

HARMONY GOLD MINING CO LTD

Form 20-F/A

November 12, 2009

**Table of Contents**

**As filed with the Securities and Exchange Commission on November 12, 2009**

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549  
FORM 20-F/A  
Amendment No.1**

(Mark One)

**REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

**OR**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES  
EXCHANGE ACT OF 1934**

**For the fiscal year ended June 30, 2009**

**OR**

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES  
EXCHANGE ACT OF 1934**

**OR**

**SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES  
EXCHANGE ACT OF 1934**

**Date of event requiring this shell company report**

**For the transition period from to**

**Commission file number: 001 - 31545**

**HARMONY GOLD MINING COMPANY LIMITED**

*(Exact name of registrant as specified in its charter)*

**REPUBLIC OF SOUTH AFRICA**

*(Jurisdiction of incorporation or organization)*

**RANDFONTEIN OFFICE PARK, CNR WARD AVENUE AND MAIN REEF ROAD,  
RANDFONTEIN, SOUTH AFRICA, 1760**

*(Address of principal executive offices)*

Khanya Maluleke, Company Secretary

tel: +27 11 411 2019, [khanya.maluleke@harmony.co.za](mailto:khanya.maluleke@harmony.co.za), fax: +27 11 411 2070,

Randfontein Office Park, CNR Ward Avenue and Main Reef Road, Randfontein, South Africa, 1760

*(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)*

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Ordinary shares, with nominal value Rand 50 cents per share\*

*(Title of Class)*

American Depositary Shares (as evidenced by American Depositary Receipts),  
each representing one ordinary share

*(Title of Class)*

Securities registered or to be registered pursuant to Section 12(g) of the Act:

Ordinary shares, with nominal value Rand 50 cents per share\*

*(Title of Class)*

Edgar Filing: HARMONY GOLD MINING CO LTD - Form 20-F/A

American Depositary Shares (as evidenced by American Depositary Receipts),  
each representing one ordinary share  
(Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None

The number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the last full fiscal year covered by this Annual Report was:

425,986,836 ordinary shares, with nominal value of Rand 50 cents per share

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

YES  NO

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

YES  NO

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days:

YES  NO

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP

International Financial Reporting Standards as  
issued  
by the International Accounting Standards  
Board

Other

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow:

Item 17  Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

YES  NO

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court.

YES  NO

\* Not for trading,  
but only in  
connection with  
the registration  
of American  
Depositary  
Shares, pursuant  
to the  
requirements of

the Securities  
and Exchange  
Commission.

---

**Table of Contents**

**Explanatory Note**

This Amendment No. 1 on Form 20-F/A to our Annual Report on Form 20-F for the fiscal year ended June 30, 2009 originally filed with the Securities and Exchange Commission on October 26, 2009 (the 2009 20-F ), is being filed for the purposes of supplementing or amending the following section from the 2009 20-F:

**Item 19. Exhibits**

The 2009 20-F was filed showing the incorrect date on the certifications of the Chief Executive Officer and the Chief Financial Officer.

Item 19 has been updated to include the certifications of the Chief Executive Officer and the Chief Financial Officer in connection with this Amendment.

\*\*\*\*\*

Other than as expressly set forth above, this Form 20-F/A does not, and does not purport to, amend, update or restate the information in any other Item of the 2009 20-F or reflect any events that have occurred after the 2009 20-F was originally filed.

---

**TABLE OF CONTENTS**

<b>Part I</b>	5
<b><u>Item 1. Identity of Directors, Senior Management and Advisors</u></b>	5
<b><u>Item 2. Offer Statistics and Expected Timetable</u></b>	5
<b><u>Item 3. Key Information</u></b>	5
<b><u>Item 4. Information on the Company</u></b>	19
<b><u>Item 4A. Unresolved Staff Comments</u></b>	90
<b><u>Item 5. Operating and Financial Review and Prospects</u></b>	90
<b><u>Item 6. Directors, Senior Management and Employees</u></b>	118
<b><u>Item 7. Major Shareholders and Related Party Transactions</u></b>	136
<b><u>Item 8. Financial Information</u></b>	138
<b><u>Item 9. The Offer and Listing</u></b>	140
<b><u>Item 10. Additional Information</u></b>	143
<b><u>Item 11. Quantitative and Qualitative Disclosures About Market Risk</u></b>	159
<b><u>Item 12. Description of Securities Other than Equity Securities</u></b>	162
<b>Part II</b>	168
<b><u>Item 13. Defaults, Dividend Arrearages and Delinquencies</u></b>	168
<b><u>Item 14. Material Modifications to the Rights of Security and Use of Proceeds</u></b>	169
<b><u>Item 15. Disclosure Controls and Procedures</u></b>	170
<b><u>Item 16A. Audit Committee Financial Expert</u></b>	171
<b><u>Item 16B. Code of Ethics</u></b>	171
<b><u>Item 16C. Principal Accountant Fees and Services</u></b>	172
<b><u>Item 16D. Exemptions from Listing Standards for Audit Committees</u></b>	172
<b><u>Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers</u></b>	172
<b><u>Item 16F. Change in Registrant's Certifying Accountant</u></b>	173
<b><u>Item 16G. Corporate Governance</u></b>	173
<b>Part III</b>	174
<b><u>Item 17. Financial Statements</u></b>	174
<b><u>Item 18. Financial Statements</u></b>	175
<b><u>Item 19. Exhibits</u></b>	176
<b><u>SIGNATURE</u></b>	179
<b><u>INDEX TO FINANCIAL STATEMENTS</u></b>	F-1
<u>CEO Certification</u>	
<u>CFO Certification</u>	
<u>Section 906 CEO Certification</u>	
<u>Section 906 CFO Certification</u>	

## **Table of Contents**

### **USE OF TERMS AND CONVENTIONS IN THIS ANNUAL REPORT**

Harmony Gold Mining Company Limited is a corporation organized under the laws of the Republic of South Africa. As used in this Annual Report on Form 20-F, or this annual report, unless the context otherwise requires, the term **Harmony** refers to Harmony Gold Mining Company Limited; the term **South Africa** refers to the Republic of South Africa; the terms **we** , **us** and **our** refer to Harmony and, as applicable, its direct and indirect subsidiaries as a **Group** .

In this annual report, references to **R** , **Rand** and **c** , cents are to the South African Rand, the lawful currency of South Africa, **A\$** refers to Australian dollars, **K** or **Kina** refers to Papua New Guinean Kina and references to **\$** , **U** and **U.S. dollars** are to United States dollars.

This annual report contains information concerning our gold reserves. While this annual report has been prepared in accordance with the regulations contained in Securities and Exchange Commission Guide 7, it is based on assumptions which may prove to be incorrect. See *Item 3. Key Information Risk Factors Harmony s gold reserve figures are estimated based on a number of assumptions, including assumptions as to mining and recovery factors, future cash costs or production and the price of gold and may yield less gold under actual production conditions than currently estimated.*

This annual report contains descriptions of gold mining and the gold mining industry, including descriptions of geological formations and mining processes. We have explained some of these terms in the Glossary of Mining Terms included at the end of this annual report. This glossary may assist you in understanding these terms.

### **PRESENTATION OF FINANCIAL INFORMATION**

We are a South African company and the majority of our operations are located in our home country. Accordingly, our books of account are maintained in South African Rand and our annual and interim financial statements are prepared in accordance with International Financial Reporting Standards ( **IFRS** ) as issued by the International Accounting Standards Board ( **IASB** ). Prior to fiscal year ended June 30, 2008, our annual financial statements (translated into U.S. dollars) were prepared and filed with the U.S. Securities and Exchange Commission ( **SEC** ) in accordance with generally accepted accounting principles in the United States ( **U.S. GAAP** ). On December 21, 2007, the SEC adopted rules allowing foreign private issuers that file Annual Reports on Form 20-F to file financial statements with the SEC in accordance with IFRS as issued by the IASB without reconciliation to U.S. GAAP. As per these rules, we include in this annual report our consolidated financial statements prepared in accordance with IFRS as issued by the IASB, translated into U.S. dollars. All financial information, except as otherwise noted, are stated in accordance with IFRS as issued by the IASB.

In this annual report, we also present total cash costs and total cash costs per ounce , which have been determined using industry standards promulgated by the Gold Institute and are non-GAAP measures. The Gold Institute was a non-profit international industry association of miners, refiners, bullion suppliers and manufacturers of gold products that ceased operation in 2002, which developed a uniform format for reporting production costs on a per ounce basis. The Gold Institute has now been incorporated into the National Mining Association. The guidance was first adopted in 1996 and subsequently revised in November 1999. An investor should not consider these items in isolation or as alternatives to production costs, cost of sales or any other measure of financial performance presented in accordance with IFRS as issued by the IASB. While the Gold Institute has provided definitions for the calculation of total cash costs, the calculation of total cash costs and total cash costs per ounce may vary significantly among gold mining companies and, by themselves, do not necessarily provide a basis for comparison with other gold mining companies. For further information, See *Item 5. Operating and Financial Review and Prospects Costs Reconciliation of Non-GAAP Measures* .

We have included the U.S. dollar equivalent amounts of certain information and transactions in Rand, Kina and A\$. Unless otherwise stated, we have translated (i) balance sheet items at the noon buying rate of the Federal Reserve Bank of New York on the last business day of the period (R7.72 per U.S.\$1.00 as at June 30, 2009 and R7.80 per U.S.\$1.00 as at June 30, 2008), (ii) acquisitions, disposals and specific items included within equity at the rate prevailing at the date the transaction was entered into and (iii) income statement items at the average rate for the year (R9.00 per U.S.\$1.00 for fiscal 2009, R7.26 per U.S.\$1.00 for fiscal 2008 and R7.20 per U.S.\$1.00 for fiscal 2007). Capital expenditures for fiscal 2010 have been translated at the rates used for balance sheet items. By including these

U.S. dollar equivalents in this annual report, we are not representing that the Rand, Kina and A\$ amounts actually represent the U.S. dollar amounts, as the case may be, or that these amounts could be converted at the rates indicated.

**Table of Contents**

**FORWARD-LOOKING STATEMENTS**

This annual report contains forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995 with respect to our financial condition, results of operations, business strategies, operating efficiencies, competitive positions, growth opportunities for existing services, plans and objectives of management, markets for stock and other matters. In particular, among other statements, certain statements in *Item 4. Information on the Company*, *Item 5. Operating and Financial Review and Prospects* and *Item 11. Quantitative and Qualitative Disclosures About Market Risk* are forward-looking in nature. Statements in this annual report that are not historical facts are forward-looking statements for the purpose of the safe harbor provided by Section 21E of the Securities Exchange Act of 1934, as amended (the **Exchange Act**), and Section 27A of the Securities Act of 1933, as amended.

These forward-looking statements, including, among others, those relating to our future business prospects, revenues and income, wherever they may occur in this annual report and the exhibits to this annual report, are necessarily estimates reflecting the best judgment of our senior management and involve a number of risks and uncertainties that could cause actual results to differ materially from those suggested by the forward-looking statements. As a consequence, these forward-looking statements should be considered in light of various important factors, including those set forth in this annual report. Important factors that could cause actual results to differ materially from estimates or projections contained in the forward-looking statements include, without limitation:

- overall economic and business conditions in South Africa and elsewhere;
- the ability to achieve anticipated efficiencies and other cost savings in connection with past and future acquisitions;
- fluctuations in the market price of gold;
- the occurrence of hazards associated with underground and surface gold mining;
- the occurrence of labor disruptions;
- availability, terms and deployment of capital;
- changes in government regulation, particularly mining rights and environmental regulation;
- fluctuations in exchange rates;
- currency devaluations/appreciations and other macroeconomic monetary policies; and
- socio-economic instability in South Africa and other countries in which we operate.

We undertake no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after the date of this annual report or to reflect the occurrence of unanticipated events.

**Table of Contents**

**PART I**

**Item 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISORS**

Not applicable.

**Item 2. OFFER STATISTICS AND EXPECTED TIMETABLE**

Not applicable.

**Item 3. KEY INFORMATION**

**SELECTED FINANCIAL DATA**

*The selected consolidated financial data below should be read in conjunction with, and are qualified in their entirety by reference to, our consolidated financial statements and the notes thereto and with Item 5. Operating and Financial Review and Prospects, both included elsewhere in this annual report. Historical results are not necessarily indicative of results to be expected for any future period.*

**SELECTED HISTORICAL CONSOLIDATED FINANCIAL DATA**

We are a South African company and the majority of our operations are located in our home country. Accordingly, our books of account are maintained in South African Rand and our annual and interim financial statements are prepared in accordance with IFRS as issued by the IASB. Prior to fiscal year ended June 30, 2008, our annual financial statements (translated into U.S. dollars) were prepared and filed with the SEC in accordance with U.S. GAAP. On December 21, 2007, the SEC adopted rules allowing foreign private issuers that file Annual Reports on Form 20-F to file financial statements with the SEC in accordance with IFRS as issued by the IASB without reconciliation to U.S. GAAP. As per these new rules, we include in this annual report our consolidated financial statements prepared in accordance with IFRS as issued by the IASB, translated into U.S. dollars.

The selected historical consolidated financial data for the last five fiscal years are, unless otherwise noted, stated in accordance with IFRS as issued by the IASB, and has been extracted from the more detailed information and financial statements prepared in accordance with IFRS as issued by the IASB, including our audited consolidated financial statements as of June 30, 2009 and 2008 and for each of the years in the three years ended June 30, 2009 and the related notes, which appear elsewhere in this annual report. The historical consolidated financial data at June 30, 2007, 2006 and 2005, and for each of the years in the two years ended June 30, 2006, has been extracted from our audited consolidated financial statements not included in this annual report as adjusted for discontinued operations and the accounting changes described below.

During fiscal 2008, we early adopted IAS 23 (Revised) Borrowing Costs. In accordance with the Revised Standard's transitional provisions, we designated July 1, 2000 (the earliest commencement date of current qualifying projects) as the effective date and applied the requirements of the Revised Standard to all qualifying projects for which the commencement date of capitalization was on or after that date.

During fiscal 2008, we classified the assets and liabilities of the Cooke operation as held-for-sale and also classified the results of this operation as discontinued operations for all periods presented below in the selected historical financial data. Discontinued operations also include the results of the Orkney and Australia's South Kalgoorlie operations that were classified as held-for-sale and discontinued operations during fiscal 2007. These reclassifications were done in terms of IFRS 5 Non-Current Assets held for sale and Discontinued Operations. In 2007, Australia's Mount Magnet operations were first classified as held-for-sale and discontinued operations when Harmony signed a letter of intent for the sale of its Mount Magnet operations with Monarch Gold Mining Company ( **Monarch** ). However, in July 2008, Harmony was advised that Monarch had placed itself in voluntary administration, and in August 2008, the Administrator indicated that Monarch would not proceed with the purchase and consequently the purchase agreement was terminated. Harmony resumed management of the operation and recommenced the sale process early in fiscal 2009. However, during the fourth quarter of 2009, it was decided that further drilling at the Mount Magnet operation would enhance the selling potential of the operation and, as a result, the operation no longer met the requirements to be classified as held-for-sale in terms of IFRS 5. The comparative periods presented for the income statement in this annual report have been re-presented for this change. See note 15 of the consolidated financial statements and *Item 4. Information of the Company Business International*

**Table of Contents**

*Operations , Information of the Company Business Orkney Operations, Item 4. Information of the Company Business  
Cooke Operations .*

	<b>Fiscal year ended June 30,</b>				
	<b>2009</b>	<b>2008</b>	<b>2007</b>	<b>2006</b>	<b>2005</b>
	(\$ in millions, except per share amounts)				
<b>Income Statement Data</b>					
Revenue	1,277	1,325	1,202	1,017	1,030
Operating profit/(loss)	214	103	82	(98)	(409)
Profit/(loss) from associates	1	(11)	(3)	(17)	
Profit/(loss) from continuing operations before taxation	216	(10)	83	(85)	(607)
Taxation	(23)	(68)	(50)	(22)	94
Profit/(loss) from continuing operations	193	(78)	33	(107)	(513)
Profit from discontinued operations	118	48	18	16	13
Net profit/(loss)	311	(30)	51	(91)	(500)
Basic earnings/(loss) per share from continuing operations (\$)	0.47	(0.20)	0.08	(0.27)	(1.42)
Diluted earnings/(loss) per share from continuing operations (\$)	0.46	(0.20)	0.08	(0.27)	(1.42)
Basic earnings/(loss) per share (\$)	0.75	(0.08)	0.12	(0.23)	(1.38)
Diluted earnings/(loss) per share (\$)	0.74	(0.08)	0.12	(0.23)	(1.38)
Weighted average number of shares used in the computation of basic earnings/(loss) per share	414,120,732	400,750,167	397,910,797	393,727,012	361,816,512
Weighted average number of shares used in the computation of diluted earnings/(loss) per share	415,962,899	402,894,248	402,382,011	393,727,012	361,817,512
Dividends per share					0.05
<b>Other Financial Data</b>					
Cash cost per ounce of gold from continuing operations (\$/oz) <sup>(1)</sup>	583	598	487	444	378
Total cash cost per ounce of gold (\$/oz) <sup>(1)</sup>	586	602	577	443	380

**Balance Sheet Data**

<i>Assets</i>					
Property, plant and equipment	3,614	3,531	3,484	3,263	3,385
Assets of disposal groups classified as held-for-sale		197	182		
Other assets	1,311	982	1,494	1,432	1,433
Total assets	4,925	4,710	5,160	4,695	4,818
<i>Equity and liabilities</i>					
Total equity	3,824	3,172	3,366	3,249	3,489
Borrowings (current and non-current)	47	525	653	500	563
Other liabilities	1,054	1,013	1,141	946	766
Total equity and liabilities	4,925	4,710	5,160	4,695	4,818

(1) Total cash costs and total cash costs per ounce are non-GAAP measures. Previously, we calculated cash costs per ounce by dividing total cash costs, as determined using the guidance provided by the Gold Institute, by gold ounces sold. During fiscal 2009, we changed the calculation, using gold produced as the denominator and therefore excluded the effect of the movement in the gold inventory from the cash cost amount. We believe that this change provides a better indication of the cash generating capabilities of our operations and also allows for a better comparison with other companies.

The cash costs and cash cost per ounce have been re-presented for all periods presented. The Gold Institute was a non-profit industry association comprised of leading gold producers, refiners, bullion suppliers and manufacturers. This institute has now been incorporated into the National Mining Association. The guidance was first issued in 1996 and was revised in November 1999. Total cash costs, as defined in the guidance provided by the Gold Institute, include mine production costs, transport and refinery costs, applicable general and administrative costs, ongoing environmental rehabilitation costs as well as transfers to and from deferred stripping and costs associated with royalties. Ongoing employee termination costs

are included,  
however,  
employee  
termination costs  
associated with  
major  
restructuring and  
shaft closures are  
excluded. Total  
cash costs have  
been calculated  
on a consistent  
basis for all  
periods  
presented.  
Changes in cash  
costs per ounce  
are affected by  
operational

**Table of Contents**

performance, as well as changes in the currency exchange rate between the Rand and the U.S. dollar.

Because total cash costs and total cash costs per ounce are non-GAAP measures, they should therefore not be considered by investors in isolation or as an alternative to production costs, cost of sales, or any other measure of financial performance calculated in accordance with IFRS as issued by the IASB.

While the Gold Institute has provided a definition for the calculation of total cash costs and total cash costs per ounce, the calculation of cash costs per ounce may vary from company to company and may not be comparable to other similarly titled measures of other companies.

However, we believe that cash costs per ounce is a useful indicator to investors and management of a mining company's performance as it provides (1) an indication of the cash generating capacities of the mining operations, (2) the trends in cash costs as the company's operations mature, (3) a measure of a company's performance, by comparison of cash costs per ounce to the spot price of gold and (4) an internal benchmark of performance to allow for comparison against other companies. For further information, See *Item 5.*

*Operating and Financial Review and Prospects Costs Reconciliation of non-GAAP measures .*

#### **EXCHANGE RATES**

Unless otherwise stated, balance sheet item amounts are translated from Rand to U.S. dollars at the exchange rate prevailing on the last business day of the period (R7.72 per U.S.\$1.00 as at June 30, 2009), except for acquisitions, disposals and specific items included within equity that are converted at the exchange rate prevailing on the date the

transaction was entered into, and income statement item amounts that are translated from Rand to U.S. dollars at the average exchange rate for the period (R9.00 per U.S.\$1.00 for fiscal 2009).

As of October 19, 2009, the noon buying rate of the Federal Reserve Bank of New York per U.S.\$1.00 was R7.33.

The following table sets forth, for the past five fiscal years, the average and period end noon buying rates in New York City for cable transfers in Rand and, for the past six months, the high and low noon buying rates in New York City for cable transfers in Rand, in each case, as certified for customs purposes by the Federal Reserve Bank of New York for Rand expressed in Rand per U.S.\$1.00.

**Fiscal Year Ended**

<b>June 30,</b>	<b>Average<sup>(1)</sup></b>	<b>Period End</b>
2005	6.18	6.67
2006	6.36	7.17
2007	7.20	7.04
2008	7.26	7.80
2009	9.00	7.72

  

<b>Month of</b>	<b>High</b>	<b>Low</b>
May 2009	8.71	7.93
June 2009	8.21	7.72
July 2009	8.26	7.65
August 2009	8.15	7.72
September 2009	7.87	7.32
October 2009 (through October 19, 2009)	7.70	7.26

(1) The average of the noon buying rates provided by the Federal Reserve Bank of New York on the last day of each full month during the relevant period

Fluctuations in the exchange rate between Rand and the U.S. dollar will affect the dollar equivalent of the price of ordinary shares on the Johannesburg Stock Exchange, which may affect the market price of the American Depositary Shares ( **ADSs** ) on the New York Stock Exchange. These fluctuations will also affect the dollar amounts received by owners of ADSs on the conversion of any dividends on ordinary shares paid in Rand.

**Table of Contents**

**CAPITALIZATION AND INDEBTEDNESS**

Not applicable.

**REASONS FOR THE OFFER AND USE OF PROCEEDS**

Not applicable.

**RISK FACTORS**

*In addition to the other information included in this annual report and the exhibits, you should also carefully consider the following factors related to our ordinary shares and ADSs. There may be additional risks that we do not currently know of or that we currently deem immaterial based on information currently available to us. Although Harmony has a formal risk policy framework in place, the maintenance and development of which is undertaken on an ongoing basis so as to help management address systematic categories of risk associated with its business operations, any of these risks could have a material adverse effect on our business, financial condition or results of operations, leading to a decline in the trading price of our ordinary shares or our ADSs. The risks described below may, in retrospect, turn out to be incomplete and therefore may not be the only risks to which we are exposed. Additional risks and uncertainties not presently known to us or that we now believe are immaterial (and have therefore not been included), could also adversely affect our businesses, results of operations or financial condition. The order of presentation of the risk factors below does not indicate the likelihood of their occurrence or the magnitude or the significance of the individual risks. The risks described below could occur individually or cumulatively and intensify in case of a cumulative occurrence.*

**Risks Relating to Our Business and the Gold Mining Industry**

***The profitability of our operations, and the cash flows generated by those operations, are affected by changes in the Rand price of gold, such that a fall in the price of gold below our cash cost of production for any sustained period may lead us to experience losses and to curtail or suspend certain operations.***

Substantially all of our revenues come from the sale of gold. Historically, the market price for gold has fluctuated widely and has been affected by numerous factors over which we have no control, including:

the demand for gold for industrial uses and for use in jewelry;

international or regional political and economic trends;

the strength or weakness of the U.S. dollar (the currency in which gold prices generally are quoted) and of other currencies;

financial market expectations regarding the rate of inflation;

interest rates;

speculative activities;

actual or expected purchases and sales of gold bullion held by central banks or other large gold bullion holders or dealers;

forward sales by other gold producers; and

the production and cost levels for gold in major gold-producing nations, such as South Africa, China, the United States and Australia.

In addition, the current demand for and supply of gold affects the price of gold, but not necessarily in the same manner as current demand and supply affect the prices of other commodities. Historically, gold has retained its value in relative terms against basic goods in times of inflation and monetary crisis. As a result, central banks, financial institutions and individuals hold large amounts of gold as a store of value and production in any given year constitutes a very small portion of the total potential supply of gold. Since the potential supply of gold is large relative to mine

production in any given year, normal variations in current production will not necessarily have a significant effect on the supply of gold or its price.

**Table of Contents**

The volatility of gold prices is illustrated in the following table, which shows the annual high, low and average of the afternoon London Bullion Market fixing price of gold in U.S. dollars for the past ten calendar years:

Calendar Year	Price per ounce		
	High (\$)	Low (\$)	Average (\$)
1999	326	253	279
2000	313	264	282
2001	293	256	271
2002	332	278	309
2003	412	322	361
2004	427	343	389
2005	476	411	434
2006	725	525	604
2007	841	608	695
2008	1,011	713	872
2009 (through October 19, 2009)	1,059	810	938

On October 19, 2009, the afternoon fixing price of gold on the London Bullion Market was U.S.\$1,050.50 per ounce.

While the aggregate effect of these factors is impossible for us to predict, if gold prices should fall below our cash cost of production and remain at such levels for any sustained period, we may experience losses and may be forced to curtail or suspend some or all of our operations. In addition, we would also have to assess the economic impact of low gold prices on our ability to recover any losses we may incur during that period and on our ability to maintain adequate reserves. Our cash cost per ounce of gold produced from continuing operations was U.S.\$583 in fiscal 2009, U.S.\$598 in fiscal 2008 and U.S.\$487 in fiscal 2007.

***As the majority of our production costs are incurred in Rand and other non-U.S. currencies, and gold is sold in U.S. dollars, our financial condition could be materially harmed by an appreciation in the value of the Rand and other non-U.S. currencies against the U.S. dollar.***

Gold is sold throughout the world in U.S. dollars, but most of our operating costs are incurred in Rand and other non-U.S. currencies. As a result, any significant and sustained appreciation of the South African Rand or other non-U.S. currencies against the dollar will serve materially to reduce our revenues and overall net income.

***As we currently do not enter into forward sales, commodity, derivatives or hedging arrangements with respect to our future gold production, we are exposed to the impact of any significant decrease in the gold price.***

As a general rule, we sell our gold at the prevailing market price. Currently, we generally do not enter into forward sales, commodity, derivative or hedging arrangements to establish a price in advance for the sale of future gold production, although we may do so in the future. As a result, we may realize the benefit of any short-term increase in the gold price, but are not protected against decreases in the gold price, and if the gold price decreases significantly, our revenues may be materially adversely affected.

***Estimations of our gold reserves are based on a number of assumptions, including assumptions as to mining and recovery factors, future cash costs of production and the price of gold and may yield less gold under actual production conditions than currently estimated.***

The ore reserve estimates contained in this annual report are estimates of the mill delivered quantity and grade of gold in our deposits and stockpiles. They represent the amount of gold which we believe can be mined, processed and sold at prices sufficient to recover our estimated future cash costs of production, remaining investment and anticipated additional capital expenditures. Our ore reserves are estimated based upon a number of assumptions, and are stated in accordance with SEC Industry Guide 7. Our ore reserve estimates are calculated based on estimates of:

future cash costs (which in some cases are assumed to decrease significantly);

future gold prices; and

future currency exchange rates.

## **Table of Contents**

These factors, which are beyond our control, significantly impact these ore reserve estimates. As a result, the reserve estimates contained in this annual report should not be interpreted as assurances of the economic life of our gold and other precious metal deposits or the future profitability of operations.

Since these ore reserves are estimates based on assumptions related to the factors detailed above, should there be changes to these, we may in the future need to revise these estimates. In particular, if our cash operating and production costs increase or do not decrease as assumed (whether in dollar, Rand, or other non-U.S. currencies terms, or in relative terms due to appreciation of the Rand and other non-U.S. currencies against the U.S. dollar) or the gold price decreases, the recovery of a portion of our ore reserves may become uneconomical. This will, in turn, lead us to reduce our estimated reserves.

***In order to maintain gold production beyond the expected lives of our existing mines or to increase production materially above projected levels, we will need to access additional reserves through exploration or discovery.***

Our operations have limited proven and probable reserves and exploration and discovery is necessary to maintain current gold production levels at these operations. Exploration for gold and other precious metals is speculative in nature, is frequently unsuccessful and involves many risks, including those related to:

- locating orebodies;

- identifying the metallurgical properties of orebodies;

- estimating the economic feasibility of mining orebodies;

- developing appropriate metallurgical processes;

- obtaining necessary governmental permits; and

- constructing mining and processing facilities at any site chosen for mining.

Our exploration efforts might not result in the discovery of mineralization, and any mineralization discovered might not result in an increase in our proven and probable reserves. To access additional reserves, we will need to successfully complete development projects, including extensions to existing mines and, possibly, that of new mines. Development projects would also be necessary to access any new mineralization discovered through our exploration activities around the world. We typically use feasibility studies to determine whether or not to undertake significant development projects. Feasibility studies include estimates of expected or anticipated economic returns, which are based on assumptions about:

- future gold and other metal prices;

- anticipated tonnage, grades and metallurgical characteristics of ore to be mined and processed;

- anticipated recovery rates of gold and other metals from the ore, and

- anticipated total costs of the project, including capital expenditure and cash costs.

***Actual cash costs of exploration, production and economic returns may differ significantly from those anticipated by our feasibility studies for new development projects.***

It can take a number of years from the initial feasibility study until development is completed and, during that time, the economic feasibility of production may change. In addition, there are a number of uncertainties inherent in the development and construction of an extension to an existing mine or any new mine, including:

- the availability and timing of necessary environmental and governmental permits;

- the timing and cost of constructing mining and processing facilities, which can be considerable;

- the availability and cost of skilled labor, power, water and other materials;

the accessibility of transportation and other infrastructure, particularly in remote locations;

the availability and cost of smelting and refining arrangements; and

the availability of funds to finance construction and development activities.

## **Table of Contents**

We currently maintain a range of focused exploration programs, concentrating on areas not too distant from our operational mines, as well as a number of prospective known gold mineralized regions around the world. During fiscal years 2009 and 2008, the bulk of exploration expenditure was allocated to activities in South Africa and Papua New Guinea ( PNG ). However, there is no assurance that any future development projects will extend the life of our existing mining operations or result in any new commercial mining operations.

***The costs associated with the pumping of water inflows from closed mines adjacent to our operations could adversely affect our results of operations.***

Certain of our mining operations are located adjacent to the mining operations of other mining companies. A mine closure may have an adverse impact on the continued operations at an adjacent mine if appropriate preventative steps are not taken. In particular, this impact can include the ingress of underground water where pumping operations at the closed mine are suspended. Such ingress could result in damage to property, operational disruptions and additional pumping costs, which would adversely affect any one of our adjacent mining operations.

***The supply of electricity and increases in the cost of power may adversely affect our results of operations and our financial condition.***

Each of our mining operations is dependent on electrical power generated by the state utility Eskom, which holds a monopoly on the South African market. As a result of an increase in demand exceeding available generating capacity, South Africa has been subject to disruptions in electrical power supply. During fiscal 2008, the electricity supply was interrupted by Eskom thereby halting production at certain of our mines. This led to management restructuring operating processes to control and reduce our consumption of electricity at all our operations. There have been no further disruptions and we have been able to continue production at 90% electricity allocation as required by the Energy Conservation Scheme ( ECS ) and interim rules imposed by Eskom. All operations were allocated an ECS allocation in line with the Eskom allocation and equipment and management structures were put in place to monitor and manage real-time consumption. Applications submitted to Eskom for additional energy allocation to the four future growth projects were approved, enabling us to proceed with the projects and to ramp-up to full capacity utilising Eskom power. We also submitted applications for additional power allocation for four future projects in the Free State, which were also approved by Eskom. Nevertheless, an insufficient supply of electricity may adversely affect our results of operations and financial condition.

As a result of Eskom's planned capital expansion program to deal with the current power constraints, several increases in rates charged to consumers have been approved by the National Energy Regulator South Africa ( NERSA ) in the past 18 months. More increases are anticipated in the future, which will also be driven by increases in input costs, primarily coal. These increases will have a negative impact on our results of operations going forward.

***We may experience problems in identifying, financing and managing new acquisitions and integrating them with our existing operations.***

Acquiring new gold mining operations involves a number of risks including:

our ability to identify appropriate assets for acquisition and/or to negotiate acquisitions on favorable terms;

obtaining the financing necessary to complete future acquisitions;

difficulties in assimilating the operations of the acquired business;

difficulties in maintaining our financial and strategic focus while integrating the acquired business;

problems in implementing uniform standards, controls, procedures and policies;

increasing pressures on existing management to oversee a rapidly expanding company; and

to the extent we acquire mining operations outside South Africa or Australasia, encountering difficulties relating to operating in countries in which we have not previously operated.

Our ability to make successful acquisitions and any difficulties or time delays in achieving successful integration of any of such acquisitions could have a material adverse effect on our business, operating results, financial condition

and share price.

**Table of Contents**

***Certain factors may affect our ability to support the carrying value of our property, plant and equipment, goodwill and other assets on our balance sheet.***

We review and test the carrying value of our assets on an annual basis when events or changes in circumstances suggest that the carrying amount may not be recoverable.

If there are indications that impairment may have occurred, we prepare estimates of expected future cash flows for each group of assets. These estimates of future cash flows are prepared at the lowest level for which identifiable cash flows are identified as being independent of the cash flows of other mining assets and liabilities. Expected future cash flows are inherently uncertain, and could materially change over time. Such cash flows are significantly affected by reserve and production estimates, together with economic factors such as spot and forward gold prices, discount rates, currency exchange rates, estimates of costs to produce reserves and future capital expenditures.

As of June 30, 2009, we have substantial amounts of property, plant and equipment, goodwill and other assets on our consolidated balance sheets. We have recorded impairment charges relating to these assets and, if any one or a combination of the uncertainties described above occur, management may be required to recognize further impairment charges, which could adversely affect our financial results and condition.

***Given the nature of mining and the type of gold mines we operate, we face a material risk of liability, delays and increased cash costs of production from environmental and industrial accidents and pollution.***

The business of gold mining by its nature involves significant risks and hazards, including environmental hazards and industrial accidents. In particular, hazards associated with underground mining include:

rock bursts;

seismic events;

underground fires;

cave-ins or falls of ground;

discharges of gases and toxic chemicals;

release of radioactive hazards;

flooding;

pillar mining;

accidents; and

other conditions resulting from drilling, blasting and the removal and processing of material from a deep-level mine.

Hazards associated with open cast mining (also known as open-pit mining) include:

flooding of the open-pit;

collapse of the open-pit walls;

accidents associated with the operation of large open-pits and rock transportation equipment; and

accidents associated with the preparation and ignition of large-scale open-pit blasting operations.

Hazards associated with waste-rock mining include:

accidents associated with operating a waste dump and rock transportation; and

production disruptions caused by weather.

We are at risk of experiencing any or all of these environmental or other industrial hazards. The occurrence of any of these hazards could delay production, increase cash costs and result in our financial liability.

**Table of Contents*****The nature of our mining operations presents safety and security risks.***

The environmental and industrial risks identified above also present safety risks for our operations and our employees and can lead to the suspension and potential closure of operations for indeterminate periods. For example, in October 2007, an incident occurred at the Elandsrand operation involving a compressed pipe column which broke off below the shaft surface bank and fell to the bottom of the men-and-material shaft, causing extensive damage to the shaft steel work and electrical cables. The incident resulted in 3,000 workers being underground for more than 30 hours. Mining operations were temporarily suspended for 42 days to allow for repairs to be undertaken at the shaft. These and other safety risks, even in situations where no injuries occur, can have a material adverse effect on our operations and production. In addition, security issues need to be continually addressed, including the problem of criminal mining.

These and other safety and security risks, even in situations where no injuries occur, can have a material adverse effect on our operations and production. See *Item 4. Health and Safety Matters* .

***Our insurance coverage may prove inadequate to satisfy future claims against us.***

We have third-party liability coverage for most potential liabilities, including environmental liabilities. While we believe that our current insurance coverage for the hazards described above is adequate and consistent with industry practice, we may be subject to liability for pollution (excluding sudden and accidental pollution) or other hazards against which we have not insured or cannot insure, including those in respect of past mining activities. Further, we maintain and intend to continue to maintain, property and liability insurance consistent with industry practice, but such insurance contains exclusions and limitations on coverage. In addition, there can be no assurance that insurance will continue to be available at economically acceptable premiums. As a result, in the future, our insurance coverage may not cover the extent of claims against us for environmental or industrial accidents or pollution.

***Our operations may be negatively impacted by inflation.***

Our operations have been materially affected by inflation. Inflation in South Africa has fluctuated widely in recent years, reaching 11.6% at the end of fiscal 2008 before it decreased significantly to 6.9% at the end of fiscal 2009. This decrease was due to inflation targeting by the South African Reserve Bank ( **SARB** ), a task that it will continue in fiscal 2010. However, working costs and wages especially, have increased considerably over the past three years resulting in significant cost pressures for the mining industry. Our profits and financial condition could also be affected adversely in the absence of a concurrent devaluation of the Rand and an increase in the price of gold.

***The socio-economic framework in the regions in which we operate may have an adverse effect on our operations and profits.***

We have operations in South Africa and PNG. As a result, changes or instability to the economic or political environment in any of these countries or in neighboring countries could affect our operations and profits. It is difficult to predict the future political, social and economic direction in these countries, or any other country in which we operate, and the impact government decisions may have on our business.

***Actual and potential shortages of production inputs may have an adverse effect on our operations and profits.***

Our results of operations may be affected by the availability and pricing of raw materials and other essential production inputs. The price of raw materials may be substantially affected by changes in global supply and demand, along with weather conditions, governmental controls and other factors. A sustained interruption to the supply of any of these materials would require us to find acceptable substitute suppliers and could require us to pay higher prices for such materials. Any significant increase in the prices of these materials would increase our operating costs and affect production considerations.

***Our financial flexibility could be materially constrained by exchange control regulations as imposed by the SARB.***

In terms of South Africa's exchange control regulations, the export of capital from South Africa is restricted. As a result, our ability to raise and deploy capital outside South Africa is limited. In particular, we are:

- generally not permitted to export capital from South Africa, to hold foreign currency or incur indebtedness denominated in foreign currencies without the approval of the South African exchange control authorities;

**Table of Contents**

generally not permitted to acquire an interest in a foreign venture without the approval of the South African exchange control authorities and first having complied with the investment criteria of the South African exchange control authorities;

generally required to repatriate to South Africa profits of foreign operations; and

limited in our ability to utilize profits of one foreign business to finance operations of a different foreign business.

These restrictions could hinder our normal corporate functioning, including our ability to make foreign investments and procure foreign currency denominated financings in the future.

Since 1995, certain exchange controls in South Africa have been relaxed. The extent to which the South African government may further relax such exchange controls cannot be predicted with certainty, although the government has committed itself to a gradual approach to the relaxation of exchange control.

***We compete with mining and other companies for key human resources.***

We compete with mining and other companies on a global basis to attract and retain key human resources at all levels with the appropriate technical skills and operating and managerial experience necessary to continue to operate our business. The need to recruit, develop and retain skilled employees is particularly critical with respect to Historically Disadvantaged South Africans ( **HDSAs** ), women in mining in South Africa and the recruitment and training of local landowners in PNG. The global shortage of key mining industry human resource skills, including geologists, mining engineers, metallurgists and skilled artisans has been exacerbated in the current environment of increased mining activity across the globe. There can be no assurance that we will attract and retain skilled and experienced employees and, should we lose any of our key personnel, our business may be harmed and our results of operations and financial condition could be adversely affected. See *Item 6. Employees*

***Since our South African labor force has substantial trade union participation, we face the risk of disruption from labor disputes and new South African labor laws.***

Despite a history of positive and constructive engagement with labor unions, there are periods during which the various stakeholders are unable to agree on dispute resolution processes. Disruptive activities on the part of labor, which normally differ in intensity, then become unavoidable. Due to the high level of union membership among our employees, we are at risk of having production stoppages for indefinite periods due to strikes and other disputes. Significant labor disruptions have affected our operations and financial condition before and we are not able to predict whether or not we will experience significant labor disputes in the future.

South African employment law sets out minimum terms and conditions of employment for employees. Though these minimum terms and conditions may be improved by agreements between us and the trade unions, the prescribed minimum terms and conditions form the benchmark for all employment contracts. See *Item 6. Employees*

We are required to submit a report in terms of South African employment law detailing the progress made towards achieving employment equity in the workplace. In the event this report is not submitted, we could incur substantial penalties.

Developments in South African employment law may increase our cash costs of production or alter our relationship with our employees and trade unions, which may have an adverse effect on our business, operating results and financial condition.

***We may suffer adverse consequences as a result of our reliance on outside contractors to conduct our operations.***

A portion of our operations are currently conducted by outside contractors. As a result, our operations are subject to a number of risks, including:

negotiating agreements with contractors on acceptable terms;

the inability to replace a contractor and its operating equipment in the event that either party terminates the agreement;

reduced control over those aspects of operations which are the responsibility of the contractor;

failure by a contractor to perform in terms of its agreement with us;

interruption of operations in the event that a contractor ceases to operate due to insolvency or other unforeseen events;

**Table of Contents**

failure of a contractor to comply with applicable legal and regulatory requirements, to the extent it is responsible for such compliance; and

contractor's problems regarding management of its workforce, labor unrest or other employment issues.

In addition, we may incur liability to third parties as a result of the actions of its contractors. The occurrence of one or more of these risks could have a material adverse effect on our business, operational results and financial condition. See *Item 6. Directors, Senior Management and Employees Employees.*

***HIV & AIDS poses risks to us in terms of productivity and costs.***

The incidence of HIV & AIDS in South Africa and PNG, which is forecast to increase over the next decade, poses risks to us in terms of potentially reduced productivity, and increased medical and other costs. If a significant increase in the incidence of HIV & AIDS infection and HIV & AIDS-related diseases among the workforce over the next several years occurs, this may have an adverse impact on our operations, projects and financial condition. See *Item 4. Regulation Health and Safety Matters.*

***The cost of occupational healthcare services may increase in the future.***

Our operations in South Africa are subject to health and safety regulations which could impose significant costs and burdens. The present Mine Health and Safety Act 29 of 1996 ( **Mine Health and Safety Act** ) imposes various duties on us at our mines, and grants the authorities broad powers to, among other things, close unsafe mines and order corrective action relating to health and safety matters.

The Occupational Diseases in Mines and Works Act 78 of 1973 (the **Occupational Diseases Act** ), governs the payment of compensation and medical costs related to certain illnesses contracted by persons employed in mines or at sites where activities ancillary to mining are conducted. Occupational healthcare services are available to our employees from our existing healthcare facilities in South Africa. There is a risk that the cost of providing such services could increase in future depending on changes in the nature of underlying legislation and the profile of our employees. This increased cost, should it transpire, is currently indeterminate. We have embarked on a number of initiatives focused on improving the quality of life of our workforce, although there can be no guarantee that such initiatives will not be adversely affected by increased costs.

***Laws governing mineral rights affect our business.***

We are governed by the South African Mineral and Petroleum Resources Development Act 2002 ( **MPRDA** ). See *Item 4. Regulation South Africa* for a description of the principal objectives set out in the MPRDA.

Under the MPRDA, tenure over established mining operations is secured for up to 30 years (and renewable for periods not exceeding 30 years each thereafter), provided that mining companies apply for new order mining rights over existing operations within five years of May 1, 2004 or before the existing right expires, whichever is the earlier date and fulfill requirements specified in the MPRDA and the Broad-Based Socio-Economic Empowerment Charter for the South African mining industry ( **Mining Charter** ).

The Mining Charter was signed by government and stakeholders in October 2002, and contains principles relating to the transfer, over a 10-year period, of 26% of South Africa's mining assets (as equity or attributable units of production) to HDSAs, as defined in the Mining Charter. An interim target of 15% HDSA participation over five years has also been set and to this end, the South African mining industry has committed to securing financing to fund participation by HDSAs in an amount of R100.0 billion within the first five years of the Mining Charter's tenure. The Mining Charter provides for the review of the participation process after five years to determine what further steps, if any, are needed to achieve target participation of 26%. In order to measure progress in meeting the requirements of the Mining Charter, companies are required to complete a Scorecard, in which the levels of compliance with the objectives of the Mining Charter can be ticked off after five and ten years, respectively. The Mining Charter and Scorecard require programs for black economic empowerment and the promotion of value-added production, such as jewelry-making and other gold fabrication, in South Africa. In particular, targets are set out for broad-based black economic empowerment in the areas of human resources and skills development; employment equity; procurement and beneficiation. In addition, the Mining Charter addresses socio-economic issues, such as migrant labor, mine community and rural development and housing and living conditions.

We actively carry out mining and exploration activities in all of our material mineral rights areas. All of our South African operations have been granted their mining licenses. We will be eligible to apply for new licenses over existing operations, provided

**Table of Contents**

that we comply with the Mining Charter. We have taken steps to comply with the expected provisions of the Mining Charter, such as promoting value-added production, exploring black empowerment initiatives and increasing worker participation. Failure to comply with the conditions of the mining licenses could have a material adverse effect on our operations and financial condition.

The MPRDA also makes reference to royalties payable to the South African state in terms of the Mineral and Petroleum Resources Royalty Act (Act 28 of 2008). The Act provides for the payment of a royalty according to a formula based on earnings before interest, tax and depreciation, after the deduction of capital expenditure. This rate is then applied to revenue to calculate the royalty amount due, with a minimum of 0.5% and a maximum of 5% for gold mining companies. It is estimated that the formula could translate to a royalty rate of more than 2% of gross sales in terms of current pricing assumptions. The royalty is to become effective on March 1, 2010. The introduction of the Mining and Petroleum Royalty Act will have an adverse impact on the profits generated by our operations in South Africa.

Once production in PNG is commenced, our PNG mining operations will be subject to royalty payments to the government of PNG. Should we desire to expand any of our initiatives in PNG operations into additional areas under exploration, these operations would need to convert the existing exploration licenses prior to the start of mining, and that process could require landowner title approval. There can be no assurance that any approval would be received. Please also see *Item 4. Regulation* for further information.

***We are subject to extensive environmental regulations.***

As a gold mining company, we are subject to extensive environmental regulation. We have experienced and expect to continue to experience increased cash costs of production arising from compliance with South African and PNG environmental laws and regulations. The MPRDA, certain other environmental legislation and the administrative policies of the South African government regulate the impact of our prospecting and mining operations on the environment.

Pursuant to these regulations, upon the suspension, cancellation, termination or lapsing of a prospecting permit or mining authorization, we will remain liable for compliance with the provisions of the various relevant regulations, including any rehabilitation obligations. This liability will continue until such time as the appropriate authorities certify that we have complied with such provisions.

In the future, we may incur significant costs associated with complying with the increasingly stringent requirements being imposed under new legislation and regulations. This may include the need to increase and accelerate expenditure on environmental rehabilitation and to alter provisions for this expenditure, which could have a material adverse effect on our results and financial condition. We may also face increased environmental costs should other mines in the vicinity of our mines fail to meet their obligations with regard to the pumping or treatment of water.

The South African government has reviewed requirements imposed upon mining companies to ensure environmental restitution. For example, following the introduction of an environmental rights clause in South Africa's constitution, a number of environmental legislative reform processes have been initiated. Legislation passed as a result of these initiatives has tended to be materially more onerous than laws previously applied in South Africa. Examples of such legislation include the MPRDA, the South African National Nuclear Regulator Act 1999, the South African National Water Act of 1998 and the South African National Environmental Management Act 1998, which include stringent polluter-pays provisions. The adoption of these or additional or more comprehensive and stringent requirements, in particular with regard to the management of hazardous waste, the pollution of ground and ground-water systems and the duty to rehabilitate closed mines, may result in additional costs and liabilities.

Our PNG operations are also subject to various laws and regulations relating to the protection of the environment, which are similar in scope to those of South Africa. See *Item 4. Regulation Environmental Matters*.

***Investors in the United States may have difficulty bringing actions, and enforcing judgments, against us, our directors and our executive officers based on the civil liabilities provisions of the federal securities laws or other laws of the United States or any state thereof.***

We are incorporated in South Africa. Each of our directors and executive officers (and our independent registered public accounting firm) reside outside of the United States. Substantially all of the assets of these persons and substantially all of our assets are located outside the United States. As a result, it may not be possible for investors to

enforce a judgment against these persons or ourselves obtained in a court of the United States predicated upon the civil liability provisions of the federal securities or other laws of

**Table of Contents**

the United States or any state thereof. A foreign judgment is not directly enforceable in South Africa, but constitutes a cause of action which will be enforced by South African courts provided that:

the court that pronounced the judgment had jurisdiction to entertain the case according to the principles recognized by South African law with reference to the jurisdiction of foreign courts;

the judgment is final and conclusive;

the judgment has not lapsed;

the recognition and enforcement of the judgment by South African courts would not be contrary to public policy, including observance of the rules of natural justice which require that the documents initiating the United States proceeding were properly served on the defendant and that the defendant was given the right to be heard and represented by counsel in a free and fair trial before an impartial tribunal;

the judgment does not involve the enforcement of a penal or revenue law; and

the enforcement of the judgment is not otherwise precluded by the provisions of the Protection of Business Act 99 of 1978, as amended, of the Republic of South Africa.

***Compliance with new and changing corporate governance and public disclosure requirements adds uncertainty to our compliance policies and increases our costs of compliance.***

Laws, regulations and standards relating to accounting, corporate governance and public disclosure, new SEC regulations and other listing regulations applicable to us are subject to change and can create uncertainty for companies like us. New or changed laws, regulations and standards could lack specificity or be subject to varying interpretations. Their application in practice may evolve over time as new guidance is provided by regulatory and governing bodies. This could result in continuing uncertainty regarding compliance matters and higher costs of compliance as a result of ongoing revisions to such governance standards.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, we are required to furnish a report by our management on our internal control over financial reporting. The report in this annual report contains, among other matters, an assessment of the effectiveness of our internal control over financial reporting as of the end of the fiscal year, including a statement as to whether or not our internal controls over financial reporting are effective. If we fail to maintain the adequacy of our internal controls, we may not be able to ensure that we can conclude on an ongoing basis that we have effective internal control over financial reporting in accordance with the Sarbanes-Oxley Act. The requirement to evaluate and report on our internal controls also applies to companies that we may acquire and therefore, this assessment may be complicated by any future acquisitions we may complete. While we continue to dedicate resources and management time to ensuring that we have effective controls over financial reporting, failure to achieve and maintain an effective internal control environment could have a material adverse effect on the market's perception of our business and our stock price. See *Item 15. Disclosure Controls and Procedures* for management's assessment as of June 30, 2009. In addition to management's assessment of internal controls over financial reporting, we are required to have our independent registered public accounting firm publicly disclose their conclusions regarding the effectiveness of Harmony's internal controls over financial reporting.

We are committed to maintaining high standards of corporate governance and public disclosure, and our efforts to comply with evolving laws, regulations and standards in this regard have resulted in, and are likely to continue to result in, increased general and administrative expenses.

***Sales of large quantities of our ordinary shares and ADSs, or the perception that these sales may occur, could adversely affect the prevailing market price of such securities.***

The market price of our ordinary shares or ADSs could fall if large quantities of ordinary shares or ADSs are sold in the public market, or there is the perception in the marketplace that such sales could occur. Subject to applicable securities laws, holders of our ordinary shares or ADSs may decide to sell them at any time. The market price of our ordinary shares or ADSs could also fall as a result of any future offerings it makes of ordinary shares, ADSs, or

securities exchangeable or exercisable for its ordinary shares or ADSs, or the perception in the marketplace that these sales might occur. We may make such offerings of additional ADS rights, letters of allocation or similar securities at any time or from time to time in the future.

**Table of Contents**

***Because we have a significant number of outstanding share options, our ordinary shares are subject to dilution.***

We have employee share option schemes as well as other share schemes. The employee share option schemes came into effect in 1994, 2001, 2003 and 2006. Our Board has authorized up to 14% of the issued share capital to be used for these plans. As a result, shareholders' equity interests in us are subject to dilution to the extent of the future exercises of the options, through share schemes.

***We may not pay dividends or make similar payments to our shareholders in the future.***

We pay cash dividends only if funds are available for that purpose. Whether funds are available depends on a variety of factors, including the amount of cash available and our capital expenditures and other cash requirements existing at the time. Under South African law, we are only entitled to pay a dividend or similar payment to shareholders if we meet the solvency and liquidity tests set out in the Companies Act and our Articles of Association. Cash dividends or other similar payments may not be paid in the future.

In February 2007, the South African Government announced a proposal to replace Secondary Tax on Companies with a 10% withholding tax on dividends and other distributions payable to shareholders. This proposal is expected to be implemented in phases to be completed by the end of the 2010 calendar year. Although this may reduce the tax payable by our South African operations, thereby increasing distributable earnings, the withholding tax will generally reduce the amount of dividends or other distributions received by shareholders.

**Table of Contents****Item 4. INFORMATION ON THE COMPANY  
BUSINESS****History and Development**

We conduct underground and surface gold mining and related activities, including exploration, processing and smelting. We are currently the third largest producer of gold in South Africa, producing approximately 23% of the country's annual gold output, and we ranked among the top 10 gold producers in the world, with operations and projects in South Africa and PNG. Our gold sales have increased from 650,312 ounces of gold in fiscal 1995 to approximately 1.5 million ounces of gold in fiscal 2009. As at June 30, 2009, our mining operations reported total proven and probable reserves of 48.2 million ounces, primarily from South African sources. In fiscal 2009, we processed approximately 21.1 million tons of ore.

In fiscal 2009, all of our total gold production took place in South Africa. In fiscal 2009, approximately 93% of our South African gold came from underground mines, and approximately 7% came from our surface operations (which include the Kalgold opencast operation and the Phoenix operation). For more detailed information about our activities, See *Item 4. Information on the Company Business Harmony's Mining Operations Overview* and the notes to the consolidated financial statements included in this annual report. Mining is a highly regulated industry, and we operate under a variety of statutes and regulations. For more detailed information about these statutes and regulations, See *Item 4. Information on the Company Regulation* and *Item 10. Additional Information Memorandum and Articles of Association*.

The majority of our exploration and evaluation done during fiscal 2009 has been focused on PNG. Our PNG exploration and evaluation opportunities are handled through the international office in Brisbane, Australia. Exploration in South Africa focused on the Evander South project, Joel and Tshepong.

