











































HARMONY'S VALUES

Our values

are at the core of all we do – they are part of our everyday actions and are built into the design of our business.

"We measure ourselves against these in everything we do and aim for."





No matter the circumstances, safety is our main priority













We are all connected as one team





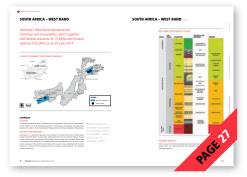
We uphold honesty in all our business dealings and communicate openly with stakeholders

NTRODUCTION

VPPENDIX



RESOURCES AND RESERVES - SOUTH AFRICA



RESOURCES AND RESERVES - PAPUA NEW GUINEA



This document, Mineral Resources and Mineral Reserves 2014, forms part of Harmony's 2014 suite of annual reports for the financial year from 1 July 2013 to 30 June 2014 (FY14). The primary report in this suite, the Integrated Annual Report 2014, is available as an interactive online report at www.harmony.co.za. Other reports in this suite are the Financial Report 2014 and the Report to Shareholders 2014, which are also available as pdfs on our website. In addition, the Report to Shareholders 2014 will be posted to shareholders.

CONTENTS

INTRODUCTION

2

Auditing and compliance	2
Location of operations	4
Overview of the year	5
Exploration and projects	6

)	MINERAL RESOURCES AND MINERAL RESERVES							
	Resource and reserve reconciliation	14						
	Relationship between Harmony's mineral resources and mineral reserves (SAMREC code)	16						
	Mineral resources statement (imperial)	19						
	Mineral resources statement (metric)	21						
	Mineral reserves statement (imperial)	23						
	Mineral reserves statement (metric)	25						

3 **RESOURCES AND RESERVES BY OPERATION**

SOUTH AFRICA	27
West Rand	28
Free State operations	35
Kalgold	57
PAPUA NEW GUINEA	63

Sampling standard	77
Quality assurance and quality control	77
Assay laboratory	77
Sample preparation plant	78
Reporting code	78
Definitions as per SAMREC Code	79
Harmony reporting in compliance with SAMREC	80
Glossary of geological terms	81
Directorate and administration	IBC

AUDITING AND COMPLIANCE

Harmony's statement of Mineral Resources and Mineral Reserves as at 30 June 2014 is produced in accordance with the South African Code for the Reporting of Mineral Resources and Mineral Reserves (SAMREC) and the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC).

The company's attributable gold equivalent mineral resources are declared as 133.8Moz as at 30 June 2014, a 9.4% decrease year-on-year from the 147.7Moz declared on 30 June 2013. The 9.4% decrease collectively represents depletion during the year and geology- and scope-related changes. The gold resource ounces in South Africa represent 69%, while the Papua New Guinea gold and gold equivalent ounces represent 31% of Harmony's total gold equivalent resources as at 30 June 2014.

As at 30 June 2014, Harmony's attributable gold equivalent mineral reserves amounted to 49.5Moz of gold, a 3.9% decrease from the 51.5Moz declared on 30 June 2013. The 3.9% decrease collectively represents depletion during the year, a change in reserves from surface sources together with some scope changes at some of the underground operations. The gold reserve ounces in South Africa represent 57% while the Papua New Guinea gold and gold equivalent ounces represent 43% of Harmony's total mineral reserves as at 30 June 2014.

Mineral resources are reported inclusive of the mineral reserves. We use certain terms in this report such as 'measured', 'indicated' and 'inferred' resources, which the United States' Securities Exchange Commission (SEC) guidelines strictly prohibit US-registered companies from including in their filings with the SEC. US investors are advised to consider closely the disclosure in our Form 20-F.

AUDITING

Harmony's South African mineral resources and mineral reserves have been comprehensively audited by a team of internal competent persons that functions independently of the operating units. The internal audit team verifies compliance with the Harmony code of resource blocking, valuation, resource classification, cut-off calculations, development of life-of-mine plans and SAMREC compliant statements from each operation and project which supports Harmony's annual mineral resources and mineral reserves declaration.

This audit process is specifically designed to comply with the requirements of internationally recognised procedures and standards such as:

- The South African Code for Reporting Mineral Resources and Mineral Reserves SAMREC
- Industry Guide 7 of the United States' SEC
- Sarbanes-Oxley requirements
- The Australian Code for Reporting of Exploration Results, Mineral Resources and Mineral Reserves JORC which complies with SAMREC

ASSUMPTIONS

In converting the mineral resources to mineral reserves, the following commodity prices and exchange rates were applied:

- A gold price of US\$1 300/oz
- An exchange rate of US\$/ZAR10.17
- The above parameters resulted in a rand gold price of R425 000/kg for the South African assets
- The Hidden Valley mine and Wafi-Golpu project in the MMJV used commodity prices of US\$1 250/oz Au, US\$21/oz Ag, US\$15/lb Mo and US\$3.10/lb Cu at an exchange rate of A\$0.90 per US\$
- Gold equivalent ounces are calculated assuming US\$1 400/oz Au, US\$3.10/lb Cu and US\$23.00/oz Ag, and assuming a 100% recovery for all metals. These are the same as those used in the 2012 prefeasibility study for the calculation of gold equivalent ounces

Tshepong is one of Harmony's eight operations in the Free State.

Tshepong mine



"In South Africa, Harmony employs an ore reserve manager at each of its operations who takes responsibility for the compilation and reporting of mineral resources and mineral reserves at their operations." Harmony's South African Mineral Resources were reviewed and audited by SRK Consulting Engineers and Scientists for compliance with SAMREC. The Golpu Mineral Resource was audited by AMC Consultants Pty Ltd for compliance with the standards set out in JORC.

COMPETENT PERSON'S DECLARATION

In South Africa, Harmony employs an ore reserve manager at each of its operations who takes responsibility for the compilation and reporting of mineral resources and mineral reserves at their operations. In Papua New Guinea, competent persons are appointed for the mineral resources and mineral reserves for specific projects and operations.

The mineral resources and mineral reserves in this report are based on information compiled by the following competent persons:

• Resources and reserves South Africa:

Jaco Boshoff, BSc (Hons), MSc, MBA, Pr. Sci. Nat, who has 19 years' relevant experience and is registered with the South African Council for Natural Scientific Professions (SACNASP) and a member of the South African Institute of Mining and Metallurgy (SAIMM).

Resources and reserves Papua New Guinea:

Gregory Job, BSc, MSc, who has 26 years' relevant experience and is a member of the Australian Institute of Mining and Metallurgy (AusIMM).

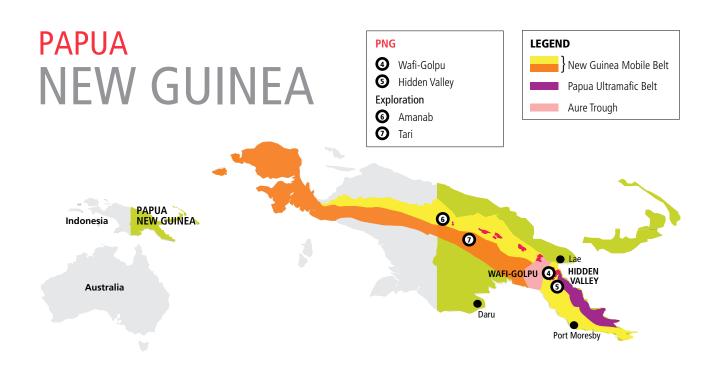
Mr Boshoff and Mr Job are full-time employees of Harmony Gold Mining Company Limited. These competent persons consent to the inclusion in the report of the matters based on the information in the form and context in which it appears.

Jaco Boshoff 23 October 2014

Greg Job 23 October 2014

LOCATION OF OPERATIONS





OVERVIEW OF THE YEAR

KEY GEOLOGICAL FEATURES OF EXPLORATION AREAS

PAPUA NEW GUINEA:

Hidden Valley, Hamata, Kerimenge, Wau and Wafi have epithermal gold deposits that are shallow, or close to the earth's surface. Golpu is a porphyry system which is deeper and contains copper. A number of other gold and copper-gold prospects are at various stages of exploration and evaluation across Harmony's lease areas.

SOUTH AFRICA:

All of our underground mines are in the Witwatersrand Supergroup. Most of these can be found in the south-western corner of the Witwatersrand Basin or Free State goldfields, and comprise sedimentary rocks that extend laterally for hundreds of kilometres into the West Rand goldfields and East Rand Basin. The Kraaipan Greenstone Belt can be found further north-west where we have an open pit operation.

"There were several significant developments across Harmony's pipeline of projects in Papua New Guinea in FY14."

In FY14, we spent R458 million (US\$44 million) (FY13: R673 million; US\$76 million) on exploration, both brownfields and greenfields.

Of this, 99% was spent in Papua New Guinea, which represents a net reduction of R215 million (32%) (US\$32 million) year-on-year, largely driven by the decline in the dollar gold price. Accordingly, in balancing the need to replace reserves and resources depleted in an environment where profit margin is being eroded by the gold price, the exploration programme has been restructured.

Key principles underpinning the FY14 programme were:

- Reduced exploration spend
- Focus on high-grade near mine (brownfields) opportunities with potential to convert to reserves in the short to medium term
- Rationalisation of the greenfields tenement package

The low gold price environment has also resulted in opening-up of available tenure over highly prospective target areas in Papua New Guinea. In line with our core operating capability in the region, Harmony is monitoring this closely for opportunities that would enhance the project portfolio.

HIGHLIGHTS OF THE YEAR

There were several significant developments across Harmony's pipeline of projects in Papua New Guinea in FY14. Although there were some material changes at the grass roots end of the pipeline, in terms of project turnover and prospect development, more than 76% of exploration expenditure was on the Wafi-Golpu project, directed at the development of a low-capital execution strategy to turn the project to account.

Prefeasibility optimisation studies at Golpu

- Exploration shaft for early underground access and data acquisition
- Refined Golpu geological model based on improved orebody understanding
- Study development of a low cost, high grade start-up mine option

Focus on brownfields exploration

- Brownfields drilling 13 365m (predominantly Golpu) vs greenfields drilling 2 175m
- Hidden Valley near-mine prospect development; new high-grade gold targets discovered between Wau and Edie Creek

Greenfields tenement rationalisation

- Harmony (100%) tenement holding reduced 73% to 1 125.5km²
- Joint venture (Harmony 50%) tenement holding reduced 50% to 2 057km²

Project turnover and development

- Southern Highlands Province tenement EL2310 pegged. It contains widespread coppergold porphyry and skarn mineralisation with alteration styles similar to Ok Tedi
- Milne Bay Province tenement ELA2316 pegged. It contains a catchment area in excess of 10km² with highly anomalous gold stream sediment anomalism and localised artisanal workings and represents a potential new gold province
- Mt Hagen, Amanab, Tari and Lake Kopiago (Hirane) projects closed out and relinquished

EXPLORATION AND PROJECTS

We began actively exploring in Papua New Guinea in 2003. Currently, we have a project portfolio in bothestablished mineral provinces and emerginggold and copper districts covering an area of 3 182km².



Hidden Valley

Altered flow banded felsic from 11 Peg showing multiple crosscutting veins, some with infill dog tooth quartz, and iron staining after sulphides.

PAPUA NEW GUINEA

The Morobe Mining Joint Ventures (MMJV) tenement package is a strategic holding in the Morobe Goldfield. During FY14, we spent R83.3 million (US\$8.0 million) on exploration in the area, of which Harmony's share was 50% of the total. Drill programmes at Garawarria and around the old Wau mine were completed with limited significant intersections. Community permission, which had delayed access to the some of the Wau area in recent years, was gained and mapping and soil geochemistry surveys of this area has revealed potential high-grade satellite resources that could supplement the mill-feed at Hidden Valley, approximately 10km to the northeast.

A budget of A\$8m (50% to Harmony) has been allocated for FY15. This year's primary objective is to discover a new orebody to compliment Hidden Valley operations and the Wafi Golpu project.

• Hidden Valley operation

Brownfields exploration to discover significant new high-grade deposits to replace ore depletion and to displace low-grade mill feed for Hidden Valley. Drilling to occur in the Wau area at Upper Namie and 11 Peg.

Wafi Area

Drill campaign in the second half of FY15 for Golpu-style deposits. These discoveries will utilise Wafi-Golpu infrastructure and increase capital utilisation and efficiency. Continue low cost mapping and sampling areas to generate drill targets for evaluation in coming years.

Greenfields evaluation

Continue to develop our understanding of the geology and mineralisation of the Morobe Province. Data mining of the voluminous data we already hold.

"During FY14, we spent R83.3 million (US\$8.0 million) on exploration in the area, of which Harmony's share was 50% of the total."

Exploration in Papua New Guinea has been a good investment for Harmony. Since 2003, R2 061 million (US\$253 million) in exploration with attributed resource growth (on a gold equivalent basis) of 32.1Moz over the same period. On this basis, Harmony's discovery cost in Papua New Guinea stands at R63.80 (US\$7.80) per gold equivalent ounce, which is amongst the best in the world.

In addition to the Morobe province joint venture tenements, Harmony also holds 100% interest in 1 125 km² of tenure in highly prospective copper-gold districts of the Papua New Guinea mobile belt. R63.0 million (US\$6.1 million) was spent on greenfields exploration of Harmony 100% tenure in FY14 (FY13: R125.1 million; US\$14.2 million) with work focused on two key projects after an economic mineral deposit at Mt Hagen proved unlikely.

WAFI BROWNFIELDS

Although drilling was primarily focussed on resource definition for the prefeasibility optimisation studies a number of significant intercepts were obtained immediately southwest of the Golpu deposit. Drilling has outlined a new zone of high grade gold mineralisation with intercepts including:

 WR498:
 38m @ 2.09g/t Au from 212m

 WR500:
 34m @ 1.97g/t Au from 222m

 Incl:
 8m @ 4.22 g/t Au from 228m

 WR502:
 54m @ 3.61g/t Au from 146m

 Incl:
 20m @ 5.83 g/t Au from 162m

The intercepts are characterised by intense kaolinite-dickite-alunite-sericite alteration with up to 15% pyrite infill and highlight the upside potential for additional high-grade Link zone style mineralisation in the gold system above the Golpu copper-gold deposit.

WAFI-TRANSFER (GREENFIELDS)

Work on the Wafi structural corridor during FY14 focussed on mapping and sampling the northeast strike extension of the transfer structure from the Wafi-Golpu deposit. Some 490 rock chip samples and 331 soil samples were collected in the latter part of the year with the aim of completing the systematic geochemical and geological coverage over the area. Some encouraging rock chip and soil values (up to 3.6 g/t Au) have been returned from the Miapilli and Zenapu areas.

HIDDEN VALLEY DISTRICT (BROWNFIELDS)

Exploration work during the year focussed on brownfields exploration in the area encompassing the historic gold mining centre at Wau, located approximately 10km to the northeast of Hidden Valley. A drill programme comprising three holes, totalling 1 024m, was completed at the historic Wau gold mine. Systematic mapping and surface sampling of the surrounding prospect areas was completed (509 samples).

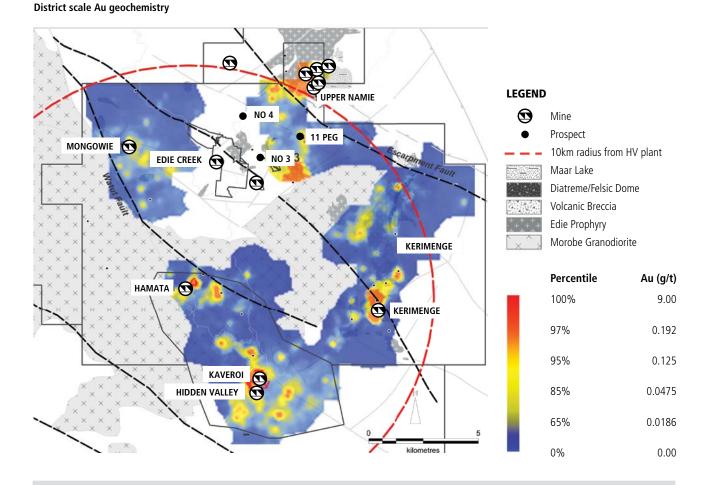
Results from this work have been highly encouraging with several new targets discovered with excellent potential for high-grade satellite resources to supplement the mill feed at Hidden Valley including:

- 11 Peg prospect: detailed mapping and sampling has defined a central zone of strong alteration and mineralisation in excess of 300m of strike. 132 samples have been collected from the zone to date, which have returned an average gold grade of 2.8g/t Au and an average silver grade of 22.9g/t Ag. The quality of this new target demonstrates the potential that still remains in the district. Drill testing is planned for the first quarter of FY15.
- Upper Namie prospect: mapping has outlined a number of high level felsic intrusive units within the Escarpment Fault structural zone. The fault zone has been reactivated over time leading to local development of breccia, accompanied by multistage mineralisation and alteration events. The fault zone has been mapped over 1 000m and up to 250m wide, with associated high order +100ppb surface geochemistry. An early staged Ribroaster style mineralisation event is overprinted by manganocarbonate veins.

"Harmony Exploration now holds interests in 1 125.5km² of exploration tenure in Papua New Guinea." NTRODUCTION

HIDDEN VALLEY

EXPLORATION AND PROJECTS continued



Several other geochemical targets are being advanced as part of the ongoing work programme. These include the No 3 target area (see map on page 9) where results show a new high order gold anomaly emerging along strike from Edie Creek. The anomaly occurs over an area of 600m by 500m (but open off the grid) and is defined by the 200ppb gold level felsic intrusive similar to the known deposits at Wau.

WAU (EL497)

Drilling at Wau comprised three holes for 1 203m. The drilling was undertaken to test interpreted depth extensions from the Upper ridges lodes and outlined a sequence of altered and mineralised volcanics and volcanic breccia overlying black shale. The contact between the two units is displaced by faulting, and the sequence intruded by andesite porphyry. Results included:

ESCDH001: 11.7m @ 1.0 g/t Au from 127.3m 4m @ 5.24 g/t Au from 184m ESCDH002: 24.9m @ 1.18 g/t Au from 28.1m ESCDH003: 1m @ 1.07 g/t Au from 337m

The widespread alteration and broad anomalous (+0.1 g/t Au) mineralisation in the overlying volcanics was encouraging and ties in with results being returned in the surface mapping / sampling programme.

"The drilling was undertaken to test interpreted depth extensions from the Upper ridges lodes and outlined a sequence of altered and mineralised volcanics and volcanic breccia overlying black shale."

Hidden Valley

Hyrdothermal breccia from 11 Peg prospect with iron oxide matrix after sulphides.



MOROBE REGIONAL EXPLORATION

Regional exploration activities were scaled back marginally in favour of brownfield target development at Hidden Valley and prefeasibility work at Wafi Golpu, although a small amount of reconnaissance work was necessary to maintain the tenements in good standing.

GARAWARIA PROSPECT (EL1629)

Two drill holes (982m) were completed to finalise the work programme before the camp was placed on care and maintenance. Results outlined broad intervals of gold anomalism including ALNDH005; 13.8m @ 0.55 g/t Au from 12.2m & 17m @ 0.54 g/t Au from 71m and ALNDH006; 22m @ 0.82 g/t Au from 266m. Gold anomalism is accompanied by elevated pathfinder elements including arsenic, antimony, lead and zinc; and appears to be structurally controlled. A tollgate report to put the results in context with the geology and geophysics is planned.

100% HARMONY PAPUA NEW GUINEA TENEMENTS FY14

A total of R63.0 million (US\$6.1 million) was spent on exploration outside of the Morobe JV on Harmony-owned projects in FY14. Turnover and rationalisation of Harmony's 100% owned greenfields tenement portfolio has resulted in a significantly reduced tenement holding comprising 1 125km²; a 70% reduction in the size of the tenement portfolio year on year. Key changes include:

- Amanab Project in the Saundaun Province of Papua New Guinea: Close-out and relinquishment
 of the project was completed after follow-up work downgraded the bedrock potential of
 the system.
- **Tari Project** located in the Southern Highlands Province: Exploration continued with prospect turnover resulting in surrender of EL1785 and EL1786, and pegging of the adjacent Kili Teke prospect in EL2310, where previous explorers have outlined a major alteration zone over several square kilometres with associated copper-gold porphyry and copper-gold skarn mineralisation.
- **Magavara Project** in the Milne Bay Province: Represents a new exploration licence application encompassing one of the highest order stream sediment gold anomalies in the historic Papua New Guinea dataset. Localised alluvial gold workings occur in association with the stream sediment anomalies, but no drill testing has been completed to explain the bedrock source.

During the year a country wide assessment of over 140 Papua New Guinea prospects and projects was also completed. In light of the current gold price environment, Harmony continues to actively monitor tenement changes for new opportunities to enhance the portfolio.

Harmon d tenemer o year on and relinc edrock pc nued with of the adj

"A total of R63.0 million (US\$6.1 million) was spent on exploration outside of the Morobe JV on Harmony-owned projects in FY14."

AMANAB PROJECT

The Amanab project which comprised 464 square kilometers of tenure in the Sandaun Province was relinquished during the year after the size potential of the system was downgraded and no further work recommended.

Work activities were focused on drill target development at the Yup east prospect with trenching and surface sampling (475 samples) completed to outline the footprint of the main vein system. However, trenching along strike constrained the strike to less than 150m, and showed that vein habit was typically thin (up to 4m).

Mapping together with the vertical trench profiles through the alluvial cover indicates multiple phases of uplift/erosion and deposition in the Amanab region since the Oligocene and the earlier intrusion of the metadiorite. The apparent disparity between occurrence of widespread alluvial gold and relatively minor but high-grade insitu gold veins in the bedrock is interpreted as the result of the multiple erosional/depositional events, with successive events combining to rework and concentrate the gold into the form of the current day alluvial field.

TARI PROJECT

At the Tari Project work completed on EL1785 and 1786 in the Southern Highlands of Papua New Guinea focussed on development of major gold and porphyry copper-gold targets. Geologically the Tari project is located in the Papuan fold belt which contains world class deposits including the Grasberg, Ok Tedi copper-gold porphyry deposits, and Porgera epithermal gold system.

During FY14 first pass sampling and mapping was conducted over a number of target areas including Kagoma, Dogoma, Koroba, and Mt Pagaruma with over 700 samples collected. First pass drill testing at Lake Kopiago (two holes/890m) was also completed. Tenement outlines and prospect locations are outlined.

"Work activities were focused on drill target development at the Yup east prospect with trenching and surface sampling (475 samples) completed to outline the footprint of the main vein system."



Kili Teke Prospect

Oxidised and mineralised skarn from the Kili Teke Prospect.

AS AT JUNE 30, 2012

Contracting Weinerstrates and a second secon

TARI PROJECT TENEMENT OUTLINES AND PROSPECT LOCATIONS

Results obtained from this regional work were only weakly anomalous, which led to the relinquishment of EL1786 and EL1785. However, over the course of the work programme the ground immediately west of EL1786 encompassing the anomalous drainage area and alteration footprint over Kili Teke prospect became available, and a new exploration licence EL2310 was lodged successfully.

KILI TEKE PROSPECT (EL2310)

The Kili Teke prospect lies approximately 40km west-northwest of Porgera located in the same host stratigraphy as the OK Tedi and Grasberg copper-gold deposits.

The area was first outlined by the then Conzinc Riotinto of Australia after regional drainage sampling in 1987 returned float samples from the Logaiyu river assaying up to 7.5 g/t Au. Subsequent work by various explorers culminated in a three-hole drill programme in which one hole, KT003 returned an intercept of 134m @ 0.28% Cu and 0.37 g/t Au. The copper-gold ratio of the intercept highlights the potential for a gold rich copper porphyry system (eg. Golpu), and together with the regional setting and host stratigraphy, formed the basis for Harmony's tenement application over the area.

Initial work at the prospect has been highly encouraging and has confirmed a potentially large Cu-Au porphyry style hydrothermal alteration system. Contact skarn mineralisation has also been mapped at or adjacent to intrusive wall-rock contacts. Key aspects picked up from the work completed to date include:

- Multiphase complex: several porphyry phases defined to date with additional zones of hydrothermal breccia developed
- Leached and oxidised: development of secondary copper minerals in most of the material sampled to date
- Alteration: dominated by variably developed pervasive clay ± sericite + pyrite (phyllic) alteration, overprinted locally by fracture controlled patchy chlorite ± pyrite ± epidote ± carbonate (propylitic) alteration
- Geology and structure:
 - Evidence of younger porphyry phases intruding tertiary limestone/siliciclastic host sequence (same host stratigraphy as Ok Tedi and Grasberg)
 - Significant northeast trending transfers identified

Mapping outside of the 1.5 by 0.5km target zone defined by previous explorers suggests potential for a significantly larger system masked by limestone cover and development work planned for FY15 has been designed to vector to the hotter, copper rich parts of the mineralised system. This includes surface geochemistry and detailed mapping, geophysics including ground magnetics and a 3D induced polarisation survey, and drill testing.

