

OPERATIONAL PERFORMANCE

Joel

		FY17	FY16	FY15
Number of employees				
– Permanent		1 962	1 796	1 818
– Contractors		171	97	81
Total		2 133	1 893	1 899
Operational				
Volumes milled	(000t) (metric)	514	542	551
	(000t) (imperial)	567	597	607
Gold produced	(kg)	2 246	2 278	2 258
	(oz)	72 211	73 239	72 596
Gold sold	(kg)	2 280	2 245	2 330
	(oz)	73 303	72 179	74 911
Grade	(g/t)	4.37	4.20	4.10
	(oz/t)	0.127	0.123	0.119
Productivity	(g/TEC)	113.57	117.33	115.65
Development results				
Total metres		3 477	3 541	3 200
Reef metres		1 596	2 315	1 037
Capital metres		532	485	338
Financial				
Revenue	(Rm)	1 309	1 220	1 046
	(US\$m)	96	84	91
Average gold price received	(R/kg)	573 986	543 442	449 026
	(US\$/oz)	1 313	1 166	1 220
Cash operating cost	(Rm)	928	845	755
	(US\$m)	68	58	66
Production profit/(loss)	(Rm)	373	389	276
	(US\$m)	27	27	24
Capital expenditure	(Rm)	243	215	182
	(US\$m)	18	15	16
Cash operating cost	(R/kg)	413 088	371 080	334 168
	(US\$/oz)	945	796	908
All-in sustaining cost	(R/kg)	477 484	424 617	384 022
	(US\$/oz)	1 092	911	1 043
Safety				
Number of fatalities		1	1	0
Lost-time injury frequency rate per million hours worked		2.54	3.49	3.72
Environment				
Electricity consumption	(GWh)	85	108	101
Water consumption – primary activities	(ML)	922	816	671
Greenhouse gas emissions	(000t CO ₂ e)	84	109	104
Intensity data per tonne treated				
– energy		1.17	0.19	0.18
– water		1.79	1.50	1.22
– greenhouse gas emissions		0.16	0.19	0.19
Number of reportable environmental incidents		0	0	0
Community				
Local economic development	(Rm)	7	3	3
Training and development	(Rm)	20	15	15

Joel *continued*

Other salient features

Status of operation	Twin-shaft operation – technically challenging
Life of mine	9 years
Nameplate hoisting capacity (per month)	75 000 tonnes (83 000 tons)
Compliance and certification	New order mining right – December 2007 ISO 14001 – not certified but operates according to the standard's requirements ISO 9001 OHSAS 18001

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)
	2.1	5.00	10	2.4	5.35	13	4.5	5.19	23
Reserves (imperial)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)
	2.3	0.146	335	2.7	0.156	420	5.0	0.151	755

Joel is located in the Free State Province, about 292km from Johannesburg, on the southern edge of the Witwatersrand Basin. The mine comprises two shafts: North and South. The primary economic reef horizon at Joel is a narrow tabular Beatrix Reef deposit, which is accessed via conventional grid development. Mining is conducted to a depth of 1 452m. Ore mined is processed at the Joel plant.

The lost-time injury frequency rate improved by 27% to 2.54 per million hours worked. Regrettably, there was one fatality in FY17 (FY16: one).

Progress was made in the 137 decline capital project and is scheduled to be completed in 2018. Production from specific areas on 137 level is expected to start in March 2018. Project was initiated to extend the life of Joel Mine by approximately eight years and is included in Joel's current life-of-mine plan.

Gold production decreased by 1% to 2 246kg (72 211oz) in FY17. Recovered gold grades improved by 4% to 4.37g/t (0.127oz/t), which mostly offset the 5% decrease in ore milled to 514 000 tonnes (567 000 tons) mainly due to hoisting backlogs. The 7% increase in revenue to R1 309 million (14% increase to US\$96 million) was largely due to the higher average rand gold price received (by 6% to R573 986/kg).

Cash operating costs increased by 10% to R928 million (increased by 17% to US\$68 million) largely as a result of annual wage increases and higher electricity tariffs.

Capital expenditure increased by 13% to R243 million (increased by 20% to US\$18 million), mainly as work progressed on the 137 decline project in FY17.