

OPERATIONAL PERFORMANCE

SOUTH AFRICA

Tshepong

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 4 304 | 4 232 | 4 218 |
| – Contractors | | 283 | 250 | 210 |
| Total | | 4 587 | 4 482 | 4 428 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 1 027 | 1 088 | 992 |
| | (000t) (imperial) | 1 132 | 1 200 | 1 095 |
| Gold produced | (kg) | 4 819 | 5 031 | 4 278 |
| | (oz) | 154 934 | 161 751 | 137 540 |
| Gold sold | (kg) | 4 817 | 5 029 | 4 337 |
| | (oz) | 154 869 | 161 685 | 139 437 |
| Grade | (g/t) | 4.69 | 4.62 | 4.31 |
| | (oz/t) | 0.137 | 0.135 | 0.126 |
| Productivity | (g/TEC) | 95.55 | 100.52 | 86.05 |
| Development results | | | | |
| Total metres | | 11 460 | 12 077 | 13 053 |
| Reef metres | | 1 735 | 1 745 | 1 822 |
| Capital metres | | 383 | 0 | 0 |
| Financial | | | | |
| Revenue | (Rm) | 2 760 | 2 756 | 1 948 |
| | (US\$m) | 203 | 190 | 170 |
| Average gold price received | (R/kg) | 572 921 | 547 967 | 449 211 |
| | (US\$/oz) | 1 311 | 1 176 | 1 221 |
| Cash operating cost | (Rm) | 2 032 | 1 845 | 1 588 |
| | (US\$m) | 149 | 127 | 139 |
| Production profit/(loss) | (Rm) | 731 | 912 | 337 |
| | (US\$m) | 54 | 63 | 29 |
| Capital expenditure | (Rm) | 387 | 307 | 313 |
| | (US\$m) | 28 | 21 | 27 |
| Cash operating cost | (R/kg) | 421 573 | 366 767 | 371 149 |
| | (US\$/oz) | 964 | 787 | 1 008 |
| All-in sustaining cost | (R/kg) | 506 969 | 438 401 | 454 512 |
| | (US\$/oz) | 1 160 | 940 | 1 235 |
| Safety | | | | |
| Number of fatalities | | 0 | 0 | 1 |
| Lost-time injury frequency rate per million hours worked | | 7.34 | 6.40 | 5.72 |
| Environment | | | | |
| Electricity consumption | (GWh) | 287 | 301 | 307 |
| Water consumption – primary activities | (ML) | 1 229 | 1 230 | 1 110 |
| Greenhouse gas emissions | (000t CO ₂ e) | 286 | 306 | 316 |
| Intensity data per tonne treated | | | | |
| – energy | | 0.28 | 0.27 | 0.31 |
| – water | | 1.19 | 1.13 | 1.12 |
| – greenhouse gas emissions | | 0.28 | 0.27 | 0.32 |
| Number of reportable environmental incidents | | 0 | 0 | 0 |
| Community | | | | |
| Local economic development* | (Rm) | 6 | 7 | 33 |
| Training and development | (Rm) | 37 | 37 | 33 |

* Included in the total for FY15 is an amount of R24 million that was capitalised as part of the hostel upgrades (FY16: R0 million, FY17: R0 million)

Tshepong *continued*

Other salient features

| | |
|---|---|
| Status of operation | Steady state operation: development continues |
| Life of mine | 17 years |
| Nameplate hoisting capacity (per month) | 192 000 tonnes (212 000 tons) |
| Compliance and certification | New order mining right – December 2007 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) |
| | 21.0 | 5.91 | 124 | 4.6 | 5.36 | 24 | 25.6 | 5.82 | 149 |
| Reserves (imperial) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) |
| | 23.2 | 0.173 | 4 002 | 5.0 | 0.156 | 785 | 28.2 | 0.170 | 4 787 |

* As at 30 June 2017, the mineral reserves reported are for Tshepong and Phakisa combined. From FY18, Tshepong and Phakisa will be integrated and reported on as a single entity, Tshepong operations

Tshepong is located in the Free State Province, near Welkom, about 248km from Johannesburg. Mining is conducted to a depth of 2 349m. The mine uses conventional undercut mining in the Basal Reef while the B Reef is exploited as a high-grade secondary reef. Ore mined is processed at the Harmony One plant.

During FY17, no fatalities occurred and Tshepong achieved a first ever three million fatality-free shifts on 31 March 2017, a total of 949 fatality-free days.

In FY17, Tshepong was Harmony's second highest contributor to cash flow from the South African operations. Both volume and kilograms were negatively impacted by under performance in the higher-grade decline section of the mine, mainly due to moving crews to other sections. The continued build-up in production from the sub-66 decline is driving the improvement in grade.

Gold production decreased by 4% to 4 819kg (154 934oz) in FY17, primarily due to the decline in volumes mined. Ore milled decreased by 6% to 1 027 000 tonnes (1 132 000 tons) while recovered gold grade increased by 2% to 4.69g/t (0.137oz/t). The decrease in gold production was offset by a 5% increase in the average rand gold price received to R572 921 kg. Revenue remained flat year on year at R2 760 million (7% increase to US\$203 million).

With the sub-71 decline capital project, reef/waste split development progressed well and is on schedule. The sub-75 decline capital project continued.

Cash operating costs increased by 10% to R2 032 million (increased by 17% to US\$149 million), mainly due to labour cost increases and higher electricity tariffs.

Capital expenditure increased by 26% to R387 million (increased by 33% to US\$28 million). Capital was mainly spent on the sub-71 and sub-75 decline project.

Management's main focus is on reducing unit costs in all disciplines, adhering to maintenance schedules, cleaning dams, quality mining and performance of development section in order to sustain current stopping profile.

OPERATIONAL PERFORMANCE CONTINUED

Phakisa

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 3 806 | 3 547 | 3 344 |
| – Contractors | | 305 | 350 | 392 |
| Total | | 4 111 | 3 897 | 3 736 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 668 | 686 | 611 |
| | (000t) (imperial) | 737 | 756 | 674 |
| Gold produced | (kg) | 4 009 | 3 988 | 3 118 |
| | (oz) | 128 893 | 128 217 | 100 246 |
| Gold sold | (kg) | 3 999 | 3 991 | 3 156 |
| | (oz) | 128 570 | 128 314 | 101 468 |
| Grade | (g/t) | 6.00 | 5.81 | 5.10 |
| | (oz/t) | 0.175 | 0.170 | 0.149 |
| Productivity | (g/TEC) | 88.64 | 93.54 | 76.99 |
| Development results | | | | |
| Total metres | | 8 002 | 11 022 | 12 138 |
| Reef metres | | 1 293 | 1 785 | 1 749 |
| Capital metres | | 216 | 0 | 162 |
| Financial | | | | |
| Revenue | (Rm) | 2 302 | 2 186 | 1 420 |
| | (US\$m) | 169 | 151 | 124 |
| Average gold price received | (R/kg) | 575 663 | 547 829 | 449 969 |
| | (US\$/oz) | 1 317 | 1 175 | 1 223 |
| Cash operating cost | (Rm) | 1 645 | 1 378 | 1 166 |
| | (US\$m) | 121 | 95 | 102 |
| Production profit/(loss) | (Rm) | 660 | 811 | 239 |
| | (US\$m) | 49 | 56 | 21 |
| Capital expenditure | (Rm) | 330 | 323 | 403 |
| | (US\$m) | 24 | 22 | 35 |
| Cash operating cost | (R/kg) | 410 387 | 345 457 | 373 876 |
| | (US\$/oz) | 939 | 741 | 1 016 |
| All-in sustaining cost | (R/kg) | 507 849 | 436 477 | 495 644 |
| | (US\$/oz) | 1 162 | 936 | 1 347 |
| Safety | | | | |
| Number of fatalities | | 1 | 2 | 0 |
| Lost-time injury frequency rate per million hours worked | | 6.80 | 6.64 | 8.76 |
| Environment | | | | |
| Electricity consumption | (GWh) | 179 | 152 | 143 |
| Water consumption – primary activities | (ML) | 1 490 | 1 254 | 1 155 |
| Greenhouse gas emissions | (000t CO ₂ e) | 177 | 154 | 147 |
| Intensity data per tonne treated | | | | |
| – energy | | 0.27 | 0.22 | 0.23 |
| – water | | 2.23 | 1.83 | 1.89 |
| – greenhouse gas emissions | | 0.27 | 0.22 | 0.24 |
| Number of reportable environmental incidents | | 0 | 0 | 0 |
| Community | | | | |
| Local economic development* | (Rm) | 6 | 6 | 12 |
| Training and development | (Rm) | 37 | 35 | 32 |

* Included in the total for FY15 is an amount of R3 million that was capitalised as part of the hostel upgrades (FY16: R0 million; FY17: R0 million)

Phakisa *continued*

Other salient features

| | |
|---|--|
| Status of operation | Production ramp up continues |
| Life of mine | 9 years |
| Nameplate hoisting capacity (per month) | 91 000 tonnes (101 000 imperial tons) |
| Compliance and certification | New order mining right – December 2007 ISO 14001 ISO 9001 OHSAS 18001 |

Mineral reserves as at 30 June 2017

See Tshepong. As at 30 June 2017, Phakisa's mineral reserves are included with those of Tshepong. From FY18, Phakisa and Tshepong will be integrated and reported on as a single entity, Tshepong operations.

Phakisa is located in the Free State Province, some 252km from Johannesburg. The mine has two shafts, the main Phakisa shaft and the Nyala shaft. The latter is used to hoist rock and serves as a second escape route. Phakisa exploits the Basal Reef. Mining is conducted to a depth of 2 426m. Ore mined is processed at the Harmony One plant. Phakisa continues to build up to full production, which is expected within the next two years.

Regrettably there was one fatality in FY17.

In line with the planned build-up at Phakisa, the recovered grade increased by 3% to 6.00g/t, offsetting the 3% decrease in ore milled (to 668 000 tonnes or 737 000 tons) resulting in a slight increase in gold produced by 0.5% to 4 009kg (128 893oz).

The integration between Tshepong and Phakisa mines involves the cross-tramming of ore from Phakisa to Tshepong which will de-bottleneck constraints on the over-utilised Phakisa infrastructure. Accelerated development was conducted in FY17 to facilitate the holing between the mines on 73 level.

Cash operating costs increased by 19% to R1 645 million (increased by 27% to US\$121 million) due to increased production crews to accelerate the production build up, increased expenditure on consumable as production ramps up and annual wage and electricity tariff increases.

Capital expenditure increased by 2% to R330 million (by 9% to US\$24 million), primarily spent on ongoing capital development.

Key deliverables include safe production, achieving volume and development targets, and increased ledging to improve flexibility. Ventilation change-overs were completed on 69 and 71 levels so that ventilation at Tshepong could be utilised at Phakisa.

OPERATIONAL PERFORMANCE CONTINUED

Bambanani

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 1 464 | 1 491 | 1 517 |
| – Contractors | | 205 | 321 | 330 |
| Total | | 1 669 | 1 812 | 1 847 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 231 | 232 | 229 |
| | (000t) (imperial) | 254 | 256 | 253 |
| Gold produced | (kg) | 2 750 | 3 013 | 2 908 |
| | (oz) | 88 415 | 96 870 | 93 495 |
| Gold sold | (kg) | 2 745 | 3 015 | 2 947 |
| | (oz) | 88 253 | 96 934 | 94 748 |
| Grade | (g/t) | 11.90 | 12.99 | 12.70 |
| | (oz/t) | 0.348 | 0.378 | 0.370 |
| Productivity | (g/TEC) | 148.42 | 156.54 | 153.08 |
| Development results | | | | |
| Total metres | | 1 591 | 1 743 | 1 150 |
| Reef metres | | 130 | 105 | 15 |
| Capital metres | | 0 | 0 | 0 |
| Financial | | | | |
| Revenue | (Rm) | 1 576 | 1 617 | 1 330 |
| | (US\$m) | 116 | 112 | 116 |
| Average gold price received | (R/kg) | 574 227 | 536 410 | 451 200 |
| | (US\$/oz) | 1 314 | 1 151 | 1 226 |
| Cash operating cost | (Rm) | 874 | 808 | 697 |
| | (US\$m) | 64 | 56 | 61 |
| Production profit/(loss) | (Rm) | 705 | 806 | 625 |
| | (US\$m) | 52 | 56 | 55 |
| Capital expenditure | (Rm) | 77 | 106 | 110 |
| | (US\$m) | 6 | 7 | 10 |
| Cash operating cost | (R/kg) | 317 833 | 268 305 | 239 552 |
| | (US\$/oz) | 727 | 576 | 651 |
| All-in sustaining cost | (R/kg) | 357 025 | 304 634 | 270 623 |
| | (US\$/oz) | 817 | 654 | 735 |
| Safety | | | | |
| Number of fatalities | | 1 | 0 | 1 |
| Lost-time injury frequency rate per million hours worked | | 5.23 | 3.59 | 4.63 |
| Environment | | | | |
| Electricity consumption | (GWh) | 143 | 140 | 133 |
| Water consumption – primary activities | (ML) | 1 200 | 1 434 | 1 731 |
| Greenhouse gas emissions | (000t CO ₂ e) | 141 | 142 | 137 |
| Intensity data per tonne treated | | | | |
| – energy | | 0.64 | 0.60 | 0.59 |
| – water | | 5.19 | 6.18 | 7.57 |
| – greenhouse gas emissions | | 0.64 | 0.60 | 0.61 |
| Number of reportable environmental incidents | | 0 | 0 | 0 |
| Community | | | | |
| Local economic development | (Rm) | 14 | 9 | 3 |
| Training and development | (Rm) | 20 | 25 | 17 |

Bambanani *continued*

Other salient features

| | |
|---|---|
| Status of operation | Mature operation with focus on mining of the shaft pillar for the next few 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 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) |
| | 1.1 | 11.54 | 12 | – | – | – | 1.1 | 11.54 | 12 |
| Reserves (imperial) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) |
| | 1.2 | 0.337 | 401 | – | – | – | 1.2 | 0.337 | 401 |

Bambanani, located in the Free State Province, near Welkom and about 262km 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 FY17. Focus on safety and fatal risk management has further intensified as we strive for zero harm.