MAGAVARA PROJECT (ELA2316)

The Magavara Project tenement area is located in the Milne Bay province, 100km west of Alotau. The tenement comprises 614 square kilometres and was lodged to assess potential for a new gold district in Papua New Guinea. Although the tenement encompasses one of the highest order gold drainage anomalies in the historic exploration data, the area remains underexplored with no previous drill testing.

Gold anomalism is associated with a number of syenite intrusive bodies, and is accompanied by anomalous base metals. The alkalic intrusives are hosted in Jurassic / Cretaceous metasediments however mapped pockets of Pliocene conglomerates suggest an extensional setting for the mineralisation, similar to the Tolokuma area and at the Wau graben.

Mining wardens hearings were conducted as part of the tenement application process in June, with full support from local communities. At this stage reconnaissance work is scheduled for the second half of FY15.

SOUTH AFRICA

PROJECTS

Joel North: The aim of exploration here was to firm up knowledge of the orebody to enable mining from 129 level to 137 level. To date, much of the infrastructural development on 129 level has been completed and the declines have been advanced almost half way down to 137 level. Blasting of the decline and its equipping will be completed in the coming year when lateral development on 137 level will commence.

Central plant reclamation: Investigations into the feasibility of processing historical tailings material from the FSS5 tailings facility (which is close to Bambanani). This reclamation project will be similar to the very profitable Phoenix project which has been under way since 2007. The plan is to process 300 000t of reclaimed material monthly.

"Initial work at the prospect has been highly encouraging and has confirmed a potentially large Cu-Au porphyry style hydrothermal alteration system."

Phakisa

Exploration work at Phakisa is aimed at anabling access to the resource below current infrastructure.



BROWNFIELDS EXPLORATION

Surface exploration of greenstone type gold mineralisation at Kalgold: Kalgold exploration has focused on the Windmill target, which has been selected due to its proximity to the mine and encouraging results of previous exploration. A total of 742m was drilled in the last financial year. Seven boreholes have been completed and all intersected mineralised BIF (Banded Ironstone Formation) units. Drilled boreholes returned an average grade of 2.5g/t but the mineralised zones are narrow (from 0.5m to 11m). Exploration has been curtailed due to financial constraints. No exploration is planned for FY2015.

UNDERGROUND EXPLORATION

In addition, a total of 28 515m was drilled across Harmony's underground operations in South Africa.

Using a method known as continuous coring, underground exploration drilling is done as per required intervals from existing underground excavations (haulages and cross cuts). This drilling is done to determine the elevation and grade of the targeted reef horizon as well as the geological features in the immediate surrounding lithology. It assists in structural geological interpretation and evaluation of specific areas as well as in the compilation of regional structural geological and evaluation models. Mine geologist and planners use this information to determine the mines development strategy and eventually the mines economic viability.

RESOURCE AND RESERVE RECONCILIATION

RELATIONSHIP BETWEEN EXPLORATION RESULTS, MINERAL RESOURCES AND MINERAL RESERVES

	EXPLORATION RESULTS		
Increasing level of geoscientific knowledge	RESOURCES Reported as <i>in situ</i> mineralisation estimates	1	RESERVES Reported as mineable production estimates
and confidence	INFERRED		
• •	INDICATED	<>	PROBABLE
	MEASURED	$\stackrel{\stackrel{\scriptstyle \scriptstyle i}{\leftarrow}}{\longleftrightarrow}$	PROVED
	<		>
	5.	metallurgical, economic, marke overnmental factors (the 'modil	5. 5 .

MINERAL RESOURCES – RECONCILIATION FY13-FY14

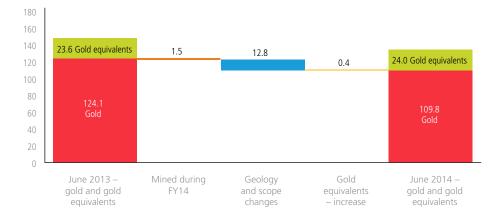
As at 30 June 2014, attributable gold equivalent mineral resources were 133.8Moz, down from 147.7Moz in June 2013. The following table and graph show the year-on-year reconciliation of the mineral resources.

Gold and gold equivalent mineral resources reconciliation

	Tonnes	Moz
June 2013 – gold and gold equivalents	4 594	147.7
Reductions		
Mined during FY14	(47)	(1.5)
Geology and scope changes	(398)	(12.8)
Increases		
Gold equivalents	12	0.4
June 2014 – gold and gold equivalents	4 161	133.8

"As at 30 June 2014, attributable gold equivalent mineral resources were 133.8Moz."

Mineral resources reconciliation (Moz) FY13 vs FY14



RESOURCE AND RESERVE RECONCILIATION continued

"As at 30 June 2014, Harmony's attributable gold equivalent mineral reserves were 49.5Moz."

Phakisa

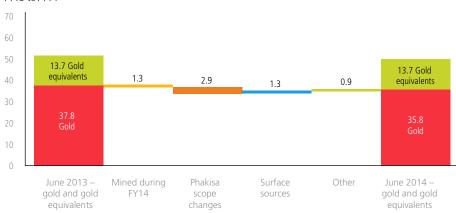
MINERAL RESERVES – RECONCILIATION FY13-FY14

As at 30 June 2014, Harmony's attributable gold equivalent mineral reserves were 49.5Moz, down from 51.5Moz. The year-on-year mineral reserves reconciliation is shown below.

Gold and gold equivalent mineral reserves reconciliation

	Tonnes	Moz
June 2013 – gold and gold equivalents	1 601	51.5
Reductions		
Mined during FY14	(40)	(1.3)
Phakisa scope changes	(89)	(2.9)
Increases		
Surface sources	39	1.3
Other	28	0.9
June 2014 – gold and gold equivalents	1 539	49.5







RELATIONSHIP BETWEEN HARMONY'S MINERAL RESOURCES AND MINERAL RESERVES

SOUTH AFRICA UNDERGROUND

Tonnes		Gold	Gold	Tonnes		Gold	G
Mt	g/t	000kg	000oz	Mt	g/t	000kg	000
316.3	8.19	2 591	83 312	108.8	5.69	619	19 9
Reported as in	situ minerali	sation estima	tes	Reported as m	neable produ	uction estimat	tes
Inferred							
Tonnes		Gold	Gold				
Mt	g/t	000kg	000oz				
155.2	7.07	1 097	35 262				
Indicated				Probable			—
Tonnes		Gold	Gold			Gold	G
Mt	g/t	000kg	000oz	Mt	g/t	000kg	000
83.4	9.25	772	24 808	54.4	5.67	309	99
Measured				Proved			
Tonnes		Gold	Gold	Tonnes		Gold	G
Mt	g/t	000kg	000oz	Mt	g/t	000kg	000
77.7	9.31	723	23 242	54.3	5.71	310	9 9

			SOUTH AFRI (INCLUDING	CA SURFACE 5 KALGOLD)			
Mineral resou	rces (total)			Mineral reserv	ves (total)		
Tonnes Mt	g/t	Gold 000kg	Gold 000oz	Tonnes Mt	g/t	Gold 000kg	Gold 000oz
1 122.6	0.26	297	9 561	969.7	0.26	250	8 042
Reported as in a	situ mineralis	sation estimat	es	Reported as mi	neable produ	uction estimat	es
Inferred							
Tonnes		Gold	Gold				
Mt	g/t	000kg	000oz				
51.3	0.47	24	769				
 Indicated				Probable			
Tonnes		Gold	Gold 🔫			Gold	Gold
Mt	g/t	000kg	000oz	Mt	g/t	000kg	000oz
680.0	0.24	162	5 198	608.7	0.24	147	4 739
Measured				Proved			
Tonnes		Gold	Gold	Tonnes		Gold	Gold
Mt	g/t	000kg	000oz	Mt	g/t	000kg	000oz
391.3	0.29	112	3 594	361.0	0.28	103	3 303

RELATIONSHIP BETWEEN HARMONY'S MINERAL RESOURCES AND MINERAL RESERVES continued

		SOUTH AF	RICA TOTAL		
Mineral resources (to	tal)		Mineral reserves (to	otal)	
Tonnes Mt	Gold 000kg	Gold 000oz	Tonnes Mt	Gold 000kg	Golo 0000
1 438.9	2 889	92 873	1 078.4	869	27 94
Reported as in situ mine	eralisation estimate	es	Reported as mineable	e production estima	tes
Inferred					
Tonnes	Gold	Gold			
Mt	000kg	000oz			
206.5	1 121	36 031			
Indicated			Probable		
Tonnes	Gold	Gold 🚽		Gold	Gol
Mt	000kg	000oz	Mt	000kg	0000
763.4	933	30 006	663.1	456	14 66
Measured			Proved		
Tonnes	Gold	Gold	Tonnes	Gold	Gol
Mt	000kg	000oz	Mt	000kg	0000
469.0	835	26 836	415.4	413	13 28

		PAPA	U NEW GU	- ATTRIBUTABLE GOL	D		
Mineral resou	rces (total)			Mineral reser	ves (total)		
Tonnes Mt	g/t	Gold 000kg	Gold 000oz	Tonnes Mt	g/t	Gold 000kg	Gold 000oz
677.6	0.78	525	16 890	253.2	0.96	242	7 782
Reported as in .	situ minerali	sation estima	tes	Reported as m	ineable prod	uction estimat	es
Inferred							
Tonnes		Gold	Gold				
Mt	g/t	000kg	000oz				
142.8	0.60	86	2 761				
Indicated				Probable			—
Tonnes		Gold	Gold			Gold	Golo
Mt	g/t	000kg	000oz	Mt	g/t	000kg	0000
533.7	0.82	438	14 085	252.1	0.96	241	7 741
Measured				Proved			
Tonnes		Gold	Gold	Tonnes		Gold	Golo
Mt	g/t	000kg	000oz	Mt	g/t	000kg	0000
1.2	1.15	1	44	1.1	1.14	1	41

Г

RELATIONSHIP BETWEEN HARMONY'S MINERAL RESOURCES AND MINERAL RESERVES continued

Mineral resources (1		Cald	Mineral reserves (to		<u> </u>
Tonnes Mt	Gold	Gold 000oz	Tonnes Mt	Gold 000kg	Gc 000
	000kg			2	
2 116.5	3 414	109 763	1 331.6	1 111	35 7
Reported as in situ m	ineralisation estima	tes	Reported as mineable	e production estima	tes
Inferred					
Tonnes	Gold	Gold			
Mt	000kg	000oz			
349.3	1 207	38 792			
Indicated		· ·	Probable		·
Tonnes	Gold	Gold 🔫		Gold	Go
Mt	000kg	000oz	Mt	000kg	000
1 297.0	1 371	44 091	915.1	697	22 4
Measured			Proved		
Tonnes	Gold	Gold	Tonnes	Gold	Go
Mt	000kg	000oz	Mt	000kg	000
470.2	836	26 880	416.5	414	13 3

TOTAL ATTRIBUTABLE GOLD EQUIVALENTS – HARMONY UNDERGROUND AND SURFACE

Tonnes	Gold ea	uivalents	Tonnes	Gold equ	ivalents_
Mt	000kg	000oz	Mt	000kg	00002
2 116.5	4 160	133 754	1 331.6	1 538	49 457
eported as <i>in situ</i> m	nineralisation estima	tes	Reported as mineable	production estima	tes
ferred					
Tonnes	Gold eq	uivalents			
Mt	000kg	000oz			
349.3	1 321	42 457			
dicated		·	Probable		
Tonnes	Gold eq	uivalents		Gold eq	uivalents
Mt	000kg	000oz	Mt	000kg	0000
1 297	2 003	64 404	915.1	1 124	36 124
leasured			Proved		
Tonnes	Gold eq	uivalents	Tonnes	Gold eq	uivalents
Mt	000kg	000oz	Mt	000kg	00002
470.2	836	26 894	416.5	415	13 333
	2 116.5 eported as <i>in situ</i> m ferred Tonnes Mt 349.3 dicated Tonnes Mt 1 297 leasured Tonnes Mt	2 116.5 4 160 eported as in situ mineralisation estima ferred Tonnes Gold eq Mt 000kg 349.3 1 321 dicated	2 116.54 160133 754eported as <i>in situ</i> mineralisation estimatesferredTonnesGold equivalents 000kg349.31 32142 457dicatedTonnesGold equivalents 000kgMt000kg000oz1 2972 00364 404leasuredTonnesGold equivalents 000kg	2 116.5 4 160 133 754 1 331.6 eported as <i>in situ</i> mineralisation estimates Reported as mineable ferred Tonnes Gold equivalents Mt 000kg 000oz 349.3 1 321 42 457 dicated Probable Tonnes Gold equivalents Mt 000kg 000oz 1 297 2 003 64 404 leasured Proved Tonnes Gold equivalents Mt 000kg 00oz Mt 000kg 00oz Mt 000kg 00oz Mt 000kg 00oz	2 116.5 4 160 133 754 1 331.6 1 538 eported as in situ mineralisation estimates Reported as mineable production estimates ferred Tonnes Gold equivalents Reported as mineable production estimates Mt 000kg 000oz 349.3 1 321 42 457 dicated Probable Tonnes Gold equivalents Mt 000kg 00oz 1 297 2 003 64 404 leasured Proved Tonnes Gold equivalents Mt 000kg 00oz Mt 000kg 00oz

MINERAL RESOURCES STATEMENT (IMPERIAL)

Operations	Measu	ured resou	urces	Indica	ted resou	urces	Inferi	red resou	rces	Total m	ineral res	ources
	Tons	Grade	Gold	Tons	Grade	Gold	Tons	Grade	Gold	Tons	Grade	Gold
	(Mt)	(oz/t)	(000oz)	(Mt)	(oz/t)	(000oz)	(Mt)	(oz/t)	(000oz)	(Mt)	(oz/t)	(000oz)
SOUTH AFRICA UNDERGROUND												
Free State												
Gold												
Bambanani	2.0	0.479	981	-	_	-	-	-	-	2.0	0.479	981
Joel	5.2	0.228	1 188	7.8	0.245	1 916	1.1	0.208	221	14.1	0.236	3 325
Masimong	10.8	0.237	2 559	6.5	0.214	1 394	58.2	0.173	10 050	75.5	0.185	14 003
Phakisa	7.7	0.278	2 144	15.3	0.358	5 459	30.4	0.243	7 388	53.4	0.281	14 991
Target 1	9.4	0.213	2 013	10.7	0.225	2 415	2.2	0.156	340	22.4	0.213	4 768
Target 2	0.1	0.399	20	0.1	0.451	67	-	-	-	0.2	0.438	87
Target 3	9.0	0.260	2 349	8.8	0.234	2 069	4.1	0.182	739	21.9	0.235	5 157
Freddies 9	_	-	_	6.6	0.309	2 045	32.6	0.236	7 690	39.2	0.248	9 735
Tshepong	21.3	0.329	7 013	3.8	0.311	1 185	9.0	0.250	2 243	34.1	0.306	10 441
Unisel	8.7	0.200	1 740	5.7	0.224	1 272	5.6	0.213	1 188	19.9	0.211	4 200
Total Free State Underground	74.3	0.269	20 007	65.4	0.272	17 822	143.1	0.209	29 859	282.8	0.239	67 688
West Rand												
Doornkop												
Doornkop South Reef	3.4	0.226	774	6.3	0.236	1 495	24.2	0.182	4 411	34.0	0.197	6 680
Doornkop Main Reef	_	_	_	_	_	_	0.3	0.202	54	0.3	0.202	54
Total	3.4	0.226	774	6.3	0.236	1 495	24.5	0.182	4 465	34.3	0.197	6 734
Kusasalethu	7.9	0.313	2 461	20.2	0.272	5 491	3.5	0.267	938	31.6	0.282	8 890
Total West Rand	11.3	0.287	3 235	26.5	0.263	6 986	28.0	0.193	5 403	65.8	0.237	15 624
Total South Africa Underground	85.6		23 242	92.0	0.270	24 808	171.1	0.206	35 262	348.6	0.239	83 312
SOUTH AFRICA SURFACE												
Kraaipan Greenstone Belt												
Kalgold	17.0	0.018	303	17.5	0.024	425	8.5	0.032	267	42.9	0.023	995
Free State – Surface		01010	505	1110	0.021	120	010	01002	207	1210	01025	555
Free State (Phoenix)	105.0	0.008	873	_	_	_	_	_	_	105.0	0.008	873
Free State (St Helena)	285.1	0.008	2 227	_	_	_	_	_	_	285.1	0.008	2 227
Free State (Other):	205.1	0.000	2 221							205.1	0.000	2221
– WRD	_		_	4.3	0.015	65	31.0	0.013	408	35.4	0.013	473
– Slimes dams	_		_	727.7	0.006	4 708	17.0	0.006	94	744.7	0.006	4 802
– Subtotal	_		_	732.0	0.007	4 773	48.1	0.010	502	780.1	0.007	5 275
Total Free State	390.2	0.008	3 100	732.0	0.007	4 773	48.1	0.010		1 170.3	0.007	8 375
Total Kalgold Tailings Dam	24.2	0.008	191	_	_	_	_	_	_	24.2	0.008	191
Total South Africa Surface												
(incl Kalgold)	431.4	0.008	3 594	749.5	0.007	5 198	56.6	0.014	769	1 237.4	0.008	9 561
Total SA	517.0		26 836	841.5		30 006	227.6		36 031	1 586.1		92 873
PAPUA NEW GUINEA ¹												
Hidden Valley	1.2	0.033	40	51.4	0.046	2 360	3.0	0.036	107	55.6	0.045	2 507
Hamata	0.09	0.042	4	2.3	0.062	145	0.1	0.053	5	2.5	0.061	154
Wafi	- 0.05	_	_	62.5	0.050	3 146	12.5	0.038	475	75.0	0.048	3 621
Golpu	_	_	_	472.0	0.018	8 434	119.9	0.030	1 669	591.9	0.040	10 103
Nambonga	_	_	_	- 472.0	0.010	-	21.9	0.014	505	21.9	0.023	505
Total Papua New Guinea	1.3	0.034	44	588.3	0.024	14 085	157.4	0.023	2 761	746.9	0.023	16 890
										1-0.3	0.023	10 000

19

MINERAL RESOURCES STATEMENT (IMPERIAL) continued

Operations	Measu	ured resou	urces	Indica	ted resou	irces	Inferr	ed resou	rces	Total mi	ineral res	ources
	Tons		Au eq	Tons		Au eq	Tons		Au eq	Tons		Au eq
	(Mt)		(000oz)	(Mt)		(000oz)	(Mt)		(000oz)	(Mt)		(000oz)
GOLD EQUIVALENTS ¹												
Silver												
Hidden Valley	1.2		14	51.4		792	3.0		45	55.6		850
Total	1.2		14	51.4		792	3.0		45	55.6		850
Copper												
Golpu	_		_	472.0		19 521	119.9		3 416	591.9		22 937
Nambonga	_		_				21.9		204	21.9		204
Total	_		_	472.0		19 521	141.8		3 620	613.8		23 141
Total silver and copper as gold												
equivalents	1.2		14	523.4		20 313	144.8		3 665	669.4		23 991
Total Papua New Guinea	1.2			525.4		20 515	144.0		5 005	005.4		23 331
including gold equivalents	1.3		58	588.3		34 398	157.4		6 426	746.9		40 881
Total Harmony including	1.5		50	500.5		54 550	137.4		0 420	740.5		40 001
equivalents	518.3		26 894	1 429.7		64 404	385.0		42 457	2 333.0		133 754
equivalents	10.5		20 0 94	1 423.7		04 404	303.0		42 4J7	2 333.0		133734
Other metals												
	Tons	Grade	Ag	Tons	Grade	Ag	Tons	Grade	Ag	Tons	Grade	Ag
	(Mt)	(oz/t)	(000oz)	(Mt)	(oz/t)	(000oz)	(Mt)	(oz/t)	(000oz)	(Mt)	(oz/t)	(000oz)
PAPUA NEW GUINEA ¹												
Silver												
Hidden Valley	1.2	0.63	750	51.4	0.86	44 371	3.0	0.83	2 492	55.6	0.86	47 613
Golpu				472.0	0.03	15 664	119.9	0.03	3 090	591.9	0.03	18 754
Nambonga							21.9	0.08	1 836	21.9	0.08	1 836
Total	1.2	0.63	750	523.4	0.11	60 035	144.8	0.05	7 418	669.4	0.10	68 203
	Tons	Grade	Cu	Tons	Grade	Cu	Tons	Grade	Cu	Tons	Grade	Cu
	(Mt)	(%)	(Mlb)	(Mt)	(%)	(Mlb)	(Mt)	(%)	(Mlb)	(Mt)	(%)	(Mlb)
Copper												
Golpu	-	_	_	472.0	0.847	8 809	119.9	0.584	1 544	591.9	0.793	10 353
Nambonga	_	_	_				21.9	0.191	92	21.9	0.191	92
Total	_	_	_	472.0	0.847	8 809	141.8	0.523	1 636	613.8	0.772	10 445
											-	
	Tons	Grade	Мо	Tons	Grade	Мо	Tons	Grade	Мо	Tons	Grade	Мо
	(Mt)	(lb/t)	(Mlb)		(lb/t)		(Mt)	(lb/t)	(Mlb)		(lb/t)	
Molybdenum	(1110)	(10/1)	(1110)	(111)	(ID/ C)	(11115)	(111)	(ID/ C)	(4110)	(ivic)		
Golpu	_	_	_	472.0	0.197	93	119.9	0.152	18	591.9	0.188	111
				172.0	0.137		113.5	0.152	10	551.5	0.100	
	Tons	Grade	U308	Tons	Grade	U308	Tons	Grade	U308	Tons	Grade	U308
	(Mt)	(lb/t)	(Mlb)	(Mt)	(lb/t)	(Mlb)	(Mt)	(lb/t)	(Mlb)	(Mt)	(oz/t)	(Mlb)
SOUTH AFRICA	((······)	(()	(······ -/	(,····-/	(······)	, <i>.</i>)			
Uranium												
Free State underground												
Masimong	_	_	_	7.4	0.584	4	67.7	0.311	21	75	0.338	25
Tshepong	7.1	0.388	3	15.4	0.452	7	11.6	0.236	3	34	0.365	12
Phakisa	7.1	0.339	3	15.3	0.432	5	30.4	0.230	8	53	0.305	16
Total	14.8	0.359	5	<u> </u>	0.339	16	109.7	0.279	32	163	0.303	54
Total South Africa Underground	14.0	0.363	5	38.1	0.432	16	109.7	0.294	32	163	0.333	54
Free State Surface	- 14.0	0.505	-	350.1	0.452	56	- 109.7	0.294	- 52	352.1	0.355	56
Grand total	- 14.8	0.363	- 5	388.2	0.180	72	109.7	0.294	32	514.7	0.160	110
	14.0	0.303	J	500.2	0.100	12	109.7	0.2.94	52	514.7	0.213	110

¹ Total attributable

Gold equivalent ounces are calculated assuming a US\$1 400/oz Au, US\$3.10/lb Cu and US\$23.00/oz Ag with 100% recovery for all metals NB Rounding of numbers may result in slight computational discrepancies

Note: 1 ton = 907 kg = 2 000 lbs

MINERAL RESOURCES STATEMENT (METRIC)

