Afplats Mineral Resource estimate (inclusive reporting)

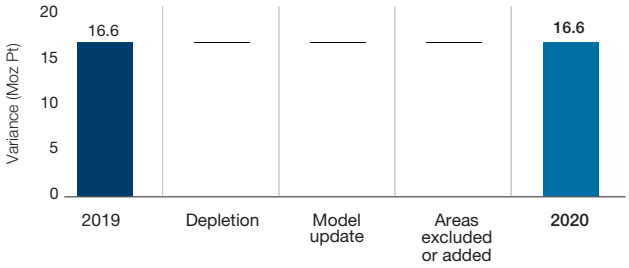
As at 30 June 2020					
Orebody		**Afplats UG2**			
Category		**Measured**	**Indicated**	**Inferred**	**Total**
Tonnes	Mt	98.4	10.8	55.9	**165.1**
Width	cm	133	136	129	
4E grade	g/t	5.19	5.11	5.06	**5.14**
6E grade	g/t	6.46	6.36	6.25	**6.38**
Ni	%	0.03	0.03	0.03	**0.03**
Cu	%	0.01	0.01	0.01	**0.01**
4E oz	Moz	16.4	1.8	9.1	**27.3**
6E oz	Moz	20.4	2.2	11.2	**33.9**
Pt oz	Moz	10.0	1.1	5.5	**16.6**
Pd oz	Moz	4.5	0.5	2.5	**7.4**

As at 30 June 2019					
Orebody		**Afplats UG2**			
Category		**Measured**	**Indicated**	**Inferred**	**Total**
Tonnes	Mt	98.4	10.8	55.9	**165.1**
Width	cm	133	136	129	
4E grade	g/t	5.19	5.11	5.06	**5.14**
6E grade	g/t	6.46	6.36	6.25	**6.38**
Ni	%	0.03	0.03	0.03	**0.03**
Cu	%	0.01	0.01	0.01	**0.01**
4E oz	Moz	16.4	1.8	9.1	**27.3**
6E oz	Moz	20.4	2.2	11.2	**33.9**
Pt oz	Moz	10.0	1.1	5.5	**16.6**
Pd oz	Moz	4.5	0.5	2.5	**7.4**

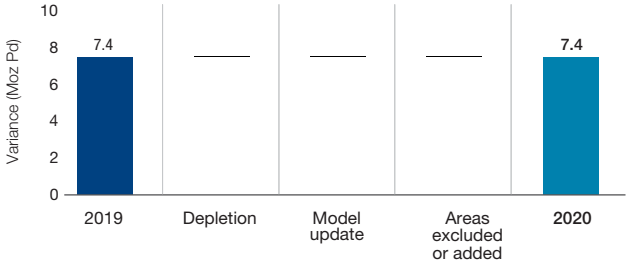
Given the changing economic and operating environments, the RPEEE for the Afplats Mineral Resources, both the mining right and prospecting rights, are regularly tested. The Afplats assets remain of strategic interest to Implats and it is estimated that the Leeuwkop project would be viable at a real basket price of between R24 000 and R28 000 per 6E ounce.

Afplats

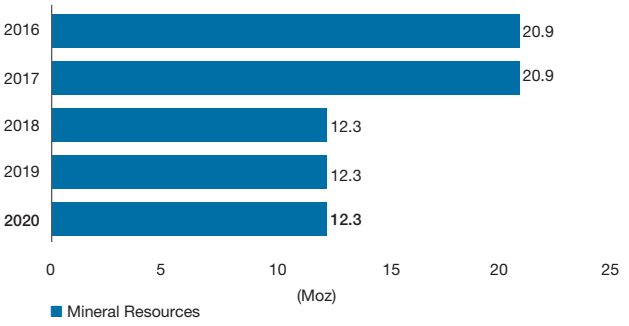
Total Afplats platinum Mineral Resources
as at 30 June 2020 (Moz Pt)



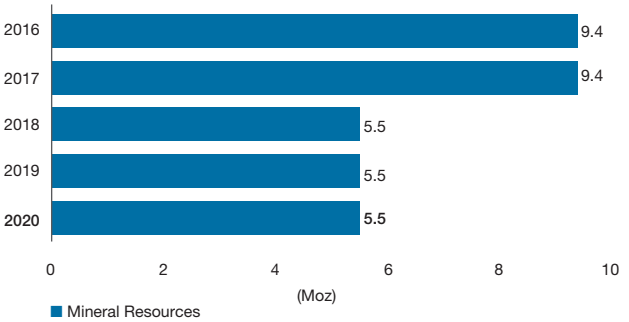
Total Afplats palladium Mineral Resources
as at 30 June 2020 (Moz Pd)



Afplats attributable platinum Mineral Resources
as at 30 June 2020 (Moz Pt)



Afplats attributable palladium Mineral Resources
as at 30 June 2020 (Moz Pd)



Compliance

The Competent Person for Afplats is Louise Fouché, a full-time employee of Impala who holds a MSc (Geology) and Post-Grad Dipl (MRM) degree and is registered with SACNASP, with registration number 400026/99 and 20 years' relevant experience. Implats has written confirmation from the Competent Person that the information disclosed in terms of these paragraphs is compliant with the SAMREC Code (2016) and, where applicable, the relevant SAMREC Table 1 and JSE Section 12 Listings Requirements, and that it may be published in the form, format and context in which it was intended.

Implats is committed to independent third-party reviews of Mineral Resource and Mineral Reserve estimates.

The Mineral Corporation was engaged for the 2020 external audit as part of Implats' governance process; their scope being to confirm that no changes had been applied to the previously derived Mineral Resource statement and that it indeed is SAMREC Code (2016) compliant, satisfying the requirements for public reporting. A confirmatory outcome was derived and the audit certificate is appended on page 143.

Exploration geology, Afplats

Waterberg Project

(Waterberg JV Resources (Pty) Ltd)

THE WATERBERG PROJECT IS LOCATED 85 KM NORTH OF THE TOWN OF MOKOPANE IN THE PROVINCE OF LIMPOPO.

History

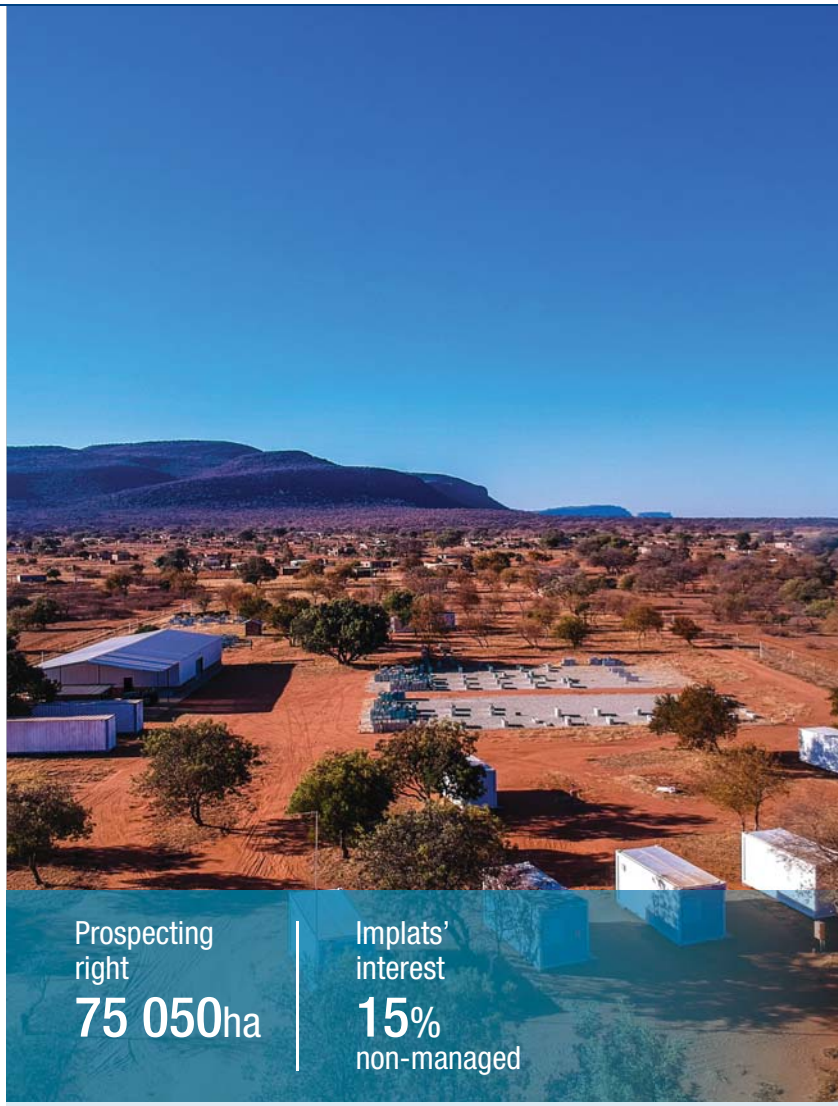
The Waterberg project was a part of a group of exploration projects that resulted from a regional target generation initiative of PTM RSA (Pty) Ltd (PTM). PTM RSA targeted this area based on its own detailed geophysical, geochemical and geological work along the trend, off the north end of the mapped Northern Limb of the Bushveld Complex.

PTM filed for an initial prospecting right application, in 2007 and this was granted in September 2009. The prospecting right applications for the properties were applied for based on the initial findings on the Waterberg project combined with an analysis of publicly available regional government geophysical data that showed an arching north-northeast trend to the signature of the interpreted edge of the Bushveld Complex.

PTM entered into an agreement with the Japan Oil, Gas and Metals National Corporation (JOGMEC) and the BEE entity, Mnombo Wethu Consultants (Pty) Ltd (Mnombo) whereby JOGMEC would earn up to a 37% interest in the project for an optional work commitment over four years on the Waterberg JV Project only. On 7 November 2011, PTM entered into an agreement with Mnombo to acquire 49.9% of the issued and outstanding shares of Mnombo in exchange for cash payments totalling R1.2 million and paying for Mnombo's 26% share of project costs to feasibility. When combined with PTM's 37% direct interest in the Waterberg project (after JOGMEC earn-in), the 12.974% indirect interest acquired through Mnombo brought PTM's effective project interest to 49.974% at the time. The underlying agreement and funding arrangement with JOGMEC was amended over time.

The so-called Waterberg Extension Project Licences were applied for separately and later, with PTM having a direct 74% interest and Mnombo retaining the remaining 26%. Subsequently in 2015, an amendment to the Waterberg JV structure consolidated the properties under one structure.

On 21 September 2017 PTM RSA completed the transfer of all Waterberg project prospecting permits into Waterberg JV Resources (Pty) Limited. Effective 21 September 2017 Waterberg JV Resources (Pty) Limited owned 100% of the prospecting rights comprising the entire Waterberg project area. On completion of the transfer of all the prospecting rights to Waterberg JV Resources (Pty) Ltd, Waterberg JV Resources (Pty) Ltd was owned 45.65% by PTM RSA, 28.35% by JOGMEC and 26% by Mnombo.



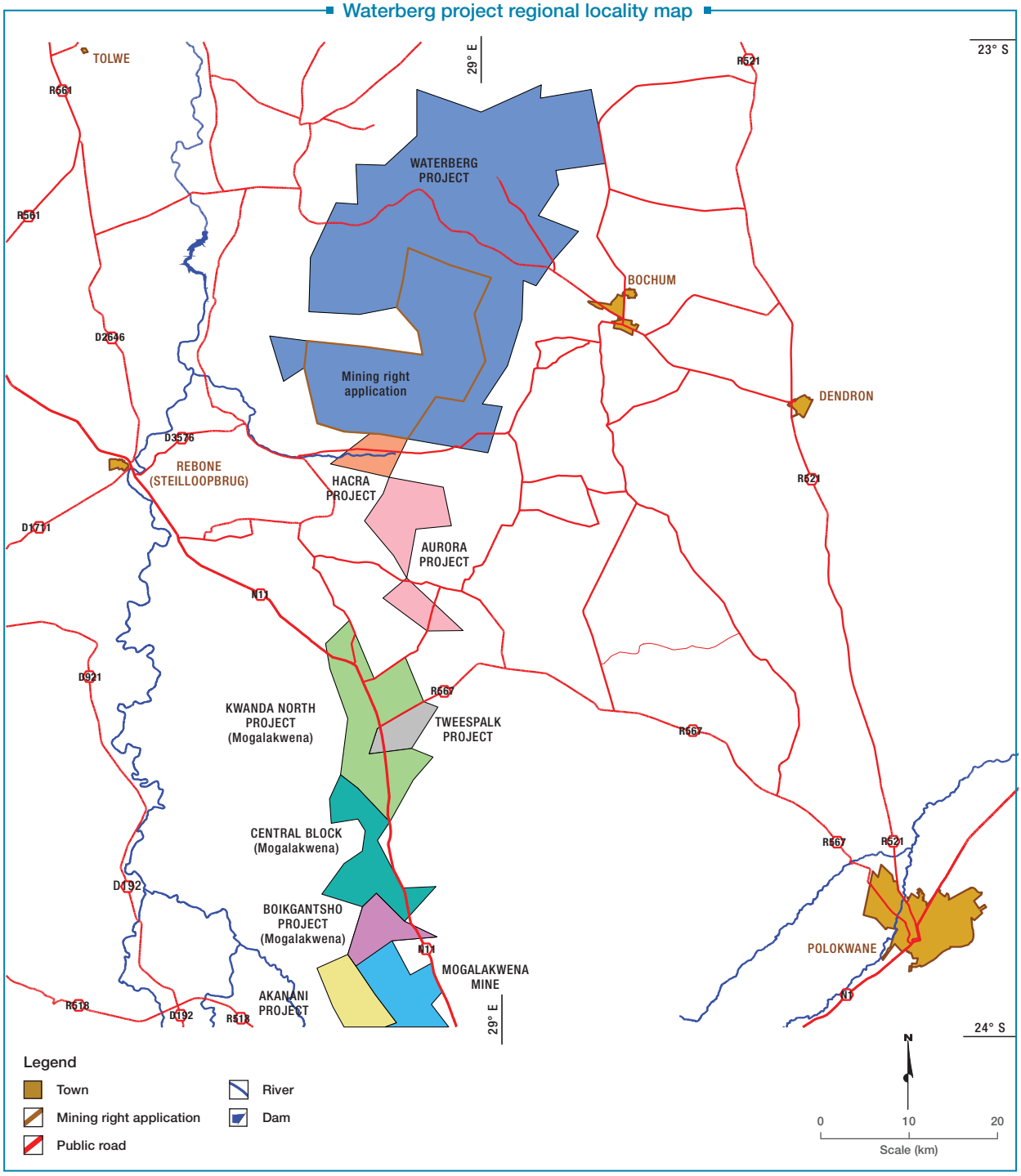
Prospecting right
75 050ha

Implats' interest
15%
non-managed

Location

The Waterberg project is located 85km north of the town of Mokopane in the province of Limpopo, South Africa, approximately 330km north-northeast from Johannesburg. The total project area, active prospecting rights, and mining right application area covers a total area of 81 329.6ha. The prospecting rights are centred at longitude 28°49' E and latitude 23°22' S. The project is accessible by dirt roads by vehicle. Elevation ranges from approximately 880 to 1 365m above sea level.

Waterberg project regional locality map



Waterberg Project (Waterberg JV Resources (Pty) Ltd)

On 16 October 2017 definitive agreements were signed with Impala Platinum Holdings Limited (Implats) in terms whereof Implats (a) purchased 15% of Waterberg JV Resources, shares from PTM RSA (8.6%) and JOGMEC (6.4%); and (b) acquired a purchase and development option to increase its stake in Waterberg JV Resources to 50.01% through additional share purchases and earn-in arrangements and acquired a right of first refusal to smelt and refine Waterberg project concentrate. This transaction closed on 6 November 2017.

Notably since the initial prospecting rights were acquired, significant exploration activities were undertaken by PTM, these were supplemented by various Mineral Resource estimates as published by PTM and available on **(www.sedar.com)**. Since the agreement with Implats, a Definitive Feasibility Study (DFS) was completed in October 2019.

Implats had an option up to 90 days post the grant of a mining right by the DMRE to increase its ownership to 50.01% with a firm funded Acquisition and Development Commitment. On 17 June 2020 Implats announced that they will not be exercising the option to increase the shareholding from 15% to 50.01% based on the prevailing economic as well as balance sheet and funding considerations. At the same time Implats confirmed their support for the project.

With a 15% equity stake in the project, this represents a non-managed project within the Implats portfolio.

Mineral rights

Waterberg JV Resources currently holds active prospecting rights covering an area of 75 050ha. An application for a mining right covering an area of 22 397.79ha was filed with the Department of Mineral Resources and Energy (DMRE) Polokwane Regional Office and accepted on 14 September 2018. The mining right application area consist of farms of active prospecting rights and farms of expired prospecting rights.

No liens, pledges, mortgage bonds, or any encumbrances of any nature are registered against the Waterberg JV Resources. The Company has the legal entitlement to the minerals being reported upon together without any known impediments.

No reason exists at this time to cause the permissions, permits, surface, and water use rights not to be achieved; however, these factors are a significant project risk. The risk is mitigated by following the established process of consultation in the environmental assessment for a new mining right.

Waterberg JV Resources consulted with the community and received permissions to access the land where it holds prospecting rights. Ongoing rights of access to specific portions of the property will be required as exploration and potential development progresses. Negotiations for access to land for potential infrastructure and where needed, the establishment of servitudes, are ongoing.

Infrastructure

The Waterberg project is located some 85km north of the town of Mokopane in Seshego and Mokerong, districts of the Limpopo Province. The Waterberg project is situated some 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 Waterberg project is located in a rural area with limited existing infrastructure apart from gravel roads, drillhole water, and 22kV rural power distribution with limited capacity. Upgrading is planned for all existing infrastructure, including the upgrading of 34km of the gravel roads to the N11 national road.

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

At the site, a lined tailings storage facility (TSF), ore stockpile and waste rock storage facilities, backfill preparation and distribution system, and the necessary surface infrastructure to support mining and processing operations will need to be constructed. The project will require 90MVA of electrical power and 6.2Ml/day of industrial water.

Environmental

In consultation with the community, the mine footprint was planned to exclude areas significant to the community, including prime grazing areas. The table below shows key environmental and social licences and permit applications required for the Waterberg project.

Status of environmental licences and permits required for the Waterberg project as at 30 June 2020

Licence/permit application	Authority	Reference number	Status
Mining Right with Social and Labour Plan (SLP)	Department of Mineral Resources and Energy (DMRE)	LP 30/5/1/2/2/2/10161MR	Submitted
Environmental Authorisation (EA*)	DMRE	LP 30/5/1/2/2/10161EM	Submitted
Waste Management Licence	DMRE	LP 30/5/1/2/2/2/10161MR	Submitted
Water Use Licence	DWS	CT11919	Submitted
Heritage Resources Consent for Development	South African Heritage Resource Agency (SAHRA)	LP 30/5/1/2/2/2/10161MR – 12878	Submitted

* *Includes Environmental Impact Assessment (EIA), Environmental Management Programme (EMPr) and closure plan.*

Waterberg Project (Waterberg JV Resources (Pty) Ltd)

From an environmental and social perspective, the greatest 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 this marks the shallowest access for underground mining and is topographically relatively flat. The findings of the Environmental Assessment Practitioner and specialists' assessments have shown that the Waterberg project may result in both negative and positive impacts to the environment; however, adequate mitigation measures are included into the EMPr to reduce the significance of the identified negative impacts.

Geology

The Waterberg JV Project is situated off the northern end of the Northern Limb of the Bushveld Complex. The Bushveld Complex in the Waterberg project area 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 projection of the east – west trending Hout River Shear system, a major shear that marks the southern boundary of the South Marginal Zone (SMZ). The SMZ is a 3 500 mega annum aged compressional terrain formed within the Kaapvaal Craton during the collision with the Zimbabwe Craton. It comprises granulite facies granitic gneiss, amphibolitic gneiss, and minor quartzite. Within the SMZ, there are several major shears that trend parallel to the Hout River Shear and trend through the Waterberg project area. The footwall to the Bushveld on 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 drillhole core. Some structural blocks may be tilted at different angles depending on structural and/or tectonic controls. The Bushveld Upper Zone is overlain by a 120m to 760m thick Waterberg Group, which is a sedimentary package predominantly, comprised 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.

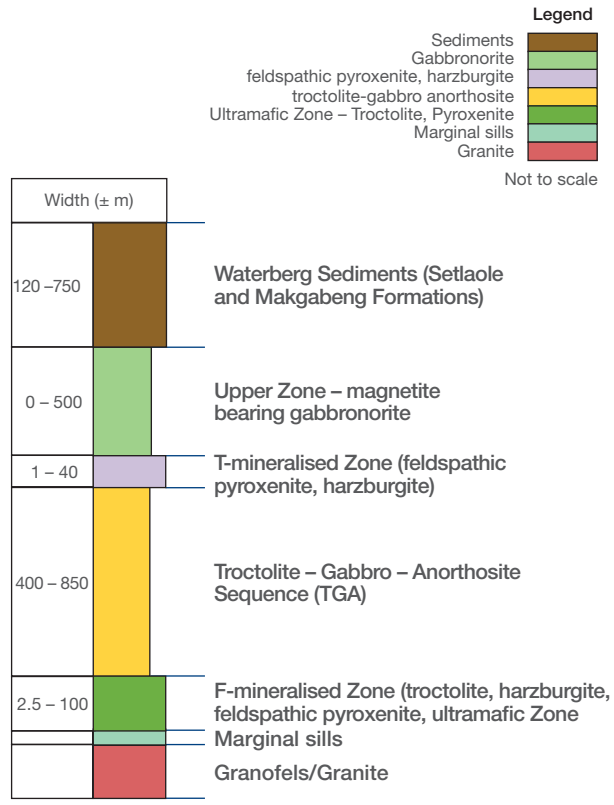
Current research indicates that the mafic to ultramafic succession of the Waterberg project does not represent a mere extension of the Northern Lobe of the Bushveld Complex, but that it also does not correlate readily with the well-known Platreef. It is noted that the Waterberg JV Project hosts similar geological features but it is believed to represent a separate magmatic basin.

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 overlaying Upper Zone. Although the T-Zone consists of numerous mineralised layers, three potential economical 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.

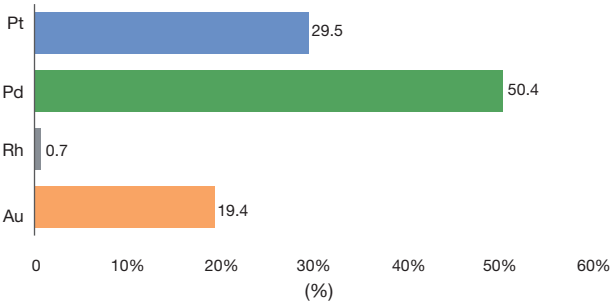
The 4E metal ratios differ significantly between the T- and F-Zones. Both zones show high palladium ratios, however, the T-Zone is relatively enriched in gold and copper compared to the F-Zone.

Generalised geological succession of the Bushveld Complex at the Waterberg Project



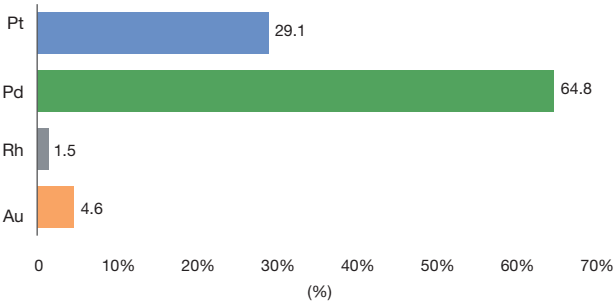
Waterberg T-Zone 4E metal ratio

as at 30 June 2020 (%)



Waterberg F-Zone 4E metal ratio

as at 30 June 2020 (%)



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

Waterberg Project (Waterberg JV Resources (Pty) Ltd)

Exploration

The Waterberg project is an advanced project that has undergone extensive exploration, preliminary economic evaluations, a prefeasibility study (PFS) and resulted in the completion of a definitive feasibility study in October 2019. Exploration work conducted to date has given the confidence to classify Mineral Resource estimates as inferred, indicated, and measured, based on increasing levels of confidence. The total project expenditure up to September 2019 since the inception of the project, inclusive of exploration and feasibility studies, amounts to US$73 million.

The exploration activities include the following:

- Historical data compilation and interpretation
- Geological mapping
- Stream sediment and soil geochemical survey
- Airborne, ground magnetic and gravity surveys
- Satellite imagery interpretation
- Diamond drill core drilling, sampling of mineralised intersections and laboratory analysis
- Geological interpretation and modelling.

The data from which the structure of the mineralised horizons was modelled and grade values estimated, were derived from a total of 362 293m of diamond drilling. The drill hole dataset consists of 441 drillholes and 583 deflections at the date of drill data cut-off (1 December 2018).

The management of the drilling programmes, logging, and sampling were undertaken from multiple facilities: one at the town of Marken and the other on the farm Goedetrouw 366LR within the prospecting right area, or at an exploration camp on the adjacent farm Harriet's Wish.

Mineral Resource estimation and reconciliation

Mineral Resources are reported inclusive of Mineral Reserves and is reflected on a 100% project basis. Mineral Resource grades are shown for 4E only given the lack of available details pertaining to ruthenium and iridium. The nickel and copper estimates for the Waterberg project are based on the four-acid digestion method and this results in a near-total assay, while the nickel and copper reported for all the other southern African Implats operations and projects are based on a partial three-acid digestion method. Mineral Resource estimates allow for estimated geological losses but not for anticipated pillar losses during eventual mining. Mineral Resources were estimated using ordinary kriging (OK) and simple kriging (SK) methods in Datamine Studio3. A process of geological modelling and 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, concentrator recoveries from the previous and ongoing engineering work completed on the property by the Waterberg JV, and its independent engineers. Spot and three-year trailing average prices and exchange rates are considered for the cut-off considerations. The upper and lower bound metal prices used in the determination of cut-off grade for Mineral Resources estimated are as follows: US$983/oz – US$953/oz Pt, US$993/oz – US$750/oz Pd, US$1 325/oz – US$1 231/oz Au, US$1 923US/oz – US$972/oz Rh, US$6.08/lb – US$4.77/lb Ni, US$3.08/lb – US$2.54/lb Cu, and US$/R15 – US$/R12. The lower cut-off was tested against the higher metal price in the range and the higher cut-off was tested against the lower price in the range. Two Mineral Resource estimates were compiled based on these cut-off grades of 2.0 and 2.5g/t 4E respectively. For purposes of the feasibility study, sensitivity analysis and comparison to earlier prefeasibility estimates, which utilised a 2.5g/t 4E cut-off grade, a Mineral Resource estimate at a 2.5g/t cut-off grade is the preferred scenario. A cut-off grade of 2.5g/t 4E was therefore used for the Mineral Resource estimate shown below. The objective of the cut-off grade estimation was to establish a minimum grade for working break even.

The Mineral Resources at the Waterberg project is 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.

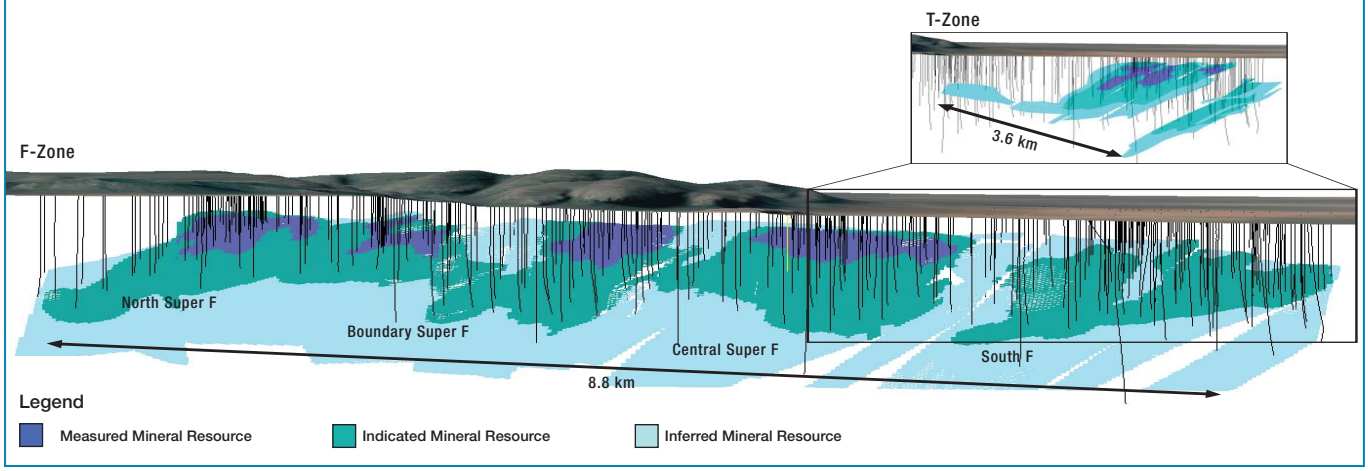
Waterberg Mineral Resource estimate (inclusive reporting)*

As at 30 June 2020										
Orebody		T-Zones				F-Zones				
Category		Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	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	0.19	**0.19**	0.09	0.09	0.06	**0.08**	**0.10**
4E oz	Moz	0.60	2.52	2.71	**5.84**	5.84	17.38	4.30	**27.53**	**33.36**
Pt oz	Moz	0.17	0.75	0.81	**1.72**	1.65	5.10	1.27	**8.02**	**9.75**
Pd oz	Moz	0.30	1.28	1.35	**2.93**	3.82	11.20	2.76	**17.78**	**20.71**

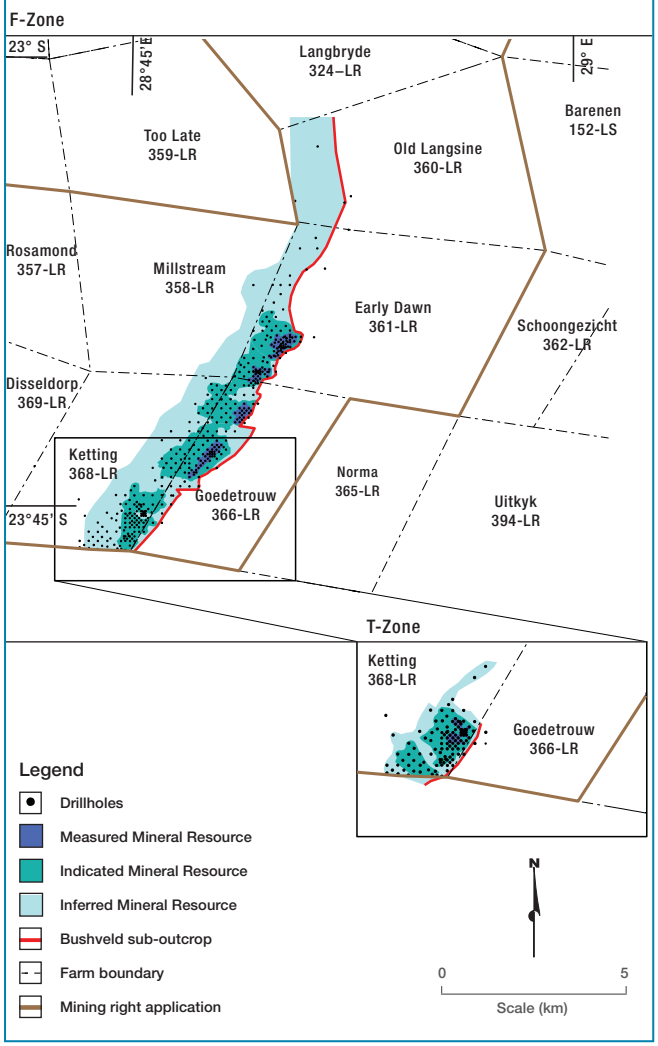
There has been no change to the estimate since the NI43-101 Technical report compiled by the Waterberg JV Resources (Pty) Ltd. and filed by PTM on **(www.sedar.com)**, dated September 2019.

