

## Appendix 4D

**Half Year Report**  
**Zimplats Holdings Limited**  
 ARBN: 083 463 058  
 Australian Stock Exchange code: **ZIM**

**Half year ended 31 December 2014**

### Results for announcement to the market

			2014 US\$000	2013 US\$000
1.	Revenue	12% ↓	233,526	266,654
2.	Profit before income tax	90% ↓	4,710	45,577
3.	Profit for the year attributable to members	88% ↓	3,914	32,158

The directors' report and financial statements of Zimplats Holdings Limited and its subsidiaries ("together the Group") for the half year ended 31 December 2014, which have been reviewed by auditors, have been released and are available on the company's website ([www.zimplats.com](http://www.zimplats.com)).

### Finance

- Revenue decreased by 12% to US\$234 million compared to the same period last year owing to the decrease in platinum in converter matte sales volume from 113,876 ounces to 103,092 ounces and lower metal prices.
- The collapse within a section of the underground working area of Bimha Mine triggered by the accelerated deterioration of ground conditions associated with the Mutambara Shear and the precautionary closure of Bimha Mine in August 2014 resulted in the damage and inaccessibility of certain underground infrastructure and equipment with a net carrying amount of US\$22.9 million, which has been written-off during the half year ended 31 December 2014. An insurance claim is in the process of being finalised for associated plant and equipment, and any compensation received will offset the impact of the write-off.
- Total operating costs (excluding the Bimha write-off) decreased by 7% to US\$206.3 million mainly owing to lower production. Cash operating cost per platinum ounce produced increased by 10% to US\$1,481 due to the impact of lower production volumes on fixed costs.
- Profit before income tax amounted to US\$4.7 million, 90% lower than US\$45.6 million achieved in the same period last year, largely due to lower sales volumes and metal prices coupled with the Bimha write-off. Consequently, the net profit attributable to members at US\$3.9 million was 88% lower than the same period last year of US\$32.2 million.
- At the end of the half year, the Group had bank borrowings of US\$105 million and a cash balance of US\$97.1 million. The bank borrowings have a final maturity date of 31 December 2017 with staged repayments. In January 2015, the Group repaid US\$30 million and made a drawdown of US\$24 million on the revolving debtor discounting facility.

## **Safety, Health and Environment**

- Four Lost Time Injuries (“LTIs”) were reported in the half year compared to one fatality reported in the same period last year resulting in the lost time injury frequency rate (“LTIFR”) increasing from 0.14 to 0.59.
- The Group’s Employee Wellness Programmes (including non-communicable diseases) was effective during the half year with a good turnout for voluntary counseling and testing.
- The rehabilitation of the closed open pit mine is progressing well with 60% of the pit now rehabilitated. The Group’s water conservation programmes performed better in the half year with total recycled water increasing by 17% compared to the same period last year.

## **Operations**

- Bimha Mine was closed as a precautionary measure to safeguard employees and assets in August 2014 following subsidence of ground and continued deterioration of ground conditions in a section of the mine. Six of the affected eight production fleets at Bimha Mine were successfully redeployed in order to offset potential production losses. However, productivity from these teams has been impacted by constrained redundancy. During the half year under review, studies by internal and external experts were further advanced to fully understand the nature/extent of the ground collapse and structural geological settings. Following a detailed risk assessment, the Board initiated the re-development of Bimha Mine which commenced in December 2014 with two mining fleets deployed to re-establish reef access. No significant further ground movements have been observed and management continues to closely monitor the situation.
- In an effort to further ameliorate the impact of closing Bimha Mine, the Board has approved the initiation of further contracted open-pit mining to supplement ore supply to the processing operations. First production is expected in the fourth quarter of the year ending 30 June 2015.
- Resultantly, tonnes mined decreased by 7% to 2.5 million tonnes compared to the same period last year.
- Tonnes milled decreased by 17% to 2.48 million tonnes compared to the same period last year owing to ore supply constraints as a result of the precautionary closure of Bimha Mine.
- The Four Elements (platinum, palladium, rhodium and gold) (“4E”) mill head grade at 3.253 g/t was marginally lower than 3.264 g/t recorded in the same period last year due to dilution arising from faults and barren intrusions at some of the mines. The redeployment of fleets from a higher grade Bimha Mine to low grade Ngwarati and Mupfuti Mines also had an effect on the overall grade performance for the half year.
- Platinum and 4E metal production for the half year at 102,420 ounces and 208,143 ounces were 12% and 11% lower than the same period last year in line with lower mills throughput.