Operations	Measu	ured reso	urces	Indica	ted resou	urces	Inferi	red resou	rces	Total m	ineral reso	ources
	Tonnes	Grade	Gold	Tonnes	Grade	Gold	Tonnes	Grade	Gold	Tonnes	Grade	Gold
	(Mt)	(g/t)	(000kg)	(Mt)	(g/t)	(000kg)	(Mt)	(g/t)	(000kg)	(Mt)	(g/t)	(000kg)
SOUTH AFRICA UNDERGROUND												
Free State												
Gold												
Bambanani	1.9	16.40	31	-	-	-	-	-	-	1.9	16.40	31
Joel	4.7	7.83	37	7.1	8.39	60	1.0	7.12	7	12.8	8.09	103
Masimong	9.8	8.11	80	5.9	7.33	43	52.8	5.92	313	68.5	6.36	436
Phakisa	7.0	9.54	67	13.8	12.26	170	27.6	8.32	230	48.5	9.62	466
Target 1	8.6	7.30	63	9.7	7.71	75	2.0	5.36	11	20.3	7.31	148
Target 2	0.05	14.00	1	0.1	15.52	2	-	-	-	0.2	15.14	3
Target 3	8.2	8.92	73	8.0	8.02	64	3.7	6.23	23	19.9	8.06	160
Freddies 9	-	-	-	6.0	10.61	64	29.6	8.09	239	35.6	8.51	303
Tshepong	19.3	11.27	218	3.5	10.67	37	8.1	8.59	70	30.9	10.50	325
Unisel	7.9	6.86	54	5.1	7.69	40	5.1	7.30	37	18.1	7.22	131
Total Free State Underground	67.4	9.23	622	59.4	9.34	554	129.8	7.16	929	256.6	8.21	2 105
West Rand												
Doornkop South Reef	3.1	7.75	24	5.7	8.09	47	22.0	6.24	137	30.8	6.74	208
Doornkop Main Reef	_	-	-	-	-	-	0.2	6.94	2	0.2	6.94	2
Total	3.1	7.75	24	5.7	8.09	47	22.2	6.25	139	31.1	6.74	209
Kusasalethu	7.1	10.75	77	18.3	9.32	171	3.2	9.16	29	28.6	9.66	277
Total West Rand	10.2	9.84	101	24.1	9.03	217	25.4	6.61	168	59.7	8.14	486
Total South Africa Underground	77.7	9.31	723	83.4	9.25	772	155.2	7.07	1 097	316.3	8.19	2 591
SOUTH AFRICA SURFACE												
Kraaipan Greenstone Belt												
Kalgold	15.4	0.61	9	15.9	0.83	13	7.7	1.08	8	38.9	0.79	31
Free State Region – Surface												
Free State (Phoenix)	95.3	0.29	27	_	_	_	_	_	_	95.3	0.29	27
Free State (St Helena)	258.7	0.27	69	_	_	_	_	_	_	258.7	0.27	69
Free State (Other):	20017	0127								20017	0127	
– WRD	_	_	_	3.9	0.51	2	28.2	0.45	13	32.1	0.46	15
– Slimes dams	_	_	_	660.2	0.22	146	15.5	0.19	3	675.6	0.22	149
– Subtotal	_	_	_	664.1	0.22	148	43.6	0.36	16	707.7	0.23	164
Total Free State	354.0	0.27	96	664.1	0.22	148	43.6	0.36	16	1 061.7	0.25	261
Total Kalgold Tailings Dam	22.0	0.27	6	_	_	_		_	_	22.0	0.27	6
Total South Africa Surface												
(incl Kalgold)	391.3	0.29	112	680.0	0.24	162	51.3	0.47	24	1 122.6	0.26	297
Total SA	469.0		835	763.4		933	206.5		1 121	1 438.9		2 889
PAPUA NEW GUINEA ¹												
Hidden Valley	1.1	1.14	1	46.6	1.57	73	2.7	1.22	3	50.4	1.55	78
Hamata	0.09	1.28	0.11	2.1	2.14	5	0.1	1.90	0.2	2.3	2.10	5
Wafi	0.05	1.20	-	56.7	1.72	98	11.3	1.30	15	68.1	1.65	113
Golpu	_	_	_	428.2	0.61	262	108.7	0.48	52	536.9	0.59	314
Nambonga	_		_	-20.2	0.01	202	19.9	0.48	16	19.9	0.39	16
Total Papua New Guinea	1.2	1.15	- 1	533.7	0.82	438	142.8	0.79	86	677.6	0.79	525
Grand total	470.2			1 297.0	0.02	1 371	349.3	0.00		2 116.5	0.70	3 414
	4/0.2		020	1 297.0		13/1	549.5		1207	2 110.5		5414

21

MINERAL RESOURCES STATEMENT (METRIC) continued

Operations	Measu	ured resou	urces	Indica	ited resou	irces	Inferr	ed resou	rces	Total mi	ineral res	ources
	Tonnes		Au eq									
	(Mt)		(000kg)									
GOLD EQUIVALENTS ¹												
Silver												
Hidden Valley	1.1		0.4	46.6		25	2.7		1	50.4		26
Total	1.1		0	46.6		25	2.7		1	50.4		26
Copper												
Golpu	_		_	428.2		607	108.7		106	536.9		713
Nambonga	-		_	_		_	19.9		6	19.9		6
Total	-		_	428.2		607	128.6		113	556.8		720
Total silver and copper as gold												
equivalents	1.1		0	474.8		632	131.3		114	607.3		746
Total Papua New Guinea												
including gold equivalents	1.2		2	533.7		1 070	142.8		200	677.6		1 272
Total Harmony including												
equivalents	470.2		836	1 297.0		2 003	349.3		1 321	2 116.5		4 160
Other metals												
	Tonnes	Grade	Ag									
	(Mt)	(g/t)	(000kg)									
PAPUA NEW GUINEA ¹												
Silver												
Hidden Valley	1.1	21.51	23	46.6	29.60	1 380	2.7	28.50	77	50.4	29.37	1 481
Golpu	-	-	-	428.2	1.14	487	108.7	0.88	96	536.9	1.09	583
Nambonga	-	-	-	-	-	-	19.9	2.87	57	19.9	2.87	57
Total	1.1	21.51	23	474.8	3.93	1 867	131.3	1.76	231	607.3	3.49	2 121
	Tonnes	Grade	Cu									
	(Mt)	(%)	(000t)									
Copper												
Golpu	-	-	-	428.2	0.93	3 996	108.7	0.64	700	536.9	0.87	4 696
Nambonga	-	-	-	-	_	-	19.9	0.21	42	19.9	0.21	42
Total	-	-	-	428.2	0.93	3 996	128.6	0.58	742	556.8	0.85	4 738
	Tonnes	Grade	Мо									
	(Mt)	(ppm)	(Mkg)									
Molybdenum										50.5.0		50
Golpu	-	-	-	428.2	98	42	108.7	76	8	536.9	94	50
	Tornac	Grada	11200	Toppor	Grade	0001	Toppor	Grade	11200	Topper	Grade	11200
	Tonnes (Mt)	Grade (kg/t)	U308 (Mkg)									
SOUTH AFRICA	(1010)	(ky/t)	(mixy)	(111)	(ixy/t)	(mixy)	(1111)	(ivg/t/	(inity)	(ivit)	(kg/t)	(iving)
Uranium												
Free State Underground												
Masimong	_	-	-	6.7	0.29	2	61.4	0.16	10	68.1	0.17	12
Tshepong	6.4	0.19	1	14.0	0.23	3	10.5	0.12	1	30.9	0.18	6
Phakisa	7.0	0.17	1	13.9	0.17	2	27.6	0.14	4	48.5	0.15	7
Total	13.4	0.18	2	34.6	0.22	7	99.5	0.15	15	147.5	0.17	25
Total South Africa Underground	13.4	0.18	2	34.6	0.22	7	99.5	0.15	15	147.5	0.17	25
Free State Surface	-	-	-	319.4	0.08	26	-	_	-	319.4	0.08	26
Grand total	13.4	0.18	2	354.0	0.09	33	99.5	0.15	15	466.9	0.11	50

¹ Total attributable

Gold equivalent ounces are calculated assuming a US\$1 400/oz Au, US\$3.10/lb Cu and US\$23.00/oz Ag with 100% recovery for all metals NB Rounding of numbers may result in slight computational discrepancies

Note: 1 tonne = 1 000 kg = 2 204 lbs

MINERAL RESERVES STATEMENT (IMPERIAL)

Operations	Prov	ved reserv	/es	Prob	able rese	rves	Total m	nineral re	serves
	Tons	Grade	Gold^2	Tons	Grade	Gold ²	Tons	Grade	Gold ²
	(Mt)	(oz/t)	(000oz)	(Mt)	(oz/t)	(000oz)	(Mt)	(oz/t)	(000oz)
SOUTH AFRICA UNDERGROUND									
Free State									
Gold									
Bambanani	2.1	0.301	647	-	-	-	2.1	0,301	647
Joel	2.6	0.153	403	4.8	0.171	822	7.4	0.165	1 225
Masimong	5.4	0.131	710	1.8	0.128	237	7.3	0.130	947
Phakisa	3.9	0.179	701	4.4	0.224	993	8.3	0.203	1 694
Target 1	5.5	0.123	672	6.4	0.158	1 008	11.8	0.142	1 680
Target 3	2.7	0.174	471	4.7	0.147	684	7.4	0.157	1 155
Tshepong	22.6	0.162	3 676	2.7	0.156	419	25.3	0.162	4 095
Unisel	1.8	0.125	223	0.7	0.117	84	2.5	0.123	307
Total Free State Underground	46.7	0.161	7 503	25.5	0.166	4 247	72.2	0.163	11 750
West Rand									
Doornkop									
Doornkop South Reef	2.9	0.147	420	5.5	0.163	899	8.4	0.158	1 319
Kusasalethu	10.4	0.198	2 055	28.9	0.165	4 778	39.3	0.174	6 833
Total West Rand	13.2	0.187	2 475	34.4	0.165	5 677	47.7	0.171	8 152
Total South Africa Underground	59.9	0.166	9 978	60.0	0.166	9 924	119.9	0.166	19 902
SOUTH AFRICA SURFACE									
Kraaipan Greenstone Belt									
Kalgold	7.7	0.026	203	11.5	0.030	341	19.3	0.028	544
Free State – Surface									
Free State (Phoenix)	105.0	0.008	873	_	-	-	105.0	0.008	873
Free State (St Helena)	285.1	0.008	2 227	_	_	-	285.1	0.008	2 227
Free State (Other):									
-WRD	-	-	-	4.3	0.015	65	4.3	0.015	65
– Slimes dams	_	-	-	655.1	0.007	4 333	655.1	0.007	4 333
– Subtotal	_	-	-	659.4	0.007	4 398	659.4	0.007	4 398
Total Free State	390.2	0.008	3 100	659.4	0.007	4 398	1 049.6	0.007	7 498
Total South Africa Surface (incl Kalgold)	397.9	0.008	3 303	670.9	0.007	4 739	1 068.9	0.008	8 042
Total SA	457.9		13 281	730.9		14 663	1 188.8		27 944
PAPUA NEW GUINEA ¹									
Hidden Valley	1.2	0.033	40	28.0	0.051	1 430	29.2	0.050	1 470
Hamata	0.04	0.028	1	1.8	0.066	117	1.8	0.065	118
Golpu	_	_	_	248.0	0.025	6 194	248.0	0.025	6 194
Total Papua New Guinea	1.2	0.033	41	277.8	0.028	7 741	279.1	0.028	7 782
Grand total	459.1		13 322				1 467.8		35 726

¹ Total attributable

Gold equivalent ounces are calculated assuming a US\$1 400/oz Au, US\$3.10/lb Cu and US\$23.00/oz Ag with 100% recovery for all metals ² Metal figures are fully inclusive of all mining dilutions and gold losses, and are reported as mill delivered tonnes and head grades.

Metallurgical recovery factors have not been applied to the reserve figures.

NB Rounding of numbers may result in slight computational discrepancies

Note: 1 ton = 907 kg = 2 000 lbs

MINERAL RESERVES STATEMENT (IMPERIAL) continued

Operations	Proved	reserves	Probabl	e reserves	Total mineral reserves		
	Tons	Au eq 2	Tons	Au eq ²	Tons	Au eq ²	
	(Mt)	(000oz)	(Mt)	(000oz)	(Mt)	(000oz)	
GOLD EQUIVALENTS 1							
Silver							
Hidden Valley	1.2	11	28.0	456	29.2	467	
Total	1.2	11	28.0	456	29.2	467	
Copper							
Golpu	-	-	248.0	13 265	248.0	13 265	
Total	-	-	248.0	13 265	248.0	13 265	
Total silver and copper as gold equivalents	1.2	11	276.1	13 720	277.3	13 731	
Total Papua New Guinea including gold equivalents	1.2	52	277.8	21 461	279.1	21 513	
Total Harmony including equivalents	459.1	13 333	1 008.7	36 124	1 467.8	49 457	
Other metals							

	Tons	Grade	Ag ²	Tons	Grade	Ag ²	Tons	Grade	Ag ²
	(Mt)	(oz/t)	(000oz)	(Mt)	(oz/t)	(000oz)	(Mt)	(oz/t)	(000oz)
PAPUA NEW GUINEA ¹									
Silver									
Hidden Valley	1.2	0.553	662	28.0	0.966	27 080	29.2	0.949	27 742
Golpu	-	-	-	248.0	0.040	9 864	248.0	0.040	9 864
Total	1.2	0.553	662	276.1	0.134	36 944	277.3	0.136	37 606
	Tons	Grade	Cu ²	Tons	Grade	Cu ²	Tons	Grade	Cu ²
	(Mt)	(%)	(Mlb)	(Mt)	(%)	(Mlb)	(Mt)	(%)	(Mlb)
Copper									
Golpu	-	-	-	248.0	1.096	5 992	248.0	1.096	5 992
Total									
	Tons	Grade	Mo ²	Tons	Grade	Mo ²	Tons	Grade	Mo ²

(Mt)

lb/ton

(Mlb)

(Mt)

248.0

lb/ton

0.162

(Mlb)

40

248.0

0.162

40

Golpu

¹ Total attributable

Molybdenum

Gold equivalent ounces are calculated assuming a US\$1 400/oz Au, US\$3.10/lb Cu and US\$23.00/oz Ag with 100% recovery for all metals

² Metal figures are fully inclusive of all mining dilutions and gold losses, and are reported as mill delivered tonnes and head grades.

Metallurgical recovery factors have not been applied to the reserve figures. NB Rounding of numbers may result in slight computational discrepancies

Note: 1 ton = 907 kg = 2 000 lbs

MINERAL RESERVES STATEMENT (METRIC)

Operations	Prov	ved reserv	/es	Prob	able rese	rves	Total n	nineral res	serves
	Tonnes	Grade	$Gold^2$	Tonnes	Grade	$Gold^2$	Tonnes	Grade	Gold ²
	(Mt)	(g/t)	(000kg)	(Mt)	(g/t)	(000kg)	(Mt)	(g/t)	(000kg)
SOUTH AFRICA UNDERGROUND									
Free State									
Gold									
Bambanani	1.9	10.33	20	-	-	-	1.9	10.33	20
Joel	2.4	5.26	13	4.4	5.87	26	6.7	5.66	38
Masimong	4.9	4.48	22	1.7	4.40	7	6.6	4.46	29
Phakisa	3.5	6.15	22	4.0	7.68	31	7.6	6.97	53
Target 1	5.0	4.21	21	5.8	5.42	31	10.7	4.86	52
Target 3	2.5	5.98	15	4.2	5.04	21	6.7	5.38	36
Tshepong	20.5	5.57	114	2.4	5.33	13	23.0	5.54	127
Unisel	1.6	4.29	7	0.7	4.02	3	2.3	4.21	10
Total Free State Underground	42.4	5.51	233	23.2	5.70	132	65.5	5.58	366
West Rand									
Doornkop									
Doornkop South Reef	2.6	5.03	13	5.0	5.59	28	7.6	5.40	41
Kusasalethu	9.4	6.80	64	26.2	5.66	149	35.6	5.96	213
Total West Rand	12.0	6.42	77	31.2	5.65	177	43.2	5.86	254
Total South Africa Underground	54.4	5.71	310	54.4	5.67	309	108.8	5.69	619
SOUTH AFRICA SURFACE									
Kraaipan Greenstone Belt									
Kalgold	7.0	0.90	6	10.4	1.02	11	17.5	0.97	17
Free State – Surface									
Free State (Phoenix)	95.3	0.29	27	-	-	-	95.3	0.29	27
Free State (St Helena)	258.7	0.27	69	-	-	-	258.7	0.27	69
Free State (Other):									
– WRD	-	-	-	3.9	0.51	2	3.9	0.51	2
– Slimes dams	-	-	-	594.3	0.23	135	594.3	0.23	135
– Subtotal	-	-	-	598.2	0.23	137	598.2	0.23	137
Total Free State	354.0	0.27	96	598.2	0.23	137	952.2	0.24	233
Total South Africa Surface (incl Kalgold)	361.0	0.28	103	608.7	0.24	147	969.7	0.26	250
Total SA	415.4		413	663.1		456	1 078.4		869
PAPUA NEW GUINEA ¹									
Hidden Valley	1.1	1.14	1	25.4	1.75	44	26.5	1.72	46
Hamata	0.03	1.10	0.04	1.6	2.26	4	1.6	2.24	4
Golpu	-	_	_	225.0	0.86	193	225.0	0.86	193
Total Papua New Guinea	1.1	1.14	1	252.1	0.96	241	253.2	0.96	242
Grand total	416.5		414	915.1		697	1 331.6		1 111

¹ Total attributable

Gold equivalent ounces are calculated assuming a US\$1 400/oz Au, US\$3.10/lb Cu and US\$23.00/oz Ag with 100% recovery for all metals

² Metal figures are fully inclusive of all mining dilutions and gold losses, and are reported as mill delivered tonnes and head grades.

Metallurgical recovery factors have not been applied to the reserve figures. NB Rounding of numbers may result in slight computational discrepancies

Note: 1 ton = 907 kg = 2 000 lbs

MINERAL RESERVES STATEMENT (METRIC) continued

Operations	Prov	ved reserves		Prob	able reserv	/es	Total m	nineral res	serves
	Tonnes	A	u eq 2	Tonnes		Au eq 2	Tonnes		Au eq ²
	(Mt)	(0)00kg)	(Mt)		(000kg)	(Mt)		(000kg)
GOLD EQUIVALENTS ¹									
Silver									
Hidden Valley	1.1		0.3	25.4		14	26.5		15
Total	1.1		0.3	25.4		14	26.5		15
Copper									
Golpu	-		-	225.0		413	225.0		413
Total	-		-	225.0		413	225.0		413
Total silver and copper as gold equivalents	1.1		0.3	250.4		427	251.5		427
Total Papua New Guinea including gold equivalents	1.1		2	252.1		668	253.2		669
Total Harmony including equivalents	416.5		415	915.1		1 124	1 331.6		1 538
Other metals									
	Tonnes	Grade	Ag ²	Tonnes	Grade	Ag ²	Tonnes	Grade	Ag ²
	(Mt)	(a/t) (0)00ka)	(Mt)	(a/t)	(000ka)	(Mt)	(n/t)	(000ka)

	(Mt)	(g/t)	(000kg)	(Mt)	(g/t)	(000kg)	(Mt)	(g/t)	(000kg)
PAPUA NEW GUINEA ¹									
Silver									
Hidden Valley	1.1	18.99	21	25.4	33.11	842	26.5	32.53	863
Golpu	-	-	-	225.0	1.36	307	225.0	1.36	307
Total	1.1	18.99	21	250.4	4.59	1 149	251.5	4.65	1 170
	Tonnes	Grade	Cu ²	Tonnes	Grade	Cu ²	Tonnes	Grade	Cu ²
	(Mt)	(%)	(000t)	(Mt)	(%)	(000t)	(Mt)	(%)	(000t)
Copper									
Golpu	-	-	-	225.0	1.21	2 718	225.0	1.21	2 718
	Tonnes	Grade	Mo ²	Tonnes	Grade	Mo ²	Tonnes	Grade	Mo ²
	(Mt)	ppm	(000t)	(Mt)	ppm	(000t)	(Mt)	ppm	(000t)
Molybdenum									
Golpu	-	-	-	225.0	81	18	225.0	81	18

¹ Total attributable

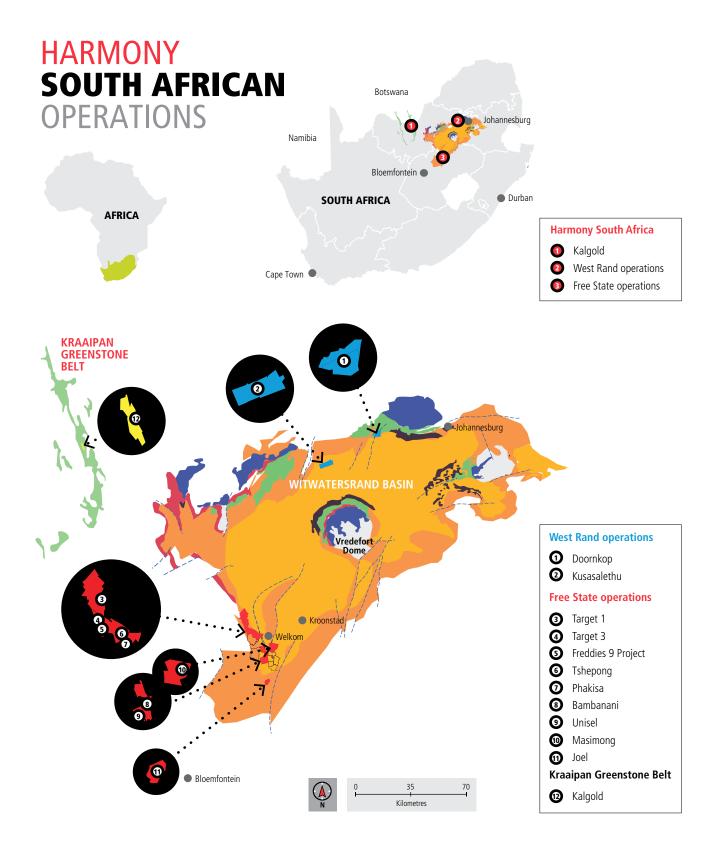
Gold equivalent ounces are calculated assuming a US\$1 400/oz Au, US\$3.10/lb Cu and US\$23.00/oz Ag with 100% recovery for all metals

² Metal figures are fully inclusive of all mining dilutions and gold losses, and are reported as mill delivered tonnes and head grades.

Metallurgical recovery factors have not been applied to the reserve figures. NB Rounding of numbers may result in slight computational discrepancies

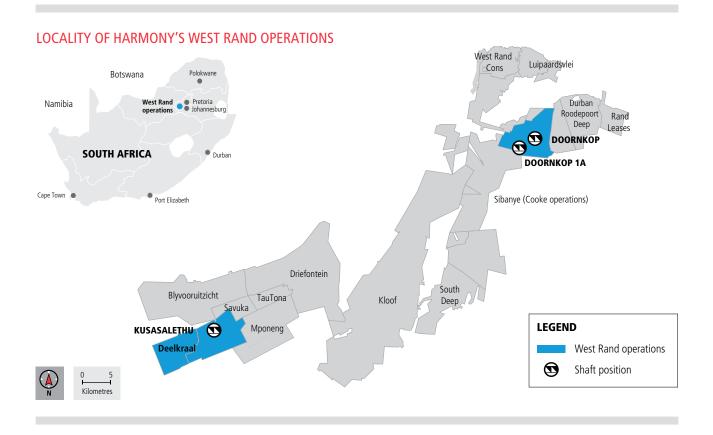
Note: 1 tonne = 1 000 kg = 2 204 lbs

SOUTH AFRICA



SOUTH AFRICA – WEST RAND

Harmony's West Rand operations are Doornkop and Kusasalethu, which together had mineral resources of 15.6Moz and mineral reserves of 8.2Moz as at 30 June 2014



DOORNKOP

LOCATION

The Doornkop shaft complex is located south of Krugersdorp, 30km west of Johannesburg, on the northern rim of the Witwatersrand Basin, in the province of Gauteng. The property lies between the Cooke 1 Shaft, belonging to Sibanye Gold, and Durban Roodepoort Deep Mines.

NATURE OF THE OPERATION

Doornkop is a single-shaft operation which exploits the South Reef some 2 000m below surface. The South Reef is a narrow reef, exploited by means of conventional stoping. The ore mined at Doornkop is processed at Doornkop's carbon-in-pulp plant, situated directly next to Doornkop shaft. Mining of the Kimberley Reef was suspended during FY14 so as to focus on the build-up of mining of the South Reef and to prevent losses resulting from the lower gold price. Mining of the Kimberley Reef may be resumed should economic circumstances improve sufficiently.

"The ore mined at Doornkop is processed at Doornkop's carbonin-pulp plant, situated directly next to Doornkop shaft."