Waterberg Project (Waterberg JV Resources (Pty) Ltd)

Waterberg isometric view looking east



Waterberg Project Mineral Resources

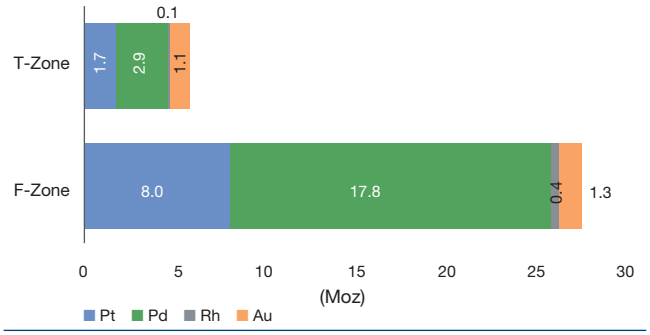


The Mineral Resource estimate for the Waterberg project was previously reported as at 4 September 2019 as part of the Waterberg definitive feasibility study. This estimate remains in place and is valid as at 30 June 2020.

The Mineral Resource estimates for the T- and F-Zones are shown adjacent and spatial distribution is illustrated in the accompanying map.

Waterberg Mineral Resource estimate (platinum, palladium, rhodium and gold)

as at 30 June 2020 (Moz)



Exploration drilling at Waterberg project

Waterberg Project (Waterberg JV Resources (Pty) Ltd)

Modifying factors

Key modifying factors such as overbreak, mining losses, planned dilution and geological losses are considered and applied to the Mineral Resource model to generate tonnage and grade profiles for the mine plan and potential Mineral Reserves. These modifying factors used in the planning process to convert a Mineral Resource to a Mineral Reserve are derived from detailed mine design and planning undertaken as well as metallurgical test work. Implats' long-term price assumptions in today's money are shown on page 12.

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

Mining methods and mine planning

The Waterberg project is planned, as per the DFS completed in October 2019, at a 400 000tpm (400ktpm) mechanised underground mining operation accessed via declines. The DFS mine design is presently based on using the Sublevel Longhole Stoping (Longhole) mining method and backfilling the mined voids with paste backfill. Additional mining methods could be considered in future at the Waterberg project.

A combination of transverse and longitudinal Longhole approaches is currently planned to be used to extract the Mineral Resource. Longhole stoping requires dividing the Mineral Resource targeted for production into individual stopes and establishing mining sublevels to access the stopes and position development to facilitate drilling, blasting, and extracting the blasted material from between the sublevels. Once mining of a stope is complete, the stope will be backfilled with paste backfill. Longhole is a non-entry method, meaning that during mining, personnel will be prohibited from entering the open portion of a stope.

A transverse approach consisting of primary and secondary stopes will be applied to areas where the average true thickness (perpendicular to 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. For areas where the true thickness is less than 15m, a longitudinal approach requiring less waste rock development will be used. In the longitudinal approach, stopes are developed along (ie, parallel) the strike of the orebody.

The Waterberg project was 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 life-of-mine.

Implats undertook in February 2020 to fund 100% of a R55 million programme prior to construction. The work in this interim phase is targeted to:

- Confirmation of portal positions using detailed designs and geotechnical work
- Complete detailed simulation of initial underground mining to optimise the mine plan and mitigate ramp-up risk
- Evaluate the potential for dry stacking of tailings for potential water and cost savings
- Detail housing strategy in line with Implats' standards
- Further detail the Project Execution Plan and the Operational Readiness Plan
- Evaluate the potential impact of new technologies such as Battery Electric Vehicles and Tunnel Boring Machines for underground development.

At 30 June 2020 the above optimisation work was still in progress.

Mineral Reserve estimation and reconciliation

On completion of the DFS in October 2019, a Mineral Reserve estimate for the Waterberg project was published in a NI 43-101 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 the base metals for the F-Zone and the T-Zone ores. The plant design makes provision for the controlled blending of the two ore types in the crushing circuit. The blending of the ores does not require a conceptual change to the MF2 flowsheet, but the controlled blending is considered advantageous in providing a consistent feed composition to the process. Further optimisation of the reagent addition during operation to achieve the optimal concentrate grade and recovery can be completed.

Waterberg Project (Waterberg JV Resources (Pty) Ltd)

The flotation concentrator will produce a concentrate containing some 80g/t 4E with a mass pull of approximately 3.1%. The concentrator was designed to process 4.8Mtpa (400ktpm) of run of mine (ROM) and will produce 155ktpa of concentrate to be shipped by road to a smelter. The concentrate will contain 12% moisture while the tailings will be directed to either the backfill plant for placing as cemented fill underground or to the surface tailings storage facility (TSF).

In terms of the contractual agreement, Implats' first right of refusal relating to the concentrate offtake from the project remains unchanged.

Waterberg Project top risks

An integrated risk assessment was completed by SRK Consulting (South Africa) (Pty) Ltd (SRK) as part of their third-party review of the 2019 DFS to identify existing and potential threats or vulnerabilities that could compromise the project, using inputs from each of the project disciplines. Following the completion of the reviews of the individual disciplines, the risk register was populated with descriptions of each relevant risk. The cause of the risk as well as the consequence of the risk were described. Each risk was then evaluated for the likelihood of occurrence and consequence if realised. The identification of controls intended to mitigate the risks were identified for each risk. Based on the interpretation that the actions for mitigation will be incorporated into risk management, the residual risk ratings were determined.

Current turbulent market conditions, related potential constrained funding and the prevailing uncertain outlook, are considered the main project risks.

Valuation

Due consideration of the RPEEE has been given to the Waterberg Mineral Resource estimates. This is aptly illustrated in the PFS and DFS studies that have been completed where the assessment of environmental, permitting, legal, title, taxation, socio-economic, marketing and political factors were among others considered. The application of cut-off grades at 2.0 and 2.5g/t 4E for the Mineral Resource estimates is described above and included various market and technical considerations.

The turbulent market conditions and the potential impact on the Waterberg are being closely monitored. Various pricing regimes are being tested, however, given the Implats perspective on long-term metal price and exchange rate forecasts (see page 12), the Waterberg project Mineral Resource estimate remains reasonably robust.

Compliance

Implats has adopted the SAMREC Code (2016) for its reporting. Mineral Resource and Mineral Reserve reporting for the Waterberg JV Resources (Pty) Ltd has been undertaken in compliance with the SAMREC Code (2016) and well as NI43-101. The Competent Person for the Mineral Resource estimate is Charles Muller, an independent consultant from CJM Consulting (Pty) Ltd. The Competent Person, PrSciNat SACNASP Registration No 400201/04, has 31 years' relevant experience. Implats has written confirmation from the Competent Person that the information disclosed in terms of these paragraphs are compliant with the SAMREC Code (2016) and, where applicable, the relevant SAMREC Table 1 and JSE Section 12 Listings Requirements and that it may be published in the form, format and context in which it was intended.

An independent high-level review of the Mineral Resource estimate by the Competent Person was completed by Competent Persons at AMEC GRD SA (Netherlands) (AMEC). The AMEC review made comments on the methodologies applied by the Competent Person. The AMEC review identified moderate to low risks and these were considered by the CP in formulation of the SAMREC (2016) compliant Mineral Resource estimate.

In addition, Implats appointed The Mineral Corporation (TMC) to complete an independent audit of the Waterberg project Mineral Resources as at 4 September 2019. TMC concluded in their 2020 audit that there are no apparent fatal flaws in the base geological data, structural and geological modelling and estimation of the PGM and base metal mineralisation of the F-Zone and T-Zone. TMC is satisfied with the rigorous application of internal protocols for data collection and validation. They noted that overall, the preparation and reporting of the Mineral Resources for the Waterberg followed the principles and guidelines of The SAMREC Code (2016) and, accordingly, the 2019 Mineral Resources for the Waterberg project can be included in the Implats Mineral Resource and Mineral Reserve Statement for 2020. In addition, the review by TMC confirmed that the RPEEE assessment of the Waterberg Mineral Resources remains positive (page 143).

Zimplats

ZIMPLATS' OPERATIONS ARE LOCATED IN THE MASHONALAND WEST PROVINCE OF ZIMBABWE.

Zimplats, as an Australian Securities Exchange (ASX) listed company, reports its Mineral Resources and Mineral Reserves in accordance with the JORC Code (2012). The definitions contained in the SAMREC Code (2016) are either identical to or not materially different from the JORC Code (2012). The Zimplats' processes, procedures and estimates are reviewed by Implats to ensure that Mineral Resource and Mineral Reserve estimates are fully compliant with the SAMREC Code (2016).

History

Delta Gold brought BHP into a joint venture (66.7% BHP and 33.3% Delta Gold) to develop Hartley Platinum Mine and development started in 1994. By 1998 Delta Gold had extended its cover to include interests in all the platinum Mineral Resources of the Hartley Complex. In 1998, Delta Gold demerged its platinum interests into a special purpose vehicle, Zimplats. In 1999 it became apparent that Hartley Platinum Mine had failed to meet its development targets and was put on care and maintenance by BHP. Zimplats subsequently took over BHP's share of Hartley, Selous Metallurgical Complex (SMC) and initiated the Ngezi/SMC project in 2001 with the assistance of Implats and ABSA Investment Bank. A 2.2 million tonne per year open pit mine was established at Ngezi whose ore was trucked to Selous where it was processed in the SMC concentrator and smelting facilities.

The first converter matte was exported to South Africa in April 2002 and Implats progressively increased its shareholding in Zimplats until 2003, when it made an unconditional cash offer to minority shareholders in Zimplats. In 2003, Zimplats embarked on the development of underground operations at Ngezi to replace the east and west open pits. Over the years the production volumes from the operations have been increased to the current 6.4 million tonnes of ore per year from five underground portals, all of which feed the two concentrator modules at Ngezi, as well as the SMC concentrator. Zimplats is one of Implats managed operations. Implats has 87% shareholding while the remaining 13% is held by minority shareholders.

Mineral rights

Zimplats previously held a special mining lease (SML1) and on 6 June 2018 the Company announced the release to the government of land measuring 23 903 hectares from within the lease area in support of the government's efforts to enable participation by other investors in the platinum mining industry in Zimbabwe. The impact of the land released on the Mineral Resources estimate was described in the 2018 annual report which is available on the company's website **(www.zimplats.com)**. Zimplats now holds title to two mining leases namely Mining Lease Number 36 (ML36) which covers the Hartley area incorporating SMC operations and Mining Lease Number 37 (ML37) covering Ngezi operations. The two mining leases (ML36 and ML37) are valid for the life of the Zimplats operations. The Zimplats processing operations are located on both ML36 and ML37.

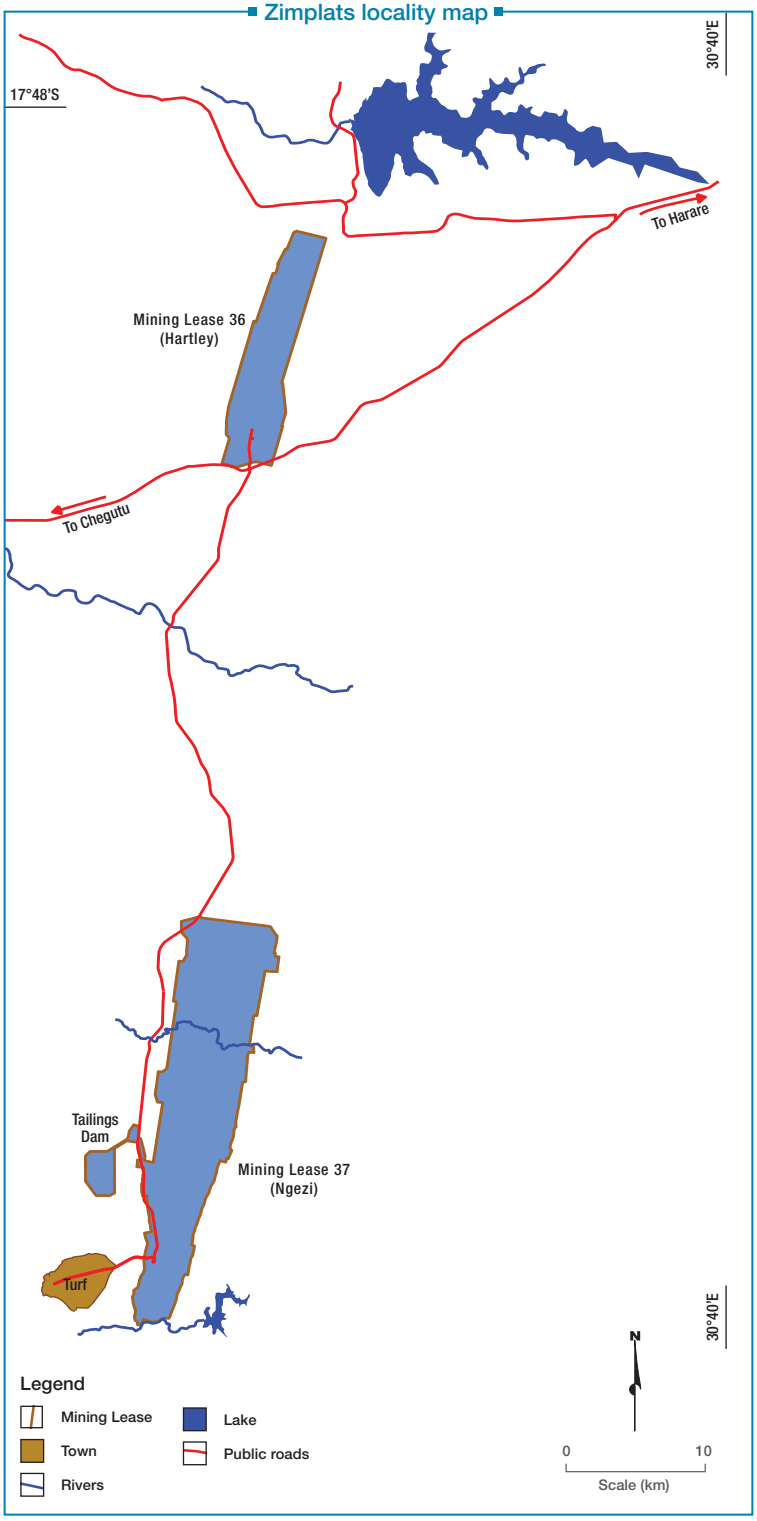
Mining right
24 632ha

Implats' interest
87% managed

Location

The mines at Ngezi are located on ML37, 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 ML36, 80km west-southwest of Harare and 77km north of the Ngezi Mine in the Darwendale sub-chamber of the Hartley Complex of the Great Dyke.

Zimplats locality map



Zimplats

Zimplats has legal entitlement to the minerals being reported upon without any known impediments. There are no legal proceedings or other material matters that may impact on the ability of Zimplats to continue with exploration and mining activities.

Infrastructure

Infrastructure to support production consists of integrated road networks, five production decline portals, conveyor networks and ore load out facilities for road trains. Ore processing infrastructure consists of two concentrator modules at Ngezi with a combined capacity of 4Mtpa, one concentrator and a smelter at SMC. Water for the Ngezi operations is drawn from the Ngezi and Chitsuwa Dams. Zimplats' annual allocation from the two dams is 11 000Ml and this exceeds the current requirements. The SMC is located some 77km north of the Ngezi mines with processing infrastructure which includes a 2.2Mtpa concentrator, a 13.5MVA smelter, tailings storage facilities, stores and offices. Water for the SMC operations is abstracted from the Manyame Dam where Zimplats has an annual allocation of 5 000Ml. 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.

Environmental

Summary details pertaining to the Group environmental management and policy are listed on page 19. This includes the focus areas such as compliance, water stewardship, air quality, managing waste streams and promoting land management practices. Zimplats implements an environmental management system (EMS) based on the ISO 14001:2015 standard requirement. During FY2020, the organisation retained its ISO 14001:2015 certification with no major non-conformities. Both internal and external audits were conducted with the objective of checking compliance with the EMS requirements. In addition to the audits, an environmental incident reporting system was implemented. All the environmental incidents reported during the year were classified as level one incidents, given the negligible environmental impact. The organisation's strategic thrust is to ensure full environmental compliance, promote water stewardship, respond to climate change, promote responsible energy management, air quality management, land stewardship and waste management.

Environmental management procedures and instructions are in place to guide the operations in complying with the applicable environmental laws, regulations and codes. No environmental fines or non-monetary sanctions for non-compliance with environmental regulations were imposed by authorities on the operations. Water withdrawn from dams in FY2020 was within the permit and agreement limits/allocations. Water recycling continued as part of the organisation's strategic thrust to minimise fresh water abstraction. Rehabilitation and mine closure activities including re-vegetation of mined out areas particularly the Ngezi Open Pits were conducted successfully during the year.

Management of both mineral and non-mineral waste progressed well with special focus on tailings storage facilities. Tailings deposited on both Ngezi and SMC tailings storage facilities amounted to 6 480 kilotonnes.

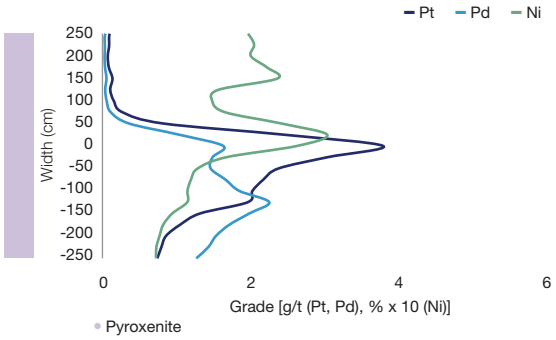
Geology

The Great Dyke of Zimbabwe developed as a series of initially discrete magma chamber compartments, which coalesced as the chambers filled. On the basis of structure, style of layering and continuity of layers, the Great Dyke has been sub-divided into five sub-chambers, namely the Wedza, Selukwe (Shurugwi), Sebakwe, Darwendale and Musengezi subchambers. 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 gabbronorite. Narrow layers of chromitite occur at the base of cyclic units throughout the ultramafic sequence. 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 some 5m to 50m below the ultramafic/mafic contact. The MSZ is a continuous layer, 2m to 10m thick, and forms an elongated basin. The zone strikes in a north-northeasterly trend and dips between 5° and 20° on the margins, flattening towards the axis (centre) of the basin. The areas where the dip is less than 9° is referred to as the 'Flats'; these have historically been the target for mining due to the ease of operating. The areas with dips between 9° and 14° are referred to as the 'Upper Ore Resources I' and those with dips above 14° are referred to as the 'Upper Ore Resources II'. Peak base metal and PGM values are offset vertically with palladium peaking at the base, platinum in the centre and nickel towards the top. Visual identification of the MSZ is difficult, therefore systematic monitoring of the reef using various sampling methods is needed to guide mining. The accompanying schematic diagram illustrates the form of the Great Dyke. The geological sequence is illustrated in the accompanying generalised stratigraphic column on page 102.

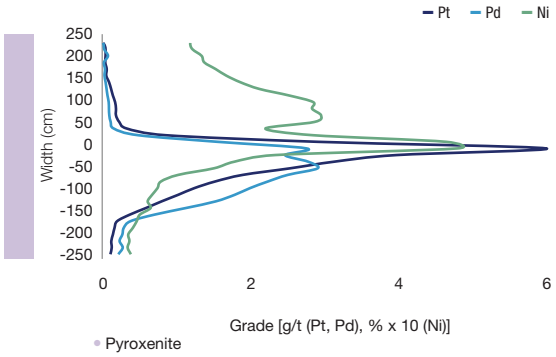
Selous Metallurgical Complex, Zimplats

Zimplats

Ngezi – MSZ

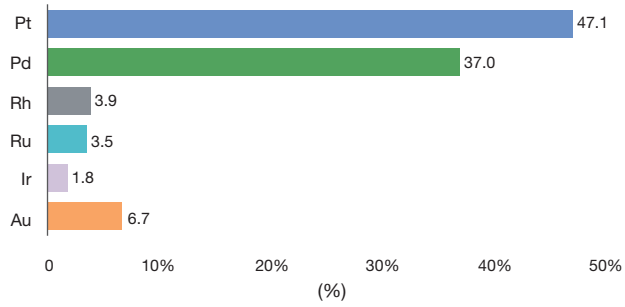


Hartley – MSZ



Zimplats MSZ 6E metal ratio

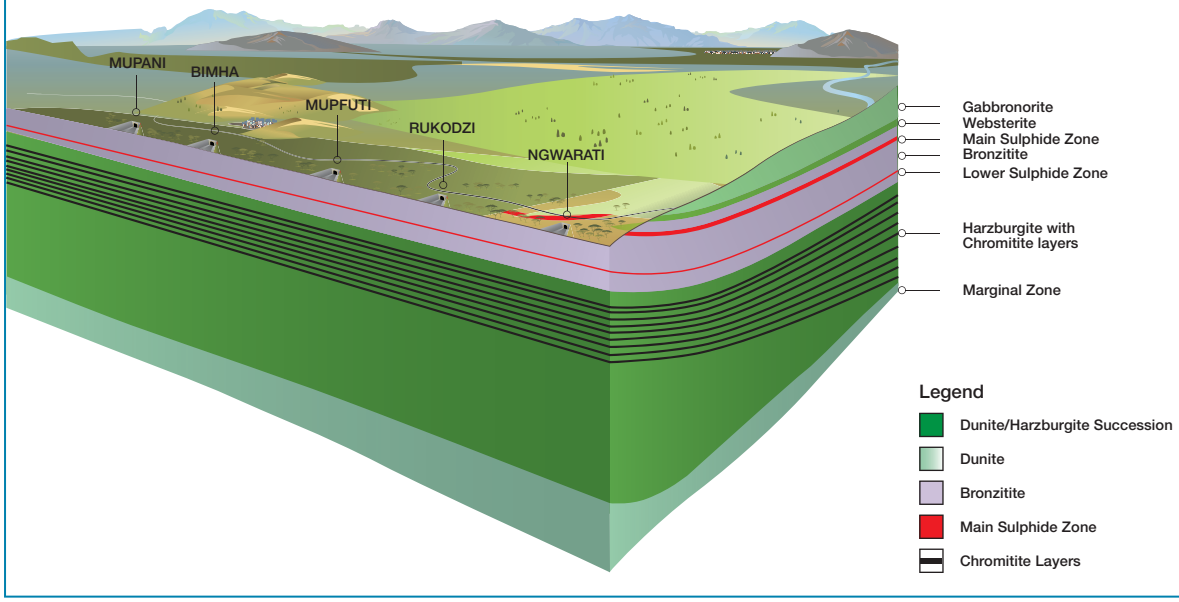
as at 30 June 2020 (%)



Metal ratios derived from the Mineral Reserve estimate.

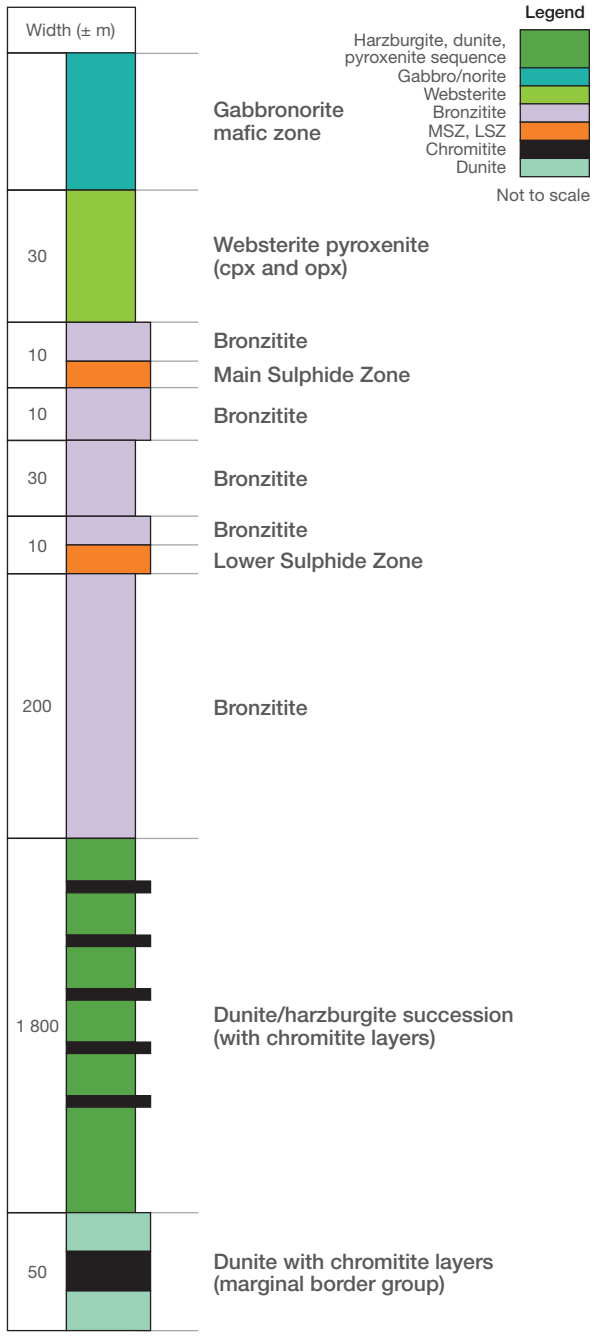
Mupani Mine, Zimplats

Generalised schematic section of the stratigraphic sequence at Zimplats



Zimplats

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



Exploration

During the year the Company carried out exploration activities for evaluation of the Mineral Resources on existing mines and projects at both mining leases with main focus on Mupfuti, Bimha and Mupani mines. The new assay data for ML37 that was received from Genalysis Laboratory included drilling from the previous year and was used to update the block models used for the Mineral Resources and Mineral Reserves estimation exercise for this annual report. No updates were done on the ML36 Mineral Resources pending completion of the ongoing twin drilling programme. This confirmatory drilling work is intended to improve the interpretation of the historical information in the Hartley database in order to align with modern estimation methodology applied to ML37. The classification of the Hartley Mineral Resources will be revisited once the revalidation exercise is concluded.

The surface exploration drilling undertaken during the past period was aimed at increasing the geological confidence in the orebodies and upgrading the relevant Mineral Resources categories in drilled areas. Surface drilling information was used to enhance the geotechnical interpretation of projects in order to manage the risk posed by ground conditions and geological structures on the operations and development projects. Drilling was focused on Mupfuti, Bimha and Mupani mines where the aim was to ensure that the next five years of mining in each mine are sufficiently covered by the requisite drillhole spacing and that all zones of known geological and geotechnical complexity are fully interpreted to guide mine development. Routine underground cover drilling continued throughout the year as this is an important strategy that allows the mines to interpret smaller scale geological structures that would otherwise not be captured by the surface drilling method and is critical to improve the efficiency of the short-term mining plan. All drillholes were sampled on the reef horizon and the half-core split dispatched for analysis at the internal or external laboratories.

The underground core drilling for reef profiling and geotechnical assessment was completed in all the active mines as detailed below and the information obtained from the logging and sampling of the holes has improved the characterisation of the orebody ahead of mining. Completed surface and underground core drilling work for FY2020 is shown in the table below.

The following drilling was completed:

	Surface drilling		Underground drilling	
Drilling site	Number of drillholes	Total drilling (m)	Number of drillholes	Total drilling (m)
Ngwarati Mine	–	–	10	1 000
Rukodzi Mine	–	–	9	800
Mupfuti Mine	28	3 310	12	1 200
Bimha Mine	18	2 899	22	2 200
Mupani Mine	7	1 757	15	1 483

Mineral Resource estimation and reconciliation

The updated Mineral Resources estimates as at 30 June 2020 are tabulated on page 103. Corresponding estimated Mineral Resources attributable to Implats are summarised on page 33. Note that the Mineral Resources are quoted inclusive of Mineral Reserves.

Day-to-day operations are monitored using in-house lead collection fire assays with ICP-MS finish. The Mineral Resources and Mineral Reserves for ML37 are based largely on external nickel sulphide collection fire assays with ICP-MS finish. The difference between the methods are incorporated within the modifying factors that have been applied, which means that there may be slight distortions, however, these are not deemed significant.

The ML36 (Hartley) Mineral Resources are largely based on historical data from drilling campaigns conducted prior to the take over of operations by Zimplats and the estimates were updated to bring alignment of the estimation methodology, with that applied at Ngezi, utilising the original data set which was based on lead collection fire assays with ICP-MS finish. As part of the initial data validation process, five holes were drilled to confirm the existing assay, lithological and geotechnical logging data. From this work it is evident that further investigative work will be required towards completing the full validation process. To achieve this, a twin hole

Zimplats

drilling programme which is aimed at improving the confidence in the interpretation of historical data is underway and will be completed over the next three years. The existing models will therefore remain unchanged and continue to be reported on, while twin drilling work progresses, with the objective of increasing the twin hole dataset to approximately 10% of the total in order to secure a reliable population of data that can be used to make informed decisions on the quality of this historical database.

