

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER  
PURSUANT TO RULE 13a-16 OR 15d-16 OF  
THE SECURITIES EXCHANGE ACT OF 1934

Report on Form 6-K dated March 31, 2011

Commission File Number 1-14846

AngloGold Ashanti Limited  
(Name of registrant)

76 Jeppe Street  
Newtown, 2001  
(P.O. Box 62117, Marshalltown, 2107)  
South Africa  
(Address of principal executive offices)

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

Form 20-F ☒ 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):

Yes ☐ No ☒

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):

Yes ☐ No ☒

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

Yes ☐ No ☒

Enclosure: Press release

ANGLOGOLD ASHANTI MINERAL RESOURCE AND ORE  
RESERVE STATEMENT 2010



Mineral Resource and Ore Reserve  
Report **2010**

pure  
gold

# Scope of report

AngloGold Ashanti's Mineral Resource and Ore Reserve are reported in accordance with the minimum standards described by the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2004 Edition), and also conform to the standards set out in the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (the SAMREC Code) 2007 edition.

The Mineral Resource is inclusive of the Ore Reserve component unless otherwise stated. Note also that all Mineral Resources and Ore Reserves listed in this document are attributable unless otherwise stated.

Information is presented either by operating region, country, mine or project. The following tables and graphs are used to illustrate developments across AngloGold Ashanti's operations during 2010:

Mineral Resource and Ore Reserve comparison by region, country, mine and project; development sampling results; details of average drill-hole spacing and type; Exclusive Mineral Resource; Mineral Resource below infrastructure; Mineral Resource and Ore Reserve by-products; year-on-year reconciliation of the Mineral Resource and Ore Reserve; Inferred Mineral Resource in business plan; Ore Reserve modifying factors; grade tonnage information on the Mineral Resource and lists of appointed competent persons. Topics for brief discussion include Regional Overview; Country Overview; Mineral Resource estimation; Ore Reserve estimation; Location; Geology; Exploration and Projects.

This document, the Mineral Resource and Ore Reserve Report 2010, is a key component of the AngloGold Ashanti suite of 2010 annual reports produced to record the company's performance regarding its finances, operations and sustainability activities for the 12 months ended 31 December 2010. Other major documents in this suite of reports are the Annual Financial Statements 2010 and the Sustainability Review 2010, both of which are available on the corporate website, [www.anglogoldashanti.com](http://www.anglogoldashanti.com).

The Annual Financial Statements 2010 contains a summary extract of AngloGold Ashanti's Mineral Resource and Ore Reserve.

*Note: Rounding of figures in this document may result in minor computational discrepancies. Throughout this report, dollar or \$ represents US dollar unless otherwise stated. All grade tonnage graphs in this document are for Mineral Resources.*

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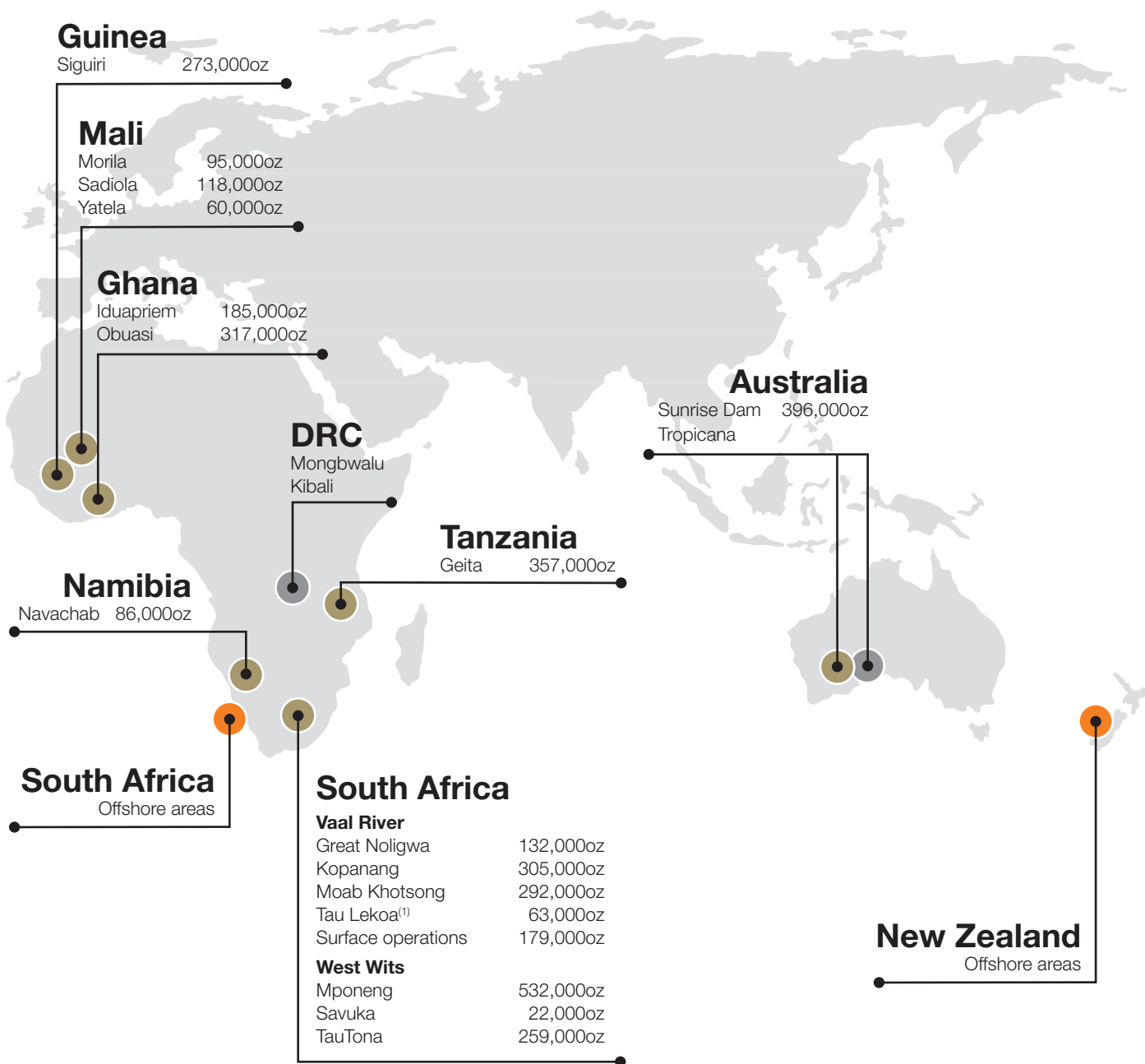
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# Corporate profile

## Locations of operations



- Operations
- Projects
- Marine exploration



<sup>(1)</sup> Sold effective 1 August 2010

# Group overview

## Mineral Resources and Ore Reserves

# underpin growth

Mineral Resources and Ore Reserves are reported in accordance with the minimum standards described by the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2004 Edition), and also conform to the standards set out in the South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (The SAMREC Code, 2007 edition). Mineral Resources are inclusive of the Ore Reserve component unless otherwise stated.

### Mineral Resource

When the 2009 Mineral Resource is restated to exclude the sale of Tau Lekoa (6.2Moz), the Mineral Resource is reduced from 226.7Moz to 220.5Moz. The total Mineral Resource remained steady, dropping slightly from 220.5Moz in 2009 to 220.0Moz in December 2010. A year-on-year increase of 5.8Moz occurred before the subtraction of depletion and a decrease of 0.5Moz after the subtraction of depletion. It should be noted that changes in economic assumptions from 2009 to 2010 resulted in the Mineral Resource increasing by 3.5Moz whilst exploration and modelling resulted in an increase of 0.7Moz. The remaining increase of 1.6Moz resulted from various other factors. Depletions from the Mineral Resource for 2009 totalled 6.3Moz.

The Mineral Resource has been estimated at a gold price of US\$1,100/oz (2009: US\$1,025/oz).

Mineral Resource		Moz
<b>Mineral Resource as at 31 December 2009</b>		<b>226.7</b>
Sale of Tau Lekoa		-6.2
<b>Restated 2009 Mineral Resource</b>		<b>220.5</b>
<b>Reductions</b>		
Great Noligwa	Due to economics and depletion	-2.4
TauTona	Transfers to Mponeng	-1.3
Siguiriri	Revision to modelling procedures and increased costs	-1.0
Other	Total of non-significant changes	-3.6
<b>Additions</b>		
Vaal River Surface	{ An economic study demonstrated that these tailings can be economically reworked to recover uranium	3.0
West Wits Surface		1.3
Other	Total non-significant changes	3.5
<b>Mineral Resource as at 31 December 2010</b>		<b>220.0</b>

\* Rounding of numbers may result in computational discrepancies

## Ore Reserve

When the 2009 Ore Reserve is restated to exclude Tau Lekoa (0.8Moz), the 2009 Ore Reserve is reduced from 71.4Moz to 70.6Moz. Using the restated figure, the AngloGold Ashanti Ore Reserve increased from 70.6Moz in 2009 to 71.2Moz in December 2010. A year-on-year increase of 6.2Moz occurred before the subtraction of 5.6Moz for depletion, resulting in an increase of 0.6Moz after the subtraction of depletion. It should be noted that changes in the economic assumptions from 2009 to 2010 resulted in the Ore Reserve increasing by 2.4Moz while exploration and modelling resulted in a further increase of 3.8Moz.

The Ore Reserve has been estimated using a gold price of US\$850/oz (2009: US\$800/oz).

Ore Reserve		Moz
<b>Ore Reserve as at 31 December 2009</b>		<b>71.4</b>
Sale of Tau Lekoa		-0.8
<b>Restated 2009 Ore Reserve</b>		<b>70.6</b>
<b>Reductions</b>		
Geita	Depletions and model changes	-0.9
Obuasi	Depletions and refinements to Ore Reserve estimation	-0.7
Siguiri	Remodelling in accordance with reconciliation and depletion	-0.7
TauTona	Depletion and transfers to Mponeng, minor model changes	-0.7
Other	Total non-significant changes	-1.2
<b>Additions</b>		
Cripple Creek & Victor	MLE2 project study incorporated	1.4
Mponeng	Successful conversion drilling and minor transfers from TauTona and Savuka <sup>(1)</sup>	1.2
Sadiola	Additions from the Deep Sulphide project	0.8
Other	Total non-significant changes	1.3
<b>Ore Reserve as at 31 December 2010</b>		<b>71.2</b>

\* Rounding of numbers may result in computational discrepancies

<sup>(1)</sup> Some of the Ore Reserves previously reflected against TauTona have now been transferred to Mponeng to facilitate the latter's mine plan



# Group overview

## By-products

Several by-products are recovered as a result of the processing of gold Ore Reserves. These include 21,591t of uranium oxide from the South African operations, 443,761t of sulphur from Brazil and 34.6Moz of silver from Argentina. Details of by-product Mineral Resources and Ore Reserves are provided later in this report.

## External audit of Mineral Resource

During the course of the year and as part of the rolling audit programme, AngloGold Ashanti's 2010 Mineral Resources at the following operations were submitted for external audit by the Australian-based company Quantitative Group (QG):

- |  |                          |
|--|--------------------------|
| • Vaal Reef at Great Noligwa, Kopanang<br>and Moab Khotsoeng mines | • Serra Grande           |
| • Cerro Vanguardia   | • Cripple Creek & Victor |
|  | • Mongbwalu              |

AngloGold Ashanti's 2010 Ore Reserves at the following operations were submitted for external audit by a number of international consulting companies, namely:

- |                            |        |                          |                        |
|----------------------------|--------|--------------------------|------------------------|
| • Geita                    | AMC    | • Cripple Creek & Victor | Pincock Allen and Holt |
| • Obuasi                   | AMC    | • Cerro Vanguardia       | Xstract                |
| • Siguiri                  | AMC    | • Serra Grande           | Xstract                |
| • Sunrise Dam: Underground | Optiro | • AGA Mineração-Cuiabá   | Xstract                |

The company has been informed that the audits identified no material shortcomings in the process by which AngloGold Ashanti's Mineral Resources and Ore Reserves were evaluated. It is the company's intention to continue this process so that each of its operations will be audited, on average, every three years.

## Competent persons

The information in this report relating to Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by the Competent Persons. These individuals are identified in the operational sections of this report. The Competent Persons consent to the inclusion of Exploration Results, Mineral Resource and Ore Reserve information in this report, in the form and context in which it appears.

During the past decade, the company has developed and implemented a rigorous system of internal and external reviews of Exploration Results, Mineral Resources and Ore Reserves. A documented chain of responsibility exists from the Competent Persons at the operations to the company's Mineral Resource and Ore Reserve Steering Committee. Accordingly, the Chairman of the Mineral Resource and Ore Reserve Steering Committee, VA Chamberlain, MSc (Mining Engineering), BSc (Hons) (Geology), MGSSA, MAusIMM, assumes responsibility for the Mineral Resource and Ore Reserve processes for AngloGold Ashanti and is satisfied that the Competent Persons have fulfilled their responsibilities.

### Mineral Resource by country (attributable)

As at 31 December 2010	Category	Tonnes million	Grade g/t	Contained gold	
				Tonnes	Moz
South Africa	Measured	26.51	15.30	405.52	13.04
	Indicated <sup>(1)</sup>	753.04	2.76	2,075.87	66.74
	Inferred	40.82	13.81	563.55	18.12
	<b>Total</b>	<b>820.38</b>	<b>3.71</b>	<b>3,044.94</b>	<b>97.90</b>
Democratic Republic of the Congo	Measured	–	–	–	–
	Indicated	59.67	3.64	217.41	6.99
	Inferred	30.54	3.27	99.94	3.21
	<b>Total</b>	<b>90.21</b>	<b>3.52</b>	<b>317.35</b>	<b>10.20</b>
Ghana	Measured	77.12	4.83	372.49	11.98
	Indicated	83.38	3.82	318.84	10.25
	Inferred	105.26	3.71	390.99	12.57
	<b>Total</b>	<b>265.76</b>	<b>4.07</b>	<b>1,082.33</b>	<b>34.80</b>
Guinea	Measured	43.18	0.65	28.28	0.91
	Indicated	101.78	0.77	78.19	2.51
	Inferred	77.77	0.85	66.11	2.13
	<b>Total</b>	<b>222.73</b>	<b>0.77</b>	<b>172.58</b>	<b>5.55</b>
Mali	Measured	15.52	1.36	21.17	0.68
	Indicated	54.86	1.79	98.07	3.15
	Inferred	19.87	1.66	32.98	1.06
	<b>Total</b>	<b>90.24</b>	<b>1.69</b>	<b>152.22</b>	<b>4.89</b>
Namibia	Measured	23.30	0.86	20.09	0.65
	Indicated	72.57	1.28	92.78	2.98
	Inferred	23.33	1.13	26.41	0.85
	<b>Total</b>	<b>119.20</b>	<b>1.17</b>	<b>139.28</b>	<b>4.48</b>
Tanzania	Measured	–	–	–	–
	Indicated	80.32	3.37	270.88	8.71
	Inferred	21.95	3.62	79.57	2.56
	<b>Total</b>	<b>102.27</b>	<b>3.43</b>	<b>350.46</b>	<b>11.27</b>
Australia	Measured	34.88	1.74	60.55	1.95
	Indicated	35.49	2.85	101.12	3.25
	Inferred	19.84	2.90	57.63	1.85
	<b>Total</b>	<b>90.21</b>	<b>2.43</b>	<b>219.30</b>	<b>7.05</b>
Argentina	Measured	11.12	1.50	16.63	0.53
	Indicated	20.86	3.82	79.69	2.56
	Inferred	10.20	3.19	32.55	1.05
	<b>Total</b>	<b>42.18</b>	<b>3.06</b>	<b>128.87</b>	<b>4.14</b>
Brazil	Measured	11.18	6.39	71.43	2.30
	Indicated	15.60	6.10	95.14	3.06
	Inferred	30.80	6.81	209.73	6.74
	<b>Total</b>	<b>57.57</b>	<b>6.54</b>	<b>376.31</b>	<b>12.10</b>
Colombia	Measured	–	–	–	–
	Indicated	15.78	0.93	14.75	0.47
	Inferred	414.06	0.98	406.06	13.06
	<b>Total</b>	<b>429.85</b>	<b>0.98</b>	<b>420.81</b>	<b>13.53</b>
United States	Measured	283.04	0.78	221.76	7.13
	Indicated	216.53	0.73	157.18	5.05
	Inferred	79.61	0.75	59.66	1.92
	<b>Total</b>	<b>579.18</b>	<b>0.76</b>	<b>438.60</b>	<b>14.10</b>
<b>Total</b>	Measured	525.84	2.32	1,217.92	39.16
	Indicated	1,509.88	2.38	3,599.94	115.74
	Inferred	874.07	2.32	2,025.18	65.11
	<b>Total</b>	<b>2,909.79</b>	<b>2.35</b>	<b>6,843.04</b>	<b>220.01</b>

<sup>(1)</sup> The reduction in grade relative to the Measured and Inferred Mineral Resource is due to the inclusion of 505Mt at 0.28g/t at tailings and rock dump Mineral Resource.

# Group overview

## Exclusive Mineral Resource by country (attributable)

As at 31 December 2010	Category	Tonnes	Grade	Contained gold	
		million	g/t	Tonnes	Moz
South Africa	Measured	15.29	17.73	271.14	8.72
	Indicated	563.41	1.65	927.58	29.82
	Inferred	19.64	18.69	367.04	11.80
	<b>Total</b>	<b>598.34</b>	<b>2.62</b>	<b>1,565.75</b>	<b>50.34</b>
Democratic Republic of the Congo	Measured	–	–	–	–
	Indicated	26.23	2.93	76.72	2.47
	Inferred	30.54	3.27	99.94	3.21
	<b>Total</b>	<b>56.77</b>	<b>3.11</b>	<b>176.66</b>	<b>5.68</b>
Ghana	Measured	29.69	6.96	206.52	6.64
	Indicated	34.46	2.45	84.26	2.71
	Inferred	105.26	3.71	391.01	12.57
	<b>Total</b>	<b>169.41</b>	<b>4.02</b>	<b>681.79</b>	<b>21.92</b>
Guinea	Measured	4.46	0.80	3.59	0.12
	Indicated	34.07	0.77	26.22	0.84
	Inferred	77.77	0.85	66.11	2.13
	<b>Total</b>	<b>116.30</b>	<b>0.82</b>	<b>95.91</b>	<b>3.08</b>
Mali	Measured	4.69	0.75	3.50	0.11
	Indicated	18.27	1.69	30.79	0.99
	Inferred	19.09	1.70	32.37	1.04
	<b>Total</b>	<b>42.05</b>	<b>1.59</b>	<b>66.66</b>	<b>2.14</b>
Namibia	Measured	9.03	0.58	5.24	0.17
	Indicated	42.83	1.11	47.50	1.53
	Inferred	23.33	1.13	26.41	0.85
	<b>Total</b>	<b>75.20</b>	<b>1.05</b>	<b>79.15</b>	<b>2.54</b>
Tanzania	Measured	–	–	–	–
	Indicated	41.62	2.93	121.83	3.92
	Inferred	21.95	3.62	79.57	2.56
	<b>Total</b>	<b>63.57</b>	<b>3.17</b>	<b>201.40</b>	<b>6.48</b>
Australia	Measured	10.83	0.93	10.10	0.32
	Indicated	12.10	2.92	35.29	1.13
	Inferred	19.84	2.90	57.63	1.85
	<b>Total</b>	<b>42.77</b>	<b>2.41</b>	<b>103.02</b>	<b>3.31</b>
Argentina	Measured	1.36	3.61	4.91	0.16
	Indicated	16.70	2.20	36.72	1.18
	Inferred	9.95	2.97	29.56	0.95
	<b>Total</b>	<b>28.01</b>	<b>2.54</b>	<b>71.18</b>	<b>2.29</b>
Brazil	Measured	6.37	6.15	39.19	1.26
	Indicated	8.35	6.10	50.93	1.64
	Inferred	28.08	6.78	190.31	6.12
	<b>Total</b>	<b>42.81</b>	<b>6.55</b>	<b>280.44</b>	<b>9.02</b>
Colombia	Measured	–	–	–	–
	Indicated	15.78	0.93	14.75	0.47
	Inferred	414.06	0.98	406.06	13.06
	<b>Total</b>	<b>429.85</b>	<b>0.98</b>	<b>420.81</b>	<b>13.53</b>
United States	Measured	135.85	0.75	102.38	3.29
	Indicated	137.77	0.71	98.42	3.16
	Inferred	69.52	0.77	53.85	1.73
	<b>Total</b>	<b>343.14</b>	<b>0.74</b>	<b>254.66</b>	<b>8.19</b>
Total	Measured	217.57	2.97	646.57	20.79
	Indicated	951.59	1.63	1,551.01	49.87
	Inferred	839.05	2.15	1,799.86	57.87
	<b>Total</b>	<b>2,008.21</b>	<b>1.99</b>	<b>3,997.44</b>	<b>128.52</b>

### Ore Reserve by country (attributable)

As at 31 December 2010	Category	Tonnes million	Grade g/t	Contained gold	
				Tonnes	Moz
South Africa	Proved	12.03	8.24	99.07	3.19
	Probable <sup>(1)</sup>	191.99	4.41	845.74	27.19
	<b>Total</b>	<b>204.02</b>	<b>4.63</b>	<b>944.81</b>	<b>30.38</b>
Democratic Republic of the Congo	Proved	–	–	–	–
	Probable	33.44	4.21	140.69	4.52
	<b>Total</b>	<b>33.44</b>	<b>4.21</b>	<b>140.69</b>	<b>4.52</b>
Ghana	Proved	44.01	3.13	137.85	4.43
	Probable	49.30	4.41	217.28	6.99
	<b>Total</b>	<b>93.31</b>	<b>3.81</b>	<b>355.13</b>	<b>11.42</b>
Guinea	Proved	39.05	0.62	24.38	0.78
	Probable	67.44	0.74	49.71	1.60
	<b>Total</b>	<b>106.49</b>	<b>0.70</b>	<b>74.08</b>	<b>2.38</b>
Mali	Proved	4.96	2.23	11.03	0.35
	Probable	39.18	1.78	69.82	2.24
	<b>Total</b>	<b>44.14</b>	<b>1.83</b>	<b>80.86</b>	<b>2.60</b>
Namibia	Proved	14.27	1.02	14.49	0.47
	Probable	29.74	1.45	42.99	1.38
	<b>Total</b>	<b>44.01</b>	<b>1.31</b>	<b>57.48</b>	<b>1.85</b>
Tanzania	Proved	–	–	–	–
	Probable	40.92	3.20	131.06	4.21
	<b>Total</b>	<b>40.92</b>	<b>3.20</b>	<b>131.06</b>	<b>4.21</b>
Australia	Proved	24.05	2.10	50.45	1.62
	Probable	23.39	2.81	65.83	2.12
	<b>Total</b>	<b>47.44</b>	<b>2.45</b>	<b>116.28</b>	<b>3.74</b>
Argentina	Proved	9.54	1.22	11.63	0.37
	Probable	8.57	5.32	45.62	1.47
	<b>Total</b>	<b>18.10</b>	<b>3.16</b>	<b>57.25</b>	<b>1.84</b>
Brazil	Proved	6.91	5.80	40.06	1.29
	Probable	7.40	5.26	38.88	1.25
	<b>Total</b>	<b>14.30</b>	<b>5.52</b>	<b>78.94</b>	<b>2.54</b>
United States	Proved	147.19	0.81	119.37	3.84
	Probable	78.76	0.75	58.76	1.89
	<b>Total</b>	<b>225.95</b>	<b>0.79</b>	<b>178.13</b>	<b>5.73</b>
Total	Proved	302.00	1.68	508.32	16.34
	Probable	570.12	2.99	1,706.39	54.86
	<b>Total</b>	<b>872.12</b>	<b>2.54</b>	<b>2,214.71</b>	<b>71.20</b>

<sup>(1)</sup> The reduction in grade relative to the Proved Ore Reserve is due to the inclusion of 111Mt at 0.49g/t at tailings and rock dump Ore Reserve.

# Group overview

## Reconciliation of Mineral Resource

as at 31 December 2010						Au Content (attributable) Moz		
	Previous		Gold			Metho-		Current
	year	Depletion	price	Cost	Exploration	dology	Other	year
<b>South Africa Region</b>								
Great Noligwa	6.941	-0.195	0.270	-2.471	-0.058	0.076	-0.055	4.508
Kopanang	10.036	-0.564	0.032	-0.052	-0.382	–	0.057	9.128
Moab Khotsoeng	20.452	-0.381	0.041	-0.086	0.287	–	–	20.312
Tau Lekoa	6.195	-0.083	–	–	–	–	-6.112	–
Vaal River Surface	1.860	-0.185	–	3.135	-0.010	0.085	–	4.886
Mponeng	49.828	-0.697	0.203	–	-1.435	0.002	1.648	49.549
Savuka	3.843	-0.044	–	-0.002	-0.249	-0.127	-0.331	3.090
TauTona	6.196	-0.304	–	-0.100	0.102	-0.159	-0.852	4.883
West Wits Surface	0.195	-0.007	–	1.342	0.002	0.010	–	1.543
<b>Total</b>	<b>105.546</b>	<b>-2.46</b>	<b>0.546</b>	<b>1.766</b>	<b>-1.743</b>	<b>-0.113</b>	<b>-5.645</b>	<b>97.899</b>
<b>Continental Africa Region</b>								
Kibali	8.889	-0.576	0.740	-0.119	-0.171	-0.414	-0.048	8.299
Mongbwalu	2.098	–	–	–	–	-0.194	–	1.904
Iduapriem	4.601	-0.227	0.721	-0.322	–	0.500	–	5.273
Obuasi	29.525	-0.350	–	–	0.110	0.502	-0.262	29.525
Siguiri	6.588	-0.370	0.300	-0.643	0.035	-0.599	0.236	5.548
Morila	0.331	-0.098	0.010	–	–	0.001	–	0.244
Sadiola	3.755	-0.130	0.483	–	0.562	-0.201	0.002	4.472
Yatela	0.145	-0.071	0.039	–	0.055	0.004	0.006	0.178
Navachab	3.728	-0.132	0.154	-0.116	0.395	0.302	0.147	4.478
Geita	11.449	-0.425	0.535	-0.576	–	0.331	-0.047	11.267
<b>Total</b>	<b>71.109</b>	<b>-2.379</b>	<b>2.982</b>	<b>-1.776</b>	<b>0.986</b>	<b>0.232</b>	<b>0.034</b>	<b>71.188</b>
<b>Australasia Region</b>								
Sunrise Dam	3.618	-0.360	0.044	-0.006	0.016	0.029	0.015	3.356
Tropicana	3.510	–	–	-0.687	1.007	-0.135	–	3.695
<b>Total</b>	<b>7.128</b>	<b>-0.36</b>	<b>0.044</b>	<b>-0.693</b>	<b>1.023</b>	<b>-0.106</b>	<b>0.015</b>	<b>7.051</b>
<b>Americas Region</b>								
Cerro Vanguardia	3.884	-0.188	–	–	0.485	-0.038	–	4.143
AGA Mineração	10.884	-0.405	-0.054	–	0.603	-0.031	0.167	11.165
Serra Grande	1.029	-0.078	–	–	–	-0.018	–	0.933
Gramalote	1.086	–	–	–	–	–	–	1.086
La Colosa	12.317	–	–	–	–	–	0.126	12.443
CC&V	13.738	-0.483	0.721	-0.043	0.337	-0.950	0.781	14.101
<b>Total</b>	<b>42.938</b>	<b>-1.154</b>	<b>0.667</b>	<b>-0.043</b>	<b>1.425</b>	<b>-1.037</b>	<b>1.074</b>	<b>43.871</b>
<b>Grand total</b>	<b>226.721</b>	<b>-6.353</b>	<b>4.239</b>	<b>-0.746</b>	<b>1.691</b>	<b>-1.024</b>	<b>-4.522</b>	<b>220.009</b>

Au Content (attributable) Moz		
Net		
diff	%	Comments
-2.43	-35.05	Decrease due to footprint reduction; movement from the Mineral Resource to Inventory and change in the Mineral Resource cut-off.
-0.90	-9.04	Reclassification of the Mineral Resource; changes in structure; re-evaluation of local and macro estimates; inter-shaft transfers and movement to Inventory.
-0.14	-0.68	The changes are all data driven. New data and changes of estimation parameters resulted in lower values.
-6.19	–	Tau Lekoa was sold to Simmer and Jack Ltd; effective on 1st August 2010.
3.02	162.24	Changes were mainly due to depletions; reinstatement of 3.1Moz from Inventory (due to new extraction method for uranium) and aerial survey updates, additions and grade adjustments.
-0.27	-0.55	Model change on Elsburgs resulted in lowered values; upgrade in WUDLS; upgrade of CLR below 120 to Indicated Mineral Resource; gain due to CLR boundary change between Mponeng, TauTona and Savuka mines.
-0.75	-19.52	Changes mainly due to lower values; depletions; reconciliation adjustment; Mponeng transfers and transfers to Inventory.
-1.31	-21.14	The changes were mainly due to depletions; value changes; geological structure changes; intershaft transfers and inventory changes.
1.34	691.28	Changes were mainly due to depletions; reinstatement of 1.3Moz from Inventory (due to new extraction method for uranium) and aerial survey updates, additions and grade adjustments.
<b>-7.64</b>	<b>-7.24</b>	
-0.58	-6.63	The decrease is due to corrections from old underground workings whilst a change in open pit wireframing methodology caused a loss of Mineral Resource at the KCD pit.
-0.19	-9.24	Infill drilling allowed for an upgrade of confidence.
0.67	14.56	The increase in gold price caused the Mineral Resource open pit shell to expand.
–	–	Decrease due to depletion was offset by exploration and reclassification of Mineral Resource categories.
-1.04	-15.79	Mineral Resource was factored to reflect a change in selectivity and the observed reconciliation.
-0.08	-26.28	Mining activity is restricted to processing of stockpiles.
0.71	19.09	Increase is mainly due to successful exploration programmes in 2010 and the higher gold price used in the optimisations.
0.03	22.76	Increase is mainly due to exploration and the higher gold price.
0.74	20.12	Exploration drilling confirmed the downplunge extension to the vein swarms in the Main and North pits.
-0.18	-1.58	The increase in gold price caused the Mineral Resource open pit shells to expand.
<b>0.07</b>	<b>0.11</b>	
-0.26	-7.24	Changes largely due to depletion, with a small increase in the underground Mineral Resource due to model change. Reduction at Golden Delicious due to reporting within an optimisation shell for the first time.
0.18	5.27	Decrease in open pit due to the use of contract mining costs rather than owner mining costs, and reporting Havana inside pit design rather than shell. Decreases were offset by discovery of Boston Shaker and extensions to Havana Deeps.
<b>-0.07</b>	<b>-1.08</b>	
0.25	6.66	Change due to positive exploration results in 2010 (0.45Moz of gold and 10.4Moz of silver from vein resources).
0.28	2.58	Cuiabá +230,000oz (Serrotinho); Raposos -176,000oz (exclusion of low grade at N10); Morro da Glória +80,000oz (new orebodies) and Lamego +34,000oz (Carruagem).
-0.09	-9.32	Exploration during 2010 resulted in Mineral Resource conversion but no extensions or additions to the current orebodies.
–	–	No additional work was done since the previous year.
0.12	1.02	No additional boreholes have been drilled since the previous year, but gains are due to an additional 1g/t Au envelope and the higher gold price that was used.
0.36	2.64	Additions from exploration and a higher gold price.
<b>0.93</b>	<b>2.17</b>	
<b>-6.71</b>	<b>-2.96</b>	

# Group overview

## Reconciliation of Ore Reserve

as at 31 December 2010					Au Content (attributable) Moz			
	Previous			Model	Change in	New ounces	Scope	Current
	year	Depletion	Other	change	economics	from projects	change	year
<b>South Africa Region</b>								
Great Noligwa	1.601	-0.104	0.144	0.047	-0.388	–	0.114	1.415
Kopanang	3.350	-0.564	–	-0.167	–	–	0.487	3.106
Moab Khotsoeng	7.137	-0.304	-0.008	0.637	–	–	0.028	7.490
Tau Lekoa Reserve	0.798	-0.083	-0.714	–	–	–	–	–
Vaal River Surface	1.737	-0.184	-0.012	0.012	–	–	-0.014	1.539
Mponeng	12.716	-0.538	-0.337	0.063	–	–	2.000	13.904
Savuka	0.688	-0.022	–	–	–	–	–	0.666
TauTona	2.732	-0.331	-0.216	-0.160	–	–	0.030	2.056
West Wits Surface	0.183	-0.007	0.012	0.010	–	–	0.003	0.200
<b>Total</b>	<b>30.942</b>	<b>-2.137</b>	<b>-1.131</b>	<b>0.442</b>	<b>-0.388</b>	<b>0</b>	<b>2.648</b>	<b>30.376</b>
<b>Continental Africa Region</b>								
Kibali Reserve	4.136	–	0.352	-0.141	0.277	–	-0.100	4.523
Iduapriem	2.397	-0.248	0.034	0.030	-0.031	–	0.312	2.494
Obuasi	9.648	-0.576	–	0.312	–	–	-0.461	8.923
Siguiri	3.073	-0.285	-0.015	-0.342	0.008	–	-0.057	2.382
Morila	0.321	-0.098	0.001	–	–	–	–	0.224
Sadiola	1.457	-0.208	0.123	–	-0.010	0.906	0.030	2.298
Yatela	0.044	-0.071	0.105	–	–	–	–	0.078
Navachab	1.625	-0.118	–	-0.033	–	–	0.374	1.848
Geita	5.066	-0.456	-0.043	-0.260	-0.031	–	-0.062	4.214
<b>Total</b>	<b>27.767</b>	<b>-2.06</b>	<b>0.557</b>	<b>-0.434</b>	<b>0.213</b>	<b>0.906</b>	<b>0.036</b>	<b>26.984</b>
<b>Australasia Region</b>								
Sunrise Dam	1.728	-0.391	0.059	0.114	–	–	-0.133	1.377
Tropicana	2.311	–	-0.012	0.043	0.051	–	-0.031	2.361
<b>Total</b>	<b>4.039</b>	<b>-0.391</b>	<b>0.047</b>	<b>0.157</b>	<b>0.051</b>	<b>0</b>	<b>-0.164</b>	<b>3.738</b>
<b>Americas Region</b>								
Cerro Vanguardia	1.879	-0.191	0.013	0.106	–	0.001	0.033	1.841
AGA Mineração	2.179	-0.363	0.264	0.094	-0.019	–	-0.008	2.146
Serra Grande	0.348	-0.079	-0.012	0.137	-0.002	–	–	0.392
CC&V	4.291	-0.483	–	0.050	–	1.869	–	5.727
<b>Total</b>	<b>8.697</b>	<b>-1.116</b>	<b>0.265</b>	<b>0.387</b>	<b>-0.021</b>	<b>1.87</b>	<b>0.025</b>	<b>10.106</b>
<b>Grand total</b>	<b>71.445</b>	<b>-5.704</b>	<b>-0.262</b>	<b>0.552</b>	<b>-0.145</b>	<b>2.776</b>	<b>2.545</b>	<b>71.204</b>

Au Content (attributable) Moz		
Net		
diff	%	Comments
-0.18	-11.62	Reduction as a result of further restructuring of the underground mineable footprint.
-0.24	-7.28	Decrease due to depletions and model changes as a result of new information.
0.35	4.94	Increase due to model changes as a result of new information.
-0.79	–	Tau Lekoa was sold to Simmer and Jack Ltd; effective on 1st August 2010.
-0.19	-11.40	Decrease due to normal depletions.
1.18	9.34	Increase mainly due to inclusion of TauTona ground below 120 level and Savuka areas; upgrade of the Mineral Resource.
-0.02	-3.19	The remainder of the Savuka Ore Reserves are to be mined by Mponeng.
-0.67	-24.74	Decrease due to depletion and transfer of ground to Mponeng.
0.01	9.28	Increase due to additions to the Mponeng marginal ore dump.
<b>-0.56</b>	<b>-1.82</b>	
0.38	9.35	The increase is due to an improved Mineral Resource to Ore Reserve ratio due to a re-design of the underground mining layout by SRK Consulting.
0.09	4.04	Increase due to updates made to the higher-grade Ajopa geological model and well as the geological models for Blocks 7 and 8 South.
-0.72	-7.51	The overall decrease is due to improved integrity of information and refinement of the processes that were used to generate the 2010 Ore Reserve.
-0.69	-22.49	The decrease is due to depletions, geological model changes having a negative impact on grade and significantly higher operating costs.
-0.09	-30.22	The decrease in Ore Reserve is almost entirely due to depletion of the stockpile inventory.
0.84	57.72	Increase due to new Mineral Resource models, economic changes, additions from the Deep Sulphide project and the upgrading of Tambali.
0.03	77.27	Increase is due to favourable economic changes that have more than offset the annual depletion.
0.22	13.72	Increase due to a new Mineral Resource model providing additional resources in the Main and North pits; also due to the outcome of the first phase of an optimisation project which has resulted in a larger pit shell and an increased plant feed schedule.
-0.85	-16.82	Decrease is due to depletion as well as geological model changes which negatively affected the grades within the Nyankanga and Geita Hill pit shells.
<b>-0.78</b>	<b>-2.81</b>	
-0.35	-20.31	Change in mine economics has modified the planned mining method in GQ and Astro from bulk to selective, reducing recoverable ounces by selectivity and sterilisation.
0.05	2.16	Gains due to Mineral Resource model update and the BFS economic assumptions, resulting in cut-off grade changes. These gains were offset by design changes and a small amount of material being removed from the schedule due to negative cash-flow.
<b>-0.30</b>	<b>-7.45</b>	
-0.03	-2.02	No significant changes. Depletion of 0.19Moz was compensated for by 0.11Moz increase due to model change and 0.03Moz of scope change (ounces that were planned for open pit but are now allocated to underground).
-0.03	-1.51	No significant changes. Depletion of 0.36Moz was compensated by 0.26Moz increase due to additional Ore Reserves from Cuiabá.
0.04	12.64	Change due to model changes of 0.14Moz. The new Ore Reserves are from Palmeiras and Pequizão.
1.43	33.47	Added Ore Reserves in 2010 due to the MLE 2 project.
<b>1.40</b>	<b>16.20</b>	
<b>-0.24</b>	<b>-0.33</b>	



# South Africa

Ensuring a  
profitable  
**future**  
for deep-level mining



## Regional overview

AngloGold Ashanti's South Africa operations comprise six deep-level mines and the surface operations. They are:

- The Vaal River operations – Great Noligwa, Kopanang, Moab Khotsong and the surface processing operation. The fourth deep-level mine in this region, Tau Lekoa, was sold during the course of the year.
- The West Wits operations – Mponeng, Savuka and TauTona and a surface processing operation.

Together, these operations produced 1.78Moz of gold in 2010, or 39% of group production, and 1.5Mlbs of uranium as a by-product.

The Mineral Resource in South Africa, attributable to AngloGold Ashanti, totalled 97.90Moz at year-end, including an attributable Ore Reserve of 30.38Moz.

All Mineral Resources and Ore Reserves listed are attributable unless otherwise stated.

### Mineral Resource by region

as at 31 December 2010		Tonnes	Grade	Contained gold	
	Category	million	g/t	Tonnes	Moz
South Africa Region	Measured	26.51	15.30	405.52	13.04
	Indicated <sup>(1)</sup>	753.04	2.76	2,075.87	66.74
	Inferred	40.82	13.81	563.55	18.12
	<b>Total</b>	<b>820.38</b>	<b>3.71</b>	<b>3,044.94</b>	<b>97.90</b>

### Ore Reserve by region

as at 31 December 2010		Tonnes	Grade	Contained gold	
	Category	million	g/t	Tonnes	Moz
South Africa Region	Proved	12.03	8.24	99.07	3.19
	Probable <sup>(2)</sup>	191.99	4.41	845.74	27.19
	<b>Total</b>	<b>204.02</b>	<b>4.63</b>	<b>944.81</b>	<b>30.38</b>

<sup>(1)</sup> The reduction in grade relative to the Measured and Inferred Mineral Resource is due to the inclusion of 505Mt at 0.28g/t at tailings and rock dump Mineral Resource.

<sup>(2)</sup> The reduction in grade relative to the Proved Ore Reserve is due to the inclusion of 111Mt at 0.49g/t at tailings and rock dump Ore Reserve.

# South Africa

## Country overview

The South African operations comprise six underground mines located in two geographical regions on the Witwatersrand Basin called the Vaal River and West Wits operations.

The primary reefs mined by the **Vaal River operations** are the Vaal Reef (VR) and the Ventersdorp Contact Reef (VCR), and the secondary Crystallkop Reef (C Reef).

The **West Wits operations** are situated near the town of Carletonville. The primary reefs mined are the Carbon Leader Reef (CLR) and the VCR.

All six operations are 100% owned by AngloGold Ashanti. In addition, the Vaal River Surface and West Wits Surface operations mine the waste rock dumps and tailings dams which result from the mining and processing of the primary and secondary reef horizons.

## Mineral Resource estimation

A multi-disciplinary approach is adapted to Mineral Resource estimation whereby inputs are required from the geoscience, survey and mine planning departments. A computerised system called the Mineral Resource Inventory System (MRIS) integrates all the input information to produce the final Mineral Resource per operation. Mineral Resource estimates are computed from a composite grid of value estimates, comprising various block sizes. The macro block sizes vary from 210m x 210m to 420m x 420m with micro blocks of 30m x 30m.

Compound lognormal macro co-kriging estimation techniques are used to produce estimates for the larger block sizes. This technique uses the Bayesian approach whereby the assayed (observed) data in the mined-out areas are used to infer the population characteristics of the area ahead of current mining. The geological model forms the basis for this estimation and all surface borehole information from the peripheral areas of the mine lease play a crucial role in determining the geological model boundaries. Simple kriging is used for the 30m block sizes and these estimates are constrained by the weight of the mean.

The Mineral Resource is initially reported as inclusive of the Ore Reserve as they form the basis for the Ore Reserve conversion process. Mineral Resource cut-offs are computed by operation, for each reef horizon. These cut-offs incorporate a profit margin that is relevant to the business plan. Mineral Resource grade tonnage curves are produced for the individual operations, which show the potential of the orebody at different cut-offs. These curves are produced for dimensions equivalent to a practical mining unit for underground operations.

## Ore Reserve estimation

All mine designs are undertaken using the Cadmine® software package and include the delineation of mining or stoping areas for each mining level and section, usually leading from an extension to the existing mining sequence, and the definition of the necessary development layouts. The in situ Mineral Resource is scheduled monthly for the full Life-Of-Mine (LOM) plan. The value estimates for these schedules are derived directly from the MRIS.

Modifying factors are applied to the in situ Mineral Resource to arrive at an Ore Reserve. These factors comprise a dilution factor to accommodate the difference between the mill width and the stoping width as well as the MCF.

### Development sampling results – January to December 2010

Development values represent actual results of sampling, no allowances having been made for adjustments necessary in estimating ore reserves.

