OPERATIONAL PERFORMANCE CONTINUED

SOUTH AFRICA – UNDERGROUND OPERATIONS

Kusasalethu

		FY20	FY19	FY18
Number of employees				
– Permanent		4 237	4 011	3 980
– Contractors		603	930	692
Total		4 840	4 941	4 672
Operational				
Volumes milled	(000t) (metric)	615	742	670
	(000t) (imperial)	678	817	738
Gold produced	(kg)	3 015	4 989	4 429
	(oz)	96 934	160 400	142 395
Gold sold	(kg)	3 085	5 028	4 301
	(oz)	99 185	161 653	138 281
Grade	(g/t)	4.90	6.72	6.61
	(oz/t)	0.143	0.196	0.193
Productivity	(g/TEC)	57.08	98.94	91.54
Development results				
– Total metres		3 039	5 437	4 016
– Reef metres		1 019	1 217	776
– Capital metres		0	0	0
Financial				
Revenue	(Rm)	2 293	2 975	2 483
	(US\$m)	146	210	193
Average gold price received	(R/kg)	743 153	591 742	577 313
	(US\$/oz)	1 476	1 298	1 397
Cash operating cost	(Rm)	2 562	2 377	2 091
	(US\$m)	164	168	163
Production profit	(Rm)	(284)	580	457
	(US\$m)	(19)	41	35
Capital expenditure	(Rm)	188	316	289
	(US\$m)	12	22	22
Operating free cash flow ¹	(Rm)	(458)	282	103
	(US\$m)	(29)	20	8
Cash operating cost	(R/kg)	849 782	476 417	472 177
	(US\$/oz)	1 687	1 045	1 143
All-in sustaining cost	(R/kg)	923 054	556 621	554 302
	(US\$/oz)	1 833	1 221	1 342
Average exchange rate	(R/US\$)	15.66	14.18	12.85
Safety				
Number of fatalities		2	3	5
Lost-time injury frequency rate	per million hours worked	10.72	9.05	6.25
Environment	· · · · · · · · · · · · · · · · · · ·			
Electricity consumption	(GWh)	599	624	595
Water consumption – primary activities	(ML)	2 720	3 205	2 609
Greenhouse gas emissions	(000t CO ₂ e)	635	569	577
Intensity data per tonne treated	(,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
– energy		0.97	0.84	0.90
– water		4.42	4.32	3.89
– greenhouse gas emissions		1.03	0.77	0.3
Number of reportable environmental incidents		0	0	2
Community				
Local economic development ²	(Rm)	9	9	6
Training and development	(Rm)	38	52	33

¹ Operating free cash flow = revenue - cash operating cost - capital expenditure ± impact of run of mine (ROM) costs as per operating results

² Figures include R6 million spent on the local economic development projects

Kusasalethu CONTINUED

Other salient features						
Status of operation	Mature, steady state operation positioned for profitability					
Life of mine	4 years					
Nameplate hoisting capacity (per month)	172 000 tonnes (190 000 tons)					
Compliance and certification	 New order mining right – December 2007 ISO 14001 ISO 9001 Cyanide Code 					

Mineral Reserve estimates at 30 June 2020

	Proved			Probable			Total		
Reserves	Tonnes	Grade	Gold	Tonnes	Grade	Gold	Tonnes	Grade	Gold
(metric)	(Mt)	(g/t)	(000kg)	(Mt)	(g/t)	(000kg)	(Mt)	(g/t)	(000kg)
	1.8	6.92	13	1.3	7.68	10	3.1	7.24	23
Reserves	Tons	Grade	Gold	Tons	Grade	Gold	Tons	Grade	Gold
(imperial)	(Mt)	(oz/t)	(000oz)	(Mt)	(oz/t)	(000oz)	(Mt)	(oz/t)	(000oz)
	2.0	0.202	410	1.4	0.224	320	3.5	0.211	730

Overview of operations

Kusasalethu is a mature, deep-level mine located 90km west of Johannesburg, near the border of Gauteng and North West provinces. With mining conducted at a depth of 3 388m, Kusasalethu is Harmony's deepest mine, with a remaining four-year life of mine.

The mine comprises twin vertical and twin sub-vertical shaft systems and uses conventional mining methods in a sequential grid layout. The mine exploits the Ventersdorp Contact Reef as its primary ore body. Ore mined is treated at the Kusasalethu plant. A shortened life-of-mine plan was implemented in FY16. This plan aims to optimise the mine's cash flow at a higher grade and create a stronger operating margin while providing the flexibility necessary to access the high-grade payshoot of the Ventersdorp Contact Reef below infrastructure, should economic circumstances allow.

Once Mponeng and Mine Waste Solutions have been integrated in our portfolio of assets, we believe there are various surface and service synergies in the West Wits area that could potentially unlock value through driving down units costs.

Operating performance FY20

Tragically, two fatalities occurred at Kusasalethu in FY20, and a third post year-end.

Gold production declined substantially by 40% to 3 015kg (96 934oz), as a result of an 17% regression in the volume of ore milled to 615 000 tonnes and a 27% decrease in recovered grade to 4.90g/t (0.143oz/t). This resulted in Kusasalethu recording a loss of R458 million in FY20, reflectively a more than 100% decrease year on year.

The significant decline in the underground recovered grade was primarily due to geological factors and, to a lesser extent, seismicity. In respect of geology, given the erratic nature of the Ventersdorp Contact Reef, some areas planned to be mined yielded much lower grades than anticipated. Plans were implemented to counter the grade issue, including the fast-tracking of new high-grade raises. By year-end, Kusasalethu was back on track and operating efficiently.

However, the decline in production was somewhat countered by exceptional rise in the gold price enabling the operation to record revenue R2 293 million in FY20. This represented a decline of 23%.

Cash operating costs increased by 8% to R2 562 million mainly due to annual wage and Eskom electricity tariff increases. Capital expenditure decreased by 41% to R188 million (US\$12 million) mainly due to the planned decrease in development for FY20 as well as the restrictions related to the national lockdown in April 2020 and the subsequent phased start-up of operations.

Outlook for FY21

It is anticipated that the mine will be in a position to exceed its production plan and grade guidance now that there is access to the high-grade areas. A 'paired panel mining model', which allows crews to mine more than one panel at any given time, has been rolled out. This improved performance will be evident in the next reporting period.