

# OPERATIONAL REVIEW

## KEY DEVELOPMENTS DURING THE YEAR

- Good safety performance at both divisions\*
- Lower production at Zondereinde due to 11-week strike
- Smelter successfully recommissioned
- Booyssendal ramp-up on track
- Total group capex of R891.1 million

## ZONDEREINDE

Zondereinde mine's operating performance was adversely impacted by the 11-week strike, which began on 3 November 2013 and ended on 21 January 2014. Following the strike, it took a little over three months for production to return to normal and, by the end of the financial year, production levels had improved significantly.

Consequently, the combined tonnes milled declined by 18.5% to 1 724 156 tonnes (F2013: 2 115 712 tonnes). Merensky reef contributed 803 736 tonnes at a head grade of 5.8g/t (F2013: 5.8 g/t) (3PGE+Au) and the UG2 reef contributed 920 420 tonnes at an improved head grade of 4.3g/t (F2013: 4.2g/t) (3PGE+Au). Consequently, the combined head grade normalised to 5.0g/t (3PGE+Au) from 4.9g/t (3PGE+Au).

Available ore reserves are currently estimated at 20 months for the Merensky reef and 24 months for the UG2 reef.

Metals produced from underground fell by 18.9% to 7 331kg (F2013: 9 041kg) and the volume of concentrates purchased increased by 20.9% from 1 663kg to 1 975kg.

Progress on ore reserve development in the north-west quadrant of the mine and the deepening project on the lower levels of the mine to access normal Merensky reef were curtailed during the strike. These activities have resumed and will gain momentum in the coming financial year.

Given the considerable infrastructural footprint at Zondereinde, the strategy going forward will be to work on increasing the current 15-year life of mine by prioritising the deepening project to access more normal Merensky reef and to further exploit the UG2 ore body which is more conformable and potentially more productive than Merensky reef. Management is currently exploring processing options to accommodate an increase in UG2 production, including the option of an additional furnace within the current smelter complex.

The smelter rebuild, prompted by the unexpected erosion of the refractory bricks in proximity to the slag level interface, was completed using a different brick specification and the introduction of copper cooling at the end of September 2013 as planned, and successfully recommissioned thereafter. The total capex for the repair work was R54.0 million.

On 28 July 2014, shareholders were advised of an incident during routine maintenance at No1 shaft when a counterweight in one of the shaft's hoisting components became detached and fell to the bottom causing damage to steelwork between 12 and 13 levels, approximately 2 000m below surface. While there were no injuries as a result of the incident, the shaft was out of commission for five weeks for repairs.

\* Safety development and performance are discussed in more detail on pages 94 to 97.

During this time the mine's production was reduced by approximately 50% while No 2 shaft remained fully operational.

### **Zondereinde – costs and capital expenditure**

Total operating costs were R2.691 billion compared to R2.759 billion in F2013, a 2.5% decrease. Unit costs were negatively affected by lower production volumes as a result of the strike. Unit operating costs increased by 19.0% to R1 682 per tonne (R1 414 per tonne) and cash costs by 18.2% to R1 526 per tonne (F2013: R1 291 per tonne).

Capital expenditure for the year was R351.5 million (F2013: R347.9 million) of which the major items were the rebuild of the smelter, the deepening project and the hostel-conversion programme.

Capital expenditure is estimated to be R331.2 million in F2015, of which R105 million has been allocated to the deepening project and the balance to maintenance expenditure, which includes R28 million for an autoclave replacement and a further R42 million for the hostel-conversion programme.

### **BOOYSENDAL**

The Booyesendal UG2 North mine came into production on 1 July 2013 and is expected to ramp up to full production by H1 F2016. During the year,

1 517 109 tonnes (F2013: 242 602 tonnes) were milled at a head grade of 2.6g/t (3PGE+Au) to produce 2 882kg of metal in concentrate.

Improving the recoveries from the concentrator plant and evaluating opportunities for growth, including the possibility of also mining the Merensky reef at Booyesendal, will be key focus areas at this operation going forward.

### **Booyesendal – costs and capital expenditure**

The mine's unit operating and cash costs were R688 and R527 per tonne milled respectively. This is not a realistic reflection of Booyesendal's performance as the unit costs have been positively influenced by the addition of tonnage from the pre-production stockpile. A more realistic assessment of unit costs will be obtained as the mine ramps up to steady state production.

Capital expenditure at Booyesendal declined significantly from R1.4 billion in F2013 to R539.6 million owing to the near-completion of the mine's capital footprint.

Forecast capital expenditure for F2015 is expected to be R483.4 million of which R78.4 million will be allocated to routine capital while R50 million will be spent on a project to investigate the feasibility of mining Merensky ore at Booyesendal.