Statistics are shown in metric units	Advanced metres	Sampled metres	Ave. channel width (cm)	Sampled gold		Sampled uranium	
South Africa	(total)			Ave. g/t	Ave. cm.g/t	Ave. kg/t	Ave. cm.kg/t
<b>Vaal River</b>							
<b>Great Noligwa</b>							
Vaal Reef	2,432	20	75.0	49.72	3,729	2.43	182.01
<b>Kopanang</b>							
Vaal Reef	24,724	3,132	23.3	55.06	1,283	3.00	70.82
<b>Moab Khotsoeng</b>							
Vaal Reef	20,939	1,806	119.9	27.41	3,287	1.19	142.75
<b>West Wits</b>							
<b>Mponeng</b>							
Ventersdorp Contact Reef	16,636	1,092	58.4	32.02	1,870	–	–
<b>Savuka</b>							
Carbon Leader Reef	315	58	55.8	60.29	3,364	0.67	37.22
<b>TauTona</b>							
Ventersdorp Contact Reef	362	70	173.3	9.26	1,605	0.02	3.91
Carbon Leader Reef	11,584	560	28.5	98.63	2,811	0.89	26.11



# South Africa

## Great Noligwa

### Location

Great Noligwa is located about 15km south-east of the town of Orkney, in the southern part of the Klerksdorp Goldfield. The Great Noligwa mining lease area is about 49km<sup>2</sup> and is constrained to the north by Aurora gold mine, to the east by Buffelsfontein gold mine, to the south by Moab Khotsong gold mine and to the west by Kopanang gold mine.

The economic horizons are exploited between 1,500 and 2,600m below surface through a mining method that gains access to the gold bearing reefs through footwall haulages and return airway development. Cross-cuts are developed every 180m from the haulages to the reef horizon. Raises are then developed on-reef to the level above and the reef is mined out on strike.

### Geology

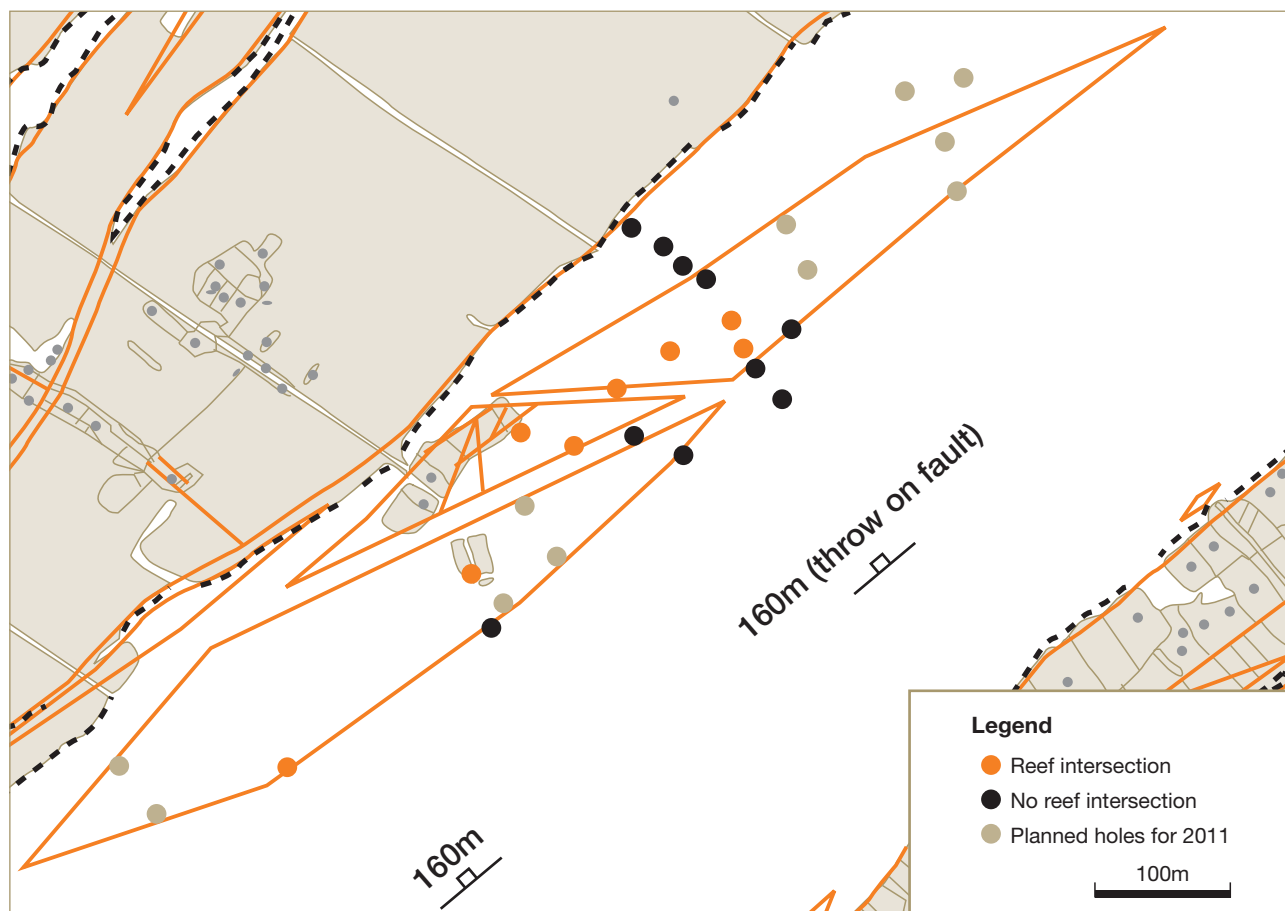
The VR is the principal economic horizon at Great Noligwa and the C Reef is the secondary economic horizon. Both reefs are part of the Witwatersrand Supergroup and are stratigraphically located near the middle of the Central Rand Group. The C Reef forms the top of the Johannesburg Subgroup, while the VR is on average 260 to 270m below the C Reef, but still in the top third of the Johannesburg Subgroup.

The VR unit can reach a maximum thickness of 2m and consists of a thin basal conglomerate (the C facies) and a thicker sequence of upper conglomerates (the A facies). These two sedimentary facies are separated by the B facies, which is a layer of barren orthoquartzites. The A facies is the principal economic horizon within the VR, but remnants of the C facies may be sporadically preserved below the A facies. High gold values in the VR are often associated with high uranium values as well as the presence of carbon at the base of the VR. Uranium is a very important by-product of Great Noligwa.

The C Reef has been mined on a limited scale in the central part of Great Noligwa, where the high-grade north-south orientated channel containing two economic horizons has been exposed. To the east and the west of the channel the C Reef is poorly developed with relatively small areas of economic interest. As in the case of VR, high uranium values are also often associated with high gold values and the presence of a 5mm to 2cm carbon seam at the base of the conglomerate. To the north the C Reef sub-crops against the Gold Estates Conglomerates and in the extreme south of the mine the C Reef has been eliminated by deep Kimberley Erosion Channel and the Jersey fault.

### Projects

Drilling is ongoing in a fault zone containing remnant blocks of VR. This ground is situated in the eastern part of the mining lease area and is referred to as the Fish Block. The reef blocks are situated in a high-grade geozone within the Zuiping A fault loss area. During the year a total of 15 boreholes were drilled (1,041m) from which six reef intersections were achieved. A total of 1,620m of diamond drilling is planned for 2011 to increase the geological confidence in the proposed mining area and to test for upside potential in the north-east of the project area.



Reef blocks in Zuiping "A" fault

## Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Great Noligwa	Category	million	g/t	Tonnes	Moz
Crystalkop Reef	Measured	1.90	7.69	14.60	0.47
	Indicated	2.72	10.28	27.96	0.90
	Inferred	0.60	10.15	6.07	0.20
	<b>Total</b>	<b>5.22</b>	<b>9.32</b>	<b>48.64</b>	<b>1.56</b>
Vaal Reef	Measured	4.54	15.09	68.54	2.20
	Indicated	1.28	15.00	19.23	0.62
	Inferred	0.30	12.66	3.80	0.12
	<b>Total</b>	<b>6.12</b>	<b>14.95</b>	<b>91.57</b>	<b>2.94</b>
<b>Great Noligwa</b>	<b>Total</b>	<b>11.34</b>	<b>12.36</b>	<b>140.20</b>	<b>4.51</b>

# South Africa

## Great Noligwa

### Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	RC	hole	Other	
Great Noligwa	Measured	5 x 5	–	–	–	✓	Chip sampling
	Indicated	100 x 100	✓	–	–	–	Diamond drilling
	Inferred	200 x 200	✓	–	–	–	Diamond drilling
	Grade control	–	–	–	–	✓	See Measured category

### Exclusive Mineral Resource

The Exclusive Mineral Resource for the Measured category of VR is 1.2Mt at a grade of 20.86g/t. The Indicated Mineral Resource is 0.4Mt at a grade of 17.41g/t and the Inferred Mineral Resource is 0.15Mt at a grade of 14.17g/t.

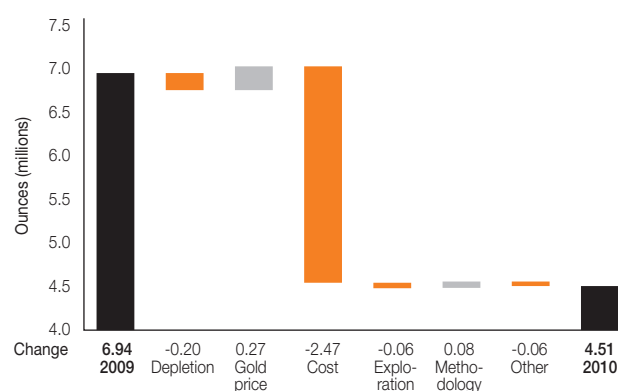
The Exclusive Mineral Resource for the Measured category of the C Reef is 1.2Mt at a grade of 7.11g/t. The Indicated Mineral Resource is 1.7Mt at a grade of 10.78 g/t. No Inferred category was classified in the Exclusive Mineral Resource.

Both the VR and C Reef Exclusive Mineral Resource are from areas located beyond the window of opportunity and beyond mine infrastructure. 62% of the total Exclusive Mineral Resource tonnes are from the C Reef horizon and 38% from the VR horizon.

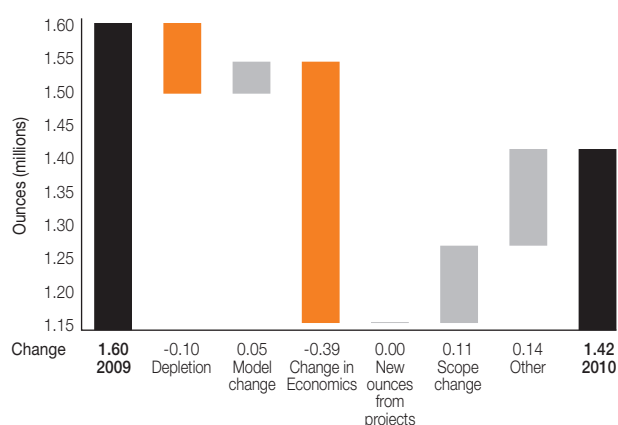
### Exclusive Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Great Noligwa	Category	million	g/t	Tonnes	Moz
	Measured	2.42	14.08	34.00	1.09
	Indicated	2.20	12.13	26.69	0.86
	Inferred	0.15	14.17	2.13	0.07
Great Noligwa	Total	4.77	13.18	62.82	2.02

### Great Noligwa: Mineral Resource reconciliation 2009 vs 2010



### Great Noligwa: Ore Reserve reconciliation 2009 vs 2010



## Ore Reserve

as at 31 December 2010		Tonnes	Grade	Contained gold	
Great Noligwa	Category	million	g/t	Tonnes	Moz
Crystalkop Reef	Proved	0.71	5.48	3.88	0.12
	Probable	0.96	5.93	5.72	0.18
	<b>Total</b>	<b>1.67</b>	<b>5.74</b>	<b>9.60</b>	<b>0.31</b>
Vaal Reef	Proved	3.32	8.19	27.18	0.87
	Probable	0.83	8.66	7.23	0.23
	<b>Total</b>	<b>4.15</b>	<b>8.29</b>	<b>34.41</b>	<b>1.11</b>
<b>Great Noligwa</b>	<b>Total</b>	<b>5.83</b>	<b>7.55</b>	<b>44.01</b>	<b>1.41</b>

## Inferred Mineral Resource in business plan

Some Inferred Mineral Resource was included in the optimisation process. The Inferred Mineral Resource for the VR is estimated at 0.3Mt at 12.66g/t. For the C Reef it is estimated at 0.6Mt at a grade of 10.15g/t. The Mineral Resource is scattered throughout the mine in the form of pillars left behind by previous mining extraction as well as pillars within the major fault loss zones.

## Inferred Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold		Comments
Great Noligwa		million	g/t	Tonnes	Moz	
Vaal Reef		0.15	7.05	1.06	0.03	Included in business plan but not published as Ore Reserve
<b>Total</b>		<b>0.15</b>	<b>7.05</b>	<b>1.06</b>	<b>0.03</b>	

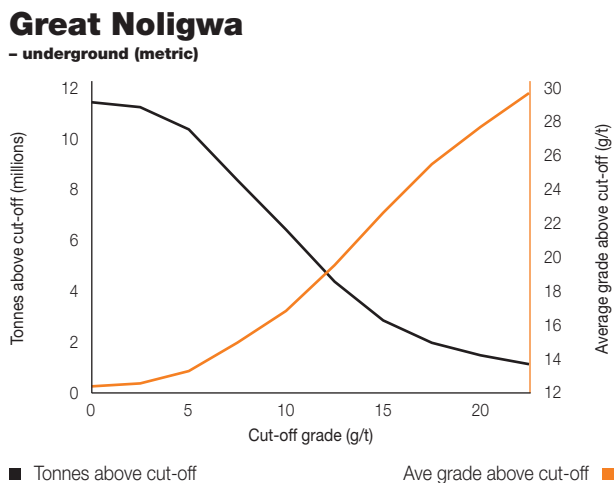
## Ore Reserve modifying factors

as at 31 December 2010		Ex-	Cut-off	Cut-off	Stoping			
Great Noligwa	Gold	change	value	value	width	Dilution	MCF%	MetRF%
Mine	price	rate	g/t Au	cmg/t Au	(cm)	(%)		
	850	8.71	11.13	1,800	161.7	52	63.20	95.99



# South Africa

Great Noligwa



## Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Geo Steyn	SACNASP	400312/05	10 years
Ore Reserve	Andre Kruger	PLATO	PMS0114	33 years



# South Africa

## Kopanang

### Location

Kopanang is located in the Orange Free State province, approximately 170km south-west of Johannesburg and 10km south-east of the town of Orkney. The mine has been in production since 1984 and was originally known as Vaal Reef 9 Shaft. Kopanang's current mine lease incorporates an area of 35km<sup>2</sup>, directly west of neighbouring Great Noligwa mine and bound to the south by the Jersey Fault. Dolomites of the Transvaal Supergroup outcrop on surface, resulting in a very subdued topography with very few rock exposures.

### Geology

Gold and uranium-bearing conglomerates of the Central Rand Group are mined at Kopanang, the most important of which is the VR. Gold is the primary commodity at Kopanang, with uranium oxide being extracted as a by-product. The economic VR and C Reef conglomerates are exposed via a twin-shaft system that reaches a depth of 2,340m. The VR is exploited at depths ranging from 1,300 to 2,600m below surface. Kopanang almost exclusively mines the VR, although minor amounts of gold are also extracted from the C Reef, which is stratigraphically about 250m above the VR. The VR and C Reef generally dip towards the south-east at between 10° and 30°.

The VR is a medium to high-grade reef consisting of a basal conglomerate called the Stilfontein Reef, occasionally overlying remnant Grootdraai conglomerate units, with an overlying Upper Vaal unit. Current terminology separates the reef into A, B and C facies, where the C facies is the basal Stilfontein and/or Grootdraai conglomerates.

The overlying Upper Vaal or A facies is split into three distinct sub facies; the VR A Bottom, Middle and Top, which consist of a series of small pebble conglomerates and grits containing very little gold. Further to the east at Great Noligwa, the A facies becomes more robust, is better developed and displays high gold values.

The B facies is simply a fine-grained, cross bedded, light grey, black speckled orthoquartzite that separates the A and C facies.

The basal C facies conglomerate of the VR is the main gold carrier on Kopanang. It varies very little in thickness, with 7 to 10cm being typical. The conglomerate comprises mostly quartz (92-98%) and chert (2-8%), with occasional porphyry clasts (<2%). The matrix is generally very pyritic and the base is non-channelised, often containing a well developed carbon seam.

The C Reef contains two economic conglomerates, although the lower-most conglomerate is only preserved as small remnants. Gold concentrations are typically associated with a basal carbon seam. The C Reef sub-crops in the north against the Gold Estates member of the Kimberley Formation. To the south of this unconformity, the reef can be eliminated by either the Kimberley erosion channels or bedding parallel faulting.



# South Africa

## Kopanang

Kopanang is situated in a structurally complex area of the Witwatersrand Basin, which has been subjected to numerous tectonic events. The complexity of the faulting at Kopanang became evident during initial surface diamond borehole drilling. Prior to 1970, 12 surface boreholes had been drilled on the farm Pretoriuskraal 53 and only five of these intersected the VR, the rest had been faulted out. Approximately 20% of the ground in the mine lease area has been eliminated due to the presence of faulting. At least nine structural events, of differing ages, are thought to have affected the reef at Kopanang. The interaction of the resultant geological structures can be very complicated since many of these faults have been reactivated at latter stages, or been active over long periods of time. The tectonic time frame ranges from late Archaean to Cretaceous and therefore involves some 2.7 billion years of structural deformation.

## Exploration

The exploration at Kopanang is focussed around target blocks that will be explored from underground drilling. The VR target blocks are situated in the shaft fault area and the ground below 68 level. Additional to this ground, the western portion of the mine lease (Gencor 1E area) forms a potential mineable area and is being explored by a combination of exploration drilling and underground development.

## Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Kopanang	Category	million	g/t	Tonnes	Moz
Crystalkop Reef	Measured	0.07	12.18	0.87	0.03
	Indicated	0.41	12.13	5.00	0.16
	Inferred	0.89	13.75	12.18	0.39
	<b>Total</b>	<b>1.37</b>	<b>13.18</b>	<b>18.06</b>	<b>0.58</b>
Vaal Reef EDOM	Measured	0.18	11.66	2.06	0.07
	Indicated	1.36	12.20	16.62	0.53
	Inferred	0.15	9.31	1.41	0.05
	<b>Total</b>	<b>1.69</b>	<b>11.89</b>	<b>20.08</b>	<b>0.65</b>
Vaal Reef Base	Measured	3.15	16.02	50.53	1.62
	Indicated	16.79	10.97	184.13	5.92
	Inferred	1.09	10.18	11.11	0.36
	<b>Total</b>	<b>21.03</b>	<b>11.68</b>	<b>245.77</b>	<b>7.90</b>
<b>Kopanang</b>	<b>Total</b>	<b>24.09</b>	<b>11.78</b>	<b>283.90</b>	<b>9.13</b>

## Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	Blast- RC	hole	Other	
Kopanang	Measured	5 x 5	–	–	–	✓	Chip sampling
	Indicated	200 x 200	✓	–	–	–	GBH drilling
	Inferred	1,000 x 1,000	✓	–	–	–	Surface boreholes
	Grade control	–	–	–	–	✓	See Measured category

## Exclusive Mineral Resource

Approximately 47% of the Exclusive Mineral Resource is expected to be taken up in safety and remnant pillars, areas beyond the window of opportunity and areas beyond infrastructure.

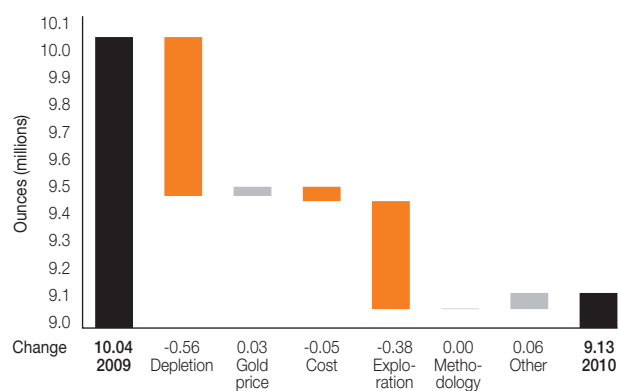
### Exclusive Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Kopanang	Category	million	g/t	Tonnes	Moz
	Measured	2.48	15.88	39.34	1.26
	Indicated	8.60	9.32	80.17	2.58
	Inferred	1.75	11.45	20.05	0.64
<b>Kopanang</b>	<b>Total</b>	<b>12.83</b>	<b>10.87</b>	<b>139.56</b>	<b>4.49</b>

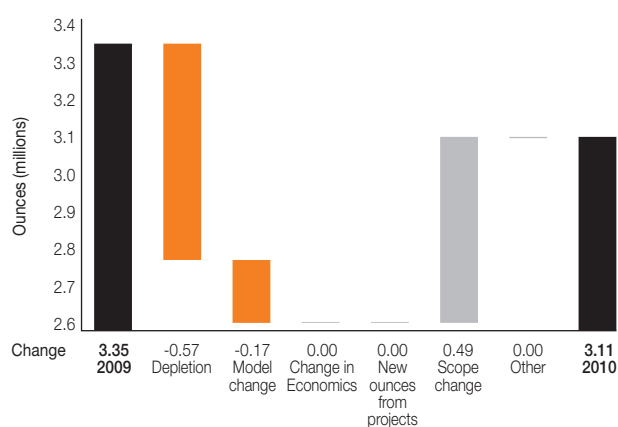
### Mineral Resource below infrastructure

as at 31 December 2010		Tonnes	Grade	Contained gold	
Kopanang	Category	million	g/t	Tonnes	Moz
	Measured	0.02	7.77	0.17	0.01
	Indicated	0.25	14.73	3.68	0.12
	Inferred	0.26	12.03	3.15	0.10
<b>Kopanang</b>	<b>Total</b>	<b>0.53</b>	<b>13.13</b>	<b>7.00</b>	<b>0.23</b>

### Kopanang: Mineral Resource reconciliation 2009 vs 2010



### Kopanang: Ore Reserve reconciliation 2009 vs 2010



# South Africa

## Kopanang

### Ore Reserve

as at 31 December 2010		Tonnes	Grade	Contained gold	
Kopanang	Category	million	g/t	Tonnes	Moz
Crystalkop Reef	Proved	0.02	5.66	0.09	–
	Probable	0.33	6.98	2.29	0.07
	<b>Total</b>	<b>0.34</b>	<b>6.92</b>	<b>2.38</b>	<b>0.08</b>
Vaal Reef EDOM	Proved	0.07	6.32	0.43	0.01
	Probable	1.51	5.39	8.14	0.26
	<b>Total</b>	<b>1.58</b>	<b>5.43</b>	<b>8.57</b>	<b>0.28</b>
Vaal Reef Base	Proved	1.16	8.00	9.24	0.30
	Probable	11.51	6.64	76.41	2.46
	<b>Total</b>	<b>12.67</b>	<b>6.76</b>	<b>85.65</b>	<b>2.75</b>
<b>Kopanang</b>	<b>Total</b>	<b>14.59</b>	<b>6.62</b>	<b>96.61</b>	<b>3.11</b>

### Inferred Mineral Resource in business plan

Some Inferred Mineral Resources were included in the business plan during the optimisation process. The Inferred Mineral Resource for VR is estimated at 1.3Mt at 11.40g/t and the C Reef is estimated at 0.9Mt at 14.20g/t. The Inferred Mineral Resource consist mainly of the outer perimeters of the mining lease area, plus pillars left behind by previous mining extraction as well as pillars within major fault loss zones. The table below indicates the Inferred Mineral Resource included in the business plan but not published as part of the Ore Reserve.

### Inferred Mineral Resource

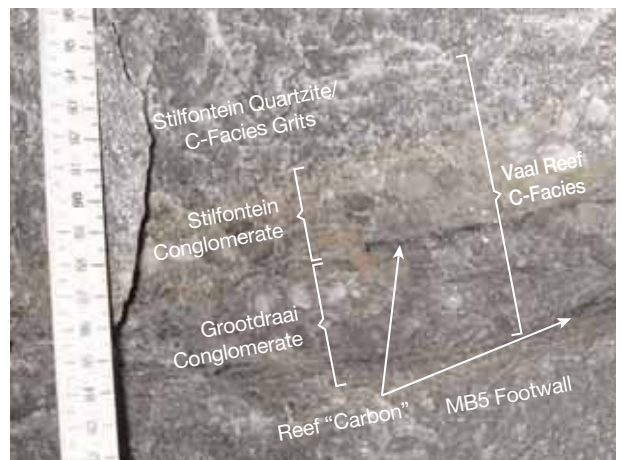
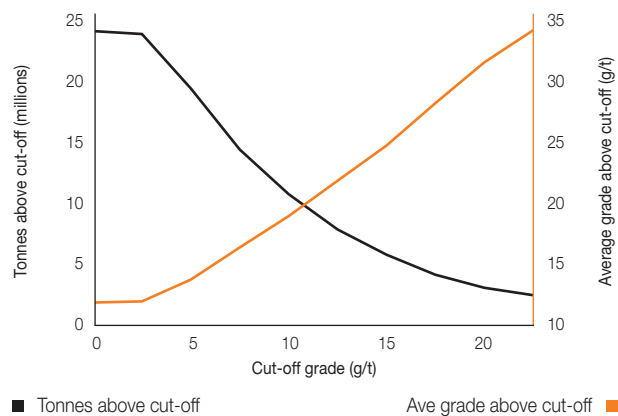
as at 31 December 2010	Tonnes	Grade	Contained gold	
Kopanang	million	g/t	Tonnes	Moz
Crystalkop Reef	0.19	11.51	2.23	0.07
Vaal Reef EDOM	0.10	7.02	0.68	0.02
Vaal Reef Base	0.31	7.79	2.42	0.08
<b>Total</b>	<b>0.60</b>	<b>8.86</b>	<b>5.32</b>	<b>0.17</b>

### Ore Reserve modifying factors

as at 31 December 2010	Ex-	Cut-off	Cut-off	Stoping				
Kopanang	Gold	change	value	value	width	Dilution		
	price	rate	g/t Au	cmg/t Au	(cm)	(%)	MCF%	MetRF%
Crystalkop Reef	850	8.71	4.81	500	104.0	51	69.15	95.55
Vaal Reef	850	8.71	4.81	500	104.0	48	69.15	95.55



## Kopanang – underground (metric)



## Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Brenda Freese	GSSA	966602	13 years
Ore Reserve	Andre Johnson	SACNASP	400011/06	21 years



# South Africa

## Moab Khotsong

### Location

Moab Khotsong is the newest deep level gold mine in South Africa. It is situated near the towns of Orkney and Klerksdorp and is about 180km south-west of Johannesburg.

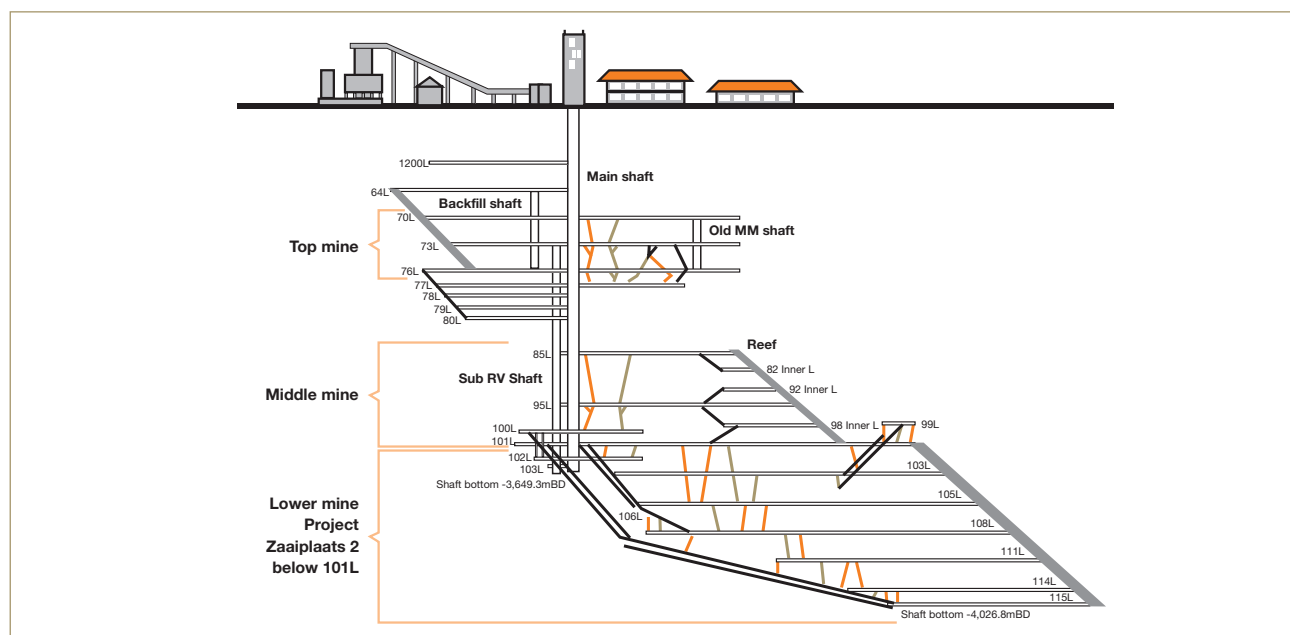
Following the successful exploration of the VR in the Moab Khotsong lease area, which lies to the south and is contiguous with the Great Norigwa lease area, a decision was taken in late 1989 to exploit the Moab Khotsong Mineral Resource. Shaft sinking started in 1991 and the first gold was produced in October 2003.

The AngloGold Ashanti Board approved the Moab Khotsong Project in its revised form in April 2003. The middle mine consists of a main shaft system and a sub vertical shaft system which are utilised to exploit the VR to depths between 2,600 and 3,054m below surface on the downthrown side of the Die Hoek and Jersey fault complex. A feasibility study of the lower mine (Zaaiplaats) was recently completed. The project will exploit the gold bearing VR to depths of 3,455m below collar. The main shaft was commissioned in June 2002 and the rock ventilation shaft in March 2003. Ore Reserve development on 85, 88, 92, 95, 98 and 101 levels is progressing to plan. Stopping operations commenced in November 2003 and the mine will reach full production in 2013.

### Geology

The Mineral Resource at Moab Khotsong is structurally complex and highly faulted, with large fault-loss areas. Mining is based on a scattered mining method with an integrated backfill support system combined with bracket pillars. The raise lines are spaced 200m apart on the dip of the reef, with 25m-long panels. Backfill is carried to within 4m of the advancing stope faces and 75% of the total area extracted is likely to be backfilled.

The geological setting of Moab Khotsong is one of crustal extension, bounded in the north-west and south-east by major south-dipping fault systems with north-dipping Zuiping faults sandwiched between them. The Die Hoek and Buffels East faults structurally bound the reef blocks of the Moab middle mine to the north-west and south-east respectively. The northern boundary is a Zuiping-type fault. The southern boundary fault of the Moab middle mine is currently not defined.



Moab Khotsong  
Schematic diagram

Due to the magnitude of the displacement across the Die Hoek fault (more than 700m down to the south) geological structures encountered on the up-thrown side of the fault cannot be projected to the down-thrown side and vice versa. It is only once the development is through the Die Hoek fault that geological mappings have any bearing on the reef blocks, and a considerable amount of exploration drilling is required to accurately delineate these blocks in this structurally complex area.

The C Reef is preserved in the northern part of the mine where the reef has been intersected by a number of boreholes. No development or stoping has taken place on the C Reef at Moab Khotsong to date.

## Projects

The initial investment and development of Moab Khotsong was, in part, taken with a view that the new mine would be well-positioned to exploit additional surrounding ore blocks. The most important of these blocks will be the Zaaipplaats block, positioned to the south-west of the current Moab Khotsong infrastructure, and extending some 400m deeper than the existing mine. The Moab Khotsong business plan, without growth projects, is expected to produce some 3Moz of gold until 2022, when the mine is scheduled to close. The Zaaipplaats project will provide an additional 5Moz, a life extension of some 13 years, and the opportunity to bring in additional blocks will that rely on the new project infrastructure to be explored and accessed.

Project study work exploiting the Zaaipplaats block began in 2003, and in 2006, the study was successfully taken through the scoping and pre-feasibility phases. In 2007 strategic intent was obtained and Ore Reserves were published on the back of a comprehensive pre-feasibility study. The subsequent feasibility study was completed by the end of 2008 and showed competitive returns. The renewed success of the study was largely as a result of a much healthier gold price environment and outlook, and incorporated several technical changes, one being flatter declines that will be excavated by means of trackless machinery.



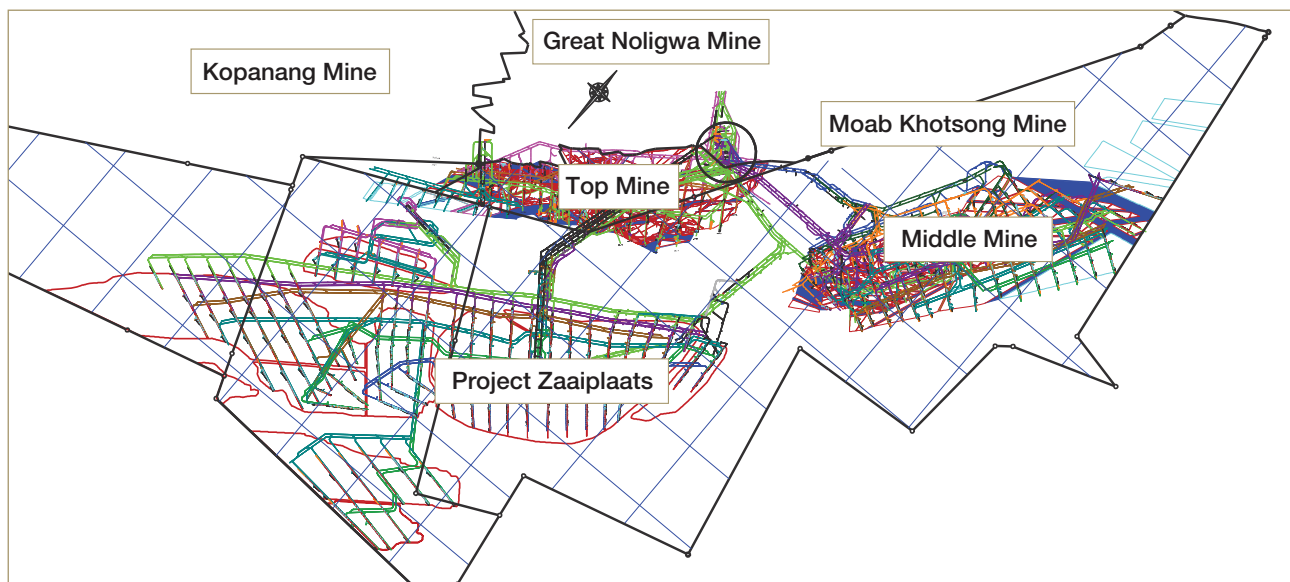


# South Africa

## Moab Khotsong

An important issue was encountered whilst developing the current Moab Khotsong middle mine, where the intersection of complex geological structures had a significant impact on the location of infrastructure, safety, production and cost performance of the mine. Accordingly, work on the project was slowed until a higher level of confidence in the geological structural setting for Moab Khotsong and Zaaipplaats was in place.

As operations at Moab Khotsong stabilised, it was considered appropriate to start the process of developing the Zaaipplaats opportunity with a modified approach of pre-development that will facilitate drilling platforms for the gathering of orebody and structural information, together with the possibility of earlier gold production given the drilling outcomes expected. This pre-development also retains the option to fundamentally change the orebody extraction approach through technology.



**Moab Khotsong**  
*The Zaaipplaats orebody*

## Exploration

Brownfields exploration is currently focussed on improving confidence in the geological model. Four surface drilling machines, targeting the Zaaipplaats Mineral Resource, and four long inclined borehole (LIB) machines, targeting middle mine Mineral Resource blocks, were in operation during 2010. The areas targeted by the four surface machines were on the periphery of the proposed Zaaipplaats mining area, where multiple structures define the ore block margins.

Borehole MZA9 was intended to raise the confidence of an Inferred Mineral Resource block in the north-east portion of the Zaaipplaats project area and also to confirm the structure between the middle and lower mines. This hole was stopped when a preferable underground drilling option became available. In the north-west of the main Zaaipplaats block, borehole MMB5 successfully intersected the VR target and deflection drilling is in progress. Further to the west, borehole MGR8 also successfully intersected the VR and has moved on to deflection drilling. The long deflection of MGR6 is in progress to increase the structural confidence along the southern margin of Zaaipplaats.

The four LIB machines, deployed in the middle mine to obtain structural information on both the VR and C Reef horizons, completed 15 boreholes and three deflections during the year. Thirteen VR intersections, four VR elimination faults and two C Reef elimination faults were obtained.

## Mineral Resource

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Moab Khotsonq	Category			Tonnes	Moz
C Reef – Middle mine area	Measured	–	–	–	–
	Indicated	0.02	8.21	0.20	0.01
	Inferred	0.96	9.84	9.45	0.30
	<b>Total</b>	<b>0.99</b>	<b>9.80</b>	<b>9.66</b>	<b>0.31</b>
VR – GNM shaft pillar area	Measured	0.11	16.95	1.83	0.06
	Indicated	1.50	16.15	24.16	0.78
	Inferred	–	–	–	–
	<b>Total</b>	<b>1.60</b>	<b>16.20</b>	<b>25.98</b>	<b>0.84</b>
VR – Top mine area	Measured	1.01	25.36	25.71	0.83
	Indicated	0.75	19.91	14.86	0.48
	Inferred	0.11	14.28	1.63	0.05
	<b>Total</b>	<b>1.87</b>	<b>22.51</b>	<b>42.20</b>	<b>1.36</b>
VR – Middle mine area	Measured	1.17	17.56	20.54	0.66
	Indicated	4.36	30.55	133.22	4.28
	Inferred	1.80	27.02	48.64	1.56
	<b>Total</b>	<b>7.33</b>	<b>27.61</b>	<b>202.40</b>	<b>6.51</b>
Lower mine – Area A	Measured	–	–	–	–
	Indicated	0.15	23.42	3.57	0.11
	Inferred	1.00	22.95	22.93	0.74
	<b>Total</b>	<b>1.15</b>	<b>23.01</b>	<b>26.50</b>	<b>0.85</b>
Lower mine – Area B	Measured	–	–	–	–
	Indicated	2.20	11.68	25.72	0.83
	Inferred	1.01	12.60	12.75	0.41
	<b>Total</b>	<b>3.21</b>	<b>11.97</b>	<b>38.47</b>	<b>1.24</b>
Lower mine – Area C	Measured	–	–	–	–
	Indicated	0.12	8.92	1.06	0.03
	Inferred	2.10	11.55	24.21	0.78
	<b>Total</b>	<b>2.21</b>	<b>11.41</b>	<b>25.27</b>	<b>0.81</b>
Lower mine – Area PZ 2	Measured	–	–	–	–
	Indicated	8.30	23.10	191.76	6.17
	Inferred	2.88	24.12	69.54	2.24
	<b>Total</b>	<b>11.18</b>	<b>23.36</b>	<b>261.30</b>	<b>8.40</b>
<b>Moab Khotsonq</b>	<b>Total</b>	<b>29.56</b>	<b>21.37</b>	<b>631.78</b>	<b>20.31</b>

# South Africa

Moab Khotsong

## Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	RC	Blast-hole	Other	
Moab Khotsong	Measured	5 x 5	–	–	–	✓	Chip sampling
	Indicated	200 x 200	✓	–	–	–	GBH drilling
	Inferred	1,000 x 1,000	✓	–	–	–	Surface boreholes
	Grade control	–	–	–	–	–	See Measured category

## Exclusive Mineral Resource

The Exclusive Mineral Resource consists of designed rock engineering bracket pillars, designed dip pillars and the Great Noligwa shaft pillar on the VR. The major portion (59%) of this Exclusive Mineral Resource is situated in the lower mine area, with minor amounts in the top mine (7%), middle mine (29%), C Reef (2%) and shaft pillar (4%) areas. The bracket pillars are designed for safety reasons and will therefore not be mined, whereas the shaft pillars can only be safely extracted at the end of the mine life.

## Exclusive Mineral Resource

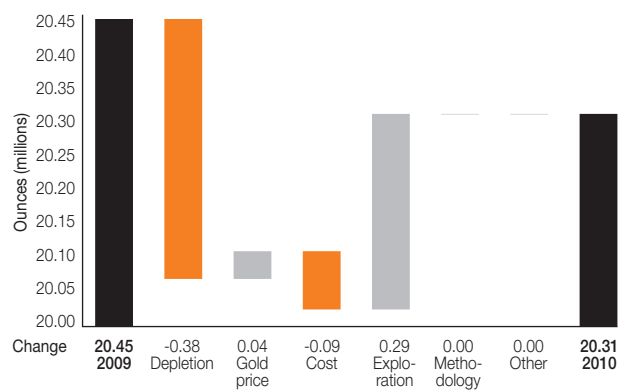
as at 31 December 2010		Tonnes	Grade	Contained gold	
Moab Khotsong	Category	million	g/t	Tonnes	Moz
	Measured	0.45	51.14	22.97	0.74
	Indicated	4.37	19.63	85.70	2.76
	Inferred	9.87	19.17	189.16	6.08
Moab Khotsong	Total	14.68	20.29	297.82	9.58



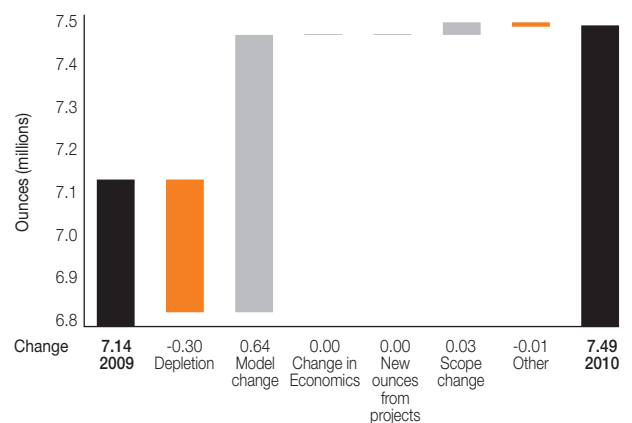
## Mineral Resource below infrastructure

as at 31 December 2010		Tonnes	Grade	Contained gold	
Moab Khotsong	Category	million	g/t	Tonnes	Moz
	Measured	–	–	–	–
	Indicated	10.95	20.70	226.62	7.29
	Inferred	8.50	20.52	174.41	5.61
<b>Moab Khotsong</b>	<b>Total</b>	<b>19.45</b>	<b>20.62</b>	<b>401.04</b>	<b>12.89</b>

**Moab Khotsong: Mineral Resource reconciliation**  
2009 vs 2010



**Moab Khotsong: Ore Reserve reconciliation**  
2009 vs 2010



## Ore Reserve

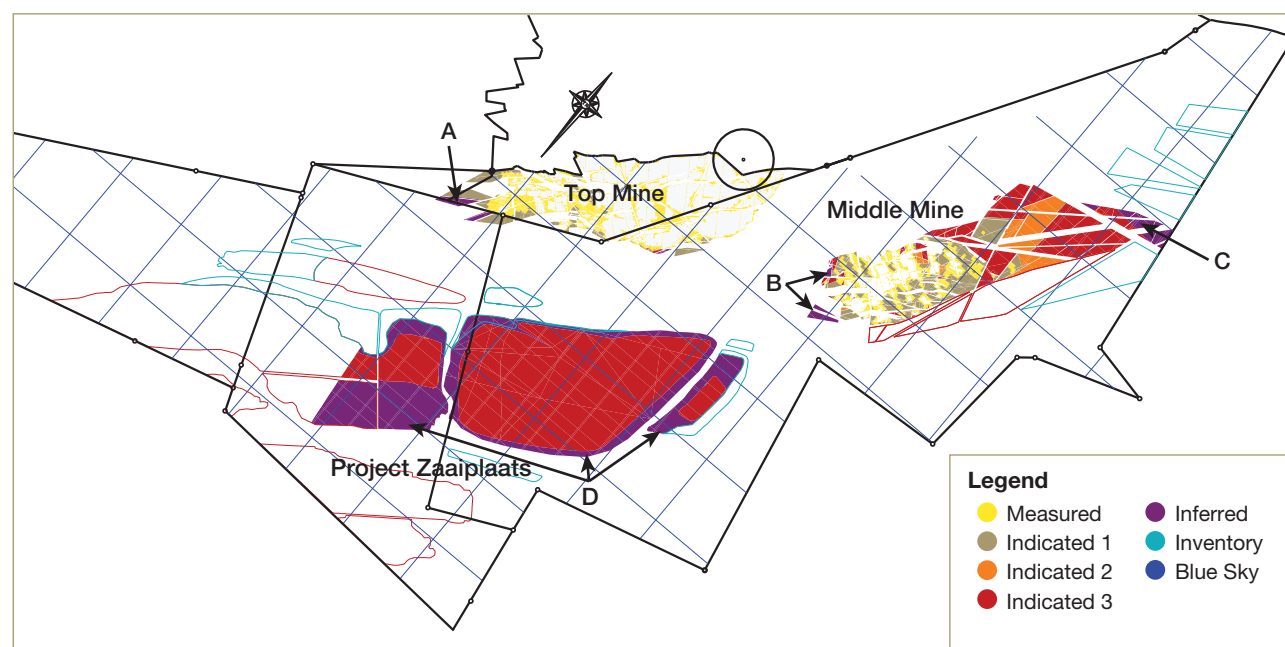
as at 31 December 2010		Tonnes	Grade	Contained gold	
Moab Khotsong	Category	million	g/t	Tonnes	Moz
VR – Top mine area	Proved	0.97	11.44	11.10	0.36
	Probable	0.75	8.92	6.70	0.22
	<b>Total</b>	<b>1.72</b>	<b>10.34</b>	<b>17.80</b>	<b>0.57</b>
VR – Middle mine area	Proved	0.87	9.36	8.16	0.26
	Probable	5.69	13.46	76.55	2.46
	<b>Total</b>	<b>6.56</b>	<b>12.91</b>	<b>84.71</b>	<b>2.72</b>
Lower mine – Area PZ 2	Proved	–	–	–	–
	Probable	10.40	12.54	130.46	4.19
	<b>Total</b>	<b>10.40</b>	<b>12.54</b>	<b>130.46</b>	<b>4.19</b>
<b>Moab Khotsong</b>	<b>Total</b>	<b>18.69</b>	<b>12.47</b>	<b>232.97</b>	<b>7.49</b>

# South Africa

Moab Khotsong

## Inferred Mineral Resource in business plan

The Inferred Mineral Resource was used for optimisation purposes as it forms part of the business plan, but is excluded from the published Ore Reserve. The location and amount of this material are indicated in the following diagram and table respectively.