## **Capital Projects**

- Mupfuti Mine development, which is part of Phase II Project, remains on track. Project completion is expected in 2015.
- In line with the Zimbabwe Agenda for Sustainable Socio-Economic Transformation (“Zim Asset”) and the Government of Zimbabwe’s thrust on beneficiation, the Group made a strategic decision to refurbish and commission the mothballed Selous Metallurgical Complex Base Metal Refinery (“BMR”) at an estimated cost of \$134 million. Orders for long lead items have already been placed and implementation of the project started in July 2014 and is expected to be completed by June 2016.

### **Mineral Resources and Ore Reserves**

- There has been no material change in the Group's mineral resources as compared to those reported last year. However, there has been a 35% reduction in ore reserves relative to 30 June 2014 following a re-estimation of the Mineral Resources and Ore Reserves by the Group after the Bimha Mine collapse, the Board approval of the redevelopment plan for Bimha Mine and new pillar designs. Please refer to the attached Mineral Resource and Ore Reserve update for more details.

### **Dividend**

- No dividend has been declared for the half year to December 2014.

This report is based on accounts which have been reviewed by auditors.

**Zimplats Holdings Limited  
("Zimplats" or "the Company")  
(ASX Code: ZIM)**

**MINERAL RESOURCE AND ORE RESERVE UPDATE**

Zimplats, the ASX quoted platinum group miner, is pleased to announce updated Mineral Resources and Ore Reserves Estimates (JORC Code, 2012 Edition) for the platinum group metal operations in Zimbabwe.

Zimplats discloses its Mineral Resources and Ore Reserves at the end of its financial year, in June. However, after the precautionary closure of Bimha Mine (Portal 4) at the Ngezi Mine Operations and the subsequent approval and commencement of the Bimha Mine Redevelopment Plan, and based on a new pillar layout, the Company decided to review its Mineral Resource and Ore Reserve estimates. The revised geotechnical designs have also been incorporated in the revised life of mine plan for the adjacent Mupfuti Mine (Portal 3). Therefore, Ore Reserve estimates reported herein incorporate the revised pillar layouts for Mupfuti and Bimha Mines.

**Highlights**

- No material change in the company's Mineral Resources as compared to those reported last year in June 2014.
- Independent geotechnical engineers recommended a protective barrier pillar to stop the propagation of the Bimha Mine ground failure into the re-development area.
- Mupfuti and Bimha Mines have similar geotechnical ground conditions and, therefore, independent geotechnical engineers recommended new pillar layouts for both mines, as well as the adjacent Portal 5S project.
- Ore Reserves for the Portal 5S project, which were included in the June 2014 statement, have been excluded from the 2015 statement to enable the completion of the mine design work based on a new pillar layout.
- Monitoring of the implementation of the new pillar designs is ongoing at Mupfuti and Bimha Mines.
- Only the Measured Mineral Resources scheduled for mining in 2015 at Bimha and Mupfuti Mines have been converted to Proved Ore Reserves as a conservative measure, with the remainder of the Measured and Indicated Mineral Resources in these areas converted to Probable Ore Reserves.
- A reduction in the Ore Reserves for the Company to 65% of the June 2014 estimate and an associated reduction in the proportion of Proved Ore Reserves from 41% in 2014 to 25% in 2015, as a consequence of the above factors and mining depletions in 2014.
- Mineral Corporation Consultancy (Pty) Limited of South Africa completed an independent audit of the Mineral Resource and Ore Reserve estimates in December 2014 and concluded that there were no material issues identified with respect to the Mineral Resources or Ore Reserve estimates.
- The Mineral Resource and Ore Reserve estimates were compiled and signed-off by the Competent Persons from Zimplats and independently reviewed by the Mineral Corporation Consultancy (Pty) Limited.

