GOLD FIELDS LTD Form 20-F December 03, 2009 Table of Contents

As filed with the Securities and Exchange Commission on December 3, 2009

# **UNITED STATES**

# SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

# Form 20-F

(Mark One)

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(c) 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 30 June 2009
 or
 TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
 For the transition period from to
 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

Commission file number: 1-31318

to

# **Gold Fields Limited**

(Exact name of registrant as specified in its charter)

**Republic of South Africa** 

(Jurisdiction of incorporation or organization)

150 Helen Road

Sandown, Sandton, 2196

South Africa

011-27-11-562-9700

(Address of principal executive offices)

**Michael Fleischer** 

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150 Helen Road

Sandown, Sandton, 2196

South Africa

(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:

Title of Each Class Ordinary shares of par value Rand 0.50 each Name of Each Exchange on Which Registered New York Stock Exchange\*

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American Depositary Shares, each representing one ordinary share

New York Stock Exchange

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

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

None

#### (Title of Class)

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

#### None

#### (Title of Class)

Indicate the number of outstanding shares of each of the issuer s classes of capital or common stock as of the close of the period covered by the Annual Report:

704,749,849 ordinary shares of par value Rand 0.50 each

50 Redeemable Preference Shares of Rand 0.01 each

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

Note Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

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 x 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 (\$232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x 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 x 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 x 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 x

#### (APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

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"

The Worldwide Locations of Gold Fields Operations

#### **Presentation of Financial Information**

Gold Fields Limited, or Gold Fields or the Company, is a South African company and the majority of its operations, based on gold production, are located there. Accordingly, its books of account are maintained in South African Rand and its annual and interim financial statements are prepared in accordance with International Financial Reporting Standards, or IFRS, as prescribed by law. Gold Fields also prepares annual financial statements in accordance with United States Generally Accepted Accounting Principles, or U.S. GAAP, which are translated into U.S. dollars. Except as otherwise noted, the financial information included in this annual report has been prepared in accordance with U.S. GAAP and is presented in U.S. dollars, and descriptions of critical accounting policies refer to accounting policies under U.S. GAAP.

For Gold Fields financial statements, unless otherwise stated, balance sheet item amounts are translated from Rand to U.S. dollars at the exchange rate prevailing on the date that it closed its accounts for fiscal 2009 (Rand 8.06 per \$1.00 as of June 24, 2009), except for specific items included within shareholders equity and the statements of cash flows that are translated at the rate prevailing on the date the relevant transaction was entered into, and statements of operations item amounts are translated from Rand to U.S. dollars at the weighted average exchange rate for each period (Rand 9.01 per \$1.00 for the year ended June 30, 2009).

In this annual report, Gold Fields presents the financial items total cash costs, total cash costs per ounce, total production costs and total production costs per ounce, which have been determined using industry standards promulgated by the Gold Institute and are not U.S. 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 revised in November 1999. An investor should not consider these items in isolation or as alternatives to production costs, income before tax, net income, operating cash flows or any other measure of financial performance presented in accordance with U.S. GAAP. While the Gold Institute provided definitions for the calculation of total cash costs and total production costs, the calculation of total cash costs per ounce, total production costs per ounce may vary significantly among gold mining companies, and by themselves do not necessarily provide a basis for company Glossary of Mining Terms Total cash costs per ounce and Information on the Company Glossary of Mining Terms Total production costs per ounce.

In this annual report Gold Fields also presents the financial items operating costs and notional cash expenditure , or NCE. Operating costs and NCE have been determined by Gold Fields on the basis of internally developed definitions and are not U.S. GAAP measures. Gold Fields defines operating costs as production costs (exclusive of depreciation and amortization) plus corporate expenditure, employment termination costs and accretion expense on provision for environmental rehabilitation. Gold Fields defines NCE as operating costs plus additions to property plant and equipment. See Operating and Financial Review and Prospects Costs Notional Cash Expenditure. An investor should not consider these items in isolation or as alternatives to production costs, cash flows from operating activities or any other measure of financial performance presented in accordance with U.S. GAAP. Operating costs and NCE as presented in this annual report may not be comparable to other similarly titled measures of performance of other companies.

#### **Defined Terms and Conventions**

In this annual report, all references to South Africa are to the Republic of South Africa, all references to Ghana are to the Republic of Ghana, all references to Australia are to the Commonwealth of Australia, all references to Venezuela are to the Bolivarian Republic of Venezuela, all references to Finland are to the Republic of Finland and all references to Peru are to the Republic of Peru.

In this annual report, all references to the DMR are references to the South African Department of Mineral Resources, the government body responsible for regulating the mining industry in South Africa, or to its predecessor entity, the Department of Minerals and Energy which was split into the Department of Mineral Resources and the Department of Energy in July 2009, as applicable.

This annual report contains descriptions of gold mining and the gold mining industry, including descriptions of geological formations and mining processes. In order to facilitate a better understanding of these descriptions, this annual report contains a glossary defining a number of technical and geological terms. See Information on the Company Glossary of Mining Terms.

This annual report contains references to serious injury frequency rates at each Gold Fields mining operation. The serious injury frequency rate is not comparable across Gold Fields operations and may not be comparable with similarly titled measures of other companies. In particular, the serious injury frequency rate for South African operations includes only those lost time injuries where the injured employee does not return to work within 14 days of the injury; whereas the serious injury frequency rate for Ghanaian and Peruvian operations includes both medically treated injuries and those lost time injuries where an employee is unable to attend any single shift due to a work-related injury; and lastly, the serious injury frequency rate for the Australian operations includes all lost time injuries where an employee is unable to attend any single shift due to a work-related injury.

In this annual report, R and Rand refer to the South African Rand and Rand cents refers to subunits of the South African Rand, \$, U.S.\$ and dollars refer to United States dollars, U.S. cents refers to subunits of the U.S. dollar, A\$ and Australian dollars refer to Australian dollars and CAD refers to Canadian dollars.

In this annual report, gold production figures are provided in troy ounces, which are referred to as ounces or oz, and ore grades are provided in grams per metric ton, which are referred to as grams per ton or g/t. All references to tons or t in this annual report are to metric tons. All references to gold include gold and gold equivalent ounces, as applicable. See Information on the Company Glossary of Mining Terms for further information regarding units of measurement used in this annual report and a table providing rates of conversion between different units of measurement.

In this annual report, except where otherwise noted, all production and operating statistics are based on Gold Fields total operations, which include production from the Tarkwa and Damang mines in Ghana and from the Cerro Corona mine in Peru which is attributable to the minority shareholders in those mines. This annual report contains references to gold equivalent ounces which are quantities of metals (such as copper) expressed as amounts of gold using the prevailing prices of gold and the other metals. To calculate this, the accepted total value of the metal based on its weight and value is divided by the accepted value of one troy ounce of gold.

Certain information in this annual report presented in Rand and Australian dollars has been translated into U.S. dollars. Unless otherwise stated, the conversion rates for these translations are Rand 8.06 per \$1.00 and A\$1.00 per \$0.798, which were the closing rates on June 24, 2009. By including the U.S. dollar equivalents, Gold Fields is not representing that the Rand or Australian dollar amounts actually represent the U.S. dollar amounts shown or that these amounts could be converted into U.S. dollars at the rates indicated.

### Information on South Deep, Western Areas and BGSA

This annual report contains certain information relating to Western Areas Limited (now known as Gold Fields Operations Limited), or Western Areas, Barrick Gold South Africa (Pty) Limited, or BGSA (now known as GFI Joint Ventures Holding (Pty) Limited, or GFI Joint Ventures), and the South Deep gold mine, or South Deep, including information contained in Risk Factors, Information on the Company, Operating and Financial Review and Prospects and Additional Information. This information, as it relates to information

regarding South Deep, Western Areas and BGSA in the period before Gold Fields acquisition of these entities, has been compiled from information published by Western Areas, including information filed with JSE Limited, or JSE, and certain due diligence materials made available to Gold Fields by Western Areas and Barrick Gold Corporation, or Barrick, and has not been commented on by any representative of Western Areas or Barrick. Gold Fields has sought to ensure that the information presented has been accurately reproduced from these sources. However, Gold Fields is otherwise unable to confirm that the information relating to Western Areas, South Deep and BGSA is in accordance with the facts and does not omit anything likely to affect the import of the information.

A portion of Gold Fields proven and probable reserves for South Deep are based on the pre-acquisition South Deep operation reserve figures as declared for December 2005 by an independent review panel, or IRP, for the Barrick Gold-Western Areas Joint Venture between BGSA (formerly, Placer Dome South Africa Proprietary Limited) and Western Areas. However, a significant portion of the June 30, 2009 South Deep reserves now take into account new estimation and mine design work on the Upper Elsburg Reefs completed during fiscal 2009 in accordance with Gold Fields standards and procedures. 50% of the total reserve ounces relate to the current mining area, or the Current Mine, and the area below the Current Mine and above infrastructure, or Phase 1, north of the Wrench Fault and also Phase 1 south of the Wrench Fault (above infrastructure). 50% of the total reserve ounces relate to Phase 2, being the South Shaft/Old Mine and the Ventersdorp Contact Reef, or the VCR. The 50% relating to the Current Mine, Phase 1 north of the Wrench Fault and Phase 1 south of the Wrench Fault (above infrastructure) have been remodeled and designed. Due to no further information being available at this stage, the remaining deeper portion of the reserves continue to be based on the pre-acquisition figures, as declared by the IRP, as described above.

Gold Fields is presently undertaking a surface drilling exploration program that Gold Fields expects will provide additional technical information on the geological structure, sedimentology, facies characteristics and tenor of the Ventersdorp Contact Reef, or the VCR, and Upper Elsburg Reefs in the area below current infrastructure to the southern boundary of the mining area, or Phase 2. When the surface drilling exploration program is completed, Gold Fields expects the additional information will provide for enhanced resource modeling of the Phase 2 ground and will increase confidence levels with regard to in situ facies geometry, reef grades and tonnages. See also Risk Factors Gold Fields has not independently confirmed the reliability of the South Deep, BGSA or Western Areas information for the period prior to their respective acquisitions by Gold Fields included in this annual report.

### **Forward-looking Statements**

This annual report contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, with respect to Gold Fields financial condition, results of operations, business strategies, operating efficiencies, competitive position, growth opportunities for existing services, plans and objectives of management, markets for stock and other matters. Statements in this annual report that are not historical facts are forward-looking statements.

These forward-looking statements, including, among others, those relating to the future business prospects, revenues and income of Gold Fields, wherever they may occur in this annual report and the exhibits to the annual report, are necessarily estimates reflecting the best judgment of the senior management of Gold Fields 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, Ghana, Australia, Peru and elsewhere;

the ability to achieve anticipated efficiencies and other cost savings in connection with past and future acquisitions;

the ability to achieve anticipated cost savings at existing operations;

the success of exploration and development activities;

decreases in the market price of gold or copper;

the occurrence of hazards associated with underground and surface gold mining;

the occurrence of work stoppages related to health and safety incidents;

the occurrence of labor disruptions and industrial actions;

the ability to manage and maintain access to current and future sources of liquidity, capital and credit, including the terms and conditions of Gold Fields facilities and Gold Fields overall cost of funding;

changes in relevant government regulations, particularly environmental regulations and potential new legislation affecting mining and mineral rights;

fluctuations in exchange rates, currency devaluations and other macroeconomic monetary policies; and

political and social instability in South Africa, Ghana, Peru or regionally in Africa or South America. Gold Fields undertakes 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.

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# PART I

# ITEM 1: IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

### **ITEM 2: OFFER STATISTICS AND EXPECTED TIMETABLE**

Not applicable.

### **ITEM 3: KEY INFORMATION**

#### Selected Historical Consolidated Financial Data

The selected historical consolidated financial data set out below for each of the three years ended June 30, 2009 and as of June 30, 2009 and 2008 have been derived from Gold Fields audited consolidated financial statements for those years and as of those dates and the related notes. The selected historical consolidated financial data for each of the two years ended June 30, 2006, and as of June 30, 2007, 2006 and 2005 have been derived from Gold Fields audited consolidated financial statements as of that date, which are not included in this annual report, and adjusted where applicable as described below. The selected historical consolidated financial data presented below have been derived from financial statements which have been prepared in accordance with U.S. GAAP. The other Operating Data presented has been calculated as described in the footnotes to the table below:

	2005	Year ended June 30, <sup>(1)(2)</sup> 2006 2007 2008			2009
	(	\$ millions, u	inless other	wise stated)	
Statements of Operations Data					
Revenues	1,893.1	2,282.0	2,735.2	3,206.2	3,228.3
Production costs (exclusive of depreciation and amortization)	1,372.4	1,499.9	1,707.7	1,996.1	1,998.6
Depreciation and amortization	366.4	353.3	388.2	400.5	433.5
Corporate expenditure	22.5	21.9	38.4	41.0	35.5
Employment termination costs	13.7	9.1	4.9	16.2	21.0
Exploration expenditure	46.0	39.3	47.4	39.8	58.0
Impairment of assets	233.1			11.4	
Shaft closure costs				3.3	(0.2)
Impairment of critical spares	2.8				
(Decrease)/increase in post-retirement healthcare provision	(4.2)	(0.5)	1.3	(0.7)	3.4
Accretion expense on environmental rehabilitation	11.5	8.6	6.4	12.0	13.9
Share-based compensation	2.1	11.5	12.5	20.7	33.7
Harmony hostile bid costs	50.8				
IAMGold transaction costs	9.3				
Interest and dividends	29.2	26.8	26.8	31.2	24.9
Finance expense	(54.9)	(55.6)	(95.2)	(100.4)	(73.9)
Unrealized gain on financial instruments	4.9	14.6	15.4		
Realized gain/(loss) on financial instruments	2.1	(9.1)	(10.7)	19.8	(1.3)
Realized (loss)/gain on foreign exchange			(15.1)	1.7	10.2
Profit on sale of property, plant and equipment	0.8	3.7	7.4	4.6	0.5
Profit/(loss) on disposal of subsidiaries				208.4	(0.3)
Profit/(loss) on disposal of listed investments	8.1	6.3	26.8	3.7	(16.1)
Impairment of listed investments	(7.7)				(16.0)
Profit on disposal of exploration rights	7.5				
Other (expenses)/income	(4.3)	(16.5)	(2.2)	5.9	(7.7)

	Year ended June 30, <sup>(1)(2)</sup>				
	2005	2006	2007	2008	2009
(Loss)/income before tax, impairment of investment in equity investee, share of equity					
investees (losses)/income and minority interests	(247.6)	309.1	481.6	840.8	551.2
Income and mining tax benefit/(expense)	85.8	(110.6)	(209.3)	(271.2)	(264.6)
(Loss)/Income before impairment of investment in equity investee, share of equity					
investees (losses)/income and minority interests	(161.8)	198.5	272.3	569.6	286.6
Impairment of investment in equity investee				(61.3)	(87.4)
Share of equity investees (losses)/income	(0.8)	(7.0)	0.3	(16.0)	(3.5)
Minority interests	(20.6)	(29.8)	(26.5)	(39.8)	(34.8)
Net (loss)/income	(183.2)	161.7	246.1	452.5	160.9
Basic (loss)/earnings per share (\$)	(0.37)	0.33	0.44	0.69	0.24
Diluted (loss)/earnings per share (\$)	(0.37)	0.33	0.44	0.69	0.24
Dividend per share (Rand)	0.70	0.80	2.00	1.60	1.50
Dividend per share (\$)	0.11	0.13	0.28	0.22	0.17
Other Operating Data					
Total cash costs per ounce of gold produced $(\$)^{(3)}$	302	338	394	505	538
Total production costs per ounce of gold produced (\$) <sup>(4)</sup>	385	419	482	610	659
Notional cash expenditure per ounce of gold produced (\$) <sup>(5)</sup>	416	441	596	822	763

Notes:

- (1) The data for each of the two years ended June 30, 2005 and 2006 has been adjusted due to a change in accounting policy in fiscal 2007 regarding ore reserve development costs, which were previously expensed and are now capitalized. Under this revised accounting policy, all costs associated with the development of a specific underground block or area are capitalized until saleable minerals are extracted from that specific block or area. At Gold Fields underground mines, these costs include the cost of shaft sinking and access, the costs of building access ways, lateral development, drift development, ramps, box cuts and other infrastructure development. Previously, at Gold Fields underground mines, costs incurred to develop the property were capitalized only until the reef horizons were intersected. Subsequent mine development costs to access other specific ore blocks or areas of the mine were treated as variable production costs and expensed as incurred.
- (2) As a result of the acquisition of Western Areas, Western Areas was fully consolidated with Gold Fields as from December 1, 2006. See Note 3(d) to Gold Fields audited consolidated financial statements included elsewhere in this annual report. During the period between December 1, 2006 and March 31, 2007, Gold Fields did not own 100% of Western Areas and therefore did not own 100% of South Deep. The percentages of the results of Western Areas and South Deep that did not accrue to Gold Fields have been accounted for as minority interests. U.S. GAAP requires that, where a company is acquired through a series of transactions, an investment in that company that was previously accounted for as available for sale be retrospectively accounted for on an equity basis. Since Gold Fields had previously held interests in Western Areas which were accounted for as available for sale, its results for prior years and the period July 1, 2006 to November 30, 2006 have been adjusted accordingly to account for the investment in Western Areas using the equity method.
- (3) Gold Fields has calculated total cash costs per ounce by dividing total cash costs, as determined using guidance provided by the Gold Institute, by gold ounces sold for all periods presented. 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 revised in November 1999. Total cash costs, as defined in the Gold Institute industry guidance, are production costs as recorded in the statement of operations, less offsite (i.e. central) general and administrative expenses (including head office costs performance, as well as changes in the currency exchange rate between the Rand, Australian dollar and the Bolivar, compared with the

U.S. dollar). Total cash costs and total cash costs per ounce are not U.S. GAAP measures. Management, however, believes that total cash costs per ounce provides a measure for comparing Gold Fields operational performance against that of its peer group, both for Gold Fields as a whole, and for its individual operations. An investor should not consider total cash costs and total cash costs per ounce in isolation or as an alternative to total production costs or net income/(loss), income before tax, operating cash flows or any other measure of financial performance presented in accordance with U.S. GAAP. In particular, depreciation and amortization is included in a measure of production costs under U.S. GAAP, but is not included in total cash costs under the guidance provided by the Gold Institute. Furthermore, while the Gold Institute provided a definition for the calculation of total cash costs, the calculation of total cash costs per ounce may vary significantly among gold mining companies, and by itself does not necessarily provide a basis for comparison with other gold mining companies. See Information on the Company Glossary of Mining Terms Total cash costs per ounce. For a reconciliation of Gold Fields production costs to its total cash costs for fiscal 2009, 2008 and 2007, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2008 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.

- Gold Fields has calculated total production costs per ounce by dividing total production costs, as determined using the guidance provided (4)by the Gold Institute, by gold ounces sold for all periods presented. Total production costs, as defined by the Gold Institute industry guidance, are total cash costs, as calculated using the Gold Institute guidance, plus amortization, depreciation and rehabilitation costs. Changes in total production costs per ounce are affected by operational performance, as well as changes in the currency exchange rate between the Rand, and the Australian dollar compared with the U.S. dollar. Changes in the currency exchange rate between the Bolivar and the U.S. dollar affected changes in total production costs per ounce until the sale of the Choco 10 mine on November 30, 2007. Total production costs per ounce is not a U.S. GAAP measure. Management, however, believes that total production costs per ounce provides a measure for comparing Gold Fields operational performance against that of its peer group, both for Gold Fields as a whole, and for its individual operations. An investor should not consider total production costs per ounce in isolation or as an alternative to total production costs or net income/(loss), income before tax, operating cash flows or any other measure of financial performance presented in accordance with U.S. GAAP. While the Gold Institute provided a definition for the calculation of total production costs, the calculation of total production costs per ounce may vary significantly among gold mining companies, and by itself does not necessarily provide a basis for comparison with other gold mining companies. See Information on the Company Glossary of Mining Terms Total production costs per ounce. For a reconciliation of Gold Fields production costs to its total production costs for fiscal 2009, 2008, and 2007, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2008 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (5) Gold Fields defines notional cash expenditure, or NCE, as operating costs plus additions to property, plant and equipment, and defines operating costs as production costs (exclusive of depreciation and amortization) plus corporate expenditure, employment termination costs and accretion expense on provision for environmental rehabilitation. Gold Fields reports NCE on a per equivalent ounce basis. Management considers NCE per equivalent ounce to be an important measure as it believes NCE per equivalent ounce provides more information than other commonly used measures, such as total cash costs per equivalent ounce, regarding the real cost to Gold Fields of producing an equivalent ounce of gold, reflecting not only the ongoing costs of production but also the investment cost of bringing mines into production. Management also believes that NCE per equivalent ounce is a useful indication of the cash Gold Fields has available to do things other than produce gold, such as paying taxes, repaying debt, funding exploration and paying dividends.

NCE per equivalent ounce is not a U.S. GAAP measure. An investor should not consider NCE or operating costs in isolation or as alternatives to production costs, cash flows from operating activities or any other measure of financial performance presented in accordance with U.S. GAAP. NCE and operating costs as presented in this annual report may not be comparable to other similarly titled measures of performance of other companies. For a

reconciliation of Gold Fields notional cash expenditure to its production costs for fiscal 2009, 2008 and 2007, see Operating and Financial Review and Prospects Costs Notional Cash Expenditure.

	As at June 30, <sup>(1)(2)</sup>				
	2005	2006	2007	2008	2009
	(	\$ millions, u	nless other	wise stated	)
Balance Sheet Data					
Cash and cash equivalents	503.7	217.7	326.4	253.7	357.5
Current portion of financial instruments	46.8	30.4		6.9	
Receivables	119.9	148.7	297.7	280.1	383.5
Inventories	77.4	111.3	144.9	152.8	196.0
Material contained on heap leach pads	55.1	47.7	58.1	74.5	81.3
Total current assets	802.9	555.8	827.1	768.0	1,018.3
Property, plant and equipment, net	2,688.6	3,172.1	5,576.8	5,423.7	5,756.9
Goodwill			1,222.7	1,092.8	1,084.7
Non-current portion of financial instruments	32.4				
Non-current investments	192.0	371.8	401.8	737.4	475.2
Total assets	3,715.9	4,099.7	8,028.4	8,021.9	8,335.1
Accounts payable and provisions	241.9	299.8	463.6	610.3	533.5
Current portion of financial instruments			10.8		1.7
Interest payable	32.6	29.8	34.7	29.2	14.4
Income and mining taxes payable	18.0	46.8	72.2	123.1	98.2
Current portion of long-term loans		0.3	227.5	772.9	317.8
Bank overdraft			3.3	2.7	9.7
Total current liabilities	292.5	376.7	812.1	1,538.2	975.3
Long-term loans	653.1	737.9	1,211.8	564.2	785.9
Deferred income and mining taxes	650.0	781.8	879.5	719.9	817.7
Provision for environmental rehabilitation	134.6	146.4	197.2	216.2	236.9
Provision for post-retirement healthcare costs	9.0	7.4	9.5	7.9	11.4
Other non-current liabilities					3.9
Minority interests	118.4	125.1	127.1	151.4	279.5
Share capital	43.7	43.9	54.8	54.9	57.7
Additional paid-in capital	1,797.9	1,827.6	4,459.8	4,490.4	4,944.2
Retained earnings	24.0	123.9	211.8	521.8	561.5
Accumulated other comprehensive (loss)/income	(7.3)	(71.0)	64.8	(243.0)	(338.9)
Total shareholders equity	1,858.3	1,924.4	4,791.2	4,824.1	5,224.5
Total liabilities and shareholders equity	3,715.9	4,099.7	8,028.4	8,021.9	8,335.1

	As at June 30, <sup>(1)(2)</sup>					
	2005	2006	2007	2008	2009	
	(\$ millions, unless otherwise stated)					
Other Financial Data						
Number of ordinary shares as adjusted to reflect changes in						
capital structure	492,294,226	494,824,723	652,158,066	653,200,682	704,749,849	
Net assets	1,858.3	1,924.4	4,791.2	4,824.1	5,224.5	

Notes:

(1) The data as of June 30, 2005 and 2006 has been adjusted due to a change in accounting policy in fiscal 2007 regarding ore reserve development costs, which were previously expensed and are now capitalized. Under this revised accounting principle, all costs associated with the development of a specific underground block or area are capitalized until saleable minerals are extracted from that specific block or area. At Gold Fields underground mines, these costs include the cost of shaft sinking and access, the costs of building access ways, lateral development, drift development, ramps, box cuts and other infrastructure development. Previously, at Gold Fields underground mines, costs incurred to develop the property were capitalized only until the reef horizons were intersected. Subsequent mine development costs to access other specific ore blocks or areas of the mine were treated as variable production costs and expensed as incurred.

(2) As a result of the acquisition of Western Areas, Western Areas was fully consolidated with Gold Fields as from December 1, 2006. See Note 3(d) to Gold Fields audited consolidated financial statements included elsewhere in this annual report. During the period between December 1, 2006 and March 31, 2007, Gold Fields did not own 100% of Western Areas and therefore did not own 100% of South Deep. The percentages of the results of Western Areas and South Deep that did not accrue to Gold Fields have been accounted for as minority interests. U.S. GAAP requires that, where a company is acquired through a series of transactions, an investment in that company that was previously accounted for as available for sale be retrospectively accounted for on an equity basis. Since Gold Fields had previously held interests in Western Areas which were accounted for as available for sale, its results for prior years and the period July 1, 2006 to November 30, 2006 have been adjusted accordingly to account for the investment in Western Areas using the equity method.

**Exchange Rates** 

The following tables set forth, for the periods indicated, the average, high, low and period-end exchange rates of Rand for US Dollars, expressed in Rand per \$1.00. For periods prior to December 31, 2008, the following tables express the exchange rates in terms of the noon buying rate in New York City for cable transfers in Rand as certified for customs purposes by the Federal Reserve Bank of New York. As of December 31, 2008, the Federal Reserve Bank ceased publication of the noon buying rate and, as such, the exchange rates for fiscal 2009 are sourced from I-Net Bridge, being the closing rate at period end.

Year ended June 30,	Average <sup>(1)</sup>
2005	6.20(1)
2006	6.42 <sup>(1)</sup>
2007	$7.20^{(1)}$
2008	$7.30^{(1)}$
2009	9.01 <sup>(2)</sup>
2010 (through November 30, 2009)	7.67 <sup>(2)</sup>

Notes:

- (1) The average of the noon buying rates on the last day of each full month during the relevant period as certified for customs purposes by the Federal Reserve Bank of New York.
- The daily average of the closing rate during the relevant period as reported by I-Net Bridge. (2)

Month ended	High	Low
May 31, 2009	8.65	7.93
June 30, 2009	8.20	7.72
July 31, 2009	8.27	7.71
August 31, 2009	8.15	7.74
September 30, 2009	7.89	7.31
October 30, 2009	7.84	7.23
November 30, 2009	7.97	7.32

The closing rate for the Rand on November 30, 2009 as reported by I-Net Bridge was Rand 7.40 per \$1.00. Fluctuations in the exchange rate between the Rand and the U.S. dollar will affect the dollar equivalent of the price of the ordinary shares on JSE Limited, or JSE, which may affect the market price of the American Depositary Shares, or ADSs, on the New York Stock Exchange. These fluctuations will also affect the U.S. dollar amounts received by owners of ADSs on the conversion of any dividends paid in Rand on the ordinary shares.

### **RISK FACTORS**

In addition to the other information included in this annual report, the considerations listed below could have a material adverse effect on Gold Fields business, financial condition or results of operations, resulting in a decline in the trading price of Gold Fields ordinary shares or ADSs. The risks set forth below comprise all material risks currently known to Gold Fields. However, there may be additional risks that Gold Fields does not currently know of or that Gold Fields currently deems immaterial based on the information available to it. These factors should be considered carefully, together with the information and financial data set forth in this document.

# Changes in the market price for gold, and to a lesser extent copper, which in the past have fluctuated widely, affect the profitability of Gold Fields operations and the cash flows generated by those operations.

Substantially all of Gold Fields revenues are derived from the sale of gold. Historically, the market price for gold has fluctuated widely and has been affected by numerous factors over which Gold Fields has no control, including:

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

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

speculative trading activities in gold;

the overall level of forward sales by other gold producers;

the overall level and cost of production by other gold producers;

international or regional political and economic events or 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; and

#### interest rates.

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. 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 the gold price. Central banks, financial institutions and individuals historically have held large amounts of gold as a store of value, and production in any given year historically has constituted a small portion of the total potential supply of gold. Historically, gold has tended to retain its value in relative terms against basic goods in times of inflation and monetary crisis. Pursuant to a gold sales agreement entered into by 15 European central banks, individual banks may sell up to 400 tons of gold per year and the International Monetary Fund has indicated that it may sell up to approximately 400 tons of gold and has already sold 200 tons of gold to the central bank of India. However, the effect on the market of these or any other gold sales is unclear.

While the aggregate effect of these factors is impossible for Gold Fields to predict, if gold prices should fall below the amount it costs Gold Fields to produce gold and remain at such levels for any sustained period, Gold Fields may experience losses and may be forced to curtail or

suspend some or all of its operations and/or reduce capital expenditures. In addition, Gold Fields might not be able to recover any losses it may incur during that period.

Copper accounts for a significant proportion of the revenues at Gold Fields Cerro Corona mine, although copper is not a major element of Gold Fields overall revenues. A decline in copper prices, which have also fluctuated widely, could adversely affect the revenues and cashflows from the Cerro Corona mine.

# Because Gold Fields does not use commodity or derivative instruments to protect against low gold prices with respect to its production, Gold Fields is exposed to the impact of any significant decline in the gold price.

As a general rule, Gold Fields sells its gold production at market prices. Gold Fields generally does not enter into forward sales, derivatives or other hedging arrangements to establish a price in advance for the sale of its future gold production. In general, hedging reduces the risk of exposure to volatility in the gold price. Hedging also enables a gold producer to fix a future price for hedged gold that generally is higher than the then current spot price. To the extent that it does not generally use commodity or derivative instruments, Gold Fields will not be protected against decreases in the gold price and, if the gold price decreases significantly, Gold Fields runs the risk of reduced revenues in respect of gold production that is not hedged. See Quantitative and Qualitative Disclosures About Market Risk.

# Gold Fields reserves are estimates based on a number of assumptions, any changes to which may require Gold Fields to lower its estimated reserves.

The ore reserves stated in this annual report represent the amount of gold and copper that Gold Fields estimated, as of June 30, 2009, could be mined, processed and sold at prices sufficient to recover Gold Fields estimated future total costs of production, remaining investment and anticipated additional capital expenditures. Ore reserves are estimates based on assumptions regarding, among other things, Gold Fields costs, expenditures, prices and exchange rates, many of which are beyond Gold Fields control. In the event that Gold Fields revises any of these assumptions in an adverse manner, Gold Fields may need to revise its ore reserves downwards. In particular, if Gold Fields production costs or capital expenditures increase, if gold or copper prices decrease or if the Rand or Australian dollar strengthens against the U.S. dollar, a portion of Gold Fields ore reserves may become uneconomical to recover, forcing Gold Fields to lower its estimated reserves. See Information on the Company Reserves of Gold Fields as of June 30, 2009.

# To the extent that Gold Fields seeks to expand through acquisitions, it may experience problems in executing acquisitions or managing and integrating the acquisitions with its existing operations.

In order to expand its operations and reserve base, Gold Fields may seek to make acquisitions of selected precious metal producing and/or exploration companies or assets. Gold Fields success at making any acquisitions will depend on a number of factors, including, but not limited to:

negotiating acceptable terms with the seller of the business or equities to be acquired;

obtaining approval from regulatory authorities;

assimilating the operations of an acquired business in a timely and efficient manner;

maintaining Gold Fields financial and strategic focus while integrating the acquired business;

implementing uniform standards, controls, procedures and policies at the acquired business; and

operating in a new environment to the extent that Gold Fields makes an acquisition outside of markets in which it has previously operated.

There can be no assurance that any acquisition will achieve the results intended. Any problems experienced by Gold Fields in connection with an acquisition as a result of one or more of these factors could have a material adverse effect on Gold Fields business, operating results and financial condition.

To the extent that Gold Fields seeks to expand through its exploration program, it may experience problems associated with mineral exploration or developing mining projects.

In order to expand its operations and reserve base, Gold Fields may rely on its exploration program for gold and other metals associated with gold and its ability to develop mining projects. Exploration for gold and other metals associated with gold is speculative in nature, involves many risks and frequently is unsuccessful. Any

exploration program entails risks relating to the location of economic orebodies, the development of appropriate metallurgical processes, the receipt of necessary governmental permits and regulatory approvals and the construction of mining and processing facilities at the mining site. Gold Fields exploration efforts may not result in the discovery of gold or other metals associated with gold and any mineralization discovered may not result in an increase of Gold Fields reserves. If orebodies are developed, it can take a number of years and substantial expenditures from the initial phases of drilling until production commences, during which time the economic feasibility of production may change. Gold Fields exploration program may not result in the replacement of current production with new reserves or result in any new commercial mining operations. Also, to the extent Gold Fields participates in the development of a project through a joint venture or any other commercial structure, there could be disagreements, legal or otherwise, or divergent interests or goals among the joint venture parties which could jeopardize the success of the project.

In addition, significant capital investment is required to achieve commercial production from exploration efforts. There is no assurance that Gold Fields will have, or be able to raise, the required funds to engage in these activities or to meet its obligations with respect to the exploration properties in which it has or may acquire an interest.

# Due to the nature of mining and the type of gold mines it operates, Gold Fields faces a material risk of liability, delays and increased production costs 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 and mining accidents. In particular, hazards associated with Gold Fields underground mining operations include:

rock bursts;

seismic events, particularly at the Driefontein, Kloof and South Deep operations;

underground fires and explosions, including those caused by flammable gas or in connection with blasting;

cave-ins or gravity falls of ground;

discharges of gases and toxic substances;

releases of radioactivity;

flooding;

electrocution;

falling from height;

accidents related to the presence of mobile machinery, including shaft conveyances and elevators;

ground and surface water pollution, including as a result of potential spillage or seepage from tailings dams;

sinkhole formation and ground subsidence;

human error; and

other accidents and conditions resulting from drilling, blasting and removing and processing material from an underground mine. Gold Fields South African operations may be more susceptible to certain of these risks because significant amounts of mining occur at deep levels of up to 3,500 meters below the surface.

Hazards associated with Gold Fields open pit mining operations include:

flooding of the open pit;

collapses of the open pit walls;

electrocution;

accidents associated with the operation of large open pit mining and rock transportation equipment;

accidents related to the presence of other mobile machinery;

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

ground and surface water pollution, including as a result of potential spillage or seepage from tailings dams;

production disruptions due to weather; and

hazards associated with heap leach processing, such as groundwater and waterway contamination. Hazards associated with Gold Fields rock dump and production stockpile mining and tailings disposal include:

accidents associated with operating a rock dump and production stockpile and rock transportation equipment;

production disruptions due to weather;

sinkhole formation and ground subsidence;

collapses of tailings dams; and

ground and surface water pollution, on and off site.

Gold Fields is at risk of experiencing any and all of these environmental or other industrial hazards. The occurrence of any of these hazards could delay or halt production, increase production costs and result in liability for Gold Fields.

Gold Fields may also be subject to actions by labor groups or other interested parties who object to perceived conditions at the mines or to the perceived environmental impact of the mines. These actions may delay or halt production or may create negative publicity related to Gold Fields.

# If Gold Fields experiences losses of senior management or is unable to hire and retain sufficient technically skilled employees, its business may be materially and adversely affected.

Gold Fields ability to operate or expand effectively depends largely on the experience, skills and performance of its senior management team. There can be no certainty that the services of its senior management will continue to be available to Gold Fields. Any senior management departures could adversely affect Gold Fields efficiency, control over operations and results of operations.

During fiscal 2009, Gold Fields restructured its operations into four regions. See Information on the Company Strategy Regional Delivery Model . An important element of this restructuring is bolstering the technical skills base of each of the four regional management teams to provide additional resources and to provide for succession planning. The mining industry, including Gold Fields, continues to experience a global shortage of technically skilled employees. Gold Fields may be unable to hire or retain appropriate technically skilled employees or other management personnel, or may have to pay higher levels of compensation than it currently intends in order to do so. If Gold Fields is not able to hire and retain appropriate management and technically skilled personnel, it may not achieve the intended benefits of its regional restructuring, which could have an adverse effect on its results of operations and financial position.

# Because gold is generally sold in U.S. dollars, while most of Gold Fields production costs are in Rand, Australian dollars and other non-U.S. dollar currencies, Gold Fields operating results or financial condition could be materially harmed by an appreciation in the value of these other currencies.

Gold is sold throughout the world principally in U.S. dollars, but Gold Fields costs of production are incurred principally in Rand, Australian dollars and other non-U.S. dollar currencies. As a result, any significant and sustained appreciation of any of these currencies against the U.S. dollar may materially increase Gold Fields costs in U.S. dollar terms, which could adversely affect Gold Fields operating results or financial condition.

# Economic, political or social instability in the countries or regions where Gold Fields operates may have an adverse effect on Gold Fields operations and profits.

Gold Fields has significant operations in South Africa, Ghana, Australia and Peru. As a result, changes or instability to the economic, political or social environment in any of these countries or in neighboring countries could affect an investment in Gold Fields.

Several of these countries have, or have had in the recent past, high levels of inflation. Continued or increased inflation in any of the countries where it operates could increase the prices Gold Fields pays for products and services, including wages for its employees and power costs, which if not offset by increased gold prices or currency devaluations could have a material adverse effect on Gold Fields financial condition and results of operations.

The South African government has implemented laws aimed at alleviating and redressing the disadvantages suffered by citizens under previous governments. In the future, the South African government may implement new laws and policies, which in turn may have an adverse impact on Gold Fields operations and profits. In recent years, South Africa has continued to experience high levels of crime and unemployment. These problems may have impacted fixed inward investment into South Africa and have prompted emigration of skilled workers. As a result, Gold Fields may have difficulties attracting and retaining qualified employees.

National elections took place in South Africa in April 2009. South Africa is a young democracy, with the election being only the fourth since the current political system was instituted. It is not certain what, if any, political, economic or social impact the elections will have in South Africa generally, or on Gold Fields specifically. Regional and national elections will take place in Peru in late 2010 and early 2011, respectively. It is not certain what, if any, political or economic impact the elections will have on Peru generally, or on Gold Fields specifically.

There has been an increase in union activity in many industries in the countries in which Gold Fields operates. Greater union activity may increase labor costs and the risk of strikes and may adversely affect Gold Fields financial position and results of operations. A number of unions in various industries have recently gone on strike in South Africa causing work stoppages and production losses. In Ghana, Gold Fields is currently negotiating with unions representing many of its employees and labor unions have recently undertaken strikes and go slow actions against other mining companies. The Australian federal government has introduced a new federal industrial relations system which increases the role and rights of unions in the workplace. Under the new system, the federal government has abolished the use of Australian Workplace Agreements and introduced a new collective bargaining framework that introduces good faith bargaining obligations for employers, fewer restrictions on the content of collective agreements and an enhanced role for union officials as bargaining representatives, parties to agreements and participants in dispute resolution. See Directors, Senior Management and Employees Employees Labor Relations Australia.

There has been regional political and economic instability in certain of the countries surrounding South Africa. Any similar political or economic instability in South Africa could have a negative impact on Gold Fields ability to manage and operate its South African operations. There has been local opposition to mine

development projects in Peru. Notwithstanding the fact that Gold Fields was complying with the commitments it had made to the local communities, in mid-October 2006, there was an illegal blockade of the access road to the Cerro Corona site resulting in a temporary suspension of construction activities at the site for 30 days. The blockade was accompanied by demands for increased employment from local communities and increased use of local contractors. In addition, the Cerro Corona site is located near the Yanacocha mine which is operated by another company. The Yanacocha mine has also been the subject of local protests, including ones that blocked the road between the Yanacocha mine complex and the City of Cajamarca, which also affected access to the Cerro Corona site. There have also been protests against a Gold Fields joint venture exploration project in Peru. If Gold Fields experiences further opposition in connection with its operations in Peru, or if protests aimed at other mining operations affect operations at Cerro Corona, it could have a material adverse effect on Gold Fields financial condition and results of operations.

As a result of its disposal of its operations in Venezuela to Rusoro Mining Limited, or Rusoro, Gold Fields holds a stake in Rusoro valued at approximately \$48.4 million as of June 30, 2009 and is therefore indirectly exposed to the risks of operating in Venezuela. Venezuela has experienced intense political and social turmoil in recent years and there can be no guarantee that Gold Fields stake in Rusoro will not lose some or all of its value.

# Some of Gold Fields power suppliers have forced it to halt or curtail activities at its mines, due to severe power disruptions. Power stoppages, fluctuations and power cost increases may adversely affect Gold Fields results of operations and its financial condition.

In South Africa, Gold Fields mining operations are dependent upon electrical power generated by the State utility, Eskom. Eskom holds a monopoly on power supply in 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. On January 24, 2008, Gold Fields was forced to suspend all mining activity at its South African operations for several days, due to Eskom declaring force majeure and advising its Key Industrial Consumers, of which Gold Fields is one, that it could not guarantee the supply of electricity, forcing Gold Fields to reduce consumption to the minimum possible level. 50% of Gold Fields normal electrical consumption is required simply to pump, ventilate and refrigerate its South African operations. On January 28, 2008, the power supply was restored to 71% of total average consumption allowing Gold Fields to begin ramping up production at its South African operations. By mid-March 2008, the total power available to Gold Fields Driefontein and Kloof mines was approximately 95% of the historical average consumption profile, and at the Beatrix and South Deep mines the percentage was approximately 90%. However, there can be no assurance that power supplies can or will be maintained at this level. The determination of the historical average consumption profile remains under discussion with Eskom, while the Department of Energy finalizes rules regarding baseline adjustments and load growth. Eskom has increased power tariffs significantly, with announced average rises of approximately 33.6% for industrial customers. Gold Fields has experienced real increases in power tariffs of 36.0%, an increase in excess of the announced average for industrial customers as a result of structural changes made to the large power user tariffs and a limitation of 15% on the increase to certain residential tariffs. Gold Fields expects further significant additional increases during the next several years as Eskom embarks on an electricity generation capacity expansion program. While Eskom has applied to the National Energy Regulator of South Africa, or NERSA, for a 35% average tariff increase on each of April 1, 2010, 2011 and 2012, it is uncertain what level of increase will be granted by NERSA. The application is subject to a public comment period, in which Gold Fields has participated, which will end with public hearings in January 2010. Should Gold Fields experience any additional power outages or further power tariff increases or usage constraints, then its financial condition and results of operations may be adversely impacted. In fiscal 2009, power costs made up approximately 11.0% of the costs of production at the South African operations. See Information on the Company Gold Fields Mining Operations Driefontein Operation Mining.

Gold Fields power needs in South Africa will increase as it builds up production at its South Deep mine. It has requested an additional allocation from Eskom and Eskom has indicated that the additional requested capacity will be granted. However, there can be no assurance that Gold Fields will receive all of the power it needs. Any failure to receive power allocation could have an adverse effect on Gold Fields ability to develop South Deep.

Gold Fields Ghana Limited, or Gold Fields Ghana, among other mining companies in Ghana, was asked by the state electricity supplier, the Volta River Authority, or VRA, in August 2006 to significantly reduce its electricity demand largely because of the low water reservoir level of the VRA s Akosombo generating facility and concerns about its ability to meet future supply and demand at present consumption levels. The VRA subsequently raised the electricity tariff significantly. Since then, the power supply has stabilized and the tariff has been reduced. Although the VRA did not impose any power cuts, frequent power interruptions were experienced. The national utility remains reliant on hydropower for approximately 50% of its generation and there can be no assurance that there will not be new disruptions to the electricity supply in the future.

### Actual and potential shortages of production inputs may have an adverse effect on Gold Fields operations and profits.

Gold Fields results of operations may be affected by the availability and pricing of raw materials and other essential production inputs, including fuel, steel and cyanide and other reagents. 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 on the supply of any of these materials would require Gold Fields to find substitute suppliers acceptable to the Company and could require it to pay higher prices for such materials. Any significant increase in the prices of these materials will increase the Company s operating costs and affect production considerations.

Giant tires, of the type used by Gold Fields for its large earthmoving equipment and trucks, are in short supply, and prices have risen recently and may continue to rise in the future. This shortage of tires for earthmoving vehicles is causing mining companies to review operating practices, to seek additional methods of preserving tire life and to examine alternative sources of tire supply. To the extent that Gold Fields is unable to procure an adequate supply of these tires, it may have to alter its mining plans, especially at its open pit operations, which could reduce its gold production and have a material adverse effect on Gold Fields business, operating results and financial condition.

### The transportation of concentrate produced at Cerro Corona by truck and ship can be interrupted, or result in environmental damage.

The gold/copper concentrate produced at Gold Field s Cerro Corona operation in Peru is transported by truck from the mine to the coast where it is loaded onto ships for transportation to smelters in Asia and Europe, with the risk of loss passing to the buyers only once the concentrate is loaded onto the ship. Gold Fields uses convoys of at least five trucks, accompanied by security personnel to transport the concentrate to the port, but the trucks are still susceptible to road blockades and possible theft of concentrate. On arrival at the port, transfer of the concentrate to ships can be delayed by restrictions on port operations. Any delays in the transportation of concentrate can adversely affect the timing of Gold Fields cashflows and its results of operations. The movement of the concentrate also presents the possibility of environmental damage in the case of spillage. Gold Fields could be held responsible for the damage, even if a contractor undertakes the actual transportation.

#### Gold Fields insurance coverage may prove inadequate to satisfy potential claims.

Gold Fields may become subject to liability for pollution, occupational illnesses or other hazards against which it has not insured, cannot insure or has insufficiently insured, including those in respect of past mining activities. Gold Fields existing property and liability insurance contains exclusions and limitations on coverage. Should Gold Fields suffer a major loss, future earnings could be affected. In addition, insurance may not continue to be available at economically acceptable premiums. As a result, in the future, Gold Fields insurance coverage may not cover the extent of claims against Gold Fields, including, but not limited to, claims for environmental or industrial accidents, occupational illnesses or pollution.

### Gold Fields financial flexibility could be materially constrained by South African exchange control regulations.

South Africa s exchange control regulations restrict the export of capital from South Africa, the Republic of Namibia, and the Kingdoms of Lesotho and Swaziland, known collectively as the Common Monetary Area. Transactions between South African residents (including companies) and non-residents of the Common Monetary Area are subject to exchange controls enforced by the South African Reserve Bank, or SARB. As a result, Gold Fields ability to raise and deploy capital outside the Common Monetary Area is restricted.

Under South African exchange control regulations, Gold Fields must obtain approval from the SARB regarding any capital raising involving a currency other than the Rand. In connection with its approval, it is possible that the SARB may impose conditions on Gold Fields use of the proceeds of any such capital raising, such as limits on Gold Fields ability to retain the proceeds of the capital raising outside South Africa or requirements that Gold Fields seek further SARB approval prior to applying any such funds to a specific use. These restrictions could hinder Gold Fields financial and strategic flexibility, particularly its ability to fund acquisitions, capital expenditures and exploration projects outside South Africa. See Information on the Company Environmental and Regulatory Matters South Africa Exchange Controls.

# An acquisition of shares in or assets of a South African company by a non-South African purchaser that is subject to exchange control regulations may not be granted regulatory approval.

In some circumstances, potential acquisitions of shares in or assets of South African companies by non-South African resident purchasers are subject to review by the SARB pursuant to South African exchange control regulations. In 2000, the South African Treasury, or the Treasury, refused to approve an acquisition of Gold Fields by Franco-Nevada Mining Corporation Limited, a Canadian mining company. The Treasury may refuse to approve similar proposed acquisitions of Gold Fields in the future. As a result, Gold Fields management may be limited in its ability to consider strategic options and Gold Fields shareholders may not be able to realize the premium over the current trading price of Gold Fields ordinary shares which they might otherwise receive upon such an acquisition. See Information on the Company Environmental and Regulatory Matters South Africa Exchange Controls.

### Gold Fields operations and financial condition may be adversely affected by labor disputes or changes in labor laws.

Gold Fields may be affected by certain labor laws that impose duties and obligations regarding worker rights, including rights regarding wages and benefits. For example, laws in South Africa impose monetary penalties for non-compliance with the administrative and the reporting requirements in respect of affirmative action policies, while Ghanaian law contains broad provisions requiring mining companies to recruit and train Ghanaian personnel and to use the services of Ghanaian companies. There can be no assurance that existing labor laws will not be amended or new laws enacted to impose additional reporting or compliance obligations or further increase worker rights in the future. Any expansion of these obligations or rights, especially to the extent they increase Gold Fields labor costs, could have a material adverse effect on Gold Fields business, operating results and financial condition.

#### Gold Fields may suffer adverse consequences as a result of its reliance on outside contractors to conduct some of its operations.

A significant portion of Gold Fields operations in Australia, Peru and the Damang operation in Ghana, and a smaller portion elsewhere, are currently conducted by outside contractors. As a result, Gold Fields operations at those sites are subject to a number of risks, some of which are outside Gold Fields control, 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 of a contractor to perform under its agreement with Gold Fields;

interruption of operations or increased costs in the event that a contractor ceases its business due to insolvency or other unforeseen events;

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

problems of a contractor with managing its workforce, labor unrest or other employment issues. In addition, Gold Fields 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 Gold Fields business, results of operations and financial condition. See Directors, Senior Management and Employees Employees Labor Relations Ghana , Directors, Senior Management and Employees Employees Labor Relations Australia and Directors, Senior Management and Employees E

### Regulation of greenhouse gas emissions and climate change issues may adversely affect Gold Fields operations.

Energy is a significant input to Gold Fields mining and processing operations, with its principal energy sources being electricity, purchased petroleum products, natural gas and coal. There is a substantial weight of scientific evidence concluding that  $CO_2$  emissions from fossil fuel-based energy consumption contribute to global warming, greenhouse effects and climate change.

A number of governments or governmental bodies have introduced or are contemplating regulatory changes in response to the potential impacts of climate change. The December 1997 Kyoto Protocol established a set of greenhouse gas emission targets for developed countries that have ratified the Protocol. South Africa, Ghana, Australia and Peru have ratified the Protocol. The Australian Government s plan of action on climate change includes the introduction of a national emissions trading scheme by 2010 and a mandatory renewable energy target of 20% by the year 2020. Elsewhere, there is current and emerging climate change regulation that will affect energy prices, demand and margins for carbon intensive products. From a medium- and long-term perspective, Gold Fields is likely to see an increase in costs relating to its energy-intensive assets and assets that emit significant amounts of greenhouse gases as a result of regulatory initiatives in countries in which it operates. These regulatory initiatives will be either voluntary or mandatory and may impact Gold Fields operations directly or by affecting its suppliers or customers. Inconsistency of regulations particularly between developed and developing countries may affect Gold Fields decision to pursue opportunities in certain countries and also may affect its costs of operations. Assessments of the potential impact of future climate change regulation are uncertain, given the wide scope of potential regulatory change in countries in which Gold Fields operates.

The potential physical impacts of climate change on Gold Fields operations are highly uncertain, and would be particular to the geographic circumstances. These may include changes in rainfall patterns and intensities, water shortages, changing sea levels, and changing temperatures. These effects may adversely impact the cost, production and financial performance of Gold Fields operations.

# Illegal mining occurs on Gold Fields properties, is difficult to control, can disrupt Gold Fields business and can expose Gold Fields to liability.

A number of Gold Fields properties have experienced illegal mining activities. For example, in 2008, approximately 2,000 miners illegally occupied the Rex pit at the Damang operation. See Information on the Company Gold Fields Mining Operations Ghana Operations Damang Mine Mining . Illegal mining could result in depletion of mineral deposits, potentially making the future mining of such deposits uneconomic. The activities of the illegal miners could cause environmental damage or other damage to Gold Fields properties

including underground fires, or personal injury or death, for which Gold Fields could potentially be held responsible. The presence of illegal miners could lead to project delays and disputes regarding the development or operation of commercial gold deposits, particularly in Ghana. Illegal mining could also have a material adverse effect on Gold Fields financial condition or results of operations.

# Gold Fields South African operations may be adversely affected by increased labor costs or industrial action at its mining operations in South Africa.

Wages and related labor costs accounted for approximately 50% of Gold Fields total production costs in South Africa in fiscal 2009. Accordingly, Gold Fields costs may be materially affected by increases in wages and related labor costs, particularly with respect to Gold Fields South African employees, who are unionized. Negotiations with South African unions that concluded in July 2009 resulted in above-inflation wage increases ranging from 9% to 10.2%, depending upon the category of employee. In total, labor costs increased approximately 14.1% in South Africa in fiscal 2009 (excluding South Deep due to the impact of the retrenchment that took place in fiscal 2009), mainly due to wage increases and a 1% increase in employee numbers necessary to support the increase in mining volumes.

In addition, the South African mining unions have taken and have indicated they may continue to take industrial action to protest a variety of issues. See Information on the Company Gold Fields Mining Operations Driefontein Operation Mining , Information on the Company Gold Fields Mining Operations Kloof Operation Mining , Information on the Company Gold Fields Mining Operations Beatrix Operation Mining and Information on the Company Gold Fields Mining Operations South Deep Operation Mining .

If Gold Fields is unable to increase production levels or implement cost cutting measures to offset these increased wages and labor costs and production losses from industrial action, these costs and losses could have a material adverse effect on Gold Fields mining operations in South Africa and, accordingly, on Gold Fields business, operating results and financial condition. See Directors, Senior Management and Employees Employees Labor Relations South Africa.

### HIV/AIDS poses risks to Gold Fields in terms of lost productivity and increased costs.

The prevalence of HIV/AIDS in South Africa poses risks to Gold Fields in terms of potentially reduced productivity and increased medical and other costs. In May 2009, management estimated that approximately 33.2% of Gold Fields workforce in South Africa was infected with HIV. Increasingly, Gold Fields is seeing an adverse impact of HIV/AIDS on its affected employees, evidenced by increased absenteeism and reduced productivity. Compounding this is the concomitant infections with tuberculosis that accompanies the end stages of HIV illness and causes additional healthcare-related costs. Of particular concern is the risk of HIV positive patients developing multi-drug-resistant tuberculosis, which is very difficult and expensive to treat and has long-term impacts on the employees ability to perform their job productively. Medical literature states that HIV positive individuals have an eight times greater risk per year of developing tuberculosis than HIV negative patients. However, even with extensive intervention campaigns, the potential impact of HIV/AIDS on Gold Fields South African operations and financial condition is large. Factors influencing the impact of HIV/AIDS include the incidence of HIV infection among Gold Fields employees and in the community as a whole, the progressive impact of HIV/AIDS on infected employees health and productivity, and the medical and other costs associated with the infection. Most of these factors are beyond Gold Fields control. See Directors, Senior Management and Employees Health and Safety Health HIV/AIDS Program.

# Gold Fields operations in South Africa are subject to environmental and health and safety regulations which could impose significant costs and burdens.

Gold Fields South African operations are subject to various environmental laws and regulations including, for example, those relating to waste treatment, emissions and disposal, and must comply with permits or standards governing, among other things, tailings dams and waste disposal areas, water consumption, air

emissions and water discharges. Gold Fields may, in the future, incur significant costs to comply with the South African environmental requirements imposed under existing or new legislation, regulations or permit requirements or to comply with changes in existing laws and regulations or the manner in which they are applied. Also, Gold Fields may be subject to litigation and other costs as a result of environmental rights granted to individuals under South Africa s Constitution or other sources of rights. These costs could have a material adverse effect on Gold Fields business, operating results and financial condition.

See Information on the Company Environmental and Regulatory Matters South Africa Environmental.

Gold Field s South African operations are also subject to various health and safety laws and regulations which impose various duties on Gold Fields mines while granting the authorities broad powers to, among other things, close unsafe mines and order corrective action relating to health and safety matters. Further, certain targets were set by the Mine Health and Safety Council, a body consisting of representatives from the government, mining companies and unions, for the reduction of accidents, noise and silicosis to be achieved by 2013. Although projections indicate that these targets will be achieved there can be no assurance that this will occur. If a mine fails to achieve these targets, the Mine Health and Safety Council could potentially order that operations be halted.