GROUP	GKOON 208-	FORMATION		INFORMAL UNIT AND REEFS	MEMBER
IPR VIERSBERG		WESTONARIA		KLIPRIVIERSBERG/ VENTERSDORP LAVA	
7		VENTERSPOST		VCR ELSBURG MASSIVES AND INDIVIDUALS	MODDERFONTEIN WATERPAN
	TUPPEPONTELN	ELSBURG	*. *. *.	QUARTZITES AND CONGLOMERATES	GEMSBOKFONTEIN PLANVLAKTE GEMSPOST VLAKFONTEIN
and		KIMBERLEY		SHAIF	KIMBERLEY REEFS
ALL RAND 33		BOOYSENS SHALE		UPPER TRANSITIONAL SHALE LOWER TRANSITIONAL	KIMBERLEY Shale
GENT		KRUGERSDORP		BIRD AMYGDALIOD BIRD REEFS WHITE REEF	BIRD
	BURG			LUIPAARDSVLEI QUARTZITE	LUIPAARDSVIEI
	JOHANNES	LIVINGSTONE CONGLOMERATE RANDEONTEIN		LIVINGSTONE REEF	LWINGSTONE REEF
		JOHNSTONE CONGLOMERATE	**	JOHNSTONE REEF	JOHNSTONE REEF
		MAIN CONGLOMERATE		MAIN REEF, LEADER REEF, Sotth Reef	LANGLAAGTE
VEST RAND GROUP	PPESTDWN	ROODEPOORT			

REGIONAL GEOLOGY

The structure of the West Rand goldfield is dominated by the Witpoortjie and Panvlakte Horst blocks, which are superimposed over broad folding associated with the south-east plunging West Rand syncline.

The Doornkop shaft lease area is bounded by and lies to the south-east of the major northeasterly striking Roodepoort fault, which dips to the south and constitutes the southern edge of the Witpoortjie Horst block or gap. This Horst block comprises the stratigraphically older sediments of the West Rand Group, the overlying Central Rand Group sediments having been removed by erosion. A number of other faults, forming part of and lying south-east of the Roodepoort fault, including the Saxon fault, also constitute conspicuous structural breaks. A second major fault, the Doornkop fault, which trends in an east-west direction, occurs toward the southern portion of the lease area. This fault dips to the south and has an up-throw to the north.

Nearly the entire upper Witwatersrand section is present in the lease area and therefore all the major zones are present, though due to the distance of the area from the primary source of gold, the number of economic bands and their payability is limited. Eight of the well-known reefs are present in the area, but only the South Reef is considered viable at this stage.

The South Reef is between 7.5m and 60m above the Main Reef horizon. The hanging wall to the South Reef consists of siliceous quartzites with non-persistent bands of 'blue-shot' grit and thin argillite partings. The footwall to the South Reef is a light coloured and fairly siliceous quartzite. Secondary conglomerate bands and stringers in the hanging wall and footwall of the South Reef may contain sporadic gold values. The general strike of the reef is east-west, with a flat dip from 5 to 15 degrees.

DOORNKOP

Gold – Mineral resources

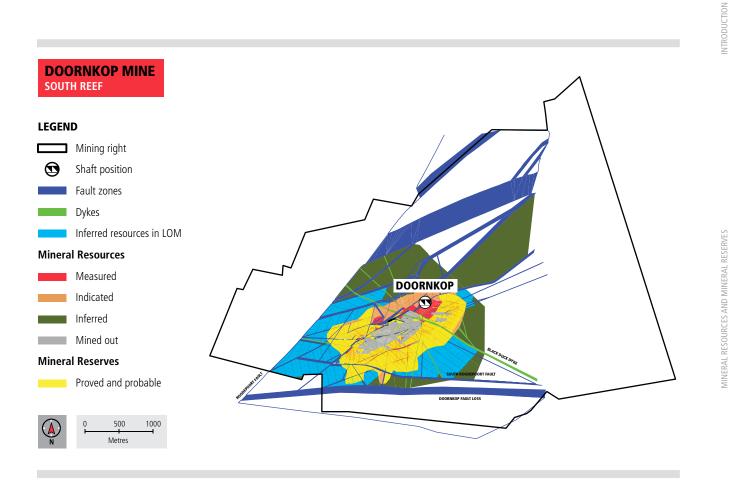
	Μ	Measured resources				ndicated	resource	S		Inferred	resources		Total mineral resources			
	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
South Reef	3.1	7.75	24	774	5.7	8.09	47	1 495	22.0	6.24	137	4 411	30.8	6.74	208	6 680
Main Reef	-	-	-	-	-	-	-	-	0.2	6.94	2	54	0.2	6.94	2	54
Grand total	3.1	7.75	24	774	5.7	8.09	47	1 495	22.2	6.25	139	4 465	31.1	6.74	210	6 734

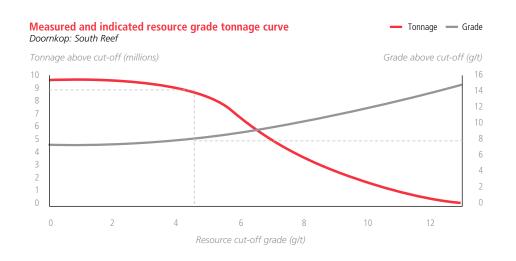
Modifying factors

	MCF	SW	MW	PRF
	(%)	(cm)	(cm)	(%)
South Reef	82	121	153	96

Gold – Mineral reserves

	Р	roved r	eserves		Pr	obable	reserves	5	Total mineral reserves			ves
	Tonnes Gold Gold				Tonnes		Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
South Reef	2.6	5.03	13	420	5.0	5.59	28	899	7.6	5.40	41	1 319
Grand total	2.6	5.03	13	420	5.0	5.59	28	899	7.6	5.40	41	1 319





KUSASALETHU

LOCATION

Kusasalethu is situated on the West Wits Line and is nestled between the Savuka and Mponeng mines to the east and Deelkraal to the west. Kusasalethu is situated 14km south of Carletonville and 90km southwest of Johannesburg.

NATURE OF THE OPERATION

The 10m-diameter rock/ventilation shaft was sunk to 2 195m and the man/material shaft to 2 127m. By June 1984, a 10m-diameter sub-vertical rock/service shaft was completed to a depth of 3 048m and a 7m-diameter sub-vertical ventilation shaft to a depth of 3 048m. Both of these shafts were deepened as part of the deepening project to extract the higher-grade pay-chute towards the west of the mine.

Kusasalethu employs the sequential-grid method of mining which is in essence an upside-down Christmas tree configuration. This method is used to direct seismic stresses away from current working areas into virgin rock areas.

REGIONAL GEOLOGY

Kusasalethu is situated in the West Wits Basin and mines the Ventersdorp Contact Reef (VCR) as its main orebody. The VCR rests unconformably on the quartzites of the Witwatersrand (WWR) Supergroup.

These WWR quartzites belong to the Mondeor Formation in the western part of the lease area and the Elsburgs Quartzite Formation in the eastern part of the lease area. The unconformity angle becomes more perceptible towards the east. The average dip of the VCR is 25 degrees to the south-east and the VCR has an average strike of N72 degrees east.

The VCR is generally a clast-supported conglomerate of small sub-angular to sub-rounded milky and smoky (60:40 respectively) quartz pebbles. The matrix is dark grey and mediumgrained and comprises mostly quartzite, separating the two units as internal quartzites. It is mineralised by some pyrhotite, chalcopyrite and, in rare instances, by some carbon flyspecks. Sometimes there are changes to the reef appearance in the form of thickness and, to some degree, elimination. These changes are brought about by either erosion (lava erosion channels – lava appearing at different elevations, with resultant undulations of the reef), or flat faulting (as evidenced by the presence of mylonite at the top contact of the reef).

The VCR facies model at Kusasalethu is based on the Palaeotopographic or Slope and Terrace model. Nine facies types have been recognised at Kusasalethu, eight sedimentological and one structural. Four of the facies are thick, high-grade, geologically distinct reef terraces separated from one another by thin low-grade slope reef. The sand-filled channel is a thick low-grade facies. Sandy Terrace Complex (TC2) is found on the same elevation as Terrace Complex but is essentially a pebbly quartzite with no grade. The Mondeor conglomerates have been identified sub-cropping against the VCR in stopes in certain areas and have been delineated as a separate facies in these areas.

"Kusasalethu is situated in the West Wits Basin and mines the VCR as its main orebody. The VCR rests unconformably on the quartzites of the Witwatersrand (WWR) Supergroup."

"The Elsburgs conglomerates are found on the western side of Kusasalethu, forming the footwall to the VCR." The Elsburgs conglomerates are found on the western side of Kusasalethu, forming the footwall to the VCR. The Elsburgs are part of the Turffontein Supergroup. It is a predominantly polymictic matrix supported conglomerate of well-packed and moderately sorted, sub-rounded smoky (80%), black/grey (15%) quartz pebbles, chert (3%) and some elongated shale pebbles (2%). The matrix is pale yellow to light green and medium-grained, also, pyritic in places.

The VCR is overlain by the Ventersdorp Lava. The lava belongs to the Ventersdorp Supergroup. It is light to mid-grey in colour and fine crystalline, seldom containing phenocrysts. In places it is amygdaloidal with quartz and pyrite mineralisation. Flow structures are also present at the base of the lava. It breaks into very angular fragments due to weak jointing and the flow banding – it would appear to be andesitic in composition.

Geological discontinuities observed at Kusasalethu include faults, dykes and sills. Sills may occur in the footwall in many areas adjacent to certain dykes. Flat bedding plane faulting also occurs and results in reef duplication, elimination and brecciation. Faults and dykes are classified according to their relative geologic ages, and are as follows: Pre-VCR structures, Ventersdorp structures, Platberg structures, Bushveld structures and Pilanesberg structures.

Kusasalethu mines in blocky ground created by structures in the form of dykes and faults. The dykes are fairly basic in composition and they tend to strike north-north-east and south-south-west with a general dip of 75 degrees. The faults, however, have a strike mostly of east-south-east and west-north-west with a few exceptions. Generally, faults here are normal faults with the accompanied loss of ground with varying throws, from a throw of mere centimetres to a massive 60m throw (Kittims and De Twem Fault).

KUSASALETHU

Gold – Mineral resources

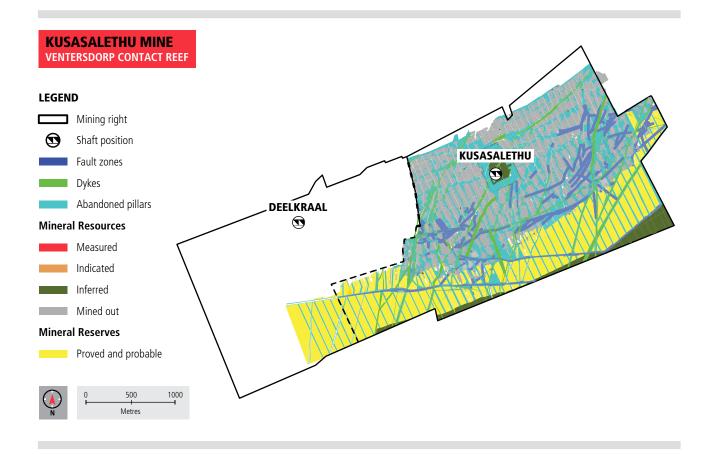
	Measured resources				Indicated resources					Inferred	resources		Total mineral resources			
	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Ventersdorp Contact Reef	7.1	10.75	77	2 461	18.3	9.32	171	5 491	3.2	9.16	29	938	28.6	9.66	277	8 890
Grand Total	7.1	10.75	77	2 461	18.3	9.32	171	5 491	3.2	9.16	29	938	28.6	9.66	277	8 890

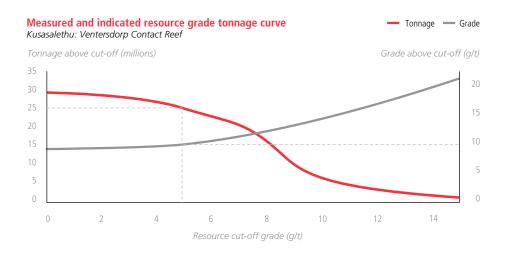
Modifying factors

	MCF	SW	MW	PRF
	(%)	(cm)	(cm)	(%)
Ventersdorp Contact Reef	86	126	165	96

Gold – Mineral reserves

	Р	roved r	reserves		Pr	obable	reserve	5	Total mineral reserves			
	Tonnes Gold			Gold	Tonnes	Gold		Gold	Tonnes		Gold	Gold
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Ventersdorp Contact Reef	9.4	6.80	64	2 055	26.2	5.66	149	4 778	35.6	5.96	213	6 833
Grand total	9.4	6.80	64	2 055	26.2	5.66	149	4 778	35.6	5.96	213	6 833



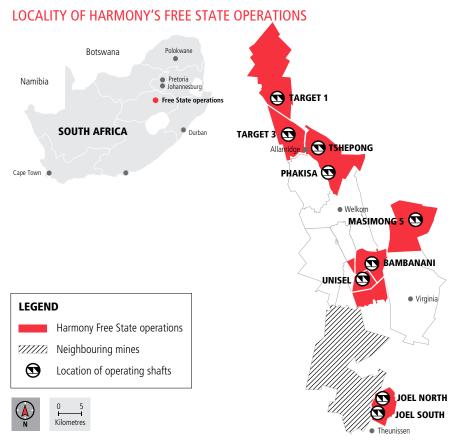


34 Harmony Mineral Reources and Mineral Reserves 2014

SOUTH AFRICA – FREE STATE OPERATIONS



Harmony's Free State operations comprise eight underground mines. Together they had mineral resources of 67.7Moz and mineral reserves of 11.8Moz as at 30 June 2014.



FREE STATE OPERATIONS

Harmony's Free State operations comprise eight underground conventional mines – including the mechanised Target 1 which is discussed separately – located on the south-western corner of the Witwatersrand Basin, between the towns of Allanridge, Welkom, Theunissen and Virginia.

The **Joel** mine is the most southerly of the gold mines mined within the Harmony stable and is situated some 40km south of Welkom, 30km southeast of Virginia and 20km north of Theunissen. The mine has a common boundary with the Beatrix gold mine to the west of the mine property.

Unisel mine is situated to the North of Joel between the City of Welkom and Virginia. It is bounded to the north by Brand 5 Shaft and West Shaft and to the east by Bambanani.

Bambanani mine is located 10km south-east of Welkom. The East Shaft is bound to the west by Bambanani West Shaft and President Steyn No.3 Shaft and to the north by president Steyn No.2 Shaft.

Masimong mine is located on the north eastern side of the De Bron Fault approximately 12km east from the city of Welkom and 10km north from the town of Virginia. It is bounded to the south by Masimong 4 shaft and Saaiplaas 3 shaft.

The **Phakisa** mine is located north west of Masimong 5 Shaft between the town of Odendaalsrus and the city of Welkom some 13 kilometres north of the City of Welkom. It is bounded to the south by Eland shaft, to the west by Nyala shaft and to the north by Tshepong shaft.

Tshepong mine is located to the north of Phakisa between the town of Odendaalsrus and the township of Kutloanong some 20km north of Welkom. It is bounded to the north by the dormant Jeanette mine, to the west by President Steyn's 3 and 9 shafts, to the south and east by the Phakisa mine, and to the south-west by Nyala shaft.

The **Target 1** mine is the most northerly of Harmony's mines in the Free State and is situated some 30km north of the town of Welkom.

Target 3 Shaft is situated \pm 4km north of the town of Odendaalsrus and 10km south of the town of Allanridge. It is bounded to the south by Steyn 3 and 9 shafts and to the north of Target 1. Post year-end, it was announced that Target 3 would be placed on care and maintenance by Novermber 2014.

NATURE OF THE OPERATIONS

Joel mines at moderate depths of ± 1 300m below surface. The primary economical reef horizon at Joel is a narrow tabular Beatrix Reef deposit which is accessed through conventional grid development. The reef dips northwards at an average angle of 14 degrees with an inherited concept of using winzes rather than raises to generate ore reserves. Extraction is done conventionally.

Unisel is a mine in a mature phase of operation, mining at intermediate depths ranging from 1 100m to 2 100m below surface. Conventional mining is scattered over all levels and takes place from 2km to 4km from the shaft. Mining takes place mainly on the Leader and Basal reefs with a lesser amount on the Middle reef, normally limited to less than 5% of mining. This distribution of mining is not expected to change over the life of mine. Pillar and fault block mining will become more important and constitute a greater percentage of mining as ore reserves are depleted. Limited blocks of ground below infrastructure will be accessed and mined from winzes.

Mining at **Bambanani** is limited to the extraction of the shaft pillar (Basal Reef only). This is done by means of four mini longwalls established on the northern side of the shaft pillar (through wide raises), mining advances in a southerly direction in a pre-determined sequence. Some mining is also done in the centre of the pillar. Most of the panels are mined on undercut (a rock engineering requirement), leaving a reef beam of approximately 80cm underneath the shale.

Masimong mines at moderate depths between 1 650m to 2 010m below surface. The reef horizon is accessed by means of conventional grid development. The economical reef horizons extracted are the Basal reef and the B Reef. Basal reef accounts for approximately 85% of the on reef production profile, and is mined on open and undercut operations, depending on whether the reef is overlain by shale. B Reef mining comprises the other 15% of the on reef production profile. It is located approximately 120m stratigraphically above the Basal Reef, thus necessitating separate infrastructure (i.e. footwall development) from the Basal. The presence

"Harmony's Free State operations currently account for more than 60% of its total mineral resources."

NTRODUCTION

WINERAL RESOURCES AND MINERAL RESERVES

of the upper shale marker approximately 20m thick below the B Reef strains the development rates of the B Reef, requiring drop raising to be done to effect holing on all box holes, also all on-reef development needs to be done by means of wide raising. The mine has significant reserves to maintain a medium term life, but the amount of pillar mining as the age of the mine progresses will increase.

Phakisa is a conventional underground deep-level gold mine. The shaft's primary economical reef horizon is the Basal reef. The reef horizon is accessed by means of conventional grid development and is extracted as an open mining operation to the south of the 69 raise line, but undercut mining will commence as the mining operation continues to the north. Phakisa is still in the process of building up to full production. It is envisaged that at the current rate of development, Phakisa will reach full production within the next three years. Pillar crews are also planned as the life of mine progresses to ensure depletion of the pillar reserves within the LOM time frame.

Tshepong mines at moderate depths of between 1 600m and 2 200m below surface. The reef horizon is accessed via conventional grid development. The shafts primary economical reef horizon is the Basal Reef that is extracted as an undercut mining operation leaving a quartzite beam in the hanging wall to ensure the stability of the overlaying shale. Minor amounts of 'B' Reef that does not exceed 5% of the on-reef area mined per annum are extracted as an open mining operation. The B reef is approximately 140m stratigraphically above the Basal reef, thus necessitating separate infrastructure (i.e. footwall development) from the Basal. The presence of Khaki shale approximately 6m thick above the Basal Reef strains the footwall development rates of the B Reef, requiring the installation of ring sets for the first 25m of development. The mine has significant reserves to maintain a long-term life, however, extraction of ore from pillars will become more important as the life of mine progresses, but volumetrically is not significant.

Target 3 is a mature mine that has a mix of remnant ore blocks (including shaft pillar blocks) and open ground where scattered conventional mining is being exploited. The shaft is currently mining four economical reef horizons, the Basal Reef is the primary reef horizon and currently accounts for approximately 31% of the on-reef area mined, the secondary reefs, namely the A (17%), B (23%) and the Elsburg reefs (EA1, 29%) account for the other 69% of on-reef area mined. The percentage of secondary reefs mined will decrease over the life of mine and only the Basal reef will be mined from 2020 onwards. Both the primary and secondary reef horizons are accessed by conventional development and extraction is done by conventional open stoping.



Masimong

Mining, which takes place at moderate depths of up to 2 010m, is accessed by means of conventional grid development.

REGIONAL GEOLOGY

Harmony's Free State operations are located on the south-western corner of the Witwatersrand Basin, between the towns of Allanridge, Welkom, Theunissen and Virginia. The basin, situated on the Kaapvaal Craton, has been filled by a 6km thick succession of sedimentary rocks, which extends laterally for hundreds of kilometres.

The Free State goldfield is divided into two sections, cut by the north-south striking De Bron fault. This major structure has a downward vertical displacement to the west of about 1 500m in the region of Bambanani, as well as a dextral shift of 4km. This lateral shift can allow a reconstruction of the orebodies of Unisel to the west of the De Bron and Masimong to the east. A number of other major faults (Stuirmanspan, Dagbreek, Arrarat and Eureka) lie parallel to the De Bron fault.

To the west of the De Bron fault, current operating mines are Target, Tshepong, Phakisa, Unisel, Bambanani and Joel. Dips of the reef are mostly towards the east, averaging 30 degrees but become steeper approaching the De Bron fault. To the east of the fault lies Masimong mine. These reefs mostly dip towards the west at 20 degrees, although Masimong is structurally complex and dips of up to 40 degrees have been measured. Between these two blocks lie the uplifted Horst block of West Rand Group sediments with no reef preserved.

NORTH - SOUTH CENTRALISED FREE STATE STRATIGRAPHIC COLUMN

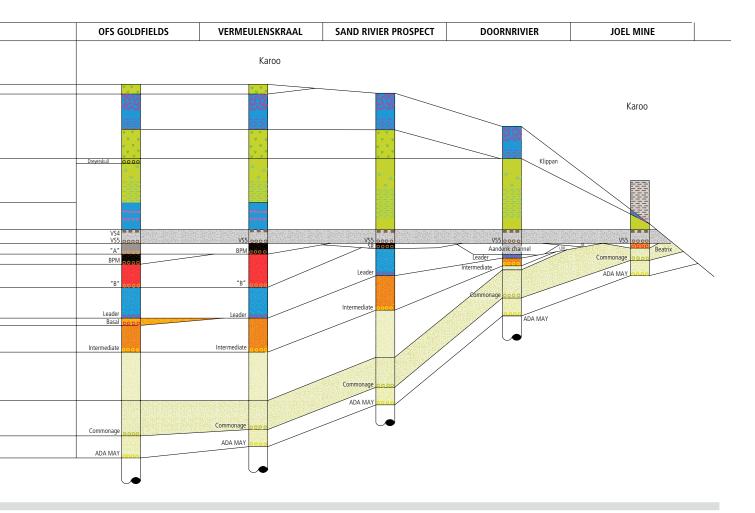
4	SUPERGROUP SEQUEN	CE GROUP				-		
ه ا				FORMATION	MEMBERS AND BED	5	REEF	
Karoo sequence	Beaufort grou	ip, ECCA group		Volkrust shale	-			
у З З		1		Vryheid Dwyka	Allanridge lava			
				Pniel sequence				
	Ventersdorp supergroup			Platberg group	Klippan Video			
				Klipriviersberg group	Lorraine Edenville		VCR	
			Turffontein sub-group	Eldorado	Venterspost Uitkyk Van Der Heeversrust	VS1A VS2A VS3A		
			ntein s		Rosendale	VS4A	VS5	
			rffoi	Aandenk	Earlscourt		"A"	
		٩	P 2		Aandenk		BPM	
		grou		Spes bona	Spes bona		"В"	
	Witwatersrand supergroup	Central rand group		Dagbreek	Dagbreek		Leader	
		ent		Harmony	Harmony	1161	Basal	
		0	group	Welkom	Welkom	UF1 UF2 UF3 UF4	Intermediate	
		C C		St. Helena	St. Helena	MF1 MF2 MF3 MF4 MF4		
			Johan	Virginia	Virginia	LF1 LF2 LF3 LF4	Commonage	
						LF5 LF6	ADA May	

The western margin area is bound by synclines and reverse thrust faults and is structurally complex. Towards the south and east, reefs sub-crop against overlying strata, eventually cutting out against the Karoo to the east of the lease area.

Most of the mineral resource tends to be concentrated in reef bands located on one or two distinct unconformities. A minority of the mineral resource is located on other unconformities. Mining that has taken place is mostly deep-level underground mining, exploiting the narrow, generally shallow dipping tabular reefs.

The Basal Reef is the most common reef horizon and is mined at all shafts except Target 1 and Joel. It varies from a single pebble lag to channels of more than 2m thick. It is commonly overlain by shale, which thickens northwards. Tshepong has resorted to undercutting in its mining panels to reduce the effect of shale dilution.

The second major reef is the Leader Reef, 15m to 20m above the Basal Reef. This is mined at Unisel to the south. Further north, it becomes poorly developed with erratic grades. The reef consists of multiple conglomerate units, separated by thin quartzitic zones, often totalling up to 4m thick. A selected mining cut on the most economic horizon is often undertaken.



NTRODUCTION

The B Reef is a highly channelised orebody located 140m stratigraphically above the Basal Reef. Because of its erratic nature, it has only been mined at Masimong, Tshepong, Target 2 and Target 3 shafts. Within the channels, grades are excellent, but this reduces to almost nothing outside the channels. Consequently, these shafts have undertaken extensive exploration to locate these pay channels.