Moab Khotsong  
Inferred Mineral Resource within Ore Reserve design

## Inferred Mineral Resource

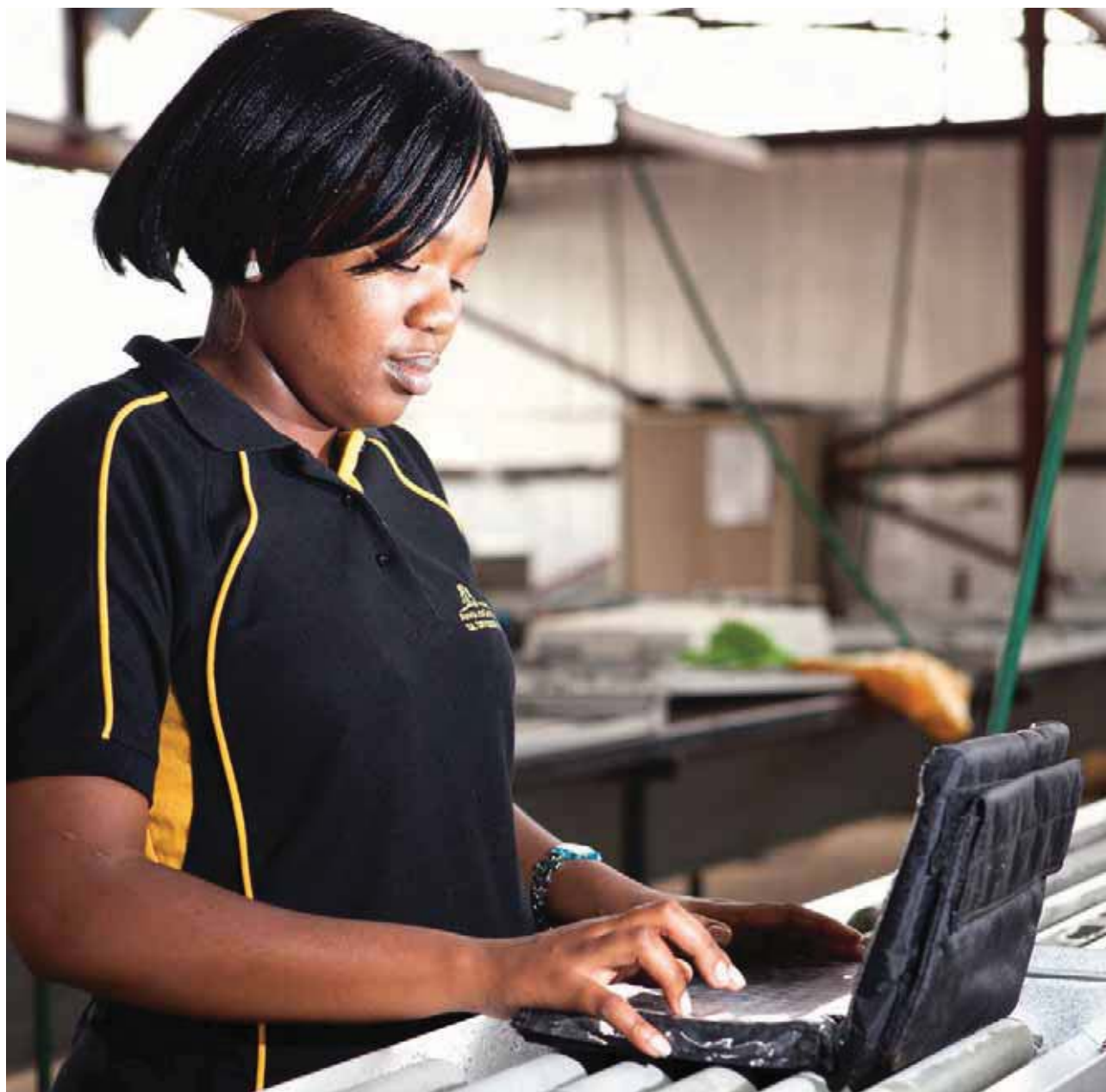
as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Moab Khotsong	Locality code			Tonnes	Moz
Top mine	A	0.07	12.04	0.84	0.03
Middle mine (Southwest)	B	0.07	11.43	0.81	0.03
Middle mine (Northeast)	C	0.24	16.98	4.15	0.13
Project Zaaipplaats	D	2.74	23.82	65.36	2.10
<b>Moab Khotsong</b>	<b>Total</b>	<b>3.13</b>	<b>22.74</b>	<b>71.16</b>	<b>2.29</b>

## Ore Reserve below infrastructure

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Moab Khotsong	Category			Tonnes	Moz
	Proved	–	–	–	–
	Probable	10.40	12.54	130.46	4.19
<b>Moab Khotsong</b>	<b>Total</b>	<b>10.40</b>	<b>12.54</b>	<b>130.46</b>	<b>4.19</b>

### Ore Reserve modifying factors

as at 31 December 2010	Gold	Ex-	Cut-off	Cut-off	Stoping	Dilution		
Moab Khotsong	price	change	value	value	width	(%)	MCF%	MetRF%
		rate	g/t Au	cmg/t Au	(cm)			
Lower mine – Area PZ 2	850	8.71	5.51	700	127.0	9	81.00	95.36
VR – Middle mine area	850	8.71	4.38	700	159.8	51	79.51	95.61
VR – Top mine area	850	8.71	4.24	700	165.2	43	74.80	95.61



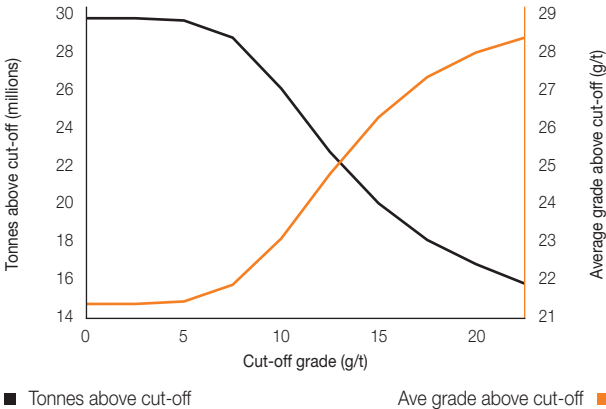


# South Africa

Moab Khotsong

## Moab Khotsong

- underground (metric)



## Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Terry Adam	GSSA	5532	32 years
Ore Reserve	Johan Wall	PLATO	PMS0164	27 years



# South Africa

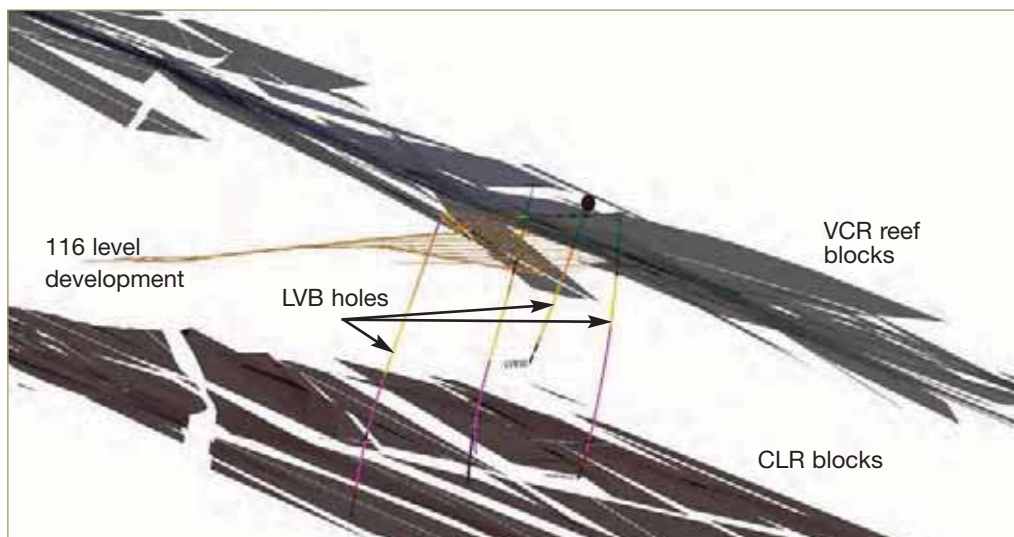
## Mponeng

### Location

Mponeng is situated on the West Wits Line, close to the town of Carletonville in the province of Gauteng. The mine is about 65km south-west of Johannesburg and forms part of AngloGold Ashanti's West Wits operations. Mining at Mponeng is conducted at an average depth of between 2,800 to 3,400m below surface. The mine operates two vertical hoisting shafts, a sub-shaft and two service shafts. The Mponeng lease area is constrained to the north by the TauTona and Savuka mines and to the south only by the depth of the orebody, which is open-ended. In 2008, permission was granted to explore the Western Ultra Deep Levels (WUDLS) portion to the south of the mine, thereby increasing the size of the lease area and the potential Mineral Resource.

### Geology

The VCR is the only reef currently being mined at Mponeng. The VCR consists of a quartz pebble conglomerate (up to 3m thick) capping the uppermost angular unconformity of the Witwatersrand Supergroup. The VCR is overlain by the Ventersdorp Lavas which dramatically halted further reef development at that time. The footwall stratigraphy partially controls the reef facies type and consists of a series of argillaceous to siliceous protoquartzites, shales and siltstones from the Central Rand Group of the Witwatersrand Supergroup. The erosional nature of the deposition of the VCR means that the VCR is lain down on these different Witwatersrand footwalls. The age of these footwall formations increase from west to east.



*Long vertical boreholes (LVBs) drilled from underground to intersect the CLR at depth*



# South Africa

## Mponeng



Most of the VCR mined at Mponeng lies on footwall strata of the Kimberley Formation, which is a relatively argillaceous protoquartzite. The VCR is dominated by a series of channel terraces at different elevations, separated by slopes where the reef widths are lower and the angular unconformity between the footwall is larger than on reef terrace planes. More durable quartzites of the Elsburg Formation lie to the west, while the eastern side of the mine is dominated by shales and siltstones of the Booyens Formation. The hardness of the footwall units is thought to have influenced the development of the terraces.

An additional gold-bearing reef that occurs at Mponeng is the CLR. This reef has been mined at the adjacent Savuka and TauTona mines, and Mponeng is planning to mine the CLR in the future. The CLR at Mponeng consists of – on average – a 20cm thick, tabular, auriferous quartz pebble conglomerate formed near the base of the Central Rand Group. The CLR is approximately 900m deeper than the VCR. Major exploration drilling started in early 2008 in order to improve resource confidence and confirm the geological structures that occur at the deep levels at which mining would extract the CLR. Of the three economic units that exist within the CLR, the Mponeng CLR target area is dominated by the centrally located Unit 3 with a smaller portion of Unit 2 towards the east. Unit 2 is a complex channel deposit, and Unit 3 is the oldest of the CLR channel deposits sitting at the base of the package.

Both the VCR and the CLR orebodies are subjected to faulting and are intruded by a series of igneous dykes and sills of various ages that cross-cut the reefs. There is an inherent risk in mining through these faults and intrusives and a key function of the geoscience department is to identify these geological features ahead of the working face. The correct mining approach can then be applied in order to minimise risk.

## Exploration

Both the VCR and CLR at Mponeng can be accessed down to 120 level (3,645m below datum), but there is currently no infrastructure in place that can service stoping operations below 120 level. The high-grade CLR below 120 level has remained inaccessible and therefore represents an enormous opportunity of additional ounces for Mponeng.

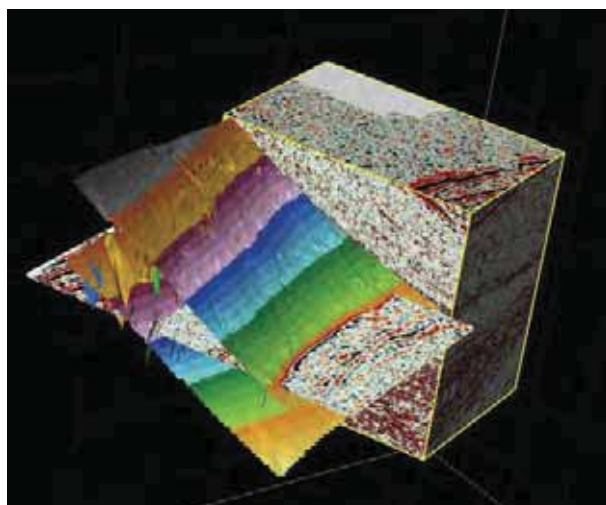
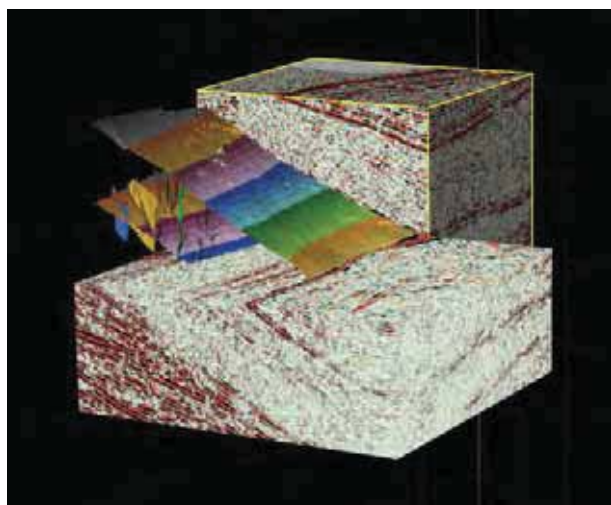
During 2010 a series of sub-vertical exploration holes were drilled from underground to intersect the CLR at depth. These sub-vertical holes were drilled to improve the confidence in the CLR orebody. The average length of each hole was 900m with the longest hole drilled in 2010 reaching 1,090m. The information that was gained from these drill-holes has confirmed the geological structure at depth and generated more confidence in the current mineralisation and estimation models.

The extension of Mponeng, by generating access to the CLR, will provide the mine with a strong base from which several regional benefits can be realised, as well as enabling other smaller projects to be brought in to match the extended life of the asset and the West Wits operations as a whole. The approval of the CLR project will compliment further exploration and development of the WUDLS Mineral Resource and also has the potential to bring additional Mineral Resources from Savuka to book.

The CLR in the deeper portion of the orebody (below 126 level) and the VCR in the north of the mine lease are also potentially mineable areas.

## Projects

A fundamental geological research project has been initiated in order to develop a better understanding of the CLR deposition and mineralisation. This study is critical in optimising the exploration planning and resource estimation that would underpin any future mine expansion.



*3D seismic cubes displaying the VCR and CLR horizons*

# South Africa

## Mponeng

### Mineral Resource

as at 31 December 2010					
Mponeng	Category	Tonnes million	Grade g/t	Contained gold Tonnes	Moz
TauTona VCR shaft pillar	Measured	0.29	17.12	4.94	0.16
	Indicated	1.13	19.47	22.04	0.71
	Inferred	–	–	–	–
	<b>Total</b>	<b>1.42</b>	<b>18.99</b>	<b>26.98</b>	<b>0.87</b>
VCR above 109 Level	Measured	8.28	10.73	88.89	2.86
	Indicated	6.96	6.31	43.96	1.41
	Inferred	–	–	–	–
	<b>Total</b>	<b>15.25</b>	<b>8.71</b>	<b>132.85</b>	<b>4.27</b>
VCR 109 to 120 level	Measured	3.35	21.47	72.01	2.32
	Indicated	7.34	12.40	91.05	2.93
	Inferred	–	–	–	–
	<b>Total</b>	<b>10.70</b>	<b>15.25</b>	<b>163.06</b>	<b>5.24</b>
VCR below 120 level	Measured	0.34	22.51	7.59	0.24
	Indicated	8.68	15.38	133.48	4.29
	Inferred	–	–	–	–
	<b>Total</b>	<b>9.02</b>	<b>15.64</b>	<b>141.07</b>	<b>4.54</b>
Mponeng WUDLS	Measured	–	–	–	–
	Indicated	2.44	13.17	32.15	1.03
	Inferred	11.52	14.68	169.20	5.44
	<b>Total</b>	<b>13.96</b>	<b>14.42</b>	<b>201.35</b>	<b>6.47</b>
VCR Block 1	Measured	–	18.40	0.08	–
	Indicated	3.06	3.91	11.95	0.38
	Inferred	–	–	–	–
	<b>Total</b>	<b>3.06</b>	<b>3.93</b>	<b>12.02</b>	<b>0.39</b>
VCR Block 3	Measured	0.01	7.02	0.10	–
	Indicated	7.84	6.70	52.51	1.69
	Inferred	–	–	–	–
	<b>Total</b>	<b>7.85</b>	<b>6.70</b>	<b>52.61</b>	<b>1.69</b>
VCR Block 5	Measured	0.01	1.75	0.03	–
	Indicated	6.04	7.16	43.25	1.39
	Inferred	–	–	–	–
	<b>Total</b>	<b>6.05</b>	<b>7.15</b>	<b>43.27</b>	<b>1.39</b>

## Mineral Resource continued

as at 31 December 2010		Tonnes	Grade	Contained gold	
Mponeng	Category	million	g/t	Tonnes	Moz
VCR outside project areas	Measured	0.09	5.49	0.48	0.02
	Indicated	7.61	3.42	26.04	0.84
	Inferred	–	–	–	–
	<b>Total</b>	<b>7.70</b>	<b>3.45</b>	<b>26.53</b>	<b>0.85</b>
TauTona CLR shaft pillar	Measured	0.30	42.28	12.76	0.41
	Indicated	1.29	45.19	58.23	1.87
	Inferred	–	–	–	–
	<b>Total</b>	<b>1.59</b>	<b>44.64</b>	<b>70.99</b>	<b>2.28</b>
CL below 120 level	Measured	0.01	23.70	0.35	0.01
	Indicated	34.31	14.66	502.87	16.17
	Inferred	11.41	14.66	167.18	5.37
	<b>Total</b>	<b>45.73</b>	<b>14.66</b>	<b>670.40</b>	<b>21.55</b>
<b>Mponeng</b>	<b>Total</b>	<b>122.32</b>	<b>12.60</b>	<b>1,541.14</b>	<b>49.55</b>

## Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	Blast- RC	hole	Other	
Mponeng	Measured	5 x 5	–	–	–	✓	Chip sampling
	Indicated	1,000 x 1,000	✓	–	–	–	LIB and UG borehole drilling
	Inferred	–	–	–	–	–	
	Grade control	–	–	–	–	–	See Measured category

## Exclusive Mineral Resource

It is customary with the current mine design to leave 35% to 50% of the Exclusive Mineral Resource as safety and remnant pillars ahead of current mining. These pillars and remnants are designed to provide additional stability to the mining faces during operations. A portion of the TauTona shaft pillar and tail gold will be mined by Mponeng on both the VCR and CLR.

## Exclusive Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Mponeng	Category	million	g/t	Tonnes	Moz
	Measured	8.52	17.26	147.04	4.73
	Indicated	36.88	12.15	448.18	14.41
	Inferred	7.87	19.78	155.70	5.01
<b>Mponeng</b>	<b>Total</b>	<b>53.27</b>	<b>14.10</b>	<b>750.91</b>	<b>24.14</b>

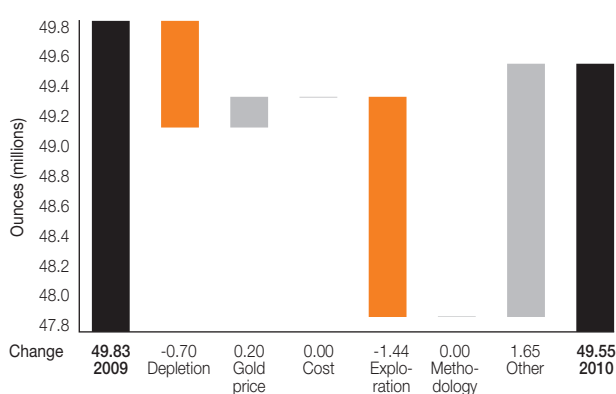
# South Africa

## Mponeng

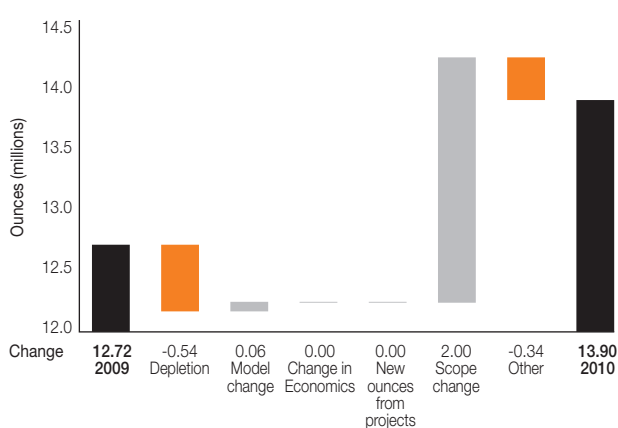
### Mineral Resource below infrastructure

as at 31 December 2010		Tonnes	Grade	Contained gold	
Mponeng	Category	million	g/t	Tonnes	Moz
	Measured	0.35	22.56	7.94	0.26
	Indicated	47.42	14.67	695.75	22.37
	Inferred	22.93	14.67	336.38	10.81
<b>Mponeng</b>	<b>Total</b>	<b>70.71</b>	<b>14.71</b>	<b>1,040.06</b>	<b>33.44</b>

### Mponeng: Mineral Resource reconciliation 2009 vs 2010



### Mponeng: Ore Reserve reconciliation 2009 vs 2010



### Ore Reserve

as at 31 December 2010		Tonnes	Grade	Contained gold	
Mponeng	Category	million	g/t	Tonnes	Moz
VCR above 109 level	Proved	1.80	5.63	10.14	0.33
	Probable	1.42	5.21	7.37	0.24
	<b>Total</b>	<b>3.22</b>	<b>5.44</b>	<b>17.51</b>	<b>0.56</b>
VCR 109 to 120 level	Proved	2.05	9.98	20.44	0.66
	Probable	6.22	8.09	50.29	1.62
	<b>Total</b>	<b>8.27</b>	<b>8.56</b>	<b>70.72</b>	<b>2.27</b>
VCR below 120 level	Proved	0.31	8.85	2.70	0.09
	Probable	8.07	8.91	71.92	2.31
	<b>Total</b>	<b>8.38</b>	<b>8.90</b>	<b>74.61</b>	<b>2.40</b>
TauTona CLR eastern block	Proved	–	–	–	–
	Probable	1.66	9.12	15.11	0.49
	<b>Total</b>	<b>1.66</b>	<b>9.12</b>	<b>15.11</b>	<b>0.49</b>
CL below 120 level	Proved	–	–	–	–
	Probable	22.52	11.30	254.51	8.18
	<b>Total</b>	<b>22.52</b>	<b>11.30</b>	<b>254.51</b>	<b>8.18</b>
<b>Mponeng</b>	<b>Total</b>	<b>44.04</b>	<b>9.82</b>	<b>432.46</b>	<b>13.90</b>

## Inferred Mineral Resource in business plan

No planning or scheduling took place in areas classified as Inferred Mineral Resource during the planning process.

### Ore Reserve below infrastructure

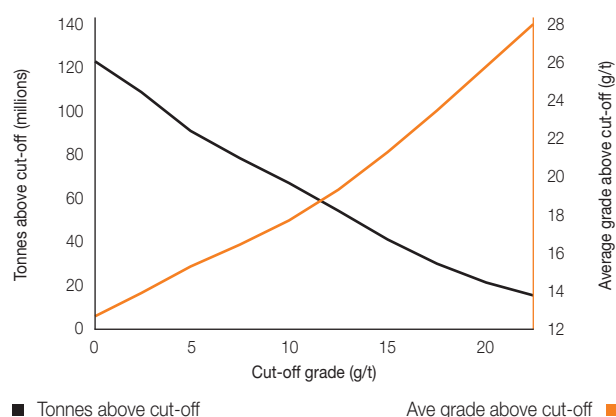
as at 31 December 2010		Tonnes	Grade	Contained gold	
Mponeng	Category	million	g/t	Tonnes	Moz
	Proved	0.31	8.85	2.70	0.09
	Probable	30.59	10.67	326.43	10.49
<b>Mponeng</b>	<b>Total</b>	<b>30.90</b>	<b>10.65</b>	<b>329.13</b>	<b>10.58</b>

### Ore Reserve modifying factors

as at 31 December 2010		Ex-	Cut-off	Cut-off	Stopping	Dilution		
Mponeng	Gold price	change rate	value g/t Au	value cmg/t Au	width (cm)	(%)	MCF%	MetRF%
CL below 120 level	850	8.71	—	750	109.9	2	81.00	98.20
TauTona CLR eastern block	850	8.71	—	750	95.0	106	81.00	97.38
VCR 109 to 120 level	850	8.71	—	750	145.0	42	83.04	97.95
VCR above 109 level	850	8.71	—	750	145.0	41	82.67	97.96
VCR below 120 level	850	8.71	—	750	145.0	37	84.47	97.98

### Mponeng

— underground (metric)



### Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Gareth Flitton	GSSA	9647581	8 years
Ore Reserve	Piet Enslin	PLATO	PMS0183	26 years



# South Africa

## Savuka

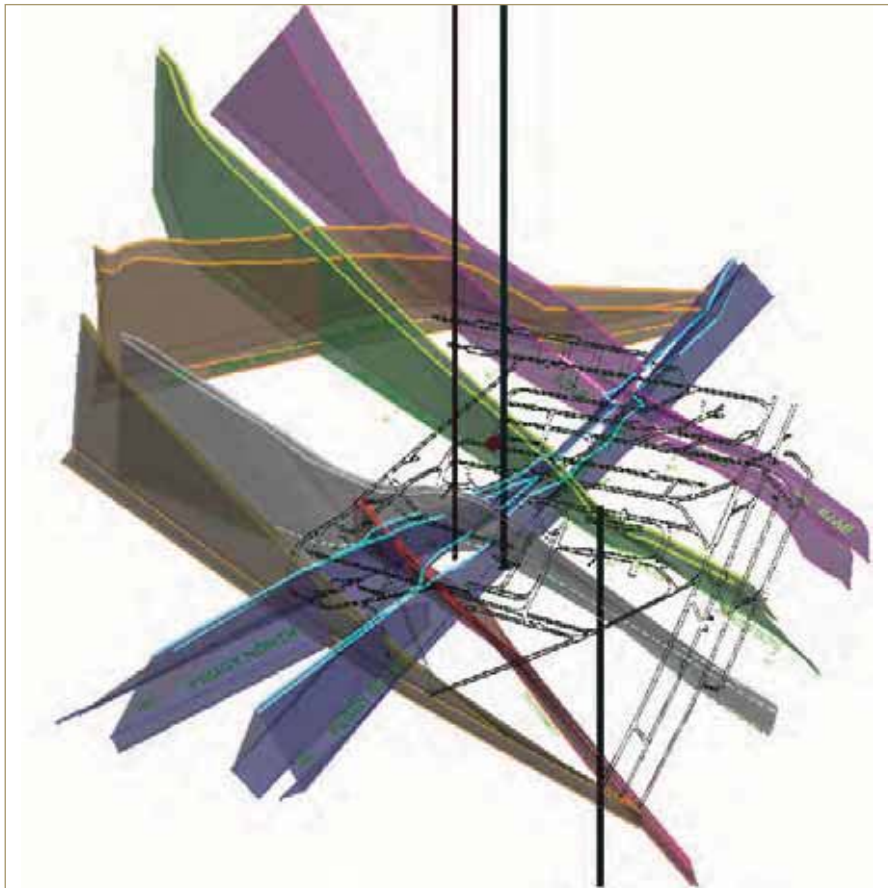
### Location

Savuka mine is located about 18km south of the town of Carletonville and forms part of AngloGold Ashanti's West Wits operations. The mine exploits the CLR at depths varying from 2,600 to 3,500m below surface, as well as the VCR. The VCR, which is about 700m above the CLR, has largely been mined out and mining operations in the VCR section are currently confined to extracting remnant pillars that are above the current cut-off.

Savuka has converted from a longwall configuration to a sequential grid mine and most of the mine's current production is derived from the CLR. The Ore Reserve at the mine is largely exhausted and mining operations at Savuka are planned to cease in 2011. Any remaining Ore Reserve at the mine will be extracted through Mponeng.

### Geology

The CLR is a thin, tabular, auriferous quartz pebble conglomerate formed near the base of the Central Rand Group. The CLR is on average 20cm thick and has been divided into three stratigraphic units. Economically the most important is Unit 1 which is present as a sheet-like deposit over the whole mine. Unit 2 is a complex channel deposit that is presently only being mined in the south and west areas of Savuka. The reef may be over 2m thick where Unit 2 is developed. Unit 3 is preserved below Unit 1 in the southern parts of Savuka and is the oldest of the three CLR stratigraphic units.



*Isometric view of Savuka shaft systems and 100 level, showing the different Intrusives that occur in the area*

The VCR comprises a quartz pebble conglomerate (up to 5m thick) capping the topmost angular unconformity of the Witwatersrand Supergroup. The topography of the VCR depositional area is uneven and consists of a series of slopes and horizontal terraces at different elevations.

The reefs at Savuka are cross-cut by faults and intrusive dykes that displace the reef horizons. The faulting, in conjunction with the numerous intrusives that also intersect the orebody at various levels, is responsible for most of the risk inherent with deep-level gold mining, since seismicity is associated with these features.

### Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Savuka	Category	million	g/t	Tonnes	Moz
Ventersdorp Contact Reef	Measured	0.16	12.87	2.02	0.06
	Indicated	0.34	13.53	4.64	0.15
	Inferred	–	8.55	0.01	–
	<b>Total</b>	<b>0.50</b>	<b>13.32</b>	<b>6.67</b>	<b>0.21</b>
Carbon Leader Reef	Measured	0.78	17.53	13.69	0.44
	Indicated	3.79	20.00	75.74	2.43
	Inferred	–	–	–	–
	<b>Total</b>	<b>4.57</b>	<b>19.58</b>	<b>89.43</b>	<b>2.88</b>
<b>Savuka</b>	<b>Total</b>	<b>5.07</b>	<b>18.96</b>	<b>96.10</b>	<b>3.09</b>

### Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	RC	hole	Other	
Savuka	Measured	5 x 5	–	–	–	✓	Chip sampling
	Indicated	200 x 200	–	–	–	–	GBH drilling
	Inferred	1,000 x 1,000	✓	–	–	–	Surface boreholes
	Grade control	–	–	–	–	–	See Measured category

### Exclusive Mineral Resource

As Savuka is going into closure mode, almost all of the published Mineral Resource is classified as Exclusive Mineral Resource. Only 0.6% of the published Mineral Resource is not part of the Exclusive Mineral Resource.

### Exclusive Mineral Resource

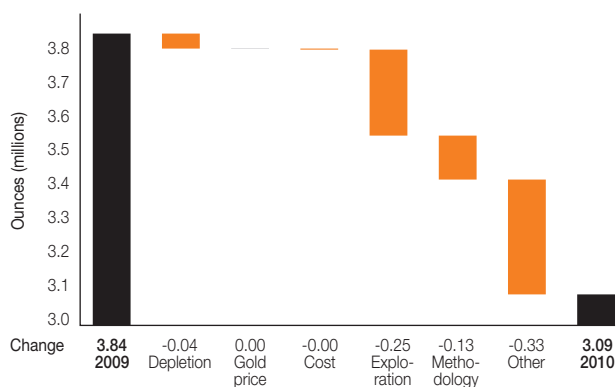
as at 31 December 2010		Tonnes	Grade	Contained gold	
Savuka	Category	million	g/t	Tonnes	Moz
	Measured	0.93	16.73	15.63	0.50
	Indicated	4.11	19.45	79.85	2.57
	Inferred	–	8.55	0.01	–
<b>Savuka</b>	<b>Total</b>	<b>5.04</b>	<b>18.94</b>	<b>95.49</b>	<b>3.07</b>



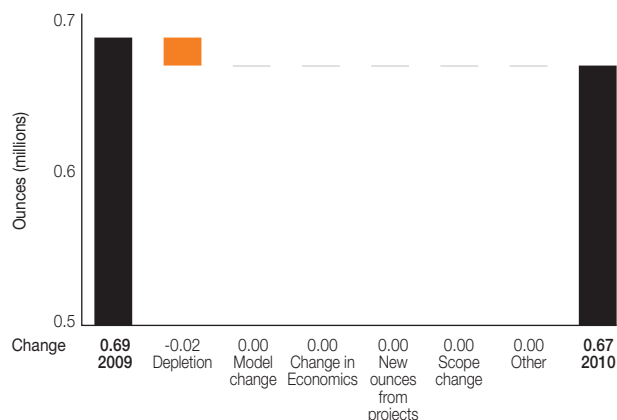
# South Africa

## Savuka

**Savuka: Mineral Resource reconciliation**  
2009 vs 2010



**Savuka: Ore Reserve reconciliation**  
2009 vs 2010



### Ore Reserve

as at 31 December 2010		Tonnes	Grade	Contained gold	
Savuka	Category	million	g/t	Tonnes	Moz
Ventersdorp Contact Reef	Proved	0.04	3.95	0.14	0.00
	Probable	0.18	4.95	0.88	0.03
	<b>Total</b>	<b>0.21</b>	<b>4.78</b>	<b>1.02</b>	<b>0.03</b>
Carbon Leader Reef	Proved	0.05	5.88	0.28	0.01
	Probable	3.09	6.28	19.41	0.62
	<b>Total</b>	<b>3.14</b>	<b>6.27</b>	<b>19.69</b>	<b>0.63</b>
<b>Savuka</b>	<b>Total</b>	<b>3.35</b>	<b>6.18</b>	<b>20.71</b>	<b>0.67</b>

### Inferred Mineral Resource in business plan

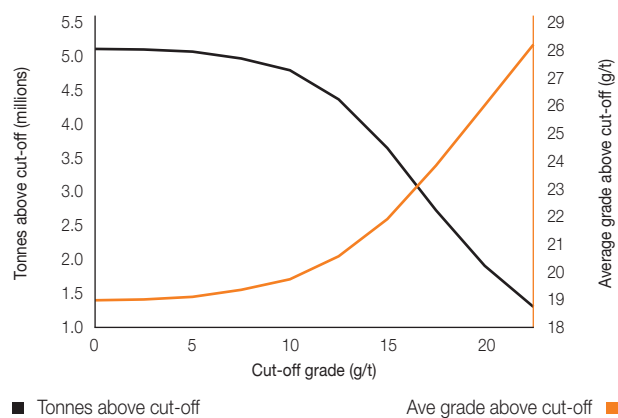
No planning or scheduling took place in areas classified as Inferred Mineral Resource during the planning process.

### Ore Reserve modifying factors

as at 31 December 2010		Ex-	Cut-off	Cut-off	Stoping	Dilution		
Savuka	Gold price	change rate	value g/t Au	value cmg/t Au	width (cm)	(%)	MCF%	MetRF%
Carbon Leader Reef	850	8.71	7.96	900	113.0	75	63	97
Ventersdorp Contact Reef	850	8.71	7.96	900	113.0	63	63	97

## Savuka

– underground (metric)



## Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Katarien Deysel	SACNASP	400093/05	9 years
Ore Reserve	Joey Modise	PLATO	MS0113	23 years



# South Africa

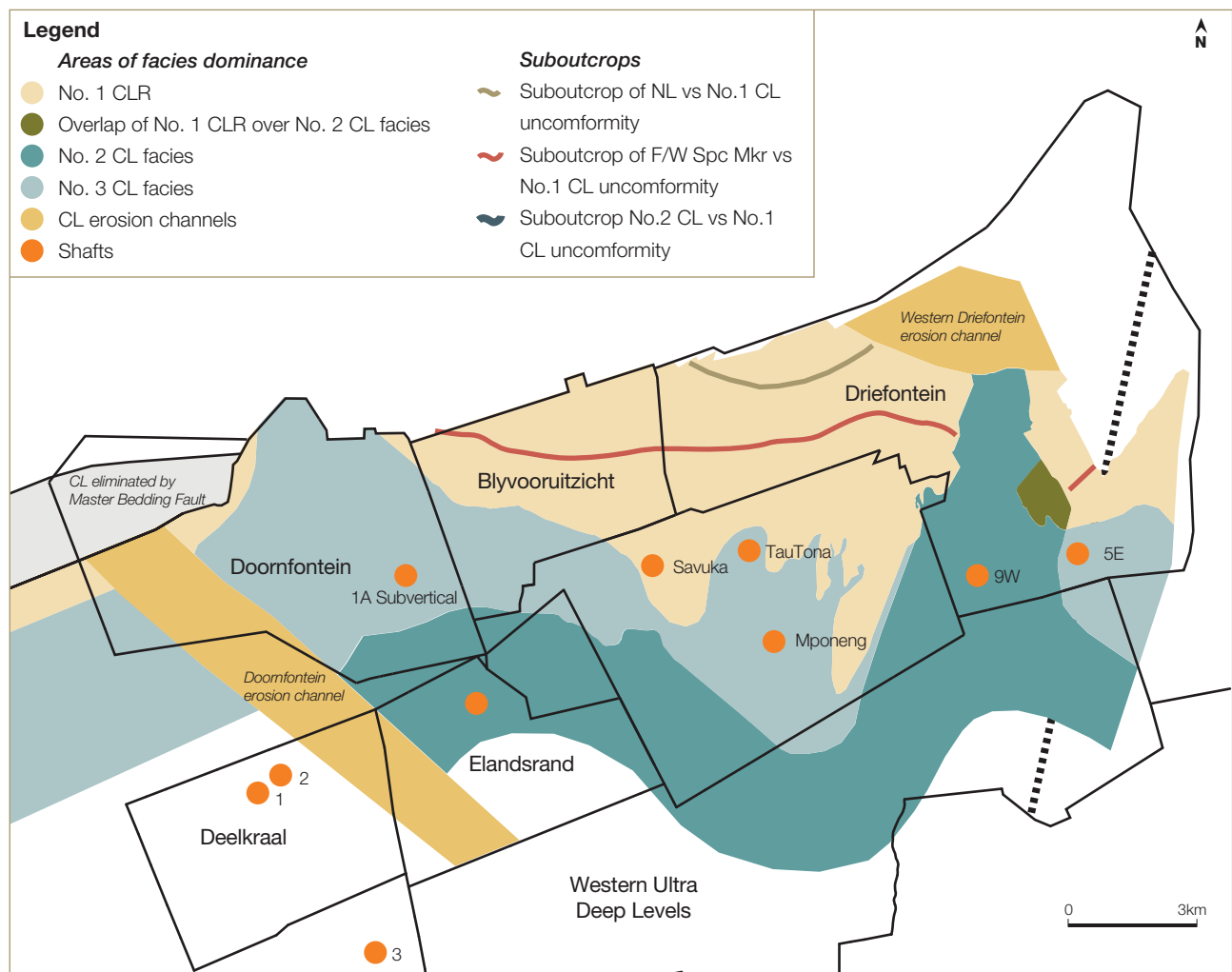
## TauTona

### Location

TauTona lies on the West Wits Line, just south of Carletonville in the North West Province, about 70km south-west of Johannesburg. Mining at TauTona takes place at depths ranging from 2,000 to 3,640m. The mine has a three-shaft system and is in the process of converting from longwall mining to scattered grid mining.

### Geology

The CLR is a thin, on average 20cm thick, tabular, auriferous quartz pebble conglomerate that is located near the base of the Central Rand Group. The CLR has been divided into three facies units. Economically the most important is Unit 1, which is present as a sheet-like deposit over the whole mine, although reef development and grades tend to drop off very rapidly where Unit 1 overlies Unit 2. Unit 2 is a complex channel deposit that is only present along the eastern-most limit of current mining at TauTona. The Unit 2 CLR may be over 2m thick. Unit 3 is preserved below Unit 1 in the southern parts of TauTona and is the oldest of the CLR conglomerates.



Production levels on the VCR at TauTona are currently limited, amounting to an average of 10% of total production volumes. The VCR comprises a quartz pebble conglomerate (up to 2m thick) capping the top-most angular unconformity of the Witwatersrand Supergroup. The topography of the VCR depositional area is uneven and consists of a series of slopes and horizontal terraces at different elevations.

## Exploration

Two development projects will be undertaken at TauTona during 2011 and include the CLR area to the east of the Bank Dyke, and the area south of the Pretorius Fault Zone. The projects will increase the structural confidence and update the facies model within these areas. The exploration project consists of the initial drilling of four LIBs from two different localities on 107 and 112 level respectively. Each LIB hole will also be complemented by the drilling of at least two deflections. Drilling is scheduled to start in January 2011 and a total of 3,900m is expected to have been drilled by November 2011.