There have been a number of accidents, many of which have resulted in fatalities, at various mining operations in South Africa recently, including accidents at some of Gold Fields operations. In October 2007, former President Thabo Mbeki ordered the DMR to conduct an occupational health and safety audit at all mines. There is no assurance that the occupational health and safety audit will not result in the introduction of more stringent safety regulations, which could result in restrictions on Gold Fields ability to conduct its mining operations and/or impose additional costs. Regardless of the consequences of the audit or improved health and safety programs, there can be no assurance that the unions will not take industrial action that could lead to losses in Gold Fields production. The DMR can and does issue instructions following safety incidents or accidents to partially or completely halt operations at affected mines. Moreover, it is Gold Fields policy to halt production at its operations, or increased costs, could have an adverse effect on Gold Fields business, operating results and financial condition. In April 2009, the Mine Health and Safety Amendment Bill became law. As a result, Gold Fields is now subject to more stringent regulations regarding mine health and safety and may be subject to an increased risk of prosecution for industrial accidents as well as greater penalties and fines for non-compliance. Further, any changes to the health and safety laws which increase the burden of compliance or the penalties for non-compliance may cause Gold Fields to incur further significant costs. See Information on the Company Environmental and Regulatory Matters South Africa Health and Safety.

#### Gold Fields operations in South Africa are subject to water use licenses which could impose significant costs and burdens.

Under South African law, Gold Fields South African operations are subject to water use licenses that govern each operation s water usage and that require, among other things, that mining operations achieve and maintain certain water quality limits regarding all water discharges. The Kloof operation was issued a water license in December 2008 which requires it to achieve compliance with these limits by 2012. Gold Fields other South African operations have been issued draft water licenses, which, when issued in final form, will likely be on terms similar to those in the Kloof license. Gold Fields operations have been generally in compliance with the proposed limits, however there have been instances where the water discharge exceeded the limits stipulated in the new water use licenses (draft and issued).

Gold Fields is reviewing and investigating a water treatment strategy that will, if successfully implemented, position Gold Fields favorably with regard to achieving these limits. However, there can be no assurance that Gold Fields will achieve such compliance within the required timeframe due primarily to the associated

regulatory approval processes and commercial agreements that are required. Gold Fields is currently in discussions with the Department of Water Affairs to amend the Kloof license to extend the deadline for compliance beyond 2012. However, there can be no assurance that Gold Fields will receive such an extension. Gold Fields expects to make significant expenditure to achieve and maintain compliance with the license requirements at each South African operation. Any failure on Gold Fields part to achieve or maintain compliance with the requirements of these licenses with respect to any of its operations could result in Gold Fields being subject to substantial penalties, fees and expenses, significant delays in operations or potentially the loss of the relevant water use license, which could curtail or halt production at the affected operation. Any of the above could have a material adverse effect on Gold Fields business, operating results and financial condition.

#### Gold Fields mineral rights in South Africa are subject to legislation which could impose significant costs and burdens.

#### The 2002 Minerals Act

The Mineral and Petroleum Resources Development Act No. 28 of 2002, or the 2002 Minerals Act, came into effect on May 1, 2004, together with the implementation of a broad-based socio-economic empowerment charter, or the Mining Charter, for effecting entry of historically disadvantaged South Africans, or HDSAs, into the mining industry. Among other things, the Mining Charter requires (i) each mining company to achieve a 15% HDSA ownership of mining assets within five years after the Mining Charter s coming into effect and a 26% HDSA ownership of mining assets within 10 years after the Mining Charter s coming into effect, (ii) the mining industry as a whole to agree to assist HDSA companies in securing finance to fund participation in an amount of Rand 100 billion over the first five years and (iii) mining companies to spell out plans for achieving employment equity at management level with a view to achieving a baseline of 40% HDSA participation in management and achieving a baseline of 10% participation by women in the mining industry, in each case within five years. In accordance with the 2002 Minerals Act, the DMR published a Code of Good Conduct on April 30, 2009, or the Code, and the Housing and Living Code Standard for the Mining Industry, or the Standard, relating to the socio-economic transformation of the mining industry. However, certain provisions of the Code and the Standard appear to be inconsistent with the Mining Charter, or to go beyond the scope envisaged in the 2002 Minerals Act. Various industry participants have been in discussions with the DMR regarding the scope and applicability of the Code and the Standard but there is significant uncertainty regarding the standing and effect of the Code and the Standard s provisions. It is unclear what the final form of the Code and the Standard will be and what effect they may have on Gold Fields results and operations. See Information on the Company Environmental and Regulatory Matters South Africa Mineral Rights The 2002 Minerals Act.

The acquisition by Mvelaphanda Resources Limited of a 15% beneficial interest in the South African gold mining assets of Gold Fields for cash consideration of Rand 4,139 million was effected to meet the requirement for a 15% HDSA ownership within five years of the charter coming into effect. See Operating and Financial Review and Prospects Overview General Mvelaphanda Transaction. Management is in dialogue with the DMR regarding Gold Fields plans and proposals to ensure compliance with relevant HDSA ownership thresholds under the 2002 Minerals Act. Any further adjustment to the ownership structure of Gold Fields South African mining assets in order to meet the mining charter s 10-year HDSA ownership requirement of 26% could have a material adverse effect on the value of Gold Fields ordinary shares and failing to comply with the charter s requirements could subject Gold Fields to negative consequences, the scope of which has not yet been fully determined. Gold Fields may also incur expenses to give effect to the charter s other requirements, and may need to incur additional indebtedness in order to comply with the industry-wide commitment to assist HDSAs in securing Rand 100 billion of financing during the first five years of the mining charter s effectiveness. Moreover, there is no guarantee that any steps Gold Fields has already taken or might take in the future will ensure the successful renewal of all of its existing mining rights or the retaining of new mining rights or the granting of further new mining rights or that the terms of renewals of its rights would not be significantly less favorable to Gold Fields than the terms of its current rights.

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#### The Royalty Act

After going through several draft Bills, the Mineral and Petroleum Resources Royalty Act, 2008, or the Royalty Act, was promulgated on November 24, 2008 and was due to come into operation on May 1, 2009. However, it was announced on February 11, 2009 that the Act would not come into operation until March 1, 2010. The Royalty Act imposes a royalty on refined and unrefined minerals payable to the State.

The royalty in respect of refined minerals (which include gold and platinum) is calculated by dividing earnings before interest and taxes, or EBIT, by the product of 12.5 times gross revenue calculated as a percentage, plus an additional 0.5%. EBIT refers to taxable mining income (with certain exceptions such as no deduction for interest payable) before assessed losses but after capital expenditure. A maximum royalty of 5% has been introduced for refined minerals.

The royalty in respect of unrefined minerals (which include uranium) is calculated by dividing EBIT by the product of nine times gross revenue calculated as a percentage, plus an additional 0.5%. A maximum royalty of 7% has been introduced. Where unrefined mineral resources (such as uranium) constitute less than 10% in value of the total composite mineral resources, the royalty rate in respect of refined mineral resources may be used for all gross sales and a separate calculation of EBIT for each class of mineral resources is not required. For Gold Fields, this means that currently it will pay a royalty based on the refined minerals royalty calculation as applied to its gross revenue.

See Information on the Company Environmental and Regulatory Matters South Africa Mineral Rights The Royalty Act.

# Gold Fields operations in Ghana are subject to environmental and health and safety laws and regulations which could impose significant costs and burdens.

Gold Fields Ghana operations are subject to various environmental laws and regulations. The Ghanaian environmental protection laws require, among other things, that Gold Fields register with the Ghanaian environmental authorities, and obtain environmental permits and certificates for the Ghana operations, as well as to rehabilitate land disturbed as a result of their mining operations. Gold Fields is required to secure estimated environmental rehabilitation costs in part by posting a reclamation bond. Gold Fields Ghana is required to post a reclamation bond and deposit a cash amount sufficient to cover 50% of the estimated rehabilitation costs for the two-year period after the date of the last estimate. Changes in the required method of calculation for these bonds or an unforeseen circumstance which produces unexpected costs may materially and adversely affect Gold Fields future environmental expenditures. See Information on the Company Environmental and Regulatory Matters Ghana Environmental.

Ghanaian health and safety regulations impose statutory duties on an owner of a mine to, among other things, take steps to ensure that the mine is managed and worked in a manner which provides for the safety and proper discipline of the mine workers. Additionally, Gold Fields is required, under the terms of its mining leases, to comply with the reasonable instructions of the relevant authorities for securing the health and safety of persons working in or connected with the mine. A violation of the health and safety regulations or a failure to comply with the reasonable instructions of the relevant authorities could lead to, among other things, a temporary shutdown of all or a portion of the mine, a loss of the right to mine or the imposition of costly compliance procedures and, in the case of a violation of the regulations relating to health and safety, constitutes an offense under Ghanaian law. If Ghanaian health and safety authorities require Gold Fields to shut down all or a portion of its mines or to implement costly compliance measures, whether pursuant to existing or new health and safety laws and regulations, such measures could have a material adverse effect on Gold Fields business, operating results and financial condition. See Information on the Company Environmental and Regulatory Matters Ghana Health and Safety.

Gold Fields, as the holder of the mining lease, has potential liability arising from injuries to, or deaths of, workers, including, in some cases, workers employed by its contractors. In Ghana, statutory workers compensation is not the exclusive means for workers to claim compensation. Gold Fields insurance for health and safety claims or the relevant workers compensation arrangements may not be adequate to meet the costs which may arise upon any future health and safety claims.

# Gold Fields mineral rights in Ghana are currently subject to regulations, and may become subject to new regulations, which could impose significant costs and burdens.

In Ghana, the ownership of land on which there are mineral deposits is separate from the ownership of the minerals. All minerals in their natural state in or upon any land or water are, under Ghanaian law, the property of Ghana and vested in the President on behalf of the people of Ghana. The new Minerals and Mining Act, 2006 (Act 703), or the Minerals and Mining Act, was passed by the Ghanaian Parliament in fiscal 2006. The Minerals and Mining Act repealed the Minerals and Mining Law, 1986 (PNDCL 153) as amended, or the Minerals and Mining Law, although, as regards existing mineral rights, the Minerals and Mining Law continues to apply to Gold Fields Ghana and Abosso Goldfields Limited, or Abosso, unless the minister responsible for mines provides otherwise by legislative instrument. Although the Minerals and Mining Act provides that it shall not have the effect of increasing the holder s costs, or financial burden, for a period of five years, if in the future new amendments or provisions are passed under the Minerals and Mining Act or new laws are passed which impose significant new costs or burdens on Gold Fields abilities to mine in Ghana or to obtain new mining leases for properties on which deposits are identified, this could have a material adverse effect on Gold Fields business, operating results and financial condition. See Information on the Company Environmental and Regulatory Matters Ghana Mineral Rights.

# Gold Fields operations in Australia are subject to environmental and health and safety laws and regulations which could impose significant costs and burdens.

Gold Fields Australian operations are subject to various laws and regulations relating to the protection of the environment. Gold Fields may, in the future, incur significant costs to comply with the Australian environmental requirements imposed under existing or new legislation, regulations or permit requirements or to comply with changes in existing laws and regulations or the manner in which they are applied. These costs may have a material adverse effect on Gold Fields business, operating results and financial condition.

Australian mining companies are required by law to undertake rehabilitation works as part of their ongoing operation and the Gold Fields subsidiaries that hold its Australian operations provide unconditional bank-guaranteed performance bonds to the Western Australian government as security for the estimated costs. These bonds do not cover remediation for events that were unforeseen at the time the bond was taken. Changes in the required method of calculation for these bond amounts or an unforeseen circumstance which produces unexpected costs may materially and adversely affect future environmental expenditures. See Information on the Company Environmental and Regulatory Matters Australia Environmental.

Gold Fields is obligated to provide and maintain a working environment which is safe for mine workers. A violation of the health and safety laws or a failure to comply with the instructions of the relevant health and safety authorities could lead to, among other things, a temporary shutdown of all or a portion of the mine, a loss of the right to mine or the imposition of costly compliance procedures and penalties (including imprisonment). If health and safety authorities require Gold Fields to shut down all or a portion of the mine or to implement costly compliance measures, whether pursuant to existing or new health and safety laws and regulations, such measures could have a material adverse effect on Gold Fields business, operating results and financial condition. See Information on the Company Environmental and Regulatory Matters Australia Health and Safety.

# Gold Fields tenements in Australia are subject to native title claims and include Aboriginal heritage sites which could impose significant costs and burdens.

Certain of Gold Fields tenements are subject to native title claims, and there are Aboriginal heritage sites located on certain of Gold Fields tenements. Native title and Aboriginal legislation protect the rights of Aboriginals in relation to the land in certain circumstances. Other tenements may become subject to native title claims if Gold Fields seeks to expand or otherwise change its interest in rights to those tenements. Native title claims could require costly negotiations with the claimants or could affect Gold Fields access to or use of its tenements, and, as a result, have a material adverse effect on Gold Fields business, operating results and financial condition.

Aboriginal heritage sites relate to distinct areas of land which have either ongoing ethnographic, archaeological or historic significance. Aboriginal heritage sites have been identified with respect to portions of some of Gold Fields Australian mining tenements. Additional Aboriginal heritage sites may be identified on the same or additional tenements. Gold Fields may, in the future, incur significant costs as a result of changes in the interpretation of, or new laws regarding, native title and Aboriginal heritage, which may result in a material adverse effect on Gold Fields business, operating results and financial condition. See Information on the Company Environmental and Regulatory Matters Australia Land Claims.

# Gold Fields mineral rights in Peru are currently subject to regulations which may be subject to change, and may become subject to new regulations, which could impose significant costs and burdens.

Gold Fields operations in Peru depend on mining concessions for exploration and exploitation works, obtained from the Geologic, Mining and Metallurgic Institute (*Instituto Geológico Minero Metalúrgico*), or the INGEMMET. In addition, Gold Fields operations in Peru depend on obtaining other administrative rights, such as provisional permits, from the Ministry of Energy and Mines, or the MEM, for exploration rights on the area of a claim, and beneficiation or processing concessions, obtained from the MEM, for treatment of mining ores.

Under Peru s current regulatory regime, mining concessions for the exploration and exploitation of minerals have an indefinite term, subject to compliance by the titleholder with the obligations set forth by the General Mining Act (Ley General de Minería), or the LGM. Compliance with such obligations is required to maintain the mining concessions in good standing. Among such obligations are the payment of an Annual Concession Fee (equivalent to U.S.\$3 per hectare) and compliance with a minimum annual production target. Failure to pay the Annual Concession Fee for any two consecutive or non-consecutive years may result in the cancellation of the relevant mining concession. Gold Fields processing concession at Cerro Corona also has an indefinite term, subject to compliance with the obligations established by the LGM. Payment of an Annual Concession Fee (calculated on the production capacity of the processing plant) is also required to maintain the processing concession in good standing. Failure to pay the Annual Concession Fee for two consecutive or non-consecutive years may result in the cancellation of the processing concession.

If the INGEMMET or the MEM revoke or cancels any of Gold Fields concessions, Gold Fields financial condition and results of operations could be adversely affected. See Information on the Company on Environmental and Regulatory Matters Peru Regulatory .

On June 24, 2004, the Peruvian Congress approved the Mining Royalty Law, which established a mining royalty that owners of mining concessions must pay to the Peruvian government for the exploitation of metallic and non-metallic resources. The mining royalties are calculated on a sliding scale with rates ranging from 1% to 3% over the value of mineral concentrates based on international market prices. As provided by the Mining Royalty Law, effective since January 26, 2007, the Peruvian Tax Authority is responsible for the collection of mining royalties.

There can be no assurance that the Peruvian government will not impose additional mining royalties or payments in the future or that they will not have an adverse effect on Gold Fields results of operations or financial condition.

# Gold Fields operations in Peru are subject to environmental laws, health and safety laws and other regulations which could impose significant costs and burdens.

Gold Fields exploration, mining and milling activities in Cerro Corona are subject to a number of Peruvian laws and regulations, including environmental and health and safety laws and regulations. All mines, including Cerro Corona, must obtain environmental permits from the government and have an Environmental Impact Assessment approved. Other matters subject to regulation include, but are not limited to, transportation of ore or hazardous substances, water use and discharges, power use and generation, use and storage of explosives, housing and other facilities for workers, reclamation, labor standards and mine safety and occupational health.

There is no assurance that current environmental laws, health and safety laws, and other regulations that may have an impact on Gold Fields operations will not be replaced or modified in the future, or that Gold Fields will not become subject to new more stringent regulations, which could impose significant costs and burdens on its operations. For instance, the development of more stringent environmental protection programs in Peru could impose constraints and additional costs on Gold Fields operations in Peru. Likewise, existing or new health and safety laws and regulations could cause health and safety authorities to require Gold Fields to shut down all or a portion of the mine or to implement costly compliance measures. Any of these events could have a material adverse effect on Gold Fields business, operating results and financial condition. See Information on the Company Environmental and Regulatory Matters Peru Health and Safety.

#### The acquisition of Western Areas, BGSA and South Deep may expose Gold Fields to unknown liabilities and risks.

Prior to acquiring South Deep from GFI Joint Venture Holdings (Proprietary) Limited (previously known as Barrick Gold South Africa (Pty) Limited, or BGSA), a subsidiary of Barrick Gold Corporation, or Barrick, and Gold Fields Operations Limited (previously known as Western Areas Limited, or Western Areas), Gold Fields was able to conduct only limited due diligence on South Deep, Western Areas and BGSA. There can be no assurance that Gold Fields identified all the liabilities of, and risks associated with, South Deep, BGSA or Western Areas prior to acquiring them or that it will not be subject to unknown liabilities of, and risks associated with, South Deep, Western Areas or BGSA, including liabilities and risks that may become evident only after Gold Fields has been involved in the operational management of South Deep for a longer period of time. On August 21, 2008, Western Areas received a summons from Randgold and Exploration Company Limited, or R&E, and African Strategic Investment (Holdings) Limited. The summons claims that, under prior ownership, Western Areas was part of a scam whereby JCI Limited unlawfully disposed of shares owned by R&E in Randgold Resources Limited and Afrikander Lease Limited, now known as Uranium One. See Information on the Company Legal Proceedings .

# Gold Fields has not independently confirmed the reliability of the South Deep, BGSA or Western Areas information for the period prior to their respective acquisitions by Gold Fields included in this annual report.

In respect of information relating to South Deep or Western Areas presented in this annual report for the period before their respective acquisitions by Gold Fields, Gold Fields relied upon publicly available information, including information publicly filed by Western Areas with JSE Limited, or the JSE, and certain due diligence materials supplied by Western Areas and Barrick. For example, a portion of Gold Fields attributable proved and probable reserves are based on the pre-acquisition South Deep operation reserve figures as declared for December 2005 by an independent review panel, or the IRP, for the Barrick Gold Western Areas Joint Venture between BGSA (formerly, Placer Dome South Africa Proprietary Limited) and Western Areas. A significant portion of the June 30, 2009 South Deep reserves take into account new estimation and mine design work on the Upper Elsburg Reefs completed during fiscal 2009 in accordance with Gold Fields standards and procedures. 50% of the total reserve ounces relate to the Current Mine, Phase 1 north of the Wrench Fault and Phase 1 south of the Wrench Fault (above infrastructure). 50% of the total reserve ounces relate to Phase 2, being the South Shaft/Old Mine and the VCR. The 50% relating to the Current Mine, Phase 1 north of the Wrench

Fault and Phase 1 south of the Wrench Fault (above infrastructure) have been remodeled and designed. Due to no further information being available at this stage, the remaining deeper portion of the reserves continue to be based on the pre-acquisition figures declared by the IRP, as described above.

Gold Fields is presently undertaking a surface drilling exploration program that will provide additional technical information on the geological structure, sedimentology, facies characteristics and tenor of the Ventersdorp Contact Reef (VCR) and Upper Elsburg Reefs in the area below current infrastructure to the southern boundary of the mining area, or Phase 2.

Gold Fields was not involved in the preparation of this information and has not had the opportunity to perform comprehensive due diligence on them. Until the exploration drilling and resource modeling in Phase 2 is completed, Gold Fields cannot verify the accuracy or completeness of the information or materials or any failure by Western Areas or Barrick to disclose events that may have occurred, but that are unknown to Gold Fields, that may affect the significance or accuracy of any such information.

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

Gold Fields is incorporated in South Africa. The majority of Gold Fields directors and executive officers (as well as Gold Fields independent registered public accounting firm) reside outside of the United States. Substantially all of the assets of these persons and substantially all of the assets of Gold Fields are located outside the United States. As a result, it may not be possible for investors to enforce against these persons or Gold Fields a judgment obtained in a United States court predicated upon the civil liability provisions of the federal securities or other laws of 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 which 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 (that is, it cannot be altered by the court which pronounced it);

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 proceedings 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 was not obtained by fraudulent means;

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 Businesses Act 99 of 1978, as amended, of the Republic of South Africa.

It is the policy of South African courts to award compensation for the loss or damage actually sustained by the person to whom the compensation is awarded. Although the award of punitive damages is generally unknown to the South African legal system, that does not mean that such awards are necessarily contrary to public policy. Whether a judgment is contrary to public policy depends on the facts of each case. Exorbitant, unconscionable or excessive awards will generally be contrary to public policy. South African courts cannot enter into the merits of a foreign judgment and cannot act as a court of appeal or review over the foreign court. South African courts will usually implement their own

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procedural laws and, where an action based on an international contract is brought before a South African court, the capacity of the parties to the contract will usually be determined in accordance with South African law. It is doubtful whether an original action based on United States federal securities laws may be brought before South African courts. A plaintiff who is not resident in South Africa may be required to

provide security for costs in the event of proceedings being initiated in South Africa. Furthermore, the Rules of the High Court of South Africa require that documents executed outside South Africa must be authenticated for the purpose of use in South Africa.

#### Investors may face liquidity risk in trading Gold Fields ordinary shares on JSE Limited.

Historically, trading volumes and liquidity of shares listed on the JSE have been low in comparison with other major markets. The ability of a holder to sell a substantial number of Gold Fields ordinary shares on the JSE in a timely manner, especially in a large block trade, may be restricted by this limited liquidity. See The Offer and Listing JSE Limited.

#### Gold Fields may not pay dividends or make similar payments to its shareholders in the future.

Gold Fields pays 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 Gold Fields capital expenditures and other cash requirements existing at the time. Under South African law, Gold Fields will be entitled to pay a dividend or similar payment to its shareholders only if it meets the solvency and liquidity tests set out in the Companies Act No. 61 of 1973, or the Companies Act, and Gold Fields Articles of Association. Cash dividends or other similar payments may not be paid in the future.

# Gold Fields non-South African shareholders face additional investment risk from currency exchange rate fluctuations since any dividends will be paid in Rand.

Dividends or distributions with respect to Gold Fields ordinary shares have historically been paid in Rand. The U.S. dollar or other currency equivalent of any dividends or distributions with respect to Gold Fields ordinary shares will be adversely affected by potential future reductions in the value of the Rand against the U.S. dollar or other currencies. In the future, it is possible that there will be changes in South African exchange control regulations, such that dividends paid out of trading profits will no longer be freely transferable outside South Africa to shareholders who are not residents of the Common Monetary Area. See Additional Information South African Exchange Control Limitations Affecting Security Holders.

#### Gold Fields ordinary shares are subject to dilution upon the exercise of Gold Fields outstanding share options.

As of September 30, 2009, Gold Fields had an aggregate of 1,000,000,000 ordinary shares authorized to be issued and as of that date an aggregate of 705,391,269 ordinary shares were issued and outstanding. Gold Fields currently has two securities option plans which are authorized to grant options in an amount of up to an aggregate of 35,242,431 ordinary shares. As of September 30, 2009, 13,379,456 shares had been awarded under these plans.

Gold Fields employees and directors had outstanding, as of September 30, 2009, options to purchase a total of 2,078,144 ordinary shares at exercise prices of between Rand 46.23 and Rand 154.65 that expire between November 24, 2009 and March 23, 2013. Such expiry dates may be extended due to unscheduled closed periods during which certain Gold Fields employees and directors may be prohibited from exercising options. Gold Fields had outstanding, as of September 30, 2009, 4,520,386 share appreciation rights at strike prices of between Rand 69.48 and Rand 127.72, which expire between February 28, 2010 and September 1, 2015, and 6,781,118 performance vesting restricted shares due to be settled between March 1, 2010 and September 1, 2012. As of the same date, Gold Fields had outstanding 18,900 restricted shares due to be settled in November 2009, 29,600 restricted shares due to be settled in November 2010 and 52,600 restricted shares due to be settled in November 2011 under The Gold Fields Limited 2005 Non-Executive Share Plan. Shareholders equity interests in Gold Fields will be diluted to the extent of future exercises or settlements of these rights and any additional rights. See Directors, Senior Management and Employees The GF Management Incentive Scheme, Directors, Senior

Management and Employees The Gold Fields Limited 2005 Share Plan, Directors, Senior Management and Employees The GF Non-Executive Director Share Plan and Directors, Senior Management and Employees The Gold Fields Limited 2005 Non-Executive Share Plan.

# Sales of Gold Fields ordinary shares, or the perception that a large number of ordinary shares will be sold, may cause the market price of Gold Fields ordinary shares to decrease.

As of March 17, 2009, Mvelaphanda Resources, through its wholly-owned subsidiary Mvelaphanda Gold Limited, Mvela Gold, took receipt of a 15% shareholding in GFI Mining South Africa, or GFIMSA, as part of a series of transactions effected to meet the requirement for 15% HDSA ownership within five years of the enactment of the Mining Charter. See Operating and Financial Review and Prospects Overview General Mvelaphanda Transaction. Immediately upon receipt of the GFIMSA shares, Mvelaphanda Gold Limited exercised its right to require the exchange of the GFIMSA shares for 50 million new ordinary shares in the issued share capital of Gold Fields.

Accordingly, on March 17, 2009, Mvela Gold used the GFIMSA Shares to subscribe for 50 million new ordinary shares in Gold Fields. Pursuant to these transactions, Mvela Gold owned approximately 7% of the listed shares of Gold Fields. Since March 17, 2009, Mvela Gold has sold approximately 11 million of its Gold Fields ordinary shares, representing approximately 1.6% of the listed shares of Gold Fields. Gold Fields holds a right of first refusal over the ordinary shares held by Mvela Gold in the event Mvela Gold wishes to sell them.

A large volume of sales of Gold Fields ordinary shares by Mvelaphanda Gold Limited or another shareholder, all at once or in blocks, could decrease the prevailing market price of Gold Fields ordinary shares and could impair Gold Fields ability to raise capital through the sale of equity securities in the future. Additionally, even if substantial sales are not effected, the mere perception of the possibility of these sales could decrease the market price of Gold Fields ordinary shares and could have a negative effect on Gold Fields ability to raise capital in the future. Further, anticipated downward pressure on Gold Fields ordinary share price due to actual or anticipated sales of ordinary shares could cause some institutions or individuals to engage in short sales of Gold Fields ordinary shares, which may itself cause the price of the ordinary shares to decline.

#### **ITEM 4: INFORMATION ON THE COMPANY**

#### Introduction

Gold Fields is a significant producer of gold and major holder of gold reserves in South Africa, Ghana, Australia and Peru. In Peru, Gold Fields also produces copper. Gold Fields is primarily involved in underground and surface gold and copper mining and related activities, including exploration, extraction, processing and smelting. Gold Fields also has an interest in a platinum group metal exploration project. Gold Fields is one of the largest gold producers in the world, based on annual production.

The majority of Gold Fields operations, based on gold production, are located in South Africa. Its South African operations are Driefontein, Kloof, Beatrix and South Deep. Gold Fields also owns the St. Ives and Agnew gold mining operations in Australia and has a 71.1% interest in each of the Tarkwa gold mine and the Damang gold mine in Ghana. Gold Fields also owns an 80.72% economic interest in the Cerro Corona mine, which started producing in the first quarter of fiscal 2009. In addition, Gold Fields has gold and other precious metal exploration activities and interests in Africa, Eurasia, Australasia and the Americas.

As of June 30, 2009, Gold Fields had attributable proven and probable reserves of approximately 81.1 million ounces, including copper expressed as gold equivalent ounces, and attributable gold reserves (excluding copper) of 78.9 million ounces of gold, as compared to the 80.5 million ounces (excluding copper) reported as of June 30, 2008. With the exception of South Deep, the reserves are based on the figures reported by Gold Fields mining operations. A portion of Gold Fields proven and probable reserves for South Deep are based on the pre-acquisition South Deep operation reserve figures as declared for December 2005 by an independent review panel, or the IRP, for the Barrick Gold-Western Areas Joint Venture between Barrick Gold South Africa (Pty) Limited, or BGSA, (formerly, Placer Dome South Africa Proprietary Limited) and Western Areas Limited (now known as Gold Fields Operations Limited), or Western Areas. The June 30, 2009 South Deep reserves take into account new estimation and mine design work on the Upper Elsburg Reefs completed during fiscal 2009 in accordance with Gold Fields standards and procedures. 50% of the total reserve ounces relate to the current mining area, or the Current Mine, and the area below the Current Mine and above infrastructure, or Phase 1, north of the Wrench Fault and also Phase 1 south of the Wrench Fault (above infrastructure). 50% of the total reserve ounces relate to Phase 2, being the South Shaft/Old Mine and the Ventersdorp Contact Reef, or the VCR. The 50% relating to the Current Mine, Phase 1 north of the Wrench Fault and Phase 1 south of the Wrench Fault (above infrastructure) have been remodeled and designed. Due to no further information being available at this stage, the remaining deeper portion of the reserves continue to be based on the pre-acquisition figures, declared by the IRP, described above.

Gold Fields is presently undertaking a surface drilling exploration program that Gold Fields expects will provide additional technical information on the geological structure, sedimentology, facies characteristics and tenor of the Ventersdorp Contact Reef, or the VCR, and Upper Elsburg Reefs in the area below current infrastructure to the southern boundary of the mining area, or Phase 2. When the surface drilling exploration program is completed, Gold Fields expects the additional information will provide for enhanced resource modeling of the Phase 2 ground and will increase confidence levels with regard to in situ facies geometry, reef grades and tonnages. See Risk Factors Gold Fields has not independently confirmed the reliability of the South Deep, BGSA or Western Areas information for the period prior to their respective acquisitions by Gold Fields included in this annual report.

In the year ended June 30, 2009, Gold Fields processed 52.9 million tons of ore and produced 3.691 million ounces of gold (including gold equivalent ounces). On an attributable basis, Gold Fields produced 3.414 million ounces of gold (including gold equivalent ounces).

#### **Developments since June 30, 2008**

Since the beginning of fiscal 2009, the following significant events have occurred:

On August 21, 2008, Gold Fields Operations Limited, formerly known as Western Areas Limited, or WAL, a wholly-owned subsidiary of Gold Fields, received a summons from Randgold and Exploration Company

Limited, or R&E, and African Strategic Investment (Holdings) Limited. The summons claims that, during the period that WAL was under the control of Brett Kebble, Roger Kebble and others, WAL was allegedly part of a scam whereby JCI Limited unlawfully disposed of shares owned by R&E in Randgold Resources Limited and Afrikander Lease Limited, now known as Uranium One. For further information, see Legal Proceedings .

On September 10, 2008, Gold Fields announced that the Arctic Platinum Project in Finland had reverted to Gold Fields after North American Palladium Limited, a Canadian platinum metals group producer, declined to exercise its rights in terms of a Letter of Intent entered into between the parties and announced on October 18, 2005 and an Acquisition and Framework Agreement subsequently entered into between the parties. See Operating Review and Prospects Recent Developments Reversion of Arctic Platinum Project to Gold Fields. See Exploration .

On October 2, 2008, Gold Fields entered into an agreement with Bateman Engineering N.V., or Bateman Engineering, to sell its Biox<sup>®</sup> Technology Business to Bateman Engineering for a net cash consideration of U.S.\$8.8 million. The transaction was conditional, among other things, upon the approval of the South African Reserve Bank, or SARB. The SARB failed to approve the transaction within the timeframes stipulated in the agreement. Following the onset of the global economic crisis, Bateman Engineering elected not to proceed with the transaction and the Biox<sup>®</sup> Technology Business remains part of the Gold Fields group. See Research and Development .

As part of the proceeds on disposal of its assets in Venezuela on November 30, 2007, Gold Fields received 140 million shares in Rusoro, a junior gold producer listed on the TSX Venture Exchange. Gold Fields accounted for its 36% investment (subsequently reduced to 26.4%) under the equity method and, due to the decrease in market value of the investment since acquisition, also recorded an impairment of \$61.3 million on June 30, 2008. See Operating Review and Prospects Results of Operations Year ended June 30, 2008 and 2007 Impairment of Investment in Equity Investee . As of June 30, 2009, Gold Fields interest in Rusoro had been reduced to 26.4% because Gold Fields did not participate in a rights offer by Rusoro in March 2009. At June 30, 2009, Gold Fields investment in Rusoro was impaired further to its market value of \$48.4 million.

On December 3, 2008, Gold Fields Orogen Holdings BVI Limited, a wholly-owned subsidiary of Gold Fields Limited, announced a joint venture agreement with Orsu Metals Corporation for the further exploration and development of the Talas license area, northwest of Kyrgyzstan. The agreement gives Gold Fields the right to earn as much as a 70% interest in Orsu s Talas license area. See Exploration Advanced Projects.

On February 29, 2009, Minera Gold Fields Peru S.A., a wholly-owned exploration subsidiary of Gold Fields Limited, and Compañía de Minas Buenaventura S.A.A., or Buenaventura, entered into an agreement, or the Buenaventura Agreement, that entitled Buenaventura to explore certain mining rights owned by Gold Fields in the area of Chucapaca, Moquegua (South Peru). As the discoveries made by Buenaventura essentially involved gold deposits, Gold Fields exercised a back-in right according to whose terms a joint venture vehicle operated by Gold Fields has been established to develop the project. Once Gold Fields has spent approximately \$8 million on the exploration of the Chucapaca Gold Project, Gold Fields will earn-in a 51% participation in the joint venture company. Otherwise, it will only retain a 2% net smelter revenue royalty on the future results of the project.

Gold Fields announced on March 17, 2009 that, in terms of the R4.1 billion Black Economic Empowerment transaction approved by shareholders of Gold Fields on March 8, 2004, Mvelaphanda Resources, or Mvela Resources, took receipt, through its wholly-owned subsidiary Mvelaphanda Gold (Proprietary) Limited, or Mvela Gold, of its 15% shareholding in GFI Mining South Africa (Proprietary) Limited, or GFIMSA, a subsidiary of Gold Fields which owns and operates the South African gold mining assets of Gold Fields. Immediately upon receipt of the GFIMSA shares, Mvela Gold exercised its right to use the GFIMSA Shares to subscribe for 50 million new ordinary shares in Gold Fields, or the Gold Fields shares. This brought the total number of Gold Fields shares in issue at that time to 703,839,976. Pursuant to the above transactions, Mvela Gold owned

approximately 7% of the listed shares of Gold Fields and Gold Fields again owns 100% of GFIMSA. Since March 17, 2009, Mvela Gold has sold approximately 11 million of the Gold Fields shares, representing approximately 1.6% of the listed shares of Gold Fields, through the market. The Gold Fields shares are subject to a right of first refusal in favor of Gold Fields.

On March 25, 2009, Gold Fields entered into a non-binding Letter of Intent, or LOI, with Glencar Mining Plc, or Glencar, in relation to the terms on which the parties would agree to enter a joint venture agreement over Glencar s Komana license in West Africa. Following termination of negotiations regarding the joint venture agreement, on August 7, 2009, Gold Fields launched a recommended cash offer for Glencar which valued Glencar at approximately U.S.\$47.7 million. On September 7, 2009, Gold Fields announced that it had received acceptances of approximately 83.1% of the share capital of Glencar, allowing Gold Fields to take control of the Company. All conditions of the offer were satisfied or waived at that time and therefore the offer was declared unconditional in all respects. Gold Fields has also taken control of the board of Glencar with the appointment of three new directors. Subsequently, Gold Fields completed the final squeeze-out of shareholders on November 9, 2009. Gold Fields now holds 100% of Glencar Mining plc. See Exploration Advanced Projects .

On June 3, 2009, Gold Fields announced that Gold Fields Australasia (BVI) Limited, a subsidiary of Gold Fields Limited, had entered into an agreement under which it would sell its 19.9% stake in Sino Gold Mining Limited to Eldorado Gold Corporation for a total consideration of approximately U.S.\$282 million payable in Eldorado shares. This consideration was settled by the issue to Gold Fields Australasia (BVI) Limited of shares in Eldorado with it receiving a share exchange ratio of 48 Eldorado shares for every 100 Sino Gold shares on July 27, 2009, resulting in a total holding of 27,824,654 Eldorado shares or approximately 7% of the outstanding shares of Eldorado on a fully diluted basis. On September 4, 2009, Gold Fields sold its entire shareholding in Eldorado on the market for a consideration of CAD 323 million (\$299.3 million). In addition, Gold Fields holds a top-up right for a period of 18 months, which will apply if Eldorado purchases an additional 5% or more of the outstanding shares of Sino Gold and the sellers in that transaction realize a consideration ratio in excess of the share exchange ratio of 0.48 Eldorado would acquire all of the issued and outstanding shares of Sino Gold by exchanging 0.55 Eldorado shares for each share of Sino Gold. Sino Gold share on December 1, 2009. Assuming completion of the offer based on the terms announced by Eldorado and Sino Gold on August 26, 2009, Gold Fields would receive 4,057,762 shares due to its top-up rights. See Exploration Sino Gold Alliance .

On August 26, 2009, Gold Fields executed an agreement with Morgan Stanley Bank, or Morgan Stanley, to terminate a royalty, or the Royalty, payable by Gold Fields wholly-owned Australian subsidiary, St. Ives Gold Mining Company Pty Ltd, to certain subsidiaries of Morgan Stanley for a consideration of A\$308 million (\$257.1 million). When Gold Fields acquired St. Ives in 2001, the total consideration included the Royalty, which was subsequently acquired by Morgan Stanley. The Royalty comprised two parts: (i) a payment equal to 4% of the net smelter returns for gold produced from St. Ives to the extent that cumulative production of gold from November 30, 2001 exceeded 3.3 million ounces, but subject to the average spot price of gold for the relevant quarter exceeding A\$400 per ounce; and (ii) provided that the gold price exceeded A\$600 per ounce, a payment equal to 10% of the difference between revenue calculated at the spot gold price expressed in Australian dollars per ounce and at a price of A\$600 per ounce calculated on all future ounces produced by St. Ives. Both components of the Royalty were payable on all future production from St. Ives. The transaction was financed from cash resources and available facilities and closed on August 26, 2009.

Gold Fields is a public company incorporated in South Africa, with a registered office located at 150 Helen Road, Sandown, Sandton, 2196, South Africa, telephone number +27-11-562-9700.

# **Organizational Structure**

Gold Fields is a holding company with its significant ownership interests organized as set forth below.

Group Structure<sup>(1)</sup>

(1) Unless otherwise stated, all subsidiaries are, directly or indirectly, wholly-owned by Gold Fields Limited.

#### Strategy

#### General

Following the appointment of Nicholas Holland as Chief Executive Officer as of May 1, 2008, Gold Fields undertook a review of the Group strategy which concluded that, while the basic strategy remained robust and appropriate, a number of strategic adjustments needed to be made.

These changes were developed and assimilated into a new Gold Fields Franchise which describes who we are , what we do , and how we do it , and comprises of:

a new vision statement;

a new set of core values;

a new overarching strategic production goal;

the three long-standing but refocused core pillars of the strategy, namely a) Sweating Our Assets , b) Growing Gold Fields , and c) Securing Our Future ; and

a new regional operational delivery model.

In addition a number of short- and medium-term strategic priorities were identified and implemented, most notably the elevation of *Safety* as the Group s number one value and strategic priority, which is discussed in the section on *Securing Our Future* below.

#### Vision Statement

During fiscal 2009, Gold Fields developed a simple yet powerful new vision for the Group:

To be the Global Leader in Sustainable Gold Mining.

The purpose was to establish a simple yet compelling new vision that all stakeholders, in particular Gold Fields 47,000 employees around the globe, could understand and buy into, and which could serve as a common and powerful motivational force across the organization.

The new vision statement, which was successfully introduced across the Group during fiscal 2010, reflects Gold Fields desire to be the best at what it does rather than to be the biggest; the imperative to maintain a sustainable business model with particular regard to the social, economic and environmental impacts of the Group and its operations on current and future generations of stakeholders; and the fact that Gold Fields is a focused gold mining company as opposed to a diversified precious or poly metals company.

#### **Overarching Strategic Production Goal**

The Group s overarching strategic production goal is to grow its production from the 3.4 million ounces achieved in fiscal 2009, to approximately five million quality, attributable gold ounces, either in development or production, by the end of 2014. Towards achieving this goal, the South Africa Region is expected to contribute between 2.2 and 2.5 million ounces per annum, with each of the Group s international regions (the West Africa Region, the Australasia Region and the South America Region) contributing approximately one million attributable ounces. The majority of this growth is expected to come from improvements at the current operations, described in the *Sweating Our Assets* section below, and from both near mine and greenfields exploration success which is described in the *Growing Gold Fields* section below.

**Core Values** 

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Supporting the vision statement and directing the strategy are six core values that every employee is expected to embrace and which defines the way in which Gold Fields conducts its business. These values are:

Safety

If we cannot mine safely, we will not mine;

#### Responsibility

We act responsibly and care for the environment, each other, and all of our Stakeholders our employees, our communities and our shareholders;

#### Honesty

We act with fairness, integrity, honesty and transparency;

Respect

We treat each other with trust, respect and dignity;

**Innovation** *We encourage innovation and entrepreneurship*; and

#### Delivery

We do what we say we will do.

#### Sweating Our Assets

Sweating Our Assets is about ensuring that all of the assets in the portfolio are turned to full account safely. It is about ensuring that systems and processes are optimized to deliver what they were designed to deliver; that infrastructure is well maintained to deliver to its full capacity; that mineral resources and reserves are optimally developed and exploited; that costs are well managed, on a notional cash expenditure or NCE basis, to ensure optimal free cash flow; and all our mines deliver the production that they are capable of delivering safely. Sweating Our Assets is also about technological innovation aimed at improving delivery and about doing what we say we will do .

Gold Fields has nine world-class producing mines. Fundamental to the attainment of the Group s vision and overarching strategic goal is for each one of these mines to produce to its real potential, and to maintain stability, predictability and consistency at its steady state level.

The first priority under *Sweating Our Assets* is a substantial improvement in the safety performance of the Group, which is discussed in the section on *Securing Our Future* below.

The second priority under *Sweating Our Assets* relates to the optimal exploitation of the Group s substantial mineral reserve endowment. With attributable mineral reserves of 81 million gold equivalent ounces, it is essential to bring these ounces to account in the most cost effective way and, in doing so, to ensure longevity for each of the mines. Equally important is the need to achieve the required levels of ore reserve development to create mining flexibility, which is a prerequisite for maintaining stability, predictability and consistency. After safety, ore reserve development is the most important strategic priority on all of the mines in the Group.

The third priority under *Sweating Our Assets* is to return the Group s production to its sustainable steady state production level. To this end, a short-term strategic priority was established late in fiscal 2008, for Gold Fields to return to its steady state production of approximately one million ounces of gold per quarter by the third quarter of fiscal 2009, at a Notional Cash Expenditure, or NCE, of approximately \$725 per equivalent ounce (as calculated for management reporting purposes, using an exchange rate of R8.00 to \$1.00). While this goal was not achieved, mainly as a result of the greater than expected impact of safety interventions during the year, the Group did show significantly improved stability, predictability and consistency, with production increasing every quarter for the last three quarters of the year, to 906,000 ounces of attributable production (at an NCE of \$825 per equivalent ounce, using an exchange rate of R8.00 to \$1.00) in the final quarter of fiscal 2009. This was 108,000 ounces or 14% higher than the production low-point of 798,000 ounces reported in quarter one of fiscal 2009. During the fourth quarter of fiscal 2009, guidance for fiscal 2010 was adjusted, to reflect the ongoing impact of safety interventions, to between 925,000 and 950,000 attributable ounces per quarter during fiscal 2010, with the goal of achieving the million ounce per quarter steady state run-rate during fiscal 2011.

Gold Fields believes the necessary steps for achieving the Group s short- and medium-term production targets include:

the continued build-up in production at South Deep which is scheduled to increase production for fiscal 2010 to a total 300,000 ounces, and to build up to an annualized production rate of between 750,000 and 800,000 ounces by the end of 2014;

the stabilization of production at Driefontein, Kloof and Beatrix at a steady state level of approximately 836,000 ounces (6.5 tons per quarter), 707,000 ounces (5.5 tons per quarter) and 424,000 ounces (3.3 tons per quarter) per annum respectively, and maintaining production at these levels for at least the next five years, and close to these levels for the next 10 years;

stabilizing the Tarkwa mine at full production of approximately 750,000 ounces per annum now that the CIL expansion is complete, and to build up to a steady state level of approximately 800,000 ounces over the course of fiscal 2010, as various optimization projects start to deliver further incremental production increases;

increasing gold production at Damang to a steady state level of at least 240,000 ounces per annum by completing the secondary crusher project, and to sustain production at this level by doubling the current life of mine to at least 15 years through an aggressive near mine exploration program which is under way;

returning St. Ives to a steady state production level of between 440,000 and 460,000 ounces per annum during fiscal 2010 as the open pit development improvement project and the underground development improvement project delivers results, and then to build up to at least 500,000 ounces after the new Athena underground mine comes into production during the second quarter of fiscal 2011. An extensive near mine exploration program is under way across the entire St. Ives tenement with the objective to double the life of this mine, at the 500,000 ounces per annum production level, to at least 10 years;

ensuring that Agnew maintains production at a steady state level of between 190,000 and 200,000 ounces per annum by extending the current life of mine to five years through an aggressive near mine exploration program; and

maintaining production at Cerro Corona at the steady state level of approximately 320,000 attributable gold equivalent ounces per annum (based on gold and copper prices of \$1,100 per ounce of gold and \$3.00 per pound of copper), while seeking incremental production growth from the on-surface stockpile of approximately six million tons of oxide ore, as well as through the potential conversion of an additional approximately 30 million tons of ore at depth by securing additional tailings management capacity at the mine.

The fourth priority under *Sweating Our Assets* relates to the proactive management of costs with a view to maintaining a free cash flow margin of at least \$200 per ounce of gold produced, at an assumed long-term baseline gold price of \$950 per ounce, and to maintain the size of the margin commensurate with changes in the gold price received. To this end, Gold Fields has introduced the concept of notional cash expenditure, or NCE, which is defined as operating costs plus additions to property plant and equipment, as well as brownfields exploration. Operating costs is defined as production costs (exclusive of depreciation and amortization) plus corporate expenditure, employment termination costs and accretion expense on provision for environmental rehabilitation. Gold Fields reports NCE on a per equivalent ounce basis. Management considers NCE per ounce to be an important measure as it believes NCE per equivalent ounce provides more information than other commonly used measures, such as total cash costs per equivalent ounce, regarding the real cost to Gold Fields of producing an equivalent ounce of gold, reflecting not only the ongoing costs of production but also the investment cost of maintaining production at steady state levels and bringing mines into production. Management also believes that NCE per equivalent ounce is a useful indication of the cash Gold Fields has available for paying taxes, repaying debt, funding exploration and paying dividends and the like.

NCE is not a U.S. GAAP measure. An investor should not consider NCE or operating costs in isolation or as alternatives to production costs, cash flows from operating activities or any other measure of financial performance presented in accordance with U.S. GAAP. NCE and operating costs as presented in this annual report may not be comparable to other similarly titled measures of performance of other companies. See Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2008 Notional Cash Expenditure .

#### Growing Gold Fields

Growing Gold Fields is about growing the value of the business on a per share basis. It is not about size, or the number of ounces produced, but about the quality of the portfolio and the generation of real value for shareholders, on a per share basis.

In the medium-term, Gold Fields target is to regionalize and grow itself into a truly global gold producer, with a goal of approximately one million gold equivalent ounces per annum either in, or close to, production in each of its West Africa, Australasia and South America Regions, and between 2.2 and 2.5 million ounces in the South Africa Region.

The bulk of this growth is expected to come from improvements at existing mines as described in the *Sweating Our Assets* section above, organic growth resulting from near mine exploration success, and from greenfields exploration success.

While growth through the acquisition of assets is not entirely ruled out, Gold Fields recognizes that value-adding opportunities are not readily available in the current market environment. The company has coined a phrase, *no M&A heroics*, to describe its approach to the acquisition of assets. Against this back-drop, the Company continues to monitor the market for accretive M&A opportunities.

The objective of the growth strategy is not merely to add ounces to the portfolio, but to add ounces that will improve the quality of the asset base and grow value on a NAV/share, EBITDA/share and cash earnings/share basis, and lower the overall NCE of the Group.

Owing to the shortage of large, viable gold projects, Gold Fields has lowered its size selection criteria compared to previous years. To be considered by Gold Fields, generally growth projects must have the potential to meet certain target criteria (which vary depending on other strategic objectives and the quality of the project) described as *The Rule of Twos*: the potential for a minimum of 2,000,000 (formerly 5,000,000) ounces of reserves; production rates in the range of 200,000 (formerly 500,000) gold equivalent ounces per year; and a positive real internal rate of return of at least 5% for producing assets and brownfields projects, and at least 10% for greenfields projects, adjusted for project-specific risks, at a long-term gold price of \$950 per ounce.

Emphasis is also placed on reviewing non-geological aspects of prospective projects, such as social, political, environmental and commercial risks, ensuring that an appropriate risk versus reward tradeoff analysis is factored into the decision. Gold Fields is prepared to consider projects with a higher risk profile if it believes they will offer superior returns. The focus will remain on gold and its by-product metals.

In fiscal 2010, Gold Fields plans to spend about \$40 million on near mine exploration, and about \$80 million on greenfields exploration, the latter largely in the three targeted international regions.

Outside South Africa, the three key regions of West Africa, Australasia and South America have been identified as containing prospective emerging gold and mineral belts with medium to long-term potential where Gold Fields has existing operational capabilities. Gold Fields objective in each of these regions is to develop one million ounce per annum production profiles. In appropriate circumstances, Gold Fields will also consider opportunities outside its key regions of focus.

During fiscal 2009 Gold Fields has made considerable progress with the development of its greenfields exploration pipeline. For the first time since its inception the Company now has four exploration projects in the advanced drilling category. These include the Yanfolila Project in Mali, the Chucapaca Project in Peru the Talas Project in Kyrgyzstan, and the APP Project in Finland. In addition the Company has a large number of exploration projects in earlier stages of development. The objective during fiscal 2010 is to progress all of the advanced stage projects significantly, and to get at least one of the projects to a scoping study level.

For acquisitions of assets or companies outside South Africa, South African exchange control regulations limit Gold Fields ability to provide guarantees or borrow outside South Africa without express approval from the SARB. However, the government has indicated that its intention is to gradually phase out the remaining exchange controls over time and Gold Fields has a good track record in gaining approval for its offshore acquisitions and in growing its international operations.

#### Securing Our Future

Securing Our Future is about ensuring the long-term sustainability of the business. It encompasses safety and Human Resources, as well as a wide range of environmental social and economic parameters that impact on the business today and into the future. It is about acquiring and maintaining a social license to operate in each of the jurisdictions in which the Company operates.

Gold Fields has embraced the concept of sustainable development and incorporated it into its vision statement in order to maintain the long-term sustainability of the business. The Company has developed a Sustainable Development Framework which is closely aligned with the sustainable development principles of the International Council for Minerals and Metals (ICMM), and the Global Compact, both of which Gold Fields is a member of. The Sustainable Development Framework consists of a Sustainable Development Policy, with subsidiary policies, strategies and practice guides in each of the following eight pillars of sustainability, namely: Health and Safety; Human Rights; Stakeholder Engagement; Risk Management; Community; Ethics and Corporate Governance; Environment; and Materials Stewardship.

While the Chief Executive Officer has assumed overall executive responsibility for Sustainable Development within the Group, each one of the Regional Heads is responsible for the implementation of the Framework in their respective regions.

#### Safety

Safety has always been of critical importance to Gold Fields and the renewed commitment to safety introduced during fiscal 2008 has resulted in a reduction in fatalities and a reduction in work-related injuries. During fiscal 2009, 21 workers in South Africa lost their lives compared to 47 during fiscal 2008. Outside South Africa, there were no fatalities in fiscal 2009, compared to 4 in fiscal 2008. The Company will continue with its commitment to safety, making the safe operation of its mines its top strategic priority. Indeed, Gold Fields has publicly stated that, if it cannot mine safely, it will not mine. As part of its commitment, the Company has undertaken the following initiatives:

in South Africa, a Safe Production Management Program was designed and is being rolled out across all the operations. Through a process of review of all historical serious safety incidences and through extensive consultation with numerous parties, the Gold Fields Safe Production Rules have been developed with the fundamental message in the Safe Production Rules being the statement made by the Chief Executive Officer: If we cannot mine safely, we will not mine . The Safe Production Rules have been printed in a booklet format and distributed to all employees. Future exposure to the Safe Production Rules for all new employees and contractors will be through the induction program where the Safe Production Rules will be presented. The rules work hand-in-hand with other initiatives like the Stop, Think, Fix, Verify and then Continue campaign, which has had a tremendous impact on employees safety behavior and awareness;

in February 2008, the South African operational bonus system was changed to provide an equal weighting between production and safety performance. A similar principle has been applied to executive incentive compensation starting in fiscal 2009, with approximately 30% of executive bonus payments, including those of the Chief Executive Officer, now linked to health and safety performance;

full audits for compliance with the Gold Fields Full Compliance Health and Safety Management System (see Directors, Senior Management and Employees Employees Health and Safety Safety ) are now to occur at least once a year, and quarterly or semi-annually until required levels of compliance are achieved;

a comprehensive review of pillar and remnant mining across all operations has been undertaken, resulting in a reduction of planned pillar mining at the Driefontein and Kloof operations in South Africa;

DuPont International conducted a comprehensive safety audit across all of Gold Fields operations, covering all aspects of Gold Fields health and safety management systems, strategies and plans. The project was completed during fiscal 2009 and all recommendations have been included in the Safe Production Management Program; and

a comprehensive review of the status of infrastructure across all of Gold Fields operations was initiated, which identified a number of items in South Africa that required immediate action to improve safety. In fiscal 2009, all South African operations reduced primary development for a period of time to address the status of secondary support.

#### **Regional Delivery Model**

Gold Fields views itself as a truly global mining company, but believes that in some circles it is perceived as predominantly a South African company with a few international operations. In order to change this perception and to improve delivery of its operational and growth aspirations, Gold Fields restructured its operations into four regions during fiscal 2009. These regions are: the South Africa Region; the West Africa Region; the South America Region; and the Australasia Region.

Most of the key regional executives have been appointed and good progress has been made in creating strong, entrepreneurial and appropriately resourced and incentivized management teams in each region. These teams are tasked with running the mines safely and efficiently, as well as driving and being significantly involved in the growth of the business within the region.

The corporate office has relocated to new premises separate from the South African regional office. Management believes this separation will enhance the ability of the corporate office to serve as a brain trust , focused on overall strategy, the allocation of capital and strategic guidance for the regions. The corporate office also establishes and monitors operational standards which apply across the regions in areas such as safety, health and environmental issues, finance and human resources.

#### Hedging

Gold Fields policy remains not to enter into forward sales, derivatives or other hedging arrangements to establish a price in advance for future gold production. Gold Fields believes that investors in Gold Fields shares seek an unlimited exposure to movements in the U.S. dollar gold price and the resulting effect on Gold Fields earnings. However, commodity hedges are sometimes undertaken in one or more of the following circumstances: to protect cash flows at times of significant capital expenditures; for specific debt servicing requirements; and to safeguard the viability of higher-cost operations.

Gold Fields may, from time to time, establish currency and/or interest rate financial instruments to protect underlying cash flows or to take advantage of potential favorable currency movements.

