

FORM 6-K
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Report of Foreign Private Issuer

**Pursuant to Rule 13a-16 or 15d-16
of the Securities Exchange Act of 1934**

For the month of February 1012
Commission File Number 1-31318

Gold Fields Limited

(Translation of registrant's name into English)

150 Helen Rd.
Sandown, Sandton 2196
South Africa
(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F...x... Form 40-F.....

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): _____

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): _____

Indicate by check mark whether by furnishing the information contained in this Form, the registrant is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes No ..x...

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82- _____

**GOLD FIELDS**

MEDIA RELEASE

Mineral Resource and Mineral Reserve Update

Johannesburg, 27 February 2012: Gold Fields Limited (Gold Fields) (JSE, NYSE, NASDAQ Dubai: GFI) has announced its Mineral Resource and Mineral Reserve statement as at 31 December 2011.

Gold Fields has total attributable precious metal and gold equivalent Mineral Resources of 217.0 million ounces (31 December 2010: 225.4 million ounces) and Mineral Reserves of 80.6 million ounces (76.7 million ounces). This represents a 5% increase in Mineral Reserves after taking into account the inventory mined during 2011 ("post depletion") and a 4% decrease in Mineral Resources when compared to the December 2010 position.

"The improved Mineral Reserve position bodes well for our growth ambition in line with our long-term target of 5 million gold-equivalent ounces either in production or in development by 2015," says Nick Holland, CEO of Gold Fields.

All Mineral Resource and Mineral Reserve numbers in this note are managed, unless otherwise stated. The accompanying tables highlight Gold Fields' Mineral Resource and Mineral Reserve position as at 31 December 2011. Mineral Resources are quoted inclusive of Mineral Reserves.

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Table 1 – Headline Numbers: Gold Fields Limited Mineral Resource and Mineral Reserve summary as at 31 Dec 2011

	Mineral Resources			Mineral Reserves		
	31 December 2011		December 2010	31 December 2011		December 2010
	Tonnes (Mt)	All Metal EqOz (Moz)	All Metal EqOz (Moz)	Tonnes (Mt)	All Metal EqOz	(Moz)
Total: Operating mines (including Cu as Au equivalents & TSF Au)						
Managed	1749.1	202.2	208.8	1062.4	85.1	81.0
Attributable ¹	1667.1	193.4	202.3	1011.0	80.6	76.7

Totals including platinum and gold equivalents (from Cu, Ag & Mo), excl Woodjam	Tonnes (Mt)	All Metal EqOz (Moz)	All Metal EqOz (Moz)	Tonnes (Mt)	All Metal EqOz (Moz)	All Metal EqOz (Moz)
Managed	2475.8	234.4	239.5	1062.4	85.1	81.0
Attributable ¹	2158.2	217.0	225.4	1011.0	80.6	76.7

¹ During 2011 the Gold Fields attributable portion of Mineral Resources and Mineral Reserves for Tarkwa and Damang have increased from 71.1% to 90% following the buyout of the IAMGold share. Similarly, the purchase of the minority shareholders equity in Cerro Corona has increased the Group's attributable portion of Mineral Resources and Mineral Reserves from 80.7% to 98.5%.

The commodity prices used for the Mineral Reserve and Mineral Resource declaration are in accordance with SEC guidelines and approximate to the historical three year trailing average commodity prices. Metal price assumptions used for evaluating Gold Fields Mineral Reserves are as follows: US\$1,300/oz (Dec 2010: US\$1,000/oz) for gold and US\$3.50/lb (Dec 2010: US\$2.72/lb) for copper. Price assumptions for Mineral Resources are: US\$1,450/oz (Dec 2010: US\$1,100/oz) for gold and US\$3.90/lb (Dec 2010: US\$3.00) for copper. A complete list of price assumptions are contained in Table 2 below.