## Projects

An internal geological project has been launched to investigate the lateral movement of the Pretorius Fault Zone and the possible implications thereof.

### Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
TauTona	Category	million	g/t	Tonnes	Moz
VCR shaft pillar	Measured	0.16	18.53	2.94	0.09
	Indicated	0.16	20.52	3.35	0.11
	Inferred	–	–	–	–
	<b>Total</b>	<b>0.32</b>	<b>19.54</b>	<b>6.29</b>	<b>0.20</b>
EOB between 100 & 112 levels	Measured	0.14	28.38	3.98	0.13
	Indicated	2.90	20.18	58.54	1.88
	Inferred	–	–	–	–
	<b>Total</b>	<b>3.04</b>	<b>20.55</b>	<b>62.52</b>	<b>2.01</b>
CLR – 1C11	Measured	0.08	24.25	1.89	0.06
	Indicated	0.43	27.11	11.71	0.38
	Inferred	–	–	–	–
	<b>Total</b>	<b>0.51</b>	<b>26.67</b>	<b>13.59</b>	<b>0.44</b>
CLR base	Measured	0.36	25.11	9.11	0.29
	Indicated	2.35	25.63	60.36	1.94
	Inferred	–	–	–	–
	<b>Total</b>	<b>2.72</b>	<b>25.56</b>	<b>69.46</b>	<b>2.23</b>
<b>TauTona</b>	<b>Total</b>	<b>6.59</b>	<b>23.04</b>	<b>151.87</b>	<b>4.88</b>

# South Africa

## TauTona

### Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	RC	Blast-hole	Other	
TauTona	Measured	5 x 5	–	–	–	✓	Chip sampling
	Indicated	200 x 200	✓	–	–	–	GBH drilling
	Inferred	1,000 x 1,000	✓	–	–	–	Surface boreholes
	Grade control	–	–	–	–	–	See Measured category

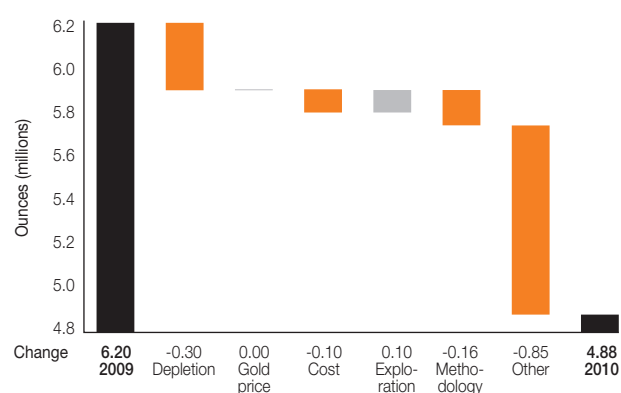
## Exclusive Mineral Resource

The Exclusive Mineral Resource is dependent on mining strategy, but approximately 2.37Moz or 95% of the Exclusive Mineral Resource is expected to be taken up in safety, boundary and remnant pillars ahead of current mining.

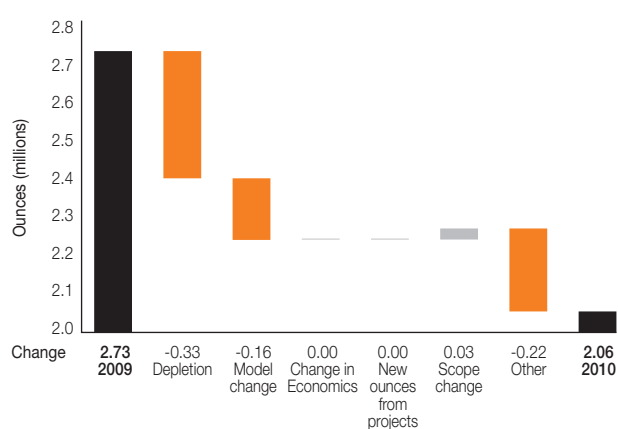
### Exclusive Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
TauTona	Category	million	g/t	Tonnes	Moz
	Measured	0.50	24.49	12.16	0.39
	Indicated	2.74	23.91	65.44	2.10
	Inferred	–	–	–	–
<b>TauTona</b>	<b>Total</b>	<b>3.23</b>	<b>24.00</b>	<b>77.61</b>	<b>2.50</b>

### TauTona: Mineral Resource reconciliation 2009 vs 2010



### TauTona: Ore Reserve reconciliation 2009 vs 2010



## Ore Reserve

as at 31 December 2010				Contained gold	
TauTona	Category	Tonnes million	Grade g/t	Tonnes	Moz
VCR shaft pillar	Proved	0.17	7.76	1.35	0.04
	Probable	0.31	7.68	2.38	0.08
	<b>Total</b>	<b>0.48</b>	<b>7.71</b>	<b>3.73</b>	<b>0.12</b>
EOB between 100 & 112 levels	Proved	0.17	7.79	1.32	0.04
	Probable	2.64	9.43	24.93	0.80
	<b>Total</b>	<b>2.81</b>	<b>9.34</b>	<b>26.25</b>	<b>0.84</b>
CLR – 1C11	Proved	0.03	9.21	0.32	0.01
	Probable	0.58	9.62	5.61	0.18
	<b>Total</b>	<b>0.62</b>	<b>9.60</b>	<b>5.93</b>	<b>0.19</b>
CLR base	Proved	0.31	7.52	2.31	0.07
	Probable	2.82	9.12	25.73	0.83
	<b>Total</b>	<b>3.13</b>	<b>8.96</b>	<b>28.04</b>	<b>0.90</b>
<b>TauTona</b>	<b>Total</b>	<b>7.04</b>	<b>9.08</b>	<b>63.95</b>	<b>2.06</b>

## Inferred Mineral Resource in business plan

No planning or scheduling took place in areas classified as Inferred Mineral Resource during the planning process.





# South Africa

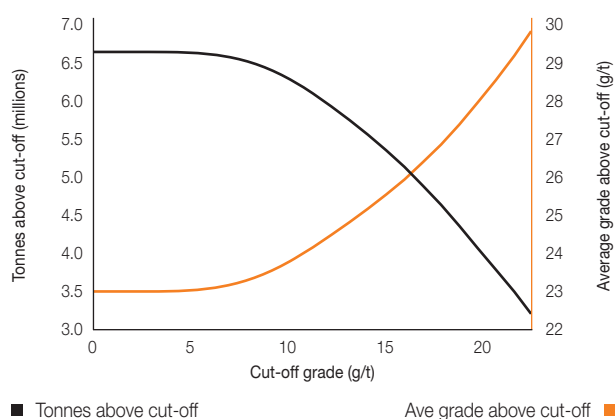
## TauTona

### Ore Reserve modifying factors

as at 31 December 2010								
	Gold	Ex-	Cut-off	Cut-off	Stoping	Dilution		
TauTona	price	change	value	value	width	(%)	MCF%	MetRF%
		rate	g/t Au	cmg/t Au	(cm)			
CLR – 1C11	850	8.71	10.60	1,200	113.0	56	81.82	97.23
CLR base	850	8.71	10.60	1,200	113.0	64	81.82	97.23
EOB between 100 & 112 levels	850	8.71	10.60	1,200	113.0	54	81.82	97.23
VCR shaft pillar	850	8.71	10.60	1,200	113.0	53	85.00	97.23

### TauTona

– underground (metric)



### Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Katarien Deysel	SACNASP	400093/05	9 years
Ore Reserve	Joey Modise	PLATO	MS0113	23 years

# South Africa

## Surface operations

### Overview

Surface operations in the South Africa Region produce gold by treating lower-grade surface material such as rock dumps and tailings dams. The strategy is to maximise the use of the treatment gap. Uranium is also produced as a by-product from the gold-bearing reef material that is mined at Great Noligwa, Moab Khotsong and Kopanang. The Surface operations comprise the Vaal River Surface and West Wits Surface operations.

### Location

The Vaal River Surface operations are located immediately to the north and south of the Vaal River, close to the town of Orkney in the North West Province of South Africa. These operations re-work the marginal ore dumps (MODs) and tailings dams resulting from the mining and processing of the VR and VCR that are mined at the Vaal River underground mines in the Klerksdorp area. Gold is mainly produced by the reclamation of marginal ore dumps and a tailings dam called the Sulphur Paydam (SPD).

The West Wits Surface operations are located on the West Wits Line, near the town of Carletonville, straddling the border between the North West and Gauteng Provinces in South Africa. These operations comprise MODs and tailings dams sourced from the mining and processing of the CLR and the VCR that are mined at the West Wits underground mines in the Carletonville/Fochville area.

### Ore dumps and tailings

The MODs have been built from waste rock mined from underground access development workings and hoisted, transported and deposited via conveyor belt. The gold contained within these rock dumps was sourced from three areas:

- the minor reefs that were developed in order to access the primary reef;
- gold-bearing reefs that were contained within small fault blocks that were exposed by off-reef development; and
- cross-tramming of gold-bearing reef material to the waste tips.

The tailings storage facility (TSF) stores the residue produced by the gold plants. These tailings were pumped in a slurry form onto tailings dams and have been built up over a period of years.

The Vaal River Ore Reserve consists of 99Mt containing 1.54Moz of gold and the West Wits Ore Reserve consists of 11Mt containing 0.20Moz of gold. During 2010 10.3Mt were depleted and 0.18Moz of gold were produced from surface sources material. The no. 3 MOD at Vaal River remains an Inferred Mineral Resource while the TSF has been moved into Mineral Resource as new technology for recovering gold and uranium is being evaluated.

During 2010 the West gold plant and the marginal ore stream in the Kopanang gold plant became dedicated surface sources plants as the treatment of Tau Lekoa and third party ore ceased.

An opportunity to upgrade marginal ore material was initiated in the West Wits area at the Savuka gold plant. The exercise has proven to be successful and the initiative will be investigated further in 2011. The Savuka MOD is currently being screened and oversize material of greater than 65mm is being stockpiled and will be made available to external parties once permission has been granted to do so by the Department of Mineral Resources.

### Flexibility

The no. 3 MOD at Vaal River was equipped and prepared for reclamation in 2010 and reclamation is planned to begin in 2011.



# South Africa

## Surface operations

### Reclamation methodology

Bulldozers are used to create furrows through the waste rock dumps in order to mix rock from different parts of the waste rock dumps that were deposited over different time periods. This is done in order to create a degree of homogenisation. The material is then loaded onto rail hoppers by means of a front-end loader and transported to the metallurgical plants.

The SPD is being reclaimed by means of remote-controlled, high-pressure water pumps. In order to facilitate blending of low and higher grade material (necessitated by a definite grade gradient that exists from the bottom to the top of the tailings dam), reclamation takes place in a three-bench, full-face operation. From the reclamation face, the slurry flows via trenches to the SPD pump station, where oversized material is screened out and then pumped to the East gold plant for processing.

During 2010 the East acid plant was closed down as it became uneconomic to produce sulphuric acid internally, resulting in the treatment cost of uranium decreasing from \$40/lb to \$31/lb.

### Environmental clean-up

Rehabilitation work is ongoing and gold is produced from clean-up operations at Vaal River where material is treated through the archive mill. In 2010 a total of 1,929oz was produced from clean-up operations.

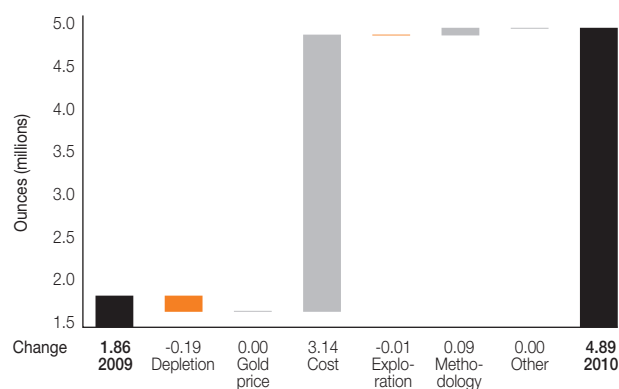
### Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Vaal River Surface	Category	million	g/t	Tonnes	Moz
SA Met – Tailings dump	Measured	–	–	–	–
	Indicated	381.01	0.31	116.92	3.76
	Inferred	–	–	–	–
	<b>Total</b>	<b>381.01</b>	<b>0.31</b>	<b>116.92</b>	<b>3.76</b>
SA Met – Rock dump	Measured	–	–	–	–
	Indicated	54.33	0.58	31.61	1.02
	Inferred	5.00	0.69	3.44	0.11
	<b>Total</b>	<b>59.32</b>	<b>0.59</b>	<b>35.04</b>	<b>1.13</b>
<b>Vaal River Surface</b>	<b>Total</b>	<b>440.33</b>	<b>0.35</b>	<b>151.96</b>	<b>4.89</b>
<b>West Wits Surface</b>					
WWGO – Tailings dump	Measured	–	–	–	–
	Indicated	168.27	0.25	41.75	1.34
	Inferred	–	–	–	–
	<b>Total</b>	<b>168.27</b>	<b>0.25</b>	<b>41.75</b>	<b>1.34</b>
WWGO – Rock dump	Measured	–	–	–	–
	Indicated	12.80	0.49	6.23	0.20
	Inferred	–	–	–	–
	<b>Total</b>	<b>12.80</b>	<b>0.49</b>	<b>6.23</b>	<b>0.20</b>
<b>West Wits Surface</b>	<b>Total</b>	<b>181.07</b>	<b>0.26</b>	<b>47.98</b>	<b>1.54</b>
<b>Surface operations</b>	<b>Total</b>	<b>621.40</b>	<b>0.32</b>	<b>199.94</b>	<b>6.43</b>

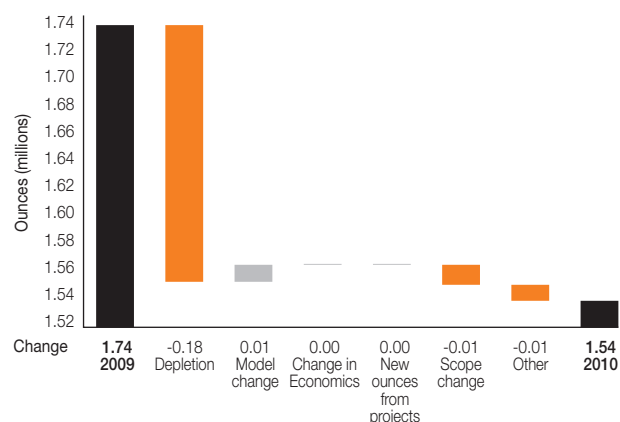
## Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	RC	Blast-hole	Other	
Vaal River Surface	Measured	–	–	–	–	–	
	Indicated	150 x 150	–	–	–	✓	Auger drilling (tailings only)
	Inferred	–	–	–	–	–	
	Grade control	–	–	–	–	–	
West Wits Surface	Measured	–	–	–	–	–	
	Indicated	150 x 150	–	–	–	✓	Auger drilling (tailings only)
	Inferred	–	–	–	–	–	
	Grade control	–	–	–	–	–	

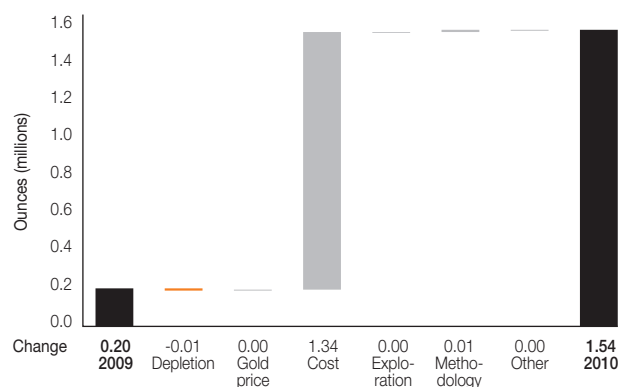
### Vaal River Surface: Mineral Resource reconciliation 2009 vs 2010



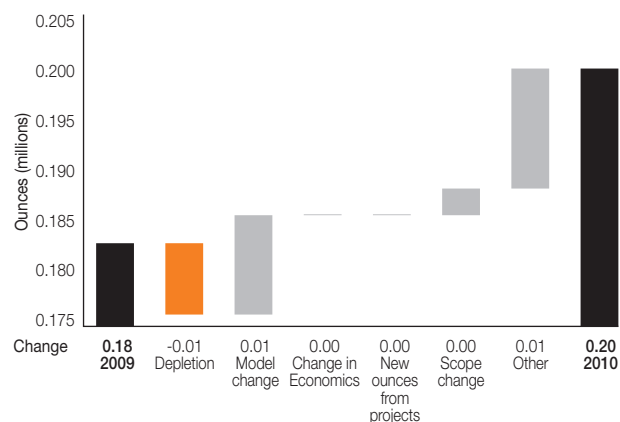
### Vaal River Surface: Ore Reserve reconciliation 2009 vs 2010



### West Wits Surface: Mineral Resource reconciliation 2009 vs 2010



### West Wits Surface: Ore Reserve reconciliation 2009 vs 2010



# South Africa

## Surface operations

### Exclusive Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Vaal River Surface	Category	million	g/t	Tonnes	Moz
	Measured	–	–	–	–
	Indicated	336.25	0.30	99.79	3.21
	Inferred	–	–	–	–
<b>Vaal River Surface</b>	<b>Total</b>	<b>336.25</b>	<b>0.30</b>	<b>99.79</b>	<b>3.21</b>
<b>West Wits Surface</b>					
	Measured	–	–	–	–
	Indicated	168.27	0.25	41.75	1.34
	Inferred	–	–	–	–
<b>West Wits Surface</b>	<b>Total</b>	<b>168.27</b>	<b>0.25</b>	<b>41.75</b>	<b>1.34</b>
<b>Surface operations</b>	<b>Total</b>	<b>504.52</b>	<b>0.28</b>	<b>141.54</b>	<b>4.55</b>

### Ore Reserve

as at 31 December 2010		Tonnes	Grade	Contained gold	
Vaal River Surface	Category	million	g/t	Tonnes	Moz
SA Met – Tailings dump	Proved	–	–	–	–
	Probable	44.76	0.37	16.68	0.54
	<b>Total</b>	<b>44.76</b>	<b>0.37</b>	<b>16.68</b>	<b>0.54</b>
SA Met – Rock dump	Proved	–	–	–	–
	Probable	54.33	0.57	31.19	1.00
	<b>Total</b>	<b>54.33</b>	<b>0.57</b>	<b>31.19</b>	<b>1.00</b>
<b>Vaal River Surface</b>	<b>Total</b>	<b>99.09</b>	<b>0.48</b>	<b>47.87</b>	<b>1.54</b>
<b>West Wits Surface</b>					
WWGO – Rock dump	Proved	–	–	–	–
	Probable	11.40	0.55	6.23	0.20
	<b>Total</b>	<b>11.40</b>	<b>0.55</b>	<b>6.23</b>	<b>0.20</b>
<b>West Wits Surface</b>	<b>Total</b>	<b>11.40</b>	<b>0.55</b>	<b>6.23</b>	<b>0.20</b>
<b>Surface operations</b>	<b>Total</b>	<b>110.49</b>	<b>0.49</b>	<b>54.10</b>	<b>1.74</b>

## Inferred Mineral Resource in business plan

### Inferred Mineral Resource

as at 31 December 2010	Tonnes	Grade	Contained gold		Comments
Vaal River Surface	million	g/t	Tonnes	Moz	
SA Met – Rock dump	5.00	0.69	3.44	0.11	No. 3 MOD is equipped and will be treated from 2011
<b>Total</b>	<b>5.00</b>	<b>0.69</b>	<b>3.44</b>	<b>0.11</b>	

### Ore Reserve modifying factors

as at 31 December 2010		Ex-	Cut-off	Cut-off	Stopping			
Vaal River Surface	Gold price	change rate	value g/t Au	value cmg/t Au	width (cm)	Dilution (%)	MCF%	MetRF%
SA Met – Rock dump	850	8.71	0.41	–	–	–	98	88.00
SA Met – Tailings dump	850	8.71	0.37	–	–	–	100	40.00
<b>West Wits Surface</b>								
WWGO – Rock dump	850	8.71	0.38	–	–	–	98	88.00

### Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
<b>Vaal River Surface</b>				
Mineral Resource	Raymond Orton	PLATO	MS0096	24 years
Ore Reserve	Richard Brokken	PLATO	MS0171	29 years
<b>West Wits Surface</b>				
Mineral Resource	Raymond Orton	PLATO	MS0096	24 years
Ore Reserve	Richard Brokken	PLATO	MS0171	29 years



# South Africa

## Uranium

### Uranium

Moab Khotsong, Great Noligwa and Kopanang material is milled in the Noligwa gold plant and treated in the South uranium plant for uranium extraction by the reverse leach process. The ammonium diuranate is transported to the Nufcor plant where the material is calcined and packed for shipment to the converters.

1.46 Million pounds of uranium oxide was produced in 2010. The expansion project at the South uranium plant has commenced in 2010 and will be commissioned in 2012. This expansion project will allow for an increased amount of Kopanang material to be processed for uranium oxide extraction.

### Mineral Resource – Uranium ( $U_3O_8$ )

as at 31 December 2010	Category	Tonnes million	Grade kg/t	Contained uranium oxide	
				Tonnes	Pounds million
Great Noligwa	Measured	–	–	–	–
	Indicated	10.44	0.37	3,883	8.56
	Inferred	0.90	0.39	352	0.78
	<b>Total</b>	<b>11.34</b>	<b>0.37</b>	<b>4,235</b>	<b>9.34</b>
Kopanang	Measured	–	–	–	–
	Indicated	21.96	0.71	15,570	34.33
	Inferred	2.13	0.55	1,174	2.59
	<b>Total</b>	<b>24.09</b>	<b>0.69</b>	<b>16,744</b>	<b>36.91</b>
Moab Khotsong	Measured	–	–	–	–
	Indicated	19.69	1.06	20,828	45.92
	Inferred	9.82	0.89	8,726	19.24
	<b>Total</b>	<b>29.51</b>	<b>1.00</b>	<b>29,553</b>	<b>65.15</b>
Vaal River Surface	Measured	–	–	–	–
	Indicated	381.01	0.09	33,986	74.93
	Inferred	–	–	–	–
	<b>Total</b>	<b>381.01</b>	<b>0.09</b>	<b>33,986</b>	<b>74.93</b>
Mponeng	Measured	–	–	–	–
	Indicated	35.91	0.18	6,521	14.38
	Inferred	11.41	0.18	2,028	4.47
	<b>Total</b>	<b>47.32</b>	<b>0.18</b>	<b>8,549</b>	<b>18.85</b>
Savuka	Measured	–	–	–	–
	Indicated	4.57	0.34	1,544	3.40
	Inferred	–	–	–	–
	<b>Total</b>	<b>4.57</b>	<b>0.34</b>	<b>1,544</b>	<b>3.40</b>

### Mineral Resource – Uranium (U<sub>3</sub>O<sub>8</sub>) continued

as at 31 December 2010	Category	Tonnes million	Grade kg/t	Contained uranium oxide	
				Tonnes	Pounds million
TauTona	Measured	–	–	–	–
	Indicated	6.27	0.29	1,801	3.97
	Inferred	–	–	–	–
	<b>Total</b>	<b>6.27</b>	<b>0.29</b>	<b>1,801</b>	<b>3.97</b>
West Wits Surface	Measured	–	–	–	–
	Indicated	168.27	0.07	12,098	26.67
	Inferred	–	–	–	–
	<b>Total</b>	<b>168.27</b>	<b>0.07</b>	<b>12,098</b>	<b>26.67</b>
<b>Total</b>	Measured	–	–	–	–
	Indicated	648.12	0.15	96,230	212.15
	Inferred	24.25	0.51	12,280	27.07
	<b>Total</b>	<b>672.38</b>	<b>0.16</b>	<b>108,510</b>	<b>239.22</b>

### Ore Reserve – Uranium (U<sub>3</sub>O<sub>8</sub>)

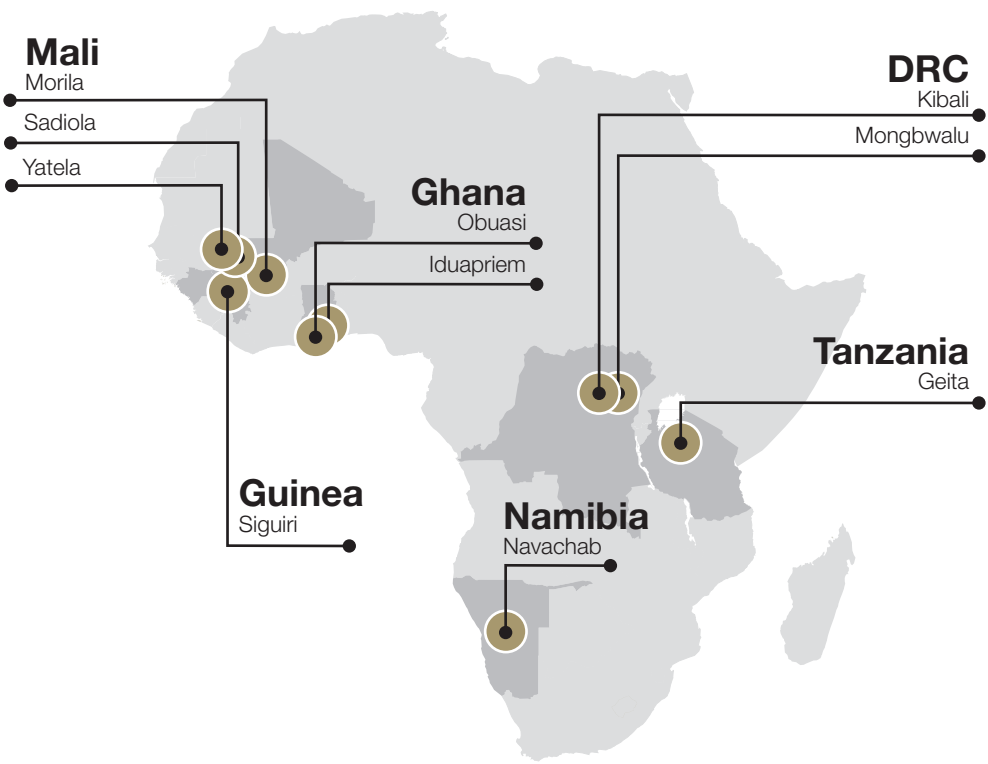
as at 31 December 2010	Category	Tonnes million	Grade kg/t	Contained uranium oxide	
				Tonnes	Pounds million
Great Noligwa	Proved	0.38	0.30	113	0.25
	Probable	0.75	0.29	221	0.49
	<b>Total</b>	<b>1.13</b>	<b>0.29</b>	<b>334</b>	<b>0.74</b>
Kopanang	Proved	1.20	0.99	1,183	2.61
	Probable	12.88	0.82	10,520	23.19
	<b>Total</b>	<b>14.07</b>	<b>0.83</b>	<b>11,702</b>	<b>25.80</b>
Moab Khotsoeng	Proved	1.84	0.25	460	1.01
	Probable	16.84	0.54	9,096	20.05
	<b>Total</b>	<b>18.69</b>	<b>0.51</b>	<b>9,556</b>	<b>21.07</b>
<b>Total</b>	Proved	3.42	0.51	1,755	3.87
	Probable	30.47	0.65	19,836	43.73
	<b>Total</b>	<b>33.89</b>	<b>0.64</b>	<b>21,591</b>	<b>47.60</b>

### Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Raymond Orton	PLATO	MS0096	24 years
Ore Reserve	Richard Brokken	PLATO	MS0171	29 years

**Continental Africa**

Challenges in Africa  
being met  
**head on**



## Regional overview

AngloGold Ashanti has eight mining operations in its Continental Africa region:

- Iduapriem and Obuasi in Ghana;
- Siguiri in Guinea;
- Morila, Sadiola and Yatela in Mali;
- Navachab in Namibia; and
- Geita in Tanzania.

It also has two advanced projects in the Democratic Republic of the Congo (DRC), namely Kibali and Mongbwalu.

Combined production from these operations declined by 6% to 1.49Moz of gold in 2010, equivalent to 33.0% of group production.

The Mineral Resource in Continental Africa, attributable to AngloGold Ashanti, totalled 71.19Moz at year-end, including an attributable Ore Reserve of 26.98Moz.

All Mineral Resources and Ore Reserves listed are attributable unless otherwise stated.

### Mineral Resource by region

as at 31 December 2010	Category	Tonnes	Grade	Contained gold	
		million	g/t	Tonnes	Moz
Continental Africa Region	Measured	159.11	2.78	442.04	14.21
	Indicated	452.58	2.38	1,076.18	34.60
	Inferred	278.73	2.50	696.01	22.38
	<b>Total</b>	<b>890.42</b>	<b>2.49</b>	<b>2,214.22</b>	<b>71.19</b>

### Ore Reserve by region

as at 31 December 2010	Category	Tonnes	Grade	Contained gold	
		million	g/t	Tonnes	Moz
Continental Africa Region	Proved	102.29	1.84	187.74	6.04
	Probable	260.02	2.51	651.55	20.95
	<b>Total</b>	<b>362.31</b>	<b>2.32</b>	<b>839.30</b>	<b>26.98</b>



## Country overview

AngloGold Ashanti has two advanced projects in the DRC, Kibali and Mongbwalu.

### Kibali

On 15 October 2009 AngloGold Ashanti acquired a 50% indirect interest in Moto Goldmines Ltd through a joint venture with Randgold. On 21 December 2009, Randgold and AngloGold Ashanti increased their joint venture interest in the Kibali gold project to 90%, whilst OKIMO retained a 10% holding.

The project is a joint development between three separate groups:

- AngloGold Ashanti;
- Randgold Resources Limited, who is the operator, an African-focussed gold mining and exploration business with primary listings on the London Stock Exchange and Nasdaq; and
- L'Office des Mines d'Or de Kilo-Moto (OKIMO), the state-owned gold mining company.

The consolidated lease is made up of 10 mining concessions.

### Mongbwalu

The Mongbwalu Project is one of AngloGold Ashanti's most important exploration projects and is situated within the 5,487km<sup>2</sup> permit covered by Concession 40 in the Ituri Province of north-eastern DRC. Concession 40 has a rich history of gold occurrences and covers the entire Kilo Archaean granite-greenstone belt that extends approximately 850km west-northwest of Lake Albert. The concession is held in a joint venture between AngloGold Ashanti Kilo (AGAK) and OKIMO, a governmental body which currently holds a 13.8% non-contributory share. AGAK is 86.2% owned by AngloGold Ashanti Limited. The area around the old Adidi mine will undergo a feasibility study as part of the agreement with the DRC government.

## Mineral Resource estimation

Mineral Resource estimation is undertaken by either in-house Competent Persons or by approved external consultants. The results of both diamond drilling (DD) and reverse circulation (RC) drilling are used in the estimation process. 3D mineralised envelopes are established using both grade and geology and these are then statistically verified to confirm their validity for use in grade estimation. Volumes are then filled with block model cells and these are then interpreted for density, rock type and grade, the latter using ordinary kriging. The use of borehole grade top cuts is applied to prevent the spread of high grades during the estimation process. Drill-hole spacing is used to guide the Mineral Resource classification according to requirements of the relevant reporting codes. Open pit Mineral Resources are quoted within a limiting shell and underground Mineral Resources are quoted above a specified cut off.

## Ore Reserve estimation

The Ore Reserve for Kibali has been based on the Karagba, Chauffeur and the Sessenge Deeps high-grade domains. High-grade domains (1.0-4.0g/t) within the ordinary kriged resource model are commonly surrounded by a low-grade (+0.3g/t) halo. 3D models of each of these domains are created as the most prospective zones to be considered for mining.

The open pit Ore Reserves were completed on the 3D ordinary kriged resource model using Whittle® pit shell optimisations. This incorporated the mining layout, operating factors, stripping ratio and relevant cut-off grade for the mineral reserve. An open pit/underground interface was determined as optimal at 5,685mRL between the KCD open pit and underground mine.

A cut-off grade analysis at US\$800/oz was used to determine a cut-off grade of 2.1g/t for the underground mine. Longitudinal and transverse stoping methods with hydraulic and waste rock fill were chosen as the preferred mining method. Underground stope designs were updated from the previously reported Ore Reserve, using the 3D ordinary kriged resource model. Datamine® software was used to compile the Ore Reserve through an automated stope creation process. Modifying factors for planned and unplanned rock dilution, backfill dilution and ore loss were used to amend the reported Ore Reserve. Metallurgical, environmental, social, legal, marketing and economic factors are perceived to be adequately considered in the Kibali feasibility study for the Ore Reserves to remain viable.

# DRC

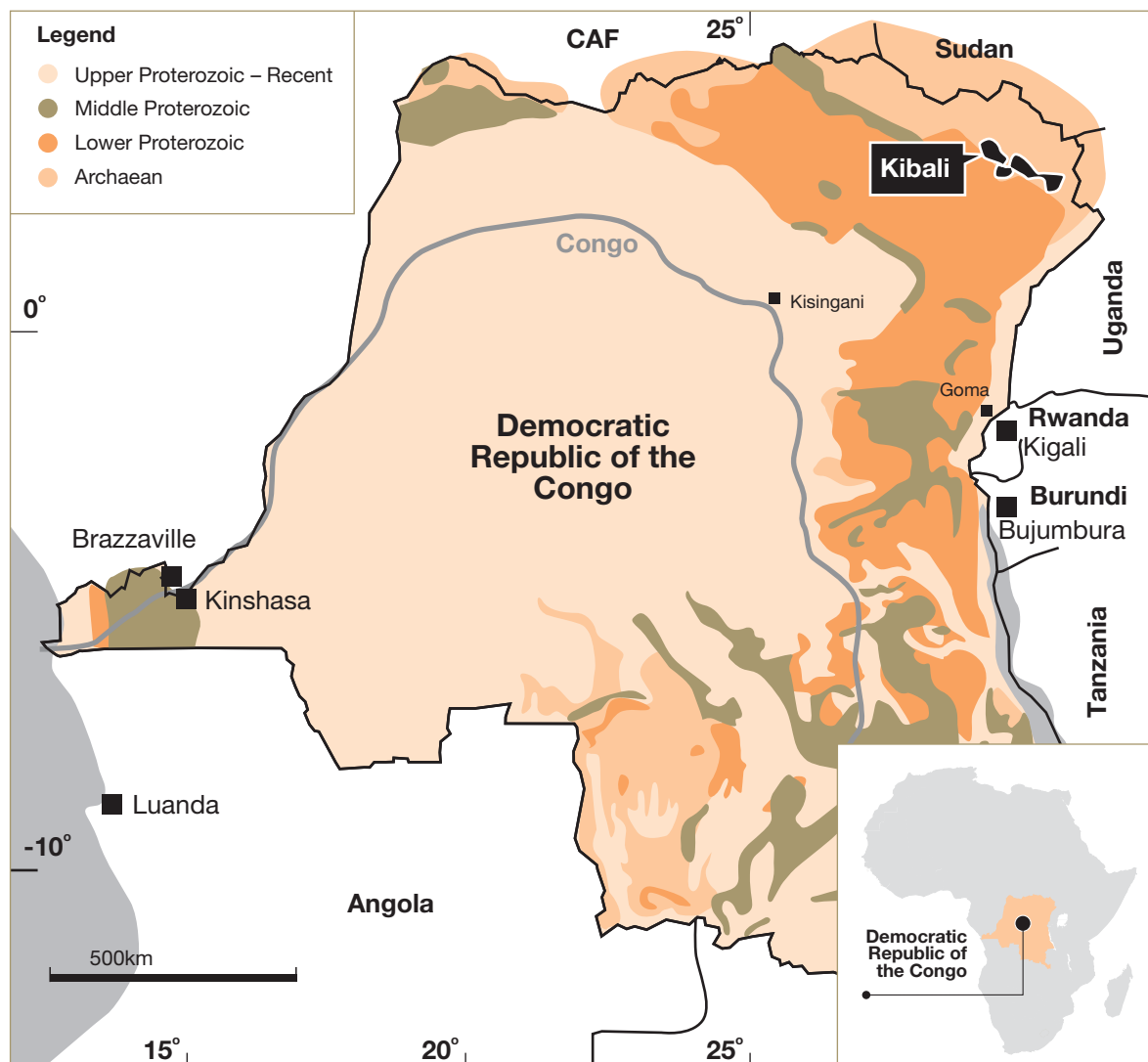
## Kibali

### Location

The Kibali concession areas are located in the north-eastern part of the DRC near the international borders with Uganda and Sudan.

The local office of Kibali Goldmines is located in the village of Doko, which is centrally located within the project area and approximately 180km by road from Arua on the Ugandan border and immediately north of the town of Watsa. The project area is centred at approximately 3.13° north and 29.58° east in the administrative district of Haut Uélé in Province Orientale.

The district capital of Watsa lies about 9km to the south of the project, which is situated just north of the Kibali River on the road to Faradje and the Sudan. The town of Bunia, which is the United Nations controlled entry point to north-eastern DRC, lies about 200km to the south of the project.



## Geology

The Moto Goldfields are located within the Moto Greenstone Belt, which consists of the Archaean Kibalian (Upper and Lower) volcano-sedimentary rocks and ironstone-chert horizons that have been metamorphosed to greenschist facies. It is cut by regional-scale north, east, north-east and north-west trending faults and is bounded to the north by the Middle Archaean West Nile granite-gneiss complex and cut to the south by the Upper Zaire granitic complex.

The stratigraphy consists of a volcano-sedimentary sequence comprising fine-grained sedimentary rocks, several varieties of pyroclastic rocks, basaltic flow rocks, mafic-intermediate intrusions (dykes and sills) and intermediate-felsic intrusive rocks (stocks, dykes and sills). The sequence is variably altered from slight to intense, such that in some cases the original lithology of the rock is unrecognisable.



Several major mineralised trends are outlined by the soil geochemistry data and by the distribution of known gold mineralisation. The Kibali-Durba-Karagba Trend and the Gorumbwa-Kombokolo Splay are anomalous with respect to gold endowment and together, define a mineralised, north-east-striking 'mineralised corridor', 1.5km wide and 8km long. These corridors host the orebodies of Kibali, Sessenge, Gorumbwa, Durba, Chauffeur, Karagba and Pakaka.

The main deposit, which comprises the combination of Karagba, Chauffeur and Durba, is colloquially termed the KCD deposit and hosts 49% of the grant's Mineral Resource and 62% of the Ore Reserve (for both open pit and underground mining options). The next biggest deposit is Pakaka, which hosts some 5% of the Mineral Resource and 6% of the Ore Reserve. Currently only the KCD deposit hosts an underground Ore Reserve and this constitutes 83% of the total KCD Ore Reserve.

Gold mineralisation is generally associated with structural features, resulting in tightly constrained zones which often host pods or lenses of plunging orebodies. Alteration is closely associated with the mineralisation and is typically carbonate-silica-albite with minor sulphide.

## Exploration

A large amount of exploration was undertaken by the previous owners of the Kibali project, Moto Goldmines Ltd, and this was focussed primarily on the KCD deposit. Since the acquisition of the concession area by AngloGold Ashanti and Randgold, the dominant exploration targets have been the KCD underground area and upgrading the confidence in the proposed KCD open pit. A feasibility study is currently underway which is due for completion in 2011. Exploration will continue to focus on confidence upgrades and ore extensions around the KCD deposit.

## Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Kibali	Category	million	g/t	Tonnes	Moz
Open pit	Measured	–	–	–	–
	Indicated	33.62	2.09	70.23	2.26
	Inferred	17.00	2.27	38.57	1.24
	<b>Total</b>	<b>50.62</b>	<b>2.15</b>	<b>108.80</b>	<b>3.50</b>
Underground	Measured	–	–	–	–
	Indicated	22.15	5.38	119.19	3.83
	Inferred	9.39	3.21	30.13	0.97
	<b>Total</b>	<b>31.54</b>	<b>4.73</b>	<b>149.33</b>	<b>4.80</b>
<b>Kibali</b>	<b>Total</b>	<b>82.16</b>	<b>3.14</b>	<b>258.13</b>	<b>8.30</b>

## Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	RC	hole	Other	
Kibali	Measured	–	–	–	–	–	
	Indicated	40 x 40	✓	✓	–	–	
	Inferred	40 x 80, 80 x 80	✓	✓	–	–	

## Exclusive Mineral Resource

The existence of the Exclusive Mineral Resource is primarily due to the gold price differential between the Mineral Resource and Ore Reserve. At the KCD deposit it is also partially due to the selection of a fixed interface between the open pit and the underground mining areas. At KCD the Exclusive Mineral Resource makes up 37% of the total Mineral Resource and for the entire grant the Exclusive Resource comprises 45% of the total Mineral Resource.

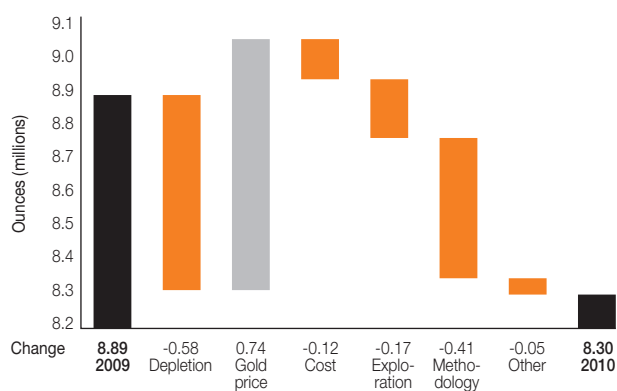
### Exclusive Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Kibali	Category	million	g/t	Tonnes	Moz
	Measured	—	—	—	—
	Indicated	22.33	2.18	48.73	1.57
	Inferred	26.39	2.60	68.71	2.21
<b>Kibali</b>	<b>Total</b>	<b>48.72</b>	<b>2.41</b>	<b>117.44</b>	<b>3.78</b>

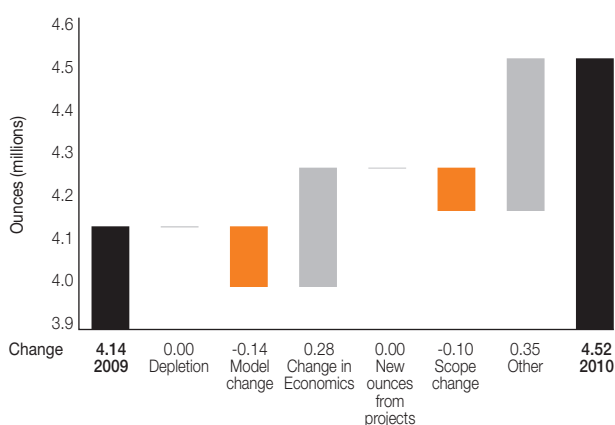
### Mineral Resource below infrastructure

as at 31 December 2010		Tonnes	Grade	Contained gold	
Kibali	Category	million	g/t	Tonnes	Moz
Underground	Measured	—	—	—	—
	Indicated	22.15	5.38	119.19	3.83
	Inferred	9.39	3.21	30.13	0.97
<b>Kibali</b>	<b>Total</b>	<b>31.54</b>	<b>4.73</b>	<b>149.33</b>	<b>4.80</b>

**Kibali: Mineral Resource reconciliation**  
2009 vs 2010



**Kibali: Ore Reserve reconciliation**  
2009 vs 2010



## Ore Reserve

as at 31 December 2010		Tonnes	Grade	Contained gold	
Kibali	Category	million	g/t	Tonnes	Moz
Kibali – Open pit	Proved	–	–	–	–
	Probable	16.82	2.67	44.94	1.44
	<b>Total</b>	<b>16.82</b>	<b>2.67</b>	<b>44.94</b>	<b>1.44</b>
Kibali – Underground	Proved	–	–	–	–
	Probable	16.62	5.76	95.75	3.08
	<b>Total</b>	<b>16.62</b>	<b>5.76</b>	<b>95.75</b>	<b>3.08</b>
<b>Kibali</b>	<b>Total</b>	<b>33.44</b>	<b>4.21</b>	<b>140.69</b>	<b>4.52</b>

## Inferred Mineral Resource in business plan

Some Inferred Mineral Resource was included in the optimisation process. Only the KCD deposit had more than 5% and much of this is covered by a line of old Belgium drilling which confirmed its presence. This drilling information has not been used in the estimation or classification, and as such, is not included in the Ore Reserve.