#### Specific Strategic Goals and Objectives for fiscal 2010

The specific strategic goals and objectives for fiscal 2010 flows from the strategy and were designed to consolidate the operational gains made during fiscal 2009. The specific strategic goals and objectives for fiscal 2010 are:

- to further enhance the efforts on health and safety. While the ultimate goal remains the total elimination of all serious and fatal accidents on all operations, during 2010 the aim is to achieve at least a 33% improvement in all safety measures in the South Africa Region and at least 20% in the International Regions;
- 2) to open up ore bodies by stepping up development. This has become particularly urgent in South Africa where the focus on secondary support over the past year has seen resources diverted away from development. As a result, flexibility has been affected, as was expected. The target is to have at least 24-months of opened-up reserves at each of the long-life shafts in the Group. Improved flexibility will also support the achievement of the targeted production run-rate, on a sustainable basis.
- 3) to achieve greater predictability, reliability and consistency in quarterly production while working towards the goal of producing at a run-rate of between 925,000 and 950,000 ounces of gold per quarter during fiscal 2010, and moving closer to the one million ounce of production per quarter target within the following 12 months;
- 4) to build momentum at South Deep by increasing production to an average of approximately 300,000 ounces for fiscal 2010, while advancing the Twin Shaft infrastructure for completion in fiscal 2012, and focusing on the development of the ore body below 95-level, which will facilitate the ultimate build-up to full production of between 750,000 and 800,000 ounces per annum by December 2014;
- 5) to increase the skills levels across the organization by attracting and retaining key personnel through a more aggressive recruitment program, as well as by further enhancing education and training initiatives;
- 6) to improve the Group s ability to develop and deliver capital projects within scope, on budget and on time by developing a strong project culture;
- 7) to further improve performance in the field of sustainable development and, in particular, to improve environmental performance;
- 8) to further entrench the regionalization strategy by bolstering the executive teams in each of the regions, in order to enhance operational delivery and to drive the growth strategy;
- 9) to increase greenfields and near mine exploration to U.S.\$80 million and U.S.\$40 million, respectively;
- 10) to deliver at least one of the advanced-stage exploration projects to scoping study stage;
- 11) to complete the Uranium feasibility study in South Africa by early in 2010; and

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12) to complete the feasibility study of the new Athena underground mine at St. Ives in Australia, initial construction of which has commenced.

#### **Reserves of Gold Fields as of June 30, 2009**

#### Methodology

While there are some differences between the definition of the South African Code for Reporting of Mineral Resources and Mineral Reserves, or SAMREC Code, and that of the Securities and Exchange Commission s, or SEC s, industry guide number 7, only reserves at each of Gold Fields operations and exploration projects as of June 30, 2009 which qualify as reserves for purposes of the SEC s industry guide number 7 are presented in the table below. See Glossary of Mining Terms. In accordance with the requirements imposed by the JSE, Gold Fields reports its reserves using the terms and definitions of the SAMREC Code. Mineral or ore reserves, as defined under the SAMREC Code, are divided into categories of proved and probable reserves and are expressed in terms of tons to be processed at mill feed head grades, allowing for estimated mining dilution, recovery and other factors.

4	2
4	2

Gold Fields reports reserves using cut-off grades (international operations and South Deep) and pay limits (South Africa excluding South Deep) to ensure the reserves realistically reflect both the cost structures and required margins relevant to each mining operation. Cut-off grade is the grade that distinguishes the material within an orebody that is to be extracted and treated from the remaining material. The pay limit is the grade at which an orebody can be mined without profit or loss calculated using an appropriate gold price and working costs, plus modifying factors. Modifying factors used to calculate the pay limit grades include adjustments to mill delivered amounts, due to dilution incurred in the course of mining. Modifying factors applied in estimating reserves are primarily historical, but commonly incorporate adjustments for planned operational improvements such as those described below under Description of Mining Business Productivity Initiatives. Tonnage and grade may include some mineralization below the selected pay limit and cut-off grade to ensure that the reserve comprises blocks of adequate size and continuity. Reserves also take into account cost levels at each operation and are supported by mine plans.

The estimation of reserves at the South African underground operations is based on surface drilling, underground drilling, surface three-dimensional reflection seismics, orebody facies modeling, structural modeling, underground mapping channel sampling and geostatistical estimation. The reefs are initially explored by drilling from the surface on an approximately 500-meter to 2,000-meter grid. Once underground access is available, drilling is undertaken on an approximately 30-meter by 60-meter grid. Underground channel sampling perpendicular to the reef is undertaken at three-meter intervals in development areas and five-meter intervals at stope faces.

The following sets out the reserve estimation methodologies for the different categories of reserves at the underground operations of each of the South African mines.

#### Driefontein

	Sample Spacing Range	Maximum Distance Data is
	Min/Max	Projected
Reserve Classification	(meters)	(meters)
Proved	3 to 180	110
Probable (AI) <sup>(1)</sup>	3 to 1,140	570
Probable (BI) <sup>(1)</sup>	3 to 2,840	1,420

Note:

#### (1) AI is above infrastructure; BI is below infrastructure.

For proved reserves, the orebody is opened up and sampled on a three-meter spacing for development (such as raises), and a five meter grid for stoping, together with underground borehole spacings ranging from tens to hundreds of meters. Blocks classified as proved are therefore generally adjacent to closely spaced sampling and generally pierced by a relatively dense irregular pattern of boreholes. Estimation is constrained within both geologically homogenous structural and facies zones, and is generally derived from either ordinary or simple kriged small-scale grids, ranging from 10-meter to 20-meter block sizes.

For above infrastructure probable reserves, the estimates are founded on significant numbers of samples on a three-meter spacing for development, and a five-meter grid for stoping bordering these areas. In addition underground borehole spacings ranging from tens to hundreds of meters are used together with surface boreholes and seismic surveys. Blocks classified as probable (AI) are generally adjacent to blocks classified as proved. Estimation is constrained within homogenous structural and facies zones, and is generally derived from either ordinary or simple kriged medium- to macro-scale-sized grids ranging from 40-meter to 420-meter sizes, or through declustered averaging or Sichel t techniques. For planning purposes, these blocks are further evaluated to facilitate the selection of blocks above the pay limit.

For below infrastructure probable reserves, the estimates access the significant numbers of samples on a three-meter spacing for development, and a five-meter grid for stoping above these areas. In addition underground borehole spacings ranging from tens to hundreds of meters are used together with surface boreholes and seismic surveys. Blocks classified as probable (BI) are generally downdip of blocks classified as proved or probable (AI). Estimation is constrained within homogenous structural and facies zones, and is generally derived from either ordinary or simple kriged medium- to macro-scale-sized grids ranging from 40 meters to 420 meter sizes, or through declustered averaging or Sichel t techniques. For planning purposes, these blocks are further evaluated to facilitate the selection of blocks above the pay limit.

#### Kloof

	Sample Spacing Range	Maximum Distance Data is
	Min/Max	Projected
Reserve Classification	(meters)	(meters)
Proved	3 to 150	150
Probable (AI) <sup>(1)</sup>	3 to 718	360
Probable (BI) <sup>(1)</sup>	3 to 1,390	890

Note:

(1) AI is above infrastructure; BI is below infrastructure. Estimations for proved reserves are made on the same basis as at Driefontein.

Estimations for above infrastructure probable reserves are made on the same basis as at Driefontein, but with medium-sized kriged grids starting from 40 meters to macro blocks of 400 meters. For planning purposes, these blocks are further evaluated to facilitate the selection of blocks above the pay limit.

Estimations for below infrastructure probable reserves are made on the same basis as at Driefontein, but with medium-sized kriged grids starting from 40 meters to macro blocks of 400 meters. The distinction between estimation techniques for above infrastructure and below infrastructure probable reserves is the same as at Driefontein. For planning purposes, these blocks are further evaluated to facilitate the selection of blocks above the pay limit.

#### Beatrix

	Sample Spacing Range	Maximum Distance Data is
	Min/Max	Projected
Reserve Classification	(meters)	(meters)
Proved	3 to 120	120
Probable (AI) <sup>(1)</sup>	3 to 820	700
Probable (BI) <sup>(1)</sup>	3 to 580	740

Note:

(1) AI is above infrastructure; BI is below infrastructure.

Estimations for proved reserves are made on the same basis as at Driefontein but with kriging blocks ranging from 16 meters to 32 meters.

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Estimations for above infrastructure probable reserves are made on the same basis as at Driefontein but with medium-sized kriged blocks of 32 meters, and macro geological zone estimates being made through declustered averaging or Sichel t techniques or macro-scale-sized kriged grids of up to 128 meters. For planning purposes these blocks are further evaluated to facilitate the selection of blocks above the pay limit.

Estimations for below infrastructure probable reserves are made on the same basis as at Driefontein but with medium-sized kriged blocks being 32 meters, to macro geological zone estimates through declustered averaging or Sichel t techniques or macro scale sized kriged grids of up to 128 meters. The distinction between estimation techniques for above infrastructure and below infrastructure probable reserves is the same as at Driefontein. For planning purposes, these blocks are further evaluated to facilitate the selection of blocks above the pay limit.

#### South Deep

	Sample Spacing Range	Maximum Distance Data is
	Min/Max	Projected
Reserve Classification	(meters)	(meters)
Proved	0 to 100	220
Probable (AI) <sup>(1)</sup>	100 to 180	450
Probable (BI) <sup>(1)</sup>	>180	1,200

Note:

#### (1) AI is above infrastructure; BI is below infrastructure.

For proved reserves, the orebody must be fully destressed and drilling is planned at an approximate 30-meter by 30-meter grid-spacing for development (such as access ramps and drives), and similarly for stoping. Estimation is constrained within both geologically homogenous structural and facies zones, and is generally derived from either ordinary or simple kriged small-scale grids.

For above infrastructure probable reserves, the estimates access a significant number of samples on spacing greater than the spacing for development and stoping bordering these areas. In addition, borehole spacings ranging from tens to hundreds of meters are used in conjunction with 3D seismic survey results that confirm certain structural elevations and surfaces. Reserves classified as probable above infrastructure are generally adjacent to those classified as proven. Estimation is constrained within homogenous structural and facies zones, and is generally derived from simple and ordinary kriging and through declustered averaging techniques.

The below infrastructure probable reserves are based on the December 2005 pre-acquisition reserve figures as defined by an Independent Review Panel acting on behalf of the Barrick Gold Western Areas Joint Venture between BGSA (formerly, Placer Dome South Africa Proprietary Limited) and Western Areas Limited. See Risk Factors Gold Fields has not independently confirmed the reliability of the South Deep, BGSA or Western Areas information for the period prior to their respective acquisitions by Gold Fields as included in this annual report.

The primary assumptions of continuity of the geologically homogenous zones are driven by the geological model, which is updated when new information arises. Any changes to the model are subject to peer, internal technical corporate consultant and independent consultant review. Historically, mining at South African deep-level gold mines has shown significant geological continuity, so that new mines were started based on limited surface borehole information. Customarily, geological models are primarily based on the definition of different facies within each conglomerate horizon. These facies are extrapolated into new, undeveloped areas taking into account any surface borehole data in those areas. Normally these facies are continuous, supported by extensive historical sample databases, and can be incorporated in the macro kriging of large blocks.

#### Ghana

For the Tarkwa open pit operation, estimation of reserves is based on a combination of an initial 100- or 200-meter grid of diamond drilling and in certain areas a 12.5-meter to 25.0-meter grid of reverse circulation drilling. For the Damang open pit operation, estimation of reserves is based on a 20-meter to 80-meter grid of diamond drilling and in certain areas reverse circulation drilling on an eight-meter by five-meter drill grid.

#### Australia

At the Australian operations, the estimation of reserves for both underground and open pit operations is based on exploration, sampling and testing information gathered through appropriate techniques, primarily from boreholes and mine development. The locations of sample points are spaced closely enough to deduce or confirm geological and grade continuity. Generally, drilling is undertaken on grids, which range between 20 meters by 20 meters to 40 meters by 40 meters, although this may vary depending on the continuity of the orebody. Due to the variety and diversity of resources at St. Ives and Agnew, sample spacing may also vary depending on each particular ore type.

#### Peru

For the Cerro Corona operation, estimation is based on diamond drill and reverse circulation holes. The spacing of holes at Cerro Corona is generally around 50 meters, with some areas approximating a 25-meter grid.

#### **Reserve Statement**

As of June 30, 2009, Gold Fields had aggregate attributable proved and probable gold reserves of approximately 78.9 million ounces as set forth in the following table.

#### Gold ore reserve statement as of June 30, 2009<sup>(1)</sup>

	Tons (million)	Proved reserves Head Grade (g/t)	Gold ( 000 oz)	Tons (million)	Probable reserves Head Grade (g/t)	Gold ( 000 oz)	Tons (million)	Total reserves Head Grade (g/t)	Gold ( 000 oz)	Attributable gold production in the 12 months ended June 30, 2009 <sup>(2)</sup> ( 000 oz)
Underground ( UG )										
South Africa	17.6	7.4	4.157	48.0	9.0	12 022	65.6	05	17.000	761
Driefontein (UG) (total) Above infrastructure <sup>(3)</sup>	17.6	7.4	4,157	48.0 20.6	9.0	13,832 5,735	38.2	8.5 8.1	17,989 9,892	761
Below infrastructure <sup>(3)</sup>	17.0	/.4	4,137	20.0	9.2	8.097	27.4	9.2	9,892 8.097	701
Kloof (UG) (total)	19.2	7.6	4,704	21.4	9.2 7.8	5,477	41.0	9.2 7.7	10,180	621
Above infrastructure <sup>(3)</sup>	19.2	7.6	4,704	18.4	7.8	4,609	37.6	7.7	9.313	621
Below infrastructure <sup>(3)</sup>	19.2	7.0	4,704	3.4	8.0	4,009	3.4	8.0	868	021
South Deep (UG) (total) <sup>(6)</sup>	15.2	5.9	2,906	134.2	6.2	26,580	149.4	6.1	29,486	175
Above infrastructure <sup>(3)(6)</sup>	15.2	5.9	2,906	67.6	6.6	14,265	82.8	6.5	17,171	175
Below infrastructure <sup>(3)(6)</sup>	10.2	5.7	2,700	66.6	5.8	12,315	66.6	5.8	12,315	115
Beatrix (UG) (total)	13.9	4.7	2,087	27.1	5.0	4,361	41.0	4.9	6,448	391
Above infrastructure $^{(3)}$	13.9	4.7	2,087	24.7	5.0	3,990	38.6	4.9	6,077	391
Below infrastructure <sup>(3)</sup>			_,	2.4	4.8	371	2.4	4.8	371	
Australia										
St. Ives	1.4	5.3	230	6.4	4.6	943	7.7	4.7	1,173	181
Agnew	0.6	8.9	186	1.9	8.7	526	2.5	8.7	712	192
Total Underground	67.9	6.5	14,270	239.4	6.7	51,719	307.2	6.7	65,988	2,322
Surface (Rock Dumps)										
Driefontein				9.6	0.7	213	9.6	0.7	213	69
Kloof				12.2	0.9	341	12.2	0.9	341	22
South Deep <sup>(6)</sup>										

	Tons (million)	Proved reserves Head Grade (g/t)	Gold ( 000 oz)	Tons (million)	Probable reserves Head Grade (g/t)	Gold ( 000 oz)	Tons (million)	Total reserves Head Grade (g/t)	Gold ( 000 oz)	Attributable gold production in the 12 months ended June 30, 2009 <sup>(2)</sup> ( 000 oz)
Surface (Production Stockpile) Ghana										
Tarkwa		~ <b>-</b>								(4)
	3.1	0.7	72				3.1	0.7	72	
Damang				3.6	1.1	131	3.6	1.1	131	(4)
Australia										
St. Ives	4.1	1.1	139				4.1	1.1	139	(4)
Agnew	0.3	0.9	10				0.3	0.9	10	(4)
Peru										
Cerro Corona	1.0	1.2	39				1.0	1.2	39	(4)
Surface (Open Pit)										
Ghana										
Tarkwa	106.4	1.3	4,423	82.4	1.2	3,096	188.8	1.2	7,519	435
Damang <sup>(5)</sup>	2.5	1.8	147	19.6	1.6	1,016	22.0	1.7	1,163	142
Australia										
St. Ives <sup>(5)</sup>	0.5	1.8	30	17.8	1.7	980	18.3	1.7	1,010	247
Agnew <sup>(5)</sup>										
Peru										
Cerro Corona	17.3	1.1	610	53.8	0.9	1,628	71.1	1.0	2,238	85
Total Surface	135.2	1.3	5,470	199.0	1.2	7,405	334.1	1.2	12,875	998
Grand Total	203.2	3.0	19,740	438.3	4.2	59,122	641.4	3.8	78,863	3,322
Totals by Mine					,					
Driefontein	17.6	7.4	4,157	57.6	7.6	14,045	75.2	7.5	18,202	830
Kloof	19.2	7.6	4,704	34.0	5.3	5,818	53.2	6.2	10,521	643
South Deep <sup>(6)</sup>	15.2	5.9	2,906	134.2	6.2	26,580	149.4	6.1	29,486	175
Beatrix	13.9	4.7	2,087	27.1	5.0	4,361	41.0	4.9	6,448	391
Tarkwa	109.5	1.3	4,495	82.4	1.2	3,096	192.0	1.2	7,591	435
Damang St. Lucz	2.5	1.8	147	23.2	1.5	1,147	25.7	1.6	1,294	142
St. Ives	6.0 1.0	2.1	399	24.1	2.5	1,922	30.1 2.9	2.4	2,322 722	428 192
Agnew Cerro Corona	1.0	6.3 1.1	196 649	1.9 53.8	8.7 0.9	526	72.1	7.8 1.0	2,277	85
Grand Total	<b>203.2</b>	<b>3.0</b>	049 <b>19,740</b>	<b>438.3</b>	<b>4.2</b>	1,628 <b>59,122</b>	<b>641.4</b>	<b>3.8</b>	78,863	3,322
Granu Totai	203.2	5.0	19,740	430.3	4.2	39,122	041.4	3.8	10,003	3,344

Notes:

(1) (a) Quoted as mill delivered metric tons and Run of Mine, or RoM, grades, inclusive of all mining dilutions and gold losses except mill recovery. Metallurgical recovery factors have not been applied to the reserve figures. The approximate metallurgical factors are as follows: (1) Driefontein 97.0%; (2) Kloof 97.6%; (3) Beatrix 96.1%; (4) South Deep 97.3%; (5) Tarkwa 97.0% for milling, 64.0% for heap leach; (6) Damang 92.5% to 93.5%; (7) St. Ives 85% to 95% for milling, 57% to 75% for heap leach; (8) Agnew 92.6%; and (9) Cerro Corona 55% to 75% for gold. The metallurgical recovery is the ratio, expressed as a percentage, of the mass of the specific mineral product actually recovered from ore treated at the plant to its total specific mineral content before treatment. The South African operations have a fairly consistent metallurgical recovery, while the recoveries on the International operations vary according to the mix of the source material and method of treatment.

- For Driefontein, Kloof and Beatrix, a gold price of Rand 230,000 per kilogram (\$800 per ounce at an exchange rate of Rand 8.95 per (b) \$1.00) was applied in calculating ore reserve figures. For the Tarkwa and Damang operations, ore reserve figures are based on an optimized pit at a gold price of \$800 per ounce. For the Australian operations, ore reserve figures are based on a gold price of A\$1,000 per ounce (\$800 per ounce at an exchange rate of A\$1.25 per \$1.00). Open pit ore reserves at the Australian operations are similarly based on optimized pits. The gold price used for reserves is the approximate three-year trailing average, calculated on a monthly basis, of the London afternoon fixing price of gold for both the U.S.\$ and A\$. The gold price in Rand used for South African reserves represents a two-year trailing average. These prices are approximately 53% higher in South African Rand terms, 23% higher in U.S. dollar terms and 33% higher in Australian dollar terms than the prices used for the June 30, 2008 declaration and reflect the effect of a consistently increasing gold price on the two- or three-year historical average. Gold Fields is still evaluating the overall reserve position at South Deep following its acquisition of the mine during fiscal 2007 and accordingly has included the reserves for the Upper Elsburg reefs in the Current Mine and in Phase 1 north of the Wrench Fault and also Phase 1 south of the Wrench Fault (above mine infrastructure) as remodeled, re-evaluated, designed and scheduled in accordance with Gold Fields standards and procedures. The remainder of the reserves are as declared by the Barrick Gold Western Areas Joint Venture (now, the South Deep Joint Venture) as at December 31, 2005, before its acquisition by Gold Fields. These historical reserves were calculated using a Rand price of 87,193 per kilogram (\$400 per ounce at an exchange rate of Rand 6.78 per \$1.00). For the Cerro Corona gold reserves, the optimized pit is based on a gold price of \$800 per ounce and a copper price of \$1.75 per pound, which, due to the nature of the deposit and the importance of net smelter returns, need to be considered together.
- (c) For the South African operations, mine dilution relates to the difference between the mill tonnage and the stope face tonnage and includes other sources stoping (which is waste that is broken on the mining horizon, other than on the stope face), development to mill and tonnage discrepancy (which is the difference between the tonnage expected on the basis of the mine s measuring methods and the tonnage accounted for by the plant). For the International operations, dilution relates to unplanned waste and/or low-grade material being mined and delivered to the mill. Ranges are given for those operations that have multiple orebody styles and mining methodologies. The mine dilution factors are as follows: (i) Driefontein 23%; (ii) Kloof 24%; (iii) Beatrix 23%; (iv) South Deep 6%; (v) Tarkwa 11%; (vi) Damang 15% for hydrothermal and 20 cm for each of the hanging wall and footwall for paleoplacer; (vii) St. Ives 1% to 13% (open pits) and 5% to 20% (underground); (viii) Agnew 13% to 33%; and (ix) Cerro Corona 0%.
- (d) The mining recovery factor relates to the proportion or percentage of ore mined from the defined orebody at the gold price used for the declaration of reserves. This percentage will vary from mining area to mining area and reflects planned and scheduled reserves against total potentially available reserves (at the gold price used for the declaration of reserves), with all modifying factors, mining constraints and pillar discounts applied. The mining recovery factors are as follows: (i) Driefontein 81%; (ii) Kloof 78%; (iii) Beatrix 53%; (iv) Tarkwa 98%; (v) Damang 100%; (vi) St. Ives 95% to 99% (open pits) and 75% to 100% (underground); and (vii) Agnew 100%. The methodology of this factor is currently being reviewed across the operations, and South Deep continues to be excluded from this summary pending completion of the review of the original acquisition model.
- (e) The pay limit (South African operations) and cut-off grade (International operations) vary per shaft, open pit or underground mine, depending on the respective costs, depletion schedule, ore type and dilution. The following are the average or range of values applied in the planning process: (i) Driefontein 1170 cm.g/t; (ii) Kloof 1310 cm.g/t; (iii) Beatrix 840 cm.g/t; (iv) South Deep 4.0g/t (at South Deep, the values are expressed in g/t, as focus is on tonnage rather than square meters, and they are only applicable to the area remodeled by Gold Fields); (v) Tarkwa 0.30 g/t for heap leach and 0.43 g/t for mill feed; (vi) Damang 0.62 g/t for fresh ore and 0.43 g/t for oxide ore; (vii) St. Ives 0.41 g/t to 0.81 g/t for heap leach, 0.41 g/t to 0.81 g/t for mill feed open pit, and 2.2 g/t to 4.9 g/t for mill feed underground; (viii) Agnew 0.28 g/t for mill feed stockpiles, and 3.6 to 4.6 g/t for mill feed underground; and (ix) Cerro Corona \$10.92 net smelter return (combined copper and gold).
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- (f) Totals may not sum due to rounding. Where this occurs it is not deemed significant.
- (2) Actual gold produced after metallurgical recovery.
- (3) Above infrastructure reserves relate to mineralization which is located at a level at which an operation currently has infrastructure sufficient to allow mining operations to occur. Below infrastructure reserves relate to mineralization which is located at a level at which an operation currently does not have infrastructure sufficient to allow mining operations to occur, but where the operation has made plans to install additional infrastructure in the future which will allow mining to occur at that level. The current studies for below infrastructure reserves at Driefontein, which contemplate accessing the area via a sub-vertical shaft complex, are currently being reviewed versus multiple declines, which may materially impact the below infrastructure reserve ounces at this operation.
- (4) Includes some gold produced from stockpile material, which cannot be separately measured.
- (5) Excludes inferred material within the pit design.
- (6) See Risk Factors Gold Fields has not independently confirmed the reliability of the South Deep, BGSA or Western Areas information for the period prior to their respective acquisitions by Gold Fields included in this annual report and note (1)(b) above.
  The following table sets forth the proved and probable copper reserves of the Cerro Corona mine as of June 30, 2009 that are attributable to Gold

# Copper ore reserve statement as of June 30, 2009<sup>(1)(2)</sup>

	Tons (million)	Proved Reserves Grade Cu (%)	Cu (million lbs)	Tons (million)	Probable Reserves Grade Cu (%)	Cu (million lbs)	Tons (million)	Total Reserves Grade Cu (%)	Cu (million lbs)	Attributable copper production in the 12 months ended June 30, 2009 (million lbs)
Surface (Open Pit) Peru			,			, í			, í	
Cerro Corona	18.3	0.6	226	53.8	0.5	571	72.1	0.5	797	43.1

Notes:

Fields.

- (1) Metallurgical recovery factors have not been applied to the reserve figures. The approximate metallurgical factor for copper at Cerro Corona is 58% to 89%.
- (2) For the copper reserves, the optimized pit is based on a gold price of \$800 per ounce and a copper price of \$1.75 per pound, which, due to the nature of the deposit, need to be considered together.

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#### Gold and copper price sensitivity

The amount of gold mineralization that Gold Fields can economically extract, and therefore can classify as reserves, is very sensitive to fluctuations in the price of gold. At gold prices significantly different than the gold price of \$800 per ounce used to estimate Gold Fields attributable gold reserves (excluding copper) of 78.9 million ounces of gold as of June 30, 2009 listed above, Gold Fields operations would have had materially different reserves. Based on the same methodology and assumptions as were used to estimate Gold Fields reserves as of June 30, 2009 listed above, but applying different gold prices that are 10% above and below the \$800 per ounce gold price used to estimate Gold Fields attributable reserves, the attributable gold reserves of Gold Fields operations, **excluding South Deep**, would have been as follows:

	\$720/oz	\$800/oz	\$880/oz
		( 000 oz)	1
Driefontein <sup>(1)</sup>	17,293	18,202	18,692
Kloof <sup>(1)</sup>	9,461	10,521	10,992
Beatrix <sup>(1)</sup>	5,588	6,448	7,275
Tarkwa	6,611	7,591	8,576
Damang	1,095	1,294	1,415
St. Ives	2,188	2,322	2,534
Agnew	626	722	977
Cerro Corona <sup>(2)</sup>	2,277	2,277	2,277

Notes:

- (1) South African operations reserves include run-of-mine ore stockpiles and low-grade strategic stockpiles. Gold Fields is still evaluating the overall reserve position at South Deep following its acquisition of the mine during fiscal 2007. It has included the Phase 2 reserves for South Deep declared by the Placer Dome Western Areas Limited Joint Venture as at December 31, 2005, calculated using a U.S. dollar price of \$400 per ounce and has updated to June 30, 2009 for remodeling of the Upper Elsburg reefs in the Current Mine, Phase 1 north of the Wrench Fault and also Phase 1 south of the Wrench Fault (above mine infrastructure). Therefore, it is not feasible to present a comparable sensitivity analysis for South Deep. See Risk Factors Gold Fields has not independently confirmed the reliability of the South Deep, BGSA or Western Areas information for the period prior to their respective acquisitions by Gold Fields included in this annual report.
- (2) Under the current tailings dam design at Cerro Corona, reserves would not respond to an upward movement of the gold price because of current capacity constraints at the tailings storage facility for the Cerro Corona mine. A decrease of 10% in gold prices is insufficient to affect the level of gold reserves.

The London afternoon fixing price for gold on November 30, 2009 was U.S.\$1,176 per ounce. Gold Fields attributable gold reserves decreased from 80.5 million ounces at June 30, 2008 to 78.9 million ounces at June 30, 2009, primarily due to mining depletion.

The amount of copper mineralization that Gold Fields can economically extract, and therefore can classify as reserves, could be sensitive to fluctuations in the price of copper. However, under the current tailings dam design at Cerro Corona, reserves would not respond to an upward movement of the copper price because of current capacity constraints at the tailings storage facility for Cerro Corona and a decrease of 10% in copper prices is insufficient to affect the level of copper reserves.

The London Metal Exchange, or LME, cash buyer price for copper on November 30, 2009 was U.S.\$6,815 per ton.

Gold Fields methodology for determining its reserves is subject to change and is based upon estimates and assumptions made by management regarding a number of factors as noted above under Methodology. Accordingly, the sensitivity analysis of Gold Fields reserves provided above should not be relied upon as

indicative of what the estimate of Gold Fields reserves would actually be or have been at the gold or copper prices indicated, or at any other gold or copper price, nor should it be relied upon as a basis for estimating Gold Fields ore reserves based on the current gold or copper price or what Gold Fields reserves will be at any time in the future. See Risk Factors Gold Fields reserves are estimates based on a number of assumptions, any changes to which may require Gold Fields to lower its estimated reserves.

#### Geology

The majority of Gold Fields gold production is derived from deep-level underground gold mines located along the northern and western margins of the Witwatersrand Basin in South Africa. These properties include the Driefontein operation, the Kloof operation, the Beatrix operation and the South Deep operation. These mines are typical of the many Witwatersrand Basin operations, which have been the primary contributors to South Africa s production of a significant portion of the world s recorded gold output since 1886.

The Witwatersrand Basin comprises a 6,000-meter vertical thickness of sedimentary rocks, extending laterally for some 350 kilometers northeast to southwest by some 1200 kilometers northwest to southeast, generally dipping at shallow angles toward the center of the basin. The basin outcrops at its northern extent near Johannesburg but to the west, south and east it is overlaid by up to 4,000 meters of volcanic and sedimentary rocks. The Witwatersrand Basin is Archaean in age, meaning the sedimentary rocks are of the order of 2.8 billion years old.

Gold mineralization occurs within laterally extensive quartz pebble conglomerate horizons called reefs, which are developed above unconformable surfaces near the basin margin. As a result of faulting and primary controls on mineralization processes, the gold fields are not continuous and are characterized by the presence or dominance of different reef units. The reefs are generally less than two meters in thickness and are widely considered to represent laterally extensive braided fluvial deposits or unconfined flow deposits, which formed along the flanks of alluvial fan systems around the edge of an inland sea. Dykes and sills of diabase or dolerite composition are developed within the Witwatersrand Basin and are associated with several intrusive and extrusive events.

The gold generally occurs in native form, often associated with pyrite, carbon and uranium. Pyrite and gold within the reefs display a variety of forms, some obviously indicative of detrital transport within the depositional system and others suggesting crystallization within the reef itself.

The most fundamental controls of gold distribution are the primary sedimentary features such as facies variation and channel directions. Consequently, the modeling of sedimentary features within the reefs and the correlation of payable grades within certain facies is key to in situ reserve estimation as well as effective operational mine planning and grade control.

For a discussion of the geological features present at the Tarkwa, Damang, St. Ives, Agnew and the Cerro Corona mines, see the geology discussion contained in the description of each of those mines found below under Gold Fields Mining Operations Ghana Operations Tarkwa Mine, Gold Fields Mining Operations Ghana Operations Damang Mine, Gold Fields Mining Operations Australia Operations Agnew , Gold Fields Mining Operations Cerro Corona.

#### **Description of Mining Business**

The discussion below provides a general overview of the mining business as it applies to Gold Fields.

#### Exploration

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

### Mining

Gold Fields currently mines only gold, with copper and silver as by-products. The mining process can be divided into two principal activities: (1) developing access to the orebody; and (2) extracting the orebody once accessed. These two processes apply to both surface and underground mines.

# **Underground Mining**

#### Developing Access to the Orebody

For Gold Fields South African underground mines, access to orebodies is provided through vertical, inclined and declined shaft systems. If additional depth is required to fully exploit the reef, and it is economically feasible, then secondary (sub-vertical) or tertiary shafts are sunk from the underground levels. 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. South African mine layouts generally follow a linear, crisscross pattern, while Australian mines have more varied layouts and typically use a spiral-shaped decline layout to descend alongside the orebody.

### Extracting the Orebody

Once an orebody has been accessed, drilling, blasting, supporting and cleaning activities are carried out on a daily basis. At Driefontein, Kloof and Beatrix, the broken ore is scraped into and down gullies to ore passes, where it is channeled to the crosscut below. The ore is then hauled by rail to shaft ore passes, where it is tipped into loading stations for hoisting to the surface. At South Deep, now a fully mechanized mine, ore is hauled by trucks along decline corridors to ore pass systems which connect to corridor crosscuts below. The ore is then transported by rail and tipped into loading stations for hoisting to the surface. At the Australian operations, the broken ore is loaded straight from the stope face into trucks, using mechanical loaders, and hauled to the surface via the decline. Mining methods employed at Gold Fields operations include longwall mining, closely spaced dip pillar mining and conventional scattered mining. In Australia, extraction methods are highly mechanized, with mechanized equipment used within the declines and at the stope for drilling, loading and hauling.

### **Open Pit Mining**

#### Developing Access to the Orebody

In open pit mining, access to the ore is achieved by stripping the overburden in benches of fixed height to expose the ore below. This is most typically achieved by drilling and blasting an area, loading the broken rock with excavators into dump trucks and hauling the rock and/or soil to dumps.

#### Extracting the Orebody

Extraction of the orebody in open pit mining involves the same activity as in stripping the overburden. Lines are established demarcating ore from waste material and the rock is then drilled and blasted. The ore is loaded into dump trucks and hauled to the crusher or stockpile, while the waste is hauled to waste rock dumps.

### Rock Dump and Production Stockpile Mining

Gold Fields mines surface rock dumps and production stockpiles using mechanized earth-moving equipment.

### Mine Planning and Management

Operational and planning management on the mines receives support from corporate management and centralized support functions. The current philosophy is one of top-down/bottom-up management, with the non-financial operational objectives at each mine defined by the personnel at the mine based on parameters, objectives and guidelines provided by Gold Fields head office. This is based on the premise that the people on the ground have the best understanding of what is realistically achievable.

Each operation compiles a detailed one-year operational plan that rolls into a life of mine, or LoM, plan prior to the commencement of each fiscal year. The plans are based on financial parameters determined by the Gold Fields Executive Committee. See Directors, Senior Management and Employees Executive Committee. The operational plan is presented to the Gold Fields Executive Committee, which takes it to the Board for approval before the commencement of each fiscal year. The planning process is sequential and is based upon geological models, evaluation models, mine design, depletion schedules and, ultimately, financial analysis. Capital planning is formalized pursuant to Gold Fields capital spending planning process. Projects are categorized in terms of total expenditure, and all projects involving amounts exceeding Rand 100 million (South Africa), A\$15 million (Australia) and U.S.\$15 million (Ghana/Peru) are submitted to the Gold Fields Board for approval. Material changes to the plans have to be referred back to the Executive Committee and the Board.

The South African operations have implemented an integrated electronic reserve and resource information system, called IRRIS, to enhance LoM planning capabilities. This system provides a common planning platform to facilitate quicker, more flexible and more accurate short- and long-term planning and more timely identification of production shortfalls. Short-term planning on the operations is conducted monthly and aligned with the operational plan. Financial and economic parameters for the LoM and the operational plan are issued to the operations from the Executive Committee and relevant survey and evaluation factors are determined in accordance with Gold Fields guidelines. Significant changes in the LoM plans may occur from year to year as a result of mining experience, new ore discoveries, changes in the ore reserve estimates, changes in mining methods and rates, process changes, investment in new equipment and technology, input costs and gold prices.

#### Processing

Gold Fields currently has 15 gold processing facilities (8 in South Africa, 3 in Ghana, 3 in Australia and 1 in Peru) which treat ore to extract gold and, in the case of Cerro Corona, copper. A typical processing plant circuit includes two phases: comminution and treatment.

#### 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, tube, ball and semi-autogenous grinding, or SAG, mills. Most of Gold Fields milling circuits utilize SAG milling where the ore itself and steel balls are used as the primary grinding media. Through the comminution process, ore is ground to a minimum size before proceeding to the treatment phase.

#### Treatment

In most of Gold Fields metallurgical plants, gold is extracted into a leach solution by leaching with cyanide in agitated tanks. Gold is then extracted onto activated carbon from the solution using either the CIL or CIP process. The activated carbon is then eluted with gold recovered by electrowinning.

Gold Fields has two active heap leach operations. In the heap leach process, crushed ore is stacked on impervious leach pads and a cyanide leaching solution is sprayed on the pile. The solution percolates through the heap and dissolves liberated gold. A system of underdrains removes the gold-containing solution, which is then passed through columns containing activated carbon. The loaded carbon is then eluted and the gold recovered by electrowinning.

As a final recovery step, gold recovered from the carbon using the above processes is smelted to produce rough gold bars. These bars are then transported to the refinery which is responsible for refining the bars to good delivery status.

At Cerro Corona, gold/copper concentrate is produced using a standard flotation process. The concentrate is then shipped to a third-party smelter for further processing.

### **Productivity and Cost Initiatives**

Towards the end of fiscal 2008, the Gold Fields South African operations reviewed a number of their productivity and cost projects in order to ensure that focus was only on those projects with substantial value beyond the next two to five years. The result of the review was the identification of a suite of projects called Project M, as noted below:

**Project 1M** *One-meter extra face advance* is a productivity initiative that aims to improve quality mining volumes by increasing the face advance by an extra meter per month to an average of 8 meters per month by the end of fiscal 2010.

**Project 2M** *Mechanization of flat-end development*, which is development on the horizontal plane, is a technology sub-group initiative aimed at mechanizing all flat-end development at the long-life shafts by the end of fiscal 2010 in order to improve safety and increase reserve flexibility.

**Project 3M** is a suite of projects focused on reducing energy and utilities consumption, work-place absenteeism and surface costs. Project 3M comprises:

*The Energy and Utilities Project* which focuses on reducing, by 10% by fiscal 2010, the consumption of power, compressed air and water. It also aims to reduce diesel consumption by 20% within a one-year period. This project is driven primarily at reducing the safety risk to employees of interruptible power supply, maintaining the integrity of equipment and machinery in the face of power supply risks and minimizing the erosion of operating margins due to higher power tariffs and oil prices.

Some of the key initiatives include on-line monitoring of power consumption, main fan vane control, energy-efficient lighting, energy-efficient machinery and equipment, and reducing air and water wastage through stope shut-off valves. In the case of diesel, strict controls are being enforced, supported by the continued replacement of diesel with battery locomotives and outsourcing and upgrade of the old surface vehicle fleet.

The Management of Workplace Absenteeism Project focuses on reducing workplace absenteeism by 4% by fiscal 2010 in order to minimize the impact of lost shifts on production. Some of the key initiatives under this project include reducing unnecessary time spent by employees in training, work orientation and recruitment and healthcare assessment processes by creating a one-stop engagement and health-assessment center, particularly for Driefontein and Kloof. Stricter controls have been implemented to manage sick leave and its abuse, while maintaining focus on continual improvement of wellness programs and employee and union relations.

*The Above-ground Cost Project* focuses on reducing surface costs by at least R100 million per annum. Various initiatives are in place including review of surface labor, improving workshop performance, implementing salvage and reclamation programs, enhancing procurement processes, and efficient management and utilization of inventories through a vigorous application of standards and norms.

**Project 4M** Achievement of the Mine Health and Safety Council (MHSC) Milestones, as agreed to on June 15, 2003. This initiative focuses on the Mine Health and Safety Council, or the MHSC, milestones agreed to on June 15, 2003 by a tripartite health and safety summit comprising representatives from Government, organized labor unions and associations, and mining companies. The focus is on achieving occupational health and safety targets and milestones over a 10-year period. The commitment was driven by the need to achieve greater improvements in occupational health and safety in the mining industry. In order to meet the noise-induced hearing loss target, the company is focusing on the noise at source. A target was set that no machine or piece of equipment may generate a noise level in excess of 110 dB after December 2013. A number of action plans have been put in place to meet this target based on the highest potential exposure source. Progress is monitored quarterly. See Directors, Senior Management and Employees Employees Health and Safety Safety.

#### **Refining and Marketing**

#### South Africa

Gold Fields has appointed Rand Refinery Limited, or Rand Refinery, to refine all of Gold Fields South African-produced gold. Rand Refinery is a non-listed public company in which Gold Fields holds a 34.9% interest, with the remaining interests held by other South African gold producers.

Since October 1, 2004, Gold Fields treasury department arranges the sale of all the gold production from the South African operations. Rand Refinery advises Gold Fields on a daily basis of the amount of gold available for sale. Gold Fields sells the gold at a price benchmarked against the London afternoon fixing price. Two business days after the sale of gold, Gold Fields deposits an amount in U.S. dollars equal to the value of the gold at the London afternoon fixing price into Rand Refinery s nominated U.S. dollar account. Rand Refinery deducts refining charges payable by Gold Fields relating to such amount of gold and deposits the balance of the proceeds into the nominated U.S. dollar account of Gold Fields.

#### Ghana

All gold produced by Gold Fields at the Tarkwa and Damang mines in Ghana is refined by Rand Refinery pursuant to two non-exclusive evergreen agreements entered into in October 2004 between Rand Refinery and Gold Fields Ghana Limited, or Gold Fields Ghana, and between Rand Refinery and Abosso Goldfields Limited, or Abosso. Under these agreements, Rand Refinery collects, refines and sells gold as instructed by Gold Fields Ghana and Abosso. Rand Refinery assumes responsibility for the gold upon collection at either the Tarkwa or Damang mine. The gold is then transported to the Rand Refinery premises in Johannesburg, South Africa, where it is refined. Gold Fields Ghana and Abosso reimburse Rand Refinery for transportation costs. Under these agreements, Rand Refinery sells the refined gold on behalf of Gold Fields Ghana and Abosso at the London afternoon fixing price for gold on the date of delivery. Rand Refinery receives refining fees for gold received, and a realization fee for gold refined. Each of these agreements continues until either party terminates it upon 90 days written notice.

#### Australia

In Australia, all gold produced by St. Ives and Agnew is refined by AGR Matthey, which is a partnership between WA Mint, Australian Gold Alliance and Johnson Matthey (Australia), under an evergreen agreement which became effective on September 1, 2002. The agreement is between St. Ives Gold Mining Company Pty Ltd, Agnew Gold Mining Company Pty Ltd and AGR Matthey. AGR Matthey applies competitive charges for the collection, transport and refining services. The collection and transportation fees are calculated by the weight of the unrefined gold and a nominal fixed fee component. The refining fees are calculated per ounce of refined gold produced which includes small refining losses of both gold and silver. AGR Matthey takes responsibility for the unrefined gold at collection from St. Ives and Agnew where they engage a sub-contractor, Brinks Australia. Brinks delivers the unrefined gold to AGR Matthey in Perth, Australia, where it is refined and the refined ounces of gold and silver are credited to the relevant metal accounts held by St. Ives and Agnew with AGR Matthey. St. Ives and Agnew then inform Gold Fields treasury in the corporate office in Johannesburg of the amount of fine gold available for sale in Perth, Australia. After such confirmation, Gold Fields treasury either sells the gold directly to AGR Matthey, at the London afternoon fixing price, or swaps it into London for a competitive fee per ounce, meaning AGR Matthey provides that volume of fine gold in London for sale by Gold Fields. In the case of a location swap, AGR Matthey is instructed to credit St. Ives or Agnew s metal account held with Deutsche Bank, London. Once the gold is sold to a third-party, Deutsche Bank in London is instructed by Gold Fields to deliver the gold to the relevant counterparty bank. All silver is sold to AGR Matthey at market rates. The agreement with AGR Matthey continues indefinitely until terminated by either party upon 90 days written notice.

#### Peru

La Cima has three contracts for the sale of the entire output of concentrate from the Cerro Corona mine, one with a Japanese refiner, one with a South Korean refiner and one with a German refiner. Two of the contracts expire on December 31, 2015, while the third contract expires on December 31, 2014. Under these contracts, La Cima is to sell approximately one-third of the concentrate to each company and to use reasonable efforts to spread the deliveries evenly throughout the year. Risk passes when the concentrate is loaded in the port of Salaverry, Peru or an alternative port chosen by La Cima. Pricing for copper and gold under each of the contracts is based on average LME copper prices and London Bullion Market Association gold prices, respectively.

#### World Gold Council

Gold Fields supports and participates in the gold marketing activities of the World Gold Council, or WGC, and, prior to January 1, 2009, contributed to the WGC in support of its activities at a rate of \$1.75 per ounce of the gold it produced in South Africa (excluding gold produced from the South Deep Project) and Australia and \$1.75 per ounce of its attributable production from Tarkwa and Damang. From January 1, 2009, the amount contributed per ounce increased to \$1.85.

#### Services

Mining activities require extensive services, located both on the surface and underground at the mines. Services include:

mining-related services such as engineering, rock mechanics, ventilation and refrigeration, materials handling, operational performance evaluation and capital planning;

safety and training;

housing and health-related services, including hostel and hospital operations;

reserves management, including sampling and estimation, geological services, including mine planning and design, and mine survey;

metallurgy;

equipment maintenance; and

assay services.

Most of these services are provided directly by Gold Fields, either at the operational level or through the head office, although some are provided by third-party contractors.

#### Gold Fields Mining Operations

Gold Fields conducts underground mining operations at each site except Tarkwa, Damang and Cerro Corona and conducts some processing of surface rock dump material at Driefontein, Kloof and South Deep. Processing of surface rock dump material at Agnew was completed in October 2008. Gold Fields conducts open pit mining at Tarkwa, Damang, St. Ives (which also conducts underground mining) and Cerro Corona and also processes material from production stockpiles at Tarkwa, Damang and St. Ives.

### **Total Operations**

The following chart details the operating and production results (including gold equivalents) for each of fiscal 2007, 2008 and 2009 for all operations owned by Gold Fields during that fiscal year. The results of operations for mines acquired during the relevant period are included as from the date of control, which is December 1, 2006 for South Deep. The results of operations for mines sold during the relevant period are included through the date of execution of the sale agreement, which was November 30, 2007 for Choco 10 in Venezuela.

	Year ended June 30,		
	2007	2008	2009
Production			
Tons ( 000)	52,166	50,376	52,907
Recovered grade (g/t)	2.6	2.4	2.2
Gold produced ( 000 oź) <sup>2</sup>	4,285	3,915	3,691
Results of operations (\$ million)			
Revenues	2,735.2	3,206.2	3,228.3
Total production costs <sup>(2)</sup>	2,052.5	2,387.9	2,430.5
Total cash costs <sup>(3)</sup>	1,692.5	1,975.2	1,986.1
Cash profit <sup>(4)</sup>	1,042.7	1,231.0	1,242.2
Cost per ounce of gold (\$)			
Total production costs	482	610	659
Total cash costs	394	505	538
Notional cash expenditure per ounce of gold produced (\$) <sup>(5)</sup>	596	822	763

Notes:

- (1) In fiscal 2007, 4.024 million ounces were attributable to Gold Fields, in fiscal 2008, 3.670 million ounces were attributable to Gold Fields, and in fiscal 2009, 3.414 million ounces were attributable to Gold Fields, with the remainder attributable to minority shareholders in the Ghana and Peru operation during fiscal 2009, attributable to minority shareholders in the Ghana and Venezuela operation during fiscal 2009, attributable to minority shareholders in fiscal 2007.
- (2) For a reconciliation of Gold Fields total production costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (3) For a reconciliation of Gold Fields total cash costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (4) Cash profit represents revenues less total cash costs.
- (5) For a reconciliation of Gold Fields notional cash expenditure to its production costs for fiscal 2009, 2008 and 2007, see Operating and Financial Review and Prospects Costs Notional Cash Expenditure.

#### **Underground Operations**

The following chart details the operating and production results for Gold Fields underground operations for fiscal 2007, 2008 and 2009. The underground operations include all of the mines in the South African operations and the underground portions of the mines in the Australian operations. The results of operations for mines acquired during the relevant period are included as from the date of control, which is December 1, 2006 for South Deep.

	Year ended June 30,		
	2007	2008	2009
Production			
Tons ( 000)	13,386	12,017	11,541
Recovered grade (g/t)	6.7	6.7	6.2
Gold produced ( 000 oź)	2,884	2,585	2,300
Results of operations (\$million)			
Revenues	1,840.2	2,100.5	2,015.2
Total production costs <sup>(2)</sup>	1,346.4	1,535.0	1,508.9
Total cash costs <sup>(3)</sup>	1,086.5	1,244.7	1,216.6
Cash profit <sup>(4)</sup>	753.7	855.8	798.6
Cost per ounce of gold (\$)			
Total production costs	474	594	656
Total cash costs	377	481	529

Notes:

- (1) In fiscal 2007, 2,881 million ounces were attributable to Gold Fields. In fiscal 2008, all 2.585 million ounces were attributable to Gold Fields and in fiscal 2009, all 2,300 million ounces were attributable to Gold Fields.
- (2) For a reconciliation of Gold Fields total production costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (3) For a reconciliation of Gold Fields total cash costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.

(4) Cash profit represents revenues less total cash costs.

Tons milled from the underground operations decreased from 12.0 million tons in fiscal 2008 to 11.5 million tons in fiscal 2009. At the South African operations, the decrease was mainly due to the addressing of the backlog in secondary support and infrastructure rehabilitation across all operations. The amount of gold produced from underground operations decreased from 2.585 million ounces in fiscal 2009. This decrease was also due to the addressing of the backlog in secondary support, lower underground grades and infrastructure rehabilitation across all operations.

Surface Operations

The following chart details the operating and production results (including gold equivalents) for Gold Fields surface operations for fiscal 2007, 2008 and 2009. Surface operations include all of the mines in the Ghana, Venezuela and Peru operations, the open pit portions of the mines in the Australian operations and the surface rock dump material at the mines in the South African operation. The results of operations for mines

acquired during the relevant period are included as from the date of control, which is December 1, 2006 for South Deep. The results of operations for Choco 10 are included only through the date of the sale, which was November 30, 2007.

	Year ended June 30,		1e 30,
	2007	2008	2009
Production			
Tons ( 000)	38,780	38,359	41,366
Recovered grade (g/t)	1.1	1.1	1.0
Gold produced ( 000 oź)	1,401	1,330	1,391
Results of operations (\$ million)			
Revenues	895.0	1,105.7	1,213.1
Total production costs <sup>(2)</sup>	706.1	852.9	921.6
Total cash costs <sup>(3)</sup>	606.1	730.5	769.5
Cash profit <sup>(4)</sup>	288.9	375.2	443.6
Cost per ounce of gold (\$)			
Total production costs	504	642	663
Total cash costs	432	550	553

Notes:

- (1) In fiscal 2007, 1.142 million ounces were attributable to Gold Fields, in fiscal 2008, 1.085 million ounces were attributable to Gold Fields and in fiscal 2009, 1.114 million ounces were attributable to Gold Fields, with the remainder attributable to minority shareholders in the Ghana and Peru operations in fiscal 2009, attributable to minority shareholders in both the Ghana and Venezuela operations in fiscal 2008 and attributable to minority shareholders in Ghana, Venezuela and South Deep in fiscal 2007.
- (2) For a reconciliation of Gold Fields total production costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (3) For a reconciliation of Gold Fields total cash costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.

(4) Cash profit represents revenues less total cash costs.

Tons milled and treated from the surface operations increased from 38.4 million tons in fiscal 2008 to 41.4 million tons in fiscal 2009, primarily because of the inclusion of the Cerro Corona operation in Peru.

#### **Driefontein Operation**

#### Introduction

The Driefontein gold mine is located in the Northwest Province of South Africa in the Far West Rand mining district, some 70 kilometers southwest of Johannesburg. Driefontein operates under mining rights covering a total area of approximately 8,600 hectares. It is an underground mine with nominal surface reserves represented by rock dumps that have been accumulated through the operating history of the mine. Driefontein has multiple operating shaft systems and three metallurgical plants and operates at depths of between 700 meters and 3,420 meters

below surface. The Driefontein operation has access to the national electricity grid and water, road and rail infrastructure and is located near regional urban centers where it can routinely obtain needed supplies. In the fiscal year ended June 30, 2009, it produced 0.830 million ounces of gold. As of June 30, 2009, Driefontein had approximately 19,200 employees, including approximately 3,200 employed by outside contractors.

#### History

Driefontein was formed from the consolidation in 1981 of the East Driefontein and West Driefontein mines. Gold mining began at Driefontein in 1952.

#### Geology

Driefontein is located in the West Wits Line that forms part of the Far West Rand of the Witwatersrand Basin. The operation is geologically divided into an eastern section and a western section, separated by a bank anticline and associated faulting. Gold mineralization at Driefontein is contained within three reef horizons. The Carbon Leader Reef, or Carbon Leader, the Ventersdorp Contact Reef, or VCR, and the Middelvlei Reef, or MVR, occur at depths of between 500 meters and 4,000 meters. Stratigraphically, the Carbon Leader is situated 40 to 70 meters below the VCR and MVR and is a generally high-grade reef comprising different facies and dips to the south at approximately 25 degrees. The Carbon Leader subcrops against the VCR in the eastern part of the mine. The west-dipping Bank Fault defines the eastern limit of both reefs. The VCR is most extensively developed in the east, and subcrops to the west. The MVR is a secondary reef, situated approximately 50 meters above the Carbon Leader, and, at present, it is a minor contributor to reserves and production. The average gold grades vary with lithofacies changes in all of the reefs.

#### Mining

In the northern, older portions of Driefontein, which include Shaft Nos. 2, 6 and 8, production is focused on remnant pillar extraction and accessing and mining of secondary reef horizons. In the southern, newer portions of the mine, which include Shaft Nos. 1 and 4, the focus is on scattered or longwall mining. In the western portion of the mine, at Shafts No. 10 and 6 Tertiary, extensive reclamation and cleaning operations are being conducted. The shafts at the deepest levels of the mine, consisting of Shaft No. 1 Tertiary and Shaft No. 5 Sub-Vertical, employ the closely spaced dip pillar mining method. This method provides additional mining flexibility. Following increased seismicity, impacting on footwall development at Shaft Nos. 1 and 5, the mine instituted a comprehensive strategy to increase the support density in all major off-reef development. Most of the development at Shaft Nos. 1, 4 and 5 was halted in September 2008, and crews were redeployed in order to address the accumulating backlog in implementing secondary support at these shafts. An estimated 90% of the high priority backlog was completed by January 2009. Development at Shaft Nos. 1, 4 and 5 recommenced in January 2009. Development at Shaft No. 7 recommenced in July 2009. In order to prevent secondary support from falling behind again, the mine also introduced the one pass system, where crews will install their own secondary support as they mine. Gold Fields believes this will limit the deterioration of the hanging wall and, to a degree, the footwall infrastructure due to seismicity. Gold Fields expects to complete the backlog by the end of fiscal 2010.

Reviews of pillar mining were also conducted during the year, which led to the stoppage of extraction of numerous higher-grade pillars across the mine. These stoppages had a significant impact on gold production during the year.

Detailed below are the operating and production results at Driefontein for the past three fiscal years.

	Year ended June 30,		ne 30,
	2007	2008	2009
Production			
Tons ( 000)	6,652	5,981	6,217
Recovered grade (g/t)	4.8	4.8	4.2
Gold produced ( 000 oz)	1,017	928	830
Results of operations (\$million)			
Revenues	648.2	756.8	726.5
Total production costs <sup>(1)</sup>	425.9	477.6	448.7
Total cash costs <sup>(2)</sup>	355.0	384.5	373.8
Cash profit <sup>(3)</sup>	293.2	372.3	352.7
Cost per ounce of gold (\$)			
Total production costs	419	515	541
Total cash costs	349	414	450
Notional cash expenditure per ounce of gold produced (\$) <sup>(4)</sup>	481	584	610

Notes:

- (1) For a reconciliation of Gold Fields total production costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (2) For a reconciliation of Gold Fields total cash costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (3) Cash profit represents revenues less total cash costs.
- (4) For a reconciliation of Gold Fields notional cash expenditure to its production costs for fiscal 2009, 2008 and 2007, see Operating and Financial Review and Prospects Costs Notional Cash Expenditure.

The increase in tonnage from fiscal 2008 to 2009 was primarily due to an increase in surface ore milled. Gold production decreased primarily due to a drop in both underground mill tons and yield. Underground production and yield was severely affected by stoppages relating to safety. In addition, numerous higher-grade areas had to be abandoned during the year due to unacceptable risk levels. Gold Fields experienced an increase in total cash costs and total production costs per ounce of gold from fiscal 2008 to fiscal 2009 at Driefontein, mainly due to lower gold production and increased input costs.