We were incorporated and registered as a public company in South Africa on August 25, 1950 (under registration number 1950/038232/06). We poured our first gold on September 11, 1954. In the early 1970's, we merged with the Anglovaal mines, Merriespruit and Virginia, forming Harmony Gold Mining Company Limited. We then expanded from a single lease-bound mining operation into an independent, world-class gold producer. We acquired additional mineral rights in the Free State, Mpumalanga, Gauteng and North West provinces in South Africa when we acquired Lydex in 1997, Evander in 1998, Kalgold in 1999, Randfontein in 2000, ARMgold in 2003 and Avgold in 2004. In building our Australian portfolio, we acquired Hill 50 and New Hampton in Western Australia in 2001 and 2002, respectively, and started our exploration portfolio in PNG with projects in the Morobe province originally through our acquisition of Abelle in 2003. During fiscal 2009 and 2008, we disposed of several operations in South Africa and Australia, as well as 50% of our interest in gold and copper assets in PNG. See *Item 4. Disposals*.

Our principal executive offices are located at Randfontein Office Park, Corner of Main Reef Road and Ward Avenue, Randfontein, 1760, South Africa and the telephone number at this location is +27-11-411-2000.

**South African Operations**

In South Africa, we operate a total of 10 underground operations, one open cast mine, and eight processing plants which are located in all of the currently known goldfields in the Witwatersrand basin of South Africa as well as the Green Stone belt. These operations produced approximately 1.5 million ounces in fiscal 2009, and South Africa represented approximately 96% (or 46.1 million ounces) of our total proven and probable reserves. The deep level gold are located in four provinces in this basin, being the Free State province, Mpumalanga, the West Rand Goldfields in Gauteng province and the North West province. Surface operations are located in all these provinces as well.

Ore from the shafts and surface material are treated at eight metallurgical plants in South Africa, located near the operations (four in the Free State province, one in the North West province, one in Mpumalanga and two in Gauteng). There are two plants on care and maintenance which can be restarted if additional processing capacity is required (Joel and St. Helena plants in the Free State province).

As part of our "Back-to-Basics" strategy, which we embarked on in August 2007, management reassessed and restructured the manner in which operations are managed and evaluated. Each operation, consisting anywhere from a single shaft to a group of shafts, is managed by a team headed up by a general manager. See *Item 4. Operational Strategy: Back-to-Basics* and *Harmony's Management Structure*.



## **Table of Contents**

Operations are classified as Underground or Surface with the reportable segments in South Africa being as follows: Tshepong, Phakisa, Bambanani, Doornkop, Elandsrand, Target, Evander, Masimong, Virginia (the Cooke operations were considered to be a reportable segment in fiscal 2008 and have been disclosed under discontinued operations for all periods presented); and

all other shafts and surface operations, including those that treat historic sand dumps, rock dumps and tailings dams, are grouped together under Other Underground or Other Surface . Other includes Joel, Kalgold and Phoenix.

### ***International Operations***

Our interests internationally are currently mainly located in PNG and represent 4% (or 2.1 million ounces) of our total proven and probable reserves.

Our interests in Australia now consist solely of one site located at Mount Magnet in Western Australia. This site has been closed down and the plant has been put on care and maintenance since December 2007. The South Kalgoorlie operational assets and tenements, which we previously owned and which were also located in Western Australia, were sold to Dioro Exploration NL ( **Dioro** ) on November 30, 2007. Ore from the underground and surface material were treated at the two metallurgical plants in Australia (one at Mount Magnet and, prior to it being sold, at South Kalgoorlie).

In July 2007, we entered into an agreement with Dioro pursuant to which Dioro acquired our South Kalgoorlie assets. The total purchase price was A\$45 million (U.S.\$39.8 million), consisting of both a cash and share component. The share component entailed the issuance of 11.4 million Dioro shares valued at A\$20 million (U.S.\$17.7 million), and a cash component of A\$25 million (U.S.\$22.1 million). The transaction was subject to various conditions precedent, including a minimum capital raising by Dioro of A\$35 million (U.S.\$30.9 million) by the completion date. On November 30, 2007, all conditions precedent were satisfied, and the transaction was completed and accounted for on that date.

During fiscal 2008, we entered into an agreement with Monarch for the sale of our Mount Magnet operation and classified the operations as held-for-sale. However, during July 2008, we were advised that Monarch had placed itself in voluntary administration and, on August 1, 2008, the Administrator indicated that Monarch will not proceed with the proposed purchase and consequently the purchase agreement has been terminated. We have since resumed management of the Mount Magnet operation. The sales process was resumed but due to various factors could not be finalised by the end of fiscal 2009. We have started an intensive drilling program at Mount Magnet and may thus be able to carry out feasibility studies or we may re-embark on a sale process. Accordingly, we have reclassified the Mount Magnet operation to continuing operations.

In PNG, we, through our wholly-owned PNG-based subsidiaries, Morobe Consolidated Goldfields Limited ( **Morobe** ) and Wafi Mining Limited ( **Wafi** ), own development and exploration prospects in the Morobe Province. In August 2008, Newcrest Mining Limited ( **Newcrest** ) acquired a 30.01% interest in our PNG assets and tenements through the Morobe Mining Joint Venture. By the end of fiscal 2009, Newcrest had earned an additional 19.99% in terms of the farm-in agreement, resulting in Newcrest and us each owning a 50% interest in the joint venture. Through the joint venture, we continued with the process of building the Hidden Valley mine, with partial commissioning of the plant completed by the end of fiscal 2009. The commissioning of the full plant and achieving commercial levels of production is scheduled and planned for the December 2009 quarter. Following the end of fiscal 2009, we announced that we had acquired new exploration projects, the Amanab and the Mount Hagen Projects. See *Item 8. Recent Developments* .

### **Strategy**

During fiscal 2008, we set ourselves several objectives to achieve financial stability as part of our Back-to Basics strategy. One of those objectives was to be net debt-free (where positive cash balances exceed debt balances), which we achieved in fiscal 2009 after concluding two major asset disposal transactions and paying off our major debt. We still retained a cash balance of R2 billion (U.S.\$253 million) by year end. As a result, we have a healthy balance sheet and are geared to make further investments in our organic growth projects as well as any suitable acquisitions.



**Table of Contents**

In August 2007, we embarked on a three-phase, three-component strategy to guide us through 2012:

**Stabilization Phase** this phase extended over a five-month period and included the focused implementation of the first component of the strategy, called **Back-to-Basics**. Back-to-Basics, which continued until the end of fiscal 2009, has now become a guiding philosophy for the overall strategy.

**Recovery Phase** the second component of the strategy, which focuses on Recovery/Organic Growth, began in fiscal 2008 and will extend into the third phase.

**Growth Phase** the third and final Organic/Acquisition component will be initiated as the Recovery/Organic Growth component of the strategy delivers results, and will extend through 2012.

***Back-to-Basics***

The initial Back-to-Basics component of our strategy, designed to stabilize and kick-start recovery, comprised four primary objectives:

Disciplined mining

Cost control

Ore reserve management

Efficiency

Key drivers of these objectives and their primary characteristics were:

**Safety**

The commitment to zero harm initiated at top management, filtering to every level through a deliberate and programmed effort.

Comprehensive safety auditing.

Agreement on key non-negotiable principles, specifically management to lead by example; continuous verbal communication with all team members; visible creation of awareness of safety-related issues; recognition of and rewarding for safety achievements; and involving all stakeholders.

Management focus on improving underground conditions, in particular areas deemed to be of the highest risk shaft infrastructure and the underground workplace.

**Empowered management teams**

Establishment of small, multi-disciplinary, focused management teams at each mining site, responsible for planning and implementing mining operations.

Setting of annual operational goals including volume, grade and cost targets by each mining site management team in consultation with the executive committee; development by each management team of an operational plan to attain set goals; and regular review of results by the executive committee.

**Focus on increased productivity:**

To maximize productivity by structuring the operations such that 60% of the workforce is directly engaged in production mining.

Commitment to cost control including the benchmarking of costing parameters, internally between operations and externally against other gold producers:

In particular, the control of labor costs which average 50% of operating costs at the South African operations.

**Table of Contents**

Pro-active maintenance practices.

Application of the appropriate maintenance principle, involving capital expenditure commensurate with the life of the operation.

Implementation of cost accounting, ore accounting and reserve management systems to track and measure costs and ore reserve depletion accurately.

Increasing operational consistency:

Commitment to increasing operational consistency in respect of both grade and production in order to extract optimal value from orebodies by increasing development expenditure and a focus on comprehensive ore reserve management.

Review of opportunities to develop certain assets uranium in particular, underground resources of which are not currently reflected in the balance sheet or reserve statement independently of the core gold business:

Selected acquisitions to diversify the company's operations and complement its competitive strengths.

Targeted disposals to upgrade the company's overall portfolio quality.

***Organic growth***

Harmony's organic growth strategy focuses on:

extracting high-quality ounces; and

developing and operating the company's long-life mines.

Key drivers of these objectives are:

the Company's extensive experience in and established track record for identification, exploration and development of its own projects;

its ongoing exploration programme focused on both on-mine exploration targeting resources within the economic radius of existing mines and new mine exploration targeting early to advanced stage projects around the world;

expansion of the production base in South Africa and PNG, with a focus on developing new mines at competitive cash costs and upgrading the overall quality of the company's portfolio;

a diverse project pipeline comprising five well-advanced projects Elandsrand new mine, Doornkop South Reef, Tshepong sub-66 and 71 Declines, Phakisa in South Africa, and Hidden Valley in PNG which could deliver up to 1.4 million low-cost production ounces by 2012 and a reduction in overall cash costs per ounce;

a number of additional development projects including surface sand dumps, rock dumps and tailings dams; the company's uranium deposits; and the Wafi-Golpu copper-gold deposit in PNG which could increase production ounces; and

expansion of the Company's exploration skills base.

## **Table of Contents**

### ***Delivering on strategy***

Key deliveries on Harmony's strategy to end of fiscal 2009 included:

improvements in two key safety indicator rates – the frequency rates of lost-time injuries and of reportable injuries and the receipt of several safety-related industry awards;

reversal of five years of accumulated losses;

achievement of zero net debt;

strong cash flow;

establishment of Rand Uranium (Proprietary) Limited ( **Rand Uranium** ), a significant step in turning to account its uranium resources;

creation of the Morobe Mining Joint Venture, a 50:50 partnership in the PNG assets with Newcrest of Australia;

start of production at all five of the company's major projects – Phakisa, Doornkop South Reef, Elandsrand and Tshepong in South Africa and Hidden Valley in PNG; and

stepping up of the company's exploration programme, with a focus on the Wafi-Golpu copper-gold tenements in PNG and the Evander South project, the St Helena tailings project and several underground areas associated with existing operations in South Africa.

### **Competitive Strengths**

We believe that the following strengths provide us with a competitive advantage:

#### ***Leading market position in the attractive gold industry***

We believe that our size and leading market position enables us to undertake exploration and simultaneously develop multiple projects around the world, as well as secure capital on competitive terms.

The global gold industry offers a number of attractive industry fundamentals from which we benefit. This includes the absence of available substitutes, relatively high barriers to entry, and increasing gold producer concentration.

We are developing new mines at a planned lower cost per ounce than our current operations, which we believe will help make them robust enough to survive any margin squeeze and to withstand any reversal in the gold price. We expect the gold price to continue its upward trend in the medium term.

#### ***Significant reserves with long mine lives***

Our ore reserves as of June 30, 2009 amounted to 48.2 million ounces of gold spread across our assets in South Africa and PNG. This ore reserve base is sufficient to support our existing production profile in excess of 10 years at current production levels. There has been a 2.3 million ounces year-on-year negative variance in ore reserves due to normal depletion of 1.6 million ounces and the equity adjustment at Papua New Guinea to 50% attributable to Harmony which resulted in a further decrease of 0.9 million ounces. On the positive side, there is a net addition of 0.2 million ounces of ore reserves from surface stockpiles and other positive adjustments from the operations.

Of our 48.2 million ounces of reserves, 36.4 million ounces are classified as above infrastructure and 11.8 million ounces are classified as below infrastructure (reserves for which capital expenditure has still to be approved).

**Table of Contents**

***Highly attractive project pipeline***

We have a diverse portfolio of gold development projects spread across South Africa and PNG. These projects include Elandsrand, Doornkop, Tshepong and Phakisa in South Africa, and Hidden Valley in PNG, which, when developed, could deliver up to 1.4 million ounces of additional production by 2012.

We believe the relatively higher grade of these South African deposits and/or lower cost base will result in these ounces being produced at highly competitive cash costs. This in turn may result in a reduction in our overall cash cost position as these new projects are commissioned.

In addition to these projects, we have a number of additional development prospects that are being considered and progressed, including the processing of sand dumps and tailings dams in our tailings projects, the processing of rock dumps, and developing the Wafi-Golpu copper/gold deposit in PNG, which, when all developed, could increase production ounces per annum.

We have also expanded our exploration skill base, evidenced by our progress in PNG.

We formed Rand Uranium, to which we have transferred our Cooke assets to optimize the value of our uranium deposits.

***Positive gold market outlook***

In the midst of volatile tumultuous global investment markets, the gold market has demonstrated great resilience and a positive upside. The price performance throughout fiscal 2009 supports our positive outlook for gold and, given our operational imperatives, we will seek to contain costs, increase output and optimize our margins.

Post June 30, 2009, the gold price hit a high of U.S.\$1,059.50 per ounce and, while it was U.S.\$1,050.50 per ounce as of October 19, 2009, this is 32% higher than it was for the same time the previous year.

We believe the fundamental drivers behind increased demand and decreased new supply of gold will remain in the future, which will in turn support a higher gold price over this period. As an unhedged gold producer, we will benefit from a rising gold price environment.

***Increased focus on earnings margins and cost***

Our aim remains to return to profitability. At an operational level we have put in place an intensive process of business planning, with benchmarks and targets we believe to be realistic.

We are committed to lower our cost base and extensively benchmark our costing parameters both internally among our operations, and externally against other gold producers. Stringent cost cutting and cost control programs have been implemented.

We are confident that the benefits of our restructuring process and ongoing cost focus will be sustained in the long term, and as a result, our ability to withstand any future adverse market conditions has been significantly enhanced.

***Conservative balance sheet and low gearing***

We maintain a conservative gearing policy and seek to fund ongoing capital expenditure (excluding growth projects) through cash generated from existing operations.

Our low level of gearing should provide us with the ability to utilize debt to fund capital and development expenditure requirements for our new projects.

## **Table of Contents**

### ***Experienced management team with significant industry expertise***

Our senior management team consists of experienced mining executives with extensive industry backgrounds combined with geological and metallurgical expertise.

Our senior management team has a proven track record in developing and managing the operations under its control, and has demonstrated an ability to optimize underperforming assets as well as developing new projects around the world.

### ***Leading Black Economic Empowerment strategy***

We are proud to be a South African company that fully embraces the country's transformation initiatives. We are approximately 15% owned by African Rainbow Minerals Limited ( **ARM Limited** ), a black empowerment company in which our chairman, Patrice Motsepe, owns an interest. Of our total production profile, 36% of our South African ounces are attributed empowerment ounces.

We believe that we have gone beyond the requirements of the Mining Charter by ensuring that our HDSA partners are truly empowered, that we are largely managed by a HDSA Board, and that we continue to engage with black shareholders and/or partners to find more opportunities to invest in BEE transactions and involve HDSA partners.

We will continue to embrace empowerment as part of our growth strategy and we acknowledge that empowerment forms a fundamental part of our business into the future.

### **Principal Investments**

See *Item 8. Recent Developments* for investments made after the reporting date.

We have concluded several other strategic transactions within and outside South Africa in the last three fiscal years, which are summarized below.

On April 17, 2009, we exchanged our interest in Dioro for shares in Avoca Resources Limited ( **Avoca** ). See *Item 4. Disposals* . In terms of the offer by Avoca, we received one Avoca share for every three Dioro shares held. The market value of the Avoca shares on the date was U.S.\$4.2 million (A\$1.50 per share).

On December 1, 2008, we issued 3,364,675 shares to Rio Tinto plc ( **Rio Tinto** ) for the purchase of Rio Tinto's rights to the royalty agreement entered into prior to our acquisition of the Wafi deposits in PNG. The shares were valued at \$23 million on the transaction date. An additional \$10 million in cash will be payable when the decision to mine is made. Of this amount, Harmony is responsible for paying the first \$6 million, with the balance of \$4 million being borne equally by the joint venture partners. The effect of the transaction will be to reduce the cost of any gold produced at Wafi.

On November 21, 2008, we transferred our Cooke operations to Rand Uranium in exchange for cash of \$209 million and a 40% interest in Rand Uranium. See *Item 4. Disposals* .

On February 27, 2008, the Group acquired a 32.4% interest in Pamodzi Gold Limited ( **Pamodzi** ) after disposing of its Orkney assets. See *Item 4. Disposals* .

In March 2007, we concluded negotiations with Rio Tinto in which we purchased Rio Tinto's rights to the royalty agreement entered into prior to our acquisition of the Hidden Valley and Kerimenge deposits in PNG. The final condition precedent, which was to obtain approval of the relevant PNG minister on the recommendation of the Mining Advisory Council that the royalty rights may be transferred to us, was met in March 2008. Our cost of U.S.\$22.5 million was met through the issue of shares and a cash payment of U.S.\$2.5 million. The effect of the transaction will be to reduce the cost of gold produced at Hidden Valley and all further extensions to the project, mine life and reserves will be free of this royalty.

On December 8, 2006 we exchanged our Western Areas Limited ( **Western Areas** ) shares for Gold Fields Limited ( **Gold Fields** ) ordinary shares. See *Item 4. Disposals* . We received 15.7 million Gold Fields shares, issued at R135.02 (U.S.\$19.15) per share, for our 44.9 million Western Areas shares. During the fiscal years 2008 and 2007, we disposed of our interest in Gold Fields. See *Item 4. Disposals* .

**Table of Contents****Disposals**

On April 17, 2009, we disposed of our Dioro shares in exchange for shares in Avoca. On that date, the market value of the Dioro shares were A\$0.50 per share, or U.S.\$4.2 million.

On November 21, 2008, we transferred our Cooke assets to our wholly-owned, newly formed subsidiary, Rand Uranium, for the consideration of U.S.\$328 million, settled with Rand Uranium shares. In a related transaction on the same date, 60% of these shares were sold to Pamodzi Resources Fund 1 LLP ( **PRF** ) for U.S.\$197 million. U.S.\$40 million was paid on the effective date and the balance of U.S.\$157 million, together with interest at 5% per annum, was paid on April 20, 2009. The conditions precedent for the second part of the Rand Uranium transaction, relating to the sale of the Old Randfontein assets, were fulfilled on April 22, 2009. Additional shares were issued in settlement and 60% of these shares were sold to PRF. PRF paid its portion of the purchase price, amounting to U.S.\$12 million, in cash on April 20, 2009. We recognized a gain of U.S.\$171 million on these transactions.

During fiscal 2009, we disposed of 50% of our interest in our PNG assets in three tranches to Newcrest. The first tranche of 30.01% was disposed of on July 31, 2008 in exchange for \$229 million in cash, which was received on August 7, 2008. On February 28, 2009, the second tranche of 10% was disposed of in terms of the farm-in agreement. Newcrest earned in a further 9.99% interest by contributing to the capital expenditure at Hidden Valley as well as with a cash payment of \$6 million on June 30, 2009. A net profit of \$112 million was realized for the total disposal.

On February 27, 2008, we disposed of our Orkney operations to Pamodzi in exchange for 30 million listed ordinary shares, the market value of which was R345 million (U.S.\$46.5 million).

On November 30, 2007 the South Kalgoorlie operations were sold to Dioro in exchange for 11.4 million listed ordinary shares, the market value of which was, when issued on December 5, 2007, U.S.\$17.7 million (A\$20 million), as well as cash of U.S.\$22.1 million (A\$25 million). A loss of U.S.\$8.8 million (A\$9.8 million), net of tax, was realized.

On August 24, 2007, the Group disposed of the remaining 13,095,079 ordinary Gold Fields shares. The proceeds amounted to R1,310 million (U.S.\$182.9 million), resulting in a loss of R459 million (U.S.\$63.2 million).

In April 2007, the surface assets and metallurgical plant at Deelkraal was sold to Ogoerion Construction CC for R98 million (U.S.\$13.7 million). It was agreed that the purchase price be paid in installments over a 24-month period. Due to various reasons, the agreement was renegotiated and the metallurgical plant was excluded from the new sale agreement. The consideration for the surface assets was set at R45 million (U.S.\$6 million), which had already been received.

In a range of transactions between January 22, 2007 and February 12, 2007, we disposed of 1,150,000 Gold Fields shares for U.S.\$19.7 million. The total cost of these shares was U.S.\$21.4 million, resulting in a loss of U.S.\$1.7 million. During May and June 2007, a further 1.5 million shares with a cost of U.S.\$28.3 million were disposed of for U.S.\$25.1 million, resulting in a loss of U.S.\$3.2 million.

On December 8, 2006, we disposed of our 29.2% interest in Western Areas in exchange for ordinary shares in Gold Fields. This was in terms of an offer by Gold Fields whereby every 100 Western Areas Shares were exchanged for 35 Gold Fields shares.

On October 19, 2006, Randfontein 4 Shaft was sold to Simmer & Jack Limited for an amount of R60 million (U.S.\$8.5 million).

## **Table of Contents**

### **Hedging Policy**

We have consistently maintained a policy of not entering into forward sales, commodity, derivatives or hedging arrangements to establish a price in advance for the sale of our future gold production, although we may do so in the future.

Where any such gold hedging position is acquired, our policy is to eliminate any such positions existing within acquired companies as soon as this can be achieved through sound, commercially advantageous transactions. There may, however, be instances where certain hedge positions in acquired companies need to be kept in place for contractual or other reasons. In line with this policy, we have historically closed out hedging arrangements inherited through our acquisitions. Our revenues are sensitive to the exchange rate of the Rand and other non-U.S. currencies to the U.S. dollar, as all the revenues are generated by gold sales denominated in U.S. dollars. We do not enter into forward sales, commodity, derivatives or other hedging arrangements to establish a Rand to U.S. dollar exchange rate in advance for the sales of our future gold production, although we may do so in the future.

In May 2007, we closed out the remainder of our Australian hedge book, which we inherited with the acquisition of the Hill 50 mine. In these transactions, some 220,000 ounces were closed out at an average spot rate of A\$809/ounce, for a total cost of A\$72.8 million (U.S.\$60.0 million). As a result, we are completely unhedged.

### **Description of Mining Business**

#### ***Exploration***

Exploration activities are focused on the extension of existing orebodies and identification of new orebodies, both at existing sites and at undeveloped sites.

Our gold-focused exploration program has two components:

on-mine exploration, which looks for resources within the economic radius of existing mines, and

new mine exploration, which is the global search for early to advanced stage projects.

Once a potential orebody has been discovered, exploration is extended and intensified in order to enable clearer definition of the orebody and the potential portions to be mined. Geological techniques are constantly refined to improve the economic viability of prospecting and mining activities.

We conduct exploration activities on our own or with joint venture partners. As at June 30, 2009, our prospecting interest in South Africa measured 48,983 hectares (121,037 acres), 327,600 hectares (809,514 acres) in PNG and 80,123 hectares (197,988 acres) in Australia. We spent U.S.\$32 million on exploration in fiscal 2009 and the bulk of exploration expenditure was allocated to activities in PNG and South Africa. In fiscal 2010, we intend to carry out exploration in PNG and South Africa.

#### ***Mining***

The mining process can be divided into two main phases: (i) accessing the orebody and (ii) mining the orebody. This basic process applies to both underground and surface operations.

*Accessing the orebody.*

In our South African underground mines, access to the orebody is by means of shafts sunk from the surface to the lowest economically and practically mineable level. Horizontal development at various intervals of a shaft (known as levels) extends access to the horizon of the reef to be mined. On-reef development then provides specific mining access. Horizontal development at various intervals of the decline extends access to the horizon of the ore to be mined. The declines are advanced on a continuous basis to keep ahead of the mining taking place on the levels above. In our open-pit mines, access to the orebody is provided by overburden stripping, which removes the covering layers of topsoil or rock, through a combination of drilling, blasting, loading and hauling, as required.

## **Table of Contents**

### *Mining the orebody.*

The process of ore removal starts with drilling and blasting the accessible ore. The blasted faces are then cleaned, and the ore is transferred to the transport system. In open-pit mines, gold-bearing material may require drilling and blasting, and is usually collected by bulldozers or shovels to transfer it onto trucks, which transport it to the mill.

In our South African underground mines, once ore has been broken, train systems collect ore from the faces and transfer it to a series of ore passes that gravity feed the ore to hoisting levels at the bottom of the shaft. The ore is then hoisted to the surface in dedicated conveyances and transported either by conveyor belts directly or via surface railway systems or roads to the treatment plants. In addition to ore, waste rock broken to access reef horizons must similarly be hoisted and then placed on waste rock dumps.

### ***Processing***

We currently have eight operational metallurgical plants and two metallurgical plants on care and maintenance in South Africa. We also have a metallurgical plant at the Hidden Valley project in PNG. The principal gold extraction processes we use are carbon in leach, or CIL, and carbon in pulp, or CIP.

The gold plant circuit consists of the following:

#### *Comminution.*

Comminution is the process of breaking up the ore to expose and liberate the gold and make it available for treatment. Conventionally, this process occurs in multi-stage crushing and milling circuits, which include the use of jaw and gyratory crushers and rod and tube and ball mills. Our more modern milling circuits include semi- or fully-autogenous milling where the ore itself is used as the grinding medium. Typically, ore must be ground to a minimum size before proceeding to the next stage of treatment.

#### *Treatment.*

In most of our metallurgical plants, gold is extracted into a leach solution from the host ore by leaching in agitated tanks. Gold is then extracted onto activated carbon from the solution using the CIL or CIP processes.

Gold in solution, at one of our plants, is recovered using zinc precipitation. Recovery of the gold from the loaded carbon takes place by elution and electro-winning. Cathode sludge or dore bars produced from electro-winning is now currently sent directly to Rand Refinery. Most of the South African plants no longer use smelting to produce rough gold bars (dore). Our South African zinc precipitation plants continue to smelt precipitate to produce rough gold bars. These bars are then transported to the Rand Refinery which is responsible for refining the bars to a minimum of good delivery status.

In fiscal 2006, we operated the only independent gold refinery and fabrication plant in South Africa. In fiscal 2006, approximately 84% of our South African gold production was refined at our refinery and the remainder was refined at the Rand Refinery, which is owned by a consortium of the major gold producers in South Africa. Since July 2006, all of our gold produced in South Africa has been sent to the Rand Refinery, as a decision was made to close the Harmony Refinery for economic reasons. The Australian gold production for fiscal years 2007 to 2009 was refined in Australia at an independent refiner, AGR Matthey.

The South African government has emphasized that the production of value-added fabricated gold products, such as jewelry, is an important means for creating employment opportunities in South Africa and has made the promotion of these beneficiation activities a requirement of the Mining Charter described in *Item 4. Information on the Company-Regulation Mineral Rights*. We support jewelry ventures in South Africa.

### **Harmony's Management Structure**

We have a de-centralized management structure that is based on small, empowered management teams led by General Managers at each of our operations. In South Africa, the General Managers report to Alwyn Pretorius and Tom Smith, the Chief Operations Officers, and are responsible for business optimization, ore reserve optimization, and for developing a business culture at the operations. They also focus on long-term viability and growth of the operations. The General Managers are supported by an Ore Reserve Manager, a Financial Manager, a Human

Resources Manager and a Technical Manager in ensuring the growth and long-term sustainability of the operations.

**Table of Contents****Capital Expenditures**

Capital expenditures for continuing operations, including the non-cash portion, incurred for fiscal 2009 totalled U.S.\$487 million compared with U.S.\$504 million for fiscal 2008 and U.S.\$340 million for fiscal 2007. In Rand terms, the capital expenditure increased by 19% from fiscal 2008. The decrease in dollar terms can be attributed to the weakening of the Rand against the US dollar during the year. For fiscal 2009, the capital development at PNG accounted for 41% of the total. The majority of the PNG development was funded by Newcrest in terms of the farm-in agreement. The increase in capital expenditure was due to the capital development at the Doornkop South Reef Project, Tshepong Sub 71 Decline, Phakisa and Elandsrand new mine. The increase in capital expenditure in fiscal 2008 compared with 2007 was primarily related to the development of the PNG assets, which accounted for 39% of the project capital expended at the continuing operations. Capital was also expended on the Doornkop South Reef Project, Tshepong Sub 66 and 71 Declines, Phakisa and Elandsrand new mine. During fiscal 2007, the increased development in PNG accounted for 21% of the project capital expended in the year at the continuing operations, with the balance being expended at the Doornkop South Reef Project, Phakisa, Tshepong Sub 66 Decline and Elandsrand new mine.

The focus of our capital expenditures in recent years has been underground development and plant improvement and upgrades. Construction in certain areas at these projects are close to completion and will start building up production in the next 12 months. The remainder of the projects will still require a great deal of capital expenditure over the next two to three years until they are substantially completed. During fiscal 2009, the projects were funded from the Company's cash reserves, as well as by the partnering agreement entered into with Newcrest for the PNG assets.

Capital expenditure for discontinued operations, including the non-cash portion, incurred for fiscal 2009 totalled U.S.\$10 million, compared with U.S.\$38 million for fiscal 2008 and U.S.\$41 million for fiscal 2007.

We have budgeted approximately U.S.\$410 million for capital expenditures in fiscal 2010. Details regarding the capital expenditures for each operation are found in the individual mine sections under *Business Harmony's Mining Operations*. We currently expect that our planned operating capital expenditures will be financed from operations and new borrowings as needed. However, if we decide to expand major projects such as the Poplar Project and the Rolspruit Project at Evander beyond our current plans, we may consider alternative financing sources. See *Item 4.*

*Information on the Company Business Harmony's Mining Operations Evander Operations*.

**Reserves**

As at June 30, 2009, we have declared proven and probable reserves of 48.2 million ounces, broken down as follows: 46.1 million ounces in South Africa and 2.1 million ounces in PNG. Of our 48.2 million ounces of ore reserves, 11.8 million ounces are classified as below infrastructure (that is, reserves for which capital expenditure has yet to be approved). There has been a 2.3 million ounces year-on-year negative variance in ore reserves due to the following reasons:

normal depletion of 1.6 million ounces;

the equity adjustment at Papua New Guinea to 50% attributable to Harmony resulted in a further decrease of 0.9 million ounces; and

a net addition of 0.2 million ounces of ore reserves from surface stockpiles and other positive adjustments from the operations.

We use the South African Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves ( **SAMREC Code** ), which sets out the internationally recognized procedures and standards for reporting of mineral resources and ore reserves. We use the term *ore reserves* herein, which has the same meaning as *mineral reserves*, as defined in the SAMREC code. Our reporting of the PNG Ore Reserves complies with the Australian Code for the Reporting of Mineral Resources and Ore Reserves ( **JORC** ) of the Australian Institute of Mining and Metallurgy. This code is materially the same as the SAMREC Code. In reporting of reserves, we have complied with Industry Guide 7 of the U.S. Securities and Exchange Commission.

For the reporting of Ore Reserves at our South African and PNG operations, we use a gold price of U.S.\$750 per ounce. An exchange rate of R9.33 per U.S. dollar is used for South Africa and for PNG an exchange rate of U.S.\$0.75 per Australian dollar is used giving a gold price of R225,000 per kilogram and AU\$1,000 per ounce, respectively. These gold prices have also been used in mine planning.

**Table of Contents**

In order to define that portion of a measured and indicated mineral resource that can be converted to a proven and probable ore reserve at our underground operations, we apply the concept of a cut-off grade. This is done by defining the optimal cut-off grade as the lowest grade at which an orebody can be mined such that the total profits, under a specified set of mining parameters, are maximized. The cut-off grade is determined using our Optimizer computer program which requires the following as input:

the database of measured and indicated resource blocks (per shaft section);

an assumed gold price which, for this ore reserve statement, was taken as R225,000 per kilogram;

planned production rates;

the mine recovery factor ( **MRF** ) which is equivalent to the mine call factor ( **MCF** ) multiplied by the plant recovery factor; and

planned cash costs (cost per tonne).

Rand per tonne cash costs of the mines are historically based, but take into account distinct changes in the cost environment, such as the future production profile, restructuring, right-sizing, and other cost reduction initiatives which we expect in the aggregate to lead to lower unit costs, and for below-infrastructure ounces, an estimate of capital expenditure.

The block cave reserve at Golpu (PNG) used the PCBC computer program to define the optimal mine plan and sequencing.

The open pit reserve at Hidden Valley (PNG) is constrained by the capacity of the tailings storage facility with Whittle optimization program guiding the most efficient mine design given this constraint.

The ore reserves represent that portion of the measured and indicated resources above cut-off 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 which includes geology, survey, planning, mining engineering, rock engineering, metallurgy, financial management, human resources management, and environmental management have been involved at each mine in the life-of-mine planning process and the conversion of resources into reserves. The ore flow-related modifying factors used to convert the mineral resources to ore reserves through the life-of-mine planning process are stated for each individual shaft. For these factors, historical information is used, except if there is a valid reason to do otherwise. Because of depth and rock engineering requirements, some shafts design stope support pillars into their mining layouts which accounts for approximately 7% to 10% discounting. Further discounting relates to the life-of-mine extraction to provide for unpay and geological losses.

Our standard for narrow reef sampling with respect to both proven and probable reserve calculations for underground mining operations in South Africa is applied on a 6 meter by 6 meter grid. Average sample spacing on development ends is at 2 meter intervals in development areas. For the massive mining at the Target operations, our standard for sampling with respect to both proven and probable reserves are fan drilling with B sized diamond drill holes (43mm core) sited at 50 meter spaced sections along twin access drives. The Kalgold open cast operations are sampled on diamond drill and reverse circulation drill spacing of no more than 25 meters on average. Surface mining at South African operations other than Kalgold involves recovering gold from areas previously involved in mining and processing, such as metallurgical plants, waste rock dumps and tailing dams (slimes and sand) for which random sampling is used.

The PNG resources are hosted in large porphyry or related mesothermal geological systems. Data is gained through diamond drilling using PQ down to NQ sized core. The core is cut in half, one half sampled at a maximum of 2 meter intervals and the other half stored in designated core storage facilities. Drill spacing is typically on less than 20 meter centers for Measured category, 20 to 40 meter centers for the Indicated category and greater than 40m for Inferred category material. Assaying for gold is by fire assay and various methods are used for copper and other elements. All assays informing the resource calculation are analyzed at a National Association of Testing Authorities accredited

commercial laboratory. Some sample preparation is done at the mine site laboratory. Extensive Quality Assurance/Quality Control work is undertaken and data is stored in an electronic database.

**Table of Contents**

Our mining operations reported total proven and probable reserves as of June 30, 2009 are set out below:

**Ore Reserves statement (Imperial) as at June 30, 2009**

OPERATIONS	PROVEN RESERVES			PROBABLE RESERVES			TOTAL RESERVES		
	Tons (million)	Grade (oz/ton)	Gold oz (1) (000)	Tons (million)	Grade (oz/ton)	Gold oz (1) (000)	Tons (million)	Grade (oz/ton)	Gold oz (1) (000)
<b>GOLD</b>									
<b>South Africa</b>									
<b>Underground</b>									
Bambanani	3.9	0.247	965	1.3	0.318	420	5.2	0.265	1,385
Joel	1.0	0.168	161	2.5	0.161	404	3.5	0.163	565
Masimong	4.9	0.152	751	1.5	0.154	233	6.4	0.152	984
Phakisa	0.4	0.145	56	22.2	0.236	5,239	22.6	0.235	5,295
Target	5.3	0.178	942	9.9	0.163	1,617	15.2	0.168	2,559
Tshepong	14.1	0.154	2,184	12.6	0.169	2,130	26.7	0.161	4,314
Virginia	7.3	0.129	940	3.1	0.133	407	10.4	0.130	1,347
Doornkop	0.7	0.104	70	1.3	0.113	153	2.0	0.110	223
Elandsrand	12.6	0.190	2,395	28.9	0.178	5,146	41.5	0.182	7,541
Evander	3.1	0.169	522	7.9	0.181	1,434	11.0	0.177	1,956
Evander(below infrastructure)				54.5	0.217	11,849	54.5	0.217	11,849
<b>Total South Africa</b>									
<b>Underground</b>	<b>53.3</b>	<b>0.169</b>	<b>8,986</b>	<b>145.7</b>	<b>0.199</b>	<b>29,032</b>	<b>199.0</b>	<b>0.191</b>	<b>38,018</b>
<b>South Africa</b>									
<b>Surface</b>									
Kalgold	17.3	0.025	425	9.8	0.031	307	27.1	0.027	732
Free State Surface	928.3	0.007	6,459	112.2	0.008	845	1,040.5	0.007	7,304
<b>Total South Africa Surface</b>	<b>945.6</b>	<b>0.007</b>	<b>6,884</b>	<b>122.0</b>	<b>0.009</b>	<b>1,152</b>	<b>1,067.6</b>	<b>0.008</b>	<b>8,036</b>
<b>Total South Africa</b>	<b>998.9</b>		<b>15,870</b>	<b>267.7</b>		<b>30,184</b>	<b>1,266.6</b>		<b>46,054</b>
<b>Papua New Guinea (2)</b>									
<b>Hidden Valley and Kaveroi</b>									
	1.5	0.068	105	19.4	0.058	1,126	20.9	0.059	1,231
Hamata	0.2	0.064	7	2.1	0.078	164	2.3	0.078	171
Golpu				39.0	0.018	694	39.0	0.018	694
<b>Total Papua New Guinea</b>	<b>1.7</b>	<b>0.068</b>	<b>112</b>	<b>60.5</b>	<b>0.033</b>	<b>1,984</b>	<b>62.2</b>	<b>0.034</b>	<b>2,096</b>
<b>GRAND TOTAL</b>	<b>1,000.6</b>		<b>15,982</b>	<b>328.2</b>		<b>32,168</b>	<b>1,328.8</b>		<b>48,150</b>

(1) Metal figures are fully inclusive of all

mining dilutions and gold losses, and are reported as mill delivered tonnes.

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

The approximate metallurgical recovery factors for the table above are as follows:

Bambanani  
96%, Joel 96%,  
Masimong 95%,  
Phakisa 95%,  
Target 96%,  
Tshepong 97%,  
Virginia 95%,  
Doornkop 95%,  
Elandsrand  
96%, Evander  
97%, Kalgold  
90%, Free State  
Surface 47%,  
Hidden  
Valley/Kaveroi  
93%, Hamata  
93%, Golpu  
56%.

Note: 1 ton = 907 kg = 2,000 lbs

**Table of Contents**

In addition to the gold reserves, we also report our equity reserves for silver, copper and molybdenum from our PNG operations. Metal prices are assumed at U.S.\$10/oz for silver, U.S.\$2.27/lb for copper and U.S.\$13/lb for molybdenum.

OPERATIONS SILVER	PROVEN RESERVES			PROBABLE RESERVES			TOTAL RESERVES		
	Tons (million)	Grade (oz/ton)	Silver oz <sup>(1)</sup> (000)	Tons (million)	Grade (oz/ton)	Silver oz <sup>(1)</sup> (000)	Tons (million)	Grade (oz/ton)	Silver oz <sup>(1)</sup> (000)
<b>Papua New Guinea</b> <sup>(2)</sup>									
Hidden Valley and Kaveroi	1.5	1.137	1,755	19.4	1.070	20,767	20.9	1.075	22,522
COPPER	Tons (million)	Grade (%)	Cu lbs (million)	Tons (million)	Grade (%)	Cu lbs (million)	Tons (million)	Grade (%)	Cu lbs (million)
	<b>Papua New Guinea</b> <sup>(2)</sup>								
Golpu				39.0	1.025	882	39.0	1.025	882
MOLYBDENUM	Tons (million)	Grade (lbs/ton)	Mo lbs (million)	Tons (million)	Grade (lbs/ton)	Mo lbs (million)	Tons (million)	Grade (lbs/ton)	Mo lbs (million)
	<b>Papua New Guinea</b> <sup>(2)</sup>								
Golpu				39.0	0.231	9	39.0	0.231	9

(1) Metal figures are fully inclusive of all mining dilutions and metal losses, and are reported as mill delivered tonnes

(2) Represents Harmony's equity portion of 50%

Note: 1 ton = 907 kg = 2,000 lbs

Our methodology for determining our reserves is subject to change and is based upon estimates and assumptions made by management regarding a number of factors as noted above in this section.

**Worldwide Operations****Description of Property**

The following is a map of our worldwide operations:

**Table of Contents**

Our operational mining areas in South Africa are set forth below:

	<b>Hectares</b>	<b>Acres</b>
Doornkop	2,941	7,267
Elandsrand	5,113	12,634
Free State (includes Masimong and Virginia)	22,583	55,802
Tshepong and Phakisa	10,799	26,683
Bambanani	2,356	5,821
Joel	2,162	5,342
Kalgold	615	1,520
Evander	36,898	91,174
Target (includes Loraine)	7,952	19,649
<b>Total</b>	<b>91,419</b>	<b>225,892</b>

In Australia and PNG, we hold granted tenements as set forth below:

	<b>Hectares</b>	<b>Acres</b>
Mount Magnet	80,123	197,988
PNG	327,600	809,514
Total Worldwide Operations	499,142	1,233,394

We acquired new tenements in PNG for exploration after June 30, 2009. See *Item 8. Recent Developments* .

In line with the rest of the South African mining industry, and in an effort to reduce costs, we have been rationalizing our mineral rights holdings in recent years. Accordingly, over the past three years, we have disposed of our shares and participation rights in areas within and outside of South Africa in which we have not actively pursued mining. However, in some cases we have retained certain participation rights and option clauses in disposed-of properties and mining rights. We may continue to investigate further disposals.

**Geology**

The major portion of our South African gold production is derived from mines located in the Witwatersrand Basin in South Africa. The Witwatersrand Basin is an elongated structure that extends approximately 300 kilometers in a northeast-southwest direction and approximately 100 kilometers in a northwest-southeast direction. It is an Archean sedimentary basin containing a six kilometer thick stratigraphic sequence consisting mainly of quartzites and shales with minor volcanic units. The majority of production is derived from auriferous placer reefs situated at different stratigraphic positions and at varying depths below the surface in three of the seven defined goldfields of the Witwatersrand Basin.

Our Hidden Valley project comprises low sulphidation carbonate-base metal-gold epithermal deposits within the Morobe Goldfield, in the Morobe Province of PNG. In the Hidden Valley project area, a batholith of Morobe Granodiorite (locally a coarse grained monzogranite) is flanked by fine metasediments of the Owen Stanley Metamorphics. Both are cut by dykes of Pliocene porphyry ranging from hornblende-biotite to feldspar-quartz porphyries. A number of commonly argillic altered and gold anomalous breccias are known, including both hydrothermal and over printing structural breccias. The Hidden Valley deposit area is dominated by a series of post Miocene faults controlling the gold mineralization, including an early north trending set and the main northwest faulting.

Our Wafi project comprises the sedimentary/volcaniclastic rocks of the Owen Stanley Formation that surround the Wafi Diatreme and host the gold mineralization. Gold mineralization occurs as extensive high-sulphidation epithermal alteration overprinting porphyry mineralization and epithermal style vein-hosted and replacement gold mineralization with associated wall-rock alteration. The Golpu Copper-Gold project is located about one kilometer northeast of the Wafi gold orebody. It is a porphyry (diorite) copper-gold deposit. The host lithology is a diorite that exhibits a typical zoned porphyry copper alteration halo and the mineralized body can be described as a porphyry copper-gold pipe .

**Table of Contents**

**Harmony's Mining Operations Overview**

In South Africa, we conduct underground mining at 10 operations:

Tshepong

Phakisa

Bambanani

Doornkop

Elandsrand

Masimong

Virginia (consists of Harmony 2, Merriespruit 1 & 3, Unisel and Brand 3 & 5)

Target

Evander (consists of Evander 2, 5, 7 and 8)

Joel (included under Other Underground )

During fiscal 2008, the Cooke operations (consists of Cooke 1, 2 and 3 shafts) were considered to be a reportable segment. An effective 60% interest in these operations was sold on November 21, 2008 and the results for the five months up to that date have been included in discontinued operations for fiscal 2009.

We conduct surface mining at four sites (all included in Other Surface ):

Free State (also known as Phoenix)

Freegold

Kalgold

Target

Surface mining was conducted at Randfontein's Cooke operations up to the date of sale and the Cooke plant has been classified as discontinued operations along with the Cooke operations.

Surface mining conducted at the South African operations other than Kalgold involves recovering gold from areas previously involved in mining and processing, such as metallurgical plants, waste rock dumps and tailings dams (slimes and sand). We are conducting studies to determine the feasibility of further retreatment projects in the Free State and at Evander.

Internationally, our mining was previously conducted at the following two sites in Australia:

Mount Magnet The site was put on care and maintenance at the end of December 2007. We have commenced with a drilling program in order to further define the orebody. Management may decide to resume the sale process as soon as the drilling results are available. See *International Operations* above.

South Kalgoorlie we finalized the sale of this operation with Dioro on November 30, 2007 See *Disposals* above.

Underground and surface mining was conducted at each of these operations, with underground access through two declines at Mount Magnet and one decline at South Kalgoorlie and surface access principally through open-pits. Surface mining at South Kalgoorlie ceased in fiscal 2006 with treatment consisting of Mount Marion ore and low grade stockpiles. Open-pit mining



**Table of Contents**

recommenced at South Kalgoorlie mines during fiscal 2007. The Mount Marion underground operation at South Kalgoorlie ceased in June 2007, with only open-pit operations continuing on that site until the date of sale to Dioro.

The following discussion is a two-part presentation of our operations:

an overview of our South African mining operations with a discussion and production analysis of each of our operating segments; and

an overview of our International (Australian and PNG) operations.

Previously, we disclosed cash costs and cash cost per ounce which including the movement in inventory and calculated using gold ounces sold as a denominator. These amounts have been re-presented for all comparative periods in the discussions and production analyses below following the changes to the calculation of these measures, See *Item 3. Selected Financial Data Selected Historical Consolidated Financial Data*.

Where we have translated the Rand amount budgeted for capital expenditures in 2010 into U.S. dollars, we have used the closing rate at the balance sheet date.

**South African Mining Operations**

*Unless indicated otherwise, the discussions below are for continuing operations.*

**Table of Contents**

***Underground***

***Tshepong, Phakisa and Bambanani***

**Introduction:** We acquired Tshepong, Phakisa and Bambanani when we, in January 2002, acquired the Freegold operations from AngloGold Ashanti Limited ( **Anglogold** ) through a 50% joint venture with African Rainbow Minerals Gold Limited ( **ARMgold** ). In September 2003, we acquired 100% of these operations when ARMgold became a wholly owned subsidiary. These operations are located in the Free State province. Production from the operations is processed through Harmony One Plant.

**History:** Exploration, development and production history in the area of the Freegold assets dates from the early 1900 s, leading to commercial production by 1932. Subsequent consolidation and restructuring led to the formation of Free State Consolidated Gold Mine (Operations) Limited, which became a wholly-owned subsidiary of AngloGold in June 1998.

**Geology:** The operations are located in the Free State Goldfield, which is on the southwestern edge of the Witwatersrand basin. The Bambanani, Tshepong and Phakisa mines are located to the north and west of Welkom. Mining is primarily conducted in the Basal reef, with limited exploitation of the B Reef at Tshepong. The reefs generally dip towards the east or northeast while most of the major faults strike north-south. B Reef is being mined at Tshepong with potential of being exploited elsewhere.

**Mining Operations:** These operations are subject to the underground mining risks detailed in the Risk Factors section. The management teams regularly revisit their mining strategy and management procedures in order to minimize risks.

Mining is conducted at depths ranging from 1,911 and 3,680 meters at Bambanani. The primary mining challenges at these operations are seismic risks, ventilation and fire avoidance. Bambanani is classified as a seismically active operation with seismic activity monitoring systems installed to do active seismic risk evaluation. Seismic activity monitoring systems are upgraded on a continuous basis to ensure that it is kept abreast of emerging technology. Operations at Tshepong were hampered by fires, safety stoppages and major equipment repairs during fiscal 2009.

Bambanani was restructured during the third quarter of fiscal 2008 due to the power shortages in the country. This resulted in the tonnages being reduced by 50%. There was also a significant reduction in the labor complement, with 2,086 people leaving through transfers and voluntary retrenchments. Implementation of the revised mining plan to convert Bambanani to a high-grade, low-volume operation continued during fiscal 2009, but there were some set-backs. While tons mined were on target, several fires occurred in the second quarter in high-grade areas. The average grade for the year was negatively affected as a result, as crews had to be deployed to lower grade panels. In addition, the mine was affected by troublesome industrial relations activities which were resolved by year-end. The split reef/waste hoisting process put in place to some extent ameliorated this loss in grade. Two of the affected areas are being systematically reopened, and will become available in fiscal 2010. Plans are in place to prepare for mining of the high-grade shaft pillar in such a way as to minimize risk and maximize the opportunity this presents. The Bambanani Shaft Pillar Project will be accessed from West Shaft (which will be reopened for this purpose) and release an expected 87% of the resource. The cost of the project is expected to be some R309 million (US\$40 million) and is expected to reach full production in June 2013.

Mining is conducted at depths ranging from 1,671 and 2,154 meters at Tshepong. Operations at Tshepong were hampered during fiscal 2009 as a series of operational, infrastructural and safety-related problems affected the mine. These included a fire in the first quarter that affected 18 panels for a period of a week and constrained flexibility during the year, safety-related stoppages, a power supply failure and a labour go-slow in the second quarter. By the fourth quarter some improvement in volumes were seen. Management spent much time during the year addressing industrial relations issues; these were largely resolved by year-end. The self-directed work team training that was originally pioneered at Tshepong has been reintroduced.

The average grade declined by 6% during fiscal 2009 This was primarily as a result of mining taking place at the edge of the orebody s main pay shoot, where grades are more variable. Once the Sub 66-decline project has been completed, mining will move into higher-grade, less variable grade zones and grades are expected to rise from fiscal 2011. As impacting on the lower grade was higher than planned off-reef mining in the lower grade north-west area. To mitigate against this grade decline, Tshepong has focussed on quality mining, with attention being paid to improved

sweepings, and reduced off-reef mining and stoping widths. By its nature the under-cut mining method employed at Tshepong results in the liberation of gold from finely fragmented ore. Historically, the MCF at Tshepong has been low. Pleasingly, the MCF improved year-on-year from 62% to 67%. The full commissioning of the belt level in the sub-66 decline will also result in higher grades being achieved.

**Table of Contents**

To improve flexibility, particular emphasis was placed on development in the second half of fiscal 2009. Other key issues that are being addressed by this mine to return it to optimal performance are the performance of the refrigeration plant and pumping infrastructure.

Given the proximity of Tshepong to Phakisa, there are access, ventilation and service synergies that can be exploited to allow access at depth.

The Tshepong Decline project, which started in April 2003, has accessed an additional two levels (69 and 71) of the Tshepong Shaft. The Sub 66 project neared completion at the end of June 2008 with a total capital expenditure of R289 million (U.S.\$39.8 million). The final development component was completed in June 2008. Poor ground condition necessitated intense secondary support and ore pass lining delayed completion. All secondary support has been completed and the lining of orepasses was completed safely during fiscal 2009. Following design alterations recommendations on box front infrastructure installations on 72 Level Cross Belt, all work is scheduled for completion by February 2010. Production commenced at Sub 66 Decline during the year, with the build-up to continue over the next three years. Emphasis is being placed on increasing mineable reserves from this area.

Sub 71 Project made good progress until November 2008 when extreme poor ground conditions were experienced in the developed section. A decision was taken to stop all development and install secondary support in the area. The stoppage continued for seven months until end fiscal 2009. The work was completed safely, without disrupting the production operations from the Sub 66 decline. Cumulatively a total of 1,582 meters have been completed. To date the baseline variation on the original plan is one year. The escalation of input costs, combined with delays and additional material required had a negative impact on the project. First production is expected in August 2012, with full production anticipated in July 2017. The total estimated cost of this project is R194 million (U.S. \$25.1 million).

The development at Phakisa, a surface shaft, sunk to 75 level elevations and a planned decline shaft to 85 level will access the ore reserves to a depth of 2,662 meters below surface. It is estimated that the area will yield 22.6 million tons, recovering 180.9 tons of gold over a project life of 21 years. Project completion requires sinking, equipping and commissioning of a decline shaft up to 85 level. The major project includes access development and stoping to maximum production build-up at a capital cost of R1.6 billion (U.S.\$190 million). To date, R1.2 billion (U.S.\$158.4 million) has already been spent. Good progress was achieved during fiscal 2009, with completion of all infrastructures except the permanent water handling system. Installation of the permanent water handling systems (i.e., Settlers, Main Pump Station on 77 Level, Mud press and underground dams) have been delayed requiring extensive sealing of the dams and re-torque of all the bolts in the shaft pump column to avoid leaks on gaskets, but expected completion is September 2009. The second train on the Rail-veyor was successfully commissioned in November 2008 and the third train planned for October 2009. Three of the 10 ice plant modules have been successfully commissioned and to complete the first phase of the 10 MW cooling system, seven more modules must be commissioned with due date December 2010. The first phase of surface offices and change houses have been successfully completed with the second phase scheduled for June 2010. Phakisa started the first production during September 2007 and will be opening up ore reserves going forward. The project is expected to be in full production in September 2011 at 91,492 tons per month. The average production rate per annum over the peak period of life of mine is 245,243 ounces.

During fiscal 2009, Tshepong accounted for 15% (14% in 2007 and 2008) of our total gold production, with Phakisa accounting for 1.5% (nil for 2007, 0.2% in 2008) and Bambanani 8% (8% in 2007 and 2008).

**Safety:** During fiscal 2009, the safety statistics for the operations compared to the Group average for lost time injury frequency rate ( **LTIFR** ) of 9.35 (2008: 12.83) per million hours worked and fatality frequency injury rate ( **FFIR** ) of 0.21 (2008: 0.18) are as follows:

	<b>LTIFR</b>	<b>FFIR</b>
Tshepong	15.18	0.62
Phakisa	2.48	0.00
Bambanani	7.48	0.15

Phakisa was awarded, for the second consecutive year, the trophy for the safest mine in the Harmony group for fiscal 2009. There were no fatal accidents in fiscal 2009, and there has not been a fall of ground accident for more than

18 months.

**Table of Contents**

Regrettably there were seven fatalities at Tshepong during fiscal 2009 (2008: 2), five of which were outside the stoping areas and in areas that would generally be considered lower risk. A behaviour-based safety programme has been implemented to promote safety awareness, particularly in the services areas, so as to address this issue.

**Plants:** The ore from these operations are sent to Harmony 1 Plant for processing. This plant, which processes underground ore, waste rock and various surface accumulations, was commissioned in 1986 and is a conventional CIP plant processing ore that has been milled by semi-autogenous grinding. Gold is recovered from the eluate solution using zinc precipitation and a precoat vacuum filter. The precipitate recovered from the filter is calcined and smelted to bullion.