Key highlights for the Mineral Resource and Mineral Reserve statement in our four Regions and for our Growth Projects are as follows:

- The Mineral Resource position in the West Africa region has increased by 46% from 17.3 million ounces to 25.2 million ounces net of depletion, primarily due to the increase in the gold price and discovery at the Greater Damang Project (Huni, Juno and Damang main pit). The total Mineral Reserve has increased by 21% from 11.3 million ounces to 13.7 million ounces, net of mine depletion. After taking depletion into account the Mineral Reserve at Tarkwa increased from 9.2 million ounces to 10.3 million ounces, mainly due to the rise in the gold price. The Mineral Reserves at Damang increased from 2.1 million ounces to 3.4 million ounces net of depletion. This is primarily due to the increase in the Mineral Reserves for the Greater Damang Project from 1.1 million ounces to 2.5 million ounces.
- In the South Africa region Mineral Resources declined by 8% to 160.2 million ounces (173.8 million ounces), due to pay limit increases, resource clean-up and changes in geological models. The total Mineral Reserve base has increased by 2%, net of depletion, primarily due to an increase of 5.2 million ounces at South Deep and the first-time inclusion of 2.9 million ounces gold reserves from the West Wits Tailings Treatment Project (WWTTP). This is partially offset by a 3.7 million ounce reduction

in the below-infrastructure Mineral Reserves at KDC West (Driefontein), with the balance due to life-of-mine tail end management adjustments.

- In the South American region, Cerro Corona's gold equivalent Mineral Resource position decreased by 5% from 8.1 million ounces to 7.7 million ounces, primarily due to depletion. The total gold equivalent Mineral Reserve base improved substantially by 15% from 5.3 million ounces to 6.1 million ounces, net of depletion, primarily due to the increase in the total capacity of the Tailings Storage Facility from 99 million to 130 million tonnes.
- The Australasia region's Mineral Resource position decreased by 5% from 9.6 million ounces to 9.2 million ounces, primarily because of depletion. The total Mineral Reserve remained flat at 4.1 million ounces, net of depletion.
- Amongst Gold Fields' Growth Projects there was an updated Mineral Resource declaration for the APP Project in Finland (12.2 million 2PG + gold ounces) and the Chucapaca Project in Peru (7.6 million gold-equivalent ounces). Approximately 70% of Chucapaca's Mineral Resource has been upgraded to the Indicated category. A first-ever Inferred Mineral Resource of 1,060 million pounds copper was declared for the Woodjam Project in British Columbia, Canada.

The information contained in the Mineral Resource and Mineral Reserve statement has been compiled by the Gold Fields competent person, Kevin Robertson, Pri.Sci.Nat, who is registered with the South African Council for Natural Scientific Professions. The Group's Mineral Resource and Mineral Reserve numbers have been externally audited by recognised independent mining consultants. The Mineral Resource and Mineral Reserve statement is compliant with the SAMREC 2007 Code, the updated Section 12 (Oct 2008) of the Johannesburg Stock Exchange (JSE) listing requirements, Industry Guide 7 (SEC) and aligned to the guiding principles of the Sarbanes-Oxley (SOX) Act of 2002.

Technical Short-form reports will be released to the market during April 2012 as supplements to the Integrated Annual Report for 2011.

Table 2 – Metal price assumptions as at 31 Dec 2011

Location	Unit	December 2011		December 2010	
		Reserves	Resources	Reserves	Resources
Ghana & Peru	Au (US\$/oz)	1,300	1,450	1,000	1,100
Australia	Au (A\$/oz)	1,400	1,550	1,225	1,350
South Africa	Au (R/kg)	310,000	340,000	265,000	290,000
	U ₃ O ₈ (US\$/lb)	-	-	-	75
Peru	Cu (US\$/lb)	3.50	3.90	2.72	3.00

Table 3 – Summary table of Gold Fields Limited Mineral Resources and Mineral Reserves as at 31 Dec 2011

