

OPERATIONAL PERFORMANCE CONTINUED

SOUTH AFRICA – UNDERGROUND OPERATIONS

Joel

		FY20	FY19	FY18
Number of employees				
– Permanent		1 883	1 867	1 914
– Contractors		131	115	184
Total		2 014	1 982	2 098
Operational				
Volumes milled	(000t) (metric)	349	429	454
	(000t) (imperial)	384	473	501
Gold produced	(kg)	1 391	1 567	1 635
	(oz)	44 722	50 379	52 566
Gold sold	(kg)	1 412	1 612	1 656
	(oz)	45 397	51 827	53 242
Grade	(g/t)	3.99	3.65	3.60
	(oz/t)	0.116	0.107	0.105
Productivity	(g/TEC)	64.01	78.10	82.23
Development results				
– Total metres		2 734	3 378	3 331
– Reef metres		832	1 288	431
– Capital metres		0	0	620
Financial				
Revenue	(Rm)	1 037	957	954
	(US\$m)	66	67	74
Average gold price received	(R/kg)	734 620	593 531	576 023
	(US\$/oz)	1 459	1 302	1 394
Cash operating cost	(Rm)	999	967	910
	(US\$m)	64	68	71
Production profit	(Rm)	27	(14)	34
	(US\$m)	2	(2)	3
Capital expenditure	(Rm)	151	187	250
	(US\$m)	10	13	19
Operating free cash flow ¹	(Rm)	(113)	(197)	(206)
	(US\$m)	(8)	(14)	(16)
Cash operating cost	(R/kg)	718 024	617 116	556 468
	(US\$/oz)	1 426	1 354	1 347
All-in sustaining cost	(R/kg)	826 970	701 644	661 921
	(US\$/oz)	1 642	1 539	1 602
Average exchange rate	(R/US\$)	15.66	14.18	12.85
Safety				
Number of fatalities		0	0	2
Lost-time injury frequency rate	per million hours worked	2.03	3.16	2.87
Environment				
Electricity consumption	(GWh)	85	87	81
Water consumption – primary activities	(ML)	853	838	788
Greenhouse gas emissions	(000t CO ₂ e)	90	80	79
Intensity data per tonne treated				
– energy		0.24	0.20	0.18
– water		2.44	1.95	1.74
– greenhouse gas emissions		0.26	0.19	0.18
Number of reportable environmental incidents		0	0	0
Community				
Local economic development ²	(Rm)	6	4	5
Training and development	(Rm)	18	19	23

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 R3 million spent on the local economic development projects

Joel CONTINUED

Other salient features

Status of operation	Twin-shaft operation – technically challenging, decline project nearing completion
Life of mine	10 years
Nameplate hoisting capacity (per month)	60 000 tonnes (83 000 tons)
Compliance and certification	<ul style="list-style-type: none">• New order mining right – December 2007• ISO 14001 – not certified but operates according to the standard's requirements• ISO 9001• SAS 18001

Mineral Reserve estimates at 30 June 2020

	Proved			Probable			Total		
Reserves (metric)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)	Tonnes (Mt)	Grade (g/t)	Gold (000kg)
	2.9	4.85	14	1.4	4.68	7	4.3	4.80	21
Reserves (imperial)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)	Tons (Mt)	Grade (oz/t)	Gold (000oz)
	3.2	0.142	447	1.6	0.137	214	4.7	0.140	661

Overview of operations

Joel is a twin-shaft mining operation located in the Free State, approximately 290km southwest of Johannesburg, on the southern edge of the Witwatersrand Basin.

A pre-developed scattered mining system is used. This system allows for unpay and geologically complex areas to be left unmined, with some cognisance taken of the overall panel configuration and stability of footwall development. This allows for mining to be selective, based on the proven ore reserve during the development phase. The primary economic reef that is mined is the narrow tabular Beatrix Reef deposit, which is accessed via conventional grid development. Mining is currently being conducted to a depth of 1 379m below collar. As the Joel plant was decommissioned in FY19, ore mined is now processed at the Harmony One plant.

Operating performance FY20

In FY20, gold production decreased by 11% to 1 391kg (44 722oz), owing to the 19% decrease in tonnes milled to 349 000 tonnes, despite a 9% increase in the recovered grade to 3.99g/t. The decline in ore milled was primarily the result of the lockdown and restrictions associated with the Covid-19 pandemic.

The exceptional rise in the gold price assisted to increase revenue to R1 037 million. Cash operating costs increased by 3% to R999 million mainly due to annual wage and Eskom electricity tariff increases. Capital expenditure decreased by 19% to R151 million owing to all expenditure being stopped during the national lockdown in April 2020 and subsequent phased start-up of operations.

Underpinning Joel's performance was a good safety record, with the mine achieving 1 million fatality free shifts in FY20.

Another notable achievement during the year was the progression of the 137 decline project, which is now approximately 90% completed and is now in the final phase. The decline project was initiated to extend the life of Joel by approximately eight to nine years and is included in the current life-of-mine plan of 10 years.

However, the following installations were not completed due to the impact of Covid-19:

- Installation and commission of Bulkhead 2 & 5, 137 level tip 2 & 5 and escape way
- Installation of the 129 – 137 level chairlift
- Decline steel barricade

This outstanding project work is planned to be completed by April 2021.

Outlook for FY21

The key focus areas in FY21 will be to complete all construction work commitments in the project area. Our development plan to open reserves will also be prioritised. In addition, we will continue with exploration drilling to identify new reserves below 137 level and in the "Klippan area". Ultimately, this will increase our volumes and grade output resulting in a safe and profitable FY21.