The A Reef is also a highly channelised reef, located some 40m above the B Reef and is only mined at Target 3 shaft, within an extensive channel that lies along the western margin from Nyala to Lorraine. It consists of multiple conglomerate bands of up to 4m thick and a selected mining cut is usually required to optimise the orebody.

Joel mine, 30km south of Welkom, is the only Harmony Free State operation to mine the Beatrix Reef. This reef varies from a single-pebble lag to a multiple conglomerate, often showing mixing of the reef with some of the overlying lower-grade VS5 (mixed pebble conglomerate) material. None of the other reefs are present this far south, having sub-cropped against the Beatrix Reef.

The Target operations are at the northern extent of the Free State goldfields, some 20km north of Welkom. The reefs currently exploited are the Elsburg-Dreyerskuil conglomerates, which form a wedge-shaped stacked package, comprising 35 separate reef horizons, often separated by quartzite beds. The Elsburg Reefs are truncated by an unconformity surface at the base of the overlying Dreyerskuil member. Below the sub-crop, the Elsburg dips steeply to the east, with dips becoming progressively shallower down dip. Close to the sub-outcrop, the thickness of the intervening quartzites reduces, resulting in the Elsburg Reefs coalescing to form composite reef packages that are exploited by massive mining techniques at Target mine. The Dreyerskuil also consists of stacked reefs dipping shallowly to the east. These reefs tend to be less numerous, but more laterally extensive than the underlying Elsburg Reefs.



Bambanani

Ore samples of the Basal Reef at Bambanani.

"Target 1 is the most northerly of Harmony's Free State mines and is situated some 30km north of Welkom."

TARGET 1 LOCATION

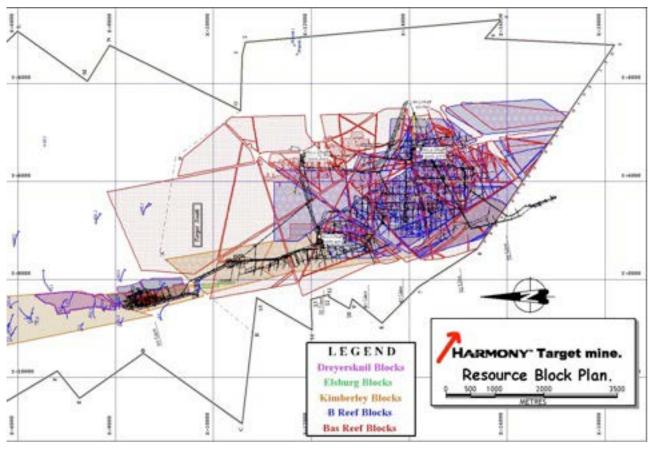
This report describes the area surrounding and the resource generation process for Target 1 (including the former Loraine property), the most northerly operation in the Free State (Welkom) goldfield. The area extends from the southern boundary of the mine lease area northwards to the position of the Siberia fault (see below). The resources quoted cover the area from the southern boundary of the mine lease area northwards to the Blast dyke.

NATURE OF THE OPERATION

The Target orebody is located some 5km to the north of the original Lorraine No 1 Shaft and is accessed via a 6km long 12° decline developed from the 203 Level of the No 1 Shaft vertical shaft system.

Initially the decline was developed to provide a drilling platform for the exploration and evaluation of the orebody, but was later used as the main access for all services, logistics, personnel and the extraction of ore.

THE RELATIVE POSITIONS OF THE MINERALISED RESOURCE BLOCKS AND THE MAIN MINING INFRASTRUCTURE WITHIN THE TARGET 1 SHAFT LEASE AREA



NTRODUCTION

The orebody is composed of some 60+ individual conglomerates located in the Uitkyk (Elsburg – EAs) and van der Heeversrust (Dreyerskuil – DKs), members of the upper Eldorado (Elsburgs) Formation. These reefs lend themselves to massive mining techniques where composited conglomerate units can be mined as one stope. These stopes are long-hole drilled and blasted and tonnages are cleaned and transported by trackless machinery, some of this being remotely operated. Massive mining is particularly relevant where the reefs become condensed and steeper in the western portion of the orebody. Massive mining contributes to 80% of total tons stoped.

Massive stopes have to be mined in a sequence, broadly from down-dip to up-dip. Previously mined stopes are backfilled for support, environmental and safety concerns.

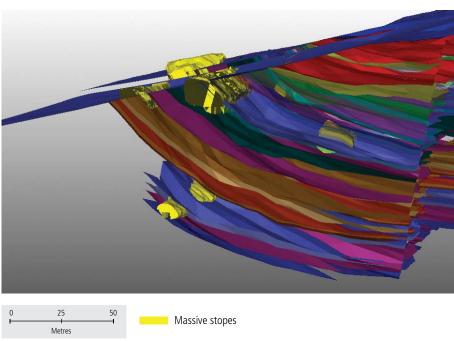
Conventional narrow reef scattered mining makes up the remaining 16% of stope tons where individual reefs are extracted in places where massive mining is inappropriate or uneconomic. In addition to mining for gold, some stopes are planned to be mined on the stratigraphically highest gold-bearing units to provide over-stoping for the future massive stopes below.

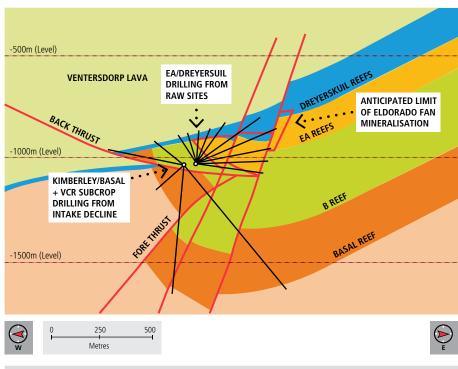
REGIONAL GEOLOGY

The gold deposits of the Witwatersrand lie in an arcuate form, along the northern and western edges of a kidney-shaped basin. The Welkom goldfield, which lies in the southernmost part of this Witwatersrand Basin, has produced 25% of all the gold mined from the Witwatersrand Basin, which in turn has accounted for 66% of all the gold ever mined in the world. It would seem that the western limit of the Welkom goldfield is an edge feature of a mountainous hinterland, through which sediment was debouched into the Witwatersrand depository. A thrust fault system has resulted in the post-depositional folding of the strata into a synclinal shape. This "border feature" is the western limit of the graben structure, some 10km wide, which contains the majority of the Welkom gold mines. The eastern limit of this graben is the well-defined De Bron fault. The Target gold prospect is a northward continuation of the Welkom Goldfield.

"The reefs occurring at Target 1 lend themselves to massive mining techniques where composited conglomerate units can be mined as one stope."

BLOCK 3 MODEL WITH MASSIVE STOPES INTERSECTING THE DK AND EA REEF HORIZONS





SCHEMATIC SECTION OF STRATIGRAPHY AND DRILLING

"The gold deposits of the Witwatersrand lie in an arcuate form, along the northern and western edges of a kidney-shaped basin." The full potential of the Basal Reef, which produced 85% of the gold from this area has yet to be established in the Target area, because the initial drilling focused on the shallower Elsburg and Kimberley reefs due to time constraints. The reefs in the Aandenk (Kimberley) Formation include the "B" Reef at the base, the Big Pebble Reef and the "A" Reef. The Eldorado (Elsburg) Formation is developed as a sequence of oligomictic auriferous conglomerates referred to as the "EA" reefs and which have been mined extensively at Loraine Gold Mine. The EA reefs are overlain by a remnant of the diamictite facies of the south, termed the Boulder Beds at Loraine. The reefs and associated quartzites represent alluvial sediment influx from a source area to the west. The distribution of gold mineralization is clearly related to the sedimentology and this primary sedimentological control of gold distribution is understood. However research has shown that some remobilization of gold has taken place over small distances. This is not extensive enough to mask the sedimentary controls.

MINING METHODS

The stoping methods can be grouped into long-hole stoping methods, development and narrow reef mining techniques. In order that more clarity be attained, the methods are broken down into seven stoping methods that detailed below:

Long-hole methods:	Massive open stoping
	Wide open stoping
	Narrow open stoping
Development methods:	Drift and fill stoping
	Drift and pillar stoping
	Cut and fill stoping
	Narrow-reef mining

Massive open stoping

The massive open stope philosophy is based on mining a large volume of ore at a low working cost. The proximity of the reefs in the sub outcrop area allow for a combination of the reefs to be mined using this method. The specifics of the method in the following description pertain directly to the main fan massive open stopes as in the first three years this is the critical area of operation. The same principles and methodology is applied to areas where similar geology allows the mining of a massive stope.

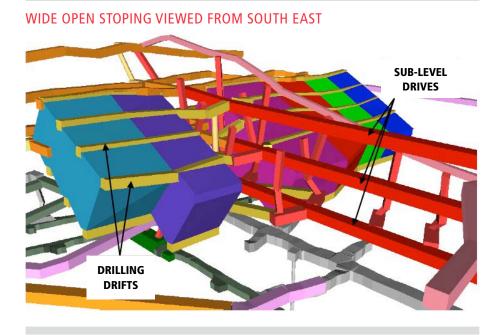
Wide open stoping

The main area of focus for the wide open stopes is the main fan block where two such stoping areas will be mined. The stoping method describes the extraction process for these two stopes but the method can be applied to any block of similar dimensions ie reef widths in excess of 10m and a dip in excess of 200m. The mining method has been designed to utilise the benefits of long hole stoping methods and backfill.

Narrow-reef mining

The schedule reflects that 8% of the initial monthly tonnage is to be mined from the Dreyerskuil (DK1A) reefs by means of the conventional narrow-reef mining method. The mining method is essential, as it must provide a de-stressed environment for the bulk of the mechanised stoping, and there is no practical and safe alternative to this method. The rate of overstoping must liberate sufficient destressed reserves to enable the planned 68 000tpm production rate to be achieved.

"The massive open stope philosophy is based on mining a large volume of ore at a low working cost."



TARGET 1, 2 AND 3

Gold – Mineral resources

	Measured resources				In	dicated	resourc	es	Ir	Iferred	resource	es	Tota	al miner	ineral resources			
	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold		
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)		
Target 1	8.6	7.30	63	2 013	9.7	7.71	75	2 415	2.0	5.36	11	340	20.3	7.31	148	4 768		
Target 2	0.0	14.00	1	20	0.1	15.52	2	67	-	-	-	-	0.2	15.14	3	87		
Target 3	8.2	8.92	73	2 349	8.0	8.02	64	2 069	3.7	6.23	23	739	19.9	8.06	160	5 157		
Grand Total	16.8	8.11	136	4 382	17.9	7.91	142	4 551	5.7	5.93	34	1 079	40.4	7.71	311	10 012		

Modifying factors

	MCF	SW	MW	PRF
	(%)	(cm)	(cm)	(%)
Target 1 (massives)	99	-	-	97
Target 3	71	122	142	96
Grand Total				

Gold – Mineral reserves

	F	Proved I	reserves		Pi	robable	reserve	5	Total mineral reserves			
	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Target 1	5.0	4.21	21	672	5.8	5.42	31	1 008	10.7	4.86	52	1 680
Target 3	2.5	5.98	15	471	4.2	5.04	21	684	6.7	5.38	36	1 155
Grand total	7.4	4.80	36	1 143	10.0	5.26	53	1 692	17.4	5.06	88	2 835

Note: It was announced post financial year-end that Target 3 would be placed on care and maintenance.



Metres



INTRODUCTION

TSHEPONG

Gold – Mineral resources

	Measured resources				Indicated resources				In	ferred	resource	S	Total mineral resource			rces
	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t) (0	000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Tshepong	19.3	11.27	218	7 013	3.5	10.67	37	1 185	8.1	8.59	70	2 243	30.9	10.50	325	10 441
Grand total	19.3	11.27	218	7 013	3.5	10.67	37	1 185	8.1	8.59	70	2 243	30.9	10.50	325	10 441

Modifying factors

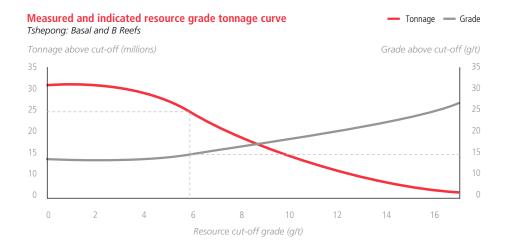
	MCF	SW	MW	PRF
	(%)	(cm)	(cm)	(%)
Tshepong	71	105	129	95

Gold – Mineral reserves

	P	roved r	eserves		Pr	obable	reserves	5	Total mineral reserves			
	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Tshepong	20.5	5.57	114	3 676	2.4	5.33	13	419	23.0	5.54	127	4 095
Grand total	20.5	5.57	114	3 676	2.4	5.33	13	419	23.0	5.54	127	4 095

Uranium – Mineral resources

	Measured resources				Inc	dicated	resource	S	Ir	ferred r	esources	5	Total mineral resources				
	Tonnes		U308	U308	Tonnes		U308	U308	Tonnes	U308	U308	U308	Tonnes	U308	U308	U308	
	(Mt)	(kg/t)	(Mkg)	(Mlb)	(Mt)	(kg/t)	(Mkg)	(Mlb)	(Mt)	(kg/t)	(Mkg)	(Mlb)	(Mt)	(kg/t)	(Mkg)	(Mlb)	
Tshepong	6.4	0.19	1 248	3	14.0	0.23	3 154	7	10.5	0.12	1 243	3	30.9	0.18	5 645	12	
Grand total	6.4	0.19	1 248	3	14.0	0.23	3 154	7	10.5	0.12	1 243	3	30.9	0.18	5 645	12	



46 Harmony Mineral Reources and Mineral Reserves 2014

TSHEPONG AND PHAKISA MINES BASAL REEF LEGEND Mining right Shaft position Boundary between Tshepong and Phakisa Fault zones Dykes **Mineral Resources** Measured Indicated Inferred Mined out **Mineral Reserves** Proved and probable 500 1000 0

Metres

PHAKISA

Gold – Mineral resources

	Me	In	dicated	resourc	es	In	ferred	resource	S	Total mineral resources					
	Tonnes	Go	ld Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t) (000k	g) (000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Phakisa	7.0	9.54	57 2 144	13.8	12.26	170	5 459	27.6	8.32	230	7 388	48.5	9.62	466	14 991
Grand total	7.0	9.54	7 2 144	13.8	12.26	170	5 459	27.6	8.32	230	7 388	48.5	9.62	466	14 991

Modifying factors

	MCF	SW	MW	PRF
	(%)	(cm)	(cm)	(%)
Phakisa	80	125	149	95

Gold – Mineral reserves

	Р	roved r	reserves		Pr	obable	reserves	5	Total mineral reserves			
	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Phakisa	3.5	6.15	22	701	4.0	7.68	31	993	7.6	6.97	53	1 694
Grand total	3.5	6.15	22	701	4.0	7.68	31	993	7.6	6.97	53	1 694

Uranium – Mineral resources

	Me	easured	resource	es	In	dicated	resource	S	In	ferred r	esources	5	Tota	l minera	al resour	ces
	Tonnes		U308	U308	Tonnes		U308	U308	Tonnes		U308	U308	Tonnes		U308	U308
	(Mt)	(kg/t)	(Mkg)	(Mlb)	(Mt)	(kg/t)	(Mkg)	(Mlb)	(Mt)	(kg/t)	(Mkg)	(Mlb)	(Mt)	(kg/t)	(Mkg)	(Mlb)
Phakisa	7.0	0.17	1 185	3	13.9	0.17	2 359	5	27.6	0.14	3 853	8	48.5	0.15	7 397	16
Grand total	7.0	0.17	1 185	3	13.9	0.17	2 359	5	27.6	0.14	3 853	8	48.5	0.15	7 397	16

Measured and indicated resource grade tonnage curve Phakisa: Basal Reef Tonnage above cut-off (millions) Grade above cut-off (g/t) 25 25 20 20 15 15 10 10 5 0 0 0 2 4 6 14 8 10 12 16 Resource cut-off grade (g/t)

— Tonnage — Grade

FREDDIES 9 PROJECT

Gold – Mineral resources

	Mea	Measured resources				resourc	es	In	ferred	resource	!S	Tota	l miner	al resou	rces
	Tonnes	nes Gold Gold				Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t) (000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Freddies 9 Project	-		-	6.0	10.61	64	2 045	29.6	8.09	239	7 690	35.6	8.51	303	9 735
Total	-		-	6.0	10.61	64	2 045	29.6	8.09	239	7 690	35.6	8.51	303	9 735

BAMBANANI

Gold – Mineral resources

	Me	Measured resources				dicated	resourc	es	In	nferred re	source	!S	Tota	al miner	al resou	irces
	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t) ((000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Bambanani	1.9	16.40	31	981	-	-	-	-	-	-	-	-	1.9	16.40	31	981
Grand total	1.9	16.40	31	981	-	-	-	-	-	-	-	-	1.9	16.40	31	981

Modifying factors

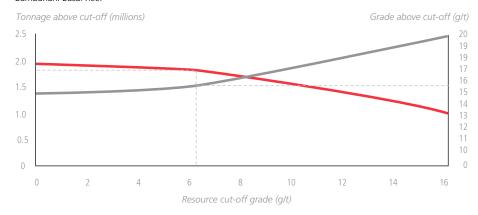
	MCF (%)	SW (cm)	MW (cm)	PRF (%)
			<u> </u>	
Bambanani	96	194	247	95

Gold – Mineral reserves

	F	Proved i	reserves		Pi	robable reserve	S	Tota	al miner	ral reserv	/es
	Tonnes Gold Gold To					Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t) (000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Bambanani	1.9	10.33	20	647	-		-	1.9	10.33	20	647
Grand total	1.9	10.33	20	647	-		-	1.9	10.33	20	647

Measured and indicated resource grade tonnage curve Bambanani Basal Reef

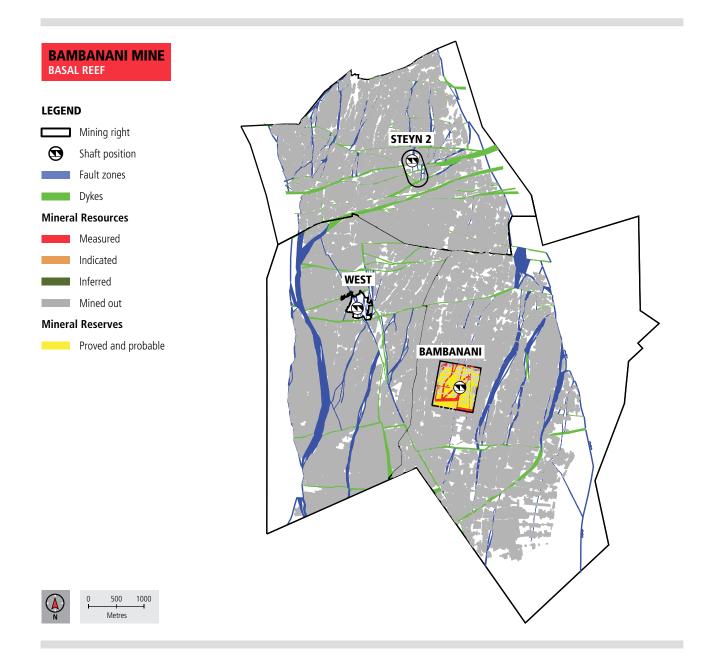
— Tonnage — Grade



Bambanani

Mining at Bambanani is currently focused on the shaft pillar.







Bambanani

Mining at Bambanani is currently limited to the extraction of the shaft pillar.

UNISEL

Gold – Mineral resources

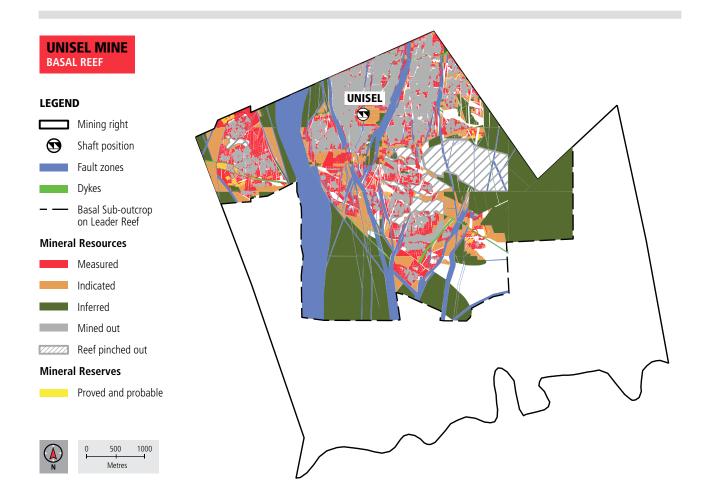
	Me	asured resou	ces	Ind	dicated	resourc	es	In	ferred r	esource	S	Tota	l miner	al resou	rces
	Tonnes Gold Gold 1			Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t) (000kg) (000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Unisel	7.9	6.86 54	1 740	5.1	7.69	40	1 272	5.1	7.30	37	1 188	18.1	7.22	131	4 200
Grand total	7.9	6.86 54	1 740	5.1	7.69	40	1 272	5.1	7.30	37	1 188	18.1	7.22	131	4 200

Modifying factors

	MCF	SW	MW	PRF
	(%)	(cm)	(cm)	(%)
Unisel	75	190	204	95

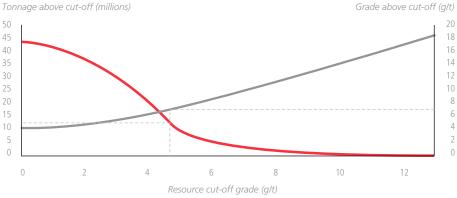
Gold – Mineral reserves

	Р	roved r	eserves		Pr	obable	reserves	5	Tota	l miner	al reserv	ves
	Tonnes Gold Gold To						Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Unisel	1.6	4.29	7	223	0.7	4.02	3	84	2.3	4.21	10	307
Grand total	1.6	4.29	7	223	0.7	4.02	3	84	2.3	4.21	10	307



🗕 Tonnage 🗕 Grade

Measured and indicated resource grade tonnage curve Unisel: Leader, Middle and Basal Reefs Tonnage above cut-off (millions)



MASIMONG

Gold – Mineral resources

	Me	asured res	es	Inc	dicated	resourc	es	In	ferred 1	resource	S	Tota	l miner	al resou	rces	
	Tonnes				Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t) (00	0kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Masimong	9.8	8.11	80	2 559	5.9	7.33	43	1 394	52.8	5.92	313	10 050	68.5	6.36	436	14 003
Grand total	9.8	8.11	80	2 559	5.9	7.33	43	1 394	52.8	5.92	313	10 050	68.5	6.36	436	14 003

Modifying factors

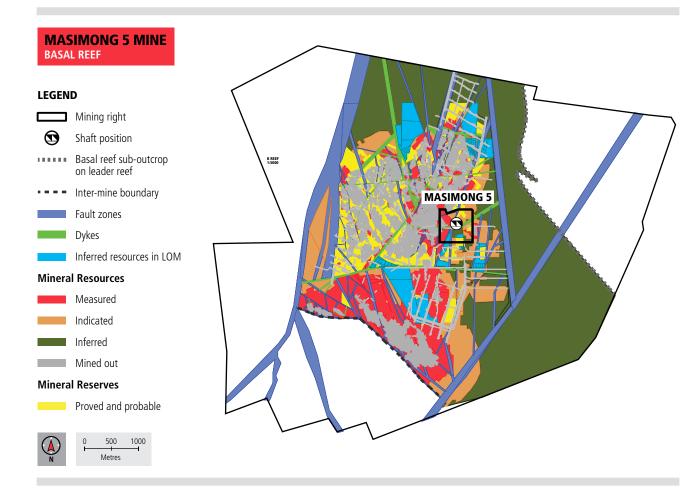
	MCF	SW	MW	PRF
	(%)	(cm)	(cm)	(%)
Masimong	65	136	155	95

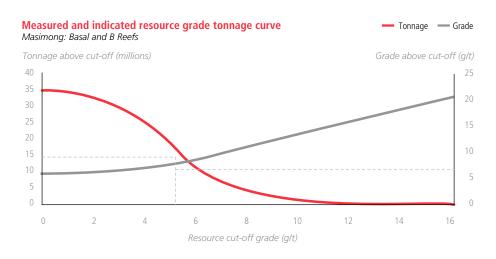
Gold – Mineral reserves

	Р	roved 1	reserves		Pr	obable	reserves	5	Tota	l miner	al reserv	/es
	Tonnes	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold		
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Masimong	4.9	4.48	22	710	1.7	4.40	7	237	6.6	4.46	29	947
Grand Total	4.9	4.48	22	710	1.7	4.40	7	237	6.6	4.46	29	947

Uranium – Mineral resources

	Me	easured	resource	es	Ind	dicated	resource	S	In	ferred r	esources	5	Tota	l minera	al resour	ces
	Tonnes		U308	U308	Tonnes		U308	U308	Tonnes		U308	U308	Tonnes		U308	U308
	(Mt)	(kg/t)	(Mkg)	(Mlb)	(Mt)	(kg/t)	(Mkg)	(Mlb)	(Mt)	(kg/t)	(Mkg)	(Mlb)	(Mt)	(kg/t)	(Mkg)	(Mlb)
Masimong	-	-	-	-	6.7	0.29	1 955	4	61.4	0.16	9 559	21	68.1	0.17	11 514	25
Grand total	-	-	-	-	6.7	0.29	1 955	4	61.4	0.16	9 559	21	68.1	0.17	11 514	25





JOEL

Gold – Mineral resources

	Measured resources			Indicated resources				Inferred resources				Total mineral resources				
	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Joel	4.7	7.83	37	1 188	7.1	8.39	60	1 916	1.0	7.12	7	221	12.8	8.09	103	3 325
Grand total	4.7	7.83	37	1 188	7.1	8.39	60	1 916	1.0	7.12	7	221	12.8	8.09	103	3 325

Modifying factors

	MCF	SW	MW	PRF
	(%)	(cm)	(cm)	(%)
Joel	84	162	196	96

Gold – Mineral reserves

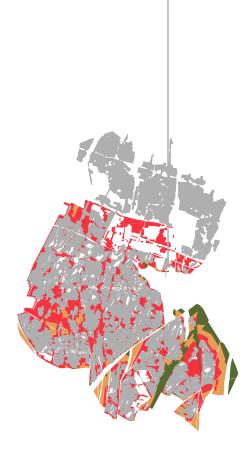
	Proved reserves				Pr	obable	reserves	5	Tota	l miner	mineral reserves		
	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold	
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	
Joel	2.4	5.26	13	403	4.4	5.87	26	822	6.7	5.66	38	1 225	
Grand total	2.4	5.26	13	403	4.4	5.87	26	822	6.7	5.66	38	1 225	



Joel

Joel, the most southerly of Harmony's operations, mines to depths of around 1 300m.