	Mineral Resources (100%)				Mineral Reserves (100%)				Attributable R & R (%)		
	31 Dec 2011		Dec-10		31 Dec 2011		Dec-10		31 Dec 2011		
	Tonnes (Mt)	Grade (g/t)	Gold (Moz)	Gold (Moz)	Tonnes (Mt)	Grade (g/t)	Gold (Moz)	Gold (Moz)	Resource (%)	Resource (Moz)	Reserve (Moz)
GOLD											
Australia Operations											
Agnew ²	24.2	4.9	3.838	3.845	7.1	5.7	1.302	1.321	100	3.838	1.302
St Ives	63.3	2.6	5.314	5.765	37.9	2.3	2.813	2.820	100	5.314	2.813
Total Australasia Region	87.5	3.3	9.152	9.610	45.0	2.8	4.114	4.141	100	9.152	4.114
South African Operations											
Beatrix (underground)	53.5	6.5	11.120	15.934	34.0	4.5	4.901	5.367	100	11.120	4.901
KDC E (underground)	94.7	12.6	38.435	40.233	27.8	7.8	6.951	7.937	100	38.435	6.951
KDC W (underground)	66.3	11.7	24.999	31.051	26.5	7.5	6.382	11.850	100	24.999	6.382
Kloof Driefontein Complex (ug)	161.0	12.3	63.434	71.284	54.3	7.6	13.333	19.787	100	63.434	13.333
South Deep (underground) ³	355.8	7.1	80.974	81.454	225.0	5.5	39.584	34.533	92.4	74.820	36.576
Beatrix Surface Rock Dumps	12.4	0.4	0.156	0.078	5.5	0.3	0.057	0.078	100	0.156	0.057
WWTP (Tailings Storage Facility) ⁷	430.5	0.3	4.164	4.490	247.2	0.4	2.916	0.000		4.131	2.916
WW Surface Rock Dumps	14.9	0.7	0.327	0.594	14.9	0.7	0.327	0.454	100	0.327	0.327
Total South Africa Region	1 028.0	4.8	160.175	173.834	580.8	3.3	61.118	60.219		153.989	58.110
Peru Operation											
Cerro Corona	151.7	0.8	3.946	4.115	110.0	0.9	3.072	2.672	98.5	3.887	3.026
Total South America Region	151.7	0.8	3.946	4.115	110.0	0.9	3.072	2.672	98.5	3.887	3.026
Ghana Operations											
Damang	165.4	1.9	10.044	4.638	61.7	1.7	3.390	2.080	90	9.040	3.051
Tarkwa	316.5	1.5	15.123	12.642	264.8	1.2	10.345	9.249	90	13.611	9.310
Total West Africa Region	481.9	1.6	25.167	17.280	326.5	1.3	13.735	11.329	90	22.651	12.361
Total International Operations	721.1	1.7	38.266	31.004	481.6	1.4	20.921	18.142		35.690	19.502
GOLD ONLY											
Total Gold Managed	1 749.1	3.5	198.441	204.839	1 062.4	2.4	82.040	78.361		-	-
Total Gold Attributable	1 667.1	3.5	189.678	199.051	1 011.0	2.4	77.612	74.571		189.678	77.612
COPPER											
(Peru) - Cerro Corona	Tonnes	Grade	Copper	Copper	Tonnes	Grade	Copper	Copper		Copper	Copper
	(Mt)	(% Cu)	(Mlbs)	(Mlbs)	(Mt)	(% Cu)	(Mlbs)	(Mlbs)		%	(Mlbs)
Cerro Corona - Copper (Cu) only	144.1	0.45	1 386	1 464	110.0	0.51	1 126	965	98.5	1 366	1 109
COPPER as Au-Eq ⁴											
			Au - Eq	Au - Eq			Au - Eq	Au - Eq		Au - Eq	Au - Eq
			(Moz)	(Moz)			(Moz)	(Moz)		(Moz)	(Moz)
Cerro Corona - Cu as Au-Eq			3.729	3.992			3.031	2.624	98.5	3.673	2.985
Total Cerro Corona (Au + Cu as Au-Eq)			7.676	8.107			6.103	5.296		7.560	6.012
PLATINUM											
(Finland) - APP Project ⁶	Tonnes	2PGE + Au	2PGE + Au	2PGE + Au	Tonnes	2PGE + Au	2PGE + Au	2PGE + Au		2PGE + Au	2PGE + Au
	(Mt)	(g/t)	(Moz)	(Moz)	(Mt)	(g/t)	(Moz)	(Moz)		(Moz)	(Moz)
Total 2PGE as Au-Eq + Au	161.9	2.3	12.159	12.601					100	12.159	-
COPPER - GOLD - SILVER ⁴											
(Peru) - Chucapaca Project	Tonnes	Grade	Metal	Metal						Metal	Metal
	(Mt)		(Moz)	(Moz)						(Moz)	(Moz)
Total Au-Eq oz (Au + Ag + Cu)	132.7		7.628	5.639		-			51	3.890	-
COPPER - GOLD - MOLYBDENUM ⁴											
(Kyrgyzstan) - Talas Project	Tonnes	Grade	Metal	Metal						Metal	Metal
	(Mt)		(Moz)	(Moz)						(Moz)	(Moz)
Total Au-Eq oz (Au + Cu + Mo - ID & IF)	423.0	-	11.695	11.710		-			60	7.017	-
GOLD											
(Mali) - Yanfolila Project	Tonnes	Grade	Gold	Gold						Gold	Gold
	(Mt)	(g/t)	(Moz)	(Moz)						(Moz)	(Moz)
Total Gold (Inferred)	9.1	2.5	0.740	0.740		-			85	0.629	-
GOLD & COPPER											
Canada - Woodjam Project ⁵	Tonnes	Au = (g/t)	Au = (Moz)	Au = (Moz)						Au = (Moz)	Au = (Moz)
	(Mt)	Cu = (%)	Cu = (Mib)	Cu = (Mib)						Cu = (Mib)	Cu = (Mib)
Inferred - Copper	146.5	0.33	1 060		-	-	-	-	51	541	-