Bambanani is Harmony's most profitable mine despite gold production decreasing by 9% to 2 750kg (88 415oz) in FY17. This was primarily due to decline in the recovered grade by 8% to 11.90g/t after an exceptional grade performance in FY16 remained flat year on year at 231 000 tonnes (254 000 tons) in FY17.

Revenue was down by 3% to R1 576 million (4% increase to US\$116 million) mainly due to lower production in FY17.

Cash operating costs increased by 8% to R874 million (or 14% to US\$64 million), mainly due to the increase in annual wages and electricity tariffs.

Capital expenditure decreased by 27% to R77 million (a decrease of 14% to US\$6 million). The decrease was due reduced capital spending as the Bambanani shaft pillar major capital project was completed at the end of FY17.

OPERATIONAL PERFORMANCE CONTINUED

Target 1

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 1 689 | 1 653 | 1 683 |
| – Contractors | | 222 | 272 | 266 |
| Total | | 1 911 | 1 925 | 1 949 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 745 | 739 | 749 |
| | (000t) (imperial) | 822 | 814 | 826 |
| Gold produced | (kg) | 2 669 | 3 387 | 3 824 |
| | (oz) | 85 809 | 108 895 | 122 944 |
| Gold sold | (kg) | 2 642 | 3 419 | 3 868 |
| | (oz) | 84 942 | 109 923 | 124 358 |
| Grade | (g/t) | 3.58 | 4.58 | 5.11 |
| | (oz/t) | 0.104 | 0.134 | 0.149 |
| Productivity | (g/TEC) | 126.66 | 155.77 | 172.25 |
| Development results | | | | |
| Total metres | | 3 656 | 3 459 | 4 174 |
| Reef metres | | 104 | 182 | 290 |
| Financial | | | | |
| Revenue | (Rm) | 1 506 | 1 833 | 1 738 |
| | (US\$m) | 111 | 126 | 152 |
| Average gold price received | (R/kg) | 570 091 | 536 196 | 449 319 |
| | (US\$/oz) | 1 304 | 1 150 | 1 221 |
| Cash operating cost | (Rm) | 1 356 | 1 242 | 1 178 |
| | (US\$m) | 100 | 86 | 103 |
| Production profit/(loss) | (Rm) | 161 | 583 | 547 |
| | (US\$m) | 12 | 40 | 48 |
| Capital expenditure | (Rm) | 324 | 322 | 296 |
| | (US\$m) | 24 | 22 | 26 |
| Cash operating cost | (R/kg) | 508 082 | 366 814 | 308 156 |
| | (US\$/oz) | 1 162 | 787 | 837 |
| All-in sustaining cost | (R/kg) | 651 833 | 471 876 | 395 669 |
| | (US\$/oz) | 1 491 | 1 012 | 1 075 |
| Safety | | | | |
| Number of fatalities | | 0 | 2 | 0 |
| Lost-time injury frequency rate per million hours worked | | 11.80 | 4.91 | 4.51 |
| Environment | | | | |
| Electricity consumption | (GWh) | 186 | 247 | 242 |
| Water consumption – primary activities | (ML) | 678 | 808 | 808 |
| Greenhouse gas emissions | (000t CO ₂ e) | 184 | 251 | 249 |
| Intensity data per tonne treated | | | | |
| – energy | | 0.25 | 0.33 | 0.32 |
| – water | | 0.91 | 1.09 | 1.22 |
| – greenhouse gas emissions | | 0.25 | 0.33 | 0.33 |
| Number of reportable environmental incidents | | 0 | 0 | 0 |
| Community | | | | |
| Local economic development | (Rm) | 5 | 4 | 4 |
| Training and development | (Rm) | 36 | 34 | 30 |

Target 1 *continued*

Other salient features

| | |
|---|--|
| Status of operation | Single, cost efficient shaft operation. Geological drilling to be conducted in the next 12 months to further evaluate capitalisation of the operation. |
| Life of mine | 7 years |
| Nameplate hoisting capacity (per month) | 97 000 tonnes (107 000 tons) |
| Compliance and certification | New order mining right – December 2007 ISO 14001 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) |
| | 3.2 | 4.18 | 13 | 2.0 | 4.29 | 9 | 5.2 | 4.22 | 22 |
| Reserves (imperial) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) |
| | 3.5 | 0.122 | 430 | 2.2 | 0.125 | 274 | 5.7 | 0.123 | 705 |

Target 1 is located in the Free State Province, some 270km southwest of Johannesburg. Mining operations at Target 1 comprise one primary underground mine, to a depth of approximately 2 945m. While most of the ore extracted comes from mechanised mining (massive mining techniques), conventional stoping is still employed primarily to destress areas ahead of mechanised mining. Ore mined is processed at the Target plant. The gold mineralisation currently exploited at Target 1 is contained within a succession of Elsburg and Dreyerskuil quartz pebble conglomerate reefs.

Target 1 manages its risks by focusing on trackless development to ensure timeous availability of massive stopes and to prevent excessive dilution from waste and backfill in the pillar areas, which could impact negatively on the delivered grade. Future success will depend on the availability of trackless mining equipment and performance regarding volumes and grade.

No fatalities occurred during the year (FY16: two).

Gold production decreased by 21% to 2 669kg (85 809oz) in FY17 as a result of 22% decrease in the recovered grade to 3.58g/t (FY16: 4.58g/t). Production was severely affected by unstable ground conditions which hampered further mining in the higher grade areas. Due to limited flexibility, a narrow reef mining method was implemented to access the ore. Grade and production improved in the second half of FY17 and a better performance is expected from Target 1 in FY18.

Revenue decreased by 18% to R1 506 million (12% decrease to US\$111 million) as a result of the decrease in the production for FY17.

Cash operating costs rose by 9% to R1 356 million (16% increase to US\$100 million). Reduced expenditure on consumables partially offset an increase in annual labour costs and electricity tariffs.

Capital expenditure in FY17 remained flat at R324 million (FY16: R322 million) (increase of 1% to US\$24 million), as a zero-based costing exercise was implemented to manage costs and cash flow following the lower than expected production performance.

OPERATIONAL PERFORMANCE CONTINUED

Doornkop

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 2 847 | 2 471 | 2 977 |
| – Contractors | | 645 | 443 | 493 |
| Total | | 3 492 | 2 914 | 3 470 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 641 | 630 | 603 |
| | (000t) (imperial) | 706 | 695 | 665 |
| Gold produced | (kg) | 2 673 | 2 730 | 2 663 |
| | (oz) | 85 939 | 87 772 | 85 618 |
| Gold sold | (kg) | 2 712 | 2 712 | 2 711 |
| | (oz) | 87 193 | 87 193 | 87 160 |
| Grade | (g/t) | 4.17 | 4.33 | 4.42 |
| | (oz/t) | 0.122 | 0.126 | 0.129 |
| Productivity | (g/TEC) | 77.08 | 83.49 | 68.47 |
| Development results | | | | |
| Total metres (excl. capital metres) | | 9 961 | 7 766 | 8 919 |
| Reef metres | | 1 337 | 1 688 | 1 701 |
| Capital metres | | 1 316 | 0 | 0 |
| Financial | | | | |
| Revenue | (Rm) | 1 553 | 1 480 | 1 220 |
| | (US\$m) | 114 | 102 | 107 |
| Average gold price received | (R/kg) | 572 494 | 545 770 | 449 857 |
| | (US\$/oz) | 1 310 | 1 171 | 1 222 |
| Cash operating cost | (Rm) | 1 224 | 1 058 | 1 071 |
| | (US\$m) | 90 | 73 | 94 |
| Production profit/(loss) | (Rm) | 312 | 433 | 128 |
| | (US\$m) | 23 | 30 | 12 |
| Capital expenditure | (Rm) | 243 | 208 | 245 |
| | (US\$m) | 18 | 14 | 21 |
| Cash operating cost | (R/kg) | 457 752 | 387 585 | 402 065 |
| | (US\$/oz) | 1 047 | 831 | 1 092 |
| All-in sustaining cost | (R/kg) | 562 907 | 473 562 | 501 151 |
| | (US\$/oz) | 1 288 | 1 016 | 1 362 |
| Safety | | | | |
| Number of fatalities | | 0 | 0 | 1 |
| Lost-time injury frequency rate per million hours worked | | 7.50 | 12.27 | 7.14 |
| Environment | | | | |
| Electricity consumption | (GWh) | 188 | 203 | 205 |
| Water consumption – primary activities | (ML) | 947 | 1 135 | 733 |
| Greenhouse gas emissions | (000t CO ₂ e) | 186 | 206 | 211 |
| Intensity data per tonne treated | | | | |
| – energy | | 0.30 | 0.32 | 0.34 |
| – water | | 1.48 | 1.80 | 1.26 |
| – greenhouse gas emissions | | 0.30 | 0.32 | 0.35 |
| Number of reportable environmental incidents | | 0 | 0 | 0 |
| Community | | | | |
| Local economic development* | (Rm) | 8 | 4 | 37 |
| Training and development | (Rm) | 42 | 30 | 35 |

* Included in the total for FY16 is an amount of R1 million that was capitalised as part of the hostel upgrades (FY15: R28 million, FY17: R0 million)

Doornkop *continued*

Other salient features

| | |
|---|---|
| Status of operation | Mining takes place on the South Reef at this single-shaft operation. |
| Life of mine | 18 years |
| Nameplate hoisting capacity (per month) | 103 000 tonnes (113 000 tons) |
| Compliance and certification | New order mining right – October 2008 ISO 14001 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 | 4.97 | 11 | 2.5 | 4.96 | 12 | 4.6 | 4.96 | 23 |
| Reserves (imperial) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) |
| | 2.4 | 0.145 | 343 | 2.7 | 0.145 | 392 | 5.1 | 0.145 | 735 |

Doornkop, a single-shaft operation, is located in the Gauteng province of South Africa, approximately 30km west of Johannesburg, on the northern rim of the Witwatersrand Basin. Mining is conducted to a depth of 1 978m. The operation focuses on narrow-reef conventional mining of the South Reef. Ore from the operation is processed at the Doornkop plant.

Safety improvements were realised and Doornkop achieved its first ever two million fatality-free shift on 17 December 2016 after working 872 days fatality-free. There were no fatalities in FY17. The lost-time injury frequency rate improved by 39% to 7.50 per million hours worked in FY17 from 12.27 in FY16.

Gold production decreased by 2% to 2 673kg (85 939oz) in FY17. A 2% increase in ore milled to 641 000 tonnes (706 000 tons) was offset by a 4% decrease in the recovered gold grade to 4.17g/t (0.122oz/t). The decrease in the grade is due to the lower plant call factor owing to lower than expected plant efficiencies. Management at the shaft are focused on improving these efficiencies in FY18.

Despite the decrease in gold production, the 5% increase in the average rand gold price received (which included the gains realised on the gold forward hedging contracts) resulted in a 5% increase in revenue to R1 553 million (12% increase to US\$114 million). The increase in dollar terms was also due to the 6% strengthening of the rand/US dollar exchange rate to R13.60 in FY17 (FY16: R14.50/US\$).

Cash operating costs increased by 16% to R1 224 million (increased by 23% to US\$90 million) as a results of annual wage and electricity tariff increases as well as additional crews brought in to accelerate production. Capital expenditure increased by 17% to R243 million (increased by 29% to US\$18 million) owing to an increase in shaft capital development on the 207 and 212 levels.

The planned seismic survey was completed during FY17 and led to an increase in the mine's reserves and a better understanding of the mines geological structures. All changes related to the survey and geological drilling will be updated in the FY19 geological interpretation and life-of-mine design.

OPERATIONAL PERFORMANCE CONTINUED

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.

OPERATIONAL PERFORMANCE CONTINUED

Kusasaletu

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 4 050 | 3 944 | 3 898 |
| – Contractors | | 538 | 539 | 1 020 |
| Total | | 4 588 | 4 483 | 4 918 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 607 | 668 | 908 |
| | (000t) (imperial) | 670 | 736 | 1 001 |
| Gold produced | (kg) | 4 394 | 3 863 | 3 953 |
| | (oz) | 141 270 | 124 198 | 127 092 |
| Gold sold | (kg) | 4 498 | 3 822 | 4 297 |
| | (oz) | 144 614 | 122 880 | 138 151 |
| Grade | (g/t) | 7.24 | 5.78 | 4.35 |
| | (oz/t) | 0.211 | 0.169 | 0.127 |
| Productivity | (g/TEC) | 89.05 | 77.80 | 65.59 |
| Development results | | | | |
| Total metres | | 5 101 | 7 183 | 13 777 |
| Reef metres | | 1 185 | 1 517 | 2 436 |
| Capital metres | | 0 | 0 | 59 |
| Financial | | | | |
| Revenue | (Rm) | 2 575 | 2 078 | 1 939 |
| | (US\$m) | 189 | 143 | 169 |
| Average gold price received | (R/kg) | 572 376 | 543 633 | 451 211 |
| | (US\$/oz) | 1 309 | 1 166 | 1 226 |
| Cash operating cost | (Rm) | 2 019 | 1 848 | 1 866 |
| | (US\$m) | 148 | 127 | 163 |
| Production profit/(loss) | (Rm) | 494 | 262 | (57) |
| | (US\$m) | 36 | 18 | (5) |
| Capital expenditure | (Rm) | 289 | 360 | 463 |
| | (US\$m) | 21 | 25 | 40 |
| Cash operating cost | (R/kg) | 459 422 | 478 277 | 472 112 |
| | (US\$/oz) | 1 051 | 1 026 | 1 283 |
| All-in sustaining cost | (R/kg) | 541 247 | 584 498 | 587 406 |
| | (US\$/oz) | 1 238 | 1 254 | 1 596 |
| Safety | | | | |
| Number of fatalities | | 0 | 2 | 1 |
| Lost-time injury frequency rate per million hours worked | | 10.29 | 7.06 | 25.80 |
| Environment | | | | |
| Electricity consumption | (GWh) | 616 | 611 | 682 |
| Water consumption – primary activities | (ML) | 613 | 1 671 | 1 342 |
| Greenhouse gas emissions | (000t CO ₂ e) | 610 | 620 | 702 |
| Intensity data per tonne treated | | | | |
| – energy | | 1.01 | 0.91 | 0.75 |
| – water | | 1.00 | 2.50 | 1.48 |
| – greenhouse gas emissions | | 0.10 | 0.91 | 0.77 |
| Number of reportable environmental incidents | | 3 | 1 | 1 |
| Community | | | | |
| Local economic development* | (Rm) | 5 | 5 | 30 |
| Training and development | (Rm) | 45 | 26 | 50 |

* Included in the total for FY15 is an amount of R18 million that was capitalised as part of the hostel upgrades (FY16: R0 million, FY17: R0 million)

Kusasaletu *continued*

Other salient features

| | |
|---|---|
| Status of operation | Positioned for profitability |
| Life of mine | 5 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 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) |
| | 4.3 | 6.95 | 30 | 0.6 | 6.18 | 4 | 4.9 | 6.85 | 34 |
| Reserves (imperial) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) |
| | 4.7 | 0.203 | 959 | 0.7 | 0.180 | 129 | 5.4 | 0.200 | 1 088 |

Kusasaletu is located about 90km from Johannesburg, near the provincial border of Gauteng and North West Province, in the West Witwatersrand Basin where it mines the Ventersdorp Contact Reef as its main ore body. The mine comprises twin vertical and twin sub-vertical shaft systems, and uses conventional mining methods in a sequential grid layout. Mining is conducted to a depth of 3 388m, making it Harmony's deepest mine. Ore mined is treated at the Kusasaletu plant.