## Zimplats Mineral Resource and Ore Reserve statement

This updated Mineral Resources and Ore Reserves Estimates statement for the Company's Zimbabwe Operations (Figure 1) shows no material change to the Company's Mineral Resource base and a 35% reduction in Ore Reserve relative to June 2014 estimates. The update follows a re-estimation of the Mineral Resources and Ore Reserves by Zimplats after the ground failure at and the Board approval of the redevelopment plan for Bimha Mine. The Mineral Resource and Ore Reserve estimates are classified in accordance with the JORC Code (2012 Edition). The Mineral Resources estimate is reported inclusive of Ore Reserves.

### Mineral Resources (inclusive of Reserves)

Category	December 2014					June 2014				
	Tonnage (millions)	4E (g/t)	Ni %	Cu %	Pt oz (millions)	Tonnage (millions)	4E (g/t)	Ni %	Cu %	Pt oz (millions)
Measured	166	3.56	0.11	0.09	9.4	173	3.55	0.11	0.09	9.7
Indicated	667	3.55	0.13	0.10	37.5	667	3.55	0.13	0.10	37.5
Inferred	1,226	3.27	0.12	0.09	62.1	1,226	3.27	0.12	0.09	62.1
<b>Total</b>	<b>2,059</b>	<b>3.38</b>	<b>0.12</b>	<b>0.09</b>	<b>108.9</b>	<b>2,066</b>	<b>3.39</b>	<b>0.12</b>	<b>0.09</b>	<b>109.3</b>

### Ore Reserves

Category	December 2014					June 2014				
	Tonnage (millions)	4E (g/t)	Ni %	Cu %	Pt oz (millions)	Tonnage (millions)	4E (g/t)	Ni %	Cu %	Pt oz (millions)
Proved	21.8	3.32	0.09	0.06	1.2	54.9	3.35	0.14	0.10	2.9
Probable	64.5	3.43	0.09	0.07	3.5	77.9	3.39	0.14	0.10	4.2
<b>Total</b>	<b>86.2</b>	<b>3.40</b>	<b>0.09</b>	<b>0.07</b>	<b>4.7</b>	<b>132.8</b>	<b>3.37</b>	<b>0.14</b>	<b>0.10</b>	<b>7.1</b>

## Competent Persons

The information in this report was prepared in accordance with the 2012 Edition of the JORC Code by Competent Persons who are full-time employees of the Company and who possess the required five years' experience relevant to the style of mineralisation and type of deposit (the Main Sulphide Zone) described in this report.

The Competent Persons, listed below, have signed the required statement and consent for the release of this report in the form and context in which it appears.

Competent Person	Area of Responsibility	Professional Membership	Membership Number
Caston Mutevhe	Ore Reserves	The South African Institute of Mining and Metallurgy	704612
Steven Duma	Mineral Resources	The Australasian Institute of Mining and Metallurgy	991294

There has been no material change in the Company's Mineral Resource estimate as compared to the June 2014 estimate, with the 0.32% reduction in tonnage attributable to mining depletion in 2014 and the barrier pillar at Bimha Mine. Preliminary mine designs recommended by a team comprising independent geotechnical engineers and geotechnical engineers from Impala Platinum Holdings Limited ("Implats") resulted in reduced extraction rates for Mupfuti and Bimha Mines.

The Ore Reserve estimate is based on the preliminary mine designs and revised life of mine plans for Mupfuti and Bimha Mines. Portal 5S has been excluded from the Ore Reserves estimate pending the finalisation and approval of the revision of the mine design, a life of mine plan for the project and feasibility study. The requirement for the completion of a feasibility study does not in any way reflect a change in the opinion of the Competent Person on the viability of this project but an internal requirement aimed at aligning reporting.

Zimplats opted to only convert Measured Mineral Resources within the annual mining boundary for 2015 to Proved Ore Reserves for Mupfuti and Bimha Mines, with the remainder of the Indicated and Measured Mineral Resources in these areas converted to Probable. This is a conservative measure, which takes into account the ongoing geotechnical design and mine design work that is being carried out by the independent geotechnical engineers and geotechnical engineers from Implats.