Oxides 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 have been estimated using kriging techniques on assay data derived from surface drillholes. Estimates are based on composite widths which are based on appropriate economic parameters. The classification of Mineral Resources at Zimplats 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 classification of Mineral Resources. For Ngezi (ML37), 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 (ML36) the density of drillholes in some portions of the Indicated and Measured Resources are wider than for ML37. The interpretation on existing data shows geological continuity of the orebody and consistency of grades in these areas. The modelling remains consistent with the known characteristics of the mined footprint at Hartley though revalidation of all historical data using twin hole drilling is currently in progress and is anticipated to be undertaken over two years, with grade block models anticipated for update upon completion of the field work and QAQC. Hartley is currently excluded from the LoM I Mineral Reserves.

Rounding-off of figures in this report may result in minor computational discrepancies and where this occurs it is not deemed significant. Mineral Resources estimates are inherently imprecise and require the application of judgement and are subject to future revisions. The results tabulated in this report must be read as estimates and not as calculations. Inferred Mineral Resources in particular are qualified as approximations. The Mineral Resource estimate reflects the actual spatial depletion as at 31 May 2020 and the non-spatial forecast depletion to 30 June 2020. More details regarding the Mineral Resources and Mineral Reserves can be obtained from the 2020 Zimplats annual report **(www.zimplats.com)**.

The reduction in Mineral Resource tonnage attributed to mining depletion amounted to 10.5Mt during the year. However, this was netted off against an increase in the Mineral Resource tonnage due to updates of the geological models after incorporating new analyses received from the recent drilling programmes where the specific gravity modelled in the Portal 10 area reported higher than previous estimates and this brought it into closer alignment with the rest of the MSZ orebody. Reconciliation of the Mineral Resources for 2020 therefore shows a marginal overall decrease of 3.2Mt. The year-on-year reconciliation of the platinum Mineral Resource estimate shows an overall increase from 56.5Moz platinum to 56.9Moz platinum due to higher overall platinum grades from the updated models.

Zimplats Mineral Resource estimate (inclusive reporting)

As at 30 June 2020

Orebody		Ngezi mines (ML37) MSZ				Hartley (ML36) MSZ				Oxides – ML36 & ML37 MSZ			
Category		Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	Indicated	Inferred	Total	Total
Tonnes	Mt	191.4	409.1	130.2	**730.7**	32.1	138.0	43.6	**213.8**	16.0	39.3	**55.4**	**999.8**
Width	cm	245	230	210		180	180	180		250	216		
4E grade	g/t	3.38	3.41	3.39	**3.40**	4.05	3.78	3.44	**3.75**	3.42	3.55	**3.51**	**3.48**
6E grade	g/t	3.57	3.61	3.57	**3.59**	4.28	3.99	3.62	**3.96**	3.61	3.75	**3.71**	**3.67**
Ni	%	0.10	0.11	0.12	**0.11**	0.13	0.12	0.11	**0.12**	0.10	0.12	**0.11**	**0.11**
Cu	%	0.08	0.08	0.09	**0.08**	0.11	0.10	0.09	**0.10**	0.07	0.10	**0.09**	**0.09**
4E oz	Moz	20.8	44.9	14.2	**79.9**	4.2	16.8	4.8	**25.8**	1.8	4.5	**6.3**	**111.9**
6E oz	Moz	22.0	47.4	14.9	**84.3**	4.4	17.7	5.1	**27.2**	1.9	4.7	**6.6**	**118.1**
Pt oz	Moz	10.5	22.6	7.2	**40.3**	2.0	8.8	2.6	**13.5**	0.9	2.2	**3.1**	**56.9**
Pd oz	Moz	8.0	17.2	5.3	**30.5**	1.6	5.9	1.6	**9.2**	0.7	1.7	**2.4**	**42.1**

As at 30 June 2019

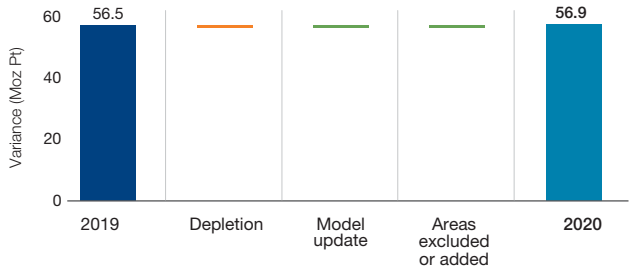
Orebody		Ngezi mines (ML37) MSZ				Hartley (ML36) MSZ				Oxides – ML36 & ML37 MSZ			
Category		Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	Indicated	Inferred	Total	Total
Tonnes	Mt	145.7	460.9	127.4	**733.9**	32.2	138.2	43.7	**214.1**	16.0	39.3	**55.4**	**1003.4**
Width	cm	250	230	201		180	180	180		250	216		
4E grade	g/t	3.35	3.40	3.30	**3.37**	4.05	3.78	3.44	**3.75**	3.42	3.55	**3.51**	**3.46**
6E grade	g/t	3.53	3.58	3.47	**3.55**	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	0.08	0.09	**0.08**	0.11	0.10	0.09	**0.10**	0.07	0.10	**0.09**	**0.09**
4E oz	Moz	15.7	50.4	13.5	**79.5**	4.2	16.8	4.8	**25.8**	1.8	4.5	**6.3**	**111.6**
6E oz	Moz	16.5	53.0	14.2	**83.8**	4.4	17.7	5.1	**27.2**	1.9	4.7	**6.6**	**117.6**
Pt oz	Moz	7.7	25.2	6.9	**39.9**	2.0	8.8	2.6	**13.5**	0.9	2.2	**3.1**	**56.5**
Pd oz	Moz	6.2	19.3	4.9	**30.4**	1.7	6.0	1.6	**9.2**	0.7	1.7	**2.4**	**42.0**

*** 2019 6E grade and ounces discrepancy corrected for Ru and Ir.*

Zimplats

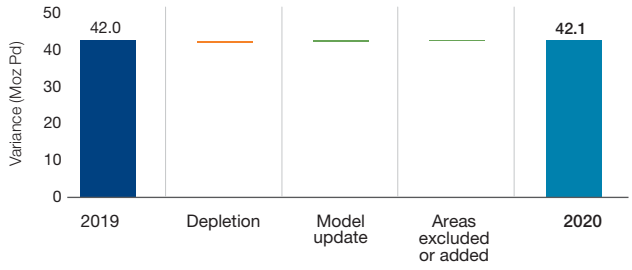
Total Zimplats platinum Mineral Resource estimate

as at 30 June 2020 (Moz Pt)



Total Zimplats palladium Mineral Resource estimate

as at 30 June 2020 (Moz Pd)



Assay laboratory, Zimplats

Zimplats MSZ Mineral Resources

Zimplats

Modifying factors

The following modifying factors were applied to the Mineral Resources:

Mineral Resource Key assumptions	Main Sulphide Zone
Geological losses	5 – 20%
Area	150 million ca
Channel width	180cm – 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	250cm – 265cm
Concentrator recoveries	80 – 81%

The modifying factors used to convert Mineral Resources to Mineral Reserves are derived from historical performance while taking future anticipated conditions into account. Implats' long-term price assumptions in today's money (supporting Mineral Reserve estimates) are shown on page 12.

Mining methods and mine planning

A mechanised room and pillar mining method is employed to extract ore from stopes whose nominal stope width is 2.5m. Mining production teams at Zimplats are organised into four specialised teams doing face preparation, face drilling and blasting, load and haul and support, on a three-shift rotation system. Each mine is divided into mine captain sections and each section is further sub-divided into four quadrants where the aforementioned activities are carried out on a rotational basis. The total face length is dependent on the sizes (widths) of the rooms and pillars. Mine access is through declines which are generally located centrally in each resource area and any asymmetry is accounted for in the mine production scheduling. This allows sufficient flexibility for the required grade control sampling and to negotiate past faults and barren intrusions while still meeting the team's production targets. The main production suite of equipment includes a single boom face rig for drilling, a roof bolter for support drilling, a 10t loader (LHD) and a 30t dump truck which are deployed into specialised functional teams in each of the production sections underground.

At the various mines, the broken rock is either trucked out to a surface crusher or trucked to an underground crusher where after crushing, it is conveyed to surface using the footwall decline conveyor. Ngwarati and Rukodzi Mines have surface crushers while Mupfuti and Bimha Mines have underground crushers with crushed ore being conveyed to surface.

The productivity per crew varies from approximately 16 500t to greater than 22 000t of ore per month depending on the particular mine, the dip of the reef and the existing pillar layout. The typical layout 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 meant to arrest pillar unravelling in the event of a localised collapse. Ngwarati and Rukodzi mines do not have barrier pillars or paddocks owing to their relatively shallow depth below surface. At all the mines, the spans of rooms may decrease, and pillar dimensions may increase in very bad ground. A combination of roof bolts and tendons is integral to the support design.

While both Upper Ores I and II are included in the Mineral Resource estimate, only Upper Ores I is progressed to the Mineral Reserve estimate, based on the current viable mining methods and economic considerations.

It should be noted that the Mineral Reserve estimate is the result of the planning process applied against the Measured and Indicated Mineral Resources only, through the application of detailed modifying factors; importantly, it should be noted that this process is subjected to rigorous economic viability testing at given market conditions.

Zimplats Mineral Reserve estimate

As at 30 June 2020				
Orebody		Ngezi MSZ		
Category		Proved	Probable	Total
Tonnes	Mt	103.3	134.3	**237.6**
Width	cm	265	265	
4E grade	g/t	3.19	3.20	**3.20**
6E grade	g/t	3.37	3.37	**3.37**
Ni	%	0.10	0.10	**0.10**
Cu	%	0.07	0.07	**0.07**
4E oz	Moz	10.6	13.8	**24.4**
6E oz	Moz	11.2	14.6	**25.8**
Pt oz	Moz	5.3	6.9	**12.1**
Pd oz	Moz	4.1	5.4	**9.5**

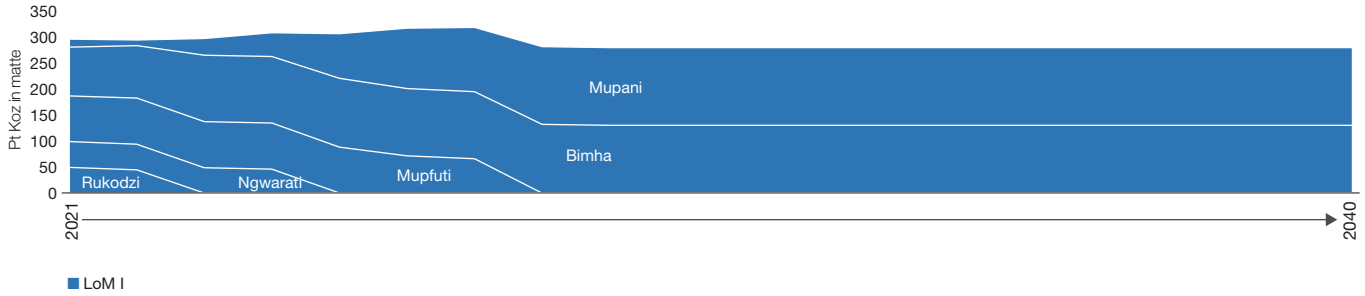
As at 30 June 2019				
Orebody		Ngezi MSZ		
Category		Proved	Probable	Total
Tonnes	Mt	86.6	164.3	**250.9**
Width	cm	265	265	
4E grade	g/t	3.22	3.23	**3.23**
6E grade	g/t	3.40	3.41	**3.41**
Ni	%	0.10	0.10	**0.10**
Cu	%	0.08	0.08	**0.08**
4E oz	Moz	9.0	17.1	**26.0**
6E oz	Moz	9.5	18.0	**27.5**
Pt oz	Moz	4.4	8.4	**12.8**
Pd oz	Moz	3.6	6.7	**10.2**

Zimplats

The high level LoM profile is depicted in the accompanying graphs below.

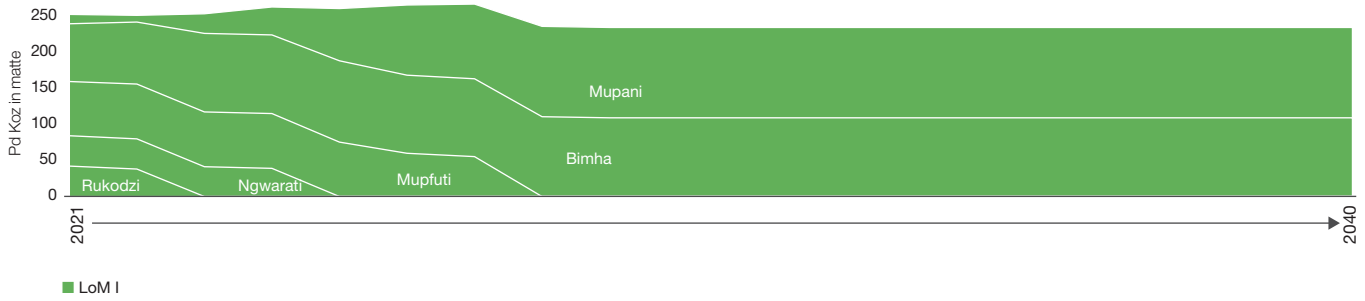
Zimplats 20-year estimated LoM platinum ounce profile

as at 30 June 2020

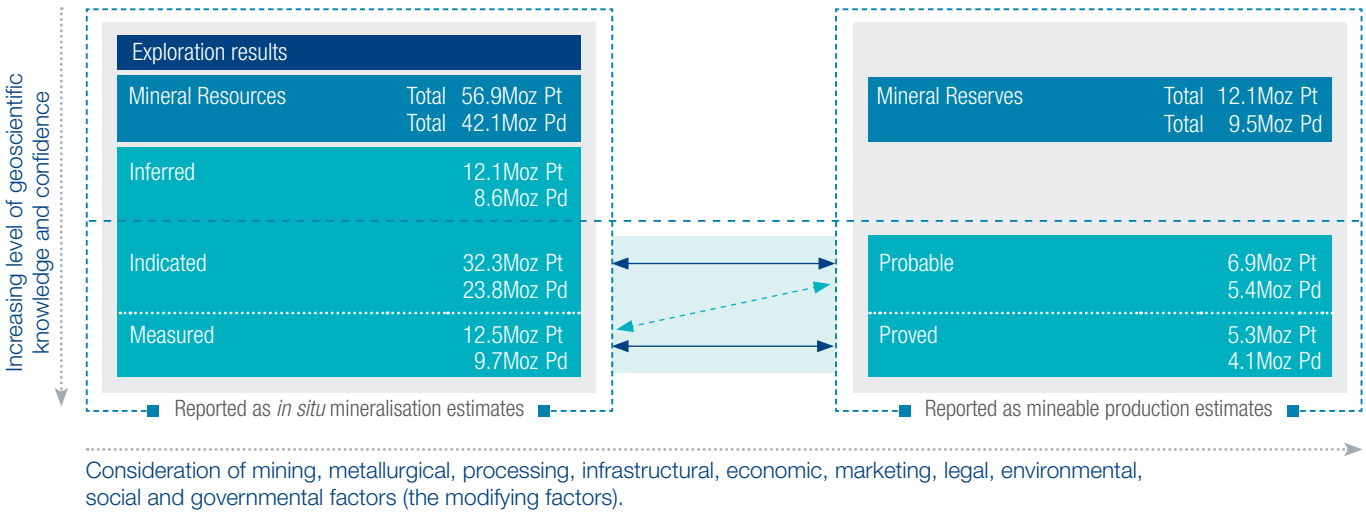


Zimplats 20-year estimated LoM palladium ounce profile

as at 30 June 2020



Relationship between exploration results, Mineral Resources and Mineral Reserves (100%)



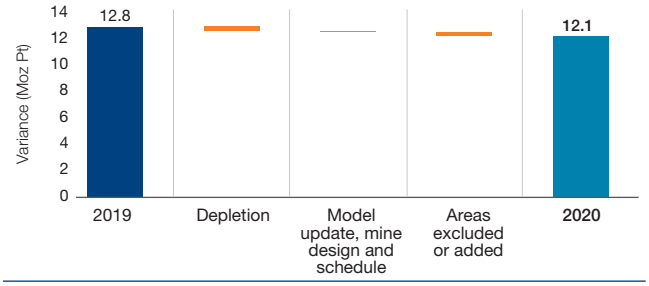
Zimplats

The total Mineral Reserve decreased by 13.3Mt (5.3%) mainly due to mining depletion during the year and also tail-cutting on the LoM production schedule which affected the last two years resulting in the removal of 4.5Mt from LoM I to LoM IIa. This tonnage is therefore not advanced to Mineral Reserves in this annual report based on the RPEEE principles. The improved interpretation on large scale structures also contributed to the reduction in overall Mineral Reserves tonnage as the mineable limits around geotechnically complex areas were refined. The declared Mineral Reserves 6E ounces subsequently decreased by 1.7Moz 6E (6.2%).

More details related to this change can be found on the Zimplats website **(www.zimplats.com)**. The distribution of Mineral Reserves at the different mines is shown alongside, indicating the varying sizes and remaining production potential.

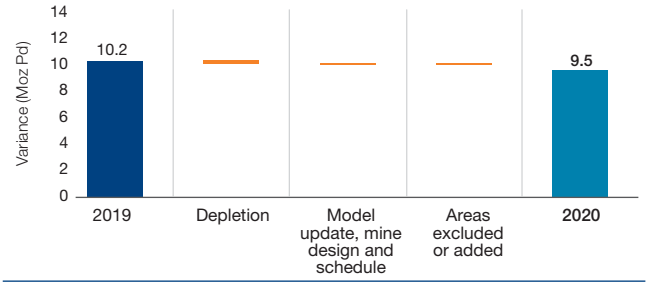
Total Zimplats platinum Mineral Reserves

as at 30 June 2020 (Moz Pt)



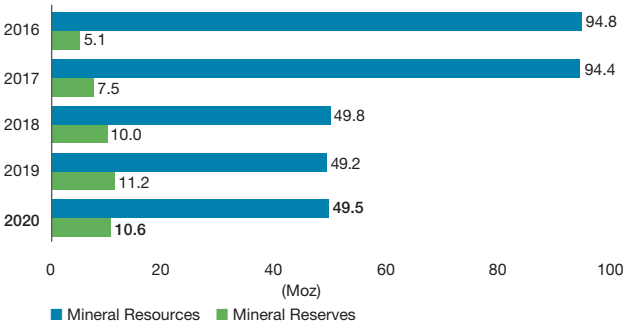
Total Zimplats palladium Mineral Reserves

as at 30 June 2020 (Moz Pd)



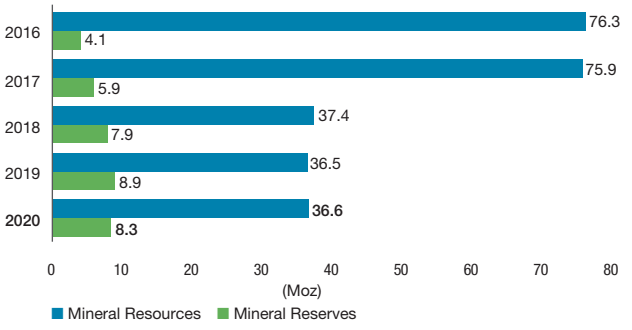
Zimplats attributable platinum Mineral Resources and Mineral Reserves

as at 30 June 2020 (Moz Pt)



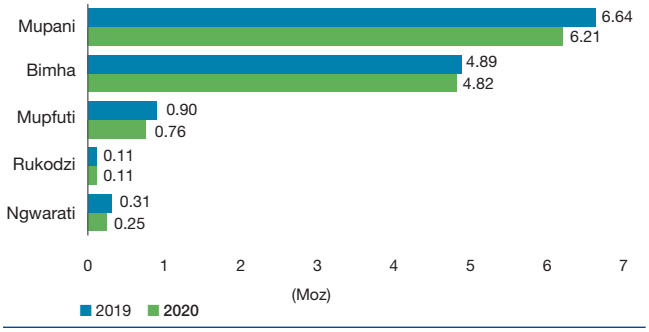
Zimplats attributable palladium Mineral Resources and Mineral Reserves

as at 30 June 2020 (Moz Pd)



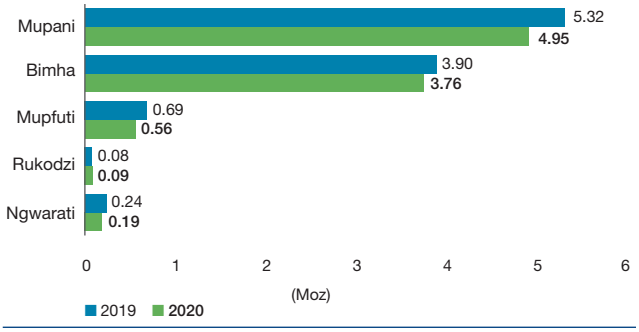
Zimplats platinum Mineral Reserve distribution

as at 30 June 2020 (Moz Pt)



Zimplats palladium Mineral Reserve distribution

as at 30 June 2020 (Moz Pd)



Zimplats

Processing

Ore from the mines is processed by two concentrators (one at SMC and the other at Ngezi). The concentrator at Ngezi has two similar modules, which were commissioned in 2009 and 2013, respectively. Each module has a design capacity of 2.0Mtpa, which makes up a total of about 4.0Mtpa. The SMC concentrator has a design capacity of 2.2Mtpa. Approximately one-third of the mined ore (2.2Mt) is transported by road trains to the concentrator at SMC, which operates a single semi-autogenous grinding mill (SAG), while the rest is transported by overland conveyor system to the crusher and ball mill concentrator modules at Ngezi. Concentrates from both the modular Ngezi and SMC concentrators are then smelted in an arc furnace and converted to matte at SMC. The resulting matte is despatched to Impala's refinery in Springs under the terms of a LoM agreement with Impala.

Zimplats top risks

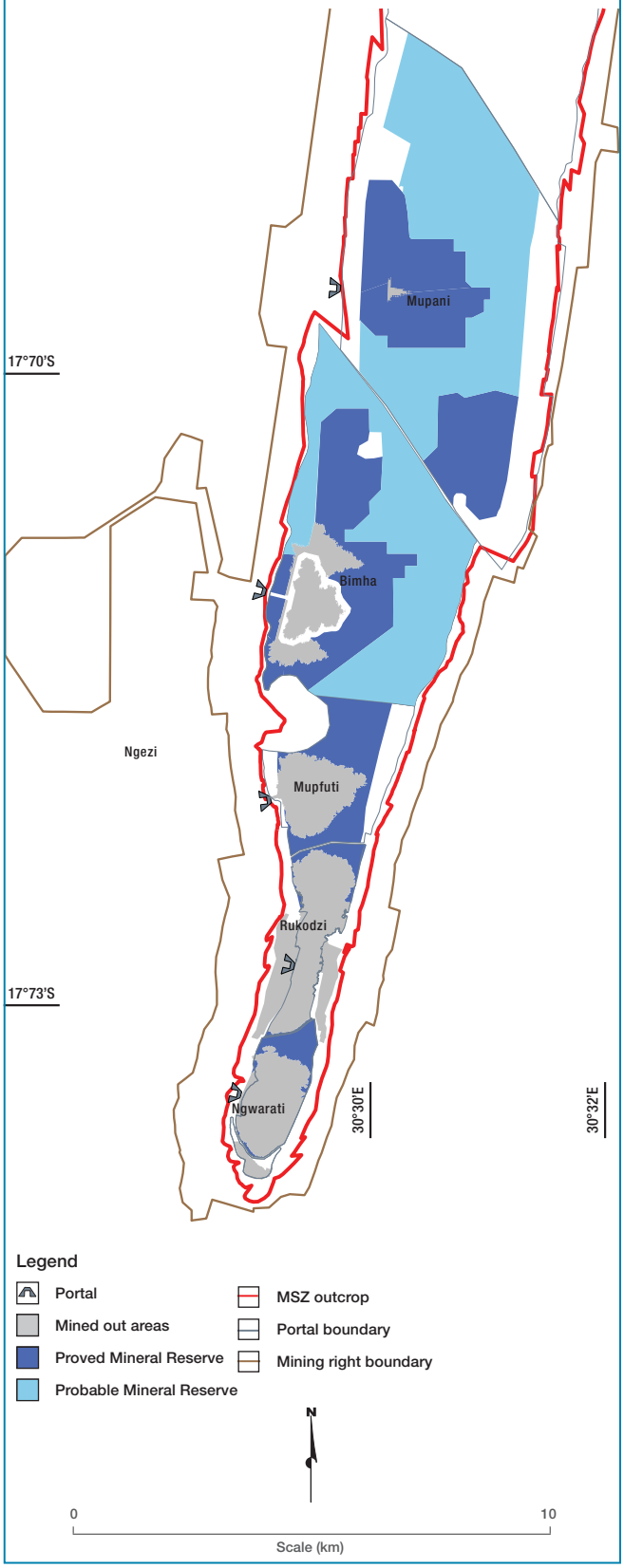
The Group risk management process is briefly described on page 15 where the Implats Group top risks are listed. In this context the top risks identified at Zimplats are:

- Covid-19 pandemic
- Sovereign risks
- Currency risk
- Power supply risk
- Supply chain risks
- Hyper inflation risk
- Cyber risk
- People risks
- Safety
- Taxation risk

Exploration core yard, Zimplats

Core cutting, Zimplats

Zimplats MSZ Mineral Reserves



Zimplats

Valuation and sensitivity

The economic viability of the Zimplats Mineral Reserves is tested by Implats by means of 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 PGM metal ratios and differs 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 2020. These tests indicate that the Zimplats operation requires a real long-term basket price of between R12 000 and R13 000 per 6E ounce to be economically viable. While the real spot basket price for Zimplats as at 30 June 2020 was R33 200 (US$1 830) per 6E ounce, the Zimplats internal long-term real basket price is R18 320 (US$1 320). The commodity market remains fluid and the outlook improved post 30 June 2020.

Compliance

Zimplats Mineral Resources and Mineral Reserves are estimated and reported in accordance with the Implats code of practice for the estimation, classification and reporting of Mineral Resources and Mineral Reserves. The code of practice is an Implats Group-wide protocol that seeks to provide more prescriptive guidance than the Australasian Code for Reporting Exploration Results, Mineral Resources and Mineral Reserves, the Joint Ore Reserve Committee Code (JORC Code), 2012 edition and the SAMREC Code (2016). Zimplats Mineral Resources and Mineral Reserves also meet the requirements of the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Experts reports, the VALMIN Code, 2005 edition. The Competent Persons designated in terms of the SAMREC Code (2016), who took responsibility for the reporting of Mineral Resources and Mineral Reserves as at 30 June 2020, are Steven Duma BSc (Hons) Geology, University of Zimbabwe (Pr. Sci. Nat, SACNASP, AusIMM) and Wadzanayi Mutsakanyi BSc (Hons) Mining Engineering, University of Zimbabwe (MAusIMM, MSAIMM) who are full-time employees of Zimplats. Steven is responsible for Mineral Resources and has 23 years of experience in mining and exploration of which 11 years have been in the platinum mining industry in Zimbabwe and South Africa. Wadzanayi is responsible for Mineral Reserves and has 25 years of experience in mining of which 11 years have been in the platinum mining industry in Zimbabwe. Implats has written confirmation from the Competent Persons that the information disclosed in terms of these paragraphs are compliant with the JORC Code (2012 edition) and SAMREC Code (2016) and, where applicable, the relevant JORC Table 1 and JSE Section 12 Listings Requirements and that it may be published in the form, format and context in which it was intended.

Implats appointed The MSA Group to undertake the 2020 Mineral Resources and Mineral Reserves audit. While a number of recommendations aimed at refinement of the MRM practices and some for continuous improvement were derived, an audit outcome of no fatal flaws, confirmation of SAMREC (2016) compliance and no impediments for inclusion into Implats' year-end Mineral Resource and Mineral Reserve statement, were derived (page 144).

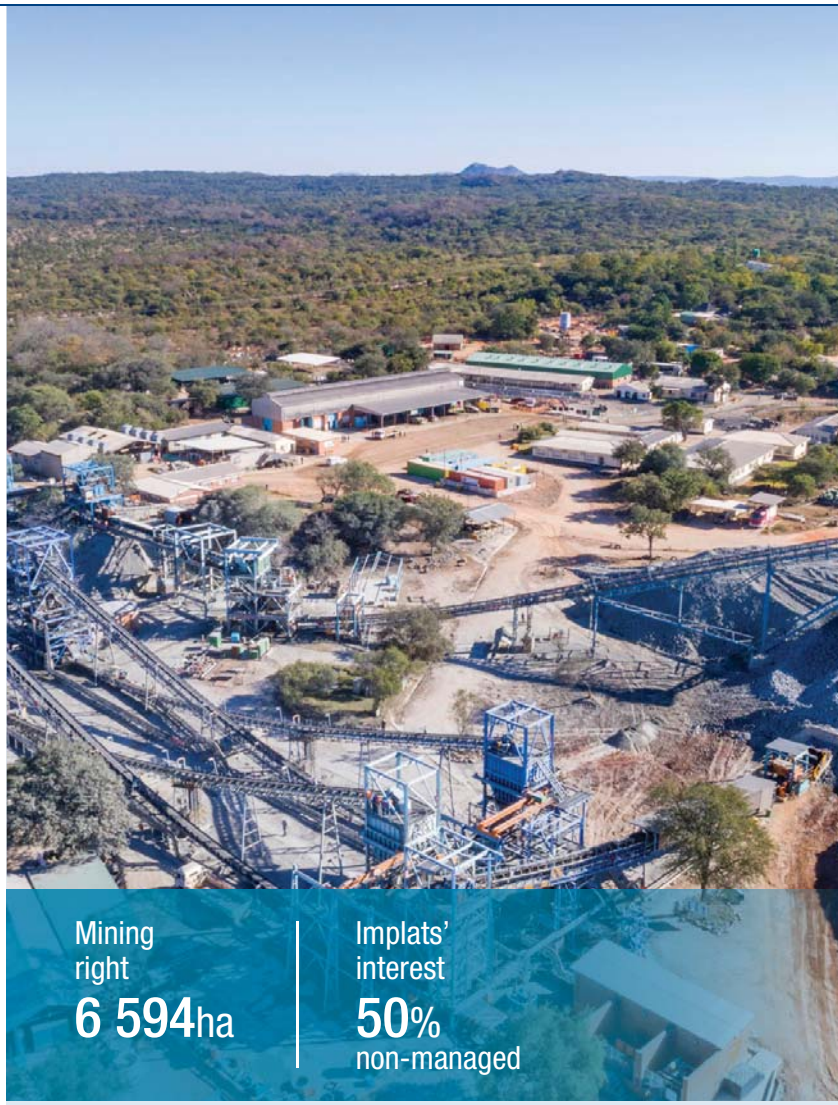
Key operating statistics

		FY2020	FY2019	FY2018	FY2017	FY2016
Production						
Tonnes milled ex mine	(000t)	**6751**	6 486	6 570	6 716	6 406
Head grade 6E	(g/t)	**3.48**	3.48	3.48	3.49	3.48
Platinum in matte	(000 oz)	**267**	270	271	281	290
Palladium in matte	(000 oz)	**228**	223	223	233	236
6E in matte	(000 oz)	**580**	580	578	602	617
Cost of sales	(Rm)	**(7 398)**	(6 292)	(5 574)	(5 870)	(6 311)
On-mine operations	(Rm)	**(3 290)**	(2 781)	(2 613)	(2 828)	(2 904)
Processing operations	(Rm)	**(1 540)**	(1 292)	(1 302)	(1 246)	(1 268)
Smelting operations	(Rm)	**(291)**	(272)	(260)	(269)	(304)
Other	(Rm)	**(2 277)**	(1 947)	(1 399)	(1 527)	(1 835)
Total cost	(Rm)	**5 700**	4 932	4 568	4 787	4 721
Per tonne milled	(R/t)	**844**	760	695	713	737
	(US$/t)	**54**	54	54	52	51
Per 6E oz in matte	(R/oz)	**9 824**	8 509	7 899	7 956	7 653
	(US$/oz)	**627**	600	615	583	531
Financial ratios						
Gross margin ex mine	(%)	**48.7**	29.7	25.5	16.6	6.5
Capital expenditure	(Rm)	**1 733**	1 628	1 738	863	981
	(US$m)	**111**	115	135	63	68

The year-on-year production performance and outlook is discussed in the Implats 2020 Annual Integrated Report **(www.implats.co.za)**.