The following table sets forth processing capacity and average tons milled during the fiscal 2009 for the Harmony 1 Plant:

<b>Plant</b>	<b>Processing Capacity (tons/month)</b>	<b>Average Milled for the Fiscal Year Ended June 30, 2009 (tons/month)</b>
FS 1	420,000	410,682

In fiscal 2009, Harmony 1 Plant recovered approximately 95.9% of the gold contained in the ore delivered for processing.

**Production analysis:**

	<b>Fiscal Year Ended June 30,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
<b>Tshepong Production</b>			
Tons ( 000)	1,516	1,649	1,824
Recovered grade (ounces/ton)	0.152	0.161	0.175
Gold produced (ounces)	230,778	265,914	319,192
Gold sold (ounces)	227,113	273,119	318,887
<b>Results of operations (\$)</b>			
Product sales ( 000)	197,726	223,185	202,757
Cash cost ( 000)	108,605	124,720	112,043
Cash profit( 000)	89,121	98,465	90,714
<b>Cash costs</b>			
Per ounce of gold (\$)	483	455	360
<b>Capex ( 000)(\$)</b>	27,711	26,834	26,072

Tons milled declined by 10% from 1,824,000 tons in fiscal 2007 to 1,649,000 in fiscal 2008, with gold production decreasing by 17% from 319,192 ounces in fiscal 2007 to 265,914 ounces in fiscal 2008. The decrease was attributable to the decrease in the recovery grade to 0.161 ounces per ton in fiscal 2008, compared with 0.175 ounces per ton in fiscal 2007. The decrease in recovery grade was primarily due to the decrease in the shaft call factor and the average mining grade which was 1,275 cmg/t in fiscal 2008, compared to 1,365 cmg/t in fiscal 2007. The drop in the average mining grade is in line with the Life of Mine profile. During fiscal 2007 the mining in the east south block was in the main high grade pay shoot and as we continued mining south during fiscal 2008 we were mining closer to the edge of this high grade channel. The continuation of this channel will be mined once the sub 66 and sub 71 decline is completed. Tshepong was hampered by a number of fires and seismic events that significantly affected production in the first half of fiscal 2008. The cessation of Conops also resulted in lower production.

Cash costs for the Tshepong shaft were U.S.\$125 million in fiscal 2008, compared with U.S.\$112 million in fiscal 2007. Cash costs per ounce were U.S.\$455 in fiscal 2008, compared with U.S.\$360 in fiscal 2007. This increase in unit cost is attributable primarily to decrease in the number of ounces of gold produced. Cash costs have increased by 11% in fiscal 2008, primarily due to increases in the costs of labor and supplies and the effect of inflation on supply

contracts.

Tons milled declined by 8% from 1,649,000 tons in fiscal 2008 to 1,516,000 in fiscal 2009, with gold production decreasing by 13% from 265,914 ounces in fiscal 2008 to 230,778 ounces in fiscal 2009. The decrease was attributable to the decrease in the recovery grade to 0.152 in fiscal 2009, compared with 0.161 in fiscal 2008. The decrease in recovery grade was primarily due to a decrease in the average mining grade which was 1,153 cmg/t in fiscal 2009, compared to 1,275 cmg/t in fiscal 2008. The drop in the average mining grade is in line with the Life of Mine profile. During fiscal 2008 the mining in the east south block was on the edge of

**Table of Contents**

the main high grade pay shoot and as mining continued south during fiscal 2009, mining have moved out of this high grade channel. The continuation of this channel will be mined once Sub 66 and Sub 71 decline is completed.

Production volume at Tshepong was negatively influenced due to the phasing out of Conops year on year as well as business interruptions due to a fire, safety, national stay away actions and repairs on major engineering equipment.

Cash costs for the Tshepong shaft were U.S.\$108.6 million in fiscal 2009, compared with U.S.\$124.7 million in fiscal 2008. Cash costs per ounce was U.S.\$483 in fiscal 2009, compared with U.S.\$455 in fiscal 2008. This increase in unit cost is attributable primarily to decrease in the number of ounces of gold produced. Cash cost for fiscal 2009 was impacted by increases in the costs of labor and electric power.

Assuming no additional reserves are identified, at expected production levels and, at the current planned gold price, it is foreseen that the reported proven and probable ore reserves of 26.7 million tons (4.3 million ounces) will be sufficient for Tshepong to maintain underground production until approximately 2026. Any future changes to the assumptions upon which the ore reserves are based, as well as any unforeseen events affecting production levels, could have an effect on the expected period of future operations.

**Capital Expenditure:** Tshepong incurred approximately R249.4 million (U.S.\$27.7 million) in capital expenditure during fiscal 2009. The expenditure was primarily for the decline project and ongoing development. For fiscal 2010 capital expenditure of R243 million (U.S.\$31.5 million) is planned, primarily for ongoing capital development.

	<b>Fiscal Year Ended June 30,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
<b>Phakisa</b>			
<b>Production</b>			
Tons ( 000)	204	34	
Recovered grade (ounces/ton)	0.109	0.118	
Gold produced (ounces)	22,216	4,024	
Gold sold (ounces)	21,477	4,212	
<b>Results of operations (\$)</b>			
Product sales ( 000)	19,009	3,891	
Cash cost ( 000)	11,903	2,348	
Cash profit ( 000)	7,106	1,543	
<b>Cash costs</b>			
Per ounce of gold (\$)	555	497	
Capex ( 000) (\$)	51,210	40,335	31,593

Tons milled increased from 34,000 tons in fiscal 2008 to 204,000 tons in fiscal 2009, with gold production increasing from 4,024 ounces to 22,216 ounces. This was as a result of the planned ramp up in production during the year. Grade was lower in fiscal 2009 at 0.109 ounces per ton, compared to 0.118 in fiscal 2008. This was due to the fact that mining was confined to a single raise line in a lower grade area.

Cash costs per ounce for Phakisa was \$555 per ounce in fiscal 2009, compared with \$497 per ounce in fiscal 2008. This increase is primarily attributable to the increase in tons mined.

The expected capacity of the Phakisa shaft will be 131,175 tons per month. Phakisa has no rock hoisting facilities and all rock will be transported via a rail system on 55 level to the Nyala shaft for hoisting to surface. First production took place during October 2007, with a build up to full production expected in the next two to three years.

Proven and probable underground ore reserves of 22.6 million tons (5.3 million ounces) will be sufficient for the Phakisa shaft to, once production commences, maintain production until approximately fiscal 2030. Any future changes to the assumptions upon which the reserves are based, as well as any unforeseen events affecting production levels, could have a material effect on the expected period of future operations.

**Capital Expenditure:** Phakisa incurred approximately R460.9 million (U.S.\$51.2 million) in capital expenditures in the fiscal year ended June 30, 2009, primarily for the main project. Planned capital expenditure for fiscal 2010 is R489 million (US\$63 million) R141 million (US\$18 million) on on-going development and R52 million (US\$7 million) on major equipment maintenance and other shaft capital. Capital planned for the main project is R296 million (US\$38 million).



**Table of Contents**

<b>Bambanani</b>	<b>Fiscal Year Ended June 30,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
<b>Production</b>			
Tons ( 000)	570	912	1,283
Recovered grade (ounces/ton)	0.213	0.170	0.154
Gold produced (ounces)	121,530	154,879	197,084
Gold sold (ounces)	119,665	158,985	197,060
<b>Results of operations (\$)</b>			
Product sales ( 000)	102,645	128,346	125,324
Cash cost ( 000)	72,343	101,962	115,469
Cash profit ( 000)	30,302	26,384	9,855
<b>Cash costs</b>			
Per ounce of gold (\$)	611	639	599
<b>Capex ( 000) (\$)</b>	5,779	14,737	17,306

Tons milled from the Bambanani shaft decreased to 912,000 in 2008 compared with 1,283,000 in fiscal 2007. Ounces produced were 154,879 in fiscal 2008, compared with 197,084 in fiscal 2007. This decrease was due to the restructuring of the shaft due to power constraints but was offset by a better recovered grade, which increased from 0.154 in fiscal 2007 to 0.170 in fiscal 2008.

Cash costs per ounce for Bambanani were U.S.\$639 in fiscal 2008, compared with U.S.\$599 in fiscal 2007. The costs per ounce increased by 7% in fiscal 2008, due to the slow start up after the collapsing of the old ore pass system increases in the costs of labor and supplies and the effect of inflation on supply contracts.

Tons milled from the Bambanani shaft decreased to 570,000 in 2009 compared with 912,000 in fiscal 2008. Ounces produced were 121,530 in fiscal 2009, compared with 154,879 in fiscal 2008. This decrease was due to the restructuring of the shaft due to power constraints but was offset by a better recovered grade, which increased from 0.170 in fiscal 2008 to 0.213 in fiscal 2009.

Cash costs per ounce for Bambanani were U.S.\$611 in fiscal 2009, compared with U.S.\$639 in fiscal 2008. The costs per ounce decreased by 4% in fiscal 2009, due to an increase in grade mined offset by an increases in the cost of labor and supplies and the effect of inflation on supply contracts.

The rock hoisting capacity at Bambanani is 116,000 tons per month. The average tons milled in fiscal 2009 was 47,500 tons per month. 52,900 tons per month are planned for fiscal 2010.

Assuming no additional reserves are identified, at expected production levels, it is foreseen that the reported proven and probable ore reserves of 5.2 million tons (1.4 million ounces) will be sufficient for Bambanani to maintain underground production until approximately 2021. Any future changes to the assumptions upon which the ore reserves are based, as well as any unforeseen events affecting production levels, could have a material effect on the expected period of future operations.

**Capital Expenditure:** Bambanani incurred approximately R52 million (U.S.\$5.8 million) in capital expenditure in fiscal 2009, primarily for ongoing development. We budgeted R73 million (U.S.\$9.4 million) for capital expenditure in fiscal 2010 for access development for the shaft pillar extraction and R25.5 million (U.S.\$2.8 million) for ongoing development with R18.4 million (U.S.\$2.0 million) for major equipment maintenance.

**Doornkop**

**Introduction:** Doornkop is located in the Gauteng Province of South Africa, approximately thirty kilometers west of Johannesburg. The operation is owned by Randfontein Estates Limited ( **Randfontein** ). Doornkop currently operates under its own mining authorization of 2,941 hectares. Production is treated at the Doornkop plant.

**History:** Harmony acquired this operation when it took over Randfontein.

**Geology:** These operations are situated in the West Rand Goldfield of the Witwatersrand Basin, the structure of which is dominated by the Witpoortjie and Panvlakte Horst blocks, which are superimposed over broad folding associated with the southeast plunging West Rand Syncline.



**Table of Contents**

The Doornkop shaft lease area is bounded by and lies to the south-east of the major north-easterly striking Roodepoort Fault, which dips to the south and constitutes the southern edge of the Witpoortjie Horst Block or Gap. This Horst Block is comprised of 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 southeast 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 towards 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 fan head, the number of economic bands and their payability is limited. Eight of the well-known reefs are present in the area, but only the Kimberley Reef and South Reef are considered viable at this stage. The resource is concentrated in the Kimberley and South Reefs. The Kimberley Reef is contained in the Vlakfontein Member of the Westonia Formation. This reef, also known as the K9 Reef horizon, rests on an unconformity and is a complex multi-pulse conglomerate, which can be separated into four facies or cycles. All four cycles consist on average of an upper conglomerate and a lower quartzite. The characteristics of every cycle are area-dependent and the grades are variable within each cycle. The South Reef is approximately 900 metres below the current Kimberley Reef mining, and between 7.5 and 60 metres 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 dip from 10 to 20 degrees. The orebody at Doornkop has a strike length of 4km and a width of 4 km from west to east.

During the fiscal 2009 year, the gathering of additional geological information from on-reef development and exploration drilling on the South Reef has continued. This has further increased our knowledge of the sedimentology and grade characteristics of this ore body. The latest data supports the sheet-type depositional model as described in fiscal 2008. The geological, depositional, facies & evaluation models receive regular attention and are being expanded as the new data becomes available. An exercise is underway to capture all data electronically and have a 3-D geological model as an end product. This model will incorporate the Kimberley, South & Main Reefs and forms part of the geological risk mitigation strategy.

**Mining Operations:** These operations are subject to the underground mining risks detailed in the Risk Factors section. Due to the shallow to moderate depths of the operations, seismicity and high rock stress related problems are infrequent. There is a risk of subterranean water and/or gas intersections in some areas of the mines. However, this risk is mitigated by active and continuous management and monitoring, which includes the drilling of boreholes in advance of faces. Where water and/or gas are indicated in the drilling, appropriate preventative action is taken.

Production from the Kimberley reef section of the mine continued in the trackless sections and will continue for a further two years while the build-up of production from the south reef sections continues. Grades from the Kimberley reef mining on level 106 declined and steps are being taken to move to level 71. Volumes were also affected by the lack of availability of trackless vehicles. Production volumes from the higher grade South Reef areas was slower than planned, largely as a result of logistical constraints and delays which related to transport of men and material as well as the hoisting of rock from the project areas. By April 2009, both the dual purpose winder, which was fully commissioned to a depth of 2,000 meters, and the dedicated rock winder to hoist Kimberley reef ore were commissioned which assisted to relieve the rock hoisting bottleneck that had been experienced. During May and June of fiscal 2009 the operation achieved record monthly hoisting volumes and meters of development.

The Doornkop South Reef Project was announced on January 22, 2003. The project involved the deepening of the Doornkop main shaft to 1,973 meters to access the South Reef between 1,650 and 2,000 meters below surface, and includes development towards these mining areas. The estimated final capital cost is R1,740 million (U.S.\$193.33 million) with R1,251 million (U.S.\$139.0 million) spent as of June 30, 2009.

The most significant achievement for fiscal 2009 was the commissioning of both the dual purpose winder and the dedicated rock winder (to level 132) which resulted in South Reef ore being hoisted separately from waste and further ensured that the rock hoisting bottleneck was alleviated. In addition, level 197 in the South Reef area came into production. Remaining work includes the commissioning of the pump station on level 207 and the Rock winder

commissioned to level 212, the lowest working level, by February 2010. Full production is expected by March 2015.

**Table of Contents**

During fiscal 2009, Doornkop accounted for 3% (2% in 2007 and 2008) of our total gold production.

**Safety:** The safety record at these operations during fiscal 2009 was as follows: in terms of LTIFR of 6.25 per million hours worked achieved at Doornkop compared favorably with the group average of 9.35. The FFIR (0.0) compared favorably with the group average of 0.21.

Safety at the operations receives constant and high-level attention and where problems are identified, steps are taken to address the risks.

**Plants:** The processing facilities presently comprises of one operating plant, the Doornkop metallurgical plant, which is serviced by a surface rail network. The Doornkop metallurgical plant, commissioned in 1985, is a conventional CIP plant, which was used to treat waste rock and other surface accumulations. It is now treating all ore from underground mining at the Doornkop operation and Rand Uranium's Cooke operations.

The following table sets forth processing capacity and average tons milled during fiscal 2009 for the Doornkop plant:

Plant	Processing Capacity (tons/month)	Average Milled for the Fiscal Year Ended June 30, 2009 (tons/month)
Doornkop	220,000	138,735

In fiscal 2009, the Doornkop plant recovered approximately 94.7% of the gold contained in the ore delivered for processing.

**Production analysis:**

	Fiscal Year Ended June 30,		
	2009	2008	2007
<b>Doornkop</b>			
<b>Production</b>			
Tons ( 000)	605	494	597
Recovered grade (ounces/ton)	0.070	0.089	0.095
Gold produced (ounces)	42,150	44,038	56,810
Gold sold (ounces)	43,211	44,143	57,364
<b>Results of operations (\$)</b>			
Product sales ( 000)	38,128	35,489	36,503
Cash cost ( 000)	31,253	31,014	25,210
Cash profit ( 000)	6,875	4,475	11,293
<b>Cash costs</b>			
Per ounce of gold (\$)	804	749	438
<b>Capex ( 000) (\$)</b>	43,918	48,039	37,557

Tons milled from Doornkop shaft were 494,000 in fiscal 2008, compared with 597,000 in fiscal 2007. Volumes were negatively affected mainly as a result of an 18 day planned production stoppage to facilitate required shaft work and a reduction in volume at the conventional Kimberley mining section due to low grades.

The shaft work was related to the South Reef project sinking program. In addition three days were lost to the industry through the Eskom power management process. Ounces produced were 44,038 in fiscal 2008, compared 56,810 in fiscal 2007.

The decrease in ounces produced was primarily due to the lower recovery grade and decrease in tons milled. The recovered grade deteriorated to 0.089 in fiscal 2008, compared with 0.095 in fiscal 2007, due to the depletion of higher grade reserves in the Kimberley reef section of the mine. The conventional mining sections of this reef mined in the channel edge areas and production was stopped during June 2008. Production from trackless areas will continue during the build-up phase of mining from the project South Reef areas.

Cash costs per ounce of gold were U.S.\$749 in fiscal 2008, compared with U.S.\$438 in fiscal 2007. This increase was attributable primarily to the lower production volumes and industry wide cost increases. It was also adversely

influenced by the movement out of

**Table of Contents**

Capital areas into production areas which resulted in costs previously incurred as capital expenditure, now being spent as operational costs.

Tons milled from Doornkop shaft were 605,000 in fiscal 2009, compared with 494,000 in fiscal 2008. Volumes increased, largely as a function of the increase in tons mined at the South Reef workings (96,000), as well as an increase in the stoping width at the Kimberley reef mining. Ounces produced were 42,150 in fiscal 2009, compared 44,038 in fiscal 2008.

The decrease in ounces sold was primarily due to the lower recovery grade. The recovered grade deteriorated to 0.070 in fiscal 2009, compared with 0.089 in fiscal 2008, mainly due to the decline in the grade mined from the Kimberley reef trackless mining sections. Production from trackless areas will continue during the build-up phase of mining from the South Reef project areas. Grade from the South Reef project was negatively affected by the large unavoidable volumes of development waste rock that were included in the reef stream which resulted in diluted head-grade. South Reef ore is now hoisted separately from waste which resulted in much improved recovered grades during the final two months of fiscal 2009.

Cash costs per ounce of gold were U.S.\$804 in fiscal 2009, compared with U.S.\$749 in fiscal 2008. The increase was mainly from labor, consumables and services cost. Labour cost increased due to an increase in labor to cater for the new South reef production levels and from annual wage increases. Consumable costs increased as a result of the South reef production build-up where additional metres were mined. In addition significant increases in power cost (38%) and company overhead cost (78%) were incurred, measured against fiscal 2008.

The hoisting capacity of the Doornkop shaft is 185,000 tons per month. The average tons milled in fiscal 2009 were 50,416 tons per month.

Assuming no additional resources are identified, at expected production levels, it is foreseen that the reported proven and probable ore reserve of 2.0 million tons (0.223 million ounces) will be sufficient for the Doornkop shaft to maintain production until approximately fiscal 2013. Any future changes to the assumptions upon which the reserves & resources are based, as well as any unforeseen events affecting production levels, could have a material effect on the expected period of future operations.

**Capital Expenditure:** Harmony incurred R395 million (U.S.\$43.9 million) in capital expenditure in fiscal 2009 at Doornkop, primarily for shaft equipping, supporting infrastructure, development and rolling stock for material and rock transport. The planned capital expenditure for fiscal 2010 is R283 million (US\$36.7 million), of which R62 million (\$8 million) is for on-going development, R12 million (US\$1.55 million) for other shaft capital and major equipment maintenance and R209 million (US\$27.1 million) for the South Reef project. South Reef project. Total project capital expenditure incurred amounts to R1,251 million (U.S.\$139.0 million) as of June 30, 2009.

**Elandsrand**

**Introduction:** Elandsrand is located near Carletonville on the Gauteng/North West province border in South Africa. The assets and associated liabilities were purchased during fiscal 2001 for approximately R1 billion (U.S.\$128.4 million) from AngloGold. Ore from the operation is treated at the Elandskraal plant.

**History:** Gold mining began at Elandsrand in 1978 following approval of the project in 1974 by Elandsrand Gold Mining Company. Two surface shafts and two adjoining sub-vertical shafts were sunk at Elandsrand. The sub-vertical shafts at Elandsrand, which accessed the deeper part of the VCR reef in the lease area, were completed in 1984. The deepening of the sub-vertical shafts to approximately 3,600 meters below surface has been completed by the previous owners after the deepening project was commissioned in 1991. Activities are currently focused on accessing and opening up areas of the new mine and on the development and construction of support infrastructure.

**Geology:** At Elandsrand we primarily exploit the Ventersdorp Contact Reef, or VCR, the Carbon Leader Reef, or CLR, with the Middelvlei Reef and the Mondeor Conglomerate Reef Zone as secondary targets. Only the VCR is economic to mine and has been mined at depths below surface between 1,600 and 2,800 meters with future production to take place up to 3,600 meters below surface at the Elandsrand operations. The VCR consists of a narrow (20 centimeters to 2 meters) tabular orebody of quartz pebble conglomerates hosting gold, with extreme lateral continuity.

**Table of Contents**

At the Elandsrand operation, the vertical separation between the VCR and CLR increases east to west from 900 meters to 1,300 meters as a result of the relative angle of the VCR unconformity surface to the regional stratigraphic strike and dip. The VCR strikes east-northeast and has a regional dip of 21 degrees to the south-southeast. Local variations in dip are largely due to the terrace-and-slope palaeotopography surface developed during VCR deposition.

**Mining Operations:** The Elandsrand mine is subject to the underground mining risks detailed in the Risk Factors section.

The Elandsrand mine, a mature mine with a declining production profile, has the challenge of a new mine being developed underneath the old mine. The implementation of Conops between August 2004 and February 2005 improved production. However, after an assessment done during fiscal 2007, Conops was stopped during February 2008. The operation is still hampered by the lack of flexibility, an issue that will be addressed by the full commissioning of the new mine. Due to the operating depths of the Elandsrand underground operations, seismicity and high rock stress are significant risks at the mine. We regularly review our mining strategy and management procedures at all of the mining operations in our efforts to mitigate these risks. The primary challenges facing the Elandsrand operations are seismicity, lack of mining flexibility, high cash costs, and the timely completion of the Elandsrand New Mine project by fiscal 2011.

During fiscal 2009, good progress continued to be made with the development and the build-up of production on the Elandsrand new mine project. The winder and headgear for the No 3 backfill shaft were installed and commissioned in May 2009 and sinking started. This shaft will supply feed and return chilled water to 109 and 113 levels. By year-end both 22 kV transformers had been installed and commissioned at 100 level, as had two of eight bulk air coolers. Commissioning of the second settler dam will begin once the dam wall and suction piping on 115 level has been completed. Progress was also made with the installation of the refrigeration plant pipes and the ventilation system. Commissioning of the pump station at 115 level, scheduled for the end of fiscal 2009, was delayed owing to leaks in the No 1 settler dam. Access development on 113 level was completed in February 2009.

The project is expected to be completed by fiscal 2011 and is expected to have a life of mine of 28 years. From the inception of the project through to the end of fiscal 2009, R940 million (U.S.\$104.0 million) has been expended. A further R160 million (U.S.\$20.7 million) has been budgeted to complete the project.

In fiscal 2009, our Elandsrand operations accounted for approximately 11% (9% in fiscal 2008 and 8% in fiscal 2007) of our total gold production.

**Safety:** During fiscal 2009, the safety record at the Elandsrand mine in terms of LTIFR, 12.67 per million hours worked, compared unfavorably with the group average of 9.35. Although this is a good improvement compared to fiscal 2008 (16.24), the benchmark has still not been achieved. During the second half of fiscal 2009, a LTIFR of less than 10 has been achieved consistently due to the implementation of the Qaphelangozi safety campaign, which was started during the period. Significant work was done to address the seismic risk described above and the FFIR (0.36) returned to a more consistent ratio with the group average of 0.21 for underground operations.

**Plants:** Commissioned in 1978, the Elandsrand Plant consist of milling in closed circuit with primary and secondary hydrocyclones, secondary ball milling in closed circuit with hydrocyclones, thickening and cyanide leaching in a CIP pump cell carousel circuit. The CIP was commissioned after an upgrade of the facility in 1999. Loaded carbon from the Elandsrand Plant is transported by road to the Central Plant at Virginia for elution, electro-winning and smelting to produce gold. Residues from the CIP are pumped either to a backfill plant or directly to the tailings facility. Ore from Elandsrand underground operations is delivered to the plant for treatment via conveyor belt after being hoisted from underground. Due to a high percentage of freegold, a gravity concentration circuit is used to extract a large percentage of the gold. The sludge from this concentrator is then transported by air to the Target Plant for extraction and smelting.

The following table sets forth processing capacity and average tons milled during fiscal 2009 for the plant:

Plant	Processing Capacity	Average Milled for the Fiscal Year June 30, 2009
-------	------------------------	---

	<b>(tons/month)</b>	<b>(tons/month)</b>
Elandsrand Plant	185,000 <sup>(1)</sup>	83,951
(1) Processing capacity will reach its optimal capacity upon completion of the Elandsrand New Mine Project.		

**Table of Contents**

In fiscal 2009, the Elandsrand Plant recovered approximately 96.6% of the gold contained in the ore delivered for processing.

**Production analysis:**

<b>Elandsrand Production</b>	<b>Fiscal Year Ended June 30,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
Tons ( 000)	1,061	981	1,117
Recovered grade (ounces/ton)	0.164	0.167	0.175
Gold produced (ounces)	174,321	164,215	195,412
Gold sold (ounces)	183,676	158,631	194,710
<b>Results of operations (\$)</b>			
Product sales ( 000)	157,956	132,699	124,347
Cash cost ( 000)	117,321	103,351	102,534
Cash profit ( 000)	40,635	29,348	21,813
<b>Cash costs</b>			
Per ounce of gold (\$)	660	652	535
<b>Capex ( 000) (\$)</b>	46,915	43,830	33,094

Tons milled from the Elandsrand shaft were 981,000 in fiscal 2008, compared with 1,117,000 in fiscal 2007, and ounces produced were 164,215 in fiscal 2008, compared with 195,412 in fiscal 2007. Volumes were negatively affected, mainly as a result of days lost to the shaft accident, namely 42, and the continued lack of flexibility in face length to deal with erratic face grades and seismicity. The recovered grade declined during fiscal 2008 as a result of higher channel widths on the Western section of the mine, as well as a delay in starting up some of the higher grade areas, due to it taking longer than expected to bring the environmental conditions within standard in deeper mining areas, after the shaft incident in October 2007.

The increase in labor rates and inflation were the main contributors to the increase in cash cost from U.S.\$535 per ounce in fiscal 2007 to U.S.\$652 per ounce in fiscal 2008. Costs per ounce have increased in fiscal 2008 by 22%, due primarily to the reduced ounces as a result of the shaft incident causing the mine to stand for 42 days. Increases in the costs of labor and supplies, especially steel and the effect of inflation on supply.

Tons milled from the Elandsrand shaft were 1,061,000 in fiscal 2009, compared with 981,000 in fiscal 2008. Ounces produced increased to 174,321 in fiscal 2009, compared with 164,215 in fiscal 2008 as a result of the increased volumes in production. Mining continues in the old, upper areas of the mine, while the new mine project is completed. Recovered grades decreased marginally during fiscal 2009, resulting in an average of 0.164 ounces per ton in fiscal 2009, compared to the average of 0.167 ounces per ton in fiscal 2008.

The increase in electricity costs, labor rates and inflation were the main contributors to the increase in cash cost from U.S.\$652 per ounce in fiscal 2008 to U.S.\$660 per ounce in fiscal 2009. Cash cost per ounce only increased by 1% due to increased ounces produced which neutralized the higher than normal increases in labor rates and electricity increases approved by the NERSA. Electricity rates are expected to continue rising above the norm until Eskom has developed additional power generating plants.

Elandsrand shaft has a hoisting capacity of 190,000 tons per month which will be utilized to its full capacity once the Elandsrand New Mine Project is complete and the production buildup reaches its maximum. The average tons milled in fiscal 2009 was 83,951 tons per month.

Assuming no additional reserves are identified, at expected production levels, it is foreseen that the reported proven and probable ore reserves of 41.5 million tons, or 7.5 million ounces will be sufficient for the Elandsrand shaft to maintain underground production until approximately calendar year 2037. Any future changes to the assumptions upon which the ore reserves are based, as well as any unforeseen events affecting production levels, could have a material effect on the expected period of future operations.

**Table of Contents**

**Capital Expenditure:** Harmony incurred R422.3 million (U.S.\$46.9 million) in capital expenditure at the Elandsrand operations in fiscal 2009 mainly for the sub shaft deepening project and ongoing development. An additional project, the Emergency Escape project was started during fiscal 2009, to improve the effectiveness of evacuation of people from underground during a shaft emergency.

Harmony budgeted R513 million (U.S.\$66.5 million), for capital expenditure at the Elandsrand operations in fiscal 2010, primarily for the sub-shaft deepening project and ongoing development expenditure.

***Masimong***

**Introduction:** Masimong is located in the Free State province, near Riebeeckstad. The Masimong complex comprises of an operating shaft 5 shaft and 4 shaft which, although closed, is used for ventilation, pumping and as a second outlet. Mining is conducted at depths ranging from 1,518 meters to 2,300 meters. Ore is treated at the Harmony One Plant.

**History:** Masimong is located in the Free State Goldfield on the south-western edge of the Witwatersrand Basin. The company purchased the Masimong complex (formerly know as Saaiplaas Shafts 4 and 5) during September 1998.

**Geology:** The operation, exploits the Basal Reef, which varies from a single pebble lag to channels on more than 2m thick. It is commonly overlain by shale, which thickens northwards. Masimong is also mining secondary reefs, most notably the Leader Reef (15-20m above Basal) and the B Reef (140m above Basal). The Leader Reef consists of multiple conglomerate units, separated by thin quartzitic zones, often totalling up to 4 metres thick. A selected mining cut on the most economic horizon is often undertaken. The B Reef is a highly channelised orebody. Within the channels, grades are excellent, but this falls away to nothing outside of the channels. Consequently, the operation has undertaken extensive exploration to locate these pay channels.

**Mining Operations:** The operations are subject to the underground mining risks detailed in the Risk Factors section. Due to the shallow to moderate depths of the underground operations, seismicity related problems are relatively infrequent. We regularly revisit our mining strategy and management procedures in connection with our efforts to mitigate risks of these problems. There is a risk of subterranean water and/or gas intersections in some areas of the mine. However, this risk is mitigated by active and continuous management and monitoring, which includes the drilling of boreholes in advance of faces. Where water and/or gas are indicated in the drilling, appropriate preventative action is taken.

The restructuring programme which began in fiscal 2008 at Masimong has taken this operation from the brink of closure to being among the lowest cost-per-kilogram-producers in the Harmony stable. This restructuring included management positions, as well as the termination of continuous operations. Masimong is now a steady-state operation, although further improvements in efficiencies are envisaged. Volumes improved by 10% in fiscal 2009. This was despite a fire in the B reef area and ventilation incidents relating to illegal mining activities. Damaged ventilation seals in the disused 4 shaft area caused major airflow problems at 5 shaft, particularly in the third and fourth quarters, and repairs are likely to be effected by December 2009. A booster fan will be installed between 4 and 5 shafts to partially address this ventilation issue.

A focus on training (People Transformation Project), in which all production crews received training on safety and health, business awareness, productivity improvement and team-building, presented positive results. Supervisory training, specifically aimed at front line supervisors, was also completed during the year.

An infrastructural upgrade involving tracks, locomotives, refrigeration, ventilation and compressors was recently begun and will continue in fiscal 2010. Steps were also taken to improve ore reserve management and quality mining on the Basal Reef stopes. Good grades achieved from the B reef further contributed to the overall improvement in grade.

In fiscal 2009, Masimong accounted for approximately 10% (6% in fiscal 2007 and fiscal 2008) of our total gold production.

**Safety:** The safety record at Masimong during fiscal 2009 in terms of LTIFR of 8.67 per million hours worked compared favorably with the group average of 9.35. The FFIR of 0.27 at Masimong doesn't compare favorably with the group average of 0.21 for underground operations. A Behavioral Safety program is in place to correct and reduce the human element in accidents.

**Plants:** The ore from these operations are sent to Harmony One Plant for processing. This plant, which processes underground ore, waste rock and various surface accumulations, was commissioned in 1986 and is a conventional CIP plant processing ore that has been milled by semi-autogenous grinding. Gold is recovered from the eluate solution using zinc precipitation and a precoat vacuum filter. The precipitate recovered from the filter is calcined and smelted to bullion.

**Table of Contents****Production analysis:**

	<b>Fiscal Year Ended June 30,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
<b>Masimong Shaft Complex</b>			
<b>Production</b>			
Tons ( 000)	981	892	1,074
Recovered grade (ounces/ton)	0.157	0.131	0.136
Gold produced (ounces)	154,034	116,424	146,575
Gold sold (ounces)	154,581	117,575	147,958
<b>Results of operations (\$)</b>			
Product sales ( 000)	135,025	96,147	94,534
Cash cost ( 000)	73,494	87,630	82,833
Cash profit ( 000)	61,531	8,517	11,701
<b>Cash costs</b>			
Per ounce of gold (\$)	476	756	543
<b>Capex ( 000) (\$)</b>	14,479	15,686	15,141

Tons milled from the Masimong shaft complex were 892,000 in fiscal 2008, compared with 1,074,000 in fiscal 2007. Ounces produced were 116,424 in fiscal 2008, compared with 146,575 in fiscal 2007. This is mainly attributable to the reduction in tons milled.

The drop in recovered grade by 0.005 ounces per ton from fiscal 2008 to fiscal 2007 can be attributed to a 3.7% drop in grade mined and a 0.72% drop in the MCF. Both these parameters were negatively influenced by the B Reef, as mining of B Reef in fiscal 2008 was significantly focused in the South Eastern portion of the 5 shaft lease area. This area is typically a highly channelized deposit with economic channels occurring at oblique to perpendicular angles to the normal depositional axis of the B Reef. These channels are generally small measured on the latitudinal axis and highly unpredictable, thus making mining and valuation extremely difficult.

Cash costs were U.S.\$87.6 million in fiscal 2008 compared with U.S.\$82.8 million in fiscal 2007 with cash costs per ounce at U.S.\$756 in fiscal 2008 compared with U.S.\$543 in fiscal 2007. This increase in cash cost is mainly attributable to increase in labor costs as a result of the annual wage increases.

Tons milled from the Masimong shaft complex were 981,000 in fiscal 2009, compared with 892,000 in fiscal 2008, and ounces produced were 154,034 in fiscal 2009, compared with 116,424 in fiscal 2008. Year on year gold production increased due to an increase in tons as well as the recovered grade.

Cash costs were U.S.\$73.5 million in fiscal 2009 compared with U.S.\$87.6 million in fiscal 2008 with cash costs per ounce at U.S.\$476 in fiscal 2009 compared with U.S. \$756 in fiscal 2008. This decrease in cash cost is mainly attributable to a 9.7% decrease in labor. Labor efficiencies contributed significantly to the improved performance. This was the first year that Masimong was fully off the Conops cycle.

The increase in recovered grade by 0.026 ounces per ton from fiscal 2008 to fiscal 2009 can be attributed to an increase in quality mining discipline. Most notable was the 6.9% increase in MCF and a 20% increase in face grade mined. This was achieved on the back of the Masimong transformation process initiated in April 2008. Furthermore the amount of B reef mining was decreased from 25% of total mining to 16% of total mining. This step reduced the high risk with regards to grade associated with the traditionally variable B Reef ore body.

Assuming no additional reserves are identified, at expected production levels, it is foreseen that the reported proven and probable ore reserves of 6.4 million tons (0.984 million ounces) will be sufficient for the Masimong shaft complex to maintain underground production until approximately fiscal 2021. Any future changes to the assumptions upon which the reserves are based, as well as any unforeseen events affecting production levels, could have a material effect on the expected period of future operations.

**Capital Expenditure:** Masimong incurred approximately R130.3 million (U.S.\$14.5 million) in capital expenditures in fiscal 2009, primarily on refrigeration infrastructure. We have budgeted a total of R238 million (\$30.8 million) for capital expenditures at Masimong in fiscal 2010, primarily for upgrading of the rail bound equipment as well as for back up generators for Masimong Complex.



**Table of Contents****Virginia operations**

**Introduction:** The Virginia operations are located in the Free State province, near Virginia and Welkom. The Virginia operations consist of the original Harmony mines, the Unisel mine, Brand shafts 1 and 3 (mined from Brand 1 shaft). Mining is conducted at these operations at depths ranging from 682 meters to 2,042 meters. Ore is treated at the Central Plant and Harmony One Plant.

**History:** Our operations in the Free State began with the Harmony mine, which is an amalgamation of the Harmony, Virginia and Merriespruit mines. Beginning in 1996, we began purchasing neighboring mine shafts. The Unisel mine was purchased in September 1996, the Saaiplaas mine Shafts 2 and 3 were purchased in April 1997, the Brand mine Shafts 1, 2, 3 and 5 were purchased in May 1998.

**Geology:** These operations are located in the Free State Goldfield on the south-western edge of the Witwatersrand Basin. The basin, situated on the Kaapvaal Craton, has been filled by a 6-kilometre 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 vertical displacement of about 1,500m in the region of Bambanani, as well as a lateral shift of 4km. This lateral shift can allow a reconstruction of the orebodies of Unisel to the west of the De Bron and Merriespruit to the east.

A number of other major faults (Stuirmanspan, Dagbreek, Arrarat and Eureka) lie parallel to the De Bron Fault.

Unisel and Brand are situated to the west of the De Bron. Dips are mostly towards the east, averaging 30 degrees but become steeper approaching the De Bron Fault. To the east of the fault lie Merriespruit 1 and 3 and Harmony 2 mines. These 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 lies the uplifted horst block of West Rand Group sediments with no reef preserved. 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 Ore 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. It varies from a single pebble lag to channels on more than 2m thick. It is commonly overlain by shale, which thickens northwards.

The second major reef is the Leader Reef, located 15-20m above the Basal Reef. This is mostly mined at the shafts to the south Unisel, Harmony 2, Merriespruit 1 and Merriespruit 3. 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 4 metres thick. A selected mining cut on the most economic horizon is often undertaken.

The A Reef is a highly channelised reef. This is currently only mined at Harmony 2 and Brand. It consists of multiple conglomerate bands of up to 4m thick and a selected mining cut is usually required to optimise the orebody.

**Mining Operations:** The operations are subject to the underground mining risks detailed in the Risk Factors section. Due to the shallow to moderate depths of the underground operations, seismicity related problems are relatively infrequent with the exception of Unisel and Harmony shafts and Merriespruit 1 shaft pillar, where these problems receive constant attention. We regularly revisit our mining strategy and management procedures in connection with our efforts to mitigate risks of these problems. There is a risk of subterranean water locally at Merriespruit 1, referred to as water pillar area, and/or gas intersections in some areas of the mine. However, this risk is mitigated by active and continuous management and monitoring, which includes the drilling of boreholes in advance of faces. Where water and/or gas are indicated in the drilling, appropriate preventative action is taken. The principal challenges at the operations of achieving optimal volumes and grades of ore production are addressed by stringent ore reserve management.

The inner shaft pillar at Merriespruit 1 is being successfully mined. Approximately 70% of the pillar is mined out.

Merriespruit 3 shaft improved its haulage and tramming conditions during fiscal 2007 and 2008, allowing the shaft to improve its safety and tonnage profile. Equipping of basal reef on 12 level took place during 2008 and limited mining of the basal reef will resume for the first time since 2002.



**Table of Contents**

Harmony 2 shaft re-started the H2 shaft pillar Leader reef exploration program in 2005, following the improvement in the gold price. This ground has been successfully mined and the extension of the pay shoot towards H3 shaft is currently being explored. The evaluation and quantification of the A reef vent project block were completed in 2007 (drilling etc.) and development started in 2008. Basal reef pillars belonging to Merriespruit 1 are being accessed through the shaft. The first pillar is currently being mined and equipping towards further pillars is ongoing.

Brand 1 shaft is being utilized to mine the Brand 1 and 3 ore bodies. Major effort has been done to improve the infrastructure of the shaft, which has allowed the shaft to improve its tonnage handling to the current levels of some 44,000t per month. A loop is currently being developed in the 40 level haulage to allow access to the A reef in the Brand 3 area. This will allow improved servicing of the area and a 2.5 kilometer reduction in tramming distances. Re-equipping on 44 level is in progress to open up a Basal Reef pillar located on the Saint Helena boundary pillar. This block of ground will come into production during the course of fiscal 2010.

Unisel mining is scattered to the south of the shaft and in the decline area towards the east of the shaft. Mining also takes place west in the Tarka block. Development is targeted towards Basal and Leader Reef channels which cut the lease area in a west to east direction. Prospecting for A and B Reefs is in progress.

The Brand 2 and Brand 5 Shafts are currently on care and maintenance whilst Brand 5 serves as a major pumping shaft for the President Steyn, Brand, and Bambanani mining areas.

Harmony 3 shaft is currently used only as a service shaft for pumping although some of its reserves are mined through the adjacent Harmony 2 shaft.

In fiscal 2009, Virginia operations accounted for approximately 17% (13% in fiscal 2008 and 11% in 2007) of Harmony's total gold production.

**Safety:** The safety record during fiscal 2009 in terms of LTIFR of 12.38 per million hours worked compared unfavorably to the group average of 9.35. The FFIR of 0.06 compared favorably to the group average of 0.21 for underground operations.

**Plants:** There are two metallurgical plants at the Free State operations, namely Central and Saaiplaas plants. A third plant, Virginia plant, was closed in fiscal 2005 and clean-up operations implemented and, during fiscal 2008, a project was initiated on the demolition of the plant which will continue through into fiscal 2010. The Central plant was commissioned in 1986 and employs CIP/CIL hybrid technology. It is currently dedicated to the treatment of both underground ore and waste rock. The Saaiplaas plant, commissioned in the late 1950s, has been converted from the zinc precipitation filter process to the CIL. During 2007, the ROM mills were de-commissioned and the plant started treating slime from Dam 22 and Brand A tailings storage facilities. The plant was officially re-named the Phoenix plant and currently processes reclaimed slime at 6 million tons per annum.

The following table sets forth processing capacity and average tons milled during fiscal 2009 for each of the plants:

<b>Plant</b>	<b>Processing Capacity (tons/month)</b>	<b>Average Milled for the Fiscal Year Ended June 30, 2009 (tons/month)</b>
Central	168,000	161,768
Phoenix	500,000	480,262

**Table of Contents**

In fiscal 2009, Central plant recovered approximately 93.8% of the gold contained in the ore delivered for processing and Phoenix plant, approximately 43.1%.

	<b>Fiscal Year Ended June 30,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
<b>Virginia operations</b>			
<b>Production</b>			
Tons ( 000)	2,493	2,349	2,507
Recovered grade (ounces/ton)	0.104	0.106	0.106
Gold produced (ounces)	258,170	247,820	264,890
Gold sold (ounces)	259,070	250,324	266,948
<b>Results of operations (\$)</b>			
Product sales ( 000)	225,897	204,807	171,297
Cash cost ( 000)	165,274	180,133	145,739
Cash profit ( 000)	60,623	24,674	25,558
<b>Cash costs</b>			
Per ounce of gold (\$)	638	726	528
<b>Capex ( 000) (\$)</b>	22,133	20,868	18,860

Tons milled from the Virginia operations decreased from 2,507,000 in fiscal 2007 to 2,349,000 in fiscal 2008. A fire at Merriespruit 1 affected production in the first quarter of fiscal 2008 and also adversely affected the flexibility at this operation. Power outages also affected production negatively in the latter part of the year. Industrial action by labor unions led to loss of production shifts. Stopping restrictions as recommended by rock engineers affected production in the pillar areas.

Lack of availability of replacement ground at Merriespruit 3 also impacted negatively on the volumes for fiscal 2008.

Harmony 2 shaft was affected by power shortages during the third quarter of fiscal 2008 resulting in a number of lost production shifts. Coupled with this was an incident at the substation at Harmony 2 Shaft which led to a loss of two shifts in March 2008. Seismicity in high grade basal pillars leading to a drop in the face grade and production stoppages during fiscal 2008.

Ounces produced were 247,820 in fiscal 2008, compared with 264,890 in fiscal 2007. The decrease in ounces was primarily due to a decrease in tons milled. The grade for fiscal 2008 of 0.106 ounces per ton was similar to the recovered grade for fiscal 2007.

Cash costs were U.S.\$180.1 million in fiscal 2008, compared with U.S.\$145.7 million in fiscal 2007. This can be partly attributed to an increase in labor cost as well as costs at Merriespruit 1 for additional support required in the shaft pillar area and the cost related to the fire in the first quarter. Cash costs per ounce were U.S.\$726 in fiscal 2008, compared with U.S.\$528 in fiscal 2007. This increase was attributable primarily to increased labor rates and inflationary escalations as well as the decrease in ounces produced.

The upgrading of the old infrastructure at Brand 3 and Unisel during fiscal 2008 led to the increase in their cash cost. Labor in fiscal 2008 on Brand 3 increased due to the inclusion of equipping crews to assist with the opening up of old areas, which were previously stopped. This led to the increase in the tons and an increase in plant costs. The upgrading of rails and the loco conversions on Unisel and Brand 3, to comply to new railbound specifications, also contributed to the higher cash costs in fiscal 2008.

Tons milled from the Virginia operations increased to 2,493,000 in fiscal 2009, compared with 2,349,000 in fiscal 2008. This is partially attributable to the fire in the Basal pillar as well as power shortages in 2008.

Ounces produced were 258,170 in fiscal 2009, compared with 247,820 in fiscal 2008. The increase in ounces produced was as a result of improved volumes.

Cash costs were U.S.\$165.3 million in fiscal 2009, compared with U.S.\$180.1 million in fiscal 2008. Cash costs per ounce was U.S.\$638 in fiscal 2009, compared with U.S.\$726 in fiscal 2008. This decrease was attributable primarily to higher tons produced resulting in higher ounces as well as a decrease in cash costs.

Assuming no additional reserves are identified, at expected production levels, it is foreseen that the reported proven and probable ore reserves of 10.4 million tons (1.3 million ounces) will be sufficient for the Virginia operations to maintain production until approximately 2015, but at a reduced rate from 2011 as some shafts are closing. However, any future changes to the assumptions upon which the reserves are based, as well as any unforeseen events affecting production levels, could have a material effect on the expected period of the future operations.

## **Table of Contents**

**Capital Expenditure:** Virginia incurred approximately R199 million (U.S.\$22.1 million) in capital expenditures in fiscal 2009, principally for ongoing capital development. We have budgeted R162 million (U.S.\$20.9 million) for ongoing capital development in fiscal 2010, as well as R30 million (U.S.\$3.9 million) for maintaining/upgrading shaft infrastructure.

### **Target**

**Introduction:** We acquired the Target mine when Avgold became a wholly owned subsidiary in fiscal 2004. Target is situated near the town of Allanridge in the Free State Province, some 270 kilometers southwest of Johannesburg. Located at approximately latitude 28 (LOGO) 00 S and longitude 26 (LOGO) 30 E on the northern limit of the Welkom Goldfields, the site is accessed via the R30 motorway situated between the towns of Bothaville and Welkom.

**History:** The Target Operations area was initially explored through surface drilling in the late 1980s with further exploration being undertaken from a 5.6 kilometers long decline, commenced in 1995, driven from 203L at Lorraine No. 1 Shaft. A positive feasibility study into the development of a 105 ktpm operation was produced in May 1998 resulting in the decision to develop the Target mine. A detailed mine design was produced in 2000 and the mine officially opened in May 2002. Upon closure of the Lorraine mine in August 1998, the Lorraine No. 1 and No. 2 Shafts were transferred to the Target mine, becoming Target No. 1 and No. 2 Shafts, respectively. No 5 Shaft being the up-cast Ventilation Shaft.

**Geology:** The gold mineralization currently exploited by Target mine is contained within a succession of Elsburg and Dreyerskuil quartz pebble conglomerate reefs hosted by the Van Heeverrust and Dreyerskuil Members of the Eldorado Formation, respectively. Additional mineral resources have been delineated in the Big Pebble Reefs of the Kimberley Formation but these are not planned to be exploited in the current life of mine plan.

The majority of the mineral reserves at Target mine are contained within the Eldorado fan, a structure with dimensions of some 135 meters vertically, 450 meters down-dip and 500 meters along strike. The Eldorado fan is connected to the subsidiary Zuurbron fan, located between the Target mine and Lorraine, by a thinner and lower grade sequence of Elsburg reefs termed the Interfan area. To the north of the Eldorado fan, a number of fans have been intersected by surface drilling of which the Siberia and Mariasdal fans are the most significant. These fans are subject to ongoing technical studies and do not form part of the current Target mine life of mine mineral reserve.

A number of faults that displace the reefs of the Target mine have been identified of which the most prominent are the north-south trending Eldorado fault and the east-west trending Dam and Blast faults. The Eldorado uplifts the more distal portions of the Elsburg and Dreyerskuil Reefs while the Blast fault forms the northern border of the Target mine.

Target North is sub-divided into the Paradise, Siberia and Mariasdal areas by the east-west trending Siberia and Mariasdal faults. To the north of the Siberia fault, the Eldorado fault continues trending more to the northwest and an additional north-south trending fault, the Twin fault has uplifted the distal portions of the reefs. North of the Maraisdal fault, the reef horizons are at a depth greater than 2,500 meters below surface. Resources have been delineated on strike up to 15 kilometers north of the Target mine.

Approximately 40 kilometers north of Target mine, surface boreholes have intersected gold bearing reefs in the Oribi area close to the town of Bothaville. Resources have been delineated at Oribi on the VCR and Elsburg at depths of approximately 2,750 meters below surface.

**Table of Contents**

**Mining operations:** Target is subject to the risks associated with underground mining detailed in the Risk Factors section.

Mining operations comprise one primary underground mine commissioned in May 2002, making use of information systems and mechanization, combined with process-driven organizational design that relies on a multi-skilled workforce. The majority of the production is derived from mechanized mining; however, conventional stoping is still employed primarily to de-stress areas ahead of the mechanized mining.

Volumes and grade were negatively affected in the first quarter of fiscal 2009 following a fall of ground in a massive high-grade stope that claimed the life of a load haul dump operator, and put this stope out of production for 18 days. Volumes were further affected by a lack of massive stope availability. Through better planning, evaluation and dedicated efforts to improve development and blasting, the process of opening up the massive stopes improved during the course of fiscal 2009. Two new massive stopes were brought into production in December 2008 and another one in March 2009, bringing the total number of massive stopes in production to four. Volumes mined increased as a result, rising by 4% year-on-year. The absence of available worked-out massive stopes in the first quarter of fiscal 2009 also had an impact on waste packing, and waste had to be tipped with reef during that period. But, concerted efforts, including back-analysis of the orebody, resulted in improved planning and the implementation of more effective control systems. Poor ventilation conditions prompted a decision to suspend development on Block 3. The focus was moved to Block 4, which is quicker to access with less development. This change also resulted in reduced capital requirements, and provided additional time to address ventilation needs. Block 3 remains an important future mining area and development will recommence on completion of the orebody re-assessment process in December 2009.

Target also underwent significant management and operational restructuring in fiscal 2009. Mine infrastructure, including the trackless fleet, ventilation and ore transport systems and water reticulation, which had been neglected in the past, was upgraded. The trackless fleet upgrade (at a total cost of R138 million (US\$15 million)) is a three-year programme which will continue until fiscal 2010. The infrastructural upgrade programme enabled the mine to maintain its current levels of production by June 30, 2009 and the benefits of this upgrade will be more fully felt in fiscal 2010. A 15-point turnaround plan is being implemented at Target. In particular, a great deal of attention is being paid to development and improving flexibility. Some of the improvements effected during fiscal 2009 started to bear results by year end.

Following on from a revision of the Mineral Resource, the longer term planning of Target Mine is in the process of being re-evaluated. Production going forward is expected to be a steady state of 60,000 tonnes per month for the next two years after which we expect to ramp up to the 75,000 tonnes per month thereafter.

In fiscal 2009, Target's operations accounted for 6% of our total gold production, compared to 6% in fiscal 2007 and 4% in 2008.

**Safety:** Safety performance was disappointing, although significant management effort in the second half of fiscal 2009 yielded improvement. Two fatalities during the year undermined the mine's safety track record. No falls of ground were recorded in the second half of the year, which is a considerable achievement as falls of ground had plagued the mine for the prior two years. The safety statistics at Target during fiscal 2009 in terms of LTIFR of 9.66 per million hours worked is higher than the group average of 9.35 while the FFIR of 0.4 is also higher than the group average of 0.21 and higher than the previous year.

Safety at the operation remains the number one priority and received constant and high-level attention. Problem areas are identified and the necessary actions steps are taken to address these areas.

**Plants:** Target Plant was commissioned in November 2001 and currently treats both underground ore and surface sources, which include both waste rock dump and plant clean up material. The process route comprise of a closed circuit SAG mill as well as a closed circuit ROM mill. Both these mills are in closed circuit with hydro-cyclones. The milling circuit is followed by thickening, cyanide leaching, CIP adsorption, elution, electro-winning, smelting and tailings disposal. Both the milling circuits are incorporated in the gravity concentration circuit and the concentrates from this circuit are processed via intensive cyanidation and electro-winning.

The ROM mill was commissioned in November 2008 and it was installed in order to reduce the steel ball consumption on the plant. The initial objective was to save R 1.2 million (U.S.\$0.13 million) on grinding media

monthly, but when a review of the project was done in June 2009 it was found that the actual saving amounted to R1.4 million (U.S.\$0.16 million) per month.

**Table of Contents**

The following table sets forth processing capacity and average tons milled during fiscal 2009:

<b>Plant</b>	<b>Processing Capacity (tons/month)</b>	<b>Average Milled For the Fiscal Year Ended June 30, 2009 (tons/month)</b>
Target Plant	105,000	103,834

In fiscal 2009, the Target Plant recovered approximately 95.2% of the gold contained in the ore delivered for processing.

**Production analysis:**

	<b>Fiscal Year Ended June 30,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
<b>Target Production</b>			
Tons ( 000)	710	686	904
Recovered grade (ounces/ton)	0.123	0.116	0.158
Gold produced (ounces)	87,225	79,602	142,653
Gold sold (ounces)	87,611	85,006	142,433
<b>Results of operations (\$)</b>			
Product sales ( 000)	76,435	69,469	91,228
Cash cost ( 000)	59,599	51,463	52,730
Cash profit ( 000)	16,836	18,006	38,498
<b>Cash costs</b>			
Per ounce of gold (\$)	645	716	403
<b>Capex ( 000) (\$)</b>	37,994	35,307	16,745

Tons milled from the Target shaft decreased from 904,000 in fiscal 2007 to 686,000 in fiscal 2008. The main issues contributing to the drop in production include trackless fleet availability, flooding of mining block, fragmentation problems in massive stopes and lack of face length especially for massive stopes. Problems encountered in the massive stopes were the main contributor to grade and volume decreases.

