

HARMONY GOLD MINING CO LTD

Form 6-K

January 25, 2011

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO
RULE 13a-16 OR 15d-16 UNDER THE SECURITIES
EXCHANGE ACT OF 1934

For 24 January 2011

Harmony Gold Mining Company

Limited

Randfontein Office Park

Corner Main Reef Road and Ward Avenue

Randfontein, 1759

South Africa

(Address of principal executive offices)

(Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.)

Form 20-F Form 40-F

(Indicate by check mark whether the registrant by
furnishing the information contained in this form
is also thereby furnishing the information to the
Commission pursuant to Rule 12g3-2(b) under the
Securities Exchange Act of 1934.)

Yes No

**Improved production figures and significant exploration intercepts reported
EXCELLENT RESULTS AT HARMONY'S PNG OPERATION**

Johannesburg, 25 January 2011. Harmony Gold Mining Company Limited (Harmony) is pleased to announce excellent quarterly production results at its Hidden Valley mine in Papua New Guinea (PNG), in line with its post-commissioning production ramp-up plan. In addition, further significant exploration drill hole intercepts at the Wafi Golpu deposit were obtained during the quarter.

Both of these assets are part of the Company's 50% interest in the Morobe Mining Joint Venture.

Gold production at Hidden Valley improved by 23%, quarter on quarter, at 26,584 ounces of gold (Harmony's 50%) produced, due to higher gold feed grades and improved recoveries. Silver production was 44% higher at 191,327 ounces of silver (Harmony's 50%), as a result of higher recoveries. The average grade for the quarter was 2.21 g/t Au, while the silver grade was 26.6 g/t Ag, with unit costs lower at R195 605/kg (US\$884/oz), in comparison to R244 720/kg (US\$1042/oz) in the previous quarter.

"These production results, together with the excellent safety performance by the mine during the quarter, demonstrate that our strategy of investing in safe, quality growth projects is starting to deliver" says Harmony chief executive, Graham Briggs.

In October 2010, Harmony reported on drilling of the Wafi Golpu deposit, which extended the mineralisation beyond the porphyry copper-gold resource of 16Moz of gold and 4.8Mt of copper. Further drilling during the December 2010 quarter has again extended the deposit.

Golpu drill results include:

- WR359 860m @ 1.37% Cu and 0.70g/t Au (2.68g/t Au equivalent*) from 1017m
 - WR361 186m @ 2.01% Cu and 0.35g/t Au (3.25g/t Au equivalent*) from 446m
 - WR362 274m @ 1.07% Cu and 0.29g/t Au (1.83g/t Au equivalent*) from 160m
 - WR363 595m @ 2.03% Cu and 1.65g/t Au (4.58g/t Au equivalent*) from 914m
- In addition, drill hole WR377, has intersected well-mineralised porphyry at a depth of 1 091m down hole which, together with the significant intersections above, has extended the high grade porphyry more than 200m north of the current resource outline (please refer to the press release on our website www.harmony.co.za to view the section and plan view).

Other drilling has focused on pre-feasibility study requirements to gain geotechnical and metallurgical data. The metallurgical drill holes targeted zones in the Wafi gold lodes and have returned significant intersections consistent with the known resource, but with an increased grade. Significant intersections include:

- WR370 202m @ 1.77g/t Au from surface
- WR371 160m @ 3.35g/t Au from 41m

**Issued by Harmony Gold
Mining Company Limited**

25 January 2011

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"The Golpu resource continues to expand to the north as ongoing drilling defines further mineralization, providing us with added confidence that we are well on track in achieving our previously stated exploration target of 30Moz of gold and 8Mt of copper. Golpu will be a future world class copper gold mine", says Harmony chief executive, Graham Briggs. "Continued hard work on ramping up production at Hidden Valley post commissioning is paying off and we are more than pleased with our offshore growth profile", he added.

Note: The Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves. The estimates of Ore Reserves and Mineral Resources in this statement were prepared in accordance with the standards set out in the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves The JORC Code" (December 2004) as published by the Joint Ore Reserve Committee of the Australian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia (JORC) The JORC Code is the accepted reporting standard for the Australian Stock Exchange (ASX).

The Exploration Results, Mineral Resources and Ore Reserves in the summary tables and are based on information compiled by Greg Job who is corporate member of the Australian Institute of Mining and Metallurgy and who has relevant experience of a 'competent person' as defined by the code for reporting of Mineral Resources and Ore Reserves in relation to the mineralisation being reported on and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears Greg Job is a full-time employee of Harmony Gold

Mining Company Ltd.

Refer to www.harmony.co.za for details on Wafi Golpu Resources and the Golpu exploration target guidance.

** Gold equivalents calculated using a gold price of US\$ 950/oz and copper price of US\$2.00 lb and assuming 100% recovery for all metals.*

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: January 24, 2011

Harmony Gold Mining Company Limited

By:

/s/

Hannes Meyer

Name: Hannes Meyer

Title: Financial Director