The changes to the Ore Reserve at the Mupfuti and Bimha Mines and the overall Ore Reserve estimate for 2015 reflect the impact of the revised designs and mining depletion while the changes to the Ore Reserves for Ngwarati (Portal 1) and Rukodzi (Portal 2) Mines are mainly due to mining depletion during 2014. Overall, the Ore Reserves have decreased in tonnage by 35% from the June 2014 estimate.

Apart from the revised extraction factors due to new mine designs for Bimha and Mupfuti Mines, most of the modifying factors utilised for the June 2014 Ore Reserve estimate have been used for the December 2014 estimate.

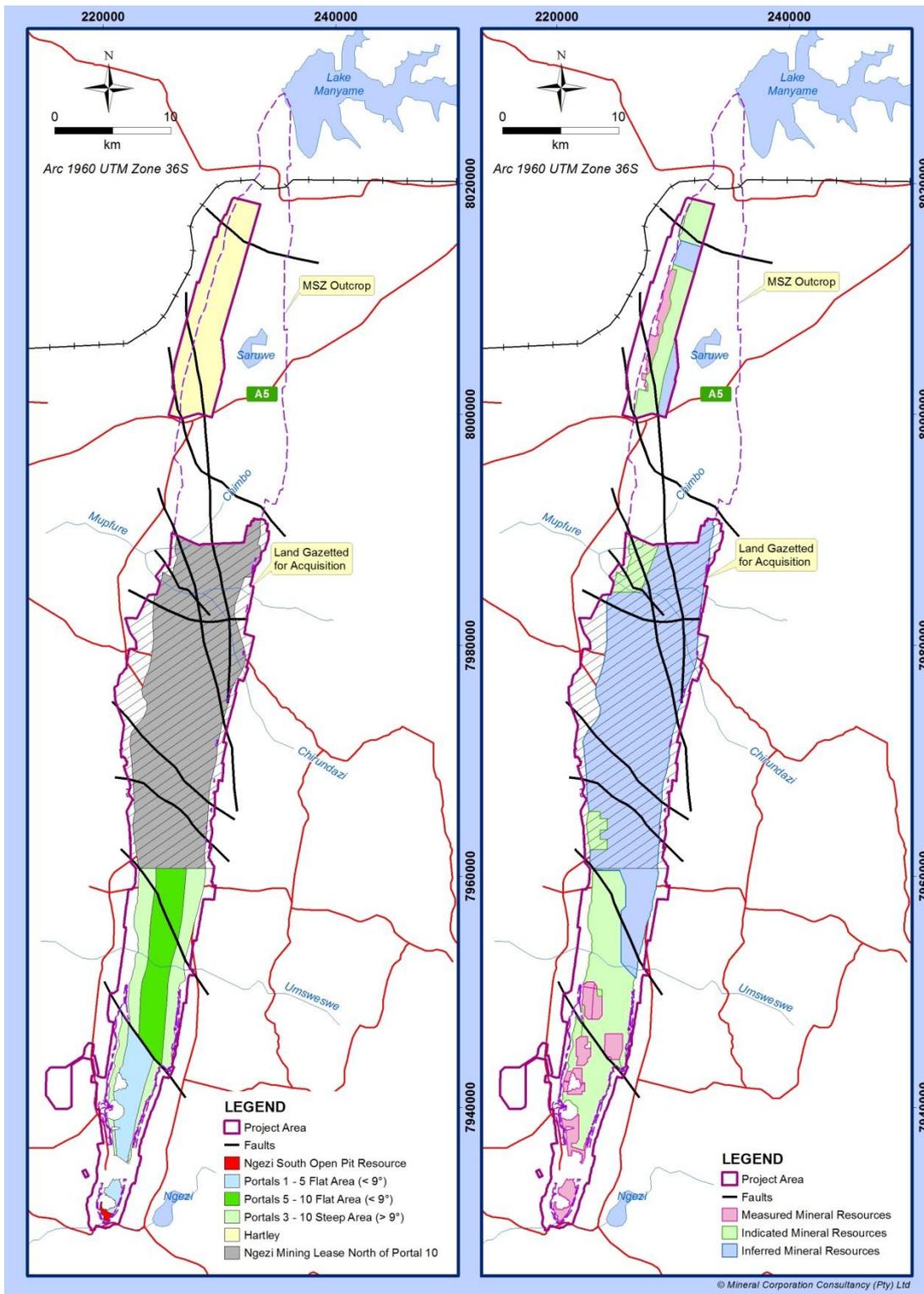


Figure 1: Location of Zimplats Operations on the Great Dyke

## Geology

The Great Dyke is a layered, 2.58 billion-year old, igneous intrusion into granites and greenstone belts of the Zimbabwe Craton (Figure 2). It is 550km long, north north-east trending, with a maximum width of 12km. The Great Dyke consists of the North and South Chambers, which are sub-divided into the Wedza, Selukwe (Shurugwi), Sebakwe, Darwendale and Musengezi Sub-chambers. The stratigraphic sequence consists of a lower ultramafic sequence (up to 2 200m thick) and an upper mafic sequence (1 150m thick). Rocks dip at between 5° and 20° near the margins and flatten out near the axis of the Great Dyke to form a flat-lying floor. Faulting on all scales has modified the synformal shape of the Great Dyke and therefore the MSZ.

The platinum-group metal (PGM)-bearing Main Sulphide Zone (MSZ) lies 5m to 50m below the base of the mafic sequence. It is a continuous layer between 2m and 10m thick that forms an elongate basin. Much of the MSZ and the overlying mafic sequence have been removed by erosion. There are four erosional remnants of MSZ.

Post mineralization intrusions also disrupt the mineralisation in the MSZ. Bushveld-style potholes are not prevalent; however, there are areas with disrupted metal profiles and hangingwall slumps. PGM grades in the MSZ inversely correlate with thickness and the grade distribution is asymmetric with higher grade, narrower profiles along the western margin.