Ounces produced were 79,602 in fiscal 2008, compared with 142,653 in fiscal 2007. The decrease in ounces sold was negatively influenced by the lower grade. The recovery grade decreased from 0.158 ounces per ton in fiscal 2007 to 0.116 ounces per ton in fiscal 2008.

Cash costs for Target were U.S.\$51.5 million in fiscal 2008, compared with U.S.\$52.7 million in fiscal 2007. This decrease was primarily attributed to lower production levels. Cash costs per ounce were U.S.\$716 in fiscal 2008, compared with U.S.\$403 in fiscal 2007. This increase was attributable primarily to a lower recovery grade.

Tons milled from the Target shaft increased from 686,000 in fiscal 2008 to 710,000 in fiscal 2009. Target experienced a number of issues impacting on production. These include:

- infrastructural problems with the belts, fridge plants and other environmental infrastructure, resulting in higher face temperatures and lower efficiencies.

- water handling.

- low availability of massive stopes.

The conveyor belt system was extensively rehabilitated during the course of fiscal 2009. An executive audit was done by Good Year which formed the basis of the rehabilitation plan that was implemented. The belt availability and reliability has increased. The crusher plant, which feeds the belts, is in the process of rehabilitation.

Electrical reticulation to the mining areas is currently being updated with substations being reviewed for compliance purposes. The process is expected to be completed by December 2009.



**Table of Contents**

During 2009 a campaign was started to update the reticulation, clean out the dams and getting the dewatering equipment to a standard. In addition to updating the reticulation in the mining areas, flow meters and dual pressure reducing valve systems are being installed to better understand, measure and manage the water usage in the actual workplaces. This campaign is currently in progress and is expected to be completed by September 2009.

Availability of massive stopes has been improved with increased focus on planning and development.

Tons milled increased from 686,000 in fiscal 2008 to 710,000 tons in fiscal 2009. This was primarily due to the new massive stopes being brought into production during fiscal 2009. Ounces produced were 87,225 in fiscal 2009, compared with 79,602 in fiscal 2008. The increase in ounces produced was due to higher milled tonnages and improved recovered grade.

The recovery grade increased marginally from 0.116 in fiscal 2008 to 0.123 in fiscal 2009. A major review of the geological modeling and evaluation of Target's Mineral Resource is in progress and has resulted in a greater understanding of the available ore-body and improved valuation. This process will be completed in December 2009.

Cash costs for Target was U.S.\$59.6 million in fiscal 2009, compared with U.S.\$51.5 million in fiscal 2008. This increase was primarily attributed to increased tonnages produced, increase in total employees costed and inflationary cost increases. Cash costs per ounce were U.S.\$645 in fiscal 2009, compared with U.S.\$716 in fiscal 2008. This reduction was due to higher gold production.

**Capital Expenditure:** Target incurred approximately R342 million (U.S.\$38 million) in capital expenditures in fiscal 2009, principally for on-going underground development, access development to Block 3, continuing replacement of the underground vehicle fleet and infrastructural rehabilitation.

Development of the new decline to access the Block 3 area, which represents a significant portion of our future Reserves, was paused in December 2008 due to infrastructural constraints. Continuation of the Block 3 project is anticipated in January 2010. For fiscal 2010, we have budgeted R257 million (U.S.\$33.3 million) for capital expenditure, primarily for ongoing development.

***Evander Operations***

**Introduction:** The Evander operations are located in the province of Mpumalanga in South Africa and comprise of an amalgamation of the former Kinross, Bracken, Leslie and Winkelhaak mines into a mining right of 36,898 hectares and additional adjacent Prospecting Rights comprising 19,933 hectares. Mining at the Evander operations is conducted at depths ranging from 300 meters to 2,300 meters.

**History:** Gold mining in the Evander Basin began in 1955. Eventually, four mining operations were established at Evander. In 1996, as a result of the depletion of ore reserves, all four mining areas were merged to form Evander Gold Mines. In August 1998, Harmony acquired Evander as a wholly-owned subsidiary.

**Geology:** The area covered by Evander's mining authorization and mineral rights is situated within the Evander basin. The Evander Basin is a tectonically preserved sub-basin outside the main Witwatersrand Basin and forms an asymmetric syncline, plunging to the north-east. It is structurally complex with a series of east-north-east striking normal faults. At the south-east margin of the basin, vertically to locally overturned reef is present. The only economic reef horizon exploited in the Evander Basin is the Kimberley Reef. The Intermediate Reef is generally poorly mineralised, except where it erodes the sub-cropping Kimberley Reef in the south and west of the basin.

**Mining Operations:** The Evander operations are primarily engaged in underground mining but a limited amount of surface material, containing gold, from the surface cleanup operations also processed. These operations are subject to the underground mining risks detailed in the Risk Factors section. Due to the shallow to moderate depths of the Evander underground operations, seismicity and high rock stress related problems are relatively infrequent. There is a risk of subterranean water and/or gas intersections in some areas of the mine. However, this risk is mitigated by active and continuous management and monitoring, which includes the drilling of boreholes in advance of faces. Where water and/or gas is indicated in the drilling, appropriate preventative action is taken. In fiscal 2004, an agreement was reached with the unions for the implementation of Conops at Evander. Downsizing and restructuring of the 7 Shaft area resulted in labor surpluses and it was also decided to stop Conops in fiscal 2008 at Evander 5 shaft. Parts of Evander 8 shaft continue to work on Conops.

**Table of Contents**

Production at the Evander operations was disappointing in fiscal 2009. Production remained constrained by environmental conditions at Evander 8 shaft for most of the year. The raise borehole to supply cool air to 24 level from 17 level (thus improving working conditions), was completed later than planned (in the third quarter of fiscal 2009) and is expected to result in improved production going forward. Flooding of the pump chamber at Evander 2 resulted in a two-week production delay at both Evander 2 and 5.

At Evander 2 in particular, high waste dilution, lower grade and logistical constraints further hampered production. While actions have been implemented to improve the underperformance at these shafts, restructuring may be unavoidable. Having undergone operational restructuring in fiscal 2008, performance at Evander 7 was much improved for most of the year. Volumes and grades increased and the life-of-mine was extended by an additional 12 months. However, lower volumes from the vamping section and a stope panel that could not be mined for safety reasons, resulted in lower production in the fourth quarter of 2009. As a result of these factors, volumes decreased by 14%. This, together with poor performance in the higher grade areas of Evander 8 and 2 shafts, as well as under-performance on the MCF at Evander 2 and 5 shafts, resulted in a decrease in gold production of 18%.

Surface material from the footprint of the old Leslie Plant and from waste rock dumps was also processed during fiscal 2009. The tons treated produced 4,147 ounces of gold and generated additional revenue of U.S.\$3.6 million. Additional production from surface sources is planned for fiscal 2010.

Potential exists at several areas in Evander:

Evander South

Project currently at an exploration stage following the prefeasibility study.

Surface exploration drilling for phase one is progressing as planned and is intended to improve the quality of and confidence in the geological model and resource estimates.

Shaft 7 portion of the 2010 Payshoot

Project at exploration stage following the geological study.

Underground development, to be used as an underground drilling platform, advanced 233 meters (or 19%). This is intended for investigation of the 7 Shaft flank of the postulated 2010 payshoot.

Feasibility study to follow, pending confirmation of the ore resource in this area.

Twistdraai and Shaft 6

Joint Venture with the African Precious Minerals ( **APM** ) was formed to explore these two target areas.

APM will earn in the 52% equity stake upon completion of the full bankable feasibility study for each area.

The geological studies are under way and drilling will commence in fiscal 2010.

Rolspruit

This is a future mining area on the downdip extension of the 8 shaft payshoot.

Synergies with the current 8 Shaft deepening are being considered.

**Table of Contents**

## Poplar

Surface exploration drilling is required to bring this project into the full bankable feasibility study.

The surface exploration drilling at Evander South is likely to produce information that will enhance the Poplar geological interpretation.

In fiscal 2009, the Evander operations accounted for approximately 12% (12% in fiscal 2008 and 10% in fiscal 2007) of Harmony's total gold production.

**Safety:** Evander 2 and 5 shafts won the Safety Achievement Flag presented by the Mine Health and Safety Council for 2008. Evander 8 shaft achieved 1.5 million fatality-free shifts during the year, while both the Winkelhaak Plant and the Evander operations as a whole achieved one million fatality-free shifts. Evander 7 shaft was accident-free for nine months. Regrettably, however, there were two fatalities in one incident at the Evander operations during fiscal 2009 as compared to one in fiscal 2008. The FFIR per million hours worked was 0.17, a deterioration on the performance of 0.07 in fiscal 2008, while the LTIFR of 10.16 was a substantial improvement on the 16.64 reported in fiscal 2008. Behaviour-based safety initiatives have been introduced at Evander to further improve safety performance.

**Plants:** Evander has one active processing plant, the Kinross-Winkelhaak plant, which is operated as two geographically distinct sections. Ore from Evander 7 and 8 is hoisted directly to and treated at the Kinross plant, which is a hybrid CIP/CIL plant. All of the ore from Shafts 2 and 5 is milled and thickened at the Winkelhaak plant, and the slurry is pumped to the Kinross plant for further processing.

The following table sets forth processing capacity and average tons milled during fiscal 2009 for the operating plant:

Plant	Processing Capacity (tons/month)	Average Milled for the Fiscal Year Ended June 30, 2009 (tons/month)
Kinross-Winkelhaak	200,000	99,083

In fiscal 2009, the plant at Evander operations recovered approximately 96.4 % of the gold contained in the ore delivered for processing.

**Production analysis:**

	Fiscal Year Ended June 30,		
	2009	2008	2007
<b>Evander operations</b>			
<b>Production</b>			
Tons ( '000)	1,241	1,447	1,667
Recovered grade (ounces/ton)	0.153	0.160	0.141
Gold produced (ounces)	190,075	231,799	235,857
Gold sold (ounces)	195,668	240,037	235,443
<b>Results of operations (\$)</b>			
Product sales ( '000)	168,180	192,978	151,039
Cash cost ( '000)	110,869	125,995	113,348
Cash profit ( '000)	57,311	66,983	37,691
<b>Cash costs</b>			
Per ounce of gold (\$)	572	526	495
<b>Capex ( '000) (\$)</b>	23,352	33,388	28,389

Tons milled at the Evander operations were 1,447,000 in fiscal 2008, compared with 1,667,000 in fiscal 2007, and ounces produced were 231,799 in fiscal 2008, compared with 235,857 in fiscal 2007. The decrease in tons milled is partially attributable to the reduction of the development at Evander 7 in November 2007 and the closure of the pillars in the old mine in February 2008. At Evander 8, tons milled decreased by 113,000 tons due to poorer environmental

conditions in the decline area which affected mining from this area. The shaft is currently busy with a raise-borehole from 17 Level to 24 Level which will alleviate the medium term ventilation constraints. Recovered grade was 0.160 in fiscal 2008, compared with 0.141 in fiscal 2007. The higher recovered grade is

**Table of Contents**

partially due to an improvement of the MCF at Evander 5 from 70.5% in 2007 to 71.7% in 2008, as well as mining in higher grade areas at the shaft. At Evander 7 and 8, the closure of the more marginal pillar sections and focusing on the higher grade decline sections also contributed to the higher recovered grade.

The increase in cash costs from U.S.\$495 per ounce in fiscal 2007 to U.S.\$526 per ounce in fiscal 2008 was attributable primarily due to the increase in cash costs from U.S.\$113.3 million in fiscal 2007 to U.S.\$125.9 million in fiscal 2008 as result of labor increases and inflation on consumables and electricity increases in excess of current inflation and lower ounces produced.

Tons milled at the Evander operations were 1,241,000 in fiscal 2009, compared with 1,447,000 in fiscal 2008, and ounces produced were 190,075 in fiscal 2009, compared with 231,799 in fiscal 2008. The decrease in tons milled is partially attributable to the reduction of the development at Evander 7 in November 2007 and the closure of the pillar section in February 2008. At Evander 8, tons milled decreased by 56,000 tons due to unfavorable environmental conditions in the decline area that affected mining from this area. The shaft completed a raise-borehole from 17 Level to 24 Level during fiscal 2009 that enables chilled ventilation to reach 24 level on the decline directly which alleviated the medium term ventilation constraints. Recovered grade was 0.153 ounces per ton in fiscal 2009, compared with 0.160 ounces per ton in fiscal 2008. The lower recovered grade is partially due to deterioration in the MCF at Evander 5 from 71% in 2008 to 61% in 2009.

The increase in cash costs per ounce from U.S.\$526 per ounce in fiscal 2008 to U.S.\$572 per ounce in fiscal 2009 was attributable primarily to the decrease in gold ounces produced in fiscal 2009 compared to fiscal 2008 due to the successful restructuring and downscaling at Evander 7 that was implemented in January 2008. Cash costs decreased from U.S.\$125.9 million to U.S.\$110.9, primarily as a result of the closure of Evander 7.

Assuming no additional reserves are identified, at expected production levels, it is foreseen that the reported proven and probable ore reserves of 11.0 million tons (1.9 million ounces) (excluding the below infrastructure reserves) will be sufficient for the Evander operations to maintain production until approximately fiscal 2027 at Evander 8, as the other shafts will have reached end of life prior to then. Any future changes to the assumptions upon which the reserves are based, as well as any unforeseen events affecting production levels, could have a material effect on the expected period of future operations.

**Capital Expenditure:** Harmony incurred approximately R210.1 million (\$23 million) in capital expenditures at the Evander operations in fiscal 2009. The expenditure was primarily for ongoing development, abnormal expenditure for the upgrading of the infrastructures as well as phase 6 of the No 2 Decline at Evander 8 and 2 ventilation bore holes. Harmony budgeted R181 million (\$23.4 million) for capital expenditures in fiscal 2010 primarily for ongoing development and the upgrading of major equipment. Included is also an amount for a Ventilation project at Evander 8 and a feasibility study for phase 7 of the No 2 decline project.

**Other Underground**

**Introduction:** Other Underground consists of several shafts, including Joel and St Helena. As the most significant portion of the results from this segment is attributable to Joel, we have only disclosed the relevant information for Joel. Joel mine, which is located in the Free State, near the town of Theunissen, on the south-western edge of the Witwatersrand Basin, comprises two shafts. Ore mined is transported to Central Plant some 38 kilometres away for processing, although the Joel Plant is in the process of being recommissioned and should come into operation in November 2009.

**History:** Joel was purchased from a subsidiary of AngloGold at the same time as the rest of the Freegold assets in January 2002.

**Geology:** The mine is located in the Free State Goldfield, which is on the southwestern edge of the Witwatersrand basin. Joel is located 30 kilometers south of Welkom and is mining the shallow flat-dipping Beatrix/V55 Reef.

**Mining operations:** These operations are subject to the underground mining risks detailed in the Risk Factors section.

Scattered mining takes place on the Beatrix Reef, down to a depth of some 1,400 metres. Upgrading of the infrastructure at North Shaft is currently in progress.

Joel was beset by a series of operational problems that were consistently addressed during fiscal 2009 and overall performance improved substantially year-on-year. The effects of the seismic event in the fourth quarter of fiscal 2008, that closed access to the four highest grade panels at the mine, continued into fiscal 2009. Access to these panels was

re-established in November 2008, and extra vamping was undertaken to compensate for the loss of volumes. Winder, loading and water problems were experienced during fiscal

**Table of Contents**

2009, hampering production. The north shaft winder rehabilitation programme was completed in the third quarter of 2009, and it is expected that winder stoppages will be reduced in the future. The replacement of shaft guide ropes and the installation of pipes from 137 to 145 level to clean the north shaft bottom further exacerbated these production constraints. Lock-up tons, as a result of past winder problems, continued to be cleared. Water still hampered development at 129 level where a system of dykes had to be negotiated and structures were put in place to ensure cover drilling and sealing operations took place. By year-end, development had advanced through most of the water-bearing structures, which will improve matters in fiscal 2010. Although some water may still be encountered in the main haulage, it will be less of a problem. The Klippan wash-out which was encountered to the east of Joel, has moved slightly further east enabling the development of two additional raise lines, which will assist in the build-up of production on 129 level.

The Joel Plant will be recommissioned in November 2009. This will reduce transport costs and create the capacity to treat 44,000 tons of the waste rock dump material at Joel.

During fiscal 2009, Joel accounted for 4% of our total gold production (3% in fiscal 2007 and fiscal 2008).

**Safety:** Safety performance at Joel continued to be exemplary. Joel has operated for two years and three months without a fatal accident, and has not had a fall of ground accident in over 18 months. During fiscal 2009, the LTIFR at Joel of 2.59 per million hours worked compared favorably with the group average of 9.35. The FFIR at Joel of 0.00 compared favorably with the group average of 0.21.

**Plants:** The Joel plant is a hybrid CIP/CIL plant and was commissioned in 1987. During fiscal 2005, it was decided to close the Joel Plant and place the plant under care and maintenance. A feasibility study has been completed and the Joel plant will again start operating from October 2009. Initially surface sources will be treated and from November 2009 Joel's underground ore will be treated.

**Production analysis:**

<b>Joel</b>	<b>Fiscal Year Ended June 30,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
<b>Production</b>			
Tons ( 000)	566	449	504
Recovered grade (ounces/ton)	0.116	0.133	0.159
Gold produced (ounces)	65,684	59,557	79,894
Gold sold (ounces)	64,784	61,215	79,927
<b>Results of operations (\$)</b>			
Product sales ( 000)	55,862	51,557	50,839
Cash cost ( 000)	40,649	39,131	33,412
Cash profit ( 000)	15,213	12,426	17,427
<b>Cash costs</b>			
Per ounce of gold (\$)	636	638	428
<b>Capex ( 000) (\$)</b>	6,183	5,375	3,911

Tons milled from Joel shaft decreased to 449,000 in fiscal 2008, compared with 504,000 in fiscal 2007. Tons milled were negatively influenced in fiscal 2008 due to the fact the rehabilitation work on North Shaft was only completed at the end of October 2007. Consequent teething problems also impacted here, for instance shaft bottom cleaning, installation of ventilation pipes on the platform, winder motor burnout which resulted in a delay as another motor had to be sourced from AngloGold. Ounces produced were 59,557 in fiscal 2008, compared with 79,894 in fiscal 2007. The decrease in tons negatively influenced ounces produced. Recovered grade decreased to 0.133 ounces per ton in fiscal 2008 compared with 0.159 in fiscal 2007.

Cash costs for Joel increased to U.S.\$39.1 million in fiscal 2008, compared with U.S.\$33.4 million in fiscal 2007. This increase was due to wage and salary increases granted to labor as well as an increase in skilled labor complement to address the skills shortage at Joel. As Joel does not have its own plant, ore is transported to a plant in Virginia, which is 33 kilometers away. This is done by means of trucks. Due to the increase in the diesel price, a fuel levy was charged to compensate the cartage contractor for the fuel price increases. This also resulted in increased costs. Cash

costs per ounce were U.S.\$638 in fiscal 2008, compared with U.S.\$428 in fiscal 2007. This increase was primarily attributable to the decreased tonnage due to the re-equipping whereafter the shaft was not fully operational for the first two quarters of fiscal 2008.

**Table of Contents**

The increase in tons milled from 449,000 in fiscal 2008 to 566,000 in fiscal 2009 is due to the rehabilitation work on North Shaft. Further work was done to improve the smooth operation which included the reconditioning of the liquid controller, installing an additional cooling tower, increasing the lubrication intervals of the guide ropes and the changing of the guide ropes on the south side. There was also a significant increase in square meters from 60,752 in fiscal 2008 to 83,413 in fiscal 2009.

Grade was affected by the loss of two high-grade raise lines which necessitated a move to lower grade raise lines. Higher than expected stoping widths were encountered which affected the face grade. Joel has a centralized high grade area with the outskirts being of lower grade. Due to flexibility and availability constraints Joel was forced to move to the outskirts therefore causing a lower recovery grade.

Ounces produced were 65,684 in fiscal 2009, compared to 59,557 in fiscal 2008. This was mainly due to higher tons milled.

The increase in cash costs from U.S.\$39.1 million in fiscal 2008 to U.S.\$40.6 million in fiscal 2009 is due to wage and salary increases granted. The labor complement also increased by 9% to accommodate an increase in stoping panels from 16 to 18. Development labor also increased as development meters increased from 2,141 meters in 2008 to 3,554 meters in 2009. An afternoon shift was also introduced to reduce the underground lockup tons. This was done with contract labor, which increased the contractor costs. There was a substantial increase in electricity charges, which came about due to the electricity shortage experienced.

Cash costs per ounce were U.S.\$636 in fiscal 2009, compared with U.S.\$638 in fiscal 2008. The decrease was primarily attributable to the increase in tonnage due to the increase in square meters in 2009 compared to 2008 as well as a decrease in lockup tons year on year.

The rock hoisting capacity at Joel is 60,000 tons per month. The average tons milled in fiscal 2009 was 47,170 tons per month.

Assuming no additional reserves are identified, at expected production levels, it is foreseen that the reported proven and probable ore reserves of 3.5 million tons (0.565 million ounces) will be sufficient for Joel to maintain underground production until approximately 2017. Any future changes to the assumptions upon which the ore reserves are based, as well as any unforeseen events affecting production levels, could have a material effect on the expected period of future operations.

**Capital Expenditure:** Joel incurred R56 million (U.S.\$6 million) in capital expenditures in fiscal 2009 on development on 129 level, general replacement and maintenance. Capital budgeted is R67 million (U.S.\$8.7 million) primarily for deepening the lift shaft from 121 level to 129, to enable mining on 129 level and to equip it, as well as North Shaft shaft bottom cleaning.

**Other Surface**

**Introduction:** Other Surface consists of Kalgold, Phoenix and the surface operations owned by the Freegold, Avgold and Evander companies. As the results of operations for Other Surface consists primarily of the results from Kalgold and Phoenix, these two operations have been discussed separately.

*Kalgold*

**Introduction:** Harmony's only open pit mining operation in South Africa is the Kalgold gold mine that is situated 60 kilometers south of Mafikeng in the North West Province of South Africa. Through Kalgold, Harmony also control extensive mineral rights on the Kraaipan Greenstone Belt in the North West Province of South Africa.

**History:** Harmony acquired Kalgold on July 1, 1999 and fully incorporated Kalgold into its existing operations in October 1999. Prior to Harmony's acquisition of the Kalgold mine, the mine had already been in operation for three years.

**Geology:** The Kalgold operation is located within the Kraaipan Greenstone Belt, 60km south of Mafikeng. This is part of the larger Amalia-Kraaipan Greenstone terrain, consisting of north trending linear belts of Archaean meta-volcanic and metasedimentary rocks, separated by granitoid units. Mineralization occurs in shallow dipping quartz veins, which occur in clusters or swarms, within the steeply dipping magnetitechert banded iron formation. Disseminated sulphide mineralization, dominated mostly by pyrite, occurs around and between the shallow dipping quartz vein swarms. The D Zone is the largest orebody encountered and has been extensively mined within a single open-pit operation, along a strike length of 1,300m. Mineralization has also been found in the Mielie Field Zone (adjacent to the D Zone), the A

Zone and A Zone West (along strike to the north of the D Zone), and the Watertank and Windmill areas to the north of the A Zone.

**Table of Contents**

**Mining Operations:** The Kalgold operation is engaged in open-pit mining. This operation is subject to the open cast mining risks detailed in the Risk Factors section. Small subterranean water intersections in the pit are common and are actively managed and appropriate action is taken when necessary. The primary mining challenges at the Kalgold operations of achieving optimal volumes and grades of ore production are addressed by stringent ore reserve management. The processing design capacity of the Kalgold operation is 150,000 tons per month. The average tons milled in fiscal 2009 were 128,387 tons per month. Although milled tons were below capacity, this was as a result of rains that affected throughput in the plant due to oxidized material being mined from Watertank pit.

Volumes processed at Kalgold for fiscal 2009 were similar to fiscal 2008, despite technical problems (failure of a bearing on the C-mill), disruption to power supply as a result of excessive thunderstorm activity, excessive rain and delays caused by chokes in the crushers as a result of the high clay content of ore mined from the weathered zone in the Watertank pit. However, gold production declined by 30%, owing largely to the 30% decline in grade as operations at the high-grade D Zone pit came to an end in March 2009. Nonetheless, this zone was mined for six months longer than scheduled. Mining now takes place at the lower-grade Watertank satellite pit.

In fiscal 2009, the Kalgold operations accounted for approximately 4% (5% in fiscal 2008 and 2% in fiscal 2007) of our total gold production.

**Safety:** The Kalgold operations had a LTIFR of 2.9 per million hours worked in fiscal 2009, and recorded no fatal accidents in fiscal 2009. Kalgold achieved 2,000,000 fatality free shifts on October 7, 2008.

**Plants:** Ore is trucked from the pit and is directly tipped into the feed bin of the pre-primary crusher or stockpiled. The ore then undergoes a four phase crushing process before it reaches the Dome stockpile. Three ball mills are used to grind the ore down to between 70-80% less than 75 micron for the leaching process.

The following table sets forth processing capacity and average tons milled during fiscal 2009 for the plant:

<b>Plant</b>	<b>Processing Capacity (tons/month)</b>	<b>Average Milled for the Fiscal Year Ended June 30, 2009 (tons/month)</b>
CIL	150,000	128,387
Heap Leach <sup>(1)</sup>		

(1) Active use of heap leaching was discontinued in July 2001.

**Table of Contents**

In fiscal 2009, the plant at our Kalgold operations recovered approximately 87.5% of the gold contained in the ore delivered for processing.

**Production analysis:**

<b>Kalgold</b>	<b>Fiscal Year Ended June 30,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
<b>Production</b>			
Tons ( 000)	1,700	1,687	1,740
Recovered grade (ounces/ton)	0.038	0.055	0.033
Gold produced (ounces)	64,784	92,229	56,714
Gold sold (ounces)	66,841	93,172	56,135
<b>Results of operations (\$)</b>			
Product sales (\$) ( 000)	56,915	76,685	35,743
Cash cost (\$) ( 000)	32,390	38,272	27,218
Cash profit (\$) ( 000)	24,525	38,413	8,525
<b>Cash costs</b>			
Per ounce of gold (\$)	506	401	506
<b>Capex (\$)</b> ( 000)	1,090	1,347	376

Tons milled decreased from 1,740,000 in fiscal 2007 to 1,687,000 in fiscal 2008. Ounces produced increased to 92,229 in fiscal 2008, compared with 56,714 in fiscal 2007, primarily due to the higher grade mined from the D Zone pit. The recovered grade increased to 0.055 in fiscal 2008, compared with 0.033 in fiscal 2007.

Cash costs increased from U.S.\$27.2 million in fiscal 2007 to U.S.\$38.3 million in 2008 as result of the write off of the deferred stripping account as mining in the D-zone pit reached completion. In spite of this, cash costs at Kalgold were U.S.\$401 per ounce in fiscal 2008, compared with U.S.\$506 per ounce in fiscal 2007. The decrease was mainly due to the increase in ounces produced as a result of higher recovered grade.

Tons milled increased from 1,687,000 in fiscal 2008 to 1,700,000 in fiscal 2009. Ounces produced decreased to 64,784 in fiscal 2009, compared with 92,229 in fiscal 2008, due to a lower recovered grade.

Cash costs decreased from U.S.\$38.3 million in fiscal 2008 to U.S.\$32.4 million in 2009 mainly due to the deferred stripping write off from the previous financial year.

The processing design capacity of the Kalgold operation is 150,000 tons per month. The average tons milled in fiscal 2009 were 128,387 tons per month.

Active use of heap leaching was discontinued in July 2001; however, Harmony expects to put the material on the heap leach pad through the processing mills at the end of the life of mine to recover the residual gold. Although the heapleach was actively stopped in July 2001, some tonnage was fed through on an adhoc basis as a contingency during the rain season and because of the difficulty of feeding oxidized material from the new Watertank pit through the crushers circuit.

Assuming no additional reserves are identified and at expected production levels, it is foreseen that the reported proven and probable ore reserves of 27.1 million tons (0.732 million ounces) will be sufficient for the Kalgold operations to maintain production until approximately fiscal 2024. However, any future changes to the assumptions upon which the reserves are based, as well as any unforeseen events affecting production levels, could have a material effect on the expected period of future operations.

**Capital Expenditure:** Harmony incurred approximately R9.8 million (U.S.\$1.1 million) in capital expenditures at the Kalgold operations in the fiscal 2009. Harmony budgeted R12 million (U.S.\$1.5 million) for capital expenditures in fiscal 2010, primarily for exploration drilling, preparation of the new pits for mining and replacing some of the plant structures.

**Table of Contents****Phoenix**

**Introduction:** Phoenix is a tailings retreatment operation, located at Virginia and adjacent to our current and historical mining operations in the Free State province.

**History:** The project commenced during fiscal 2007 and is aimed at treating the surface sources from our operations in the Free State province.

**Safety:** Safety at the Phoenix operations improved year-on-year. The LTIFR improved by 27% to 3.09 per million hours worked (2008: 4.23). There were no fatalities.

**Mining operations:** Slimes tonnage reclamation decreased during fiscal 2009, to an average of 479,863 tons per month by year end. The focus during the year was on improving efficiencies, recoveries and ultimately profitability.

Fiscal 2009 was characterized by severe downward pressure on recovered grades, which impacted directly on the profitability margin. Problems were experienced with lower-than-expected grades at one of the dams being processed on the Phoenix tailings retreatment programme. Several projects were launched to increase the recoveries, but without success, mineralogical analysis conducted at Mintek revealed that the gold particles are extremely fine (5 -10 micron) and totally occluded in silica. Because no milling of the slime takes place prior to treatment, the extraction of these gold particles will remain problematic. The mining plan was consequently amended, as a result of which grades are expected to increase in fiscal 2010. Problems were also experienced regarding water availability and contractor labour issues. Slime deposition capacity constraints played a major factor in the treatment capacity of Phoenix during fiscal 2009, two new deposition sites were earmarked for use by Phoenix late in fiscal 2009. These Tailing Storage Facilities ( **TSF s** ) are due for commissioning in August 2009.

During fiscal 2009, Phoenix accounted for 1.4% of our total gold production (1.7% in 2008 and less than 1% in fiscal 2007).

**Production analysis:**

	<b>Fiscal Year Ended June 30,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
<b>Free State (Phoenix)</b>			
<b>Production</b>			
Tons ( 000)	6,578	7,033	2,368
Recovered grade (ounces/ton)	0.003	0.005	0.009
Gold produced (ounces)	22,345	32,215	21,346
Gold sold (ounces)	22,345	32,215	21,348
<b>Results of operations (\$)</b>			
Product sales ( 000)	19,448	26,247	13,628
Cash cost ( 000)	11,924	12,286	6,489
Cash profit ( 000)	7,524	13,961	7,139
<b>Cash costs</b>			
Per ounce of gold (\$)	534	381	293
<b>Capex ( 000) (\$)</b>	0.279	0.492	

Tons treated from Phoenix were 7,033,000 in fiscal 2008, compared with 2,368,000 in fiscal 2007. Ounces produced increased to 32,215 in fiscal 2008, compared with 21,346 in fiscal 2007, primarily due to the increase in tons treated. The recovered grade decreased from 0.009 in fiscal 2007 to 0.005 in fiscal 2008. The grade of the tons treated is dependent on the time at which the original deposition was done.

Cash costs were U.S.\$12.3 million in fiscal 2008, compared with U.S.\$6.5 million in fiscal 2007, primarily due to the increase in volumes as well as the higher costs of reagents. Cash costs per ounce increased during fiscal 2008 to U.S.\$381 per ounce, compared with U.S.\$293 in fiscal 2007 due to increase in volume and increase in transport rates and the price of consumables.

**Table of Contents**

Tons treated from Phoenix decreased to 6,578,000 tons in fiscal 2009, compared with 7,033,000 in fiscal 2008. Ounces produced decreased to 22,345 ounces in fiscal 2009, compared with 32,215 in fiscal 2008, primarily due to the decrease in tons treated as well as the lower recovery grade.

Cash costs decreased to U.S. \$11.9 million in fiscal 2009 from U.S.\$12.3 million, despite the increase in some reagent costs, rising by as much as 40%. Cash costs per ounce increased to U.S. \$534 per ounce, primarily due to the decrease in ounces produced for fiscal 2009.

**Capital Expenditure:** We incurred approximately R2.5 million (U.S.\$0.3 million) in capital expenditures at the Free State operations in fiscal 2009. For 2010, R8.7 million (U.S. \$0.9 million) is planned for capital for screens and bund wall repairs as well as upgrade of equipment.

**Cooke operations**

**Introduction:** The Cooke operations are located in the Gauteng Province of South Africa, approximately thirty kilometers west of Johannesburg.

During fiscal 2008, an agreement was entered into for the sale of the Cooke operations, together with the associated surface assets. As a result, the assets and related liabilities were classified as held-for-sale and the results from operations have been included under *Discontinued Operations* in the income statement. On November 21, 2008, the conditions precedent were fulfilled and the sale of an effective 60% interest in the operations was recognized. The discussion below relates to the period up to the effective date of the sale.

**Geology:** These operations are situated in the West Rand Goldfield of the Witwatersrand Basin, the structure of which is dominated by the Witpoortjie and Panvlakte Horst blocks, which are superimposed over broad folding associated with the southeast plunging West Rand Syncline. At the Cooke operations, two major fault trends are present. The first is parallel to the Panvlakte Fault and strikes north to north-east, having small throws and no lateral shift. The second trend, which runs north-west to west, has small throws, but significant lateral shift, resulting in the payshoots becoming displaced.

There are six identified main reef groupings in the area of these operations: the Black Reef; the Ventersdorp Contact Reef; the Elsburg Formations; the Kimberleys; the Livingstone Reefs; and the South Reef. Within these, several economic reef horizons have been mined at depths below surface between 600 and 1,260 meters.

The reefs comprise fine to coarse grained pyritic mineralization within well developed thick quartz pebble conglomerates or narrow single pebble lags, which in certain instances are replaced by narrow carbon seams.

**Mining Operations:** These operations are subject to the underground and waste rock mining risks detailed in the Risk Factors section. Due to the shallow to moderate depths of the operations, seismicity and pressure related problems are infrequent. There is a risk of subterranean water and/or gas intersections in some areas of the mines. However, this risk is mitigated by active and continuous management and monitoring, which includes the drilling of boreholes in advance of faces. Where water and/or gas are indicated in the drilling, appropriate preventative action is taken.

The Cooke assets and related liabilities were classified as a disposal group and held-for-sale during fiscal 2008.

We incurred R53.7 million (U.S.\$7.4 million) in capital expenditure in fiscal 2008 at Cooke 3 Shaft for accessing the reserves in the 128 South Area to extend the life of mine reserves. The area contains an estimated total in situ resource of approximately 4.9 million tons at 5.5 grams per ton. It is intended to extract the UE1A reef band which is mainly a conglomerate type reef.

Production at the Cooke operations was negatively affected in fiscal 2008 by a change in the mining mix, with less ore from the high grade VCR reef at Cooke 3 shaft and lower than expected grades from 128 South project at Cooke 3 shaft and from the 90 North 6 area at Cooke 2 shaft. The power shortages during the third quarter in 2008 also impacted negatively on volumes.

During fiscal 2009, the Cooke operations accounted for 5% (10% and 12% in 2007 and 2008, respectively) of our total gold production.

**Table of Contents**

**Plants:** The processing facilities at the operations presently comprises of the Cooke metallurgical plant, which is serviced by a surface rail network. The Cooke metallurgical plant, commissioned in 1977, is a hybrid CIP/CIL plant, which processes the tailings from the surface sands dumps around Randfontein.

Feasibility studies are being done for a proposed Uranium Plant of an approximate capacity of 500,000 tons per month. It is envisaged that the plant will be completed in approximately three years when it will treat uranium ore from the Cooke dumps as well as from the Cooke 3 underground operations.

**Production analysis:**

<b>Cooke operations</b>	<b>Fiscal Year Ended June 30,</b>		
	<b>2009<sup>(1)</sup></b>	<b>2008</b>	<b>2007</b>
<b>Production</b>			
Tons ( 000)	1,419	3,905	2,327
- Underground	514	1,322	1,432
- Surface	905	2,583	895
Recovered grade (ounces/ton)	0.057	0.060	0.105
- Underground	0.137	0.152	0.155
- Surface	0.011	0.013	0.025
Gold produced (ounces)	80,377	236,170	244,056
- Underground	70,378	201,884	221,463
- Surface	9,999	34,286	22,593
Gold sold (ounces)	85,746	236,242	243,219
- Underground	75,747	201,939	224,245
- Surface	9,999	34,305	18,974
<b>Results of operations (\$)</b>			
Product sales( 000)	68,204	193,613	154,711
Cash cost ( 000)	49,625	121,978	117,603
Cash profit ( 000)	18,579	71,635	37,108
<b>Cash costs</b>			
Per ounce of gold (\$)	644	511	475
- Underground	613	545	497
- Surface	868	525	256
<b>Capex ( 000) (\$)</b>	9,655	22,357	19,494

(1) As the operations were sold on November 21, 2008, the results are for the five months then ended and are not comparable with the prior years.

During fiscal 2008, the assets and related liabilities for Cooke 1, 2 and 3 as well as the Cooke plant were classified as a disposal group and are held-for-sale. The results from the operations were also classified as discontinued operations in the income statement. The table above and the discussion below include the results of the surface operations. A comparison between the results for fiscal 2008 and 2009 has not been presented as the results for fiscal 2009 are only for the five months to November 2008.

Tons milled were 3,905,000 in fiscal 2008, compared with 2,327,000 in fiscal 2007, and ounces produced were 236,170 in fiscal 2008, compared with 244,056 in fiscal 2007. The increase in tons milled can mainly be attributed to the Cooke plant, used for the treating of tailings from sand surface dumps, coming into full production during fiscal 2008. The plant is treating on average 215,000 tons per month. This was offset by a decrease in tons milled from underground due to the stopping of Conops, electricity constraints and a reduction in volume from Cooke 1. The decrease in ounces sold was primarily due to lower volumes from underground as a result of the reasons mentioned above. The recovery grade from surface decreased from 0.025 in fiscal 2007 to 0.013 in fiscal 2008, mainly due to the replacement of higher grade waste rock with lower grade sand from Dump 20.

Cash costs per ounce of gold were U.S.\$511 in fiscal 2008, compared with U.S.\$475 in fiscal 2007. The increase was influenced by decreased efficiency of the machinery in the Trackless areas, increased maintenance cost on those machines, increases in the costs of labor and supplies and the effect of inflation on supply contracts also negatively affected cash costs.

**Table of Contents****Other Discontinued operations**

**Introduction:** The results of operation from Other Discontinued Operations consists of results from the Orkney operations and South Kalgoorlie. South Kalgoorlie formed part of our International operations. Refer to *Western Australia* below for a discussion on its operations and results. In fiscal 2007, Mount Magnet, a part of our International operations, was classified as held-for-sale and as discontinued operations, and its results were presented as such for all periods shown. In fiscal 2009, as a result of the Mount Magnet operations ceasing to be classified as held-for-sale, the results of its operations were reclassified as continuing operations. All periods shown have been re-presented for this change.

The discussion on Orkney follows below.

**Introduction:** We acquired the Orkney operations when on September 22, 2003, we merged with ARMgold via a share exchange which resulted in ARMgold becoming our wholly-owned subsidiary. In September 2007, we announced that we had entered into formal agreements with Pamodzi for the sale of the Orkney Shafts. The sale was finalized on February 27, 2008 and the related assets and liabilities derecognized.

**History:** Exploration and development at Orkney started from 1886 and following dormant periods, large-scale production commenced during the 1940s with the formation of Vaal Reefs Gold Mining and Exploration Company Limited in 1944.

**Geology:** At the Orkney operations, the Vaal Reef is the most significant reef mined. The reef strikes northeast, dipping southeast and is heavily faulted to form a series of graben structures. The dip is generally less than 30 degrees but can vary locally in direction and magnitude to exceed 45 degrees. The VCR is also exploited, as well as the Elsburg Reef. There are several major faults in the lease area, being Nooitgedacht, Buffelsdoorn, Witkop, WK2, No 3 BU, No 5 BU and No 2 BU Fault. These faults typically have throws of tens of meters and further divide the reef into blocks of up to 100 meters in width.

**Mining operations:** These operations are subject to all of the underground mining risks detailed in the Risk Factors section. Mining depths ranged from 1,600 meters to 2,000 meters below the surface at the Orkney operations.

During February 2008, the Orkney shafts were sold to Pamodzi. These shafts had been managed by Pamodzi since October 2007.

For fiscal years 2008 and 2007, the Orkney operations accounted for approximately 5% of our total gold production.

**Plants:** Ore from the Orkney operations was treated at Vaal River Operations ( **VRO** ) No. 1 Gold Plant (of AngloGold). Various agreements between us and VRO governed the supply and quality of the ore and gold apportionment.

**Production analysis:**

	<b>Fiscal Year Ended June 30,</b>		
	<b>2009</b>	<b>2008<sup>(1)</sup></b>	<b>2007</b>
<b>Orkney operations</b>			
<b>Production</b>			
Tons ( 000)		571	947
Recovered grade (ounces/ton)		0.100	0.126
Gold produced (ounces)		46,655	119,061
Gold sold (ounces)		57,132	119,109
<b>Results of operations (\$)</b>			
Product sales ( 000)		42,810	75,499
Cash cost ( 000)		51,482	64,603
Cash (loss)/profit ( 000)		(8,672)	10,896
<b>Cash costs</b>			
Per ounce of gold (\$)		1,093	544
<b>Capex (\$)</b>		3,579	15,119

- (1) The results are  
for the eight  
months ended  
February 2008.

The Orkney operations were sold to Pamodzi during fiscal 2008 and therefore the results for fiscal 2008 are only for eight months and are not comparable with fiscal 2007.

**Table of Contents**

***International Mining Operations***

**Western Australia Operations**

During fiscal 2008, we entered into an agreement with Monarch for the sale of our Mount Magnet operations. However, subsequent to fiscal 2008 year-end, we were advised that Monarch had placed itself in voluntary administration and, on August 1, 2008, the Administrator indicated that Monarch will not proceed with the proposed purchase and consequently the purchase agreement has been terminated. We have since resumed management of the Mount Magnet operations. The sales process was resumed but due to various factors (conditionality of contracts and the impact of the global financial crisis) could not be finalized by the end of fiscal 2009. The conditions put on indicative offers related mainly to performing a successful feasibility study which will prolong the sales process and the realization of the sales proceeds. To remove this condition from prospective buyers' offers, we started an intensive drilling program at Mount Magnet to be able to provide a Life of Mine model. As a result the Mount Magnet disposal group is therefore no longer disclosed as held-for-sale as at 30 June 2009 and we have re-classified the Mount Magnet operations to Continuing Operations. The comparative income statement and cash flow related note information has been adjusted to reflect this.

As of June 30, 2009, our Western Australian operations had 13 employees (these include care and maintenance and exploration personnel on the Mount Magnet site).

In fiscal 2009, our Australian operations accounted for 0% of our total gold production, as compared to 5% in fiscal years 2007 and 2008.

**Table of Contents*****Mount Magnet Operations***

**Introduction.** In 2002, we acquired Mount Magnet as part of the Hill 50 transaction. In fiscal 2009, Mount Magnet's operations accounted for approximately 0% of our total gold production, as compared to 6% and 4% respectively in fiscal years 2007 and 2008. This change was the result of the site being placed on care and maintenance as from December 31, 2007.

**History:** Mining at Mount Magnet began after the discovery of gold in 1896. From that time to June 30, 2009, the Mount Magnet area has produced approximately 6 million ounces. The most recent Mount Magnet operations commenced production in the late 1980s on the Hill 50 and Star underground mines and nearby open-pits, and the processing of low grade ore from previously accumulated stockpiles. Production ceased at the Star underground mine in June 2005. The Star underground mine was subsequently replaced by St. George, a new underground mine. The Mount Magnet site was put on care and maintenance as from December 31, 2007.

**Geology:** The Mount Magnet operations are located near the town of Mount Magnet in the Murchison region, some 600 kilometers northeast of Perth. The geology consists of folded basaltic and komatiitic greenstones with intercalated banded iron formations and volcanoclastic units. In addition to having been intensely folded, the area has undergone substantial faulting and later intrusion by felsic intrusives. Mineralization within the Murchison belt consists of sulphide replacement style (characteristic of the Hill 50 mine) and quartz lode and shear-hosted hydrothermally emplaced bodies proximal to fault conduits. Smaller stockwork bodies within felsic intrusives are also common. As is typical of the Archaean Shield, the deep weathering profile at Mount Magnet has resulted in supergene enrichment and hypogene dispersion of gold in the oxidizing environments. These effects lend themselves well to the process of small scale open-pit mining. Historically underground mining of primary lodes was the largest contributor to Mount Magnet's gold production.

**Mining Operations:** The Mount Magnet operations were engaged in underground, open-pit and waste rock mining prior to site closure. These operations are subject to the underground, open-pit, and waste rock mining risks detailed in the Risk Factors section.

Underground operations at Mount Magnet consisted of the Hill 50 and St. George mines, each of which operated a decline. The Hill 50 mine, which approached 1,525 meters in depth, was one of Australia's deepest underground mines. The St. George Mine was approximately 300 meters in depth. Underground mining was conducted by decline tunnel access. The principal challenges confronted by the Hill 50 underground mine related to its continuing depth and the geotechnical, ventilation and cost impediments that increased depth imposes, including increased ground stress and potential increased seismic activity. A decision was made in May 2007 which placed the Hill 50 mine's decline development on hold due to significant seismic activity, and effectively put the mine in harvest mode at that time.

With the closure of Star, the development of the new underground mine at the St. George open-pit provided additional underground tonnage for the Mount Magnet operations. Underground development at St. George started in December 2005. The first stope was mined in the second quarter of fiscal 2006. Underground mining continued at this mine during fiscal 2007. This mine reached its economic depth limit during fiscal 2007, and was put in harvest mode, with mining operations ceasing in October 2007. Open-pit production was hindered by the delay in the start up of the Cue open-pits until the last quarter of fiscal 2005 as a result of delayed mining approvals and extended contractor negotiations, although these were subsequently resolved and mining commenced in fiscal 2006. Open-pit mining mainly took place around Mount Magnet during fiscal years 2007 and 2008.

Surface operations at Mount Magnet exploited several medium-sized open-pits, as well as numerous smaller open-pits. Surface materials from areas previously involved in production, including waste rock dumps and tailings dams, are also processed at Mount Magnet. The principal challenge faced by the Mount Magnet operations involved the short mine lives which results from the open-pits being situated on small orebodies. The Mount Magnet site was put on care and maintenance as from December 31, 2007.

**Plant:** The Mount Magnet operations include one metallurgical plant which was built in 1989 as a CIL plant and upgraded in 1999 to a CIP plant. Actual throughputs of the Mount Magnet plant varies based upon the blend of oxide and sulphide ores in their feed. Processing capacity is an estimate of nominal throughput based on a 70% hard (sulphide) and 30% oxide (soft) blend.



**Table of Contents****Production analysis:**

	<b>Fiscal Year Ended June 30,</b>		
	<b>2009<sup>(1)</sup></b>	<b>2008<sup>(1)</sup></b>	<b>2007</b>
<b>Production</b>			
Tons ( 000)		966	1,875
Recovered grade (ounces/ton)		0.080	0.073
Gold produced (ounces)		75,297	136,415
Gold sold (ounces)		77,097	136,415
<b>Results of operations (\$)</b>			
Product sales ( 000)		56,215	85,760
Cash cost ( 000)		41,405	70,528
Cash profit ( 000)		14,810	15,232
<b>Cash costs</b>			
Per ounce of gold (\$)		545	517
<b>Capex ( 000) (\$)</b>		<b>3,909</b>	<b>20,199</b>

(1) The operation was on care and maintenance as of December 31, 2007.

Recovered grade was 0.080 ounces per ton in fiscal 2008 compared to 0.073 ounces per ton in fiscal 2007. This was due to higher grades produced from the Hill 50 underground mine. Tons milled were 966,000 in fiscal 2008 compared to 1,875,000 in fiscal 2007. Ounces sold decreased to 77,097 in fiscal 2008, compared to 136,415 in fiscal 2007. The decrease in both tons and ounces in fiscal 2008 are a reflection of the Mount Magnet production figures representing just 6 months of production due to the site being placed on care and maintenance.

Cash costs per ounce were U.S.\$545 for fiscal 2008, compared to U.S.\$517 for fiscal 2007. This increase was due to higher underground and open-pit contracting cost due to the underlying mining cost increases in the Western Australian and a wider Australian mining market environment.

The majority of declared ore reserves were mined during fiscal 2008. The mines were closed and the processing plant has been put on care and maintenance.

**Capital Expenditure:** We spent A\$0 million on capital expenditure at the Mount Magnet operations in fiscal 2009, primarily due to the fact that the site was put on care and maintenance during 2008 and a feasibility study was commenced during April 2009. No capital expenditure was therefore incurred.

**Exploration:** Activities at Mount Magnet, Western Australia, were performed to the minimum level required to keep the tenements in good standing as the site and the plant is currently on care and maintenance.

**South Kalgoorlie Operations**

**Introduction:** The South Kalgoorlie Operations are made up of New Hampton's Jubilee Operations and Hill 50's New Celebration operations. Since the commencement of operations to November 30, 2007, total gold production from the mines in the South Kalgoorlie area has exceeded 2.5 million ounces. In fiscal 2008, South Kalgoorlie operations accounted for 1% of Harmony's total gold production, and accounted for 4% of our total gold production in 2007.

In July 2007, we announced the sale of the South Kalgoorlie Mine to Dioro. The total purchase price was A\$45 million (U.S.\$39.8 million), which consisted of a cash and a shares component. On November 30, 2007, all conditions precedent to the transaction were satisfied. The results for fiscal 2008 below reflect only the 5 months ended November 30, 2007.

**History:** The South Kalgoorlie operations included several open-pits at Jubilee and New Celebration, as well as the Mount Marion underground mine. The Jubilee operations were originally comprised of the large Jubilee open-pit and a number of smaller open-pits. The New Celebration operations were initially developed in 1987 by Newmont

exploiting the same ore body that hosted the Jubilee Pit. Hill 50 acquired these operations from Newcrest Mining Ltd. in June 2001. The Mount Marion decline was established in 1998. Open-pit mining ceased at the South Kalgoorlie Operations at the end of fiscal 2005, with only low grade stockpiles treated during fiscal 2006 together with Mount Marion ore. During fiscal years 2008 and 2007, open-pit mining recommenced at South Kalgoorlie Mines, with a cutback on the HBJ pit, as well as the Shirl open-pit.

**Table of Contents**

**Geology:** The South Kalgoorlie mines were located approximately 30 kilometers south of Kalgoorlie in the Eastern Goldfields region of Western Australia. The South Kalgoorlie orebodies were located in a number of geological domains including the Kalgoorlie-Kambalda belt, the Boulder-Lefroy Structure, the Zuleika Shear, the Coolgardie Belt and Yilgarn-Roe Structures. At South Kalgoorlie, the mining tenure and geology straddled the three major fault systems or crystal sutures considered to be the main ore body plumbing systems of the Kalgoorlie Goldfield. The geology consisted of Archaean greenstone stratigraphy of basalts and komatiites with intercalated sediments, tuffs, volcanics and later felsic intrusives. Late stage and large scale granitic (Proterozoic) intrusion stopped out large sections of the greenstone. Quartz filled lode and shear-hosted bodies are the most dominant among many mineralization styles. Large scale stockwork bodies hosted in felsic volcanics were an important contributor to bulk tonnage of relatively low grade deposits.

**Mining Operations:** The South Kalgoorlie operations are engaged in open-pit, underground and waste rock mining. These operations are subject to the underground, open pit and waste rock mining risks detailed in the Risk Factors section.

At the South Kalgoorlie operations during fiscal 2008, open cast mining took place at Shirl open-pit, together with a cutback project on the HBJ open-pit. The HBJ open-pit had a mine life of three years and consisted of 3.3 million tons of 0.048 ounces per ton at the time the cutback was completed. The discovery of the Shirl prospect during fiscal 2006, which resulted in an open-pit reserve of 50,000 ounces and a 15 month mine life, together with an improved gold price environment, lead to the recommencement of open-pit mining at South Kalgoorlie mines during fiscal years 2008 and 2007. The primary challenge that faced the South Kalgoorlie operations involved identifying adequate sources of new open-pit and underground reserves and managing the geotechnical risk on the HBJ pit cutback. See *Item 3. Key Information Risk Factors Risks Relating to Our Business and Our Industry To maintain gold production beyond the expected lives of Harmony's existing mines or to increase production materially above projected levels, Harmony will need to access additional reserves through development or discovery.*

**Plant:** The South Kalgoorlie operation had a metallurgical plant located at Jubilee. This CIL treatment plant was capable of treating the planned production from the mining operations. Ore was hauled from the open-pits and from low grade Shirl stockpiles to the treatment plant by conventional road trains. Actual throughputs of the Jubilee plant varied based upon the blend of oxide and sulphide ores in their feed. Processing capacity was an estimate of nominal throughput based on a 70% hard (sulphide) and 30% soft (oxide) blend.

**Production analysis:**

	<b>Fiscal Year Ended June 30,</b>		
	<b>2009<sup>(1)</sup></b>	<b>2008<sup>(1)</sup></b>	<b>2007</b>
<b>Production</b>			
Tons ( 000)		477	1,391
Recovered grade (ounces/ton)		0.058	0.064
Gold produced (ounces)		27,778	88,375
Gold sold (ounces)		27,778	88,371
<b>Results of operations (\$)</b>			
Product sales ( 000)		18,858	56,253
Cash cost ( 000)		14,453	44,567
Cash profit ( 000)		4,405	11,686
<b>Cash costs</b>			
Per ounce of gold(\$)		517	504
<b>Capex ( 000) (\$)</b>		12,526	6,859

(1) The South Kalgoorlie Operations sales process was concluded on

November 30,  
2007. The results  
for fiscal 2008  
are for the five  
months ended  
November 2007.

No comparison between fiscal 2007 and 2008 has been presented as the results for fiscal 2008 are for the five months ended November 2007 and therefore not comparable.

69

---

## **Table of Contents**

### **PNG Operations and Exploration**

#### ***Overview***

**Introduction:** Fiscal 2009 was the first year of the Morobe Mining Joint Venture between Harmony Gold and Newcrest. The Morobe Mining Joint Venture is a 50:50 Joint Venture encompassing:

1. the Hidden Valley Operation;
2. the Wafi-Golpu Project; and
3. an Exploration Joint Venture on the surrounding tenement package.

Newcrest acquired a 50% interest in the Harmony's Morobe Province assets in two stages:

**Stage 1** Purchase of 30.01% participating interest:

On July 16, 2008, the conditions precedent were finalized for the transaction with Newcrest, which included regulatory and statutory approvals by the PNG Government. Completion of Stage 1 was effected July 31, 2008. A total consideration for completion of Stage 1 of U.S.\$229 million was received.