Kusasaletu achieved one million fatality-free shifts on 31 January 2017. Regrettably, post year-end, a seismic event triggered a fall-of-ground accident which led to five fatalities.

At the end of FY16 it was resolved that Kusasaletu's life of mine would be reduced from 25 years to five years to optimise cash flow and access the higher grade areas of the mine. Kusasaletu generated a profit and free cash flow in FY17. The recovered gold grade increased by 25% to 7.24g/t (0.211oz/t), which offset a 9% reduction in the volume of ore milled to 607 000 tonnes (670 000 tons), resulting in a 14% increase in gold production to 4 394kg (141 270oz).

The operation was impacted by illegal industrial action during January 2017 and March 2017. Management instituted disciplinary measures against the instigators and the AMCU branch leadership. Employee and union relations after the illegal industrial action were largely stable.

Critical infrastructure and related maintenance repair work was conducted at Kusasaletu over the extended Easter break. A notable reduction in unplanned infrastructure stoppages was evident following the maintenance work conducted.

Revenue increased by 24% to R2 575 million in FY17 (increased by 32% to US\$189 million) as a result of the higher average rand gold price received and increased production.

Cash operating costs increased by 9% to R2 019 million (17% to US\$148 million) due to wage increases, higher electricity tariffs and costs associated with the maintenance work conducted.

Capital expenditure decreased by 20% to R289 million (16% decrease to US\$21 million). The variance was mainly due to the slow-down in ongoing capital development as a result of Kusasaletu's reduced life of mine.

OPERATIONAL PERFORMANCE CONTINUED

Masimong

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 2 437 | 2 478 | 2 470 |
| – Contractors | | 107 | 112 | 99 |
| Total | | 2 544 | 2 590 | 2 569 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 640 | 650 | 670 |
| | (000t) (imperial) | 706 | 716 | 739 |
| Gold produced | (kg) | 2 538 | 2 432 | 2 463 |
| | (oz) | 81 599 | 78 190 | 79 187 |
| Gold sold | (kg) | 2 539 | 2 432 | 2 491 |
| | (oz) | 81 631 | 78 191 | 80 087 |
| Grade | (g/t) | 3.97 | 3.74 | 3.68 |
| | (oz/t) | 0.116 | 0.109 | 0.107 |
| Productivity | (g/TEC) | 89.73 | 83.85 | 75.27 |
| Development results | | | | |
| Total metres | | 4 754 | 4 755 | 9 855 |
| Reef metres | | 1 054 | 1 549 | 2 376 |
| Financial | | | | |
| Revenue | (Rm) | 1 452 | 1 318 | 1 118 |
| | (US\$m) | 107 | 91 | 98 |
| Average gold price received | (R/kg) | 571 870 | 541 806 | 448 867 |
| | (US\$/oz) | 1 308 | 1 162 | 1 220 |
| Cash operating cost | (Rm) | 1 115 | 1 038 | 979 |
| | (US\$m) | 82 | 72 | 86 |
| Production profit/(loss) | (Rm) | 339 | 280 | 127 |
| | (US\$m) | 25 | 19 | 11 |
| Capital expenditure | (Rm) | 119 | 110 | 166 |
| | (US\$m) | 9 | 8 | 15 |
| Cash operating cost | (R/kg) | 439 457 | 426 904 | 397 380 |
| | (US\$/oz) | 1 005 | 916 | 1 080 |
| All-in sustaining cost | (R/kg) | 500 938 | 493 527 | 479 096 |
| | (US\$/oz) | 1 146 | 1 059 | 1 302 |
| Safety | | | | |
| Number of fatalities | | 1 | 2 | 1 |
| Lost-time injury frequency rate per million hours worked | | 10.54 | 10.05 | 12.09 |
| Environment | | | | |
| Electricity consumption | (GWh) | 170 | 172 | 184 |
| Water consumption – primary activities | (ML) | 825 | 715 | 859 |
| Greenhouse gas emissions | (000t CO ₂ e) | 169 | 175 | 190 |
| Intensity data per tonne treated | | | | |
| – energy | | 0.27 | 0.26 | 0.28 |
| – water | | 1.29 | 1.10 | 1.28 |
| – greenhouse gas emissions | | 0.27 | 0.26 | 0.29 |
| Number of reportable environmental incidents | | 0 | 0 | 0 |
| Community | | | | |
| Local economic development | (Rm) | 7 | 6 | 6 |
| Training and development | (Rm) | 23 | 22 | 25 |

Masimong *continued*

Other salient features

| | |
|---|--|
| Status of operation | Mature, single shaft operation nearing the end of its life of mine |
| Life of mine | 4 years |
| Nameplate hoisting capacity (per month) | 112 000 tonnes (124 000 tons) |
| Compliance and certification | New order mining right – December 2007 ISO 14001 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 | 4.19 | 9 | 0.3 | 3.23 | 1 | 2.4 | 4.07 | 10 |
| 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 | 0.122 | 281 | 0.3 | 0.094 | 31 | 2.6 | 0.119 | 312 |

Masimong is located in the Free State Province, near Welkom, about 260km from Johannesburg. The Masimong complex comprises an operating shaft (5 shaft) and 4 shaft, which, although closed for mining, is used for ventilation, pumping and as a second escape outlet. Masimong exploits the Basal Reef and the secondary B Reef. Mining is conducted to a depth of 2 050m. Ore mined is processed at the Harmony One plant.

Sadly, there was one fatality at Masimong in FY17. Management is committed to improving the safety at this operation.

Masimong delivered an improved performance in FY17 as a result of accessing higher grade B-reef areas and improved mining discipline. The recovered gold grade increased by 6% to 3.97g/t (0.116oz/t). Ore milled decreased by 2% to 640 000 tonnes (706 000 tons). Gold produced increased by 4% to 2 538kg (81 599oz).

The increase in gold production and 6% increase in the average rand gold price received in FY17 (to R571 870/kg) contributed to a 10% increase in revenue to R1 452 million (18% increase to US\$107 million, due to increased production and the strengthening of the average rand/US dollar exchange rate by 6% from R14.50 in FY16 to R13.60 in FY17).

Cash operating costs increased by 7% to R1 115 million (14% increase to US\$82 million) mainly due to wage and electricity tariff increases.

Capital expenditure increased by 8% to R119 million (increased by 13% to US\$9 million). Capital was spent mainly on ongoing development.

OPERATIONAL PERFORMANCE CONTINUED

Unisel

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 1 839 | 1 817 | 1 809 |
| – Contractors | | 152 | 128 | 114 |
| Total | | 1 991 | 1 945 | 1 923 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 394 | 424 | 417 |
| | (000t) (imperial) | 436 | 467 | 460 |
| Gold produced | (kg) | 1 595 | 1 704 | 1 695 |
| | (oz) | 51 280 | 54 785 | 54 495 |
| Gold sold | (kg) | 1 590 | 1 705 | 1 715 |
| | (oz) | 51 120 | 54 817 | 55 138 |
| Grade | (g/t) | 4.05 | 4.02 | 4.06 |
| | (oz/t) | 0.118 | 0.117 | 0.118 |
| Productivity | (g/TEC) | 73.56 | 77.43 | 77.82 |
| Development results | | | | |
| Total metres | | 3 647 | 3 145 | 5 177 |
| Reef metres | | 1 575 | 1 917 | 2 816 |
| Financial | | | | |
| Revenue | (Rm) | 915 | 925 | 770 |
| | (US\$m) | 67 | 64 | 67 |
| Average gold price received | (R/kg) | 575 650 | 542 487 | 449 082 |
| | (US\$/oz) | 1 317 | 1 164 | 1 220 |
| Cash operating cost | (Rm) | 839 | 754 | 674 |
| | (US\$m) | 62 | 52 | 59 |
| Production profit/(loss) | (Rm) | 77 | 171 | 88 |
| | (US\$m) | 6 | 12 | 7 |
| Capital expenditure | (Rm) | 78 | 62 | 99 |
| | (US\$m) | 6 | 4 | 9 |
| Cash operating cost | (R/kg) | 525 732 | 442 359 | 397 615 |
| | (US\$/oz) | 1 203 | 949 | 1 080 |
| All-in sustaining cost | (R/kg) | 591 913 | 496 099 | 469 246 |
| | (US\$/oz) | 1 354 | 1 064 | 1 275 |
| Safety | | | | |
| Number of fatalities | | 0 | 0 | 1 |
| Lost-time injury frequency rate per million hours worked | | 13.57 | 9.61 | 8.74 |
| Environment | | | | |
| Electricity consumption | (GWh) | 112 | 112 | 109 |
| Water consumption – primary activities | (ML) | 441 | 563 | 519 |
| Greenhouse gas emissions | (000t CO ₂ e) | 112 | 113 | 112 |
| Intensity data per tonne treated | | | | |
| – energy | | 0.28 | 0.26 | 0.26 |
| – water | | 1.12 | 1.33 | 1.25 |
| – greenhouse gas emissions | | 0.28 | 0.26 | 0.27 |
| Number of reportable environmental incidents | | 0 | 0 | 0 |
| Community | | | | |
| Local economic development* | (Rm) | 5 | 4 | 19 |
| Training and development | (Rm) | 24 | 23 | 21 |

* Included in the total for FY15 is an amount of R15 million that was capitalised as part of the hostel upgrades (FY16: R0 million, FY17: R0 million)

Unisel *continued*

Other salient features

| | |
|---|--|
| Status of operation | Mature operation reaching the end of its life of mine. Mining of safety pillars to begin in FY18 |
| Life of mine | 5 years |
| Nameplate hoisting capacity (per month) | 63 000 tonnes (69 000 tons) |
| Compliance and certification | New order mining right – December 2007 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) |
| | 1.2 | 4.56 | 5 | 0.9 | 4.60 | 4 | 2.0 | 4.58 | 9 |
| Reserves (imperial) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) |
| | 1.3 | 0.133 | 170 | 1.0 | 0.134 | 131 | 2.3 | 0.134 | 302 |

Unisel is located in the Free State Province, near Virginia, about 270km from Johannesburg. Mining is conducted to a depth of 2 153m below surface. Conventional scattered mining and pillar reclamation take place to access the Basal, Leader and, to a lesser extent, the Middle reefs. Ore mined is processed at Harmony One plant.

Unisel is nearing the end of its operating life and is Harmony's oldest operating mine. Unisel's ageing infrastructure presents significant challenges to the mine's operational flexibility and to the maintenance of production. From FY18 mining will focus on targeted areas of the shaft pillar and continue for an estimated three years.

In May 2017, Unisel achieved one million fatality-free shifts, with FY17 being the second consecutive year without a fatality.

Gold production declined by 6% to 1 595kg (51 280oz) in FY17 mainly as ore milled decreased by 7% to 394 000 tonnes (436 000 tons). While the recovered gold grade increased by 1% to 4.05g/t (0.118oz/t). The decrease in gold production offset the 6% increase in the average rand gold price received (to R575 650/kg), which resulted in a 1% decrease in revenue to R915 million (5% increase to US\$67 million). Unplanned infrastructure disruptions in the main shaft and decline sections affected production.

Cash operating costs increased by 11% to R839 million (increased by 19% to US\$62 million), mainly due to increased labour costs related to wage increases and once-off special bonuses, increased repair and maintenance expenditure and associated overtime.

Capital expenditure increased by 26% to R78 million (increased by 50% to US\$6 million) mainly due to the purchase and installation of a replacement of the man winder motor and capital repairs to the replaced unit which is available as a spare unit.

OPERATIONAL PERFORMANCE CONTINUED

SOUTH AFRICA – SURFACE OPERATIONS

Kalgold

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 241 | 235 | 240 |
| – Contractors | | 395 | 377 | 465 |
| Total | | 636 | 612 | 705 |
| Operational | | | | |
| 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 |
| Financial | | | | |
| 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 |
| Safety | | | | |
| Number of fatalities | | 0 | 0 | 0 |
| Lost-time injury frequency rate per million hours worked | | 2.19 | 0 | 2.25 |
| Environment | | | | |
| Electricity consumption | (GWh) | 54 | 49 | 40 |
| Water consumption – primary activities | (ML) | 392 | 375 | 1 795 |
| Greenhouse gas emissions | (000t CO ₂ 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 |
| Community | | | | |
| 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.