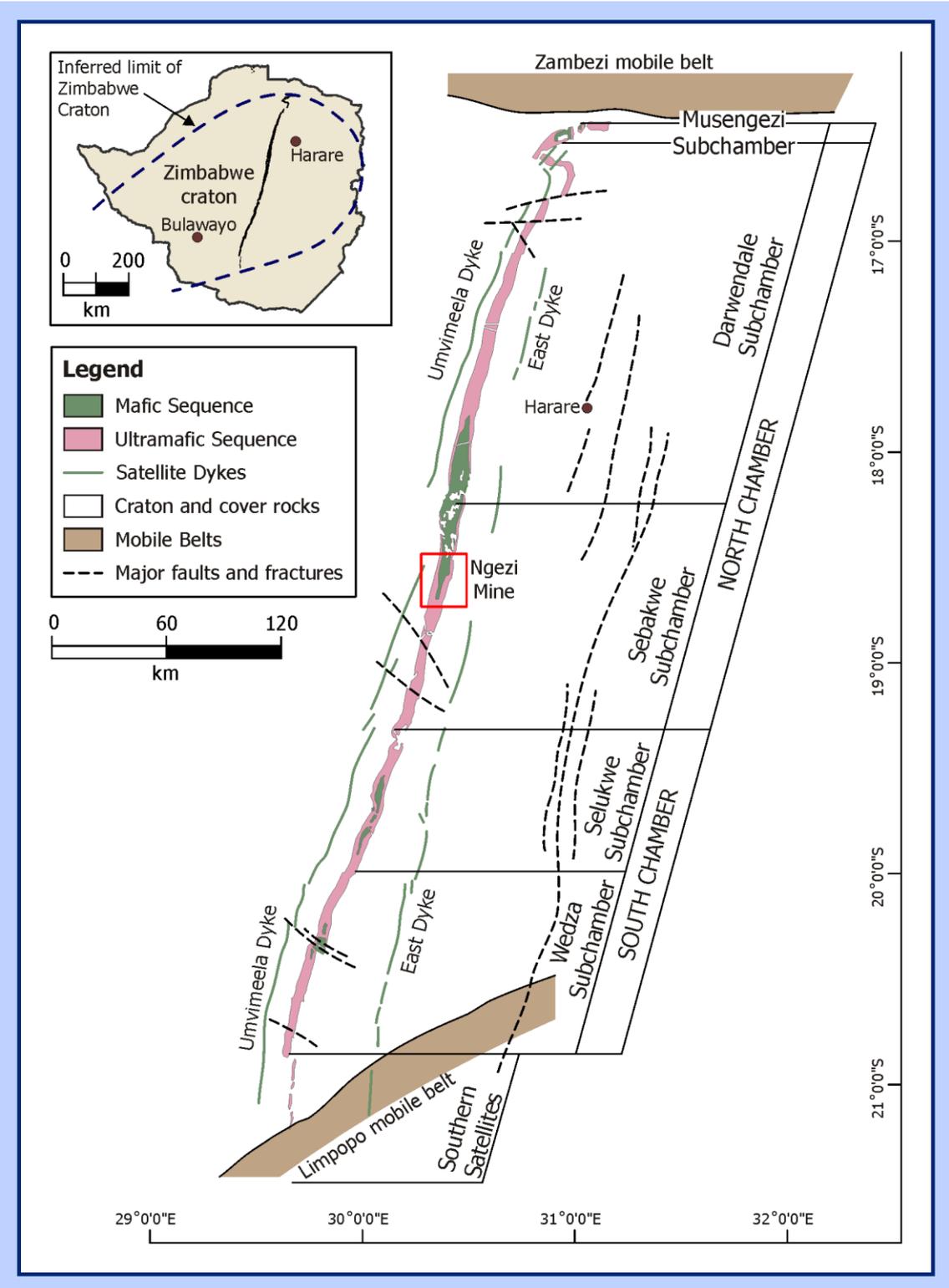


Figure 2: Regional Geology of the Great Dyke

## **Sampling and sub-sampling**

Diamond drill samples are split using a diamond saw and half core samples mostly of the NQ size and a few BQ size are taken (weighing approximately 400g to 650g, respectively). Sample preparation is conducted at the Genalysis (Pty) Limited (Genalysis) where samples are entered into its management system, crushed and pulverized. Core is cut along the line joining the top or bottom of the igneous layering, ensuring a representative sub-sample can be taken. The core is sampled throughout the mineralized interval, ensuring it is representative of the in-situ material. The use of half-core mainly from NQ size drilling is considered acceptable for the style of mineralisation present.

Zimplats employs various sampling techniques that include diamond and RC drilling and channel sampling, but only the diamond drilling data acquired primarily for Mineral Resource estimation has been used for the estimates. The drillhole data was derived from various drilling campaigns dating from the 1990s. Zimplats has employed similar exploration drilling protocols, sampling, laboratory and analytical techniques over this time, and thus the resultant exploration data is essentially of the same quality.

The platinum group elements (PGEs) and base metal mineralization is associated with macroscopic sulphide mineralization and sampling of diamond drillcore by 25cm samples, over a total sampling interval of approximately 8m, which straddles the peak sulphide mineralization, provides the necessary data for Mineral Resource estimation.

## **Drilling Techniques**

All drillhole data used in this estimate is based on surface diamond drill core, with the main drill core size being NQ core (47.6mm diameter) in most of the areas except for the Portal 4 where the BQ size (36.4mm diameter) was employed.

## **Mineral Resource Classification Criteria**

The scheme for classification of the Mineral Resource was implemented based on the standards implemented by Implats, as well as the JORC Code (2012). The Mineral Resources are classified into the various resource categories based primarily on drillhole density, which impacts on geological and grade continuity. The criteria, which inform the Mineral Resource classes, are:

- Less than 250m by 250m for Measured Mineral Resources.
- Greater than 250m by 250m but less than 1000m by 1000m for Indicated Mineral Resources.
- Greater than 1000m by 1000m for Inferred Mineral Resources.

## **Sample analysis method**

The laboratory employed for the analysis of samples is Genalysis (Pty) Limited (Genalysis) that is certified by the National Association of testing Authorities Australia (Nata). Genalysis used nickel sulphide collector fire assays with ICP-MS finish for platinum group elements and total acid attack and optical emission spectrometry for base metals. The detection limits for Platinum group metals and base metals were between 1 to 2ppm and 1 ppm respectively

These analytical methods are appropriate for the elements and mineralization style present.