**Stage 2** Farm-in to earn an additional 19.99% participating interest:

This stage was concluded on June 29, 2009 when Newcrest completed its agreed upon contributions of U.S.\$303 million.

Outside of the Morobe province Harmony has actively sought additional prospective ground for greenfields exploration. A single tenement application ELA1708 covering 863 square kilometers in the Sandaun Province was lodged with the MRA on January 6, 2009. However, grant notification had not been received by the end of fiscal 2009. Details of the Mount Hagen project acquisition are outlined under *Recent Developments*

**Harmony PNG tenement locations.** In terms of regional geological setting, Harmony's tenement interests are all located within the New Guinea mobile belt. The mobile belt comprises tracts of metamorphosed Lower Jurassic and Cretaceous sediments and oceanic crust. These rocks have undergone deformation in the collision zone between the Australian and Pacific Plates and multiple intrusive events including Tertiary granodiorite and younger mineralized porphyries.

Exploration expenditure in PNG for fiscal 2009 was A\$32.6 million (U.S.\$24.4 million); however, A\$30.4 million (U.S.\$22.7 million) was solely funded by Newcrest as part of the Joint Venture farm-in terms in order to earn a 50% equity interest in the Morobe Joint Venture assets. Results from exploration work have been highly encouraging, as a number of targets with the potential for major stand-alone gold and copper/gold deposits have been identified and advanced to the drill testing phase.

#### ***Hidden Valley Operation***

**Introduction:** The Hidden Valley operation falls within Mining License ( **ML** ) 151 and the Hidden Valley Joint Venture. The mine is located approximately 90 kilometers south-southwest of Lae.

The Hidden Valley Operation is an open pit gold-silver mine and processing plant both currently under construction. Two separate open pits are planned and in process of being pre-stripped, being Hidden Valley-Kaveroi ( **HVK** ) pit, and Hamata pit. The HVK pit is the larger pit supplying the majority of the ore and is located some 6 kilometers from the processing plant.

The mill has been constructed to process a nominal 4.2 Mt. of ore per year from the two pits, with de-bottlenecking of the plant planned up to 4.7 Mtpa.

The mine is located in a highly prospective exploration lease area and it is envisaged that, as active exploration continues, the life of the process facility may be extended as it is fed from a number of sources.

**Table of Contents**

**History:** Alluvial gold was first discovered at Hidden Valley in 1928 but it was not until the early 1980 s that the area was investigated by CRA Exploration using modern exploration techniques that resulted in the discovery of the Hidden Valley and Kaveroi gold deposits on Exploration License ( **EL** ) 677. A number of feasibility studies have been prepared for the Hidden Valley Project by the various owners, including one by Abelle in 2003. Harmony extensively reviewed and updated the Abelle feasibility study during fiscal 2006 in order to: (a) reflect changes in the project s ore body interpretation; (b) incorporate increases in capital and operating costs as a result of energy prices and scarce resources in the mining industry as well; and (c) resolve technical aspects that were outstanding from the previous study. The updated feasibility study was presented to the Board during June 2006 with subsequent approval given for construction of the project. In late 2007, Harmony began a search for a partner to partake in all of our PNG mining and exploration activities, culminating in the selection of Newcrest as a partner.

**Project Overview:** Once fully developed, the Hidden Valley Mine is expected to initially process 4.6 million tons of ore per annum from ore mined at two open-pits, the Hamata ore body in one small pit and the Hidden Valley and Kaveroi orebodies in a much larger pit. Currently planned de-bottlenecking is expected to increase the processing rate to 5.2 million tons of ore per annum by year three of operations.

Expected annual production will average 255,000 ounces of gold per annum and 4.4 million ounces of silver. Expected mine life is 10 years.

The resources will be mined in a sequence that sees the low silver, high gold Hamata ore mined first, with plant and infrastructure development for the project developed in close proximity to the Hamata deposit. The next ore mined will be the Hidden Valley/Kaveroi oxide/transition ores (high silver) followed by the Hidden Valley/Kaveroi primary ores.

**Geology:** The major gold-silver deposits of the Morobe Goldfield, and the Hidden Valley project are hosted in the Wau Graben. The Wau Graben developed as a back-arc rift basin in the southern extension of the New Guinea Mobile Belt (Owen Stanley Foreland Thrust Belt) covering an area of approximately 850 square kilometers in which the Morobe Goldfield, including the Hidden Valley and Hamata deposits are developed.

The Hidden Valley Deposit is interpreted as a low-sulphidation or adularia-sericite-type epithermal gold-silver system. The Hidden Valley deposit further forms part of the carbonate-base-metal-gold subgroup, with abundant carbonate vein-gangue. Other gold-silver deposits around the Pacific Rim in this sub-group are Kelian (Indonesia), Woodlark (PNG) and Gold Ridge (Solomon Islands).

Discrete zones of intense stockwork fracture and mineralized veining comprise individual lodes. At the Hidden Valley deposit, gold and silver are related to steeply dipping (Hidden Valley Zone, **HVZ** ) and flat-lying (Kaveroi Creek Zone, **KCZ** ) sheeted vein swarms associated with an underlying shallow thrust.

**Reserves:** The table below shows Harmony s 50% equity portion of the proven and probable gold reserves for the Hidden Valley/Kaveroi/Hamata deposits, which are 2.096 million ounces at 0.034 ounces per ton. Silver proven and probable reserves at Hidden Valley/Kaveroi and Hamata amount to 22.5 million ounces at 1.08 ounces per ton.

**Table of Contents**

Pit	Reserve Category	Ore Tons	Grade		Gold MOz	Silver MOz
			Gold [ oz/st Au ]	Silver [ oz/st Ag ]		
Hidden Valley	Proven	1,543,234	0.068	1.14	0.105	1.8
	Probable	19,400,656	0.058	1.07	1.126	20.8
	Sub-Total	20,943,890	0.059	1.08	1.231	22.5
Hamata	Proven	110,231	0.064		0.007	
	Probable	2,094,389	0.078		0.164	
	Sub-Total	2,204,620	0.078		0.171	
Golpu	Proven					
	Probable	39,021,774	0.018		0.694	
	Sub-Total	39,021,774	0.018		0.694	
TOTAL	Proven	1,653,465	0.068	1.14	0.112	1.8
	Probable	60,516,819	0.033	1.07	1.984	20.8
	<b>Total</b>	<b>62,170,284</b>	<b>0.034</b>	<b>1.08</b>	<b>2.096</b>	<b>22.5</b>

*Stockpiled Tons*

**Site Access.** The Hidden Valley site is located approximately 90 kilometers south-southwest of Lae, which is the nearest deepwater port for the project, and the Capital of Morobe Province. Access to the site from Lae uses an existing 110 kilometers sealed two-lane main road to the town of Bulolo, continuing to Hidden Valley via an all-weather two-lane gravel access road constructed by Harmony.

**Engineering Procurement and Construction Management Contract.** Following Board approval, a small owners team of experienced construction professionals was recruited, including several key individuals with extensive PNG experience, to ensure that project objectives, scope of work and all other project requirements are met. In July 2006 an agreement was reached with the engineering group Ausenco Limited to provide engineering procurement and construction management services for the project. At the end of fiscal 2009, the project was commencing the commissioning phase with construction around the plant complete.

**Power Supply.** The ability to obtain an alternate power supply from PNG's national power supplier, PNG Power Limited ( PPL ), is of importance to the project. On May 14, 2007, we announced that we had signed an agreement with PPL to supply the Hidden Valley mine with electricity. PPL has committed to construct new transmission lines and infrastructure in order to supply hydro-electricity from the Yonki Dam. Contracts for this work have already been awarded, and supply is expected to commence by the middle of calendar 2010.

We acquired diesel generators and will install them for the purpose of providing 100% backup power supply to the project, if required, and will be powering the site until hydro-electricity is supplied.

**Customs and Excise.** In November 2006 the PNG National Executive Committee approved exemptions to customs and excise on a range of commodities that will be required for the construction of the project. This was gazetted, and customs officials at Lae port are already applying the exemptions, based on the draft gazettal notice.

**Environment:** The environmental investigation and completion of the Environmental Impact Statement ( EIS ), was undertaken by Enesar Consulting Pty Ltd. The investigation applied the data and knowledge gathered since 1987 and

baseline studies undertaken as part of the 2004 Feasibility Study, to establish the environmental impacts of the revised development plan.

The EIS has been approved by the Minister for Environment and Conservation of the PNG Government and Environment (Waste Discharge) and Environment (Water Extraction) permits were granted in March 2005. The Hidden Valley Project is the first mining project in PNG to be completely permitted under the new Environment Act 2000.

**Table of Contents**

A condition of the Environmental Permit is the development and submission for approval of an Environmental Management Plan ( **EMP** ). The EMP was approved in April 2006. Other conditions of the Environmental Permit included the development of an Acid Mine Drainage ( **AMD** ) management strategy and a waste management strategy, which were submitted in 2007. Management of AMD and waste disposal remain a critical issue being tackled by the site.

Hidden Valley is the first major open pit mine in PNG to build a Tailings Storage Facility ( **TSF** ) to contain all tailings, followed by discharge of treated decant (involving cyanide detoxification).

**Community affairs/landowner discussions.** Through its subsidiary MCG, Harmony worked extensively with the landowners, local and national government to agree an appropriate sharing of the benefits of the Hidden Valley proposed mine. This culminated in the signing of a Memorandum of Agreement ( **MOA** ) between MCG and relevant affected parties on August 5, 2005. These parties were PNG National Government, the Morobe Provincial Government, the immediate area Local Level Government units and the local Landowner Association. This MOA clearly defines the roles and responsibilities of each signatory and in particular removes any of the grey area with regards to the distribution of proceeds from mineral royalties.

Community support and development of the mine in compliance with the MOA with landowner groups is critical to the success of the project. Meetings are held regularly with these groups and officials from the provincial and national government to monitor progress and ensure these objectives are met. A range of opportunities for the commercial participation of landowner groups in the development of the project have occurred, and community relations initiatives focused on positive outcomes for health, education and infrastructure are ongoing.

**Mining and Mining Fleet.** The mine is being developed by conventional open pit mining techniques. The primary mining fleet consists of three Komatsu PC-2000 hydraulic backhoe excavators, two Komatsu PC-800 hydraulic backhoe excavators, two Komatsu WA-900 front-end loaders and 20 Komatsu 785-7 rigid dump trucks (100 t class) with a further 5 of the same trucks ordered for delivery in November 2009. Drilling equipment comprises seven Atlas Copco ECM720 drill rigs, drilling 6.5 meter holes at 127 mm diameter. A range of ancillary equipment includes track dozers, graders, a fuel truck, and numerous light vehicles.

Ore will be delivered by truck to the Hamata and Hidden Valley crusher stations. Crushed Hamata ore will be delivered by conventional conveyor to the primary stockpile and Hidden Valley ore will be delivered via an overland pipe conveyor to the same stockpile.

**Plant:** Once operational the processing plant is expected to process ore at a rate of approximately 4.6 million tons (short) of ore per annum and has been designed with three distinct process routes that complement the metallurgical characteristics of the three ore types to be mined. The processing plant will commence as:

- (a) a primary crushing, grinding (with the incorporation of a gravity gold recovery circuit), CIL, Merrill-Crowe zinc precipitation, goldroom and tailings detox plant for the low silver Hamata ores, and
- (b) will revert to a primary and secondary crushing, grinding, flotation, concentrate regrind, counter-current decantation circuit with Merrill-Crowe zinc precipitation, flotation concentrate and tailing CIL, goldroom and tailings detox for the high silver oxide/transition ores, and
- (c) then a similar circuit without flotation tail CIL for high silver sulphide ores from Hidden valley/Kaveroi ores.

The gravity gold recovered will be processed through an intensive cyanide leach followed by electro-winning circuit to produce a high quality ore product.

All tailings will be stored in a tailings storage facility, and all water recovered will be subject to detoxification prior to being re-cycled or released to the environment. The processing plant and tailings storage facility will be built to meet or exceed the requirement of the International Cyanide Management Code. With construction of the plant being effectively complete and the commissioning phase underway continuous gold production is anticipated to commence in the December 2009 quarter.

**Government royalty and other rights.** The gold and silver production from the Hidden Valley Project will be subject to a 2% royalty, payable on the net return from refined production if refined in PNG or 2% royalty on the realized price if refined out of PNG.

The government of PNG also has a statutory right to acquire up to a 30% participatory interest in mining development projects, at sunk cost. However the memorandum of agreement signed between the government and ourselves reduced the participation right to 5%, should the government wish to exercise it. Once an interest is acquired by the government of PNG, it contributes to the further exploration and development costs on a pro rata basis.

**Table of Contents**

**Third Party Royalties.** On March 28, 2007, we announced that we had concluded negotiations with Rio Tinto pursuant to which we would purchase the Rio Tinto rights under a royalty agreement relating to Hidden Valley, which was entered into prior to our acquisition of the Hidden Valley and Kerimenge deposits in PNG. Under the royalty agreement, Rio Tinto had the right to receive a portion of between 2% and 3.5% of future ounces produced by the Hidden Valley mine in PNG. The consideration we paid to Rio Tinto totaled U.S.\$22.5 million, which was settled with our issue of ordinary shares valuing U.S.\$20 million, with the balance of U.S.\$2.5 million paid in cash.

The transaction will reduce the cash costs per ounce of gold produced at Hidden Valley, and all further extensions to the project, mine life and reserves will be free of this royalty.

**Capital Expenditure:** Capital expenditure on the project for fiscal 2009 was U.S.\$317 million (A\$397 million) compared to the U.S.\$162 million (A\$181 million) spent in fiscal 2008. Capital was mainly spent on completing earthworks within the mining lease, particularly the process plant platform, construction of the process plant, construction of the Hamata permanent camp and related infrastructure. Other areas of significant expenditure were for process equipment and management related costs. The total project capital cost is estimated to be U.S.\$614 million (A\$768 million), which represents a 27% increase in A\$ terms on the last reported budget. Increases in costs were primarily caused by market forces resulting from the high demand created by resource development projects in the region. There were no significant changes in the scope of work of the project. This value excludes U.S.\$37 million for mine fleet repayments post the construction phase which is not considered part of the construction capital.

**Wafi-Golpu Project**

**Introduction:** The Wafi-Golpu Project falls within EL440 and the Wafi-Golpu Joint Venture. The first exploration at Wafi dates back to a nationwide porphyry copper search by CRA Exploration Ltd in the late 1960 s. Elders Resources farmed-in to the project from 1989-1991, and AGF subsequently farmed-in to the project for a short period in 1997 prior to going into administration in 1998. Aurora subsequently acquired the project from Rio Tinto (CRA) in 1999, with ownership passing to Abelle when it merged with Aurora in 2002. Harmony assumed control of the Wafi Project by way of its acquisition of Abelle in 2003 and in 2009 entered into the MMJV with Newcrest.

The Wafi-Golpu Project contains two main types of potentially economic mineralization within close proximity of each other. Gold mineralization (Wafi Gold Project) is hosted by sedimentary/volcanoclastic rocks of the Owen Stanley Formation which surrounds the intrusive Wafi Diatreme. The mineralization occurs in the form of extensive high-sulphidation epithermal alteration overprinting porphyry mineralization and epithermal style vein-hosted and replacement gold mineralization with associated wall-rock alteration. Copper / gold mineralization (Golpu and Nambonga North) has been discovered in diorite porphyry intrusives with typical zoned porphyry alteration halos.

**Geography:** The Wafi-Golpu Project is located near Mount Watut in the Morobe Province of PNG, approximately 60 kilometers southwest of Lae and about 60 kilometers northwest of Wau. The Wafi camp is located at an elevation of 400 meters above sea level in terrain that is mountainous and forested in most areas. The site is accessed by sealed road (Lae to Timini) and then a 38 kilometre dirt-base access track to the project which is accessible during dry weather conditions. The site is serviced by helicopter when the road access is cut due to wet weather. The Watut Valley is located immediately west of the project, and the foothills of Watut Valley are planned to be utilized for placement of ore processing and mine infrastructure.

**Mining Reserves:** A probable ore reserve has been declared. See *Item 4. Reserves* .

The Golpu Ore Reserve is derived from the Golpu Stand Alone Project Pre Feasibility Study (PFS). This study assumed a block cave underground mine with ore processed on site to produce a copper and gold concentrate for shipping to a smelter. Metallurgical studies indicate that recoveries of 88% for copper, 54% for gold and 36% for molybdenum could be expected. Metal prices were assumed at U.S.\$2.30/lb for copper, U.S.\$520/oz gold and U.S.\$20/lb for molybdenum.

In declaring the probable reserve, the following considerations were made:

1. The PFS was completed to industry accepted standards but the outcome of further more detailed studies may affect the reserve.
2. The location for a tailings storage facility has not been finalized, however two potential sites proximal to the project were identified.



**Table of Contents**

3. There are outstanding issues associated with traditional land owners that need to be resolved before the project is able to be constructed.

4. The Board has not yet committed to completing subsequent phases of study, or to project construction.

A reserve for the Wafi gold ore bodies has not been declared.

**Government Royalty and Other Rights:** Any metal production from the Wafi-Golpu Project Area will be subject to a 2% royalty payable on the net return from refined metal production if refined in PNG or a 2% royalty payable on the realized price if refined outside of PNG. The government royalty has been accounted for in project financial models. The PNG government also has a statutory right to acquire up to a 30% participatory interest in mining development projects at sunk cost. However the MOA signed between the government and ourselves reduced the participation right to 5%, should the government wish to exercise it. Once an interest is acquired by the government of PNG, it contributes to the further exploration and development costs on a pro rata basis. Previously, a third party royalty of 2% on gold production or a 2% NSR (net smelter return) from copper-gold concentrates was payable to Rio Tinto as a deferred acquisition cost. In December 2008 Harmony purchased this royalty from Rio Tinto.

**Capital Expenditures:** No capital expenditures were incurred during fiscal 2009 as all costs were expensed.

**Pre-Feasibility Studies:** Two pre-feasibility studies for the Wafi-Golpu Project have been completed:

The Golpu stand alone Pre-Feasibility Study ( **Golpu PFS** ), dated July 2007, which examined solely the development of Golpu copper gold resources;

The Wafi Pre-Feasibility Study ( **Wafi PFS** ), dated October 2007, which included the Wafi gold resources and examined the development of the following three scenarios:

Golpu stand alone (an update of the Golpu PFS scenario);

Golpu + Link Zone; and

Golpu + Link Zone + NRG1;

The returns projected by the studies did not meet requirements and it was decided not to immediately move to the Feasibility stage. Additional exploration of the area has been committed to in order to identify additional resources that could provide the Wafi-Golpu Project Area with a critical mass to warrant further advanced feasibility studies.

**Wafi Gold Projects**

**Introduction:** The Wafi Gold resource is comprised of three main zones: Zone A, Zone B and the Link Zone (high grade lenses within Zone B). In addition to the Wafi Gold resource, several other areas are highly prospective for further gold mineralization.

**Geology:** The Wafi PFS focused on extraction of the high grade Link Zone material, and the shallower oxidized mineralization (NRG1), amenable to high gold recovery under standard cyanide leach conditions. Additional exploration activities have focused on the discovery of additional Link Zone style mineralization (such as the Western Zone) which may have the potential to improve Wafi gold project economics.

**Metallurgy:** Metallurgical test work for the Link Zone mineralization has demonstrated that whole ore pressure oxidation is a technically viable processing method, with gold recoveries of approximately 95% achieved.

Metallurgical test work for the Non-Refractory gold mineralization ( **NRG1** ) has shown that 95% recovery of gold in completely oxidized ores can be consistently achieved. Recovery in transitional material remains variable with indications that recoveries averaging 84% to 86% are able to be achieved.

**Project Status:** Geotechnical, mining, infrastructure, and environmental investigations were undertaken as part of the Link Zone and NRG1 studies. Synergies between the Wafi Gold projects and the Golpu Copper project were utilized during the studies to minimize cost as far as possible. Works are ongoing to further optimize this project including further exploration to expand known gold resources and discover new areas of mineralization.

## **Table of Contents**

### ***Porphyry Copper-Gold Projects***

**Introduction:** The Golpu Copper-Gold Project is located approximately one kilometre northeast of the Wafi gold orebodies. During 2008, a second porphyry copper/gold body (Nambonga North Prospect) was identified two kilometers to the north of the Wafi gold orebodies. A copper/gold resource has been estimated for Nambonga North.

**Geology:** The Golpu alteration profile is a typical zoned porphyry copper alteration halo, grading from potassic to phyllic to advanced argillic upwards in the core. Outwards from the core, the alteration grades from the above to argillic potassic, to propylitic. The mineralized body is a porphyry copper-gold pipe with approximately 200 meters by 200 meters plan dimensions, slightly north plunging and still displaying strong mineralization at grades similar to those in the rest of the potassic alteration zone at 1.2 kilometers depth (the maximum depth to which it has been drilled). Drilling and reinterpretation have shown that copper and gold mineralization extend some way into the metasediment host rock immediately adjacent to the porphyry body. The mineralized metasediment has potential to add to the volume of the porphyry stock if additional exploration defines the mineralization as part of the resource.

The surface expression of Golpu is oxidized and leached to about 150 meters vertical depth, resulting in a residual gold only mineralization from which the copper has been leached. At the oxidation interface, a strong 20 to 30 meters thick zone of supergene copper enrichment is developed which transitions at depth into lower grade covellite-enargite mineralization. Beneath this is a zone of more covellite rich mineralization that contains lesser enargite and consequently less arsenic. From approximately 300 meters below surface, the ore exists in a covellite-rich (arsenic-poor) form grading into a chalcopyrite-bornite rich zone from approximately 500 meters to its current known depth of approximately 1.2 kilometers. A reserve of 70.8 Mt. at 1.13% Cu, 0.61g/t gold and 121 ppm Molybdenum has been declared for Golpu.

**Project Status:** The Golpu PFS was undertaken as a standalone scenario and also in parallel with the Link Zone and NRG1 resources (Wafi PFS) but neither study indicated a return that met company requirements. The newly discovered Nambonga North porphyry is not yet considered sufficiently large to positively contribute to a scenario that could include this resource in a mine plan. However, excellent prospects remain in the immediate vicinity of the existing resource areas for porphyry copper/gold and related epithermal gold mineralization.

### ***Morobe Mining Joint Venture Tenement Exploration***

The Morobe Mining Joint Venture tenements comprises 3,276 square kilometers of tenure and contain the Hidden Valley Operation and the Wafi-Golpu Project. The Morobe Mining Joint Venture is divided into 3 separate Joint Venture entities:

1. Hidden Valley Joint Venture (ML151 and associated infrastructure tenure ME82 and LMP80);
2. Wafi-Golpu Joint Venture (EL440 and EL1105); and
3. Morobe Exploration Joint Venture (EL497, EL677, EL1193, EL1103, EL1316, EL1590, EL1612, EL1629, EL1630, EL1631, and EL1403).

Tenement boundaries are outlined below in figure 1.

The tenements are under-explored and remain highly prospective for large-scale porphyry Cu-Au deposits, low-grade bulk mineable epithermal Au-Ag deposits (similar to Hidden Valley) and for high-grade epithermal Au satellite resources. Focus of the exploration program on the Morobe Joint Venture tenements is four-fold:

Major new stand alone discoveries;

High-grade drivers to improve cash flows of the Hidden Valley Operation;

Additional reserves to substantially increase mine life or production profile of the Hidden Valley Operation; and

Additional resources to drive the development of the Wafi-Golpu Project.

Exploration programs undertaken during fiscal 2009 included those on the Hidden Valley Mining Lease and the area surrounding the Wafi-Golpu Project. However, in addition to these areas, project generation over the broader area

of the Morobe Exploration Joint Venture continued, such as the capturing of historical data, a regional detailed airborne magnetic survey and other grassroots exploration activities (which include mapping, stream sediment sampling and integration of results with regional magnetic data).

**Table of Contents**

***Hidden Valley Joint Venture (ML151)***

**Introduction:** ML151 contains the Hidden Valley and Hamata gold deposits and consists of 41 square kilometers of tenure. Gold exploration on the lease falls under two categories:

1. Resource definition to test down plunge extensions of the known orebodies; and
2. Exploration drilling to test for new satellite resources.

Resource definition drilling comprised 17 holes for 5398m and focused on Kaveroi. Resource definition drilling also included some minor sterilization drilling at Bulldog prospect for the planned Hidden Valley ROM pad. The program focused on the southern strike extension of the Kaveroi orebody but to date only sporadic intervals of gold mineralization have been intersected and no further work is planned for this target.

Exploration drilling during fiscal 2009 on the ML comprised 3910m of diamond drilling on four prospects, Apu Creek, Big Wau, Yafo, and Hidden Valley South.

**Project Status:** Work integrating the geological and geochemical datasets together with detailed helimagnetics is underway to provide a new solid geology interpretation and new tool for targeting and ranking prospects on the Hidden Valley Mining Lease.

Drilling to follow-up on high-grade gold intercepts at the Hidden Valley South prospect (previously known as Upper Bulolo prospect) intersected only narrow sporadic gold intercepts. Work to understand the geometry and continuity of mineralization is planned in fiscal 2010.

Apu creek drilling was undertaken to test a possible faulted extension of the Kaveroi mineralization. The drilling outlined zones of carbonate base-metal and epidote alteration, developed below the metasediment cap. Follow-up work to scope the geometry and alteration zonation is planned for the first half of fiscal 2010.

**Table of Contents**

***Wafi Joint Venture (EL440 & EL1105)***

**Introduction:** Fiscal 2009 exploration in the brownfields region surrounding the Wafi and Golpu deposits focused on defining additional mineral resources to impact development of the project.

Exploration during the first half of fiscal 2009 was directed at scoping and delineating the Nambonga North porphyry resource. Subsequent reconnaissance drilling along strike to the northeast of the Golpu on the Wafi Transfer obtained significant anomalism at the Miapilli prospect. Compilation and interpretation of the historical Wafi-Golpu datasets was undertaken during the year to create a new, integrated 3D geological model. This work has highlighted the north and northeastern margins of the central diatreme intrusive as underexplored, and prioritized the area for follow-up work in fiscal 2010.

***Nambonga North***

**Introduction:** The Nambonga North prospect lies approximately 2 kilometers northwest of Golpu. The prospect was initially discovered in fiscal 2008 after initial drilling intersected a major zone of Au-Cu stock work mineralization associated with a separate porphyry intrusive. Systematic drilling completed during the first half of 2008 comprised 27 drillholes for 8380 metres.

**Project Status:** The prospect was progressed during the year from an advanced prospect into an inferred gold-copper porphyry resource of 39.8 Mt @ 0.8g/t Au and 0.2% Cu for 1.0M oz Au and 86Kt Cu. (50% attributable to Harmony). Importantly, this recent discovery represents the second mineralised Au-Cu porphyry in the region that does not outcrop at surface.

## **Table of Contents**

### ***Miapilli***

**Introduction:** The Miapilli prospect is located approximately 800m northeast along strike of the Golpu deposit, on the Wafi Transfer structure. The prospect is characterised by a circular magnetic anomaly, interpreted to represent an alteration halo associated with intrusion of a porphyry body at depth.

Three initial drill holes for a total of 2060m were completed and magnetic bodies modelled from the regional magnetics.

**Project Status:** While the two northern holes drilled failed to intersect any indications of mineralization, the southernmost drill hole, intersected broad intervals of anomalous Au-Cu vein stockwork mineralization. Follow up of these initial results will constitute a high priority for the exploration strategy for fiscal 2009 and 2010.

**Morobe Exploration Joint Venture (EL497, EL677, EL1193, EL1103, EL1316, EL1590, EL1612, EL1629, EL1630, EL1631, and EL1403 )**

**Introduction:** Exploration on the broader tenement package surrounding The Wafi Project and Hidden Valley Operations is aimed at major new stand alone discoveries. During fiscal 2009 over 12,000 line kilometers of detailed airborne magnetics data were collected to complete the magnetic coverage over the core tenement area of the Morobe Joint Venture. The base dataset has highlighted several previously unknown anomalies for prioritization and follow-up in fiscal 2010. These include intrusive complexes at Bakau located approximately 10 kilometers southeast of Biamena on EL1316, and at Garaina on EL1629.

Reconnaissance mapping and stream sediment sampling, and soil sampling resulted in some 3460 samples collected. Results highlighted the Wafi Transfer Structure with Kesiago and Miapilli (refer Wafi Joint Venture above) prospects advanced to drill testing and new targets including Pekumbe generated during fiscal 2009.

Further afield on the Morobe coast results have highlighted the Wiwo prospect with potential for major porphyry copper-gold and epithermal gold mineralization. Prospect development work at Giu was postponed temporarily as a detailed helimagnetic survey is planned for the prospect area during fiscal 2010. This base dataset will provide context in order to assess and prioritize surface soil anomalies for follow-up.

### ***Kesiago***

**Introduction:** The Kesiago prospect covers an area of approximately 3 square kilometers, located on the Wafi transfer structure approximately 4 kilometers southwest of Golpu. This prospect has the potential for both epithermal gold and porphyry copper-gold deposits similar to Wafi-Golpu.

4 holes for 3650m were drilled at the prospect, primarily targeting a high-order Au-Cu surface geochemical anomaly associated with a bulls-eye magnetic target.

**Status:** Results from the initial drilling obtained several highly anomalous gold intercepts for follow-up work. Recent surface work extending the soil geochemical coverage has outlined a significant Au-As-Pb-Ag anomaly immediately northwest of the existing drill target. First pass drill testing of this zone is also planned for the first half of fiscal 2010.

### ***Biamena***

**Introduction:** Biamena prospect lies approximately 12 kilometers south of the Golpu deposit on EL1316. The prospect area was prioritized for follow-up work based on highly anomalous Cu-Au stream sediment geochemistry coincident with an intrusive unit evident in the magnetics.

**Project Status:** Work during fiscal 2009 comprised diamond drilling totaling 8 holes (4733m). Although some anomalous intercepts were obtained from the drilling program, integration and interpretation of this data is currently underway to determine if additional follow-up work is warranted.

**Table of Contents**

***Pekumbe***

**Introduction:** The Pekumbe target is located approximately 1.5 kilometers south west of Kesiago, within EL1103. This target is characterized by a subtle circular magnetic feature, coinciding with linear structural breaks. Field reconnaissance has returned highly encouraging rock chip results.

**Status:** A work program comprising grid based soil sampling has commenced in the fourth quarter of fiscal 2009. Drill testing of any delineated anomalies planned to be undertaken early in fiscal 2010.

***Wiwo***

**Introduction:** Wiwo prospect is located approximately 15 kilometers south-southwest of the Morobe townsite on the east coast of PNG. Results from reconnaissance sampling have been highly encouraging with visible gold evident in a large number of pan concentrate samples.

Rock chip sample assays undertaken in conjunction with the stream sediment sampling exercise have returned encouraging assays. Mineralization was observed in veins and shears, and together with the base metal association suggests potential for a buried porphyry copper system.

**Status:** Ridge and spur soil sampling is currently in progress. A detailed helicopter borne magnetic survey is planned for fiscal 2010 to provide additional data for prospect development.

**Table of Contents**

**REGULATION**

**Mineral Rights**

***South Africa***

South African law no longer provides for the separate ownership of surface and mineral rights. Prior to the promulgation of the MPRDA on May 1, 2004, it was therefore possible for one person to own the surface of a property, another to own rights to precious metals, and yet another to own rights to base minerals. In terms of the MPRDA, all mineral rights in South Africa are now vested in the South African State. The principal objectives of the Act are:

- to recognize the internationally accepted right of the state of South Africa to exercise full and permanent sovereignty over all the mineral and petroleum resources within South Africa;
- to give effect to the principle of South Africa's custodianship of its mineral and petroleum resources;
- to promote equitable access to South Africa's mineral and petroleum resources to all the people of South Africa;
- to substantially and meaningfully expand opportunities for HDSAs including women, to enter the mineral and petroleum industry and to benefit from the exploitation of South Africa's mineral and petroleum resources;
- to promote economic growth and mineral and petroleum resources development in South Africa;
- to promote employment and advance the social and economic welfare of all South Africans;
- to provide security of tenure in respect of prospecting, exploration, mining and production operations;
- to give effect to Section 24 of the South African Constitution by ensuring that South Africa's mineral and petroleum resources are developed in an orderly and ecologically sustainable manner while promoting justifiable social and economic development; and
- to ensure that holders of mining and production rights contribute towards socio-economic development of the areas in which they are operating.

Under the MPRDA, tenure over established mining operations is secured for up to 30 years (and renewable for periods not exceeding 30 years each thereafter), provided that mining companies apply for new order mining rights over existing operations within five years of May 1, 2004, or before the existing right expires, whichever is the earlier date and fulfill requirements specified in the MPRDA, its Regulations and the Mining Charter.

The Mining Charter was signed by government and stakeholders in October 2002 and contains principles relating to the transfer, over a ten-year period, of 26% of South Africa's mining assets (as equity or attributable units of production) to HDSAs, as defined in the Mining Charter. An interim target of 15% HDSA participation over five years has also been set and to this end, the South African mining industry has committed to securing financing to fund participation of HDSAs in an amount of R100.0 billion within the first five years of the Mining Charter's tenure. The Mining Charter provides for the review of the participation process after five years to determine what further steps, if any, are needed to achieve the 26% target participation. In order to measure progress in meeting the requirements of the Mining Charter, companies are required to complete a Scorecard, in which the levels of compliance with the Mining Charter can be ticked-off after five and ten years respectively. The Mining Charter and Scorecard require programs for black economic empowerment and the promotion of value-added production (mineral beneficiation), such as jewelry-making and other gold fabrication, in South Africa. In particular, targets are set out for broad-based black economic empowerment in the areas of human resource and skills development; employment equity; procurement beneficiation and direct ownership. In addition, the Mining Charter addresses socio-economic issues such as migrant labor, mine community and rural development, and housing and living conditions.

We actively carry out mining and exploration activities in all of our material mineral rights areas. Accordingly, the MPRDA has not had a significant impact on these mining and exploration activities because we applied for and were granted the conversion of all of our old order mining rights into mining rights in terms of the MPRDA. We now have to comply with the required annual and bi-annual reporting to the Department of Mineral Resources ( **DMR** ) on the Social and Labour Plans, Environmental Management

## **Table of Contents**

Programmes, and Progress Reports on our prospecting rights.

We have already complied with the requirements of the Mining Charter, with an equivalent of 36% of production ounces qualifying as empowerment credit ounces. We have been working on our program of licensing since 2004, which involved the compilation of a mineral assets register and the identification of all of our economic, mineral and mining rights. We have secured all old mining rights and validated existing mining authorizations. Our strategy has been to secure all strategic mining rights on a region-by-region basis. The first application for conversion from old order to new order mining rights was for the Evander Operations and was lodged on May 21, 2004. The Evander mining license was the first conversion application in the region and in October 2004 we became the first senior company to convert old order to new order mining rights for our Evander and Randfontein operations. We have worked closely with the DMR to help ensure, to the extent we are able, that the licenses are granted as swiftly as possible. The conversion of licenses for all our remaining operations were granted during November 2007 and Doornkop was executed in October 2008. All of our mining areas are therefore secured/supported by new order mining rights.

The MPRDA as well as the Codes of Good Practice for the Minerals Industry are under review. We are taking an active role in these deliberations. We are committed to engaging with all stakeholders to ensure that the South African mining industry remains a globally competitive and attractive destination for foreign and domestic investment.

The Mineral and Petroleum Royalty Act 28 of 2008 and the Mineral and Petroleum Royalty Administration Act 29 of 2008 were assented to on November 21, 2008 with the commencement date set as May 1, 2009. However on February 11, 2009, South Africa's Finance Minister proposed in his budget speech that government delay the implementation of the mineral and mining royalties until March 2010. The proposal was mainly to assist the mining industry in minimizing job losses as the South African Mining Sector had been set back by electricity supply failures, shutdowns related to mine safety, retreating commodity prices and weakening international demand. Royalties will be payable to the government according to formula based on earnings before interest and tax. This rate is then applied to revenue to calculate the royalty amount due, with a minimum of 0.5% and a maximum of 5% for gold. It is estimated that the formula could translate to a royalty rate of more than 2% of gross sales in terms of current pricing assumptions.

The MPRDA intends to, among other things:

give effect to the Minister's stated intention to promote investment in the South African mining industry;

establish objective criteria for compliance with the MPRDA's socio-economic objectives;

remove the technical deficiencies of the MPRDA;

align the MPRDA with the Promotion of Administrative Justice Act, 2000; and

coordinate the environmental requirements between the MPRDA and the National Environmental Management Act.

## ***PNG***

The Mining Act of 1992 (PNG) is based on Australian legislation. Accordingly, mineral rights in PNG also belong to the government of PNG and they have a statutory right to obtain up to a 30% participating interest in mining development projects. The government then issues and administers mining tenements under the relevant mining legislation, and mining companies must pay royalties to the government based on production.

The key difference in PNG is that citizens have the right to carry out non-mechanized mining of alluvial minerals on land owned by them. These customary rights do not extend over a mining lease, unless an alluvial mining lease is obtained.

Almost all land in PNG is owned by a person or group of persons, and is not generally overlaid by landowner title issues. There is, however, considerable difficulty in identifying landowners of a particular area of land because land ownership may arise from both contract and inheritance, and because of the absence of a formal written registration system.

Prior to commencing exploration, compensation for loss or damage must be agreed with the landowners. Prior to commencing mining, a written agreement must be entered into with landowners dealing with compensation and other matters.

## **Table of Contents**

In PNG, Morobe Consolidated Goldfields Limited and Newcrest PNG 1 Limited hold a mining lease and various exploration licenses granted by the Department of Mineralogy and Geohazards Management for the Hidden Valley Project. Both parties have obligations under a memorandum of agreement with the state, local government and the landowners.

Wafi Mining Limited and Newcrest PNG 2 Limited hold various exploration licenses granted by the Department of Mineralogy and Geohazards Management for the Wafi-Golpu Project, and has entered into a compensation agreement with landowners on one of its exploration licenses.

In PNG there are no applicable exchange control restrictions but the PNG central bank does have to be informed of all transactions and has to approve lending facilities and interests rates charged.

### **Environmental Matters**

#### ***South Africa***

We are committed to conducting our business in an ethically, morally, socially and environmentally responsible manner that will protect human health, natural resources and the environment in which we live. We aim to balance our economic, social and environmental goals and responsibilities to achieve sustainable, profitable growth in our business and, more importantly, to work with communities and regulatory agencies to implement sound management practices which will ensure that our mining is conducted in an environmentally-safe manner. In addition, with regard to legacy mining impacts, we remain committed to identifying and implementing coordinated remediation plans that are acceptable to all relevant parties.

In support of the above commitment, our environmental policy stipulates that:

#### ***Compliance***

We will strive to comply with all applicable municipal, provincial and national laws and regulations, as well as the other requirements to which the company subscribes that are relevant to the environmental aspects of our activities.

#### ***Continual Improvement***

We will evaluate and continually improve the effectiveness of our Environmental Management System ( **EMS** ) through periodic audits and management reviews, and we will review our environmental policy on an annual basis.

#### ***Pollution Prevention***

We will actively design our operations and undertake our mining activities so as to prevent pollution. We will strive towards the continual reduction of adverse environmental effects and support the principle of sustainable development.

#### ***Awareness***

We will communicate our environmental policies to our employees, contractors and suppliers, and will provide appropriate training to all employees to ensure their continuing awareness of our environmental responsibilities.

To address and minimize the impact of the company's operations on the environment, taking into account regulatory requirements, the board has approved a number of five year targets relating to emissions to air, water consumption and usage, energy consumption, recycling and land use based on fiscal 2008, namely:

#### ***Emissions to air***

to reduce electricity usage by 15% in line with DME 2005 Energy Accord;

to reduce fuel usage (diesel and petrol) by 15%;

to reduce all dust emissions (from tailings dams) by 15%;

to reduce methane emissions by 30%; and

to reduce domestic coal usage by 50%.

## **Table of Contents**

### *Water*

to reduce water usage by 10%; and

to reduce metals/salt discharge by 70% to surface water, and by 20% to groundwater.

### *Recycling*

all steel, plastic and timber waste to be handled through designated areas, to improve levels of recycling, and 50% of all oil and grease to be recycled.

### *Land use*

a 10% reduction in the company's land use footprint will be effected through rehabilitation.

## **Environmental performance**

### *ISO14001 implementation*

An ISO14001 EMS is being introduced progressively across our operations, and it is planned that the implementation programme at the longer-life operations will be completed in 2012. Formal certification will be sought progressively. By the end of June 2009, the implementation status at the various operations (where 100% means certification) was estimated as follows:

Doornkop shaft 90% and plant started. Stage 2 certification audit scheduled for October 2009;

Target 12%. Certification audit planned for March 2011;

Elandsrand 20%. Certification audit planned for March 2011;

Phakisa 20%. Certification audit planned for November 2010;

Evander 10%. Certification audit planned for March 2011; and

Kalgold 12%. Certification audit planned for December 2010.

The EMS forms the basis for the implementation of the environmental policy and monitoring compliance, while the Environmental Management Programme Report ( **EMPR** ) developed in line with legislative requirements, contain specific as well as general principles governing environmental management during the life of the mine. The EMPRs identify individual impacts, mitigation measures and rehabilitation requirements.

Generic closure objectives are set and high-level closure plans formulated within the EMPR, including investigation of the potential for re-use of existing infrastructure, preparation of a rehabilitation plan, rehabilitation and vegetation of the affected area and post-closure monitoring. These EMPRs are legally binding and forms part of the Group's submission for, and receipt, of mining rights conversions. Revised EMPRs (aligned with new minerals legislation) were developed for Doornkop, Kalgold, Joel, St Helena, Target, Evander, the Virginia operations and Elandsrand in fiscal 2009, and submitted to the regulatory authorities for approval. As part of this process, public participation meetings have been held with interested and affected parties.

A number of annual compliance audits were undertaken during the year, most notably by the DMR. Areas of non-compliance identified by the audits have been and are being addressed.

### *Significant environmental incidents*

Significant incidents are defined as those that have an impact outside the Group's boundaries, which may cause irreparable harm or which require significant expenditure to remedy. In fiscal 2009, four significant environmental incidents were reported. These related primarily to:

water seepage from slimes dams (one incident);

unexpected water discharged, particularly as a result of electricity interruptions and equipment failure (two incidents); and

## **Table of Contents**

the failure of a clay-lined return water dam that resulted in the flooding of an agricultural area (one incident). Incidents involving water are reported using a specific water related incident reporting system, as required in terms of Regulation 704 of the National Water Act.

### *Financial provision*

In accordance with legislation, Harmony has constituted independent environmental rehabilitation trust funds to make adequate financial provision for the expected cost of environmental rehabilitation at mine closure and for the discharge of its obligations and contingent liabilities. Each operation reviews and updates the financial provision for its expected environmental closure liability annually in consultation with a consultant. This estimate is then used to calculate the contributions to be made to the rehabilitation trust funds, and, if necessary, adjustments are made to the trust fund provisions.

The accumulated amount in the various South African rehabilitation trust funds was R1,597 million (U.S.\$207 million) at the end of June 2009 (compared with fiscal 2008, which was R1,603 million (U.S.\$206 million)), while the total rehabilitation liability was estimated at R1,918 million (U.S.\$248 million) (compared with fiscal 2008, which was R2,102 million (U.S.\$269 million).)

The assets of each mine within each fund are ring-fenced and may not be used directly to cross-subsidise one another. Contributions to the various funds will continue to be made over the operation's life-of-mine and each fund is expected to be fully cash funded at the time of closure. Until such time as the trust funds are fully-funded, bank guarantees are issued for the short-fall.

### *Australia*

Our Western Australian operations are subject to applicable environmental legislation including site specific tenement conditions imposed by the Department of Mines and Petroleum ( **DMP** ), operating licenses issued by the Department of Environment and Conservation ( **DEC** ), and water abstraction licenses issued by the Department of Water.

In Western Australia, rehabilitation obligations under the Mining Act are covered by environmental securities issued by us, or by performance bonds issued by our bankers and cash-backed by us. These bonds cannot be relinquished or cancelled without the approval of the DMP. The requirement to lodge an environmental bond is a condition applied to the tenement following assessment and approval of any mining proposal and is necessary prior to commencement of operations. Environmental rehabilitation costs are amortized over the operating life of a mine and the bond amount reviewed on an annual basis following a site audit by the regional inspector and/or our issuance of an Annual Environmental Report. As areas are successfully rehabilitated, the bond requirement is reduced until complete bond relinquishment is achieved.

While we believe that our current provision for compliance with such requirements is reasonable, any future changes and development in Australian environmental laws and regulations may adversely affect the Australian operations. The total Australian rehabilitation liability was A\$23.3 million (U.S.\$18.8 million) at the end of fiscal 2009.

During operation of the mine site, bi-annual audits are conducted by DEC to determine compliance with the relevant operating license(s). However, DEC tend not to audit when sites are on care and maintenance. There are currently no outstanding material non-compliance issues against our licenses.

At the Mount Magnet operation an appointed person dedicated to environmental matters is responsible for implementing the environmental management programs, monitoring the impact of mining on the environment and responding to impacts that require specific attention outside of the normal program of environmental activities.

The primary environmental focus at most of our operations is water management and rehabilitation. The major objective is to ensure that water is of a quality fit for use by downstream users.

**Table of Contents**

***PNG***

Our PNG operations are in various phases of activity including exploration, pre-feasibility study and project construction. We are subject to applicable environmental legislation including specific site conditions attached to the mining tenements imposed by the PNG Government Department of Environment and Conservation ( **DEC** ), the terms and conditions of operating licenses issued by the Department of Mines and DEC, and the Environment Permits for water extraction and waste discharge issued by DEC.

Some non-compliances with these requirements have been identified at the Hidden Valley Mine and remedial actions have been implemented in consultation with DEC. All other operations in PNG are compliant with their respective statutory requirements.

All PNG operations have departments and personnel dedicated to environmental matters who are responsible for implementing the company environmental management programs, monitoring the impact of mining on the environment and responding to impacts that require specific attention outside of the normal program of environmental activities.

A framework for a Sustainable Business Management System ( **SBMS** ) has been completed which complies with relevant Australian and international standards and principles for safety, environment, quality and sustainable development (including AS/NZS ISO14001:Environmental Management Systems, Equator Principles, and the Cyanide Code). This system will be implemented at all PNG and Australian operations over the next two years.

**Table of Contents**

**Health and Safety Matters**

***South Africa***

*The Mine Health and Safety Act*

For many years, the safety of persons working in South African mines and quarries was controlled by the Mines and Works Act of 1956 and then by the Minerals Act of 1991 which was replaced by the Mine Health and Safety Act. The Minerals Act of 1991 has subsequently been repealed and the MPRDA promulgated. The Mine Health and Safety Act has since been amended by Act 74 of 2008. The objectives of the Mine Health and Safety Act are:

to protect the health and safety of employees and other persons at mines;

to promote a culture of health and safety;

to require employers and employees to identify hazards and eliminate, control and minimize the risks relating to health and safety at mines;

to give effect to the public international law obligations of South Africa that concern health and safety at mines;

to provide for employee participation in matters of health and safety through health and safety representatives and health and safety committees at mines;

to provide for the effective monitoring of health and safety conditions at mines;

to provide for the enforcement of health and safety measures at mines; and

to foster and promote co-operation and consultation on health and safety between the DMR, employers, employees and their representatives.

The Mine Health and Safety Act prescribes general and specific duties for employers and others, determines penalties and a system of administrative fines, and provides for employee participation by requiring the appointment of health and safety representatives and the establishment of health and safety committees. It also entrenches the right of employees to refuse to work in dangerous conditions. Key amendments to this Act are the following:

Training records to be kept

Employer investigations

Permanent committees of the MHSC

Health and Safety Management system

Administrative fines increased from R200,000 to R1 million

Offences applicable to the Employer

Government, through the DMR, ordered the institution of audit teams to conduct legal compliance and systems and explosives control audits on mines across all commodities.

It is anticipated that mining companies will incur additional expenditure in order to comply with the prescribed legislative requirements. Management anticipates that such additional expenditure will not have a material adverse effect upon our operational results or financial condition.

**Table of Contents**

*Criminal mining*

Security issues with regard to criminal mining came to the fore during fiscal 2009. In June 2009, criminal mining resulted in the deaths of criminal miners. Harmony continues to address the issue of criminal mining on a daily basis with enhanced security, together with the South African Police Services, the Department of Justice, the National Prosecuting Authority and other affected mining companies, and by doing everything reasonably practicable to ensure that the unauthorized miners do not get access to barred areas.

*HIV & AIDS Policy*

We are actively pursuing holistic HIV & AIDS awareness campaigns with our South African workforce and are also providing medical assistance and anti-retroviral treatment. Employees who decide to leave their place of work and return home for care are cared for at their homes through the TEBA home based care system, to which we contribute. See *Item 3. Key Information Risk Factors Risks Relating to Our Business and Our Industry HIV & AIDS poses risks to Harmony in terms of productivity and costs* and *Item 3. Key Information Risk Factors Risks Relating to Our Business and Our Industry The cost of occupational healthcare services may increase in the future*.

In South Africa, we have an agreement with the relevant stakeholders concerning the management of HIV & AIDS in the workplace. This agreement, originally signed in 2002 with the National Union of Mine Workers ( NUM ) and the United Association of South Africa ( UASA ) has been subsequently amended, the latest in August 2006. While many aspects of the policy have remained unaltered, the most fundamental change is the inclusion in the policy of a broad spectrum of chronic manageable diseases other than HIV & AIDS such as diabetes, asthma and hypertension. This was done in order to minimize the stigma surrounding stand alone HIV & AIDS treatment centers and also to emphasize our view that HIV & AIDS should no longer be viewed as a death sentence, but rather a chronic, manageable disease. The agreement also serves to reassure our employees of our commitment to the respect of all human rights and commitment to non-discriminatory practices and zero tolerance to discrimination of any of our employees. During the early stages of the implementation of the HIV & AIDS program, the agreement was also used as a marketing tool to encourage employee participation in the Harmony HIV & AIDS Program.

*Management of HIV & AIDS & Tuberculosis (TB)*

The HIV & AIDS pandemic continues to have a significant impact on the company (through absenteeism, reduced performance, loss of skills) and employees and their families. At Harmony HIV & AIDS is managed at three levels.

At a clinical level, the symptoms of the illness are managed by the Group s health care services.

Company-wide and mine-specific initiatives are conducted. Shaft-based HIV & AIDS committees form an integral part of the Health and Safety Committees, which meet on a monthly basis.

Group policy and practice is overseen by a specialist health care professional.

A revised integrated clinical strategy, developed as part of the new strategy to address TB and HIV & AIDS was developed during the year. This strategy was developed through a workshopping process that was led by academics and experts drawn from the Universities of Cape Town, Pretoria and Witwatersand, and with the participation of the 19 Harmony health care staff, ranging from medical doctors, to occupational health practitioners, nursing sisters and others.

A number of key issues have been highlighted in this new strategy that integrate and consolidate the traditional HIV/AIDS and TB approaches. These include:

Concerted efforts will be made to enhance and sustain the group s Voluntary Counselling and Testing ( VCT ) programs, and to implement a pre-employment testing program.

Enhanced education and counselling will be provided to employees who are HIV-negative.

Anti-retroviral therapy ( ART ) will be introduced at an earlier stage, which is expected to have a significant impact on reducing TB incidence rates.

**Table of Contents**

In addition, efforts will be made to intensify case findings, introduce isoniazid ( **INH** ) preventative treatment and improve infection control with further infection control measures such as the use of masks, ultra-violet lights, etc.

**HIV & AIDS performance**

It is currently estimated (based on estimates within the gold mining industry) that around 30% of Harmony's employees are HIV positive. It is possible, however, that actual prevalence rates are higher than this as a result of the current treatment campaigns (including ART). A follow-up financial impact analysis will be undertaken in fiscal 2010, and will include updated actuarial analysis of these figures. Our focus is on early detection and treatment to increase the likelihood of extended, healthy lives for infected employees. New electronic data collation systems were implemented in fiscal 2009 and will improve the monitoring and evaluation of the programme outcomes.

The group's performance is focused on the following four areas:

Prevention

VCT

Treatment, care and support

Community-based interventions

HIV & AIDS expenditure decreased to R16 million (U.S.\$1.7 million) in fiscal 2009, compared to R19 million (U.S.\$2.6 million) in fiscal 2008, the decrease was mainly due to vacancies not being filled and we also saw a slight drop in drug prices as more generic drugs were registered and introduced into the market. It is understood that 633 employees with AIDS were separated from the company during the year, and 185 employees died in service as a result of AIDS, compared to 523 and 396 in fiscal 2008, respectively.

**Australia**

Australia has a well-regulated system of occupational health and safety, comprised of legislation and regulations in each of its states. Several of these specifically apply to the mining industry, including extensive codes of practice and guidelines. There is also a well-developed certification and licensing system for employees and the usage of certain items of equipment. The legislation and regulations governing this area include the Australian Standards 4804, the Safety Management Systems and the Western Australian Mining Regulation Act 1994, the Occupational Safety and Health Act 1984 (WA), the Occupational Safety and Health Regulations 1996, the Mines Safety and Inspection Act 1994 (WA) and the Mines Safety and Inspection Regulations 1995. In the event of injury while at work, employees are protected by a compulsory workers compensation scheme. We currently believe that the prevalence of HIV & AIDS-related diseases among our Australian workforce is not material to our Australian operations.

**PNG**

PNG has a significant mining industry, and a developing system of occupational health and safety. The Mining (Safety) Act of 1977 (PNG) is the principal legislation that addresses a range of issues such as working hours, minimum safety and reporting requirements. Other legislation and regulations also apply.

Although reliable statistics with regard to infection rates are not readily available, preliminary results indicate that PNG is in the early stages of an AIDS pandemic. As part of the development of the Hidden Valley project, and other exploration activities carried out by us in PNG, we have rolled out a health care strategy focused on prevention and VCT campaigns for our employees to increase AIDS awareness. See *Item 3. Key Information Risk Factors Risks Relating to Our Business and Our Industry HIV/AIDS poses risks to Harmony in terms of productivity and costs* and *Item 3. Key Information Risk Factors Risks Relating to Our Business and Our Industry The cost of occupational healthcare services may increase in the future*.

**Table of Contents**

**Item 4A. UNRESOLVED STAFF COMMENTS**

Not applicable.