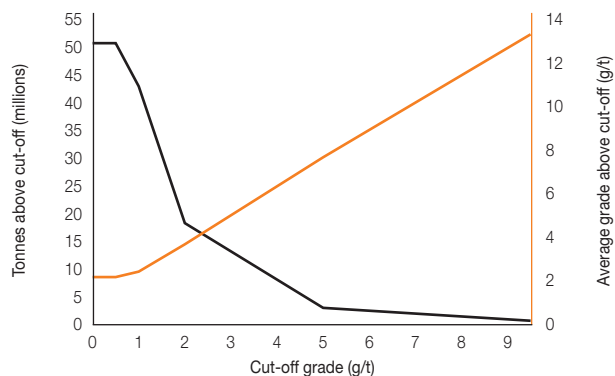


### Ore Reserve modifying factors

as at 31 December 2010	Gold	Ex- change	Cut-off value	Dilution	% RRF	% RRF	% MRF	% MRF		
Kibali	price	rate	g/t Au	(%)	(based on tonnes)	(based on g/t)	(based on tonnes)	(based on g/t)	MCF%	MetRF%
Open pit	800	–	1.08	10	50	28	–	–	–	84.50
Underground	800	–	2.10	8	33	19	–	–	–	91.30

### Kibali

– surface (metric)

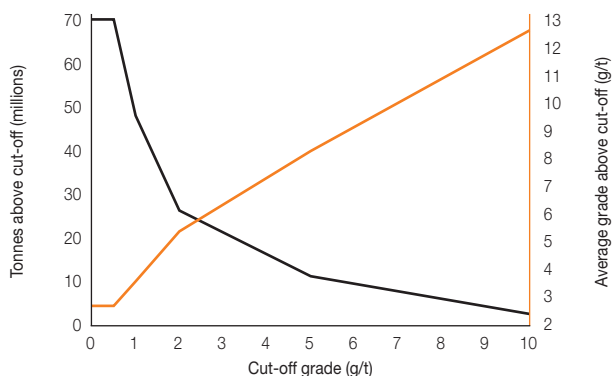


■ Tonnes above cut-off

Ave grade above cut-off ■

### Kibali

– underground (metric)



■ Tonnes above cut-off

Ave grade above cut-off ■

### Competent persons

Category	Name	Professional organisation	Registration number	Relevant Experience
Mineral Resource	Tom Gell	AusIMM	211795	18 years
Ore Reserve	Alex Bals	PLATO	PMS0174	16 years



## **Location**

The Mongbwalu Project is located within Permis d'Exploitation No. 5105, which covers an area of 396km<sup>2</sup>. It forms part of a larger concession of exploitation licences, totalling 5,487km<sup>2</sup>, that are held in the Ituri province of the north-eastern DRC. The district capital of Bunia lies just to the south and west of the concession area, some three hours by road from the project site. Bunia is in turn approximately one hour's flight from Entebbe, Uganda, which hosts the nearest major airport.

## **Geology**

The Mongbwalu project is located within the Kilo Archaean granite-greenstone belt that extends 850km west-north-west of Lake Albert and is approximately 3,000km<sup>2</sup> in extent. The oldest known rocks in the region are basement gneisses which have been dated at more than 3,400Ma. Granitoid rock comprise more than 80% of this belt, which includes rafts of Kibalian rocks that have been intruded by 2,651Ma old diorites of variable mineralogy.

The Kibalian rocks have been divided into an upper and lower unit. The lower unit is dominated by magnesium-rich tholeiitic basalt whilst the upper is dominated by schists, quartzites and banded iron formations that have been intruded by quartz monzonites. The relationship between the upper and lower units appears to be conformable.

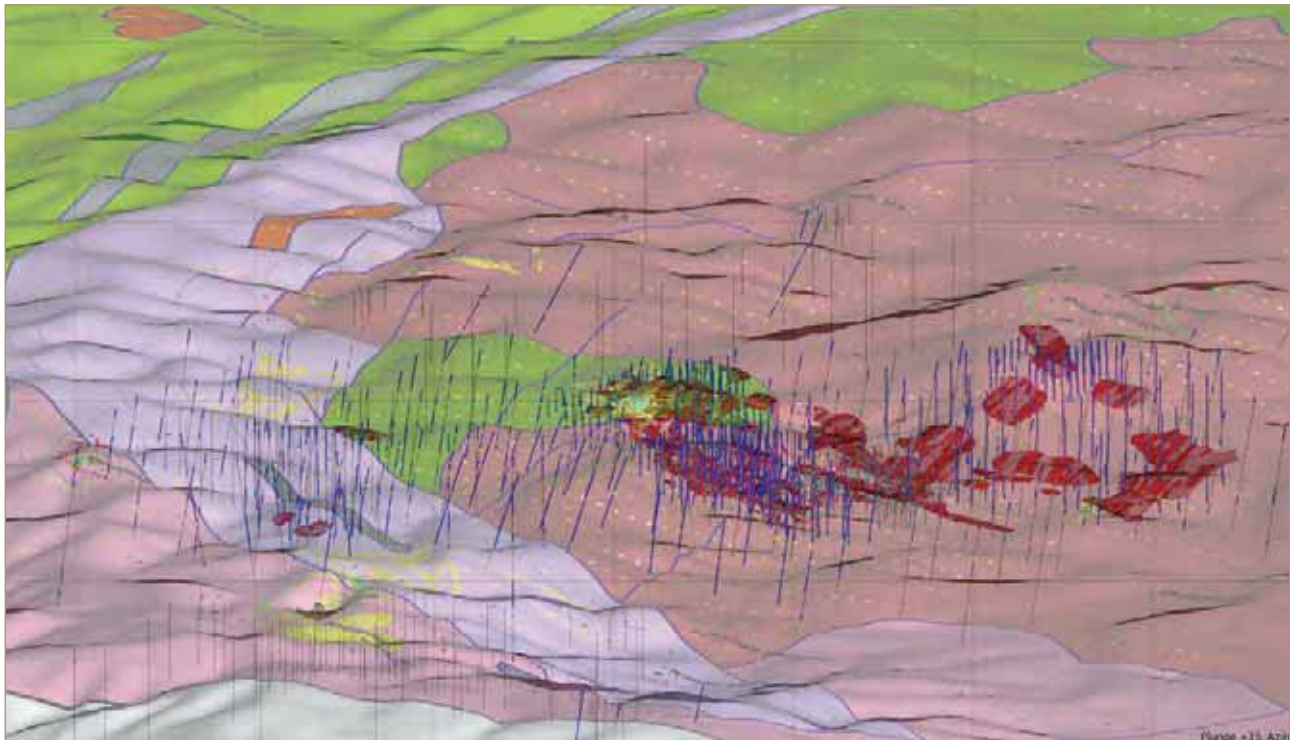


The Kilo Archaean granite-greenstone belt was part of the Tanzania shield but was separated by Late Proterozoic crustal mobilisation and then by later rifting along the Eastern Rift Valley system. The predominantly flatly east-dipping thrust planes, quartz reefs, thrust zones and mylonites are thought to be aged at 2,647Ma. The rocks have undergone regional metamorphism, ranging from upper green schist to lower amphibolite facies. During the formation of the East African rift system over the period 100-200Ma, north-south faults formed along which dolerite-lamprophyre dykes were intruded. There is also evidence of some younger faulting in the region. The area has undergone weak lateritic weathering to shallow depths. Cover sequences are thin and are generally no greater than 1m thick

The mineralisation is hosted within anatomising mylonite bodies which average around 10-15m in width. At Mongbwalu, these mylonite bodies can be subdivided into three main blocks that are separated by two late north-south trending faults that offset mineralisation by up to 200m. The fault blocks are termed the eastern, central and western blocks (Nzebi, Adidi and Kanga mylonites).

The mylonites are composed of quartz, dolomite, calcite, chlorite, sericite and albite. They generally dip to the east and are brought closer to the surface by the two late reverse north-south trending faults. The main mineralisation is hosted within the central and eastern blocks within what appears to be continuous mylonite horizons. The gold is generally not distributed evenly throughout the mylonite and the majority of it occurs as discrete boudinaged zones associated with quartz veining and silicification. The gold predominantly occurs as free gold, and is often visible in greyish quartz veins and veinlets or disseminated through silicified zones within the mylonite. Sulphides present in the mylonite include pyrite, pyrrhotite, chalcopyrite, sphalerite and galena.

Granitoids dominated by diorite, quartz diorite and tonalite form the footwall and hangingwall to the mineralisation in the potential Mineral Resource area. However, at Nzebi Mine, east-west striking talc carbonate schists of mafic to ultramafic composition and massive para-amphibolite predominate.



**Mongbwalu**  
*3D geological model viewed from the south showing local geology and shallow east-dipping orebodies in red*

## Exploration

As a result of the 2008 conceptual study and the 2009 Mineral Resource estimate it was decided to advance the Mongbwalu project with a 50m by 25m infill drilling campaign aimed at upgrading the Mineral Resource estimate from Inferred to Indicated Mineral Resource. The intention was to upgrade the high-grade areas identified in the conceptual mine design for extraction during the first five years of mine life.

Based on the information from the 2009 Mineral Resource model and grade estimate, a programme was designed to upgrade approximately 1.0Moz of the Inferred to Indicated Mineral Resource, which has successfully been achieved.

Geo-metallurgical and geo-technical data requirements within the Mineral Resource area were identified and separate programmes to meet these requirements compiled. These programmes include geotechnical drilling for civil engineering purposes, limited sterilisation and condemnation drilling and water drilling. In total some 26,400m of drilling was completed.

## Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Mongbwalu	Category	million	g/t	Tonnes	Moz
Underground	Measured	–	–	–	–
	Indicated	3.90	7.18	27.99	0.90
	Inferred	4.15	7.52	31.23	1.00
	<b>Total</b>	<b>8.05</b>	<b>7.36</b>	<b>59.22</b>	<b>1.90</b>
<b>Mongbwalu</b>	<b>Total</b>	<b>8.05</b>	<b>7.36</b>	<b>59.22</b>	<b>1.90</b>

## Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	RC	hole	Other	
Mongbwalu	Measured	–	–	–	–	–	
	Indicated	25 x 50	✓	✓	–	–	
	Inferred	50 x 100	✓	✓	–	–	

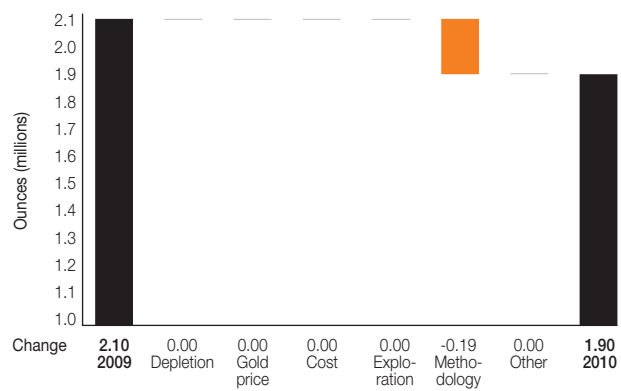
## Exclusive Mineral Resource

The Mongbwalu Mineral Resource is reported above a cut-off grade of 2.8g/t Au. The mineralisation has been classified as Indicated Mineral Resource and represents a drill spacing of 25m x 50m. The Exclusive and Inclusive Mineral Resource numbers are currently identical due to the absence of Ore Reserves.

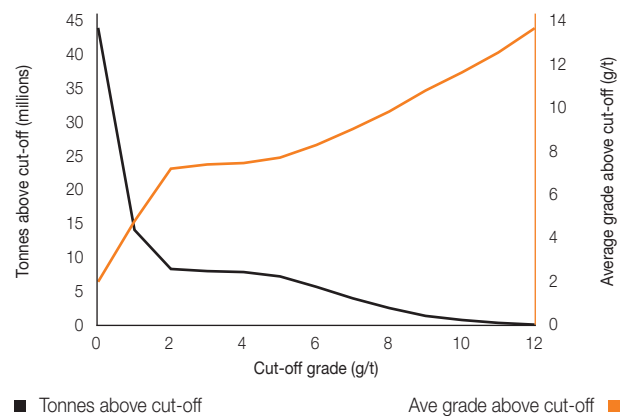




### Mongbwalu: Mineral Resource reconciliation 2009 vs 2010



### Mongbwalu - underground (metric)



### Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Paul Young	SACNASP	400270/05	24 years



# Ghana

## Country overview

AngloGold Ashanti has two mines in Ghana: Obuasi, which has both surface and underground operations and Iduapriem, an open-pit mine. Obuasi and Iduapriem are both wholly owned by AngloGold Ashanti. Obuasi is located in the Ashanti region of southern Ghana, approximately 80km south of Kumasi. It is primarily an underground mine operating at depths of up to 1,500m with a continuous history of mining dating back to the 1890s.

The orebody consists of two main ore types, firstly, quartz veining with non-refractory free gold and secondly, a sulphide-hosted mineralisation style generally associated with arsenopyrite which is refractory. Three main structural trends control the gold mineralisation within a 9km long continuous zone which remains open at depth. The Obuasi orebody is considered one of the classic Birimian hosted orebodies.

At Iduapriem, situated in the western region of Ghana, some 70km north of the coastal city of Takoradi and 10km south-west of Tarkwa, the gold mineralisation is hosted by the Proterozoic Banket Series, a conglomerate sequence of the Tarkwaian System.

## Mineral Resource estimation

Mineral Resource estimates are derived from interpretations of information about the location, shape, continuity and grade of the individual orebodies.

The underground Mineral Resource at Obuasi is estimated using block models within the delineated mineralised ore zones. The geological interpretation is based on diamond drill and cross-cut sampling information. A prototype block model of 20m x 5m x 15m representing the minimum mining unit was used and estimates are based on ordinary kriging.

Although no open-pit mining has taken place at Obuasi since 2005, three pits still contain a Mineral Resource. The open pit Mineral Resource at Obuasi and Iduapriem was estimated using 3D computer block models constructed using Datamine® software. Geological interpretation was based on trench and reverse circulation and/or diamond drilling data. A prototype block model of 30m x 30m x 10m was used by the geological model and ordinary kriging as the primary estimation methodology.

Surface stockpiles volumes are based on surveyed figures and grades based on historical sampling. Tailings are part of the Mineral Resource with tonnes and grades based on combinations of 3D block models of some dams and historical metallurgical discharge data.

## Ore Reserve estimation

The 3D Mineral Resource models are used as the basis for the Ore Reserve. An ore envelope is developed using the Mineral Resource block model, geological information and the relevant cut-off grade, which is then used for mine design. Datamine®'s Mineral Resource Optimizer is used to generate the ore envelope. An appropriate mining layout is designed that incorporates mining extraction losses and dilution factors.



# Ghana

## Iduapriem

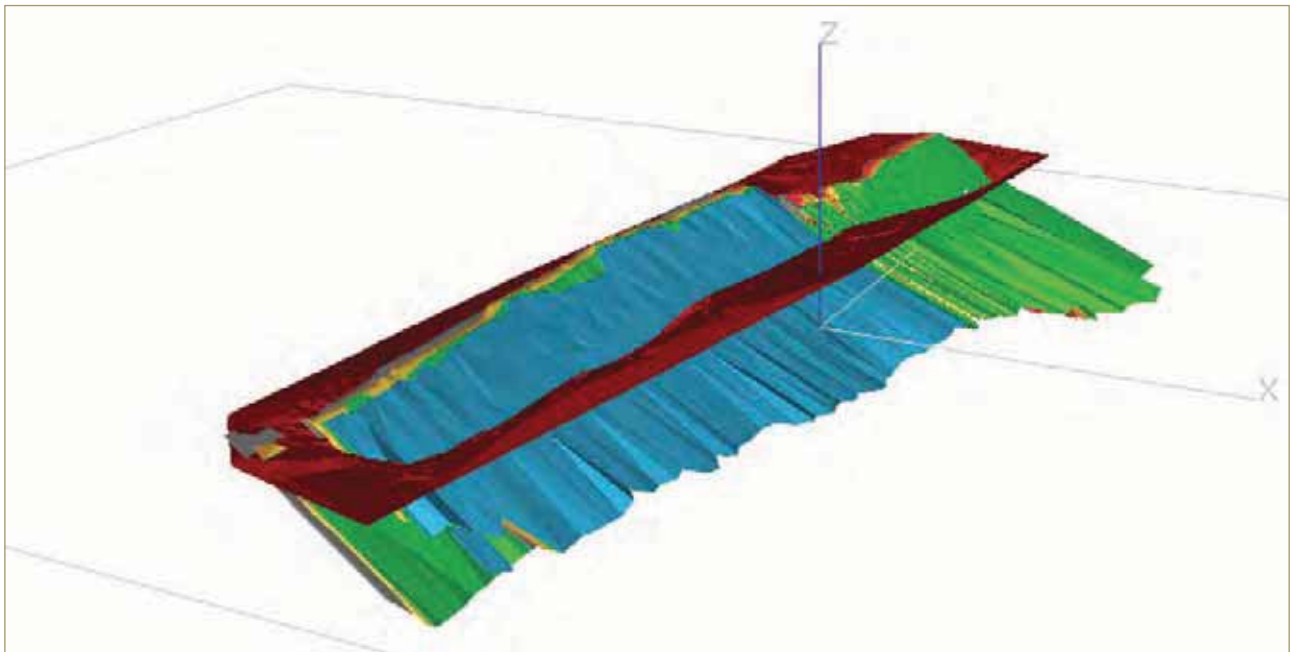
### Location

Iduapriem is located in the western region of Ghana, some 85km north of the coastal city of Takoradi and approximately 8km south-west of the town of Tarkwa. Iduapriem is an open pit mine which commenced mining operations in 1992. Its processing facilities include a 4.2Mtpa carbon-in-pulp (CIP) plant with a gravity circuit. The gravity feed recovers about 30% of the gold and the CIP plant recovers the remainder.

### Geology

Iduapriem is located within the Tarkwaian Group and forms part of the West Africa Craton which is covered to a large extent by metavolcanics and metasediments of the Birimian Supergroup. In Ghana, the Birimian terrane consists of north-east/south-west trending volcanic belts separated by basins. The Tarkwaian Group was deposited in these basins as shallow water deltaic sediments. The gold mineralisation is contained in the Proterozoic Banket Series conglomerates that were developed within these sediments.

The Banket Reef Zone (BRZ) comprises a sequence of individual beds of quartz pebble conglomerates, breccia conglomerates, quartzites and grits. The outcropping Banket Series in the mine lease area forms prominent curved ridges that extend southwards from Tarkwa, westwards through Iduapriem and northwards towards Teberebie.



*Isometric view of the Iduapriem orebody*



# Ghana

## Iduapriem

All known gold mineralisation within the Banket Series is associated with the conglomerates and is found within the matrix that binds the pebbles together. The gold content is a function of the size and amount of packing of the quartz pebbles within the conglomeratic units. At Iduapriem, the gold mineralisation is unrelated to metamorphic or hydrothermal alteration events and the gold is coarse grained, particulate and free milling. Mineralogical studies indicate that the grain size of native gold particles ranges between 2 and 500 microns and averages 130 microns. Sulphide mineralisation is present only at trace levels and is not associated with the gold.

The Mineral Resource originates from four mining block areas, namely Blocks 3W, 5, 7 & 8 and Ajopa. Evaluation of the Mineral Resource was carried out using Datamine® software to generate 3D wireframe models of the mineralisation. These models are based on geological information and 0.5g/t sample cut-off boundaries defined on 50m sections.

## Exploration

Iduapriem is a mature operation and there is little prospect of adding to its surface Mineral Resource. The main potential for future expansion is dependent on the economic viability of its underground potential. Work on this proposal has been limited to reviewing the existing limited data to determine if an economic Mineral Resource could be delineated to support an underground mining proposition. Due to the paucity of data, a five-year phased drilling programme is being implemented, commencing in 2011. The purpose of this initial drilling programme is two-fold:

- test the validity of the conceptual geological model; and
- increase the geological confidence of the delineated payshoots to the Inferred Mineral Resource category.



## Mineral Resource

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Iduapriem	Category			Tonnes	Moz
Ajopa	Measured	7.29	2.00	14.55	0.47
	Indicated	0.55	1.06	0.59	0.02
	Inferred	1.58	1.40	2.21	0.07
	<b>Total</b>	<b>9.43</b>	<b>1.84</b>	<b>17.35</b>	<b>0.56</b>
Block 3W	Measured	—	—	—	—
	Indicated	2.25	1.52	3.41	0.11
	Inferred	0.84	1.29	1.09	0.03
	<b>Total</b>	<b>3.09</b>	<b>1.46</b>	<b>4.50</b>	<b>0.14</b>
Block 5	Measured	5.96	1.24	7.41	0.24
	Indicated	1.71	1.28	2.19	0.07
	Inferred	0.66	1.42	0.94	0.03
	<b>Total</b>	<b>8.34</b>	<b>1.27</b>	<b>10.55</b>	<b>0.34</b>
Blocks 7 and 8	Measured	15.42	1.37	21.07	0.68
	Indicated	43.17	1.73	74.64	2.40
	Inferred	12.40	1.82	22.53	0.72
	<b>Total</b>	<b>70.99</b>	<b>1.67</b>	<b>118.24</b>	<b>3.80</b>
Stockpile (full grade ore)	Measured	3.89	1.04	4.06	0.13
	Indicated	—	—	—	—
	Inferred	—	—	—	—
	<b>Total</b>	<b>3.89</b>	<b>1.04</b>	<b>4.06</b>	<b>0.13</b>
Stockpile (other)	Measured	—	—	—	—
	Indicated	—	—	—	—
	Inferred	16.50	0.56	9.32	0.30
	<b>Total</b>	<b>16.50</b>	<b>0.56</b>	<b>9.32</b>	<b>0.30</b>
<b>Iduapriem</b>	<b>Total</b>	<b>112.23</b>	<b>1.46</b>	<b>164.01</b>	<b>5.27</b>

# Ghana

## Iduapriem

### Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	RC	Blast-hole	Other	
Iduapriem	Measured	50 x 50, and	✓	✓	–	–	
		50 x 100	✓	✓	–	–	
	Indicated	50 x 75, and	✓	✓	–	–	
		75 x 100	✓	✓	–	–	
	Inferred	40 x 40, and	✓	✓	–	–	Old leach pads – portions drilled approximately 40 x 40m
		100 x 100	✓	✓	–	–	
	Grade control	10 x 12, and	–	✓	–	–	
		10 x 15	–	✓	–	–	

### Exclusive Mineral Resource

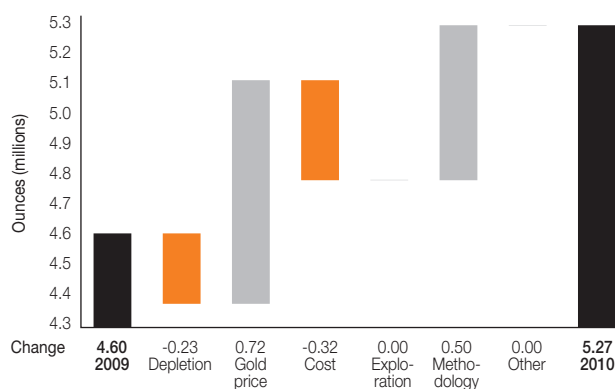
The Exclusive Mineral Resource listed below is derived mainly from the following:

- Inferred Resource located within the optimised Ore Reserve pit shell; and
- Mineral Resource located outside the Ore Reserve shell but within the optimised Mineral Resource shell. This consists mainly of down-dip extensions of the ore zones, most of which may be mineable at a higher gold price.

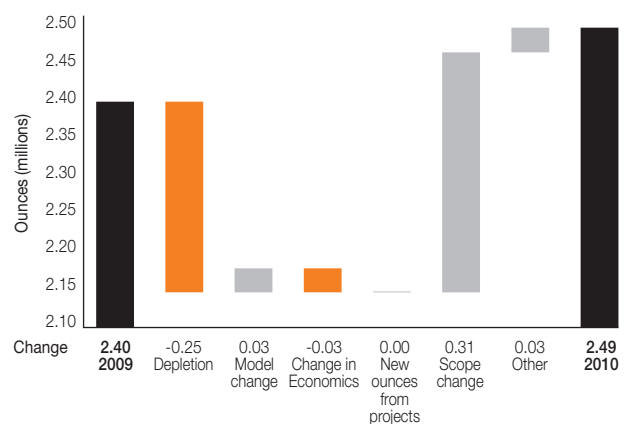
### Exclusive Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Iduapriem	Category	million	g/t	Tonnes	Moz
	Measured	3.33	1.75	5.82	0.19
	Indicated	22.98	1.70	38.99	1.25
	Inferred	31.99	1.13	36.09	1.16
<b>Iduapriem</b>	<b>Total</b>	<b>58.31</b>	<b>1.39</b>	<b>80.90</b>	<b>2.60</b>

### Iduapriem: Mineral Resource reconciliation 2009 vs 2010



### Iduapriem: Ore Reserve reconciliation 2009 vs 2010



## Ore Reserve

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Iduapriem	Category			Tonnes	Moz
Ajopa	Proved	4.88	1.88	9.19	0.30
	Probable	0.36	1.05	0.38	0.01
	<b>Total</b>	<b>5.23</b>	<b>1.83</b>	<b>9.56</b>	<b>0.31</b>
Block 3W	Proved	–	–	–	–
	Probable	1.89	1.47	2.79	0.09
	<b>Total</b>	<b>1.89</b>	<b>1.47</b>	<b>2.79</b>	<b>0.09</b>
Block 5	Proved	5.48	1.13	6.18	0.20
	Probable	1.62	1.13	1.83	0.06
	<b>Total</b>	<b>7.10</b>	<b>1.13</b>	<b>8.02</b>	<b>0.26</b>
Blocks 7 and 8	Proved	14.98	1.31	19.66	0.63
	Probable	20.83	1.61	33.50	1.08
	<b>Total</b>	<b>35.81</b>	<b>1.48</b>	<b>53.15</b>	<b>1.71</b>
Stockpile (full grade ore)	Proved	3.89	1.04	4.06	0.13
	Probable	–	–	–	–
	<b>Total</b>	<b>3.89</b>	<b>1.04</b>	<b>4.06</b>	<b>0.13</b>
<b>Iduapriem</b>	<b>Total</b>	<b>53.92</b>	<b>1.44</b>	<b>77.58</b>	<b>2.40</b>



# Ghana

Iduapriem

## Inferred Mineral Resource in business plan

The Inferred Mineral Resource within the Ore Reserve design is 5% of the total ore scheduled (51.58Mt) and exists as pockets of Inferred material that sit within the models of all the deposits.

### Inferred Mineral Resource

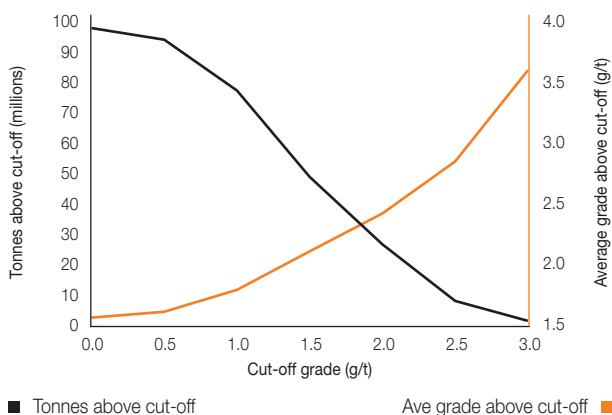
as at 31 December 2010	Tonnes	Grade	Contained gold		Comments
Iduapriem	million	g/t	Tonnes	Moz	
Ajopa	0.65	1.61	1.05	0.03	RC drilling will be done on every bench (18m) for better definition when mining commences
Block 3W	0.31	1.31	0.41	0.01	RC drilling will be done on every bench (18m) for better definition when mining commences
Block 5	0.57	1.15	0.65	0.02	Resource drilling to convert to Ore Reserves when mining commences
Blocks 7 and 8	0.99	1.40	1.39	0.04	RC drilling on every bench (18 m) for better definition
<b>Total</b>	<b>2.52</b>	<b>1.39</b>	<b>3.50</b>	<b>0.11</b>	

### Ore Reserve modifying factors

as at 31 December 2010	Ex-	Cut-off		% RRF	% RRF	% MRF	% MRF		
	Gold	change	value	Dilution	(based on	(based on	(based on	(based on	
Iduapriem	price	rate	g/t Au	(%)	tonnes)	on g/t)	tonnes)	on g/t)	
All projects and pits	850	–	–	–	100	100	100	94	100 95.00

### Iduapriem

– surface (metric)





## Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Kwasi Osei	AusIMM	112723	16 years
Ore Reserve	Stephen Asante Yamoah	AusIMM	304095	6 years



# Ghana

## Obuasi

### Location

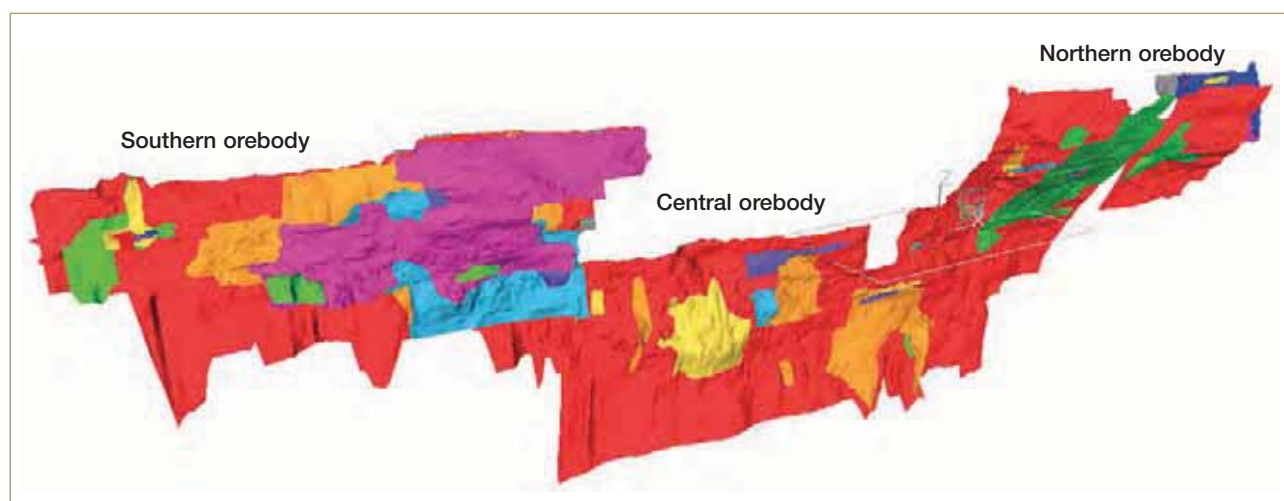
Obuasi is located in the Ashanti Region of Ghana, some 320km north-west of the capital Accra. It lies at latitude 6°12' north, longitude 1°40' west and at an elevation of 280m above sea level. The mine is situated in a largely forested region, with surrounding land occupied by subsistence farming. The mining concession covers an area of 47,500Ha. Eighty communities are located within a 30km radius of the mine.

### Geology

The mine is located within the Obuasi concession area in south-western Ghana along the north-easterly striking Ashanti volcanic belt. The deposit is in one of the most significant Proterozoic gold belts discovered to date. The Ashanti belt consists predominantly of sedimentary and mafic volcanic rocks and is the most prominent of the five Birimian gold belts found in Ghana. The belt is a 300km wrench fault system that extends from Dixcove in the south-west to beyond Konongo in the north-east.

The Birimian was deformed, metamorphosed and intruded by syn- and post-tectonic granitoids during the Eburnean tectonothermal event around two billion years ago. Folding trends are dominantly north-north-east to north-east. Elongate syn-Birimian basins developed between the ridges of the Birimian system and these were filled with the Tarkwaian molasse sediments made up primarily of conglomerates, quartzose and arkosic sandstones and minor shale units.

Major faulting has taken place along the same trends as the folding. These shear zones are commonly associated with pervasive silica, carbonate and sulphide hydrothermal alteration and occur in tightly folded Lower Birimian schists, phyllites meta greywackes and tuffs along the eastern limb of the Kumasi anticlinorium. The shear zones are found in close proximity to the contact between these rocks and the harder metamorphosed and metasomatically altered intermediate to basic upper Birimian volcanics. The contact between the harder metavolcanic rocks to the east and the more argillaceous rocks to the west is thought to have formed a plane of weakness as a result of the contrast in competency between the lithological units. During crustal movement, this plane became a zone of shearing and thrusting coeval with the compressional phases. Adjacent to the shear zones, the metasediments are replaced by sericitic, chloritic and carbonaceous schists, which may be graphitic in places. The gold mineralisation at Obuasi occurs within the fault zones and multiple lodes of mineralisation are a common feature.



Model of the Obuasi orebody



## Exploration

Exploration on the Obuasi concession is currently limited to underground drilling to explore the Obuasi Deeps below 50 level and the southern extensions of the current mining areas above 50 level.

## Projects

A major project has been embarked upon at Obuasi to convert the current mining method of transverse and longitudinal open stoping to a longitudinal retreat mining method (LRMM). The conversion will take place in mining blocks where it is most suitable to do so. The major advantage of this method is that it should result in a reduction of waste development of up to 50%. It will also reduce capital expenditure and provide additional reef drive exposure.

The Pompora reclamation project will consist of a reclamation station and pipeline that will enable the Kokoteasua and Pompora TSFs to be reclaimed. The reclaimed material will then be pumped to the tailings sulphide plant (TSP) to extract the gold, and this project is planned to commence in 2011.



# Ghana

Obuasi

## Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Obuasi	Category	million	g/t	Tonnes	Moz
Anyankyirem	Measured	0.40	2.41	0.97	0.03
	Indicated	2.86	2.60	7.44	0.24
	Inferred	0.78	2.49	1.94	0.06
	<b>Total</b>	<b>4.04</b>	<b>2.56</b>	<b>10.35</b>	<b>0.33</b>
Anyinam	Measured	0.00	2.35	0.00	0.00
	Indicated	0.04	3.20	0.14	0.00
	Inferred	0.12	3.74	0.44	0.01
	<b>Total</b>	<b>0.16</b>	<b>3.59</b>	<b>0.58</b>	<b>0.02</b>
Gyabunsu-Sibi	Measured	–	–	–	–
	Indicated	0.17	4.77	0.80	0.03
	Inferred	0.21	4.76	0.98	0.03
	<b>Total</b>	<b>0.37</b>	<b>4.76</b>	<b>1.79</b>	<b>0.06</b>
Tailings (Kokoteasua)	Measured	3.22	1.97	6.33	0.20
	Indicated	1.65	1.96	3.24	0.10
	Inferred	–	–	–	–
	<b>Total</b>	<b>4.87</b>	<b>1.96</b>	<b>9.57</b>	<b>0.31</b>
Tailings (Pompora)	Measured	–	–	–	–
	Indicated	–	–	–	–
	Inferred	33.61	1.57	52.89	1.70
	<b>Total</b>	<b>33.61</b>	<b>1.57</b>	<b>52.89</b>	<b>1.70</b>
Other surface resources	Measured	–	–	–	–
	Indicated	–	–	–	–
	Inferred	0.79	2.40	1.90	0.06
	<b>Total</b>	<b>0.79</b>	<b>2.40</b>	<b>1.90</b>	<b>0.06</b>
Upper mine	Measured	3.50	10.14	35.54	1.14
	Indicated	1.70	8.24	13.99	0.45
	Inferred	1.66	10.71	17.80	0.57
	<b>Total</b>	<b>6.86</b>	<b>9.81</b>	<b>67.34</b>	<b>2.16</b>
Above 50 base	Measured	34.00	7.59	257.90	8.29
	Indicated	25.31	6.38	161.41	5.19
	Inferred	25.77	6.56	169.10	5.44
	<b>Total</b>	<b>85.08</b>	<b>6.92</b>	<b>588.41</b>	<b>18.92</b>

## Mineral Resource continued

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Obuasi	Category			Tonnes	Moz
Adansi 50-60	Measured	1.69	5.66	9.59	0.31
	Indicated	1.27	4.68	5.94	0.19
	Inferred	2.82	5.55	15.63	0.50
	<b>Total</b>	<b>5.78</b>	<b>5.39</b>	<b>31.16</b>	<b>1.00</b>
Stockpile (heap leach)	Measured	0.47	0.50	0.23	0.01
	Indicated	–	–	–	–
	Inferred	–	–	–	–
	<b>Total</b>	<b>0.47</b>	<b>0.50</b>	<b>0.23</b>	<b>0.01</b>
Adansi 60-70	Measured	0.26	5.21	1.34	0.04
	Indicated	0.31	5.31	1.63	0.05
	Inferred	1.68	7.14	11.97	0.38
	<b>Total</b>	<b>2.24</b>	<b>6.67</b>	<b>14.93</b>	<b>0.48</b>
Stockpile (surface oxides)	Measured	0.03	1.72	0.05	0.00
	Indicated	–	–	–	–
	Inferred	–	–	–	–
	<b>Total</b>	<b>0.03</b>	<b>1.72</b>	<b>0.05</b>	<b>0.00</b>
KMS 50-60	Measured	0.70	18.22	12.67	0.41
	Indicated	2.20	18.52	40.79	1.31
	Inferred	3.07	10.91	33.55	1.08
	<b>Total</b>	<b>5.97</b>	<b>14.57</b>	<b>87.01</b>	<b>2.80</b>
Stockpile (surface sulphides)	Measured	0.30	2.64	0.78	0.03
	Indicated	–	–	–	–
	Inferred	–	–	–	–
	<b>Total</b>	<b>0.30</b>	<b>2.64</b>	<b>0.78</b>	<b>0.03</b>
KMS 60-70	Measured	0.00	12.48	0.00	0.00
	Indicated	0.18	14.16	2.62	0.08
	Inferred	2.76	17.62	48.70	1.57
	<b>Total</b>	<b>2.95</b>	<b>17.40</b>	<b>51.32</b>	<b>1.65</b>
<b>Obuasi</b>	<b>Total</b>	<b>153.53</b>	<b>5.98</b>	<b>918.32</b>	<b>29.52</b>

# Ghana

## Obuasi

### Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	RC	Blast-hole	Other	
Obuasi: surface	Measured	20 x 20,	✓	✓	–	✓	Auger drilling, historical information.
		50 x 50	✓	✓	–	✓	No current exploration or production.
	Indicated	30 x 30,	✓	✓	–	✓	Auger drilling, historical information.
		50 x 50 and	✓	✓	–	✓	No current exploration or production.
		60 x 60	✓	✓	–	✓	
	Inferred	90 x 90	✓	✓	–	✓	Auger drilling, historical information. No current exploration or production.
	Grade control	10 x 10	–	✓	–	–	
Obuasi: underground	Measured	20 x 20	✓	–	–	–	
	Indicated	60 x 60	✓	–	–	–	
	Inferred	120 x 120	✓	–	–	–	
	Grade control	1.5 x 25	–	–	–	✓	Chip sampling of development ends

### Exclusive Mineral Resource

The Exclusive Mineral Resource is made up of material from underground, open pit and tailings. The bulk of the Exclusive Mineral Resource (71%) is from underground and of this, approximately 52% is locked up in Mineral Resource blocks and remnants of historically mined out areas in the northern section of the mine. Some of the Exclusive Mineral Resource will be brought into the Ore Reserve as mining development is put into place to access these areas, and also as the economic criteria changes. Further drilling will increase the confidence in the Inferred Mineral Resource to bring this material into the Ore Reserve in the near future.

Approximately 10% of the Exclusive Mineral Resource is from tailings and will be brought into the Ore Reserve as infrastructure is developed and capacity is increased in the new TSP. None of the open pits are currently included in the Ore Reserve, to bring the open pits into the Ore Reserve will require more geotechnical investigation, optimisation and mine design.