In order to improve operational excellence, in fiscal 2009, Driefontein focused on the implementation of various new technologies and initiatives. These initiatives are aimed at improving mining efficiencies and streamlining the mining process, and include the purchase of a boxhole borer, various mechanized loaders, new era locomotives and development drill rigs.

The Driefontein operation is engaged in both underground and rock dump mining, and is thus subject to all of the underground and rock dump mining risks discussed in Risk Factors. The primary safety challenges facing the Driefontein underground operation include falls of ground, seismicity, flammable gas, water intrusion and temperatures. Water intrusion is dealt with through drilling, cementation sealing techniques and

an extensive water-pumping network. Also, because rock temperatures tend to increase with depth, Driefontein requires an extensive cooling infrastructure. Driefontein has instituted a number of initiatives to reduce the risks posed by seismicity, including a detailed analysis of previous seismic events, preconditioning and backfilling, the use of hydraulic props, monitoring seismic risk parameters to allow quicker reactions to changes and centralized blasting. In addition, during fiscal 2009, Driefontein adopted a revised stope support standard in all areas with

friable hangwall and in areas that have the Westonaria Formation Lava hangwall. Continued reviews of remnant and pillar mining areas were also conducted during the year leading to the stoppage of extraction at numerous higher risk areas across the mine. Driefontein has contracted with external seismologists and rock engineers as a seismic task team to assess and improve seismic strategies.

On January 24, 2008, Gold Fields suspended all mining activity at its South African operations, due to Eskom advising their Key Industrial Consumers, of which Gold Fields is one, that they could not guarantee supply. On January 28, 2008, the power supply was restored to 71% of total average consumption allowing Gold Fields to begin ramping up production at its South African operations. 50% of Gold Fields normal electrical consumption is required simply to pump, ventilate and refrigerate its operations. Therefore, the amount of power available on January 28, 2008, was sufficient for essential maintenance, pumping, ventilation, refrigeration, opening up faces and ensuring working areas were safe to operate, but not for production or beneficiation purposes. By mid-March 2008, the total power available to Gold Fields South African mines was approximately 95% of the historical average consumption profile at Driefontein and Kloof, and 90% at the Beatrix and South Deep mines. Gold Fields power needs in South Africa will increase as it builds up production at its South Deep mine. It has requested an additional allocation from Eskom and Eskom has indicated that the additional requested capacity will be granted. If a power conservation program is implemented, Gold Fields expects that the power allocations of each of its operations will be tradable. As a result, Gold Fields expects to be able to shift power usage from one mine to another as necessary. See Risk Factors Some of Gold Fields power suppliers have forced it to halt or curtail activities at its mines, due to severe power disruptions. Power stoppages, fluctuations and power cost increases may adversely affect Gold Fields is operations and its financial condition .

As a result of the electricity issues, sinking operations at Shaft No. 9 have been suspended indefinitely. Gold Fields plans to continue to perform essential maintenance on the shaft so that the deepening project may be resumed quickly if Gold Fields decides to do so. In the interim, Driefontein will continue with the drilling program in the area below the lowest area currently being mined, targeting the area expected to be accessed by Shaft No. 9. Gold Fields is also conducting an optimization study on mining below current infrastructure. This study is currently investigating a viable alternative to the Shaft No. 9 project, such as a phased mini-decline start system.

Driefontein continued to process low-grade surface material in fiscal 2009, for which the biggest risk is a decrease in grade of the remaining dumps. In order to manage this risk, the grade of the rock dumps is monitored on a daily basis. Grade management is undertaken through the screening of material to separate out the smaller fraction sizes of ore, which tend to be of higher grade. This process reduces the tonnage that will be available for processing. The surface operation safety risks include problems with ground stability, moving machinery and dust generation. Driefontein has a risk management system in place that guides the mining of the rock dumps to minimize these risks.

In total, during fiscal 2009, there were seven fatalities at Driefontein and, to date in fiscal 2010, there have been three fatalities. Of the 10 fatalities, six were due to seismic events, one due to a winches and rigging related accident, one due to an accident related to a discharge of gas and two due to tramming related accidents. The serious injury frequency rate (see Defined Terms and Conventions ) for fiscal 2009 was 3.0 serious injuries for every million hours worked, reflecting an improvement as compared to the serious injury frequency rate of 4.4 for fiscal 2008 and 7.1 for fiscal 2007. The fatal injury frequency rate decreased from 0.26 in fiscal 2008 to 0.16 fatalities for every million hours worked in fiscal 2009. In fiscal 2007, the fatal injury frequency rate was 0.26 fatalities for every million hours worked. A major source of accidents in the mine remains falls of ground, which make up about a third of all accidents. Based on the results of the Presidential Safety Audit conducted in 2007, as well as the Du Pont audit in fiscal 2009, Gold Fields is designing a safety management system called the Safe Production Management System, to address outstanding issues identified and to assist Driefontein and the other South African operations to improve health and safety to best practice levels. The mine also continued with the Masiphephe safety program, which incorporates elements of the Safe Production Management System, during the year. On June 12, 2009, the mine completed in excess of 2.85 million fatality-free shifts, which is a record



achievement for the mine and set a new benchmark for deep-level gold mining in South Africa. Driefontein again maintained its Occupational Health and Safety Assessment Series, or OHSAS 18001 certification, through external audits conducted in fiscal 2009.

During fiscal 2009, after each major mine incident or accident, Driefontein received, and complied with, various instructions to halt operations from the Principal Inspector of the Gauteng area of the DMR. As part of Gold Fields compliance with these instructions, Driefontein participated in the Health and Safety Audit which checked legal compliance of the mine. The Department of Mineral Resources has expressed its satisfaction with the mine s remedial measures. See Directors, Senior Management and Employees Employees Safety .

During fiscal 2009, there were three industrial actions that affected production at Driefontein. On July 23, 2008, there was a one-day regional work stoppage in Gauteng province in support of COSATU s protest against the electricity crisis in South Africa followed by another one-day COSATU national stay-away on August 6, 2008 for the same reason. The third action was an isolated illegal work stoppage that lasted for a day at Driefontein s Shaft No. 1. For more information about labor relations at Driefontein, see Directors, Senior Management and Employees Employees Labor Relations South Africa. Driefontein s productivity improvement strategies continue to be hampered by high levels of worker absenteeism. Although the mine has succeeded in reducing the absenteeism rate, the sick rate, which is one factor of the absenteeism rate, remains an area of concern. Driefontein is continuing with a wellness program as an initiative aimed at improving the health of employees generally. The previous shortage of skilled labor at Driefontein has been eased following closures in other areas of the mining industry.

The total shaft hoisting capacity of Driefontein is detailed below.

Shaft System	Hoisting capacity (tons/month)
No. 1	105,000
No. 2	165,000
No. 4	107,000
No. 5	150,000
No. 6 <sup>(1)</sup>	96,000
No. 7	190,000
No. 8	96,000
No. 10 <sup>(1)</sup>	121,000

Note:

(1) Shaft Nos. 6 Tertiary and 10 are currently only operated on a limited scale, with the focus on reclamation and cleaning. Assuming that Gold Fields does not increase or decrease reserve estimates at Driefontein and that there are no changes to the current mine plan at Driefontein, Driefontein s June 30, 2009 proven and probable reserves of 18.2 million ounces of gold will be sufficient to maintain production through approximately fiscal 2040. However, as discussed earlier in Risk Factors and Mine Planning and Management, there are numerous factors which can affect reserve estimates and the mine plan, which thus could materially change the life of mine.

Driefontein achieved full compliance certification under the International Cyanide Management Code in October 2009.

#### Processing

The following table sets forth year commissioned, processing techniques and processing capacity per month, as well as average tons milled per month and metallurgical recovery factors during the fiscal year ended June 30, 2009, for each of the plants at Driefontein:

Processing Techniques						
Plant	Year commissioned <sup>(1)</sup>	Comminution phase	Treatment phase	Capacity <sup>(2)</sup> (tons/month)	Average milled for the year ended June 30, 2009 (tons/month)	Approximate recovery factor for the year ended June 30, 2009 <sup>(4)</sup>
No. 1 Plant	1972	SAG milling	CIP treatment and electrowinning	240,000	246,043	97%
No. 2 Plant	1964	SAG/ball milling	CIP treatment <sup>(3)</sup>	200,000	174,981	92%
No. 3 Plant	1998	SAG milling	CIP treatment <sup>(3)</sup>	115,000	97,098	92%

Notes:

- (1) No. 1 Plant was substantially upgraded in fiscal 2004, and No. 2 Plant was substantially upgraded in fiscal 2003. No. 3 Plant was originally commissioned as a uranium plant and was upgraded to a gold plant in 1998. Therefore, No. 3 Plant lists the year commissioned as a gold plant.
- Nameplate capacity. Plant/Mill nameplate capacities are based on a number of operating assumptions, including assumptions regarding the (2)blend of soft and hard ores processed, that can change and which may result in an increased level of throughput over and above the designed nameplate capacity.
- After CIP treatment, electrowinning occurs at No. 1 Plant. (3)

(4) Percentages are rounded to the nearest whole percent. In fiscal 2009, the Driefontein plants collectively extracted approximately 97% of the gold contained in ore delivered for processing.

### Capital Expenditure

Gold Fields spent approximately \$115 million on capital expenditures at the Driefontein operation in fiscal 2009, primarily on ore reserve development, shaft pillar extraction at Shaft No. 4, upgrading and building of accommodation units, historical tailings treatment operation, emergency power generators, the introduction of battery locomotives and continued implementation of new technology such as development drill rigs and a box-hole borer. Gold Fields has budgeted approximately \$147 million of capital expenditures at Driefontein for fiscal 2010, principally for the Shaft No. 4 pillar extraction project, the Uranium Project feasibility study, ore reserve development, continuing mechanization and a residential area upgrade.

### **Kloof Operation**

#### Introduction

Kloof is situated approximately 60 kilometers west of Johannesburg, near the towns of Carletonville and Westonaria in the Gauteng Province of South Africa. The Kloof mine operates under mining rights covering a total area of approximately 20,100 hectares. It is principally an

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underground operation, with surface rock dump material being processed at both the Kloof and South Deep plants. Kloof currently has five operating shaft systems serviced by two metallurgical plants. Kloof is an intermediate to ultra-deep-level mine, with operating depths between 1,300 meters and 3,500 meters below surface. The Kloof operation has access to the national electricity grid and water, road and rail infrastructure and is located near regional urban centers where it can routinely obtain needed supplies. In the fiscal year ended June 30, 2009, it produced 0.643 million ounces of gold. As of June 30, 2009, Kloof had approximately 17,200 employees, including approximately 2,300 who were employed by outside contractors.

### History

Kloof s present scope of operations is the result of the consolidation of the Kloof, Libanon, Leeudoorn and Venterspost mines. Gold mining began in the area now covered by these operations in 1934.

# Geology

The majority of production at Kloof is from the VCR, which occurs at depths of between 1,300 meters and 3,350 meters below surface. The VCR is a tabular orebody that has a general northeast-southwest strike and dips to the southeast at between 20 and 45 degrees. The Middelvlei Reef, or MVR, is classified as Kloof s secondary reef and minor production volumes are also delivered from the Kloof Reef, or KR, and Libanon Reef, or LR.

Kloof lies between the Bank Fault to the west, and the north trending West Rand Fault to the east. The latter truncates the VCR along the eastern boundary of the mine, with a 1- to 1.5-kilometer up throw to the east. Normal faults are developed sub-parallel to the westerly dipping West Rand Fault, with sympathetic north-northeast trending dykes that show little to no apparent offset of the stratigraphy. A conjugate set of faults and dykes occurs on a west-southwest trend, with throws of 1 to 15 meters. Structures that offset the VCR increase in frequency toward the southern portion of the mine as the Bank Fault is approached.

### Mining

The current preferred mining method at Kloof is breast stoping with closely spaced dip pillar mining, with limited application of longwalling and remnant pillar mining in the mature areas. Shaft Nos. 1, 3, 4 and 7 provide the main centers of current production at Kloof, although for the first six months of fiscal 2009 essential maintenance work was performed on Main Shaft infrastructure which hampered production.

In fiscal 2009, Kloof faced several challenges in meeting several of its production targets. Planned production was severely affected by numerous safety-related shaft and full mine production stoppages that were imposed by the DMR, as well as safety stoppages required by management. Production was also adversely affected by the Shaft No. 1 maintenance work mentioned above, a slow return to standard production levels following the Christmas and Easter breaks, seismicity damage, an underground fire at Shaft No. 7 and an illegal stay-away by some miners at Kloof for two months beginning on June 11, 2008. Although grade variability of the primary VCR reef was high, total underground average yield was 4% lower than in fiscal 2008.

The planned extraction of the high-grade Shaft No. 1, or Main Shaft, pillar has been deferred until fiscal 2014 after an external audit review by GroundWorks Consulting revealed that the geotechnical information concerning the Main Shaft pillar area is insufficient to guide the pillar extraction and associated activities required to assist in the safe and profitable extraction of this pillar. The Main Shaft pillar extraction project s original extraction report was reviewed subsequent to a full geotechnical investigation. The report highlighted that mining of the pillar fringes are possible, but indicate significant seismic risk associated with the inherent geological structure. Further seismic analysis and a review of the design is required to minimize the seismic risk. The final design on how to mine the shaft pillar with the necessary bracket and regional stability pillars is currently being modeled and the final mining sequence and seismic risk analysis will then be completed. Mining of the outskirts of the pillar, though, has begun.

At Shaft No. 3, plans are on track to reopen those areas that were isolated during the power crisis of fiscal 2008, and at Shaft No. 4, an additional refrigeration plant has been commissioned and should assist in improving environmental conditions underground. Shaft No. 7 has all major infrastructure in place and working conditions are conducive to production delivery. As of the date of this annual report, Shaft No. 8 is predominantly mining the lower-grade MVR reef with reduced remnant mining on the VCR horizon due to the presence of complex geological structures which have to be negotiated and which result in reef elimination and gold losses. In line with the overall Gold Fields productivity initiatives, Kloof continues to focus on optimizing mine design and configuration, while ensuring that the high-productivity drivers of workforce motivation and competence are addressed through training and incentive schemes.

Short-term grade management is well entrenched and, together with the initiatives put into operation to drive the mine call factor, or MCF, and quality mining program, it is envisaged that the full potential of the mining grade can be realized. The objectives of the quality management program are to ensure that the mine reduces the grade gap between the stope face and the plant, optimizing the size of rock fragments delivered to the plant and ensuring that effective cleaning methods of ore accumulations are employed. A feasibility study for the modified Kloof Extension Area, or KEA, project, now called the 55 Line Decline, is underway. This project consists of a three-level, 14-degree conveyor decline and a service way, and will target the southern portion of the original KEA. Planned infill drilling at Shaft No. 4 will further test the extent of certain higher-grade Sandy 1 facies below the current infrastructure. Additional drilling is also planned to target the MVR area to the south of Shaft No. 1 sub-vertical.

During the first quarter of fiscal 2010, it became evident that the production trajectory and forward gold profile for Kloof was showing misalignment with Kloof s operational plan. There had been a decrease in the mining grades as well as a loss of high-grade panels due to seismicity.

Gold Fields has undertaken a comprehensive review of the mine s fiscal 2010 operational plan, taking into consideration the latest information on areas affected by seismicity, geology, evaluation, face length flexibility, payability, mining mix, production rates, quality factors and costs. This work is critical to producing a safe production baseline for Kloof that can be used as a realistic point of departure before building in new opportunities and expediting a number of quality aspects waiting to be leveraged. Gold Fields now believes that Kloof will produce between five and five and a half tons per quarter until it has improved flexibility.

Detailed below are the operating and production results at Kloof for the past three fiscal years.

	Year ended June 3		
	2007	2008	2009
Production			
Tons ( 000)	3,829	3,953	3,319
Recovered grade (g/t)	7.5	6.5	6.0
Gold produced ( 000 oz)	923	821	643
Results of operations (\$million)			
Revenues	587.0	660.9	562.3
Total production costs <sup>(1)</sup>	423.1	445.6	413.7
Total cash costs <sup>(2)</sup>	338.6	354.6	328.7
Cash profit <sup>(3)</sup>	248.4	306.3	233.6
Cost per ounce of gold (\$)			
Total production costs	458	543	643
Total cash costs	367	432	511
Notional cash expenditure per ounce of gold produced (\$) <sup>(4)</sup>	501	602	698

Notes:

- (1) For a reconciliation of Gold Fields total production costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (2) For a reconciliation of Gold Fields total cash costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.

- (3) Cash profit represents revenues less total cash costs.
- (4) For a reconciliation of Gold Fields notional cash expenditure to its production costs for fiscal 2009, 2008 and 2007, see Operating and Financial Review and Prospects Costs Notional Cash Expenditure.

The decrease in tonnage from fiscal 2008 to 2009 was primarily as a result of planned reductions in production due to the maintenance work on Shaft No. 1. Gold production for fiscal 2009 decreased by 21.7% to 0.643 million ounces from 0.821 million ounces in fiscal 2008, due to the planned decreases in production, maintenance on Shaft No. 1 and numerous safety-related stoppages during the year. Recovered grade decreased from 6.5 g/t in fiscal 2008 to 6.0 g/t in fiscal 2009, primarily due to the higher proportion of lower-grade surface tons processed during fiscal 2009. Total cash costs per ounce increased in fiscal 2009, due to the planned decrease in production and commodity price increases.

The Kloof operation is engaged in underground and rock dump mining, and is thus subject to all of the underground and rock dump risks discussed in Risk Factors. A significant challenge facing the Kloof operation is seismicity, and a lesser risk is flammable gas. Gold Fields seeks to reduce the impact of seismicity at Kloof by using the closely spaced dip pillar mining method. In addition, during fiscal 2009, Kloof adopted a revised stope support standard in all areas with friable hangwall and in areas that have the Westonaria Formation Lava hangwall. Early detection and increased ventilation of the shafts are being used to minimize the risk of incidents caused by flammable gas. Also Kloof requires extensive cooling infrastructure to maintain comfortable conditions for workers due to the extreme depth of its operations.

As discussed in regards to Driefontein, the Kloof operation experienced a total suspension of production during the third quarter of fiscal 2008 due to power constraints. See Information on the Company Gold Fields Mining Operations Driefontein Operation Mining . An application for additional power was made to Eskom in fiscal 2009. This has been granted and Kloof is now permitted a greater power allocation that it used prior to the power crisis. This additional power is required for the installation of new ventilation equipment and the running of the mills at higher capacity. In addition, in the unlikely event of a total power outage for a prolonged period, Kloof has installed and commissioned an emergency generation plant to allow mine personnel to be evacuated speedily. If a power conservation program is implemented, Gold Fields expects that the power allocations of each of its operations will be tradable. As a result, Gold Fields expects to be able to shift power usage from one mine to another as necessary.

Ten workers lost their lives at Kloof in fiscal 2009, in nine separate incidents. One was related to an ore-pass incident, one as a result of a conveyance incident, one related to blasting, one due to falling from a height, one from a gravity incident and five were seismicity related. To date in fiscal 2010, there have been two fatalities at Kloof. One was related to an ore-pass incident and one was related to a conveyance incident. The serious injury frequency rates (see Defined Terms and Conventions ) at Kloof in fiscal 2009, 2008 and 2007 were 3.3, 6.3 and 7.0 injuries per million hours worked, respectively. The fatality frequency rate in fiscal 2009, 2008 and 2007 was 0.13, 0.33 and 0.23 fatalities per million hours worked, respectively. Shaft No. 7 achieved one million fatality-free shifts in November 2007 and Kloof as a whole achieved one million fatality-free shifts in June 2008. Management is committed to reducing serious injuries and fatalities at Kloof through its safety programs, including the Kloof Eyethu team development program, the Sawubona Kusasa initiative and an incident-reporting initiative entitled Cabanga Inyoka. To date, almost 100% of employees at Kloof have been through the Sawubona Kusasa Training and positive feedback has been received from follow-up audits on all shafts. See Directors, Senior Management and Employees Employees Safety . Kloof maintained its OHSAS 18001 certification through external audits conducted in fiscal 2009. In October 2007, former President Thabo Mbeki ordered the DMR to conduct an occupational health and safety audit at all mines, including Gold Fields mines. The audit of legal compliance has been completed and a report of its findings has been received. Kloof has enacted action plans to address issues identified in the report. See Information on the Company Environmental and Regulatory Matters South Africa Health and Safety.

In fiscal 2009, Kloof experienced numerous safety-related work stoppages imposed internally as well as by the DMR. Production at the entire Kloof mine was stopped for a total of eight days, at Shaft No. 1 for a further 16 days and Shaft No. 7 for a further day. Other interruptions were a national stay-away organized by COSATU to protest the energy crisis, a month-long underground fire at Shaft No. 7 and a one-day stay-away related to an investigation of absenteeism at Shaft No. 4. In addition, the Main Shaft repairs, the slow start-up after the

Christmas and Easter holidays and lost shifts due to the weeklong implementation of the new stope support standards on portions of all shafts had a negative effect on production during fiscal 2009.

The total shaft hoisting capacity of Kloof is detailed below.

Shaft System	Hoisting capacity (tons/month)
No. 1	265,000
No. 3 <sup>(1)</sup>	131,000
No. 4	112,000
No. 7	176,000
No. 8	84,000

Notes:

(1) This shaft does not hoist material to the surface. It has a capacity of 131,000 tons per month for sub-surface hoisting. Assuming that Gold Fields does not increase or decrease reserve estimates at Kloof and that there are no changes to the current mine plan at Kloof, Kloof s June 30, 2009 proven and probable reserves of 10.5 million ounces of gold will be sufficient to maintain production through approximately fiscal 2030. However, as discussed earlier in Risk Factors and Mine Planning and Management, there are numerous factors which can affect reserve estimates and the mine plan, which could thus materially change the life of mine.

Kloof achieved full compliance certification under the International Cyanide Management Code in October 2009.

Processing

The following table sets forth year commissioned, processing techniques and processing capacity per month, as well as average tons milled per month and metallurgical recovery factor during the fiscal year ended June 30, 2009, for each of the plants at Kloof:

Processing Techniques						
Plant	Year commissioned	Year Comminution Treatment missioned phase phase Capacity <sup>(1)</sup>		Capacity <sup>(1)</sup> (tons/month)	Average milled for the year ended June 30, 2009 (tons/month)	Approximate recovery factor for the year ended June 30, 2009 <sup>(2)</sup>
No. 1 Plant	1968	Traditional crushing and milling	CIP treatment <sup>(3)</sup>	180,000	86,473	98%
No. 2 Plant	1990	SAG milling	CIP treatment and electrowinning	150,000	143,236	97%

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Notes:

(1) Nameplate capacity. Plant/Mill nameplate capacities are based on a number of operating assumptions, including assumptions regarding the blend of soft and hard ores processed, that can change and which may result in an increased level of throughput over and above the

designed nameplate capacity.

(2) Percentages are rounded to the nearest whole percent.

(3) After CIP treatment, electrowinning occurs at No. 2 Plant.

In fiscal 2009, the Kloof plants collectively extracted approximately 97.3% of gold contained in ore delivered for processing. Gold Fields is currently undertaking a review of the infrastructure at No. 1 Plant to

determine whether to refurbish and upgrade the plant or instead to expand the plant at South Deep (which is adjacent to Kloof) to allow it to treat ore from Kloof. A decision on which option is preferred is currently expected to be made during the third quarter of fiscal 2010.

#### Capital Expenditures

Gold Fields spent approximately \$106 million on capital expenditures at the Kloof operation in fiscal 2009, primarily on development at Shaft No. 4, the social labor plan housing project, emergency power generators, the upgrading of high-density accommodation, which is a socio-economic development program to upgrade hostels, maintenance on Shaft No. 1 and ore reserve development. Gold Fields expects to spend approximately \$142 million on capital expenditures in fiscal 2010, primarily on the 69 Line Decline Project (a depth extension to Shaft No. 7), further upgrading of high-density accommodation, a refrigeration plant at Shaft No. 3, a pump system at Shaft No. 4, refurbishment of Shaft No. 2 sub-vertical steelwork and ore reserve development.

#### **Beatrix Operation**

#### Introduction

The Beatrix operation is located in the Free State Province of South Africa, some 240 kilometers southwest of Johannesburg, near Welkom and Virginia, and comprises the Beatrix mine. The Beatrix operation was formerly known as the Free State operation.

Beatrix operates under mining rights covering a total area of approximately 16,800 hectares. Beatrix is an underground only operation. Beatrix has four shaft systems, with two ventilation shafts to provide additional up-cast and down-cast ventilation capacity and is serviced by two metallurgical plants. It is a shallow to intermediate-depth mining operation, at depths between 700 meters and 2,200 meters below surface. The Beatrix mine has access to the national electricity grid and water, road and rail infrastructure and is located near regional urban centers where it can routinely obtain needed supplies. In the fiscal year ended June 30, 2009, Beatrix produced 0.391 million ounces of gold. As of June 30, 2009, Beatrix had approximately 11,700 employees, including approximately 1,400 employed by outside contractors.

#### History

Beatrix s present scope of operations is the result of the consolidation with effect from July 1, 1999 of two adjacent mines: Beatrix and Oryx. Gold mining commenced at Beatrix in 1985 and at Oryx in 1991.

#### Geology

The Beatrix mine exploits the Beatrix Reef, or BXR, at Shaft Nos. 1, 2 and 3, and the Kalkoenkrans Reef, or KKR, at Shaft No. 4 (the former Oryx mine). The reefs are developed on the Aandenk erosional surface and dip to the north and northeast at between four degrees and nine degrees.

In general, the BXR occurs at depths of between 570 meters and 1,380 meters and the KKR occurs at depths of between 1,800 meters and 2,200 meters. Both the BXR and KKR reefs are markedly channelized and consist of multi-cycle, upward fining conglomerate beds with sharp erosive basal contacts. A general east-west trending pay-zone, some 500 to 800 meters wide, has been identified east of Shaft No. 4 and is known as the main channel Zone 2. In addition, surface exploratory drilling, and underground development has confirmed the reserves to the south of Beatrix s Shaft No. 4 main channel in Zone 5, which now represents the majority of the reserves at the operation. Ongoing development and underground exploration drilling has continued over the past fiscal year so that all facies and structures have been updated and layouts and planning adapted. All new information is used as part of customary mine planning practices.

#### Mining

Beatrix is managed as three operational sections: the North Section (comprising Shaft No. 3), the South Section (comprising Shaft No. 2 and Shaft No. 1) and the West Section (comprising Shaft No. 4). No shafts were closed or opened in fiscal 2009.

Mining at Beatrix is based upon a scattered mining method with the North Section being the primary source of production. Focus on increasing development volumes at all shafts to provide future mining flexibility and ore body definition remains essential at Beatrix. However, cessation of activities on some levels, as well as delays associated with water intersections and secondary support upgrading, resulted in a 24% decrease in development volumes at Beatrix in fiscal 2009, as compared to fiscal 2008. The emphasis on development volumes is planned to continue in fiscal 2010. Overall stoping volumes at Beatrix decreased by approximately 10% between fiscal 2008 and 2009.

At the North Section in fiscal 2009, activity focused upon continued haulage development and building up stoping production to full production at the shaft. In general, development and stoping volumes were in line with expectations but were lower year on year due to hoisting constraints and revisions to the mine plan. The purpose of revising the 2009 plan was to allocate time to upgrade the rock hoist at Beatrix Shaft No. 3 in order to minimize the hoisting constraint. The overall mining grade at the North Section remained constant year on year and gold output was affected by the lower mine call factor and volumes. The power source being used for a variety of activities including drilling is primarily hydropower, as opposed to compressed air, with a majority of the mining equipment being run off a high-pressure water system. The benefits of the system include improved cooling underground, improved machine efficiency, lower noise levels and less electrical power usage

The South Section was repositioned during the latter half of fiscal 2009 to deliver reduced volumes at an improved grade during fiscal 2010. This, coupled with a stope width reduction and efforts to improve the mine call factor, is intended to improve the economics and earnings at the South Section during fiscal 2010.

The performance at Shaft No. 4 remained flat in fiscal 2009 primarily as a result of higher stoping volumes, at similar grades, offset by a lower mine call factor. Tramming discipline has been addressed during the second half of fiscal 2009, resulting in improved separation of ore and waste and therefore improved grades during the same period. Shaft No. 4 was impacted in fiscal 2009 by numerous middle and senior management changes. The KKR, which was historically characterized as being a highly erratic reef structure, is tending to exhibit greater reef consistency in Zone 5.

The overall MCF remained a major technical and operational challenge for fiscal 2009. Renewed efforts during the year coupled with training and in-stope behavior changes, such as revised drilling patterns and explosives usage and focus on conventional sweepings were undertaken to reduce the loss of free gold content within the various Beatrix reefs. Implementation of the recommendations of an external review of mining quality remains ongoing. The program initiated to clean up accumulated broken rock and mud in the mine resulted in a positive change in the MCF trend and metrics during the latter half of fiscal 2009.

In fiscal 2009, ongoing improvements were made to rail tracks and ventilation conditions, to increase the logistics capacity and support future mining volumes, and they are expected to continue in fiscal 2010. Lower-grade and marginal mining activities continued to be curtailed at Beatrix in fiscal 2009, despite the increasing gold price, as the mine plans to maintain operating margins.

Beatrix requires cooling infrastructure to maintain comfortable conditions for workers at depth. The Beatrix West Section has a refrigeration plant installed on its surface, which provides chilled water to bulk air coolers on surface and mid-shaft to the West Section s primary sub-vertical shaft, Shaft No. 4. Presently, this cooling system at Shaft No. 4 extends into Zone 5, where Gold Fields installed two bulk air coolers during fiscal 2007. Additional air coolers were installed during the fourth quarter of fiscal 2009.

Based on the higher gold price received and in anticipation of improving gold prices in the longer term, a number of incremental expansion opportunities are being examined at Beatrix. Initial development work on the Vlakpan project area commenced in fiscal 2008 which involves an extension of Beatrix on lower levels with access via the infrastructure of Shaft No. 1 and Shaft No. 3. This work continued in fiscal 2009. Additionally, a down dip extension project to access ground below the bottom level of Shaft No. 3 is planned and development of this area is expected to commence in fiscal 2011, with stoping commencing in fiscal 2014.

An extensive delineation drilling program has been approved for fiscal 2010. Drilling began in July 2009 of five surface holes at the Vlakpan area of the BXR. Surface hole drilling is expected to continue for 18 months. It is also expected that six long incline boreholes (LIB) will be drilled to explore the northern extent of the VS5, a thicker portion of the BXR, and structure north of a Tear fault. Nine reef intersections are planned in the North Block with LIB drilling having started in July 2009. Four other reef intersections are also planned to explore the potential of extensions to other zones.

Detailed below are the operating and production results at Beatrix for the past three fiscal years.

	Year ended June 3		
	2007	2008	2009
Production			
Tons ( 000)	3,590	3,215	2,991
Recovered grade (g/t)	4.7	4.2	4.1
Gold produced ( 000 oz)	543	438	391
Results of operations (\$million)			
Revenues	344.9	359.7	339.1
Total production costs <sup>(1)</sup>	247.5	269.4	267.7
Total cash costs <sup>(2)</sup>	205.6	228.0	217.7
Cash profit <sup>(3)</sup>	139.3	131.7	121.4
Cost per ounce of gold (\$)			
Total production costs	455	615	684
Total cash costs	378	520	557
Notional cash expenditure per ounce of gold produced (\$) <sup>(4)</sup>	552	724	757

Notes:

- (1) For a reconciliation of Gold Fields total production costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (2) For a reconciliation of Gold Fields total cash costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (3) Cash profit represents revenues less total cash costs.
- (4) For a reconciliation of Gold Fields notional cash expenditure to its production costs for fiscal 2009, 2008 and 2007, see Operating and Financial Review and Prospects Costs Notional Cash Expenditure.

The decrease in tonnage milled from fiscal 2008 to fiscal 2009 was primarily due to hoisting constraints and repositioning of the mine going forward. Gold production was lower in fiscal 2009 and the overall recovered grade in fiscal 2009 decreased due to an increase in stoping width and lower mining grade.

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No surface tonnage was processed during the year. Beatrix intends to review its low-grade dumps under the dynamics of variable gold prices during fiscal 2010 by milling and treating screened waste for ten days during the Christmas break.

The increase in total cash costs per ounce of gold and total production costs per ounce of gold from fiscal 2008 to fiscal 2009 resulted primarily from the reduced gold produced and the increases in the prices of material, labor and electricity costs.

The Beatrix mine is engaged in underground mining, and thus is subject to all of the underground mining risks discussed in Risk Factors. The primary safety risks at Beatrix are falls of ground, tramming accidents, winches, ventilation control and flammable gas explosions. Beatrix does experience seismic events and, while the seismic risk is much lower at Beatrix than it is at Kloof or Driefontein, the operation manages these events with a seismic network consisting of several geophones.

As discussed in regards to Driefontein, the Beatrix operations experienced a total suspension of production during the third quarter of fiscal 2008 due to power constraints. Power has been restored to 90% of the historical average consumption profile and Gold Fields believes that Beatrix can be fully functional at current levels of electricity supply owing to the shallower depth at which Beatrix operates. Current mine planning and project implementation have taken these power constraints into account and are aligned with power availability. See Risk Factors Some of Gold Fields power suppliers have forced it to halt or curtail activities at its mines, due to severe power disruptions. Power stoppages, fluctuations and power cost increases may adversely affect Gold Fields results of operations and its financial condition and Information on the Company Gold Fields Mining Operations Driefontein Operation Mining .

The principal risks at Beatrix include falls of ground, tramming accidents and methane. In April 2008, Beatrix embarked on a focused awareness campaign called Khuseleka (be protected) regarding falls of ground and tramming accidents. This campaign involves a one-day team concept training session, covering theoretical and practical issues. Health and safety audits of working places are used to measure behavior when crews return to work. Methane hazard awareness training remains an area of focus and is ongoing. During fiscal 2007, Beatrix was audited against the requirements of OHSAS 18001 and it received accreditation in the first quarter of fiscal 2008. Two surveillance audits were carried out during fiscal 2008 and one audit in fiscal 2009.

The mine has an ongoing methane management system which includes the declaration by competent ventilation staff of certain locations as hazardous, methane emission rate monitoring, ongoing awareness campaigns as well as the deployment of gas, velocity and fan sensors connected to an electronic telemetry system to act as early warning. These sensors are connected to the mine s electronic telemetry system. Furthermore, all critical fans are connected to the telemetry system and, in certain instances, equipped with localized alarms. These safety systems are monitored on a 24-hour basis from a central control room from which action is taken in the event of alarm.

Although there were four fatalities at Beatrix in fiscal 2009, Beatrix experienced no shaft closures for any length of time in fiscal 2009 due to accidents. Of the four fatalities in fiscal 2009, one was due to falling down an ore-pass, one was as a result of a gravity fall incident and two were tramming-related incidents. To date in fiscal 2010, there have been no fatalities at Beatrix. The serious injury frequency rate (See Defined Terms and Conventions ) for fiscal 2009, 2008 and 2007 was 3.81, 2.89 and 4.02 serious injuries for every million hours worked, respectively. In fiscal 2009, the fatal injury frequency rate was 0.13 fatalities for every million hours worked, while it was 0.29 in fiscal 2008. In October 2007, former President Thabo Mbeki ordered the DMR to conduct an occupational health and safety audit at all mines, including Gold Fields mines. The audit of legal compliance has been completed and the audit results have been received. Beatrix has implemented action plans to address any issues raised. See Information on the Company Environmental and Regulatory Matters South Africa Health and Safety .

Production was affected by local and national strikes in fiscal 2009. On July 16, 2008 there was a one-day regional work stoppage in the Free State province in support of COSATU s protest on the electricity crisis in South Africa followed by another one-day COSATU national stay-away on August 6, 2008 for the same reason. A further work stoppage occurred at Shaft No. 4 on July 1 and 2, 2008 when the South African Police Services arrested a number of employees for criminal activities. See Directors, Senior Management and Employees Employees Labor Relations South Africa.

The total shaft hoisting capacities of Beatrix are detailed below.

Shaft System	Hoisting capacity (tons/month)
No. 1	170,000
No. 2	170,000
No. 3	170,000
No. 4	180,000

Assuming that Gold Fields does not increase or decrease reserves estimates at Beatrix and that there are no changes to the current mine plan, Beatrix s June 30, 2009 proven and probable reserves of 6.5 million ounces of gold will be sufficient to maintain production through to approximately fiscal 2022. However, as discussed earlier in Risk Factors and Mine Planning and Management, there are numerous factors which can affect reserve estimates and the mine plan, which could thus materially change the life of mine.

Beatrix achieved full compliance certification under the International Cyanide Management Code in July 2009.

#### Processing

The following table sets forth year commissioned, processing techniques and processing capacity per month, as well as average tons milled per month and metallurgical recovery factor during the fiscal year ended June 30, 2009, for each of the plants at Beatrix.

#### **Processing Techniques**

Plant	Year commissioned	Comminution phase	Treatment phase	Capacity <sup>(1)</sup> (tons/month)	Average milled for the year ended June 30, 2009 (tons/month)	Approximate recovery factor for the year ended June 30, 2009 <sup>(2)</sup>
No. 1 Plant	1983	SAG milling	CIP treatment	260,000	197,800	95%
No. 2 Plant	1992	SAG milling	CIP treatment	150,000	51,500	96%

Notes:

(1) Nameplate capacity. Plant/Mill nameplate capacities are based on a number of operating assumptions, including assumptions regarding the blend of soft and hard ores processed, that can change and which may result in an increased level of throughput over and above the designed nameplate capacity.

### (2) Percentages are rounded to the nearest whole percent.

In fiscal 2009, the Beatrix plants collectively extracted approximately 95.5% of gold contained in ore delivered for processing. In fiscal 2004, Gold Fields installed a Knelson concentrator at the No. 1 Plant which removes gold earlier in the metallurgical process. A gravity concentrating circuit, which was commissioned in November 2006, was installed at No. 2 Plant in order to reduce locked-up gold in the mills and to improve the overall recovery. These improvements to capacity are expected to remain effective going forward.

None of the metallurgical plants or facilities was upgraded or temporarily or permanently closed in fiscal 2009, and normal routine maintenance and repairs were carried out as part of regular asset management. No major expansion or upgrades are currently planned.

Capital Expenditure

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Gold Fields spent approximately \$70 million on capital expenditures at the Beatrix operation in fiscal 2009, primarily on ore reserve development, upgrade to rail infrastructure from high-volume stoping areas, continuing

infrastructure development at Shaft No. 3, improvements at both No. 1 and No. 2 Plants in order to achieve compliance with the International Cyanide Management Code, hydropower equipment, the conversion of employee hostel accommodations from higher to lower density. Gold Fields expects to spend approximately \$69 million on capital expenditures at Beatrix in fiscal 2010, primarily on ore reserve development, upgrades to rail infrastructure, continuing the hostel accommodation alterations, mechanization of horizontal development and the continuing infrastructure development at Shaft No. 3.

#### South Deep Operation

#### Introduction

Gold Fields acquired control of South Deep on December 1, 2006. South Deep is situated adjacent to Kloof, in the Gauteng Province of South Africa. South Deep is a capital project and remains a developing mine where currently most of the permanent infrastructure to support expanded production is under construction. South Deep operates under old order mining rights covering a total area of approximately 3,600 hectares. South Deep has submitted an application to have its mining rights converted to mining rights under the 2002 Minerals Act. It is engaged in underground mining and is comprised of two operating shaft systems, the older South Shaft Complex and the newer Twin Shaft complex, and one metallurgical plant. The South Shaft Complex includes a main shaft and three sub-vertical (SV) shafts, two of which are operational. SV2 is used to hoist rock with SV3 being used to move personnel and materials. SV1 is on care and maintenance and only the upper half of the shaft is accessible as a shaft sidewall failure damaged the lower portion of the shaft prior to acquisition by Gold Fields. Options for the life of mine plan for the South Shaft area are currently being assessed with the objective of optimizing the mining schedule. The Twin Shaft complex consists of a single-barrel main shaft and an adjacent bratticed ventilation shaft. The South Shaft complex operates at depths between 1,510 meters and 2,650 meters below surface and the Twin Shaft complex operates between the surface and 2,995 meters below surface. The South Deep operation has access to the national electricity grid, water, and road infrastructure and is located near regional urban centers where it can routinely obtain needed supplies. In the fiscal year ended June 30, 2009, South Deep produced 0.175 million ounces of gold. As of June 30, 2009, South Deep had approximately 2,300 employed by outside contractors.

#### History

The current South Deep operations derive from the Barrick Gold Western Areas Joint Venture, which Gold Fields acquired in a series of transactions in the second and third quarters of fiscal 2007. The Barrick Gold Western Areas Joint Venture is now named the South Deep Joint Venture.

#### Geology

Gold mineralization at South Deep is hosted by conglomerates of the Upper Elsburg reefs and the VCR. The Upper Elsburg reefs sub-crop against the VCR in a northeasterly trend, which defines the western limits of the Upper Elsburg reefs. To the east of the sub-crop, the Upper Elsburg reefs are preserved in an easterly diverging sedimentary wedge attaining a total thickness of approximately 120 meters, which is subdivided into the lower Individuals and the overlying Massives. To the west of the sub-crop, only the VCR is preserved.

The stratigraphic units at South Deep generally dip southward at around 12 to 15 degrees and the gold-bearing reefs occur at depths of 1,500 meters to 3,500 meters below surface. The gold grade generally decreases within a reef unit, gradually toward the east away from the Upper Elsburg Reef sub-crop, as sedimentary parameters influence the overall tenor of the reefs in the distal environment.

The north-south trending normal West Rand and Panvlakte faults, which converge on the western side of the lease, are the most important large-scale faults in the area and form the western limit to gold mineralization for the mine.

### Mining

Production at South Deep currently is from the Upper Elsburgs (the Massives and the Individuals). The Upper Elsburgs occur to the east of a north-northeast striking subcrop with the overlaying VCR and form part of an easterly divergent clastic wedge. In general terms, the Upper Elsburg succession represents an easterly prograding sedimentary sequence, with the Massives containing higher gold grades and showing more proximal sedimentological attributes in the eastern sector of the mining authorization than the underlying Individuals. South Deep s workings are at depth and therefore require significant cooling infrastructure.

Mining at South Deep is entirely mechanized. The Upper Elsburgs are mined by a variety of methods including long hole open stoping, drift-and-fill and drift-and-benching. South Deep s mining method is trackless, mechanized mining. Trackless mining is a modern rock excavation technique which features an array of methods and mobile machines combined so as to form the most efficient excavation system for a given area.

South Deep remains, at present, a developing mine with large sections of its infrastructure, especially at lower levels, incomplete. Horizontal development below the current mining area has now started and is expected to build up to 500 meters per month by the second quarter of fiscal 2010. De-stressing on the Upper Elsburg Individual horizon using mechanized methods commenced during fiscal 2009. Employees with the skills to undertake trackless, mechanized mining, including drill rig operation, load haul dumper operation, dump truck operation and utility vehicle operation, are highly sought after by other trackless miners and the construction sector. Gold Fields made adjustments to remuneration packages in fiscal 2007 to attract and retain qualified staff.

As indicated at the time of acquisition, the planned production build-up at South Deep could not be delivered due to the following significant factors which required the re-planning of the mine in February 2008. The VCR mining encountered the Waterpan Fault earlier than anticipated, leading to the earlier than planned termination of conventional mining in February 2008. In the acquisition plan, the strategy of down-dip mining below the current mining area from the existing trackless mining projects was essential to the planned build-up. However, on a detailed review and considering the lack of structural and geological information, this mining method was put on hold. With the future production volumes of the Elsburg Reef package remaining dependent upon de-stress mining rates, the shift from conventional to mechanized de-stress mining was implemented in fiscal 2009 in order to accelerate the de-stress mining volumes and the opening up of minable reserves. The changes required the mine to be re-planned with the intent to maximize production from the current projects, complete the initial Twin Shaft infrastructure and develop the orebody below the current mining area. The above changes led to the restructuring of the mine and the downsizing of the workforce by approximately 2,000 employees.

Installation of the brattice wall at the Twin Shaft complex ventilation shaft was completed in the first quarter of fiscal 2009 and commissioning of the first surface fan occurred early in the second quarter of fiscal 2009. Further work on deepening the shaft and equipping it for rock hoisting has an estimated completion date of June 2012. Moving forward, management focus will be on developing pumping and rock-handling infrastructure below the current mining area and installation of additional refrigeration units, which are required to allow the expansion of mining at the lower levels.

The new tailing dam required at South Deep for the life of mine production received approval and construction commenced in the first quarter of fiscal 2010 with the first tailings deposit planned for the third quarter of fiscal 2011. The rock winder for the Twin Shafts ventilation shaft has been ordered and commission is scheduled for the second half of fiscal 2011.

During fiscal 2009, Gold Fields remodeled the reserves above infrastructure serviced by the Twin Shaft complex. Efforts are focused on bringing the mine into full production by the end of calendar 2014 for these reserves. As a result, the conceptual study of potential underground synergies between Kloof and South Deep was put on hold early in fiscal 2009. However, Gold Fields intends to seek to identify other operational synergies

between the two operations, which could include the provision of technical and financial services, the utilization of surface infrastructure such as workshops and offices, the procurement of consumables and supply chain management and the potential upsizing of the South Deep metallurgical treatment plant capacity to allow for treatment of Kloof ore.

Detailed below are the operating and production results at South Deep for the seven-month period from December 1, 2006 to June 30, 2007 (the period of Gold Fields ownership of the mine in fiscal 2007) and the fiscal years ended June 30, 2008 and 2009.

	Seven months ended June 30, 2007	Year ended June 30, 2008	Year ended June 30, 2009
Production <sup>(1)</sup>			
Tons ( 000)	1,104	1,367	1,241
Recovered grade (g/t)	4.6	5.3	4.4
Gold produced ( 000 oz)	163	232	175
Results of operations (\$ million)			
Revenues	107.9	184.6	155.2
Total production costs <sup>(2)</sup>	118.6	213.2	157.6
Total cash costs <sup>(3)</sup>	98.9	178.2	125.3
Cash profit <sup>(4)</sup>	9.0	6.4	29.9
Cost per ounce of gold (\$)			
Total production costs	714	919	902
Total cash costs	595	768	717
Notional cash expenditure per ounce of gold produced $(\$)^{(5)}$	866	1,253	1,403

Notes:

- (1) For fiscal 2007, production is reported from December 1, 2006, the date on which Gold Fields effectively acquired the mine.
- (2) For a reconciliation of Gold Fields total production costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (3) For a reconciliation of Gold Fields total cash costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (4) Cash profit represents revenues less total cash costs.
- (5) For a reconciliation of Gold Fields notional cash expenditure to its production costs for fiscal 2009, 2008 and 2007, see Operating and Financial Review and Prospects Costs Notional Cash Expenditure.

The decrease in tonnage and gold production was due primarily to the ending of the VCR mining operations and the reduction in mechanized mining in the first quarter in order to install support on main railways. Cash costs decreased primarily due to the reduction in the labor force related to the conversion of South Deep to mechanized mining.

South Deep is engaged in underground mining and is thus subject to all of the underground mining risks discussed in Risk Factors . The primary safety issues facing South Deep underground operations include seismicity (including seismic induced falls of ground) and aerial support coverage of the hanging wall to prevent falls of ground. A renewed fall of ground prevention campaign, which was started by Gold Fields during the

second half of fiscal 2009, has reduced such incidents but a review of safety-related incidents has highlighted the need to focus on slip and fall risks. South Deep is addressing the seismic risks through de-stressing and backfilling which help to alleviate seismic risks. In addition, mechanized mining requires fewer workers and allows them to conduct mining activities at a greater distance from the rock face than conventional mining methods, thereby reducing the exposure of employees to higher risk areas. During fiscal 2009, South Deep implemented a one-pass mesh and bolt ground reinforcement and support regime and a significant ground control upgrade program to further mitigate rock-fall risk.

As discussed in regards to Driefontein, the South Deep operation experienced a total suspension of production during the third quarter of fiscal 2008 due to power constraints. Power has since been restored to 90% of the historical average consumption profile, and Gold Fields believes that South Deep is currently fully functional at this level owing to the shift from more power intensive conventional mining to mechanized mining. See Risk Factors Some of Gold Fields power suppliers have forced it to halt or curtail activities at its mines, due to severe power disruptions. Power stoppages, fluctuations and power cost increases may adversely affect Gold Fields results of operations and its financial condition and Information on the Company Gold Fields Mining Operations Driefontein Operation Mining .

As production builds up, the power needs at South Deep will increase. South Deep has requested an additional allocation of electricity from Eskom. Eskom has indicated that the additional requested capacity will be granted. If a power conservation program is implemented, Gold Fields expects that the power allocations of each of its operations will be tradable. As a result, Gold Fields expects to be able to shift power usage from one mine to another as necessary.

In fiscal 2009, the serious injury frequency rate (see Defined Terms and Conventions ) was 2.08 injuries for every million hours worked, as compared to 5.25 injuries for every million hours worked in fiscal 2008, and the fatal injury frequency rate was 0.0 fatalities for every million hours worked. There were no fatalities at the South Deep operation in fiscal 2009. The mine achieved one million fatality-free shifts in March 2009 and there were no safety-related work stoppages imposed by the DMR in fiscal 2009. To date in fiscal 2010, there have been no fatalities. In October 2007, former President Thabo Mbeki ordered the DMR to conduct an occupational health and safety audit at all mines, including Gold Fields mines. The audit of legal compliance has been completed and a report of its finding have been released. South Deep has enacted action plans to address any issues identified in the audit. See Information on the Company Environmental and Regulatory Matters South Africa Health and Safety .

On July 23, 2008, there was a one-day regional work stoppage in Gauteng province in support of COSATU s protest against the electricity crisis in South Africa followed by another one-day COSATU national stay-away on August 6, 2008 for the same reason.

The ISO 14001:2004 Environmental Management System implementation was successfully achieved in the first half of fiscal 2009. During fiscal 2010, South Deep was audited against the requirements of OHSAS 18001 and it has been recommended for certification. South Deep achieved full compliance certification under the International Cyanide Management Code in December 2008.

The total shaft hoisting capacities of South Deep are detailed below.

Shaft System	Hoisting capacity (tons/month)
Twins Main	175,000
Twins Main Ventilation Shaft <sup>(1)</sup>	195,000
SV2 <sup>(2)</sup>	60,000
South Shaft <sup>(3)</sup>	60,000

Notes:

- (1) The Twins Main ventilation shaft is under construction and is planned to have a hoisting capacity of 195,000 tons/month once commissioned.
- (2) This shaft does not hoist material to the surface. It has a capacity of 60,000 tons per month for sub-surface hoisting.
- (3) The South Shaft complex was refurbished in fiscal 2009 for hoisting operations to recommence in fiscal 2010. 60,000 tons per month is planned to be hoisted in fiscal 2010 at South Shaft as the Twin Shaft builds to full capacity. Ongoing refurbishment and infrastructure upgrades at South Shaft are planned to continue over the next several years.

Assuming that Gold Fields does not materially increase or decrease reserves estimates at South Deep and that there are no significant changes to the life of mine plan, South Deep s June 30, 2009 proven and probable reserves of 29.5 million ounces will be sufficient to maintain production through approximately fiscal 2050. However, as discussed earlier in Risk Factors and Mine Planning and Management, there are numerous factors which can affect reserve estimates and the mine plan, which could thus materially change the life of mine. A portion of Gold Fields deeper proven and probable reserves at South Deep are based on the pre-acquisition figures as declared for December 2005 by the IRP for the Barrick Gold Western Areas Joint Venture between BGSA (formerly, Placer Dome South Africa Proprietary Limited) and Western Areas. However, a significant portion of the June 30, 2009 South Deep reserves now take into account new estimation and mine design work on the Upper Elsburg Reefs completed during fiscal 2009 in accordance with Gold Fields standards and procedures. 50% of the total reserve ounces relate to Phase 1 north of the Wrench Fault and Phase 1 south of the Wrench Fault (above infrastructure). 50% of the total reserve ounces relate to Phase 2, being the South Shaft/Old Mine and the VCR. The 50% relating to the Current Mine, Phase 1 north of the Wrench Fault (above infrastructure) have been remodeled and designed. Due to no further information being available at this stage, the remaining reserves continue to be based on the pre-acquisition figures, declared by the IRP, as described above.

Gold Fields is presently undertaking a surface drilling exploration program that Gold Fields expects will provide additional technical information on the geological structure, sedimentology, facies characteristics and tenor of the Ventersdorp Contact Reef, or the VCR, and Upper Elsburg Reefs in the area below current infrastructure to the southern boundary of the mining area, or Phase 2. When the surface drilling exploration program is completed, Gold Fields expects the additional information will provide for enhanced resource modeling of the Phase 2 ground and will increase confidence levels with regard to in situ facies geometry, reef grades and tonnages. See also Risk Factors Gold Fields has not independently confirmed the reliability of the South Deep, BGSA or Western Areas information for the period prior to their respective acquisitions by Gold Fields included in this annual report.

### Processing

All processing at South Deep is provided by a single plant. The following table sets forth year commissioned, processing techniques and processing capacity per month, as well as average tons milled per month and metallurgical recovery factors during fiscal 2009 for the plant.

#### **Processing Techniques**

Plant	Year commissioned	Comminution phase	Treatment phase	Capacity <sup>(1)</sup> (tons/month)	Average milled for the year ended June 30, 2009 (tons/month)	recovery factor for the year ended June 30, 2009 <sup>(2)</sup>
Twin Shaft Plant	2002	Primary SAG and Secondary Ball milling	Leach, CIP treatment with elution and electrowinning	220,000	103,000 <sup>(2)</sup>	96.7%

Note:

(1) Nameplate capacity as designed. Plant/Mill nameplate capacities are based on a number of operating assumptions, including assumptions regarding the blend of soft and hard ores processed, that can change and which may result in an increased level of throughput over and above the designed nameplate capacity.

## (2) Excludes Kloof low grade surface material.

During fiscal 2009, the South Deep Plant treated an average of 0.103 million tons per month made up of underground and surface material. During fiscal 2009, the plant treated an average of approximately 47,000 tons of Kloof low-grade surface material per month. Gold Fields originally planned to increase plant capacity from 220,000 tons/month to 330,000 tons/month. However, the Company is now exploring options to increase capacity further. An additional exercise to review the viability of the South Deep plant treating a further 100,000 tons per month from Kloof and being expanded to include a floatation circuit, should the uranium project being considered go ahead, is scheduled to be completed during the first half of fiscal 2010 and the work is well advanced. See Exploration Project 5M . Regardless of the ultimate capacity chosen, South Deep is required to order the new mill by March 2010 for the final plant capacity.

During fiscal 2009, 15.0% by mass of the annual tons milled was returned underground as backfill with the remainder sent to the residue disposal facility. The current backfill plant has the capacity to recover 42% by mass of the tons milled as backfill product though produced in batches. South Deep is exploring the possibility of converting its backfill to continuous production (not batched) in the short-term and full plant tailings in the medium-term. The current residue disposal facilities have a capacity of only 132,000 tons per month. The design for a new residue disposal facility for South Deep has been completed and approved by the Board. Construction commenced in the first quarter of fiscal 2010. It is expected to take up to two years to complete the construction program to a point where deposits of residue on the dam can begin.

## Capital Expenditure

Gold Fields spent approximately \$113 million on capital expenditures at the South Deep operation in fiscal 2009, primarily on developing the orebody, establishing ore handling infrastructure, ventilation infrastructure and shaft infrastructure. Gold Fields expects to spend approximately \$193 million on capital expenditures at South Deep in fiscal 2010, primarily on continuing the infrastructure development.

## **Ghana** Operations

The Ghana operations are comprised of the Tarkwa and Damang mines.

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## Tarkwa Mine

### Introduction

Gold Fields Ghana, which holds the interest in the Tarkwa mine, is owned 71.1% by Gold Fields, 18.9% by IAMGold and 10.0% by the government of Ghana.