**Item 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS**

*You should read the following discussion and analysis together with the consolidated financial statements, including the related notes, appearing elsewhere in this annual report.*

**Overview**

We conduct underground and surface gold mining and related activities, including exploration, processing, smelting and beneficiation. Our operations have grown significantly since 1995, largely through acquisitions. Since 1995, we have expanded from a lease-bound mining operation into an independent world-class gold producer. We are currently the third largest producer of gold in South Africa, producing some 23% of the country's gold output, and are among the world's top ten gold producers. Our gold sales have increased from 650,312 ounces of gold in fiscal 1995 to approximately 1.5 million ounces of gold in fiscal 2009. As at June 30, 2009, our mining operations reported total proven and probable reserves of approximately 48.2 million ounces and in fiscal 2009, we processed approximately 21.1 million tons of ore.

For segment purposes, management distinguishes between Underground and Surface, with each shaft or group of shafts managed by a team (headed by a single general manager) being considered to be an operating segment.

Our reportable segments are as follows:

Tshepong, Phakisa, Bambanani, Doornkop, Elandsrand, Target, Evander, Masimong, Virginia, Cooke operations (sold in November 2008 and classified as discontinued operations) and PNG; and

all other shafts and surface operations, including those that treat historic sand dumps, rock dumps and tailings dams, are grouped together under Other Underground or Other Surface.

**Critical Accounting Policies and Estimates**

The preparation of our financial statements in accordance with IFRS as issued by the IASB requires management to make estimates and assumptions that affect the reported results of our operations. Actual results may differ from those estimates. We have identified the most critical accounting policies upon which our financial results depend. Some of our accounting policies require the application of significant judgment and estimates by management in selecting the appropriate assumptions for calculating financial estimates. By their nature, these judgments are subject to an inherent degree of uncertainty and are based on our historical experience, terms of existing contracts, management's view on trends in the gold mining industry and information from outside sources.

Our significant accounting policies are described in more detail in note 2 to the consolidated financial statements. This discussion and analysis should be read in conjunction with the consolidated financial statements and related notes included in *Item 18. Financial Statements*. Management has identified the following as critical accounting policies because estimates used in applying these policies are subject to material risks and uncertainties. Management believes the following critical accounting policies, together with the other significant accounting policies discussed in the notes to the consolidated financial statements, affect its more significant judgments and estimates used in the preparation of the consolidated financial statements and could potentially impact our financial results and future financial performance.

***Gold mineral reserves***

Gold mineral reserves are estimates of the amount of ounces that can be economically and legally extracted from the Group's properties. In order to calculate the gold mineral reserves, estimates and assumptions are required about a range of geological, technical and economic factors, including quantities, grades, production techniques, recovery rates, production costs, commodity prices and exchange rates.

Estimating the quantities and/or grade of the reserves requires the size, shape and depth of the orebodies to be determined by analyzing geological data such as the logging and assaying of drill samples. This process may require complex and difficult geological

**Table of Contents**

judgments and calculations to interpret the data. These reserves are determined in accordance with SAMREC, JORC and SEC Industry Guide 7.

Because the economic assumptions used to estimate the gold mineral reserves change from year to year, and because additional geological data is generated during the course of operations, estimates of the mineral reserves may change from year to year. Changes in the proven and probable reserves may affect the Group's financial results and financial position in a number of ways, including depreciation and amortization charged in the income statement may change as they are calculated on the units-of-production method.

The estimate of the total expected future lives of our mines could be materially different from the actual amount of gold mined in the future. See *Item 3. Key Information Risk Factors Harmony's gold reserve figures are estimated based on a number of assumptions, including assumptions as to mining and recovery factors, future cash costs of production and the price of gold and may yield less gold under actual production conditions than currently estimated.*

**Impairment of Property, Plant and Equipment**

We review and evaluate our mining assets for impairment when events or changes in circumstances indicate the related carrying amounts may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash generating units). Each operating shaft, along with allocated common assets such as plants and administrative offices, is considered to be a cash generating unit as each shaft is largely independent of the cash flows of other shafts and assets.

Future cash flows are estimated based on estimated quantities of recoverable minerals, expected gold prices (considering current and historical prices, price trends and related factors), production levels and cash costs of production, capital and reclamation costs, all based on detailed life-of-mine plans. The significant assumptions in determining the future cash flows for each individual operating mine at June 30, 2009, apart from production cost and capitalized expenditure assumptions unique to each operation, included a long-term gold price of U.S.\$750 per ounce and South African and Australian dollar exchange rates of U.S.\$1 = R9.33 and A\$1 = U.S.\$0.75, respectively. The term "recoverable minerals" refers to the estimated amount of gold that will be obtained from proven and probable reserves and related exploration stage mineral interests, except for other mine-related exploration potential and greenfields exploration potential discussed separately below, after taking into account losses during ore processing and treatment. Estimates of recoverable minerals from such exploration stage mineral interests are risk adjusted based on management's relative confidence in such materials. With the exception of other mine-related exploration potential and Greenfields exploration potential, estimates of future undiscounted cash flows are included on an area of interest basis, which generally represents an individual operating mine, even if the mines are included in a larger mine complex. In the case of mineral interests associated with other mine-related exploration potential and Greenfields exploration potential, cash flows and fair values are individually evaluated based primarily on recent exploration results and recent transactions involving sales of similar properties.

As discussed above under "Gold mineral reserves", various factors could impact our ability to achieve our forecasted production schedules from proven and probable reserves. Additionally, gold prices, capital expenditure requirements and reclamation costs could differ from the assumptions used in the cash flow models used to assess impairment. The ability to achieve the estimated quantities of recoverable minerals from exploration stage mineral interests involves further risks in addition to those factors applicable to mineral interests where proven and probable reserves have been identified, due to the lower level of confidence that the identified mineralized material can ultimately be mined economically. Assets classified as other mine-related exploration potential and Greenfields exploration potential have the highest level of risk that the carrying value of the asset can be ultimately realized, due to the still lower level of geological confidence and economic modeling.

During fiscal 2009, 2008 and 2007, we recorded impairments of U.S.\$61 million, U.S.\$22 million and U.S.\$37 million, respectively, on property, plant and equipment, all from continuing operations. Material changes to any of these factors or assumptions discussed above could result in future impairment charges.

**Carrying Value of Goodwill**

We evaluate, on at least an annual basis, the carrying amount of goodwill to determine whether current events and circumstances indicate that such carrying amount may no longer be recoverable. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash generating units). Each operating shaft, along with allocated common assets such as plants and administrative offices, is considered to be a cash generating unit as each shaft is largely independent

**Table of Contents**

of the cash flows of other shafts and assets. To accomplish this, we compare the recoverable amounts of our cash generating units to their carrying amounts. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. If the carrying value of a cash generating unit were to exceed its recoverable amount at the time of the evaluation, we would compare the implied fair value of the cash generating unit's goodwill to its carrying amount and any shortfall would be charged to consolidated income statements. Assumptions underlying fair value estimates are subject to risks and uncertainties. If these assumptions change in future, we may need to record impairment charges on goodwill not previously recorded.

During fiscal 2008, we recorded an impairment of U.S.\$13 million on goodwill. No impairment was recorded during fiscal 2009.

***Provision for environmental rehabilitation***

Our mining and exploration activities are subject to various laws and regulations governing the protection of the environment. Estimated long term environmental obligations, comprising pollution control, rehabilitation and mine closure, are based on the Group's environmental management plans. Annual changes in the provision consist of finance costs relating to the change in the present value of the provision and inflationary increases in the provision estimate, as well as changes in estimates. The present value of environmental disturbances created is capitalized to mining assets against an increase in the rehabilitation provision. The rehabilitation asset is depreciated as discussed above. Rehabilitation projects undertaken, included in the estimates are charged to the provision as incurred. The cost of ongoing current programs to prevent and control pollution is charged against income as incurred.

***Deferred Tax Asset***

We do not recognize a deferred tax asset when it is more likely than not that the asset will not be utilized. Assessing recoverability of deferred tax assets requires management to make significant estimates related to expectation of future taxable income. Estimates of future taxable income are based on forecasted cash flows from operations, reversals of deferred tax liabilities and the application of existing tax laws in each jurisdiction. To the extent that future taxable income differs significantly from estimates, our ability to realize the net deferred tax assets recorded at the balance date could be impacted. Additionally, future changes in tax laws in the jurisdictions in which we operate could limit our ability to obtain the future tax benefits represented by deferred tax assets recorded at the balance date.

**Revenue**

Substantially all of our revenues are derived from the sale of gold. As a result, our operating results are directly related to the price of gold. Historically, the price of gold has fluctuated widely. The gold price is affected by numerous factors over which we do not have control. See *Item 3. Key Information Risk Factors The profitability of Harmony's operations, and the cash flows generated by those operations, are affected by changes in the market price for gold, which in the past has fluctuated widely*.

As a general rule, we sell our gold produced at market prices to obtain the maximum benefit from increases in the prevailing gold price and do not enter into hedging arrangements such as forward sales or derivatives that establish a price in advance for the sale of our future gold production.

A substantial proportion of the production at each of New Hampton and Hill 50 in Australia was already hedged when we acquired them. Since fiscal 2002, in line with our strategy of being generally unhedged, we evaluated the hedge agreements as well as market conditions and closed out the hedge contracts at the time that provided the most benefits. The last of the contracts were closed out during fiscal 2007, which resulted in our being unhedged in line with our stated company policy to give shareholders full exposure to the gold price. Our costs of closing out certain operations hedge positions in fiscal year 2007 were approximately U.S.\$60 million, before taxes.

Significant changes in the price of gold over a sustained period of time may lead us to increase or decrease our production in the near-term.

**Table of Contents****Harmony's Realized Gold Price**

The average gold price in U.S. dollars received by us has generally increased since January 1, 2002. In fiscal 2009, the average gold price in U.S. dollars received by us for continuing operations was U.S.\$867 per ounce. The market price for gold (and, accordingly, the price received by us) is affected by numerous factors over which we have no control. See *Item 3. Key Information Risk Factors The profitability of Harmony's operations, and the cash flows generated by those operations, are affected by changes in the market price for gold, which in the past has fluctuated widely*.

The following table sets out the average, the high and the low London Bullion Market price of gold and our average U.S. dollar sales price during the past three fiscal years:

	<b>Fiscal Year Ended June 30,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
		(\$/oz)	
Average	874	821	638
High	989	1,011	692
Low	713	649	561
Harmony's average sales price - continuing operations	867	813	638

- (1) Our average sales price differs from the average gold price due to the timing of our sales of gold within each year.

**Costs**

Our cash costs and expenses typically make up over 80% of our total costs. The remainder of our total costs consists primarily of exploration costs, employment termination costs, corporate and sundry expenditure, and depreciation and amortization. Our cash costs consist primarily of production costs exclusive of depreciation and amortization. Production costs are incurred on labor, stores and utilities. Labor costs are the largest component and typically comprise approximately 58% of our production costs.

Our cash costs for continuing operations has increased from U.S.\$487 per ounce in fiscal 2007 to U.S.\$583 per ounce in fiscal 2009, mainly as a result of lower production volumes, the impact of increased labor and energy costs as well as inflationary pressures on supply contracts. In U.S. dollar terms, these increases were offset by the depreciation of the Rand-U.S. dollar exchange rate.

Our U.S. translated costs are very sensitive to the exchange rate of the Rand and other non-U.S. currencies to the U.S. dollar. See *Item 5. Operating and Financial Review and Prospects Exchange Rates*. Appreciation of the Rand and other non-U.S. currencies against the U.S. dollar increases working costs at our operations when those costs are translated into U.S. dollars. See *Item 3. Key Information Risk Factors Because most of Harmony's production costs are in Rand and other non-U.S. currencies, while gold is generally sold in U.S. dollars, Harmony's financial condition could be materially harmed by an appreciation in the value of the Rand and other non-U.S. currencies*.

The average rate of the South African Rand depreciated approximately 24% against the U.S. dollar in fiscal 2009 compared to fiscal 2008. In the case of our International operations, the Australian dollar depreciated approximately 16%, while the Kina appreciated approximately 5%, against the U.S. dollar in fiscal 2009 compared to fiscal 2008.

**Reconciliation of Non-GAAP Measures**

Total cash costs and total cash costs per ounce are non-GAAP measures.

Our cash costs consist primarily of production costs and are expensed as incurred. The cash costs are incurred to access ore to produce current mined reserves. Cash costs do not include capital development costs, which are incurred to allow access to the ore body for future mining operations and are capitalized and amortized when the relevant reserves are mined.

We have previously calculated total cash costs and total cash costs per ounce by dividing total cash costs, as determined using the guidance provided by the Gold Institute, by gold ounces sold. Total cash costs, as defined in the guidance provided by the Gold Institute, include mine production costs, transport and refinery costs, applicable general and administrative costs, costs associated with movements in production inventories and ore stockpiles, ongoing environmental rehabilitation costs, as well as transfers to and from deferred stripping and costs associated with royalties. Ongoing employee termination cost is included, however, employee termination costs associated with major restructuring and shaft closures are excluded. Management has recalculated these measures to exclude the

**Table of Contents**

costs associated with movements in production inventories, and in line with this change, now use gold ounces produced as the denominator. The measures have been re-presented for all comparative periods shown.

Changes in cash costs per ounce are affected by operational performance, as well as changes in the currency exchange rate between the Rand and the U.S. dollar and, in the case of the International operations, the Australian dollar and Kina. Total cash costs and total cash costs per ounce are non-GAAP measures. Total cash costs and total cash costs per ounce should not be considered by investors in isolation or as an alternative to production costs, cost of sales, or any other measure of financial performance calculated in accordance with IFRS as issued by the IASB. In addition, while the Gold Institute has provided guidance for the calculation of total cash costs and total cash costs per ounce, the calculation of total cash costs and total cash costs per ounce may vary from company to company and may not be comparable to other similarly titled measures of other companies. However, we believe that cash costs per ounce is a useful indicator to investors and management of a mining company's performance as it provides (1) an indication of the cash generating capacities of our mining operations, (2) the trends in cash costs as the company's operations mature, (3) a measure of a company's performance, by comparison of cash costs per ounce to the spot price of gold and (4) an internal benchmark of performance to allow for comparison against other companies.

*Continuing operations*

The following is a reconciliation of total cash costs from continuing operations, as a non-GAAP measure, to the nearest comparable GAAP measure, cost of sale from continuing operations:

	<b>Fiscal year ended June 30,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
	<b>(in \$ millions, except per ounce amounts)</b>		
Total cost of sales from continuing operations under IFRS	1,104	1,162	1,084
Depreciation and amortization expense	(167)	(117)	(134)
(Provision)/reversal of provision for rehabilitation costs	(3)	(2)	6
Care and maintenance costs of restructured shafts	(6)	(10)	(8)
Employment termination and restructuring costs	(4)	(32)	
Share-based payments	(13)	(6)	(6)
Impairment of assets	(61)	(35)	(37)
Provision for post retirement benefits		(1)	2
Gold inventory movement	2	(2)	10
Total cash costs from continuing operations using Gold Institute guidance	852	957	917
Per ounce calculation:			
Ounces produced	1,460,831	1,599,854	1,881,908
Total cash cost per ounce from continuing operations using Gold Institute guidance	583	598	487

**Table of Contents***Discontinued operations*

The following is a reconciliation of total cash costs from discontinued operations, as a non-GAAP measure, to the nearest comparable GAAP measure, cost of sales from discontinued operations:

	<b>Fiscal year ended June 30,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
	<b>(in \$ millions, except per ounce amounts)</b>		
Total cost of sales from discontinued operations under IFRS	50	196	263
Depreciation and amortization expense		(7)	(29)
Provision for rehabilitation costs		(1)	(6)
Care and maintenance costs of restructured shafts			(1)
Employment termination and restructuring costs		(1)	
Share-based payments			(1)
Gold inventory movement	2	6	
Total cash costs from discontinued operations using Gold Institute guidance	52	193	226
Per ounce calculation:			
Ounces produced	80,377	310,603	451,492
Total cash cost per ounce from discontinued operations using Gold Institute guidance	644	621	499

*Total Harmony Continuing and discontinued operations*

The following is a reconciliation of total cash costs from the total operations, as a non-GAAP measure, to the nearest comparable GAAP measure, cost of sales from the total operations:

	<b>Fiscal year ended June 30,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
	<b>(in \$ millions, except per ounce amounts)</b>		
Total production costs under IFRS	1,154	1,358	1,347
Depreciation and amortization expense	(167)	(124)	(163)
(Provision)/reversal of provision for rehabilitation costs	(3)	(3)	
Care and maintenance costs of restructured shafts	(6)	(10)	(9)
Employment termination and restructuring costs	(4)	(33)	
Share-based payments	(13)	(6)	(7)
(Impairment)/reversal of impairment of assets	(61)	(35)	(37)
Provision for post retirement benefits		(1)	2
Gold inventory movement	4	4	10
Total cash costs using Gold Institute guidance	904	1,150	1,143
Per ounce calculation:			
Ounces produced	1,541,208	1,910,457	2,333,400
Total cash cost per ounce using Gold Institute guidance	586	602	489

Within this disclosure document, our discussion and analysis is focused on the total cash costs measure as defined by the Gold Institute, as modified to exclude the effects of changes in production inventory.

While recognizing the importance of reducing cash costs, our chief focus is on controlling and, where possible, reducing total costs, including overhead costs. We aim to control total unit costs per ounce produced by maintaining our low total cost structure at our existing operations. We have been able to reduce total costs by implementing a management structure and philosophy that is focused on reducing management and administrative costs, implementing an ore reserve management system that allows for greater grade control and acquiring higher grade reserves. See *Item 4. Information on the Company Business Strategy*.



**Table of Contents****Exchange Rates**

Our revenues are very sensitive to the exchange rate of the Rand and other non-U.S. currencies to the U.S. dollar.

Currently, the majority of our earnings are generated in South Africa and, as a result, most of our costs are incurred in Rand. Since gold is generally sold in U.S. dollars, most of our revenues are received in U.S. dollars. The average gold price received by us during fiscal 2009 increased by U.S.\$54 per ounce to U.S.\$867 per ounce from U.S.\$813 per ounce during fiscal 2008. Appreciation of the Rand against the U.S. dollar increases our U.S. dollar working costs at our South African operations when those costs are translated into U.S. dollars, which serves to reduce operating margins and net income from our South African operations. Depreciation of the Rand against the U.S. dollar reduces these costs when they are translated into U.S. dollars, which serves to increase operating margins and net income from our South African operations. Accordingly, strength in the Rand generally results in poorer earnings for us if there is not a similar increase in the gold price.

The exchange rates obtained when converting U.S. dollars to Rand are determined by foreign exchange markets, over which we have no control. The conversion rate for balance sheet items as at June 30, 2009 is R7.72 per U.S.\$1.00, except for specific items within equity that are converted at the exchange rate prevailing on the date the transaction was entered into. This compares with a conversion rate of R7.80 per U.S.\$1.00 as at June 30, 2008, reflecting an appreciation of 1% of the Rand against the U.S. dollar when compared with June 30, 2008. Income statement items were converted at the average exchange rate for the fiscal 2009 (R9.00 per U.S.\$1.00), reflecting a depreciation of 24% of the Rand against the U.S. dollar when compared with fiscal 2008. The majority of our working costs are incurred in Rands and as a result this depreciation of the Rand against the U.S. dollar would reduce our working costs when translated into U.S. dollars. This effect was however negated by increases in our labor costs as well as inflationary pressures on our consumable stores and energy cost, which served to decrease operating margins and net income reflected in our consolidated income statement for fiscal 2009. Depreciation of the Rand against the U.S. dollar would cause a decrease in our costs in U.S. dollar terms. Similarly, at our International operations, depreciation of the Australia dollar or Kina against the U.S. dollar would cause a decrease in our costs in U.S. dollar terms. See *Item 3. Key Information Risk Factors Because most of Harmony's production costs are in Rand and other non-U.S. currencies, while gold is generally sold in U.S. dollars, Harmony's financial condition could be materially harmed by an appreciation in the value of the Rand and other non-U.S. currencies* .

**Inflation**

Our operations have been materially affected by inflation. Inflation in South Africa has fluctuated widely in recent years, reaching 11.6% at the end of fiscal 2008 before it decreased significantly to 6.9% at the end of fiscal 2009. This decrease was due to inflation targeting by the SARB, a task that it will continue in fiscal 2010. However, working costs, and wages especially, have increased considerably over the past three years resulting in significant cost pressures for the mining industry. Our profits and financial condition could also be affected adversely in the absence of a concurrent devaluation of the Rand and an increase in the price of gold.

**South African Socio-Economic Environment**

We are a South African company and the majority of our operations are in South Africa. As a result, we are subject to various economic, fiscal, monetary and political policies and factors that affect South African companies generally. See *Item 3. Key Information Risk Factors Socio-economic instability in South Africa or regionally may have an adverse effect on Harmony's operations and profits* .

South African companies are subject to significant exchange control limitations. While exchange controls have been relaxed in recent years, South African companies remain subject to significant restrictions on their ability to deploy capital outside of the Southern African Common Monetary Area. See *Item 10. Additional Information Exchange Controls* .

Social and Labor Plans, or SLPs, have been developed for each of our South African operations. These SLPs are prepared in line with legislation governing the participation of HDSAs in mining assets.

We have been granted all of our mining licenses under the MPRDA. We have therefore already started to incur expenses relating to HDSA participation. We believe the biggest challenge will lie in maintaining these licenses, as we will have a responsibility in respect of human resource development, procurement and local economic development. We are unable, however, to provide a specific amount of what the estimated cost of compliance will be but we will

continue to monitor these costs on an ongoing basis.

## **Table of Contents**

### **Royalties**

The MPRDA makes reference to royalties payable to the South African state in terms of the Mineral and Petroleum Resources Royalty Act (Act 28 of 2008). The Act provides for the payment of a royalty according to a formula based on earnings before interest, tax and depreciation, after the deduction of capital expenditure. This rate is then applied to revenue to calculate the royalty amount due, with a minimum of 0.5% and a maximum of 5% for gold mining companies. It is estimated that the formula could translate to a royalty rate of more than 2% of gross sales in terms of current pricing assumptions. The final legislation results in a large increase from the 1.5% rate proposed in the draft in 2006. The royalty is to become effective on March 1, 2010. The introduction of the Mining and Petroleum Royalty Act will have an adverse impact on the profits generated by our operations in South Africa.

### **Costs**

As part of our Back-to-Basics strategy, we reinstated the focus on monthly reviews to ensure that stringent cost control measures are in place and enforced. This will assist us in monitoring and reducing consumable costs.

Due to the fact that the new mines are expected to start producing high volumes of ore, with better economies of scale, at higher grades, we expect that cash operating costs in dollar per ounce terms will be reduced. This will be dependent on our achieving our operational plans. An increase is expected in revenue due to the increase in the gold price, as per our long term view on the various factors influencing the Rand gold price.

We reassessed our labor force and implemented several measures to reduce labor costs. These measures included terminating some contractors and offering voluntary severance packages to employees.

### **Conops**

For some years, mining companies have been trying to implement the concept of Conops on the basis that it is, in theory, a better practice to utilize the company's capital intensive, fixed assets for every day (excluding public holidays) of the year rather than for 80% of the year. It was estimated that Conops should result in increased production of around 25%, with a cost increase in the region of 18%, which would lead to increased profitability. We have been one of the few companies that had actually been able to implement Conops, with some degree of success and with the cooperation of the labor unions.

However, as part of our complete review of the operations in fiscal 2008, our Executive Committee took a long and hard look at the real benefits of Conops. In essence, we undertook a due diligence as if we were evaluating it for the first time.

As a result of these assessments, Conops was stopped at all operations by the end of fiscal 2008, with the exception of Evander 8 and Target. During 2009, Conops continued at both these shafts.

### **Productivity**

The decline in productivity has been one of the challenges facing the South African gold industry for a number of years. This decline in our productivity mainly came as a result of an aging workforce, the health of the workforce that has been negatively impacted by HIV and AIDS, increased working distances from shafts and aging infrastructure. We reacted to these challenges through various initiatives including the Healthy workforce drive, the VCT campaign upgrade of rail bound equipment and track work and other improvement projects.

### **Electricity Supply**

Historically, South Africa has enjoyed both low-cost electrical energy provision, and a stable supply. In early 2008, however, the national power utility Eskom experienced a major capacity shortage resulting in country-wide blackouts and reduced energy supply. The mining industry was severely affected for a period of five days in January 2008, and thereafter imposed limitations which continued to have an impact. We have devised new strategies so as to optimize our usage of 90% of our previous electricity supply allowed in terms of the Energy Conservation Scheme ( ECS ) and interim rules imposed by Eskom. All operations were allocated an ECS allocation in line with the Eskom allocation and equipment and management structures were put in place to monitor and manage real-time consumption.

**Table of Contents**

Applications submitted to Eskom for additional energy allocation to the four future growth projects were approved, enabling us to proceed with the projects and to ramp-up to full capacity utilizing Eskom power. We also submitted applications for additional power allocation for four future projects in the Free State, which were also approved by Eskom. Annual re-submissions for the verification of the fiscal 2009/2010 allocations, including additional allocation for all approved projects, and Nominated Maximum Demand ( **NMD** ) to secure adequate network capacity were made to Eskom as required by the interim ECS and new NMD rules. We are a voluntary participant in the ECS until such time that the national ECS becomes compulsory and Eskom relationships are maintained on this basis.

The Eskom supply constraint renewed South African industry's interest in renewable energy and various companies have obtained access to internationally-proven technology that was previously not readily available or affordable in South Africa. Investigations into solar heating and solar electricity generation initiatives are currently underway to identify viable projects that could potentially contribute towards our energy efficiency improvement and carbon footprint reduction.

The challenge for us is to improve production to the required levels without compromising the saving initiatives achieved during fiscal 2008 and 2009.

**Table of Contents**

**Results of Operations**

***Years Ended June 30, 2009 and 2008***

***Continuing Operations***

***Revenues***

Revenue decreased U.S.\$48 million, or 4%, from U.S.\$1,325 million in fiscal 2008 to U.S.\$1,277 million in fiscal 2009. This decrease can primarily be attributed to the decrease in ounces sold. This was offset was by the higher average price of gold received by us, U.S.\$867 per ounce in 2009 compared to U.S.\$813 per ounce in 2008.

Our gold sales decreased 154,062 ounces, or 9%, from 1,627,624 in fiscal 2008 to 1,473,562 in fiscal 2009. The grade recovered was lower, at 0.07 ounces per ton in fiscal 2009 compared to 0.08 ounces per ton in fiscal 2008, negatively impacting on the ounces produced. The lower recovery grade was as a result of the increase in tons treated from surface tailings dams at a lower recovery grade.

At Tshepong ounces sold decreased by 17%, from 273,119 in fiscal 2008 to 227,113 in fiscal 2009. This was due to a lower recovery grade of 0.152 ounces per ton compared with 0.161 ounces per ton in fiscal 2008.

At Phakisa ounces sold increased from 4,212 in fiscal 2008 to 21,477 in fiscal 2009. This was due to an increase in production volumes as the various sections moved into production, building up to full production in the next two to three years.

At Bambanani ounces sold decreased by 25%, from 158,985 in fiscal 2008 to 119,665 in fiscal 2009. This was due to a lower production as a result of the restructuring due to power constraints. This was offset by a better recovery grade which increased from 0.170 ounces per ton in fiscal 2008 to 0.213 in fiscal 2009.

At Doornkop ounces sold decreased from 44,143 in fiscal 2008 to 43,211 in fiscal 2009. This is due to the lower recovery grade, which deteriorated to 0.070 in fiscal 2009, compared with 0.089 in fiscal 2008.

At Elandsrand ounces increased from 158,631 in fiscal 2008 to 183,676 in fiscal 2009. This was due to an increase in the production volumes.

At Masimong ounces sold increased by 31%, or 37,006 ounces, from 117,575 in fiscal 2008 to 154,581 in fiscal 2009. This was due to an increase in production volumes from 892,000 tons to 981,000 tons in fiscal 2009 and a higher recovery grade of 0.157 ounces per ton due to a higher face grade being mined.

At Evander ounces sold decreased by 18%, from 240,037 in fiscal 2008 to 195,668 in fiscal 2009. This was due to a decrease in production volumes as a result of the closure of the pillars in the old mine and poor environment conditions in the decline area which affected mining.

The ounces sold at Kalgold decreased by 28% from 93,172 in fiscal 2008 to 66,841 in fiscal 2009. This was due to a 31% decrease in recovery grade from 0.055 ounces per ton in fiscal 2008 to 0.038 ounces per ton in fiscal 2009. This was due to the depletion of the D-zone.

Ounces sold at Mount Magnet decreased from 77,097 in fiscal 2008 to nil in fiscal 2009. This was due to the operation being put on care and maintenance in December 2007 in anticipation of its sale.

**Table of Contents***Cost of sales*

Cost of sales includes production costs, depreciation and amortization, impairment of assets and employment termination and restructuring costs.

a) *Production costs*

The following table sets out our total ounces produced and weighted average cash costs per ounce for fiscal 2009 and fiscal 2008:

	Year Ended June 30, 2009		Year Ended June 30, 2008		Percentage (Increase)/decrease in Cash Costs per ounce
	(oz)	(\$/oz)	(oz)	(\$/oz)	
<b>SOUTH AFRICA</b>					
Tshepong	230,778	483	265,914	455	(6.2)
Phakisa	22,216	555	4,024	497	(11.7)
Bambanani	121,530	611	154,879	639	4.4
Doornkop	42,150	804	44,038	749	(7.3)
Elandsrand	174,321	660	164,215	652	(1.2)
Target	87,225	645	79,602	716	9.9
Masimong	154,034	476	116,424	756	37.0
Evander	190,075	572	231,799	526	(8.7)
Virginia	258,170	638	247,820	726	12.1
Other underground	65,684	636	67,862	752	15.4
Other surface	114,648	521	147,980	378	(37.8)
<b>INTERNATIONAL</b>					
<b>PNG</b>					
Other			75,297	545	100
Total continuing operations	1,460,831		1,599,854		
Weighted average		583		598	2.5

Our average cash costs from continuing operations decreased by U.S.\$15 per ounce, or 2.5%, from U.S.\$598 per ounce in fiscal 2008 to U.S.\$583 per ounce in fiscal 2009. Cash costs per ounce vary with the working costs per ton (which is, in turn, affected by the number of tons processed) and grade of ore processed. Cash costs expressed in U.S. dollars per ounce also vary with fluctuations in the Rand-U.S. dollar exchange rate, because most of our working costs are incurred in Rand. The decrease in cash cost expressed in U.S. dollars per ounce in fiscal 2009 was attributable primarily to the depreciation of the South African Rand against the U.S. dollar. This was offset by an increase in operating cost as well as the decrease in ounces produced when compared to fiscal 2008. Annual increases in labor cost as well as inflationary pressures on our consumable stores and energy costs were the main contributors towards a higher operating cost.

At Tshepong, the cash costs per ounce increased from U.S.\$455 in fiscal 2008 to U.S.\$483, or 6%, in fiscal 2009. This was due to the decrease in ounces produced in fiscal 2009 as well as increases in labor and electricity costs.

At Phakisa, the cash costs per ounce increased from U.S.\$497 in fiscal 2008 to U.S.\$555, or 12%, in fiscal 2009. This was due to the increase in tons mined as a result of the planned ramp-up in production.

At Doornkop, the cash costs per ounce increased by 7%, from U.S.\$749 in fiscal 2008 to U.S.\$804 in fiscal 2009, primarily due to labor, consumables and services cost increases.

At Target, the cash costs per ounce decreased from U.S.\$716 in fiscal 2008 to U.S.\$645 in fiscal 2009, or by 10%. This reduction was due to higher gold production.

At Masimong, the cash costs per ounce decreased by 37% from U.S.\$756 in fiscal 2008 to U.S.\$476 in fiscal 2009, primarily due to the restructuring and cessation of Conops, as well as an increase in ounces produced.



**Table of Contents**

At Evander, the cash costs per ounce increased by 9%, from U.S.\$526 in fiscal 2008 to U.S.\$572 in fiscal 2009, primarily due to a decrease in ounces produced.

Under Other Surface, the cash costs per ounce at Kalgold increased by 26% from U.S.\$401 in fiscal 2008 to U.S.\$506 in fiscal 2009, primarily due to the decrease in ounces produced. Also contributing was an increase of 40% at Phoenix, from U.S.\$381 to U.S.\$534, as a result of a decrease in grade.

*b) Depreciation and amortization*

Depreciation and amortization increased to U.S.\$167 million in fiscal 2009 from U.S.\$117 million in fiscal 2008. This increase relates primarily to the charge for the Mount Magnet operation when it ceased to be classified as held-for-sale and depreciation amounting to U.S.\$28 million for the period from April 2007 to June 2009 was recorded. Also contributing to the increase is the commencement of depreciation at Tshepong's Sub 66 Decline. Depreciation was accelerated at Evander and Bambanani as a result of the decrease in the reserves used as a denominator in the calculation.

*c) Employment termination and restructuring costs*

The charge for employment termination and restructuring costs decreased from U.S.\$32 million in fiscal 2008 to U.S.\$4 million in fiscal 2009. The charges relate to the voluntary retrenchment process that was initiated in December 2007 when management decided to decentralize certain of the central services departments and the cessation of Conops at several of the operations.

*d) Impairment of assets*

The impairment charge increased from U.S.\$35 million in fiscal 2008 to U.S.\$61 million in fiscal 2009. The charge in fiscal 2009 relates to impairments at the Virginia, Evander and Target operations amounting to U.S.\$71 million. These impairments resulted primarily from a decrease in the expected life of mine of these operations, as well as an increase in the costs to operate the shafts. At Target and Evander, additional capital expenditure has been included in the revised life-of-mine plans in order to access reserve ounces in areas where geological anomalies have been discovered. These changes resulted in the carrying amount exceeding the recoverable amount. This was offset by a reversal of the impairment at Mount Magnet when this operation was no longer classified as held-for-sale and the carrying amount was re-measured in terms of IFRS 5, *Non-current Assets Held For Sale and Discontinued Operations*. The charge in fiscal 2008 relates to impairments at the Evander and other underground operations as well as surface operations (Kalgold). Included in the amount is U.S.\$13 million for goodwill related to certain shafts that were included under Other Underground. These impairments resulted primarily from a decrease in the expected life of mine of these operations, as well as an increase in the costs to operate the shafts. These changes resulted in the carrying amount exceeding the recoverable amount.

*e) Share based compensation*

The charge for share based compensation increased from U.S.\$6 million in fiscal 2008 to U.S.\$13 million in fiscal 2009. This increase is primarily attributable to the higher grant-date fair value of share options granted to eligible employees in December 2008. Also included in the charge for 2009 is the acceleration of the cost relating to unvested shares attributable to the employees at the Cooke operations who were transferred to Rand Uranium.

*Corporate, administration and other expenditure*

The charge increase from U.S.\$33 million in fiscal 2008 to U.S.\$40 million in fiscal 2009, primarily as a result of the allocation of certain central service departments and employees to the corporate budget, which is not included in production costs.

*Profit on sale of property, plant and equipment*

The profit increased from U.S.\$18 million in fiscal 2008 to U.S.\$116 million in fiscal 2009, primarily as a result of the sale of 50% of our interest in the PNG gold and copper assets to Newcrest.

**Table of Contents***Other expenses net*

The charge for other expenses decreased to U.S.\$3 million, compared with a charge of U.S.\$13 million in fiscal 2008. Included in the total for fiscal 2009 is a charge of U.S.\$22 million recognized in the income statement for the foreign exchange movements after the de-designation of loans previously designated as forming part of the net investment in foreign operations. The amount in fiscal 2008 was a credit of U.S.\$15 million. Also included in the total for fiscal 2009 is an amount of U.S.\$53 million relating to the reclassification to the income statement, following the partial repayment of the loans, of a portion of the accumulated gains recorded in equity that arose while these loans were considered to form part of the net investment in the foreign operations. During fiscal 2009, bad debts amounting to U.S.\$3 million were written off. A provision for bad debts of U.S.\$11 million was also raised in fiscal 2009, a decrease from fiscal 2008 of U.S.\$2 million.

*Profit/(loss) from associates*

The profit from associates was U.S.\$1 million in fiscal 2009, compared to the loss of U.S.\$11 million in fiscal 2008. The increase relates primarily to inclusion of profits from Rand Uranium since acquisition on November 21, 2008. This was offset by the losses from Pamodzi of U.S.\$4 million in fiscal 2009. The loss in fiscal 2008 relates to losses from Pamodzi recognized from the date of acquisition.

*Impairment of investment in associate*

The charges in fiscal 2009 and 2008 for the impairment of investment in associate relates primarily to the impairment of the investment in Pamodzi. When Pamodzi was placed into liquidation and the trading of its shares on the JSE suspended during fiscal 2009, the investment was fully impaired. At June 30, 2008, management determined that the recoverable amount of the investment was U.S.\$19 million, which represented the market value of the listed shares on that date.

*Fair value movement of financial instruments*

The loss in fiscal 2009 relates primarily to the impairment of the investment in Dioro of U.S.\$11 million reclassified from other reserves to the income statement when the investment was considered to be permanently impaired at December 31, 2008. This was offset by the subsequent gain recognized in the income statement on the disposal of the investment in April 2009. The gain in fiscal 2008 relates to the investment in ARM held by the ARM Empowerment Trust, where the increase in the share value of the ARM shares above R29 (U.S.\$4.62) per share was limited to the interest capitalized on the Nedbank loan.

*Loss on sale of listed investments*

The loss on sale of listed investments of U.S.\$63 million in fiscal 2008 relates to the sale of the remainder of the investment in Gold Fields.

*Investment income*

Investment income increased from U.S.\$39 million in fiscal 2008 to U.S.\$49 million in fiscal 2009, primarily due to the increase in interest received on cash balances, which were higher throughout the year, as well as on held-to-maturity investments held by our environmental trust funds.

*Finance costs*

Finance costs decreased from U.S.\$71 million in fiscal 2008 to U.S.\$24 million in fiscal 2009. This was due primarily to the decrease in interest rates as well as the decrease in the balance of the outstanding debt. Also contributing to the decrease in finance cost expensed was the increase in interest capitalized to qualifying assets, from U.S.\$22 million in fiscal 2008 to U.S.\$31 million in fiscal 2009.

*Income and Mining Taxes*

*South Africa.* We pay taxes on mining income and non-mining income. The amount of our South African mining income tax is calculated on the basis of a formula that takes into account our total revenue and profits from, and capital expenditures for, mining operations in South Africa. 5% of total mining revenue is exempt from taxation in South Africa as a result of the application of the

**Table of Contents**

applicable gold mine formula. The amount of revenue subject to taxation is calculated by deducting qualifying capital expenditures from taxable mining income. The amount by which the taxable mining income exceeds 5% of mining revenue constitutes taxable mining income. We and our subsidiaries each make our own calculation of taxable income.

The tax rate applicable to the mining and non-mining income of a gold mining company depends on whether the company has elected to be exempt from the Secondary Tax on Companies ( **STC** ). STC is a tax on dividends declared and, at present, the STC tax rate is equal to 10% (previously 12.5%). To the extent we receive dividends, such dividends received are offset against the amount of dividends paid for purposes of calculating the amount subject to STC. In 1993, all existing South African gold mining companies had the option to elect to be exempt from STC. If the election was made, a higher tax rate would apply for both mining and non-mining taxable income. In 2009 and 2008, the tax rates for companies that elected the STC exemption were 43% for mining income and 35% for non-mining income, compared with 34% for mining income and 28% for non-mining income if the STC exemption election was not made. In 1993, the Harmony Company elected to pay the STC tax. All of our South African subsidiaries, excluding Avgold, elected the STC exemption.

<b>Income and Mining Tax</b>	<b>2009</b>	<b>2008</b>
Effective tax rate expense	(10%)	680%

The effective tax rate for fiscal 2009 was lower than the statutory tax rate of 43% for us and our subsidiaries as a whole. The most significant reasons for the decrease relates to differences between the SA mining statutory tax rate and the rate used to provide deferred tax, and other tax dispensations granted on certain mining assets. Offsetting this is non-deductible expenses and prior year adjustments. Included in the non-deductible expenses is non-deductible interest of U.S.\$17 million, impairments of U.S.\$20 million, as well U.S.\$24 million relating to transfer pricing.

*Australia.* Generally, Australia imposes tax on the worldwide income (including capital gains) of all of our Australian incorporated and tax resident entities. The current income tax rate for companies is 30%. Ongoing business, mining, exploration and rehabilitation costs incurred each year are fully deductible. The cost of plant and capital mining expenditure may be depreciated and deducted over its effective life.

The Australian legislature has introduced a Tax Consolidations Regime, under which from July 1, 2003, Harmony Gold Australia Proprietary Limited and its wholly owned Australian subsidiary companies are recognized and taxed as a single entity. Under the consolidations rules all of the Australian subsidiary companies are treated as divisions of the Head Company, Harmony Gold Australia. As a result all inter company transactions between group members are ignored for tax purposes. This allows the group to transfer assets between group members without any tax consequences, and deems all tax losses to have been incurred by the Head Company of the group.

Mining operations in Western Australia are also subject to a 2.5% gold royalty because the mineral rights are owned by the State Government. All gold production from the Mount Magnet operations is subject to this royalty.

Withholding tax is payable on dividends, interest and royalties paid by Australian residents to non-residents, which would include any dividends on the shares of our Australian subsidiaries that are paid to us. In the case of dividend payments to non-residents, a 30% withholding tax applies. However, where the recipient of the dividend is a resident of a country with which Australia has concluded a double taxation agreement, the rate of withholding tax is generally limited to 15% (or in the case of South Africa 5% where the dividend is paid to a company which controls at least 10% of the Australian dividend paying company). Where dividends are fully franked, no withholding tax applies as an effective credit is allowed against any withholding tax otherwise payable, regardless of whether a double taxation agreement is in place.

*PNG.* The Hidden Valley Project in PNG is expected to commence operations in fiscal 2010. We are also reviewing other potential projects and carrying out extensive exploration.

PNG mining projects are taxed on a project basis. Therefore each project is taxed as a separate entity, even though it may be one of a number of projects carried on by the same company. In certain circumstances there is an ability to transfer the tax benefit obtained through exploration expenditure between projects and wholly owned companies. Tax losses are generally quarantined and cannot be transferred between projects.

PNG mining companies are taxed at a rate of tax of 30%.



**Table of Contents**

Capital development and exploration expenditure incurred in PNG is capitalized for tax purposes and can be generally deducted at 25% per annum on a diminishing value basis against project income.

PNG imposes dividend withholding tax of 10% on dividends paid by PNG mining operations to non residents. Although PNG also imposes interest withholding tax on interest paid off-shore, the PNG Tax Act exempts interest paid to non resident lenders from withholding tax where the PNG company is engaged in mining operations in PNG.

*Discontinued Operations*

*Revenues*

Revenues decreased from U.S.\$253 million in fiscal 2008 to U.S.\$69 million in fiscal 2009, due to the fact that the Cooke operation was sold in November 2008.

*Costs*

Costs decreased from U.S.\$199 million in fiscal 2008 to U.S.\$51 million in fiscal 2009. This was due to the sale of the Cooke operation in November 2008.

*Profit/(loss) on sale of property, plant and equipment*

The profit on property, plant and equipment in fiscal 2009 relates to the sale of the Cooke operations in November 2008. The loss on sale of property, plant and equipment for fiscal 2008 of U.S.\$4 million relates to the loss of U.S.\$13 million on the sale of South Kalgoorlie as well as the profit of U.S.\$9 million on the sale of Orkney.

*Income and Mining Taxes*

*South Africa.* We pay taxes on mining income and non-mining income. For details, refer to the discussion under *Income and Mining Taxes* in the *Continuing Operations* section.

In 2009 and 2008, the tax rates for companies that elected the STC exemption were 43% for mining income and 35% for non-mining income, compared with 34% for mining income and 28% for non-mining income if the STC exemption election was not made.

*Australia.* We pay taxes on mining income and non-mining income. For details, refer to the discussion under *Income and Mining Taxes* in the *Continuing Operations* section. In fiscal 2009 and 2008, the income tax rate for companies was 30%.

*Continuing and discontinued operations*

*Net profit/(loss)*

The net profit/(loss) increased from a net loss of U.S.\$30 million in fiscal 2008 to a net profit of U.S.\$311 million. This is due to the factors discussed above.

***Years Ended June 30, 2008 and 2007***

*Continuing Operations*

*Revenues*

Revenue increased U.S.\$123 million, or 10%, from U.S.\$1,202 million in fiscal 2007 to U.S.\$1,325 million in fiscal 2008. This increase is attributable primarily to the higher average price of gold received by us, U.S.\$813 per ounce in 2008 compared to U.S.\$638 per ounce in 2007. This increase was partially offset by a decrease in ounces sold.

Our gold sales decreased 255,862 ounces, or 14%, from 1,883,486 in fiscal 2007 to 1,627,624 in fiscal 2008. The grade recovered was lower, at 0.08 ounces per ton in fiscal 2008 compared to 0.10 ounces per ton in fiscal 2007, negatively impacting on the ounces

**Table of Contents**

produced. The lower recovery grade was as a result of the increase in tons treated from surface tailings dams at a lower recovery grade.

At Bambanani ounces sold decreased by 19%, from 197,060 in fiscal 2007 to 158,985 in fiscal 2008. This was due to the restructuring of the shaft as a result of power constraints. This was offset by a better recovery grade which increased from 0.154 ounces per ton in fiscal 2007 to 0.174 ounces per ton in fiscal 2008.

At Doornkop ounces sold decreased from 57,364 in fiscal 2007 to 44,143 in fiscal 2008. Production volumes decreased by 103,000 tons, or 17%, primarily due to an 18 day production stoppage to facilitate shaft work related to the South Reef project as well as three days lost due to Eskom's power management process.

At Elandsrand ounces sold decreased from 194,710 in fiscal 2007 to 158,631. This was due to a decrease in volumes mainly as a result of days lost due to the accident in October 2007, as well as a decrease in grade.

At Target ounces sold decreased by 40% from 142,433 in fiscal 2007 to 85,006 in fiscal 2008. Production volumes decreased by 24% mainly due to issues relating to the massive stopes, which also impacted on the grade.

At Masimong ounces sold decreased by 21%, or 30,383 ounces, from 147,958 in fiscal 2007 to 117,575 in fiscal 2008. This was due to a decrease in production volumes from 1,0740,000 tons to 892,000 tons as a result of the restructuring process at the shaft.

The ounces sold at Kalgold increased by 66% from 56,135 in fiscal 2007 to 93,172 in fiscal 2008. This was due to a 67% increase in recovery grade from 0.032 ounces per ton in fiscal 2007 to 0.055 ounces per ton in fiscal 2008. This was due to the higher grade mined in the D-zone pit.

*Cost of sales*

Cost of sales includes production costs, depreciation and amortization, employment termination and restructuring costs and impairment of assets.

a) *Production costs*

The following table sets out our total ounces produced and weighted average cash costs per ounce for fiscal 2008 and fiscal 2007:

	Year Ended June 30, 2008		Year Ended June 30, 2007		Percentage (Increase)/decrease in Cash Costs per ounce
	(oz)	(\$/oz)	(oz)	(\$/oz)	
<b>SOUTH AFRICA</b>					
Tshepong	265,914	455	319,192	360	(26)
Phakisa	4,024	497			(100)
Bambanani	154,879	639	197,084	599	(7)
Doornkop	44,038	749	56,810	438	(71)
Elandsrand	164,215	652	195,412	535	(22)
Target	79,602	716	142,653	403	(78)
Masimong	116,424	756	146,575	543	(39)
Evander	231,799	526	235,857	495	(6)
Virginia	247,820	726	264,890	528	(38)
Other underground	67,862	752	104,553	504	(49)
Other surface	147,980	378	82,467	443	15
<b>INTERNATIONAL</b>					
PNG					
Other	75,297	545	136,415	517	(5)
Total continuing operations	1,599,854		1,881,908		
Weighted average		598		487	(23)



**Table of Contents**

Our average cash costs from continuing operations increased by U.S.\$111 per ounce, or 23%, from U.S.\$487 per ounce in fiscal 2007 to U.S.\$598 per ounce in fiscal 2008. Cash costs per ounce vary with the working costs per ton (which is, in turn, affected by the number of tons processed) and grade of ore processed. Cash costs expressed in U.S. dollars per ounce also vary with fluctuations in the Rand-U.S. dollar exchange rate, because most of our working costs are incurred in Rand. The increase in cash cost expressed in U.S. dollars per ounce in fiscal 2008 was attributable primarily to an increase in operating cost as well as the decrease in ounces produced when compared to fiscal 2007. Annual increases in labor cost as well as inflationary pressures on our consumable stores and energy costs were the main contributors towards a higher operating cost.

At Tshepong, the cash costs per ounce increased from U.S.\$360 per ounce in fiscal 2007 to U.S.\$455, or 26%, in fiscal 2008. This was due to the decrease in ounces produced in fiscal 2008 as well as an increase of 11% related to increases in labor and supply costs.

At Doornkop, the cash costs per ounce increased by 71%, from U.S.\$438 in fiscal 2007 to U.S.\$749 in fiscal 2008, primarily due to lower production volumes and industry-wide cost increases.

At Target, the cash costs per ounce increased from U.S.\$403 in fiscal 2007 to U.S.\$716 in fiscal 2008, or by 78%, primarily due to lower recovery grades and volumes resulting from issues experienced during fiscal 2008.

At Masimong, the cash costs per ounce increased by 39% from U.S.\$543 in fiscal 2007 to U.S.\$756 in fiscal 2008, primarily due to the restructuring and cessation of Conops, as well as a decrease in ounces produced.

Under Other Underground, the cash costs at Joel increased from U.S.\$428 in fiscal 2007 to U.S.\$638 in fiscal 2008, or 49%. This was due to the decrease in tonnage after re-equipping resulted in the shaft not being fully operational for the first six months of fiscal 2008. Costs were also 17% higher in fiscal 2008. Also, at St. Helena, cash costs increased by 82% from U.S.\$860 per ounce in fiscal 2007 to U.S.\$1,565 per ounce in fiscal 2008. This was due to the fact that the shaft was closed during fiscal 2008.

Under Other Surface, the cash costs at Kalgold decreased by 21% from U.S.\$506 in fiscal 2007 to U.S.\$401 in fiscal 2008, primarily due to the increase in ounces produced. This was offset by an increase of 30% at Phoenix, from U.S.\$293 to U.S.\$381, as a result of a decrease in grade and an increase in volumes and transport costs

*b) Depreciation and amortization*

Depreciation and amortization decreased to U.S.\$117 million in fiscal 2008, from U.S.\$134 million in fiscal 2007. This decrease relates primarily to the decrease in production. This decrease was offset by increases relating to the increase in depreciation on non-mining assets (U.S.\$4 million) and borrowings issue costs (U.S.\$3 million). Also contributing was the commencement of depreciation on the two completed levels at Elandsrand during July 2007 resulted in a depreciation charge of U.S.\$2 million.

*c) Employment termination and restructuring costs*

The charge for employment termination and restructuring costs increased from U.S.\$nil in fiscal 2007 to U.S.\$32 million in fiscal 2008. The charge in fiscal 2008 relates to the voluntary retrenchment process that was initiated in December 2007 when management decided to decentralize central services and the cessation of Conops at several of the operations.

*d) Impairment of assets*

The impairment charge decreased from U.S.\$37 million in fiscal 2007 to U.S.\$35 million in fiscal 2008. The charge in fiscal 2008 relates to impairments at the Evander and other underground operations as well as surface operations (Kalgold). Included in the amount is U.S.\$13 million for goodwill related to certain shafts that were included under Other Underground. These impairments resulted primarily from a decrease in the expected life of mine of these operations, as well as an increase in the costs to operate the shafts. These changes resulted in the carrying amount exceeding the recoverable amount. The charge in fiscal 2007 relates primarily to an impairment on the Mount Magnet operation of U.S.\$56 million and U.S.\$2 million relating to the cessation of operations at the Refinery in the Free State. This was offset by reversals at surface operations (Kalgold) and other underground operations.

**Table of Contents***Profit on sale of property, plant and equipment*

The profit decreased from U.S.\$25 million in fiscal 2007 to U.S.\$18 million in fiscal 2008. Included in the total for fiscal 2008 was a profit of U.S.\$11 million relating to the sale of tenements in Australia. In fiscal 2007, the disposal of the Randfontein 4 shaft and the Deelkraal surface assets netted profits of U.S.\$10 million and U.S.\$14 million, respectively.

*Other expenses net*

The total for other expenses increased to U.S.\$13 million, compared with a credit of U.S.\$ nil in fiscal 2007. This was primarily due to the increase in provision for bad debts from U.S.\$1 million in fiscal 2007 to U.S.\$13 million in fiscal 2008. This provision relates to trade and loans receivables that have exceeded their payment terms, and where we believe that recoverability is doubtful.

These charges were offset by the increase of U.S.\$15 million in foreign exchange gains related to the loans to the International operations. These loans, which was previously designated as net investments of the Group's International operations, were de-designated in fiscal 2008, mainly as a result of the expected proceeds from the PNG Partnership Agreement. Accumulated exchange gains/(losses) that arose while the loans were considered to form part of the Group's net investment in its International operations are reclassified to the consolidated income statement as and when the loans are repaid.

*Loss from associates*

The loss from associates increased from U.S.\$3 million in fiscal 2007 to U.S.\$11 million in fiscal 2008. The increase relates primarily to inclusion of losses from Pamodzi since acquisition on February 27, 2008.

*Profit on sale of investment in associate*

The profit on sale of investment in associate decreased to U.S.\$nil in fiscal 2008 from U.S.\$33 million in fiscal 2007. The amount in 2007 was as a result of the disposal of our interest in Western Areas in exchange for Gold Fields shares.

*Impairment of investment in associate*

The charge relating the impairment of investment in associate increased from U.S.\$nil in fiscal 2007 to U.S.\$12 million in fiscal 2008. The amount in fiscal 2008 relates primarily to the impairment of the investment in Pamodzi. The recoverable amount was determined with reference to the market value of the listed shares, which would be the amount we would receive on disposal of the shares. As the carrying value exceeded the recoverable amount, the investment was impaired down to this amount.

*Fair value movement of financial instruments*

The gains in fiscal years 2007 and 2008 are related to the investment in ARM held by the ARM Empowerment Trust, where the increase in the share value of the ARM shares above R29 (U.S.\$4.62) per share was limited to the interest capitalized on the Nedbank loan.

*Loss on sale of listed investments*

The loss on sale of listed investments increased from U.S.\$5 million in fiscal 2007 to U.S.\$63 million in fiscal 2008. The amount in 2008 relates to the sale of the remainder of the investment in Gold Fields. The loss in fiscal 2007 arose when we disposed of a portion of our interest in Gold Fields through various transactions.

*Investment income*

Investment income increased from U.S.\$27 million in fiscal 2007 to U.S.\$39 million in fiscal 2008, primarily to the increase in interest received on loans (U.S.\$4 million) and held-to-maturity investments, held by our environmental trust funds (U.S.\$4 million). Also contributing was an increase in dividends received from U.S.\$3 million in fiscal 2007 to U.S.\$5 million in fiscal 2008, which related to the Gold Fields shares.