### Exclusive Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Obuasi	Category	million	g/t	Tonnes	Moz
	Measured	26.35	7.62	200.70	6.45
	Indicated	11.48	3.94	45.27	1.46
	Inferred	73.27	4.84	354.92	11.41
<b>Obuasi</b>	<b>Total</b>	<b>111.10</b>	<b>5.41</b>	<b>600.90</b>	<b>19.32</b>

### Mineral Resource below infrastructure

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Obuasi	Category			Tonnes	Moz
	Measured	2.65	8.92	23.60	0.76
	Indicated	3.80	12.79	48.66	1.56
	Inferred	7.81	8.40	65.64	2.11
<b>Obuasi</b>	<b>Total</b>	<b>14.26</b>	<b>9.67</b>	<b>137.90</b>	<b>4.43</b>



# Ghana

## Obuasi

### Ore Reserve

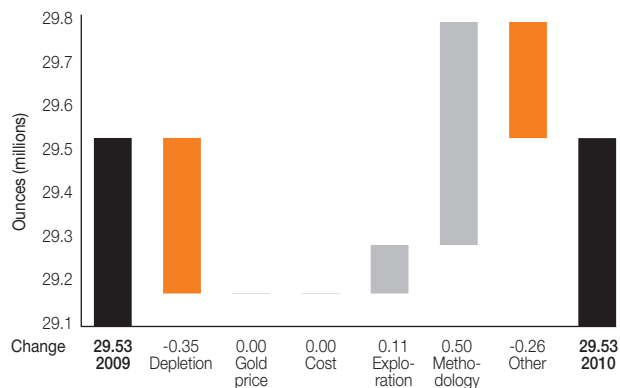
as at 31 December 2010		Tonnes	Grade	Contained gold	
Obuasi	Category	million	g/t	Tonnes	Moz
Tailings (Kokoteasua)	Proved	1.78	1.96	3.48	0.11
	Probable	3.16	1.96	6.19	0.20
	<b>Total</b>	<b>4.94</b>	<b>1.96</b>	<b>9.67</b>	<b>0.31</b>
Above 50 base	Proved	13.01	7.32	95.28	3.06
	Probable	18.73	7.32	137.10	4.41
	<b>Total</b>	<b>31.74</b>	<b>7.32</b>	<b>232.38</b>	<b>7.47</b>
KMS 50-60	Proved	—	—	—	—
	Probable	2.71	13.08	35.49	1.14
	<b>Total</b>	<b>2.71</b>	<b>13.08</b>	<b>35.49</b>	<b>1.14</b>
<b>Obuasi</b>	<b>Total</b>	<b>39.39</b>	<b>7.05</b>	<b>277.55</b>	<b>8.92</b>

### Inferred Mineral Resource in business plan

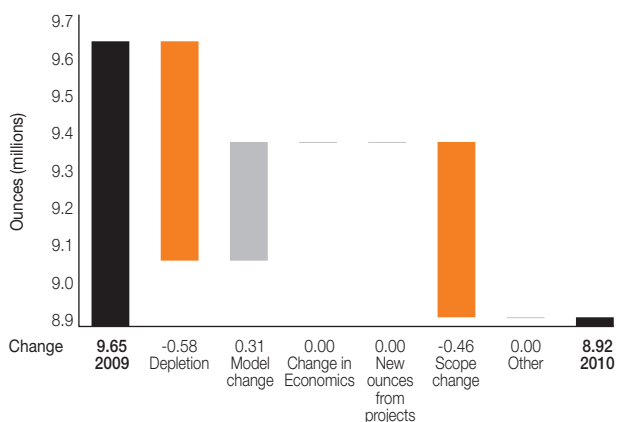
#### Inferred Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Obuasi		million	g/t	Tonnes	Moz
Tailings (Pompura)		32.86	1.57	51.74	1.66
Above 50 base		0.01	7.32	0.08	0.00
KMS 50-60		0.00	13.08	0.01	0.00
<b>Total</b>		<b>32.87</b>	<b>1.58</b>	<b>51.83</b>	<b>1.67</b>

#### Obuasi: Mineral Resource reconciliation 2009 vs 2010



#### Obuasi: Ore Reserve reconciliation 2009 vs 2010





### Ore Reserves below infrastructure

as at 31 December 2010		Tonnes	Grade	Contained gold	
Obuasi	Category	million	g/t	Tonnes	Moz
Below 50 level	Proved	–	–	–	–
	Probable	2.71	13.08	35.49	1.14
<b>Obuasi</b>	<b>Total</b>	<b>2.71</b>	<b>13.08</b>	<b>35.49</b>	<b>1.14</b>

### Ore Reserve modifying factors

as at 31 December 2010		Cut-off		Stopping	% RRF	% RRF	% MRF	% MRF	
	Gold	value	Dilution	width	(based on	(based	(based on	(based	
Obuasi	price	g/t Au	(%)	cm	tonnes)	on g/t)	tonnes)	on g/t)	MetRF%
Obuasi – Above 50 base	850	5.00	12	9,200	–	–	–	–	85
Obuasi – KMS 50–60	850	5.00	12	3,700	–	–	–	–	85



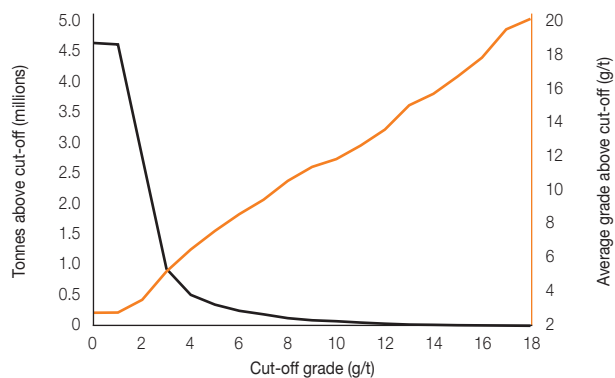


# Ghana

## Obuasi

### Obuasi

– surface (metric)

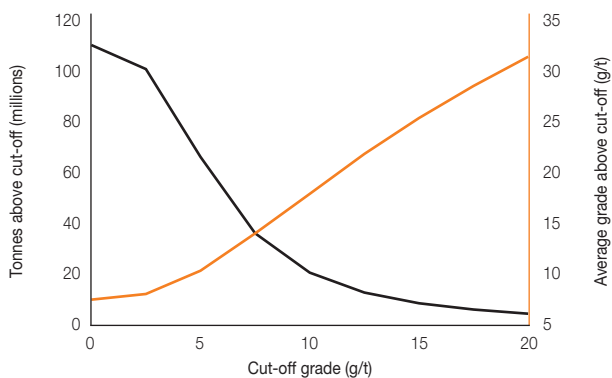


■ Tonnes above cut-off

Ave grade above cut-off ■

### Obuasi

– underground (metric)



■ Tonnes above cut-off

Ave grade above cut-off ■

### Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Clement Asamoah-Owusu	AusIMM	210145	26 years
Ore Reserve	Francis Owusu-Mensah	AusIMM	305571	25 years



# Guinea

## Country overview

The Siguiri mine is AngloGold Ashanti's only operation in the Republic of Guinea in West Africa. The mine is 85% owned by AngloGold Ashanti and 15% by the government of Guinea. The mine is a conventional open-pit operation situated in the Siguiri district in the north-east of Guinea. It lies about 850km from the capital city of Conakry. Gold-bearing ore is mined from several pits and sent to a CIP plant.

The Siguiri orebody is hosted in Birimian aged rocks and characterised by wide zones of multiple narrow quartz veins hosting gold mineralisation. The deposits have been influenced by a deep weathering profile, typically 50-80m below surface, resulting in broad zones of low-grade mineralisation easily amenable to bulk mining methods. Mining is presently focussed on block 1, which hosts the processing plant and mining operations, with ongoing exploration of blocks 2-4 expected to increase significantly in line with the operations' long-term development plans so as to maximise the exploitation of the Mineral Resource potential.

## Mineral Resource estimation

Mineral Resource definition drilling consists of air core (AC), RC and DD drilling. All available geological drill-hole information is validated for usage in the models and the local geology of the orebody is used to classify the drill-hole information into appropriate geostatistical domains. Detailed statistical analyses are conducted on each of these domains and this allows for the identification of high-grade outliers. If these values are anomalous to the general population characteristics then they are cut back to the appropriate upper limit of the population.

The Mineral Resource is estimated using 3D computer block models constructed in Datamine® software. Geological interpretation is based on geological borehole data. A prototype block model ranging from 10m x 10m x 2.5m to 50m x 25m x 6m block sizes, depending on the shape of the orebody and drilling density, is used within the geological model outlines. Ordinary and indicator kriging is used to estimate gold grades and a limiting pit shell at \$1,100/oz is used to quantify the total Mineral Resource.

## Ore Reserve estimation

The Mineral Resource models for each pit are depleted to the mining surfaces. Costs are assigned on a pit-by-pit basis reflecting the current existing cost structure of the operation. The relevant dilution and ore loss factors are applied and the optimisation is done in Whittle® software. The relevant metallurgical recoveries, geotechnical parameters, cut-off grades and economics are applied to generate the final Ore Reserve.

# Guinea

## Siguiri

### Location

Siguiri is situated in the north-east of Guinea and is located about 850km from the capital city of Conakry. The Société Ashanti Goldfields de Guinée (SAG) mining concession consists of four blocks totalling 1,495km<sup>2</sup>. Siguiri is a multi-pit mining operation and the current LOM plan comprises the mining of three individual pits. The oxide gold ore is mined by a mining contractor in a conventional open-pit mining operation and processing is done by a CIP plant.

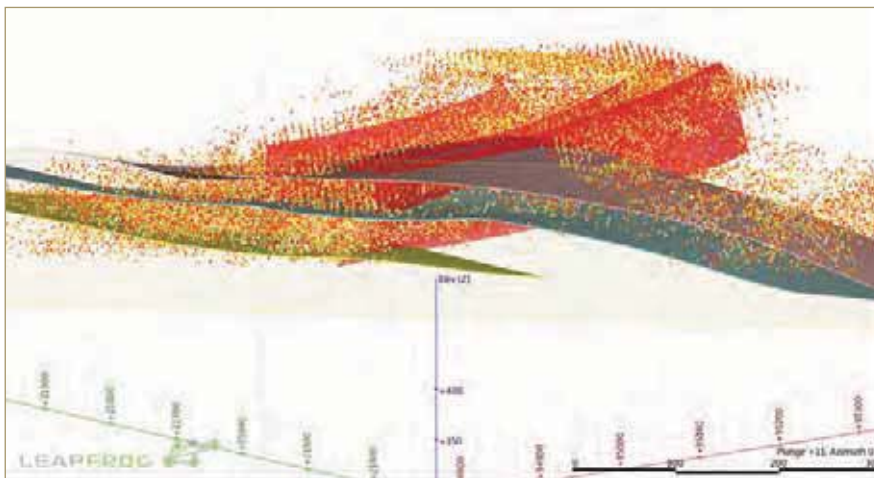
### Geology

Mineralisation occurs in Paleoproterozoic Birimian rocks consisting of turbidites and lesser volcanoclastic sequences. The mineralisation is structurally controlled and occurs as sheeted veins or within shear zones. There are two main types of oxide mineralisation in the Siguiri basin, namely:

- alluvial or alluvial-hosted laterite mineralisation; and
- primary quartz-vein related or shear hosted mineralisation.

The laterite mineralisation occurs as aprons of colluvial or as palaeo-channels of alluvial lateritic gravel adjacent or immediately above the in situ vein-related or shear hosted mineralisation. The in situ mineralisation can occur as either sheeted veins or associated with shear zones, with the best mineralisation often occurring at the intersection of the two.

The shear zone mineralisation is related to the development of a number of north-south striking shear zones that appear to cut through different lithologies. This mineralisation is commonly associated with silicification, brecciation and quartz-albite-pyrite veining, with magnetite present at some localities.



Siguiri

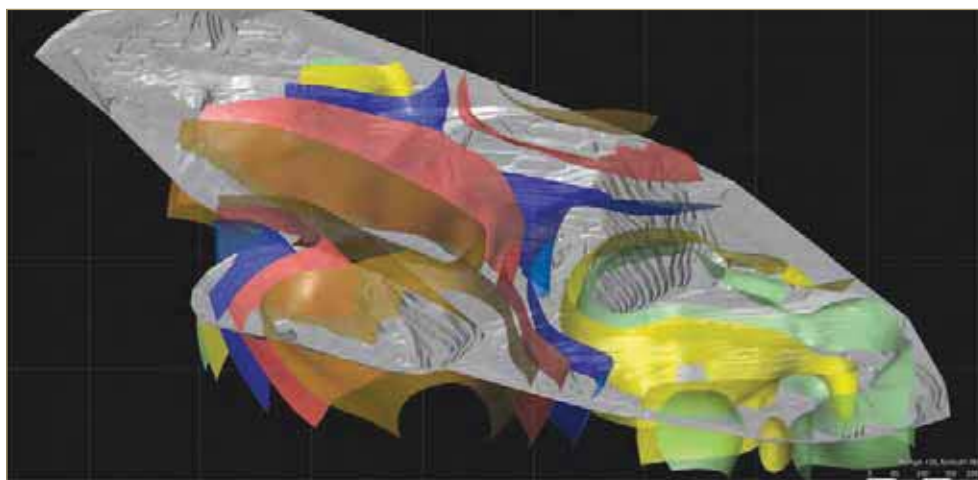
3D model of geological features (veins and bedding planes) and gold-bearing samples

The vein related mineralisation occurs as north-east/south-west to east-west striking, discontinuous sheeted veins. The better mineralised areas are associated with vein stockworks that generally occur in the coarser, brittle siltstones and sandstones. The sheeted veins appear to be related to a younger folding event and may be developed in fold axial planes. Mineralisation is associated with white quartz veins, with grey selvages and scattered large arsenopyrite crystals proximal to these veins.

The mineralisation at Siguiri has been deeply weathered to depths of up to 100m. The mineralised saprolite provides the primary oxide feedstock for the CIP plant. The original practice at Siguiri was to blend the laterite and saprolite ore types and to process these using the heap-leach method. With the percentage of available laterite ore decreasing, a CIP plant was brought on stream during 2005 to treat predominantly saprolite oxide ore. With continued exploration into deeper fresh rock extensions of the ore deposit, new treatment options are under consideration.

## Exploration

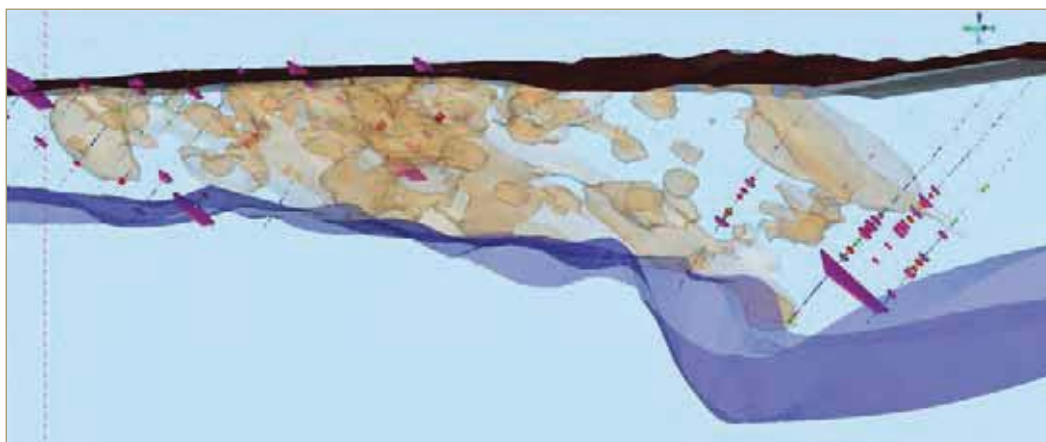
The primary objective of the exploration programme at Siguiri is to discover new deposits and upgrade prospective areas to replace the annual depletion from mining. Exploration is focussed on finding and upgrading oxide style mineralisation in the saprolite, using geophysics, soil geochemistry and drill-hole sampling in the context of the regional and pit-scale geological models. There is a secondary focus to investigate and evaluate the potential mineralisation in the fresh rock so that all opportunities are explored. The 2010 budget was spent mainly on drilling, with 149,235m drilled during the year made up of 125,944m of brownfield exploration (AC and RC) in oxides; 5,984m mixed RC and DD in sulphides and a further 17,307m of sterilisation drilling.



*Structural model of the Tubani and Bindini pits*

# Guinea

## Siguiri



*North-east section through the Seguélen pit*

The areas around the current pits were again the focus of the drilling in 2010 in order to investigate the potential extensions to the current pits. The principal targets that were explored include Bidini South, Kalamagna South, north-west of Seguélen North East and South West pits, Kozan North West (ii), Kozan Central West and Sanu-Tinti-Tubani connections. Extension drilling was undertaken at Sintroko North.

During the year the Sokunu-Sintroko soil anomalies were investigated with geophysics and reconnaissance drilling, with promising results. The fresh rock potential below a number of pits was also investigated, with particular emphasis on the Sanu-Tinti, Toubani, Kami North East, Sintroko South, Eureka North and Soloni Pits. Soil/regolith sampling of Block 1 continued throughout the year with approximately 85% of Block 1 covered by a 200m x 50m grid by year end. The geological model has been significantly revised on the basis of the deep drilling and field work results, with the structural controls of the mineralisation being the focus of these investigations. This process is ongoing and further academic studies are planned.

## Projects

The Foulata drilling was completed in 2007 and the first Inferred Mineral Resource in Block 2 was declared in 2008. The Mineral Resource at present is based on the assumption that ore from the deposit will be trucked to the current processing plant. An additional 17 DD holes were drilled for metallurgical testwork and additional coverage during 2010. Opportunities for upside potential through on-site mineral concentration are being investigated.

The Siguiri Expansion Project was initiated to investigate the economic viability of increased production volumes from Block 1. The exploration potential for oxide and sulphide deposits is encouraging. Fast-tracking of drilling to bring the project to account is required to meet the LOM plan. Current exploration potential is based on positive surface geochemistry results, extensive orpillage activity, geophysical data interpretation, geological modelling and experienced target generation extrapolated from existing mining areas.

This Siguiri expansion project, presently at scoping level, will consider alternative routes to:

- increase gold production;
- lower mining costs; and
- increase plant throughput.

## Mineral Resource

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Siguiri	Category			Tonnes	Moz
Bidini	Measured	–	–	–	–
	Indicated	6.42	1.11	7.14	0.23
	Inferred	12.01	0.98	11.72	0.38
	<b>Total</b>	<b>18.43</b>	<b>1.02</b>	<b>18.86</b>	<b>0.61</b>
Eureka East	Measured	–	–	–	–
	Indicated	0.46	0.78	0.36	0.01
	Inferred	0.06	0.68	0.04	0.00
	<b>Total</b>	<b>0.52</b>	<b>0.77</b>	<b>0.40</b>	<b>0.01</b>
Eureka North	Measured	–	–	–	–
	Indicated	0.70	0.89	0.62	0.02
	Inferred	0.21	0.79	0.17	0.01
	<b>Total</b>	<b>0.91</b>	<b>0.87</b>	<b>0.78</b>	<b>0.03</b>
Foulata	Measured	–	–	–	–
	Indicated	–	–	–	–
	Inferred	2.83	1.63	4.61	0.15
	<b>Total</b>	<b>2.83</b>	<b>1.63</b>	<b>4.61</b>	<b>0.15</b>
Kalamagna	Measured	–	–	–	–
	Indicated	5.70	0.72	4.09	0.13
	Inferred	6.45	0.87	5.64	0.18
	<b>Total</b>	<b>12.15</b>	<b>0.80</b>	<b>9.73</b>	<b>0.31</b>
Kami	Measured	6.59	0.92	6.08	0.20
	Indicated	4.40	0.78	3.42	0.11
	Inferred	7.74	0.81	6.30	0.20
	<b>Total</b>	<b>18.73</b>	<b>0.84</b>	<b>15.80</b>	<b>0.51</b>
Kosise	Measured	–	–	–	–
	Indicated	9.40	0.72	6.74	0.22
	Inferred	8.72	0.85	7.40	0.24
	<b>Total</b>	<b>18.13</b>	<b>0.78</b>	<b>14.14</b>	<b>0.45</b>
Kozan North	Measured	–	–	–	–
	Indicated	5.56	0.64	3.59	0.12
	Inferred	3.10	0.76	2.35	0.08
	<b>Total</b>	<b>8.66</b>	<b>0.69</b>	<b>5.94</b>	<b>0.19</b>
Kozan South	Measured	–	–	–	–
	Indicated	2.68	0.67	1.80	0.06
	Inferred	1.14	0.79	0.90	0.03
	<b>Total</b>	<b>3.82</b>	<b>0.71</b>	<b>2.70</b>	<b>0.09</b>

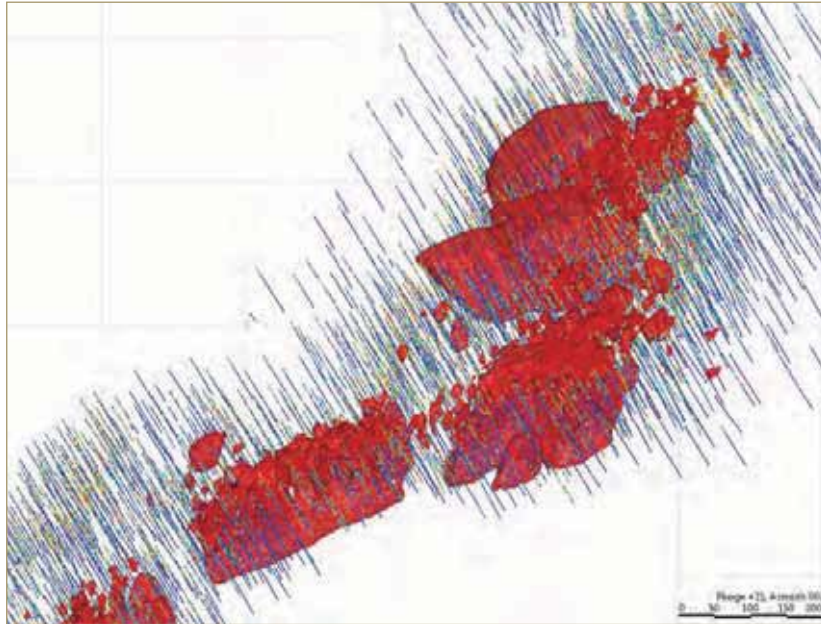
# Guinea

## Siguiri

### Mineral Resource continued

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Siguiri	Category			Tonnes	Moz
Seguélén	Measured	7.51	0.78	5.83	0.19
	Indicated	11.08	1.02	11.31	0.36
	Inferred	11.13	0.97	10.82	0.35
	<b>Total</b>	<b>29.72</b>	<b>0.94</b>	<b>27.97</b>	<b>0.90</b>
Sintroko South	Measured	–	–	–	–
	Indicated	7.08	1.22	8.68	0.28
	Inferred	0.22	1.77	0.39	0.01
	<b>Total</b>	<b>7.30</b>	<b>1.24</b>	<b>9.06</b>	<b>0.29</b>
Sokunu	Measured	–	–	–	–
	Indicated	2.48	0.82	2.02	0.07
	Inferred	0.55	0.83	0.46	0.01
	<b>Total</b>	<b>3.04</b>	<b>0.82</b>	<b>2.48</b>	<b>0.08</b>
Soloni	Measured	–	–	–	–
	Indicated	7.18	0.75	5.36	0.17
	Inferred	7.28	0.73	5.32	0.17
	<b>Total</b>	<b>14.46</b>	<b>0.74</b>	<b>10.68</b>	<b>0.34</b>
Sorofe	Measured	0.06	0.69	0.04	–
	Indicated	6.68	0.86	5.77	0.19
	Inferred	2.91	0.82	2.39	0.08
	<b>Total</b>	<b>9.65</b>	<b>0.85</b>	<b>8.20</b>	<b>0.26</b>
Stockpile (marginal ore)	Measured	20.49	0.44	9.02	0.29
	Indicated	–	–	–	–
	Inferred	–	–	–	–
	<b>Total</b>	<b>20.49</b>	<b>0.44</b>	<b>9.02</b>	<b>0.29</b>
Stockpile (full grade ore)	Measured	8.54	0.86	7.31	0.23
	Indicated	–	–	–	–
	Inferred	–	–	–	–
	<b>Total</b>	<b>8.54</b>	<b>0.86</b>	<b>7.31</b>	<b>0.23</b>
Stockpile (spent heap leach)	Measured	–	–	–	–
	Indicated	31.95	0.54	17.29	0.56
	Inferred	13.40	0.57	7.61	0.24
	<b>Total</b>	<b>45.35</b>	<b>0.55</b>	<b>24.90</b>	<b>0.80</b>
<b>Siguiri</b>	<b>Total</b>	<b>222.73</b>	<b>0.77</b>	<b>172.58</b>	<b>5.55</b>





*Ore envelopes and drilling at Siguiri*



# Guinea

## Siguiri

### Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	RC	Blast-hole	Other	
Siguiri	Measured	5 x 10	–	✓	–	–	
	Indicated	20 x 40,	–	✓	–	✓	Mainly RC, but AC is used in the early stages and some DD holes are drilled for geology
		25 x 25, and	–	✓	–	✓	
		50 x 25	–	✓	–	✓	
	Inferred	20 x 40,	✓	✓	–	✓	Mainly RC, but AC is used in the early stages and some DD holes are drilled for geology
		25 x 50, and	✓	✓	–	✓	
		50 x 50	✓	✓	–	✓	
	Grade control	5 x 10,	–	✓	–	–	
		5 x 12, and	–	✓	–	–	
		10 x 10	–	✓	–	–	

### Exclusive Mineral Resource

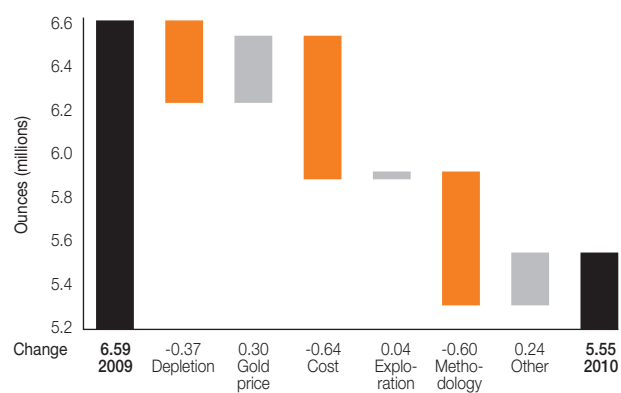
The Exclusive Mineral Resource at Siguiri comprises:

- material that is economic at the Mineral Resource gold price of US\$1,100 per ounce, but not at the Ore Reserve price of US\$850 per ounce (73% of the Exclusive Mineral Resource);
- new deposits that are currently at the Inferred Mineral Resource level of confidence (16% of the Exclusive Mineral Resource). These areas were being infill drilled during 2010; and
- the Inferred Mineral Resource in the current pit designs (11% of the Exclusive Resource).

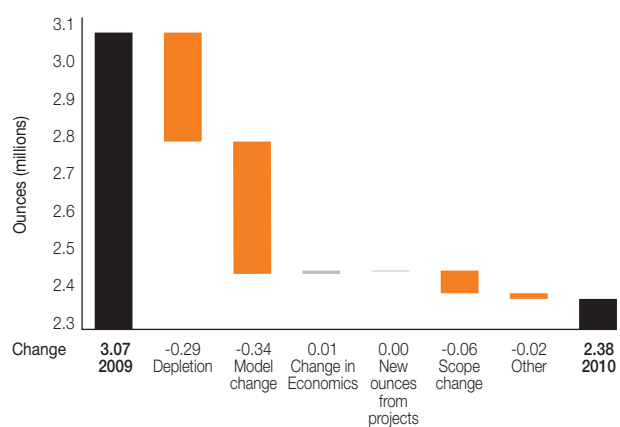
### Exclusive Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Siguiri	Category	million	g/t	Tonnes	Moz
	Measured	4.46	0.80	3.59	0.12
	Indicated	34.07	0.77	26.22	0.84
	Inferred	77.77	0.85	66.11	2.13
<b>Siguiri</b>	<b>Total</b>	<b>116.30</b>	<b>0.82</b>	<b>95.91</b>	<b>3.08</b>

**Sigüiri: Mineral Resource reconciliation**  
2009 vs 2010



**Sigüiri: Ore Reserve reconciliation**  
2009 vs 2010



## Ore Reserve

as at 31 December 2010		Tonnes	Grade	Contained gold	
Sigüiri	Category	million	g/t	Tonnes	Moz
Bidini	Proved	—	—	—	—
	Probable	0.85	1.89	1.62	0.05
	<b>Total</b>	<b>0.85</b>	<b>1.89</b>	<b>1.62</b>	<b>0.05</b>
Eureka East	Proved	—	—	—	—
	Probable	0.44	0.67	0.29	0.01
	<b>Total</b>	<b>0.44</b>	<b>0.67</b>	<b>0.29</b>	<b>0.01</b>
Kalamagna	Proved	—	—	—	—
	Probable	5.32	0.70	3.73	0.12
	<b>Total</b>	<b>5.32</b>	<b>0.70</b>	<b>3.73</b>	<b>0.12</b>
Kami	Proved	2.07	1.21	2.50	0.08
	Probable	—	—	—	—
	<b>Total</b>	<b>2.07</b>	<b>1.21</b>	<b>2.50</b>	<b>0.08</b>
Kosise	Proved	—	—	—	—
	Probable	4.11	0.72	2.95	0.09
	<b>Total</b>	<b>4.11</b>	<b>0.72</b>	<b>2.95</b>	<b>0.09</b>
Kozan North	Proved	—	—	—	—
	Probable	0.86	0.66	0.57	0.02
	<b>Total</b>	<b>0.86</b>	<b>0.66</b>	<b>0.57</b>	<b>0.02</b>
Kozan South	Proved	—	—	—	—
	Probable	0.67	0.77	0.51	0.02
	<b>Total</b>	<b>0.67</b>	<b>0.77</b>	<b>0.51</b>	<b>0.02</b>

# Guinea

## Siguiri

### Ore Reserve continued

as at 31 December 2010		Tonnes	Grade	Contained gold	
Siguiri	Category	million	g/t	Tonnes	Moz
Seguélén	Proved	7.95	0.70	5.56	0.18
	Probable	9.10	1.02	9.29	0.30
	<b>Total</b>	<b>17.05</b>	<b>0.87</b>	<b>14.84</b>	<b>0.48</b>
Sintroko South	Proved	–	–	–	–
	Probable	4.85	1.09	5.30	0.17
	<b>Total</b>	<b>4.85</b>	<b>1.09</b>	<b>5.30</b>	<b>0.17</b>
Sokunu	Proved	–	–	–	–
	Probable	1.66	0.87	1.44	0.05
	<b>Total</b>	<b>1.66</b>	<b>0.87</b>	<b>1.44</b>	<b>0.05</b>
Soloni	Proved	–	–	–	–
	Probable	2.98	0.93	2.77	0.09
	<b>Total</b>	<b>2.98</b>	<b>0.93</b>	<b>2.77</b>	<b>0.09</b>
Sorofe	Proved	–	–	–	–
	Probable	4.64	0.85	3.94	0.13
	<b>Total</b>	<b>4.64</b>	<b>0.85</b>	<b>3.94</b>	<b>0.13</b>
Stockpile (marginal ore)	Proved	20.49	0.44	9.02	0.29
	Probable	–	–	–	–
	<b>Total</b>	<b>20.49</b>	<b>0.44</b>	<b>9.02</b>	<b>0.29</b>
Stockpile (full grade ore)	Proved	8.54	0.86	7.31	0.23
	Probable	–	–	–	–
	<b>Total</b>	<b>8.54</b>	<b>0.86</b>	<b>7.31</b>	<b>0.23</b>
Stockpile (spent heap leach)	Proved	–	–	–	–
	Probable	31.95	0.54	17.29	0.56
	<b>Total</b>	<b>31.95</b>	<b>0.54</b>	<b>17.29</b>	<b>0.56</b>
<b>Siguiri</b>	<b>Total</b>	<b>106.49</b>	<b>0.70</b>	<b>74.08</b>	<b>2.38</b>

### Inferred Mineral Resource in business plan

Some Inferred Mineral Resource was included in the optimisation process and the total Inferred Mineral Resource within the in situ ore reserve is 0.20Moz or 11% of the declared in situ Ore Reserve. The Inferred Mineral Resource was generally not used in the optimisation process except at the Tubani and Sintroko pits, since these pits are coming to an end. The inclusion of the Inferred Mineral Resource in these two pits was deemed to be insignificant in influencing the pit size as it made up less than 10% of the declared Ore Reserve in these two pits.

The Seguélén pits contain 0.10Moz of Inferred material within the pit design. This Inferred material is mostly located within the Kintinia Area 1 where access to this area has historically been difficult.

## Inferred Mineral Resource

as at 31 December 2010	Tonnes	Grade	Contained gold		Comments
Siguiri	million	g/t	Tonnes	Moz	
Bidini	0.66	0.90	0.60	0.02	Sanutinti pits containing 6% transition ore
Eureka East	0.09	0.55	0.05	0.00	Within the Ore Reserve pit design
Kalamagna	1.11	0.64	0.71	0.02	Within the Ore Reserve pit design
Kami	0.01	1.00	0.01	0.00	100% hard oxides
Kosise	0.16	0.55	0.09	0.00	Within the Ore Reserve pit design
Kozan North	0.05	0.85	0.04	0.00	Within the Ore Reserve pit design
Kozan South	0.08	0.93	0.08	0.00	Within the Ore Reserve pit design
Seguélén	3.47	0.92	3.18	0.10	Sanutinti pits containing 0.36% transition ore
Sintroko South	0.05	0.80	0.04	0.00	Within the Ore Reserve pit design
Sokunu	0.26	0.70	0.18	0.01	Within the Ore Reserve pit design
Soloni	0.85	0.90	0.76	0.02	Within the Ore Reserve pit design
Sorofe	0.56	0.71	0.39	0.01	Tubani pits containing 0.03% transition ore
<b>Total</b>	<b>7.34</b>	<b>0.84</b>	<b>6.14</b>	<b>0.20</b>	





# Guinea

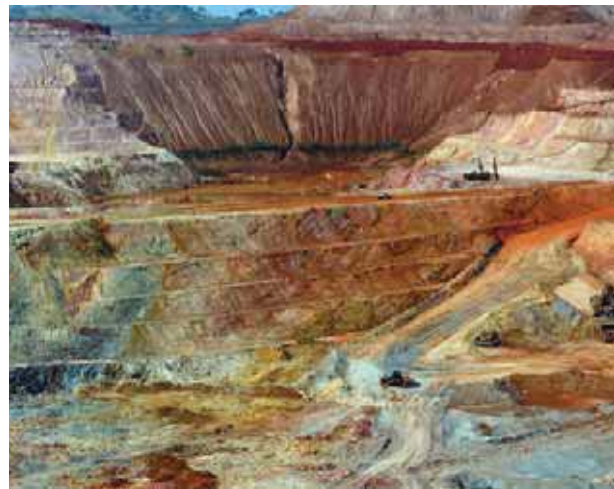
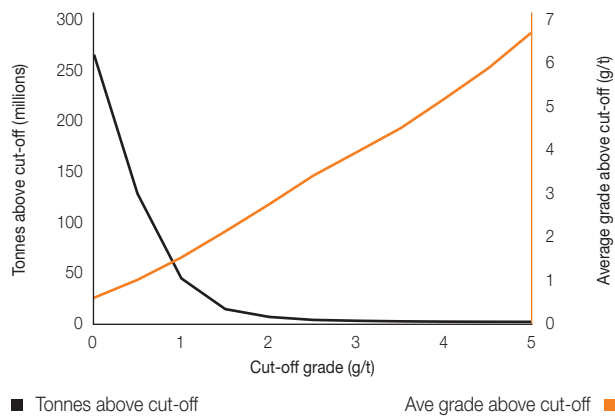
## Siguiri

### Ore Reserve modifying factors

as at 31 December 2010	Gold	Cut-off	% RRF	% MRF	% MRF		
	price	value	(based	(based on	(based		
Siguiri		g/t Au	on g/t)	tonnes)	on g/t)	MCF%	MetRF%
Seguélén	850	0.35	100	100	100	100	0.94
Sintroko South	850	0.41	100	100	100	100	0.94
Sokunu	850	0.37	100	100	100	100	0.94
All remaining pits	850	0.31	100	100	100	100	0.94
Stockpile (full grade ore)	850	0.55	100	100	100	100	0.94
Stockpile (marginal ore)	850	0.35	100	100	100	100	0.94
Stockpile (spent heap leach)	850	0.35	100	100	100	100	0.94

### Siguiri

– surface (metric)



### Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Peter Winkler	AusIMM	220329	26 years
Ore Reserve	Tebogo Mushi	SAIMM	702438	9 years



# Mali

## Country overview

AngloGold Ashanti has interests in three operations in the west African country of Mali – Sadiola (41%), Yatela (40%) and Morila (40%). The Sadiola and Yatela operations are managed by AngloGold Ashanti, while Randgold Resources Limited manages Morila.

## Mineral Resource estimation

The Mineral Resource is taken as the material that falls within the \$1,100/oz economic shell optimised for each individual deposit. A 3D surface is generated to create the outline of the geological model. This model is then used as a prototype model to estimate grades. Block sizes are between 25m x 25m x 10m and 30m x 30m x 10m (X Y Z) and where appropriate, selective sub-celling is used for definition on the geological and mineralisation boundaries. All the deposits have kriged block models and where appropriate, a geostatistical technique called uniform conditioning is used to estimate the proportion of economic ore that occurs above the cut-off and this is reported according to the dimensions of the practical mining unit.

## Ore Reserve estimation

The Mineral Resource models are used as the basis for the Ore Reserve. Pit optimisation is done using Whittle® software. The typical Whittle® approach for a mill-constrained operation is followed. Optimisations are run on the Measured and Indicated Mineral Resource and the Measured, Indicated and Inferred Mineral Resource. All appropriate costs, metallurgical recovery factors and geotechnical parameters are applied to generate the final Ore Reserve.



# Mali

## Morila

### Location

The Morila mine is situated some 280km south-east of Bamako, the capital city of Mali. The mine is operated by Morila SA, a joint venture company incorporating Randgold Resources (40%), AngloGold Ashanti (40%) and the Government of Mali (20%). Randgold Resources took over the operation of Morila mine from AngloGold Ashanti in February 2008.

### Mining

The Morila open-pit activities were successfully completed in April 2009. Consequently the main mining activity for the rest of the mine life will be re-handling already mined stockpiles at a rate of 4.2Mtpa using a core and backup fleet comprising two hydraulic excavators, two CAT 990 front-end loaders and seven Caterpillar 777 dump trucks.

### Geology

The Morila orebody is located predominantly in metasediments within a broad NNW-trending corridor of shearing. This shear zone has both near vertical and flat lying components. It is interpreted as being a second order shear off the main Banafin shear, approximately 25km to the east. The Doubalakoro granite pluton bounds the sediments to the west and the Massigui granite to the east. The deposit occurs within a sequence of amphibolites facies metamorphosed Birimian metasediments. Gold mineralisation is associated with silica feldspar alteration and the sulphide minerals arsenopyrite, pyrrhotite, and pyrite (with minor chalcopyrite).

### Processing

Ore is processed at a rate of 4.2Mtpa via a conventional CIL plant after passing through primary and secondary crushing processes followed by further comminution via a semi-autogenous grinding (SAG) mill and ball mill. After milling and classification, the slurried ore passes through the cyanide leach circuit for gold extraction after which the leached ore is pumped and deposited into the TSF. Supernatant water from the TSF is reclaimed and collected in the return water dam before being returned to the mill for re-use.

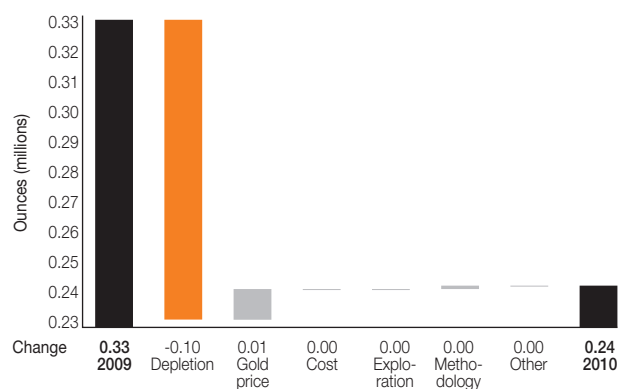
### Mineral Resource

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Morila	Category			Tonnes	Moz
Stockpile (marginal ore)	Measured	2.68	1.14	3.04	0.10
	Indicated	–	–	–	–
	Inferred	0.78	0.79	0.61	0.02
	<b>Total</b>	<b>3.46</b>	<b>1.06</b>	<b>3.65</b>	<b>0.12</b>
Stockpile (full grade ore)	Measured	2.35	1.68	3.93	0.13
	Indicated	–	–	–	–
	Inferred	–	–	–	–
	<b>Total</b>	<b>2.35</b>	<b>1.68</b>	<b>3.93</b>	<b>0.13</b>
<b>Morila</b>	<b>Total</b>	<b>5.80</b>	<b>1.31</b>	<b>7.58</b>	<b>0.24</b>

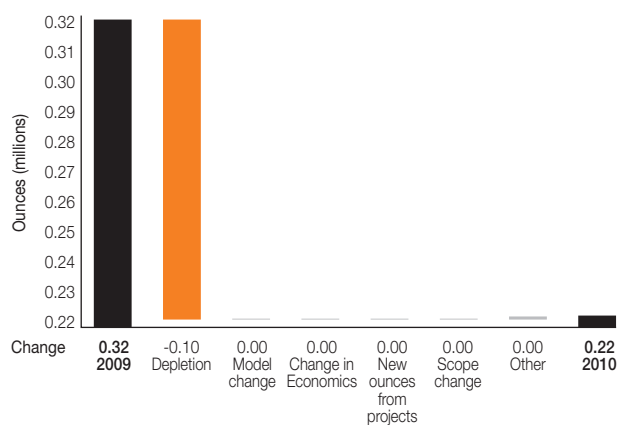
### Exclusive Mineral Resource

The Exclusive Mineral Resource is comprised of stockpiles below the current processing cut-off and stockpiles with diluted boundary limits.

**Morila: Mineral Resource reconciliation**  
2009 vs 2010



**Morila: Ore Reserve reconciliation**  
2009 vs 2010



**Ore Reserve**

as at 31 December 2010		Tonnes	Grade	Contained gold	
Morila	Category	million	g/t	Tonnes	Moz
Stockpile (marginal ore)	Proved	–	–	–	–
	Probable	2.68	1.14	3.04	0.10
	<b>Total</b>	<b>2.68</b>	<b>1.14</b>	<b>3.04</b>	<b>0.10</b>
Stockpile (full grade ore)	Proved	2.35	1.68	3.93	0.13
	Probable	–	–	–	–
	<b>Total</b>	<b>2.35</b>	<b>1.68</b>	<b>3.93</b>	<b>0.13</b>
<b>Morila</b>	<b>Total</b>	<b>5.02</b>	<b>1.39</b>	<b>6.97</b>	<b>0.22</b>

**Ore Reserve modifying factors**

as at 31 December 2010	Gold	Cut-off value
Morila	price	g/t Au
Morila – Stockpiles	850	0.90

**Competent persons**

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Tom Gell	AusIMM	211795	18 years
Ore Reserve	Alex Bals	PLATO	PMS0174	16 years

# Mali

## Sadiola

### Location

Sadiola is situated in the north-west of Mali, 77km to the south of the regional capital of Kayes. The mining operations take place in six open pits, namely the Sadiola main pit and five satellite pits.

Ore is treated in a 4.8Mtpa CIP processing plant. The plant was originally designed to treat soft oxide ore, but has been progressively adapted to receive soft sulphide ores and even some types of hard oxide ores.

The down dip extension of the mineralisation mined in the Sadiola main pit has been named the Deep Sulphides Project (DSP), in which the gold ore occurs in the underlying fresh rock. A full feasibility study of the DSP is scheduled for completion in 2011. If approved, the project will extend the life of Sadiola's operations and leverage exploration efforts and further discoveries of hard-rock gold deposits in the district.

### Geology

The Sadiola deposits are located within the Malian portion of the Keniéba-Kedougou Inlier, a major early Proterozoic-Birimian window along the north-east margin of the Kenema-Man shield. The deposits are in the north of the inlier and positioned in the Kofi Formation, just east of the Senegalo-Malian Shear Zone (SMS) terrane boundary. Regional metamorphism is greenschist facies with amphibolites facies metamorphism observed in the contact aureoles around major intrusions.

Sadiola main pit is a brittle-ductile shear zone-hosted deposit related to the interaction of the north-striking Sadiola Fracture Zone (SFZ) and a north-north-east striking fault array. The SFZ follows the contact between the hangingwall greywacke and footwall marble and is mineralised over a drilled strike length of approximately 2,500m. The stratigraphy is intruded by discontinuous diorite and quartz-feldspar porphyry. Mineralisation occurs in all four rock types although most of the mineralisation is hosted in the footwall adjacent to the SFZ. The deposit has been intensely weathered to a maximum depth of 200m.

The Sadiola main pit deposit originally consisted of two zones, an upper oxidised cap and an underlying sulphide zone. From 1996 until 2002, shallow saprolite oxide ore was the primary ore source. Since 2002, the deeper saprolitic sulphide ore has been mined, progressively replacing the depleted oxide Ore Reserve. The Ore Reserve of the main pit is fully depleted with the remaining material below the current pit being part of the DSP.

The primary source of the oxide ore currently comes from five satellite pits located approximately 6km south-east of the Sadiola mine and processing plant. Some gold-rich, hard-oxide nodes have been also treated in the Sadiola plant, after first stage crushing. Mineralisation for FE3 pits 1, 2 and 3 is hosted in marble adjacent to the upper contact with carbon-rich pelites. Gold is associated with north-east-striking faults and lens-shaped breccia zones that are broadly parallel to the north-west-trending stratigraphy. The FE4 deposit is located in a bedded sandstone and pelite sequence with mineralisation predominantly hosted in breccia along a NE-striking regional shear and several subsidiary NNE-trending faults.

### Exploration

Exploration around Sadiola aims to grow SEMOS's current production profile by developing and upgrading Mineral Resources and thereby Ore Reserves, and discovering new projects. To this end, 62,452m RC and 7,183m DC drilling were completed on the Sadiola concession in 2010.

