## **OPERATIONS 2018** CONTINUED

## **Bambanani**

		FY18	FY17	FY16
Number of employees				
– Permanent		1 568	1 464	1 491
– Contractors		163	205	321
Total		1 137	1 669	1 812
Operational				
Volumes milled	(000t) (metric)	233	231	232
	(000t) (imperial)	257	254	256
Gold produced	(kg)	2 821	2 750	3 013
	(oz)	90 698	88 415	96 870
Gold sold	(kg)	2 804	2 745	3 015
	(OZ)	90 151	88 253	96 934
Grade	(g/t)	12.11	11.90	12.99
	(oz/t)	0.353	0.348	0.378
Productivity	(g/TEC)	150.60	148.42	156.54
Development results				
Total metres		1 495	1 591	1 743
Reef metres		0	130	105
Capital metres		0	0	0
Financial				
Revenue	(Rm)	1 616	1 576	1 617
	(US\$m)	126	116	112
Average gold price received	(R/kg)	576 398	574 227	536 410
	(US\$/oz)	1 395	1 314	1 151
Cash operating cost	(Rm)	905	874	808
	(US\$m)	70	64	56
Production profit	(Rm)	720	705	806
·	(US\$m)	56	52	56
Capital expenditure	(Rm)	64	77	106
	(US\$m)	5	6	7
Cash operating cost	(R/kg)	320 724	317 833	268 305
, 5	(US\$/oz)	776	727	576
All-in sustaining cost	(R/kg)	360 462	357 025	304 634
3	(US\$/oz)	873	817	654
Safety				
Number of fatalities		1	1	0
Lost-time injury frequency rate per million hours worked		2.43	5.23	3.59
Environment				
Electricity consumption	(GWh)	145	143	140
Water consumption – primary activities	(ML)	1 527	1 200	1 434
Greenhouse gas emissions	(000t CO <sub>2</sub> e)	141	141	142
Intensity data per tonne treated				
– energy		0.62	0.64	0.60
– water		6.60	5.19	6.18
- greenhouse gas emissions		0.62	0.64	0.60
Number of reportable environmental incidents		0	0	0
Community				
Local economic development	(Rm)	11	14	9
Training and development	(Rm)	25	20	25

## Bambanani continued

Other salient features					
Status of operation	Mature operation with focus on mining of the shaft pillar for the next fer years after which it will be at the end of its operating life				
Life of mine	5 years				
Nameplate hoisting capacity (per month)	32 000 tonnes (35 000 tons)				
Compliance and certification	New order mining right – December 2007				
	ISO 14001 – not certified but operates according to standards requirements				
	ISO 9001				
	OHSAS 18001				

## Mineral reserves as at 30 June 2018

	Proved reserves			Probable reserves			Total mineral reserves		
Reserves (metric)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)
	1.0	12.08	12	-	-	_	1.0	12.08	12
Reserves (imperial)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)
	1.1	0.352	386	_	-	_	1.1	0.352	386

Bambanani, located in the Free State Province, near Welkom and about 260km from Johannesburg, has two surface shafts (the East and West shafts). Mining is conducted to a depth of 2 365m. Activities at the mine focus on the Basal Reef and are limited to shaft pillar extraction. The ore mined is sent to Harmony One Plant for processing. Given the high risk of seismicity at Bambanani, efforts are focused on managing support systems and the rehabilitation of areas with challenging ground conditions.

Regrettably, one fatality occurred at Bambanani in FY18. Focus on safety and fatal risk management remains critical for this operation.

Bambanani is Harmony's most profitable mine. Gold production increased by 3% to 2 821kg (90 698oz) in FY18. This was primarily due to the increase in recovered grade by 2% to 12.11g/t. Volumes milled remained flat year on year at 233 000 tonnes (257 000 tons) in FY18.

Revenue was up by 3% to R1 616 million (9% increase to US\$126 million) mainly due to higher production in FY18.

Cash operating costs increased by 4% to R905 million (or 9% to US\$70 million), mainly due to the increase in annual wages and electricity tariffs.

Capital expenditure decreased by 17% to R64 million (a decrease of 17% to US\$5 million). The decrease was due to reduced capital spending as the Bambanani shaft pillar major capital project was completed at the end of FY17.

The operation is performing well. Safety and disciplined mining are key to its success.