Mimosa

MIMOSA MINING COMPANY IS SITUATED 32KM WEST FROM ZVISHAVANE TOWN, APPROXIMATELY 340KM SOUTHWEST FROM THE CAPITAL CITY OF HARARE IN ZIMBABWE.



Mining right
6 594ha

Implats' interest
50%
non-managed

History

Mining operations targeting mineral extraction from oxide ores started in 1926 at North Hill and lasted approximately two years with some 60oz of platinum having been recovered. Union Carbide Zimbabwe secured an EPO in the Wedza area over the Mimosa deposit in 1962. Exploration and trial mining were periodically undertaken over a 30-year period. Mimosa was acquired by Zimasco from Union Carbide in 1993. Zimasco piloted platinum mining in Zimbabwe by resuscitating the operation and steadily increasing production to 1 000 tonnes per day, which was achieved in 1998. In July 2001, Implats acquired a 35% stake in Mimosa and increased this stake to 50% with a further acquisition of 15% in August the following year. Aquarius acquired a 50% stake in Mimosa during the same year. Sibanye-Stillwater concluded a deal on 12 April 2016 which resulted in Sibanye-Stillwater acquiring all the shares that formerly belonged to Aquarius. Mimosa is wholly owned by Mimosa Investments Limited, a Mauritius-based Company held by Implats and Sibanye-Stillwater and is a non-managed operation in the Implats portfolio. Current milled throughput is about 8 000 tonnes per day.

Mineral rights

Mimosa has legal entitlement to the minerals being reported upon without any known impediments. There are no legal proceedings or other material matters that may impact on the ability of Mimosa to continue with exploration and mining activities. The Mimosa mining rights are covered by a contiguous mining lease covering an area of 6 594 hectares. The mining lease, namely Lease No 24, was granted to Mimosa on 5 September 1996. The lease was registered for nickel, copper, cobalt, gold, silica, chromite and platinum group minerals and Mimosa Mining Company (Pvt) Ltd currently holds the mining rights to that lease. The lease agreement gives Mimosa exclusive mining rights for PGMs and base metals within the vertical limits of its boundary.

Mimosa Mining Company is currently in the process of acquiring mining claims adjacent to the Mimosa mining lease from Anglo American. While the process of acquisition is at advanced stages, the Mineral Resources contained are not reported in the current Mineral Resource statement since the deal has not yet been finalised and the mining titles not yet transferred.

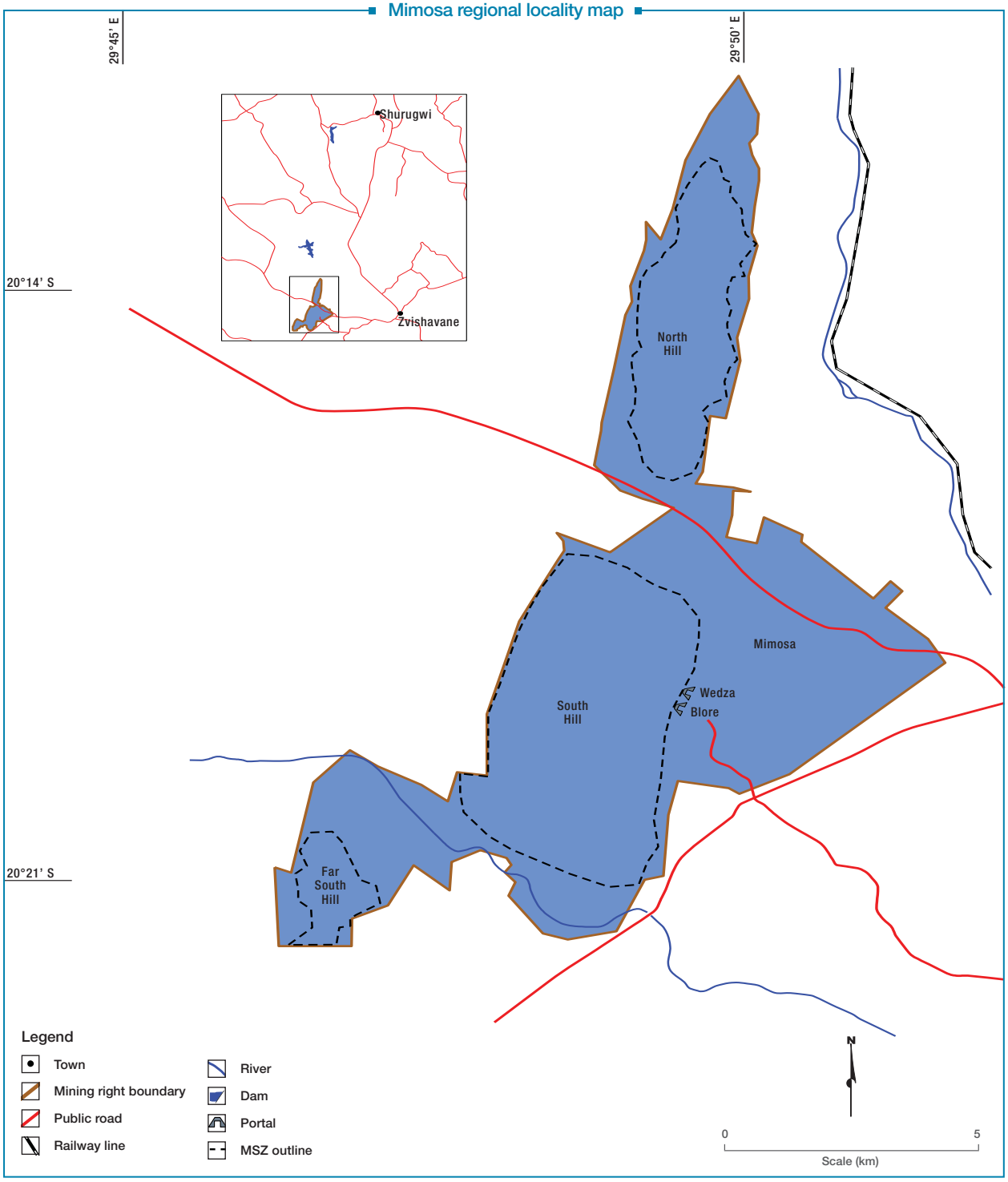
The GoZ has announced publicly that the requirement for foreign investors to dispose of 51% of their shareholding to indigenous Zimbabweans is no longer applicable for the platinum sub-sector, as with all other mining sub-sectors in the country. This has however not yet been legislated through the relevant amendments to the Indigenisation Act.

Mimosa is supportive of and is committed to the government efforts towards increased beneficiation of its products.

Location

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

Mimosa regional locality map



Mimosa

Mimosa is currently pursuing alternatives as part of its efforts towards establishing a viable beneficiation route. These efforts are guided by the fact that Mimosa on its own has no capacity to establish its own smelting and refining process.

Infrastructure

The mining operation is well established with a mature infrastructure. The mine currently extracts 2 900Ml raw water per annum from the Khumalo weir. The weir is 6km from the mine and located in the Ngezi River. The weir is supplied downstream from the Palawan Dam. Water is released from the dam for the mine and other water use permit holders. The power supply to the mine is through a 132kV overhead powerline feeder teeing off Mberengwa switching station located some 15km south of the Mimosa Mine consumer sub-station. The maximum load capacity of the line feeding the mine consumer sub-station is 118MVA. It is adequate to accommodate an additional load. The access surface tarred road to the mine is in a good condition and well maintained. The nearest railway station (Bannockburn) is 16km from the mine.

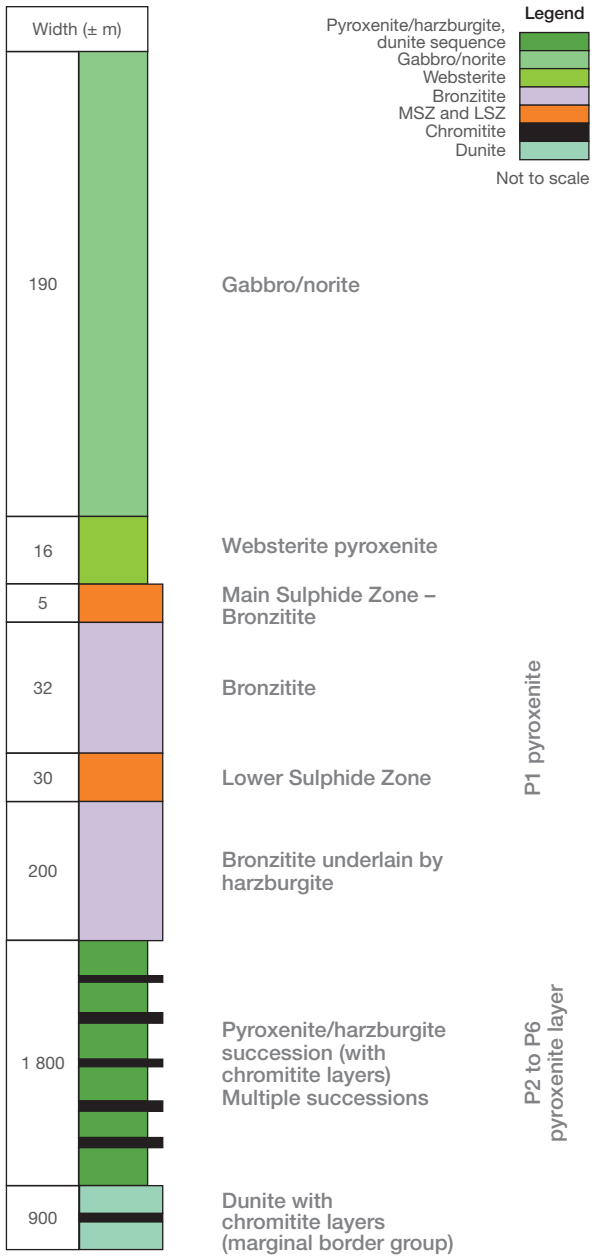
Environmental

Summary details pertaining to the Group environmental management and policy are listed on page 19. This includes the focus areas such as compliance, water stewardship, air quality, managing waste streams and promoting land management practices. Mimosa is certified to operate on an ISO 14001 and ISO 45000 Business Management system. The system has a comprehensive, auditable method of identifying, implementation, monitoring and tracking of all aspects and impacts of its activities to the environment. The system is subjected to internal reviews, internal audits and also external audits. All environmental parameters are covered in the mine's Environmental Impact Assessment (EIA) covering the whole mining lease. Project specific EIAs are also carried out as and when required.

Geology

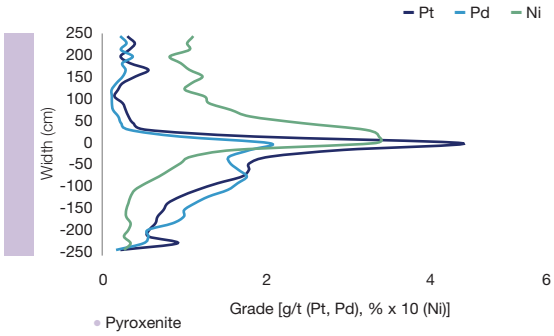
The geological succession at Mimosa is illustrated in the accompanying generalised stratigraphic column. PGM mineralisation at Mimosa is located in four erosionally isolated and fault-bounded blocks, namely, from north to south, the North Hill orebody, South Hill orebody, Mtshingwe Fault Block orebody and Far South Hill orebody areas. Each of these blocks is host to a pyroxenite layer known as the P1 pyroxenite layer which is overlain by a layer of gabbro. 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 zone strikes in a north-northeasterly trend and dips at about 14° on the margins flattening towards the axis of the basin. 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. At Mimosa the MSZ is visually identified using pyroxene and sulphide mineralisation followed by confirmatory channel sampling and underground XRF channel definition. Minor faults and dykes are present at Mimosa. Although no potholes have been identified, low-grade areas and areas of no mineralisation, or 'washouts', have been intersected. These are all accounted for in the Mineral Resource and Mineral Reserve estimate. The 6E metal ratios are shown in the accompanying graph. This is similar to the distribution at Zimplats.

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



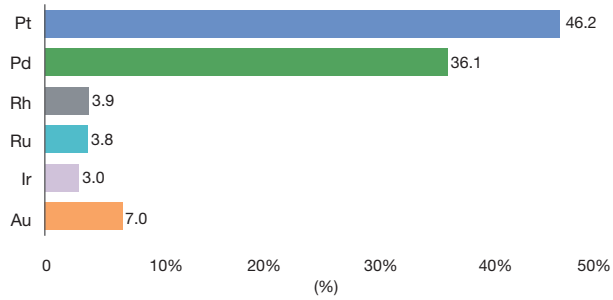
Mimosa

Mimosa – MSZ



Mimosa MSZ 6E metal ratio

as at 30 June 2020 (%)



Metal ratios derived from the Mineral Reserve estimate.

Exploration

The lease area has been explored by a total of 514 exploration core-recovering drillholes of which 134 are on the North Hill deposit, 344 on the South Hill, four on Mtshingwe Fault Block and 22 on the Far South Hill. The area has also been explored by surface mapping and trenching. The drillholes were drilled and assayed over a series of drilling campaigns spanning the life of the mine. Drill core is largely NQ size though the unconsolidated part of the hole is drilled HQ size. All drill holes are logged lithologically and geotechnically. All lithological and assay data are verified for integrity before being imported into the database. Surface exploration drilling continued during the past year with 4 487m in total drilled in 33 surface drillholes.

Mineral Resource estimation and reconciliation

The updated Mineral Resource estimates are tabulated below. The statement reflects the total Mineral Resource estimate for Mimosa as at 30 June 2020. Mineral Resources are quoted inclusive of Mineral Reserves. Mineral Resource estimates allow for estimated geological losses, while no allowance is made for anticipated support pillar losses during eventual mining. Mineral Resource grades are quoted *in situ*. The Mineral Resource estimates have been done using Surpac™ software using inverse distance techniques. The estimation block model cut-off was in December 2019 with five (5) diamond drillholes from the 2018 – 2019 drilling campaign being the last batch to be included in the solids and block modelling. Rounding of numbers may result in minor computational discrepancies. Mineral Resource estimates are inherently imprecise in nature. The results tabulated in this report must be read as estimates and not as calculations. Inferred Mineral Resources in particular are qualified as approximations. The Mineral Resource estimate reflects the actual spatial depletion as at 31 May 2020 and the non-spatial forecast depletion to 30 June 2020. The main change can be attributed to normal mining depletion and review of Mineral Resource loss factors.

The classification of Mineral Resources at Mimosa is informed by a matrix considering geological complexity and the confidence in the geostatistical estimation. In broad terms confidence is derived from surface drill hole spacing and this has the largest weighting on 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 Mineral Resource estimates (inclusive reporting)

As at 30 June 2020

Orebody		South Hill MSZ					North Hill MSZ					Far South Hill MSZ					
Category		Measured	Indicated	Inferred	Inferred (Oxides)	Total	Measured	Indicated	Inferred	Inferred (Oxides)	Total	Measured	Indicated	Inferred	Inferred (Oxides)	Total	Total
Tonnes	Mt	31.8	12.0	6.9	4.4	**55.0**	18.0	16.3	1.9	7.6	**43.8**	3.7	2.0	0.0	5.9	**11.7**	**110.4**
Width	cm	200	200	200	200		200	200	200	200		200	200	200	200		
4E grade	g/t	3.75	3.45	3.63	3.40	**3.64**	3.48	3.62	3.52	3.54	**3.54**	3.70	3.87	3.94	3.43	**3.59**	**3.60**
6E grade	g/t	3.97	3.67	3.86	3.62	**3.86**	3.68	3.84	3.73	3.76	**3.76**	3.93	4.12	4.19	3.65	**3.82**	**3.82**
Ni	%	0.14	0.15	0.15	0.12	**0.14**	0.14	0.16	0.14	0.14	**0.15**	0.14	0.15	0.16	0.13	**0.14**	**0.14**
Cu	%	0.11	0.11	0.12	0.11	**0.11**	0.10	0.12	0.10	0.11	**0.11**	0.11	0.11	0.11	0.10	**0.11**	**0.11**
4E oz	Moz	3.8	1.3	0.8	0.5	**6.4**	2.0	1.9	0.2	0.9	**5.0**	0.4	0.2	0.0	0.7	**1.4**	**12.8**
6E oz	Moz	4.1	1.4	0.9	0.5	**6.8**	2.1	2.0	0.2	0.9	**5.3**	0.5	0.3	0.0	0.7	**1.4**	**13.6**
Pt oz	Moz	1.9	0.6	0.4	0.2	**3.2**	1.0	0.9	0.1	0.4	**2.5**	0.2	0.1	0.0	0.3	**0.7**	**6.3**
Pd oz	Moz	1.5	0.5	0.3	0.2	**2.5**	0.8	0.7	0.1	0.3	**1.9**	0.2	0.1	0.0	0.2	**0.5**	**4.9**

Mimosa

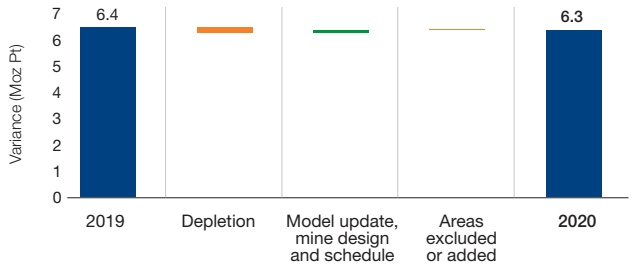
Mimosa Mineral Reserve estimate

As at 30 June 2019

Orebody		South Hill MSZ					North Hill MSZ					Far South Hill MSZ					
Category		Measured	Indicated	Inferred	Inferred (Oxides)	Total	Measured	Indicated	Inferred	Inferred (Oxides)	Total	Measured	Indicated	Inferred	Inferred (Oxides)	Total	Total
Tonnes	Mt	32.5	13.1	6.9	4.4	**56.9**	18.0	16.3	1.9	7.7	**43.8**	4.3	1.5	0.0	5.9	**11.7**	**112.4**
Width	cm	200	200	200	200		200	200	200	200		200	200	200	200		
4E grade	g/t	3.77	3.50	3.66	3.16	**3.65**	3.48	3.62	3.52	3.54	**3.54**	3.70	3.87	3.52	3.54	**3.64**	**3.61**
6E grade	g/t	4.02	3.74	3.90	3.36	**3.89**	3.68	3.84	3.73	3.54	**3.72**	3.93	4.12	3.73	3.76	**3.87**	**3.82**
Ni	%	0.14	0.15	0.14	0.12	**0.14**	0.14	0.16	0.14	0.14	**0.15**	0.14	0.15	0.16	0.13	**0.14**	**0.14**
Cu	%	0.11	0.12	0.11	0.12	**0.11**	0.10	0.12	0.10	0.11	**0.11**	0.11	0.11	0.11	0.10	**0.11**	**0.11**
4E oz	Moz	3.9	1.5	0.8	0.4	**6.7**	2.0	1.9	0.2	0.9	**5.0**	0.5	0.2	0.0	0.7	**1.4**	**13.0**
6E oz	Moz	4.2	1.6	0.9	0.5	**7.1**	2.1	2.0	0.2	0.9	**5.2**	0.5	0.2	0.0	0.7	**1.5**	**13.8**
Pt oz	Moz	1.9	0.7	0.4	0.2	**3.3**	1.0	0.9	0.1	0.4	**2.5**	0.3	0.1	0.0	0.3	**0.7**	**6.4**
Pd oz	Moz	1.5	0.6	0.3	0.2	**2.6**	0.8	0.7	0.1	0.3	**1.9**	0.2	0.1	0.0	0.2	**0.5**	**5.0**

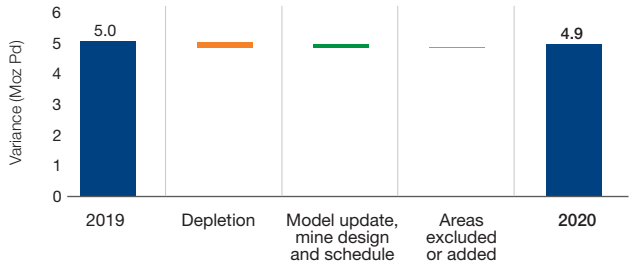
Total Mimosa platinum Mineral Resources

as at 30 June 2020 (variance Moz Pt)



Total Mimosa palladium Mineral Resources

as at 30 June 2020 (variance Moz Pd)

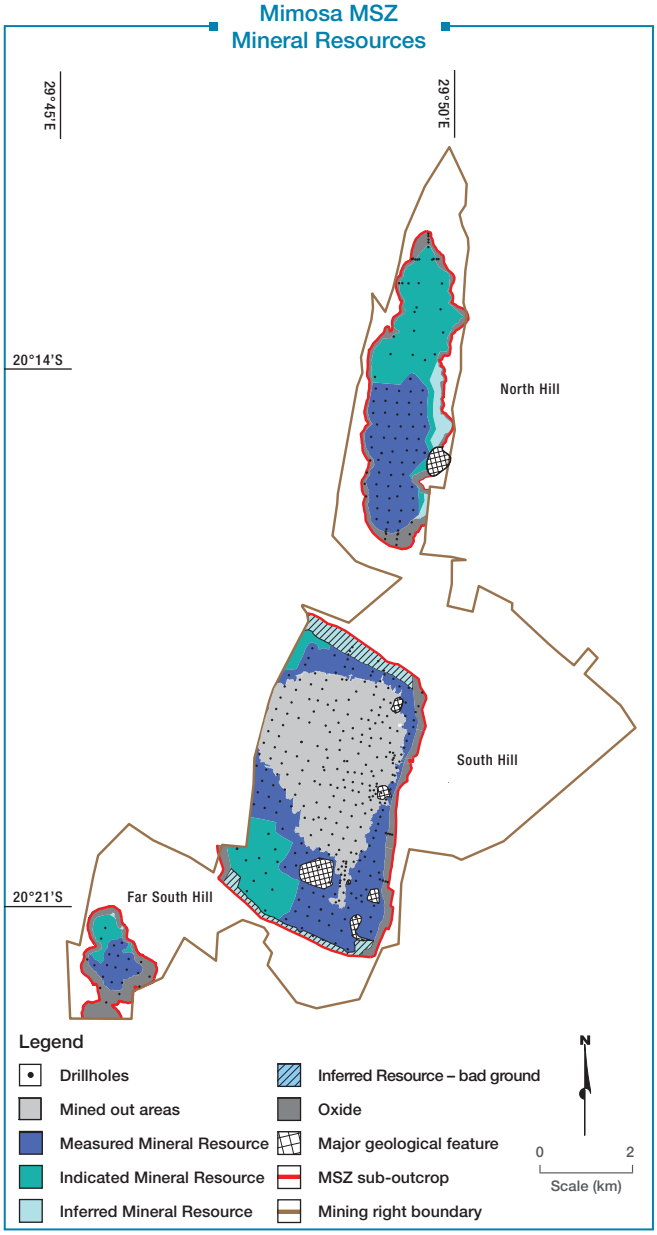


The reconciliation of the Mineral Resources is mostly impacted by normal mining depletion and reflect a 3% year-on-year decrease in the estimate.

Modifying factors

The modifying factors used to convert Mineral Resources to Mineral Reserves are derived from historical performance while taking future anticipated conditions into account. Implats' long-term price assumptions in today's money (supporting Mineral Reserve

Mimosa MSZ Mineral Resources



Mimosa

estimates are shown on page 12). The following other modifying factors were applied to the Mineral Resources:

Mineral Resource Key assumptions	Main Sulphide Zone
Geological losses	11 – 26%
Area	23 million ca
Channel width	200cm

Mineral Reserve Modifying factors	Main Sulphide Zone
Dilution	8 – 12%
Pillars	24 – 25%
Mine call factor	92 – 98%
Relative density	3.15 – 3.18
Stoping width	200cm
Concentrator recoveries	78 – 80%

Mining methods and mine planning

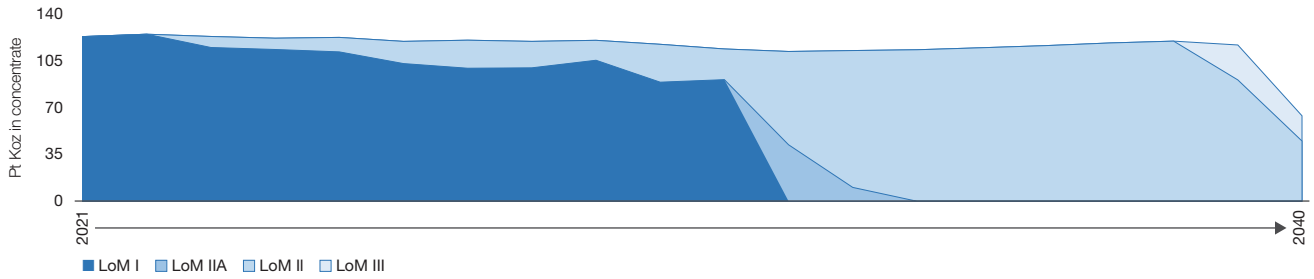
Mimosa is a shallow underground mine accessed by the two decline shafts, Wedza Decline and Blore Shaft. Mechanised bord and pillar mining method is used to extract ore over average stoping width of 2m. Historically, the bord widths have varied from 15m to 6m wide, depending on the ground control district. Minimum pillar sizes are dependent on depth to give a safety factor of greater than 1.6, with pillars being 10m by 3m for 18 Level and above, 10m x 4.5m from 20 to 28 Level in areas where 15m bords were mined. Current mining consists of 5.5m to 7m bord sizes with 8m by 4m for the whole mine. The bord sizes are 7m, 6.5m and 5.5m in GCD class C, D and E respectively. The strike pillars in panels are elongate on strike so that the longest dimension of the pillar intersects the dominant joint set (J_1) at nearly 90 degrees. Most of the faults and dykes are part of the dominant J_1 joint set.

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 feeding to an underground bunker. From the bunker, ore is conveyed to a surface stockpile ahead of feeding into the processing plant. Optimum stoping widths and mining cut selection are regularly reviewed given variation in metal prices and the non-linear distribution of the different metals. Mining models are defined relative to the platinum peak position within the MSZ. The current planned mining horizon is a two-metre slice defined by the hanging wall at 0.45m above and the footwall at 1.55m below the Platinum peak position. This overbreaks to an actual mining width average of 2.1m. The reported mined grade is based on inverse distance block modelling of drillhole values using Surpac™.

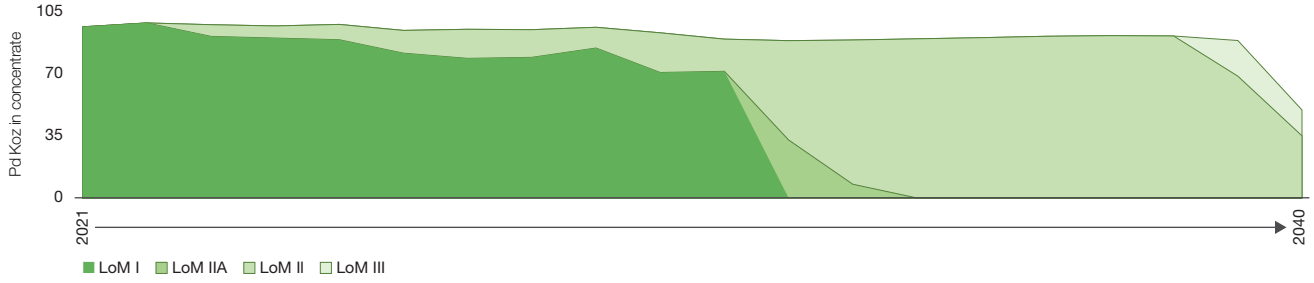
Mine design and scheduling is computer aided using MineShed™ software. The mine plan is derived from a target milling throughput including a provision for a strategic surface stockpile. Losses due to mining modifying and geological factors are applied in production scheduling to produce a LoM production (tonnage and grade) profile. A tailcut has been effected on LoM I to exclude the last two years whose cash flows are negative. The LoM I tail cut tonnage is classed as LoM II A for opportunity extraction with LoM II. North Hill Mine is now at BFS stage and is classified as LoM II. LoM I comprises extraction from the orebody's Mineral Reserves at Wedza and Mtshingwe, which is the southern part of the South Hill orebody. The LoM graph for Mimosa is shown below. Work is underway to assess various options to optimise extraction from different ore sources of the remaining Mineral Resources of Mimosa. The updated LoM indicates the mine plan, which dictated accelerated mining of the Mtshingwe Shaft area, in order to deliver a constant head grade and throughput to the mill.