The Tarkwa mine is located in southwestern Ghana, about 300 kilometers by road west of Accra. The Tarkwa mine consists of several open pit operations on the original Tarkwa property and the adjacent southern portion of the property, which was formerly referred to as the Teberebie property and was acquired by Gold Fields in August 2000, together with a heap leach facility, referred to as the North Plant Heap Leach Facility. A new SAG mill and CIL plant commenced continuous operations at the Tarkwa property in November 2004. In December 2008, the expanded CIL plant was commissioned and the stacking of new ore at the South Plant Heap Leach Facility was terminated, although gold harvesting for the existing heaps will continue while it is economically viable. The expansion of the CIL Plant to incorporate a ball mill in close circuit with the SAG mill doubled the capacity of the CIL Plant to 12.3 million tons treated annually. The total treatment capacity including both the North Plant and the CIL Plant is estimated to be 23 million tons per annum.

The Tarkwa mine operates under mining leases with a total area of approximately 20,800 hectares. It currently conducts only surface operations, although it previously had a small underground mining operation which it operated through July 1999 under Gold Fields agreement with the government of Ghana. The Tarkwa mine has access to the national electricity grid, water, road and railroad infrastructure. Most supplies are trucked in from either the nearest seaport, which is approximately 140 kilometers away by road in Takoradi, or from Tema near Accra, which is approximately 300 kilometers away by road. In the fiscal year ended June 30, 2009, Tarkwa produced 0.612 million ounces of gold, of which 0.435 million ounces were attributable to Gold Fields, with the remainder attributable to minority shareholders in Gold Fields Ghana. As of June 30, 2009, Tarkwa had approximately 3,900 employees, including approximately 2,000 employed by outside contractors.

#### History

Investment in large-scale mining in the Tarkwa area commenced in the last quarter of the nineteenth century. In 1993, Gold Fields of South Africa, or GFSA, took over an area previously operated by the State Gold Mining Corporation, or SGMC. SGMC had, in turn, acquired the property from private companies owned by European investors. Following initial drilling, feasibility studies and project development (which included the removal of overburden and the resettlement of approximately 22,000 people), mining operations commenced in 1997.

## Geology

Gold mineralization at Tarkwa is hosted by Proterozoic Tarkwaian metasediments, which overlie but do not conform to a Birimian greenstone belt sequence. Gold mineralization is concentrated in conglomerate reefs and has some similarities to deposits in the Witwatersrand Basin in South Africa. The deposit comprises a succession of stacked, tabular paleoplacer units consisting of quartz pebble conglomerates. Approximately 10 such separate economic units occur in the concession area within a sedimentary package ranging from 40 meters to 110 meters in thickness. Low-grade to barren quartzite units are interlayered between the separate reef units.

#### Mining

The existing surface operation currently exploits narrow auriferous conglomerates from four pits, namely Pepe, Akontansi, Teberebie and Kottraverchy. A fifth pit, West Hill, was fully depleted in February 2007. Two additional pits, Atuabo and Mantraim, which have previously been mined by Gold Fields, are temporarily inactive, but both are planned to be reactivated within the next few years pending the relocation of an electrical sub-station which lies on the edge of the current allowed blast radius and as adjacent active pits are expanded to join them.

Tarkwa uses the typical open pit mining methods of drilling, blasting, loading and hauling. The progression of blasting in the open pit occurs in steps of six meters (or in some cases three meters) with the ore loaded into 144-ton dump trucks.

Tarkwa currently presents no unusual challenges beyond those faced at most open pit and heap leaching mining operations, including variations in amenability of ores to leaching. However, harder ores are expected at Tarkwa which could reduce throughput and recoverable grade at the North Heap Leach facility. As yet, throughput has not been affected, but heap leach recoveries declined from 71% in fiscal 2008 to 62% in fiscal 2009 as a result of the increase in competent ore, which is less amenable to heap leaching. The operational challenges during the year consisted of initial delay in the completion of the CIL expansion project, challenges during the commissioning of the expanded plant and maintaining planned availability of an aging mining fleet.

Detailed below are the operating and production results at Tarkwa for the past three fiscal years.

	Year ended June 30,		1e 30,
	2007	2008	2009
Production			
Tons ( 000)	22,639	22,035	21,273
Recovered grade (g/t)	1.0	0.9	0.9
Gold produced ( 000 oź)	697	646	612
Results of operations (\$million)			
Revenues	444.8	531.5	537.2
Total production costs <sup>(2)</sup>	302.6	357.0	417.8
Total cash costs <sup>(3)</sup>	263.6	317.6	368.1
Cash profit <sup>(4)</sup>	181.2	213.9	169.1
Cost per ounce of gold (\$)			
Total production costs	434	553	682
Total cash costs	378	492	601
Notional cash expenditure per ounce of gold produced (\$) <sup>(5)</sup>	500	753	831

Notes:

- (1) In fiscal 2007, 2008 and 2009, 0.496 million ounces, 0.459 million ounces and 0.435 million ounces of production, respectively, were attributable to Gold Fields, with the remainder attributable to minority shareholders in the Ghana operations.
- (2) For a reconciliation of Gold Fields total production costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (3) For a reconciliation of Gold Fields total cash costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (4) Cash profit represents revenues less total cash costs.

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(5) For a reconciliation of Gold Fields notional cash expenditure to its production costs for fiscal 2009, 2008 and 2007, see Operating and Financial Review and Prospects Costs Notional Cash Expenditure.

In fiscal 2009, overall ore tonnage decreased by 0.7 million tons compared to fiscal 2008 levels due to challenges during the commissioning of the CIL plant. Stacking of ore on the South Plan Heap Leach Facility

heaps ceased in December 2008 but irrigation of the South Heap Leach Facility heaps will continue until all economically viable gold has been recovered. Total waste mined increased as additional equipment was added to ensure that sufficient waste was mined to meet the production profile for the life of mine. Compared to fiscal 2008 levels, gold production at Tarkwa decreased in fiscal 2009 primarily because of lower throughput due to commissioning challenges at the expanded plant. Total cash costs per ounce of gold increased approximately 22% during fiscal 2009, primarily due to lower throughput and associated gold production.

Gold Fields Ghana, among other mining companies in Ghana, was asked by the state electricity supplier, the Volta River Authority, or VRA, in August 2006 to significantly reduce its electricity demand largely because of the low water reservoir level of the VRA s Akosombo generating facility and concerns about its ability to meet future supply and demand at then present consumption levels. As part of the efforts to stabilize the power supply situation, during fiscal 2008, the four largest mining companies in Ghana, including Gold Fields Ghana, formed a consortium and agreed to jointly fund the construction of an 80MW power plant, known as the Mining Reserve Plant, or MRP, to guarantee electricity supply into the future. The MRP was commissioned in the second quarter of fiscal 2008 and has been put into service to stabilize power during periods of peak demand. A new VRA substation has been installed close to the Tarkwa mine and the mine has been connected to the national network to the north, in addition to the existing southern connection which is expected to result in a more reliable transmission network.

A 60% increase in the electricity tariff became effective on November 1, 2007, followed by a further 80% increase with effect from July 1, 2008. The electricity tariff has since reverted to the tariff in effect on November 1, 2007 with effect from January 1, 2009. During fiscal 2009, Tarkwa registered as a bulk electricity user which allows Tarkwa to negotiate power tariffs directly with the VRA.

During fiscal 2009, the VRA ceased providing electricity transmission as part of the power sector restructuring program in Ghana. A new Government-owned transmission company called the Ghana Grid Company Limited, or GRIDCo, was formed to carry out the transmission functions. The VRA is now responsible for the generation of power alongside other power generation companies that are emerging. No required power usage cuts were experienced in fiscal 2009, although frequent power interruptions did occur. This trend increased over the fourth quarter of fiscal 2009, and can be attributed to a combination of localized problems within the old GRIDCo substation at Tarkwa and inflexibility within the transmission network. A new VRA substation has been installed close to the Tarkwa mine and the mine has been connected to the national network to the north in addition to the existing southern connection, which is expected to result in more reliable electricity transmission. Assuming that Gold Fields does not increase or decrease reserves estimates at Tarkwa and that there are no changes to the current mine plan at Tarkwa, Tarkwa s June 30, 2009 proven and probable reserves of 10.7 million ounces (7.6 million of which were attributable to Gold Fields, with the remainder attributable to minority shareholders in the Ghana operations) will be sufficient to maintain production through approximately fiscal 2022. However, as discussed earlier in Risk Factors and Mine Planning and Management, there are numerous factors which can affect reserve estimates and the mine plan, which could thus materially change the life of mine.

The Tarkwa mine is engaged in open pit mining and is thus subject to all of the risks associated with open pit mining discussed in Risk Factors. Although surface mining generally is less dangerous than underground mining, serious and even fatal accidents do still occur. Tarkwa had no fatalities in fiscal 2009 and had three fatalities in fiscal 2008. To date in fiscal 2010, there have been no fatalities at Tarkwa. The serious injury frequency rate for fiscal 2009, 2008 and 2007 was 0.3, 0.2 and 0.0 serious injuries for every million hours worked, respectively. The fatal injury frequency rate (see Defined Terms and Conventions ) for fiscal 2009 was 0.0 fatal injuries for every million hours worked, while for 2008 and 2007 it was 0.2 and 0.0 fatal injuries for every million hours worked, respectively. OHSAS 18001 (2004) certification was maintained during the year. The mine also was recertified under the ISO 14001 (2007) standard during fiscal 2009. There were no material work stoppages during fiscal 2009 or to date in fiscal 2010.

### Processing

Tarkwa s ore can be processed using either conventional heap leach techniques with acceptable recoveries or SAG milling with a CIL plant. The operation incorporated two separate heap leach circuits, the North Plant and the South Plant, until December 2008 when the South Plant was closed. The operation also incorporates a SAG mill with a CIL plant which was commissioned in 2004. An expansion of the CIL Plant to incorporate a ball mill was commissioned in December 2008. The following table sets forth year commissioned, processing techniques and processing capacity per month, as well as average tons milled per month and metallurgical recovery factors during the fiscal year ended June 30, 2009, for each of the plants at Tarkwa.

		Process	sing Techniques			
Plant	Year commissioned	Comminution phase	Treatment phase	Capacity <sup>(1)</sup> (tons/month)	Average milled for the year ended June 30, 2009 (tons/month)	Approximate recovery factor for the year ended June 30, 2009 <sup>(2)</sup>
CIL Plant	2004	SAG milling (with ball mill) <sup>(3)</sup>	CIL treatment	350,000/ 1,000,000 <sup>(4)</sup>	455,000/834,000 <sup>(5)</sup>	97%
North Plant Heap Leach Facility	1997	Multiple-stage crushing and screening process and agglomeration	Heap leach with AD&R treatment	810,000	871,400	74% <sup>(6)</sup>
South Plant Heap Leach Facility <sup>(7)</sup>	1992	Multiple-stage crushing and screening process and agglomeration	Heap leach with AD&R treatment and electrowinning	530,000	490,000	60%(6)

Notes:

- (1) Nameplate capacity as designed. Plant/Mill nameplate capacities are based on a number of operating assumptions, including assumptions regarding the blend of soft and hard ores processed, that can change and which may result in an increased level of throughput over and above the designed nameplate capacity.
- (2) Percentages are rounded to the nearest whole percent.
- (3) The ball mill was added in December 2008.
- (4) 350,000 represents the capacity from July 2008 to December 2008. 1,000,000 represents the capacity with the new configuration with ball mill from January 2009 to June 2009.
- (5) 455,000 represents the average milled from July 2008 to December 2008. 834,000 represents the average milled with the new configuration with ball mill from January 2009 to June 2009.

(6)

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Heap leach recoveries are the result of an extended solution application process with full recovery requiring several leach cycles. Full recovery of all recoverable gold for current ores is only achieved over several years. Thus, recoveries must be considered in terms of recovery as time progresses, or a progressive recovery. Over time, Gold Fields expects both plants to achieve progressive recovery factors of about 64% of contained gold, equivalent to full recovery of all recoverable gold during the life of mine.

(7) Results are reported until December 22, 2008, the date on which the South Plant Heap Leach Facility was closed.

The SAG mill and CIL plant exceeded nameplate capacity during fiscal 2009. The amount of tonnage treated at the heap leach facilities decreased by 2.9 million tons in fiscal 2009 as a result of expansion of the CIL and resulting planned closure of the South Plant. Expansion of the North Plant heap leach pads commenced during the third quarter of fiscal 2007. The CIL plant processed 7.73 million tons in fiscal 2009, as compared to 5.57 million tons in fiscal 2008. The increased throughput is due to the CIL expansion project commissioned in December 2008.

Tarkwa achieved full compliance certification under the International Cyanide Management Code in June 2008.

### Capital Expenditure

Gold Fields spent approximately \$141 million on capital expenditures at the Tarkwa operation in fiscal 2009 (excluding \$60 million spent on capital waste mining, which is expensed), primarily on the CIL plant expansion, further expansion of the north plant heap leach pad and additional mining equipment. Gold Fields has budgeted approximately \$66 million for capital expenditures at Tarkwa for fiscal 2010 (excluding \$94 million spent on capital waste mining, which is expensed), principally for additional mining equipment and high-pressure grinding rolls to improve heap leach recovery.

#### Damang Mine

#### Introduction

Abosso, which owns the interest in the Damang mine, is owned 71.1% by Gold Fields, 18.9% by IAMGold and 10% by the Ghanaian government, mirroring the shareholding structure of Gold Fields Ghana.

The Damang deposits are located in the Wassa West District in southwestern Ghana approximately 330 kilometers by road west of Accra and approximately 30 kilometers by road northeast of the Tarkwa mine. The Damang mine consists of an open pit operation with a SAG mill and CIL processing plant.

Damang operates under a mining lease with a total area of approximately 8,100 hectares. The Damang mine has access to the national electricity grid and water and road infrastructure. Most supplies are trucked in from either the nearest seaport, which is approximately 200 kilometers away by road in Takoradi, or from Accra, which is approximately 360 kilometers away by road. In the fiscal year ended June 30, 2009, the Damang mine produced 0.200 million ounces of gold, of which 0.143 million ounces were attributable to Gold Fields, with the remainder attributable to minority shareholders in Abosso. As of June 30, 2009, Damang had approximately 1,600 employees, including approximately 1,200 employed by outside contractors.

#### History

Mining on the Abosso concession began with underground mining in the early twentieth century. Surface mining at Damang commenced in August 1997 and Gold Fields assumed control of operations on January 23, 2002. Historically, the underground mine was in operation from 1878 until 1956.

#### Geology

Damang is located on the Damang Anticline, which is marked by Tarkwaian metasediments on the east and west limbs, around a core of Birimian metasediments and volcanics. Gold in the Tarkwaian metasediment and volcanics is predominantly found in the conglomerates of the Banket Formation and is similar to the Witwatersrand in South Africa; however, at Damang, hydrothermal processes have enriched much of this paleoplacer mineralization. Within the region, the contact between the Birimian and Tarkwaian metasediment and volcanics is commonly marked by zones of intense shearing and is host to a number of significant shear hosted gold deposits including Prestea, Bogoso, and Obuasi.

Paleoplacer mineralization occurs on the west limb of the anticline at Abosso, Chida, and Tomento, and on the east limb of the anticline at the Kwesie, Lima South, and Bonsa North locations. Hydrothermal enrichment of the Tarkwaian paleoplacer occurs at the Rex, Amoanda, and Nyame areas on the west limb and the Damang and Bonsa areas on the east limb.

#### Mining

Damang uses the typical open pit mining methods of drilling, blasting, loading and hauling. The progression of blasting in the open pit occurs in six-meter benches, which are then combined to form steps of three meters with the ore and waste loaded into 100-ton dump trucks. The primary operational challenges include managing the Damang Pit Cut Back, or DPCB, and maintaining adequate and timely supply of appropriate plant feed blend. There were no material stoppages to the mining operations during fiscal 2009.

During fiscal 2009, the DPCB pit remained the high-grade fresh ore feed source to the plant. Of the five Tomento pits, four were fully depleted by the end of fiscal 2008 and the oxide in the fifth pit, the Tomento pit 2, was depleted during fiscal 2009. Currently, the main oxide feed sources to the plant are the Tomento East and Rex pits, which were started during the fourth quarter of fiscal 2008 and the first quarter of fiscal 2009, respectively.

The DPCB waste stripping continued in fiscal 2009. Approval was sought for additional waste stripping expenditure over the life of the pit. The waste stripping expenditure, which is projected to increase compared to the original forecast due to the increase in mining volumes and the increasing contract rates of African Mining Services (Ghana) Pty Ltd, or AMS, the main contractor at Damang, is required for the continued development of the DPCB. In addition, a scoping study supplementary to the pre-feasibility study was completed to evaluate the underground mining potential at Abosso Deeps, an area at the southern end of the Damang lease area near the old Abosso underground mine. The scoping study identified that additional drilling from the surface as well as a study into the feasibility of alternative mining methods were required. A first phase of drilling on Abosso Deeps was completed during fiscal 2009. However, further drilling is required to better define the ore body. That drilling is scheduled for fiscal 2010. Based upon the results of this drilling, Gold Fields will determine whether to undertake a feasibility study.

The development of Damang s several satellite pits has increased the size of the mine extensively, requiring compensation payments and in some cases the resettlement of affected landowners. The development of Rex Pit in fiscal 2009 and the extension of Tomento East waste dumps resulted in the relocation of 95 landowners. Additional resettlement is required in fiscal 2010 at the Rex and Tomento pit areas due to delays in achieving consensus with the affected landowners. Following Gold Fields acquisition of Damang in January 2002, an exploration program was started to seek alternative sources of ore to replace the Damang pit, by testing both hydrothermal and conglomerate styles of mineralization across the Damang lease area. The Rex pit is a new pit located on southern extent of the Damang Mining Lease. The Rex exploration program was conducted in fiscal 2006 and the pit was originally planned to be mined in fiscal 2010. In light of the occurrence of illegal mining activities in the Rex project area, management decided to accelerate the mining of the Rex pit to fiscal 2009. Negotiations between the mine and the illegal miners resulted in the peaceful withdrawal of the illegal miners over several months without incident. Although the illegal miners mined some of the ore body, they vacated the area before the mining plan was seriously affected.

AMS performs a substantial proportion of the mining operations at Damang. In January 2006, AMS was awarded a six-year contract beginning June 25, 2005 to reflect the increased scope of works from mining the DPCB and the Damang satellite pits. In July 2008, the AMS contract was extended by three years. AMS provides employees, supplies and equipment for mining at Damang, which includes drilling, blasting and waste stripping. AMS receives fees under the contract which depend on the type of service being performed and the equipment being used. Under the terms of the contract, AMS is liable for any damage or loss it causes, including that caused by any subcontractor it hires. AMS is not liable for damage that is the result of work performed in accordance

with the terms of the contract that is unavoidable or that is caused by any negligent act or omission of employees of Abosso or third parties over whom AMS has no control. AMS is required to take out insurance to cover potential damage and liability. Abosso can terminate its contract at any time; however, there are significant penalties associated with doing this, particularly early on in the life of the contract. In the event of termination, Abosso is under no obligation to purchase any of the AMS equipment, although, should AMS agree, it would have an option to purchase such equipment.

A different contractor, Engineers & Planners Company Limited, performs the ore haulage contract work at Damang, using 30-ton trucks to haul the material from the various satellite pits to the Run of Mine, or RoM, pad, which is the ore stockpile dump close to the crushing plant.

Detailed below are the operating and production results at Damang for the past three fiscal years.

	Year ended June 30,		ne 30,
	2007	2008	2009
Tons ( 000)	5,269	4,516	4,991
Recovered grade (g/t)	1.1	1.3	1.2
Gold produced ( 000 oź)	188	194	200
Results of operations (\$ million)			
Revenues	119.5	160.4	175.7
Total production costs <sup>(2)</sup>	113.1	131.6	144.0
Total cash costs <sup>(3)</sup>	112.2	127.8	134.4
Cash profit <sup>(4)</sup>	7.3	32.6	41.3
Cost per ounce of gold (\$)			
Total production costs	602	678	719
Total cash costs	597	658	671
Notional cash expenditure per ounce of gold produced (\$) <sup>(5)</sup>	624	717	745

Notes:

- (1) In fiscal 2007, 2008 and 2009, 0.134 million ounces, 0.138 million ounces and 0.142 million ounces of production, respectively, were attributable to Gold Fields, with the remainder attributable to minority shareholders in Abosso.
- (2) For a reconciliation of Gold Fields total production costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (3) For a reconciliation of Gold Fields total cash costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (4) Cash profit represents revenue less total cash costs.
- (5) For a reconciliation of Gold Fields notional cash expenditure to its production costs for fiscal 2009, 2008 and 2007, see Operating and Financial Review and Prospects Costs Notional Cash Expenditure.

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The gold production in fiscal 2009 increased primarily due to processing more high-grade material from DPCB. The grade, however, decreased as a result of more lower-grade oxide material treated from Tomento Pit. Total production and cash costs increased in fiscal 2009 due to mining more expensive tons from the DPCB and higher consumable costs. Mill tonnage throughput increased due to better fragmentation and improved plant availability.

Total production and cash costs increased in fiscal 2009 due to increases in mining costs, haulage, fuel, power and consumable costs, together with expenditure incurred on the DPCB.

Damang obtains its electricity indirectly from the VRA, which generates the electricity. The electricity is distributed by Electricity Company of Ghana, or the ECG, which is a distributor for GRIDCo, the electricity transmission utility. A 60% increase in the electricity tariff became effective on November 1, 2007, followed by a further 80% increase with effect from July 1, 2008. The electricity tariff has since reverted to the tariff in effect on November 1, 2007 with effect from January 1, 2009. During fiscal 2009, Damang registered as a bulk electricity user which allows Damang to negotiate electricity tariffs directly with the VRA rather than with ECG or GRIDCo. Damang has a back-up power generation facility that is owned and controlled by the mine. This is only used during power outages or reduced supply capacity from the VRA or the ECG. During fiscal 2010, standby power generation units are being rebuilt and upgraded. Power outages from ECG and VRA and poor-quality power from VRA resulted in the need to use back-up generation from time to time.

Assuming that Gold Fields does not increase or decrease reserves estimates at Damang and that there are no changes to the current mine plan at Damang, Damang s June 30, 2009 proven and probable reserves of 1.8 million ounces (approximately 1.3 million of which were attributable to Gold Fields, with the remainder attributable to minority shareholders in the Ghana operations) will be sufficient to maintain production through approximately fiscal 2019. However, as discussed earlier in Risk Factors and Mine Planning and Management, there are numerous factors that can affect reserve estimates and the mine plan, which could thus materially change the life of mine.

The Damang mine comprises open pit mining, and is thus subject to all of the risks associated with open pit mining discussed in Risk Factors. Although surface mining generally is less dangerous than underground mining, serious and even fatal accidents do still occasionally occur. The Damang mine has not had a fatal injury since its acquisition by Gold Fields in 2002, including to date in fiscal 2010. The serious injury frequency rate (see Defined Terms and Conventions ) at Damang for fiscal 2009, 2008 and 2007 was 0.0, 0.0 and 0.0 serious injuries for every million hours worked. The Damang mine has introduced a management system in accordance with OHSAS 18001. The environmental management system at the mine is certified to the ISO 14001 standard. There were no strikes or material work stoppages at Damang in fiscal 2009 or to date in fiscal 2010. Damang achieved full compliance certification under the International Cyanide Management Code in May 2008.

#### Processing

All ore at Damang is processed through a single facility. The following table sets forth the year commissioned, processing techniques and processing capacity per month, as well as average tons milled per month and metallurgical recovery factor during the fiscal year ended June 30, 2009 for the plant.

Processing Techniques

		1 TOCCSSINg 1	reeningues			
Plant	Year commissioned	Comminution phase	Treatment phase	Capacity <sup>(1)</sup> (tons/month)	Average milled for the year ended June 30, 2009 (tons/month)	Approximate recovery factor for the year ended June 30, 2009 <sup>(2)</sup>
Main Plant	1997	Single-stage crushing with SAG and ball milling	CIL treatment	383,000	415,892	93%

Notes:

<sup>(1)</sup> Nameplate capacity as designed. Plant/Mill nameplate capacities are based on a number of operating assumptions, including assumptions regarding the blend of soft and hard ores processed, that can change and which may result in an increased level of throughput over and above the designed nameplate capacity.

(2) Percentages are rounded to the nearest whole percent.

Optimization of the Damang mill involves careful blending of hard and soft ores to maximize use of the milling circuit, which remains the major throughput constraint in this plant. Mining operations continue to focus on maintaining an appropriate plant feed blend.

A feasibility study for the installation of a secondary crusher was initiated in the latter half of fiscal 2009. This project is intended to increase the hard fresh ore production in the mill feed which has better grades compared with the soft oxide ore.

The walls of the East Tailings Storage Facility were raised during fiscal 2008 to increase the capacity of the facility and the work was completed during the second quarter of fiscal 2009. This provides capacity for the tailings to be generated during the expected life of the mine.

#### Capital Expenditure

Gold Fields spent approximately \$17 million on capital expenditures at the Damang mine in fiscal 2009, primarily on crusher rehabilitation, exploration drilling, new computer software and development of satellite pits. Gold Fields has budgeted approximately \$25 million of capital expenditures at Damang for fiscal 2010, primarily for exploration and installation of a secondary crusher.

#### Australia Operations

When Gold Fields acquired the St. Ives and Agnew gold mining operations from WMC Resources Limited, or WMC, on November 30, 2001, part of the purchase consideration included Gold Fields agreeing to pay a royalty to WMC. Separate, but similar, royalties were payable for gold produced from the St. Ives and Agnew operations, calculated as follows:

4% of the net smelter returns for gold produced from St. Ives to the extent that cumulative production of gold from November 30, 2001 exceeded 3.3 million ounces, but subject to the average spot price of gold for the relevant quarter exceeding A\$400 per ounce. A similar royalty was payable for gold production at Agnew but only for cumulative production of gold from November 30, 2001 in excess of 0.8 million ounces; and

a price participation royalty equal to 10% of the difference between revenue calculated at the spot gold price expressed in Australian dollars per ounce and at A\$600 per ounce of gold in respect of all gold produced from the St. Ives and Agnew operations each quarter after November 30, 2001, subject to the spot price of gold exceeding A\$600 per ounce.

On June 26, 2002, WMC agreed to give up its right to receive royalties from the Agnew operation in exchange for a payment of A\$3.6 million. In July 2002, WMC sold its right to royalties from the St. Ives operation to Morgan Stanley. During fiscal 2009, the gold price continued to exceed the A\$600 price required to trigger the price participation royalty and, as a result, royalties of A\$25.8 million (approximately U.S.\$19.1 million) were expensed in fiscal 2009. During June 2008, St. Ives exceeded the threshold of 3.3 million ounces of cumulative production of gold from November 30, 2001, creating the liability to pay the 4% net smelter return royalty on subsequent ounces sold, and, as a result, additional royalties of A\$20.5 million (approximately U.S.\$15.2 million) were expensed in fiscal 2009.

On August 26, 2009, Gold Fields executed an agreement with Morgan Stanley pursuant to which the royalty payable by St. Ives to certain subsidiaries of Morgan Stanley was terminated for a consideration of A\$308 million (\$267.1 million). See Operating and Financial Review and Prospects Recent Developments Termination of Royalty Over St. Ives.

St. Ives

#### Introduction

St. Ives is located 80 kilometers south of Kalgoorlie and 20 kilometers south of Kambalda, straddling Lake Lefroy in Western Australia. It holds exploration licenses, prospecting licenses and mining leases covering a total area of approximately 83,500 hectares. St. Ives is both a surface and underground operation, with a number of open pits, three operating underground mines, a metallurgical CIP plant and a heap leach facility. The St. Ives operation obtains electricity pursuant to a contract with a major mining company that expires in January 2014 and has access to water, rail, air and road infrastructure. Needed supplies are trucked in locally from both Kambalda and Kalgoorlie. In fiscal 2009, St. Ives produced 0.428 million ounces of gold. St. Ives had a workforce of approximately 950 employees as of June 30, 2009, approximately 660 of whom were employed by outside contractors.

Gold production takes place over an extensive area at St. Ives, although it is mainly concentrated in a 55-kilometer corridor extending south-southeast from Kambalda across Lake Lefroy.

#### History

Gold mining began in the St. Ives area in 1897, with WMC commencing gold mining operations at St. Ives in 1980. Gold Fields acquired the St. Ives gold mining operation from WMC in November 2001.

#### Geology

The gold deposits of St. Ives are located at the southern end of the Norseman-Wiluna greenstone belt of the West Australian Goldfields Province. In the St. Ives area the belt consists of Kalgoorlie Group volcanic rocks, Black Flag group felsic volcanic rocks and sediments and a variety of intrusive and overlying post-tectonic sediments. The area is structurally complex, with host rocks metamorphosed to upper greenschist and lower amphibolite facies. Gold mineralization discovered to date is best developed in the mafic-dominated parts of the sequence, hosted in minor structures including vein arrays, breccia zones and central, quartz-rich and mylonitic parts of shear zones. Deposit styles and ore controls are varied, but deposits are commonly associated with subsidiary structures which splay off the regionally extensive Boulder-Lefroy Fault.

#### Mining

St. Ives sources production from a variety of underground and surface operations, has a mill that treats primary ore and a heap leach facility which treats low- and marginal-grade ore. The principal production sources in fiscal 2009 included the Argo, Belleisle and Cave Rocks underground mines together with the Leviathan, Cave Rocks, Agamemnon, Grinder, Pluton and North Revenge open pits. During fiscal 2009, underground production increased significantly as the Cave Rocks and Belleisle underground mines moved from a capital development phase with some production into full production. The primary open pit production sources shifted in fiscal 2009, with the full depletion of the Cave Rocks, Pluton and North Revenge pits, which were replaced by new open pits at Leviathan, Agamemnon and Grinder. As many of the operations at St. Ives involve mining deposits on or under Lake Lefroy (which is a shallow salt pan that has water in it only intermittently), extracting ore requires construction of bunds and other earthworks to prevent water intrusion. Open pit operations use 180- to 250-ton excavators loading 150-ton trucks. Waste dumps are formed adjacent to the pits or, if practicable, waste is dumped in previously exhausted pits.

*Argo Complex.* Stoping activities at the Argo mine commenced in November 2003. The Argo underground mine operated below capacity during fiscal 2009 due to challenging ground conditions. Performance at Argo in fiscal 2010 is expected to increase with modifications to mining methods to reduce losses through dilution. Based on the June 30, 2009 reserves, Argo has a further four years of production. It is however expected that production will continue beyond this point as existing ore resources are converted and further exploration and development is performed at the Argo mine.

*Greater Revenge Complex.* Mining at the Greater Revenge Area commenced in 1989. The operation utilizes typical open pit and lake sediment mining methods. Further exploration and mine design updates resulted in extensions to the Agamemnon open pit during fiscal 2008. The North Revenge and Pluton pits were depleted early in fiscal 2009, with production from the Agamemnon and Grinder pits starting in fiscal 2009.

*Belleisle Underground Mine.* The Belleisle deposit lies in the Greater Revenge area adjacent to the depleted Mars open pit. Development of a decline tunnel commenced in the second half of fiscal 2007 to access the Belleisle ore body. Development continued during fiscal 2008 but was delayed due to a number of water in-flow intersections and difficult working conditions. Some ore production occurred during the development phase and a first stope opened in June 2008. The Belleisle mine moved into a full production schedule during the second quarter of fiscal 2009. Production was affected negatively in the second quarter by an accident related to the paste plant which reduced the paste filling capability of the mine. This reduction in paste filling resulted in a stope failure in the fourth quarter and cessation of stoping for the months of May and June 2009. At the end of June, the backlog of paste filling stopes was nearing clearance. Access development to the Belleisle extension recommenced in the fourth quarter by restarting the decline. The Belleisle extension reserve ounces are expected to be included in the 2010 reserve statement.

*Cave Rocks*. Cave Rocks is located approximately six kilometers to the west of the Kambalda West township and was previously an open pit mine completed in 1985. The mining of a series of three open pits was completed in the first quarter of fiscal 2009. Development of an underground mine via a decline tunnel from the southern pit commenced in September 2007, with a second decline being developed from the northern pit, which commenced in November 2007. Development was based on the ore body mined in the open pits. However, during development, the geometry of the ore body was found to be different than expected in the original interpretation, being a series of lenses instead of a single sheet. This does not significantly change the stoping method but does slightly increase the quantity of development needed on a level to connect the lenses. The underground mine utilizes primarily open stoping methods without backfill to extract ore as originally planned and is currently undergoing an intensive delineation and exploration program. The life of this mine is expected to be approximately four years, with potential for reserve extension. The Cave Rocks mine moved into a full production schedule during the third quarter of fiscal 2009.

*Leviathan Open Pit*. The Leviathan open pit is based on the expansion of a pre-existing open pit located approximately two kilometers southeast of the Lefroy processing plant. Mining of the cut back commenced in the third quarter of fiscal 2007, with first ore production in the fourth quarter. The mine utilizes conventional truck and shovel mining practices. Mining is planned to occur through areas previously exploited by underground mining methods, requiring special care when passing through these mined areas. Procedures based on industry best practice in the mining district have been implemented to manage the risks associated with these zones. Production continued at Leviathan throughout fiscal 2009 and is expected to continue until 2012 under current economic assumptions.

St. Ives s exploration program in fiscal 2009 led to an improved understanding of the underlying geological mineralization, enabling consolidation of a number of key project areas going forward. The majority of activities completed during fiscal 2009 were the focused drill out and discovery of the Athena orebody and surrounding Hamlet environment. See Exploration Near Mine Exploration. Continued early-stage exploration and follow-up of prospective targets with first-pass exploratory drilling was also completed in a number of areas. In fiscal 2009, the exploration program included expansion of underground reserves at the Argo and Belleisle Mines, extensional growth at operating pits and further Santa Ana open pit mining areas, and selective targeting in prospective greenfield areas. Santa Ana is another project area with potential mineralization for the extension of the St. Ives life of mine.

The St. Ives production schedule requires that new open pit and underground mining sources are progressively accessed. Underground production in fiscal 2009 was enhanced by the Cave Rocks and Belleisle underground mines moving into full production while the Leviathan, Grinder and Agamemnon open pits replaced depleted pits. The Leviathan and Agamemnon open pits are expected to continue to provide the primary source of open pit ore in fiscal 2010.

The Underground Development Improvement Project, or UDIP, was fully implemented in fiscal 2009. The objective of the project was to substantially reduce costs, improve productivities and create a safer and more efficient workplace based on the principles of improved communication and transparency between management and the contractor. This process is intended to continue in fiscal 2010. A similar project, the Open Pit Development Improvement Project, or ODIP, was started at the end of fiscal 2009 for the open pit mines.

All underground mining activities are completed under an agreement with Carlowen Proprietary Ltd, which trades as GBF Underground Mining, or GBF. A five-year agreement with GBF commenced in April 2004, which includes a cost-reimbursable performance-based remuneration model. In fiscal 2009, a term sheet was agreed with GBF for a three-year contract with extension options beyond the three years at the sole discretion of St. Ives. GBF provides all the employees and equipment necessary to complete the underground development and stoping. Under the terms of the agreement, Gold Fields approves all expenditures incurred and guarantees to reimburse 95% of these costs, with the remaining 5% plus any profit earned contingent on GBF achieving certain key performance indicators. Under the terms of the agreement, GBF is liable for claims arising from its performance or non-performance, and any loss, damage, injury or death related to the presence of its employees onsite. GBF is not liable for liabilities or losses that are the result of negligence or a breach of a statutory duty of the mine owner. GBF is required to ensure that it and any subcontractors have adequate insurance.

Leighton Contractors Proprietary Limited, or Leighton, performs the surface mining at St. Ives under an alliance agreement which was extended in January 2004 for a five-year period. In fiscal 2009, a letter of intent was agreed with Leighton that extends the existing contract and contemplates a term sheet and ultimately a new agreement for a three year term with extension options for up to two more years at the sole discretion of St. Ives. As of November 30, 2009, negotiations were ongoing. Leighton provides employees and equipment for mining ore and waste from the open pit mines. Leighton is reimbursed 100% of its approved costs and earns an additional margin payment contingent upon Leighton achieving targets in regards to certain key performance indicators. Under the terms of the agreement, Leighton is liable for claims arising from any loss and/or damage related to the negligence, injury or death of its employees on the sites. Leighton is not liable for claims or loss resulting from the mine owner s negligence. Leighton is required to ensure that it and any subcontractors have adequate insurance.

Detailed below are the operating and production results at St. Ives for the past three fiscal years.

	Year ended June		ne 30,
	2007 2008		2009
Production			
Tons ( 000)	6,759	7,233	7,262
Recovered grade (g/t)	2.2	1.8	1.8
Gold produced ( 000 oz)	487	418	428
Results of operations (\$ million)			
Revenues	310.4	342.1	378.6
Total production costs <sup>(1)(2)</sup>	286.8	351.4	350.3
Total cash costs <sup>(3)</sup>	202.6	276.0	280.2
Cash profit <sup>(4)</sup>	107.8	66.1	98.4
Cost per ounce of gold (\$)			
Total production costs	589	841	818
Total cash costs	416	661	654
Notional cash expenditure per ounce of gold produced (\$) <sup>(5)</sup>	582	915	802

Notes:

(1) For purposes of allocating production costs between St. Ives and Agnew, the consideration paid for the Australian operations in excess of the book value of the underlying net assets was allocated pro rata to the value of the underlying assets.

- (2) For a reconciliation of Gold Fields total production costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (3) For a reconciliation of Gold Fields total cash costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2009 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (4) Cash profit represents revenues less total cash costs.
- (5) For a reconciliation of Gold Fields notional cash expenditure to its production costs for fiscal 2009, 2008 and 2007, see Operating and Financial Review and Prospects Costs Notional Cash Expenditure.

From fiscal 2008 to fiscal 2009, there was an increase in tonnage at St. Ives with a higher tonnage treated at the Lefroy Plant more than offsetting a small decrease in tonnage treated through the heap leach circuit. The reduced tonnage treated through the heap leach was a consequence of the availability of heap leachable ore throughout the year. If the available ore was expected to provide a better return by processing through the Lefroy Plant, then it was stockpiled for treatment by the Plant. Gold production increased from fiscal 2008 to fiscal 2009 primarily due to increased underground ore production. Total cash costs in fiscal 2009 increased as compared to fiscal 2008 due to higher mining costs and higher royalty payments to Morgan Stanley with the commencement of the 4% net smelter return royalty triggered by the volume of production at St. Ives in June 2008 and the impact of the higher Australian dollar gold price on the royalty payment.

Assuming that Gold Fields does not increase or decrease reserves estimates at St. Ives and that there are no changes to the current mine plan at St. Ives, St. Ives June 30, 2009 proven and probable reserves of 2.3 million ounces will be sufficient to maintain production through approximately fiscal 2014. However, as discussed earlier in Risk Factors and Mine Planning and Management, there are numerous factors which can affect reserve estimates and the mine plan, which could thus materially change the life of mine.

St. Ives is engaged in underground mining and in both open pit and production stockpile surface mining, and is thus subject to all of the underground and surface mining risks discussed in Risk Factors. Seismicity is the primary safety risk with mining increasingly occurring at depths below 500 meters. The risk is addressed through the use of backfilling and by mining different parts of the orebody in controlled steps to improve stability, which is called stope sequencing. No fatalities were recorded in 2007, 2008, 2009 or to date in fiscal 2010. The serious injury frequency rate (see Defined Terms and Conventions ) for fiscal 2009, 2008 and 2007 was 0.0, 0.0 and 0.0 serious injuries per million hours worked, respectively. St. Ives has a health and safety system that conforms to the requirements of OHSAS 18001 and is integrated with its ISO 14001 environmental management system. St. Ives achieved full compliance certification under the International Cyanide Management Code in August 2009. There were no strikes or material work stoppages at St. Ives in fiscal 2009 or to date in fiscal 2010.

### Processing

The table below sets forth year commissioned, processing techniques and processing capacity per month, as well as average tons milled per month and metallurgical recovery factors during fiscal 2009, for each of the plants at St. Ives.

Processing	Techniques
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Plant	Year commissioned	Comminution phase	Treatment phase	Capacity <sup>(1)</sup> (tons/month)	Average milled for the year ended June 30, 2009 (tons/month)	recovery factor for the year ended June 30, 2009 <sup>(2)</sup>
Lefroy Plant	2005	Single-stage crushing and SAG milling	CIP	375,000	401,777	91%
Heap Leach Facility	2000	Multiple-stage crushing and screening process	Carbon absorption	167,000	203,380	56% <sup>(3)</sup>

Notes:

- (1) Nameplate capacity as designed. Plant/Mill nameplate capacities are based on a number of operating assumptions, including assumptions regarding the blend of soft and hard ores processed, that can change and which may result in an increased level of throughput over and above the designed nameplate capacity.
- (2) Percentages are rounded to the nearest whole percent.
- (3) Heap leach recoveries are the result of an extended solution application process with full recovery requiring several leach cycles. Full recovery of all recoverable gold (about 60% of the contained gold) for current ores is only achieved over several years. Thus, recoveries must be considered in terms of recovery as time progresses, or a progressive recovery. Over time, Gold Fields expects the plant to achieve progressive recovery factors of about 60% of contained gold, equivalent to full recovery of all recoverable gold.

The Lefroy Plant was fully commissioned in February 2005 and is located on the south shore of Lake Lefroy, approximately 12 kilometers south of the township of Kambalda. The plant consistently achieved in excess of nameplate capacity throughout fiscal 2009 and optimization continued throughout the year to realize incremental improvements in throughput, costs and recovery.

The Heap Leach Facility treats low- and marginal-grade ore from St. Ives. During fiscal 2009, a number of improvements were made on the heap leach circuit, including a spent ore rehandling strategy being established instead of building pad extensions for future stacking.

The Lake Disturbance Permit required to operate on Lake Lefroy expires in 2011. The mine has started the reapproval process and Gold Fields believes that there is ample time to get this permit approved.

## Capital Expenditure

Gold Fields spent approximately \$49 million on capital expenditures at St. Ives in fiscal 2009, primarily on the continued development of the underground operations at Argo, Belleisle and Cave Rocks. Gold Fields has budgeted approximately \$55 million for capital expenditures at St. Ives for fiscal 2010, which is principally earmarked for the development of the Athena underground mine and continued development at the Argo, Belleisle and Cave Rocks underground mines.

Annrovimate

Agnew

#### Introduction

Agnew is located 23 kilometers southwest of Leinster, approximately 375 kilometers north of Kalgoorlie in Western Australia. It holds exploration licenses, prospecting licenses and mining leases covering a total area of approximately 58,000 hectares. Agnew is an underground operation, having completed mining of the most recent open pit in August 2007 and processing of its ore stockpiles by October 2008. All mining is from the Waroonga Underground Complex which comprises multiple ore zones. Agnew has one metallurgical plant. Agnew has access to electricity pursuant to a contract with a neighboring mine operated by a major mining company that expires in January 2014 and has access to road infrastructure. Accommodation for workers at Agnew is provided pursuant to an arrangement with the same neighboring mine. Agnew also has access to sealed roads to the mine gate. Less than 10% of the water requirement comes from local bores. The bulk of the water is supplied from the mining operations and recovered from the in-pit tailings facility. Supplies are generally trucked in from Perth or Kalgoorlie. In fiscal 2009, the operation produced 0.19 million ounces of gold. As of June 30, 2009, Agnew had approximately 340 employees, including approximately 200 who were employed by outside contractors.

#### History

Gold was discovered at Agnew in 1895 and production was intermittent until Western Mining Corporation, or WMC, acquired the operation in the early 1980s and constructed the current mill in 1986. Since that time, numerous open pits and underground operations have been mined.

#### Geology

The Agnew deposits are located within the northwest portion of the Norseman-Wiluna greenstone belt of the Western Australian Goldfields. In the Agnew area the greenstone belt consists of an older sequence of ultramafic flows, gabbros, basalts, felsic volcanics and related sedimentary rocks. The rocks are folded about the large, moderately north plunging Lawlers Anticline. The Agnew deposits are located on the western limb of this anticline, and major deposits discovered to date lie on sheared contacts between stratigraphic units. The anticline is cut by north-northeast trending faults such as the Waroonga and East Murchison Unit shear zones.

#### Mining

The principal production source in fiscal 2009 at Agnew was the Waroonga underground mining complex. Gold Fields expects the principal production source in fiscal 2010 will remain the Waroonga complex.

*Waroonga Underground Complex.* The Waroonga Underground Complex currently includes underground mining of the Kim South, Rajah and Main Lode orebodies. The mining method involves longhole open stoping with paste filling. Ore development tunnels are developed on 20 to 25 meter vertical spacings, with stoping taking place between these tunnels in blocks of 20 to 40 meters along strike depending on ground conditions. Each stope is mucked clean using tele-remote loaders prior to pastefilling. Access to the orebody is through a decline tunnel which accommodates workers, materials and equipment. Waroonga underground performance increased from less than 55,000 tons per month in the fourth quarter of 2008 to greater than 65,000 tons per month in the fourth quarter of fiscal 2009.

*Songvang Open Pit.* The Songvang open pit, located 16 kilometers south of the Agnew metallurgical plant, commenced production during fiscal 2005. The Songvang open pit was successfully depleted in August 2007 and the mining fleet demobilized. The Songvang high grade stockpile was blended with underground ore until February 2008, after which time the Songvang low grade stockpile was substituted. The Songvang stockpile was depleted in the second quarter of fiscal 2009.

During fiscal 2009, a significant amount of effort was placed in redesigning the Kim and Main Lode declines and level accesses to improve the productivity of the mine, including a second link drive between the

orebodies at a depth of 650 meters below surface. This will provide additional flexibility in the mine and is expected to be completed in fiscal 2010. Capital development of the Kim and Main declines has been accelerated to enable detailed ore definition drilling of the ore body prior to ore development and to provide drilling platforms for future reserve conversion.

Underground mining is performed by Byrnecut Mining Services Limited, or Byrnecut. Byrnecut provides employees, consumables and equipment including drilling, blasting and haulage of ore and waste. Byrnecut receives fees under an agreement which depend on the type of service being performed and the equipment being used, with adjustments for performance. Under the terms of the agreement, Byrnecut is liable for claims arising from its performance or non-performance and any loss, damage or injury related to the presence of its employees on the sites. Byrnecut is not liable for claims or loss due to the mine owner s negligence. Byrnecut is required to ensure that it and any subcontractors have adequate insurance. Byrnecut has operated at Agnew for 18 consecutive years and their current contract expires in May 2010.

Detailed below are the operating and production results at Agnew for the past three fiscal years.

	Year ended June 30,		
	2007	2008	2009
Production			
Tons ( 000)	1,323	1,315	1,066
Recovered grade (g/t)	5.0	4.8	5.6
Gold produced ( 000 oz)	212	204	192
Results of operations (\$ million)			
Revenues	136.3	169.0	169.9
Total production costs <sup>(1)(2)</sup>	98.2	109.6	94.1
Total cash costs <sup>(3)</sup>	84.7	84.4	77.6
Cash profit <sup>(4)</sup>	51.6	84.6	92.3
Cost per ounce of gold (\$)			
Total production costs	462	538	490
Total cash costs	399	414	404
Notional cash expenditure per ounce of gold produced (\$) <sup>(5)</sup>	487	606	564

Notes:

- (1) For purposes of allocating production costs between St. Ives and Agnew, the consideration paid for the Australian operations in excess of the book value of the underlying net assets was allocated pro rata to the value of the underlying assets.
- (2) For a reconciliation of Gold Fields total production costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2008 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (3) For a reconciliation of Gold Fields total cash costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2008 Costs and Expenses and Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (4) Cash profit represents revenues less total cash costs.

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(5) For a reconciliation of Gold Fields notional cash expenditure to its production costs for fiscal 2009, 2008 and 2007, see Operating and Financial Review and Prospects Costs Notional Cash Expenditure.

In fiscal 2009, 1.1 million tons of ore were processed and 0.19 million ounces of gold were produced. Tons processed were lower than fiscal 2008 and gold production was lower than in fiscal 2008 due to the completion of processing of the Songvang pit stockpiles, with 94% of ounces produced coming from underground compared

to 68% in fiscal 2008. Although the total cash costs decreased in U.S. dollar terms due to the weakening Australian dollar, total cash costs increased in Australian dollar terms during fiscal 2009, due to the increased production from underground operations, though the increase was more pronounced on a per ounce basis.

Exploration to extend reserves at Waroonga focused on down-dip extensions to the Kim South and Main Lode resources. Deep drilling to a depth of 1,000 to 1,400 meters below surface is underway at Kim Lode with the objective of increasing reserves below current infrastructure by June 2010.

Assuming that Gold Fields does not increase or decrease reserves estimates at Agnew and that there are no changes to the current mine plan at Agnew, the June 30, 2009 proven and probable reserves of 0.7 million ounces will be sufficient to maintain production through mid-fiscal 2013. However, as discussed earlier in Risk Factors and Mine Planning and Management, there are numerous factors which can affect reserve estimates and the mine plan, which could thus materially change the life of mine.

Agnew is engaged in underground mining and surface stockpile reclamation and may pursue further open pit opportunities in the future and is thus subject to all of the underground and surface mining risks discussed in Risk Factors. The primary safety risk at Agnew is falls of ground at the underground operations, which is addressed through the use of ground support, backfilling of open voids and sequencing of mine operations to improve overall stability of the ground. There were no fatalities at Agnew in fiscal 2007, 2008, 2009 or to date in fiscal 2010. The serious injury frequency rate for fiscal 2009, 2008 and 2007 was 0.0, 0.0 and 0.0 serious injuries per million hours worked, respectively.

Agnew deploys a health and safety management system that conforms to the requirements of OHSAS 18001. The mine also has an environmental management system that is certified to the ISO 14001 standard. Agnew achieved substantial compliance certification under the International Cyanide Management Code in June 2009 and expects to achieve full compliance certification by the end of December 2009. There were no strikes or material work stoppages at Agnew in fiscal 2009 or to date in fiscal 2010.

#### Processing

All processing at Agnew is provided by a single plant. The following table sets forth year commissioned, processing techniques and processing capacity per month, as well as average tons milled per month and the metallurgical recovery factor during the fiscal year ended June 30, 2009 for the plant:

#### **Processing Techniques**

Plant	Year commissioned	Comminution phase	Treatment phase	Capacity <sup>(1)</sup> (tons/month)	Average milled for the year ended June 30, 2009 (tons/month)	recovery factor for the year ended June 30, 2009 <sup>(2)</sup>
Main Plant	1986	2-stage ball milling	CIP treatment	100,000	88,849	93%

Notes:

(1) Nameplate capacity as stated by the manufacturer. Plant/Mill nameplate capacities are based on a number of operating assumptions, including assumptions regarding the blend of soft and hard ores processed, that can change and which may result in an increased level of throughput over and above the designed nameplate capacity.

(2) Percentages are rounded to the nearest whole percent.

**Annrovimate** 

## Capital Expenditure

Gold Fields spent approximately \$22 million on capital expenditures at Agnew in fiscal 2009, primarily on further development of the Kim South and Main Lode declines and various capital works projects in the underground mine and processing plant and on exploration. Gold Fields has budgeted approximately \$27 million for capital expenditures at Agnew for fiscal 2010, primarily for further development of the Kim South and Main Lode declines and capital works projects in the processing plant and on exploration.

### Peru Operation

Gold Fields owns a 92% voting interest (80.7% economic interest) in the Cerro Corona mine through its shareholding in Gold Fields La Cima S.A., or La Cima.

#### Cerro Corona

#### Introduction

The Cerro Corona mine became operational by the end of the first quarter of fiscal 2009. It forms part of a porphyry copper-gold deposit situated within the Hualgayoc Mining District in northern Peru. It is located in the highest part of the Western Cordillera of the Andes, in northern Peru, close to the headwaters of the Atlantic continental basin. It lies approximately 80 kilometers by road north of the City of Cajamarca and near the village of Hualgayoc. Cerro Corona holds mining leases covering a total area of approximately 1,600 hectares and the project was developed over an area of 940 hectares. Access to Cerro Corona from Cajamarca is by means of two roads, one from Cajamarca to the Yanacocha Mine (40 kilometers), and then from Yanacocha to the village of Hualgayoc (40 kilometers). Cerro Corona s electricity is supplied through a long-term contract with a local power supplier and transported through the national power transmission system and a 34 kilometer transmission line constructed by the project. Cerro Corona s water requirements are provided primarily by retention of rainfall and pit dewatering; water is continuously recycled. In fiscal 2009, the operation produced 105,000 ounces of gold and 24,000 tons of copper for a total of 219,000 gold equivalent ounces, of which 85,000 ounces of gold and 19,700 tons of copper for a total of 177,000 gold equivalent ounces were attributable to Gold Fields. As of June 30, 2009, Cerro Corona had approximately 840 employees involved in operating the mine including approximately 540 contractors. As of the same date, Cerro Corona also had approximately 1,170 employees working on the construction of the tailings dam, or TMF, including approximately 1,160 contractors.

## History

In December 2003, Gold Fields, through a subsidiary, signed a definitive agreement to purchase an 80.72% economic and 92% voting interest in the Cerro Corona mine from a Peruvian family-owned company, Sociedad Minera Corona S.A., or SMC. The agreement called for a reorganization whereby the assets of Cerro Corona were transferred to La Cima, in July 2004. Following approval of an environmental impact assessment on December 2, 2005, Gold Fields completed the purchase of the 92% voting interest (80.7% economic interest) in La Cima in January 2006, for a total consideration of \$40.5 million. La Cima subsequently acquired all requisite additional permits to construct the mine and construction commenced in May 2006.

#### Geology

The Cerro Corona gold-copper deposit is hosted by a 600- to 700-meter diameter sub-vertical cylindrical-shaped quartz diorite porphyry stock emplaced into mid-Cretaceous limestone and marls. Within the porphyry, gold-copper mineralization is primarily hosted by extensive zones of stockwork veining. There are at least two phases of diorite placement, only one of which is mineralized. The non-mineralized diorite is generally regarded as the last phase, and is referred to as barren core. The latest re-modeling suggests that the Cerro Corona porphyry is probably comprised of four or five satellite stocks with the last two being barren. The intrusive has

been emplaced at the intersection of Andean-parallel and Andeannormal (*transandean*) structures. Supergene oxidation and leaching processes at Cerro Corona have led to the development of a weak to moderate copper enrichment blanket, allowing for the subdivision of the deposit, from the surface downward, into an oxide zone, a mixed oxide-sulphide zone, a secondary enriched (*supergene*) sulphide zone and a primary (*hypogene*) sulphide zone.

### Mining

The Cerro Corona deposit is mined by conventional, bulk surface mining methods. The Cerro Corona operation involves a single surface mine. This ore is treated in a conventional milling and sulphide flotation concentrator capable of treating 6.2 million tons per annum of ore and producing between 100,000 and 140,000 tons per annum of copper and gold containing concentrate, which is treated mainly at smelters in Japan, Korea and Europe.

Following completion of a definitive cost and schedule estimate in January 2007, the capital construction costs for the Cerro Corona mine were estimated at approximately U.S.\$343 million and the treatment of ore was scheduled to commence early in the third quarter of fiscal 2008. However, through the first half of fiscal 2007, progress on the TMF construction and on the later stages of erection of the concentrator lagged behind schedule and cost escalations on various aspects of the project were experienced. On November 15, 2007, La Cima announced a four-month delay and a revised capital forecast for Cerro Corona, amounting to U.S.\$421 million, which included an additional contingency of U.S.\$20 million, and the scheduled commencement of ore treatment was delayed until the fourth quarter of fiscal 2008. In August 2008, La Cima announced a further revised capital construction forecast for Cerro Corona amounting to U.S.\$550 million. The first shipment of concentrate was made in September 2008. There were four primary causes of the increase in construction costs:

the delay in the completion of the mine which attracted significant additional costs in terms of management and engineering personnel, as well as attendant indirect or support costs such as the maintenance of the remote onsite camp and other services such as transportation and meals;

an increase in the construction costs for the TMF due to higher unit rates for mining and crushing of construction materials and also due to difficulties in obtaining adequate construction materials onsite;

poor ground conditions encountered in the construction of the various facility platforms as well as mine and access road construction which has necessitated additional cut and fill activities to ensure the stability of the various structures; and

continued price escalation of commodity based products, such as steel, electrical cabling and power lines as well as the piping and mechanical and electrical components of the tailing management systems.