OPERATIONAL PERFORMANCE CONTINUED

Phoenix (Tailings retreatment)

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 82 | 82 | 83 |
| – Contractors | | 261 | 296 | 312 |
| Total | | 343 | 378 | 395 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 6 729 | 6 465 | 6 245 |
| | (000t) (imperial) | 7 420 | 7 129 | 6 887 |
| Gold produced | (kg) | 918 | 804 | 867 |
| | (oz) | 29 515 | 25 849 | 27 875 |
| Gold sold | (kg) | 932 | 788 | 881 |
| | (oz) | 29 964 | 25 335 | 28 324 |
| Grade | (g/t) | 0.136 | 0.124 | 0.139 |
| | (oz/t) | 0.004 | 0.004 | 0.004 |
| Productivity | (g/TEC) | 187.96 | 177.72 | 185.73 |
| Financial | | | | |
| Revenue | (Rm) | 512 | 429 | 396 |
| | (US\$m) | 38 | 30 | 35 |
| Average gold price received | (R/kg) | 549 777 | 544 390 | 449 941 |
| | (US\$/oz) | 1 258 | 1 168 | 1 223 |
| Cash operating cost | (Rm) | 364 | 320 | 295 |
| | (US\$m) | 27 | 22 | 26 |
| Production profit/(loss) | (Rm) | 140 | 117 | 97 |
| | (US\$m) | 10 | 8 | 8 |
| Capital expenditure | (Rm) | 5 | 5 | 4 |
| | (US\$m) | – | – | – |
| Cash operating cost | (R/kg) | 396 486 | 398 122 | 339 896 |
| | (US\$/oz) | 907 | 854 | 924 |
| All-in sustaining cost | (R/kg) | 404 685 | 403 907 | 344 319 |
| | (US\$/oz) | 926 | 866 | 936 |
| Safety | | | | |
| Number of fatalities | | 0 | 0 | 0 |
| Lost-time injury frequency rate per million hours worked | | 0 | 2.06 | 0.00 |
| Environment | | | | |
| Electricity consumption | (GWh) | 42 | 40 | 41 |
| Water consumption – primary activities | (ML) | 249 | 267 | 277 |
| Greenhouse gas emissions | (000t CO ₂ e) | 42 | 41 | 42 |
| Intensity data per tonne treated | | | | |
| – energy | | 0.006 | 0.006 | 0.007 |
| – water | | 0.04 | 0.04 | 0.04 |
| – greenhouse gas emissions | | 0.006 | 0.006 | 0.007 |
| Number of reportable environmental incidents | | 0 | 0 | 0 |

Phoenix (Tailings retreatment) *continued*

Other salient features

| | |
|------------------------------|---|
| Status of operation | Retreatment of tailings |
| Life of mine | 12 years |
| Compliance and certification | New order mining right – December 2007 ISO 14001 certification is under consideration – interim focus is on compliance 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) |
| | 73.0 | 0.28 | 20 | – | – | – | 73.0 | 0.28 | 20 |
| Reserves (imperial) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) |
| | 80.5 | 0.008 | 646 | – | – | – | 80.5 | 0.008 | 646 |

Phoenix, a tailings retreatment operation situated in Virginia in the Free State Province, makes use of the Saaiplaas plant to retreat tailings. During FY13, Harmony finalised an empowerment agreement and transferred 30% of its shareholding in the Phoenix operations to black economic empowerment owners.

The Phoenix operation delivered an excellent performance in FY17. The increase in volumes processed was due to a well-managed tailings dam to plant operational circuit. Improved plant efficiencies enhanced the recovery of higher grade tailings throughput to the plant.

Year-on-year, gold production improved by 14% to 918kg (29 515oz), mainly as a result of a 10% improvement in the recovered grade to 0.136g/t (0.004oz/t), and a 4% increase in volumes processed to 6 729 000 tonnes (7 420 000 tons).

The increase in the average rand gold price received and increase in gold production, resulted in a 19% increase in revenue to R512 million (increase of 27% to US\$38 million). Cash operating costs increased by 14% to R364 million (increased by 23% to US\$27 million) due to the higher volumes processed in FY17, and increase in labour costs resulting from wage increases and bonuses paid and higher electricity tariffs.

Operational success depends on maintaining plant efficiency and reducing pump and pipe failures (adequate spillage control). Grade variability and the theft of pipelines and electrical cables are the main risks being managed at Phoenix. Security has been increased in an effort to halt the endemic theft of piping and cables that can affect the integrity of operations.

OPERATIONAL PERFORMANCE CONTINUED

Surface dumps

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 10 | 10 | 10 |
| – Contractors | | 107 | 190 | 174 |
| Total | | 117 | 200 | 184 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 2 810 | 3 041 | 2 701 |
| | (000t) (imperial) | 3 099 | 3 353 | 2 978 |
| Gold produced | (kg) | 1 055 | 1 065 | 862 |
| | (oz) | 33 918 | 34 241 | 27 713 |
| Grade | (g/t) | 0.375 | 0.350 | 0.319 |
| | (oz/t) | 0.011 | 0.010 | 0.009 |
| Financial | | | | |
| Revenue | (Rm) | 609 | 577 | 389 |
| | (US\$m) | 45 | 40 | 34 |
| Average gold price received | (R/kg) | 572 172 | 544 996 | 450 420 |
| | (US\$/oz) | 1 309 | 1 169 | 1 224 |
| Cash operating cost | (Rm) | 459 | 427 | 330 |
| | (US\$m) | 34 | 29 | 29 |
| Production profit/(loss) | (Rm) | 142 | 158 | 58 |
| | (US\$m) | 10 | 11 | 5 |
| Capital expenditure | (Rm) | 163 | 18 | 6 |
| | (US\$m) | 12 | 1 | 1 |
| Cash operating cost | (R/kg) | 434 715 | 401 033 | 382 959 |
| | (US\$/oz) | 995 | 860 | 1 041 |
| All-in sustaining cost | (R/kg) | 445 451 | 422 205 | 403 906 |
| | (US\$/oz) | 1 019 | 906 | 1 097 |
| Safety | | | | |
| Number of fatalities | | 0 | 0 | 0 |
| Lost-time injury frequency rate per million hours worked | | 0 | 0 | 2.48 |
| Environment | | | | |
| Electricity consumption | (GWh) | 52 | 66 | 64 |
| Water consumption – primary activities | (ML) | 234 | 394 | 480 |
| Greenhouse gas emissions | (000t CO ₂ e) | 51 | 67 | 66 |
| Intensity data per tonne treated | | | | |
| – energy | | 0.02 | 0.02 | 0.02 |
| – water | | 0.08 | 0.12 | 0.18 |
| – greenhouse gas emissions | | 0.02 | 0.02 | 0.02 |
| Number of reportable environmental incidents | | 0 | 0 | 0 |
| Community | | | | |
| Local economic development | (Rm) | 0 | 0 | 0 |

Surface dumps *continued*

Other salient features

| | |
|------------------------------|--|
| Status of operation | Following the conversion of the Central Plant to process tailings, the processing of waste rock dumps will be substantially reduced over the next few years. |
| Life of mine | ± 1 year (depending on availability of spare plant capacity) |
| Compliance and certification | Certification depends on the future of these operations 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) |
| | – | – | – | 3.9 | 0.51 | 2 | 3.9 | 0.51 | 2 |
| Reserves (imperial) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) |
| | – | – | – | 4.3 | 0.015 | 64 | 4.3 | 0.015 | 64 |

Production from the processing of surface rock dumps situated in the Free State province of South Africa depends entirely on the availability of spare mill capacity at the Harmony One and Target plants, which in turn depends on the availability of underground ore delivered for milling. Waste and waste rock dump deliveries to Kusasaletu Plant (situated near the border of Gauteng and North West Province) supplement mining volumes in order to secure sufficient backfill to use as support in stoping areas.

The tailings retreatment conversion of the Central Plant in FY17 reduced capacity to process waste rock volumes and resulted in an 8% decrease in volumes milled to 2 810 000 tonnes (3 099 000 tons). Waste rock dumps will no longer be processed at the Central Plant in FY18 following the completion of the conversion of this plant to treat tailings.

Gold production from the processing of material from the surface dumps reduced by 1% as the decrease in volumes processed was largely offset by the increase in the recovered grade of 7% to 0.375g/t (0.011oz/t) as higher grade waste rock material was processed in FY17.

Included in the capital expenditure for FY17 is R156 million (US\$11.5 million) related to the Central Plant tailings conversion project which was completed on time and below budget.

OPERATIONAL PERFORMANCE CONTINUED

PAPUA NEW GUINEA

Hidden Valley

| | | FY17* | FY16* | FY15* |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 1 192 | | |
| – Contractors | | 881 | | |
| Total | | 2 073 | 1 168 | 1 257 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 2 889 | 1 729 | 1 825 |
| | (000t) (imperial) | 3 186 | 1 906 | 2 012 |
| Gold produced ² | (kg) | 2 965 | 2 257 | 2 943 |
| | (oz) | 95 327 | 72 565 | 94 619 |
| Gold sold ² | (kg) | 3 119 | 2 340 | 3 003 |
| | (oz) | 100 278 | 75 233 | 96 548 |
| Grade | (g/t) | 1.07 | 1.31 | 1.61 |
| | (oz/t) | 0.035 | 0.038 | 0.047 |
| Financial | | | | |
| Revenue | (Rm) | 1 500 | 1 320 | 1 346 |
| | (US\$m) | 110 | 91 | 118 |
| Average gold price received | (R/kg) | 544 442 | 564 272 | 448 322 |
| | (US\$/oz) | 1 246 | 1 210 | 1 218 |
| Cash operating cost | (Rm) | 1 214 | 1 082 | 1 153 |
| | (US\$m) | 89 | 75 | 101 |
| Production profit/(loss) | (Rm) | 186 | 108 | 203 |
| | (US\$m) | 14 | 7 | 18 |
| Capital expenditure ³ | (Rm) | 1 335 | 121 | 357 |
| | (US\$m) | 98 | 8 | 31 |
| Cash operating cost | (R/kg) | 466 847 | 479 196 | 391 774 |
| | (US\$/oz) | 1 068 | 1 028 | 1 065 |
| All-in sustaining cost | (R/kg) | 543 186 | 597 398 | 514 690 |
| | (US\$/oz) | 1 241 | 1 282 | 1 395 |
| Safety | | | | |
| Number of fatalities | | 0 | 1 | 1 |
| Lost-time injury frequency rate per million hours worked | | 0.52 | 1.39 | 0.28 |
| Environment | | | | |
| Electricity consumption | (GWh) | 53 | 54 | 48 |
| Water consumption – primary activities | (ML) | 1 309 | 715 | 722 |
| Greenhouse gas emissions | (000t CO ₂ e) | 53 | 55 | 0 |
| Intensity data per tonne treated | | | | |
| – energy | | 0.02 | 0.03 | 0.03 |
| – water | | 0.45 | 0.41 | 0.39 |
| – greenhouse gas emissions | | 0.07 | 0.03 | 0 |
| Number of reportable environmental incidents | | 0 | 0 | 1 |

* The FY16 and FY15 key statistics in the table above represent Harmony's 50% interest in the Hidden Valley mine and are not comparable to the FY17 results. Following Harmony's acquisition of the remaining 50% of Hidden Valley in October 2016, Hidden Valley has been accounted for at 100% from the end of October 2016

¹ Employees of the Hidden Valley joint venture

² FY17 gold produced and gold sold includes 364kg (11 713oz) capitalised as part of pre-stripping of stages 5 and 6 (FY16:nil), (FY15:nil). Revenue of R195 million (US\$14 million) and the associated costs were capitalised

³ Figures for FY15 restated to include capitalised stripping activities

Hidden Valley *continued*

Other salient features

| | |
|------------------------------|---|
| Status of operation | Open-pit mining operation producing gold and silver. Post the acquisition in full, the stage 5 and 6 cutback investment is underway; commercial levels of production scheduled for the last quarter of FY18 |
| Life of mine | 6 years |
| Compliance and certification | Mining lease approved by Papua New Guinea authorities |

Mineral reserves as at 30 June 2017 (including Hamata)

| Gold 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) |
| | 0.5 | 1.04 | 0.4 | 25.7 | 1.65 | 43 | 26.2 | 1.63 | 43 |
| Reserves (imperial) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) |
| | 0.6 | 0.030 | 17 | 28.4 | 0.048 | 1 370 | 29.0 | 0.048 | 1 387 |

The Hidden Valley mine is an open pit gold and silver mine, situated in the highly prospective area of the Morobe Province in Papua New Guinea, some 210km northwest of Port Moresby. Harmony increased its interest in Hidden Valley to 100% by acquiring the remaining 50% in October 2016.

The major gold and silver deposits of the Morobe goldfield and Hidden Valley are hosted in the Wau Graben. The operational pits are Hidden Valley-Kaveroi and Hamata, located approximately 6km apart. Ore mined is treated at the Hidden Valley processing plant.

The acquisition of full ownership of Hidden Valley followed the decision to invest primarily in the development of the Hidden Valley-Kaveroi stage 5 and 6 cutbacks. The investment in Hidden Valley has the potential to contribute approximately 180 000oz gold per annum to Harmony's production profile, at an all-in sustaining cost of less than US\$950/oz. The total investment capital will be net US\$180 million, of which US\$68 million was spent in FY17 with expenditure of an estimated US\$110 million planned for FY18. Commercial levels of production are expected to be achieved in the June quarter of FY18.

A planned major four-month shutdown commenced in August 2017. Depleted ore stockpiles and a lack of mined ore to feed the plant have necessitated the shutdown, during which extensive upgrades and maintenance will be undertaken.

During FY17, the mine processed ore from the Hamata pit and stockpiles until June 2017 which resulted in the 18% decrease in grade year on year to 1.07g/t (0.035oz/t).

The lost-time injury frequency rate improved significantly in FY17 to 0.52 per million hours worked from 1.39 in FY16. There were no fatalities in FY17 (FY16: one). A culture of safe behaviour and the use of critical control equipment are driving improved safety performance.

Ore milled in the process plant increased by 67% to 2.9 million tonnes (3.2 million tons), gold production rose by 31% year-on-year to 2 965kg (95 327oz), resulting in an increase in revenue of 14% to R1 500 million (an increase of 21% to US\$110 million). Cash operating costs increased by 12% to R1 214 million (19% increase to US\$89 million). These increases are mainly attributable to Harmony's increased stake in Hidden Valley.

Capital expenditure increased by 1 003% in FY17 to R1 335 million (increased by 1 125% to US\$98 million). In order to support waste strip mining and improve production, a significant investment was made in additional and replacement mining equipment.