It should be noted that the Mineral Reserve estimate is the result of the planning process applied against the Measured and Indicated Mineral Resources only, through the application of detailed modifying factors; importantly, it should be noted that this process is subjected to rigorous economic viability testing at given market conditions.

Mimosa 20-year estimated LoM platinum ounce profile
as at 30 June 2020 (in concentrate)



Mimosa 20-year estimated LoM palladium ounce profile
as at 30 June 2020 (in concentrate)



Mimosa

Mineral Reserve estimation and reconciliation

The updated Mineral Reserve estimates are tabulated below. The statement reflects the total Mineral Reserve estimate for Mimosa as at 30 June 2020. Mineral Reserve grades are quoted after applying mine to mill modifying factors. 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 are aligned to the business plan by scheduling ore tonnages and grades at a 212cm stoping width. Rounding of numbers may result in minor computational discrepancies. The results tabulated in this report must be read as estimates and not as calculations. The updated pillar design in selected ground district areas impacted on the overall extraction ratio. The conversion and classification of Mineral Reserves at Mimosa is 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 if the mine plan, approval, funding and economic test is passed
- Measured Mineral Resources can be classified as Proved Mineral Reserves if the mine plan, approval, funding and economic test is passed
- In certain exceptional circumstances the Competent Person may elect to convert Measured Mineral Resources to Probable Mineral Reserves if the confidence in the modifying factors is being confirmed
- No Inferred Mineral Resources are converted to the Mineral Reserve category.

Mimosa Mineral Reserve estimate

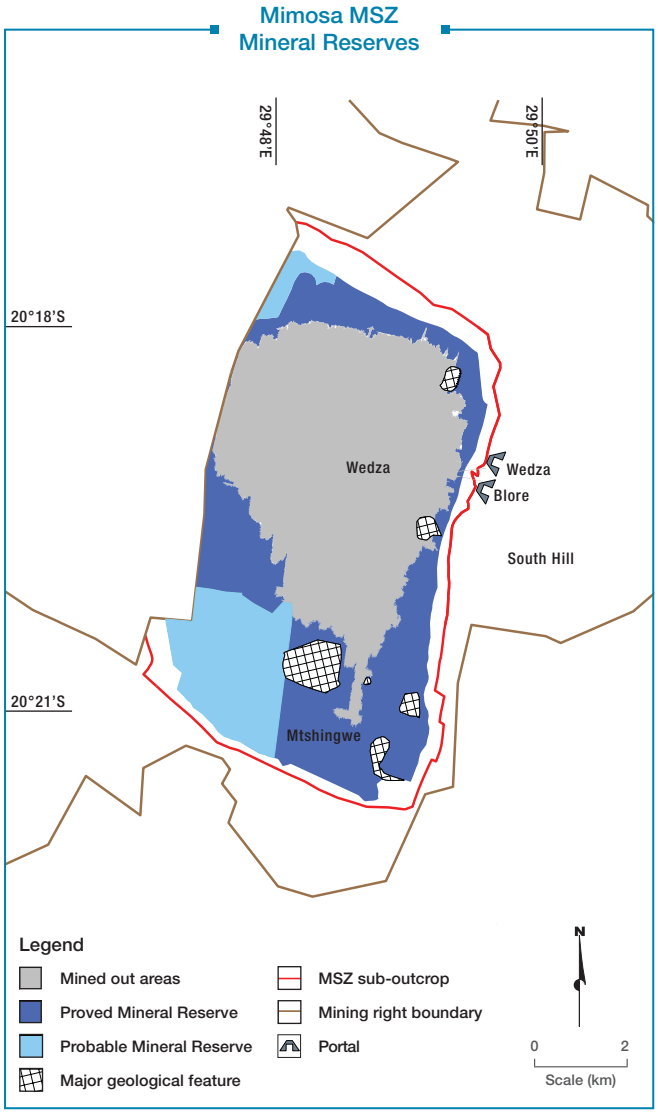
As at 30 June 2020

Orebody		South Hill MSZ (Wedza)			South Hill MSZ (Mtshingwe)			
Category		Proved	Probable	Total	Proved	Probable	Total	Total
Tonnes	Mt	8.1	1.5	**9.5**	10.3	7.8	**18.1**	**27.6**
Width	cm	200	200		200	200		
4E grade	g/t	3.38	3.19	**3.35**	3.61	3.36	**3.50**	**3.45**
6E grade	g/t	3.61	3.37	**3.57**	3.89	3.62	**3.77**	**3.70**
Ni	%	0.16	0.15	**0.16**	0.13	0.16	**0.14**	**0.15**
Cu	%	0.12	0.10	**0.12**	0.11	0.12	**0.11**	**0.11**
4E oz	Moz	0.9	0.2	**1.0**	1.2	0.8	**2.0**	**3.1**
6E oz	Moz	0.9	0.2	**1.1**	1.3	0.9	**2.2**	**3.3**
Pt oz	Moz	0.4	0.1	**0.5**	0.6	0.4	**1.0**	**1.5**
Pd oz	Moz	0.3	0.1	**0.4**	0.5	0.3	**0.8**	**1.2**

As at 30 June 2019

Orebody		South Hill MSZ (Wedza)			South Hill MSZ (Mtshingwe)			
Category		Proved	Probable	Total	Proved	Probable	Total	Total
Tonnes	Mt	9.8	2.4	**12.2**	10.6	8.8	**19.4**	**31.6**
Width	cm	200	200		200	200		
4E grade	g/t	3.42	3.28	**3.39**	3.62	3.38	**3.51**	**3.46**
6E grade	g/t	3.68	3.54	**3.65**	3.91	3.66	**3.79**	**3.74**
Ni	%	0.14	0.15	**0.14**	0.14	0.15	**0.14**	**0.14**
Cu	%	0.12	0.11	**0.11**	0.11	0.11	**0.11**	**0.11**
4E oz	Moz	1.1	0.3	**1.3**	1.2	1.0	**2.2**	**3.5**
6E oz	Moz	1.2	0.3	**1.4**	1.3	1.0	**2.4**	**3.8**
Pt oz	Moz	0.5	0.1	**0.7**	0.6	0.5	**1.1**	**1.7**
Pd oz	Moz	0.4	0.1	**0.5**	0.5	0.4	**0.8**	**1.4**

Mimosa



Processing

Mimosa has a concentrator plant onsite where initial processing is undertaken to produce a concentrate. The concentrates are transported by road to Impala Mineral Processes in Rustenburg in terms of an offtake agreement with Impala. An alternative option for local beneficiation is being investigated.

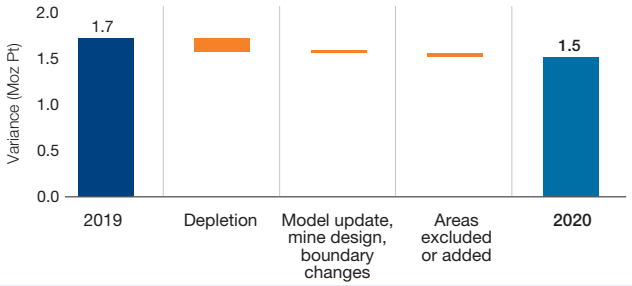
Mimosa top risks

The Group risk management process is briefly described on page 15 where the Implats Group top risks are listed.
In this context the top risks identified at Mimosa are:

- Energy supply security and cost
- Mineral price fluctuations
- Economy-wide price increases
- Taxation.

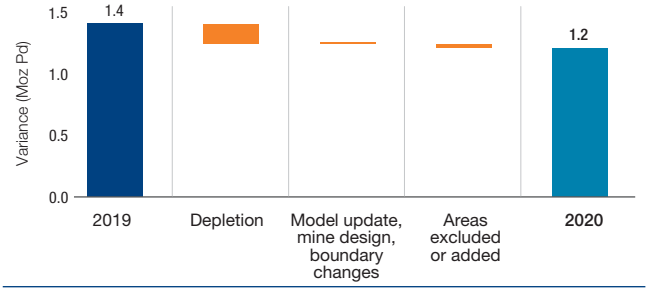
Total Mimosa platinum Mineral Reserves

as at 30 June 2020 (variance Moz Pt)



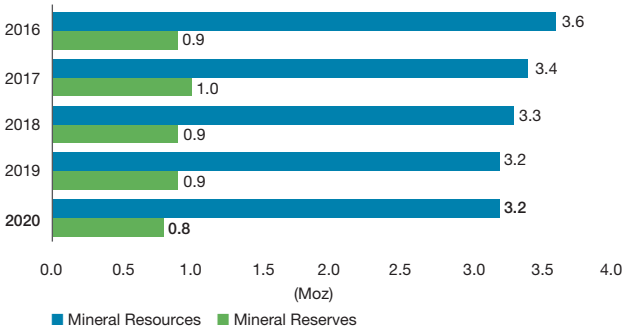
Total Mimosa palladium Mineral Reserves

as at 30 June 2020 (variance Moz Pd)



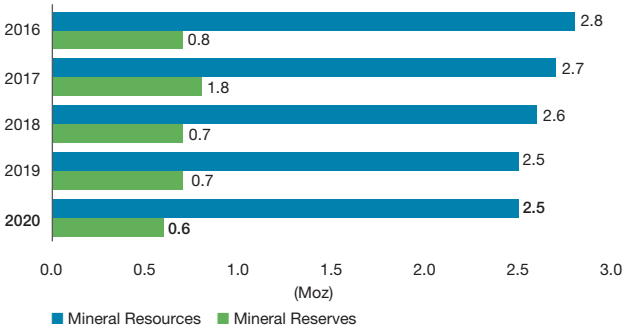
Mimosa attributable platinum Mineral Resources and Mineral Reserves

as at 30 June 2020 (Moz Pt)



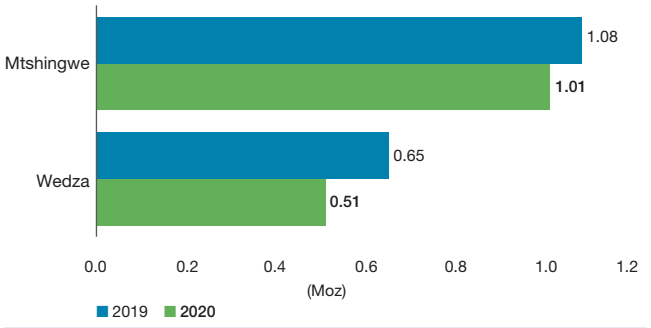
Mimosa attributable palladium Mineral Resources and Mineral Reserves

as at 30 June 2020 (Moz Pd)

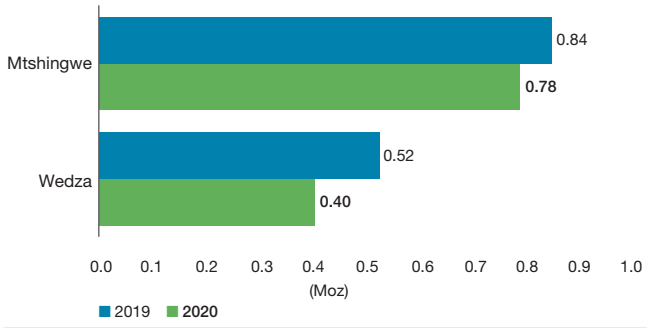


Mimosa

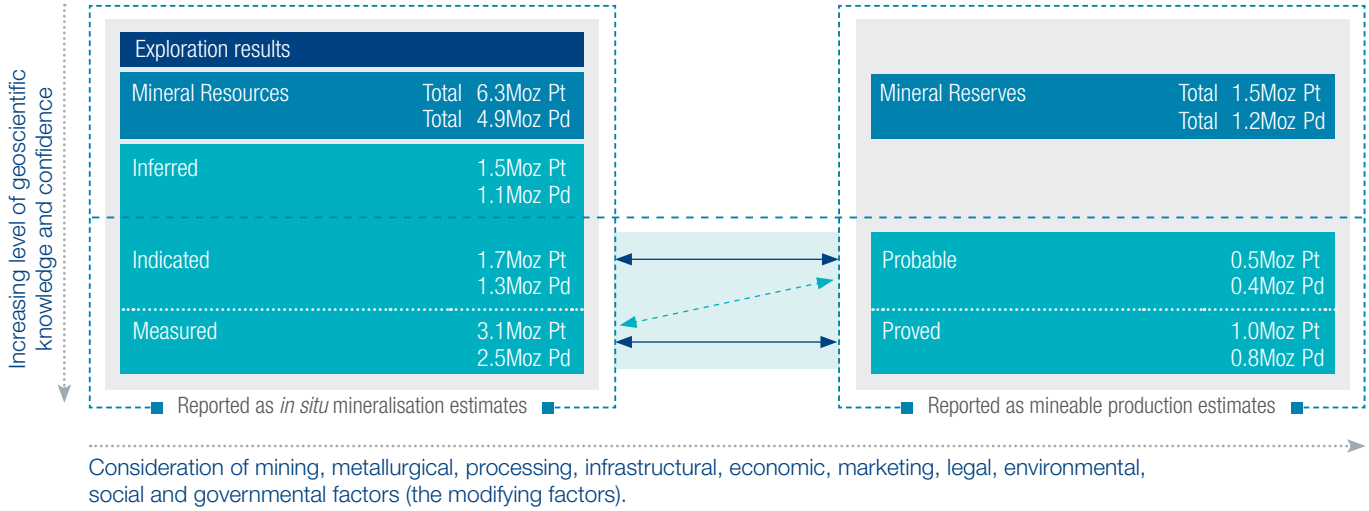
Mimosa platinum Mineral Reserve distribution
as at 30 June 2020 (Moz Pt)



Mimosa palladium Mineral Reserve distribution
as at 30 June 2020 (Moz Pd)



Relationship between exploration results, Mineral Resources and Mineral Reserves (100%)



- Geotechnical conditions
- Concentrates and key materials transportation disruptions
- Availability and cost of capital
- Tailings Storage Facility (TSF) failure
- Inadequate foreign currency and fluctuation in foreign exchange
- Indigenisation compliance.

Valuation and sensitivity

The economic viability of the Mimosa Mineral Reserves is tested by Implats by means of 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 PGM metal ratios and differs 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 2020. These tests by Implats indicate that the Mimosa operation requires a real long-term basket price of between R13 000 and R14 000 per 6E ounce to be economically viable. While the real spot basket price for Mimosa as at 30 June 2020 was R33 370 (US$1 840) per 6E ounce, the Mimosa internal long-term real basket price is R18 830 (US$1 360). The commodity market remains fluid and the outlook improved post 30 June 2020.

Compliance

Mimosa has adopted the SAMREC Code (2016) for its reporting. The Competent Person for Mimosa's Mineral Resources is Dumisayi Mapundu (CertNatSci SACNASP), BSc (Geology), a full-time employee of Mimosa with 26 years' of relevant experience. The Competent Person for Mimosa's Mineral Reserves is Alex Mushonhiwa (MSAIMM), (BSc Mining Eng (Hons)) a full-time employee of Mimosa with 30 years' of relevant experience. Implats has written confirmation from the Competent Persons that the information disclosed in terms of these paragraphs are compliant with the SAMREC Code (2016) and, where applicable, the relevant SAMREC Table 1 and JSE Section 12 Listings Requirements and that it may be published in the form, format and context in which it was intended.

During the financial year 2019 – 2020 Implats engaged The MSA Group (Pty) Ltd (MSA) to conduct an audit of the 2020 Mimosa Mineral Resources and Mineral Reserves. The objective of the audit was a high-level year-on-year (2019 vs 2020) reconciliation of the Mineral Resources and Mineral Reserves and alignment to internal standards and regulatory compliance (SAMREC Code, 2016). Due to travel restriction as a result of Covid-19 regulations, the audit work had to be carried out remotely through internet-based (Microsoft Teams) presentations and discussions with the responsible personnel, and interrogation of reports, data and models provided to the auditors by Mimosa. The audit did not pick up any fatal flaws, nor any impediments for inclusion for year-end reporting, however, all issues identified by the audit are currently in various stages of implementation (page 144).

Mimosa

Key operating statistics

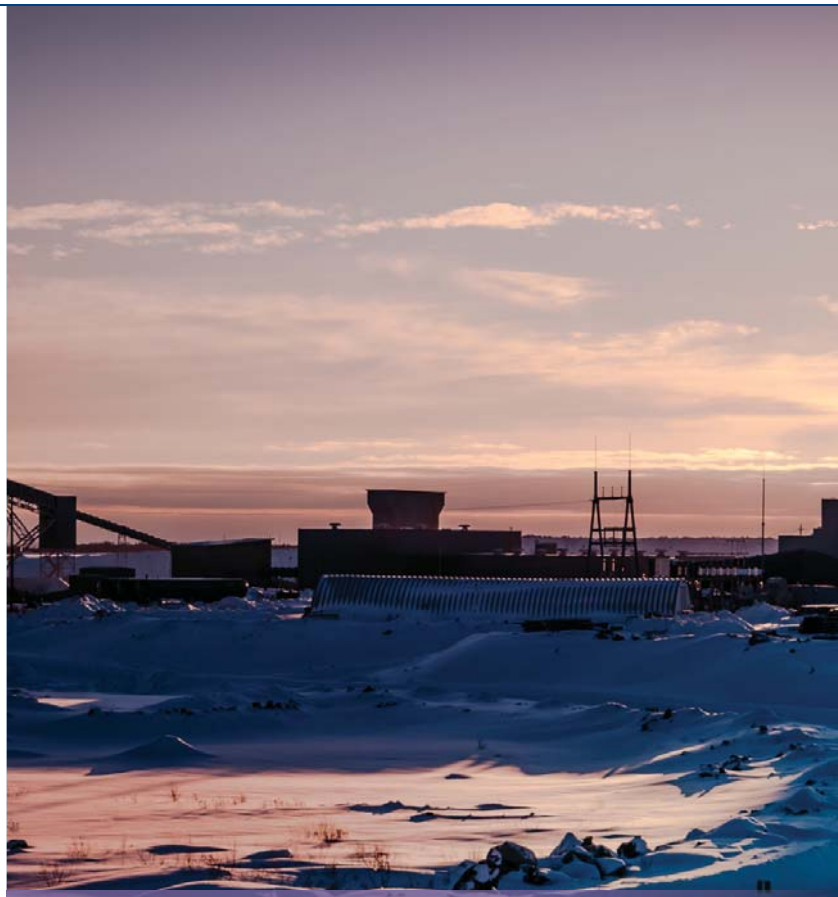
		FY2020	FY2019	FY2018	FY2017	FY2016
Production						
Tonnes milled ex mine	(000t)	**2701**	2 814	2 802	2 729	2 641
Head grade 6E	(g/t)	**3.85**	3.83	3.84	3.83	3.88
Platinum in concentrate	(000 oz)	**117**	122	125	122	120
Palladium in concentrate	(000 oz)	**92**	97	99	97	94
6E in concentrate	(000 oz)	**248**	261	266	259	254
Cost of sales	(Rm)	**(3 494)**	(3 675)	(3 240)	(3 520)	(3 565)
On-mine operations	(Rm)	**(2 168)**	(1 996)	(1 705)	(1 784)	(1 764)
Concentrating operations	(Rm)	**(720)**	(679)	(582)	(581)	(632)
Other	(Rm)	**(606)**	(1 000)	(953)	(1 155)	(1 169)
Total cost	(Rm)	**2 982**	2 852	2 443	2 506	2 525
Per tonne milled	(R/t)	**1 104**	1 014	872	918	956
	(US$/t)	**70**	71	68	67	66
Per 6E oz in concentrate	(R/oz)	**12 034**	10 944	9 198	9 679	9 953
	(US$/oz)	**768**	771	716	710	690
Financial ratios						
Gross margin ex mine	(%)	**34.8**	17.4	16.5	0.1	(9.2)
Capital expenditure	(Rm)	**679.0**	693	568	445	456
	(US$m)	**43.0**	49	44	33	32

The year-on-year production performance and outlook is discussed in the Implats 2020 Annual Integrated Report **(www.implats.co.za)**.

South Hill, Mimosa

Lac des Iles Mine –
Impala Canada Limited

IMPALA CANADA LIMITED (IMPALA CANADA) WAS FORMED FOLLOWING THE ACQUISITION OF CANADIAN PGM MINER, NORTH AMERICAN PALLADIUM (NAP) ON 13 DECEMBER 2019. IMPALA CANADA IS NOW A WHOLLY OWNED SUBSIDIARY OF IMPALA PLATINUM HOLDINGS LIMITED (IMPLATS). IMPALA CANADA OWNS AND OPERATES THE LAC DES ILES MINE (LDI) NORTHWEST OF THUNDER BAY, ONTARIO, AND HAS A SHAREHOLDING IN TWO EXPLORATION PROPERTIES, THE SUNDAY LAKE PROJECT AND THE SHEBANDOWAN JOINT VENTURE, AND OPERATES THREE OFFICES: A CORPORATE OFFICE IN TORONTO, ONTARIO, AND AN EXPLORATION AND FINANCE OFFICE IN THUNDER BAY, ONTARIO.



Mining Leases and Mineral Claims
78 234ha

Implats' interest
100% managed

Mineral rights

Impala Canada Limited holds a 100%-interest in mining leases encompassing 3 513ha, as shown in the table on page 18, and 62 998ha of mining claims. Additionally, Impala Canada has a 51% interest in the Sunday Lake JV mining claims and leases, encompassing 3 677ha and 140ha, respectively, as well as a 50% interest in the past-producing Shebandowan Mine Property, encompassing 8 046ha. A regional map displaying the bulk of Impala Canada's mining claims and leases is indicated in the regional locality map on page 121.

As of the effective date of this report, all claims and leases on the property are in good standing and sufficient assessment credits exist to renew the claims for several years. All of the current mine leases have a renewal date in 2027 at which time the Company has the exclusive right to apply for their renewal. The Company has the legal entitlement to the minerals being reported upon together with any known impediments. The directors confirmed with a written statement that there are no legal proceedings or other material conditions that may impact on the Company's ability to continue with future mining or exploration activities.

CANADA

Location

Impala Canada's Lac des Iles Mine (LDI) property is located at latitude 49°10' north, longitude 89°37' west, 90km northwest of the city of Thunder Bay in Northwestern Ontario as shown on the previous page and the locality map below. The mine properties comprise approximately 782.3km^2 (78 234ha) of mining leases and mineral claims in total.

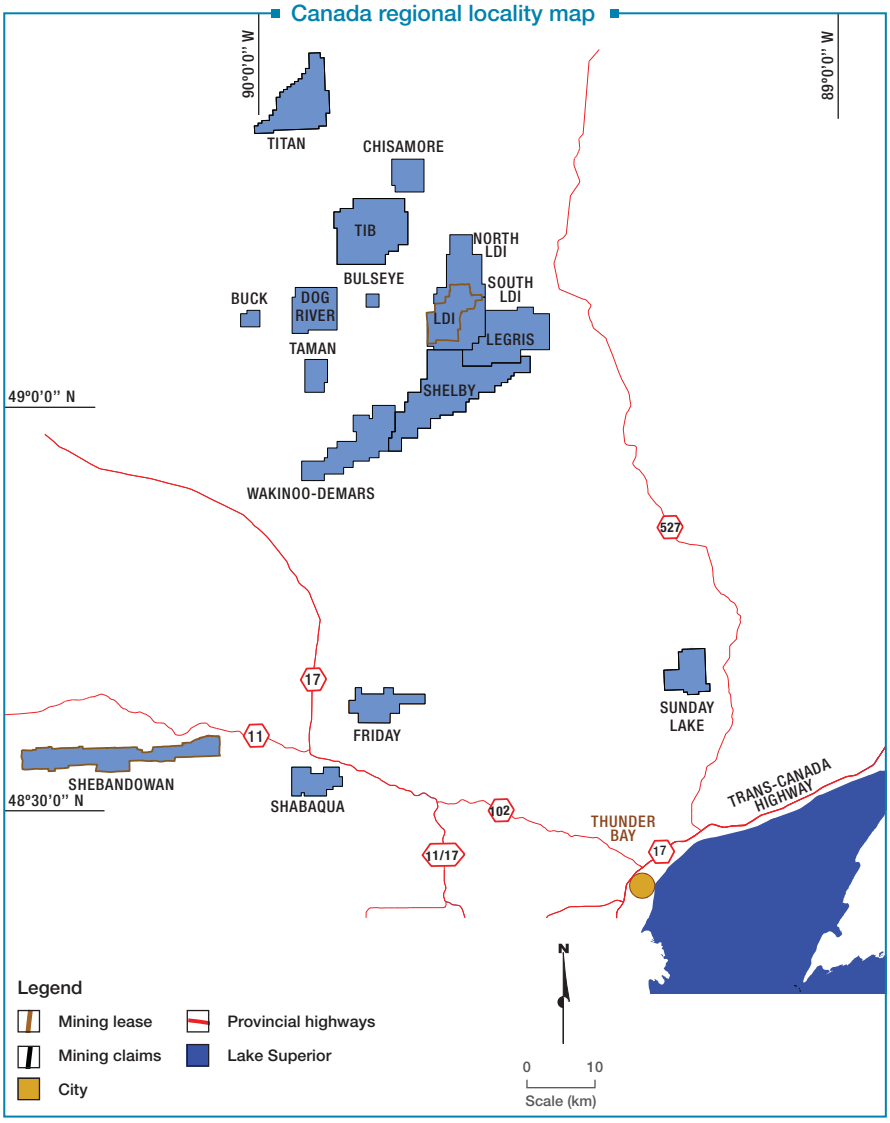
The Lac des Iles site is located in an area of interest to five indigenous groups which have asserted treaty rights and/or traditional usage, in accordance with Federal Government of Canada and Province of Ontario criteria. The five communities include:

- Gull Bay First Nation (Kiashke Zaaging Anishnaabek)
- Whitesand First Nation
- Fort William First Nation
- Red Sky Independent Métis Nation
- Métis Nation of Ontario (Thunder Bay Métis Council).

Impala Canada is committed to ensuring appropriate consultation with indigenous communities that may be affected by Lac des Iles mining and exploration activities.

Impala Canada Limited, a wholly owned subsidiary of Impala Platinum Holdings Limited (Implats), holds the mineral rights to the mining leases and mineral claims.

Canada regional locality map



Lac des Iles Mine – Impala Canada Limited

Summary of Mining Leases

Claim number	Parcel	Area (ha)	Lease number	Due date	Annual taxes (CA$)	Comments
CLM251	2982L TB	235.0	107910	31 Aug 2027	705	Surface and mining rights
CLM252	2983L TB	341.4	107911	31 Aug 2027	1 024	Surface and mining rights
CLM253	2985L TB	395.7	107909	31 Aug 2027	1 187	Surface and mining rights
CLM254	2984L TB	497.4	107908	31 Aug 2027	1 492	Mining rights only
CLM430	2531L TB	348.4	108139	30 Sep 2027	1 045	Surface and mining rights
CLM431	2532L TB	1 695.3	108138	30 Sep 2027	5 086	Surface and mining rights
Total	6	3 513.2			10 539	

History

Geological investigations in the area began with reconnaissance mapping in the early 1930s, and again in the late 1960s, sparked by the discovery of aeromagnetic anomalies in the late 1950s. Various exploration programmes were undertaken over the next 25 years by a number of companies. Significant milestones prior to Lac des Iles acquisition were in:

- **1963:** Gunnex discovers mineralisation in the Baker Zone through prospecting
- **1974:** Boston Bay Mining intersects the Roby Zone in drillholes.

Lac des Iles acquired the property in 1992. Open pit production commenced in 1993 and the significant milestones of the operation at the mine are summarised as follows:

- **2000:** Offset Zone is discovered through exploration drilling
- **2001:** Major expansion of the Roby open pit mine
- **2002:** Major increase in Roby Zone pit Mineral Reserves and Mineral Resources. Commissioning of a new 15 000tpd mill. Record ore tonnes mined from Roby pit (7.25 million tonnes)
- **2003:** Major write-down of Roby open pit Mineral Reserves and Mineral Resources based on falling metal prices and related higher cut-off grade
- **2006:** Start of underground mining from the Roby Zone via ramp access, while concurrently mining from the open pit
- **2008:** Mine was temporarily placed on care and maintenance, effective 29 October, due to declining metal prices. On 8 December 2009, NAP announced its intention to restart operations at the mine
- **2010:** Mine was successfully restarted in May 2010. Mining resumed from underground only (Roby Zone) as the open pit had been predominantly mined out. At the start of 2010, NAP commenced a significant mine expansion, including shaft sinking and extension of the ramp from the Roby Zone to the Offset Zone, in order to prepare for production from the Offset Zone
- **2011:** Underground Roby Zone mining was augmented with Upper Offset Zone development material and available surface stockpiles. The mine expansion was significantly advanced
- **2012:** The Roby Zone open pit was restarted and blended with underground production from remnant underground Mineral Reserves in the Roby Zone and from initial development levels in the Offset Zone. The mine expansion continued to advance, with most of the surface infrastructure completed
- **2013:** Phase 1 of shaft sinking was completed as was surface and underground infrastructure construction. Subsequent shaft sinking phases were deferred. Production from the shaft commenced in the fourth quarter with underground production from the Offset Zone
- **2014:** The Offset Zone underground mine was ramped up to planned production. There was no production from the open pit, although some material from surface stockpiles was processed
- **2015:** The mill was placed on temporary shut down during the second quarter of 2015 due to insufficient water storage capacity in the tailings management facility (TMF) at that time. Underground production continued from the Offset Zone. Some surface stockpile material was processed
- **2016:** Start of transition from a longhole stoping to a sub-level shrinkage (SLS) mining method. Production from the upper levels of SLS was achieved in the second half of 2016. Underground ore was supplemented by surface stockpiles
- **2017:** Conversion to the SLS mining method in the Lower Offset Zone completed. Recovery of some high-grade remnant ore in the Roby Zone. Full time mill operation in the fourth quarter
- **2018:** Feasibility study published and board approval received on the Roby Zone and Near Surface Zone underground expansion project
- **2019:** North American Palladium Limited acquired by Impala Platinum Holdings Limited to form Impala Canada Limited, a wholly owned subsidiary of Implats.