SURFACE SOURCES

Gold – Mineral resources

	Me	Measured resources			Inc	dicated	resourc	es	In	iferred i	resource	25	Total mineral resources				
	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold	
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	
Free State (Phoenix)	95.3	0.29	27	873	0.0	0.00	0	0	-	-	-	-	95.3	0.29	27	873	
Free State (St Helena)	258.7	0.27	69	2 227	0.0	0.00	0	0	-	-	-	-	258.7	0.27	69	2 227	
Free State (Other):																	
Waste Rock Dumps	0.0	0.27	0	0	3.9	0.51	2	65	28.2	0.45	13	408	32.1	0.46	15	473	
Slimes dams	0.0	0.27	0	0	660.2	0.22	146	4 708	15.5	0.19	3	94	675.6	0.22	149	4 802	
Kalgold Tailings Dam	22.0	0.29	6	191	-	-	-	-	-	-	-	-	22.0	0.27	6	191	
Grand total	375.9	0.27	102	3 291	664.1	0.22	148	4 773	43.6	0.36	16	502	1 083.6	0.25	266	8 566	

Modifying factors

	MCF	:
	(%)) PRF (%)
Free State (Phoenix)	100) 45
Free State (St Helena)	100) 45
Free State (Other)	100) 52

Gold – Mineral reserves

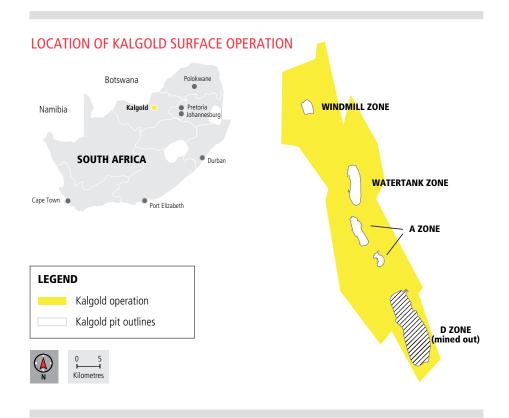
	F	Pi	obable	reserve	S	Tota	l miner	al reserv	/es			
	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Free State (Phoenix)	95.3	0.29	27	873	-	-	-	-	95.3	0.29	27	873
Free State (St Helena)	258.7	0.27	69	2 227	-	-	-	-	258.7	0.27	69	2 227
Free State (Other):												
Waste Rock Dumps	-	-	-	-	3.9	0.51	2	65	3.9	0.51	2	65
Slimes dams	-	-	-	-	594.3	0.23	135	4 333	594.3	0.23	135	4 333
Subtotal	-	-	-	-	598.2	0.23	137	4 398	598.2	0.23	137	4 398
Grand total	354.0	0.27	96	3 100	598.2	0.23	137	4 398	952.2	0.24	233	7 498

Uranium – Mineral resources

	Me	easured	resource	25	In	dicated	resource	es	In	ferred r	esources	5	Tota	tal mineral resources		
	Tonnes		U308	U308	Tonnes		U308	U308	Tonnes		U308	U308	Tonnes		U308	U308
	(Mt)	(kg/t)	(Mkg)	(Mlb)	(Mt)	(kg/t)	(Mkg)	(Mlb)	(Mt)	(kg/t)	(Mkg)	(Mlb)	(Mt)	(kg/t)	(Mkg)	(Mlb)
Total	-	-	-	-	319.4	0.08	25 532	56	-	-	-	-	319.4	0.08	25 532	56
Grand total	-	-	-	-	319.4	0.08	25 532	56	-	-	-	-	319.4	0.08	25 532	56

SOUTH AFRICA – KALGOLD

Harmony has one surface mining operation in South Africa, Kalgold, which is situated on the Kraaipan Greenstone Belt.



KRAAIPAN GREENSTONE BELT – KALGOLD

LOCATION

Kalgold mine is located 55km southwest of Mafikeng between Mareetsane and Stella along the Mafikeng-Vryburg road (R49) in the North West Province of South Africa.

Several lode gold deposits exist within the Kalgold mineral lease area. The orebodies are typical banded iron formation-hosted greenstone gold deposits. These orebodies include the A-Zone, A-Zone West, Watertank and Windmill. These orebodies and mining methods are unique amongst Harmony's South African operations hence sampling methods, cut-off calculations, ore resource estimation and reporting are carried out and presented differently to the other operations.

NATURE OF OPERATION

A total of 71 843m of exploration and evaluation drilling has been undertaken to date within the Mineral Lease area and on surrounding properties. The D-Zone and A-Zone have been proven and several prospective zones that warrant further investigation were identified.

The A-Zone occurs to the north of the D-Zone at similar stratigraphic position. It is a composite deposit consisting of a number of mineralised cherty, banded iron formation (BIF) units that are inter-bedded with schist and shale. The A-Zone has an overall strike of 850m and comprises individual zones of mineralization which are steeply dipping and have strike length from20m to 500m. Reef widths range between 15m to 70m. A total of 232 reverse circulation percussion boreholes representing a combined depth of 12 700m have been drilled into the A-Zone. Six diamond boreholes (1 310m) were also drilled.

The A-Zone West is situated in the footwall of the A-Zone orebody. The orebodies are separated by a chloritic schist unit that pinches out to the north. A-Zone West has an overall strike of 750m and width of 20m thinning to 5m in the north. A total of 172 reverse circulation boreholes were drilled along section lines spaced 25m apart. A total of 6 450m were drilled.

The Watertank is a long, narrow deposit hosted by cherty banded iron formation which has similar stratigraphic position to the D-Zone and the A-Zone. The host rock banded-iron formation is steeply dipping and has a strike length of 950m and an average width of 45m. The mineralised D-Zone within this unit ranges between 2m and 12m in width. A total of 168 boreholes representing 10 969m of drilling have been completed on section lines spaced at 25m to 50m intervals.

The Windmill deposit is the smallest of the Goldridge orebodies but contains generally higher gold grades. It is positioned stratigraphically below the other three deposits and is hoisted by a magnetite-rich banded iron formation unit which is inter-bedded with schist. The host rock banded formation has a strike length of 950m and thins to the north and south with a maximum width of 25m in the centre. Mineralisation within this unit occurs over a length of 800m with widths ranging from 2m to 17m. This deposit is structurally complex with displacements by faulting and dips varying from 75 to 90 degrees east. A total 8 800m of drilling has been completed along lines spaced 50m apart.

REGIONAL GEOLOGICAL SETTING

The Kraaipan Greenstone Belt forms part of the Kaapvaal Craton. It is overlaid by late Archaean Ventersdorp lavas and tertiary sediments.

The Kraaipan Group consists of four formations, which are Khunwana, Ferndale and Gold Ridge Formations. The Gold Ridge Formation is the oldest and contains BIF, which is the host rock of gold mined in the Kalahari Goldridge deposits.

The Kalgold operation is located within the geological terrain of the Archaean Kraaipan Greenstone Belt. This greenstone environment is exposed in discontinuous outcrops of steeply dipping rocks, which define three narrow, sub-parallel belts that strike approximately north-south. The Goldridge deposits occur within the central belt, which comprises banded iron formations (BIF), magnetite quartzite, chert, greywacke, shale and schist. The greenstones are surrounded by intrusive granites and gneisses. These rocks have a complex history of deformation, which includes folding, faulting and shearing.

"The Watertank is a long, narrow deposit hosted by cherty banded iron formation which has similar stratigraphic position to the D-Zone and the A-Zone."

Younger cover rocks include isolated patches of lavas of the Ventersdorp Supergroup with much of the area blanketed by Aeolian Kalahari sands. Sparse outcrops of quartz porphyry belonging to the Makwasie Formation occur in the region. Several large dykes with a predominant eastwest trend have intruded the region.

The geology of the lease area and its immediate vicinity is characterized by ferruginous chemical and clastic sediments inter-bedded with meta-lavas and non-ferruginous meta-sedimentary rocks. Outcrops in the area are sparse and generally restricted to the ferruginous rock types, which are more resistant to erosion. Magnetite quartzite and clastic sediments form a low ridge to the west of the lease area. Eastwards of this unit the iron-rich rocks are generally comprised of chemical sediments represented by magnetite-rich BIF, cherty BIF and banded chert. These units are interibedded with mafic schist, greywacke and sparse black shale.

The geology of the D-Zone is used as a benchmark at Kalgold. The new pits are well established at the A-Zone and Watertank areas and the blast hole database is now significant. The geology consists of mafic schist, which forms the immediate footwall, a BIF horizon as the main orebody and a succession of clastic sediments consisting of shale, greywacke and volcanic conglomerates as the hanging wall.

Gold mineralisation is hosted by steeply dipping BIF that are interbedded with schist, shale and greywacke. BIF consists of rhythmically banded chemical sediments comprising alternating light and dark laminae, which vary from 10mm to 50mm in thickness.

The BIF are oxidized to a depth of about 40m below surface. Near surface the material is red and porous, composed of quartz, hematite and goethite with minor magnetite. At depth the unaltered BIF consists of quartz, siderite, pyrite, pyrrhotite and magnetite with minor chlorite, calcite and stilpnomelane. In general gold mineralisation has an erratic and localised distribution. Individual gold grains are on average less than 10µm in diameter and occur in clusters. Gold is generally associated with goethite in the weathered rocks and with pyrite and pyrrhotite in the fresh material.

GEOLOGICAL PROCESS

Geological model

Geological modelling has been completed using Datamine[™] software. Drill holes and blastholes have been surveyed and utilised to construct a series of west-east sections from north to south through the various pit areas. The A-Zone and Water Tank areas have been modelled as a single contiguous area as the geology and data is continuous and contiguous.

A wireframe geological model has been constructed by linking individual sections to form a continuous wireframe model. The construction of the sections includes outlines for the mineralised zones and waste zones. The definition of the mineralised zones is based primarily on the lithological contacts between the BIF's and waste material (volcanic/ sedimentary schists).

The geological model is constructed in the form of a wire frame from exploration borehole intersections, blasthole information and geological mapping within the pit and updated regularly as new information becomes available.

"The new pits are well established at the A-Zone and Watertank areas and the blast hole database is now significant."

KALGOLD

Gold – Mineral resources

	Me	easured r	resourc	es	Indicated resources				Inferred resources				Total mineral resources			
	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t) (000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Kalgold	15.4	0.61	9	303	15.9	0.83	13	425	7.7	1.08	8	267	38.9	0.79	31	995
Grand total	15.4	0.61	9	303	15.9	0.83	13	425	7.7	1.08	8	267	38.9	0.79	31	995
Modifying factors																

	MCF	Dilution	PRF
	(%)	(%)	(%)
Kalgold	100	3.5	85

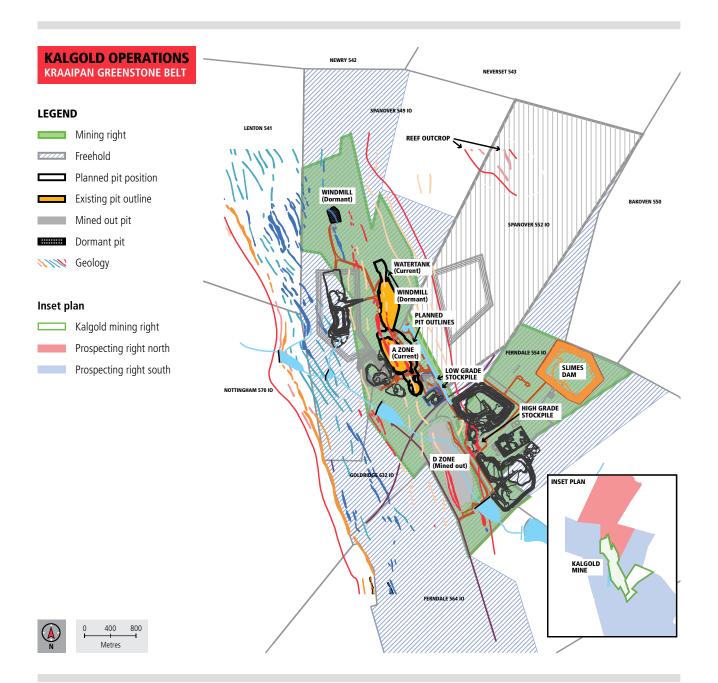
Gold – Mineral reserves

	Proved reserves				Pr	obable i	reserves	5	Tota	l miner	ineral reserves		
	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold	
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t) ((000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	
Kalgold	7.0	0.90	6	203	10.4	1.02	11	341	17.5	0.97	17	544	
Grand total	7.0	0.90	6	203	10.4	1.02	11	341	17.5	0.97	17	544	



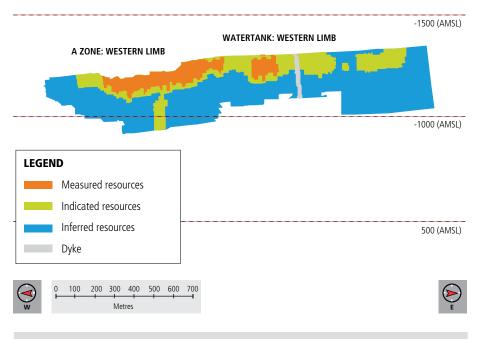
Kalgold

Kalgold is Harmony's sole open-pit operation in South Africa.



APPENDIX

DISTRIBUTION OF MINERAL RESOURCE CLASSIFICATION

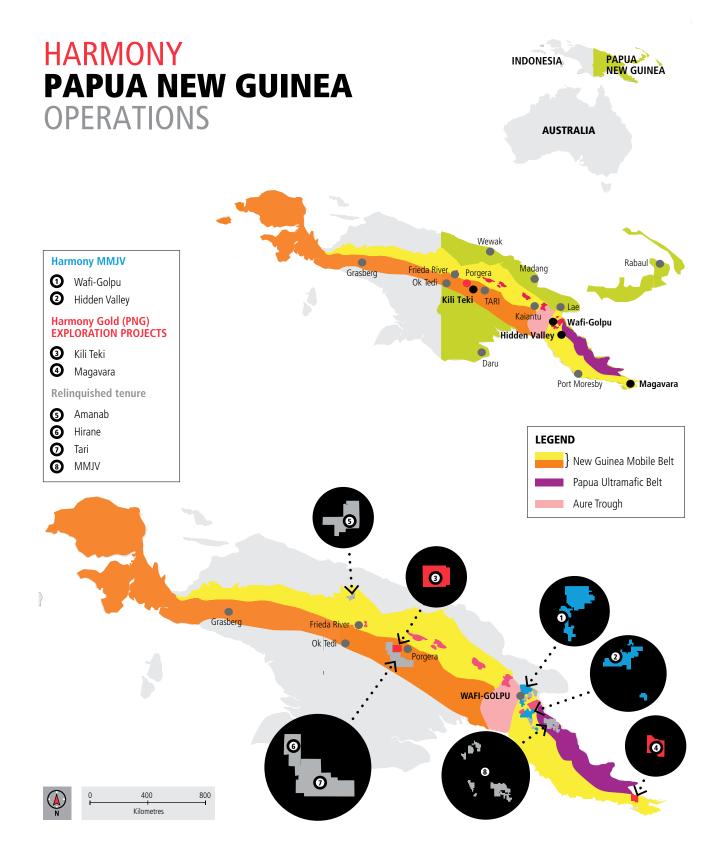




Kalgold

Kalgold's orebodies and mining methods are unique among Harmony's South African operations.

PAPUA NEW GUINEA



In Papua New Guinea, Harmony holds a 50% interest in the Morobe Mining Joint Ventures which includes Hidden Valley, Wafi, Golpu and Nambonga. Separately, Harmony also has 100% interest in extensive exploration tenements.

The Morobe Mining Joint Ventures (50% Harmony) operations fall within the New Guinea Mobile Belt of Papua New Guinea which is one of the world's pre-eminent geological terrains for porphyry copper-gold and epithermal gold mineralisation. The belt is host to several world-class deposits and continues to grow in endowment with recent discoveries and resource expansions at Wafi-Golpu, Frieda River and Yandera.

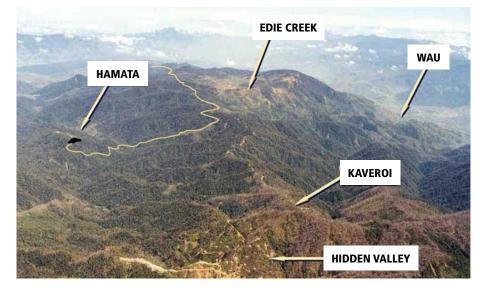
Harmony, through the MMJV, operates at the Hidden Valley Mine, the Wafi Golpu Project and conducts exploration in the Morobe Province. Harmony also explores in areas outside of the Morobe Province on a 100%-owned basis. There are no mineral resources in the 100% Harmony-owned tenements.

HIDDEN VALLEY OPERATIONS

LOCATION

The Hidden Valley Gold Mine is located at latitude 7°22"S and longitude 146°39"E, approximately 15km south-southeast of the township of Wau and approximately 90km south-southwest from Lae, the capital of Morobe Province in Papua New Guinea. The closest major towns to the project are Wau and Bulolo. Lae is the nearest maritime port in the region, and is connected to Bulolo by a tarred two-lane main road. The operation is a 50:50 joint venture between Harmony Gold Mining Company (through Morobe Consolidated Goldfields (MCG)) and Newcrest Mining Limited (through Newcrest Papua New Guinea 1 Limited).

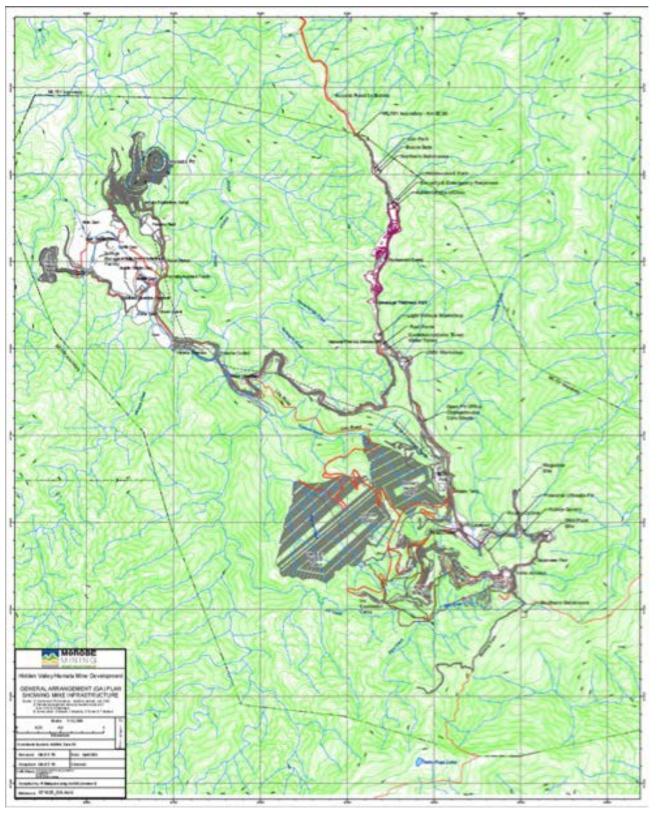
"The operation is a 50:50 joint venture between Harmony Gold Mining Company and Newcrest Mining Limited."



Hidden Valley

Location of Hidden Valley operations with respect to Wau and surrounding topography.

GENERALISED SITE LAYOUT HIDDEN VALLEY OPERATIONS



NATURE OF OPERATIONS

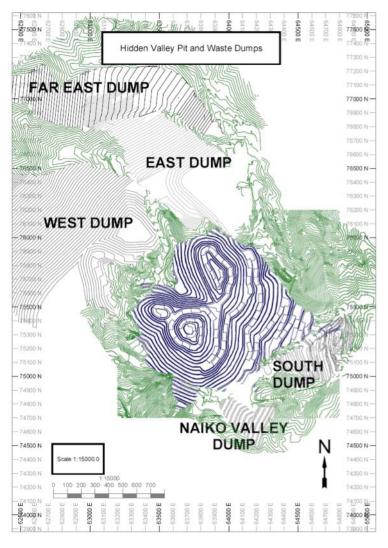
The Hidden Valley mine consists of the Hidden Valley-Kaveroi (HVK) and Hamata open pits located approximately 6km apart, and an ore processing facility in steep, heavily forested, mountainous terrain. Both pits employ conventional truck/excavator mining techniques with nested incremental cutbacks.

The mine is an open pit gold-silver operation, and comprises two operating open pits, the Hidden Valley pit (HVK) and the Hamata pit and one ore-processing plant. Production from the processing plant began in May 2010, with annual nameplate processing capacity of 4.2Mtpa.

The HVK pit is the larger pit supplying the majority of the ore and is located 6km from the processing plant. The mine employs conventional open pit mining techniques with back-hoe excavators and rigid dump trucks as the primary load and haul equipment. Front-end loaders are used for crusher feed and stockpile reclaim. A number of articulated smaller dump trucks are used for construction, and to a lesser extent mining in Hamata. Mining bench configuration consists of 18m inter-berm heights, mined as 3m x 6m benches of 2m x 3m flitches.

"The Hidden Valley mine operates in accordance with a Memorandum of Agreement (MoA) with local landowners and government."

HIDDEN VALLEY PIT AND WASTE DUMPS



Hidden Valley

Tailings are deposited onto a TSF, construction of which is on-going.



In terms of operational design, waste is to be disposed of in engineered valley fill waste dumps, with toes keyed in using competent non-acid producing rock.

Crushed ore is conveyed from the Hidden Valley pit via a 4.5km long overland pipe conveyor. Ore from the Hamata pit is trucked to the Hamata crushing station, located next to the ore processing plant.

The Hidden Valley process plant was designed to nominally treat 4.2Mtpa of gold-bearing ore through a conventional semi-autogenous grinding (SAG) mill, gravity, float, Merrill Crowe (for silver) and carbon-in-leach (for gold) circuit. Gold d'ore bars are produced on site and shipped to a refinery. The tailings are disposed of in a terrestrial tailings storage facility (TSF) located to the south-west of the process plant. Construction of the TSF dam-wall is on-going and largely constitutes placement of suitable oxide material sourced from mining in the Hamata pit. The processing inventory in this ore reserve estimate is unconstrained by the capacity of the TSF capacity and expansion of the existing TSF and construction of an additional facility will be required to accommodate all ore scheduled to be milled.

