

# OPERATIONAL PERFORMANCE

## SOUTH AFRICA – SURFACE OPERATIONS

### Kalgold

		FY17	FY16	FY15
<b>Number of employees</b>				
– Permanent		241	235	240
– Contractors		395	377	465
Total		636	612	705
<b>Operational</b>				
Volumes milled	(000t) (metric)	1 506	1 479	1 472
	(000t) (imperial)	1 660	1 630	1 623
Gold produced	(kg)	1 205	1 103	1 198
	(oz)	38 742	35 463	38 517
Gold sold	(kg)	1 213	1 086	1 230
	(oz)	38 999	34 916	39 545
Grade	(g/t)	0.80	0.75	0.81
	(oz/t)	0.023	0.022	0.024
Productivity	(g/TEC)	123.82	116.79	183.86
<b>Financial</b>				
Revenue	(Rm)	695	595	551
	(US\$m)	51	41	48
Average gold price received	(R/kg)	573 010	548 072	448 230
	(US\$/oz)	1 311	1 176	1 218
Cash operating cost	(Rm)	557	548	452
	(US\$m)	41	38	40
Production profit/(loss)	(Rm)	131	55	88
	(US\$m)	10	4	8
Capital expenditure*	(Rm)	96	39	48
	(US\$m)	7	3	4
Cash operating cost	(R/kg)	462 037	496 991	377 547
	(US\$/oz)	1 057	1 066	1 026
All-in sustaining cost*	(R/kg)	558 731	549 590	427 902
	(US\$/oz)	1 278	1 179	1 163
<b>Safety</b>				
Number of fatalities		0	0	0
Lost-time injury frequency rate per million hours worked		2.19	0	2.25
<b>Environment</b>				
Electricity consumption	(GWh)	54	49	40
Water consumption – primary activities	(ML)	392	375	1 795
Greenhouse gas emissions	(000t CO <sub>2</sub> e)	53	50	41
Intensity data per tonne treated				
– energy		0.04	0.03	0.03
– water		0.26	0.25	1.22
– greenhouse gas emissions		0.36	0.03	0.03
Number of reportable environmental incidents		0	0	1
<b>Community</b>				
Local economic development	(Rm)	2	2	2
Training and development	(Rm)	7	5	4

\* Figures for FY15 and FY16 restated to include capitalised stripping activities

## Kalgold *continued*

### Other salient features

Status of operation	Open-pit mining operation
Life of mine	21 years
Compliance and certification	New order mining right – August 2008 ISO 14001 ISO 9001

### Mineral reserves as at 30 June 2017

Reserves (metric)	Proved reserves			Probable reserves			Total mineral reserves		
	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)
	4.5	0.96	4	22.1	1.12	25	26.6	1.09	29
Reserves (imperial)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)
	4.9	0.028	138	24.4	0.033	796	29.3	0.032	934

Kalgold is an open-pit mine situated 55km southwest of Mahikeng in North West Province and located within the Kraaipan Greenstone Belt. Mining takes place from the A-Zone pit. Ore mined is processed at a carbon-in-leach plant located at Kalgold.

There were no fatalities during the year under review.

The A-Zone and Watertank pits are to be merged into one pit which is expected to expose higher grade ore. Plant refurbishment and crusher upgrades were completed during FY17. These improvements delivered improved plant efficiencies and recoveries while the crushers delivered finer and increased volumes of ore throughput to the plant mills.

Gold production improved by 9% to 1 205kg (38 742oz), which was due to an increase in the recovered grade by 7% to 0.80g/t (0.023oz/t), and increase in ore milled by 2% to 1 506 000 tonnes (1 660 000 tons). Revenue increased by 17% to R695 million (a 24% increase to US\$51 million) as a result of increased production and the higher average gold price received.

Cash operating costs increased by 2% to R557 million (8% increase to US\$41 million). Refer to capital expenditure discussion below.

Capital expenditure increased by 146% to R96 million (increased by 133% to US\$7 million), mainly due to the increase from capitalised stripping activities of R77 million (US\$5.7 million) from the A-zone pit and Watertank pit merger as the ore to waste ratio takes into account a larger merged pit and increased expenditure related to the plant refurbishment and crusher upgrades.