Infrastructure

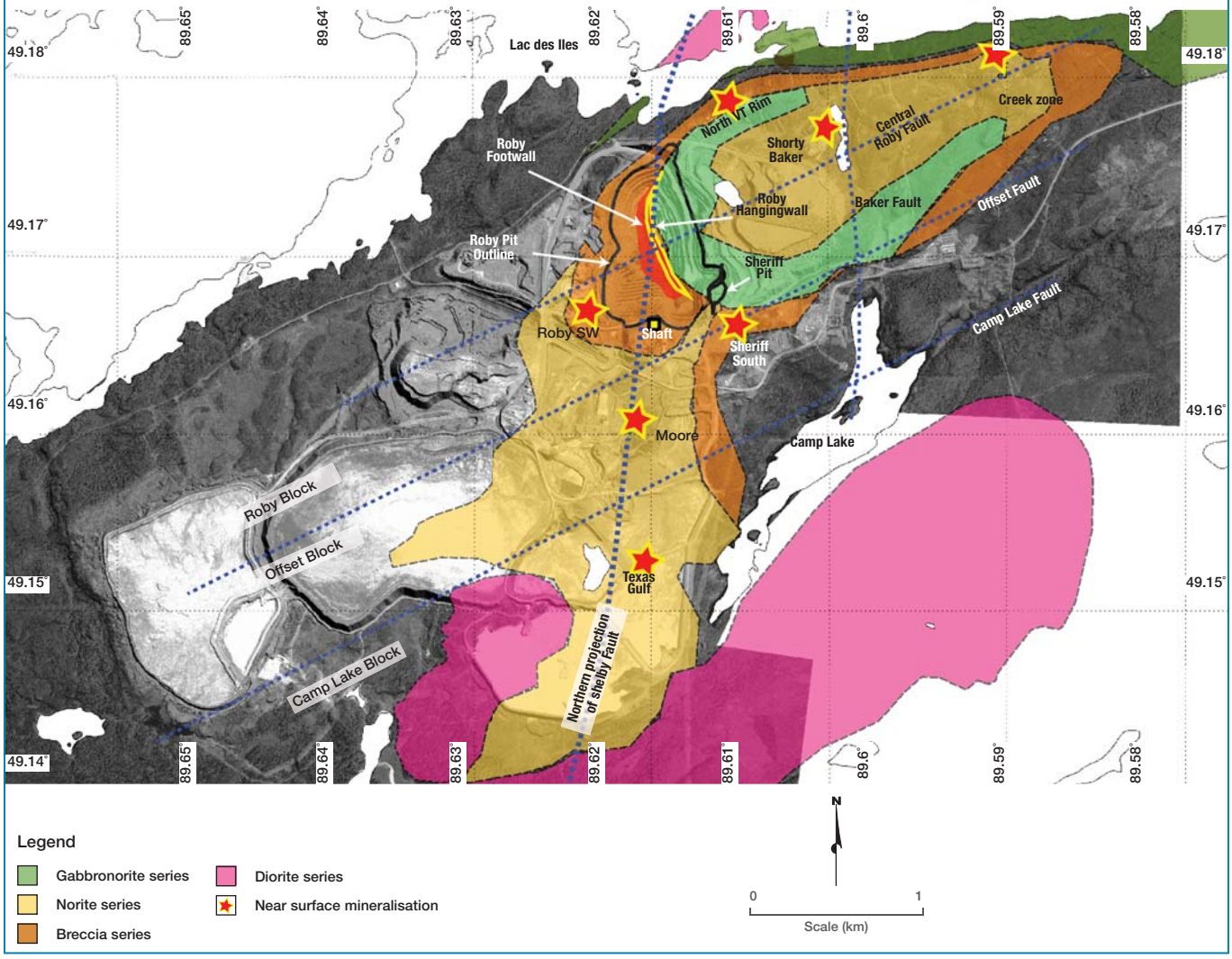
The Lac des Iles Mine has been in operation for several years and has well-established permanent infrastructure. Due to its distance from the nearest city, Thunder Bay, Ontario, the mine is operated on a ‘remote mine’ basis in which most of the employees work on a ‘14 day in/14 day out’ basis.

The existing infrastructure at the site consists of the following:

- A 15km gravel access road to site from Provincial Highway 527 with gated access to site and security building
- Main camp accommodation for 654 people, includes dining and recreation
- A separate construction camp with accommodation for an additional 50 people
- A potable water treatment plant
- An exploration office building and core storage area
- An open pit maintenance facility and warehouse
- A fuel farm, two major propane tank stations and miscellaneous propane facilities throughout the site
- No 1 Shaft, headframe, truck load out, fresh air fans with heaters, a hoist house and compressor building
- The underground ore handling system which consists of two ore passes, grizzlies, rock breakers, a crusher and a loading pocket
- The administration and mine dry buildings
- The mill complex and tailings thickener
- The tailings management facility (TMF) and the water treatment plant
- The upper and lower portals, the second fresh air fan with heater and the two exhaust raise fans which are all located within the Roby pit
- West fresh air intake fan and heater house
- Surface explosive storage buildings
- The fresh water pump house
- Electrical power capacity of 47MW supplied by Hydro One via a 115kV line to three main sub-stations of site
- The low-grade stockpile (RGO) which is used as supplemental mill feed
- The South Fill Raise and Dump.

Lac des Iles Mine – Impala Canada Limited

Simplified geology and PGE-Cu-Ni Sulphide mineralisation of the South Lac des Iles Complex



Details pertaining to the property geology is summarised in the Lac des Iles Mineral Resource and Mineral Reserve chapter on page 124.

Environmental

Lac des Iles has developed management plans to comply with the requirements for environmental impact monitoring during operations. This includes a comprehensive environmental monitoring programme in accordance with federal and provincial regulatory requirements and in accordance with the relevant permits. Environmental effects monitoring at Lac des Iles includes, but is not limited to, surface water and groundwater quality, sediment quality, benthic invertebrate community monitoring, fish population studies and air quality monitoring. The ongoing operational monitoring, reporting, and regulatory filings related to the environment will be continued at Lac des Iles after the mine has closed as outlined in the Mine Closure Plan.

There are three Tailings Management Facilities (TMF) present on the property: the West TMF (WTMF), the East TMF (ETMF) and the South TMF (STMF). The TMFs are located adjacent to one another, occupying a footprint of approximately 350ha southwest of the Roby pit. There is also a Water Management Facility (WMF 1) located adjacent to the STMF. The TMFs and the WMF 1 are located over low-lying areas, bounded by engineered retaining structures and natural heights of land. Lac des Iles has short- and long-term plans for tailings management to more efficiently increase tailings storage capacity, to ensure safe operations, and to minimise additional environmental impacts. The updated tailings management plan is designed to accommodate thickened tailings.

Lac des Iles Mine – Impala Canada Limited

Geology

The Lac des Iles mine property captures the known extents of two discrete intrusive complexes including:

- The South Lac des Iles Complex, comprising the former Mine block, South Lac des Iles and Camp Lake intrusions, but having been re-interpreted by Impala Canada Limited exploration personnel in 2018 as representing the product of three discrete magmatic episodes
- The North Lac des Iles Complex, characterised by a series of relatively flat-lying and nested ultramafic bodies with subordinate mafic rocks, and interpreted to be the product of two discrete magmatic episodes.

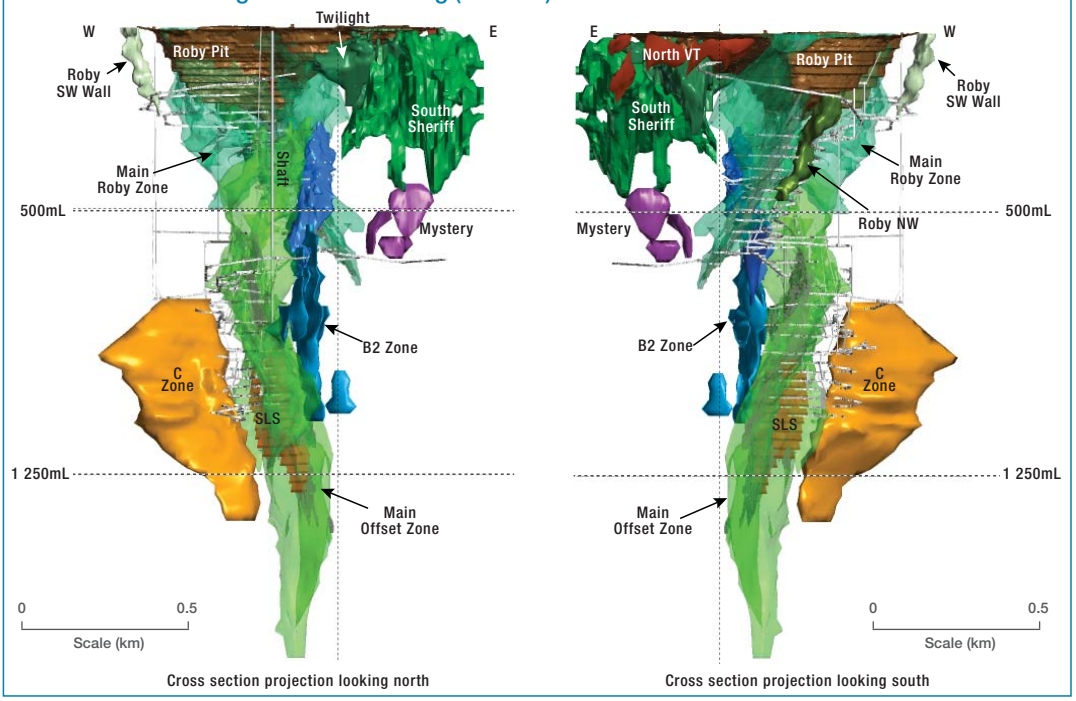
The North Lac des Iles Complex is a polyphase intrusive body consisting of a series of nested to locally cross-cutting intrusions. It is approximately coeval with the South Lac des Iles Complex, although rarely observed, intrusive contacts between the two bodies suggest that the southern part of the North Lac des Iles Complex, was younger than the northern margin of the South Lac des Iles Complex. Most of the North Lac des Iles Complex consists of layered ultramafic rocks that are distributed within two types of cyclic units including an orthopyroxene-bearing cyclic unit (dunite, lherzolite olivine websterite, websterite and minor gabbro) and an orthopyroxene-free cyclic unit (dunite, wehrlite, olivine clinopyroxenite and clinopyroxenite). The western part of the North Lac des Iles Complex exhibits a marginal zone comprising hornblende gabbro and associated hornblendite whereas the eastern part encompasses a gabbronorite-dominated marginal zone. Historical surface prospecting, mapping and limited trenching and diamond drilling have identified several areas in the North Lac des Iles Complex hosting PGE occurrences exceeding 1g/t of combined Pd+Pt+Au. These PGE occurrences are interpreted to represent stratiform or 'reef-type' magmatic PGM mineralisation.

The South Lac des Iles Complex was emplaced into predominantly intermediate composition orthogneiss basement rocks. The emplacement age of the main block intrusion has been established as 2.689 to 2.693 billion years. Four major intrusive sequences (series) are recognised in the complex. The oldest series is referred to as the gabbronorite series and consists of a plagioclase-rich, equigranular gabbronorite unit (EGAB) and a magnetite-rich gabbronorite unit (GABMt).

This was succeeded by a major period of noritic magmatism that produced both the norite series and breccia series. The former comprises massive, equigranular, medium- to coarse-grained leuconorite, norite and melanorite. In highly strained areas, the altered norite is strongly foliated with aligned chlorite grains defining a pervasive schistosity. This alteration is particularly well developed at the contact between the Roby and Offset zones and the barren EGAB unit, where the altered norite is commonly referred to as the pyroxenite (PYXTE) or mafic schist unit. The breccia series generally consists of a matrix of vari-textured "gabbro" (GAB Vt) that has a primary composition of leuconorite. The youngest magmatism to occur 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 in textures and grain sizes. The diorite series is dominant in the southwestern part of the complex. It is not known to host significant palladium mineralisation.

Mapping and drilling have shown that the central-east part of the South Lac des Iles Complex 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 that host the majority 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 clearly visible as a linear, positive magnetic anomaly to the south of the property and is visible in the Roby pit and in underground workings as an intensely recrystallised schistose melanorite unit that hosts the majority of 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 Complex has recently been inferred from geological and geophysical data, drill hole 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 position of the thicker, central parts of both the Roby and Offset zones.

North-looking and South-looking (inverted) cross sections of Lac des Iles orebodies



Lac des Iles Mine – Impala Canada Limited

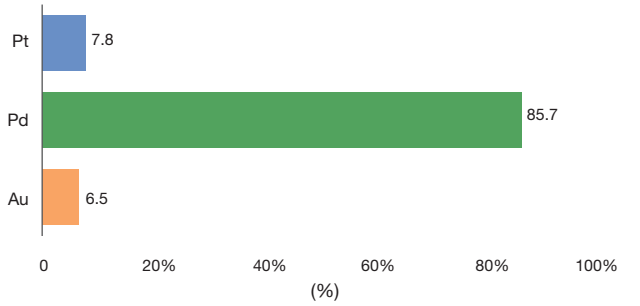
All historical and recent Mineral Resources on the property are classified as palladium-rich (disseminated) magmatic sulphide deposits and are located in the northwestern part of the noritic South Lac des Iles Complex. The South Lac des Iles Complex is one of several 2.68 billion year old mafic-ultramafic intrusions in the region, most of which are covered by mineral claims held by Impala Canada Limited. The Lac des Iles palladium deposits share many important geological and geochemical characteristics with the giant platinum-group element (PGE) deposits in the Bushveld Complex in South Africa. However, 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 100 metres.

PGM and Au mineralisation in the South Lac des Iles Complex is most commonly associated with 1 to 2% of fine- to medium-grained disseminated iron-copper-nickel sulphides within broadly stratabound zones of PGE and gold enrichment. A majority of the known PGE-rich sulphide mineralisation consists of approximately 50% pyrrhotite, 25% pentlandite and 25% chalcopyrite. In some mineralised zones, pyrite is the dominant iron sulphide mineral, but these areas tend to have low PGE + gold grades (eg, < 1 ppm combined). Minor millerite is locally present in the PGE-rich mineral zones. Sulphides occur as polycrystalline aggregates that generally reflect the grain sizes and shapes of adjacent silicate minerals. The coarsest sulphide blebs observed at Lac des Iles are up to several cm long, but typical sulphide aggregate sizes are <2cm. Rare massive sulphide occurrences up to ~1-metre-thick are also reported from the property.

There are two principal ore zones at Lac des Iles, the Roby zone and Offset zone, which are separated by the Offset fault. Previous surface mining included production from the Roby and Twilight zones from the now-dormant Roby open pit. Underground mining, which commenced in 2006, initially focused on the central portions of the Roby zone beneath the Roby pit and began transitioning to the deeper Offset zone Mineral Resources starting in 2010.

The average ratio of Pt:Pd:Au, based on the combined 2020 Mineral Reserve estimate is shown below. The dominance of palladium is clearly illustrated as this presents some 86% of the combined average PGE grade. Historic internal reviews and academic studies show that in the other PGE grades are negligible compared to Pd, Pt, and Au.

Lac des Iles (Impala Canada) Pt:Pd:Au metal ratio
as at 30 June 2020 (%)



Metal ratios derived from the Mineral Reserve estimate.

Exploration

Exploration activities at Impala Canada Limited are focused on near-mine mine targets, regional properties (within 30km of the Lac des Iles Mill) and Sunday Lake (60km from Lac des Iles). In addition to the properties, Impala Canada Limited also retains a 50% interest in the Shebandowan nickel property with its partner, Vale Canada Limited. These activities have historically comprised core-recovery drilling (surface and underground), geological mapping (surface and underground), trenching (surface), and ground magnetic field surveys and high-resolution magnetic field surveys (surface).

Surface exploration drilling site during winter

Lac des Iles Mine – Impala Canada Limited

The Lac des Iles property hosts several well-defined exploration targets. These include recent discoveries of higher-grade, near-surface palladium mineralisation in the eastern part of the property and extensions to several discrete underground Mineral Resources in the Offset block. The Company continues to invest in near-mine exploration as its primary vehicle to expand its Mineral Resources and extend the life of the Lac des Iles operation.

Drilling for 2019 was broken into three categories: Underground, Surface and Geotechnical. Underground drilling focused primarily on delineation of the newly discovered C-Zone, Mystery Zone and the B-Zones. Surface drilling primarily focused on the East Mine Block with an extensive programme designed to follow-up on targets generated by extensive geophysics in 2018.

The drilling in 2019 combined with the drilling from 2018 contributed significantly to an increase in Mineral Resources at Lac des Iles of 359 844oz Pd in Measured and Indicated category; and 405 791oz Pd in the Inferred category after depletion forecast to 30 June 2020.

Subsequent to the transaction on 13 December 2019, Impala Canada's exploration focus shifted predominantly to supporting the life-of-mine plan Mineral Resources. BP2020 was adjusted to focus underground drilling on the delineation of C-Zone Mineral Resources (20 000m), exploratory drilling of the Camp Lake Block (4 400m) and surface drilling on East Mine Block along a prospective structural horizon. Delineation drilling at C-Zone had been successful to date with every hole intersecting mineralisation with numerous significant intersections. Due to the Covid-19 pandemic, all exploration drilling ceased on 12 April 2020 and all Lac des Iles Mining Operations were placed on care and maintenance on 13 April 2020 and resumed on 26 May 2020.

The past exploration expenditure is illustrated below, both for the calendar year 2019 as well as since 13 December 2019 when Implats acquired NAP.

Exploration drilling 2020

Location	Total (number)	Length (m)	Amount (R'000)*
Underground			
Lac des Iles	34	14 202	27 323
Surface			
Lac des Iles	9	3 497	11 386
Sunday Lake	3	4 294	24 901
Total	**46**	**21 993**	**63 610**

Exploration drilling 2019

Location	Total (number)	Length (m)	Amount (R'000)*
Underground			
Lac des Iles	99	32 170	90 793
Surface	65	36 000	110 887
Geotechnical	12	3 512	7 962
Total	176	71 682	209 642

* *R12.75 per CA$ as at 30 June 2020.*

BP2021 budget and planning has scheduled an aggressive conversion and delineation programme to enhance the life-of-mine with a target gain of 450 000oz Pd in Measured and Indicated Mineral Resources. Some 25 600 metres are planned for conversion drilling at C-Zone, Offset Zone, Offset South and Roby South. An additional 14 500 metres are being allocated to further delineation of C-Zone Mineral Resources above the 800L and below the 1300L. The budget for the BP2021 exploration programme at Lac des Iles is estimated at R179 million (CA$14 million).

Mineral Resource estimation and reconciliation

Mineral Resources are reported both inclusive and exclusive of Mineral Reserves. Mineral Resource grades are reported for five metals at Lac des Iles – palladium, platinum, gold, copper and nickel. These grades are estimated from block models interpolated using a combination of ordinary kriging and inverse distance squared estimation methods. Dynamic anisotropy has been applied in some domains to better control the orientation of the search ellipse based on the domain geometry. Inverse distance squared estimation has generally been applied in domains with inadequate data density or inconclusive variography. Data included in the block model-based estimation of Mineral Resources has been restricted to only diamond drilling data that meets the SAMREC Code (2016), although boundaries of mineralisation domains have been created in consideration of 'non-compliant' data including definition diamond drilling data, underground chip and pit blast hole sample data.

Selection of Mineral Resources was done through a combination of engineering design shapes and using Datamine RM Studio's 'Mineable Reserve Optimizer®' with a 5m x 15m x 15m minimum mining unit (MMU) to identify areas with sufficient grade and tonnage for potential mining. Cut-off grades for the MMU are based on palladium only and were determined on the mining method likely to be used. Offset SLS and Roby SLC cut-off grades (1.5g/t Pd and 1.2g/t Pd respectively) were slightly lower than stoping cut-off grades (1.8g/t Pd). Other restrictions on the selection of Mineral Resources included no more than 22.2% of the MMU being below a standard ore cut-off of 1.2g/t. This optimisation is undertaken to ensure reasonable and realistic prospects for eventual economic extraction (RPEEE) of the estimated Mineral Resource.

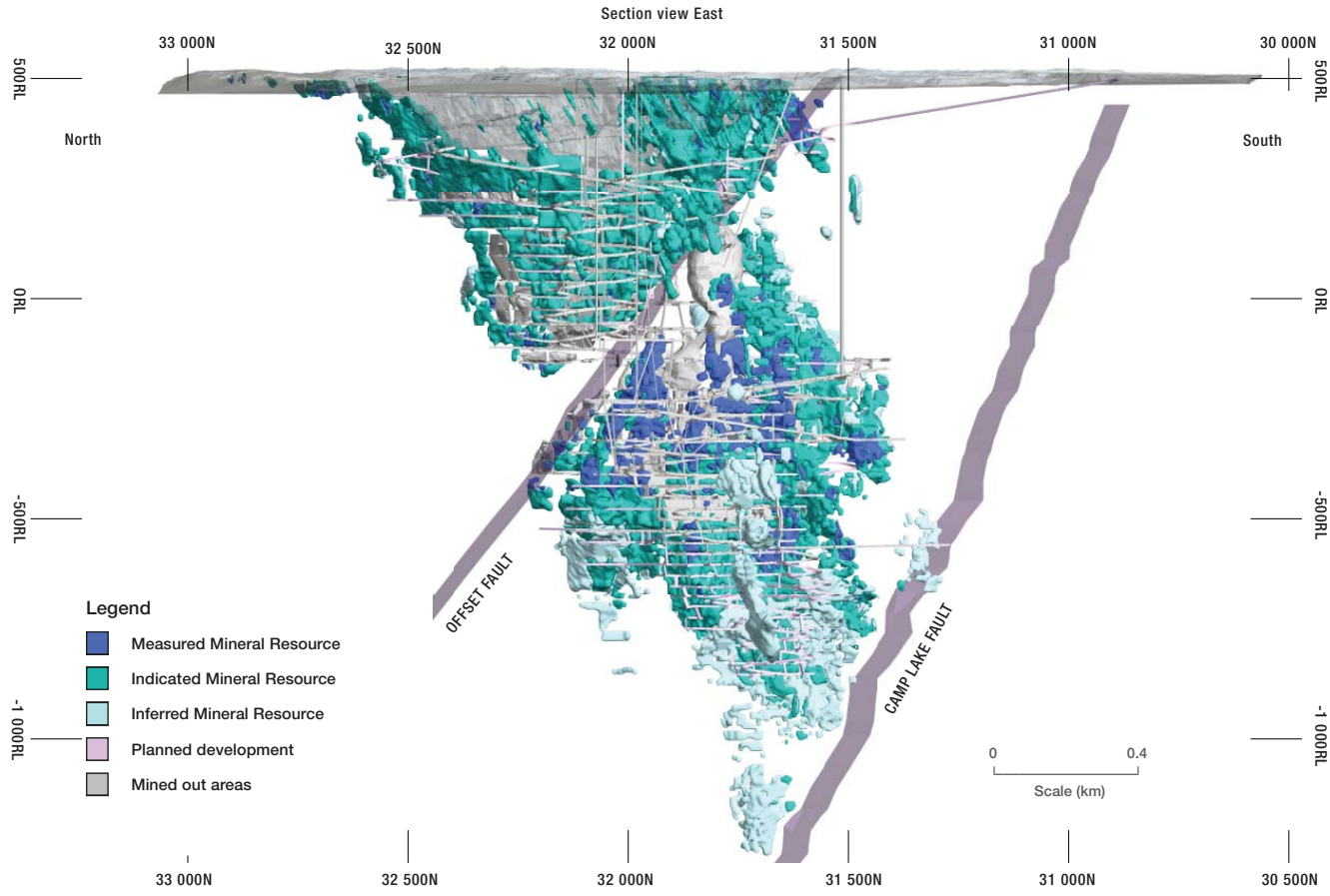
Near surface Mineral Resources were identified using Whittle optimised pit shells. Blocks identified above 0.68g/t cut-off are reported as Mineral Resources inside four pit areas. Also included in the Mineral Resource estimate is material from the Regular Grade Ore (RGO) Stockpile, from Roby pit mining, and grades of the RGO stockpile are based on historical, and recent mucking data.

The classification of Mineral Resources is tied directly to the block estimation search ellipse and strategy for each domain, and thus 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. Rounding of numbers may result in minor computational discrepancies. The Mineral Resources tabulated in this report must be read as estimates and not as calculations. It should be noted that base metal assays are based on a four-acid digestion using perchloric, nitric, hydrofluoric and hydrochloric acids. This procedure results in a near total digestion.

The combined Measured, Indicated and Inferred Inclusive Mineral Resource estimate is 5.88Moz Pd, net of two years' production depletion since June 2018. The waterfall graph on page 128 depicts the value add attributable largely to two cycles of drilling data being included, as well as refinement of the geological modelling and Mineral Resource estimation methodology.

Lac des Iles Mine – Impala Canada Limited

Lac des Iles Mine section illustrating
Mineral Resource estimates as at 30 June 2020



Mineral Resource map coordinates are presented as per the local coordinate grid system that is used by Lac des Iles Mine.

Lac des Iles (Impala Canada) Mineral Resource estimate (inclusive reporting)*

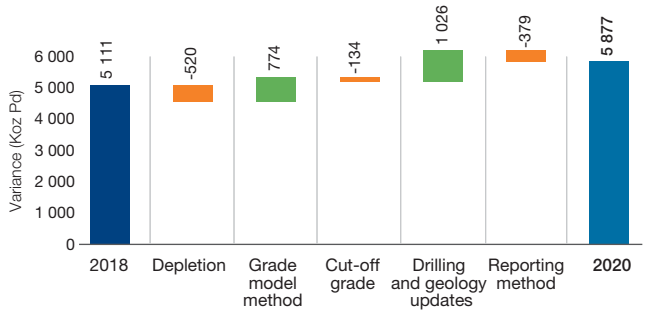
As at 30 June 2020																	
Orebody		RGO Stock Pile				Surface Pit				Roby UG				Offset UG				Total
Category		Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	Measured	Indicated	Inferred	Total	
Tonnes	Mt	–	1.0	–	**1.0**	0.5	9.2	0.3	**10.1**	0.5	21.5	0.8	**22.7**	7.9	27.3	11.0	**46.1**	**79.9**
3E grade	g/t	–	1.07	–	**1.07**	1.83	1.69	1.95	**1.70**	2.81	2.44	2.39	**2.45**	3.03	3.05	2.90	**3.01**	**2.66**
Ni	%	–	0.06	–	**0.06**	0.06	0.05	0.04	**0.05**	0.05	0.05	0.05	**0.05**	0.09	0.09	0.08	**0.09**	**0.07**
Cu	%	–	0.03	–	**0.03**	0.05	0.06	0.04	**0.05**	0.04	0.05	0.05	**0.05**	0.07	0.07	0.08	**0.07**	**0.06**
3E oz	Moz	–	0.04	–	**0.04**	0.03	0.50	0.02	**0.55**	0.05	1.68	0.06	**1.79**	0.76	2.68	1.02	**4.46**	**6.84**
Pt oz	Moz	–	0.00	–	**0.00**	0.00	0.05	0.00	**0.06**	0.00	0.15	0.00	**0.15**	0.06	0.20	0.08	**0.33**	**0.55**
Pd oz	Moz	–	0.03	–	**0.03**	0.03	0.42	0.02	**0.46**	0.04	1.44	0.05	**1.53**	0.66	2.31	0.89	**3.86**	**5.88**

Previous estimate dated 2 October 2018 was published by NAP in accordance with the NI43-101 Standards of Disclosure for Mineral Projects on **(www.sedar.com)**.

Lac des Iles Mine – Impala Canada Limited

Implats did not previously report any Mineral Resource estimate for Lac des Iles, however a high-level reconciliation of the 2018 Feasibility study Mineral Resource estimate is illustrated below.

Total Lac des Iles (Impala Canada) palladium Mineral Resource estimate
as at 30 June 2020 (variance Koz Pd)



Mining methods and mine planning

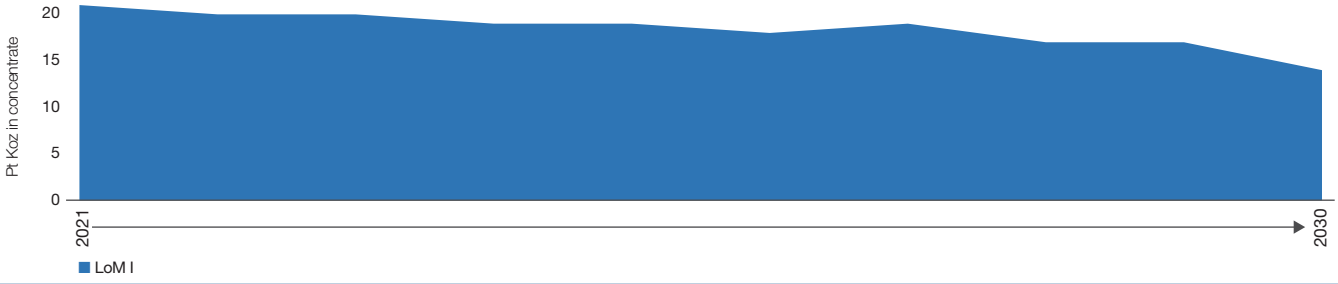
Mine production at Lac des Iles is presented in terms of Mineral Reserves from four areas: the Offset Zone, the Roby Zone, Open Pit, and Stockpiles. These areas are broken down further by mining method as well as by mineralisation zone and/or spatial location. For the Offset Zone, with the exception of the Sheriff South, ore is typically hoisted to surface through the shaft. Ore tonnes from the Roby Zone are transported via haul truck through a ramp and the lower portal; a new portal and ramp to surface is scheduled for completion during FY2021.

The majority of the planned production for the Roby Zone 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 FY2022. Additional near-surface mining areas will be developed and brought into production later in the plan, as production from near-surface operations declines. Production from the Offset Zone includes production by the 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 over the life of mine.

Mine design and scheduling are undertaken using Deswik.CAD® and Deswik.Sched® software with all geological resource block models generated using Datamine software. The planning sequence allows for a cycle that starts with a comprehensive review of the life-of-mine plan (LoM) followed by the detailed scheduling of a five-year development schedule and a two-year detailed month-by-month stoping schedule.

The Lac des Iles LoM currently extends for a 10-year period, as supported by the available geological information, Mineral Resource estimates and mine design and schedule. Work continues to expand the footprint.