Detailed below are the operating and production results at Cerro Corona for the 10 month period from September 2008 to June 30, 2009 (the period of operations at the mine in fiscal 2009).

	10 months ended June 30, 2009
Production <sup>(1)</sup>	
Tons ( 000)	4,547
Recovered gold grade (g/t)	0.7
Recovered copper grade (%)	0.78
Gold produced ( 000 oz)	105
Copper produced ( 000 tons)	24 <sup>(2)</sup>
Results of operations (\$ million)	
Revenues	183.8
Total production costs <sup>(3)</sup>	120.4
Total cash costs <sup>(4)</sup>	80.3
Cash profit <sup>(5)</sup>	103.5
Cost per ounce of gold (\$) <sup>(6)</sup>	
Total production costs	553
Total cash costs	369
Notional cash expenditure per equivalent ounce of gold produced (\$) <sup>(7)</sup>	908

Notes:

- (1) For fiscal 2009, production is reported from September 2008.
- (2) Equates to 114,000 ounces on a gold equivalent basis at a price of \$875 per ounce of gold and \$4,115 per ton of copper.
- (3) For a reconciliation of Gold Fields total production costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2008 Costs and Expenses and Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (4) For a reconciliation of Gold Fields total cash costs to production costs, see Operating and Financial Review and Prospects Results of Operations Years Ended June 30, 2009 and 2008 Costs and Expenses and Years Ended June 30, 2008 and 2007 Costs and Expenses.
- (5) Cash profit represents revenues less total cash costs.
- (6) Calculated on the basis of a total of 217,800 ounces of gold and gold equivalent sold.
- (7) Calculated on the basis of a total of 219,000 ounces of gold and gold equivalent produced. For a reconciliation of Gold Fields notional cash expenditure to its production costs for fiscal 2009, see Operating and Financial Review and Prospects Costs Notional Cash Expenditure.

In fiscal 2009, 4.5 million tons of ore were processed. 105,000 ounces of gold and 24,000 tons of copper were produced.

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The single largest contractor employer is Minera San Martin. Minera San Martin carries out all mining activities under the direction of the La Cima mining and geology department. All mine planning, excavation and head grade and engineering specifications to meet the required design performance through the life of mine are directly managed by La Cima personnel. Other contractors provide camp administration and catering, security, safety and laboratory operations. In addition, as of June 30, 2009, there were approximately 1,160 temporary contractors on site working on the second phase of the TMF construction.

Assuming that Gold Fields does not increase or decrease reserve estimates at Cerro Corona and that there are no changes to the current mine plan at Cerro Corona, Cerro Corona s June 30, 2009 proven and probable

reserves of 2.8 million ounces of gold and 988 million pounds of copper (of which, 2.3 million ounces of gold and 797 million pounds of copper were attributable to Gold Fields, with the remainder attributable to minority shareholders in the Peru operation) will be sufficient to maintain production through approximately fiscal 2024. However, as discussed earlier in Risk Factors and Mine Planning and Management, there are numerous factors which can affect reserve estimates and the mine plan, which could thus materially change the life of mine.

The Cerro Corona mine involves open pit mining, and is thus subject to all of the risks associated with open pit mining discussed in Risk Factors. Although surface mining generally is less dangerous than underground mining, serious and even fatal accidents do still occasionally occur.

There were no fatalities at Cerro Corona in fiscal 2009 and none to date in fiscal 2010. The serious injury frequency rate at Cerro Corona for fiscal 2009, 2008 and 2007 was 0.2, 0.4 and 0.1 serious injuries for every million hours worked, respectively. Cerro Corona has implemented a health and safety management system in accordance with the Gold Fields Full Compliance Health and Safety Management System and in accordance with the OHSAS 18001. The environmental management system implementation started in June 2008. Certification to the ISO 14001 (2004) standard is in progress. The final audit took place in October 2009 with a final recommendation that Cerro Corona be granted ISO 14001 certification. The OHSAS 18001 certification process began in July 2009. For its safety and environmental practices, La Cima was awarded two important recognition prizes during fiscal 2009; second prize for national open pit safety by the Peruvian National Institute of Mine Engineers and second prize in the Expomina national contest for environmental practices and projects.

Currently, La Cima s employees at the mine are not unionized and there were no strikes in fiscal 2009 or to date in fiscal 2010. However, road access to the mine has been blocked on occasion by members of local communities mainly as part of regional or national protests, not targeting Cerro Corona directly. No blockades or demonstrations occurred during fiscal 2009 or to date in fiscal 2010 that have impacted Cerro Corona s operations.

Over the last few years Peru has seen many cases of conflict and dissention between local communities and mining operations and mining projects, stemming largely from the communities desire for greater participation in the economic benefits of these mining projects. Cerro Corona has undertaken extensive community consultation and negotiation since 2003 through the land purchase and permitting process to achieve agreement with local communities on various aspects of community involvement. A comprehensive strategy to work with the communities has been implemented through the construction and operations stages. The main focus of this strategy relies on three pillars which are (i) promoting the development of basic local infrastructure such as roads, telecommunications, electricity, potable water, education and health, (ii) training and employing the local communities, including employing more than 1,000 locals during construction and approximately 500 currently, and developing more than 50 local contractors and (iii) developing economically self-sustaining projects such as a natural pastures and dairy project, a blueberry plantation and pork and guinea pig farms. Gold Fields believes its social strategy has created goodwill with the local communities, with key projects underway such as the paving of the road to Hualgayoc, rural electrification, a potable water plant, and the Kunturwasi highway, among others. The sustainable development projects have been very successful, with more than 300 hectares of natural pastures improved, 150 cows genetically enhanced to improve production of milk and a dairy plant built and currently under commissioning. The blueberry pilot program is expected to deliver the first fruits by November 2009. In recognition of these projects, La Cima has carefully delivered on the agreements with local communities.

Gold Fields believes that over time Cerro Corona has generated strong community relationships; however, there have been instances of conflict with the local communities in the past and continuous work is conducted by the Cerro Corona social team to ensure continuity in the relationships. Following three weeks of blocked road access to Cerro Corona in October 2006 by the local communities, no other blockade or significant protest activity has occurred. In particular, Gold Fields 50:50 joint venture, Consolidada de Hualgayoc, has been affected and activity at the joint venture has been suspended after violent clashes between local communities and anti-mining campaigners.

## Processing

The following table sets forth year commissioned, processing techniques and processing capacity per month, for the processing plant at Cerro Corona:

#### **Processing Techniques**

Plant	Year commissioned	Comminution phase	Treatment phase	Capacity <sup>(1)</sup> (tons/month)	Average milled for the 10 months ended June 30, 2009 (tons/month)	Approximate recovery factor for the 10 months ended June 30, 2009 <sup>(2)</sup>
Processing Plant	2008	SAG/ball milling	Conventional sulphide flotation circuit	517,000	455,000	59% Gold 71% Copper

Note:

(1) Nameplate capacity as designed. Plant/Mill nameplate capacities are based on a number of operating assumptions, including assumptions regarding the blend of soft and hard ores processed, that can change and which may result in an increased level of throughput over and above the designed nameplate capacity.

Gold Fields operates a concentrate storage warehouse at the port of Salaverry in Trujillo city, approximately 450 kilometers away from Cerro Corona. Concentrate is shipped from the Salaverry port in bulk carrier vessels. Gold Fields entered into a five-year contract with Transporters Rodrigo Carranza, or TRC, in the third quarter of fiscal 2008 pursuant to which TRC handles the logistics of trucking concentrate from the mine to the warehouse and then transferring it to the ships. Operations at Saláverry are managed under the same safety and environmental standards as those at Cerro Corona. La Cima has contributed to improvement of the environmental practices at the port by implementing the first fully hermetic shiploading equipment in Peru.

## Capital Expenditure

Gold Fields spent approximately \$117 million on capital expenditures at Cerro Corona in fiscal 2009, consisting of approximately \$63 million on project expenditure primarily to complete the construction of the processing plant and facilities and \$53 million on life of mine capital primarily on ongoing tailings facilities. Gold Fields has budgeted approximately \$90 million for capital expenditures at Cerro Corona for fiscal 2010, consisting primarily of further construction on the TMF.

## Exploration

Gold Fields holds a diverse portfolio of active gold exploration projects and assets in Africa, Central Asia, the Americas and Australasia. In addition, Gold Fields has in place a number of exploration projects in connection with mineral rights it holds which are adjacent to its active mining operations and advanced exploration projects in South Africa, Ghana, Peru and Australia. Gold Fields exploration program is run out of two exploration hubs in Perth, Western Australia; and Denver, Colorado. The company also has offices in Santiago, Chile; Lima, Peru; Vancouver, Canada; Bamako, Mali; Accra, Ghana; and Beijing, China. As of June 30, 2009, Gold Fields exploration team included 207 full-time and contract employees, of which 47 are geoscientists, who provide the key exploration capability in the regions of focus around the world.

Gold Fields exploration strategy is based on a balanced approach to projects, which provides the ability to consider a project at any stage of development, from the early grassroots stage through to full feasibility study.

The goal of this strategy is to maintain a steady pipeline at various stages of exploration to deliver a new feasibility level project every one or two years.

Generally, Gold Fields budgets to spend about \$20 per ounce of gold it produces on greenfields exploration (distinct from near mine exploration which refers to exploration around Gold Fields mine sites), provided the opportunities offered warrant such expenditure.

Gold Fields focuses its exploration activities on finding opportunities with the correct balance of quality, size and risk. When determining whether it will proceed with a project, Gold Fields weighs a variety of factors, including acquisition costs, expected operating and capital costs of production, as well as the possible technical, commercial, social, environmental and geo-political risks against the likely returns for the project. Other important considerations include the optionality embedded in the project and the projects strategic importance in terms of geographic diversification and production profiles. This could result in consideration of additional multi-commodity targets such as copper-gold deposits or gold-silver type deposits.

Outside South Africa, the focus is on growing Gold Fields three international regions of West Africa, Australasia and South America with the objective of achieving one million ounces per annum of production from each region. Gold Fields will leverage off its established infrastructure wherever possible to reduce development hurdles and delivery timelines for new opportunities. Near mine exploration projects, which are adjacent to Gold Fields existing mining operations, endeavor to capture any possible operating synergies which can be realized, for example, by sharing processing plants and other infrastructure, which has a knock-on effect with regard to minimum project size criteria. For greenfield projects, Gold Fields makes use of its existing operating centers in Ghana, Australia and Peru (through Minera Gold Fields Peru S.A.) to pursue, incubate and facilitate new opportunities within other prospective countries in the respective regions.

In the longer term, Gold Fields is also considering a limited number of opportunities in jurisdictions outside its established regions. The focus is on areas of the world which are historically under-explored or where new technologies and concepts can be applied to improve the likelihood of discovery. Gold Fields has successfully expanded its exploration activities in countries and regions where it has limited experience by means of equity investments in, and strategic alliances with, junior mining partners that are already operating in the relevant region with the requisite operating experience and in some cases have mining permits and approvals. Gold Fields has historically applied this strategy to exploration projects in Mali, China, Philippines, and Kyrgyzstan, amongst others.

Gold Fields divides the different phases of an exploration target s development into what it refers to as the resource pipeline. An exploration project normally comprises several distinct exploration targets and the resource pipeline provides for the progression of the exploration targets in five stages: (1) target definition, (2) initial drilling, (3) advanced drilling, (4) resource development and (5) feasibility study. To be successful, exploration targets need to be drill tested and moved up to the next exploration phase, or be divested. There is, therefore, a focus on turning over targets as quickly and as effectively as possible by drill testing. Greenfields exploration is generated by reviewing and ranking the most prospective terrains across the world and exploration areas are selected after considering country risk and strategic fit. Each exploration region continuously monitors and reviews projects, targeting projects at all stages of development.

## Gold Fields Greenfields Exploration Targets

The table below provides a breakdown of the number of targets in Gold Fields three main exploration regions, as well as targets in the rest of the world, for each of the five stages of the resource triangle as of June 30, 2009. The table does not include near mine exploration projects on sites adjacent to Gold Fields existing operations in South Africa, Ghana, Australia and Peru.

Phase	Africa	Australasia	South America	<b>Rest of World</b>
Feasibility Study				
Resource Development				
Advanced Drilling	1		1	$2^{(1)}$
Initial Drilling	4	14	13	3
Target Definition	20	8	14	9

Note:

#### (1) Including the Arctic Platinum Project

Gold Fields spent \$46.6 million on greenfield exploration projects not adjacent to its mining operations and \$4.3 million on equity investments in exploration related, third-party companies (not including investments in Sino Gold) during fiscal 2009. Gold Fields total exploration budget for greenfields projects for fiscal 2010 is approximately \$80 million.

#### Early Stage Projects

At the East Lachlan joint ventures in New South Wales, Australia, Gold Fields signed an additional agreement with Clancy Exploration Ltd. on the Myall property and is now earning into an 80% interest on four separate joint venture projects namely Myall, Wellington North, Gobondery and Cowal East. During the fiscal year, initial drilling of bedrock geochemical and geophysical targets confirmed the presence of large porphyry systems on two of the properties, analogous to the nearby Cadia and Ridgeway porphyry mines. Drilling on several targets returned significant intercepts of strong alteration and anomalous copper-gold-molybdenum mineralization.

In Chile, Gold Fields is earning into a 90% interest in certain claims held by SBX Asesorias e Inversiones and 100% of a claim held by Aguas Heladas. During the year, Gold Fields completed geophysical surveys, bulldozer trenching and a reverse circulation drill program. Positive results were returned from the Pircas target and a follow-up drilling program is planned for the next field season starting in the second quarter of fiscal 2010.

On March 4, 2009, Gold Fields and Cascadero Copper Corp. signed an agreement which allows Gold Fields to earn up to a 75% interest in Cascadero s Toodoggone copper and gold project in British Columbia, Canada. An airborne magnetics survey was completed in April 2009 and field work commenced in June 2009 and includes ground follow-up geophysics and geologic mapping. Initial drilling started in August 2009.

On March 27, 2009, Gold Fields signed a letter of intent with SBX Asesorias e Inversiones, a private Chilean company, to earn up to a 70% interest in the Ojo de Maricunga project. However, after entering into the letter of intent, Gold Fields and SBX were unable to agree deal terms.

On May 5, 2009, Gold Fields entered into an agreement with Mindoro Resources Ltd. on the Batangas joint venture which allows Gold Fields to earn up to a 75% interest in this large copper and gold porphyry project located in the Philippines. A community relations program and field work commenced at the end of fiscal 2009 and initial drilling began in September 2009.

On July 30, 2009, Gold Fields signed a joint venture agreement with Fjordland Exploration Inc. and Cariboo Rose Resources, or the Woodjam Partners, to earn into a 70% interest in a joint venture on a 40,500 hectare property covering several known porphyry copper and gold targets in south-central British Columbia, Canada. Field work consisting of core re-logging, geological mapping and soil sampling has commenced. Geophysical surveys and initial drilling began in August 2009.

### Advanced Projects

On December 3, 2008, Gold Fields announced a joint venture agreement with Orsu Metals Corporation for the further exploration and development of the Talas license area in northwestern Kyrgyzstan. The agreement gives Gold Fields the right to earn as much as a 70% interest in Orsu s Talas license area. Gold Fields assumed operatorship of the Talas Project at the beginning of the third quarter of fiscal 2009 and continued an aggressive drilling program through the winter months to delineate the resource potential at the Taldybulak gold and copper porphyry target as well as testing other promising targets within the license area. Results continue to be encouraging and work is progressing toward the completion of a conceptual study by the end of fiscal 2010. Gold Fields expects to complete its initial earn into a 60% interest in the joint venture in the second quarter of fiscal 2010.

On March 18, 2009, Minera Gold Fields Peru S.A. formally exercised its back-in right with Compania de Minas Buenaventura to earn a 51% interest in the Chucapaca project located in southern Peru. The option was triggered on the back of the Canahuire discovery made by Buenaventura on the Chucapaca tenements where drilling intersected significant gold mineralization with locally important copper grades. Operatorship for the project was transferred to Minera Gold Fields Peru S.A. during the fourth quarter of fiscal 2009 and an aggressive drill campaign was commenced to delineate the extent of mineralization of the main deposit as well to test several other prospective targets in the area. Results have confirmed and expanded the potential of the deposit and work is progressing to complete a scoping study on the Canahuire deposit by the end of fiscal 2010.

On March 25, 2009, Gold Fields signed a non-binding Letter of Intent with Glencar, which allowed Gold Fields to earn up to a 65% interest in the Komana project in Mali. As part of the agreement, Gold Fields acquired an equity interest in Glencar and as of June 30 2009 held approximately 9% of Glencar s issued share capital. Gold Fields and Glencar were unable to negotiate the definitive terms for joint venture and abandoned joint venture discussions. On August 2, 2009, Gold Fields launched a recommended cash offer for Glencar which valued Glencar at approximately U.S.\$47.7 million. On September 7, 2009, Gold Fields announced that it had received acceptances of approximately 83.2% of the share capital of Glencar, allowing Gold Fields to take control of the Company. All conditions of the offer were satisfied or waived at that time and therefore the offer was declared unconditional in all respects. Gold Fields took control of the board of Glencar with the appointment of three new directors. Subsequently, Gold Fields now owns 100% of the Komana, Solona and Sankarani (formerly a joint venture with Gold Fields) projects.

Field work including geophysical surveys, diamond drilling and air core drilling commenced on the Komana East and West shear-hosted orogenic gold zones and their extensions in May 2009 but was suspended for the rainy season by the end of June 2009. Field work and drilling was re-started in October 2009. At the Sankarani project (originally operated as a joint venture), initial drilling results over the year have broadly defined extensive mineralized trends with economic gold grades over significant drill widths at the Finguana, Bokoro and Sanioumale licenses. Additional field work and follow up drilling has commenced following the rainy season in October 2009, with the aim of progressing at least one target to the Advanced Drilling stage.

### Arctic Platinum Project

The Arctic Platinum Project, or APP, is located approximately 60 kilometers south of the city of Rovaniemi in northern Finland. The APP is assessing two potential surface mineable deposits called Konttijarvi and

Ahmavaara, which are referred to as the Suhanko Project. The Konttijarvi and Ahmavaara deposits are found in the Konttijarvi-Suhanko Intrusion, which forms part of the Portimo mafic layered complex situated in northern Finland. Gold Fields completed a feasibility study for the Suhanko Project in the third quarter of fiscal 2005. Based on the results of the study, including a lower than expected mine head grade, prevailing metal market conditions and significant euro currency strengthening, Gold Fields decided to postpone the development of a large-scale surface mining complex and to continue investigations into smaller scale, high-margin projects. Exploration drilling at Konttijarvi and Ahmavaara continued until March 2005.

On March 24, 2006, an Acquisition and Framework Agreement, or Acquisition Agreement, was entered into between North American Palladium Limited, or NAP, Gold Fields Exploration BV, Gold Fields Finland Oy and North American Palladium Finland Oy to form a joint venture to further explore mining properties and develop a mine at the APP. The Acquisition Agreement granted NAP an option to acquire up to a 60% undivided interest in the APP, including the Suhanko, SJ Reef and SK Reef mining properties and claims located south of Rovaniemi, Finland upon satisfaction of certain conditions on or before August 31, 2008. During the option period, NAP was the operator with the responsibility to manage and fund the project.

On September 10, 2008, NAP declined to exercise its right to acquire 60% of the APP and the project has reverted back to Gold Fields. See also Additional Information Material Contracts Arctic Platinum Project.

For the remainder of fiscal 2009, Gold Fields explored the possibility of applying the Platsol hydrometallurgical process at APP. Preliminary metallurgical testwork returned positive results and further engineering work was conducted to provide initial operating and capital cost estimates to use Platsol on a commercial scale at APP. For fiscal 2010, further analysis will be performed to assess the economic viability of the Platsol process and a decision is expected to be made on pilot plant testing by the year end.

#### Sino Gold Alliance

In November 2006, Gold Fields wholly-owned subsidiary Gold Fields Australasia BVI entered into an alliance, or the Alliance, with Sino Gold Mining Limited, or Sino Gold, for the purposes of exploring and developing geological belts within the People's Republic of China, or PRC. Gold Fields agreed that it could undertake activities in the PRC only through the Alliance while the Alliance remained in place. In connection with the Alliance, Gold Fields acquired an equity stake in Sino Gold which was increased to 19.9% during fiscal 2008.

On June 3, 2009, Gold Fields agreed to sell its stake in Sino Gold to Eldorado Gold Corporation, or Eldorado, for a total consideration of approximately U.S.\$282 million and the sale was completed on July 27, 2009. Gold Fields received a share exchange ratio of 48 Eldorado shares for every 100 Sino Gold shares, which resulted in Gold Fields holding 27,824,654 Eldorado shares or approximately 7% of the outstanding shares of Eldorado on a fully diluted basis. On September 4, 2009, Gold Fields sold its entire shareholding in Eldorado on the market for consideration of CAD 323 million (\$299.3 million). In addition, Gold Fields holds a top-up right for a period of 18 months commencing June 3, 2009, which will apply should Eldorado purchase an additional 5% or more of the outstanding shares of Sino Gold and the sellers in that transaction realize a consideration ratio in excess of the share exchange ratio of 0.48 Eldorado shares per Sino Gold share received by Gold Fields. On August 26, 2009, Eldorado and Sino Gold announced that they had agreed that Eldorado would acquire all of the issued and outstanding shares of Sino Gold in exchange for 0.55 Eldorado shares for each share of Sino Gold. Sino Gold shareholders approved the transaction on December 1, 2009. The transaction remains subject to final approval of the Federal Court of Australia. Assuming completion of the offer based on the terms announced by Eldorado and Sino Gold on August 26, 2009, Gold Fields would receive 4,057,762 shares due to its top-up rights.

The Exploration Alliance was dissolved on July 3, 2009. However, Gold Fields and Sino Gold continued to participate in a Stage 2 drilling program at the Jinshu project, which was part of the Alliance. In November 2009, subsequent to the drilling program, both companies decided to dispose of their respective interests and, as a result, no further business is being undertaken.

Gold Fields has maintained a limited number of staff in Beijing and is currently developing a new strategy for exploration in China.

#### Near Mine Exploration

Gold Fields is undertaking a project, which it refers to as Project 5M, or the Uranium Project, focused on exploring the economic potential of processing Gold Fields South African tailings dams to recover uranium, gold and sulphur and its underground reserves to recover uranium and sulphur. Drilling of the tailings dams has been completed and models developed that define the gold, uranium and sulphur content of each tailings dam. These models will be reviewed by independent experts and further evaluation is expected to be achieved by the end of fiscal 2010. A bankable feasibility study began in July 2009 to optimize the best option identified during the pre-feasibility study. This option envisages the concurrent re-treatment of all tailings dams and the current horizons from Driefontein, Kloof and South Deep in two processing plants. The bankable feasibility study is expected to cost approximately R119.33 million. The engineering and marketing studies will be completed by March 2010, with the regulatory processes expected to be completed by the end of September 2010.

Near mine exploration at the South Deep mine in South Africa has five surface drill rigs targeting the Upper Elsburg Reefs of the Witwatersrand Basin, contiguous to the mine lease area. To the east, four of these rigs are drilling boreholes to test the potential of the reefs down-dip to the current mine workings in Uncle Harry s Area, at depths ranging from 2,450 meters to 2,760 meters below surface. To the south, the remaining rig is probing the strike extension of the Upper Elsburg subcrop against the VCR at a depth of 3,330 meters below surface. Three of the boreholes have intersected reef, providing 10 intersections through deflection drilling. Early indications suggest the structural and sedimentological parameters are consistent with the current geological models.

At the St. Ives mine in Western Australia, the main focus for the year was delineating reserves and extensional drilling at the Athena target which is located adjacent to the Argo underground mine. The Athena orebody is located approximately 2 kilometers to the east of the Argo Underground mine offices and workshop. The orebody consists of three lodes, South, Central and North, of which the Central lode contains more than 80% of known reserves. The orebody has an ore zone with 500 meters of strike, dipping to the east at 50-60 degrees with a shallow southern plunge. The project commenced in July 2009 with the beginning of the excavation of a box-cut to access hard rock for the decline portal. Drilling at Athena has produced encouraging results and demonstrates both grade and structural continuity in line with expectations. The majority of drilling related to the Athena conceptual study has now been completed and a full feasibility study is scheduled to be completed in early fiscal 2010. Also within the Argo/Athena area, drilling at Hamlet focused on extending the lateral and depth extents of the known mineralization. Drilling will continue testing along the length of these deeper results in the first quarter of fiscal 2010 to assess if the high grade mineralization extends.

At the Agnew mine in Western Australia, drilling for the year focused on the underground extensional drilling and reserve delineation at Waroonga, specifically at Kim South and 450 South Ore Shoots. Unfortunately, there were technical delays in the drilling but these have been overcome and increased drilling performance is expected through fiscal 2010. Surface drilling north and south of Waroonga was also started and these programs are expected to extend through fiscal 2010.

At the Damang mine in Ghana, the emphasis during fiscal 2009 has been on extensional drilling to the south of the main Damang mine and between some of the smaller surface mines. Positive results are being returned from the Nyame and Tamang prospects and suggest that the Damang mineralization may extend for at least 2 kilometers south of the Damang pit cutback. Extensional drilling to the north of the Amoanda surface mine, and between Amoanda and the Rex surface mine, is also starting to show promise. These initial drilling targets are supported by an extensive, lease wide gravity and IP geophysical survey which is scheduled for completion by the third quarter of fiscal 2010.

At Cerro Corona in Peru, district exploration continues under a 50:50 joint venture with Compania de Minas Buena ventura. At the Titan-Arabe copper-gold target, access was negotiated through the local communities to gain drilling access. However, after commencing drilling, the joint venture partners decided to suspend activities following violent clashes between the local communities and anti-mining campaigners.

### **Recent Developments**

On August 7, 2009, Gold Fields launched a recommended cash offer for Glencar, which valued Glencar at approximately U.S.\$ 47.7 million. On September 7, 2009, Gold Fields announced that it had received acceptances of approximately 83.1% of the share capital of Glencar, allowing Gold Fields to take control of the Company. All conditions of the offer were satisfied or waived at that time and therefore the offer was declared unconditional in all respects. Gold Fields has also taken control of the board of Glencar with the appointment of three new directors. Subsequently, Gold Fields completed the final squeeze-out of shareholders on November 9, 2009. Gold Fields now holds 100% of Glencar Mining plc.

On June 3, 2009, Gold Fields agreed to sell its current 19.9% stake in Sino Gold to Eldorado Gold Corporation, or Eldorado for a total consideration of approximately U.S.\$282 million. and the sale was completed on July 27, 2009. Gold Fields received a share exchange ratio of 48 Eldorado shares for every 100 Sino Gold shares, which resulted in Gold Fields holding 27,824,654 Eldorado shares or approximately 7% of the outstanding shares of Eldorado on a fully diluted basis. On September 4, 2009, Gold Fields sold its entire shareholding in Eldorado on the market for consideration of CAD 323 million (\$299.3 million). In addition, Gold Fields holds a top-up right for a period of 18 months, which will apply should Eldorado purchase an additional 5% or more of the outstanding shares of Sino Gold and the sellers in that transaction realize a consideration ratio in excess of the share exchange ratio of 0.48 Eldorado shares per Sino Gold share received by Gold Fields. On August 26, 2009, Eldorado and Sino Gold announced that they had agreed that Eldorado would acquire all of the issued and outstanding shares of Sino Gold in exchange for 0.55 Eldorado shares for each share of Sino Gold. Sino Gold shareholders approved the transaction on December 1, 2009. The transaction remains subject to final approval of the Federal Court of Australia. Assuming completion of the offer based on the terms announced by Eldorado and Sino Gold on August 26, 2009, Gold Fields would receive 4,057,762 shares due to its top-up rights.

On August 26, 2009, Gold Fields executed an agreement with Morgan Stanley Bank, or Morgan Stanley, to terminate the royalty, or the Royalty, payable by Gold Fields wholly owned Australian subsidiary, St. Ives Gold Mining Company Pty Ltd, to certain subsidiaries of Morgan Stanley for a consideration of A\$308 million (\$257.1 million). When Gold Fields acquired St. Ives in 2001, the total consideration included the Royalty, which was subsequently acquired by Morgan Stanley. The Royalty comprised two parts: (i) a payment equal to 4% of the net smelter returns for gold produced from St. Ives to the extent that cumulative production of gold from November 30, 2001 exceeded 3.3 million ounces, but subject to the average spot price of gold for the relevant quarter exceeding A\$400 per ounce; and (ii) provided that the gold price exceeded A\$600/oz, a payment equal to 10% of the difference between revenue calculated at the spot gold price expressed in Australian dollars per ounce and at a price of A\$600/oz calculated on all future ounces produced by St. Ives. Both components of the Royalty were payable on all future production from St. Ives (the 3.3 million ounces production threshold having been exceeded in June 2008) and thus represented an uncapped liability. The transaction was financed from cash resources and available facilities and closed on August 26, 2009.

### Insurance

Gold Fields holds insurance policies providing coverage for general liability, accidental loss or damage to its property, business interruption in the form of fixed operating costs or standing charges, material damage and other losses, some of which are insured, through a captive insurance company domiciled in Gibraltar. Gold Fields insurance program does not insure all potential losses associated with its operations as some insurance premiums might be considered to be economically unacceptable, or the risk considered too remote to insure or insurance cover is not available in the global insurance markets. Should an event occur for which there is no or limited insurance cover, this could affect Gold Fields cash flows and profitability.

Management believes that the scope and amounts of coverage of its insurance policies are adequate, taking into account the probability and potential severity of each identified risk, and in accordance with customary practice for a gold mining company of its size with multinational operations. See Risk Factors Gold Fields insurance coverage may prove inadequate to satisfy potential claims.

#### **Environmental and Regulatory Matters**

#### South Africa

#### Environmental

Gold Fields South African operations are subject to various laws relating to the protection of the environment. South Africa's Constitution grants the people of South Africa the right to an environment that is not harmful to human health or well-being and to protection of that environment for the benefit of present and future generations through reasonable legislative and other measures. The Constitution and the National Environment Act 107 of 1998, or NEMA, grants legal standing to a wide range of people and interest groups to bring legal proceedings to enforce their environmental rights, which are enforceable against private entities as well as the South African government.

South African environmental legislation commonly requires businesses whose operations may have an impact on the environment to obtain permits and authorizations for those operations. The applicable environmental legislation also imposes general compliance requirements and incorporates the polluter pays principle. Under the terms of the 2002 Minerals and Petroleum Resources Development Act, or the 2002 Minerals Act, all prospecting and mining operations are to be conducted according to an environmental management plan/program which must be approved by the DME. Directors will be held liable under provisions of the 2002 Minerals Act and NEMA for any environmental degradation. See Mineral Rights.

South African mining companies are required by law to undertake rehabilitation works as part of their ongoing operations in accordance with an approved environmental management plan/program, which incorporates a mine closure plan. In addition, during the operational life of the mine they must provide for the cost of mine closure and post-closure rehabilitation and monitoring once mining operations cease. Gold Fields funds these environmental rehabilitation costs by making contributions into an environmental trust fund. The trust fund system enables payments to be made in a tax-efficient way, while providing comfort to the regulators that the operator has the means to restore any mine after operations have ceased. As of September 30, 2009, Gold Fields had contributed more than Rand 900 million, including accrued interest, to the fund. Gold Fields has implemented environmental management systems in compliance with ISO 14001 throughout its operations in South Africa, and has received full certification under ISO 14000 for all surface portions of its South African operations including the shafts. South Deep is in the process of implementing an environmental management system that is ISO 14001 compliant, with certification successfully achieved in fiscal 2009.

In addition, Gold Fields became a signatory to the International Cyanide Management Code, or Cyanide Code, on November 3, 2005, along with nine gold companies and five cyanide manufacturers. All of Gold Fields operations are committed to complying with the Cyanide Code. The implementation structure of the Cyanide Code allows the operations up to three years from the date of becoming a signatory to have independent, third-party audits conducted to evaluate compliance status. As of October 2009, all of Gold Fields eligible operations had obtained accreditation under the Cyanide Code with seven of the eight eligible operations achieving full compliance.

Under the National Water Act, all water in the hydrological cycle is under the custodianship of the State held in trust for the people of South Africa and all water users have been required to re-register their water uses. In addition, the National Water Act governs waste water and waste discharge into water resources. Gold Fields is

lawfully removing water from its South African mines. Kloof was issued a water use license in December 2008. Driefontein has been issued a draft license, subject to further comment by Gold Fields and the Department of Water Land Environmental Affairs or DWEA (previously the Department of Water Affairs and Forestry). While the water use license application for South Deep was submitted on time, there has been a delay in processing it. There is some uncertainty regarding the water quality parameters applicable to the removed water and Gold Fields has engaged DWEA to address these issues.

In September 2005, certain sections of the National Environmental Management Air Quality Act, or the Air Quality Act, came into force. In the past, certain air polluting activities were allowed to be carried on provided that the operator registered the activity and was granted permission from the authority with responsibility for air quality in the region. However, the Air Quality Act sets more onerous standards which companies will be required to achieve. It is envisaged that the Air Quality Act will be fully phased in over the next few years. To the extent that more stringent requirements may be introduced regarding dust, Gold Fields is positioning itself operationally.

The National Environmental Management Amendment Act 62 of 2008, or NEMAA, was promulgated on January 9, 2009 and came into effect on May 1, 2009. The Minerals and Petroleum Resources Development Amendment Act 49 of 2008, or MPRDAA, was promulgated on April 21, 2009, although a commencement date has not been proclaimed by the President. Environmental Impact Assessment Regulations, or EIA Regulations, for 2009 have also been published for final comments and, once effective, will replace the existing 2006 EIA Regulations. The effect of the amendments as contained in the NEMAA and the MPRDAA will ultimately mean that NEMA will be responsible for all environmental authorizations for and relating to mining and the Minister of Water and Environmental Affairs will be the relevant authority. There are three relevant periods or phases that will take place before the ultimate position is achieved. Until the MPRDAA comes into effect, as well as during the first 18 month period after such effect, the 2002 Minerals Act is the applicable legislation and the Minister of Mineral Resources is the responsible authority for all environmentally related mining activities. Once the first 18 month period has elapsed, the provisions relating to the environment will be excised from the 2002 Minerals Act and included in NEMA. NEMA will contain all the environmental provisions relating to mining, therefore environmental authorizations will be applied for in terms of NEMA. The Minister of Mineral Resources will remain the responsible authority and appeals may be directed to the Minister of Water and Environmental Affairs. Upon completion of the second 18 month period, that is three years after the commencement of the MPRDAA, NEMA will be the applicable legislation for all environmental provisions relating to mining, however, the Minister of Water and Environmental Affairs will be the responsible authority.

Section 24G of NEMA introduced an amnesty period to allow operations which had not been authorized under the previous Environment Conservation Act EIA regulations to continue. The amnesty period was available from January 7, 2005 to July 6, 2005. Gold Fields submitted three applications for such amnesty (as each identified activity required its own application) and is currently awaiting the decision of the environmental authorities in this regard. The applications related to the authorization of cyanide plants at Beatrix, Kloof and Driefontein. It is likely that the applications will be granted. If the applications are granted, the maximum fine that can be levied is R1 million per application. In the unlikely event that the applications are not granted, the authorities may order that the activities are stopped and that remediation and rehabilitation takes place.

Although South Africa has a comprehensive environmental regulatory framework, enforcement of environmental law has traditionally been poor. The Department of Environmental Affairs and Tourism has indicated that enforcement will improve and Environmental Management Inspectors have been appointed under NEMA. The Environmental Management Inspectors have commenced with environmental inspections and investigations at some of the major industrial facilities. The focus to date has been on those industries that impact heavily on air quality, such as platinum mines and the steel industry.

Gold Fields undertakes activities which are regulated by the National Nuclear Regulator Act 47 of 1999, or the NNR Act. The NNR Act requires Gold Fields to obtain authorization from the National Nuclear Regulator, or NNR, and undertake activities in accordance with the conditions of such authorizations. The NNR has alleged certain non-compliance issues relating to radiation levels in water running adjacent to certain of Gold Fields properties. Gold Fields does not concede the accuracy of the NNR samples and is currently undertaking its own sampling. Despite Gold Fields belief that it has not breached compliance with the NNR Act, it is in discussions with the NNR regarding the possible remediation of these areas as part of an industry initiative.

It has been publicly indicated by various individuals purporting to represent certain non-governmental organizations and other interested parties that they believe that Gold Fields, together with various other mining companies in South Africa, have polluted the water in and around the Wonderfontein Spruit, which is a catchment area in the West Wits Basin. This may lead to action being taken against Gold Fields, individually or collectively with other mining companies, and/or against the regulator. In March 2008, Gold Fields and two other mining companies received letters of demand from attorneys representing Duffuel (Pty) Ltd, or Duffuel, claiming substantial damages in the sum of R50 million based on this alleged pollution. In April 2009, Duffuel instituted action for damages of approximately R100 million against one of the other mining companies, but as yet no such action has been instituted against Gold Fields.

During fiscal 2008, a decision was taken by the Executive Committee to consolidate and contextualize the environmental and associated legal risks at the South African operations. This was done through a due diligence exercise conducted by two external firms that specialize in environmental risk and environmental law, respectively. The reason for selecting these firms was to ensure objectivity and to maintain an irreproachable level of credibility. The exercise was expected to fully identify the South African operation s current risk profile in terms of environmental and associated legal risks.

The results of this exercise have been finalized and will form the basis upon which existing strategies will be reviewed and modified so as to reduce any risks that have been identified. If deemed necessary, Gold Fields intends to undertake mitigating action focused on reducing existing risks and preventing future risks.

#### Health and Safety

The principal objective of the South African Mine Health and Safety Act No. 29 of 1996, or the Mine Health and Safety Act, is to protect the health and safety of persons at mines. The Mine Health and Safety Act requires that employers and others ensure their operating and non-operating mines provide a safe and healthy working environment, determines penalties and a system of administrative fines for non-compliance and gives the Minister of Minerals and Energy the right to restrict or stop work at any mine and require an employer to take steps to minimize health and safety risks at any mine. The Mine Health and Safety Act further provides for employee participation through the establishment of health and safety committees and by requiring the appointment of health and safety representatives. It also gives employees the right to refuse dangerous work. Finally, it describes the powers and functions of a mine health and safety inspectorate (which is part of the DMR) and the process of enforcement.

Under the Mine Health and Safety Act, an employer is obligated, among other things, to ensure, as far as reasonably practicable, that its mines are designed, constructed and equipped to provide conditions for safe operation and a healthy working environment and the mines are commissioned, operated, maintained and decommissioned in such a way that employees can perform their work without endangering their health and safety or that of any other person. Every employer must ensure, as far as reasonably practicable, that persons who are not employees, but who may be directly affected by the activities at a mine, are not exposed to any hazards to their health and safety.

The Mine Health and Safety Amendment Act came into operation on May 30, 2009. Gold Fields is subject to more stringent regulations regarding mine health and safety as a result of the Act taking effect. The Mine

Health and Safety Amendment Act criminalizes violations of the Mine Health and Safety Act and increases the maximum fines. Any owner convicted in terms of the above offenses may have its mining permits withdrawn or suspended, be fined R3 million and/or be imprisoned for a period not exceeding five years, while the maximum fine for other offenses and administrative fines are increased, with the highest fine being R1 million per occurrence. Two sections of the Mine Health and Safety Amendment Act, which create new offenses of contravening or failing to implement provisions of the Act resulting in a person s death and vicarious liability for an employer where certain persons commit an offense and the employer permitted or did not take all reasonable steps to prevent the person s actions, have not yet come into effect as several mining companies objected on the basis that the provisions appeared to be unconstitutional. The government agreed that these provisions would not come into effect pending further discussion with the industry.

In October 2007, as a result of a spate of accidents at various mining operations in South Africa, including Gold Fields operations, former President Thabo Mbeki ordered the Department of Minerals and Energy to conduct an occupational health and safety audit at all mines. The department developed audit protocols and divided them into two parts: (1) Legal Audit and (2) Technical Audit of certain installations and practices at mines. The intention of the audits was to give an indication of the extent to which mines comply with health and safety requirements, and also to help mines develop programs of action to improve their health and safety. The legal audits began in December 2007 and the results were released in the Presidential Mine Health and Safety Audit Report in February 2009. As yet, there has been no further development regarding the technical audit. The audit process was intended to broadly cover the topics indicated below:

Legal audit of mines:

Design and maintenance;

Legal appointments;

Occupational health and safety policy;

Occupational health and safety risk management;

Training;

Health and safety representatives and committees;

Reporting;

Mandatory codes of practice;

Explosives control;

Water management; and

Public health and safety. Technical audit of mines: Shafts and shaft infrastructure;

Rockfalls and rockbursts;

Rail bound and trackless mobile equipment;

Occupational health; and

Effectiveness of the Mine Health and Safety Act legal sanctions.

See Risk Factors Gold Fields operations in South Africa are subject to environmental and health and safety regulations which could impose significant costs and burdens.

The Occupational Diseases in Mines and Works Act 78 of 1973, or the Occupational Diseases Act, governs 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 made available by Gold Fields to employees from its existing facilities. Pursuant to changes in the Occupational Diseases Act, Gold Fields may experience an increase in the cost of these services. See Risk Factors Gold Fields operations in South Africa are subject to environmental and health and safety regulations which could impose significant costs and burdens. This increased cost, should it transpire, is currently indeterminate.

#### Mineral Rights

#### The 2002 Minerals Act

The 2002 Minerals Act came into effect on May 1, 2004. The 2002 Minerals Act vests the right to prospect and mine in the state (which includes the rights to grant prospecting and mining rights on behalf of the nation) to be administered by the government of South Africa in order to, among other things, promote equitable access to the nation s mineral resources by South Africans, expand opportunities for historically disadvantaged persons who wish to participate in the South African mining industry, advance social and economic development, and create an internationally competitive and efficient administrative and regulatory regime, based on the universally accepted principle, and consistent with common international practice, that mineral resources are part of a nation s patrimony. In accordance with the 2002 Minerals Act, the DMR published a Code of Good Conduct, or the Code, and the Housing Code Standard for the Mining Industry, or the Standard, relating to the socio-economic transformation of the mining industry. However, certain provisions of the Code and the Standard appear to be inconsistent with the Mining Charter, or to go beyond the scope envisaged by the 2002 Minerals Act. Various industry participants have been in discussions with the DMR regarding the scope and applicability of the Code and the Standard but there is significant uncertainty regarding the standing and effect of the Code and the Standard s provisions. It is unclear what the final form of the Code and the Standard will be and what effect they may have on Gold Fields results and operations. In a speech on June 23, 2009, the Minster of Minerals and Energy acknowledged that she was aware that some stakeholders had concerns and said that the Department would be consulting with them with a view to finding a lasting solution to the problem.

Under the 2002 Minerals Act, prospecting rights are initially granted for a maximum period of five years and can be renewed once upon application for a further period, each of which may not exceed 30 years. Provision is made for the grant of retention permits, which would have a maximum term of three years and could be renewed once upon application for a further two years. A wide range of factors and principles, including proposals relating to black economic empowerment and social responsibility, will be considered by the Minister of Minerals and Energy when exercising her discretion whether to grant these applications. A mining right can be canceled if the mineral to which such mining right relates is not mined at an optimal rate. In November 2006, the DMR approved the conversion of Gold Fields mining licenses under the old regulatory regime at Driefontein, Kloof and Beatrix into rights under the new regime. The South Deep application was completed in December 2008 and is currently under review by the DMR.

The 2002 Minerals Act provides that pursuant to the terms of the 2002 Minerals Act a broad-based socio-economic empowerment charter, or the Mining Charter, for effecting entry of historically disadvantaged South Africans, or HDSAs, into the mining industry became effective on May 1, 2004.

The Mining Charter s stated objectives are to:

promote equitable access to South Africa s mineral resources for all the people of South Africa;

substantially and meaningfully expand opportunities for HDSAs, including women, to enter the mining and minerals industry and to benefit from the exploitation of South Africa s mineral resources;

utilize the existing skills base for the empowerment of HDSAs;

expand the skills base of HDSAs in order to serve the community;

promote employment and advance the social and economic welfare of mining communities and areas supplying mining labor; and

promote beneficiation of South Africa s mineral commodities beyond mining and processing, including the production of consumer products.

The charter clarifies that it is not the government s intention to nationalize the mining industry.

To achieve these objectives, the charter requires that, within five years of its May 1, 2004 effective date, each mining company achieves a 15% HDSA ownership of mining assets and, within 10 years of that date, a 26% HDSA ownership of mining assets. Ownership can comprise active involvement, through HDSA-controlled companies (where HDSAs own at least 50% plus one share of the company and have management control), strategic joint ventures or partnerships (where HDSAs own at least 25% plus one vote of the joint venture or partnership interest and there is joint management and control) or collective investment vehicles, the majority ownership of which is HDSA based, or passive involvement, particularly through broad-based vehicles such as employee stock option plans. The charter envisages measuring progress on transformation of ownership by:

taking into account, among other things, attributable units of production controlled by HDSAs;

allowing flexibility by credits or offsets, so that, for example, where HDSA participation exceeds any set target in a particular operation, the excess may be offset against shortfalls in another operation;

taking into account previous empowerment deals in determining credits and offsets; and

considering special incentives to encourage the retention by HDSAs of newly acquired equity for a reasonable period. It is envisaged that transactions will take place in a transparent manner and for fair market value with stakeholders meeting after five years to review progress in achieving the 26% target. Under the charter, the mining industry as a whole agreed to assist HDSA companies in securing finance to fund participation in an amount of Rand 100 billion over the first five years. Beyond the Rand 100 billion commitment, HDSA participation will be increased on a willing seller-willing buyer basis, at fair market value, where the mining companies are not at risk.

In addition, the charter requires, among other things, that mining companies:

spell out plans for achieving employment equity at management level with a view to achieving a baseline of 40% HDSA participation in management and achieving a baseline of 10% participation by women in the mining industry, in each case within five years;

give HDSAs preferred supplier status, where possible, in the procurement of capital goods, services and consumables; and

identify current levels of beneficiation and indicate opportunities for growth.

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When considering applications for the conversion of existing licenses, the government takes a scorecard approach to the different facets of promoting the objectives of the charter. The scorecard sets out the requirements of the charter in tabular form which allows the DMR to tick off areas where a mining company is in compliance. The scorecard covers the following areas:

human resource development;

employment equity;

migrant labor;

mine community and rural development;

housing and living conditions;

ownership and joint ventures;

beneficiation; and

#### reporting.

The scorecard does not indicate the relative significance of each item, nor does it provide a particular score which an applicant must achieve in order to be in compliance with the charter and be granted new order rights. The charter, together with the scorecard, provides a system of credits or offsets with respect to measuring compliance with HDSA ownership targets. Offsets may be claimed for beneficiation activities undertaken or supported by a company above a predetermined base state, which has not yet been established for each mineral. Offsets may also be claimed for continuing effects of previous empowerment transactions.

The charter also requires mining companies to submit annual, audited reports on progress toward their commitments, as part of an ongoing review process.

On March 8, 2004, the shareholders of Gold Fields approved a series of transactions, referred to in this discussion as the Mvelaphanda Transaction, involving the acquisition by Mvelaphanda Resources Limited, or Mvela Resources, of a 15% beneficial interest in the South Africa gold mining assets of Gold Fields for cash consideration of R4,139 million. See Operating and Financial Review and Prospects Overview General Mvelaphanda Transaction.

The Mvelaphanda Transaction was intended to meet the Mining Charter s requirement that mining companies achieve a 15% HDSA ownership within five years of the Mining Charter coming into effect. Management is in dialogue with the DMR regarding Gold Fields plans and proposals to ensure compliance with relevant HDSA ownership thresholds under the 2002 Minerals Act.

As the initial five year period contemplated by the charter has expired, the government has appointed an independent auditor to audit compliance by mining companies with the provisions of the charter. As of November 30, 2009, Gold Fields has not been notified of the audit of any of its operations by the government appointed independent auditor.

### The Royalty Act

After going through several draft Bills, the Mineral and Petroleum Resources Royalty Act, 2008, or the Royalty Act, was promulgated on November 24, 2008 and was due to come into operation on May 1, 2009. However, it was announced on February 11, 2009 that the Act would not come into operation until March 1, 2010. The Royalty Act imposes a royalty on refined and unrefined minerals payable to the State.

The royalty in respect of refined minerals (which include gold and platinum) is calculated by dividing earnings before interest and taxes, or EBIT, by the product of 12.5 times gross revenue calculated as a percentage, plus an additional 0.5%. EBIT refers to taxable mining income (with certain exceptions such as no deduction for interest payable) before assessed losses but after capital expenditure. A maximum royalty of 5% has been introduced for refined minerals.

The royalty in respect of unrefined minerals (which include uranium) is calculated by dividing EBIT by the product of nine times gross revenue calculated as a percentage, plus an additional 0.5%. Where unrefined mineral resources (such as uranium) constitute less than 10% in value of the total composite mineral resources, the royalty rate in respect of refined mineral resources may be used for all gross sales and a separate calculation of EBIT for each class of mineral resources is not required. For Gold Fields, this means that currently it will pay a royalty based on the refined minerals royalty calculation as applied to its gross revenue.

Based on the proposed formula, the rate for Gold Fields, if applied to the results for fiscal 2009, would have been approximately 2% of revenue. See Risk Factors Gold Fields mineral rights in South Africa have become subject to new legislation which could impose significant costs and burdens The Royalty Act.

#### Exchange Controls

South African law provides for exchange control regulations, which, among other things, restrict the outward flow of capital from the Common Monetary Area, or CMA, comprising South Africa, the Kingdoms of Lesotho and Swaziland and the Republic of Namibia. The exchange control regulations, which are administered by the South African Reserve Bank, or the SARB, are applied throughout the CMA and regulate transactions involving South African residents, including companies. The basic purpose of exchange controls is to mitigate the negative effects caused by a decline of foreign capital reserves in South Africa, which may result in the devaluation of the Rand against other currencies. It is anticipated that South African exchange controls will remain in place for the foreseeable future. The South African government has, however, committed itself to gradually relaxing exchange controls and various relaxations have occurred in recent years. The most recent relaxations of Exchange Controls were announced by the Minister of Finance in the 2009 Medium Term Budget Policy Statement in October 2009. It is the stated objective of the authorities to achieve equality of treatment between residents and non-residents in relation to inflows and outflows of capital. The gradual approach to the abolition of exchange controls is designed to allow the economy to adjust more smoothly to the removal of controls that have been in place for a considerable period of time.

SARB approval is required for Gold Fields and its South African subsidiaries to receive and/or repay loans to non-residents of the CMA. Repayment of principal and interest on such loans will usually be approved where the payment is limited to the amount borrowed and a market-related rate of interest.

Funds raised outside of the CMA by Gold Fields non-South African resident subsidiaries (whether through debt or equity) can be used for overseas expansion, subject to any conditions imposed by the SARB. Gold Fields and its South African subsidiaries would, however, require SARB approval in order to provide guarantees for the obligations of any of Gold Fields subsidiaries with regard to funds obtained from non-residents of the CMA. Debt raised outside the Common Monetary Area by Gold Fields non-South African subsidiaries must be repaid or serviced by those foreign subsidiaries. Absent SARB approval, income earned in South Africa by Gold Fields and its South African subsidiaries cannot be used to repay or service such foreign debts. Unless specific SARB approval has been obtained, income earned by one of Gold Fields foreign subsidiaries cannot be used to finance the operations of another foreign subsidiary.

Exchange Control Circular No.16/2009, announced in October 2009, addresses foreign direct investments outside the CMA by South African companies. Transfers of funds from South Africa for the purchase of shares in offshore entities or for the creation or expansion of business ventures offshore require exchange control approval. However, if the investment is a new outward foreign direct investment where the total cost does not exceed R500 million per company per calendar year, the investment application may, without specific SARB approval, be processed by an authorized dealer, subject to all existing criteria and reporting obligations. In determining whether Gold Fields and its South African subsidiaries can invest overseas, the SARB will consider whether the investment meets certain requirements, including the benefit of the investment to South Africa. Gold Fields applies annually to the SARB for blanket approval for offshore exploration expenditure and to make exploration related foreign investments. The current approval allows for annual expenditure of up to \$80 million per year. Gold Fields is required to provide the SARB with an annual update on the Group s activities, including any such exploration investments.

South African companies are allowed to retain foreign dividends declared after October 26, 2004 offshore. Foreign dividends repatriated to South Africa after that date may be transferred offshore at any time and be used for any purpose.

Prior to October 2009, South African entities operating Customer Foreign Currency accounts, or CFC Accounts, were obliged to convert foreign currency proceeds and repatriate to South Africa within 180 days. Under Exchange Control Circular No. 19/2009 issued in October 2009, the above restrictions have been abolished and South African entities are not required to convert and repatriate funds.

A listing by a South African company on any stock exchange other than the JSE for the purpose of raising capital needs permission from the SARB. Any such listing which would result in a South African company being redomiciled also needs approval from the Minister of Finance.

Gold Fields must obtain approval from the SARB regarding any capital raising involving a currency other than the Rand. In connection with its approval, it is possible that the SARB may impose conditions on Gold Fields use of the proceeds of any such capital raising, such as limits on Gold Fields ability to retain the proceeds of the capital raising outside South Africa or requirements that Gold Fields seeks further SARB approval prior to applying any such funds to a specific use. Any limitations imposed by the SARB on Gold Fields use of the proceeds of a capital raising could adversely affect Gold Fields financial and strategic flexibility. See Risk Factors Gold Fields financial flexibility could be materially constrained by South African exchange control regulations.

In his speech to Parliament on February 20, 2008, the Minister of Finance announced that the requirement for South African companies to obtain a significant equity interest in investments outside the CMA of at least 25% was replaced with the requirement that at least 10% of the foreign target entity s voting rights must be acquired. In addition, to further enable South African companies, trusts, partnerships and banks to manage their foreign exposure, they are to be permitted to participate without restriction in the Rand futures market on the JSE. This dispensation was also extended to investment in inward-listed (foreign) instruments on the JSE Limited and the Bond Exchange of South Africa.

#### Ghana

#### Environmental

The laws and regulations relating to the environment in Ghana have their roots in the 1992 Constitution which charges both the state and individuals with a duty to take appropriate measures to protect and safeguard the natural environment. Mining companies are also required, under the Minerals and Mining Act, 2006 (Act 703), Environmental Assessment Regulations 1999 (LI 1652) and Water Use Regulations 2001 (LI 1692), to obtain all necessary approvals from the Environmental Protection Agency, or EPA, and the Forestry Commission before undertaking mining operations. The Minerals and Mining Act also requires mines to comply with all laws for the protection of the environment.

Under the relevant environmental laws and regulations, mining operations are required to undergo an environmental impact assessment process and obtain approval for an environmental permit prior to commencing operations. Within 24 months of the date upon which operations commence, Ghanaian mining operations must submit an environmental management plan for the operations to obtain an environmental certificate. Environmental management plans are submitted every three years and include details regarding the likely impact of the operation on the environment, including local communities, as well as a comprehensive plan and timetable for actions to lessen and remediate adverse impacts.

The laws also require mining operations to rehabilitate land disturbed as a result of mining operations pursuant to an environmental reclamation plan agreed with the Ghanaian environmental authorities. The reclamation plan provides an estimate of the costs to rehabilitate the mining area for the life of the mine, or the life of mine rehabilitation estimate, and an estimate of the costs to rehabilitate the mine as at the date of the reclamation plan, or the current estimated rehabilitation costs. These estimates are adjusted every two years, taking into account any new disturbance or rehabilitation undertaken during the two year period from the date of

the previous estimate. The obligations to rehabilitate the mining area and to provide security for the rehabilitation costs is included in a reclamation security agreement negotiated with the EPA and signed by the mining company. Each mining company is required to secure a percentage (typically between 50% and 100%) of the current estimated rehabilitation costs by posting a reclamation bond and a cash deposit, which serve as a security deposit against default.