**Table of Contents***Finance costs*

Finance costs increased from U.S.\$66 million in fiscal 2007 to U.S.\$71 million in fiscal 2008. This was due primarily to the increase in interest rates as well as the increase in the balance of the outstanding debt. This was offset by the increase in interest capitalized to qualifying assets, from U.S.\$10 million in fiscal 2007 to U.S.\$22 million in fiscal 2008.

*Income and Mining Taxes*

*South Africa.* We pay taxes on mining income and non-mining income. The amount of our South African mining income tax is calculated on the basis of a formula that takes into account our total revenue and profits from, and capital expenditures for, mining operations in South Africa. 5% of total mining revenue is exempt from taxation in South Africa as a result of the application of the applicable gold mine formula. The amount of revenue subject to taxation is calculated by deducting qualifying capital expenditures from taxable mining income. The amount by which the taxable mining income exceeds 5% of mining revenue constitutes taxable mining income. We and our subsidiaries each make our own calculation of taxable income.

The tax rate applicable to the mining and non-mining income of a gold mining company depends on whether the company has elected to be exempt from the STC. The STC is a tax on dividends declared and, at present, the STC tax rate is equal to 10% (previously 12,5%). To the extent we receive dividends, such dividends received are offset against the amount of dividends paid for purposes of calculating the amount subject to STC. In 1993, all existing South African gold mining companies had the option to elect to be exempt from STC. If the election was made, a higher tax rate would apply for both mining and non-mining taxable income. In 2008, the tax rates for companies that elected the STC exemption were 43% for mining income and 35% for non-mining income, compared with 34% for mining income and 28% for non-mining income if the STC exemption election was not made. In 2007, the tax rates for companies that elected the STC exemption were 45% for mining income and 37% for non-mining income, compared with 35% for mining income and 29% for non-mining income if the STC exemption election was not made. In 1993, we elected to pay the STC tax. All of our South African subsidiaries, excluding Avgold, elected the STC exemption.

**Income and Mining Tax**

	<b>2008</b>	<b>2007</b>
Effective tax rate expense	680%	(1%)

The effective tax rate for fiscal 2008 was higher than the statutory tax rate of 43% for us and our subsidiaries as a whole. The most significant reasons for the increase in the effective tax rate in fiscal 2008 relates to non-deductible expenses and prior year adjustments. Offsetting this is the difference between the SA mining statutory tax rate and the rate used to provide deferred tax and other tax dispensations granted on certain mining assets. Included in the non-deductible expenses is the impairment on investment in associate (U.S.\$11 million) and loss on sale of investments (U.S.\$63 million).

*Australia.* Generally, Australia imposes tax on the worldwide income (including capital gains) of all of our Australian incorporated and tax resident entities. The current income tax rate for companies is 30%. Ongoing business, mining, exploration and rehabilitation costs incurred each year are fully deductible. The cost of plant and capital mining expenditure may be depreciated and deducted over its effective life.

The Australian legislature has introduced a Tax Consolidations Regime, under which from July 1, 2003, Harmony Gold Australia Proprietary Limited and its wholly owned Australian subsidiary companies are recognized and taxed as a single entity. Under the consolidations rules all of the Australian subsidiary companies are treated as divisions of the Head Company, Harmony Gold Australia. As a result all inter company transactions between group members are ignored for tax purposes. This allows the group to transfer assets between group members without any tax consequences, and deems all tax losses to have been incurred by the Head Company of the group.

Mining operations in Western Australia are also subject to a 2.5% gold royalty because the mineral rights are owned by the State Government. All gold production from the Mount Magnet operations is subject to this royalty. Most of the production from the South Kalgoorlie operations is from freehold land and is, accordingly, exempt from this royalty.

Withholding tax is payable on dividends, interest and royalties paid by Australian residents to non-residents, which would include any dividends on the shares of our Australian subsidiaries that are paid to us. In the case of dividend payments to non-residents, a 30% withholding tax applies. However, where the recipient of the dividend is a resident of a country with which Australia has concluded a double taxation agreement, the rate of withholding tax is generally limited to 15 (or in the case of South Africa 5% where the dividend is paid to a company which controls at least 10% of the Australian dividend paying company). Where dividends are fully franked, no

**Table of Contents**

withholding tax applies as an effective credit is allowed against any withholding tax otherwise payable, regardless of whether a double taxation agreement is in place.

*PNG.* We are in the process of developing the Hidden Valley Project in PNG. We are also reviewing other potential projects and carrying out extensive exploration.

PNG mining projects are taxed on a project basis. Therefore each project is taxed as a separate entity, even though it may be one of a number of projects carried on by the same company. In certain circumstances there is an ability to transfer the tax benefit obtained through exploration expenditure between projects and wholly owned companies. Tax losses are generally quarantined and cannot be transferred between projects.

PNG mining companies are taxed at a rate of tax of 30%.

Capital development and exploration expenditure incurred in PNG is capitalized for tax purposes and can be generally deducted at 25% per annum on a diminishing value basis against project income.

PNG imposes dividend withholding tax of 10% on dividends paid by PNG mining operations to non residents. Although PNG also imposes interest withholding tax on interest paid off-shore, the PNG Tax Act exempts interest paid to non resident lenders from withholding tax where the PNG company is engaged in mining operations in PNG.

*Discontinued Operations**Revenues*

Revenues decreased from U.S.\$287 million in fiscal 2007 to U.S.\$253 million in fiscal 2008, due to the fact that South Kalgoorlie and Orkney operations were sold in December 2007 and February 2008, respectively. Also contributing is lower ounces produced at the Cooke operations. These decreases were offset by an increase in the average gold price received.

*Costs*

Costs decreased from U.S.\$271 million in fiscal 2007 to U.S.\$199 million in fiscal 2008. This was due to the sale of South Kalgoorlie and Orkney operations during fiscal 2008. Also contributing is the decrease in the depreciation and amortization charge from U.S.\$29 million in fiscal 2007 to U.S.\$7 million in fiscal 2008. This was due to the cessation of charging depreciation on assets classified as held-for-sale.

*Loss on sale of property, plant and equipment*

The loss on sale of property, plant and equipment for fiscal 2008 was U.S.\$4 million, compared with U.S.\$nil in fiscal 2007. Included in the total is the loss on the sale of South Kalgoorlie of U.S.\$13 million as well as the profit on the sale of Orkney of U.S.\$9 million.

*Income and Mining Taxes*

*South Africa.* We pay taxes on mining income and non-mining income. For details, refer to the discussion under *Income and Mining Taxes* in the *Continuing Operations* section.

In 2008, the tax rates for companies that elected the STC exemption were 43% for mining income and 35% for non-mining income, compared with 34% for mining income and 28% for non-mining income if the STC exemption election was not made. In 2007, the tax rates for companies that elected the STC exemption were 45% for mining income and 37% for non-mining income, compared with 35% for mining income and 29% for non-mining income if the STC exemption election was not made.

*Australia.* We pay taxes on mining income and non-mining income. For details, refer to the discussion under *Income and Mining Taxes* in the *Continuing Operations* section. In fiscal 2008 and 2007, the income tax rate for companies was 30%.

**Table of Contents***Continuing and discontinued operations**Net (loss)/profit*

The net (loss)/profit decreased from a net profit of U.S.\$51 million in fiscal 2007 to a net loss of U.S.\$30 million. This is due to the factors discussed above.

**Recent Accounting Pronouncements**

In April 2009, the IASB issued Improvements to IFRS for 2008. This is a collection of amendments to IFRSs under the IASB's annual improvements process which is intended to deal with non-urgent but necessary amendments to Standards. The amendments focus on areas of inconsistency in Standards or where clarification of wording is required. The improvements include 12 separate amendments which impact 8 different Standards. Unless otherwise specified, the amendments are effective for annual periods beginning on or after 1 January 2010. The effect of the amendments will be recorded in future periods when such transactions are entered into.

In March 2009, the IASB issued IFRS 7 (Amended) Financial Instruments disclosures: Improving Disclosures about Financial Instruments. The amendment increases the disclosure requirements about fair value measurement and reinforces existing principles for disclosure about liquidity risk. The amendment introduces a three-level hierarchy for fair value measurement disclosure and requires some specific quantitative disclosures for financial instruments in the lowest level in the hierarchy. In addition, the amendment clarifies and enhances existing requirements for the disclosure of liquidity risk primarily requiring a separate liquidity risk analysis for derivative and non-derivative financial liabilities. The standard becomes effective for annual periods commencing on or after 1 January 2009; early adoption is permitted. The standard will affect the disclosure of financial instruments in the financial statements.

In January 2009, the International Financial Reporting Interpretation Committee ( **IFRIC** ) issued interpretation no. 18 Transfers of assets from customers. The interpretation clarifies the accounting treatment for transfers of property, plant and equipment received from customers. This interpretation applies to agreements with customers in which the entity receives cash from a customer when that amount of cash must be used only to construct or acquire an item of property, plant and equipment and the entity must then use the item of property, plant and equipment either to connect the customer to a network or to provide the customer with ongoing access to a supply of goods and services, or to do both. The provisions of the interpretation become effective for annual periods commencing on or after July 1, 2009. We currently do not expect this interpretation to have any effect on the financial statements.

In November 2008, IFRIC issued interpretation no.17 Distributions of Non-cash Assets to Owners. IFRIC 17 applies to the accounting for distributions of non-cash assets (commonly referred to as *dividends in specie*) to the owners of the entity. The interpretation clarifies that: a dividend payable should be recognized when the dividend is appropriately authorized and is no longer at the discretion of the entity; an entity should measure the dividend payable at the fair value of the net assets to be distributed; and an entity should recognize the difference between the dividend paid and the carrying amount of the net assets distributed in profit or loss. The provisions of the interpretation become effective for annual periods commencing on or after July 1, 2009. The effect of the interpretation will be recorded in future periods when such transactions are entered into.

In August 2008, the IASB issued Improvements to IFRS for 2007. This is a collection of amendments to 20 IFRSs under the IASB's annual improvements process which is intended to deal with non-urgent but necessary amendments to Standards. The amendments focus on areas of inconsistency in Standards or where clarification of wording is required. The effective date for most amendments is annual periods beginning on or after 1 January 2009. The improvements are of two broad types: Amendments that result in accounting changes in presentation, recognition, or measurement; and terminology or editorial changes that have no or minimal effect on accounting. The effect of the amendments will be recorded in future periods when such transactions are entered into.

In July 2008, the IASB issued IAS 39 (Amended) IAS 39 Financial Instruments: Recognition and Measurement Exposures Qualifying for Hedge Accounting. The amendment makes two significant changes. It prohibits designating inflation as a hedgeable component of a fixed rate debt. It also prohibits including time value in the one-sided hedged risk when designating options as hedges. The standard becomes effective for annual periods commencing on or after January 1, 2009; early adoption is permitted. We currently do not anticipate the change to affect our financial statements as we do not have hedges.



**Table of Contents**

In May 2008 the IASB issued IFRS 1 (Amended) First-time Adoption of International Financial Reporting Standards and IAS 27 (Amended) Consolidated and Separate Financial Statement Cost of an investment in Subsidiary, Jointly Controlled Entity or Associate. The amendments to IFRS 1 allow first-time adopters, in their separate financial statements, to use a deemed cost option for determining the cost (in terms of IAS 27, paragraph 38(a)) of an investment in subsidiary, jointly controlled entity or associate. The deemed cost of such an investment shall be: (a) Fair value (determined in accordance with IAS 39 Financial Instruments: Recognition and Measurement) at the entity's date of transition to IFRS's; or (b) previous GAAP carrying amount at that date. The amendments to IAS 27 remove the definition of the cost method from paragraph 4 of the standard. In addition, when an entity reorganizes the structure of its group by establishing a new entity as its parent (subject to certain criteria), the amendments require the new parent to measure cost as the carrying amount of its share of the equity items shown in the separate financial statements of the original parent at the date of the reorganization. The standard becomes effective for annual periods commencing on or after January 1, 2009; early adoption is permitted. The effect of the amended IFRS 1 and IAS 27 will be recorded in future periods when such transactions are entered into.

In May 2008, IFRIC issued interpretation No.16, Hedges of a Net Investment in a Foreign Operation (IFRIC 16), which provides guidance on: (a) identifying the foreign currency risks that qualify as a hedged risk in the hedge of a net investment in a foreign operation; (b) where, within a group, hedging instruments that are hedges of a net investment in foreign operation can be held to qualify for hedge accounting; (c) and how an entity should determine the amounts to be reclassified from equity to profit or loss for both the hedging instrument and the hedged item. IFRIC 16 applies to entities that hedges on foreign currency risk arising from net investments in foreign operations and where the related hedge qualify for hedge accounting in accordance with IAS 39, Financial Instruments: Recognition and Measurement. The provisions of IFRIC 16 are effective for annual periods commencing on or after October 1, 2008, the effect of the change will be accounted for prospectively in future periods. We currently do not anticipate the change affecting our financial statements as we do not have hedges on our net investments in foreign operations.

In February 2008, the IASB issued amendments to IAS 32- Financial Instruments: Presentation and IAS 1 Presentation of Financial Statements, the amendment aims to improve the accounting for particular types of financial instruments that have characteristics similar to ordinary shares but are at present classified as financial liabilities. IAS 32 requires a financial instrument to be classified as a liability if the holder of that instrument can require the issuer to redeem it for cash; currently these financial instruments are considered liabilities, rather than equity. The amendments to IAS 32 addresses this issue and require entities to classify the following types of financial instruments as equity, provided they have particular features and meet specific conditions: (a) puttable financial instruments; (b) instruments, or components of instruments, that impose on the entity an obligation to deliver to another party a pro rata share of the net assets of the entity only on liquidation. The amendments become effective for annual periods commencing on or after January 1, 2009; early application is permitted. We do not expect the adoption of these amendments to have an impact on our consolidated financial statements.

In January 2008, the IASB issued IAS 23 (Revised) Borrowing Costs. The statement eliminates the choice regarding capitalization of borrowing costs. Where an asset is acquired, constructed or produced as a qualifying asset, it has to capitalize the borrowing costs relating to the asset against the cost price of the asset. All other borrowing costs are expensed. Excluded from the amended statement are inventories that are manufactured, or otherwise produced in large quantities on a repetitive basis; and qualifying asset measured at fair value. The statement comes into effect for annual periods commencing on or after January 1, 2009. We have early adopted the revised IAS 23 for year ended June 30, 2008.

In December 2007, the IASB issued IFRS 2 (Amended) Share Based Payment on vesting conditions and cancellations. The amendment deals with two matters: (a) it clarifies that vesting conditions are service conditions and performance conditions only; (b) It specifies all cancellations, whether by the entity or by other parties, should receive the same accounting treatment. IFRS 2 becomes effective for annual periods commencing on or after January 1, 2009, early adoption is permitted. The effect of the amended IFRS 2 will be recorded in future periods when such transactions affecting vesting conditions and cancellations on share based payment occurs.

In November 2007, the IASB issued IFRS 8 Operating Segments. The statement was issued with the aim to achieve convergence in accounting standards around the world. The IASB and the FASB after review of the FASB

statement 131 Disclosures about Segments of an Enterprise and Related Information and IAS 14 Segment reporting collaborated and issued the new IFRS 8 Operating Segment. IFRS 8 requires that an entity report on the financial and descriptive information about its reportable segments. IFRS 8 requires that a measure of the operating profit or loss, the segment assets and liabilities be reported. A reconciliation of total segments' reportable revenues, total profit or loss, total assets, liabilities and other amounts disclosed for reportable segments to corresponding amounts in the entity's annual financial statements should be reported. IFRS 8 also requires entities to report on information about revenues derived from its products or services, about countries in which they earn revenues and hold assets and the

**Table of Contents**

major customers. In addition, a description of how each segment was determined, the products and services provided per segment and any differences in determining the segment's information. Although IFRS 8 is effective for annual periods commencing on or after January 1, 2009, we decided to early adopt the standard from the year ending June 30, 2008.

In September 2007, the IASB issued IAS 1 (Revised) Presentation of Financial Statements. The statement was issued with the aim to aggregate information in the financial statements on a basis of common characteristics, which resulted in the changes in equity to be presented separately between those changes resulting from transactions with equity participants (owners), in their capacity as owners, and those other non-owner equity transactions. The revised standard allows for a statement of other comprehensive income, with the net income recognized directly in equity now being moved to the statement of other comprehensive income, with the statement of changes in equity reflecting a line item, total comprehensive income. The change is effective for annual periods commencing on or after January 1, 2009. We early adopted the disclosure requirements of IAS 1, effective for the year ending June 30, 2008.

In July 2007, IFRIC issued interpretation no.15 Agreements for the Construction of Real Estate. IFRIC 15 standardises accounting practice across jurisdictions for the recognition of revenue by real estate developers for sales of units, such as apartments or houses, off plan that is, before construction is complete. The fundamental issue is whether the developer is selling a product (goods) the completed apartment or house or is selling a service a construction service as a contractor engaged by the buyer. Revenue from selling products is normally recognised at delivery. Revenue from selling services is normally recognised on a percentage-of-completion basis as construction progresses. The provisions of the interpretation become effective for annual periods commencing on or after January 1, 2009. The effect of the interpretation will be recorded in future periods when such transactions are entered into.

In June 2007, IFRIC issued interpretation 14 IAS 19, The Limit on a Defined Asset Minimum Funding Requirements and their Interaction. IFRIC 14 addresses three issues: (a) how to determine the limit placed by IAS 19 Employee Benefits on the amount of a surplus in a pension plan they can recognize an asset; (b) how a minimum funding requirement affects that limit; (c) and when the minimum funding requirement creates an onerous obligation that should be recognized as a liability in addition to that otherwise recognized under IAS 19. IFRIC 14 requires that an asset be recognized in relation to the surplus on a consistent basis; and where there is both a strong minimum funding requirement and restrictions over the amount, an entity can recover from the plan, either as refunds or a reduction in contribution; entities have to recognize an additional liability. The interpretation is effective for annual periods commencing on or after January 1, 2008. IFRIC 14 will not affect our annual report as we only have defined contributions pension plans.

In June 2007, IFRIC issued interpretation 12 Service Concession Arrangements. A service concession arrangement is an arrangement whereby a government or other public sector body contracts with a private operator to develop (or upgrade), operate and maintain the grantor's infrastructure assets such as roads, bridges, tunnels, airports, energy distribution networks, prisons or hospitals. The grantor controls or regulates what services the operator must provide using the assets, to whom, and at what price, and also controls any significant residual interest in the assets at the end of the term of the arrangement. The objective of IFRIS 12 is to clarify how certain aspects of existing IASB literature are to be applied to service concession arrangements. The interpretation is effective for annual periods commencing on or after January 1, 2008. IFRIC 12 will not affect our annual report as we have no service concession arrangements.

In June 2007, the IFRIC issued interpretation 13 Customer Loyalty Programmes. IFRIC 13 addresses accounting by entities that grant loyalty award credits (such as points or travel miles) to customers who buy other goods or services. Specifically, it explains how such entities should account for their obligations to provide free or discounted goods or services ( awards ) to customers who redeem award credits. The interpretation is effective for annual periods commencing on or after July 1, 2008. IFRIC 13 will not affect our annual report as we have no customer loyalty programmes.

In April 2007, the IASB issued IFRS 3 (Revised) Business Combinations and IAS 27 (Amended) Consolidated and Separate Financial Statements, effective for the annual periods commencing after July 1, 2009. The changes made to IFRS 3 and IAS 27 have the following effects: (a) Partial acquisitions on non-controlling interest are measured

either as their proportionate interest in the net identifiable assets or at fair value; (b) Goodwill is measured as the difference at acquisition date between the fair value of any investment in the business held before the acquisition, the consideration transferred and the net assets acquired for step acquisitions; (c) Acquisition-related costs are generally recognized as expenses instead of included in goodwill; (d) Contingent consideration must be recognized and measured at fair value at the acquisition date. Subsequent changes in fair value are recognized in accordance with other IFRSs, usually in profit and loss, rather than adjusting goodwill; (e) for transactions with non-controlling interests, the changes

**Table of Contents**

in a parent's ownership in a subsidiary that do not result in the loss of control are accounted for as equity transactions. The effect of the revised IFRS 3 and amended IAS 27 will be recorded in future periods when such transactions are entered into.

**Liquidity and Capital Resources**

We centrally manage our funding and treasury policies. There are no legal or economic restrictions on the ability of our subsidiaries to transfer funds to us. We have generally funded our operations and our short-term and long-term liquidity requirements from (i) cash generated from operations, (ii) credit facilities and other borrowings and (iii) sales of equity securities.

**Cash Resources**

	<b>Fiscal year ended June 30,</b>		
	<b>2009</b>	<b>2008</b>	<b>2007</b>
	(\$ in millions)		
<i>Continuing operations</i>			
Operating cash flows	234	169	176
Investing cash flows	(105)	(310)	(318)
Financing cash flows	(234)	78	132
Foreign exchange differences	16	4	6
<b>Total cash flows from continuing operations</b>	<b>(88)</b>	<b>(59)</b>	<b>(4)</b>
<i>Discontinued operations</i>			
Operating cash flows	20	67	(17)
Investing cash flows	199	(19)	
Financing cash flows			
Foreign exchange differences	69	(6)	
<b>Total cash flows from discontinued operations</b>	<b>288</b>	<b>42</b>	<b>(17)</b>
<i>Operations</i>			

Net cash provided by operations is primarily affected by the quantities of gold sold, the gold price, the Rand-U.S. dollar exchange rate, cash costs per ounce and, in the case of the International operations, the Australian dollar and Kina versus U.S. dollar exchange rate. A significant adverse change in one or more of these parameters could materially reduce cash provided by operations as a source of liquidity.

Net cash generated by operations was U.S.\$254 million in fiscal 2009, as compared with U.S.\$236 million in fiscal 2008. This improvement is attributable primarily to the higher gold price received during the year as well as the increase in interest received of U.S.\$13 million to U.S.\$51 million. Also contributing to the improvement is the decrease of interest paid of U.S.\$26 million to U.S.\$31 million as a result of a decrease in the outstanding debt balances. Negating the effect of the improvement was the increase in taxation paid of U.S.\$67 million to U.S.\$85 million.

Net cash generated by operations was U.S.\$236 million in fiscal 2008, as compared with U.S.\$159 million in fiscal 2007. This improvement is attributable primarily to the higher gold price received during the year as well as the increase in interest received of U.S.\$13 million. Negating the effect of the improvement was the increase in interest paid of U.S.\$26 million and taxation paid of U.S.\$16 million. An increase in the production costs of U.S.\$82 million due to inflationary pressures relating to labor, materials and energy supplies also negatively affected the increase.

**Investing**

Net cash generated by investing activities was U.S.\$94 million, as compared with net cash utilized of U.S.\$329 million in fiscal 2008. This increase was mainly due to the decrease in capital expenditure during fiscal 2009 from U.S.\$552 million to U.S.\$339 million. Also contributing was an increase in proceeds on disposal of mining assets, relating to the disposal of the PNG assets to Newcrest and the Rand Uranium transaction (U.S.\$444 million). Offsetting this was an increase in the restricted cash balance (U.S.\$9 million).

Net cash utilized by investing activities was U.S.\$329 million in fiscal 2008, as compared with U.S.\$318 million in fiscal 2007. This increase was mainly due to the increase in capital expenditure during fiscal 2008 by

U.S.\$169 million to U.S.\$552 million. An increase of U.S.\$129 million in fiscal 2008 from proceeds on disposal of listed investments offset the increase in cash utilized during

113

---

**Table of Contents**

fiscal 2008. Also offsetting the amounts was an increase in proceeds on disposal of mining assets, including the disposal of South Kalgoorlie (U.S.\$9 million) and a increase in the restricted cash balance (U.S.\$32 million).

*Financing*

Net cash utilized by financing activities was U.S.\$233 million in fiscal 2009, as compared with net cash generated of U.S.\$78 million in fiscal 2008. This decrease was mainly due to the repayment of the convertible bond and the Nedbank loan during the year. This decrease was partially offset by the cash raised by the two share issues during the year, raising U.S.\$188 million, net of transaction costs.

Net cash generated by financing activities was U.S.\$78 million in fiscal 2008, as compared with U.S.\$132 million in fiscal 2007. This decrease was mainly due to the fact that we raised less borrowings during the year.

*Outstanding Credit Facilities and Other Borrowings*

On July 30, 2003, Africa Vanguard Resources (Doornkop) (Proprietary) Limited ( **AVRD** ) entered into a term loan facility of R140 million (U.S.\$19 million) with Nedbank Limited ( **Nedbank** ) for the purpose of partially funding AVR s purchase of an undivided 26% share of the Mining titles, to be contributed to the Doornkop South Reef Project with Randfontein. Interest at a fixed rate equal to Johannesburg Interbank Agreed Rate ( **JIBAR** ) plus 2%, compounded monthly, and any stamp duties and holding costs. The terms of the loan were extended from the original maturity of July 30, 2008, to September 30, 2009, at which date all loan amounts and any interest accrued are to be paid. The loan is jointly and severally guaranteed by the Company and several of its subsidiaries. The facility from Nedbank to AVR D is guaranteed by us and certain of our subsidiaries. Interest capitalized during the fiscal 2009 was U.S.\$3.7 million compared to U.S.\$4.1 million in fiscal 2008 (fiscal 2007 was U.S.\$2.2 million). During fiscal 2005, AVR D borrowed an additional R18 million (U.S.\$2.8 million) from its holding company Africa Vanguard Resources to service working capital commitments. The loan is uncollateralized and interest free. As there are no fixed repayment terms, the loan has no fixed maturity date.

During July 2007, Morobe Consolidated Goldfields entered into a finance lease agreement with Westpac Bank for the purchase of mining fleet to be used on the Hidden Valley project amounting to U.S.\$37 million. Interest is charged at U.S. LIBOR plus 1.25% per annum. Interest is accrued monthly and lease instalments are repayable quarterly terminating June 30, 2013. The mining fleet financed is used as collateral for these loans. The balance at June 30, 2009 was U.S.\$14 million.

*Recently Retired Credit Facilities and Other Borrowings*

On May 21, 2004, we issued R1.7 billion (U.S.\$252.0 million) in international unsecured fixed-rate convertible bonds in order to refinance our domestic Rand debt. Interest was calculated on the convertible bonds at a rate of 4.875% per annum, payable semi-annually in arrears on May 21 and November 21 of each year. The bonds were convertible at the option of the bondholders into fully paid up ordinary shares at any time on or after July 1, 2004 and up to, and including, May 15, 2009, unless they had been previously redeemed, converted or purchased and cancelled by us. The trust deed for the convertible bonds contained clauses that restricted certain of our activities, including a negative pledge, according to which we were not permitted to create or permit any mortgage, charge, lien, pledge or other form of encumbrance of security interest with respect to any part of our undertaking or assets, present or future, to secure any relevant debt, guarantee or indemnity. In addition, the trust deed contained covenants that required us to, among other things, maintain the listing of the bonds with the UK Listing Authority and do all things necessary, in the opinion of the trustee, to give effect to the trust deed. Included in the amortization charge as per the income statement is U.S.\$0.9 million compared to U.S.\$1.2 million in fiscal 2008 and U.S.\$1.2 million in 2007 for amortization of the bond issue costs. On May 20, 2009, we repaid the convertible bond.

On September 28, 2007, we entered into a term loan facility of R2 billion (U.S.\$283.9 million) with Nedbank Limited, for the purpose of partially funding capital expenditure in respect of projects, as well as to repay the short term bridging loan amounting to R500 million (U.S.\$68.6 million). Interest accrued on a day to day basis over the term of the loan at a variable interest rate, which is fixed for three month periods, equal to the JIBAR plus 2.75% plus banking costs. The interest is repayable every quarter commencing on September 28, 2007. During fiscal 2009, the loan was repaid in tranches, with the last tranche of R750 million (U.S.\$83.6 million) being repaid on April 21, 2009.

On April 15, 2005 the ARM Empowerment Trust entered into a term loan facility of R474 million (U.S.\$75.4 million) with Nedbank Limited for the purpose of funding the balance of the ARM Empowerment Trust s

acquisition of the ARM shares held by us.

**Table of Contents**

The loan bore interest, compounded monthly, at a rate of JIBAR plus of 1.5%. We guaranteed this loan, subject to a maximum guaranteed amount of R367.4 million (U.S.\$50.4 million) plus interest. In addition, if the ARM Empowerment Trust chose to dispose of 8,175,640 of its ARM Limited shares at cost, the maximum guaranteed amount would be reduced to R214.9 million (U.S.\$29.5 million) plus interest. We also entered into an indemnity agreement with ARM Limited, pursuant to which ARM Limited indemnified us against 50% of all claims under the guarantee, subject to a maximum of R107.4 million (U.S.\$14.7 million) plus interest thereon at the applicable rate from May 26, 2006. Interest capitalized during the year ended 2008 amounted to U.S.\$2.5 million, compared to U.S.\$8.5 million for fiscal 2007. On September 28, 2007, the guarantee was cancelled by Nedbank and, consequently, we have no further obligation to Nedbank in this regard.

On April 15, 2005, the ARM Empowerment Trust entered into a second term loan facility of R356 million (U.S.\$56.7 million) with Nedbank Limited for the purpose of funding the ARM Empowerment Trust's partial acquisition of the ARM shares held by us. The loan bore interest, compounded monthly, at a rate of JIBAR plus 1.5%. Interest capitalized during the year ended 2008 amounted to U.S.\$2.1 million, compared to U.S.\$6.7 million for fiscal 2007. On September 28, 2007, the guarantee was cancelled by Nedbank and consequently we have no further obligation to Nedbank in this regard.

On March 20, 2007, we arranged financing from RMB, collateralized by 5,747,000 shares in Gold Fields, resulting in total cash proceeds of R750.3 million (U.S.\$103.4 million). Of these proceeds, R599.8 million (U.S.\$82.3 million) were applied towards partial repayment of the R1.0 billion term loan facility with RMB. See below in this section. Interest was payable at a rate equal to the SAFEX Financial Derivatives overnight deposit rate (the **Safex Overnight Rate**) plus 35 basis points. On August 24, 2007, we repaid the loan.

On March 20, 2007, Randfontein (our wholly-owned subsidiary) entered into a preference share subscription agreement with RMB. According to the terms of the agreement, following the satisfaction of certain conditions, Randfontein issued R550.0 million (U.S.\$75.4 million) principal amount of preference shares to RMB on April 5, 2007. Dividends on the preference shares were payable semi-annually on the principal amount and were calculated at 35% of the South African Prime Interest Rate from the issue date until August 31, 2007, 50% of the South African Prime Interest Rate from September 1, 2007 to February 29, 2008 and 83% of the South African Prime Interest Rate thereafter. The preference shares were guaranteed by us, Evander Gold Mines Limited, ARMgold/Harmony Freegold Joint Venture Company (Pty) Limited, Avgold Limited and ARMgold/Harmony Joint Investment Company (Pty) Limited (**AHJIC**), as well as certain future material subsidiaries.

In the subscription agreement for the preference shares, AHJIC also granted a security interest over 6,196,863 Gold Fields shares held by it to secure its obligations under the subscription agreement for the preference shares. In the subscription agreement for the preference shares, AHJIC also undertook that, if the cover ratio of the value of the Gold Fields shares to the redemption amount falls below 1.25, it would deposit additional Gold Fields shares or cash to bring this ratio to 1.5. On or after March 1, 2008, if this ratio falls below 2.0, AHJIC will be required to deposit cash equal to 75% of the redemption amount.

The preference shares were redeemable at the option of the holders on the final redemption date, which is three years and one day after the issue date, and upon the occurrence of certain events, including a failure by AHJIC to meet its obligations under the subscription agreement, a delisting of the Gold Fields shares from the Johannesburg Stock Exchange, cross-defaults or other events that are customary events of default for financing agreements. The preference shares were also redeemable by Randfontein at any time. On August 24, 2007, the preference shares were redeemed.

On June 29, 2007, we entered into a senior bridge loan facility for R500.0 million (U.S.\$68.6 million) with RMB for the purpose of funding our capital expenditure requirements in respect to the Hidden Valley mine project. The loan bore interest, compounded monthly at a rate equal to the Safex Overnight Rate plus 2.4% until July 31, 2007, the maturity date. In the event that we elected to extend the loan facility until September 30, 2007, the loan would bear interest at a rate equal to the Safex Overnight Rate plus 3.6% during the extension period. On September 29, 2007, the loan was settled in full.

On June 27, 2007, we entered into a draw down facility agreement with Westpac Bank for the PNG operations. The limit was K3 million and interest was payable at 9.45%. During July 2007, the facility was repaid and then cancelled.

On March 9, 2006, we entered into a term loan facility of R1.0 billion (U.S.\$159.7 million) with RMB, for the purpose of partially funding the acquisition of the 29.2% stake in Western Areas. Interest is compounded at a rate equal to three-month JIBAR plus 1.5%. This facility was partially repaid on March 27, 2007 from the net proceeds of a sale of Gold Fields shares, and the balance was repaid on April 4, 2007 from the net proceeds from the issuance of certain preference shares by our subsidiary Randfontein.

**Table of Contents****Contractual Obligations and Commercial Commitments**

Our contractual obligations and commercial commitments consist primarily of credit facilities, post-retirement healthcare and environmental obligations.

**Contractual Obligations on the Balance Sheet**

The following table summarizes our contractual obligations as of June 30, 2009:

	<b>Total</b>	<b>Payments Due by Period</b>			<b>After 60 Months</b>
		<b>Less Than 12 Months</b>	<b>12-36 Months</b>	<b>36-60 Months</b>	
		<b>July 1, 2009 to June 30, 2010</b>	<b>July 1, 2010 to June 30, 2012</b>	<b>July 1, 2012 To June 30, 2014</b>	<b>Subsequent June 30, 2014</b>
	<b>(\$ million)</b>	<b>(\$ million)</b>	<b>(\$ million)</b>	<b>(\$ million)</b>	<b>(\$ million)</b>
Africa Vanguard Resources <sup>(1)</sup>	4	4			
Nedbank AVR <sup>(1)</sup>	29	29			
Westpac Bank <sup>(1)</sup>	14	4	5	5	
Post retirement health care <sup>(2)</sup>	20				20
Environmental obligations <sup>(3)</sup>	198				198
<b>Total contractual obligations</b>	<b>265</b>	<b>37</b>	<b>5</b>	<b>5</b>	<b>218</b>

(1) See *Item 5. Operating and Financial Review and Prospects Liquidity and Capital Resources Credit Facilities and Other Borrowings Outstanding Credit Facilities and Other Borrowings* .

(2) This liability relates to post-retirement medical benefits of former employees who retired prior to December 31, 1996 and is

based on  
actuarial  
valuations  
conducted  
during fiscal  
2009.

- (3) We make provision for environmental rehabilitation costs and related liabilities based on management's interpretations of current environmental and regulatory requirements. See Item 5.

Operating and  
Financial  
Review and  
Prospects  
Critical  
Accounting  
Policies .

*Contractual Obligations off the Balance Sheet*

Our obligation with regards to operating leases is U.S.\$6 million for the next year and relates to the International office in Brisbane as well as expenditure on mining tenements. Of this amount, U.S.\$5 million is due within 12 months.

**Capital Expenditure**

The following table sets forth our authorized capital expenditure as of June 30, 2009:

	<b>\$ million</b>
Authorized and contracted for <sup>(1)</sup>	62
Authorized but not yet contracted for	95
<b>Total</b>	<b>157</b>

- (1) Including our share of the PNG joint venture's capital expenditure of U.S.\$30 million.

**Table of Contents***Commercial Commitments*

The following table provides details regarding our commercial commitments as of June 30, 2009:

	<b>Amount of Commitments Expiring by Period</b>				
	<b>Less Than 12 Months July 1, 2009 to</b>	<b>12-36 Months July 1, 2010 to</b>	<b>36-60 Months July 1, 2012 to</b>	<b>After 60 Months Subsequent to June 30, 2014</b>	
<b>Total (\$ million)</b>	<b>June 30, 2010 (\$ million)</b>	<b>June 30, 2013 (\$ million)</b>	<b>June 30, 2014 (\$ million)</b>	<b>June 30, 2014 (\$ million)</b>	<b>June 30, 2014 (\$ million)</b>
Guarantees <sup>(1)</sup>	42				42
Capital commitments <sup>(2)</sup>	32	32			
<b>Total commitments expiring by period</b>	<b>74</b>	<b>32</b>			<b>42</b>

(1) Amount of Commitments Expiring by Period.

(2) Capital commitments consist only of amounts committed to external suppliers, although a total of U.S.\$127 million has been approved by the Board for capital expenditures.

**Trend Information**

Information on recent trends in our operations is discussed in *Item 4. Information on the Company Business Strategy and Results of Operations* above.

**Working Capital and Anticipated Financing Needs**

The Board believes that our working capital resources, by way of cash generated from operations and existing cash on hand, are sufficient to meet our present working capital needs. Several of the Growth projects will require a great deal of capital expenditure over the next two to three years, and given the current cash position, we are re-evaluating the planned capital expenditure, together with project timelines. Should a decision be taken to reduce or cease capital expenditure on one or more of the projects, the effect would be to delay the start of production, and therefore the associated revenue stream. This could have an impact on available cash resources. For more information on our planned capital expenditures, see *Capital Expenditures* above and *Item 4. Information on the Company Business Harmony's Mining Operations*. We may, in the future, explore debt and/or equity financing in connection with our acquisition strategy and/or major capital projects. See *Item 3. Key Information Risk Factors Harmony's strategy*

*depends on its ability to make additional acquisitions* . Our Board believes that we will have access to adequate financing on reasonable terms given our cash-based operations and modest leverage. Our ability to generate cash from operations could, however, be materially adversely affected by increases in cash costs, decreases in production, decreases in the price of gold and appreciation of the Rand against the U.S. dollar. Future financing arrangements would also be subject to the limits on the Board's borrowing powers described in *Item 10. Additional information Memorandum and Articles of Association Directors Borrowing Powers* . In addition, South African companies are subject to significant exchange control limitations, which may impair our ability to fund overseas operations or guarantee credit facilities entered into by overseas subsidiaries. See *Item 10. Additional Information Exchange Controls* .

#### **Other Financial Information**

##### ***Export Sales***

In fiscal years 2007, 2008 and 2009, 100% of our gold produced in South Africa was refined by Rand Refinery, which is owned by a consortium of the major gold producers in South Africa. All of our gold produced in Australia in those periods was sold to AGR Matthey, a Perth-based refinery.

**Table of Contents****Item 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES****Directors and Senior Management**

The members of the Board, their principal past affiliations, information on their business experiences and principal outside activities and selected other information are set forth below:

**Board of directors**

<b>Name</b>	<b>Date of appointment</b>
Patrice Motsepe <sup>(1)</sup>	September 23, 2003
Frank Abbott	October 1, 1994
Graham Briggs	August 6, 2007
Joaquim Chissano <sup>(1) (2)</sup>	April 20, 2005
Fikile De Buck <sup>(1) (2)</sup>	March 30, 2006
Ken Dicks <sup>(1) (2)</sup>	February 13, 2008
Cheick Diarra <sup>(1) (2)</sup>	March 5, 2008
Dr Simo Lushaba <sup>(1) (2)</sup>	October 18, 2002
Cathie Markus <sup>(1) (2)</sup>	May 1, 2007
Modise Motloba <sup>(1) (2)</sup>	July 30, 2004
Cedric Savage <sup>(1) (2)</sup>	September 23, 2003
André Wilkens <sup>(1)</sup>	August 6, 2007

<sup>(1)</sup> *Non-executive directors*

<sup>(2)</sup> *Independent*

**Non-Executive Chairman**

**Patrice Motsepe (47) BA (Legal), LLB.** Patrice was appointed to the board in 2003. Patrice was a partner in one of the largest law firms in South Africa, Bowman Gilfillan Inc. He was a visiting attorney in the USA with the law firm, McGuire Woods Battle and Boothe. In 1994 he founded Future Mining, which grew rapidly to become a successful contract mining company. He then formed ARMgold in 1997, which listed on the JSE in 2002. ARMgold merged with Harmony in 2003 and this ultimately led to the takeover of Anglovaal Mining ( **Avmin** ) by African Rainbow Minerals Limited ( **ARM** ). In 2002 he was voted South Africa's Business Leader of the Year by the CEOs of the top 100 companies in South Africa. In the same year, he was winner of the Ernst & Young Best Entrepreneur of the Year Award. He is also the Executive Chairman of ARM and the Deputy Chairman of Sanlam. His various business responsibilities included being President of Business Unity South Africa ( **BUSA** ) from January 2004 to May 2008, which is the voice of organized business in South Africa. He is also President of Mamelodi Sundowns Football Club.

**Executive Directors**

**Graham Briggs (56), BSc (Hons) (Geology), PrSciNat, Chief Executive Officer.** Graham was appointed as chief executive officer in January 2008, after his appointment to the board in 2007. Having joined Harmony as new business manager in 1995, Graham's previous positions include that of chief executive of Harmony Australia and regional manager for Australasia. A geologist by training, Graham has more than 35 years' experience in the field and in an operational capacity at a number of South African gold mines, including a stint as ore reserve manager at Beatrix. Graham serves as a director on Harmony's subsidiary companies and was recently appointed to the board of Virtual Metals Group in the United Kingdom.

**Frank Abbott (54), BComm, CA (SA), MBL, Interim Financial Director.** Frank was appointed executive interim financial director in August 2007. Frank initially joined the Harmony board as a non-executive director in 1997. In 2004 Frank was appointed financial director of ARM, while remaining on the Harmony board as non-executive director. In August 2007, Frank was seconded to Harmony as interim financial director. Frank serves as a director of Harmony's subsidiaries and is a non-executive director of ARM. Frank is going on early retirement at the

end of December 2009. Frank will remain on the Harmony board as non-executive director from January 1, 2010.

**Table of Contents*****Non-Executive Directors***

**Joaquim Chissano (69), Independent Non-Executive Director.** Joaquim was appointed to the board in April 2005. Formerly President of Mozambique (1986 – 2004), Joaquim also served as chairman of the African Union for 2003-4. On leaving the presidency, he established the Joaquim Chissano Foundation for Peace Development and Culture, and has led various international peace initiatives on behalf of the United Nations, African Union and the Southern African Development Community to Guinea Bissau, the Democratic Republic of the Congo, Uganda and Madagascar. In 2006 he was awarded the annual Chatham House Prize for significant contributions to improving international relations and was the recipient of the inaugural Mo Ibrahim Prize for Achievement in African Leadership in 2007. He is also a non-executive director of ARM Limited and TEAL.

**Fikile De Buck (48), BA (Economics), FCCA (UK), Independent Non-Executive Director.** Fikile joined the board on 1 April 2006. A certified chartered accountant, she is a fellow of the Association of Chartered Certified Accountants (ACCA) (UK) and a member. From fiscal 2000 to fiscal 2008, Fikile worked in various capacities at the Council for Medical Schemes in South Africa, including that of chief financial officer and chief operations officer. Prior to that she was treasurer at the Botswana Development Corporation. Fikile is also a non-executive director and chairman of the Audit Committee of Rand Uranium (Pty) Ltd and of Anooraq Resources Corporation.

**Dr Cheick Diarra (57), PhD (Mechanical and Aerospace Engineering), Independent Non-Executive Director.** Dr Cheick Diarra joined the board in March 2008. He is also the chairman for Africa at Microsoft. Dr Diarra graduated from the Pierre and Marie Curie University in Paris, France, and obtained his PhD in mechanical and aerospace engineering from Howard University, Washington DC, USA. After six years as an Assistant Professor at Howard, he joined the National Aeronautic and Space Association (NASA) Jet Propulsion Laboratory. Dr Diarra has served as a UNESCO goodwill ambassador and, in 2002 and 2003, he was chief executive officer of the African Virtual University based in Kenya. He is a member of several international and African scientific organisations, and was awarded an African Lifetime Achievement Award for Outstanding Contributions to Science.

**Ken Dicks (70), Mine Managers Certificates (Metalliferous and Fiery Coal Mines), Management Development Diploma and Management Diploma, Independent Non-Executive Director.** Ken joined the board in February 2008. He has 39 years' experience in the mining industry, mainly in the Anglo American group. He has served on the boards of mining companies such as Freegold, Western Deep Levels and Elandsrand. He is also a non-executive director of Gold One International, following a reverse takeover by Aflase Gold Limited.

**Dr Simo Lushaba (43), BSc (Hon), MBA and DBA, Independent Non-Executive Director.** Simo joined the Harmony board in October 2002. An entrepreneur and an executive business coach, he previously held senior management positions at Spoornet and Lonmin plc and was chief executive of Rand Water. Simo is a member of the board of the Nepad Business Foundation (SA), chairman of Spescom Limited and a board member of Gidani, Numsa Investment Services and Doves Funeral Services

**Cathie Markus (52), BA LLB, Independent Non-Executive Director.** Cathie joined the board in May 2007. Cathie spent 16 years at Impala Platinum Holdings Limited (Implats), initially as legal advisor and latterly, from 1998 to 2007, as executive director with responsibility for legal compliance and public affairs. Having graduated from the University of the Witwatersrand, Cathie served articles at Bell Dewar & Hall. On qualifying as an attorney, notary and conveyancer, she joined the legal department of Dorbyl Limited. She is currently a trustee of the Impala Bafokeng Trust.

**Modise Motloba (43), BSc, Diploma in Strategic Management, Independent Non-executive Director.** Modise joined the board in July 2004. Currently the chief executive of Quartile Capital (Pty) Ltd, Modise is also a director of Rand Merchant Bank Structured Insurance, Deutsche Bank Securities SA (Pty) Ltd, the Land Bank and the Small Enterprise Foundation. Modise's 17 years' experience in investment banking, treasury and fund management includes appointments at Rand Merchant Bank, African Harvest Fund Managers and Goldman Sachs. Modise is a former President of the Association of Black Securities and Investment Professionals (ABSIP) where he was instrumental in formulating and negotiating the historic Financial Services Charter in October 2003.

**Cedric Savage (70), BSc (Eng), MBA, ISMP (Harvard), Independent Non-executive Director.** Cedric joined the board in September 2003. He retired as the chairman of the Tongaat Hulett Group in May 2009 but remains a trustee of the Tongaat Hulett Group Pension Fund. He started his career in the United Kingdom in 1960 as a graduate

engineer with Fairey Aviation. He returned to South Africa in 1963 and worked in the oil (Mobil), textile (Felt & Textiles) and chicken (Rainbow Chickens Limited) industries. He was President of the South African Chamber of Business from 1993 to 1994. He has also served as Chairman of the Board of Governors of the University of KwaZulu-Natal's Development Foundation and as a Member of Council of that university. He joined the Tongaat-Hulett Group Ltd in 1977 as Managing Director of Tongaat Foods and progressed to Executive Chairman of the Building

**Table of Contents**

Materials Division; he became Chief Executive Officer of the group in 1991. In May 2000, he assumed the dual roles of Chief Executive Officer and Executive Chairman. He currently serves on the board of Denel (Proprietary) Limited. He also served on the Nedbank board from 2002 until May 2008 when he retired as Non-Executive Director and the board of Datatec Limited from 2001 and Datatec International from 2004, after which he retired from both boards in August 2009.

**André Wilkens (60), Mine Manager s Certificate of Competency, MDPA, RMIIA, Non-Executive Director.** André joined the board in August 2007. He is currently the chief executive officer of ARM Limited and previously held the same position at ARM Platinum. Prior to this, he was the chief operating officer at Harmony, following the merger of Harmony with ARMgold in 2003. Andre has a wealth of experience in the mining industry, having joined Anglo American in 1969 and moved up the ranks to mine manager of Vaal Reefs south mine.

**Management**

The members of our management, their principal past affiliations, information on their business experiences and principal outside activities and selected other information are set forth below:

**Bob Atkinson (57), NHD (Metalliferous Mining), Executive: New Business and Projects.** Bob joined Harmony as a Section Manager in 1986 and served as Operations Director on the Executive Committee from June 2001 to May 2003. He was appointed Chief Operating Officer at Harmony Gold Australia and was appointed as Executive: Sustainable Development (Safety and Occupational Health) at Harmony in South Africa in July 2004. He has more than 32 years experience in the mining industry.

**Jaco Boshoff (40), BSc (Hons), MSc (Geology), MBA, PrSciNat, Executive: Reserves and Resources.** Jaco joined Harmony in April 1996. He has served as the Executive: Reserves and Resources and Competent Person since March 2004. Prior to this, he was an Ore Reserve Manager from 1998 to 2004 and before that was a geologist at Harmony and at Gengold. Jaco is registered as a professional geological scientist with the South African Council for Natural Scientific Professions and has worked in the mining industry for more than 12 years.

**Matthews Pheello Dikane (43), LLB, LLM (Labour Law), Postgraduate Diploma In Management Practice, Executive: Legal and Compliance.** Matthews joined Harmony in 2009. He has 20 years experience in the mining industry, working his way up through the ranks from learner official to production mine overseer at AngloGold Ashanti Ltd. During this time, he studied for his law degree and served his articles at Perrott Van Niekerk Woodhouse Incorporated. He also completed his Master s degree in Labour Law and a Postgraduate Diploma in Management Practice. He returned to AngloGold Ashanti s corporate office as a Legal Counsel, later joining Brink Cohen Le Roux as a senior associate where he was made a director.

**Leon le Roux (53), NHD (Mechanical and Electrical Engineering), Executive: Risk Management and Engineering.** Leon joined Harmony on its merger with ARMgold in 2003. Having begun his mining career as a learner official in 1979 and obtaining his GCC (Mines and Works), he worked as an engineer on several AngloGold operations. He joined ARMgold on its formation in 1999 where he held a number of positions in the management team and was later seconded to ARMplatinum. He was appointed to the Harmony executive team in June 2009.

**Mashego Mashego (45), BA Ed, BA (Hons), GEDP, JMDP, Executive: Human Resources.** Mashego joined Harmony in July 2005 as Group Human Resources Development Manager. Mashego, who has more than 20 years experience in human resources, began his career as Human Resources Manager at Eskom. He then progressed in the field at JCI, Atlantis Diesel Engines and Foskor Ltd. He was promoted to General Manager at Harmony s Evander Operations in November 2005 and was appointed Executive: Human Resources in August 2007.

**Jackie Mathebula (39), B Admin Honours, MBA, Master of Management (MM, HR), Executive: Corporate Affairs.** Jackie joined Harmony in September 2002 as Employee and Industrial Relations Executive. In 2005, his portfolio became Training, Human Resource Development and Occupational Health, and in 2005 he was appointed Executive: Corporate Affairs. Prior to joining Harmony, he worked at Gensec Bank, Gold Fields Limited and then Iscor group (now ArcelorMittal South Africa). He also worked for the South African government in the Gazankulu Public Service Commission.

**Hannes Meyer (39), CA (SA), BCom (Hons), Financial Director Designate.** Hannes joined Harmony in August 2009. During his 13-year career in the mining industry, he gained extensive mining and financial experience at Randgold and Exploration Ltd, Randgold Resources Ltd, AngloGold Ashanti Ltd and TEAL Exploration & Mining

Inc ( **TEAL** ). His exposure extended to gaining

120

---

**Table of Contents**

knowledge of mines in Africa, corporate finance and business development. Before joining Harmony Hannes served as chief financial officer of TEAL and served as acting chief executive officer of TEAL since May 2008.

**Melanie Naidoo-Vermaak (35), MSc (Sustainable Development), Executive: Environment.** Melanie joined Harmony in 2009. She is an experienced environmental specialist who has worked for both the private sector in the mining industry, as well as the public sector in the Departments of Water Affairs and Forestry and Minerals and Energy. She has spent 10 years in this discipline and has international environmental management exposure gained in Australia, Papua New Guinea, Fiji as well as Africa. She has held various positions at some of the leading mining companies, including BHP Billiton, Anglo American PLC and De Beers Consolidated Mines Limited.

**Alwyn Pretorius (38), BSc Mining Engineering, BSc Industrial Engineering, Chief Operating Officer: North Region.** Alwyn joined Harmony on its merger with ARMgold in 2003. He began his career at Vaal Reefs mine as a mining graduate in training in 1993 and was appointed shift boss in 1995, gaining experience in remnant mining. Alwyn obtained his BSc in Industrial Engineering in 1998 and joined ARMgold in 1999 at its Orkney operations progressing to become mine manager in 2003. Alwyn was appointed Executive, South African Operations at Harmony in March 2007, and is the Chief Operating Officer: North Region.

**Tom Smith (53), NHD (Mine Surveying and Metalliferous Mining), Chief Operating Officer: South Region.** Tom joined Harmony in 2002. Tom began his career in the mining industry in 1975 as a sampler at Vaal Reefs mine, becoming chief surveyor in 1988. He made a career change in 1991 to mining and worked as a section manager on Great Nologwa, Elandsrand and Mponeng mines. He was also involved in projects at Tau Lekoa and Moab Khotsoeng, acquiring experience in conventional, trackless, pillar and deep-level mining. Tom was promoted to Production Manager at Mponeng in 1998. He was appointed General Manager of Tshepong in 2000. Following the merger with ARMgold he was involved in the restructuring of the Free State operations. He joined the executive team in September 2007 and is the Chief Operating Officer: South Region.

**Marian van der Walt (36), BCom (Law), LLB, Higher Diploma in Tax, Diploma in Corporate Governance, Diploma in Insolvency Law, Certificate in Business Leadership; Executive: Corporate and Investor Relations.** Marian has 12 years of legal experience and was appointed Company Secretary on 3 February 2003. She completed her articles at Routledges Modise Attorneys and was admitted as an attorney and conveyancer in 1998. She then joined Deloitte and Touche as an insolvency practitioner/administrator. She held legal and management positions at the Standard Bank of South Africa Limited in the Commercial Properties Division prior to joining Harmony in 2003. Marian was appointed to the Executive Committee in October 2005 with responsibility for legal, compliance and risk management. Internal audit and Sarbanes-Oxley compliance were added to her portfolio in September 2007. In October 2008, she was appointed Executive: Corporate and Investor Relations.

**Johannes van Heerden (37), BCompt (Hons), CA(SA), Chief Executive Officer: South East Asia.** Johannes joined Harmony in 1998 as Financial Manager of the Free State operations. Here he obtained broad financial management experience at an operational level. He was subsequently appointed Group Financial Manager in 2001, before being relocated to Harmony Australasia as Chief Financial Officer in 2003. Johannes presently holds the position of Chief Financial Officer: South East Asia.