Lac des Iles 10-year LoM platinum ounce profile
as at 30 June 2020 (in concentrate)



Lac des Iles 10-year LoM palladium ounce profile
as at 30 June 2020 (in concentrate)

Lac des Iles Mine – Impala Canada Limited

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, as well as where and how the cave material would enter into the shape: from one side, both sides or the back.

Power Geotechnical Cellular Automata® (PGCA®) software was utilised to estimate the recovered and diluted material from the Offset Central (SLS) production mining and the Roby Central (SLC). Dilution for these cave mining areas was determined as part of the PGCA® flow modelling. The flow model for the Offset Central (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 as well as the estimated grades and tonnes for the historically backfilled stopes less depletion of all mining prior to 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 and has a density of 2.89t/m^3.

A summary of the weighted average modifying factors for the various mining zones are shown below:

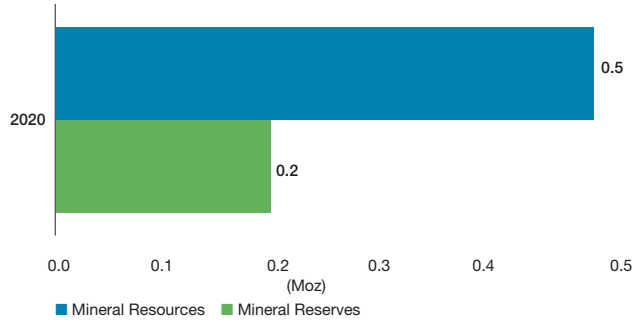
Weighted average modifying factors by mining zone

Mining Zone	Dilution Factor	Recovery Factor
Roby SLC	20[1]	80[1]
Roby Central OHS	47	54
Roby SW Floor	15	85
Roby S	14	86
Roby NW	15	85
Roby NE	20	76
Offset SLS	20[1]	80[1]
Offset NE/SW OHS	12	88
Offset Central OHS	23	72
Sheriff S	15	85
B2	16	92
Sheriff Pit	5	95
RGO	0	100

[1] *Offset SLS and Roby SLC recovery and dilution are estimates, particle flow modelling was used to determine recovered material and optimise the production level footprints.*

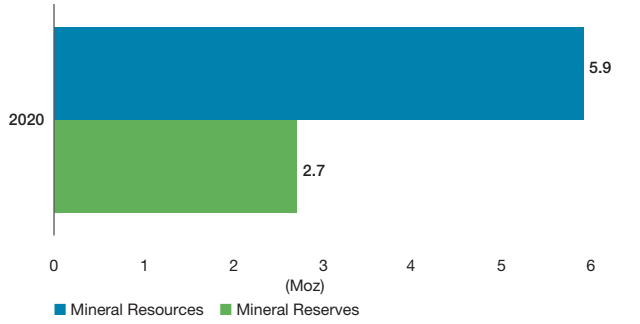
Lac des Iles attributable platinum Mineral Resources and Mineral Reserves

as at 30 June 2020 (Moz Pt)



Lac des Iles attributable palladium Mineral Resources and Mineral Reserves

as at 30 June 2020 (Moz Pd)



Mineral Reserve estimation and reconciliation

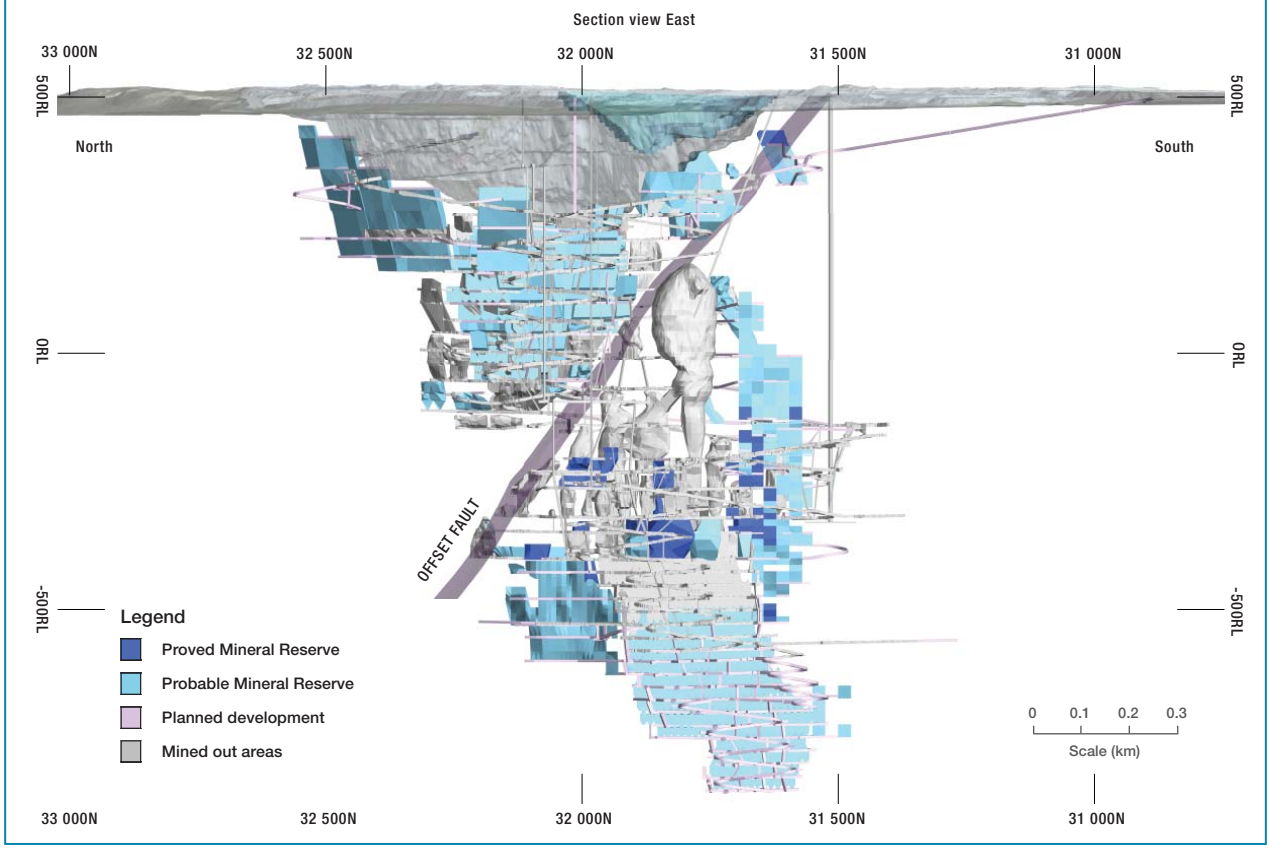
The updated Mineral Reserve estimates are tabulated below and reflect the total Mineral Reserve estimate for Lac des Iles (Impala Canada) as of 30 June 2020. Mineral Reserve grades are quoted after applying mine to mill modifying factors. Current Mineral Reserve estimates have included the latest drillhole information, assay results, revised mine design and updated modifying factors. The Mineral Reserves quoted reflect anticipated grades delivered to the mill and estimations are aligned to the business plan. Rounding of numbers may result in minor computational discrepancies. The results tabulated in this report must be read as estimates and not as calculations. The conversion and classification of Mineral Reserves at Lac des Iles (Impala Canada) is informed by:

- Feasible mine plan and project studies, board approval and available funding
- Economic testing at given market conditions (price deck) to ensure RPEEE
- 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. All mine designs were completed using only the Measured and Indicated Mineral Resources. Due to the disseminated nature of the orebody and the mass mining methods, some incidental Inferred Mineral Resources (mineralised waste) will be contained within the stope designs but is treated as waste dilution material with all metal grades set to zero. This is deemed insignificant.

It should be noted that the Mineral Reserve estimate is the result of the planning process applied against the Measured and Indicated Mineral Resources only, through the application of detailed modifying factors; importantly, it should be noted that this process is subjected to rigorous economic viability testing at given market conditions.

Lac des Iles Mine – Impala Canada Limited

Lac des Iles Mine section illustrating Mineral Reserve estimates as at 30 June 2020



Mineral Reserve map coordinates are presented as per the local coordinate grid system that is used by Lac des Iles Mine.

Lac des Iles (Impala Canada) Mineral Reserve estimate*

As at 30 June 2020

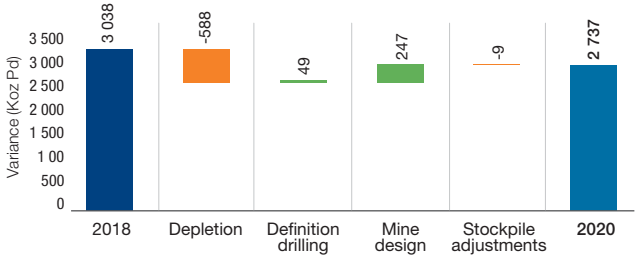
Orebody		RGO Stockpile			Surface Pit			Roby UG			Offset UG			
Category		Proved	Probable	Total	Proved	Probable	Total	Proved	Probable	Total	Proved	Probable	Total	Total
Tonnes	Mt	–	1.0	**1.0**	–	1.4	**1.4**	0.2	18.9	**19.1**	2.2	19.4	**21.5**	**43.0**
3E grade	g/t	–	1.07	**1.07**	–	1.30	**1.30**	2.19	1.94	**1.95**	2.49	2.78	**2.75**	**2.31**
Ni	%	–	0.06	**0.06**	–	0.05	**0.05**	0.04	0.05	**0.05**	0.08	0.09	**0.08**	**0.07**
Cu	%	–	0.03	**0.03**	–	0.05	**0.05**	0.03	0.05	**0.05**	0.06	0.07	**0.07**	**0.06**
3E oz	Moz	–	0.04	**0.04**	–	0.06	**0.06**	0.02	1.18	**1.20**	0.17	1.73	**1.90**	**3.19**
Pt oz	Moz	–	0.00	**0.00**	–	0.01	**0.01**	0.00	0.10	**0.10**	0.01	0.12	**0.13**	**0.25**
Pd oz	Moz	–	0.03	**0.03**	–	0.05	**0.05**	0.01	1.00	**1.02**	0.15	1.49	**1.64**	**2.74**

Previous estimate dated 2 October 2018 was published by NAP in accordance with the NI43-101 Standards of Disclosure for Mineral Projects on **(www.sedar.com)**.

The 2020 declaration represents Implats' reporting of Lac des Iles Mineral Reserves. The high-level reconciliation with the 2018 Feasibility study estimate is depicted below. It is evident that the main factor impacting on the changes relate to mining depletion (588Koz Pd) and an increase of some 247Koz Pd due to the updated mine design.

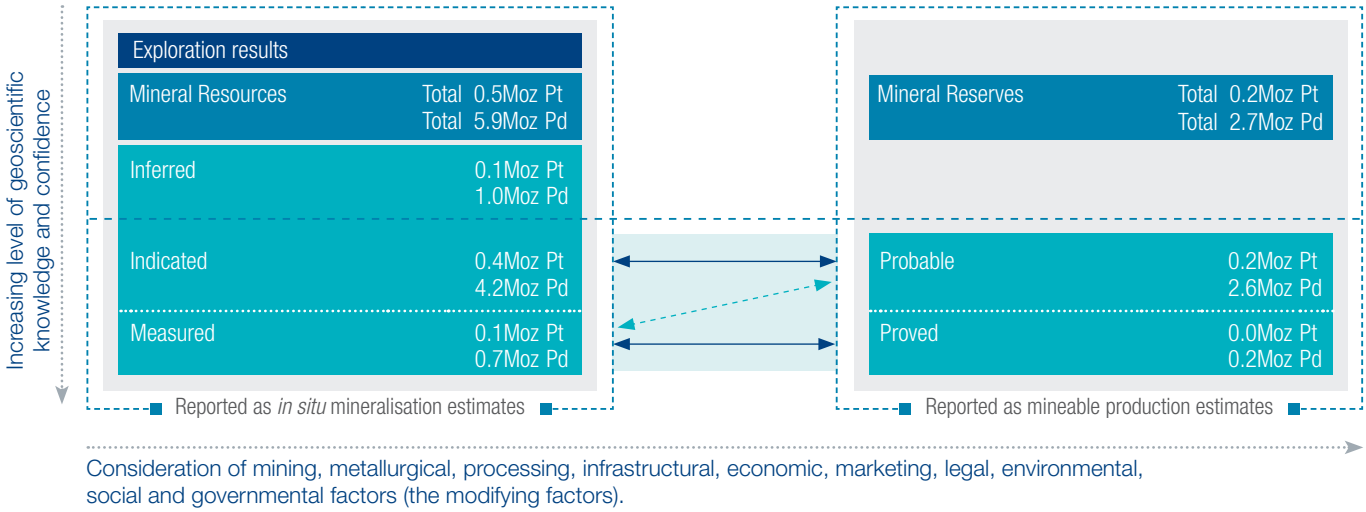
Total Lac des Iles (Impala Canada) palladium Mineral Reserve estimate

as at 30 June 2020 (variance Koz Pd)

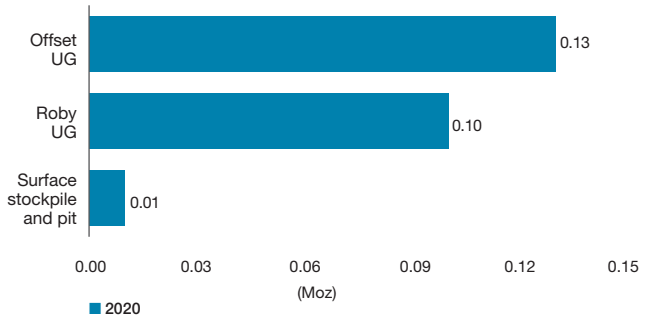


Lac des Iles Mine – Impala Canada Limited

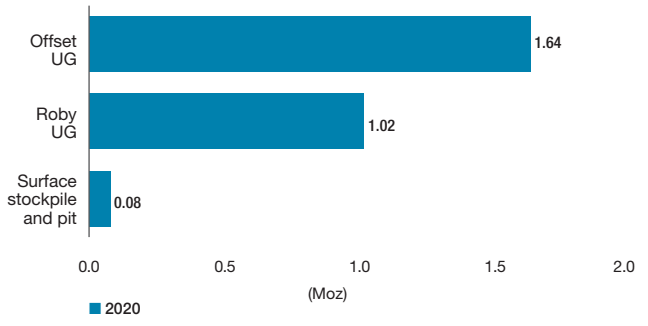
Relationship between exploration results, Mineral Resources and Mineral Reserves (100%)



Lac de Iles platinum Mineral Reserve distribution
as at 30 June 2020 (Moz Pt)



Lac de Iles palladium Mineral Reserve distribution
as at 30 June 2020 (Moz Pd)



The Mineral Resources and Mineral Reserves involved with the royalty agreement with the Sheridan Platinum Group Limited. (SPG) and John Patrick Sheridan (Sheridan) are included in this report. The royalty agreement is a 5% net smelter return (NSR) royalty. The term NSR is defined in the Lac des Iles-SPG-Sheridan royalty agreement as the net proceeds receivable by Lac des Iles from the production and sale of concentrates from Lac des Iles after deducting: the costs of sampling, assaying, transportation and insuring of concentrate, smelting, processing, and refining charges and penalties (excluding Lac des Iles milling costs). All Lac des Iles mining operations are on the mining leases covered by the royalty. The royalty is in effect until the expiration of the leases.

Processing

The Lac des Iles mill has a nominal capacity of 13 500 tonnes per day and is designed to operate for 365 days per year at a 92% availability, which is based on 18 days of scheduled downtime, 2.5 days of curtailment for peak power, and 97.5% operating reliability. The resulting working capacity is therefore 4 470 000 tonnes per year (tpa).

The run-of-mine (ROM) ore feed is crushed prior to reporting to the milling circuit. The crushing circuit begins with all the ore being crushed through a primary 54" x 75" gyratory crusher driven by a 447kW (600hp) motor. The gyratory discharge is conveyed to a live stockpile. Apron pan feeders feed the conveyor between the stockpile and the grinding circuit, with the capability of diverting a variable proportion of the coarse ore to the secondary crusher. The proportion fed to the secondary crushing circuit is regulated by the operator to maximise throughput in the grinding circuit. Secondary crushing is accomplished with a cone crusher (standard HP800), which discharges back on the mill feed conveyor producing a finer feed for the grinding circuit.

The grinding circuit consists of a SAG mill, ball mills and pebble crusher. The SAG mill, which can be operated in autogenous or semi-autogenous configurations, has dimensions of 9.14m in diameter by 4.27m equivalent grinding length (EGL), and is driven by a 6 400kW motor. The mill output is passed over a vibrating screen where oversized particles are directed by conveyor to the pebble crusher (short head cone HP800). The pebble crusher product is then returned to the SAG mill. The pebble circuit is configured to allow oversized particles to bypass the pebble crusher and return directly to the SAG mill feed.

SAG Mill undersize products are pumped into the cyclone feed boxes together with discharge from two parallel ball mills for classification using two clusters of hydrocyclones. The two ball mills each have dimensions of 6.10m in diameter by 10.36m EGL and are also each fitted with 6 400kW motors. Each ball mill is in closed circuit with a hydrocyclone cluster. Cyclone underflow goes back to ball mills as circulating load while the overflow moves to flotation circuit. The hydrocyclones were upgraded to GMAX 20' and the ball mill media was reduced to 1' high chrome balls in order to produce the current P80 of 55µm.

Lac des Iles Mine – Impala Canada Limited

The rougher conditioning tank receives feed from the two parallel hydrocyclone overflows. The conditioner is configured to feed the rougher cell in line 2, which has a capacity of 50m^3. The concentrate from the rougher flotation cells, report to the 1.7m rougher column cleaner cell (column cell C). The tailings from rougher flotation cell 2 move forward to a series of scavenger flotation cells having a capacity of 130m^3 each (2A to 2G on line 2). Tailings from scavenger flotation are final tailings and are pumped into the tailings thickener. Tailings thickener underflow is pumped to the tailings management facility while clear overflow water reports back to reclaim water tank and/or feed the water clarifier. Scavenger concentrates from cells 1A, 2A, 1B, 2B, 1C, and 2C are combined and pumped to the first cleaner. The scavenger concentrates from 1D, 2D, 1E, 2E, 1F, 2F, 1G and 2G are combined and pumped into a 50m^3 conditioning tank in line 1.

The cleaner circuit consists of two main divisions, one for rougher cleaning (column cells C) and the other for scavenger cleaning (four conventional banks of cells B called 1st cleaner, column cells A/B, Denver cells and line 1 scavenger).

Rougher concentrate reporting to 1.7m diameter column C is cleaned once to produce final concentrate. The three columns A, B and C are operated in series with tails from column C is fed to column B and tails of column B being fed to column A. Tailings of column A reports to the front end of 1st cleaner feed box. The concentrate from columns A and B is pumped to Denver cleaner consist of 8 x 2.8m^3 cells. The concentrate produced from Denver cells are final concentrate while the tails goes to 1st cleaner cells consisting of 9 x 38m^3 cells. Cleaner cells are operated in counter current mode with the concentrate from each 1st cleaner cells 4 to 9 are pumped into the next higher cleaner cells (1, 2 and 3) while tailings move by gravity through each successively lower cleaner. Concentrate from 1st cleaner cells are fed into the Denver cells.

First cleaner tailings, together with the combined concentrate from cells 1D, 2D, 1E, 2E, 1F, 2F, 1G and 2G are fed into 7 x 130m^3 cleaner scavenger cells. Tailings from line 1 also reports to final tailings.

Final concentrate streams are combined and pumped to the 17m high-rate concentrate thickener. The thickener underflow is pumped into a 4.3m by 7m storage tank prior to filtration. Two pressure filters (PF-19) are operated to reduce concentrate moisture to 10%. The high-grade polymetallic sulphide concentrate is then shipped via trucks to its final destination.

The concentrate's main value is generated from palladium, with lesser values platinum, gold, copper, silver, nickel and cobalt. The concentrate produced is currently sold under contract to Glencore. This current off-take agreement will remain in effect through 31 December 2021 and includes an evergreen clause to extend the contract on mutual agreement.

Lac des Iles (Impala Canada) top risks

The following principal risks have been identified at Impala Canada:

- As a result of the sustained operation of the SLS, the geomechanical impacts resulting from caving void propagation are well-understood and are anticipated in the mine plan and engineering designs. Additional measures may need to be implemented should void propagation occur sooner than expected or Mineral Reserve write-downs may need to occur should caving void propagation impair the ability to safely extract Mineral Resources currently included in the Mineral Reserve estimate
- Deterioration, as a result of wear, of the rockmass surrounding the underground shaft loading pocket and materials handling infrastructure has been identified as a long-term risk to the organisation. To mitigate this risk, extensive rehabilitation programmes are planned every two years and hoisting rates are reduced for that production year to account for planned downtime associated with the rehabilitation
- It is recognised that evolving industry standards may pose a risk to the permitting of upstream dam raises in the TMF. As mitigation, the updated long-term tailings management plan, developed under the guidance of Lac des Iles' Independent Tailings Review Board, reduces the reliance on upstream raises through the application of hybrid raise methodologies
- Given the increasing resourcing challenges facing the mining industry as a whole, the availability and retention of manpower, and the ability to recruit qualified personnel will be critical to the successful execution of this plan
- Consultations with First Nations on closure planning and other specific permitting continue to pose risks to business certainty. However, Lac des Iles has established and maintained cooperative relationships with its local indigenous communities to ensure that the required consultation is carried out in a transparent and timely fashion, and to date has not experienced delays in obtaining its required permits.

Valuation and sensitivity

The economic viability of the Impala Canada Mineral Reserves is tested by means of net present value calculations over the LoM of the Mineral Reserve. This approach is based on calculation of the present value of a series of future expenditures and revenue streams. The revenue stream in the model was generated using a production plan, which details the sequence of the mine's various sources of ore in order to generate the mill feed profile (tonnes and grades). This production plan was then entered into a metallurgical (mill) recovery module to determine the amount of metal reporting to concentrate. Metallurgical outputs were then processed through a smelting and refining module to calculate net payable metal and revenues were generated using the internal Impala estimate of the real long-term basket price and the spot price as at 30 June 2020. Costs were deducted from revenue for shipping, smelting and refining, and royalties, resulting in Net Smelter Return (NSR). Operating costs were derived principally from the operation's known historic and current cost data. Capital costs were derived from historic and current cost data, engineering designs and vendor quotations. Pre-tax cash flow was calculated by deducting operating capital costs from revenue. A taxation module was utilised to calculate the taxation to generate post-tax cash flows.

Geotechnician cutting core, Lac des Iles

Lac des Iles Mine – Impala Canada Limited

The financial model calculates and presents key production and economic metrics including production (tonnes and grades), recovered and payable metals, revenue, production cost and total cash flows, margins, and unit cost calculations. A suite of sensitivities was calculated to determine the main drivers of economic performance including: grade, mill recovery, operating and capital costs, metal prices and foreign exchange rate. Cash flows are then presented as undiscounted and discounted at 8%.

With the exception of overhead costs incurred by Impala Canada that are directly related to Lac des Iles operations, allowances for assets or cash flows from Impala Canada are excluded from this evaluation. Regional exploration costs were also excluded from the evaluation (corporate costs do not account for any growth potential beyond Lac des Iles). The economic model is static and accrual based; revenues and costs were assumed to be realised in the month or year in which they occurred. The model does not include debt-financing costs related to the acquisition costs, other than interest on equipment leases currently in place.

Key points of note are:

- All costs are quoted in Canadian dollars unless otherwise noted.
- The valuation period runs to 2031 to include all closure costs.
- Asset recovery and salvage values are included in the valuation
- Terms and conditions of Lac des Iles' current smelting agreements are included in the cash flows for the life-of-mine
- Lac des Iles' royalty obligation is included in the cash flows.

The economic viability of the Lac des Iles Mineral Reserves is tested by Implats by means of 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 PGM metal ratios and differs 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 2020. These tests by Implats indicate that the Lac des Iles operation requires a real long-term basket price of between R14 000 and R15 000 per 6E ounce to be economically viable. While the real spot basket price for Lac des Iles as at 30 June 2020 was R36 000 (US$1 995) per 6E ounce, the Lac des Iles internal long-term real basket price is R17 850 (US$1 290). The commodity market remains fluid and the outlook improved post 30 June 2020.

Compliance

Impala Canada has adopted the SAMREC Code (2016) for its reporting. The Competent Person for the Lac des Iles (Impala Canada) Mineral Resources is Stuart Gibbins, a full-time employee of Impala Canada, who holds a MSc (Geology) degree and is registered with PGO, with registration number 0754, has 22 years' relevant experience. The Competent Person for the Impala Canada Mineral Reserves is Kris Hutton, a full-time employee of Impala Canada, who holds a B Applied Science and Engineering (Mineral Engineering) degree and is registered with PEO, with registration number 100195677, has 15 years' relevant experience. Implats has written confirmation from the Competent Persons that the information disclosed in terms of these paragraphs are compliant with the SAMREC Code (2016) and, where applicable, the relevant SAMREC (2016) Table 1 and JSE section 12 Listings Requirements and that it may be published in the form, format and context in which it was intended.

Implats appointed The Mineral Corporation (TMC) to complete an independent review of the Lac des Iles Mineral Resources and Mineral Reserves estimate as at 30 June 2020. TMC concluded that there are no apparent fatal flaws related to the estimation of the Lac des Iles Mineral Resources and Mineral Reserves. They noted that overall, the preparation and reporting of the Mineral Resources and Mineral Reserves for Lac des Iles followed the principles and guidelines of the SAMREC Code (2016). Accordingly, the 2020 Mineral Resources and Mineral Reserves for Lac des Iles (Impala Canada) can be included in the Implats Mineral Resource and Mineral Reserve Statement for 2020, with no impediments identified for public disclosure. In addition the review by TMC confirmed that the RPEEE assessment of the Lac des Iles Mineral Resources and Mineral Reserves remains positive (page 143).

Key operating statistics

		FY2020
Production		
Tonnes milled ex mine	(000t)	**1 553**
Head grade 6E	(g/t)	**2.45**
Platinum in concentrate	(000oz)	**6.4**
Palladium in concentrate	(000oz)	**84.7**
6E in concentrate	(Rm)	**97.4**
Cost of sales	(Rm)	**(2 375)**
On-mine operations	(Rm)	**(873)**
Processing operations (excluding smelter)	(Rm)	**(288)**
Other	(Rm)	**(1 214)**
Total cost	(Rm)	**1 266**
Per tonne milled	(R/t)	**815**
	(US$/t)	**52**
Per 6E oz in concentrate	(R/oz)	**12 998**
	(US$/oz)	**829**
Financial ratios	(%)	**27.0**
Gross margin ex mine	(Rm)	**657**
Capital expenditure	(US$m)	**42**

Production performance and outlook is discussed in the Implats 2020 Integrated Annual report **(www.implats.co.za)**.

Chromium ore at Implats

THE WORLD CHROMIUM ORE PRODUCTION ORIGINATES FROM THE MINERAL CHROMITE (A CHROMIUM-IRON OXIDE) IN THE ROCK OR ORE CALLED CHROMITITE. THE MAJORITY OF THE CHROMIUM MINERAL RESOURCES OF THE WORLD ARE TO BE FOUND IN THE BUSHVELD COMPLEX OF SOUTH AFRICA AND THE GREAT DYKE OF ZIMBABWE, WHERE IT OCCURS AS NUMEROUS THIN AND LATERALLY CONTINUOUS STRATIFORM CHROMITITE LAYERS, INTERLAYERED WITH MAFIC AND ULTRAMAFIC ROCKS.

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 further clustered into three groups, ie, the lower, middle and upper groups of chromitite layers. Named from the bottom up, these 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 commenced in 1916 in the Bushveld Complex and in 1919 on the Great Dyke.

The use and mining of chromium escalated after the conclusion of the Second World War, with approximately half of the total world chromium ore production being mined from the Bushveld Complex.

In the Bushveld Complex, only the LG6, MG1 and UG2 chromitite layers are amenable to underground mining.

The uppermost chromitite layer (UG2) 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 therefore mined at all Implats' operations, principally for the PGMs. Chromium can therefore be seen as a by-product of the UG2 Reef in South Africa. The LG6 and MG1, with an average Cr_2O_3 grade of between 40% and 50%, occurs more than 250m below the UG2 Reef. These units can therefore not be mined from the existing infrastructure at the Implats' operations and are mined by other operators close to surface in opencast and underground mining operations for the chromium content only.

The UG2 Reef at Impala has an average *in situ* Cr_2O_3 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 has an offtake agreement with Merafe Resources and annually sells approximately 220kt of chromite concentrate recovered at one of the chromite recovery plants. The second chromite recovery plant, which is owned by Impala Chrome, is operated by Glencore Operations South Africa (Pty) Ltd.

Currently some 130kt of chromite is reprocessed per annum by Unicorn Chrome and the remainder is pumped to the tailings dams. The retrieved chromite from the UG2 tailings has an average Cr_2O_3 grade of approximately 41.5%. The number 3 and number 4 tailings dams at Impala currently contain some 500Mt of milled and processed material, with an average Cr_2O_3 grade of less than 8%.

At the Marula Mine, material from the UG2 Reef is milled and processed to retrieve the PGMs at the concentrator of the mine. The Makgomo chrome recovery plant subsequently reprocesses the UG2 tailings generated by the concentrator to extract the chromite. The plant has been operating since 2010. The plant is operated by Chrome Traders who also has an offtake agreement whereby all of the concentrate produced is purchased on a Free Carrier (FCA) basis from the plant. Makgomo Chrome is 50% owned by the Marula Community Chrome (Pty) Ltd, 30% by Implats and 20% by Marula Platinum Mine. In recent years some 118kt of chromium concentrate is 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 Cr_2O_3 grade of approximately 42%. The tailings dam at Marula currently contains some 23 million tonnes of milled and processed UG2 material at an average Cr_2O_3 grade of approximately 12%.

At the Two Rivers Platinum Mine, which is 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 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 also has an offtake agreement with Chrome Traders whereby all of the concentrate produced is purchased on a free carrier basis from Two Rivers. Currently some 215kt per annum of chromite is produced at a Cr_2O_3 grade of 40.1% and a silica content of less than 3.9%, with the remainder being pumped to the tailings dams. The tailings dams at Two Rivers currently contain some 37 million tonnes of milled and processed material, at an average Cr_2O_3 grade of 15%. The UG2 Reef in this area has an average *in situ* Cr_2O_3 grade of about 20.75%.

