HARMONY GOLD MINING CO LTD

Form 6-K

November 24, 2015

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 November 2015

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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¹ Gold equivalent based on US\$1200 /oz gold, US\$ 3.0/lb copper with 100% recovery for all metals excluding molybdenum

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

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

Maiden copper-gold resource of 4 million gold equivalent ounces defined for Harmony's Kili Teke prospect Key highlights:

Greenfield porphyry copper-gold discovery

The first new porphyry copper-gold deposit defined in PNG since the Golpu discovery in the early 1990's

Drilling to date has defined an initial Inferred Mineral Resource of 128 million tonnes @ 0.4 % copper, 0.3 g/t Au, 170 parts per million (ppm) molybdenum containing

506 000 tonnes copper, 1.2 million ounces gold, 22 000 tonnes molybdenum

4 million ounces on a gold equivalent basis

Excellent exploration upside

Resource model constrained to a zone of 600m long, 300m wide and 400m deep (above the 1000m RL), with the mineralisation remaining open at depth and along strike

New significant drill intercepts at depth below the Resource area, and along strike including:

KTDD014: 144m @ 0.53% Cu, 0.23 g/t Au from 610m

KTDD017: 374m @ 0.51% Cu, 0.27 g/t Au, 173 ppm Mo from 391m

High grade zones of copper-gold skarn mineralisation yet to be included in the modelling

Positive preliminary scoping parameters

Mineralisation extends to surface and accessible through open pit mining techniques

Preliminary metallurgical test-work favourable with good copper and gold recoveries and clean concentrates

Proximity to key infrastructure including roads and power

Diamond drilling continues with two drilling rigs onsite to accelerate infill and extension drilling

Johannesburg: Tuesday, 24 November 2015

. Harmony Gold Mining Company

Limited (Harmony and/or Company) is pleased to announce a maiden Mineral Resource estimate for the Kili Teke copper-gold deposit on its 100% owned exploration licence EL2310, containing 506 000 tonnes of copper, 1.2 million ounces

of gold and 22 000 tonnes of molybdenum.

The Mineral Resource comprises 128 Million tonnes @ 0.4 % copper, 0.3 g/t Au, 170 ppm molybdenum and was completed in accordance with the guidelines of the SAMREC and JORC (2012 edition) codes. The Mineral Resource is classified as Inferred, and has been defined over a zone 600m long, 300m wide and 400m deep.

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At this stage the Resource is constrained only by the drill density and limits of the drill pattern (refer figure 1). Harmony CEO Graham Briggs commented: "This initial Inferred Mineral Resource estimate for Kili Teke of 4 million ounces of gold equivalent

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represents an extremely positive outcome from the early stage drilling at Kili Teke. Additional significant drill intercepts have already been obtained at depth below and along strike. The declaration of a maiden resource is step one in growing a magnificent resource base – one which is wholly owned by Harmony. Our exploration discovery cost is less than US\$10 per gold ounce equivalent – one of the lowest world-wide. We are thrilled at the prospect of turning Kili Teke into a major new deposit, further enhancing the value of our world class copper-gold portfolio in PNG."

Figure 1; Schematic long section (looking west) showing Inferred Resource outline in relation to drill intercepts and modelled 0.3% (pale yellow) and 0.5% copper (red) block model grade shells.

For more detail on the Kili Teke resource and drilling information, please refer to the Annexure of https://www.harmony.co.za/downloads/finish/91-files/1790-kili-teke-annexure-nov-2015.

Drillhole trace

+0.3% Cu

+0.5% Cu

Open

Open

Open

Open

Limit of Inferred

Resource

610m

Limestone

Diorite porphyry

and skarn

South

North

600m

900m

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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.

The information in this report that relates to Mineral Resources is based on information compiled by Mr Greg Job. Mr Job is a full time employee of

Harmony and a member of the Australasian Institute of Mining and Metallurgy. Mr Job has sufficient experience that is relevant to the styles of

mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in 2012

Edition of the 'Australasian Code for Reporting of Exploration Reports, Mineral Resources and Ore Reserves' and SAMREC. Mr Job consents to the

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

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: November 24 2015

Harmony Gold Mining Company Limited

By:

/s/Frank Abbott Name:Frank Abbott

Title: Financial Director