

HARMONY GOLD MINING CO LTD

Form 6-K

April 13, 2016

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 13 April 2016

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 X

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 X

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**Issued by Harmony Gold
Mining Company Limited**

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Listing codes:

JSE: HAR

NYSE: HMY

ISIN no:

ZAE000015228

Registration no: 1950/038232/06

Harmony Gold Mining Company Limited

(Harmony), a world-class gold mining

and exploration company, has

operations and assets in South Africa

and Papua New Guinea. Harmony,

which has more than 60 years'

experience in the industry, is the third

largest gold producer in South Africa.

Our assets include 9 underground

mines and 1 open pit operation and

several surface sources in South Africa.

Our assets in PNG – an open pit mine

(Hidden Valley), as well as the

significant Golpu project – are held in a

joint venture. We also own several

exploration tenements, in Papua New

Guinea.

The company's primary stock exchange

listing is on the JSE with a secondary

listing on the New York Stock

Exchange. The bulk of our shareholders

are in South Africa and the United

States. Additional information on the

company is available on the corporate

website, www.harmony.co.za.

New significant copper-gold drill results at Harmony's Kili Teke prospect

Johannesburg: Wednesday, 13 April 2016

. Harmony Gold Mining Company

Limited ('Harmony' or 'the Company') is pleased to advise continuing exploration success at its 100% held Kili Teke prospect in the Hela province in Papua New Guinea (PNG).

A maiden Mineral Resource estimate for Kili Teke was declared and announced in November 2015, comprising 128 million tonnes at 0.4 % copper and 0.3 g/t Au (506,000 tonnes copper, 1.2 million ounces Au)

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. The deposit contains two main areas of higher-grade quartz stockwork related mineralisation. Drilling completed since the release (10 holes / 6,820m) has focussed on potential to expand these zones along strike and down dip, with very encouraging results:

- New zones of near surface, stockwork related copper-gold mineralisation developing within the current footprint:

KTDD027: 584.4m @ 0.52% Cu, 0.35 g/t Au from 4.6m

Including

287.4m @ 0.56% Cu, 0.44 g/t Au from 4.6m (on section below)

- Depth extensions of porphyry related quartz vein stockwork mineralisation confirmed in latest drilling:

KTDD022: 206m @ 0.59% Cu, 0.42 g/t Au from 482m

KTDD025: 376m @ 0.47% Cu, 0.29 g/t Au from 495m

- Results also include high-grade massive sulphide chalcopyrite-bornite skarn mineralisation intersected at depth:

KTDD025: 7.8m @ 12.98% Cu, 11.45 g/t Au from 920.2m

Harmony's chief executive officer, Peter Steenkamp, commented: "It is a rare phenomenon, in this day and age, to drill a 584 meter borehole and achieve grades averaging over 0.5 percent copper and 0.35 grams per tonne gold from surface.

Massive sulphide lodes averaging 13% copper and 11.4 grams per tonne gold are even rarer - which is what we are seeing from our Kili Teke drill results."

Drilling at the prospect continues with 2 drill rigs. A revised mineral resource estimate incorporating the latest drill results is planned for the September 2016 quarter.

"The latest drilling results support our belief that Kili Teke has the potential to develop into a major new porphyry copper-gold system. Developing a portfolio of world class copper-gold assets in PNG - replacing ounces at a discovery cost of less than US\$10 per gold equivalent ounce - creates excellent long term value for our shareholders,"

Peter added.

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Figure 1: Transverse section through the northern stockwork zone showing recent drilling intercepts from KTDD025 and KTDD027. Results support the current model, highlight an extension of the mineralisation developing at depth below the current resource limit, and extend the mineralised porphyry hosted quartz vein stockwork zone to surface. High-grade massive sulphide copper-gold mineralisation was intersected by KTDD025 off section near the footwall contact of the intrusive with the marbleised limestone host sequence.

¹ For more details refer to the press release “Maiden copper-gold resource of 4 million gold equivalent ounces defined for Harmony’s Kili Teke

prospect” 24 November 2015 – available on

<https://www.harmony.co.za/our-business/exploration/kili-teke-prospect>.

For full results on the Kili Teke drilling information referred to in this release, including JORC / SAMREC disclosure requirements, please refer to the Annexure at

<https://www.harmony.co.za/downloads/finish/91-files/1962-annexure-13-april-2016>

Competent Persons statement

The information in this report that relates to Exploration Results and other scientific and technical information, is based on information compiled by Mr

Mike Humphries. Mr Humphries is a full time employee of Harmony and a member of the Australia Institute of Geoscientists. Mr Humphries has

sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activity which he is

undertaking to qualify as a Competent Person as defined in The JORC Code 2012 and SAMREC. Mr Humphries consents to the inclusion in this

report of the matters based on this information in the form and context in which it appears.

KTDD027: 287.4m @ 0.56% Cu,

0.44 g/t Au from 4.6m (quartz veined porphyry host)

KTDD025: 376m @ 0.47% Cu,

0.29 g/t Au from 495m (quartz veined porphyry host)

KTDD025: 7.8m @ 12.98% Cu,

11.45 g/t Au from 920.2m

(massive sulphide)

KTDD013: 319m @ 0.79% Cu,

0.57 g/t Au from 166m (pre

November result quartz veined porphyry host)

Limestone

Mixed

porphyry

and skarn

Footwall

contact

Inferred

resource

limit

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: April 13, 2016

Harmony Gold Mining Company Limited

By:

/s/Frank Abbott

Name: Frank Abbott

Title: Financial Director