Footnotes

- Managed, unless otherwise stated
- Agnew deposits, Miranda & Vivien, are subject to a royalty agreement

- 3 The BEE transaction concluded in December 2010 grants an empowerment consortium 10% of South Deep. Based on the relevant sliding scale of the vesting of the economic benefit attached to the 10% and the current Life of Mine profile, the Mineral Resource and Mineral Reserve portion attributable to Gold Fields is 92.4%.
- 4 Copper, silver and molybdenum are reported as gold equivalent ounces (commodity revenue is divided by the gold price for the conversion to gold equivalent ounces).
- 5 Woodjam is a copper deposit with gold as a by product.
- 6 The declared Mineral Resource for Konttijärvi and Ahmavaara is pit constrained (7.1 Moz 2PGE +Au). The declared Mineral Resource includes the original unconstrained SK reef estimates (5.1 Moz 2PGE +Au).
- 7 The WWTTP has been included into the gold Mineral Reserve figures this year, whereas the uranium Mineral Resource figures have been excluded, but remain in the inventory.

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Notes to editors

About Gold Fields

Gold Fields is one of the world's largest unhedged producers of gold with attributable annualised production of 3.5 million gold equivalent ounces from eight operating mines in Australia, Ghana, Peru and South Africa. Gold Fields also has an extensive and diverse global growth pipeline with four major projects in resource development and feasibility, with construction decisions expected in the next 18 to 24 months. Gold Fields has total attributable gold equivalent Mineral Reserves of 80.6 million ounces and Mineral Resources of 217 million ounces. Gold Fields is listed on the JSE Limited (primary listing), the New York Stock Exchange (NYSE), NASDAQ Dubai Limited, Euronext in Brussels (NYX) and the Swiss Exchange (SWX).

Sponsor: J.P. Morgan Equities Limited

Signatures

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

GOLD FIELDS LIMITED

Date: 27 February 2012

By:

A handwritten signature in black ink, appearing to read "Willie Jacobsz", written in a cursive style.

Name: Mr W J Jacobsz

Title: Senior Vice President: Investor
Relations and Corporate Affairs