OPERATIONAL PERFORMANCE

SOUTH AFRICA

Tshepong

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 4 304 | 4 232 | 4 218 |
| – Contractors | | 283 | 250 | 210 |
| Total | | 4 587 | 4 482 | 4 428 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 1 027 | 1 088 | 992 |
| | (000t) (imperial) | 1 132 | 1 200 | 1 095 |
| Gold produced | (kg) | 4 819 | 5 031 | 4 278 |
| | (oz) | 154 934 | 161 751 | 137 540 |
| Gold sold | (kg) | 4 817 | 5 029 | 4 337 |
| | (oz) | 154 869 | 161 685 | 139 437 |
| Grade | (g/t) | 4.69 | 4.62 | 4.31 |
| | (oz/t) | 0.137 | 0.135 | 0.126 |
| Productivity | (g/TEC) | 95.55 | 100.52 | 86.05 |
| Development results | | | | |
| Total metres | | 11 460 | 12 077 | 13 053 |
| Reef metres | | 1 735 | 1 745 | 1 822 |
| Capital metres | | 383 | 0 | 0 |
| Financial | | | | |
| Revenue | (Rm) | 2 760 | 2 756 | 1 948 |
| | (US\$m) | 203 | 190 | 170 |
| Average gold price received | (R/kg) | 572 921 | 547 967 | 449 211 |
| | (US\$/oz) | 1 311 | 1 176 | 1 221 |
| Cash operating cost | (Rm) | 2 032 | 1 845 | 1 588 |
| | (US\$m) | 149 | 127 | 139 |
| Production profit/(loss) | (Rm) | 731 | 912 | 337 |
| | (US\$m) | 54 | 63 | 29 |
| Capital expenditure | (Rm) | 387 | 307 | 313 |
| | (US\$m) | 28 | 21 | 27 |
| Cash operating cost | (R/kg) | 421 573 | 366 767 | 371 149 |
| | (US\$/oz) | 964 | 787 | 1 008 |
| All-in sustaining cost | (R/kg) | 506 969 | 438 401 | 454 512 |
| | (US\$/oz) | 1 160 | 940 | 1 235 |
| Safety | | | | |
| Number of fatalities | | 0 | 0 | 1 |
| Lost-time injury frequency rate per million hours worked | | 7.34 | 6.40 | 5.72 |
| Environment | | | | |
| Electricity consumption | (GWh) | 287 | 301 | 307 |
| Water consumption – primary activities | (ML) | 1 229 | 1 230 | 1 110 |
| Greenhouse gas emissions | (000t CO ₂ e) | 286 | 306 | 316 |
| Intensity data per tonne treated | | | | |
| – energy | | 0.28 | 0.27 | 0.31 |
| – water | | 1.19 | 1.13 | 1.12 |
| – greenhouse gas emissions | | 0.28 | 0.27 | 0.32 |
| Number of reportable environmental incidents | | 0 | 0 | 0 |
| Community | | | | |
| Local economic development* | (Rm) | 6 | 7 | 33 |
| Training and development | (Rm) | 37 | 37 | 33 |

* Included in the total for FY15 is an amount of R24 million that was capitalised as part of the hostel upgrades (FY16: R0 million, FY17: R0 million)

Tshepong *continued*

Other salient features

| | |
|---|---|
| Status of operation | Steady state operation: development continues |
| Life of mine | 17 years |
| Nameplate hoisting capacity (per month) | 192 000 tonnes (212 000 tons) |
| Compliance and certification | New order mining right – December 2007 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) |
| | 21.0 | 5.91 | 124 | 4.6 | 5.36 | 24 | 25.6 | 5.82 | 149 |
| Reserves (imperial) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) |
| | 23.2 | 0.173 | 4 002 | 5.0 | 0.156 | 785 | 28.2 | 0.170 | 4 787 |

* As at 30 June 2017, the mineral reserves reported are for Tshepong and Phakisa combined. From FY18, Tshepong and Phakisa will be integrated and reported on as a single entity, Tshepong operations

Tshepong is located in the Free State Province, near Welkom, about 248km from Johannesburg. Mining is conducted to a depth of 2 349m. The mine uses conventional undercut mining in the Basal Reef while the B Reef is exploited as a high-grade secondary reef. Ore mined is processed at the Harmony One plant.

During FY17, no fatalities occurred and Tshepong achieved a first ever three million fatality-free shifts on 31 March 2017, a total of 949 fatality-free days.

In FY17, Tshepong was Harmony's second highest contributor to cash flow from the South African operations. Both volume and kilograms were negatively impacted by under performance in the higher-grade decline section of the mine, mainly due to moving crews to other sections. The continued build-up in production from the sub-66 decline is driving the improvement in grade.

Gold production decreased by 4% to 4 819kg (154 934oz) in FY17, primarily due to the decline in volumes mined. Ore milled decreased by 6% to 1 027 000 tonnes (1 132 000 tons) while recovered gold grade increased by 2% to 4.69g/t (0.137oz/t). The decrease in gold production was offset by a 5% increase in the average rand gold price received to R572 921 kg. Revenue remained flat year on year at R2 760 million (7% increase to US\$203 million).

With the sub-71 decline capital project, reef/waste split development progressed well and is on schedule. The sub-75 decline capital project continued.

Cash operating costs increased by 10% to R2 032 million (increased by 17% to US\$149 million), mainly due to labour cost increases and higher electricity tariffs.

Capital expenditure increased by 26% to R387 million (increased by 33% to US\$28 million). Capital was mainly spent on the sub-71 and sub-75 decline project.

Management's main focus is on reducing unit costs in all disciplines, adhering to maintenance schedules, cleaning dams, quality mining and performance of development section in order to sustain current stopping profile.

OPERATIONAL PERFORMANCE

Phakisa

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 3 806 | 3 547 | 3 344 |
| – Contractors | | 305 | 350 | 392 |
| Total | | 4 111 | 3 897 | 3 736 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 668 | 686 | 611 |
| | (000t) (imperial) | 737 | 756 | 674 |
| Gold produced | (kg) | 4 009 | 3 988 | 3 118 |
| | (oz) | 128 893 | 128 217 | 100 246 |
| Gold sold | (kg) | 3 999 | 3 991 | 3 156 |
| | (oz) | 128 570 | 128 314 | 101 468 |
| Grade | (g/t) | 6.00 | 5.81 | 5.10 |
| | (oz/t) | 0.175 | 0.170 | 0.149 |
| Productivity | (g/TEC) | 88.64 | 93.54 | 76.99 |
| Development results | | | | |
| Total metres | | 8 002 | 11 022 | 12 138 |
| Reef metres | | 1 293 | 1 785 | 1 749 |
| Capital metres | | 216 | 0 | 162 |
| Financial | | | | |
| Revenue | (Rm) | 2 302 | 2 186 | 1 420 |
| | (US\$m) | 169 | 151 | 124 |
| Average gold price received | (R/kg) | 575 663 | 547 829 | 449 969 |
| | (US\$/oz) | 1 317 | 1 175 | 1 223 |
| Cash operating cost | (Rm) | 1 645 | 1 378 | 1 166 |
| | (US\$m) | 121 | 95 | 102 |
| Production profit/(loss) | (Rm) | 660 | 811 | 239 |
| | (US\$m) | 49 | 56 | 21 |
| Capital expenditure | (Rm) | 330 | 323 | 403 |
| | (US\$m) | 24 | 22 | 35 |
| Cash operating cost | (R/kg) | 410 387 | 345 457 | 373 876 |
| | (US\$/oz) | 939 | 741 | 1 016 |
| All-in sustaining cost | (R/kg) | 507 849 | 436 477 | 495 644 |
| | (US\$/oz) | 1 162 | 936 | 1 347 |
| Safety | | | | |
| Number of fatalities | | 1 | 2 | 0 |
| Lost-time injury frequency rate per million hours worked | | 6.80 | 6.64 | 8.76 |
| Environment | | | | |
| Electricity consumption | (GWh) | 179 | 152 | 143 |
| Water consumption – primary activities | (ML) | 1 490 | 1 254 | 1 155 |
| Greenhouse gas emissions | (000t CO ₂ e) | 177 | 154 | 147 |
| Intensity data per tonne treated | | | | |
| – energy | | 0.27 | 0.22 | 0.23 |
| – water | | 2.23 | 1.83 | 1.89 |
| – greenhouse gas emissions | | 0.27 | 0.22 | 0.24 |
| Number of reportable environmental incidents | | 0 | 0 | 0 |
| Community | | | | |
| Local economic development* | (Rm) | 6 | 6 | 12 |
| Training and development | (Rm) | 37 | 35 | 32 |

* Included in the total for FY15 is an amount of R3 million that was capitalised as part of the hostel upgrades (FY16: R0 million; FY17: R0 million)

Phakisa *continued*

Other salient features

| | |
|---|--|
| Status of operation | Production ramp up continues |
| Life of mine | 9 years |
| Nameplate hoisting capacity (per month) | 91 000 tonnes (101 000 imperial tons) |
| Compliance and certification | New order mining right – December 2007 ISO 14001 ISO 9001 OHSAS 18001 |

Mineral reserves as at 30 June 2017

See Tshepong. As at 30 June 2017, Phakisa's mineral reserves are included with those of Tshepong. From FY18, Phakisa and Tshepong will be integrated and reported on as a single entity, Tshepong operations.

Phakisa is located in the Free State Province, some 252km from Johannesburg. The mine has two shafts, the main Phakisa shaft and the Nyala shaft. The latter is used to hoist rock and serves as a second escape route. Phakisa exploits the Basal Reef. Mining is conducted to a depth of 2 426m. Ore mined is processed at the Harmony One plant. Phakisa continues to build up to full production, which is expected within the next two years.

Regrettably there was one fatality in FY17.

In line with the planned build-up at Phakisa, the recovered grade increased by 3% to 6.00g/t, offsetting the 3% decrease in ore milled (to 668 000 tonnes or 737 000 tons) resulting in a slight increase in gold produced by 0.5% to 4 009kg (128 893oz).

The integration between Tshepong and Phakisa mines involves the cross-tramming of ore from Phakisa to Tshepong which will de-bottleneck constraints on the over-utilised Phakisa infrastructure. Accelerated development was conducted in FY17 to facilitate the holing between the mines on 73 level.

Cash operating costs increased by 19% to R1 645 million (increased by 27% to US\$121 million) due to increased production crews to accelerate the production build up, increased expenditure on consumable as production ramps up and annual wage and electricity tariff increases.

Capital expenditure increased by 2% to R330 million (by 9% to US\$24 million), primarily spent on ongoing capital development.

Key deliverables include safe production, achieving volume and development targets, and increased ledging to improve flexibility. Ventilation change-overs were completed on 69 and 71 levels so that ventilation at Tshepong could be utilised at Phakisa.

OPERATIONAL PERFORMANCE CONTINUED

Bambanani

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 1 464 | 1 491 | 1 517 |
| – Contractors | | 205 | 321 | 330 |
| Total | | 1 669 | 1 812 | 1 847 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 231 | 232 | 229 |
| | (000t) (imperial) | 254 | 256 | 253 |
| Gold produced | (kg) | 2 750 | 3 013 | 2 908 |
| | (oz) | 88 415 | 96 870 | 93 495 |
| Gold sold | (kg) | 2 745 | 3 015 | 2 947 |
| | (oz) | 88 253 | 96 934 | 94 748 |
| Grade | (g/t) | 11.90 | 12.99 | 12.70 |
| | (oz/t) | 0.348 | 0.378 | 0.370 |
| Productivity | (g/TEC) | 148.42 | 156.54 | 153.08 |
| Development results | | | | |
| Total metres | | 1 591 | 1 743 | 1 150 |
| Reef metres | | 130 | 105 | 15 |
| Capital metres | | 0 | 0 | 0 |
| Financial | | | | |
| Revenue | (Rm) | 1 576 | 1 617 | 1 330 |
| | (US\$m) | 116 | 112 | 116 |
| Average gold price received | (R/kg) | 574 227 | 536 410 | 451 200 |
| | (US\$/oz) | 1 314 | 1 151 | 1 226 |
| Cash operating cost | (Rm) | 874 | 808 | 697 |
| | (US\$m) | 64 | 56 | 61 |
| Production profit/(loss) | (Rm) | 705 | 806 | 625 |
| | (US\$m) | 52 | 56 | 55 |
| Capital expenditure | (Rm) | 77 | 106 | 110 |
| | (US\$m) | 6 | 7 | 10 |
| Cash operating cost | (R/kg) | 317 833 | 268 305 | 239 552 |
| | (US\$/oz) | 727 | 576 | 651 |
| All-in sustaining cost | (R/kg) | 357 025 | 304 634 | 270 623 |
| | (US\$/oz) | 817 | 654 | 735 |
| Safety | | | | |
| Number of fatalities | | 1 | 0 | 1 |
| Lost-time injury frequency rate per million hours worked | | 5.23 | 3.59 | 4.63 |
| Environment | | | | |
| Electricity consumption | (GWh) | 143 | 140 | 133 |
| Water consumption – primary activities | (ML) | 1 200 | 1 434 | 1 731 |
| Greenhouse gas emissions | (000t CO ₂ e) | 141 | 142 | 137 |
| Intensity data per tonne treated | | | | |
| – energy | | 0.64 | 0.60 | 0.59 |
| – water | | 5.19 | 6.18 | 7.57 |
| – greenhouse gas emissions | | 0.64 | 0.60 | 0.61 |
| Number of reportable environmental incidents | | 0 | 0 | 0 |
| Community | | | | |
| Local economic development | (Rm) | 14 | 9 | 3 |
| Training and development | (Rm) | 20 | 25 | 17 |

Bambanani *continued*

Other salient features

| | |
|---|---|
| Status of operation | Mature operation with focus on mining of the shaft pillar for the next few 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 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) |
| | 1.1 | 11.54 | 12 | – | – | – | 1.1 | 11.54 | 12 |
| Reserves (imperial) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) |
| | 1.2 | 0.337 | 401 | – | – | – | 1.2 | 0.337 | 401 |

Bambanani, located in the Free State Province, near Welkom and about 262km 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 FY17. Focus on safety and fatal risk management has further intensified as we strive for zero harm.