In Ghana, updated reclamation plans are submitted to the EPA every two years with a readjustment of the calculated bond based on the current estimated rehabilitation costs. Gold Fields Ghana s current reclamation bond secures an amount of \$7.4 million which is 50% of the rehabilitation costs estimated as at December 2005. The amount secured will be revised based on adjusted current estimated rehabilitation costs as at the date a new reclamation security agreement is signed. The EPA is reviewing the current life of mine rehabilitation estimate forecast for Tarkwa (following its expansion) of \$39.2 million. Upon submission of a Notice of Intent for the Tarkwa expansion project in 2006, Gold Fields Ghana was advised by the EPA to submit a new environmental impact statement, or EIS, and the EPA further advised Gold Fields Ghana to submit an updated reclamation plan and revised security bond agreement after the approval of the new EIS document. Gold Fields Ghana submitted a new EIS in February 2007 which was approved by the EPA in May 2007. A new environmental permit was issued in May 2007 allowing Gold Fields Ghana to continue operations subject to submission of a revised EMP for the site within 18 months. Gold Fields Ghana submitted a revised EMP to the EPA in November 2008 and the EPA responded in January 2009 that it was reviewing the document. In late June 2009, Gold Fields was advised by African Environmental Research Consultants to reformat the document and to address issues raised by consultants engaged by the EPA in July 2009, be incorporated in the EMP before the certificate is issued. Following this review, a revised Closure Plan and security bond agreement will be negotiated based on the agreed estimated rehabilitation costs.

Abosso has submitted the required environmental management plans and reclamation plans and is in compliance with all permit, certificate and reclamation requirements. Following submission of Damang s Environmental Management Plan 2005 to 2008 in August 2005, on January 23, 2006 Damang s environmental certificate was renewed for a further three years. A revised Environmental Management Plan for the period from 2008 to 2011 was submitted to the EPA in November 2008. The EPA has indicated that the new environmental certificate, which covers a three year period, will be issued after concerns raised in the Akoben inspection have been addressed. Under Ghanaian law, a mining company may continue operations while its application is being considered as long as all necessary filings have been made.

Abosso was the first mining company in Ghana to sign a reclamation security agreement, in May 2001. Following various intermediate amendments to the agreement, in April 2006, Abosso provided the EPA with a revised draft reclamation security agreement. The draft reclamation security agreement was based on calculated current estimated rehabilitation costs totaling \$4.2 million. The current life of mine rehabilitation estimate is \$5.8 million (which includes the \$4.2 million in current estimated rehabilitation costs) and takes into account a reduction in the liability for completed reclamation works. Meetings with the EPA were held during 2007 and a further draft agreement was submitted to the EPA in November 2007. Abosso was asked to make certain amendments to this draft and submitted a final draft to the EPA in November 2008. A reclamation bond (in the form of an irrevocable letter of credit of \$2.0 million) and a \$200,000 cash deposit were provided as security. The bond expired in June 2008, but has been renewed, most recently in June 2009. The bond is expected to continue to be renewed until the amount required to be secured is revised by the EPA and a new reclamation security agreement can be signed with the EPA.

Gold Fields has implemented environmental management systems in compliance with ISO 14001 throughout its operations in Ghana. Gold Fields operations in Ghana were re-certified under ISO 14001 (2007) during fiscal 2009 for a further three years.

Following Gold Fields becoming a signatory to the Cyanide Code on November 3, 2005, all its operations, including the Ghanaian operations, are committed to complying with the code. Certification under the code at both Ghana operations was achieved in May 2008. As of October 2009, all of Gold Fields eligible operations had obtained accreditation under the International Cyanide Management Code.

#### Health and Safety

A mine owner is statutorily obligated to, among other things, take steps to ensure that the mine is managed and worked in accordance with the regulations that provide for the safety and proper discipline of the mine workers. The regulations prescribe the measures to be taken at every mining operation to ensure the safety and health of mine workers. Additionally, Gold Fields is required under the terms of its mining leases to comply with the reasonable instructions of the Chief Inspector of Mines regarding health and safety in the mine. A violation of the provisions of the health and safety regulations or failure to comply with the reasonable instructions of the Chief Inspector of Mines could lead to, among other things, a shutdown of all or a portion of the mine or the imposition of costly compliance procedures, and, in the case of a violation of the regulations relating to health and safety, constitutes an offense. Gold Fields, as the holder of the mining lease, has potential liability arising from injuries to, or deaths of, workers, including, in some cases, workers employed by its contractors. Although Ghanaian law provides statutory workers compensation for injuries or fatalities to workers, it is not the exclusive means for workers to claim compensation. Gold Fields insurance for health and safety claims or the relevant workers compensation may not be adequate to meet the costs which may arise upon any future health and safety claims. As a result, Gold Fields may suffer adverse consequences. See Risk Factors Gold Fields operations in Ghana are subject to environmental and health and safety regulations which could impose significant costs and burdens.

Every person resident in Ghana is required to belong to either a public or private health insurance scheme. Since August 1, 2004, to fund the National Health Insurance Fund, a levy of 2.5% has been imposed on goods and services produced or provided in, or imported into, Ghana, although certain types of machinery used in mining, as well as water and certain types of fuel, are exempt from the levy. Employers who establish or contribute to a private health insurance scheme are not exempt from payment of the levy. See Risk Factors Gold Fields operations in Ghana are subject to environmental and health and safety regulations which could impose significant costs and burdens.

#### Mineral Rights

Gold Fields Ghana holds five mining leases in respect of its operations at the Tarkwa property, each dated April 18, 1997, and two mining leases dated February 2, 1988 and June 18, 1992, respectively, for its operations at the former Teberebie property. The Tarkwa property mining leases all expire in 2027 and the Teberebie property mining leases both expire in 2018. Under the provisions of the Minerals and Mining Law, 1986 (PNDCL 153), or the Minerals and Mining Law, and the terms of the mining leases, all of the Tarkwa property and Teberebie property mining leases are renewable by agreement between Gold Fields Ghana and the government of Ghana.

Abosso holds a mining lease in respect of the Damang mine dated April 19, 1995, as amended by an agreement dated April 4, 1996. This lease expires in 2025. Abosso also holds a mining lease in respect of Lima South, dated March 22, 2006, which expires in 2017. As with the Tarkwa and Teberebie mining leases, these leases are renewable under their terms and the provisions of the Minerals and Mining Law by agreement between Abosso and the government of Ghana.

In addition, under Ghanaian law, the Tarkwa property mining leases are subject to the ratification of Parliament. The Minerals Commission, the statutory corporation overseeing the mining operations on behalf of the government of Ghana, has confirmed that the Tarkwa property leases have been ratified by Parliament.

A license is required for the export, sale or other disposal of minerals and the permission of the Chief Inspector of Mines is required to remove minerals obtained by the holder of a mineral right. Under Ghanaian law, the government has the right to compel the sale to it of all mineral rights obtained in Ghana and all products derived from the refining or treatment of minerals. However, the current project development agreement entitles Gold Fields to export and sell its entire production of gold and by-products. In respect of Abosso, the government has agreed not to exercise these pre-emption rights for as long as Abosso follows such procedure for marketing its products as may be approved by the Bank of Ghana acting on the advice of the Minerals Commission.

Under the provisions of the Minerals and Mining Law, the size of an area in respect of which a mining lease may be granted cannot exceed 50 square kilometers for any single grant or 150 square kilometers in the aggregate for any company. Gold Fields Ghana s mining leases cover approximately 207 square kilometers and Abosso s mining lease covers approximately 52 square kilometers. Gold Fields Ghana is currently discussing a development agreement with the Ghanaian government which would permit it to hold all its current land.

The Minerals and Mining Act came into force on March 31, 2006. Although the Minerals and Mining Act repealed the Minerals and Mining Law, and the amendments to it, the Minerals and Mining Act provides that leases, permits and licenses granted or issued under the repealed laws will continue under those laws unless the Minister responsible for minerals provides otherwise by regulation. Therefore, unless and until such regulations are passed in respect of Gold Fields mineral rights, the Minerals and Mining Law will continue to apply to Gold Fields current operations in Ghana.

The major provisions of the Minerals and Mining Act are as follows:

the government of Ghana s right to a 10% free carried interest in mineral operations is restricted to mining leases. The government may participate further in mineral operations upon agreement with the holder;

mineral rights in land over which mineral rights have been granted may not be granted to any other person in respect of the same minerals;

introduction of a new system for demarcating the land, referred to as the cadastral system, whereby land is demarcated in blocks. Under the new system, a mining lease area may not be less than one block or more than 300 contiguous blocks. A block is defined as 21 hectares;

mining companies which have invested or intend to invest at least \$500 million may benefit from stability and development agreements, relating to both existing and new operations, which will serve to protect holders of current and future mining leases for a period not exceeding 15 years against changes in laws and regulations generally and in particular relating to customs and other duties, levels of payment of taxes, royalties and exchange control provisions, transfer of capital and dividend remittances. A development agreement may contain further provisions relating to the mineral operations and environmental issues. Each stability and development agreement is subject to the ratification of Parliament;

provisions requiring the renewal of a mining lease for a further period of up to 30 years once the holder has made an application for renewal pursuant to the terms of the lease if the holder is in material compliance with its obligations under law and under the lease;

provisions restricting royalty rates to not more than 6% or less than 3% of the total revenue of minerals; and

changes to the definition of a mining company. Under the Minerals and Mining Law, a mining company is defined as a company which or whose subsidiary is the holder of a mining lease. The Minerals and Mining Act defines a mining company as a company which or whose subsidiary is the holder of a mineral right (holders of mineral rights include prospecting and reconnaissance license holders) and excludes companies listed on a stock exchange and companies whose holding in mining

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companies or whose subsidiary s assets are less than 50% of the market value of their total assets. The effect of this re-definition is that persons seeking to become controllers of prospecting or reconnaissance license holders as well as mining lease holders are required to seek the approval of the Minister responsible for mines. Further, mineral rights holders are required to notify the Minister of changes in control. Additionally, similar to its rights currently in respect of companies holding mining leases, the government of Ghana is entitled to a special share in prospecting or reconnaissance license holders. See Government Option to Acquire Shares of Mining Companies.

Under the Minerals and Mining Act, neither a landowner nor any other person may search for minerals or mine on any land without having been granted a mineral right by the Minister responsible for mines. Additionally, even if a mineral right granted under the Minerals and Mining Law is made subject to the Minerals and Mining Act, the Act provides that this shall not have the effect of increasing the holder s costs, or financial burden, for a period of five years.

Ghana s finance minster has announced that the government intended to increase the minimum royalty rate from 3% to 6%. Gold Fields expects a draft bill to be circulated within the Ghanaian parliament in the near future and further expects that the royalty increase will take effect immediately upon gazetting of the bill as an Act.

#### Government Option to Acquire Shares of Mining Companies

Under Ghanaian law, the government is entitled to a 10% interest in any Ghanaian company which holds a mining lease in Ghana, without the payment of compensation. The government of Ghana has already received this 10% interest in each of Gold Fields Ghana and Abosso. The government also has the option, under the Minerals and Mining Law, of acquiring an additional 20% interest in the share capital of mining companies whose rights were granted under the Minerals and Mining Law at a price agreed upon by the parties, at the fair market value at the time the option is exercised, or as may be determined by international arbitration. The government of Ghana exercised this option in respect of Gold Fields Ghana and subsequently transferred the interest, which now forms part of the IAMGold interest in Gold Fields Ghana. The Government of Ghana retains this option to purchase an additional 20% of the share capital of Abosso. As far as management is aware, the government of Ghana has not exercised this option for any other gold mining company in the past.

Under the Minerals and Mining Law, which continues to apply to Gold Fields Ghana s operations, and under the Minerals and Mining Act, the government has a further option to acquire a special share in a mining company for no consideration or in exchange for such consideration as the government and that company shall agree. This interest, when acquired, constitutes a special share which gives the government the right to attend and speak at any general meeting of shareholders, but does not entitle the government to any voting rights. The special share does not entitle the government to distributions of profits of the company which issues it to the government. The written consent of the government is required to make any amendment to a company s articles of incorporation relating to the government s option to acquire a special share. Although the government of Ghana has agreed not to exercise this option in respect of Gold Fields Ghana, it has retained this option for Abosso.

#### Exchange Controls

Under Ghana s mining laws, the Bank of Ghana or the Minister for Finance may permit the holder of a mining lease to retain a percentage of its foreign exchange earnings for certain expenses in bank accounts in Ghana. Under a foreign exchange retention account agreement with the government of Ghana, Gold Fields Ghana is required to repatriate 20% of its revenues derived from the Tarkwa mine to Ghana and use the repatriated revenues in Ghana or maintain them in a Ghanaian bank account. Management believes that Gold Fields Ghana is entitled to rely on the provisions of the foreign exchange retention account agreement for the duration of the Tarkwa mining leases. Abosso is currently obligated to repatriate 25% of its revenue to Ghana, although the level of repatriation under the deed of warranty between Abosso and the government of Ghana is subject to renegotiation every two years. The most recent negotiations were concluded in February 2003. Since then there have been no requests for negotiations by either side and Abosso s obligations remain the same. Until Abosso s repatriation level is renegotiated, it will remain the same. While management has no reason to believe that the repatriation level will increase as a result of the next set of negotiations, there is no agreed ceiling on the

repatriation level, and it could be increased. Any increase could adversely affect Gold Fields ability to use the cash flow from the Damang mine outside Ghana, including to fund working costs and capital expenditures at other operations, to provide funds for acquisitions and to repay principal and interest on indebtedness. Gold Fields currently repatriates on average approximately 40% of revenues from the Ghana operations to Ghana, annually. In fiscal 2009, Gold Fields repatriated approximately 84% to fund its capital expenditures and capital waste program in Ghana. However, Gold Fields does not expect repatriation to remain at this level in the future.

#### Australia

#### Environmental

While Australia s national government retains the power to regulate activities which impact matters of national environmental significance, the Constitution vests the power to legislate environmental matters principally in the states. Gold Fields gold operations in Australia are primarily subject to the environmental laws and regulations of the State of Western Australia which require, among other things, that Gold Fields obtains environmental licenses, work approvals and mining licenses to begin mining operations.

During the operational life of its mines, Gold Fields is required by law to make provisions for the ongoing rehabilitation of its mines and to provide for the cost of post-closure rehabilitation and monitoring once mining operations cease. Gold Fields guarantees its environmental obligations by providing the Western Australian government with unconditional bank-guaranteed performance bonds. However, these bonds would not cover any environmental events requiring remediation that were unforeseen at the time the bonds were issued or which occur as a result of a breach of Gold Fields environmental licensing conditions. The Western Australian Government is proposing to increase the value of these bonds to cover approximately 50% of the total cost of rehabilitation. The current value of the bonds is in the order of 25%.

Gold Fields is subject to the Environmental Protection Act 1986. Under the Environmental Protection Act 1986, Gold Fields is obliged to prevent and abate pollution and environmental harm. Under the Contaminated Sites Act 2003, Gold Fields is required to report known or suspected contaminated sites. The Western Australian government s Department of Environment and Conservation then classifies the site based on the risk posed to human health and the environment. Gold Fields may be required to investigate or remediate an affected site if there is contamination that is likely to cause harm to human health or the environment. If that happens, Gold Fields environmental duties and responsibilities will be increased. See Risk Factors Gold Fields operations in Australia are subject to environmental and health and safety regulations which could impose significant costs and burdens.

Gold Fields is required to publicly report energy use and efficiency measures under the Energy Efficiency Opportunities (EEO) Act 2006, with the first report for the 2008 fiscal year already submitted and published on the Gold Fields website in December 2008. Reports are required by the 31<sup>st</sup> of December following the end of each fiscal year, with an additional more detailed government report due December 31, 2011.

Under the National Greenhouse and Energy Reporting (NGER) Act 2007, Gold Fields is required to submit yearly reports to the federal government in relation to the energy use, energy production and greenhouse gas emissions associated with its Australian mining operations. The scheme, which commenced on July 1, 2008, also requires regulated companies to retain energy and emissions data for seven years for audit. Gold Fields Australia, which includes St. Ives, Agnew, the Australian division of the Exploration group and associated offices, recently submitted energy use and emission data for the 2009 fiscal year.

In May 2009, a bill was introduced into the Australian parliament which, if passed, would have introduced a country-wide cap and trade system for greenhouse gases. The Carbon Pollution Reduction Scheme Bill 2009, or the CPRS Bill, would have required large direct emitters of greenhouse gases in certain sectors of the economy to purchase and then surrender carbon permits called Australian Emission Units, or AEUs. Currently, a revised version of the CPRS Bill is being negotiated in the Australian Senate. If passed, the scheme is planned to come into effect on July 1, 2011.

Under the CPRS Bill as previously drafted, at the end of each financial year, regulated entities would be required surrender to the Federal Government one AEU for each ton of CO2-e directly produced by their facilities during that financial year. Permits would be available for purchase at monthly auctions or on the secondary market, and could also be earned through eligible onshore or offshore carbon offsetting projects.

Gold Fields would have direct liability for permits under the scheme due to St Ives gold mine exceeding the 25kt CO2-e facility threshold for direct emissions. In terms of indirect liability, created by the use of electricity generated by an external supplier, both St Ives and Agnew gold mines will incur a pass-through cost equivalent to the associated permit cost.

Certain eligible companies are expected to receive permits free of charge from the Federal Government under the Emissions-Intensive Trade-Exposed Industries, or EITE, program. The gold industry s average emissions intensity sits on the lower threshold of assistance, whereby 60% free permits would be allocated, although a decision on the eligibility of the industry is not expected until the first half of 2010.

On December 2, 2009, a revised version of the CPRS Bill was again defeated in the Australian Senate. The government is considered likely to re-introduce the bill to parliament for a third time in February 2010. If passed through parliament, Gold Fields is likely to be regulated directly under this scheme and its operational expenditure will be affected by the pass-through of compliance costs through its contracts with regulated suppliers.

Following Gold Fields becoming a signatory to the International Cyanide Management Code, or the Code, on November 3, 2005, all its operations, including its Australian operations, are committed to complying with the Code. The Code requires signatories to have their compliance audited by independent, third-party auditors every three years. As of October 2009, all of Gold Fields eligible operations had obtained accreditation under the International Cyanide Management Code. St. Ives achieved full compliance with the Code on August 5, 2009. Agnew expects to be in full compliance by the end of December 2009.

#### Health and Safety

The Western Australia Mines Safety and Inspection Act 1994 (WA), or the Safety and Inspection Act, regulates the duties of employers and employees in the mining industry with regard to occupational health and safety and outlines offenses and penalties for breach. The regulations prescribe specific measures and provide for inspectors to review the work site for hazards and violations of the health and safety requirements. A violation of the health and safety laws or failure to comply with the instructions of the relevant health and safety authorities could lead to, among other things, a temporary shutdown of all or a portion of the mine, a loss of the right to mine or the imposition of costly compliance procedures. However, mine owner liability for contractors employees and labor hire employees under the Safety and Inspection Act extends only to matters over which the Company has the capacity to exercise control. See Risk Factors Gold Fields operations in Australia are subject to environmental and health and safety regulations which could impose significant costs and burdens.

The Safety and Inspection Act was amended in April 2005 and the changes include:

a new regime of penalties characterized by significant increases (particularly in relation to companies), higher penalties for repeat offenses, and new offenses of causing death or serious harm through gross negligence, which attract high penalties including the option of imprisonment;

broader powers for inspectors to impose improvements or prohibition notices on machinery and work practices; and

a new duty of care imposed on employers with respect to residential accommodation supplied in connection with employment.

The effect of the amendments is that Gold Fields exposure to prosecution has increased, as has the cost of health and safety compliance of Gold Fields mining operations in Australia.

#### Mineral Rights

In Australia, the ownership of land is separate from the ownership of most minerals, which are the property of the states and are thus regulated by the state governments. The Western Australian Mining Act 1978 (WA), or the Mining Act, is the principal piece of legislation governing exploration and mining on land in Western Australia. Licenses and leases for, among other things, prospecting, exploration and mining must be obtained pursuant to the requirements of the Mining Act before the relevant activity can begin. Application fees and rental payments are payable in respect of each mining tenement.

Prospecting licenses, exploration licenses and mining leases are subject to prescribed minimum annual expenditure commitments. Royalties are payable to the state based on the amount of ore produced or obtained from a mining tenement. A monthly production report must be filed and royalties are calculated accordingly at a fixed rate of 2.5%.

Ministerial consent is required with respect to assignment or sale of a mining lease and certain other leases and tenements. Gold Fields has obtained ministerial consent for the transfer of all material mining leases and other tenements acquired from WMC.

#### Land Claims

In 1992, the High Court of Australia recognized a form of native title which protects the rights of indigenous people in relation to land in certain circumstances. As a result of this decision, the Native Title Act 1993 (Cth), or Native Title Act, was enacted to recognize and protect existing native title by providing a mechanism for the determination of native title claims and a statutory right for Aboriginal groups or persons to negotiate, object, and/or be consulted when, among other things, there is an expansion of, or change to, the rights and interests in the land which affects native title and constitutes a future act under the Native Title Act. The existence of these claims does not necessarily prevent continued mining under existing tenements. Tenements granted prior to January 1, 1994 are not future acts and do not need to comply with the aforementioned consultation or negotiation procedures. As a general rule, tenements granted after January 1, 1994 need to comply with this process. However, in Western Australia, some tenements were granted without complying with this consultation or negotiation process on the basis of then prevailing Western Australian legislation. This legislation was subsequently found to be invalid as it conflicted with the Native Title Act which is Commonwealth legislation. Subsequent legislation was passed validating the grant of tenements between January 1, 1994 and December 23, 1996, provided certain conditions were met.

Certain of Gold Fields tenements are currently subject to native title claims. However, most of Gold Fields tenements were granted prior to January 1, 1994. Where tenements were granted between January 1, 1994 and December 23, 1996, Gold Fields believes it complies with the conditions set out by the Native Title Act for those tenements to be validly granted. On those tenements not granted before December 1996, Gold Fields has entered into agreements with the claimant parties which provides the Company with security of tenure. Therefore, the granting of native title over any of these tenements will not have a material effect on Gold Fields tenure.

Mining leases do not necessarily extinguish all native title, but do extinguish the native title rights with which they conflict. The right of native title holders to control access to land is extinguished by a mining lease in Western Australia. However, mining leases may not extinguish other native title rights. Therefore, some native title rights may co-exist with the rights granted under a mining lease. Compensation could be payable for rights lost by native title holders on the grant of a mining lease. In addition, negotiations with native title applicants are generally necessary before a new mining lease will be granted by the state and these can be time consuming and costly.

It is possible that land comprised in seven of Gold Fields existing tenements could be at risk due to native title claims, because those particular tenements may have been granted by the State of Western Australia in a manner contrary to the Native Title Act. Although the validity of those seven tenements is in question, Gold Fields management does not believe those tenements are material to its Australian operation.

The Aboriginal heritage laws protect sites of significance to Aboriginal people which have ongoing ethnographic, archaeological or historic significance. Gold Fields is aware of several Aboriginal heritage sites on its tenements. However, it does not believe that the protected status of these sites will materially affect its current operations in Australia. See Risk Factors Gold Fields operations in Australia are subject to environmental and health and safety laws and regulations which could impose significant costs and burdens.

#### Peru

#### Regulatory

The regulatory framework governing the development of mining activities in Peru mainly consists of a General Mining Act (Ley General de Minería), or the LGM, and Regulations relating to mining procedures, health and safety, environmental protection, and mining investment and guarantees. Other laws, such as the Mining Royalty Law and laws relating to the granting of mining concessions in urban areas and urban expansion areas, the closing of mines, and liabilities for environmental damage, also affect mining companies.

The exploration and exploitation of mineral substances from the soil or subsoil is governed by the LGM. Mining activities as defined by the LGM include surveying, prospecting, exploration, general workings, beneficiation, trading and transportation of ore.

### Regulatory and Supervisory Entities

In general terms, the principal regulator of mining activities in Peru is the Ministry of Energy and Mines, or the MEM, through its General Bureau of Mining (*Dirección General de Minería*), or DGM, and its General Bureau of Mining and Environmental Affairs (*Dirección General de Asuntos Ambientales Mineros*), or DGAAM. Other regulatory institutions are the Geological, Mining and Metallurgical Institute (*Instituto Geológico Minero Metalúrgico*), or the INGEMMET, and the Supervisory Body of Investment in Energy and Mining (*Organismo Supervisor de la Inversión en Energía Minería*), or the OSINERGMIN.

The DGM is the senior body of the MEM overseeing the mining industry. It reports directly to the Office of the Vice-Minister of Mining and is responsible for, among other things, the promotion of mining activities, the granting of beneficiation, ore transportation and general working concessions, the proposal of welfare, health and safety regulations.

The DGAAM has the following duties, among others: (i) propose policy and legal provisions for environmental conservation and protection in the mining sector; (ii) approve technical standards for the appropriate application of regulations on environmental conservation and protection to apply to activities of the mining sector; and (iii) assess environmental and social impacts derived from activities of the mining sector, establishing the preventive and corrective measures necessary to control such impacts.

The INGEMMET has the following duties, among others: (i) process mining claims, grant titles to mining concessions and act on applications relating to mining rights pursuant to law; (ii) keep the National Mining Land Register (*Castastro Minero*); administer and distribute the Annual Concession Fee, or ACF, and collect any penalties for failure to meet minimum annual production targets; and (iii) cancel mining claims or mining concessions pursuant to applicable laws.

The OSINERGMIN supervises and inspects mining activities as regards matters of mine safety and health, and environmental conservation and protection and may impose sanctions on any operations failing to comply with these regulations.

#### Concessions

In accordance with the LGM, mining activities (except surveying, prospecting and trading) must be performed exclusively under the concession system. A concession confers upon its holder the exclusive right to develop a specific mining activity within a defined area. The LGM establishes four types of concessions:

#### Mining Concessions

Mining concessions confer the right to explore and exploit the mineralization granted which is within a solid of undefined depth, limited by vertical planes corresponding to the sides of a square, rectangle or closed polygon, the vertices of which refer to Universal Transversal Mercator, or UTM, coordinates. A mining concession is a real property interest independent and separate from surface land located within the UTM coordinates of the concession. It is granted by the INGEMMET. Once the claimed area is subject to a mining concession, the titleholder must register its title with the Public Mining Registry (*Registro de Derechos Mineros*) administered by the National Superintendent of Public Registers (*Superintendencia Nacional de Registros Públicos*) where all the agreements, resolutions and acts thereto must also be registered.

Holders of mining concessions are also required to meet minimum annual production targets prescribed by law. Titleholders are entitled to aggregate multiple concessions for these purposes provided certain conditions are met. In the case of mining concessions obtained prior to October 2008, the minimum annual production target for concessions to mine metals is equivalent to U.S.\$100.00 per hectare per year. If the titleholder has not met the minimum annual production target by the end of the sixth year of the concession having been granted, the titleholder is required to pay from the seventh year a penalty equal to U.S.\$6.00 per year per hectare until the year in which the minimum annual production target is achieved. The penalty increases to U.S.\$20.00 per year per hectare if the minimum production target is not met by the end of the twelfth year of the concession having been granted. Failure to pay this penalty for two consecutive years may lead to the cancellation of the mining concession, although titleholders may be able to avoid paying the penalty if they can prove to the mining authorities that they have invested an amount equivalent to at least 10 times the amount of the penalty in the concession or Administrative Economic Unit (a grouping of concessions) during the previous year.

Pursuant to new regulations enacted in 2008, in the case of mining concessions obtained starting in October 2008, the minimum annual production target for metallic concessions is equivalent to one Fiscal Payment Unit, or UIT, per hectare per year. The UIT is fixed on a yearly basis and in 2009 is equal to approximately U.S.\$1,200. If the titleholder has not met the minimum annual production target by the end of the tenth year of the minimum annual production target until the target is fulfilled. This regime also applies to mining concessions acquired prior to October 2008, if the titleholder does not achieve the minimum annual production target by January 2, 2019.

Pursuant to the new regulations, mining concessions obtained after October 2008 may be canceled if the titleholder (i) does not meet the minimum annual production target for two consecutives years between the eleventh and fifteenth year of the concession having been granted or (ii) does not meet, after the fifteenth year, the minimum annual production target, unless the corresponding penalty has been paid and the titleholder has evidenced investments in mining activities or in public infrastructure for an amount equivalent to 10 times the penalty. Finally, if the non-fulfillment of the minimum annual production target remains until the end of the twentieth year, the mining concession will be canceled. These requirements will also apply to mining concessions obtained prior to October 2008, in case they do not meet the minimum annual production target established by the new regulations by January 2, 2019.

### **Beneficiation Concessions**

Beneficiation or process concessions confer the right to extract or concentrate the valuable substances of an aggregate of minerals and/or to smelt, purify or refine metals through a set of physical, chemical and/or physicochemical processes. This concession is granted by the DGM.

#### General Working Concessions

General workings concessions confer the right to render ancillary services to two or more mining concession holders. The following are considered ancillary services: ventilation, drainage, hoisting or extraction in favor of two or more concessions of different concessionaires. This concession is granted by the DGM.

#### Ore Transportation Concessions

Ore transportation concessions confer the right to install and operate a system for the continuous massive transportation of mineral products between one or more mining centers and a port or beneficiation plant, or a refinery, or along one or more stretches of these routes. The ore transportation system must be non-conventional, such as conveyor belts, pipelines or cable cars, among others. This concession is granted by the DGM. Conventional transportation systems are authorized by the Ministry of Transport and Communications.

All the concessions regulated by the LGM must be registered with the Public Mining Registry. In addition, all concessions in force must be registered with the National Mining Land Register, administered by the INGEMMET, including the UTM coordinates of the vertices of each mining concession.

The holders of mining concessions or of any pending claims for mining concessions must comply with several obligations, among which is the payment of the ACF. In the case of mining concessions and mining claims, the ACF is equivalent to U.S.\$3.00 per hectare and, in the case of beneficiation or processing concessions, the ACF is calculated on the basis of the production capacity of the processing plant. Default in payment of the ACF for two consecutive years may result in the cancellation of the respective concession or claim.

In order to fulfill the work obligations established by Peruvian law, the holder of more than one mining concession of the same class and nature may group them in Administrative Economic Units, provided that the concessions are located within a radius of five kilometers in the case of non-ferrous metallic minerals or primary auriferous metallic minerals such as gold, silver and copper; 20 kilometers in the case of ferrous, coal or non-metallic minerals; and 10 kilometers in the case of auriferous detritus or heavy minerals detritus. Creation of an Administrative Economic Unit requires an approval resolution issued by the DGM.

The holders of concessions have the following rights, among others: (i) in concessions granted on uncultivated lands, to make free mining use of the concession surface for their economic purpose, without any additional request being required; (ii) to request the right to the free mining use, for the same purpose, of uncultivated lands located outside the concession; (iii) to request an authorization to establish easements on third-party lands as necessary for the rational use of the concession; an easement will be established after paying fair value compensation; (iv) to request an authorization to establish mining use or easements, if applicable, on the surface lands of other concessions, provided that the mining activity of their holders is not disturbed or hindered; (v) to construct, on neighboring concessions, the works that may be necessary for access, ventilation and drainage of its own concessions, ore transportation and the safety of its workers, after appropriate compensation has been paid if such works cause any damages and without creating any encumbrance to the adjacent concessions; and (vi) to use the water necessary for the concession operations pursuant to the applicable law.

On June 24, 2004, the Peruvian Congress approved the Mining Royalty Law, which established a mining royalty that owners of mining concessions must pay to the Peruvian government for the exploitation of metallic and non-metallic resources. The mining royalties are calculated on a sliding scale with rates ranging from 1% to 3% over the value of mineral concentrates based on international market prices. As provided by the Mining Royalty Law, since January 26, 2007, the Peruvian Tax Authority is responsible for the collection of mining royalties.

#### Environmental

During the 1990s, a modern environmental practice that conforms to the international environmental standards was established and made generally applicable to most of the mining industry. In 1990, the

Environmental Code was enacted, which established for the first time a legal and institutional system to preserve the environment. In 1993, the Environmental Protection Regulations for Mining and Metallurgical Activities were enacted. On October 15, 2005, the Environmental Act completely repealed and replaced the Environmental Code.

The following items are required to be produced under the environmental laws in order to perform mining activities:

**Environmental Impact Assessment (EIA)**: EIAs are required for new projects, expansions of the operations by more than 50% and in conjunction with a project moving from the exploration stage to the development stage. EIAs must evaluate the physical, biological, socioeconomic and cultural impacts on the environment resulting from the execution of the mining projects.

Semi-Detailed Environmental Impact Assessment (SD-EIAs) and Environmental Impact Statement (DIA): SD-EIAs and DIAs are required for mining exploration projects. SD-EIAs apply to larger projects while DIAs apply to smaller projects.

**Annual Consolidated Statement**: Holders of mining concessions must submit statements by June 30 of each year describing emissions to the environment and follow-up actions taken pursuant to the previously approved EIA and/or the Program for Environmental Adequacy, or PAMA.

Periodic Environmental Audits are made by OSINERGMIN to supervise compliance with the commitments undertaken in the respective EIAs and/or PAMA.

In 2003, a law regulating mine closure was approved. The closure of a mine usually entails the sealing of exits, in the case of underground mines, the removal of surface infrastructure and the environmental rehabilitation of the surface where the mining activity has been developed. The law requires mining companies to ensure the availability of the resources necessary for the execution of an adequate mine closure plan, including an Environmental Liabilities Closure Plan, in order to prevent, minimize and control the risks to and negative effects on health, personal safety and environment that may be generated or may continue after the cessation of mining operations. Furthermore, the law obligates holders of mining concessions to furnish guarantees in favor of the MEM to ensure that they will carry out the Environmental Liabilities Closure Plan in accordance with the environmental protection regulations and to ensure that the MEM has the necessary funds to execute the mine closure plan in the event of non-compliance by the holder of the mining concession. Mine concession holders may satisfy these requirements by providing to the MEM stand-by letters of credit to cover the amount of any mine closure plan.

Regulations under the mine closure law establish the procedure to be followed to obtain approval of the Environmental Liabilities Closure Plan and the requirements and characteristics of the guarantees furnished by the holders of mining concessions. These regulations also establish procedures for the approval of mine closure plans and inspection of the implementation of such plans, as well as the penalties to be imposed in the event of non-compliance by the holders of mining concessions.

## Property

Gold Fields operations as of June 30, 2009 comprised the following:

#### Gold Fields operative mining areas as of June 30, 2009

Operation	Size
South Africa	
Driefontein	8,561 hectares
Kloof	20,087 hectares
Beatrix	16,821 hectares
South Deep	3,566 hectares
Ghana	
Tarkwa	20,825 hectares
Damang	8,111 hectares
Australia	
St. Ives	83,458 hectares
Agnew	62,298 hectares
Peru	
Cerro Corona	940 hectares

Gold Fields leases its corporate headquarters in Sandton, its South African Regional Office in Roodepoort and its exploration offices not located at the mines.

As discussed earlier, the 2002 Minerals Act came into operation on May 1, 2004 and vests the right to prospect and mine in the South African State with administration by the government of South Africa. See Environmental and Regulatory Matters South Africa Mineral Rights. In November 2006, the South African Department of Minerals and Energy approved the conversion of Gold Fields mining rights under the former regulatory regime at Driefontein, Kloof and Beatrix into rights under the new regime. The application for the conversion of the South Deep mining rights has been completed and is currently under review by the DMR. See Environmental and Regulatory Matters South Africa Mineral Rights.

Gold Fields also owns most of the surface rights with respect to its South African mining properties. Where Gold Fields conducts surface operations on land the surface rights of which it does not own, it does so in accordance with applicable mining and property laws. In addition, Gold Fields owns various mineral rights, under the previous regime, and surface rights contiguous to its operations in South Africa. As required under the 2002 Minerals Act, Gold Fields has registered its surface rights utilized for mining purposes. Gold Fields has received prospecting rights on properties which it has identified as being able to contribute, now or in the future, to its business and is in the process of converting those prospecting rights to mining rights under the 2002 Minerals Act. See Environmental and Regulatory Matters South Africa Mineral Rights.

Gold Fields Ghana obtained the mining rights for the Tarkwa property from the government of Ghana in 1993. In August 2000, with the consent of the government of Ghana, Gold Fields Ghana was assigned the mining rights for the northern portion of the Teberebie property. The Tarkwa rights expire in 2027, while the Teberebie rights expire in 2018. Abosso holds the right to mine at the Damang property under a mining lease from the government of Ghana which expires in 2025. Gold Fields may exploit all surface and underground gold at all three sites until the rights expire, provided that Gold Fields pays the government of Ghana a quarterly royalty which is calculated on the basis of a formula which ranges from 3% to 12% of revenues derived from mining at the sites. For fiscal 2009, this formula resulted in Gold Fields Ghana paying royalties equivalent to approximately 3% of the revenues from gold produced at the Tarkwa and Teberebie properties, and Abosso paying approximately 3% of the revenues from 3% to 6%. Gold Fields expects a draft bill to be circulated within the Ghanaian parliament in the near future and further expects that the royalty increase will take effect immediately upon gazetting of the bill as an Act.

In Australia, mining rights and property are leased from the state. Australian mining leases have an initial term of 21 years with one automatic 21-year renewal period and thereafter an indefinite number of 21-year renewals with government approval. At the St. Ives operations, the initial 21-year term has expired for 12 mining leases, with those mining leases having now entered their second 21-year term in the last two to three years. At the Agnew operations the initial 21-year term has expired for 20 mining leases, with those mining leases having now entered their second 21-year term in the last two to three years. At the Agnew operations the initial 21-year term has expired for 20 mining leases, with those mining leases having now entered (in most cases only quite recently) their second 21-year term. In relation to gold produced from the mining leases at St. Ives and Agnew, Gold Fields pays an annual royalty to the state of 2.5% of production.

In Peru, exploration and extraction activities can only be performed in duly authorized areas. Authorization is granted when a mining concession is issued. Mining concessions are for an indefinite term provided the titleholder complies with the timely payment of annual concession fees of U.S.\$3.00 per hectare and any applicable fines. In addition, La Cima owns mining rights outside Cerro Corona covering 185.2 hectares and surface rights related to Cerro Corona covering 881.3 hectares.

As of June 30, 2009, Gold Fields also held exploration tenements covering a total of approximately 3.6 million hectares in various countries, including the Dominican Republic, Chile, Brazil, Peru, Indonesia, Finland, Kyrgyzstan, South Africa, Ghana, Guinea, the Democratic Republic of Congo, Mali, Australia and Canada. Gold Fields ownership interests in these sites vary with its participation interests in the relevant exploration projects. Gold Fields international exploration offices are leased under various contract terms and durations. See Exploration.

Gold Fields also holds title to numerous non-mining properties in South Africa, including buildings, shops, farmland and hospitals. Gold Fields controls approximately 53,500 hectares of land in the West Wits and Welkom regions.

#### **Research and Development**

Gold Fields undertakes various research and development projects relating to gold production technology and potential uses of gold. In particular, Gold Fields has developed a patented technology called Biox<sup>®</sup> through its wholly-owned Swiss subsidiary Biomin Technologies S.A. Biox<sup>®</sup>, which involves a process whereby bacteria release gold from sulfide-bearing gold ore to permit more economical recovery of the gold. On October 2, 2008, Gold Fields entered into an agreement with Bateman Engineering to sell its Biox<sup>®</sup> Technology Business to Bateman Engineering for a net cash consideration of U.S.\$8.8 million. However, the agreement was canceled on February 3, 2009 as some of the conditions precedent to completion were not fulfilled. Gold Fields continues to actively develop and market Biox<sup>®</sup> technology.

Gold Fields participates in a collaborative research and development project, entitled the Autek Project, together with AngloGold Ashanti Limited, Harmony Gold Mining Company Limited and Mintek, which is focused on investigating potential new industrial uses for gold. The Autek Project has been integrated into the Nanotechnology Innovation Centre, which is an initiative of the South African government s Department of Science and Technology. Gold Fields primary contribution to the Autek Project is aimed at researching gold nanotechnology.

The Company is currently involved in the testing of biotechnology for the destruction of cyanide compounds in residue streams, for the purpose of complying with the Cyanide Code.

Gold Fields is continuing its support of the AMIRA International project, P420D. AMIRA International is an independent association of minerals companies, created to develop, broker and facilitate collaborative research projects. The P420 project, centered on gold processing technology, commenced in 1984. P420D is designed to build on previous work with a focus on the areas of industry sustainability, capturing and preserving industry knowledge, predicting and improving ore processing, protecting the license to operate, and processing difficult ores. The funding commitment for this project is through calendar 2012.

In Australia, Gold Fields signed a relationship agreement with the Commonwealth Scientific & Industrial Research Organisation, or CSIRO, to work together on mining projects that are mutually beneficial. The agreement commenced in July 2008 with project work to date being carried out primarily in the mineral exploration field, relevant to the St. Ives and Agnew operations, as well as a mechanical agitation project at Agnew using a CSIRO patented technology. Laboratory scale tests have been carried out to test this technology which proved successful. The project has moved into the feasibility stage with full scale trials expected in calendar 2010. Further to this, preliminary test work carried out by CSIRO in the application of in situ leaching of small, shallow, oxide ore zones has led to a proposal in which Gold Fields will consider participation in full scale trials to be carried out through June 30, 2010.

#### Legal Proceedings

On August 21, 2008, Gold Fields Operations Limited, formerly known as Western Areas Limited, or WAL, a subsidiary of Gold Fields, received a summons from Randgold and Exploration Company Limited, or R&E, and African Strategic Investment (Holdings) Limited. The summons claims that during the period that WAL was under the control of Brett Kebble, Roger Kebble and others, WAL was allegedly part of a scam whereby JCI Limited unlawfully disposed of shares owned by R&E in Randgold Resources Limited, or Resources, and Afrikander Lease Limited, now known as Uranium One. WAL s preliminary assessment was that it had strong defenses to these claims and, accordingly, WAL s attorneys were instructed to vigorously defend the claims. The claims have been computed in various ways. The highest claims have been computed on the basis of the highest prices of Resources and Uranium One between the dates of the alleged thefts and March 2008 (approximately R12 billion). The alternative claims have been computed on the basis of the allegedly received by WAL to fund its operations (approximately R519 million). The claims lie only against WAL, which holds a 50% stake in the South Deep Mine. This alleged liability is historic and relates to a period of time prior to Gold Fields purchasing the company.

On May 1, 2008, an accident occurred at the Twin Shaft Complex of the South Deep Mine. The accident occurred at the mine s ventilation raise hole and nine people were fatally injured. The Mine Health and Safety Inspectorate, or MHSI, of the DMR has completed an investigation into the accident pursuant to the Mine Health and Safety Act. Although the MHSI has completed its investigation, Gold Fields has not been notified of the results and, at this point in time, it is unclear whether the MHSI will convert its investigation into an inquiry pursuant to the Mine Health and Safety Act or whether it will hold an inquiry jointly with an inquest. Accordingly, Gold Fields is unable at this time to furnish a view regarding the dates and possible full implications of such further proceedings.

Other than the summons and investigation described above, Gold Fields is not a party to any material legal or arbitration proceedings, nor is any of its property the subject of pending material legal proceedings.

#### **Glossary of Mining Terms**

The following explanations are not intended as technical definitions, but rather are intended to assist the reader in understanding some of the terms used in this annual report.

Absorption, desorption and recovery, or AD&R: a treatment process involving the extraction of gold in solution using activated carbon, followed by removal of the gold from the carbon.

Agglomeration: a method of concentrating gold based on its adhesive characteristics.

**Backfill:** material, generally sourced from tailings or waste rock, used to refill mined-out areas to increase the long-term stability of mines and mitigate the effects of seismicity.

Brattice wall: a partition normally made from pre-cast concrete panels that separates the fresh air entering and the exhaust exiting a mine shaft.

Breast Stoping: a mining method whereby the direction of mining is in the direction of strike of the reef.

Carbon absorption: a treatment process which uses activated carbon to remove gold in solution.

**Carbon in leach, or CIL:** a process similar to CIP (described below) except that the ore slurries are not leached with cyanide prior to carbon loading. Instead, the leaching and carbon loading occur simultaneously.

**Carbon in pulp, or CIP:** a common process used to extract gold from cyanide leach slurries. The process consists of carbon granules suspended in the slurry and flowing counter-current to the process slurry in multiple-staged agitated tanks. The process slurry, which has been leached with cyanide prior to the CIP process, contains soluble gold. The soluble gold is absorbed onto the carbon granules which are subsequently separated from the slurry by screening. The gold is then recovered from the carbon by electrowinning onto steel wool cathodes or by a similar process.

Cleaning: the process of removing broken rock from a mine.

**Closely spaced dip pillar mining method:** a mining method where support pillars are left in place at relatively close intervals to increase the stability of the mine. Mining is conducted using conventional drilling and blasting techniques.

Comminution: the breaking, crushing or grinding of ore by mechanical means.

Crosscut: a mine working driven horizontally and at right angles to a level.

Cut-off grade: the grade which distinguishes the material within the orebody that is to be extracted and treated from the remainder.

De-bottlenecking: decreasing production constraints (e.g., removing mechanical deficiencies so that processed tonnage may be increased).

**Decline or incline:** a sloping underground opening for machine access from the surface to an underground mine or from level to level in a mine. Declines and inclines are often driven in a spiral to access different elevations in the mine.

Declustered averaging: an estimation technique used in the evaluation of ore reserves.

Depletion: the decrease in quantity of ore in a deposit or property resulting from extraction or production.

**Development:** activities (including shaft sinking and on-reef and off-reef tunneling) required to prepare for mining activities and maintain a planned production level and those costs incurred to enable the conversion of mineralization to reserves.

Dilution: the mixing of waste rock with ore, resulting in a decrease in the overall grade.

Dissolution: the process whereby a metal is dissolved and becomes amenable to separation from the gangue material.

Electrowinning: the process of removing gold from solution by the action of electric currents.

Elution: removal of the gold from the activated carbon.

**Exploration:** activities associated with ascertaining the existence, location, extent or quality of mineralization, including economic and technical evaluations of mineralization.

**Flotation:** the process whereby certain chemicals are added to the material fed to the leach circuit in order to float the desired minerals to produce a concentrate of the mineral to be processed. This process can be carried out in column flotation cells.

Friable Hangwall: a hangwall made of rock that crumbles naturally or is easily broken or pulverized.

Gangue: commercially valueless material remaining after ore extraction from rock.

Gold in process: gold in the processing circuit that is expected to be recovered during or after operations.

Gold reserves: the gold contained within proven and probable reserves on the basis of recoverable material (reported as mill delivered tons and head grade).

Grade: the quantity of metal per unit mass of ore expressed as a percentage or, for gold, as grams of gold per ton of ore.

Greenfield: a potential mining site of unknown quality.

Grinding: reducing rock to the consistency of fine sand by crushing and abrading in a rotating steel grinding mill.

Head grade: the grade of the ore as delivered to the metallurgical plant.

**Heap leaching:** a relatively low-cost technique for extracting metals from ore by percolating leaching solutions through heaps of ore placed on impervious pads. Generally used on low-grade ores.

Hypogene: ore or mineral deposits formed by ascending fluids within the earth.

In situ: within unbroken rock or still in the ground.

Kriging: an estimation technique used in the evaluation of ore reserves.

Leaching: dissolution of gold from the crushed and milled material, including reclaimed slime, for absorption and concentration onto the activated carbon.

Level: the workings or tunnels of an underground mine which are on the same horizontal plane.

Life of mine, or LoM: the expected remaining years of production, based on production rates and ore reserves.

London afternoon fixing price: the afternoon session open fixing of the gold price which takes place daily in London and is set by a board comprising five financial institutions.

**London morning fixing price:** the morning session open fixing of the gold price which takes place daily in London and is set by a board comprising five financial institutions.

Longwall mining method: a mining method involving mining over large continuous spans without the use of pillars.

Mark-to-market: the current fair value of a derivative based on current market prices, or to calculate the current fair value of a derivative based on current market prices, as the case may be.

Measures: conversion factors from metric units to U.S. units are provided below.

Metric unit		U.S. equivalent
1 ton	= 1 t	= 1.10231 short tons
1 gram	= 1 g	= 0.03215 ounces
1 gram per ton	= 1  g/t	= 0.02917 ounces per short ton
1 kilogram per ton	= 1  kg/t	= 29.16642 ounces per short ton
1 kilometer	= 1 km	= 0.62137 miles
1 meter	= 1 m	= 3.28084 feet
1 centimeter	= 1 cm	= 0.39370 inches
1 millimeter	= 1 mm	= 0.03937 inches
1 hectare	= 1 ha	= 2.47104 acres

Metallurgical plant: a processing plant used to treat ore and extract the contained gold.

Metallurgical recovery factor: the proportion of metal in the ore delivered to the mill, that is recovered by the metallurgical process or processes.

Metallurgy: in the context of this document, the science of extracting metals from ores and preparing them for sale.

Mill delivered tons: a quantity, expressed in tons, of ore delivered to the metallurgical plant.

Milling/mill: the comminution of the ore, although the term has come to cover the broad range of machinery inside the treatment plant where the gold is separated from the ore.

**Mine call factor:** the ratio, expressed as a percentage, of the specific product recovered at the mill (plus residue) to the specific product contained in an orebody calculated based on an operation s measuring and valuation methods.

Mineralization: the presence of a target mineral in a mass of host rock.

**Net smelter return:** the volume of refined gold sold during the relevant period multiplied by the average spot gold price and the average exchange rate for the period, less refining, transport and insurance costs.

Open pit: mining in which the ore is extracted from a pit. The geometry of the pit may vary with the characteristics of the orebody.

Ore: a mixture of material containing minerals from which at least one of the minerals can be mined and processed at an economic profit.

Orebody: a well defined mass of material of sufficient mineral content to make extraction economically viable.

Ore grade: the average amount of gold contained in a ton of gold-bearing ore expressed in grams per ton.

Ore reserves or reserves: that part of a mineral deposit which could be economically and legally extracted or produced at the time of the reserve determination.

Ounce: one troy ounce, which equals 31.1035 grams.

Overburden: the soil and rock that must be removed in order to expose an ore deposit.

**Paste filling:** a technique whereby cemented paste fill is placed in mined out voids to improve and maintain ground stability, minimize waste dilution and maximize extraction of the ore.

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**Pay limit:** the value at which the orebody can be mined without profit or loss, calculated using an appropriate gold price, production costs and recovery factors.

Porphyry: an igneous rock of any composition that contains larger, well-formed mineral grains in a finer-grained groundmass.

**Probable reserves:** reserves for which quantity and grade and/or quality are computed from information similar to that used for proven reserves, but the sites for inspection, sampling, and measurement are farther apart or are otherwise less adequately spaced. The degree of assurance, although lower than that for proven reserves, is high enough to assume continuity between points of observation.

Production stockpile: the selective accumulation of low grade material which is actively managed as part of the current mining operations.

Prospect: to investigate a site with insufficient data available on mineralization to determine if minerals are economically recoverable.

Prospecting permit or right: permission to explore an area for minerals.

**Proven reserves:** reserves for which: (1) quantity is computed from dimensions revealed in outcrops, trenches, workings or boreholes; (2) grade and/or quality are computed from the results of detailed sampling; and (3) the sites for inspection, sampling and measurement are spaced so closely and the geologic character is so well defined that size, shape, depth and mineral content of reserves are well-established.

Reef: a gold-bearing sedimentary horizon, normally a conglomerate band, that may contain economic levels of gold.

**Refining:** the final stage of metal production in which final impurities are removed from the molten metal by introducing air and fluxes. The impurities are removed as gases or slag.

Rehabilitation: the process of restoring mined land to a condition approximating its original state.

Remnant pillar mining: the removal of blocks of ground previously left behind for various reasons during the normal course of mining.

Rock burst: an event caused by seismicity which results in damage to underground workings and/or loss of life and equipment.

**Rock dump:** the historical accumulation of low grade material derived in the course of mining which is processed in order to take advantage of spare processing capacity.

Run of Mine, or RoM: a loose term to describe ore of average grade.

Sampling: taking small pieces of rock at intervals along exposed mineralization for assay (to determine the mineral content).

Scattered mining method: conventional mining which is applied in a non-systematic configuration.

**Seismicity:** a sudden movement within a given volume of rock that radiates detectable seismic waves. The amplitude and frequency of seismic waves radiated from such a source depend, in general, on the strength and state of stress of the rock, the size of the source of seismic radiation, and the magnitude and the rate at which the rock moves during the fracturing process. Rock bursts, as defined above, involve seismicity.

**Semi-autogenous grinding, or SAG, mill:** a piece of machinery used to crush and grind ore which uses a mixture of steel balls and the ore itself to achieve comminution. The mill is shaped like a cylinder causing the grinding media and the ore itself to impact upon the ore.

**Shaft:** a shaft provides principal access to the underground workings for transporting personnel, equipment, supplies, ore and waste. A shaft is also used for ventilation and as an auxiliary exit. It may be equipped with a surface hoist system that lowers and raises conveyances for men, materials and ore in the shaft. A shaft generally has more than one conveyancing compartment.

Shortfall: the ratio of actual reef tonnage hoisted compared to monthly reef tonnage broken.

Sichel t : an estimation technique used in the evaluation of ore reserves.

Slimes: the finer fraction of tailings discharged from a processing plant after the valuable minerals have been recovered.

Slurry: a fluid comprising fine solids suspended in a solution (generally water containing additives).

Smelting: thermal processing whereby molten metal is liberated from beneficiated ore or concentrate with impurities separating as lighter slag.

Spot price: the current price of a metal for immediate delivery.

Stockpile: a store of unprocessed ore.

Stope: the underground excavation within the orebody where the main gold production takes place.

Stripping: the process of removing overburden to mine ore.

Stripping ratio: the number of units of overburden which must be removed in order to mine one unit of ore.

Sulfide: a mineral characterized by the linkages of sulfur with a metal or semi-metal, such as pyrite (iron sulfide). Also a zone in which sulfide minerals occur.

**Supergene:** ores or ore minerals formed where descending surface water oxidizes mineralized rock and redistributes the ore minerals, often concentrating them in zones.

Tailings: finely ground rock from which valuable minerals have been extracted by milling.

Tailings dam/slimes dam: dams or dumps created from tailings or slimes.

Ton: one ton is equal to 1,000 kilograms (also known as a metric ton or tonne ).

**Tonnage:** quantities where the ton or tonne is an appropriate unit of measure. Typically used to measure reserves of gold-bearing material in situ or quantities of ore and waste material mined, transported or milled.

**Total cash costs per ounce:** a measure of the average cost of producing an ounce of gold, calculated by dividing the total cash costs in a period by the total gold sold over the same period. Total cash costs represent production costs as recorded in the statement of operations less offsite (i.e., central) general and administrative expenses (including head office costs charged to the mines, central training expenses, industry association fees and social development costs) and rehabilitation costs, plus royalties and employee termination costs. In determining the total cash cost of different elements of the operations, production overheads are allocated pro rata.

**Total production costs per ounce:** a measure of the average cost of producing an ounce of gold, calculated by dividing the total production costs in a period by the total gold production over the same period. Total production costs represent total cash costs, plus amortization, depreciation and rehabilitation costs.

Waste: rock mined with an insufficient gold content to justify processing.

Westonia Formation Lava Hangwall: lava formations directly overlying the VCR in certain localities. Under mining conditions, the lava is brittle and is easily fractured.

Yield: the actual grade of ore realized after the mining and treatment process.

# 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 Gold Fields consolidated financial statements including the notes, appearing elsewhere in this annual report. Certain information contained in the discussion and analysis set forth below and elsewhere in this annual report includes forward-looking statements that involve risks and uncertainties. See Forward-looking Statements and Risk Factors for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in this annual report.

### Overview

#### General

Gold Fields is a significant producer of gold and a major holder of gold reserves in South Africa, Ghana, Australia and Peru. In Peru, Gold Fields also produces copper. Gold Fields is primarily involved in underground and surface gold and copper mining and related activities, including exploration, extraction, processing and smelting. Gold Fields is one of the largest gold producers in the world, based on annual production. In the year ended June 30, 2009, Gold Fields produced 3.691 million ounces of gold and gold equivalents, 3.414 million ounces of which were attributable to Gold Fields, and the remainder of which were attributable to minority shareholders in Gold Fields Ghana Limited, or Gold Fields Ghana, Abosso Goldfields Limited, or Abosso and Gold Fields La Cima S.A., or La Cima. Gold Fields reported attributable gold reserves, including copper expressed as gold equivalent ounces, of 81.1 million ounces as of June 30, 2009, with attributable gold reserves (excluding copper) of 78.9 million ounces and attributable copper reserves of 797 million pounds. For a description of how gold equivalent ounces are determined, see Defined Terms and Conventions .