No mining has taken place at Afplats. The UG2 Reef in this area has an average *in situ* Cr_2O_3 grade of about 31%.

At Zimplats, the uppermost chromitite layer (Seam 1) occurs 220m below the MSZ and outcrops in a few places within Zimplats' mining leases (Ml36 and Ml37). It can therefore not be mined from the 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 currently not sufficient to support a comprehensive Mineral Resource or Mineral Reserve Statement for the chromium ore production by Implats.

Areas excluded from Mineral Resource estimates

IMPLATS INTRODUCED A DEPTH CUT-OFF IN 2010 WHEREBY MINERALISATION BELOW A CERTAIN DEPTH IS EXCLUDED FROM THE MINERAL RESOURCE ESTIMATE.

This depth cut-off is applicable to the Bushveld Complex setting and is reviewed annually considering a range of assumptions, specifically the virgin rock temperature (VRT), cooling requirements, available technology, support design and other cost, prices and mining depth limits presently in the platinum industry. It is recognised that while the actual depth cut-off could vary from area to area and over time as conditions vary, a constant depth is assumed for all operations at present. The revised depth cut-off was effectively set at 2 000m below surface in 2014. Additional to the depth cut-off areas, various Mineral Resource blocks are considered on a case-by-case basis. Effectively all mineralisation deeper than 2 000m below surface has now been excluded from the Mineral Resource Statements, as well as other areas where the RPEEE is in doubt. In order to avoid confusion, these areas are not reported with the Mineral Resources but separately in this section. For further clarity, note that these are excluded from the summation of total Mineral Resources per area and the attributable Mineral Resources. These areas are also indicated as excluded areas on the Mineral Resource maps per operation.

The indicative quantum of such excluded areas is as follows:

- At Impala the estimate for the areas underlain by the Merensky and UG2 Reefs that are excluded in the Mineral Resource estimates is in the order of some 19.5Moz Pt. More than 60% of these areas occur at depths greater than 2 350m below surface
- At Afplats all of the Merensky Reef is excluded from the Mineral Resource estimates given the unlikely eventual economic extraction. In addition, there are areas where the UG2 Reef occurs at depths deeper than 2 000m and these are excluded in the Mineral Resource estimates listed in the Afplats section. The indicative quantum of such excluded areas is in the order of some 16.2Moz Pt for the UG2 Reef and Merensky Reef
- At Two Rivers, an area west of the major fault on the farms Kalkfontein and Buffelshoek is excluded from the Mineral Resource estimate. The indicative quantum of such excluded areas is in the order of some 9.3Moz Pt in total for the Merensky and UG2 Reefs. An additional 0.4Moz Pt in an area west and around the major geological feature on the farm Buffelshoek 368KT are excluded from the Merensky Mineral Resources due to additional data and updated interpretation of the Merensky Reef
- At Zimplats, areas which are excluded from the Mineral Resource estimates are indicated on the Mineral Resource maps. These are mostly low grade areas and the quantum of these is not material in comparison with the total estimate for Zimplats.

Ore tramming, Impala

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
AA	Atomic absorption spectroscopy is an analytical technique which uses the absorption of light to measure the concentration of elements
Afplats	Afplats Proprietary Limited
Anorthosite	Igneous rock composed almost entirely of plagioclase feldspar
ARM	African Rainbow Minerals Limited of which ARM Platinum is a subsidiary
ASX	Australian Securities Exchange
AusIMM	Australasian Institute of Mining and Metallurgy
BEE	Black economic empowerment
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. Pillars are usually rectangular and arranged in a regular pattern
Bronzitite	Igneous rock composed mainly of orthopyroxene
BFS	Bankable feasibility study
Concentrating	A process of splitting the milled ore in two fractions. The smaller fraction contains the valuable minerals and the rest is low-grade
Chromitite	A rock composed mainly of the mineral chromite
CIMA	Chartered Institute of Management Accountants
CP	Competent Person
CRIRSCO	Committee for Mineral Reserves International Reporting Standards
CV	Competent Valuator
Decline	A shallow dipping mining excavation used to access the orebody
Development	Underground excavations for the purpose of accessing Mineral Reserves
DMRE	Department of Mineral Resources and Energy (DMRE), Republic of South Africa
Diorite	Igneous rock composed of amphibole, plagioclase feldspar, pyroxene and small amounts of quartz
Dunite	Igneous rock consisting predominately of olivine
DWS	Department of Water and Sanitisation, Republic of South Africa
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
EA	Environmental Authorisation
ECSA	Engineering Council of South Africa: The Engineering Profession Act, 2000 (Act No 46 of 2000), was promulgated in 2000; the Act became effective in 2011. In terms of section 18(1), the Act empowers ECSA to register persons in certain prescribed Categories of Registration. Paragraph 9 of the SAMREC Code refers to ECSA: A 'Competent Person' is a person who is registered with SACNASP, ECSA or SAGC, or is a Member or Fellow of the SAIMM, the GSSA or a Recognised Overseas Professional Organisation (ROPO)
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
EPO	Exclusive Prospecting Order (Zimbabwe)
ESG	Environmental, social and governance
Felsic rock	Igneous rock composed mainly of a light-coloured mineral 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
Gabbro	Igneous rock composed predominately of plagioclase feldspar and clinopyroxene occurring in approximately equal proportions
g/t	Grams per metric tonne. The unit of measurement of metal content or grade which is equivalent to parts per million

Glossary of terms

GoZ	Government of Zimbabwe.
GSSA	Geological Society of South Africa
ha	Hectare is a unit of area measurement equal to 10 000 square metres
Harzburgite	Igneous rock composed mainly of olivine and pyroxene
ICP-MS	Inductively Coupled Plasma Mass Spectrometry is a type of spectrometry which is capable of detecting metals at low levels. This is achieved by ionizing the sample with inductively coupled plasma and then using a mass spectrometer to separate and quantify those ions
IMSSA	Institute of Mine Surveyors of Southern Africa
In situ	In its natural position or place
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
JORC Code	The 2004 Australasian Code for Reporting of Mineral Resources and Ore Reserves. This was updated and reissued as the JORC Code 2012
JSE	South African securities exchange based in Johannesburg. Formerly the JSE Securities Exchange and prior to that the Johannesburg Stock Exchange
JV	Joint venture
Kriging	A geostatistical estimation method which determines the best unbiased linear estimates of point values or of block averages
LoM	Life-of-mine
Mafic	Igneous rock composed mainly of dark ferromagnesium minerals which is less than 90% by volume
MCLEF	Mine Community Leadership Engagement Forum
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 gram per tonne, of the contained material delivered to the mill
Moz	Million ounces. All references to ounces are troy ounces with the factor being 31.10348 metric grams per ounce
MPRDA	Minerals and Petroleum Resources Development Act of South Africa
MSAIMM	Member of the South African Institute of Mining and Metallurgy
MSZ	Main Sulphide Zone (MSZ) is the PGM bearing horizon hosted by the Great Dyke. In addition to the economically exploitable PGMs there is associated base metal mineralisation. The MSZ is located 10m to 50m below the ultramafic/mafic contact in the P1 Pyroxenite
Mt	Million metric tonnes
Norite	Igneous rock composed mainly of plagioclase feldspar and orthopyroxenes in approximately equal proportions
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)
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 (self-regulatory organisation governing the practice of professional geoscience in Ontario, Canada and reporting to the Minister of Energy, Northern Development and Mines)
Pyroxenite	Igneous rock composed predominately of pyroxene and minor feldspar
QAQC	Quality Assurance and Quality Control
RBR	Royal Bafokeng Resources
Reef	A local term for a tabular metalliferous mineral deposit
RPEEE	Reasonable Prospects for Eventual Economic Extraction
RPO	Recognised Professional Organisation
SACNASP	South African Council for Natural Scientific Professions: The Natural Sciences Profession Act, 2003 (Act No 27 of 2003), was approved in 2003. The Act empowers SACNASP to register persons in certain prescribed categories of registration.

Glossary of terms

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 mining industry (The Samesg Guideline, 2017)
SAMREC	South African Mineral Resource Committee
SAMREC Code	South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves 2016 Edition
SAMVAL Code	South African Code for the Reporting of Mineral Asset Valuation 2016 Edition
Section 11	Section 11 of the MPRDA provides that the Minister's written consent is required for the cession, transfer or sale of a right, or an interest in such right, as well as the sale of a controlling interest in an unlisted Company or close corporation
Section 52	Section 52 of the MPRDA provides that the holder of a mining right must, after consultation with applicable trade unions, inform the Minerals and Mining Development Board if any mining operation are to be curtailed or to cease with the likely consequence being that 10% or more of the workforce or more than 500 employees are likely to be retrenched in any 12-month period
Section 102	Section 102 of the MPRDA provides that a right may not be amended or varied without the written consent of the Minister. This includes the mining work programme, environmental management programme, extension of the area or addition of minerals or seams
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 longhole mining method
SLP	Social and Labour Pan
Smelting	A pyrometallurgical process to further upgrade the fraction containing valuable minerals
SSC	SAMREC/SAMVAL Committee
Stoping	Underground excavations to effect the removal of ore
TMF	Tailings management facility
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
ZESA	Zimbabwe Electricity Supply Authority

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 being issued in 2009 and the latest edition was released in May 2016, this supersedes the previous editions of the Code.

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 Competent Person must comply with the provisions of the relevant promulgated Acts. A Competent Person must have a minimum of five years' relevant experience in the style of mineralisation or type of deposit under consideration and in the activity which that person is undertaking. If the Competent Person 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 Competent Person 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 Competent Person 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. 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 (the SAMVAL Code or 'the Code') 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 and this resulted in the recent 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 Competent Valuator is a person who possesses the necessary qualifications, ability, and relevant experience in valuing mineral assets. A person called upon to sign as a Competent Valuator 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.samcodes.co.za)**.

Appendix – Third party assurance

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27 July 2020

Executive - Mineral Resources
Impala Platinum Holdings Limited
2 Fricker Road, Illovo,
Johannesburg, 2196
South Africa

Attention: Mr Theo Pegram

Dear Theodore

Process Audit of the 2020 Mineral Resource and Mineral Reserve estimates of Impala and Marula Platinum Mines

Impala Platinum Holdings Limited (**Implats**) commissioned SRK Consulting (South Africa) (Pty) Ltd (**SRK**) in February 2020 to conduct an audit of Impala and Marula Platinum Mines' (**Impala** and **Marula** respectively) processes applicable to the BP2021 Mineral Resource estimation, and conversion thereof to Mineral Reserves. The audit was for the Merensky and UG2 Reef packages, although only the UG2 was considered for Marula. SRK was mandated to ascertain whether the process-flow adopted for the Public Reporting of the Platinum Group Elements (**PGE**s) and Base Metals Mineral Resource and Mineral Reserve (**MRR**) Statements (effective date 30 June 2020) is consistent with the Standard Operating Procedures of the respective Mines and the guidelines of The 2016 edition of The South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (**The SAMREC Code (2016)**).

SRK reviewed all the internal protocols, electronic data and technical reports that underpinned the MRR estimates. Subsequently, SRK engaged the Competent Persons' of the respective Mines via a series of virtual meetings (due to lock down regulations as a result of the Covid-19 pandemic) to seek clarity on aspects of the documents where necessary and, in a stepwise approach, discuss the methodology and technique adopted for the MRR estimation. The review of the documents and subsequent interactions enabled SRK to make an informed opinion on the reliability of the assay dataset (for the period under review) for Mineral Resource estimation, the appropriateness of the estimation technique and associated parameters applied, the validity of the Mineral Resource estimate and categories and ultimately, the appropriateness of the parameters considered for the modifying factors in the conversion of Mineral Resources into Mineral Reserves.

SRK notes that the protocols governing the compilation of the MRR estimates are generally sound and in line with industry best practice. Based on Interaction with the respective Competent Persons, SRK has established that the process-flow adopted is consistent with the internal protocols of the respective mines. The Public Reporting of the MRR estimate is transparent, captures all issues of materiality and has been compiled by a team of Competent Persons; this, in essence, is compliant to The SAMREC Code (2016).

SRK is of the opinion that there are no material flaws in the estimation processes underpinning the MRR Statement; SRK by this statement does not accept responsibility as Competent Person. This role resides with the nominated personnel of Implats.

Yours faithfully,

SRK Consulting (South Africa) (Pty) Ltd

Ivan Doku Pr.Sci.Nat
Principal Resource Geologist

Marcin Wertz Pr.Eng
Partner & Principal Mining Engineer

Appendix – Third party assurance

Caracle Creek International Consulting
CCIC MinRes
Mineral Resource Estimation Services

To: Impala Platinum Holding Limited. (“**Implats”**)

And To: Mr Theodore Pegram
Executive: Mineral Resources
2 Fricker Road, Illovo
Johannesburg, 2196
South Africa

Independent Mineral Resources Audit of Two Rivers Platinum Mine

As part of Implats corporate governance protocol for reporting of their June 2020 annual Mineral Resources and Mineral Reserves Statement, Implats appointed Caracle Creek International Consulting MinRes Pty Ltd (“CCIC MinRes”) to conduct an independent audit of their Mineral Resource Estimates (“MRE”) at Two Rivers Platinum Mine (“TRP”). The audit was carried out by Sivanesan (Desmond) Subramani, Principle for Geology and Mineral Resources at CCIC MinRes. Desmond has 25 years of experience, of which the last 17 years was in Mineral Resource Modelling and Estimation. A site visit was removed from the scope because of restrictions in provincial travel, due to the Covid 19 pandemic. The scope for the annual Resource audit was to check; validate and reconcile all changes between the 30 June 2019 and 30 June 2020 Resources.

CCIC MinRes used the SAMREC Code (2016) Table One and Implats internal “Mineral Resource and Reserves Code of Practice” as a guideline to assess TRP’s Mineral Resource Estimation performance for compliance. The audit covered 14 Key Performance Items (“KPI’s”), each of which were evaluated using a seven-point scoring system. The scores increase in performance from one, which is unacceptable practice, to six, which goes beyond the statutory requirements and is industry leading. Each KPI was also assessed against a Risk Ranking Matrix. The aim was to evaluate both performance and risk for each KPI. Some KPI’s may have a low performance score and a low risk ranking, whilst others may have a low performance score but a high-risk ranking. The Risk Ranking Matrix is a 4-level risk ranking system that classify each KPI as “Low”; “Moderate”; “High” or “Very High”.

Findings from the assessment of each KPI against performance and risk, resulted in a three-tiered classification system:

“Critical Findings” are those that present critical risk to the MRE and require immediate attention.

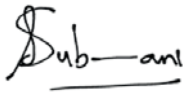
“Significant Findings” are items that may contribute a risk to the MRE and require attention during future stages of Mineral Resource development, i.e., future data collection or Mineral Resource updating or Mineral Resource reporting.

“Enhancements” are suggestions that may simplify or streamline the Geological or Mineral Resource modelling process.

Based on the CCIC MinRes evaluation, an overall average performance score of 4.5 (Meets or exceeds Industry Reporting Code Standards) was achieved for the audit. Both Data Quality and Geological Interpretation exceeded Industry Standards, with Grade Estimation meeting the required industry standards. Report Writing is to acceptable industry practice but should adopt the SAMREC code (2016) guideline and format for the reporting of Mineral Resources to meet the required Industry Standard.

In conclusion of this 30 June 2020 independent audit of the UG2 Reef Mineral Resources at Two Rivers Platinum Mine, no Critical (material) issues have been identified. Several Significant issues have been identified and recommendations to address them are provided. These Significant issues however do not present a material risk to the Mineral Resources. CCIC MinRes therefore confirm that Implats may include the UG2 Reef Mineral Resources at Two Rivers Platinum Mine into their annual audited Mineral Resources Statement, as at 30 June 2020.

Dated this 20th day of June 2020



Sivanesan (Desmond) Subramani,
B.Sc. Honours Geology, Pri. Sci. Nat (400184/06)
Principle - Geology and Mineral Resources

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Appendix – Third party assurance

FRASER MCGILL
MINING & MINERALS ADVISORY

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Fourways 2191
South Africa

Fraser McGill (Pty) Ltd
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VAT NO: 4270275854
Directors: RB McGill, C Fraser, A Wilkinson
www.frasermcgill.com

Mr Theodore Pegram
Executive: Mineral Resources
Impala Platinum Holdings Limited
No 2, Fricker Road, Illovo
Johannesburg
South Africa
30 June 2020

Dear Mr Pegram,

2020 AUDIT OF THE MINERAL RESERVE STATEMENT FOR TWO RIVERS PLATINUM

Fraser McGill (Pty) Limited carried out an independent audit of the Mineral Reserve Statement for Two Rivers Platinum (TRP) mine as at 30 June 2020 on behalf of Impala Platinum Holdings Limited (Implats). The audit was undertaken by Mineral Reserve Competent Persons from Fraser McGill.

Following the guidelines of the SAMREC Code (2016), the 2020 TRP Mineral Reserve Audit entailed a systematic and detailed inspection of the key elements of the Mineral Reserve estimation process undertaken in order to validate adherence to Implats standards and procedures, and to identify material errors and/or omissions or improvements. Fraser McGill also assessed compliance to the principles and guidelines of the SAMREC Code (2016) with respect to the estimation, classification and reporting of Mineral Reserve Estimates by TRP.

A detailed review of the mine design and scheduling for the UG2 Mineral Reserve of TRP was undertaken. Fraser McGill also reviewed the key inputs and outputs of the Business and Life of Mine Planning process, Life of Mine Plans, economic viability testing of the Life of Mine Plans as well as the estimation, classification and reporting of the Mineral Reserve estimate for TRP. Fraser McGill did not perform independent estimation of the Mineral Reserves. In addition, and due to COVID 19 restrictions, no site visit was undertaken by the Competent Persons for the purposes of the Audit and all data exchanges were undertaken by electronic platforms, with interactive engagement, discussion and audit feedback sessions were specifically by MS Teams.

Fraser McGill were satisfied that the Mineral Reserve Estimates are based on a detailed Life of Mine Plan that was tested for economic viability under a set of realistically assumed production levels, Modifying Factors and economic inputs; given that the Mine is operated by African Rainbow Minerals Limited (ARM), the economic parameters were based on those employed by ARM.

No fatal flaws or material issues were identified in the preparation of Mineral Reserve Estimate reported in the TRP Mineral Reserve Statement for 2020. However, a number of issues were identified, which, whilst not material, should be addressed for future Mineral Reserve Estimates.

Fraser McGill is satisfied that the Mineral Reserve Estimates are a fair reflection of the economic value of Two Rivers Platinum mine and has derived no impediment for inclusion of said Mineral Reserves for public reporting purposes.

This opinion does not imply that Fraser McGill has accepted the role of Competent Person for the purpose of the Mineral Reserve estimation and sign-off for Implats. Such role resides with the nominated personnel of Implats and the relevant Joint Venture partners.

Yours sincerely

Adam Wilkinson

Director

B.Eng (Hons), Pr. Eng (20100038), MSAIMM

Appendix – Third party assurance

THE MINERAL CORPORATION

Mr Theodore Pegram
Executive: Mineral Resources
Impala Platinum Holdings Limited
No 2, Fricker Road, Illovo
Johannesburg
South Africa

27 July 2020

Dear Theodore,

RE: AUDITS OF THE MINERAL RESOURCES FOR THE WATERBERG AND AFPLATS PROJECTS, AND MINERAL RESOURCES AND MINERAL RESERVES FOR LAC DES ILES MINE

Mineral Corporation Consultancy (Pty) Limited (The Mineral Corporation), at the request of Impala Platinum Holdings Limited (Implats), carried out independent audits of the Mineral Resource Estimates for the Waterberg and Afplats Projects in South Africa and the Mineral Resource and Mineral Reserve Estimates for Lac des Iles Mine in Canada for inclusion in the Implats Annual Mineral Resource and Mineral Reserve Statement for 2020. The Waterberg and Afplats Projects are platinum group metal (PGM) exploration projects in the Bushveld Complex under development by the Waterberg Joint Venture Resources (Pty) Limited (Waterberg JV Resources) and Afplats (Pty) Ltd (Afplats), respectively. Implats has minority and majority ownership in Waterberg Resources and Afplats, respectively. Lac des Iles Mine is a wholly owned Implats mine focused at the exploration, mining and processing of primary PGM mineralisation in the Lac des Iles Complex and consisting of surface and underground mining and ore processing operations.

The Mineral Resource Estimates for Waterberg and Afplats Projects and the Mineral Resource and Mineral Reserve Estimates for Lac des Iles Mine were prepared and signed-off as at 30 June 2020 by Competent Persons appointed by Waterberg JV Resources (Waterberg Project) and Implats (Afplats and Lac des Iles Mine). The audits were carried out by Mineral Resource and Mineral Reserve Competent Persons from The Mineral Corporation following the guidelines of the 2016 Edition of the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (The SAMREC Code, 2016).

The Mineral Resource audit for the Waterberg Project was completed through a combination of desktop reviews of the relevant geological and Mineral Resource information provided by Implats and a confirmatory site visit by The Mineral Corporation's Competent Person for Mineral Resources. However, the Mineral Resource and Mineral Reserve audit for Lac des Iles Mine was achieved through an entirely desktop review process as a confirmatory site visit could not be completed due to the COVID-19 pandemic induced international travel restrictions. The Mineral Resource Estimate for Afplats is a historical estimate previously reviewed in detail by The Mineral Corporation and was, therefore, subjected to a high-level desktop review. In general, the desktop reviews entailed systematic and detailed inspections and examination of the key elements of the Mineral Resources and Mineral Reserves, internal protocols and approved estimation processes, assumptions and conclusions in order to validate the appropriateness of the various components which contribute to these Mineral Resource and Mineral Reserve estimates, where applicable. The reviews were directed towards the identification of issues, errors, omissions or oversights in the input geological and mining data and the completed technical work that could have a risk of material impact on the geological models, Life of Mine plan or final estimates reported for each of the Mineral Assets audited, where relevant. The Mineral Corporation did not perform independent estimations of the Mineral Resources and Mineral Reserves audited.

The Mineral Corporation's audits of the Mineral Resources for the Waterberg Project could not identify any fatal flaws or unmitigated material risks that would prevent the disclosure of the Mineral Resource Estimate according to The SAMREC Code (2016). Internal procedures were followed for the collection and validation of input data and the preparation of the estimates. The high-level review of the Mineral Resources for could not identify any fatal flaws or material issues in the Mineral Resources for the Afplats Project, which is a historical estimate previously disclosed by Implats.

The Mineral Corporation could not identify any fatal flaws or unmitigated material risks that would prevent the disclosure of the Mineral Resource and Mineral Reserve Estimates for Lac des Iles Mine according to The SAMREC Code (2016). The Mineral Corporation recognises that the integration of Lac des Iles Mine into the Implats standard for preparing Mineral Resource and Mineral Reserve Estimates is currently under way, but the mine has successfully migrated from the previous Mineral Resources and Mineral Reserve reporting regime to The SAMREC Code (2016) reporting regime.

In all cases, the Mineral Resource Estimates satisfy The SAMREC Code (2016) requirements for reasonable prospects for eventual economic extraction. For Lac des Iles Mine, the Mineral Reserve Estimate is based on a detailed Life of Mine Plan that was sufficiently tested for economic viability under a set of realistically assumed production levels, Modifying Factors and economic inputs. The Mineral Corporation has provided Implats with recommendations for continuous improvement, where relevant.

The Mineral Resource Estimates for Waterberg and Afplats Projects and the Mineral Resource and Mineral Reserve Estimates for Lac des Iles Mine as at 30 June 2020 can be included in the Implats Mineral Resource and Mineral Reserve Statement for 2020. This opinion does not imply that The Mineral Corporation has accepted the role of Competent Person for the purpose of the Mineral Resource and Mineral Reserve estimation and sign-off for Implats. Such role resides with the nominated personnel of Implats.

Yours sincerely

C. Madamombe

CONIACE MADAMOMBE
Director
MSc, BSc (Hons), MBA, Pr.Sci.Nat (400093/08), FGSSA

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

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> ADVISORS TO THE MINERAL BUSINESS

Appendix – Third party assurance

Specialist Consultants to the Mining Industry

The MSA Group (Pty) Ltd
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Directors: KD Scott, NNP Makhoba, IG Haddon

27 July 2020

Theodore Pegram
Executive - Mineral Resources
Impala Platinum
2 Fricker Road, Illovo
Johannesburg,
2196

Dear Sir

RE: Zimplats and Mimosa Mineral Resource and Mineral Reserve Audit 2020

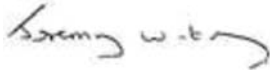
At the request of Impala Platinum, The MSA Group (Pty) Ltd ("MSA") completed an Independent Audit of the 2020 Zimplats and Mimosa Mineral Resources and Mineral Reserves.

The audit covered Mineral Resource and Mineral Reserve estimation, classification and reporting and was focused on additions and revisions completed since the previous audited estimates. The audit process included on-line discussions with the persons responsible for the estimates, analysis of the input data, review of the underlying assumptions and processes, and checks on the resulting estimates.

It is MSA's opinion that the Mineral Resources and Mineral Reserves have been estimated using reasonable assumptions and techniques for the style of mineralisation and mining method at Zimplats and Mimosa. No "fatal flaw" items were identified. MSA considers that the Mineral Resources and Mineral Reserves have been prepared in accordance with the guidelines of the 2016 Edition of the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (The SAMREC Code, 2016) and are suitable for Public Disclosure in the Impala Platinum annual report.

The Mineral Resource audit was completed by Mr. Jeremy Witley (Pri. Sci. Nat.) and the Mineral Reserve audit was completed by Mr. Jonathan Hudson (Pr. Eng.). Both Mr. Witley and Mr. Hudson have the appropriate qualifications, competence and experience to be considered Competent Persons for Mineral Resources and Mineral Reserves respectively under the definitions provided in The SAMREC Code (2016). Neither MSA, Mr. Witley nor Mr. Hudson have any material interest in the assets concerned and have the required independence to complete this external audit. MSA is remunerated based on fees that are not contingent on the outcome of this audit.

On behalf of The MSA Group (Pty) Ltd.



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

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

Appendix – Competent Person and Recognised Professional organisations details

Competent persons

Qualifications, experience, appointments, professional registration, addresses and other details

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 Pegram	Full-time Implats	Implats Executive Mineral Resources	Lead CP Mineral Resources	BSc (Hons) (Geology), GDE (Mining)	SACNASP, FGSSA, FSAIMM	400032/03	31	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	20030236	35	Private Bag X18, Northlands, 2116, Gauteng, South Africa
	Nico Strydom	Full-time Implats	Group Strategy & Business Development Manager	Lead CV (Valuation)	CA(SA), ACMA	SAICA, CIMA	03141381	26	Private Bag X18, Northlands, 2116, Gauteng, South Africa
Impala	Johannes du Plessis	Full-time Impala	Group Geology Manager – Mineral Resources & Reserves	CP Mineral Resources & CP Audits	MSc (Geology)	SACNASP, FGSSA	4000284/07	19	PO Box 5683, Rustenburg, 0300, North west province, South Africa
	David Sharpe	Full-time Impala	Group MRM Manager	CP Mineral Reserves	BSc (Hons) (Geology), BComm	SACNASP, MGSSA	400018/91	32	PO Box 5683, Rustenburg, 0300, North West province, South Africa
	Louise Fouché	Full-time Impala	Geostatistics Manager	CP Geostatistics and databases	MSc (Geology), Post-Grad Dipl (MRM)	SACNASP, MGSSA, MSAIMM	400026/99	20	PO Box 5683, Rustenburg, 0300, North West province, South Africa
	Philip Fouché	Full-time Impala	Geology Manager Exploration	CP Exploration	MSc (MRM), B Compt	SACNASP, MGSSA	400254/05	18	PO Box 5683, Rustenburg, 0300, North West province, South Africa
Marula	Sifiso Mthethwa	Full-time Marula	Technical Services Manager	CP Mineral Resources & CP Mineral Reserves	BSc (Hons) (Geology)	SACNASP, MGSSA	400163/13	17	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	17	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)	IMSSA	1113	21	PO Box 786136, Sandton, 2146, Gauteng, South Africa
Zimplats	Steven Duma	Full-time Zimplats	Technical Services Manager	CP Mineral Resources	BSc (Hons) (Geology)	SACNASP, MAusIMM	991294	23	PO Box 6380, Harare, Zimbabwe
	Wadzanayi Mutsakanyi	Full-time Zimplats	Mine Manager	CP Mineral Reserves	BSc (Hons) (Mining Engineering)	MSAIMM, MAusIMM	709309	25	PO Box 6380, Harare, Zimbabwe
Mimosa	Dumisayi Mapundu	Full-time Mimosa	Geology and Survey Manager	CP Mineral Resources	BSc (Geology)	SACNASP	200021/05	26	PO Box 638, Zvishavane, Zimbabwe
	Alex Mushonhiwa	Full-time Mimosa	General Manager	CP Mineral Reserves	BSc (Hons) (Mining Engineering)	MSAIMM	706224	30	PO Box 638, Zvishavane, Zimbabwe
Lac des Iles	Stuart Gibbins	Full-time Impala Canada	Chief Mine Geologist	CP Mineral Resources	MSc (Geology)	PGO	0754	22	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	15	PO Box 10547, Thunder Bay, Ontario, P7B 6T9, Canada
	David Benson	Full-time Impala Canada	Exploration Manager	CP Exploration	BSc (Geological Sciences)	PGO	2302	15	PO Box 10547, Thunder Bay, Ontario, P7B 6T9, Canada
Afplats	Louise Fouché	Full-time Impala	Geostatistics Manager	CP Mineral Resources	MSc (Geology), Post-Grad Dipl (MRM)	SACNASP, MGSSA, MSAIMM	400026/99	20	PO Box 5683, Rustenburg, 0300, North West province, South Africa
Waterberg project	Charles Muller	Independent Consultant	Director	CP Mineral Resources	BSc (Hons) Geology	SACNASP, MGSSA, MGASA	400051/05	31	CJM Consulting, 54 Hayes Road, Protea Ridge, Krugersdorp, 1739, Gauteng, South Africa

Appendix – Competent Person and Recognised Professional organisations details

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 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 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 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 PO Box 61127, Marshalltown 2107, Gauteng, South Africa Telephone: +27 (11) 834 1273/7 Facsimile: +27 (11) 838 5923/8156 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.*

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