## **Estimation methodology**

Quality grids for all layers generated in Isatis were imported into Vulcan. These quality grids and structure (stratigraphic) grids generated in Vulcan were used to form Horizon Adaptive Rectangular Prism (HARP) models. In addition and as a validation measure, quality grids were generated in Vulcan and these were compared with those generated in Isatis. HARP models contain estimates of variables for each of the domains (layers) modelled.

Zimplats does not estimate grades into block using Ordinary Kriging interpolation. Instead, grids are created as discussed above and grades for each of the 0.25m layers of the Mineral Resource evaluation cut estimated using Ordinary Kriging interpolation. A 10m x 10m grid dimension (similar to the dimensions of the selective mining unit) is utilised as this provides the resolution required for mine planning. Given the drillhole densities in most areas currently being mined and the grade continuity (long ranges) of the MSZ in general, grade estimating into 10m x 10m grids does not have a material impact on biasing the estimates. The estimates are similar to check estimates by The Mineral Corporation based on 200m x 200m.

The suitability of the search neighbourhoods employed was assessed by reviewing a number of kriging statistics notably the slope of regression and the mean of the weights. The slope of regression for Pt in the PK layer, for instance, has a mean of 0.92 and mean of weights of 0.1, which indicates good quality estimation. Zimplats also utilises histogram plots to compare estimates and input data, as an additional validation measure.

### **Cut-off grade**

The geological variability of the MSZ grade and thickness profiles influences the selection of the most appropriate evaluation and mining cuts, and the resultant head grade generated by mining. The cut is optimised to ensure that the Pt peak layer is fully extracted and not left in the hangingwall.

The evaluation cut for Portals 1-5 areas, which is the planned underground mining cut, is a 2.5m-thick interval that incorporates the Pt peak zone. The thickness cut-off of 2.5m is an economic (optimal mining) cut-off based on feasibility study work completed for the portals. However, owing to thinner but higher-grade intersection in areas north of Portal 6, Mineral Resources are reported at thickness cut-offs varying from 1.6m to 2m.

### **Mining Factors**

Zimplats employs mechanised room and pillar mining to extract ore from stopes, with a nominal width of 2.5m at dips of less than 9°. Each production team deploys a single-boom face rig, a bolter, a 10t LHD and a 30t dump truck and mines twenty panels. This allows sufficient flexibility for the required grade control sampling and to negotiate faults and intrusions while still meeting the team's monthly production target. The revised layout has 6m panels with 4m square pillars, but spans decrease and pillar dimensions increase in bad ground and with depth. A combination of roof bolts and tendons is integral to the support design. Underground mining infrastructure is accessed through declines from surface portals.

There is an inverse relationship between grades and thickness, with areas north of Portal 5 characterised by narrower (1.6m-2m) but higher-grade economic mining cuts and areas to the south are characterised by wider (2.5m-3m) cuts of moderate grades. The variability is taken into consideration when reporting Mineral Resources.

Mineral Resources have been reported at a constant thickness cut-off of 2.5m for the Ngezi Mine area, which is based on results of feasibility studies and other technical studies of similar level for the various portals in this area and for the open pit. These studies indicated economic mining widths in the 2.5 to 3m range based on Implats' long-term metal price assumptions. The underground mining cut is optimised to ensure that the Pt peak is fully extracted and not left in the hangingwall. An allowance of 50cm of hangingwall overcut is made in defining the underground mining cut and 75cm for the open pit mining cut.

A narrow mining cut is preferred when metal prices decline as increasing the mining cut decreases the grade of the primary element, Pt. However, the benefits of a narrow mining cut are offset by higher mining costs and dilution. Therefore, an optimum mining width based on equipment height of 2.5m, which provides a reasonable combination of tonnage, mining cost, head grades and dilution,

was selected for underground mining in the Portal 1s-5 areas. A wider mining cut makes sense for open pit mining where it leads to a lower stripping ratio and significant mining cost savings, for as long as the added material pays for its ore mining and processing cost. Although Mineral Resources are reported at 2.5m evaluation cut, a mining width of 3m is planned for the Ngezi South Open Pit.

Given the difficulty of visually locating the MSZ, the smaller faults give rise to inherent dilution of the Mineral Resources. Location and efficient traversing of the larger faults is an important component of the mining operation. Shears, sub-parallel to the MSZ can have a significant negative effect on the geotechnical characteristics of the rock.