**Abre van Vuuren (49), BComm, MDP, DPLR, Executive: Services.** Abre joined Harmony in 1997 when the Group acquired Grootvlei Gold Mine ( **Grootvlei** ). Abre's career in the mining industry started in 1982 where he joined the Finance department at the Blyvooruitzicht Gold Mine. At the end of 1982, Abre switched profiles from Finance at Blyvooruitzicht, to Human Resources at Harmony. He continued to progress through the ranks at various gold mines and collieries in the Rand Mines Group, including Grootvlei. Abre was an integral part of the management team when Harmony acquired Grootvlei in 1997. As Harmony progressed on its acquisition trail, Abre held various Services Management and Human Resource Management portfolios. He was promoted to the Executive Committee in 2000 when he became the Industrial Relations Executive. In this time and through to 2005, he too held various portfolios in Services and Human Resources, until he consolidated the Human Resources function into one. In 2007, when the Chief Executive at the time embarked on strengthening the Executive Management, Abre was appointed to his current portfolio of Executive: Services.

**Table of Contents****Board Practices**

Our Articles of Association provide that the Board must consist of no less than four and no more than twenty directors at any time. The Board currently consists of twelve directors.

Our Articles of Association provide that the longest serving one-third of directors retire from office at each annual general meeting. Retiring directors normally make themselves available for re-election and are re-elected at the annual general meeting at which they retire. Members of our senior management who are also directors retire as directors in terms of the Articles of Association, but their service as officers is regulated by standard industry employment agreements. According to the Articles of Association, the Board meets not less than quarterly.

Details of directors' service contracts are described under Compensation of Directors and Senior Management and Directors' Terms of Employment, below. We also describe significant ways in which our corporate governance practices differ from practices followed by U.S. companies listed on the NYSE on our website under Corporate Governance.

In order to ensure good corporate governance, the Board has formed an Audit Committee, a Remuneration Committee, a Nomination Committee, an Investment Committee, an Empowerment Committee, Sustainable Development Committee and a Technical Committee. All of the Board committees are comprised of a majority of independent, non-executive directors.

***Executive Management Committee***

Our Executive Committee comprises our executive directors and selected senior officers, each with his or her own area of responsibility. The Executive Committee consists of 15 executives who meet on a weekly basis and more often if required.

The composition of the Executive Management Committee (with areas of responsibility indicated) is as follows:

Graham Briggs	Chief Executive Officer
Frank Abbott	Interim Chief Financial Officer
Bob Atkinson	New Business and Projects
Jaco Boshoff	Ore Reserves
Mashego Mashego	Human Resources
Jackie Mathebula	Corporate Affairs
Alwyn Petorius	North Operations South Africa
Tom Smith	South Operations South Africa
Marian van der Walt	Corporate and Investor Relations
Johannes van Heerden	Chief Executive Officer: South East Asia
Abre van Vuuren	Services
Leon le Roux	Risk Management and Engineering
Melanie Naidoo- Vermaak	Environmental Management
Hannes Meyer	Financial Director Designate
Matthews Dikane	Legal and Compliance

**Table of Contents**

***Audit Committee***

***Members***

In terms of its charter this committee must comprise at least three members.

As at June 30, 2009, the members of this committee were:

Cedric Savage	Chairman; appointed to the committee on January 26, 2004 and chairman as from August 5, 2005
Fikile De Buck	Appointed to the committee on March 30, 2006
Dr. Simo Lushaba	Appointed to the committee on January 24, 2003
Modise Motloba	Appointed to the committee on July 30, 2004

The internal and external auditors, the chief executive officer, the financial director and executive managers are all invited to the Audit Committee meeting.

***Frequency of meetings***

The Audit committee is, in terms of its charter, required to meet at least four times a year, or more frequently as circumstances dictate. During the financial year, the committee met on five occasions.

***Purpose and function***

The Audit Committee was established to assist the board in discharging its duties relating to the safeguarding of assets; the operation of adequate system and internal controls and control processes; the preparation of accurate financial reporting and statements in compliance with all applicable legal requirements, corporate governance and accounting standards. It also provides support to the board on the risk profile and risk management of the group.

The Audit Committee reports and makes recommendations to the board, and the board retains responsibility for implementing such recommendations.

***Independence/compliance***

All members of the Audit Committee are independent, non-executive directors.

Currently, we do not have an individual audit committee financial expert as defined by the rules of the SEC. It is our contention that the audit committee members, through their collective experience, do meet the majority of the definitions of the SEC for an audit committee financial expert in both the public and private sectors. The members have served as directors and officers of numerous public companies and have over the years developed a strong knowledge and understanding of IFRS, overseeing the preparation, audit and evaluation of financial statements. We believe that the combined knowledge, skills and experience of the Audit committee, and their authority to engage outside experts to provide them with advice on matters relating to their responsibilities as they deem appropriate, enables them as a group to act effectively in the fulfillment of tasks and responsibilities required under U.S. Sarbanes Oxley Act of 2002.

**Table of Contents**

***Empowerment Committee***

***Members***

The Empowerment Committee must comprise of at least three members.

As at June 30, 2009, the members of this committee were as follows:

Joaquim Chissano	Chairman; Appointed as chairman with effect from May 3, 2006
Modise Motloba	Appointed to the committee on May 3, 2006
Cathie Markus	Appointed to the committee on October 29, 2007

The chief executive officer and several executive managers are invited to attend the Empowerment Committee meetings.

***Frequency of meetings***

The Empowerment Committee met on four occasions.

***Purpose and function***

The Empowerment Committee was established by the board to ensure that the company meets not only regulations stipulated in the Employment Equity Act, the Labour Relations Act and the Mineral and Petroleum Resources Development Act's Mining Charter Scorecard, but also in fulfilment of our own empowerment imperatives.

The responsibilities of the Empowerment Committee include ensuring that a sustainable organizational culture, structures and processes are in place to support the development of empowerment in the company in line with the company's needs and requirements; to monitor the development and progress of empowerment within the company; to address inequalities that may exist in staff profiles and organizational practices; and to review and monitor whether appropriate support is given to previously disadvantaged staff in order to equip them for successful careers in the company.

***Independence/compliance***

The committee is chaired by an independent non-executive director and comprises independent non-executive directors.

***Investment Committee***

***Members***

The Investment Committee must comprise of at least three members.

As at June 30, 2009, the members were:

Dr. Simo Lushaba	Chairman; Appointed to the committee on January 26, 2004 and as Chairman with effect from August 5, 2005)
Fikile De Buck	Appointed to the committee on May 3, 2006
Cedric Savage	Appointed to the committee on January 26, 2004
André Wilkens	Appointed to the committee on August 7, 2007
Cathie Markus	Appointed to the committee on October 29, 2007
Ken Dicks	Appointed to the committee on February 13, 2008

The chief executive officer, the financial director and executive managers are invited to attend the meetings.

**Table of Contents**

*Frequency of meetings*

The committee should meet at least four times a year, but may, at its discretion, meet more often depending on the circumstances. The committee met on six occasions in fiscal 2009.

*Purpose and function*

The Investment Committee's purpose was reviewed, following the implementation of the Technical Committee in February 2008. The primary purpose of the Investment Committee is to consider projects, acquisitions and the disposal of assets in line with the Group's overall strategy. This includes performing such other investment related functions as may be designated by the Board from time to time, considering the viability of the capital project and/or acquisition and/or disposal and the effect it may have on the Group's cash flow, as well as whether these will fit the Group's overall strategy. This committee's remit includes ensuring that due diligence procedures are followed when acquiring or disposing of assets.

*Independence/compliance*

The Investment Committee consists of six non-executive members. Of the six non-executive members, five are independent. The chairman is an independent, non-executive director.

***Nomination Committee***

*Members*

The Nomination Committee must comprise of at least three members.

As at June 30, 2009, the members of this committee were:

Patrice Motsepe	Chairman; Appointed to the committee on October 24, 2003
Joaquim Chissano	Appointed to the committee on May 3, 2006
Frank Abbott	Appointed to the committee August 5, 2005

*Frequency of meetings*

Members of this committee are required to meet annually or more often at the committee's discretion, depending on prevailing circumstances. The committee did not meet in fiscal 2009 as there were no new appointments to or resignations from the board in fiscal 2009.

*Purpose and function*

The primary purpose of the Nomination Committee is to ensure that the procedures for appointments to the board are formal and transparent, by making recommendations to the board on all new board appointments and reviewing succession planning for directors. The duties and responsibilities of this committee are set out in the Nomination Committee charter, with which the committee is fully compliant.

*Independence/compliance*

The chairman of the Nomination Committee is non-executive, but is not independent. To ensure appropriate levels of governance, the potential directors identified by the nominations committee are considered by the board as a whole, the majority of whom are non-executive, independent directors.

**Table of Contents**

***Remuneration Committee***

*Members*

The Remuneration Committee must comprise of at least three members.

As at June 30, 2009, the members of this committee were:

Cedric Savage	Chairman; Appointed to the committee on January 24, 2004, and as chairman from May 3, 2006
Simo Lushaba	Appointed to the committee on August 5, 2005
Patrice Motsepe	Appointed to the committee on January 26, 2004
André Wilkens	Appointed to the committee on August 7, 2007

The chief executive officer, the financial director and the human resources executive are invited to attend all meetings.

*Frequency of meetings*

The Remuneration committee is expected to meet at least on a quarterly basis or to pass a resolution in lieu of a formal meeting not held. In fiscal 2009, the committee met on six occasions.

*Purpose and function*

The primary purposes of the Remuneration Committee are to ensure that the group's directors and senior executives are fairly rewarded for their individual contributions to our overall performance and to demonstrate to all stakeholders that the remuneration of our senior executive members is set by a committee of board members who have no personal interest in the outcome of their decisions, and who will give due regard to the interests of our shareholders and to our financial and commercial health.

The committee's primary objectives are to monitor and strengthen the objectivity and credibility of our directors and senior executives' remuneration system, and to make recommendations to the board on remuneration packages and policies applicable to directors. A formal reward philosophy was adopted by the Remuneration Committee in March 2006. This philosophy is reviewed annually by the committee.

*Independence/compliance*

The committee comprises four non-executive directors, of which two are independent. It is therefore not compliant with King II which requires that the committee comprise independent directors only. The chairman of the Remuneration Committee is, however, an independent non-executive director and ensures that decisions are fair and not biased. The chairman attended the annual general meeting which was held on November 24, 2008 to respond to any queries from shareholders.

***Sustainable Development Committee***

*Members*

The Sustainable Development Committee must comprise of at least three members.

As at June 30, 2009, the following were members of this committee:

Modise Motloba	Chairman; Appointed as chairman on August 5, 2005
Joaquim Chissano	Appointed to the committee on May 3, 2006
Fikile De Buck	Appointed to the committee on May 3, 2006

The chief executive officer and certain executive managers are invited to attend the meetings.

## **Table of Contents**

### *Frequency of meetings*

The Sustainable Development Committee should meet at least four times a year, or more frequently as circumstances dictate. In fiscal 2009, four meetings of this committee were held.

### *Purpose and function*

The objective of the Sustainable Development Committee is to assist the board in ensuring that we are and remain a committed socially responsible corporate citizen. The committee's primary role is to supplement, support, advise and provide guidance on the effectiveness or otherwise of management's efforts in respect of sustainable development.

The committee considers the following sustainable development issues: occupational health, safety, HIV/Aids, social investment and environmental management.

### *Independence/compliance*

The committee comprises independent, non-executive directors.

## ***Technical Committee***

### *Members*

The Technical Committee must comprise of at least four members.

As at June 30, 2009, the following were members of this committee:

Andre Wilkens	Chairman; Appointed as chairman on January 22, 2008
Ken Dicks	Appointed to the committee on January 22, 2008
Fikile De Buck	Appointed to the committee on July, 14, 2008
Modise Motloba	Appointed to the committee on January 22, 2008
Cedric Savage	Appointed to the committee on January 22, 2008

The chief executive and certain executive managers are all invited to attend the meetings.

### *Frequency of meetings*

The Committee should meet at least six times a year. The Committee, at its discretion, may decide to change this requirement, depending on the circumstances. In fiscal 2009, six meetings of this committee were held.

### *Purpose and function*

The Technical Committee was formed in January 2008 to provide a platform for the chief executive officer to discuss the company's strategy, its performance against targets and its operational results and projects. The Technical Committee keeps the Board informed of the developments, progress and challenges facing the company's operations. The strategic plans are considered by the Technical Committee and recommended for approval to the Investment Committee and the Board. In addition, the Technical Committee provides guidance and support to Management to ensure that the Company remains sustainable and successful.

The committee considers and reviews the company's strategy, its performance targets and its projects on an annual basis; reviews the performance of the company and the chief executive; reports to the Board on the developments, progress and challenges facing the company's operations on a quarterly basis.

**Table of Contents***Independence/compliance*

The committee comprises four independent, non-executive directors. The chairman is not independent, but it was agreed that he was best suited to be appointed as chairman, due to his vast knowledge of the company's assets and his years of mining experience.

**Compensation of Directors and Senior Management**

The following table shows the compensation of directors and senior management for fiscal 2009:

Name	Directors Fee (\$ 000) 2009	Salaries and Benefits (\$ 000) 2009	Retirement	Bonuses Paid (\$ 000) 2009	Total (\$ 000) 2009
			Contributions during the year (\$ 000) 2009		
<b>Non-executive</b>					
Patrice Motsepe	83				83
Joaquim Chissano	41				41
Fikile De Buck	43				43
Cheick Diarra	16				16
Ken Dicks	31				31
Dr Simo Lushaba	38				38
Cathie Markus	26				26
Modise Motloba	51				51
Cedric Savage	55				55
André Wilkens	41				41
<b>Executive</b>					
Frank Abbott		270	29	58	357
Graham Briggs		470		271	741
<b>TOTAL</b>	<b>425</b>	<b>740</b>	<b>29</b>	<b>329</b>	<b>1,523</b>

128

**Table of Contents****Directors Terms of Employment**

None of our directors have a service contract with us or any of our subsidiaries with a notice or contract period of one year or more or with provisions for pre-determining compensation on termination of an amount which equals or exceeds one year's salary and benefits in kind.

The terms of employment of our executive directors continue until terminated by reaching the mandatory retirement age of 60 or on service of 30 days' notice by either us or the employee. Each of our executive directors participates in our share option scheme and a discretionary executive profit share scheme, the latter provided that certain profit targets, set by the Remuneration Committee, are achieved. They have both waived their rights to directors' fees.

The executive directors also benefit from pension contributions, provident funds, life insurance and medical aid, the value of which is included in the salary details listed above. The total amount currently set aside or accrued by us and our subsidiaries for the payment of these pension, life insurance, medical aid and retirement benefits is U.S.\$nil million. The non-executive directors are entitled to fees as agreed at our annual general meeting from time to time, reimbursement of out-of-pocket expenses incurred on our behalf and remuneration for other services, such as serving on committees. For fiscal 2009, total directors' remuneration amounted to U.S.\$1.5 million and senior management's remuneration to U.S.\$2.7 million.

Non-executive directors are paid as per the chart below. Executives participate in an executive bonus scheme and bonuses (if any) are determined for a financial year by the Remuneration Committee, in line with our reward philosophy. A bonus of U.S.\$271,000 was awarded to the chief executive officer during the past financial year.

The board has agreed to an increase in non-executive directors' fees, effective from July 1, 2008. Shareholders approved the increase in fees at the annual general meeting held on November 24, 2008.

For fiscal 2009 non-executive directors received the following fees:

	<b>Annual Fee</b>
Board	R 140,000 annually
Audit Committee	R 70,000 annually
Empowerment Committee	R 45,000 annually
Investment Committee	R 45,000 annually
Nomination Committee	R 45,000 annually
Remuneration Committee	R 45,000 annually
Sustainable Development Committee	R 60,000 annually
Technical Committee	R 60,000 annually
Chairman of Board	R 650,000 annually
Chairman of Board committees	Double the amount that the individual Board committee member received annually

The terms of employment of the non-executive directors are not set out in any written agreements.

**Table of Contents****Share Options**

At October 19, 2009, our executive directors and senior management held the following share options, totalling less than 1% of our share capital:

<b>Directors and Senior Management</b>	<b>Number of Share Options</b>	<b>Average Strike Price (R)</b>	<b>Expiration Dates</b>
Frank Abbott			
Graham Briggs	91,938	48.55	2012-2015
<b>Senior Management (as a group)</b>	<b>386,182</b>	<b>50.17</b>	<b>2012-2015</b>
<b>Total</b>	<b>478,120</b>	<b>49.86</b>	<b>2012-2015</b>

Options to purchase a total of 2,794,659 ordinary shares were outstanding on October 19, 2009. The exercise prices of the outstanding options range between 36.50 and 91.60 per share and they expire between 2012 and 2015. Of the outstanding options, options to purchase 478,120 ordinary shares were held by our directors and senior management and those of our subsidiary companies, as described above. No consideration was payable on the grant of these options. See Note 36 to the Consolidated Financial Statements included herein.

**Shares issued in terms of the Harmony 2006 Share Plan**

At October 19, 2009, our executive directors and senior management held the following share appreciation rights and performance shares, totaling less than 1% of our share capital:

<b>Directors and Senior Management</b>	<b>Share Appreciation Rights (SAR)</b>	<b>SAR Price (R)</b>	<b>Performance Shares (PS)</b>	<b>PS Price (R)</b>	<b>Expiration Dates</b>
Frank Abbott					
Graham Briggs	237,488	78.14	214,216	n/a	2014/2015
<b>Senior Management (as a group)</b>	<b>656,809</b>	<b>73.36</b>	<b>577,937</b>	<b>n/a</b>	<b>2014/2015</b>
<b>Total</b>	<b>894,297</b>	<b>74.63</b>	<b>792,153</b>	<b>n/a</b>	<b>2014/2015</b>

**Share Ownership**

The following sets forth, as at June 30, 2009 and at October 19, 2009, the total amount of ordinary shares directly or indirectly owned by our directors and senior management, including shares issued under the 2006 Share Plan. Our directors and senior management do not own any preference shares.

<b>Holder</b>	<b>Ordinary Shares Number as at June 30, 2009</b>	<b>Percentage</b>	<b>Ordinary Shares Number as at October 19, 2009</b>	<b>Percentage</b>
<b>Non-executive chairman</b>				
Patrice Motsepe <sup>(1)</sup>				
<b>Directors Non-executive</b>				
Joaquim Chissano				
Fikile De Buck				
Cheick Diarra				
Ken Dicks				
Dr Simo Lushaba				

Cathie Markus				
Modise Motloba				
Cedric Savage				
André Wilkens	101,303	(2)	101,303	(2)
<b>Executive Directors</b>				
Frank Abbott				
Graham Briggs				
<b>Total Directors (12 persons)</b>	101,303		101,303	

(1) Patrice Motsepe, our Chairman, has an indirect holding in ARM Limited.

(2) Less than 1%.

**Table of Contents****Employees****General**

Set out below is the number of people working at each of our operations and the number at our operations who are employed by outside contractors as at the end of each of fiscal years 2009, 2008 and 2007.

	Harmony Employees at			Outside Contractors at		
	June 30,			June 30,		
	2009	2008	2007	2009	2008	2007
South Africa	37,316	40,751	47,600	4,962	6,309	9,075
International	979	862	516	2,482	846	350
Grand total	38,295	41,543	48,325	7,390	7,155	9,851

These numbers show a substantial reduction in the number of both employees and of outside contractors which was achieved over the period ended June 30, 2008. It represents the consequences of the restructuring program on the employee numbers (see below).

**South Africa**

South Africa is a signatory to all the International Labour Organization conventions in respect of employment and fair labor practices. Consequently, South African labor relations are characterized by a high degree of regulation, with legislation covering all aspects of the employment relationship, including but not restricted to the following:

minimum conditions of employment (note there is no prescribed basic minimum wage, but laws cover most aspects of employment, from hours of work to prohibitions on child labor);

trade union access and membership;

training and development;

mandatory compensation in the event of termination for operational reasons;

affirmative action policies and programs;

compensation for occupational illness and injury;

mechanisms for collective bargaining;

procedures for the resolution of disputes; and

regulation of strikes and dismissals.

Harmony invests in the training and development of its current and potential employees. During fiscal 2009 around 95% of South African employees received some form of training in areas such as mining, engineering, metallurgy, ore reserve, human resources and soft skills. In South Africa, we have various programmes in place to attract and develop university and young school leavers through apprenticeships, bridging programmes and bursaries, as well as extensive in-house and external training programmes.

In the mining industry, our relationship with the unions and the government is well established and provides a structure for negotiation between independent representative Trade Unions and employer associations of all conditions of employment and the provision of benefits, including retirement benefits and health care for employees and their dependants. This structure also allows for consultation on many operational issues including for example, recruitment and selection, training and development and health and safety. We are no different from the other major gold producers in this regard; we fully participate, and in some instances have played a major role, in the industry's industrial relations structures, including the Chamber of Mines of South Africa (which represents the interest of the major employers in the mining sector), the various statutory training bodies and benefit structures.



**Table of Contents**

The major unions present and recognized by us are the (i) National Union of Mineworkers (NUM), (ii) United Association of South Africa (UASA) and (iii) Mineworkers Solidarity and the South African Electrical Workers Association (SAEWA) is the smallest with 15 members.

Set out below is the number of our employees by union membership as of June 30, 2009:

NUM	28,124
Solidarity	812
UASA	3,668
Collective Bargaining Fund	1,134
Un-unionized	3,558

Approximately 1,134 employees are subject to Agency Shop arrangements (whereby the terms and conditions of service negotiated and agreed to with the recognized Trade Unions are extended to apply to non-union members who, in turn, then pay a small fee to the union) and the rest of the employees either do not belong to a union or belong to one of the more insignificant unions active in Harmony from time to time.

As a result of our highly unionized labor force and the fact that labor costs constitute approximately 50% of production costs, we have attempted over the years to balance union demands for improvements in wages and conditions of employment with the need to contain and reduce cash costs in order to ensure the long-term viability of our operations.

The most significant event in our employee relations during fiscal 2008 was the restructuring program which resulted in a substantial reduction in our employee headcount. This workforce reduction was achieved with the cooperation of all our represented unions and without any disruption of operations. As such, while a workforce reduction of this size by a South African company would normally be a sensitive issue, we were successful in engage in reductions without major operational disruptions and negative publicity. The success of this exercise is attributable to the excellent relationship that our management has cultivated with the unions over the last three years. Affected employees were given severance packages and many were placed in training programmes funded by the Company's social plan.

Another key event in fiscal 2008 was the reduction in electricity supply to our mines, resulting in a halting operations and a redeployment of employees to other operations which did not have similar electrical issues. As with our workforce reduction program, we also sought the cooperation of the unions in this matter. While this reduction of electricity supply presented some difficulties which slowed down the redeployment process, approximately 9,095 employees of affected sites were redeployed to other sites within our operations in fiscal 2008.

The industry wage negotiations were successfully completed in July 2009, and the unions reached an agreement with the Chamber of Mines which provided for a better-than-inflation wage agreement (ranging from 10.5% for lower level semi-skilled employees down to 9% for the more skilled employees). Also agreed was that the minimum wage be increased to R4,000 (U.S.\$518) a month with effect from July 2010 for category 3 employees. The wage increases are supplemented by non-contributory medical aid, as well as a living-out allowance or free accommodation and food, as has been practice in the South African mining industry. A guaranteed wage increase of 7.5%, or Consumer Price Index plus 1%, whichever is the higher of the two, was agreed for the second year of the two-year settlement agreement. Special arrangements were also agreed to attempt to address the skills shortage in the industry and certain key job categories now receive scarcity allowances of various kinds in an attempt to make the industry attractive to them.

In November 2007, our Conops Task Team completed an internal due diligence of Conops. The objective of the internal due diligence exercise were to:

establish whether Conops has been successfully implemented at the mines where it was introduced and to what extent the original objective of improved profitability without compromising safety was met;

understand the gap that exists between the current performance of the operations and the potential performance after implementation of Conops at these operations; and



**Table of Contents**

understand the reasons for the underperformance versus the Conops potential and propose actions to the operations to close the gap.

Following the above exercise, action plans were produced by each shaft management team at each operation addressing those issues that were identified as requiring attention. After the recommended actions were implemented, progress towards operational improvement was monitored. Our stated intention was to review these planned Conops within three months of implementation; in February 2008, this review was completed, and we decided to phase Conops out at those operations whose ore reserves, infrastructure and staffing levels did not delivery on our profitability objectives. Currently, Conops is in force at only two of our Evander shafts, the reason being that these shafts are achieving their objectives under the Conops system.

*Work Stoppages*

During July and August 2008, two days were lost as part of the national campaign by the largest trade union federation COSATU against soaring food prices.

During September 2008, a one day work stoppage occurred at Tshepong, in protest of mine safety, following a fatal accident in which a mineworker was killed. This work stoppage followed an agreement between our management and NUM and was limited only to Tshepong.

During October 2008, a four day long work stoppage occurred at the Elandsrand mine near Carletonville due to a fall of ground accident which resulted in the death of one mineworker.

There were no group wide work stoppages in fiscal 2007.

*Women in mining*

The Mining Charter stipulates that 10% of the total workforce should be made up of women by 2009. At the end of June 2009, there were 3,952 women in the group (11%), compared with 3,578 in fiscal 2008, or 9% of women in the total workforce. Various steps have been taken to accommodate women in the underground mining environment.

PNG obtained government approval to recruit females specifically in the surface mining environment. As a result, there are plans in place at Hidden Valley specifically to address the gender balance of employees, and eight heavy equipment women operator trainees were recruited in fiscal 2008. In addition, a process of transferring women landowners (who were part of the construction team) to the open-pit operations has started. Meanwhile, aptitude tests of women landowners are ongoing to establish a pool of available candidates. In fiscal 2009, 16% of the workforce in PNG was women, exceeding the 15% target set in fiscal 2008.

There is no differentiation in salary scales for men and women at Harmony.

*Australia*

Employee relations in Australia are regulated by a combination of federal and state statutes that stipulate minimum standards and provide for collective bargaining and action. All employment contracts are based on Australian Workplace Agreements. Our Australian workforce is not unionized.

*PNG*

Employee relations in PNG are regulated by the Employment Act of 1978 (PNG) and the Employment of Non-Citizens Act 1978 (PNG). Individual contracts are entered into, and the workforce is not unionized.

The workforce comprises both expatriates and national citizens, with most expatriates (8% of the workforce) working a fly-in fly-out roster.

**Table of Contents**

**Long Term Incentive Schemes**

In addition to employees' annual salaries, Harmony has implemented various share option schemes, including the Harmony 2006 Share Plan. In all, 14% of Harmony's share capital is reserved for long-term incentive schemes, which were approved by shareholders at the annual general meeting held in November 2005.

***Existing share option schemes***

Harmony has two share option schemes, namely the 2001 Share Option Scheme and the 2003 Share Option Scheme (collectively), which all have similar rules. Since the implementation of the 2006 Share Plan, no options have been nor will be issued in terms of the existing schemes. Options granted before the implementation of the 2006 Share Plan remain open for acceptance for 10 years after the date of grant, subject to the terms of the relevant option scheme.

A share purchase trust was established in 2002 which is controlled by Harmony. Recourse loans are provided by the trust to employees to enable them to acquire shares or exercise their options under Share Option Schemes. Since March 27, 2003, share option scheme participants are no longer allowed to place their shares in the share purchase trust.

The share purchase trust is funded by a loan from Harmony, which it repays once it receives repayment of the recourse loans granted to employees. Members of the Remuneration Committee serve as trustees. The trustees are not eligible to receive loans from the trust. Participants are not allowed to use structures to lock-in profits as the options are meant to align employees with our shareholders.

***Broad-Based Employee Scheme***

The Group intends to implement a broad-based employee share scheme and intends to structure the scheme so as to maximise the recognition of black participation therein, both from the perspective of the MPRDA and the Broad-Based Black Economic Empowerment Act. Discussions relating to option benefits for non-managerial employees are ongoing with unions representing these employees.

***The Harmony 2006 Share Plan***

The Harmony 2006 Share Plan (the plan) was adopted by shareholders at the annual general meeting held on 10 November 2006. The plan incorporates the following elements: equity-settled share appreciation rights, performance shares and performance allocated restricted shares. The Plan is in line with global best practice and emerging South African practice, which in combination serves to reward the required attributes of shareholder alignment and long-term, sustained performance.

In terms of the Plan, executive directors and senior employees of Harmony and its subsidiaries are awarded rights to receive shares in Harmony, based on the value of these awards when time and performance conditions have been met, the awards have vested and, in the case of the Share Appreciation Rights (SARs), the restricted shares, have been exercised.

The primary intent of the Plan is to reward executives and senior management for long term, sustained performance achievements which are aligned to shareholder value, and at the same time to ensure an optimal positioning in terms of the accounting and regulatory environment.

It is envisaged that rewards will be settled in shares.

Annual allocations of SARs awards of performance shares and grants of restricted shares are governed by Harmony's reward philosophy, in which (*inter alia*) the expected value of long-term incentive rewards is set for defined categories of executives and senior management. The expected value is defined as the present value of the future reward outcome of an allocation/award/grant, given the targeted future performance of Harmony and its share price.

**Table of Contents**

***Annual incentive scheme***

Our Remuneration Committee ensures that our directors and senior executives are fairly rewarded for their individual contributions to our overall performance.

In September 2006, the Remuneration Committee approved an annual incentive scheme as part of Harmony's Reward Philosophy to benefit executive directors and members of management. Since July 2008 the shaft management teams get paid a quarterly bonus and are excluded from the annual incentive schemes.

**Table of Contents****Item 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS****Major Shareholders**

We are an independent gold producer, with no single shareholder exercising control. As of October 19, 2009, our issued share capital consisted of 426,028,533 ordinary shares. To our knowledge, (A) we are not directly or indirectly owned or controlled (i) by another corporation or (ii) by any foreign government and (B) there are no arrangements (including any announced or expected takeover bid), the operation of which may at a subsequent date result in a change in our control.

The voting rights of our major shareholders do not differ from the voting rights of other holders of the same class of shares.

Significant changes in the percentage ownership held by major shareholders in the past three years are described below on *Related Party Transactions*.

A list of the 5% holders of our securities as of October 19, 2009 is set forth below:

<b>Holder</b>	<b>Number of Shares</b>	<b>Percentage</b>
1. Bank of New York (1)	123,013,456	28.90%
2. ARM Limited (2)	63,632,922	14.99%
3. Allan Gray	56,383,055	13.29%
4. Blackrock Investment Management (UK) Ltd.	41,496,772	9.78%
(1) Depository with respect to the ADRs held on the U.S. register.		
(2) Patrice Motsepe, our Chairman, has an indirect holding in ARM Limited.		

As of October 19, 2009, there were 2,239 record holders of our ordinary shares in the United States.

**Capital Raising**

Harmony engaged in capital raising by issuing two tranches of shares following the resolution passed by shareholders at the Annual General Meeting held on November 24, 2008 that allowed directors to issue shares for cash. In the first tranche, completed between November 25, 2008 and December 19, 2008, 10,504,795 Harmony shares were issued at an average subscription price of R93.20 resulting in R979 million (U.S.\$98 million) before costs being raised.

The second tranche of shares was issued between February 10, 2009 and March 6, 2009 and consisted of 7,540,646 Harmony shares being issued at an average subscription price of R124.45, resulting in R938 million (U.S.\$94 million) before costs being raised. The combined share issue amounts to R1.9 billion (U.S.\$192 million) at a cost of R30 million (U.S.\$3.5 million).

**Related Party Transactions**

None of our directors or major shareholders or, to our knowledge, their families, had any interest, direct or indirect, in any transaction since July 1, 2006 or in any proposed transaction that has affected or will materially affect us or our subsidiaries, other than as stated below.

On November 21, 2008, the Group disposed of its Randfontein Cooke assets to Rand Uranium in exchange for 100% interest in the company. On the same date the Group disposed of 60% of the interest held in Rand Uranium to PRF which resulted in a 40% interest held and Rand Uranium became an associate.

The conditions precedent for the second part of the Rand Uranium transaction relating to the sale of the Old Randfontein assets were fulfilled on April 22, 2009. Additional shares were issued in settlement and 60% of these shares were sold to PRF in terms of the agreement. PRF paid its portion of the purchase price in cash on April 20, 2009. The total value of these transactions was U.S.\$348 million.

**Table of Contents**

We have three directors on the board of Rand Uranium, being GP Briggs, F Abbott and Ms FFT De Buck. Rand Uranium owes the Group U.S.\$5 million for services and goods provided in terms of the service level agreements entered into between the Group and Rand Uranium. The Group has subordinated a loan of U.S.\$9 million owed by Rand Uranium. The loan bears interest at a rate equal to the 91 Day JIBAR plus 250 basis points and is repayable within seven years.

In fiscal 2008 Morobe Consolidated Goldfields Limited and Wafi Mining Limited, subsidiaries of Harmony Gold (Australia) (Proprietary) Limited entered into a Master Purchase and Farm-in Agreement with Newcrest. This agreement provided for Newcrest to purchase a 30.01% participating interest (stage 1) and a further buy-out of an additional 19.99% participating interest in Harmony's PNG Gold and copper assets, giving them a 50% interest.

Included in the Group's consolidated balance sheet is a loan to the Morobe Mining Joint Venture amounting to U.S.\$10 million, being Newcrest's portion of the loan to the PNG joint venture companies.

On July 11, 2008, we sold our 37.8% share in Village Main Reef Gold Mining Company (1934) Limited for R1.1 million (U.S.\$0.1 million) to To the Point Investments. ZB Swanepoel, our former Chief Executive Officer, is a director and founder of To The Point Investments.

On February 27, 2008, the Group sold its Orkney assets to Pamodzi in exchange for shares, whereby it obtained an interest of 32.4% and Pamodzi became an associate (refer to note 22). Subsequent to this, we provided goods and services to Pamodzi at cost plus an applicable margin as set out in the service level agreement. The balance of the unsecured loan at June 30, 2008 was R103 million (U.S.\$13.2 million). Interest was charged at prime rate. When Pamodzi was placed into liquidation in March 2009, interest was no longer charged on the loan and the loan was provided for in full. The balance of the loan at that time was R116 million (U.S.\$15.0 million).

ARM Limited currently holds approximately 15% of our shares. Patrice Motsepe, André Wilkens and Frank Abbott are directors of ARM Limited.

In fiscal 2005, as part of the disposal of our investment in ARM Limited to the ARM Broad-based Economic Empowerment Trust ( **BEE Trust** ), various agreements were put in place to which we accepted and resulted in the majority of the risk not being transferred away from us. Included in these agreements were two guarantees by us to Nedbank relating to the loans obtained by the BEE Trust to acquire the shares from us. On September 28, 2007, the guarantees were cancelled by Nedbank and, consequently, we have no further obligation to Nedbank in this regard. The ARM investment (and associated Nedbank loan) have been derecognized from this date.

**INTERESTS OF EXPERTS AND COUNSEL**

Not applicable.

**Table of Contents**

**Item 8. FINANCIAL INFORMATION  
CONSOLIDATED STATEMENTS**

Please refer to *Item 18. Financial Statements* of this annual report.

**Legal Proceedings**

None of our properties is the subject of pending material legal proceedings. We have experienced a number of claims and legal and arbitration proceedings incidental to the normal conduct of our business, such as the ones described below. The directors, however, do not believe that liabilities related to such claims and proceedings are likely to be, individually or in the aggregate, material to the company's consolidated financial condition.

***Class Action***

There is a pending class action in the United States whereby certain ADR holders are seeking damages against us pertaining to our business practices. We have filed with the court a Motion to Dismiss all claims asserted in the class action case, the plaintiffs have filed an opposing response, and we have subsequently replied to that response. At this point the matter is in the hands of the U.S. court and we are awaiting a ruling. It is not possible to predict with certainty when the court will rule on the Motion to Dismiss as the timing of the ruling is entirely within the discretion of the Court, but we would estimate that such a decision will be made by the end of the calendar year, although it may be later than that.

***ArcelorMittal South Africa Limited ( ArcelorMittal )***

On September 14, 2009 Harmony and DRDGold withdrew a complaint to the Competition Commission against ArcelorMittal originally made in 2002. The complaint alleged that ArcelorMittal had abused its dominant position in the local market for flat steel products by charging excessive prices. Following several years of litigation, Harmony, DRDGold and ArcelorMittal entered into a settlement agreement, the terms of which are confidential.

**Dividends and Dividend Policy**

We paid interim and final dividends on our ordinary shares in 2003 and 2004. Due to operating conditions and our commitment to expenditure on long-term growth projects, we were not able to declare any dividends in fiscal 2005, fiscal 2006, fiscal 2007 or fiscal 2008. On August 13, 2009, the Board approved a final dividend for fiscal 2009 of R0.50 per share, that was paid on September 21, 2009. The total amount of the dividend paid was R213 million (U.S.\$28.6 million). As the dividend was declared after the reporting date of June 30, 2009, the dividend was not recorded in fiscal 2009. For information on our accounting policy relating to dividends, see note 2.20 to the consolidated financial statements.

South African law was relaxed to permit the distribution of a company's equity as a dividend, provided that the necessary shareholder or board approval is obtained and, after the distribution of the dividend, the company remains solvent and liquid. Cash dividends, however, may only be paid out of accumulated profits or other distributable reserves. Previously under South African law, a company's equity could not be distributed as a dividend. The amount of dividends, if any, paid in the future will depend on our results of operations, financial condition, cash requirements and other factors deemed relevant by the Board.

**Recent Developments**

***PNG exploration acquisition***

On August 27, 2009, we acquired two new exploration projects, the Amanab and the Mount Hagen Projects, in PNG.

These ELs complement the exploration activities undertaken by Harmony and underscore our commitment and belief in the developing minerals industry in PNG.

Amanab project EL1708 was granted on July 6, 2009 and comprises of about 863 square kilometers of tenure. The tenement is located approximately 160 kilometers north of the OK Tedi copper-gold mine in the Sandaun Province and was pegged to target the bedrock source of the alluvial goldfield centered on the Yup River.

**Table of Contents**

The Mount Hagen project comprises two contiguous tenements, EL1611 & EL1596, encompassing approximately 1,100 square kilometers of tenure. The tenements are located approximately 20 kilometers north-northeast of Mount Hagen and are readily accessible via the Highlands Highway connecting Lae and Porgera.

Harmony acquired 100% of the mineral rights for EL1596 from Frontier Resources for the cash consideration of A\$0.3 million (U.S.\$0.25 million).

We also acquired the rights to explore the adjacent tenement EL1611 over a four year period, with the condition that our exploration program meets the minimum annual expenditure commitment. At any time during this period we may exercise an option to purchase 100% of the tenement for a total cash consideration of 6 million Kina (U.S.\$2.4 million).

***Pamodzi Gold Free State (Proprietary) Limited***

During June 2009, Harmony reported that the provisional liquidators for Pamodzi Gold Free State (Proprietary) Limited (In Provisional Liquidation) ( Pamodzi Free State ) had chosen Harmony Group as the preferred bidder of Pamodzi Free State s assets. These assets consisted of President Steyn 1 and 2 Shafts, Loraine 3 Shaft, Freddie 7 Shaft and Freddie 9 Shaft, a metallurgical gold plant, a waste rock dump and a dormant tailings storage facility.

Harmony s offer was accepted during July 2009, following the approval from the Industrial Development Corporation of South Africa and the relevant trade unions.

In September 2009 Harmony entered into four separate agreements to purchase Pamodzi Free State s assets. The Pamodzi Free State assets will be purchased free from all liabilities, save for all associated rehabilitation and environmental liabilities. The purchase consideration for these assets is R405 million. The purchase was approved by the South African High Court on September 15, 2009.

The major conditions precedent that have to be fulfilled in order for the agreements to become unconditional are the conversion of the Pamodzi Free State mining rights and the consent for the cession thereof to Harmony by the Minister of Mineral Resources.

***Avoca Resources Limited***

During September 2009 and October 2009, the Group disposed of its Avoca Resources Limited shares for approximately A\$6 million (US\$5.2 million).

***Big Bell Operations (Proprietary) Limited***

During September 2009 quarter, the board approved the sale of Big Bell Operations (Proprietary) Limited (BBGO), operations in Western Australia. A tender process was completed and a preferred bidder was identified. The share sale agreement is expected to be completed and executed during the December 2009 quarter. BBGO has been classified as held-for-sale.

**Table of Contents****Item 9. THE OFFER AND LISTING***Markets***Stock Exchange Listings and Ticker Codes**

The primary listing of our ordinary shares is on the JSE Limited. Our ordinary shares are also listed on stock exchanges in London and Berlin, as well as being quoted in Brussels, Paris and Luxembourg in the form of International Depositary Receipts (IDRs) and on the New York Stock Exchange and NASDAQ in the form of ADSs.

JSE Limited	HAR
New York Stock Exchange	HMY
NASDAQ	HMY
London Stock Exchange	HRM
Euronext Brussels	HMY
Euronext Paris	HG
Berlin Stock Exchange	HAM1

*Offering and Listing Details*

The high and low sales prices in Rand for our ordinary shares on the JSE for the periods indicated were as follows:

	<b>Harmony Ordinary Shares (Rand per Ordinary Share)</b>	
	<b>High</b>	<b>Low</b>
<b>Fiscal year ended June 30, 2007</b>		
First Quarter	121.54	86.10
Second Quarter	123.00	101.00
Third Quarter	113.45	90.85
Fourth Quarter	117.85	94.30
Full Year	123.00	86.10
<b>Fiscal year ended June 30, 2008</b>		
First Quarter	104.05	60.00
Second Quarter	83.05	63.00
Third Quarter	118.50	69.00
Fourth Quarter	104.41	82.98
Full Year	118.52	60.00
<b>Fiscal year ended June 30, 2009</b>		
First Quarter	97.00	54.99
Second Quarter	103.75	62.50
Third Quarter	129.50	92.50
Fourth Quarter	104.40	75.50
Full Year	129.50	54.99
<b>Month of</b>		
July 2009	79.00	69.05
August 2009	76.50	70.80
September 2009	87.51	71.60
As of October 19, 2009	87.00	80.00

On October 19, 2009, the share price of our ordinary shares on the JSE was R85.60.

Our ADRs are dual-listed on the New York Stock Exchange and, as of November 29, 2005, on the NASDAQ. The high and low sales prices in U.S. dollars for our ADRs for the periods indicated, as reported on the NYSE and NASDAQ, were as follows:



**Table of Contents**

	NYSE		NASDAQ	
	Harmony ADRs		Harmony ADRs	
	(\$ per ADR)		(\$ per ADR)	
	High	Low	High	Low
<b>Fiscal year ended June 30, 2007</b>				
First Quarter	17.10	11.91	17.10	12.93
Second Quarter	17.26	13.44	15.75	13.44
Third Quarter	15.27	13.90	15.27	13.90
Fourth Quarter	14.31	14.27	14.31	14.27
Full Year	17.26	11.91	16.76	12.67
<b>Fiscal year ended June 30, 2008</b>				
First Quarter	15.27	8.42	15.27	8.42
Second Quarter	11.90	10.31	11.90	10.31
Third Quarter	11.51	10.75	11.51	10.75
Fourth Quarter	12.25	11.51	12.25	11.51
Full Year	15.27	8.42	15.27	8.42
<b>Fiscal year ended June 30, 2009</b>				
First Quarter	12.51	6.39	12.51	6.39
Second Quarter	10.97	5.58	10.97	5.58
Third Quarter	13.06	8.95	13.06	9.12
Fourth Quarter	12.10	8.17	12.10	8.17
Full Year	13.06	5.58	13.06	5.58
<b>Month of</b>				
July 2009	10.35	8.50	10.34	8.50
August 2009	9.62	8.93	9.58	8.91
September 2009	11.75	9.03	11.78	9.05
As of October 19, 2009	11.98	10.23	11.94	10.22

On October 19, 2009, the closing share price of our ordinary shares on the NYSE was U.S.\$11.59.

On October 19, 2009, the closing share price of our ordinary shares on NASDAQ was U.S.\$11.60.

**The Securities Exchange In South Africa**

The JSE is the sixth largest emerging market exchange and by far the leading exchange in Africa, playing a leadership role in the continent, supporting South Africa's role as the African financial hub. It is also recognized as a leading exchange in the global resources sector.

As South Africa's only full service securities exchange, the JSE connects buyers and sellers in five different markets; equities, which includes a primary and secondary board, equity derivatives, agricultural derivatives and interest rate instruments. The JSE is one of the top 20 exchanges in the world in terms of market capitalization. The market capitalization of the JSE equities market was R4,733 billion (U.S.\$613 billion) at June 30, 2009. The mining market capitalization was, at June 30, 2009, 28.9% of the overall JSE market capitalization and constituted 29.2% in terms of value traded.

The JSE is the market of choice for local and international investors looking to gain exposure to the leading capital markets in South Africa and the broader African continent.

**History**

The Securities Exchange in South Africa, now known as JSE Limited, was formed in November 1887. In 1993 the JSE became an active member of the African Stock Exchanges Association. On May 15, 1996, the formal bond market passed from the JSE to the Bond Exchange of South Africa and is separately licensed as a financial market in terms of the Financial Markets Control Act.

Following the closure of the open outcry trading floor on June 7, 1996, an order driven, centralized automated trading system known as the JSE Equities Trading, or JET, system was introduced together with dual trading and

negotiated brokerage. On August 18, 1997, the Listings division of the JSE introduced a real time news service for the dissemination of company announcements and price sensitive information. Stock Exchange News Service ( **SENS** ) ensures early, equal and wide dissemination of all information

**Table of Contents**

that is expected to have an effect on the prices of securities that trade on the JSE. In 1998, the JSE introduced an Internet-based Service, the Emerging Enterprise Zone, or the EEZ, to match seekers and providers of capital for small and medium business. In November 1999, the electronic clearing and settlement system, Share Transactions Totally Electronic ( **STRATE** ) was introduced and the JET system was modified to prepare for the implementation of an open interface to the system via the Application Program Interface. The Alternative Exchange, known as the AltX , aimed at attracting smaller companies to the JSE, was launched in October 2003 and at June 30, 2009 boasts 76 listings. Yield-X, which trades spot and derivative interest rate products across the yield curve on an automated central order book was introduced in February 2005. The JSE's Single Stock Futures market is the world leader in terms of contracts traded, according to the World Federation of Exchanges' IOMA Derivative Markets Survey. Concurrent with its loss of tax-exempt status on July 1, 2005, the JSE Securities Exchange South Africa de-mutualized, ending its 118 year history as a tax-exempt, member owned, voluntary association to become JSE Limited, a public but unlisted company.

***STRATE Settlement***

Under STRATE there are essentially two types of clients: controlled and non-controlled. A controlled client is one who elects to keep his shares and cash with his broker and these shares are held in custody at the broker's chosen Custodian Bank, the CSDP. A non-controlled client is one who appoints his own CSDP to act as custodian on his behalf. Equity settlements take place on a contractual T+5 (where T= trade date) settlement cycle. Securities and funds become due for settlement a set number of business days after the trade. Contractual settlement is a market convention embodied in the rules of the JSE which states that a client has a contractual obligation to cause a JSE trade to settle on settlement day. The JSE, in its capacity as Settlement Authority, ensures that all on-market trades entered into by two JSE member firms settle five days after the trade date.

**PLAN OF DISTRIBUTION**

Not applicable.

**SELLING SHAREHOLDERS**

Not applicable.

**DILUTION**

Not applicable.

**EXPENSES OF THE ISSUE**

Not applicable.

**Table of Contents**

**Item 10. ADDITIONAL INFORMATION**

**Share Capital**

Not applicable.

**Memorandum and Articles of Association**

*This section summarizes certain material provisions of Harmony's Memorandum and Articles of Association, the Companies Act and the JSE listings requirements, each as currently in effect. These descriptions do not purport to be complete and are qualified in their entirety by reference to all of the provisions of those sources. Directions on how to obtain a complete copy of Harmony's Articles of Association are provided under Documents on Display below.*

*General*

We are a public company with limited liability, and is registered under the Companies Act with the Registrar of Companies, Department of Trade and Industry under Registration number 1950/038232/06. We are governed by our Memorandum of Association and Articles of Association, the provisions of the Companies Act and the various Listings Requirements. Our operations are also subject to various laws and regulations, including those described in *Item 4. Information on the Company Regulation*.

*Objects and Purposes*

Our objects are set forth in Paragraph 3 of our Memorandum of Association and include:

to acquire by purchase, cession, grant, lease, exchange or otherwise any movable or immovable property, mines, mineral property, claims, mineral rights, mining rights, mining leases, mining titles, mynpachts, lands, farms, buildings, water rights, concessions, grants, rights, powers, privileges, surface rights of every description, servitudes or other limited rights or interests in land and mineral contracts of every description; and any interest therein and rights over the same; and to enter into any contract, option or prospecting contract in respect thereof, and generally to enter into any arrangement that may seem conducive to our objects or any of them;

to carry out all forms of exploration work and in particular to search for, prospect, examine, explore and obtain information in regard to mines, mineral properties, claims, mineral rights, mining rights, mining leases, mining titles, mynpachts, mining districts or locations and ground and soil supposed to contain or containing precious stones, minerals or metals of every description;

to open, work, develop and maintain gold, silver, diamond, copper, coal, iron and other mines, mineral and other rights, properties and works, and to carry on and conduct the business of raising, crushing, washing, smelting, reducing and amalgamating ores, metals, minerals and precious stones, and to render the same merchantable and fit for use and to carry on all or any of the businesses of miners, mineralogists, metallurgists, amalgamators, geophysicists, smelters, quarry owners, quarrymen and brickmakers;

to buy, sell, refine and deal in bullion, specie, coin and precious and base metals, and also precious stones and other products of mining; and

to employ and pay mining experts, agents and other persons, partnerships, companies or corporations, and to organize, equip and dispatch expeditions for prospecting, exploring, reporting on, surveying, working and developing lands, farms, districts, territories and properties in any part of the world, whether the same are our property or otherwise.

***Directors***

***Disclosure of Interests***

A Harmony director may not vote in respect of any contract or arrangement in which he or she is interested, and may not be counted in the quorum for the purpose of any resolution regarding such a contract or arrangement. This restriction does not apply, however, to:

**Table of Contents**

any arrangement for giving the director a security or indemnity in respect of money lent, or an obligation undertaken, by such director for our benefit;

any arrangement by which we give any security to a third party in respect of our debt or obligation for which the director himself or herself has assumed responsibility, in whole or in part, whether under a guarantee or indemnity or by the deposit of a security;

any contract by the director to subscribe for or underwrite our shares or debentures;

any contract or arrangement with a company other than us, in which the director holds or controls, directly or indirectly, no more than 1% of shares representing either (i) any class of the equity share capital of that company or (ii) the overall voting rights of that company; or

any retirement scheme or fund which relates to both directors and to employees (or a class of employees) and does not accord to any director, as such, any privilege or advantage not generally accorded to the employees to which such scheme or fund relates.

The restrictions preventing directors from voting in respect of contracts or arrangement in which they are interested may be suspended or relaxed at any time, either generally or in respect of particular circumstances, by the holders of 75% of our ordinary shares who are present and voting in a general meeting.

A director, notwithstanding his or her interest, may be counted in the quorum present at any meeting where: (i) he or she or any other director is appointed to hold any office or position of profit in Harmony; (ii) the directors resolve to exercise any of our rights to appoint, or concur in the appointment of, a director to hold any office or position of profit in any other company; or (iii) the terms of any such appointment are considered or varied. At this meeting, each director may vote on the matters listed above, but no director may vote in respect of his or her own appointment, or the arrangement or variation of the terms of his or her own appointment.

The restrictions described above do not prevent or debar any director, as a holder of any class of our shares, from taking part in or voting upon any question submitted to a vote by that class at a general meeting, regardless of that director's personal interest or concern.

*Compensation*

The remuneration of our directors in their capacity as directors, including fees per directors meeting, and additional compensation for the performance of other services, such as serving on committees, may be established either by a majority of the holders of our ordinary shares, present and voting in a general meeting, or by a majority of disinterested directors at a meeting of directors, provided they constitute a quorum.

*Borrowing Powers*

Our directors may raise, borrow or secure the payment of any sums of money for our purposes as they see fit. However, without the consent of a majority of the holders of our ordinary shares present and voting in a general meeting, the aggregate principal amount outstanding in respect of monies raised, borrowed or secured by us and any of our subsidiaries may not exceed the greater of (i) R40 million or (ii) the aggregate amount, from time to time, of our issued and paid up capital, plus the aggregate of the amounts standing to the credit of all distributable and non-distributable reserves, plus our share premium account and the share premium accounts of our subsidiaries.

The Companies Act provides that a company may only make a loan to its owner, director or manager with the prior consent of all the members of the company or pursuant to a special resolution relating to a specific transaction.

*Rotation*

At each of our annual general meetings, one-third of the directors, or, if the number is not a multiple of three, then the number nearest to but not exceeding one-third, shall retire from office by rotation. Those directors who have been longest in office since their last election or re-election shall retire. As between directors of equal seniority, the directors to retire by rotation shall, in the absence of agreement, be selected by lot. If at the date of any annual general meeting, any director shall have held office for a period of at least three years since his or her last election or re-election, he or she shall retire at such meeting, either as one of the directors resigning pursuant to the

aforementioned rotation principles, or in addition thereto. Retiring directors are eligible for re-election and said

**Table of Contents**

directors have made themselves available for re-election.

If a director is appointed to any Harmony executive office, his or her employment contract may provide that he or she shall be exempt from rotation for the lesser of (i) a period of 5 years or (ii) the period during which he or she continues to hold the relevant executive office. During the relevant period, the director in question shall not be taken into account in determining the retirement of directors by rotation. The number of directors who may be exempt from retirement by rotation in this manner shall not equal or exceed one-half of the total number of the directors at the time of the relevant director's appointment. Currently none of our directors are exempted from retirement under these provisions.

*Qualifications*

There is no age limit requirement with regard to retirement or non-retirement of directors. Directors are not required to hold any of our shares to qualify them for appointment as directors.

***Share Capital***

As of June 30, 2009, our issued share capital consisted of 425,986,836 ordinary shares with a par value of R0.50 each. As of October 19, 2009, our issued share capital consisted of 426,028,533 ordinary shares with a par value of R0.50 each. Our authorized share capital is 1,200,000,000 ordinary shares with a par value of R0.50 each. The terms of the ordinary shares are described in "Description of Ordinary Shares" below.

***Description of Ordinary Shares***

*This section summarizes the material provisions of Harmony's ordinary shares as set out in Harmony's Memorandum and Articles of Association, the Companies Act and the JSE listings requirements, each as currently in effect. It does not purport to be complete and is qualified in its entirety by reference to all of the provisions of those sources.*

*Dividends*

Either the Board or a majority of the holders of our ordinary shares, voting in a general meeting, may, from time to time, declare a dividend to be paid to the registered holders of ordinary shares according to their respective rights and interests in the profits, measured in proportion to the number of ordinary shares held by them. Under South African law, a company's equity may be distributed as a dividend, provided that any necessary shareholder approval is obtained and, after the distribution of the dividend, the company remains solvent and liquid. Cash dividends, however, may only be paid out of the profits of the company. Cash div