The Hidden Valley mine operates in accordance with a Memorandum of Agreement (MoA) with local landowners and government, which sets out a preference for employment of landowners and local residents ahead of those from other provinces and offshore employees when qualifications are equivalent.

The current life of mine expectation for Hidden Valley is 13 years.

REGIONAL GEOLOGY

The deposit is a structurally controlled vein-stockwork gold-silver deposit located in the Morobe Granodiorite of the Wau Graben. Gold-silver mineralisation is contained in carbonate-adularia-quartz-sulphide vein-stockworks and in a few instances in hydrothermal breccias. Discrete zones of intense stockwork fracture and mineralised veining comprise individual lodes. At the Hidden Valley deposit gold and silver are related to steeply dipping (Kaveroi Creek Zone) and flat-lying (Hidden Valley Zone) sheeted vein swarms associated with an underlying shallow thrust.

Both the Hidden Valley and the Hamata models have been estimated using a localised multiple indicator Kriged (LMIK) method constrained within broad three-dimensional wireframe domains based on gold and silver grade, alteration and structure. This method accommodates the large panels required for a robust estimate using a long-standing well-known estimation method, but also allows the estimation of localised SMU sized blocks for mine planning purposes. Checks against historical production indicate that both these models are robust.

The Wafi mineralisation was first identified in 1979 by CRA Exploration with the discovery of the underlying Golpu porphyry by **Elders Resources** Itd in 1990."

Mineral resources and mineral reserves detailed in the following tables represent Harmony Newcrest Joint Venture 100% portion.

HIDDEN VALLEY AND HAMATA

Gold – Mineral resources

	Me	asured	resourc	es	In	dicated	resourc	es	Inferred resources				Total mineral resources			
	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Hidden Valley	2.2	1.14	2.0	80	93.3	1.57	147	4 720	5.4	1.22	7	214	100.9	1.55	156	5 014
Hamata	0.17	1.28	0.2	8	4.2	1.14	9	290	0.2	1.90	0	10	4.6	2.10	10	308
Grand total	2.3	1.15	3	88	97.5	1.60	156	5 010	5.6	1.24	7	224	105.4	1.57	166	5 322

Modifying factors

	MCF	Dilution	PRF
	(%)	(%)	(%)
Hidden Valley	95	8	88
Hamata	95	10	88

Gold – Mineral reserves

	Proved reserves			Pr	obable	reserve	S	Total mineral reserves			ves	
	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Hidden Valley	2.2	1.14	2	80	50.9	1.75	89	2 860	53.1	1.72	91	2 940
Hamata	0.1	1.10	0	2	3.2	2.26	7	234	3.3	2.24	7	236
Grand total	2.2	1.14	3	82	54.1	1.78	96	3 094	56.3	1.75	99	3 176

Silver – Mineral resources

	Me	Measured resources Indicated resources				Inferred resources				Total mineral resources				
	Tonnes	Ag	Ag	Tonnes	Ag	Ag	Tonnes		Ag	Ag	Tonnes		Ag	Ag
	(Mt)	(g/t) (000kg)	(000oz)	(Mt)	(g/t) (000kg)	(000oz)	(Mt)	(g/t) (C	000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Hidden Valley	2.2	21.5 47	1 500	93.3	29.6 2 760	88 742	5.4	28.5	155	4 984	100.9	29.4	2 962	95 226
Grand total	2.2	21.5 47	1 500	93.3	29.6 2 760	88 742	5.4	28.5	155	4 984	100.9	29.4	2 962	95 226

Silver – Mineral resources as gold equivalents

	Measured	Indicated	Inferred	Total
	(000oz)	(000oz)	(000oz)	(000oz)
Hidden Valley	27	1 584	89	1 700
Grand total	27	1 584	89	1 700

Modifying factors

	MCF	Dilution	PRF
	(%)	(%)	(%)
Hidden Valley	95	6	61

Silver – Mineral reserves

	Proved reserves				Probable reserves			Total mineral reserves			
	Tonnes		Ag	Ag	Tonnes		Ag Ag	Tonnes		Ag	Ag
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t) (000	kg) (000oz)	(Mt)	(g/t) ((000kg)	(000oz)
Hidden Valley	2.2	19.0	41	1 324	50.9	33.1 16	685 54 160	53.1	32.5	1 726	55 484
Grand total	2.2	19.0	41	1 324	50.9	33.1 16	85 54 160	53.1	32.5	1 726	55 484

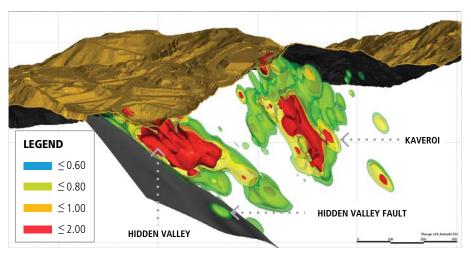
Silver – Mineral reserves

	Proved	Probable	Total
	(000 oz)	(000 oz)	(000 oz)
Hidden Valley	22	911	933
Grand total	22	911	933

"The Hidden Valley Mine consists of the Hidden Valley, Kaveroi and Hamata open pits located approximately 6km apart."

HIDDEN VALLEY

Kaveroi mine showing block model grades and end of July 2013 Pit surface, looking northwest



Hamata

Mining operations at Hamata are based on conventional open-pit mining techniques.



WAFI, GOLPU AND NAMBONGA

LOCATION

The Wafi, Golpu and Nambong deposits are located in eastern Papua New Guinea, approximately 60km southwest of Lae in the Morobe Province. Access to the project from Lae is via a combination of sealed and unsealed roads with a travel time of 4 hours. The operation is a 50:50 joint venture between Harmony Gold Mining Limited (Wafi Mining Limited) and Newcrest Mining Limited (Newcrest Papua New Guinea 2 Limited).

NATURE OF OPERATIONS

The Wafi area mineralisation was first identified in 1979 by CRA Exploration with the discovery of the underlying Golpu Porphyry by Elders Resources Ltd in 1990. Since this time, several companies have completed exploration and resource definition drilling programmes with associated mine development studies.

The operations are advanced exploration play and project studies phase. Golpu, the most advanced is currently revising the 2012 pre-feasibility study. No mining has occurred in the project area.

REGIONAL GEOLOGY

Golpu

The Golpu deposit is the largest of the deposits and found in a block of deformed Upper Mesozoic to Middle Miocene metasedimentary rocks cut by Miocene-Pliocene calc-alkaline dioritic intrusives. Copper and gold mineralisation results from a porphyry system with the upper portion overprinted by high sulphidation epithermal alteration. The deposit is also 60km north-northwest of the porphyry-related gold-silver-base metal Hidden Valley-Kaveroi mines and other related deposits in the Bulolo Graben (e.g. Edie Creek, Kerimenge, Upper Ridges).

The Wafi

mineralisation has been defined over a surface area of 1 100m x 800m and up to 600m below surface, with the majority of the material potentially exploitable by open-pit mining methods."

Wafi-Golpu

The Golpu deposit is one of the largest in eastern Papua New Guinea.

The Golpu mineral resource is approximately 800m by 400m elliptical in plan and extends from 200m below surface to greater than 2 000m depth.

The system consists of multiple, hornblende-bearing diorite porphyries intruded into host sediments. Intrusives range from small dykes to small stocks and apopheses. Hydrothermal alteration related to the porphyry Cu-Au mineralisation forms a predictable zonal arrangement grading from potassic core to propylitic margins. A high sulphidation epithermal system is 'telescoped' over the upper portion of the porphyry system forming a central alunite-quartz (advanced argillic) core grading out to dickite-kaolinite (argillic) with an outer margin of sericite alteration. This results in either epithermal-dominant, interaction (mixed) or porphyry-only zones.

The June 2014 Golpu mineral resource model incorporates lithology, alteration, oxidation, sulphide distribution and structure interpretative wireframes developed from the drilling information using implicit modelling interpolations. Significant changes since the previous model are that the boundary between the Livana porphyry and the surrounding actinolite domain was treated as a hard boundary in estimation and the orientation of the search ellipse was rotated slightly to be steeply west dipping to align with the orientation of the porphyries.

Golpu reserve

The Golpu reserves estimate is based on the assumption that block cave mining method will be used with a two-lift strategy, based on the June 2012 mineral resource. Production will commence from lift 1 (700m below surface), ramping up to a rate of 15Mtpa and transitioning to the higher grade lift 2 (1 400m below surface) with a maximum production rate of 22Mtpa. Access to the mine will be via twin declines developed from the Watut River flats. An inclined conveyor will facilitate the transport of ore to the process plant located near the portal of the access declines.

The ore will be processed on site at the proposed treatment plant using conventional flotation methods to produce a copper concentrate. The gold will be recovered from the copper concentrate, which will be exported to Asia or Europe for smelting via the existing port in Lae. Ore is classified using a net value, rather than a cut-off grade, to take into account the contributions of both gold and copper.

Wafi resource

The Wafi deposit is centred on high sulphidation epithermal mineralisation within a larger epithermal and porphyry related complex in granted Exploration Licence EL440, approximately 60km southwest of Lae, Papua New Guinea. The Wafi deposit outcrops less than 1km to the south of the top of the Golpu porphyry deposit.

The Wafi mineralisation has been defined over a surface area of 1 100m x 800m and up to 600m below surface, with the majority of the material potentially exploitable by open pit mining methods. No reserve is declared and no mining has been undertaken in the project area to date.

Nambonga resource

The Nambonga deposit is located 700m east of Golpu and is hosted in a diorite porphyry stock, termed the Nambonga Porphyry. Chalcopyrite is the dominant copper mineral in the porphyry, which is associated with silicification, either pervasive or as veins. Gold is thought to be intergrown with the chalcopyrite or pyrite.

The approximate extents of the system are 500m (east-west), 400m (north-south) and 1 000m vertically.

The Nambonga resource model contains estimates for gold, silver, copper, lead, zinc and sulphur. Estimation domains are based on a combination of lithology, alteration and mineralisation. The Nambonga deposit is an advanced exploration target and no mining has been undertaken in the project area to date.

WAFI

Gold – Mineral resources

	Mea	Measured resources			Indicated resources				Inferred resources				Total mineral resources			
	Tonnes	Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold	
	(Mt)	(g/t) (000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	
Wafi	_		-	113.5	1.72	196	6 292	22.7	1.30	30	950	136.1	1.65	225	7 242	
Grand total	-		-	113.5	1.72	196	6 292	22.7	1.30	30	950	136.1	1.65	225	7 242	

GOLPU

Gold – Mineral resources

	Mea	asured resourc	es	In	dicated	resourc	es	lr	ferred	resource	S	Total	miner	al resou	rces
	Tonnes	Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t) (000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Golpu	-		-	856.4	0.61	525	16 868	217.5	0.48	104	3 338	1 073.9	0.59	629	20 206
Grand total	-		-	856.4	0.61	525	16 868	217.5	0.48	104	3 338	1 073.9	0.59	629	20 206

Modifying factors

	MCF	Dilution	PRF
	(%)	(%)	(%)
Golpu	100	0	61

Gold – Mineral reserves

	Proved reserves			Pr	obable reserve	Total mineral reserves				
	Tonnes	Gold	Gold	Tonnes	Gold	Gold	Tonnes		Gold	Gold
	(Mt)	(g/t) (000kg)	(000oz)	(Mt)	(g/t) (000kg)	(000oz)	(Mt)	(g/t) (0)00kg)	(000oz)
Golpu	-		-	450.0	0.86 385	12 388	450.0	0.86	385	12 388
Grand total	-		-	450.0	0.86 385	12 388	450.0	0.86	385	12 388

Silver – Mineral resources

	Mea	asured resour	ces	Indicated resources			Ir	nferred resource	es.	Total mineral resources			
	Tonnes	Ag	Ag	Tonnes	Ag	Ag	Tonnes	Ag	Ag	Tonnes		Ag	Ag
	(Mt)	(g/t) (000kg)	(000oz)	(Mt)	(g/t) (000kg)	(000oz)	(Mt)	(g/t) (000kg)	(000oz)	(Mt)	(g/t) (000kg)	(000oz)
Golpu	-		-	856.4	1.1 974	31 328	217.5	0.9 192	6 180	1 073.9	1.1	1 167	37 508
Grand total	_		-	856.4	1.1 974	31 328	217.5	0.9 192	6 180	1 073.9	1.1	1 167	37 508

Modifying factors

	MCF	Dilution	PRF
	(%)	(%)	(%)
Golpu	100	0	61

Silver – Mineral reserves

	Proved reserves			Probable reserves				Total mineral reserves			/es	
	Tonnes		Ag	Ag	Tonnes		Ag	Ag	Tonnes		Ag	Ag
	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Golpu	-	-	-	-	450.0	1.4	614	19 728	450.0	1.4	614	19 728
Grand total	-	-	-	-	450.0	1.4	614	19 728	450.0	1.4	614	19 728

Copper – Mineral resources

	Mea	Measured resources Indicated resources			Inferred resources				Total mineral resources							
	Tonnes		Cu	Cu	Tonnes		Cu	Cu	Tonnes		Cu	Cu	Tonnes		Cu	Cu
	(Mt)	%	(Mkg)	(Mlb)	(Mt)	%	(Mkg)	(Mlb)	(Mt)	%	(Mkg)	(Mlb)	(Mt)	%	(Mkg)	(Mlb)
Golpu	-	-	-	-	856.4	0.93	7 991	17 618	217.5	0.64	1 400	3 087	1 073.9	0.87	9 392	20 705
Grand total	-	-	-	-	856.4	0.93	7 991	17 618	217.5	0.64	1 400	3 087	1 073.9	0.87	9 392	20 705

Copper – Mineral resources as gold equivalents

	Measured	Indicated	Inferred	Total
	(000oz)	(000oz)	(000oz)	(000oz)
Golpu	-	39 042	6 832	45 874
Grand total	-	39 042	6 832	45 874

Modifying factors

	MCF	Dilution	PRF
	(%)	(%)	(%)
Golpu	100	0	92

Copper – Mineral reserves

	Proved reserves			Probable reserves				Total mineral reserves				
	Tonnes		Cu	Cu	Tonnes		Cu	Cu	Tonnes		Cu	Cu
	(Mt)	%	(Mkg)	(Mlb)	(Mt)	%	(Mkg)	(Mlb)	(Mt)	%	(Mkg)	(Mlb)
Golpu	-	-	-	-	450.0	1.21	5 436	11 984	450.0	1.21	5 436	11 984
Grand total	-	-	-	-	450.0	1.21	5 436	11 984	450.0	1.21	5 436	11 984

Copper – Mineral reserves as gold equivalents

	Proved	Probable	Total
	(000 oz)	(000 oz)	(000 oz)
Golpu	-	26 529	26 529
Grand total	-	26 529	26 529

Molybdenum – Mineral resources

	Me	easured	resource	es	Ind	dicated	resource	S	Ir	nferred re	esources	5	Tota	l minera	l resour	ces
	Tonnes		Мо	Мо	Tonnes		Мо	Мо	Tonnes		Мо	Мо	Tonnes		Мо	Мо
	(Mt)	(ppm)	(Mkg)	(Mlb)	(Mt)	(ppm)	(Mkg)	(Mlb)	(Mt)	(ppm)	(Mkg)	(Mlb)	(Mt)	(ppm)	(Mkg)	(Mlb)
Golpu	-	-	-	-	856.4	98	84	186	217.5	76	17	37	1 073.9	94	101	222
Grand total	-	-	-	-	856.4	98	84	186	217.5	76	17	37	1 073.9	94	101	222

Modifying factors

	MCF	Dilution	PRF
	(%)	(%)	(%)
Golpu	100	0	35.7

Molybdenum – Mineral reserves

	P	roved r	eserves		Pi	robable	reserves		Tota	al miner	al reserv	es
	Tonnes		Мо	Мо	Tonnes		Мо	Mo	Tonnes		Мо	Мо
	(Mt)	(ppm)	(Mkg)	(Mlb)	(Mt)	(ppm)	(Mkg)	(Mlb)	(Mt)	(ppm)	(Mkg)	(Mlb)
Golpu	-	-	-	-	450.0	81	36	80	450.0	81	36	80
Grand total	-	-	-	-	450.0	81	36	80	450.0	81	36	80

NAMBONGA

Gold – Mineral resources

	Mea	sured resourc	es	Ind	licated resourc	es	In	ferred resou	rces	Tota	l minera	al resou	rces
	Tonnes	Gold	Gold	Tonnes	Gold	Gold	Tonnes	G	old Gold	Tonnes		Gold	Gold
	(Mt)	(g/t) (000kg)	(000oz)	(Mt)	(g/t) (000kg)	(000oz)	(Mt)	(g/t) (000	g) (000oz)	(Mt)	(g/t)	(000kg)	(000oz)
Nambonga	_		-	-		-	39.8	0.79	31 1010	39.8	0.79	31	1 010
Grand total	-		-	-		-	39.8	0.79	31 1010	39.8	0.79	31	1 010

Silver – Mineral resources

	Me	asured	resource	S	Ind	licated i	resource	S	Int	ferred re	esource	5	Total	minera	l resour	ces
	Tonnes		Ag	Ag	Tonnes		Ag	Ag	Tonnes		Ag	Ag	Tonnes		Ag	Ag
	(Mt)	(g/t)	(Mkg)	(Mlb)	(Mt)	(g/t)	(Mkg)	(Mlb)	(Mt)	(g/t)	(Mkg)	(Mlb)	(Mt)	(g/t)	(Mkg)	(Mlb)
Nambonga	-	-	-	-	-	-	-	-	39.8	2.9	114	3 672	39.8	2.9	114	3 672
Grand total	-	-	-	-	-	-	-	-	39.8	2.9	114	3 672	39.8	2.9	114	3 672

Copper – Mineral resources

	Mea	sured	resource	es	Inc	dicated i	resource	S	In	ferred r	esources	5	Tota	l minera	al resour	ces
	Tonnes		Cu	Cu	Tonnes		Cu	Cu	Tonnes		Cu	Cu	Tonnes		Cu	Cu
	(Mt)	%	(Mkg)	(Mlb)	(Mt)	%	(Mkg)	(Mlb)	(Mt)	%	(Mkg)	(Mlb)	(Mt)	%	(Mkg)	(Mlb)
Nambonga	-	-	-	-	-	-	-	-	39.8	0.21	84	184	39.8	0.21	84	184
Grand total	_	-	-	-	-	-	-	-	39.8	0.21	84	184	39.8	0.21	84	184

Copper – Mineral resources as gold equivalents

	Measured	Indicated	Inferred	Total
	(000oz)	(000oz)	(000oz)	(000oz)
Nambonga	-	-	408	408
Grand total	-	-	408	408

Total mineral resources: Gold and gold equivalents*

	Measured	Indicated	Inferred	Total
	(000oz)	(000oz)	(000oz)	(000oz)
Gold	88	28 170	5 522	33 780
Silver	27	1 584	89	1 700
Copper	-	39 042	7 240	46 282
Grand total	115	68 796	12 851	81 762

Total mineral reserves: Gold and gold equivalents*

	Proved	Probable	Total
	(000 oz)	(000 oz)	(000 oz)
Gold	82	15 482	15 564
Silver	22	911	933
Copper	-	26 529	26 529
Grand total	104	42 922	43 026

Mineral resources and mineral reserves detailed in the following tables represent Harmony 50% attributable gold equivalent mineral resources and mineral reserves in Papua New Guinea.

Mineral resources - gold equivalents*

	Tonnes	Gold	Gold
	(Mt)	(000kg)	(000oz)
Measured	1	2	58
Indicated	534	1 070	34 398
Inferred	143	200	6 426
Total	678	1 272	40 881

Mineral reserves – gold equivalents*

	Tonnes	Gold	Gold
	(Mt)	(000kg)	(000oz)
Proved	1	2	52
Probable	252	668	21 461
Total	253	669	21 513

* Gold equivalent ounces are calculated assuming a US\$1 400/oz Au, US\$3.10/lb Cu and US\$23.00/oz Ag with 100% recovery for all metals

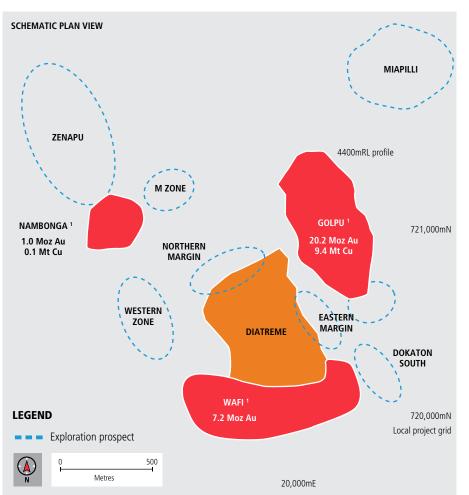
Hidden Valley

Crushed ore is transported from the Hidden Valley pit via a 4.5km-long overland conveyor.



PAPUA NEW GUINEA continued

LOCATION OF THE WAFI GOLPU AND NAMBONGA DEPOSITS AND EXPLORATION PROSPECTS





APPENDIX



The following standards, processes and procedures are followed and adhered to at all Harmony's underground mines in South Africa.

SAMPLING STANDARD

A standard procedure for the sampling of stopes and development ends is used to ensure quality of sampling information and safety in its collection. All samplers and sampling crews are trained based on the rules of the sampling standard. The standard specifies all the steps and rules involved in the preparation of the face and the collection of samples, as well as all safety aspects of sampling. Particular attention is given to quality of information captured, and planned task observations are routinely carried out to ensure the standard is adhered to.

QUALITY ASSURANCE AND QUALITY CONTROL

Assessment of assaying accuracy and precision is carried out through the use of certified Standard Reference Materials (SRMs), blanks and duplicates. SRMs, blank samples and duplicate samples are added with the actual underground chip samples and drillhole samples sent to the assay laboratory. For analysis of Underground chip-samples, the total number of SRMs, blank samples and duplicate samples to be added to the daily underground samples will equal approximately 5% of the total underground samples submitted for that day. Generally, this equates to approximately 2% of each type of QAQC sample. For analysis of underground/ surface drill-holes, QAQC is required to be more stringent in terms of numbers of SRMs, blank samples and duplicate samples submitted. One gold SRM, one uranium SRM, one duplicate and one blank is required for every 20 drill-hole samples assayed. In other words, QAQC material will equate to approximately 15% of the total drill-hole samples analysed. If the SRM or blank sample has been deemed to have failed, the entire batch of samples assayed with this failed QAQC sample must be identified. A request must then be sent to the laboratory requesting them to repeat the assay procedure on all samples within this batch. A second SRM or blank sample must be provided to the laboratory to be included with the batch of samples. Should the batch of samples fail the QAQC standards again, these samples will be excluded from the sampling database (not captured in the sampling system), and the sampling will be repeated if necessary.

ASSAY LABORATORY

Fire assay is the oldest and, in most circumstances, still the best method for determining the concentration of precious metals in ores and metallurgical products. Essentially, the method consists of two consecutive pyrochemical separations. The finely ground sample is fused with a suitable flux, under reducing conditions which promote the separation of the precious metals from the gangue, with simultaneous collection, normally as a lead alloy. Subsequently, the lead is removed by oxidising fusion (cupellation) and the precious metals, thus isolated, are available for measurement.

Harmony's assay laboratory performs various types of analysis, but the laboratory is only ISO 17025 accredited for the analysis of gold and uranium. Underground ore samples are received and prepared for fire assay gold, uranium and relative density analysis. Plant samples, e.g. residues, head samples, carbons, and solutions, are also analysed for gold. Determination of gold fines is determined on bullion samples and sludge. The laboratory undertakes precious metal determinations on SAPS (exhibits) and securities recovered samples.

Water samples are also analysed to determine the quality. Tests are conducted for the presence of cyanide and trace metals tests, as is bacteriological testing.



The laboratory is accredited to ISO/IEC 17025 for all gold analysis. This means that it is competent in meeting international and national laboratory standards and provides reliable testing services. In terms of the ISO/IEC 17025 laboratory systems accreditation, feedback is provided to the laboratory on whether it is conducting its work in accordance with international criteria for technical competence. This feedback assists the laboratory in continual improving it performance in terms of data quality and laboratory effectiveness.