Bambanani is Harmony's most profitable mine despite gold production decreasing by 9% to 2 750kg (88 415oz) in FY17. This was primarily due to decline in the recovered grade by 8% to 11.90g/t after an exceptional grade performance in FY16 remained flat year on year at 231 000 tonnes (254 000 tons) in FY17.

Revenue was down by 3% to R1 576 million (4% increase to US\$116 million) mainly due to lower production in FY17.

Cash operating costs increased by 8% to R874 million (or 14% to US\$64 million), mainly due to the increase in annual wages and electricity tariffs.

Capital expenditure decreased by 27% to R77 million (a decrease of 14% to US\$6 million). The decrease was due reduced capital spending as the Bambanani shaft pillar major capital project was completed at the end of FY17.

OPERATIONAL PERFORMANCE CONTINUED

Target 1

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 1 689 | 1 653 | 1 683 |
| – Contractors | | 222 | 272 | 266 |
| Total | | 1 911 | 1 925 | 1 949 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 745 | 739 | 749 |
| | (000t) (imperial) | 822 | 814 | 826 |
| Gold produced | (kg) | 2 669 | 3 387 | 3 824 |
| | (oz) | 85 809 | 108 895 | 122 944 |
| Gold sold | (kg) | 2 642 | 3 419 | 3 868 |
| | (oz) | 84 942 | 109 923 | 124 358 |
| Grade | (g/t) | 3.58 | 4.58 | 5.11 |
| | (oz/t) | 0.104 | 0.134 | 0.149 |
| Productivity | (g/TEC) | 126.66 | 155.77 | 172.25 |
| Development results | | | | |
| Total metres | | 3 656 | 3 459 | 4 174 |
| Reef metres | | 104 | 182 | 290 |
| Financial | | | | |
| Revenue | (Rm) | 1 506 | 1 833 | 1 738 |
| | (US\$m) | 111 | 126 | 152 |
| Average gold price received | (R/kg) | 570 091 | 536 196 | 449 319 |
| | (US\$/oz) | 1 304 | 1 150 | 1 221 |
| Cash operating cost | (Rm) | 1 356 | 1 242 | 1 178 |
| | (US\$m) | 100 | 86 | 103 |
| Production profit/(loss) | (Rm) | 161 | 583 | 547 |
| | (US\$m) | 12 | 40 | 48 |
| Capital expenditure | (Rm) | 324 | 322 | 296 |
| | (US\$m) | 24 | 22 | 26 |
| Cash operating cost | (R/kg) | 508 082 | 366 814 | 308 156 |
| | (US\$/oz) | 1 162 | 787 | 837 |
| All-in sustaining cost | (R/kg) | 651 833 | 471 876 | 395 669 |
| | (US\$/oz) | 1 491 | 1 012 | 1 075 |
| Safety | | | | |
| Number of fatalities | | 0 | 2 | 0 |
| Lost-time injury frequency rate per million hours worked | | 11.80 | 4.91 | 4.51 |
| Environment | | | | |
| Electricity consumption | (GWh) | 186 | 247 | 242 |
| Water consumption – primary activities | (ML) | 678 | 808 | 808 |
| Greenhouse gas emissions | (000t CO ₂ e) | 184 | 251 | 249 |
| Intensity data per tonne treated | | | | |
| – energy | | 0.25 | 0.33 | 0.32 |
| – water | | 0.91 | 1.09 | 1.22 |
| – greenhouse gas emissions | | 0.25 | 0.33 | 0.33 |
| Number of reportable environmental incidents | | 0 | 0 | 0 |
| Community | | | | |
| Local economic development | (Rm) | 5 | 4 | 4 |
| Training and development | (Rm) | 36 | 34 | 30 |

Target 1 *continued*

Other salient features

| | |
|---|--|
| Status of operation | Single, cost efficient shaft operation. Geological drilling to be conducted in the next 12 months to further evaluate capitalisation of the operation. |
| Life of mine | 7 years |
| Nameplate hoisting capacity (per month) | 97 000 tonnes (107 000 tons) |
| Compliance and certification | New order mining right – December 2007 ISO 14001 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) |
| | 3.2 | 4.18 | 13 | 2.0 | 4.29 | 9 | 5.2 | 4.22 | 22 |
| Reserves (imperial) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) |
| | 3.5 | 0.122 | 430 | 2.2 | 0.125 | 274 | 5.7 | 0.123 | 705 |

Target 1 is located in the Free State Province, some 270km southwest of Johannesburg. Mining operations at Target 1 comprise one primary underground mine, to a depth of approximately 2 945m. While most of the ore extracted comes from mechanised mining (massive mining techniques), conventional stoping is still employed primarily to destress areas ahead of mechanised mining. Ore mined is processed at the Target plant. The gold mineralisation currently exploited at Target 1 is contained within a succession of Elsburg and Dreyerskuil quartz pebble conglomerate reefs.

Target 1 manages its risks by focusing on trackless development to ensure timeous availability of massive stopes and to prevent excessive dilution from waste and backfill in the pillar areas, which could impact negatively on the delivered grade. Future success will depend on the availability of trackless mining equipment and performance regarding volumes and grade.

No fatalities occurred during the year (FY16: two).

Gold production decreased by 21% to 2 669kg (85 809oz) in FY17 as a result of 22% decrease in the recovered grade to 3.58g/t (FY16: 4.58g/t). Production was severely affected by unstable ground conditions which hampered further mining in the higher grade areas. Due to limited flexibility, a narrow reef mining method was implemented to access the ore. Grade and production improved in the second half of FY17 and a better performance is expected from Target 1 in FY18.

Revenue decreased by 18% to R1 506 million (12% decrease to US\$111 million) as a result of the decrease in the production for FY17.

Cash operating costs rose by 9% to R1 356 million (16% increase to US\$100 million). Reduced expenditure on consumables partially offset an increase in annual labour costs and electricity tariffs.

Capital expenditure in FY17 remained flat at R324 million (FY16: R322 million) (increase of 1% to US\$24 million), as a zero-based costing exercise was implemented to manage costs and cash flow following the lower than expected production performance.

OPERATIONAL PERFORMANCE CONTINUED

Doornkop

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 2 847 | 2 471 | 2 977 |
| – Contractors | | 645 | 443 | 493 |
| Total | | 3 492 | 2 914 | 3 470 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 641 | 630 | 603 |
| | (000t) (imperial) | 706 | 695 | 665 |
| Gold produced | (kg) | 2 673 | 2 730 | 2 663 |
| | (oz) | 85 939 | 87 772 | 85 618 |
| Gold sold | (kg) | 2 712 | 2 712 | 2 711 |
| | (oz) | 87 193 | 87 193 | 87 160 |
| Grade | (g/t) | 4.17 | 4.33 | 4.42 |
| | (oz/t) | 0.122 | 0.126 | 0.129 |
| Productivity | (g/TEC) | 77.08 | 83.49 | 68.47 |
| Development results | | | | |
| Total metres (excl. capital metres) | | 9 961 | 7 766 | 8 919 |
| Reef metres | | 1 337 | 1 688 | 1 701 |
| Capital metres | | 1 316 | 0 | 0 |
| Financial | | | | |
| Revenue | (Rm) | 1 553 | 1 480 | 1 220 |
| | (US\$m) | 114 | 102 | 107 |
| Average gold price received | (R/kg) | 572 494 | 545 770 | 449 857 |
| | (US\$/oz) | 1 310 | 1 171 | 1 222 |
| Cash operating cost | (Rm) | 1 224 | 1 058 | 1 071 |
| | (US\$m) | 90 | 73 | 94 |
| Production profit/(loss) | (Rm) | 312 | 433 | 128 |
| | (US\$m) | 23 | 30 | 12 |
| Capital expenditure | (Rm) | 243 | 208 | 245 |
| | (US\$m) | 18 | 14 | 21 |
| Cash operating cost | (R/kg) | 457 752 | 387 585 | 402 065 |
| | (US\$/oz) | 1 047 | 831 | 1 092 |
| All-in sustaining cost | (R/kg) | 562 907 | 473 562 | 501 151 |
| | (US\$/oz) | 1 288 | 1 016 | 1 362 |
| Safety | | | | |
| Number of fatalities | | 0 | 0 | 1 |
| Lost-time injury frequency rate per million hours worked | | 7.50 | 12.27 | 7.14 |
| Environment | | | | |
| Electricity consumption | (GWh) | 188 | 203 | 205 |
| Water consumption – primary activities | (ML) | 947 | 1 135 | 733 |
| Greenhouse gas emissions | (000t CO ₂ e) | 186 | 206 | 211 |
| Intensity data per tonne treated | | | | |
| – energy | | 0.30 | 0.32 | 0.34 |
| – water | | 1.48 | 1.80 | 1.26 |
| – greenhouse gas emissions | | 0.30 | 0.32 | 0.35 |
| Number of reportable environmental incidents | | 0 | 0 | 0 |
| Community | | | | |
| Local economic development* | (Rm) | 8 | 4 | 37 |
| Training and development | (Rm) | 42 | 30 | 35 |

* Included in the total for FY16 is an amount of R1 million that was capitalised as part of the hostel upgrades (FY15: R28 million, FY17: R0 million)

Doornkop *continued*

Other salient features

| | |
|---|---|
| Status of operation | Mining takes place on the South Reef at this single-shaft operation. |
| Life of mine | 18 years |
| Nameplate hoisting capacity (per month) | 103 000 tonnes (113 000 tons) |
| Compliance and certification | New order mining right – October 2008 ISO 14001 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 | 4.97 | 11 | 2.5 | 4.96 | 12 | 4.6 | 4.96 | 23 |
| Reserves (imperial) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) |
| | 2.4 | 0.145 | 343 | 2.7 | 0.145 | 392 | 5.1 | 0.145 | 735 |

Doornkop, a single-shaft operation, is located in the Gauteng province of South Africa, approximately 30km west of Johannesburg, on the northern rim of the Witwatersrand Basin. Mining is conducted to a depth of 1 978m. The operation focuses on narrow-reef conventional mining of the South Reef. Ore from the operation is processed at the Doornkop plant.

Safety improvements were realised and Doornkop achieved its first ever two million fatality-free shift on 17 December 2016 after working 872 days fatality-free. There were no fatalities in FY17. The lost-time injury frequency rate improved by 39% to 7.50 per million hours worked in FY17 from 12.27 in FY16.

Gold production decreased by 2% to 2 673kg (85 939oz) in FY17. A 2% increase in ore milled to 641 000 tonnes (706 000 tons) was offset by a 4% decrease in the recovered gold grade to 4.17g/t (0.122oz/t). The decrease in the grade is due to the lower plant call factor owing to lower than expected plant efficiencies. Management at the shaft are focused on improving these efficiencies in FY18.

Despite the decrease in gold production, the 5% increase in the average rand gold price received (which included the gains realised on the gold forward hedging contracts) resulted in a 5% increase in revenue to R1 553 million (12% increase to US\$114 million). The increase in dollar terms was also due to the 6% strengthening of the rand/US dollar exchange rate to R13.60 in FY17 (FY16: R14.50/US\$).

Cash operating costs increased by 16% to R1 224 million (increased by 23% to US\$90 million) as a results of annual wage and electricity tariff increases as well as additional crews brought in to accelerate production. Capital expenditure increased by 17% to R243 million (increased by 29% to US\$18 million) owing to an increase in shaft capital development on the 207 and 212 levels.

The planned seismic survey was completed during FY17 and led to an increase in the mine's reserves and a better understanding of the mines geological structures. All changes related to the survey and geological drilling will be updated in the FY19 geological interpretation and life-of-mine design.

OPERATIONAL PERFORMANCE CONTINUED

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.

OPERATIONAL PERFORMANCE CONTINUED

Kusasaletu

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 4 050 | 3 944 | 3 898 |
| – Contractors | | 538 | 539 | 1 020 |
| Total | | 4 588 | 4 483 | 4 918 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 607 | 668 | 908 |
| | (000t) (imperial) | 670 | 736 | 1 001 |
| Gold produced | (kg) | 4 394 | 3 863 | 3 953 |
| | (oz) | 141 270 | 124 198 | 127 092 |
| Gold sold | (kg) | 4 498 | 3 822 | 4 297 |
| | (oz) | 144 614 | 122 880 | 138 151 |
| Grade | (g/t) | 7.24 | 5.78 | 4.35 |
| | (oz/t) | 0.211 | 0.169 | 0.127 |
| Productivity | (g/TEC) | 89.05 | 77.80 | 65.59 |
| Development results | | | | |
| Total metres | | 5 101 | 7 183 | 13 777 |
| Reef metres | | 1 185 | 1 517 | 2 436 |
| Capital metres | | 0 | 0 | 59 |
| Financial | | | | |
| Revenue | (Rm) | 2 575 | 2 078 | 1 939 |
| | (US\$m) | 189 | 143 | 169 |
| Average gold price received | (R/kg) | 572 376 | 543 633 | 451 211 |
| | (US\$/oz) | 1 309 | 1 166 | 1 226 |
| Cash operating cost | (Rm) | 2 019 | 1 848 | 1 866 |
| | (US\$m) | 148 | 127 | 163 |
| Production profit/(loss) | (Rm) | 494 | 262 | (57) |
| | (US\$m) | 36 | 18 | (5) |
| Capital expenditure | (Rm) | 289 | 360 | 463 |
| | (US\$m) | 21 | 25 | 40 |
| Cash operating cost | (R/kg) | 459 422 | 478 277 | 472 112 |
| | (US\$/oz) | 1 051 | 1 026 | 1 283 |
| All-in sustaining cost | (R/kg) | 541 247 | 584 498 | 587 406 |
| | (US\$/oz) | 1 238 | 1 254 | 1 596 |
| Safety | | | | |
| Number of fatalities | | 0 | 2 | 1 |
| Lost-time injury frequency rate per million hours worked | | 10.29 | 7.06 | 25.80 |
| Environment | | | | |
| Electricity consumption | (GWh) | 616 | 611 | 682 |
| Water consumption – primary activities | (ML) | 613 | 1 671 | 1 342 |
| Greenhouse gas emissions | (000t CO ₂ e) | 610 | 620 | 702 |
| Intensity data per tonne treated | | | | |
| – energy | | 1.01 | 0.91 | 0.75 |
| – water | | 1.00 | 2.50 | 1.48 |
| – greenhouse gas emissions | | 0.10 | 0.91 | 0.77 |
| Number of reportable environmental incidents | | 3 | 1 | 1 |
| Community | | | | |
| Local economic development* | (Rm) | 5 | 5 | 30 |
| Training and development | (Rm) | 45 | 26 | 50 |

* Included in the total for FY15 is an amount of R18 million that was capitalised as part of the hostel upgrades (FY16: R0 million, FY17: R0 million)

Kusasaletu *continued*

Other salient features

| | |
|---|---|
| Status of operation | Positioned for profitability |
| Life of mine | 5 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 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) |
| | 4.3 | 6.95 | 30 | 0.6 | 6.18 | 4 | 4.9 | 6.85 | 34 |
| Reserves (imperial) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) |
| | 4.7 | 0.203 | 959 | 0.7 | 0.180 | 129 | 5.4 | 0.200 | 1 088 |

Kusasaletu is located about 90km from Johannesburg, near the provincial border of Gauteng and North West Province, in the West Witwatersrand Basin where it mines the Ventersdorp Contact Reef as its main ore body. The mine comprises twin vertical and twin sub-vertical shaft systems, and uses conventional mining methods in a sequential grid layout. Mining is conducted to a depth of 3 388m, making it Harmony's deepest mine. Ore mined is treated at the Kusasaletu plant.