The Gold Fields group holdings evolved through a series of transactions, principally in 1998 and 1999. With effect from January 1, 1998, a company formed on November 21, 1997 and referred to in this discussion as Original Gold Fields acquired substantially all of the gold mining assets and interests previously held by Gold Fields of South Africa Limited, or GFSA, Gencor Limited, New Wits Limited and certain other shareholders in the companies owning the assets and interests. These assets and interests included all of the Beatrix, Oryx and Kloof mines, a 70.0% interest in the Tarkwa mine (which was increased to 71.1% through dilution of some of the other shareholders in 1999), a 54.2% interest in the St. Helena mine and a 37.3% interest in the Driefontein mine. The transaction involved a purchase of the assets and interests held by the three selling companies, as well as offers to the minority shareholders of the three companies holding the Beatrix, Oryx and Kloof mines to acquire their shares in exchange for Original Gold Fields shares. Original Gold Fields accounted for the transaction as a purchase. Because Original Gold Fields was formed as a subsidiary of GFSA, the assets acquired from GFSA were accounted for at the value they had been carried at on GFSA s books. The assets acquired from Gencor Limited, New Wits Limited and the minority shareholders were accounted for at fair value.

With legal effect from January 1, 1999, Original Gold Fields was acquired by the company that is today Gold Fields. For accounting purposes, Original Gold Fields was fully consolidated with effect from June 1, 1999. Although for legal purposes Gold Fields acquired Original Gold Fields, for accounting purposes, Original Gold Fields was considered the acquirer because the Original Gold Fields shareholders obtained the majority interest in the enlarged company. As part of this transaction, the remaining interest in the Driefontein mine came into the Gold Fields group.

With effect from July 1, 1999, Gold Fields acquired the remaining interest in the St. Helena mine and reorganized the group to simplify its holding structure. Since that time, Gold Fields has acquired its Australian operations and Abosso mine in Ghana, sold the St. Helena mine, completed a transaction with Mvelaphanda Resources Limited, or Mvela Resources, involving a 15% beneficial interest in its South African operations, restructured its South African operations, and acquired its interests in the Cerro Corona Mine. It also acquired, then sold, its Venezuelan operations. See Information on the Company History.

In fiscal 2007, Gold Fields acquired the entire issued share capital of Barrick Gold South Africa (Proprietary) Limited, or BGSA, and the remaining shares of Western Areas Limited, or Western Areas, which it did not already own. BGSA and Western Areas each held a 50% interest in the Barrick Gold Western Areas Joint Venture, an unincorporated entity that owned the developing South Deep gold mine adjacent to Gold Fields Kloof gold mine, located in the Witwatersrand basin near Johannesburg. See Acquisition of South Deep. After the acquisition, BGSA was renamed GFI Joint Ventures Holding (Pty) Limited, or GFI Joint Ventures, and Western Areas was renamed Gold Fields Operations Limited, or Gold Fields Operations.

Total managed gold production was 3.691 million ounces in fiscal 2009 (3.414 million ounces of which were attributable to Gold Fields with the remainder attributable to minority shareholders in Gold Fields Ghana, Abosso and La Cima). Total gold production was 3.915 million ounces in fiscal 2008 (3.670 million ounces of which were attributable to Gold Fields with the remainder attributable to minority shareholders in Gold Fields With the remainder attributable to minority shareholders in Gold Fields With the remainder attributable to minority shareholders in Gold Fields With the remainder attributable to minority shareholders in Gold Fields With the remainder attributable to minority shareholders in Gold Fields With the remainder attributable to minority shareholders in Gold Fields With the remainder attributable to minority shareholders in Gold Fields With the remainder attributable to minority shareholders in Gold Fields With the remainder attributable to minority shareholders in Gold Fields With the remainder attributable to minority shareholders in Gold Fields With the remainder attributable to minority shareholders in Gold Fields With the remainder attributable to minority shareholders in Gold Fields With the remainder attributable to minority shareholders in Gold Fields With the remainder attributable to Minority shareholders in Gold Fields With the remainder attributable to Minority shareholders in Gold Fields With the remainder attributable to Minority shareholders in Gold Fields With the remainder attributable to Minority shareholders in Gold Fields With the remainder attributable to Minority shareholders in Gold With the remainder attributable to Minority shareholders in Gold With the remainder attributable to Minority shareholders in Gold With the remainder attributable to Minority shareholders in Gold With the remainder attributable to Minority shareholders in Gold With the remainder attributable to Minority shareholders in Gold With the remainder attributable to Minority shareholders in Gold With th

In fiscal 2009, production from the South African operations decreased 15.7% mainly due to safety related stoppages and rehabilitation projects. Driefontein s production was 10.6% lower due to a decrease in volumes mined mainly due to safety factors as a result of the need to address the accumulating backlog in implementing secondary support and the suspension of significant pillar mining. At Kloof, production was 21.7% lower mainly due to the Main Shaft refurbishment project and safety related mine stoppages. Beatrix s production was 10.7% lower primarily due to lower mining volumes, limited flexibility and lower than planned grades. South Deep s production was 24.7% lower primarily due to termination of conventional VCR mining as a result of a major geological fault and the rehabilitation of two main access ramps. Production at the international operations increased 12.9%. The main reason for this increase was the inclusion of 0.22 million gold equivalent ounces from Cerro Corona not included in the previous year. In Ghana, Tarkwa s production was 5.2% lower due to commissioning issues at the new CIL plant, which affected the whole plant. Damang s production was 3.2% higher due to the build-up of the crushed ore stockpile in fiscal 2008, which resulted in a more consistent feed to the mill in fiscal 2009. In Australia, St. Ives production was 5.7% lower primarily due to increased production from the Argo and Cave Rocks underground mines being processed through the plant. At Agnew, production was 5.7% lower primarily due to the depletion of Songvang stockpiles.

### Mvelaphanda Transaction

On March 8, 2004, the shareholders of Gold Fields approved a series of transactions, referred to in this discussion as the Mvelaphanda Transaction, involving the acquisition by Mvelaphanda Resources Limited, or Mvela Resources, of a 15% beneficial interest in the South African gold mining assets of Gold Fields for cash consideration of Rand 4,139 million.

The Mvelaphanda Transaction was preceded by an internal restructuring of Gold Fields, whereby each of the Driefontein, Kloof and Beatrix mining operations, as well as certain ancillary assets and operations, were transferred to a new, wholly-owned subsidiary of Gold Fields, GFI Mining South Africa (Proprietary) Limited, or GFIMSA.

On November 26, 2003, Gold Fields, Mvela Resources, Mvelaphanda Gold (Proprietary) Limited, or Mvela Gold, a wholly-owned subsidiary of Mvela Resources, and GFIMSA entered into a covenants agreement, or the Covenants Agreement, regulating their rights and obligations with respect to GFIMSA. This agreement became effective following the advance by Mvela Gold of the loan to GFIMSA described below, which is referred to in this discussion as the Mvela Loan. On December 11, 2003, Gold Fields, GFIMSA, and Mvela Gold entered into a subscription and share exchange agreement, or the Subscription and Share Exchange Agreement, pursuant to which, upon repayment of the Mvela Loan, Mvela Gold had to subscribe for shares equal to 15% of GFIMSA s outstanding share capital, including the newly issued shares, for consideration of Rand 4,139 million. In addition, for a period of one year after the subscription by Mvela Gold of the GFIMSA shares, each of Gold Fields and Mvela Gold would be entitled to require the exchange of Mvela Gold s GFIMSA shares for ordinary shares of

Gold Fields of an equivalent value based on an exchange ratio equal to 15% of a discounted cash flow calculation as applied to GFIMSA s operations divided by the same calculation as applied to Gold Fields operations, with certain adjustments. Mvela Gold ceded its rights under the Subscription and Share Exchange Agreement to secure its obligations under certain mezzanine financing it incurred to fund, in part, the Mvela Loan. Mvela Gold was entitled to dispose of the GFIMSA shares and any Gold Fields ordinary shares it may hold only in accordance with the terms of a pre-emptive rights agreement entered into by the parties whereby if Mvela Gold receives an offer for, or otherwise wished to sell, any GFIMSA or Gold Fields shares, it has to first offer to sell them to Gold Fields. The Subscription and Share Exchange Agreement became unconditional following the advance of the Mvela Loan to GFIMSA on March 17, 2004.

On December 11, 2003, Gold Fields, GFIMSA, Mvela Gold, First Rand Bank Limited, Gold Fields Australia Pty Limited, or Gold Fields Australia, and Gold Fields Guernsey Limited (now Gold Fields Holdings Company (BVI) Limited, or Gold Fields Holdings), entered into a loan agreement, or the Mvela Loan Agreement, pursuant to which Mvela Gold advanced a loan of Rand 4,139 million, or the Mvela Loan, to GFIMSA on March 17, 2004. GFIMSA applied the loan toward funding its acquisition of Gold Fields South African mining operations and certain ancillary assets and operations as part of the internal restructuring of Gold Fields. The Mvela Loan had a term of five years, bore interest at a rate of 10.57% per annum and was guaranteed by Gold Fields, Gold Fields Australia and Gold Fields Holdings.

The Mvela Loan was funded by way of commercial bank debt of approximately Rand 1,300 million and mezzanine finance of approximately Rand 1,100 million, with the balance of approximately Rand 1,700 million being raised by way of an international private placement of shares of Mvela Resources. In connection with the mezzanine finance, Gold Fields subscribed for preference shares in an amount of Rand 200 million in Micawber 325 (Proprietary) Limited, or Micawber, a special purpose entity established by the mezzanine lenders. Further, Gold Fields subscribed for Rand 100 million of the shares issued by Mvela Resources in the private placement. In addition, pursuant to an agreement entered into on February 13, 2004, or the PIC Agreement, Gold Fields had effectively guaranteed a loan of Rand 150 million, or the PIC Loan, made by the Public Investment Corporation, or the PIC, to Micawber. Interest on the PIC Loan accrued at the rate of 14.25%, was compounded semi-annually and was payable in one lump sum at the end of the term of the loan. Under the terms of the PIC Agreement, the PIC had the right to require Gold Fields to assume all its rights and obligations under the PIC Loan, together with its underlying security, which consisted of the PIC s proportionate share of Mvela Gold s rights under the Subscription and Share Exchange Agreement and a guarantee of Rand 200 million from Mvela Resources, at a price equal to the value of the principal and interest of the PIC Loan was due for repayment, Micawber did not repay the loan in full. Whether or not the PIC required Gold Fields to assume its rights and obligations under the PIC Loan was due for repayment, Micawber did not repay the loan in full. Whether or not the PIC required Gold Fields to assume its rights and obligations under the PIC Loan, the PIC was obligated to pay the guarantee fee to Gold Fields on the date on which the PIC Loan was repaid to the PIC.

On February 13, 2004, the Mvela Loan Agreement was amended, principally in order to add and clarify certain definitions.

On November 17, 2004, GFL Mining Services Limited, or GFLMSL, Gold Fields, Mvela Gold, Mvela Resources and GFIMSA entered into an agreement, referred to in this discussion as the Amendment Agreement, amending the existing agreements relating to the Mvelaphanda Transaction, including the Subscription and Share Exchange Agreement and the Covenants Agreement. Pursuant to the Amendment Agreement, among other things, Mvela Gold would be entitled to not less than 45,000,000 or not more than 55,000,000 Gold Fields ordinary shares in the event that GFIMSA shares were exchanged for Gold Fields shares pursuant to the Subscription and Share Exchange Agreement. These minimum and maximum numbers of ordinary shares were subject to adjustment to take account of changes to Gold Fields capital structure and certain corporate activities of Gold Fields. During the first part of fiscal 2007, Mvelaphanda Holdings (Proprietary) Limited, or Mvela Holdings, entered into various agreements in terms of which the status quo regarding the shareholding in Mvela Resources as of the date of the Mvelaphanda Transaction was restored by Mvela Holdings once again having a

direct interest in the issued share capital of Mvela Resources. On July 17, 2006, Gold Fields, Mvela Gold, Mvela Resources, Mvela Holdings, GFIMSA, GFLMSL and others entered into an agreement further amending the existing agreements relating to the Mvelaphanda Transaction, including, among others, the Covenants Agreement and the sponsor support, guarantee and retention agreement, or the Sponsor Support, Guarantee and Retention Agreement, dated February 13, 2004, among Gold Fields, GFIMSA, Mvela Resources, Mvela Holdings, Mvela Gold, Micawber and FirstRand Bank Limited. In accordance with the revised agreements, Mvela Holdings undertook to remain an HDSA company, to retain beneficial ownership of no less than 26% of the issued equity share capital of Mvela Resources, to have board control of Mvela Resources (together with other HDSAs) and to retain management control of Mvela Resources pursuant to a written management agreement.

On December 7, 2006, Mvela Resources announced a transaction between Mvela Resources, Mvela Holdings (Proprietary) Limited, or Mvela Holdings, the parent company of Mvela Resources, Lazarus Zim and Afripalm Resources, an HDSA company formed by Lazarus Zim, in terms of which the parties among other things agreed as follows:

Afripalm would subscribe for shares in Mvela Resources to acquire economic and voting interests in Mvela Resources of approximately 19.3% and 31%, respectively. As a result of such acquisition, the economic and voting interests of Mvela Holdings, the other major HDSA shareholder in Mvela Resources, would be approximately 22.9% and 19.6%, respectively. As a result of the increase in the broad-based HDSA voting control of Mvela Resources to more than 50%, Mvela Resources would thus be an HDSA controlled company; and

the management agreement between Mvela Resources and Mvela Holdings, in terms of which the latter managed the day-to-day operations of Mvela Resources, was canceled.

Subsequently, Gold Fields, Mvela Gold, Mvela Resources, Mvela Holdings, GFIMSA, GFLMSL and others entered into an agreement further amending the existing agreements relating to the Mvelaphanda Transaction, including, among others, the Covenants Agreement and the Sponsor Support, Guarantee and Retention Agreement. In accordance with the revised agreements, Mvela Holdings and Afripalm (and certain of its subsidiaries) undertook jointly (i) to remain HDSA companies, (ii) to retain beneficial ownership of no less than 26% of the issued equity share capital of Mvela Resources, (iii) to retain voting control over no less than 50% of the issued equity share capital of Mvela Resources, and (iv) to have board control of Mvela Resources (together with other HDSAs).

On August 24, 2007, the Mvela Loan Agreement was amended, principally in order to relax certain financial covenants.

On March 17, 2008, a Memorandum of Agreement was signed between the Company, GFLMSL, Mvela Resources, Mvela Gold and GFIMSA whereby the number of shares for which the GFIMSA shares were to be exchanged pursuant to the Subscription and Share Exchange Agreement was fixed at 50,000,000.

On March 27, 2008, Mvela Resources obtained the consent of the Company, GFIMSA, GFLMSL and others under the Sponsor Support, Guarantee and Retention Agreement to enter into a proposed transaction with Anglo Platinum Limited, or APL, and Northam Platinum Limited, or Northam, in terms of which Mvela Resources would purchase approximately 53.1 million Northam shares from APL s subsidiaries and would advance shareholder loans to, and became the holder of the entire issued share capital of, Micawber 278 (Proprietary) Limited, or M278, which owned APL s indirect 50% beneficial interest in the Booysendal Platinum Project. In addition, Mvela Resources would sell all its indirect shareholdings in M278 to Northam in exchange for 121 million new Northam shares.

In addition, this transaction effectively replaced the Mvela Holdings guarantee set out in the Sponsor Support, Guarantee and Retention Agreement with a guarantee by Nedbank Limited for the due and punctual payment and performance by Mvela Resources of its obligations under the guarantee provided by Mvela Resources under the Sponsor Support, Guarantee and Retention Agreement.

On March 17, 2009, the Mvela Loan was repaid and Mvela Gold took receipt of its 15% shareholding in GFIMSA. Immediately upon receipt of the GFIMSA shares, Mvela Gold exercised its right to exchange the GFIMSA shares for 50 million new ordinary shares in Gold Fields. This brought the total number of Gold Fields shares in issue at that time to 703,839,976. Pursuant to the above transactions, Mvela Gold owned approximately 7% of the listed shares of Gold Fields at that time and Gold Fields again owns 100% of GFIMSA. Since March 17, 2009, Mvela Gold has sold approximately 11 million of the Gold Fields shares, representing approximately 1.6% of the listed shares of Gold Fields, through the market. Gold Fields holds a right of first refusal in the event Mvela Gold wishes to sell any of its remaining Gold Fields shares.

The Mvelaphanda Transaction was intended to meet the Mining Charter s requirement that mining companies achieve a 15% HDSA ownership within five years of the Mining Charter coming into effect. Management is in dialogue with the DMR regarding Gold Fields plans and proposals to ensure compliance with relevant HDSA ownership thresholds under the 2002 Minerals Act.

### Acquisition and Disposal of Choco 10

Effective on February 28, 2006, Gold Fields acquired a 95% interest in the Choco 10 gold mine and surrounding exploration tenements in the El Callao district of Guayana, Venezuela, through the purchase of Bolivar Gold Corp., or Bolivar, for total cash consideration of approximately U.S.\$330 million.

Gold Fields owned its interest in the Choco 10 mine through its 95% holding in Promotora Minera de Guyana (PMG) S.A., or PMG. PMG was a venture between Promotora Minera de Venezuela, S.A., or Promiven (a wholly owned subsidiary of Gold Fields which it acquired from Bolivar), and a subsidiary of Corporacion Venezolana de Guayana, or CVG, a governmental development entity for the Guayana region. Gold Fields assumed operation of PMG on March 1, 2006.

On November 30, 2007, Gold Fields disposed of its assets in Venezuela to Rusoro Mining Ltd., or Rusoro, for a total consideration of approximately U.S.\$413 million comprising U.S.\$180 million in cash and 140 million newly issued Rusoro shares, which at the time of sale represented approximately 37% of the outstanding shares of Rusoro.

### Acquisition of La Cima

On January 11, 2006, Gold Fields acquired an 80.72% economic and 92% voting interest in Sociedad Minera La Cima S.A., now known as Gold Fields La Cima S.A., or La Cima, for a total consideration of U.S.\$40.5 million. La Cima is the holding company for the Cerro Corona Mine. See Information on the Company Gold Fields Mining Operations Peru Operation and Credit Facilities Cerro Corona Facility.

The Cerro Corona Mine became operational during the first quarter of fiscal 2009.

### Acquisition of South Deep

In fiscal 2007, pursuant to a series of transactions, Gold Fields acquired 100% of BGSA and Western Areas, giving it ownership of the South Deep gold mine in South Africa. See Information on the Company Gold Fields Mining Operations South Deep Operation and Liquidity and Capital Resources Credit Facilities and Other Capital Resources.

On December 1, 2006, Gold Fields acquired 100% of the issued share capital of BGSA for \$1,154.8 million. The \$1,154.8 million comprised:

\$324.0 million in Gold Fields ordinary shares issued;

\$801.8 million in cash;

\$24.2 million relating to the reimbursement of an insurance claim to the vendors; and

\$4.8 million of direct costs relating to the acquisition. Gold Fields also repaid \$407.0 million owing by BGSA to Barrick Gold Africa.

Through a series of purchases completed by March 31, 2007, Gold Fields acquired 100% of the issued share capital of Western Areas for \$1,033.5 million. The \$1,033.5 million comprised:

\$893.8 million in Gold Fields ordinary shares issued;

\$116.6 million in respect of shares acquired in years prior to fiscal 2007;

\$17.2 million in cash paid in fiscal 2007; and

\$5.9 million of direct costs relating to the acquisition. Therefore, the total purchase consideration to acquire South Deep was \$2,188.3 million.

These business combinations have been accounted for as purchase transactions, with Gold Fields being identified as the acquirer and BGSA and Western Areas as the acquirees. Gold Fields consolidated financial statements for fiscal 2007 include the operating results of BGSA and Western Areas for the period from December 1, 2006 to June 30, 2007.

For the purposes of Gold Fields consolidated financial statements, the purchase consideration for each of BGSA and Western Areas has been allocated to the underlying assets acquired and liabilities assumed, based on management s best estimates, taking into account all available information at the time of acquisition.

Gold Fields concluded that the excess of the purchase consideration over the net identifiable tangible and intangible assets acquired represents goodwill in respect of the transaction.

The allocation of the purchase consideration of \$2,188.3 million is as follows:

Property, plant and equipment totaling \$1,867.7 million;

Other assets worth \$297.5 million;

Liabilities totaling \$1,196.2 million which included the gold derivative structure held by Western Areas; and

### Goodwill of \$1,219.3 million.

The goodwill arising on the acquisition of BGSA and Western Areas principally represents the difference between the purchase consideration and the fair value on the assets acquired and can be attributed to the upside potential of the asset.

As a result of Gold Fields acquiring 100% of the issued share capital of BGSA, South Deep was fully consolidated as from December 1, 2006.

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During the period between December 1, 2006 and March 31, 2007, Gold Fields did not own 100% of Western Areas and therefore did not own 100% of South Deep. The percentages of the results of Western Areas and South Deep that did not accrue to Gold Fields have been accounted for as minority interests. As a result of the acquisition of Western Areas, Gold Fields became exposed to the gold derivative structure held by Western Areas, which consisted of put and call options as well as deferred premium. The marked to market valuation of this derivative structure as of December 1, 2006, the date of acquisition, was negative \$539.0 million at a gold price of \$631.75 per ounce. The structure was closed out on January 24, 2007 at a gold price of \$643.00 per ounce with a payment of \$549 million after deducting scheduled maturities of \$10 million. This resulted in a realized loss of \$20.7 million.

During December 2006 and January 2007, Western Areas purchased 1.005 million ounces of gold, which was the net delta position of the gold derivative structure, at an average gold price of \$622.14 per ounce. These purchases are referred to herein as gold delta purchases. This position was subsequently sold at a gold price of \$643.00 per ounce on January 24, 2007 resulting in a net gain of \$21.0 million on the gold delta purchases.

### Acquisition and disposal of IRCA

On March 1, 2007, Gold Fields acquired 70% of IRCA (Pty) Limited, or IRCA, for \$7.9 million. The consideration consisted of \$5.3 million in cash plus the assumption of a bank overdraft of \$2.6 million. IRCA is a company that specializes in mine safety training and it formed part of the Gold Fields Business Leadership Academy structure. The holding in IRCA was disposed of in March 2009 for \$5.0 million, resulting in a loss of \$0.3 million.

### Sale of Essakane Project

On October 11, 2007, Gold Fields reached an agreement to sell its 60% stake in the Essakane exploration project located in Burkina Faso to Orezone for a minimum total consideration of U.S.\$200 million. The transaction closed on November 26, 2007. Orezone paid Gold Fields U.S.\$152 million in cash and issued 41,666,667 common shares having an aggregate subscription price of U.S.\$48 million to its wholly-owned subsidiary, Gold Fields Essakane (BVI) Limited. Following the acquisition, Gold Fields owned 41,666,667 common shares of Orezone, representing 12.2% of Orezone sissued and outstanding common shares. During fiscal 2009, Gold Fields exchanged the Orezone shares for approximately 3.3 million shares of IAMGold Limited, as a result of the acquisition of all Orezone shares by IAMGold. Gold Fields subsequently disposed of the IAMGold shares for a cash consideration of \$33.4 million. See Results of Operations Years Ended June 30, 2009 and 2008 (Loss)/Profit on disposal of listed investments.

### Revenues

Substantially all of Gold Fields revenues are derived from the sale of gold and copper. As a result, Gold Fields revenues are directly related to the prices of gold and copper. Historically, the prices of gold and copper have fluctuated widely. The gold and copper prices are affected by numerous factors over which Gold Fields does not have control. See Risk Factors Changes in the market price for gold, and to a lesser extent copper, which in the past have fluctuated widely, affect the profitability of Gold Fields operations and the cash flows generated by those operations. The volatility of gold and copper prices is illustrated in the following tables, which show the annual high, low and average of the London afternoon fixing price of gold and the London Metal Exchange cash settlement price for copper in U.S. dollars for the past 12 calendar years and to date in calendar year 2009:

	Pr	Price per ounce <sup>(1)</sup>			
Gold	High	Low (\$)	Average		
1997	367	283	331		
1998	313	273	294		
1999	326	253	279		
2000	313	264	282		
2001	293	256	270		
2002	349	278	310		
2003	416	320	363		
2004	454	375	409		
2005	537	411	445		
2006	725	525	604		
2007	834	607	687		
2008	1,011	713	872		
2009 (through November 30, 2009)	1,183	810	959		

On November 30, 2009, the London afternoon fixing price of gold was U.S.\$1,176 per ounce.

	Price per ton <sup>(1)</sup>								
Copper	High	Low	Average						
		(\$/ton)							
1997	2,720	1,699	2,276						
1998	1,880	1,438	1,654						
1999	1,846	1,354	1,574						
2000	2,009	1,607	1,814						
2001	1,837	1,319	1,577						
2002	1,690	1,421	1,558						
2003	2,321	1,545	1,780						
2004	3,287	2,337	2,867						
2005	4,650	3,072	3,687						
2006	8,788	4,537	6,728						
2007	8,301	5,226	7,128						
2008	8,985	2,770	6,952						
2009 (through November 30, 2009)	6,946	3,051	4,999						

Source: I-Net

Note:

(1) Rounded to the nearest U.S. dollar.

On November 30, 2009, the London Metal Exchange cash settlement price for copper was U.S.\$6,815 per ton.

As a general rule, Gold Fields sells the gold it produces at market prices to obtain the maximum benefit from prevailing gold prices and does not enter into hedging arrangements such as forward sales or derivatives which establish a price in advance for the sale of its future gold production. Hedges are sometimes undertaken in one or more of the following circumstances: to protect cash flows at times of significant capital expenditures; for specific debt servicing requirements; and to safeguard the viability of higher cost operations. At June 30, 2009, Gold Fields was party to forward sales and zero cost collar derivative agreements which established a price in advance for approximately 50% of its forecasted copper production in fiscal 2010. These agreements were entered into to protect cash flows at the Cerro Corona operation due to significant capital expenditures budgeted for fiscal 2010. See Quantitative and Qualitative Disclosure About Market Risk Commodity Price Sensitivity . Significant changes in the prices of gold and copper over a sustained period of time may lead Gold Fields to increase or decrease its production in the near-term, which could have a material impact on Gold Fields revenues.

Sales of copper concentrate are provisionally priced that is the selling price is subject to final adjustment at the end of a period normally ranging from 30 to 90 days after delivery to the customer, based on market prices at the relevant quotation points stipulated in the contract. Revenue on provisionally priced copper concentrate sales is recorded on the date of shipment, net of refining and treatment charges, using the forward London Metal Exchange price to the estimated final pricing date, adjusted for the specific terms of the agreements. Variations between the price used to recognize revenue and the actual final price received can be caused by changes in prevailing copper and gold prices and result in an embedded derivative. The host contract is the receivable from the sale of copper concentrate at the forward London Metal Exchange price at the time of sale. The embedded derivative, which does not qualify for hedge accounting, is marked-to-market each period until final settlement occurs, with changes in fair value classified as provisional price adjustments and included as a component of revenue while the contract itself is recorded in accounts receivable.

# Gold Fields Realized Gold and Copper Prices

The following table sets out the average, the high and the low London afternoon fixing price per ounce of gold and Gold Fields average U.S. dollar realized gold price during the past three fiscal years. Gold Fields average realized gold price is calculated using the actual price per ounce of gold received on gold sold and the

actual amount of revenue received on sales of copper concentrate, expressed in terms of the price per gold equivalent ounce. For a description of how gold equivalent ounces are determined, see Defined Terms and Conventions.

	Year	Year ended June 30,				
Realized Gold Price	2007	2008	2009			
Average	638	821	874			
High	691	1,011	989			
Low	561	649	713			
Gold Fields average realized gold price	638	819	875			

Note:

(1) Gold Fields average realized gold price may differ from the average gold price due to the timing of its sales of gold within each year. The following table sets out the average, the high and the low London Metal Exchange cash settlement price per ton for copper and Gold Fields average U.S. dollar realized copper price for the 10 month period from September 1, 2008 (when the Cerro Corona Mine commenced production) and June 30, 2009.

Realized Copper Price	10 months ended June 30, 2009
Average	4,322
High	7,420
Low	2,770
Gold Fields average realized copper price	4,115

Note:

(1) Gold Fields average realized copper price may differ from the average copper price due to the timing of its sales of copper within each year and is net of treatment and refining charges.

#### Costs

Over the last three fiscal years, Gold Fields total cash costs have typically made up approximately 80% of total costs and consist primarily of labor and, where applicable, contractor costs, and consumable stores, which include explosives, timber and other consumables, including diesel fuel and other petroleum products.

Gold Fields South African operations are labor intensive due to the use of deep level underground mining methods. As a result, over the last three fiscal years labor has represented on average approximately 50% of total cash costs at the South African operations. At the South African operations, power and water made up on average approximately 11% of total cash costs over the last three fiscal years. At the Ghana operations, mining operations at Damang are conducted by an outside contractor, while starting in fiscal 2005, Tarkwa began engaging in owner mining and therefore significantly reduced its use of outside contractors. Contractor costs represented on average 21% of total cash costs at Tarkwa over the last three fiscal years, and 21% of total cash costs during fiscal 2009. Over the last three fiscal years contractor costs represented on average 48% of total cash costs at Damang. Direct labor costs represent on average a further 10% of total cash costs at Tarkwa over the last three fiscal 2009. At the Australian operations, mining operations are conducted by outside contractors. Over the last three fiscal years, total contractor costs represented on average 51% at Agnew and 39% at St. Ives of total cash costs and direct labor costs represented on average a further 15% at Agnew and 11% at St. Ives of total cash costs.

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For open-pit operations, such as those at the Ghana and Australia operations, cash costs tend to vary over the life of the open pit. Initially, cash costs are relatively high because the proportion of waste rock to ore, or

stripping ratio, is higher when operations first commence. As an open pit evolves, the stripping ratio and cash cost per ounce tend to decrease. Stripping ratios can, however, increase over the life of an operation.

Gold Fields operations in Ghana consume large quantities of diesel fuel for the running of their mining fleet. The cost of diesel fuel is directly related to the oil price and any movement in the oil price will have an impact on the cost of diesel fuel and therefore the cost of running the mining fleet. Over the last three fiscal years, fuel costs have represented approximately 15% of total cash costs at the Ghana operations. Fuel use is proportionately higher at the Ghana operations than at other operations because open pit mining in general requires more fuel usage than underground mining and because of the configuration of the Ghana operations, including the scale of certain of the pits and the distances between the pits and the plants. In order to provide some protection against future rises in oil prices, and therefore in diesel fuel prices, Gold Fields has in recent years entered into various call options for diesel fuel for the benefit of its Ghana operations. See Quantitative and Qualitative Disclosures About Market Risk Commodity Price Sensitivity, Quantitative and Qualitative Disclosures About Market Risk Commodity Price Quantitative and Qualitative Disclosures About Market Risk Commodity Price Contract Position Oil.

During fiscal 2009, price participation royalties of A\$25.8 million (U.S.\$19.1 million) were paid to certain subsidiaries of Morgan Stanley Bank in respect of St. Ives. Total gold produced from St. Ives since November 30, 2001 exceeded 3.3 million ounces during fiscal 2009, creating the liability to pay the 4% net smelter volume royalty which amounted to A\$20.5 million (U.S.\$15.2 million) for fiscal 2009. See Information on the Company Gold Fields Mining Operations Australia Operations. On August 26, 2009, Gold Fields entered into an agreement to terminate the royalty for a consideration of A\$308 million (U.S.\$257.1 million). See Recent Developments Termination of Royalty Over St. Ives .

The remainder of Gold Fields total costs consist primarily of amortization and depreciation, exploration costs and selling, administration and general and corporate charges.

### **Notional Cash Expenditure**

Gold Fields defines notional cash expenditure, or NCE, as operating costs plus additions to property, plant and equipment, and defines operating costs as production costs (exclusive of depreciation and amortization) plus corporate expenditure, employment termination costs and accretion expense on provision for environmental rehabilitation. Gold Fields reports NCE on a per equivalent ounce basis. Management considers NCE per equivalent ounce to be an important measure as it believes NCE per ounce provides more information than other commonly used measures, such as total cash costs per equivalent ounce, regarding the real cost to Gold Fields of producing an equivalent ounce of gold (including gold equivalent ounces), reflecting not only the ongoing costs of production but also the investment cost of bringing mines into production. Management also believes that NCE per equivalent ounce is a useful indication of the cash Gold Fields has available for paying taxes, repaying debt, funding exploration and paying dividends and the like.

NCE is not a U.S. GAAP measure. An investor should not consider NCE or operating costs in isolation or as alternatives to production costs, cash flows from operating activities or any other measure of financial performance presented in accordance with U.S. GAAP. NCE and operating costs as presented in this annual report may not be comparable to other similarly titled measures of performance of other companies.

The following tables set out a reconciliation of Gold Fields production costs, as calculated in accordance with U.S. GAAP, to its NCE for fiscal 2009, 2008 and 2007.

	For the year ended June 30, 2009 South Cerro										
	Driefontein	Kloof	Beatrix	Deep	Tarkwa n \$ million	Damang except as o		0	Corona	Corporate	Group
Production Costs	378.9	330.6	218.4	128.3	359.4	130.7	288.9	84.6	79.1	(0.3)	1,998.6
Add:											
Corporate expenditure	7.1	5.7	3.9	2.5	8.1	1.3	3.4	1.5	2.0		35.5
Employment termination costs	1.8	2.5	2.0				0.6	0.2			7.1
Accretion expense on provision for											
environmental rehabilitation	4.0	3.5	1.8	1.0	0.8	0.2	1.0	0.3	1.3		13.9
Operating costs	391.8	342.3	226.1	131.8	368.3	132.2	293.6	86.6	82.4	(0.3)	2,055.1
Additions to property, plant and										, ,	<i>,</i>
equipment	114.8	106.4	69.9	113.3	140.8	16.9	49.4	21.7	116.8	10.2	760.3
Notional cash expenditure	506.6	448.7	296.0	245.1	509.1	149.1	343.3	108.3	199.2	9.9	2,815.4
Rotional cash expenditure	200.0	440.7	270.0	240.1	507.1	147.1	545.5	100.5	177.2	,,,	2,015.4
	820.0	(12.0	201.1	1747	(10.4	200.4	400.0	100.1	210.2(2)		2 (01 0
Gold produced ( 000oz)	829.9	643.0	391.1	174.7	612.4	200.4	428.3	192.1	219.3(2)		3,691.2
Notional cash expenditure per ounce of gold produced (\$)	610	698	757	1,403	831	744	802	564	908		763
ounce of goin produced (\$)	010	070	151	1,405	031	/ 44	002	504	<b>J</b> 00		705

Notes:

(1) Calculated using an average exchange rate of R9.01 per \$1.00.

## (2) Including gold equivalent ounces.

	For the year ended June 30, 2008											
	Driefontein	Kloof	Beatrix	South Deep		-	Choco 10 t as otherwis		-	Cerro Corona	Corporate	Group
Production Costs	390.3	358.9	229.0	170.3	312.5	126.9	25.1	292.2	97.5		(6.6)	1,996.1
Add:												
Corporate expenditure	8.5	7.4	4.6	2.8	3.7	1.4	2.1	3.0	1.0	5.2	1.3	41.0
Employment termination costs	2.2	1.9	2.4	9.4				0.3				16.2
Accretion expense on provision												
for environmental rehabilitation	1.1	2.6	2.0	0.5	0.8	0.2	1.0	3.0	0.8			12.0
Operating costs	402.1	370.8	238.0	183.0	317.0	128.5	28.2	298.5	99.3	5.2	(5.3)	2,065.3
Additions to property, plant												
and equipment	139.8	123.5	79.3	107.9	169.7	10.8	7.4	83.6	24.1	348.4	59.9	1,154.4
Notional cash expenditure	541.9	494.3	317.3	290.9	486.7	139.3	35.6	382.1	123.4	353.6	54.6	3,219.7
rotional cash expenditure	0110	17 110	01710	_>0.>	10017	10,10	2210	202.1	12011	00010	2 110	0,217.7
Gold produced (000oz)	928.0	820.9	438.1	232.1	646.1	194.2	33.8	417.7	203.7			3,914.6
	928.0	620.9	+30.1	252.1	040.1	194.2	55.6	41/./	203.7			5,714.0
Notional cash expenditure per ounce of gold produced (\$)	584	602	724	1,253	753	717	1,053	915	606			822
				,			,					

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Note:

(1) Calculated using an average exchange rate of R7.27 per \$1.00.

	For the year ended June 30, 2007											
				South						Cerro		
	Driefontein	Kloof	Beatrix	Deep		0	Choco 10 ot as otherw		0	Corona	Corporate	Group
Production Costs	361.2	344.9	211.1	99.0	261.5	109.0	33.7	212.5	83.1		(8.3)	1,707.7
Add:												
Corporate expenditure	8.6	5.7	3.8	2.9	3.0	2.0	3.7	2.3	0.8		5.6	38.4
Employment termination costs	2.1	1.8	0.9								0.1	4.9
Accretion expense on												
provision for environmental												
habilitation	3.6	2.0	1.8	0.1	0.6	(1.8)	0.5	1.6	(2.0)			6.4
Operating costs	375.5	354.4	217.6	102.0	265.1	109.2	37.9	216.4	81.9		(2.6)	1,757.4
Additions to property, plant												
and equipment	113.2	107.8	82.3	39.4	83.8	8.2	20.5	67.0	21.5	233.9	19.4	797.0
Notional cash expenditure	488.7	462.2	299.9	141.4	348.9	117.4	58.4	283.4	103.4	233.9	16.8	2,554.4
_												
Gold produced (000oz)	1,016.5	922.9	543.4	163.2	697.2	187.9	54.6	486.9	212.4			4,285.0
Notional cash expenditure												
per ounce of gold produced												
(\$)	481	501	552	866	500	624	1,070	582	487			596

Note:

(1) Calculated using an average exchange rate of R7.20 per \$1.00.

NCE decreased from \$822 per ounce in fiscal 2008 to \$763 per ounce in fiscal 2009, primarily because of significant decreases in additions to property, plant and equipment mainly due to the completion of the Cerro Corona project, the Tarkwa CIL expansion and the 23.9% weakening of the South African Rand.

One of Gold Fields short-term strategic objectives is to reduce its NCE per ounce to \$725 (as calculated for management reporting purposes, using an exchange rate of R8.00 to \$1.00). See Information on the Company Strategy Strategic Review Short-term Priorities .

# South African Power Disruptions

In South Africa, Gold Fields mining operations are dependent upon electrical power generated by the State utility, Eskom. Eskom holds a monopoly on power supply in the South African market. On January 25, 2008 as a result of an increase in demand exceeding available generating capacity, Gold Fields was forced to suspend all mining activity at its South African operations for several days, due to Eskom requesting that their Key Industrial Consumers, of which Gold Fields is one, reduce consumption to the minimum possible level. 50% of Gold Fields normal electrical consumption is required simply to pump, ventilate and refrigerate its operations. By mid-March 2008, total power available to Gold Fields South African mines had been restored to approximately 95% of the historical average consumption profile at Driefontein and Kloof, and 90% at the Beatrix and South Deep mines. Since then, Gold Fields has applied to Eskom for an additional power allocation and Eskom has indicated the additional requested capacity will be granted. Gold Fields has no reason to expect that the remainder will not be granted. Moreover, if a power conservation program is implemented, Gold Fields expects that the power allocations of each of its operations will be tradable. As a result, Gold Fields expects to be able to shift power usage from one mine to another as necessary. During fiscal 2009 Eskom increased power tariffs significantly, with an announced average rise of 31.3% and approximately 33.6% for industrial customers. Gold

Fields has experienced real increases in power tariffs of 36%, an increase in excess of the announced average for industrial customers as a result of structural changes made to the large power user tariffs and a limitation of 15% on the increase to certain residential tariffs. Gold Fields expects further significant increases during the next several years as Eskom embarks on an electricity generation capacity expansion program. In fiscal 2009, power costs made up approximately 11% of the operating cost of production at the South African operations. See Risk Factors Some of Gold Fields power suppliers have forced it to halt or curtail activities at its mines, due to severe power disruptions. Power stoppages, fluctuations and power cost increases may adversely affect Gold Fields results of operations and its financial condition and Information on the Company Gold Fields Mining Operations Driefontein Operation Mining .

### **Income and Mining Taxes**

### South Africa

Gold Fields pays taxes on its taxable income generated by its mining and non-mining tax entities. Under South African law, gold mining companies are taxed at different rates. For tax purposes, GFIMSA is considered a gold mining company whereas Gold Fields itself and its other South African subsidiaries are non-gold mining companies. All non-gold mining companies pay tax at the statutory rate of 28% which was reduced from 29% for tax years ending on or after April 1, 2008, whereas gold mining companies pay tax at a rate which is calculated in terms of a formula which is explained below. In addition, non-gold mining companies are liable for Secondary Tax on Companies, or STC, which is currently charged at a rate of 10%, effective as from October 1, 2007 (previously 12.5%). STC is a tax on dividends declared by companies or closed corporations that are resident in South Africa. It differs from a dividend withholding tax in that it is a tax imposed on companies or closed corporations, and not on its shareholders. STC is payable on the amount of dividends declared by the company, less the sum of qualifying dividends received or accrued to the company during a particular time period (referred to as a dividend cycle).

Gold mining companies are subject to tax at different rates on their mining and non-mining income. Mining income is taxed on a formula basis, in terms of which the tax rate rises as the ratio of taxable income to gross mining revenue increases. The formula takes the form of y = a-ab/x, where y = the tax rate, a = the marginal tax rate, b = the quantum of revenue that is free of tax (which is a form of depletion allowance and is calculated as a percentage of mining revenue, with the currently applicable rate being effectively 5%) and x = the ratio of profit to revenue (expressed as a percentage).

Gold mining companies can elect to be exempt from STC and different formulae are used to calculate tax on mining income depending on whether an election has been made. If the election has been made, the current relevant values are a = 43 and b = 5. These values are effective for tax years ending on or after April 1, 2008. For tax years ending on or after April 1, 2008, the rate applicable to non-mining income for gold mining companies who have made the election is 35%.

As a result of the consolidation of the South African assets into GFIMSA in 2004, the mines are no longer separate tax entities but are treated as a single tax entity. However, unredeemed capital expenditure is still ring fenced between the divisions of GFIMSA, so that capital expenditure at one mine cannot be used to reduce taxable income from another mine. GFIMSA has elected to be exempt from STC. However, Gold Fields itself, as a holding company not conducting any gold mining operations, as well as its other non-mining South African subsidiaries, are not eligible to be exempt from STC. To the extent Gold Fields receives dividends from GFIMSA, such received dividends are offset against the amount of dividends paid by Gold Fields for purposes of calculating the net amount subject to STC.

After going through several draft Bills, the Mineral and Petroleum Resource Royalty Act, 2008, or the Royalty Act, was promulgated on November 24, 2008 and was due to come into operation on May 1, 2009. However, it was announced on June 1, 2009 that Act would not come into operation until March 1, 2010. The Royalty Act imposes a royalty on refined and unrefined minerals payable to the State.

The royalty in respect of refined minerals (which include gold and platinum) is calculated by dividing earnings before interest and taxes, or EBIT, by the product of 12.5 times gross revenue calculated as a percentage, plus an additional 0.5%. EBIT refers to taxable mining income (with certain exceptions such as no deduction for interest payable) before assessed losses but after capital expenditure. A maximum royalty of 5% has been introduced on refined minerals.

The royalty in respect of unrefined minerals (which include uranium) is calculated by dividing EBIT by the product of nine times gross revenue calculated as a percentage, plus an additional 0.5%. A maximum royalty of 7% has been introduced on unrefined minerals.

Where unrefined mineral resources (such as uranium) constitute less than 10% in value of the total composite mineral resources, the royalty rate in respect of refined mineral resources may be used for all gross sales and a separate calculation of EBIT for each class of mineral resources is not required. For Gold Fields, this means that currently it will pay a royalty based on the refined minerals royalty calculation as applied to its gross revenue.

### Ghana

Ghanaian resident companies are subject to tax on the basis of income derived from, accruing in, received in, or brought into Ghana. The standard corporate income tax rate is currently 25% having been reduced from 28% with effect from January 1, 2006. Because the mineral rights are owned by the state, the Tarkwa and Damang operations are also subject to a gold royalty of a minimum of 3% and a maximum of 6%, depending on the profitability of the mine, calculated on the basis of a formula which came into effect from July 4, 1986. This royalty is included in the income and mining tax benefit/(expense) line item in Gold Fields consolidated statements of operations. A reconstruction and development levy of 2.5% on operating profit that was introduced on January 1, 2001 was abolished from January 1, 2006.

On July 21, 2009, the Ghanaian government promulgated the National Fiscal Stabilization Levy Act, which introduces a levy of 5% on profits before tax of companies in selected industries, including mining. The Ghanaian government has indicated that this will only be applicable to the 2009 and 2010 calendar years, commencing for Gold Fields during the quarter ended September 30, 2009. The levy has been introduced as a temporary measure to raise additional revenue and meet critical government expenditure, and is not intended to be a permanent feature of the Ghanaian fiscal regime.

Tax depreciation of capital equipment operates under a capital allowance regime. The capital allowances consist of an initial allowance of 80% of the cost of the asset and the balance is added to the balance carried forward and depreciated at a rate of 50% per year on a declining balance basis. For the purposes of computing depreciation for the year following its acquisition, 5% of the cost of the mining asset is included in the balance, effectively allowing a total of 105% allowance on mining assets. Under the project development agreement entered into between the Ghanaian government and Gold Fields Ghana and the deed of warranty entered into between the Ghanaian government and Abosso, the government has agreed that no withholding tax shall be payable on any dividend or capital repayment declared by Gold Fields Ghana or Abosso which is due and payable to any shareholder not normally resident in Ghana.

#### Australia

Generally, Australia will impose tax on the worldwide income (including capital gains) of all of Gold Fields Australian incorporated and tax resident entities. The current income tax rate for companies is 30%. Exploration costs are deductible in full as incurred and other capital expenditure is deductible over the lives of the assets acquired. In addition, other expenditures, such as export market development, mine closure costs actually incurred and the defense of native title claims, may be deducted from income. The St. Ives and Agnew operations are also subject to a 2.5% gold royalty, which came into effect from July 1, 1998, because the mineral rights are owned by the state. This royalty is included in the income and mining tax benefit/(expense) line item in Gold Fields consolidated statements of operations.

With effect from July 1, 2001 the Australian legislature introduced a Uniform Capital Allowance, which allows tax deductions for:

depreciation attributable to assets; and

certain other capital expenditures.

Gold Fields Australia and its wholly-owned Australian controlled entities have elected to be treated as a tax consolidated group for taxation purposes. As a tax consolidated group, a single tax return is lodged for the group based on the consolidated results of all companies within the group. The decision to implement the tax consolidation regime was made by Gold Fields during the 2005 fiscal year and applied as of July 1, 2003.

Withholding tax is payable on dividends, interest and royalties paid by Australian residents to non-residents. In the case of dividend payments to non-residents, withholding tax at a rate of 30% will apply. 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 10% where the dividend is paid to a company). Where dividends are paid out of profits that have been subject to Australian corporate tax there is no withholding tax, regardless of whether a double taxation agreement is in place.

#### Peru

Peru taxes resident individuals and domiciled corporations on their worldwide income. The corporate income tax rate applicable to domiciled corporations is 30% on taxable income. Capital gains are also taxed as ordinary income (except for resident individuals whom are levied with a 5% income tax rate).

Tax losses may be carried forward by a domiciled corporation using one of the following methods:

Losses may be carried forward and used in full in the subsequent four tax years. The balance of tax losses carried forward and not used during these four tax years is forfeited

Losses can be carried forward, and up to 50% of the tax loss may be set off against taxable income in a subsequent tax year. The balance of the assessed losses may be carried forward and applied on this basis until balance is fully used up, with no time limit on the carry forward.

On October 4, 2007, La Cima and its parent company, Gold Fields Corona (BVI) Limited, or Gold Fields Corona, signed stability agreements with the relevant governmental authorities in Peru. These agreements, among other things, guarantee the current tax regime, including a 4.1% withholding tax rate on dividends and 30% income tax rate, for a period of 10 years. In line with certain provisions of these agreements, Gold Fields Corona capitalized \$404.5 million of inter-company loans in March 2008.

On June 24, 2004, the Peruvian Congress approved the Mining Royalty Law, which established a mining royalty that owners of mining concessions must pay to the Peruvian government for the exploitation of metallic and non-metallic resources. The mining royalties are calculated on a sliding scale with rates ranging from 1% to 3% of the value of mineral concentrates based on international market prices.

#### **Exchange Rates**

Gold Fields South African revenues and costs are very sensitive to the Rand/U.S. dollar exchange rate because revenues are generated using a gold price denominated in U.S. dollars, while the costs of the South African operations are incurred principally in Rand. Depreciation of the Rand against the U.S. dollar reduces Gold Fields average costs when they are translated into U.S. dollars, thereby increasing the operating margin of the South African operations. Conversely, appreciation of the Rand results in South African operating costs being translated into U.S. dollars at a lower Rand/U.S. dollar exchange rate, resulting in lower operating margins. The impact on profitability of any change in the value of the Rand against the U.S. dollar can be substantial.

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Furthermore, the exchange rates obtained when converting U.S. dollars to Rand are set by foreign exchange markets, over which Gold Fields has no control. For more information regarding fluctuations in the value of the Rand against the U.S. dollar, see Key Information Exchange Rates. In fiscal 2009, movements in the U.S. dollar/Rand exchange rate had a significant impact on Gold Fields results of operations as the Rand weakened 23.9% against the U.S. dollar, from an average of 7.27 in fiscal 2008 to 9.01 in fiscal 2009.

During fiscal 2009, Gold Fields had two different forward purchase contracts to manage its exposure to fluctuations in the value of the Rand against the U.S. dollar:

As a result of the draw down on January 31, 2007 of \$550 million under a \$1.8 billion bridge loan facility entered into to close-out the Western Areas gold derivative structure and refinance certain working capital loans, U.S. dollar/Rand forward cover was purchased during the fiscal quarter ended March 31, 2007 in an amount of \$550.8 million for settlement August 6, 2007, at an average forward rate of R7.3279 based on a spot rate of R7.1918. Subsequently, that cover was extended for periods of between one and three months during fiscal 2008 and 2009. The cover was reduced as a result of loan repayments of \$60.8 million and \$172.0 million made on December 6, 2007 and December 31, 2007 respectively. During fiscal 2009, a further amount of \$44 million was repaid against the loan and the forward cover was reduced by the same amount. The balance of the \$274 million forward cover was extended to July 15, 2009, being the next repayment date on the loan, at an average forward rate of R8.0893. On September 17, 2009, the forward cover has been designated as a hedging instrument. As a result the gains and losses are accounted for under foreign exchange gains/(losses), along with gains and losses on the underlying loan that has been hedged. The forward cover points are deemed to be an interest cost and are therefore accounted for as part of interest. Subsequent to year end this contract was closed out; and

In October 2008, \$150 million of expected gold revenue for the December quarter was sold forward on behalf of the South African operations. In December 2008, the \$150 million was extended to the March quarter at an average forward rate of R10.3818. During the March quarter \$30 million was settled at a gain for the quarter of \$0.7 million. The outstanding balance of \$120 million was extended into the June quarter at an average forward rate of R10.2595. In the June quarter, the remaining forward cover of \$120 million was partly settled by delivering U.S. dollar proceeds into the contract and the balance closed out, resulting in a gain of \$6.0 million. This was accounted for in the income statement under realized gain/(loss) on financial instruments.

Gold Fields operations are also affected by movements in the Australian dollar/U.S. dollar exchange rate. In October 2008, \$70 million of expected gold revenue for the December quarter was sold forward on behalf of the Australian operations. \$14 million of the forward sales instruments were settled by delivering U.S. dollar proceeds into the contract during the December quarter. In December 2008, \$56 million was extended to the March quarter at an average forward rate of A\$0.6650. During the March quarter an additional \$8 million of the same instruments were taken out. The total of \$64 million was extended into the June quarter at an average forward rate of A\$0.6445. In the June quarter the forward cover of \$64 million was partly settled by delivering U.S. dollar proceeds into the contract and the balance closed out, resulting in a gain of \$1.4 million. This was accounted for in the income statement under realized gain/(loss) on financial instruments.

See Quantitative and Qualitative Disclosures About Market Risk Foreign Currency Sensitivity Foreign Currency Hedging Experience .

With respect to the Australian operations, Gold Fields expects that the effect of fluctuations in the value of the Australian dollar against the U.S. dollar will be similar to that for the Rand, with weakness in the Australian dollar resulting in improved earnings for Gold Fields and strength in the Australian dollar producing the opposite result. In order for the Group to participate in potential Australian dollar appreciation, a strip of quarterly maturing Australian dollar/U.S. dollar call options were purchased in fiscal 2005. The last of these instruments

matured during fiscal 2007. Gold Fields accounted for these financial instruments on a mark-to-market basis, using exchange rates prevailing at the end of the relevant accounting period.

With respect to its operations in Ghana and Peru, a substantial portion of Gold Fields operating costs (including wages) are either directly incurred in U.S. dollars or are determined according to a formula by which costs are indexed to the U.S. dollar. Accordingly, fluctuations in the Ghanaian Cedi and Peruvian Nuevos Soles do not materially impact operating results for the Ghana and Peru operations.

### Inflation

It is possible that a period of significant inflation in South Africa could adversely affect Gold Fields results and financial condition. However, because the majority of Gold Fields costs at the South African operations are in Rand, while its revenues from gold sales are in U.S. dollars, the extent to which the Rand devalues against the U.S. dollar will offset the impact of South African inflation. In Ghana and Peru, Gold Fields operations are not significantly impacted by Ghanaian and Peruvian inflation because a substantial portion of Gold Fields costs are either incurred directly in U.S. dollars or are determined according to a formula by which U.S. dollar amounts are converted into Ghanaian Cedi and Peruvian Soles. Gold Fields expects that the impact of Australian inflation will be similar to that of South Africa.

### South African, Ghanaian and Peruvian Economic and Political Environment

Gold Fields is a South African company and a substantial portion of its operations, based on gold production, are in South Africa. As a result, Gold Fields is subject to various economic, fiscal, monetary and political policies and factors that generally affect South African companies. See Risk Factors Economic or political instability in the countries or regions where Gold Fields operates may have an adverse effect on Gold Fields operations and profits.

South African companies, including Gold Fields, are subject to exchange control restrictions which require companies to repatriate some or all of their offshore profits. While exchange controls have been relaxed in recent years, South African companies remain subject to restrictions on their ability to deploy capital outside of the Southern African Common Monetary Area. See Information on the Company Regulatory and Environmental Matters South Africa Exchange Controls.

Gold Fields also has significant operations in Ghana and is therefore subject to various economic, fiscal, monetary and political policies and factors that affect companies operating in Ghana. See Risk Factors Economic or political instability in the countries or regions where Gold Fields operates may have an adverse effect on Gold Fields operations and profits. In addition, pursuant to an agreement which it has entered into with the Ghanaian government with respect to the Tarkwa mine, Gold Fields is required to repatriate at least 20% of the revenues derived from the Tarkwa mine to Ghana and either use such amounts in Ghana or maintain them in a Ghanaian bank account. Abosso is currently obligated to repatriate 25% of its revenue to Ghana, although the level of repatriation under the deed of warranty between Abosso and the government of Ghana is subject to renegotiation every two years. See Information on the Company Regulatory and Environmental Matters Ghana Exchange Controls. Although it has been more than two years since the last set of negotiations with the Bank of Ghana regarding the Damang mine s level of repatriation, the next set of negotiations has not been scheduled pending the execution of a new development agreement with the government of Ghana. Gold Fields repatriated approximately 84% to fund its capital expenditures and capital waste program in Ghana. However, Gold Fields does not expect repatriation to remain at this level in the future. While management has no reason to believe that the repatriation level will increase as a result of the next set of negotiations, there is no agreed ceiling on the repatriation level, and it could be increased. Any increase could adversely affect Gold Fields ability to use the cash flow from the Damang mine outside Ghana, including to fund working costs and capital expenditures at other operations, to provide funds for acquisitions and to repay principal and interest on indebtedness.

In addition, Gold Fields has operations in Australia and Peru an