Société Générale de Surveillance (SGS) – Performance Laboratories Randfontein is a fully equipped laboratory providing analytical services using fire assay, instrumental and classical techniques for precious and base metal ores. The laboratory provides services to the major mining houses, including Harmony, in South Africa as well as exploration companies currently active in Africa.

The laboratory is ISO 17025:2005 accredited for the analysis of gold, uranium and the platinum group metals. This international standard confirms that the laboratory operates a quality system, is technically competent and is able to generate valid results. The quality system is applied across the entire laboratory, irrespective of the accreditation status of the method. This is critical in providing results on which major decisions regarding mining and plant operations are based.

The importance of reporting quality results with minimum delay is well understood. Quality results are of limited importance if they are not available when the decision needs to be made. To this end SGS – Performance Laboratory Randfontein prides itself on meeting the reporting requirements and specifications of its clients.

SAMPLE PREPARATION PLANT

To determine the grade of the ore hoisted at the mines, we make use of go belt sampling. A belt sample of up to 1 000kg is received at the plant from the shaft. The sample is first put through a 300mm screen prior to drying with infra-red heaters. Primary crushing to <70mm is then followed by a secondary crushing to <25mm, after which the sample is reduced. At the primary splitter 7/8 of the sample is discarded via a conveyor belt and 1/8 of the sample progress to final drying. Tertiary crushing to <6mm is then followed by secondary splitting. Again 7/8 of the sample is discarded and 1/8 of the sample is pulverised to 85% <106 micron. At final splitting all eight sub-samples are packaged and sent to the laboratory for analyses.

The sample ticket with the necessary information from the shaft, accompanies the sample throughout the process. Empty bins are hosed out, whilst cleaning continues as part of the procedure to avoid contamination. At regular intervals grading analyses are done at the assay laboratory. A quartz sample is done to monitor any possible contamination.

To ensure that a high standard of preparation is maintained, each step of the process, which includes the adherence to safety standards, is checked by a supervisor.

REPORTING CODE

Harmony uses the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (SAMREC), which sets out the internationally recognised procedures and standards for reporting mineral resources and ore/mineral reserves in South Africa. This code was developed by the South African Institute of Mining and Metallurgy and is the recommended guideline for reserve and resource reporting for companies listed on the JSE Limited. Harmony's reporting of its Australian and Papua New Guinea mineral resources and mineral reserves also complies with the Australian Code for the Reporting of Mineral Resources and Mineral Reserves (JORC) of the Australian Institute of Mining and Metallurgy. This code is materially the same as SAMREC. In reporting reserves, distinct cognisance has also been taken of Industry Guide 7 of the United States Securities Exchange Commission.

"After annealing the gold will be seen to have contracted into the form of a coherent, malleable prill of the classic golden yellow colour."

"To ensure that a high standard of preparation is maintained, each step of the process, which includes the adherence to safety standards, is checked by a supervisor."

DEFINITIONS AS PER THE SAMREC CODE

MINERAL RESOURCES

A mineral resource is a concentration (or occurrence) of material of economic interest in or on the earth's crust in such form, quality and quantity that there are reasonable and realistic prospects for eventual economic extraction. The location, quantity, grade, continuity and other geological characteristics of a mineral resource are known, estimated from specific geological evidence and knowledge, or interpreted from a well-constrained and portrayed geological model.

Mineral resources are sub-divided in order of increasing confidence in respect of geoscientific evidence into inferred, indicated and measured categories.

An inferred mineral resource is that part of a mineral resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and sampling, and assumed but not verified geologically and/or through analysis of grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that may be limited in scope or of uncertain quality and reliability.

An indicated mineral resource is that part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing of information from material gathered from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.

A measured mineral resource is that part of a mineral resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable information from exploration, sampling and testing of material from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity.

MINERAL RESERVES

A mineral reserve is the economically mineable material derived from a measured and/or indicated mineral resource. It includes diluting and contaminating materials and allows for losses that are expected to occur when the material is mined. Appropriate assessments to a minimum of a pre-feasibility study for a project, and a life-of-mine plan for an operation, must have been completed, including consideration of, and modification by, realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors (the modifying factors). Such modifying factors must be disclosed.

A probable mineral reserve is the economically mineable material derived from a measured and/ or indicated mineral resource. It is estimated with a lower level of confidence than a proved mineral reserve. It includes diluting and contaminating materials and allows for losses that are expected to occur when the material is mined. Appropriate assessments to a minimum of a pre-feasibility study for a project, and a life-of-mine plan for an operation, must have been carried out, including consideration of, and modification by, realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. Such modifying factors must be disclosed.

A proved mineral reserve is the economically mineable material derived from a measured mineral resource. It is estimated with a high level of confidence. It includes diluting and contaminating materials and allows for losses that are expected to occur when the material is mined. Appropriate assessments to a minimum of a pre-feasibility study for a project, and a life-of-mine plan for an operation, must have been carried out, including consideration of,

"Mineral resources are sub-divided in order of increasing confidence in respect of geoscientific evidence into inferred, indicated and measured categories."



and modification by, realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. Such modifying factors must be disclosed.

HARMONY REPORTING IN COMPLIANCE WITH SAMREC

To meet SAMREC's requirements that the material reported as a mineral resource should have 'reasonable and realistic prospects for eventual economic extraction', Harmony has determined an appropriate cut-off grade which has been applied to the quantified mineralised body according to a process incorporating a long-term view on future economic modifying factors. In applying this process, Harmony uses a gold price of R525 000/kg to derive a cut-off grade to determine the mineral resources at each of its South African underground operations.

Mineral resources have been estimated on the basis of geoscientific knowledge with input from the company's ore reserve managers, geologists and geostatistical staff. Each mine's mineral resources are categorised, blocked-out and ascribed an estimated value. At all our mines, computerised geostatistical estimation processes are used.

To define that portion of a measured and indicated mineral resource that can be converted to a proved and probable mineral reserve, Harmony applies the concept of a cut-off grade. At our underground South African mines, this is done by defining the optimal cut-off as the lowest grade at which an orebody can be mined such that the total profits, under a specified set of mining parameters, are maximised. The cut-off grade is determined using the company's Optimiser software, which requires the following as input: the database of measured and indicated resource blocks (per shaft section); an assumed gold price which, for this mineral reserve statement, was taken as R425 000/kg; planned production rates; the mine recovery factor (MRF) which is equivalent to the mine call factor (MCF) multiplied by the plant recovery factor (PRF); and planned cash operating costs (rand per tonne). Rand per tonne cash operating costs are historically based but take cognisance of distinct changes in the cost environment such as restructuring, right-sizing, and other cost-reduction initiatives, and for below-infrastructure ounces, an estimate of capital expenditure.

The block cave reserve at Golpu in Papua New Guinea uses proprietary block cave optimisation software to define the optimal mine plan and sequencing. The open-pit reserve at Hidden Valley in Papua New Guinea is using the Whittle optimisation programme to guide the most efficient mine design given the commodity prices and cost inputs assumed.

The mineral reserves represent that portion of the measured and indicated resources above the cut-off grade in the life-of-mine plan and have been estimated after consideration of the factors affecting extraction, including mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors.

A range of disciplines, including geology, survey, planning, mining engineering, rock engineering, metallurgy, financial management, human resources management and environmental management, has been involved at each mine in the life-of-mine planning process and the conversion of resources into reserves.

The modifying factors related to the ore flow that are used to convert the mineral resources to mineral reserves through the life-of-mine planning process are stated for each shaft. For these factors, historical information is used, except if there is a valid reason to do otherwise. As a result of the depth at which mining occurs and the resulting rock engineering requirements at our South African underground mines, some shafts include stope support pillars into the design of their mining layouts which accounts for discounts of 7% to 10%. A further 15% discount is applied as a life-of-mine factor to provide for unpay and off-reef mining. In general, life-of-mine plan extraction factors do not exceed 85% and are reflected in the mineral reserves.

"Each mine's mineral resources are categorised, blockedout and ascribed an estimated value."

Term	Definition
Acidic	Descriptor for silica rich igneous rocks (containing greater than 65% silica) such as Rhyolite or Granite.
Alluvium	Relatively recent deposits of sedimentary material laid down in riverbeds, flood plains, lakes, or at the base of mountain slopes.
Alteration	Any physical or chemical change in a rock resulting from fluids moving through the rock.
Anticline	An arch or fold in layers of rock.
Assay	An analysis to determine the presence and concentration of one or more chemical components.
Basalt	An extrusive mafic volcanic rock.
Basic	Descriptor for silica poor igneous rocks such as Basalt or Gabbro.
Below infrastructure	That part of a company's mineral reserve that can only be accessed following certain capital expenditure which has yet to be approved.
Block caving	A mining method suited for large low-grade orebodies that are unsuitable for open cut mining. In development a series of evenly spaced crosscuts are made at the bottom of the ore block from which raises are driven up into the ore. The ore block is then undercut so that it begins to collapse (or 'cave') into the raises. The weight of the material above provides the force to fracture and crush the underlying ore which is drawn from the drawpoints on the crosscuts. As ore is withdrawn the cave progresses up through the orebody.
Bornite	A copper iron sulphide that commonly defines the core of porphyry copper gold deposits.
Breccia	Fractured and broken rock that results from structural, volcanic or sedimentary processes.
Bulk mining	Any large-scale mechanised method of mining involving significant volumes of material being extracted or a daily basis.
Caldera	A large, basin shaped volcanic depression, more or less circular in form, that results from the collapse of the earth's surface into an exhausted magma chamber.
Chalcocite	A copper sulphide mineral common in zones of secondary enrichment.
Chalcopyrite	A copper iron sulphide that comprises the bulk of ore in many copper mines.
Concentrate	The product of the milling process that contains a high percentage of the valuable metals. The concentrate is commonly the final product produced onsite and is sent to a third party for separation or smelting.
Conglomerate	A sedimentary rock consisting of rounded, water worn pebbles or boulders cemented into a solid mass.
Contact	A geological term used to describe the line or plane along which two different rock types meet.
Contact metamorphism	Metamorphism of country rocks adjacent to an intrusion caused by heat and fluids from the intrusion.
Craton	A part of the earth's crust that has attained stability and has been little deformed for a long period or geological time.
Crosscut	An opening underground that is cut at right angles from the main level drive or shaft that generally links to and cuts the orebody, may also refer to a link between different drives.
Country rocks	The surrounding "Host" rocks into which an igneous intrusion or orebody is emplaced.
Cut-off grade	The lowest grade of copper or gold ore that is considered economic to mine.
Decline	A tunnel below the horizontal that allows access to the orebody.
Deposit	A concentration of mineral matter, sedimentary or volcanic material, commonly refers to an accumulation of mineralised material that need not be economic to extract.
Diamond drilling	A method of obtaining samples of rock that utilises a diamond encrusted drill bit to cut long cylindrica sticks of core.
Diatreme	A long vertical pipe or plug filled with volcanic breccia formed by explosive release of energy from a gas- charged magma.
Dilution	Unmineralised rock that is by necessity removed along with ore during the mining process that effectively lowers the overall grade of the ore.



Term	Definition
Dip	The angle at which a bed, stratum, or vein is inclined from the horizontal, measured perpendicular to the strike and in the vertical plane.
Disseminated ore	Ore carrying small distributed particles or valuable minerals distributed more or less uniformly through the rock.
Drawpoint	An underground opening at the bottom of the stope through which broken ore is extracted.
Dyke	A long and relatively thin body of igneous rock that, while in the molten state, intruded a fissure in older rocks.
Enrichment	The process of upgrading the concentrations of various elements into more concentrated deposits.
Epithermal deposit	A mineral deposit consisting of veins and replacement bodies containing precious metals or, more rarely, base metals; that form close to the earth's surface at high levels in the crust.
Exploration	Prospecting, sampling, mapping, drilling and other work involved in the search for ore.
Fault	A break in the continuity of a body of rock. It is accompanied by a movement on one side of the break relative to the other so that what were once parts of one continuous rock stratum or vein are now separated. The amount of displacement of the parts may range from a few inches to thousands of feet. Various descriptive names have been given to different kinds of faults, including but not limited to; closed fault, dip fault, dip-slip fault, distributive fault, flaw fault, gravity fault, heave fault, hinge fault, horizontal fault, longitudinal fault, normal fault, oblique fault, oblique slip fault, open fault, overthrust fault, parallel displacement fault, pivotal fault, reverse fault, rotary fault, step fault, strike fault, strike-slip fault, thrust fault, transcurrent fault, translatory fault, underthrust, vertical fault.
Felsic	An igneous rock having abundant light-coloured minerals and enriched in lighter elements such as silica and aluminium.
Flotation	A milling process in which valuable particles are induced to become attached to bubbles and float where they are more easily separated.
Fold	A curve or bend of a planar structure such as rock strata, bedding planes, foliation, or cleavage. A fold is usually a product of deformation, although its definition is descriptive and not genetic and may include primary sedimentary structures.
Gabbro	A dark, coarse-grained mafic igneous rock.
Gangue	The commercially worthless material that surrounds, or is closely mixed with, the ore.
Gold equivalent ounces	In instances where individual deposits may contain multiple valuable commodities with a reasonable expectation of being recovered; for example gold + copper in the one deposit, Harmony computes a Gold Equivalent to more easily assess the value of the deposit against gold only mines. Harmony does this by calculating the value of each of the deposits commodities then divides the product by the price of gold. For example ((gold ounces * gold price per ounce) + (copper pounds* copper price per pound)) / gold price per ounce; this will return the gold equivalent of a gold and copper deposit. All calculations are done using metal prices as stipulated in attached documentation. Harmony assumes a 100% metallurgical recovery in its calculations unless otherwise stated.
Graben	A block of rock bound by faults that has moved downward to form a depression between adjacent fault blocks.
Graben Granite	A block of rock bound by faults that has moved downward to form a depression between adjacent fault
	A block of rock bound by faults that has moved downward to form a depression between adjacent fault blocks.
Granite	A block of rock bound by faults that has moved downward to form a depression between adjacent fault blocks. A light coarse-grained felsic intrusive rock.
Granite Granodiorite	 A block of rock bound by faults that has moved downward to form a depression between adjacent fault blocks. A light coarse-grained felsic intrusive rock. A light coarse-grained intermediate intrusive rock. A field term for any compact dark green altered or metamorphosed basic igneous rock that owes its colour
Granite Granodiorite Greenstone	 A block of rock bound by faults that has moved downward to form a depression between adjacent fault blocks. A light coarse-grained felsic intrusive rock. A light coarse-grained intermediate intrusive rock. A field term for any compact dark green altered or metamorphosed basic igneous rock that owes its colour to chlorite.
Granite Granodiorite Greenstone Head grade	 A block of rock bound by faults that has moved downward to form a depression between adjacent fault blocks. A light coarse-grained felsic intrusive rock. A light coarse-grained intermediate intrusive rock. A field term for any compact dark green altered or metamorphosed basic igneous rock that owes its colour to chlorite. The average grade of ore fed into the mill. An elongate, relatively uplifted crustal unit or block that is bounded by faults, the opposite of a Graben. It



Term	Definition
Intrusive	A body of igneous rock formed by the consolidation of magma intruded into country rock, in contrast to lava which is extruded onto the earth's surface.
Lava	A general name for the molten rock ejected by volcanoes.
Mafic	An igneous rock composed chiefly of dark, ferromagnesium minerals and enriched in heavier elements such as iron.
Magma	The molten material within the earth from which igneous rocks are formed.
Maramuni arc	A part of the New Guinea Mobile Belt, an arc across the island of Papua New Guinea within which a large portion of economic deposits are found.
Matrix	The finer-grained material between the larger particles of a rock or the material surrounding a fossil or mineral.
Metallurgy	The study of extracting metals from their ores.
Mesozoic	An era of geologic time, from the end of the Paleozoic to the beginning of the Cenozoic, or from about 225 million years to about 65 million years ago.
Mine call factor	Is the ratio, expressed as a percentage, which the specific product accounted for in "recovery plus residue" bears to the corresponding product "called for" by the mine's measuring and valuation methods.
MW	Milling width is a calculated width expressing the relationship between the total reef area excavated and the total tonnes milled from underground sources.
New guinea	
Mobile belt	A belt of folded and mountainous terrain that defines the core of the island of Papua New Guinea, considered to define the leading edge of the Australian content where it is in collision with the pacific ocean plate.
Non-refractory	Gold or copper ore that is easily extracted using standard and well tested mill and plant technologies.
Ophiolite	A section of the earth's oceanic crust and the underlying mantle that has been uplifted and often emplaced (or obducted) onto the edge of a continental plate; commonly the product of subduction systems. The material comprises mafic and ultramafic rocks and minerals.
Ore	A mixture of minerals and gangue from which at least one of the minerals can be extracted at a profit.
Orogeny	A period of mountain building characterised by compression and folding within the earth's crust.
Oxidation	Generically refers to a chemical reaction of the rock when exposed to oxygen and surface water, resulting in oxide material in a mining environment.
Plunge	The inclination and orientation of a fold axis or other linear feature, measured in the vertical plane.
Porphyry	An igneous rock of any composition that contains conspicuous phenocrysts in a fine-grained groundmass that has intruded into the upper crust rapidly. A rock name descriptive of the groundmass composition usually precedes the term; eg, diorite porphyry.
Porphyry copper	A specific deposit type associated with the intrusion of multiple phases of porphyry. The heat and associated fluids commonly carry and precipitate metals such as gold, copper, molybdenum and silver.
PRF	Plant recovery factor is the ratio, expressed as a percentage, of the mass of the specific mineral product actually recovered from ore treated at the plant to its total specific mineral content before treatment.
Pyrite	Iron sulphide that usually occurs in veins, as magmatic segregation, as an accessory in igneous rocks, and in metamorphic rocks, in sedimentary rocks including coal seams; It is commonly associated with gold.
Quartzite	A very hard metamorphosed sandstone, consisting chiefly of quartz grains that are so completely cemented with secondary silica that the rock breaks across or through the grains rather than around them.
Raise	Any tunnel having an inclination above the horizontal in the direction of workings.
Recovery	The percentage of valuable metal in the ore that can be recovered by metallurgical treatment.
Refractory	Ore type that contains gold or copper that is 'locked up' and difficult to extract without specialised processing equipment.
Resource	The estimated amount of material in a mineral deposit, based on limited drilling but considered to be



Term	Definition
Rhyolite	A fine-grained extrusive igneous rock with the same chemical composition as granite.
Schist	A foliated metamorphic rock that has undergone sufficient strain so as to align all the mineral components into a roughly parallel arrangement.
Shaft	A vertical or inclined excavation in rock for the purpose of accessing the orebody, usually equipped with a hoist and winder to move miners and materials between the surface and various levels underground.
Silica	Fine grained silicon dioxide (such as quartz).
Siliceous	An alteration type where a large portion of the original rock has been replaced by silica. Also spelled silicious.
Skarn	Lime-bearing silicates of any geologic age derived from nearly pure limestone or dolomite with the introduction of large amounts of Silica, Aluminium, Iron and Magnesium.
Stockwork	A mineral deposit in the form of a network of veinlets diffused in the country rock.
Stope	An excavation in a mine from which ore is, or has been, removed.
Strike	The bearing from north of a geological structure such as a bed, fault or orebody, defined as a horizontal line measured across the surface perpendicular to the dip.
Strip	To remove the overburden and waste to reveal the ore underneath.
Stripping ratio	The ratio of ton of waste removed to tons of ore recovered in an open pit mine.
Subduction	The process in plate tectonics whereby a portion of one of the earth's plates is drawn down below another.
Sublevel	A level in an underground mine between two main working levels.
Sub-outcrop	A rock stratum that unconformably underlies another rock stratum.
Syncline	Concave fold in stratified rock, in which strata dip down to meet in a trough.
Tailings	Material rejected from the milling process from which much of the economic material has been removed.
SW	Stoping width is the width of the excavation made during stoping operations.
Tsf	Tailings Storage Facility (or tailings pond) – where the tailings are stored until the end of mining when the facility is capped and rehabilitated.
Unconformity	The structural relationship between rock strata in contact, characterised by a lack of continuity in deposition due to a period of non-deposition, weathering, or erosion prior to the deposition of the younger beds. An unconformity is often marked by absence of parallelism between the strata where the younger overlying stratum does not conform to the dip and strike of the older underlying rocks.
Volcanic	Derived from volcanoes.
Waste	Unmineralised or low-grade material that cannot be mined at a profit.
Winze	Any tunnel having an inclination below the horizontal in the direction of workings.

DIRECTORATE AND ADMINISTRATION

HARMONY GOLD MINING COMPANY LIMITED

Corporate office Randfontein Office Park PO Box 2, Randfontein, 1760 South Africa

Corner Main Reef Road and Ward Avenue Randfontein, 1759 South Africa

Telephone: +27 11 411 2000 Website: www.harmony.co.za

DIRECTORS

PT Motsepe* (chairman) M Motloba*^ (deputy chairman) GP Briggs (chief executive officer) F Abbott (financial director) HE Mashego (executive director) FFT De Buck*^ (lead independent director) JA Chissano*1A KV Dicks*^ Dr DS Lushaba*^ KT Nondumo*^ VP Pillay*^ C Markus*^ M Msimana*^ J Wetton*^ AJ Wilkens* * Non-executive

Non-executive
 Independent

¹ Mozambican

INVESTOR RELATIONS

E-mail: harmonyIR@harmony.co.za

Henrika Basterfield Investor Relations Manager Telephone: +27 11 411 2314 +27 11 692 3879 Fax: Mobile: +27 82 759 1775 E-mail: henrika@harmony.co.za Marian van der Walt Executive: Corporate and Investor Relations Telephone: +27 11 411 2037 Fax: +27 86 614 0999 Mobile: +27 82 888 1242 E-mail: marian@harmony.co.za

COMPANY SECRETARY

 Riana Bisschoff

 Telephone:
 +27 11 411 6020

 Fax:
 +27 11 696 9734

 Mobile:
 +27 83 629 4706

 E-mail:
 riana.bisschoff@harmony.co.za

TRANSFER SECRETARIES

Link Market Services South Africa (Proprietary) Limited (Registration number 2000/007239/07) 13th Floor, Rennie House, Ameshoff Street, Braamfontein PO Box 4844 Johannesburg, 2000 South Africa

Telephone: +27 86 154 6572 Fax: +27 86 674 4381

ADR DEPOSITARY

Deutsche Bank Trust Company Americas c/o American Stock Transfer and Trust Company Peck Slip Station PO Box 2050 New York, NY 10272-2050

 E-mail queries: db@amstock.com

 Toll free:
 +1-800-937-5449

 Int:
 +1-718-921-8137

 Fax:
 +1-718-921-8334

SPONSOR

JP Morgan Equities Limited 1 Fricker Road, corner Hurlingham Road Illovo, Johannesburg, 2196 Private Bag X9936, Sandton, 2146

Telephone: +27 11 507 0300 Fax: +27 11 507 0503

TRADING SYMBOLS

JSE Limited: HAR New York Stock Exchange, Inc: HMY Euronext, Brussels: HMY Berlin Stock Exchange: HAM1

Registration number: 1950/038232/06 Incorporated in the Republic of South Africa ISIN: ZAE 000015228

FORWARD-LOOKING STATEMENTS

Private Securities Litigation Reform Act

Safe Harbour Statement

This report contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and 21E of the Securities Exchange Act of 1934, as amended, that are intended to be covered by the safe harbour created by such sections. These statements may be identified by words such as "expects", "looks forward to", "anticipates", "intends", "believes", "seeks", "estimates", "will", "project" or words of similar meaning. All statements other than those of historical facts included in this report are forward-looking statements, including, without limitation, (i) estimates of future earnings, and the sensitivity of earnings to the gold and other metals prices; (ii) estimates of future gold and other metals production and sales, (iii) estimates of future cash costs; (iv) estimates of future cash flows, and the sensitivity of cash flows to the gold and other metals prices; (v) statements regarding future debt repayments; (vi) estimates of future capital expenditures; and (vii) estimates of reserves, and statements regarding future exploration results and the replacement of reserves. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to, gold and other metals price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, project cost overruns, as well as political, economic and operational risks in the countries in which we operate and governmental regulation and judicial outcomes. For a more detailed discussion of such risks and other factors (such as availability of credit or other sources of financing), see the Company's latest Annual Report on Form 20-F which is on file with the Securities and Exchange Commission, as well as the Company's other SEC filings. The Company does not undertake any obligation to release publicly any revisions to any "forward-looking statement" to reflect events or circumstances after the date of this report, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.





www.harmony.co.za