Kusasaletu achieved one million fatality-free shifts on 31 January 2017. Regrettably, post year-end, a seismic event triggered a fall-of-ground accident which led to five fatalities.

At the end of FY16 it was resolved that Kusasaletu's life of mine would be reduced from 25 years to five years to optimise cash flow and access the higher grade areas of the mine. Kusasaletu generated a profit and free cash flow in FY17. The recovered gold grade increased by 25% to 7.24g/t (0.211oz/t), which offset a 9% reduction in the volume of ore milled to 607 000 tonnes (670 000 tons), resulting in a 14% increase in gold production to 4 394kg (141 270oz).

The operation was impacted by illegal industrial action during January 2017 and March 2017. Management instituted disciplinary measures against the instigators and the AMCU branch leadership. Employee and union relations after the illegal industrial action were largely stable.

Critical infrastructure and related maintenance repair work was conducted at Kusasaletu over the extended Easter break. A notable reduction in unplanned infrastructure stoppages was evident following the maintenance work conducted.

Revenue increased by 24% to R2 575 million in FY17 (increased by 32% to US\$189 million) as a result of the higher average rand gold price received and increased production.

Cash operating costs increased by 9% to R2 019 million (17% to US\$148 million) due to wage increases, higher electricity tariffs and costs associated with the maintenance work conducted.

Capital expenditure decreased by 20% to R289 million (16% decrease to US\$21 million). The variance was mainly due to the slow-down in ongoing capital development as a result of Kusasaletu's reduced life of mine.

OPERATIONAL PERFORMANCE CONTINUED

Masimong

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 2 437 | 2 478 | 2 470 |
| – Contractors | | 107 | 112 | 99 |
| Total | | 2 544 | 2 590 | 2 569 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 640 | 650 | 670 |
| | (000t) (imperial) | 706 | 716 | 739 |
| Gold produced | (kg) | 2 538 | 2 432 | 2 463 |
| | (oz) | 81 599 | 78 190 | 79 187 |
| Gold sold | (kg) | 2 539 | 2 432 | 2 491 |
| | (oz) | 81 631 | 78 191 | 80 087 |
| Grade | (g/t) | 3.97 | 3.74 | 3.68 |
| | (oz/t) | 0.116 | 0.109 | 0.107 |
| Productivity | (g/TEC) | 89.73 | 83.85 | 75.27 |
| Development results | | | | |
| Total metres | | 4 754 | 4 755 | 9 855 |
| Reef metres | | 1 054 | 1 549 | 2 376 |
| Financial | | | | |
| Revenue | (Rm) | 1 452 | 1 318 | 1 118 |
| | (US\$m) | 107 | 91 | 98 |
| Average gold price received | (R/kg) | 571 870 | 541 806 | 448 867 |
| | (US\$/oz) | 1 308 | 1 162 | 1 220 |
| Cash operating cost | (Rm) | 1 115 | 1 038 | 979 |
| | (US\$m) | 82 | 72 | 86 |
| Production profit/(loss) | (Rm) | 339 | 280 | 127 |
| | (US\$m) | 25 | 19 | 11 |
| Capital expenditure | (Rm) | 119 | 110 | 166 |
| | (US\$m) | 9 | 8 | 15 |
| Cash operating cost | (R/kg) | 439 457 | 426 904 | 397 380 |
| | (US\$/oz) | 1 005 | 916 | 1 080 |
| All-in sustaining cost | (R/kg) | 500 938 | 493 527 | 479 096 |
| | (US\$/oz) | 1 146 | 1 059 | 1 302 |
| Safety | | | | |
| Number of fatalities | | 1 | 2 | 1 |
| Lost-time injury frequency rate per million hours worked | | 10.54 | 10.05 | 12.09 |
| Environment | | | | |
| Electricity consumption | (GWh) | 170 | 172 | 184 |
| Water consumption – primary activities | (ML) | 825 | 715 | 859 |
| Greenhouse gas emissions | (000t CO ₂ e) | 169 | 175 | 190 |
| Intensity data per tonne treated | | | | |
| – energy | | 0.27 | 0.26 | 0.28 |
| – water | | 1.29 | 1.10 | 1.28 |
| – greenhouse gas emissions | | 0.27 | 0.26 | 0.29 |
| Number of reportable environmental incidents | | 0 | 0 | 0 |
| Community | | | | |
| Local economic development | (Rm) | 7 | 6 | 6 |
| Training and development | (Rm) | 23 | 22 | 25 |

Masimong *continued*

Other salient features

| | |
|---|--|
| Status of operation | Mature, single shaft operation nearing the end of its life of mine |
| Life of mine | 4 years |
| Nameplate hoisting capacity (per month) | 112 000 tonnes (124 000 tons) |
| Compliance and certification | New order mining right – December 2007 ISO 14001 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 | 4.19 | 9 | 0.3 | 3.23 | 1 | 2.4 | 4.07 | 10 |
| 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 | 0.122 | 281 | 0.3 | 0.094 | 31 | 2.6 | 0.119 | 312 |

Masimong is located in the Free State Province, near Welkom, about 260km from Johannesburg. The Masimong complex comprises an operating shaft (5 shaft) and 4 shaft, which, although closed for mining, is used for ventilation, pumping and as a second escape outlet. Masimong exploits the Basal Reef and the secondary B Reef. Mining is conducted to a depth of 2 050m. Ore mined is processed at the Harmony One plant.

Sadly, there was one fatality at Masimong in FY17. Management is committed to improving the safety at this operation.

Masimong delivered an improved performance in FY17 as a result of accessing higher grade B-reef areas and improved mining discipline. The recovered gold grade increased by 6% to 3.97g/t (0.116oz/t). Ore milled decreased by 2% to 640 000 tonnes (706 000 tons). Gold produced increased by 4% to 2 538kg (81 599oz).

The increase in gold production and 6% increase in the average rand gold price received in FY17 (to R571 870/kg) contributed to a 10% increase in revenue to R1 452 million (18% increase to US\$107 million, due to increased production and the strengthening of the average rand/US dollar exchange rate by 6% from R14.50 in FY16 to R13.60 in FY17).

Cash operating costs increased by 7% to R1 115 million (14% increase to US\$82 million) mainly due to wage and electricity tariff increases.

Capital expenditure increased by 8% to R119 million (increased by 13% to US\$9 million). Capital was spent mainly on ongoing development.

OPERATIONAL PERFORMANCE CONTINUED

Unisel

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 1 839 | 1 817 | 1 809 |
| – Contractors | | 152 | 128 | 114 |
| Total | | 1 991 | 1 945 | 1 923 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 394 | 424 | 417 |
| | (000t) (imperial) | 436 | 467 | 460 |
| Gold produced | (kg) | 1 595 | 1 704 | 1 695 |
| | (oz) | 51 280 | 54 785 | 54 495 |
| Gold sold | (kg) | 1 590 | 1 705 | 1 715 |
| | (oz) | 51 120 | 54 817 | 55 138 |
| Grade | (g/t) | 4.05 | 4.02 | 4.06 |
| | (oz/t) | 0.118 | 0.117 | 0.118 |
| Productivity | (g/TEC) | 73.56 | 77.43 | 77.82 |
| Development results | | | | |
| Total metres | | 3 647 | 3 145 | 5 177 |
| Reef metres | | 1 575 | 1 917 | 2 816 |
| Financial | | | | |
| Revenue | (Rm) | 915 | 925 | 770 |
| | (US\$m) | 67 | 64 | 67 |
| Average gold price received | (R/kg) | 575 650 | 542 487 | 449 082 |
| | (US\$/oz) | 1 317 | 1 164 | 1 220 |
| Cash operating cost | (Rm) | 839 | 754 | 674 |
| | (US\$m) | 62 | 52 | 59 |
| Production profit/(loss) | (Rm) | 77 | 171 | 88 |
| | (US\$m) | 6 | 12 | 7 |
| Capital expenditure | (Rm) | 78 | 62 | 99 |
| | (US\$m) | 6 | 4 | 9 |
| Cash operating cost | (R/kg) | 525 732 | 442 359 | 397 615 |
| | (US\$/oz) | 1 203 | 949 | 1 080 |
| All-in sustaining cost | (R/kg) | 591 913 | 496 099 | 469 246 |
| | (US\$/oz) | 1 354 | 1 064 | 1 275 |
| Safety | | | | |
| Number of fatalities | | 0 | 0 | 1 |
| Lost-time injury frequency rate per million hours worked | | 13.57 | 9.61 | 8.74 |
| Environment | | | | |
| Electricity consumption | (GWh) | 112 | 112 | 109 |
| Water consumption – primary activities | (ML) | 441 | 563 | 519 |
| Greenhouse gas emissions | (000t CO ₂ e) | 112 | 113 | 112 |
| Intensity data per tonne treated | | | | |
| – energy | | 0.28 | 0.26 | 0.26 |
| – water | | 1.12 | 1.33 | 1.25 |
| – greenhouse gas emissions | | 0.28 | 0.26 | 0.27 |
| Number of reportable environmental incidents | | 0 | 0 | 0 |
| Community | | | | |
| Local economic development* | (Rm) | 5 | 4 | 19 |
| Training and development | (Rm) | 24 | 23 | 21 |

* Included in the total for FY15 is an amount of R15 million that was capitalised as part of the hostel upgrades (FY16: R0 million, FY17: R0 million)

Unisel *continued*

Other salient features

| | |
|---|--|
| Status of operation | Mature operation reaching the end of its life of mine. Mining of safety pillars to begin in FY18 |
| Life of mine | 5 years |
| Nameplate hoisting capacity (per month) | 63 000 tonnes (69 000 tons) |
| Compliance and certification | New order mining right – December 2007 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) |
| | 1.2 | 4.56 | 5 | 0.9 | 4.60 | 4 | 2.0 | 4.58 | 9 |
| Reserves (imperial) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) |
| | 1.3 | 0.133 | 170 | 1.0 | 0.134 | 131 | 2.3 | 0.134 | 302 |

Unisel is located in the Free State Province, near Virginia, about 270km from Johannesburg. Mining is conducted to a depth of 2 153m below surface. Conventional scattered mining and pillar reclamation take place to access the Basal, Leader and, to a lesser extent, the Middle reefs. Ore mined is processed at Harmony One plant.

Unisel is nearing the end of its operating life and is Harmony's oldest operating mine. Unisel's ageing infrastructure presents significant challenges to the mine's operational flexibility and to the maintenance of production. From FY18 mining will focus on targeted areas of the shaft pillar and continue for an estimated three years.

In May 2017, Unisel achieved one million fatality-free shifts, with FY17 being the second consecutive year without a fatality.

Gold production declined by 6% to 1 595kg (51 280oz) in FY17 mainly as ore milled decreased by 7% to 394 000 tonnes (436 000 tons). While the recovered gold grade increased by 1% to 4.05g/t (0.118oz/t). The decrease in gold production offset the 6% increase in the average rand gold price received (to R575 650/kg), which resulted in a 1% decrease in revenue to R915 million (5% increase to US\$67 million). Unplanned infrastructure disruptions in the main shaft and decline sections affected production.

Cash operating costs increased by 11% to R839 million (increased by 19% to US\$62 million), mainly due to increased labour costs related to wage increases and once-off special bonuses, increased repair and maintenance expenditure and associated overtime.

Capital expenditure increased by 26% to R78 million (increased by 50% to US\$6 million) mainly due to the purchase and installation of a replacement of the man winder motor and capital repairs to the replaced unit which is available as a spare unit.

OPERATIONAL PERFORMANCE CONTINUED

SOUTH AFRICA – SURFACE OPERATIONS

Kalgold

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 241 | 235 | 240 |
| – Contractors | | 395 | 377 | 465 |
| Total | | 636 | 612 | 705 |
| Operational | | | | |
| 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 |
| Financial | | | | |
| 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 |
| Safety | | | | |
| Number of fatalities | | 0 | 0 | 0 |
| Lost-time injury frequency rate per million hours worked | | 2.19 | 0 | 2.25 |
| Environment | | | | |
| Electricity consumption | (GWh) | 54 | 49 | 40 |
| Water consumption – primary activities | (ML) | 392 | 375 | 1 795 |
| Greenhouse gas emissions | (000t CO ₂ 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 |
| Community | | | | |
| 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.