The mining operations will continue within the framework of existing government approvals, available surface engineering infrastructure and transportation solutions to the market for the final products.

### **Metallurgical Factors**

Zimplats has in place two operating flotation plants at Ngezi Mine and the Selous Metallurgical Complex (SMC), and a smelter at the SMC. The metallurgical processes at these plants are well established, and no material changes are envisaged. The recoveries applied in the development of the Ore Reserves and subsequent mining schedules are based on actual recoveries achieved at these plants. The processing efficiencies are also cross-checked against past metallurgical mineral department studies that have been carried out on similar types of ores from Ngezi.

All waste rock is contained in designated storage areas and based on historical evidence is not likely to produce acid mine drainage. The tailings material produced during the processing of the ore is stored in a purpose built facility that has sufficient capacity to contain all tailings produced over the life of mine. The facility is designed to prevent any inadvertent discharges into the general environment.

### **Ore Reserve Classification**

Ore Reserves are classified as Proved or Probable depending on the confidence in the Mineral Resource model and modifying factors. The Proved Ore Reserve is a sub-set of Measured Mineral Resources, and the Probable Ore Reserve is derived from Indicated Mineral Resources. No Inferred Resource metal is included in the Ore Reserve estimate.

Proved Ore Reserves are delineated in those parts of the Measured Mineral Resources scheduled for mining in the twelve month plan, while Probable Ore Reserves are delineated on the remainder of the Measured and Indicated Mineral Resource areas.

### **Additional Notes**

- Zimplats' standard is to report Mineral Resources inclusive of Ore Reserve.
- The Ore Reserves figures are estimated based on the diluted grades delivered to the processing plants.
- The boundaries of the ore envelope are gradational, particularly in the footwall, such that the choice of economic mining cut is affected by operational costs and economic factors. The price of the suite of metals that is produced from the Main Sulphide Zone has fluctuated considerably in the last few years. It is, however, evaluated that the choice of mining cut is robust under a wide range of mineral commodity pricing conditions.
- The maximum depth of these Mineral Resources is 1 250m and, with no part being more than 5km down dip from outcrop location, any part of the Mineral Resources is theoretically accessible to mining within a 10-15year time frame.
- Zimplats' Mineral Resources are 100% owned by Zimplats through a subsidiary and is held under Special Mining Lease 1, with a 25 year duration which expires in 2018. The Mining Agreement relating to the Special Mining Lease 1 allows for two extensions of ten years each.

- In March 2013, the Government of Zimbabwe issued notice of its intention to compulsorily acquire ground north of Portal 10, which contains some 54.6 Moz platinum. Zimplats submitted a formal objection within the stipulated 30 days from the notice. As at the 31st December, 2014 the acquisition had been neither completed nor cancelled.
- The Mineral Resource and Ore Reserve estimates tabulated in this report are estimates and not calculations. They are subject to a wide range of factors, some of which are outside the Company's control, which include:-
  - The quality and quantity of available data. Estimates are based on limited sampling and, consequently, there is uncertainty as the samples may not be representative of the entire ore body and Mineral Resource.
  - The quality of the methodologies employed.
  - Geological interpretation and the judgment of the individuals involved.
  - Economic conditions and commodity prices.
- Changes in these factors along with developments in the understanding of the ore body and changes in recovery rates, production costs and other factors may ultimately result in a restatement of Ore Reserves and/or Mineral Resources and may adversely impact future cash flows.
- To mitigate this risk the company appoints independent 3<sup>rd</sup> parties to review the Mineral Resources and Ore Reserves estimates on a regular basis and mining project feasibility studies are subject to independent review prior to applying to the Board for capital approval.
- Mineral Corporation Consultancy (Pty) Limited (The Mineral Corporation) of South Africa completed an audit of the current estimates and concluded that there were no key issues identified with respect to the Mineral Resource or Ore Reserve estimates.
- Rounding-off of numbers may result in minor computational discrepancies.
- Zimplats' Mineral Resources and Ore Reserves are also reported on in the Implats Integrated Annual Report and its Mineral Resource and Mineral Reserve supplement.