OPERATIONAL PERFORMANCE CONTINUED

Phoenix (Tailings retreatment)

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 82 | 82 | 83 |
| – Contractors | | 261 | 296 | 312 |
| Total | | 343 | 378 | 395 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 6 729 | 6 465 | 6 245 |
| | (000t) (imperial) | 7 420 | 7 129 | 6 887 |
| Gold produced | (kg) | 918 | 804 | 867 |
| | (oz) | 29 515 | 25 849 | 27 875 |
| Gold sold | (kg) | 932 | 788 | 881 |
| | (oz) | 29 964 | 25 335 | 28 324 |
| Grade | (g/t) | 0.136 | 0.124 | 0.139 |
| | (oz/t) | 0.004 | 0.004 | 0.004 |
| Productivity | (g/TEC) | 187.96 | 177.72 | 185.73 |
| Financial | | | | |
| Revenue | (Rm) | 512 | 429 | 396 |
| | (US\$m) | 38 | 30 | 35 |
| Average gold price received | (R/kg) | 549 777 | 544 390 | 449 941 |
| | (US\$/oz) | 1 258 | 1 168 | 1 223 |
| Cash operating cost | (Rm) | 364 | 320 | 295 |
| | (US\$m) | 27 | 22 | 26 |
| Production profit/(loss) | (Rm) | 140 | 117 | 97 |
| | (US\$m) | 10 | 8 | 8 |
| Capital expenditure | (Rm) | 5 | 5 | 4 |
| | (US\$m) | – | – | – |
| Cash operating cost | (R/kg) | 396 486 | 398 122 | 339 896 |
| | (US\$/oz) | 907 | 854 | 924 |
| All-in sustaining cost | (R/kg) | 404 685 | 403 907 | 344 319 |
| | (US\$/oz) | 926 | 866 | 936 |
| Safety | | | | |
| Number of fatalities | | 0 | 0 | 0 |
| Lost-time injury frequency rate per million hours worked | | 0 | 2.06 | 0.00 |
| Environment | | | | |
| Electricity consumption | (GWh) | 42 | 40 | 41 |
| Water consumption – primary activities | (ML) | 249 | 267 | 277 |
| Greenhouse gas emissions | (000t CO ₂ e) | 42 | 41 | 42 |
| Intensity data per tonne treated | | | | |
| – energy | | 0.006 | 0.006 | 0.007 |
| – water | | 0.04 | 0.04 | 0.04 |
| – greenhouse gas emissions | | 0.006 | 0.006 | 0.007 |
| Number of reportable environmental incidents | | 0 | 0 | 0 |

Phoenix (Tailings retreatment) *continued*

Other salient features

| | |
|------------------------------|---|
| Status of operation | Retreatment of tailings |
| Life of mine | 12 years |
| Compliance and certification | New order mining right – December 2007 ISO 14001 certification is under consideration – interim focus is on compliance 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) |
| | 73.0 | 0.28 | 20 | – | – | – | 73.0 | 0.28 | 20 |
| Reserves (imperial) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) |
| | 80.5 | 0.008 | 646 | – | – | – | 80.5 | 0.008 | 646 |

Phoenix, a tailings retreatment operation situated in Virginia in the Free State Province, makes use of the Saaiplaas plant to retreat tailings. During FY13, Harmony finalised an empowerment agreement and transferred 30% of its shareholding in the Phoenix operations to black economic empowerment owners.

The Phoenix operation delivered an excellent performance in FY17. The increase in volumes processed was due to a well-managed tailings dam to plant operational circuit. Improved plant efficiencies enhanced the recovery of higher grade tailings throughput to the plant.

Year-on-year, gold production improved by 14% to 918kg (29 515oz), mainly as a result of a 10% improvement in the recovered grade to 0.136g/t (0.004oz/t), and a 4% increase in volumes processed to 6 729 000 tonnes (7 420 000 tons).

The increase in the average rand gold price received and increase in gold production, resulted in a 19% increase in revenue to R512 million (increase of 27% to US\$38 million). Cash operating costs increased by 14% to R364 million (increased by 23% to US\$27 million) due to the higher volumes processed in FY17, and increase in labour costs resulting from wage increases and bonuses paid and higher electricity tariffs.

Operational success depends on maintaining plant efficiency and reducing pump and pipe failures (adequate spillage control). Grade variability and the theft of pipelines and electrical cables are the main risks being managed at Phoenix. Security has been increased in an effort to halt the endemic theft of piping and cables that can affect the integrity of operations.

OPERATIONAL PERFORMANCE CONTINUED

Surface dumps

| | | FY17 | FY16 | FY15 |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 10 | 10 | 10 |
| – Contractors | | 107 | 190 | 174 |
| Total | | 117 | 200 | 184 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 2 810 | 3 041 | 2 701 |
| | (000t) (imperial) | 3 099 | 3 353 | 2 978 |
| Gold produced | (kg) | 1 055 | 1 065 | 862 |
| | (oz) | 33 918 | 34 241 | 27 713 |
| Grade | (g/t) | 0.375 | 0.350 | 0.319 |
| | (oz/t) | 0.011 | 0.010 | 0.009 |
| Financial | | | | |
| Revenue | (Rm) | 609 | 577 | 389 |
| | (US\$m) | 45 | 40 | 34 |
| Average gold price received | (R/kg) | 572 172 | 544 996 | 450 420 |
| | (US\$/oz) | 1 309 | 1 169 | 1 224 |
| Cash operating cost | (Rm) | 459 | 427 | 330 |
| | (US\$m) | 34 | 29 | 29 |
| Production profit/(loss) | (Rm) | 142 | 158 | 58 |
| | (US\$m) | 10 | 11 | 5 |
| Capital expenditure | (Rm) | 163 | 18 | 6 |
| | (US\$m) | 12 | 1 | 1 |
| Cash operating cost | (R/kg) | 434 715 | 401 033 | 382 959 |
| | (US\$/oz) | 995 | 860 | 1 041 |
| All-in sustaining cost | (R/kg) | 445 451 | 422 205 | 403 906 |
| | (US\$/oz) | 1 019 | 906 | 1 097 |
| Safety | | | | |
| Number of fatalities | | 0 | 0 | 0 |
| Lost-time injury frequency rate per million hours worked | | 0 | 0 | 2.48 |
| Environment | | | | |
| Electricity consumption | (GWh) | 52 | 66 | 64 |
| Water consumption – primary activities | (ML) | 234 | 394 | 480 |
| Greenhouse gas emissions | (000t CO ₂ e) | 51 | 67 | 66 |
| Intensity data per tonne treated | | | | |
| – energy | | 0.02 | 0.02 | 0.02 |
| – water | | 0.08 | 0.12 | 0.18 |
| – greenhouse gas emissions | | 0.02 | 0.02 | 0.02 |
| Number of reportable environmental incidents | | 0 | 0 | 0 |
| Community | | | | |
| Local economic development | (Rm) | 0 | 0 | 0 |

Surface dumps *continued*

Other salient features

| | |
|------------------------------|--|
| Status of operation | Following the conversion of the Central Plant to process tailings, the processing of waste rock dumps will be substantially reduced over the next few years. |
| Life of mine | ± 1 year (depending on availability of spare plant capacity) |
| Compliance and certification | Certification depends on the future of these operations 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) |
| | – | – | – | 3.9 | 0.51 | 2 | 3.9 | 0.51 | 2 |
| Reserves (imperial) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) |
| | – | – | – | 4.3 | 0.015 | 64 | 4.3 | 0.015 | 64 |

Production from the processing of surface rock dumps situated in the Free State province of South Africa depends entirely on the availability of spare mill capacity at the Harmony One and Target plants, which in turn depends on the availability of underground ore delivered for milling. Waste and waste rock dump deliveries to Kusasaletu Plant (situated near the border of Gauteng and North West Province) supplement mining volumes in order to secure sufficient backfill to use as support in stoping areas.

The tailings retreatment conversion of the Central Plant in FY17 reduced capacity to process waste rock volumes and resulted in an 8% decrease in volumes milled to 2 810 000 tonnes (3 099 000 tons). Waste rock dumps will no longer be processed at the Central Plant in FY18 following the completion of the conversion of this plant to treat tailings.

Gold production from the processing of material from the surface dumps reduced by 1% as the decrease in volumes processed was largely offset by the increase in the recovered grade of 7% to 0.375g/t (0.011oz/t) as higher grade waste rock material was processed in FY17.

Included in the capital expenditure for FY17 is R156 million (US\$11.5 million) related to the Central Plant tailings conversion project which was completed on time and below budget.

OPERATIONAL PERFORMANCE CONTINUED

PAPUA NEW GUINEA

Hidden Valley

| | | FY17* | FY16* | FY15* |
|--|--------------------------|---------|---------|---------|
| Number of employees | | | | |
| – Permanent | | 1 192 | | |
| – Contractors | | 881 | | |
| Total | | 2 073 | 1 168 | 1 257 |
| Operational | | | | |
| Volumes milled | (000t) (metric) | 2 889 | 1 729 | 1 825 |
| | (000t) (imperial) | 3 186 | 1 906 | 2 012 |
| Gold produced ² | (kg) | 2 965 | 2 257 | 2 943 |
| | (oz) | 95 327 | 72 565 | 94 619 |
| Gold sold ² | (kg) | 3 119 | 2 340 | 3 003 |
| | (oz) | 100 278 | 75 233 | 96 548 |
| Grade | (g/t) | 1.07 | 1.31 | 1.61 |
| | (oz/t) | 0.035 | 0.038 | 0.047 |
| Financial | | | | |
| Revenue | (Rm) | 1 500 | 1 320 | 1 346 |
| | (US\$m) | 110 | 91 | 118 |
| Average gold price received | (R/kg) | 544 442 | 564 272 | 448 322 |
| | (US\$/oz) | 1 246 | 1 210 | 1 218 |
| Cash operating cost | (Rm) | 1 214 | 1 082 | 1 153 |
| | (US\$m) | 89 | 75 | 101 |
| Production profit/(loss) | (Rm) | 186 | 108 | 203 |
| | (US\$m) | 14 | 7 | 18 |
| Capital expenditure ³ | (Rm) | 1 335 | 121 | 357 |
| | (US\$m) | 98 | 8 | 31 |
| Cash operating cost | (R/kg) | 466 847 | 479 196 | 391 774 |
| | (US\$/oz) | 1 068 | 1 028 | 1 065 |
| All-in sustaining cost | (R/kg) | 543 186 | 597 398 | 514 690 |
| | (US\$/oz) | 1 241 | 1 282 | 1 395 |
| Safety | | | | |
| Number of fatalities | | 0 | 1 | 1 |
| Lost-time injury frequency rate per million hours worked | | 0.52 | 1.39 | 0.28 |
| Environment | | | | |
| Electricity consumption | (GWh) | 53 | 54 | 48 |
| Water consumption – primary activities | (ML) | 1 309 | 715 | 722 |
| Greenhouse gas emissions | (000t CO ₂ e) | 53 | 55 | 0 |
| Intensity data per tonne treated | | | | |
| – energy | | 0.02 | 0.03 | 0.03 |
| – water | | 0.45 | 0.41 | 0.39 |
| – greenhouse gas emissions | | 0.07 | 0.03 | 0 |
| Number of reportable environmental incidents | | 0 | 0 | 1 |

* The FY16 and FY15 key statistics in the table above represent Harmony's 50% interest in the Hidden Valley mine and are not comparable to the FY17 results. Following Harmony's acquisition of the remaining 50% of Hidden Valley in October 2016, Hidden Valley has been accounted for at 100% from the end of October 2016

¹ Employees of the Hidden Valley joint venture

² FY17 gold produced and gold sold includes 364kg (11 713oz) capitalised as part of pre-stripping of stages 5 and 6 (FY16:nil), (FY15:nil). Revenue of R195 million (US\$14 million) and the associated costs were capitalised

³ Figures for FY15 restated to include capitalised stripping activities

Hidden Valley *continued*

Other salient features

| | |
|------------------------------|---|
| Status of operation | Open-pit mining operation producing gold and silver. Post the acquisition in full, the stage 5 and 6 cutback investment is underway; commercial levels of production scheduled for the last quarter of FY18 |
| Life of mine | 6 years |
| Compliance and certification | Mining lease approved by Papua New Guinea authorities |

Mineral reserves as at 30 June 2017 (including Hamata)

| Gold 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) |
| | 0.5 | 1.04 | 0.4 | 25.7 | 1.65 | 43 | 26.2 | 1.63 | 43 |
| Gold Reserves (imperial) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) | Tons (Mt) | Grade (oz/t) | Gold (000oz) |
| | 0.6 | 0.030 | 17 | 28.4 | 0.048 | 1 370 | 29.0 | 0.048 | 1 387 |

The Hidden Valley mine is an open pit gold and silver mine, situated in the highly prospective area of the Morobe Province in Papua New Guinea, some 210km northwest of Port Moresby. Harmony increased its interest in Hidden Valley to 100% by acquiring the remaining 50% in October 2016.

The major gold and silver deposits of the Morobe goldfield and Hidden Valley are hosted in the Wau Graben. The operational pits are Hidden Valley-Kaveroi and Hamata, located approximately 6km apart. Ore mined is treated at the Hidden Valley processing plant.

The acquisition of full ownership of Hidden Valley followed the decision to invest primarily in the development of the Hidden Valley-Kaveroi stage 5 and 6 cutbacks. The investment in Hidden Valley has the potential to contribute approximately 180 000oz gold per annum to Harmony's production profile, at an all-in sustaining cost of less than US\$950/oz. The total investment capital will be net US\$180 million, of which US\$68 million was spent in FY17 with expenditure of an estimated US\$110 million planned for FY18. Commercial levels of production are expected to be achieved in the June quarter of FY18.

A planned major four-month shutdown commenced in August 2017. Depleted ore stockpiles and a lack of mined ore to feed the plant have necessitated the shutdown, during which extensive upgrades and maintenance will be undertaken.

During FY17, the mine processed ore from the Hamata pit and stockpiles until June 2017 which resulted in the 18% decrease in grade year on year to 1.07g/t (0.035oz/t).

The lost-time injury frequency rate improved significantly in FY17 to 0.52 per million hours worked from 1.39 in FY16. There were no fatalities in FY17 (FY16: one). A culture of safe behaviour and the use of critical control equipment are driving improved safety performance.

Ore milled in the process plant increased by 67% to 2.9 million tonnes (3.2 million tons), gold production rose by 31% year-on-year to 2 965kg (95 327oz), resulting in an increase in revenue of 14% to R1 500 million (an increase of 21% to US\$110 million). Cash operating costs increased by 12% to R1 214 million (19% increase to US\$89 million). These increases are mainly attributable to Harmony's increased stake in Hidden Valley.

Capital expenditure increased by 1 003% in FY17 to R1 335 million (increased by 1 125% to US\$98 million). In order to support waste strip mining and improve production, a significant investment was made in additional and replacement mining equipment.