Advanced project work has focussed on detailed structural and geological mapping to understand the controls on gold mineralisation and to maximise project potential. This has led to Mineral Resource drilling at Tambali which converted the Inferred Mineral Resource within the pit design to Indicated Mineral Resource and allowing the project to be added to the LOM plan. Additional scope exists to increase the Ore Reserve in the high-grade zone in the fresh rock.

Mineral Resource drilling at Sadiola has targeted both the oxide and deep sulphides to upgrade the Inferred Mineral Resource to Indicated Mineral Resource inside the pit shell and to add more Mineral Resources along the NNE structures. Mapping and drilling around the FE3 and FE4 pit areas has indicated potential for further oxide mineralisation which will be followed up in 2011.

Regional exploration work has focussed predominantly on oxide mineralisation within the Sadiola concession. Detailed gravity, termite sampling and drilling is ongoing. An exploration strategy for 2011 was developed to assess the oxide endowment of the concession through termite sampling, field mapping, trenching, IP geophysics surveys and drilling.

First stage exploration is also targeting areas of the Souroukoto Sandstone Plateau where the major mineralising structures and basement rocks continue under shallow cover. Additionally, a more regional focus to target potential joint ventures is being implemented.

## Projects

A full feasibility study for the DSP was planned to be finalised in November 2010. This was completed, except for the EIA study which was pushed back by approximately six months. To date all geological work indicates favourable results. Additional drilling has been completed along north-east structures to target some 880,000 additional ounces and to convert the Inferred Mineral Resource to Indicated Mineral Resource.

Work is continuing to examine the underground potential of Sadiola. Preliminary drilling targets have been identified and drilling is expected to commence in 2012.

## Mineral Resource

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Sadiola	Category			Tonnes	Moz
FE2	Measured	–	–	–	–
	Indicated	–	–	–	–
	Inferred	0.84	1.63	1.37	0.04
	<b>Total</b>	<b>0.84</b>	<b>1.63</b>	<b>1.37</b>	<b>0.04</b>
FE3	Measured	–	–	–	–
	Indicated	4.02	2.12	8.53	0.27
	Inferred	0.56	3.04	1.71	0.05
	<b>Total</b>	<b>4.58</b>	<b>2.24</b>	<b>10.24</b>	<b>0.33</b>
FE4	Measured	–	–	–	–
	Indicated	3.42	2.01	6.87	0.22
	Inferred	0.26	2.20	0.56	0.02
	<b>Total</b>	<b>3.67</b>	<b>2.02</b>	<b>7.43</b>	<b>0.24</b>

# Mali

## Sadiola

### Mineral Resource continued

as at 31 December 2010		Tonnes	Grade	Contained gold	
Sadiola	Category	million	g/t	Tonnes	Moz
FN2	Measured	–	–	–	–
	Indicated	0.25	1.49	0.37	0.01
	Inferred	0.36	3.35	1.21	0.04
	<b>Total</b>	<b>0.61</b>	<b>2.59</b>	<b>1.57</b>	<b>0.05</b>
FN3	Measured	–	–	–	–
	Indicated	0.04	1.64	0.06	0.00
	Inferred	1.27	1.24	1.57	0.05
	<b>Total</b>	<b>1.31</b>	<b>1.25</b>	<b>1.63</b>	<b>0.05</b>
Total stockpiles	Measured	9.60	1.39	13.39	0.43
	Indicated	–	–	–	–
	Inferred	–	–	–	–
	<b>Total</b>	<b>9.60</b>	<b>1.39</b>	<b>13.39</b>	<b>0.43</b>
Sekokoto	Measured	–	–	–	–
	Indicated	–	–	–	–
	Inferred	0.68	1.47	1.00	0.03
	<b>Total</b>	<b>0.68</b>	<b>1.47</b>	<b>1.00</b>	<b>0.03</b>
Tambali South	Measured	–	–	–	–
	Indicated	3.86	1.38	5.34	0.17
	Inferred	0.55	2.37	1.30	0.04
	<b>Total</b>	<b>4.41</b>	<b>1.50</b>	<b>6.63</b>	<b>0.21</b>
DSP (oxides)	Measured	–	2.00	–	–
	Indicated	0.38	1.66	0.64	0.02
	Inferred	0.05	1.61	0.07	0.00
	<b>Total</b>	<b>0.43</b>	<b>1.66</b>	<b>0.71</b>	<b>0.02</b>
DSP (transitional)	Measured	–	–	–	–
	Indicated	0.17	1.70	0.29	0.01
	Inferred	0.45	1.79	0.80	0.03
	<b>Total</b>	<b>0.62</b>	<b>1.77</b>	<b>1.09</b>	<b>0.04</b>
DSP (sulphides)	Measured	0.00	5.17	0.02	0.00
	Indicated	41.20	1.77	72.76	2.34
	Inferred	13.27	1.60	21.26	0.68
	<b>Total</b>	<b>54.47</b>	<b>1.73</b>	<b>94.03</b>	<b>3.02</b>
<b>Sadiola</b>	<b>Total</b>	<b>81.21</b>	<b>1.71</b>	<b>139.11</b>	<b>4.47</b>



### Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	RC	Blast-hole	Other	
Sadiola	Measured	25 x 25	✓	✓	–	–	
	Indicated	25 x 25,	✓	✓	–	–	
		30 x 30,	✓	✓	–	–	
		35 x 35, and	✓	✓	–	–	
		25 x 50	✓	✓	–	–	
	Inferred	25 x 50, and	✓	✓	–	–	
		50 x 50	✓	✓	–	–	
	Grade control	5 x 10	–	✓	–	–	



# Mali

## Sadiola

### Exclusive Mineral Resource

The Exclusive Mineral Resource is defined as the part of the Mineral Resource that was not converted to Ore Reserve. For the Sadiola pits that is defined as follows:

- the Mineral Resource that is outside the current Ore Reserve designs but inside the Mineral Resource shells;
- the Inferred Mineral Resource; and
- material below the Ore Reserve cut-off grade and above the Mineral Resource cut-off grade.

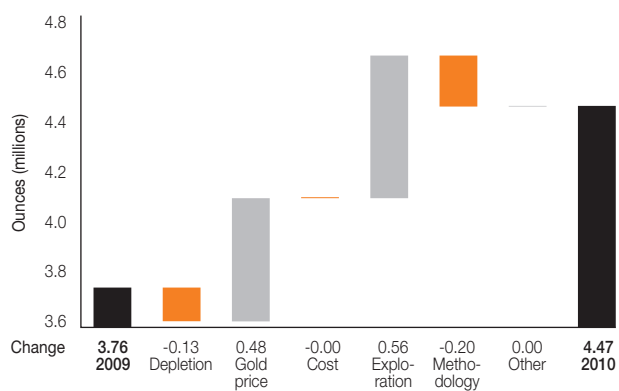
The Exclusive Mineral Resource gives an indication of the deposit's future potential. This material could be converted to Ore Reserve with an increase in the gold price and favourable costs. The Inferred Mineral Resource portion of the Mineral Resource within the Ore Reserve pit design will be converted to the Ore Reserve through grade control drilling. The low-grade "mineralised waste" stockpiles that are currently below the marginal ore cut-off grade are also declared as Exclusive Mineral Resource as these stockpiles are currently not in the mining plan.

### Exclusive Mineral Resource

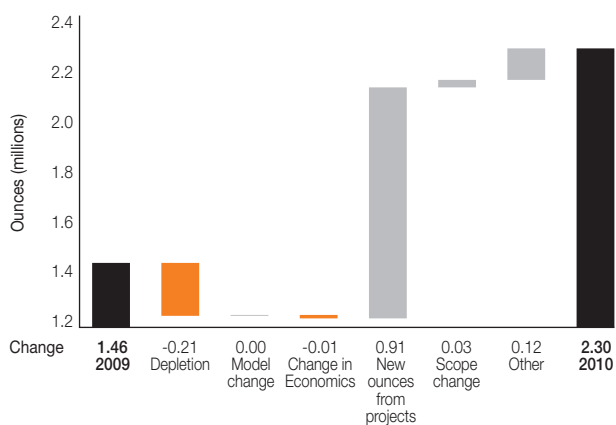
as at 31 December 2010		Tonnes	Grade	Contained gold	
Sadiola	Category	million	g/t	Tonnes	Moz
	Measured	4.67	0.75	3.49	0.11
	Indicated	18.24	1.69	30.77	0.99
	Inferred	18.27	1.69	30.85	0.99
<b>Sadiola</b>	<b>Total</b>	<b>41.18</b>	<b>1.58</b>	<b>65.11</b>	<b>2.09</b>



**Sadiola: Mineral Resource reconciliation**  
2009 vs 2010



**Sadiola: Ore Reserve reconciliation**  
2009 vs 2010



**Ore Reserve**

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Sadiola	Category			Tonnes	Moz
FE3	Proved	–	–	–	–
	Probable	2.71	1.88	5.11	0.16
	<b>Total</b>	<b>2.71</b>	<b>1.88</b>	<b>5.11</b>	<b>0.16</b>
FE4	Proved	–	–	–	–
	Probable	2.77	1.67	4.62	0.15
	<b>Total</b>	<b>2.77</b>	<b>1.67</b>	<b>4.62</b>	<b>0.15</b>
Total stockpiles	Proved	2.33	2.95	6.88	0.22
	Probable	–	–	–	–
	<b>Total</b>	<b>2.33</b>	<b>2.95</b>	<b>6.88</b>	<b>0.22</b>
Tambali South	Proved	–	–	–	–
	Probable	1.96	1.42	2.78	0.09
	<b>Total</b>	<b>1.96</b>	<b>1.42</b>	<b>2.78</b>	<b>0.09</b>
DSP (sulphides)	Proved	–	–	–	–
	Probable	27.83	1.87	52.08	1.67
	<b>Total</b>	<b>27.83</b>	<b>1.87</b>	<b>52.08</b>	<b>1.67</b>
<b>Sadiola</b>	<b>Total</b>	<b>37.60</b>	<b>1.90</b>	<b>71.47</b>	<b>2.30</b>

## Inferred Mineral Resource in business plan

The plant feed of the final LOM pit designs includes 18% Inferred Mineral Resource which has been included in the final schedule, amounting to 0.89Moz of produced gold.

### Inferred Mineral Resource

as at 31 December 2010	Tonnes	Grade	Contained gold		Comments
Sadiola	million	g/t	Tonnes	Moz	
FE3	0.40	2.48	1.00	0.03	FE3, all pits
FE4	0.12	2.13	0.25	0.01	FE, including north-west small pit
Tambali South	0.01	1.31	0.01	0.00	Tambali north and south
DSP (sulphides)	14.39	1.83	26.32	0.85	All categories of DSP
<b>Total</b>	<b>14.92</b>	<b>1.85</b>	<b>27.59</b>	<b>0.89</b>	





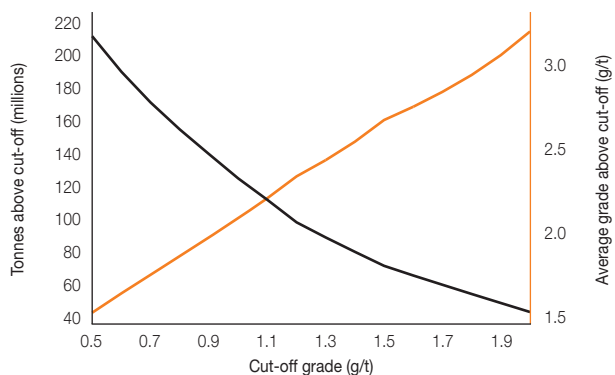
## Ore Reserve modifying factors

as at 31 December 2010	Gold	Cut-off value	Dilution	% RRF	% RRF	% MRF	% MRF		
	price	g/t Au	(%)	(based on tonnes)	(based on g/t)	(based on tonnes)	(based on g/t)	MCF%	MetRF%
<b>Sadiola</b>									
DSP	900	0.70	0	100	100	100	100	100	76-96*
FE2	850	0.90	0	100	100	100	100	100	76-96*
FE3	900	0.65	0	100	100	100	100	100	76-96*
FE4	900	0.65	0	100	100	100	100	100	76-96*
FN2	850	0.70	0	100	100	100	100	100	76-96*
FN3	850	0.70	0	100	100	100	100	100	76-96*
Main pit (sulphides)	900	0.80	0	100	100	100	100	100	76-96*
Sekokoto	850	0.90	0	100	100	100	100	100	76-96*
Tambali South	900	0.90	0	100	100	100	100	100	76-96*
Total stockpiles	900	–	–	100	100	100	100	100	76-96*

\* MetRF% varies for each material type

## Sadiola

– surface (metric)



■ Tonnes above cut-off

■ Ave grade above cut-off



## Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Mark Kenwright	AusIMM	302344	14 years
Ore Reserve	Karol Bartsch	AusIMM	107390	21 years

# Mali

## Yatela

### Location

Yatela mine is situated some 25km north of Sadiola and approximately 50km southwest of Kayes. The Yatela operation is currently mining from two open pits, the Yatela main pit and the satellite Alamoutala pit.

Ore is processed through a 3.0Mtpa heap leach plant that was commissioned in 2000. The pregnant liquor pond for gold recovery uses the carbon in solution process. Loaded carbon is sent to Sadiola for elution, regeneration, electro-winning and smelting.

### Geology

The Yatela and Alamoutala deposits are located in north-west Mali within the Keniéba-Kedougou Inlier, a major Early Proterozoic-Birimian inlier along the north-east margin of the Kenema-Man shield.

The Yatela deposit is located in the north of the window and is hosted by sediments of the Kofi Formation, which have been intruded by numerous felsic intrusives. The sediments consist of fine-grained greywacke, pelites that are locally carbon-rich, and impure limestones with minor tuffs and acid volcanics. The primary gold mineralisation is hosted along a sheared contact between predominantly dolomitic carbonate rocks of the Kofi Formation to the west and a large, weakly mineralised dioritic intrusion to the east. This primary mineralisation was concentrated to economic grades through dissolution of the carbonate by supergene processes.



Karst development at Yatela has formed deep pot-holes, collectively named the Yatela Basin, which were gradually filled by sandstones and conglomerates during peneplanation of the Proterozoic rocks. Chaotic collapse during karstification, coupled with the infill sediments resulted in the orebody being hosted in a melange-type of rocks made up of sedimentary rocks and dissolution residues. Gold is disseminated in the unconsolidated ferruginous, sandy-clayed layer that lines the bottom and walls of a deep trough with steep margins. The ore zone dips steeply on the west wall and more gently to the west on the east wall, following a keel-like geometry with tight closure towards the south. The supergene enrichment of low-grade primary gold mineralisation associated with the karstification is the most important geological feature to the economics of the Yatela deposit.

The Alamoutala geology comprises north-trending clastic metasediments and calcitic marbles which are intruded by a coarse-grained granodiorite. In the Alamoutala pits, the gold mineralisation is hosted in saprolitised marbles and karstic rocks in the south, and in weathered clastic meta-sedimentary rocks to the north. The mineralisation occurs proximal to the intermittently sheared and fractured contact, named the Alamoutala Fracture Zone, between the clastic and carbonate units. These rocks have locally been strongly biotite and feldspar-altered. High-grade gold mineralisation is also hosted in magnetite-bearing, skarn-like calc-silicate rocks along the contact with the granodiorite intrusive.

## Exploration

The exploration strategy around the Yatela Concession is focussed on defining high-grade oxide Mineral Resources to extend the LOM. Execution over the year has involved 64,812m RC drilling and 3,202m DC drilling, predominantly for development of the Yatela and Alamoutala orebodies.

Detailed mapping of the Yatela main pit has provided a better understanding of the mineralisation with follow up Mineral Resource drilling extending the LOM until October 2013.

Significant recent drill intersections around Alamoutala have highlighted an area of continuous mineralisation between the western and northern satellite pits that has been added to the current mine plan.

Ground gravity surveys have been completed over most of the Yatela concession to identify the gravity lows typical for Yatela-type deposits. The exploration model implies that preferential weathering of sulphides and karstic dissolution and collapse led to the development of a relative gravity low over Yatela. Several similar gravity lows have been identified and are being assessed by termite mound sampling and drill testing.

Drilling of IP targets adjacent to the Yatela main pit is in progress. Follow up of the mineralised Yatela structures that extend to the north under the Souroukoto Sandstone is also planned.

## Projects

The exploration programme will continue in 2011 to target the high-grade oxide potential within the mining lease area. The company is also looking at possible partnerships with nearby lease holders which may result in an additional Ore Reserve that could extend the life of the Yatela processing plant.



# Mali

## Yatela

### Mineral Resource

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Yatela	Category			Tonnes	Moz
Main pit	Measured	0.08	2.46	0.19	0.01
	Indicated	0.77	2.80	2.16	0.07
	Inferred	0.34	2.04	0.69	0.02
	<b>Total</b>	<b>1.18</b>	<b>2.56</b>	<b>3.03</b>	<b>0.10</b>
Yatela North	Measured	–	–	–	–
	Indicated	–	–	–	–
	Inferred	0.42	1.79	0.76	0.02
	<b>Total</b>	<b>0.42</b>	<b>1.79</b>	<b>0.76</b>	<b>0.02</b>
Alamoutala pit	Measured	0.17	1.44	0.25	0.01
	Indicated	0.67	1.36	0.92	0.03
	Inferred	0.06	1.24	0.07	0.00
	<b>Total</b>	<b>0.90</b>	<b>1.37</b>	<b>1.23</b>	<b>0.04</b>
KW18	Measured	–	–	–	–
	Indicated	0.08	1.75	0.14	0.00
	Inferred	0.01	1.94	0.01	0.00
	<b>Total</b>	<b>0.09</b>	<b>1.76</b>	<b>0.15</b>	<b>0.00</b>
Total stockpiles	Measured	0.65	0.56	0.36	0.01
	Indicated	–	–	–	–
	Inferred	–	–	–	–
	<b>Total</b>	<b>0.65</b>	<b>0.56</b>	<b>0.36</b>	<b>0.01</b>
<b>Yatela</b>	<b>Total</b>	<b>3.23</b>	<b>1.71</b>	<b>5.53</b>	<b>0.18</b>



### Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	RC	Blast-hole	Other	
Yatela	Measured	5 x 10, and 25 x 25	✓	✓	-	-	
			✓	✓	-	-	
	Indicated	25 x 25, and 35 x 45	✓	✓	-	-	
			✓	✓	-	-	
	Inferred	50 x 50	✓	✓	-	-	
	Grade control	5 x 10	-	✓	-	-	

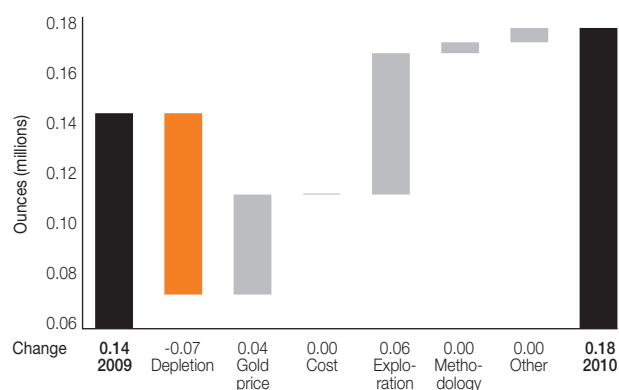
### Exclusive Mineral Resource

The Exclusive Mineral Resource is defined as the part of the Mineral Resource that was not converted to Ore Reserve. As the Yatela pits are approaching the end of their life, the Ore Reserve shells are optimised to ensure that all recoverable material is mined before closure. This means that the pits were optimised at a higher gold price than the long-term equilibrium price used on the other deposits in the group. As a result the Mineral Resource and Ore Reserve are declared in the same shell. Therefore the Exclusive Mineral Resource consists of Inferred material within these pit designs and the material below the Ore Reserve cut-off grade and above the Mineral Resource cut-off grade.

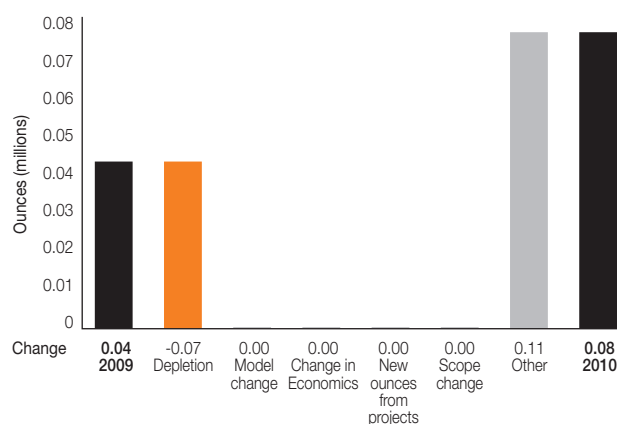
### Exclusive Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Yatela	Category	million	g/t	Tonnes	Moz
	Measured	0.01	0.58	0.01	0.00
	Indicated	0.03	0.58	0.02	0.00
	Inferred	0.82	1.86	1.52	0.05
<b>Yatela</b>	<b>Total</b>	<b>0.87</b>	<b>1.79</b>	<b>1.55</b>	<b>0.05</b>

**Yatela: Mineral Resource reconciliation**  
2009 vs 2010



**Yatela: Ore Reserve reconciliation**  
2009 vs 2010



# Mali

## Yatela

### Ore Reserve

as at 31 December 2010		Tonnes	Grade	Contained gold	
Yatela	Category	million	g/t	Tonnes	Moz
Main pit	Proved	0.05	1.46	0.07	0.00
	Probable	0.66	2.16	1.42	0.05
	<b>Total</b>	<b>0.70</b>	<b>2.11</b>	<b>1.48</b>	<b>0.05</b>
Alamoutala pit	Proved	–	–	–	–
	Probable	0.58	1.35	0.78	0.03
	<b>Total</b>	<b>0.58</b>	<b>1.35</b>	<b>0.78</b>	<b>0.03</b>
Total stockpiles	Proved	0.23	0.66	0.15	0.00
	Probable	–	–	–	–
	<b>Total</b>	<b>0.23</b>	<b>0.66</b>	<b>0.15</b>	<b>0.00</b>
<b>Yatela</b>	<b>Total</b>	<b>1.52</b>	<b>1.60</b>	<b>2.42</b>	<b>0.08</b>

### Inferred Mineral Resource in business plan

The plant feed of the final LOM pit designs includes 43.8% Inferred Mineral Resource, amounting to 0.11Moz of produced gold.

Stockpiles previously declared as marginal ore have been removed from the Mineral Resource and Ore Reserve due to inaccurate survey figures. This has lead to a total estimated write-off of 0.04Moz. An airborne LIDAR survey is planned to provide accurate stockpile figures.

### Inferred Mineral Resource

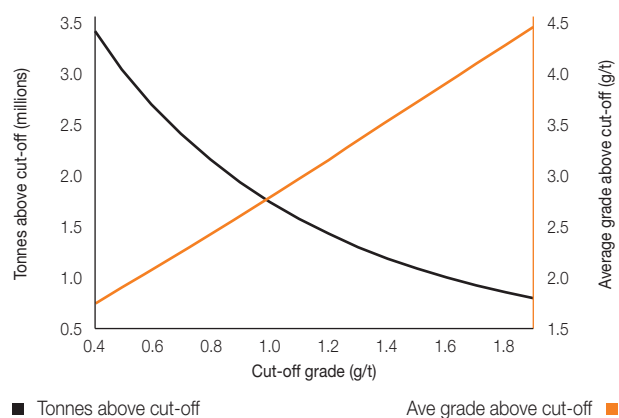
as at 31 December 2010	Tonnes	Grade	Contained gold		
Yatela	million	g/t	Tonnes	Moz	Comments
Alamoutala pit	0.10	1.36	0.14	0.00	This includes Inferred material from satellite pits
Main pit	2.24	1.90	4.27	0.14	Inferred from Yatela main pit, drilling to be done before mining
<b>Total</b>	<b>2.34</b>	<b>1.88</b>	<b>4.40</b>	<b>0.14</b>	

## Ore Reserve modifying factors

as at 31 December 2010	Gold	Cut-off	Dilution	% RRF		
Yatela	price	value	(%)	(based on	MCF%	MetRF%
		g/t Au		tonnes)		
Alamoutala pit	1,075	0.74	0	100	100	75-85
Main pit	1,000	0.62	0	100	100	75-85
Total stockpiles	–	0.55	0	100	100	75-85

## Yatela

– surface (metric)



## Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Mark Kenwright	AusIMM	302344	14 years
Ore Reserve	Karol Bartsch	AusIMM	107390	21 years

# Namibia

## Country overview

Navachab gold mine, AngloGold Ashanti's sole operation in Namibia, is wholly owned by the Company.

## Mineral Resource estimation

Mineral Resource estimation is performed using Datamine® software. Block dimensions of 25m x 25m x 5m are used as the prototype model. Grade interpolation is done into these blocks using ordinary and indicator kriging methods. A geostatistical technique called uniform conditioning is then used to estimate the proportion of economic ore that occur above the Mineral Resource cut-off and this is reported according to the selective mining unit (SMU).

## Ore Reserve estimation

MineSight® optimisation software is used to generate optimised pit shells using economic parameters. The final pits are then designed based on the optimised pit shell, recommended slope geometry and ramp access requirements.



# Namibia

## Navachab

### Location

Navachab is located 10km SW of Karibib and 170km WNW of Windhoek, the capital of Namibia. Navachab is mined as an open-pit mine with a CIP plant that has a production capacity of 120,000tpm. The plant includes mills, CIP and electro-winning facilities. A dense media separation (DMS) plant with a 200t/h capacity was commissioned during 2010 and a portion of the CIP feed comes from this pre-concentration plant.

### Geology

The Navachab gold deposit is located in the Pan-African Damara Orogen and is hosted by greenschist-amphibolite facies calc-silicates, marbles and volcanoclastic rocks. The rocks have been intruded by granite, pegmatite and aplitic dykes and have also been deformed into a series of alternating dome and basin-like structures.

The main mineralisation forms a sheet-like body which plunges at an angle of approximately 20° to the NW. The mineralisation is predominantly hosted in a sheeted quartz vein set ( $\pm 60\%$ ) and a replacement skarn ( $\pm 40\%$ ). The mineralisation in the main pit is hosted by a NE to SW striking metamorphosed sequence of calc-silicates, marbles and volcanoclastic rocks that dip at 70° to the west. The gold is very fine-grained and associated with pyrrhotite and minor amounts of pyrite, chalcopyrite, arsenopyrite, sphalerite, maldonite and bismuthinite. An estimated 90% of the gold occurs as free gold and the remainder is present in minerals such as maldonite ( $\text{Au}_2\text{Bi}$ ). Silver is also present with a gold to silver ratio of approximately 15 to 1.

### Exploration

The exploration strategy at Navachab's main deposit is to evaluate the shallow north pit 2 mineralisation (located near the main pit) where it plunges down to 250m below surface. Drilling during the year has confirmed the down plunge extension of this oreshoot and this near surface mineralisation will assist in unlocking deeper footwall and hangingwall mineralisation for further exploitation down to 350m below surface. Drilling during the year has confirmed the footwall and hangingwall down plunge extension. Drilling during the next four years will focus on growing the Mineral Resource base by 0.3 to 0.4Moz per year and increasing the confidence level in the mineralisation. Exploration of the satellite deposits will continue to focus on near-surface, high-grade "Grid A" type mineralisation to displace low-grade plant feed during stripping of the main orebody extensions. Current satellite target areas are Anomaly 16, Gecko, Steenbok, Starling and Klipspringer.

### Projects

Exploration of the Gecko target has produced a shallow, high-grade Mineral Resource of 0.04Moz. This mineralisation can be used to supplement the low production years. Exploration of the Anomaly 16 target, which is approximately 7km from the plant, has produced a lower-grade Mineral Resource of approximately 0.12Moz with potential to grow significantly. The identified Mineral Resource for Anomaly 16 is currently situated in the Valley target area, whilst the Central and Beacon target areas are yet to be explored.



# Namibia

## Navachab

### Mineral Resource

as at 31 December 2010					
Navachab	Category	Tonnes million	Grade g/t	Contained gold Tonnes	Moz
Anomaly 16	Measured	–	–	–	–
	Indicated	1.69	1.28	2.17	0.07
	Inferred	1.11	1.29	1.44	0.05
	<b>Total</b>	<b>2.81</b>	<b>1.29</b>	<b>3.61</b>	<b>0.12</b>
Gecko	Measured	–	–	–	–
	Indicated	0.50	1.59	0.80	0.03
	Inferred	0.29	1.37	0.40	0.01
	<b>Total</b>	<b>0.79</b>	<b>1.51</b>	<b>1.20</b>	<b>0.04</b>
Main pit	Measured	8.37	1.23	10.30	0.33
	Indicated	70.37	1.28	89.81	2.89
	Inferred	21.93	1.12	24.56	0.79
	<b>Total</b>	<b>100.67</b>	<b>1.24</b>	<b>124.68</b>	<b>4.01</b>
Stockpile (marginal ore)	Measured	6.72	0.53	3.55	0.11
	Indicated	–	–	–	–
	Inferred	–	–	–	–
	<b>Total</b>	<b>6.72</b>	<b>0.53</b>	<b>3.55</b>	<b>0.11</b>
Stockpile (full grade ore)	Measured	8.21	0.76	6.23	0.20
	Indicated	–	–	–	–
	Inferred	–	–	–	–
	<b>Total</b>	<b>8.21</b>	<b>0.76</b>	<b>6.23</b>	<b>0.20</b>
<b>Navachab</b>	<b>Total</b>	<b>119.20</b>	<b>1.17</b>	<b>139.28</b>	<b>4.48</b>





#### Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	RC	hole	Other	
Navachab	Measured	10 x 10	–	✓	–	–	
	Indicated	25 x 25	✓	✓	–	–	
	Inferred	50 x 50	✓	✓	–	–	
	Grade control	5 x 10	–	✓	–	–	

### Exclusive Mineral Resource

The main pit contains the largest portion (2.36Moz) of the Exclusive Mineral Resource. Approximately 0.11Moz of the Exclusive Mineral Resource hosted in the marginal ore stockpiles at a grade of 0.47g/t and the intention is to bring the gold to account through the pre-concentration route in the future. The remainder of the Exclusive Mineral Resource is from Anomaly 16 (0.06Moz), and Gecko (0.02Moz).

#### Exclusive Mineral Resource

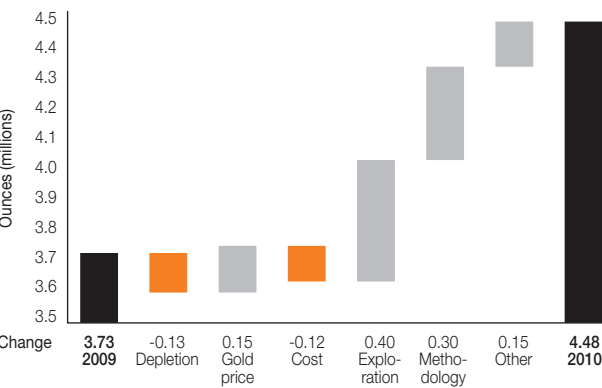
as at 31 December 2010		Tonnes	Grade	Contained gold	
Navachab	Category	million	g/t	Tonnes	Moz
	Measured	9.03	0.58	5.24	0.17
	Indicated	42.83	1.11	47.50	1.53
	Inferred	23.33	1.13	26.41	0.85
<b>Navachab</b>	<b>Total</b>	<b>75.20</b>	<b>1.05</b>	<b>79.15</b>	<b>2.54</b>

# Namibia

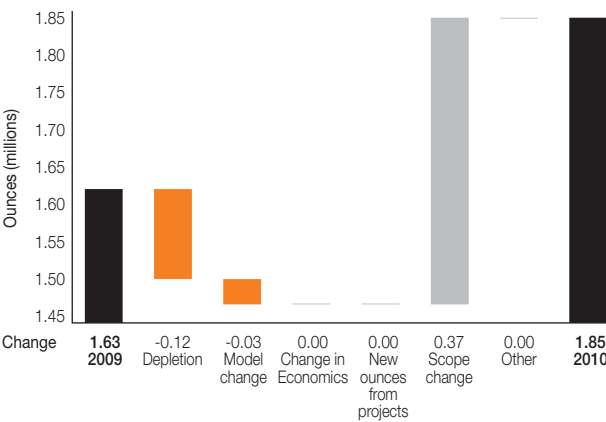
Navachab



**Navachab: Mineral Resource reconciliation**  
2009 vs 2010



**Navachab: Ore Reserve reconciliation**  
2009 vs 2010



## Ore Reserve

The bulk of the Navachab Ore Reserve is from the main pit (1.57Moz). Of this 1.3Moz is classified as Probable and 0.26Moz is classified as Proved Ore Reserve. Anomaly 16 and Gecko satellite pit provide 0.05Moz and 0.02Moz respectively. The total Ore Reserve for Navachab as at the end of 2010 is 1.85Moz.

### Ore Reserve

as at 31 December 2010		Tonnes	Grade	Contained gold	
Navachab	Category	million	g/t	Tonnes	Moz
Anomaly 16	Proved	–	–	–	–
	Probable	1.13	1.47	1.66	0.05
	<b>Total</b>	<b>1.13</b>	<b>1.47</b>	<b>1.66</b>	<b>0.05</b>
Gecko	Proved	–	–	–	–
	Probable	0.43	1.67	0.71	0.02
	<b>Total</b>	<b>0.43</b>	<b>1.67</b>	<b>0.71</b>	<b>0.02</b>
Main pit	Proved	6.06	1.35	8.18	0.26
	Probable	28.18	1.44	40.62	1.31
	<b>Total</b>	<b>34.24</b>	<b>1.43</b>	<b>48.80</b>	<b>1.57</b>
Stockpile (full grade ore)	Proved	8.21	0.77	6.31	0.20
	Probable	–	–	–	–
	<b>Total</b>	<b>8.21</b>	<b>0.77</b>	<b>6.31</b>	<b>0.20</b>
<b>Navachab</b>	<b>Total</b>	<b>44.01</b>	<b>1.31</b>	<b>57.48</b>	<b>1.85</b>

## Inferred Mineral Resource in business plan

The Inferred Mineral Resource was used in the pit optimisation process and 0.22Moz, or 10.3%, is present in the designed pits and in the LOM schedule.

### Inferred Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Navachab		million	g/t	Tonnes	Moz
Anomaly 16		0.80	1.45	1.16	0.04
Gecko		0.13	1.28	0.16	0.01
Main pit		4.52	1.28	5.79	0.19
<b>Total</b>		<b>5.44</b>	<b>1.31</b>	<b>7.12</b>	<b>0.23</b>

# Namibia

## Navachab

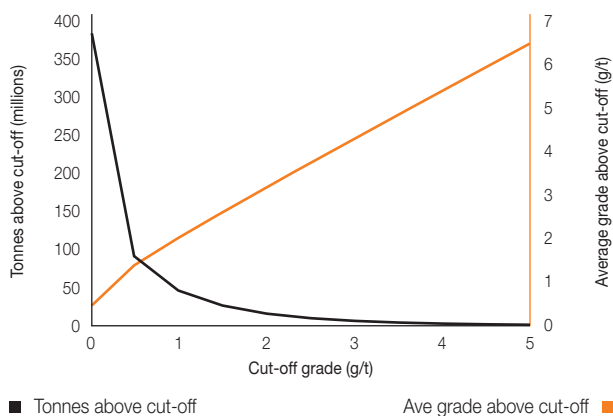
### Ore Reserve modifying factors

as at		Ex-	Cut-off		% RRF	% RRF	% MRF	% MRF		
31 December 2010	Gold	change	value	Dilution	(based on	(based	(based on	(based	MCF%	MetRF%
Navachab	price	rate	g/t Au	(%)	tonnes)	on g/t)	tonnes)	on g/t)		
Anomaly 16	850	8.71	0.60	0	100	100	100	100	95	69.22; 86.48*
Gecko	850	8.71	0.60	0	100	100	100	100	95	69.22; 86.48*
Main pit	850	8.71	0.60	0	100	100	100	100	95	69.22; 86.48*
Stockpiles	850	8.71	0.60	0	100	100	100	100	95	69.22; 86.48*

\* DMS = 69.22%, CIP = 86.48%

### Navachab

– surface (metric)



### Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Frederik Badenhorst	AusIMM	211026	19 years
Ore Reserve	George Botshiwe	AusIMM	229475	10 years



# Tanzania

## Country overview

Geita is the largest of AngloGold Ashanti's seven open-pit mines in Africa. Prior to April 2004, Geita was managed under the joint venture agreement between Ashanti and AngloGold. Since the merger of the two companies, Geita is a wholly-owned subsidiary.

## Mineral Resource estimation

As with any estimation techniques, the results are dependent upon the data quality and availability. The geological model is a critical input to the Mineral Resource estimation process. The orebody boundaries for the individual deposits are defined from the detailed logging of all geological boreholes and after validation this information is used to create a 3D model. This model is subsequently populated with an appropriately dimensioned block model. The size of this block model is determined by analysing different block sizes in relation to the variance of the blocks. A block size which gives an optimal variance is then chosen. Ordinary kriging is used to interpolate values into the blocks. A geostatistical technique called uniform conditioning is then used to estimate the proportion of economic ore that occur above the Mineral Resource cut-off and this is reported according to the SMU.

## Ore Reserve estimation

The Mineral Resource models as produced by the geology department are used as the basis for the Ore Reserve. Appropriate mining dilution is used as a modifying factor in the Ore Reserve conversion process. Appropriate Ore Reserve cut-off grades are applied and optimised pit shells are generated taking into cognisance the economic parameters. The final pits are then designed taking into consideration the optimised pit shell and recommended slope geometry.





# Tanzania

## Geita

### Location

The Geita gold mine is located approximately 910km from Dar es Salaam in the Lake Zone of northern Tanzania. The tenements are situated within the Sukumaland Greenstone Belt of the Lake Victoria goldfields which hosts other gold mines including Golden Pride, Bulyanhulu, Tulawaka and North Mara. This geological terrain is considered to be one of the most productive Archaean Greenstone Belts in East Africa. Mining at Geita is undertaken by standard open-pit mining methods.

### Geology

The Geita Greenstone trend is a component of the Sukumaland Greenstone Belt. This zone of Archaean rocks strikes east-west, is 60km long and up to 15km wide. The terrain is made up of upper to mid-Nyanzian greenstone facies rocks that consist mainly of clastic sediments, intermediate to felsic volcanoclastics and banded iron formations (BIFs). These rocks form a sedimentary sequence that is up to 1,000m thick.

North-west trending deformation corridors separate the Geita Greenstone trend into three distinct sub-terrains. These three sub-terrains are Nyamulilima in the west (hosting the Star and Comet, Ridge 8 and Roberts deposits), Geita in the central part (hosting the Nyankanga, Geita Hill, Lone Cone and Chipaka deposits) and Kukuluma to the north-east (hosting the Matandani, Kukuluma and Area 3 West deposits). Approximately 78% of the Mineral Resource is situated in the Geita sub-terrain, with 16% in the Nyamulilima sub-terrain and 6% in the Kukuluma sub-terrain.

Late dextral faults have utilised the deformation corridors at Geita and have re-activated the pre-existing fault systems. Gold mineralisation and hydrothermal alteration of the host lithologies, on all scales, is associated with late stage ductile to brittle-ductile deformation.

### Exploration

During 2009 and 2010 the exploration focus revolved around risk mitigation of the Mineral Resource that will be mined from 2011 to 2013. The exploration programmes therefore largely consisted of infill drilling, with subsequent updating and refinement of the Mineral Resource model. During the next two years additional infill drilling programmes are planned to focus on the Nyankanga underground project areas and the planned open pit production areas.

The mine's regional exploration programme will ramp up during the next three years. The base consolidation work, involving mostly ground geophysics, structural analysis, data consolidation and geological interpretation, was done according to ranked target areas that had been identified by the 2008 airborne geophysical survey. Preliminary follow up drilling on the targets identified during the 2008 survey will continue into 2011 and the drilling results will be used to guide future drill targets after 2011.

### Projects

Three prospective projects have been identified which collectively have the potential to increase the Mineral Resource and Ore Reserve at Geita.

The Refractory Ore project is focussed on the Kukuluma sub-terrain where 58% of the ore is refractory and currently not economically treatable at the Geita metallurgical plant. A project has been initiated to determine a suitable treatment process for this material and exploration holes will be drilled in 2011 to assess the metallurgical characteristics of this ore. Success in this regard could increase the potential of the underground Mineral Resource, which has a significant upside below the Kukuluma and Matandani open pits.

The underground project will initially focus on the down dip extension of the Nyankanga orebody because this currently shows the greatest potential for economic viability. The Nyankanga orebody, together with down dip extensions to the Geita Hill and Ridge 8 orebodies, shows that potentially 3.2Moz Mineral Resource could be exploited by underground mining methods. The strategy for the Nyankanga underground project has been to evaluate the eastern (near surface) portion of the project area to assess whether it would support a pilot underground mining plan aimed at paying for additional underground exploration development. The additional exploration development drive would then prove up the predominantly Inferred Mineral Resource and provide further insight regarding the eventual mining method to be employed. This project, known as 'Block 1', was partially drilled in 2010 and the remaining portion, which forms the down dip extensions, will be drilled in 2011 to firm up on Mineral Resource confidence. The 2011 exploration drilling plan will also focus on extensional drilling to the current underground Mineral Resource. A 3D geological model of the Geita trend will amalgamate structural mapping and mineralogical characteristics and will be used to guide this extensional drilling.

The third project involves potential satellite pits. Extensions to current Mineral Resources in the vicinity of the Nyankanga and Star and Comet pits have been given a higher priority. This will be followed by exploration work in the areas to the west and east of the Geita Central area. This project is still in the early exploration stage and is expected to gather momentum over the next three years.

### Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Geita	Category	million	g/t	Tonnes	Moz
Area 3 West (oxide)	Measured	–	–	–	–
	Indicated	0.91	2.42	2.21	0.07
	Inferred	0.00	2.02	0.01	0.00
	<b>Total</b>	<b>0.92</b>	<b>2.42</b>	<b>2.22</b>	<b>0.07</b>
Area 3 West (refractory ore)	Measured	–	–	–	–
	Indicated	0.18	2.76	0.50	0.02
	Inferred	–	–	–	–
	<b>Total</b>	<b>0.18</b>	<b>2.76</b>	<b>0.50</b>	<b>0.02</b>
Chipaka	Measured	–	–	–	–
	Indicated	1.97	2.57	5.05	0.16
	Inferred	–	–	–	–
	<b>Total</b>	<b>1.97</b>	<b>2.57</b>	<b>5.05</b>	<b>0.16</b>
Geita Hill (open pit)	Measured	–	–	–	–
	Indicated	15.36	2.92	44.79	1.44
	Inferred	0.19	1.82	0.35	0.01
	<b>Total</b>	<b>15.55</b>	<b>2.90</b>	<b>45.14</b>	<b>1.45</b>
Geita Hill (underground)	Measured	–	–	–	–
	Indicated	4.67	5.43	25.36	0.82
	Inferred	2.81	5.61	15.78	0.51
	<b>Total</b>	<b>7.48</b>	<b>5.50</b>	<b>41.15</b>	<b>1.32</b>
Kalonidwa Hill	Measured	–	–	–	–
	Indicated	–	–	–	–
	Inferred	1.15	3.60	4.12	0.13
	<b>Total</b>	<b>1.15</b>	<b>3.60</b>	<b>4.12</b>	<b>0.13</b>

# Tanzania

## Geita

### Mineral Resource continued

as at 31 December 2010		Tonnes	Grade	Contained gold	
Geita	Category	million	g/t	Tonnes	Moz
Kukuluma (non-refractory ore)	Measured	–	–	–	–
	Indicated	0.10	2.84	0.30	0.01
	Inferred	–	–	–	–
	<b>Total</b>	<b>0.10</b>	<b>2.84</b>	<b>0.30</b>	<b>0.01</b>
Kukuluma (refractory ore)	Measured	–	–	–	–
	Indicated	1.46	3.75	5.47	0.18
	Inferred	–	–	–	–
	<b>Total</b>	<b>1.46</b>	<b>3.75</b>	<b>5.47</b>	<b>0.18</b>
Lone Cone	Measured	–	–	–	–
	Indicated	0.77	2.61	2.01	0.06
	Inferred	0.34	1.92	0.66	0.02
	<b>Total</b>	<b>1.12</b>	<b>2.40</b>	<b>2.67</b>	<b>0.09</b>
Matandani (non-refractory ore)	Measured	–	–	–	–
	Indicated	1.24	2.24	2.78	0.09
	Inferred	0.00	8.58	0.03	0.00
	<b>Total</b>	<b>1.24</b>	<b>2.26</b>	<b>2.82</b>	<b>0.09</b>
Matandani (refractory ore)	Measured	–	–	–	–
	Indicated	2.43	3.77	9.19	0.30
	Inferred	0.07	4.87	0.34	0.01
	<b>Total</b>	<b>2.50</b>	<b>3.81</b>	<b>9.53</b>	<b>0.31</b>
Nyankanga (open pit)	Measured	–	–	–	–
	Indicated	22.65	4.42	100.17	3.22
	Inferred	7.51	2.36	17.73	0.57
	<b>Total</b>	<b>30.16</b>	<b>3.91</b>	<b>117.90</b>	<b>3.79</b>
Nyankanga (underground)	Measured	–	–	–	–
	Indicated	5.85	4.26	24.94	0.80
	Inferred	4.91	4.02	19.75	0.64
	<b>Total</b>	<b>10.76</b>	<b>4.15</b>	<b>44.69</b>	<b>1.44</b>
Ridge 8 (open pit)	Measured	–	–	–	–
	Indicated	1.59	2.31	3.69	0.12
	Inferred	0.13	4.22	0.54	0.02
	<b>Total</b>	<b>1.72</b>	<b>2.46</b>	<b>4.23</b>	<b>0.14</b>
Ridge 8 (underground)	Measured	–	–	–	–
	Indicated	1.20	4.58	5.50	0.18
	Inferred	1.82	5.36	9.77	0.31
	<b>Total</b>	<b>3.02</b>	<b>5.05</b>	<b>15.27</b>	<b>0.49</b>
Roberts	Measured	–	–	–	–
	Indicated	6.87	1.63	11.17	0.36
	Inferred	0.31	4.12	1.27	0.04
	<b>Total</b>	<b>7.18</b>	<b>1.73</b>	<b>12.45</b>	<b>0.40</b>

## Mineral Resource continued

as at 31 December 2010		Tonnes	Grade	Contained gold	
Geita	Category	million	g/t	Tonnes	Moz
Star and Comet	Measured	–	–	–	–
	Indicated	3.91	4.19	16.37	0.53
	Inferred	2.70	3.41	9.21	0.30
	<b>Total</b>	<b>6.61</b>	<b>3.87</b>	<b>25.58</b>	<b>0.82</b>
Stockpile (full grade ore)	Measured	–	–	–	–
	Indicated	1.86	2.01	3.74	0.12
	Inferred	–	–	–	–
	<b>Total</b>	<b>1.86</b>	<b>2.01</b>	<b>3.74</b>	<b>0.12</b>
Stockpile (marginal ore)	Measured	–	–	–	–
	Indicated	6.01	0.88	5.30	0.17
	Inferred	–	–	–	–
	<b>Total</b>	<b>6.01</b>	<b>0.88</b>	<b>5.30</b>	<b>0.17</b>
Stockpile (refractory ore)	Measured	–	–	–	–
	Indicated	1.26	1.85	2.33	0.08
	Inferred	–	–	–	–
	<b>Total</b>	<b>1.26</b>	<b>1.85</b>	<b>2.33</b>	<b>0.08</b>
<b>Geita</b>	<b>Total</b>	<b>102.27</b>	<b>3.43</b>	<b>350.46</b>	<b>11.27</b>

## Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	RC	Blast-hole	Other	
Geita	Measured	–	–	–	–	–	
	Indicated	20 x 20, and 40 x 40	✓	✓	–	–	Infill drilling was done at 20 x 20m to increase the confidence of the Mineral Resource; 40 x 40m is the lower limit for the Indicated Mineral Resource
			✓	✓	–	–	
	Inferred	50 x 50, and 50 x 80	✓	✓	–	–	
			✓	✓	–	–	
	Grade control	5 x 10, and 5 x 10	–	✓	–	–	Depths vary from 10 to 30m
			–	✓	–	–	

## Exclusive Mineral Resource

The Exclusive Mineral Resource at Geita totals 6.5Moz and includes the underground Mineral Resource plus additional material that occurs between the Ore Reserve pit shell (at a gold price of \$850/oz) and the Mineral Resource pit shell (at a gold price of \$1,100/oz). This material is sub economic to mine at the current Ore Reserve gold price and forms potential extensions to the current LOM in an elevated gold price environment. A significant portion of this material is in the Inferred Mineral Resource category and infill drilling programmes are planned to upgrade potentially economic areas to Indicated Mineral Resource.

# Tanzania

## Geita

Cut 9 contains approximately 0.2Moz of Exclusive Mineral Resource and lies immediately south-west of the Nyankanga open pit. It could support an additional pushback and drilling will resume once access has been established. Further programmes to upgrade confidence in the Star, Comet and Geita Hill East pits are planned for 2011.

The Exclusive Mineral Resource forming part of the mine's business plan comprises approximately 0.5Moz from underground extensions to the Nyankanga open pit and 0.2Moz from Inferred Mineral Resource material located within the design pits.

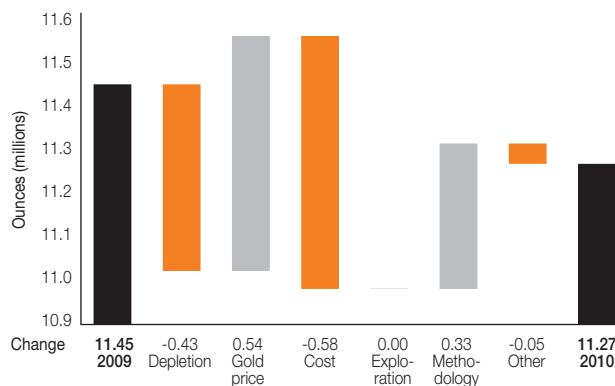
While the economic viability of the in-pit material is known, scoping and pre-feasibility studies are currently in progress to determine the economic viability of the underground material. As part of these studies, exploration drives and infill drilling are planned to upgrade the confidence in the Mineral Resource.

In instances where the orebody extends down dip, below the current LOM design pit shell and could potentially be exploited by underground mining methods, a 35m crown pillar forms part of the Exclusive Mineral Resource below the open pit limits. This material is not planned to be mined.

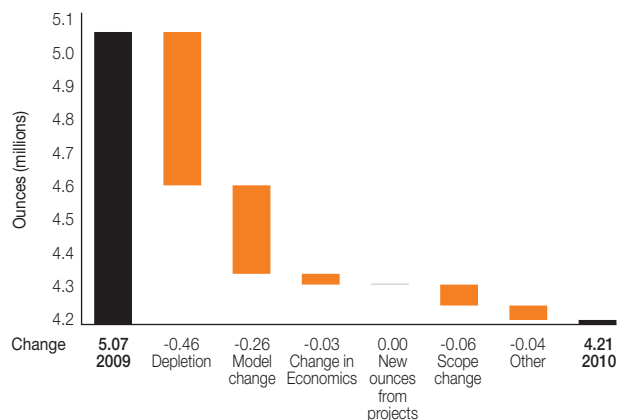
### Exclusive Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Geita	Category	million	g/t	Tonnes	Moz
	Measured	–	–	–	–
	Indicated	41.62	2.93	121.83	3.92
	Inferred	21.95	3.62	79.57	2.56
<b>Geita</b>	<b>Total</b>	<b>63.57</b>	<b>3.17</b>	<b>201.40</b>	<b>6.48</b>

**Geita: Mineral Resource reconciliation**  
2009 vs 2010



**Geita: Ore Reserve reconciliation**  
2009 vs 2010



## Ore Reserve

as at 31 December 2010					
Geita	Category	Tonnes million	Grade g/t	Contained gold Tonnes	Moz
Area 3 West (oxide)	Proved	–	–	–	–
	Probable	0.40	2.56	1.03	0.03
	<b>Total</b>	<b>0.40</b>	<b>2.56</b>	<b>1.03</b>	<b>0.03</b>
Geita Hill (open pit)	Proved	–	–	–	–
	Probable	11.72	2.66	31.23	1.00
	<b>Total</b>	<b>11.72</b>	<b>2.66</b>	<b>31.23</b>	<b>1.00</b>
Nyankanga (open pit)	Proved	–	–	–	–
	Probable	19.20	4.03	77.48	2.49
	<b>Total</b>	<b>19.20</b>	<b>4.03</b>	<b>77.48</b>	<b>2.49</b>
Ridge 8 (open pit)	Proved	–	–	–	–
	Probable	0.70	2.51	1.76	0.06
	<b>Total</b>	<b>0.70</b>	<b>2.51</b>	<b>1.76</b>	<b>0.06</b>
Roberts	Proved	–	–	–	–
	Probable	2.75	1.60	4.39	0.14
	<b>Total</b>	<b>2.75</b>	<b>1.60</b>	<b>4.39</b>	<b>0.14</b>
Star and Comet	Proved	–	–	–	–
	Probable	2.50	4.07	10.19	0.33
	<b>Total</b>	<b>2.50</b>	<b>4.07</b>	<b>10.19</b>	<b>0.33</b>
Stockpile (full grade ore)	Proved	–	–	–	–
	Probable	1.74	1.83	3.20	0.10
	<b>Total</b>	<b>1.74</b>	<b>1.83</b>	<b>3.20</b>	<b>0.10</b>
Stockpile (marginal ore)	Proved	–	–	–	–
	Probable	1.89	0.94	1.78	0.06
	<b>Total</b>	<b>1.89</b>	<b>0.94</b>	<b>1.78</b>	<b>0.06</b>
<b>Geita</b>	<b>Total</b>	<b>40.92</b>	<b>3.20</b>	<b>131.06</b>	<b>4.21</b>



# Tanzania

## Geita

### Inferred Mineral Resource in business plan

No Inferred Mineral Resource is included in the pit optimisation exercise. Although it does not contribute to the economic assessment of the optimised pit (it is deactivated during the optimisation runs), it is present within the final pit shell as Exclusive Resource. The magnitude of this Inferred Mineral Resource is quantified in the table below.

#### Inferred Mineral Resource

as at 31 December 2010	Tonnes	Grade	Contained gold		Comments
Geita	million	g/t	Tonnes	Moz	
Area 3 West (oxide)	0.00	1.40	0.00	0.00	Most of the ore is full grade ore from Cut 7 and Cut 8
Geita Hill (open pit)	0.17	2.71	0.46	0.01	
Ridge 8 (open pit)	0.00	1.19	0.00	0.00	
Star and Comet	0.07	3.37	0.23	0.01	
Nyankanga (open pit)	3.23	1.72	5.56	0.18	
<b>Total</b>	<b>3.47</b>	<b>1.80</b>	<b>6.25</b>	<b>0.20</b>	

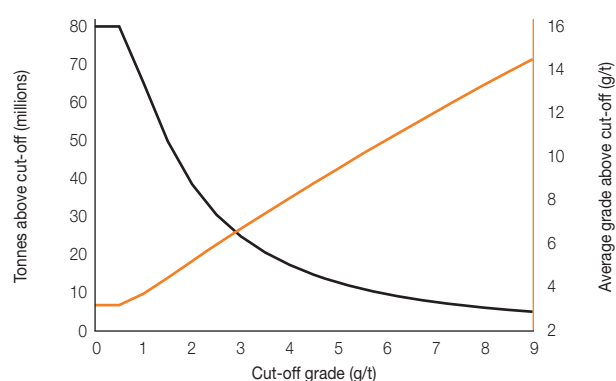


## Ore Reserve modifying factors

as at 31 December 2010		Ex-	Cut-off	% RRF	% RRF	% MRF	% MRF		
	Gold	change	value	(based on	(based	(based on	(based		
Geita	price	rate	g/t Au	tonnes)	on g/t)	tonnes)	on g/t)	MCF%	MetRF%
Area 3 West (refractory ore)	850	1,300	1.48	100	100	105	95	95	59
Area 3 West (oxide)	850	1,300	1.36	100	100	105	95	95	81
Chipaka	850	1,300	1.38	100	100	105	95	95	78
Kukuluma (non-refractory ore)	850	1,300	1.97	100	100	105	95	95	75
Kukuluma (refractory ore)	850	1,300	2.09	100	100	105	95	95	46
Lone Cone	850	1,300	1.07	100	100	105	95	95	88
Matandani (non-refractory ore)	850	1,300	1.68	100	100	105	95	95	84
Matandani (refractory ore)	850	1,300	1.94	100	100	105	95	95	50
Nyankanga (open pit)	850	1,300	1.19	110	95	100	100	95	89
Ridge 8 (open pit)	850	1,300	1.40	100	100	105	95	95	82
Roberts	850	1,300	1.38	100	100	105	95	95	85
Star and Comet	850	1,300	1.41	100	100	110	91	95	85
Stockpile (full grade ore)	—	—	0.90	100	100	100	100	95	86
Stockpile (marginal ore)	—	—	1.28	100	100	100	100	95	86
Stockpile (refractory ore)	—	—	2.33	100	100	100	100	95	52
Geita Hill (open pit)	850	1,300	1.25	105	95	105	95	95	87

### Geita

— surface (metric)

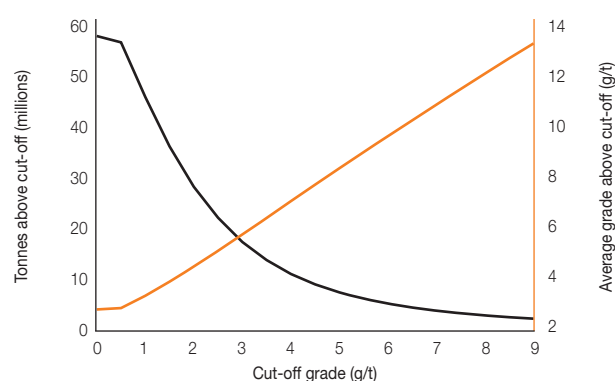


■ Tonnes above cut-off

Ave grade above cut-off ■

### Geita

— underground (metric)



■ Tonnes above cut-off

Ave grade above cut-off ■

## Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Steven Robins	AusIMM	222533	15 years
Ore Reserve	Jasper Musadaidzwa	AusIMM	991333	12 years

# Solid

## operational

### performance



## Regional overview

AngloGold Ashanti's sole operating mine in Australasia is Sunrise Dam. The Company is also developing the new Tropicana gold mine in Western Australia, along with joint venture partner Independence Group Ltd., who hold a 30% stake. Tropicana, a greenfield discovery made by AngloGold Ashanti, is expected to deliver its first production in 2013. AngloGold Ashanti is managing that project along with a vast exploration programme in the area that covers some 13,500km<sup>2</sup> of tenements along a 600km strike length, considered one of the most prospective regions for new gold discoveries in Australia.

Production from Australasia declined by 1% to 396,000oz in 2010, equivalent to 8.7% of group production.

The Mineral Resource for Australasia, attributable to AngloGold Ashanti, totalled 7.05Moz at year-end, including an attributable Ore Reserve of 3.74Moz.

All Mineral Resources and Ore Reserves listed are attributable unless otherwise stated.

### Mineral Resource by region

as at 31 December 2010	Category	Tonnes	Grade	Contained gold	
		million	g/t	Tonnes	Moz
Australasia Region	Measured	34.88	1.74	60.55	1.95
	Indicated	35.49	2.85	101.12	3.25
	Inferred	19.84	2.90	57.63	1.85
	<b>Total</b>	<b>90.21</b>	<b>2.43</b>	<b>219.30</b>	<b>7.05</b>

### Ore Reserve by region

as at 31 December 2010	Category	Tonnes	Grade	Contained gold	
		million	g/t	Tonnes	Moz
Australasia Region	Proved	24.05	2.10	50.45	1.62
	Probable	23.39	2.81	65.83	2.12
	<b>Total</b>	<b>47.44</b>	<b>2.45</b>	<b>116.28</b>	<b>3.74</b>

# Australia

## Country overview

The Australian assets were acquired by AngloGold Ashanti at the end of 1999 and currently comprise the Sunrise Dam gold mine and the Tropicana project.

AngloGold Ashanti owns 100% of Sunrise Dam gold mine. The Tropicana project is a joint venture with Independence Group NL in which AngloGold Ashanti Australia Limited (AGAA) holds 70%.

The Tropicana deposit represents a discovery in a new gold province in which the joint venture partners have a dominant land position and a competitive advantage in understanding the mineralised system. Exploration potential in the district is high and a number of large targets have been identified.

## Mineral Resource Estimation

### Sunrise Dam

Open-pit estimates are generated using a geostatistical method called multiple indicator kriging. All available geological drill-hole information is validated for use in the models and the local geology of the orebody is used to classify the drill-hole information into appropriate geostatistical domains. Detailed statistical analyses are conducted on each of these domains and this allows for the identification of high-grade outliers. If these values are anomalous to the general population characteristics then they are cut back to the appropriate upper limit of the population.

Estimation of the underground Mineral Resource uses the geological model boundaries to subdivide all drill-hole data into appropriate domains. Statistical analyses are performed on these domains and, in a similar manner to that of open-pit estimation, high-grade outliers are identified and appropriately cut back to the upper limit of the population. A geostatistical method called ordinary kriging is used to produce estimates of a pre-determined block size. These block sizes are 10m x 10m and 20m x 20m. The geostatistical technique of conditional simulation has been used to estimate the Cosmo ore zone.

### Tropicana

The geostatistical method of uniform conditioning is used to estimate the Mineral Resource. All available geological drill-hole information is validated for use in the models and the local geology of the orebody is used to classify the drill-hole information into appropriate geostatistical domains. Detailed statistical analyses are conducted on each of these domains and this allows for the identification of high-grade outliers. If these values are anomalous to the general population characteristics, then they are cut back to the appropriate upper limit of the population.

## Ore Reserve estimation

The Ore Reserve is estimated within the current pit design using the relevant Mineral Resource models and updated geotechnical and metallurgical parameters and appropriate operating costs. The recoverable gold Mineral Resource model has been estimated either by a geostatistical technique called multiple indicator kriging or uniform conditioning (non-linear geostatistical methods) and reflects the selectivity or SMU of the mining equipment that is intended to be used to recover the Mineral Resource within the Ore Reserve pit design.

# Australia

## Sunrise Dam

### Location

Sunrise Dam lies some 220km north-north-east of Kalgoorlie and 55km south of Laverton in Western Australia. The mine, 100% owned by AngloGold Ashanti, comprises an open-pit operation and an underground operation. Mining is carried out by contractors and ore is treated in a conventional gravity and leach process plant. The mining of the open pit has reached its final depth and only a small north wall cutback is now in operation.

### Geology

At Sunrise Dam, gold mineralisation is structurally controlled and vein hosted. The style of mineralisation can be differentiated depending on the structure or environment in which it is hosted. There are three dominant domains, namely:

- shear-related and high strain – e.g. Sunrise Shear Zone;
- stock work development in planar faults with brittle characteristics (these occur in all rock types and are commonly concentrated at lithofacies contacts within the volcanic stratigraphy or the porphyry margin and within hinge domains within the magnetite shales) – e.g. Western Shear Zone, Watu, Cosmo, Summercloud; and
- placer-style mineralisation hosted within the fluvial sediments.

The vein and shear styles of gold mineralisation are introduced primarily during the third and fourth deformation stages and variations in structural style, ore and gangue mineralogy and alteration intensity are observed locally. Secondary (supergene) gold mineralisation is also an important part of the Cleo-Sunrise ore system and is highlighted by extremely high gold grades developed near the base of Tertiary paleochannels and horizontal blankets of mineralisation related to iron redox fronts and associated water tables.

### Exploration

Near-mine exploration at Sunrise Dam is specifically focussed on a two-stage strategy of developing and advancing proximal opportunities for the open pit and underground operations, whilst determining long-term opportunities that exist up to 1.5km below the mine.

The focus for 2011 continues to be the increase of the Mineral Resource for the underground project. This will entail specific deep drilling programmes of up to 2km vertical depth. These drill-holes will determine the extent of the main mineralising shoots of Cosmo, Dolly and Midway Shear.

In 2011 near-mine exploration will continue, aimed at growing the Mineral Resource. The tenement areas have increased to in excess of 300km<sup>2</sup> and contain strategic and highly prospective targets with areas of known mineralisation within the central Laverton Greenstone Belt. High-quality targets have also been located immediately proximal to and below the mine area. Open pit, satellite opportunities have been investigated in 2010 and extensions to these will continue to be investigated throughout 2011. The mineralisation at the Golden Delicious and Neville projects has proven that additional mineralisation sources away from the mega pit exist and that further investigation is warranted.

In addition to projects within the owned tenure, strategic joint ventures continue to be developed. These opportunities, coupled with world-class, cutting edge geological research and development initiatives support a well developed strategy that will provide the best opportunity to successfully develop a strong and diverse project portfolio.



# Australia

## Sunrise Dam

### Projects

The underground LOM project seeks to delineate deep Mineral Resources below the mine area. The extensions of the current orebodies can be traced to depths in excess of 1.2km vertical and extend over a strike length of 2.5km. This, in addition to the satellite underground and open pit opportunities, forms the framework for the LOM at Sunrise Dam.

During 2010 a detailed project charter was established to assess the viability of utilising the sub-level caving mining method in the GQ and Dolly orebodies in the underground mine area.

### Mineral Resource

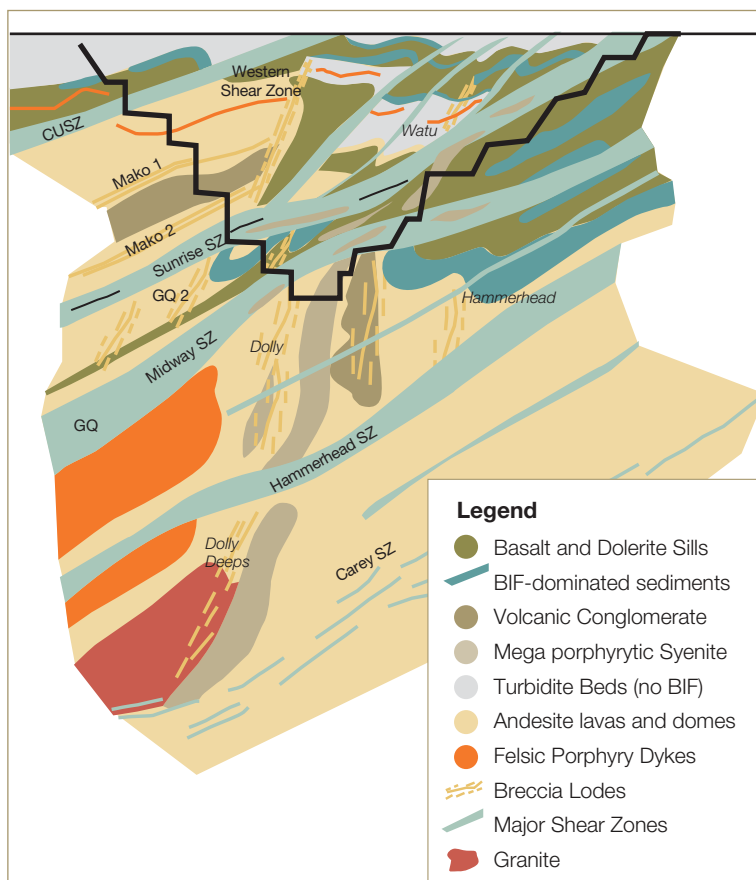
as at 31 December 2010		Tonnes	Grade	Contained gold	
Sunrise Dam	Category	million	g/t	Tonnes	Moz
Golden Delicious	Measured	–	–	–	–
	Indicated	2.48	1.52	3.76	0.12
	Inferred	0.25	1.68	0.42	0.01
	<b>Total</b>	<b>2.73</b>	<b>1.53</b>	<b>4.18</b>	<b>0.13</b>
North Wall Outback	Measured	0.77	1.82	1.41	0.05
	Indicated	2.25	2.44	5.49	0.18
	Inferred	0.01	1.48	0.02	0.00
	<b>Total</b>	<b>3.03</b>	<b>2.28</b>	<b>6.92</b>	<b>0.22</b>
Stockpile (open pit)	Measured	15.86	1.18	18.77	0.60
	Indicated	–	–	–	–
	Inferred	–	–	–	–
	<b>Total</b>	<b>15.86</b>	<b>1.18</b>	<b>18.77</b>	<b>0.60</b>
Underground	Measured	–	–	–	–
	Indicated	10.59	4.79	50.78	1.63
	Inferred	4.29	5.28	22.66	0.73
	<b>Total</b>	<b>14.88</b>	<b>4.93</b>	<b>73.44</b>	<b>2.36</b>
Stockpile (underground)	Measured	0.18	5.98	1.08	0.03
	Indicated	–	–	–	–
	Inferred	–	–	–	–
	<b>Total</b>	<b>0.18</b>	<b>5.98</b>	<b>1.08</b>	<b>0.03</b>
<b>Sunrise Dam</b>	<b>Total</b>	<b>36.68</b>	<b>2.85</b>	<b>104.38</b>	<b>3.36</b>

## Exclusive Mineral Resource

The Exclusive Mineral Resource includes Inferred Mineral Resource and low-grade stockpiles that do not currently meet the Ore Reserve cut-off grade requirements.

### Exclusive Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Sunrise Dam	Category	million	g/t	Tonnes	Moz
	Measured	9.62	0.93	8.96	0.29
	Indicated	8.63	3.42	29.49	0.95
	Inferred	4.55	5.08	23.10	0.74
<b>Sunrise Dam</b>	<b>Total</b>	<b>22.80</b>	<b>2.70</b>	<b>61.55</b>	<b>1.98</b>



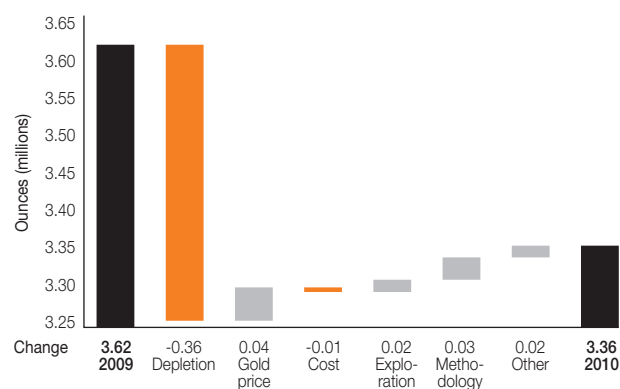
Cross-section of SDGM



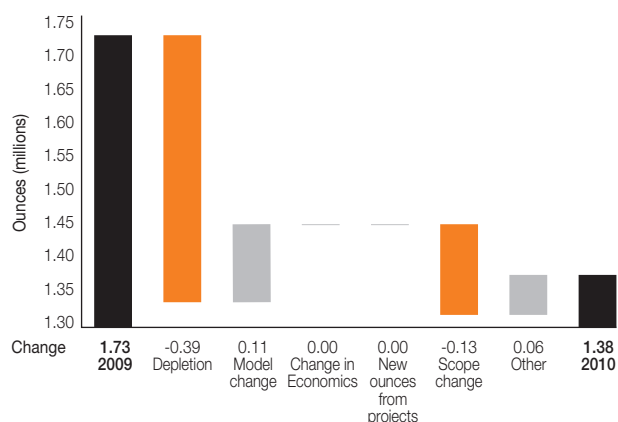
# Australia

## Sunrise Dam

**Sunrise Dam: Mineral Resource reconciliation**  
2009 vs 2010



**Sunrise Dam: Ore Reserve reconciliation**  
2009 vs 2010



## Ore Reserve

as at 31 December 2010		Tonnes	Grade	Contained gold	
Sunrise Dam	Category	million	g/t	Tonnes	Moz
North Wall Cutback	Proved	0.61	2.08	1.28	0.04
	Probable	1.87	2.78	5.19	0.17
	<b>Total</b>	<b>2.48</b>	<b>2.60</b>	<b>6.47</b>	<b>0.21</b>
Stockpile (open pit)	Proved	6.40	1.55	9.94	0.32
	Probable	–	–	–	–
	<b>Total</b>	<b>6.40</b>	<b>1.55</b>	<b>9.94</b>	<b>0.32</b>
Underground	Proved	–	–	–	–
	Probable	4.82	5.26	25.34	0.81
	<b>Total</b>	<b>4.82</b>	<b>5.26</b>	<b>25.34</b>	<b>0.81</b>
Stockpile (underground)	Proved	0.18	5.98	1.08	0.03
	Probable	–	–	–	–
	<b>Total</b>	<b>0.18</b>	<b>5.98</b>	<b>1.08</b>	<b>0.03</b>
<b>Sunrise Dam</b>	<b>Total</b>	<b>13.89</b>	<b>3.08</b>	<b>42.83</b>	<b>1.38</b>

## Inferred Mineral Resource in business plan

Inferred material is included in the pit optimisation, but makes up only a small proportion (<1%) of the total Mineral Resource ounces.

### Ore Reserve modifying factors

as at 31 December 2010	Ex-	Cut-off		% RRF	% RRF	% MRF	% MRF		
Gold	change	value	Dilution	(based on	(based	(based on	(based		
price	rate	g/t Au	(%)	tonnes)	on g/t)	tonnes)	on g/t)	MCF%	MetRF%
Sunrise Dam – Surface									
Surface – North Wall									
Cutback	850	0.84	0.90	–	–	–	–	–	85.50
Surface – Stockpile									
(open pit)	850	0.84	0.90	–	–	–	–	–	85.50
as at 31 December 2010	Ex-	Cut-off			Stopping				
Gold	change	value			width	Dilution	Dilution		
price	rate	g/t Au			(cm)	(%)	(g/t)	MCF%	MetRF%
Sunrise Dam –									
Underground									
Stockpile (underground)	850	0.84	2.68		1,250	28	–	100	86.00
Underground	850	0.84	2.68		1,250	28	–	100	86.00

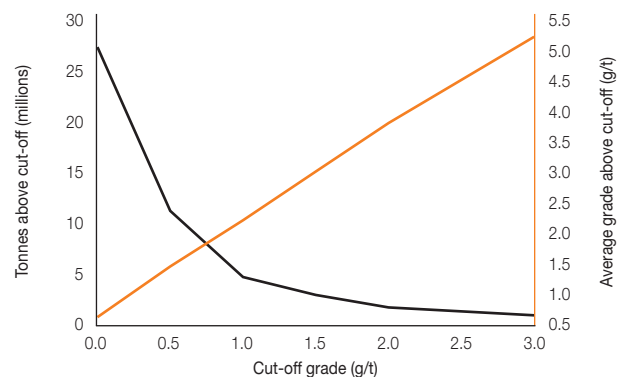


# Australia

## Sunrise Dam

### Sunrise Dam

– surface (metric)

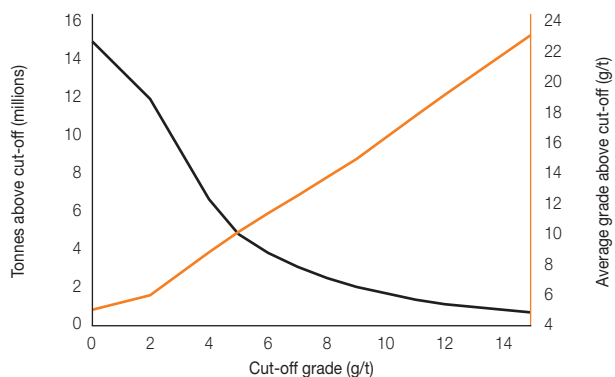


■ Tonnes above cut-off

Ave grade above cut-off ■

### Sunrise Dam

– underground (metric)



■ Tonnes above cut-off

Ave grade above cut-off ■

### Competent persons

Category	Type	Name	Professional organisation	Registration number	Relevant experience
Surface	Mineral Resource	John Carswell	AusIMM	106181	17 years
	Ore Reserve	Salih Ramazan	AusIMM	222870	9 years
Underground	Mineral Resource	John Carswell	AusIMM	106181	17 years
	Ore Reserve	Steve Tombs	AusIMM	105785	30 years



# Australia

## Tropicana

### Location

The Tropicana gold project is located 330km east-north-east of Kalgoorlie, Western Australia. The mineral deposit is hosted in the eastern margin of the Yilgarn Craton. Tropicana is the first deposit discovered in this remote portion of the Great Victoria Desert and is widely regarded as defining an emerging greenfields gold province.

Together, the Tropicana, Havana and Boston Shaker deposits define a north-east trending mineralised corridor approximately 1.2km wide and 5km long that has been tested to vertical depth of over 1,000m. The Mineral Resource remains open down-dip for the Tropicana, Havana and Boston Shaker deposits and to the south of the Havana deposit. Neither the immediate metamorphic host rocks nor the mineralised zones are exposed at surface due to the presence of widespread cover sequences, which tend to be between 0.5 and 15m thick.

### Geology

The Tropicana deposit comprises a main ore zone up to 50m thick, dominantly hosted in quartzo-feldspathic gneiss, with subordinate thin (3 to 5m), discontinuous mineralised lenses that typically return intercepts of >0.5g/t gold, hosted within the garnet gneiss-dominated hanging wall package. The Havana deposit comprises a lower, laterally continuous higher-grade lode up to 50m thick that is overlain, in central and southern parts of the proposed pit, by stacked, typically lower-grade and thinner (up to 25m thick) ore zones dominantly hosted in quartzo-feldspathic gneiss.

Mineralisation within the ore zones is accompanied by 2% to 8% pyrite with accessory pyrrhotite, chalcopyrite, electrum and minor other sulphides and tellurides. The gold mineralisation is related to shear planes that post-date the main gneissic fabric developed during peak granulite-facies metamorphism.

### Exploration

The Tropicana joint venture has assembled a dominant land-holding within an emerging greenfields belt hosting the Tropicana gold project. Maximising the value of the known Mineral Resource and capitalising on the strategic ground holding is dependent on timely application of exploration expenditure. The progressive focusing of expenditure in tenure shown to be more prospective will increase the probability of new discoveries. This approach is being applied by the joint venture and will be achieved through sustained investment in a systematic exploration programme.

Capitalising on the joint venture “first mover” advantage is dependent on systematic exploration of regional targets (more than 60km from Tropicana), near resource targets (less than 60km), and extensions of the known Mineral Resource that form part of the underground Mineral Resource. The exploration strategy aims to balance short to longer term value creation through sustained deployment of expenditure within the portfolio of early, mid and later stage prospects and targets.

The key objectives for 2011 can be summarised as follows:

- defining additional higher value ounces to maximise the value of the Tropicana gold project;
- identifying the potential scale of underground Mineral Resource at Havana Deeps that can complement planned open pit mining and extend the mine life; and
- progressing exploration in the wider Tropicana Belt to leverage the value that may be unlocked at a province scale with the objective of making further greenfields discoveries.

### Projects

The Boston Shaker zone is currently the focus of a feasibility study, due for completion in mid-2011, which will define material amenable to open pit mining in the early phase of Tropicana’s mine life.



# Australia

## Tropicana

Havana Deep is the focus of a pre-feasibility study into the viability of underground mining of the down-plunge extension of the Havana mineralisation. The pre-feasibility study is due for completion in 2012.

### Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Tropicana	Category	million	g/t	Tonnes	Moz
Surface	Measured	18.06	2.18	39.29	1.26
	Indicated	20.17	2.04	41.09	1.32
	Inferred	11.56	1.81	20.91	0.67
	<b>Total</b>	<b>49.79</b>	<b>2.03</b>	<b>101.29</b>	<b>3.26</b>
Underground	Measured	–	–	–	–
	Indicated	–	–	–	–
	Inferred	3.73	3.65	13.63	0.44
	<b>Total</b>	<b>3.73</b>	<b>3.65</b>	<b>13.63</b>	<b>0.44</b>
<b>Tropicana</b>	<b>Total</b>	<b>53.53</b>	<b>2.15</b>	<b>114.92</b>	<b>3.69</b>

### Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	Blast- RC	hole	Other	
Tropicana	Measured	25 x 25	✓	✓	–	–	
	Indicated	50 x 50	✓	✓	–	–	
	Inferred	50 x 100, and	✓	✓	–	–	
		100 x 100	✓	✓	–	–	

### Exclusive Mineral Resource

The Exclusive Mineral Resource includes Inferred Mineral Resource material in the Havana South pit and at depth in the Havana and Tropicana pits. It also includes the Boston Shaker zone and Havana Deep, which are not yet drilled to a level of confidence to establish an Ore Reserve.

### Exclusive Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Tropicana	Category	million	g/t	Tonnes	Moz
	Measured	1.21	0.94	1.14	0.04
	Indicated	3.47	1.67	5.80	0.19
	Inferred	15.30	2.26	34.53	1.11
<b>Tropicana</b>	<b>Total</b>	<b>19.98</b>	<b>2.08</b>	<b>41.47</b>	<b>1.33</b>

### Mineral Resource below infrastructure

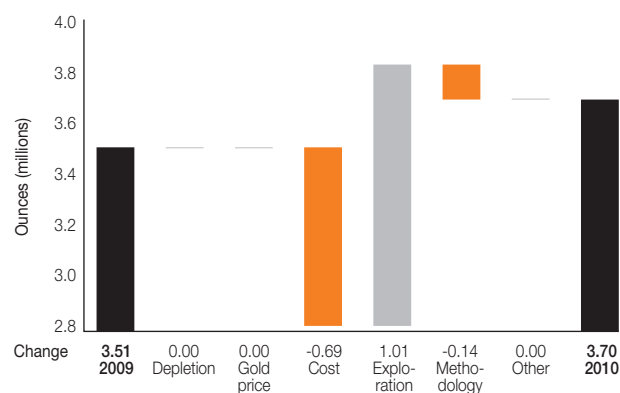
as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Tropicana	Category			Tonnes	Moz
Underground	Measured	–	–	–	–
	Indicated	–	–	–	–
	Inferred	3.73	3.65	13.63	0.44
<b>Tropicana</b>	<b>Total</b>	<b>3.73</b>	<b>3.65</b>	<b>13.63</b>	<b>0.44</b>



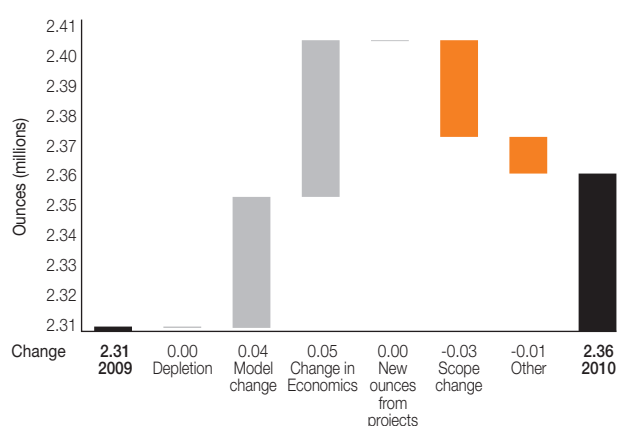
# Australia

## Tropicana

**Tropicana: Mineral Resource reconciliation**  
2009 vs 2010



**Tropicana: Ore Reserve reconciliation**  
2009 vs 2010



### Ore Reserve

as at 31 December 2010		Tonnes	Grade	Contained gold	
Tropicana	Category	million	g/t	Tonnes	Moz
Surface	Proved	16.85	2.26	38.16	1.23
	Probable	16.70	2.11	35.29	1.13
<b>Tropicana</b>	<b>Total</b>	<b>33.55</b>	<b>2.19</b>	<b>73.45</b>	<b>2.36</b>

### Inferred Mineral Resource in business plan

Inferred material resource is included in the pit optimisation process, but makes up only a small proportion (less than 15%) of the total mining inventory. Further drilling will increase the confidence in the estimation of this material with a view to convert the Inferred Mineral Resource into an Ore Reserve in the near future.

### Inferred Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Tropicana		million	g/t	Tonnes	Moz
Surface		7.12	1.34	9.58	0.31
Inferred Mineral Resource in the Tropicana bankable feasibility study LOM schedule					
<b>Total</b>		<b>7.12</b>	<b>1.34</b>	<b>9.58</b>	<b>0.31</b>

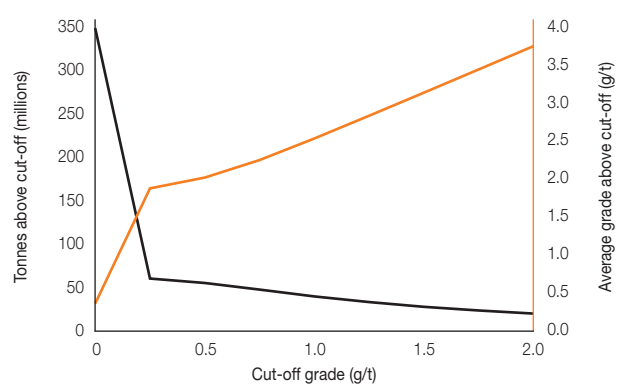
### Ore Reserve modifying factors

as at 31 December 2010		Ex-	Cut-off	% RRF		% MRF		% MRF	
Tropicana	Gold	change	value	Dilution	(based on	(based on	(based on	(based on	
	price	rate	g/t Au	(%)	tonnes)	on g/t)	tonnes)	on g/t)	MCF%
Surface	880	0.80	0.70	–	–	–	–	–	90.30



## Tropicana

– surface (metric)

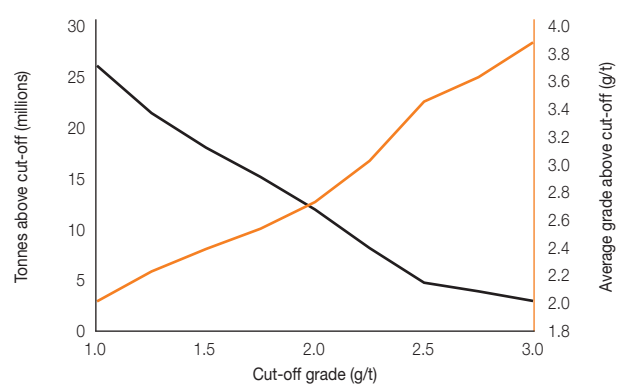


■ Tonnes above cut-off

Ave grade above cut-off ■

## Tropicana

– underground (metric)



■ Tonnes above cut-off

Ave grade above cut-off ■

## Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Mark Kent	AusIMM	203631	13 years
Ore Reserve	Marek Janas	AusIMM	210148	19 years

## Americas

Hard-won improvements  
**cemented**  
in Brazil and Argentina



## Regional overview

AngloGold Ashanti has the Cripple Creek & Victor mine in the USA, the Cerro Vanguardia mine in Argentina and also the AngloGold Ashanti Córrego do Sítio Mineração operation and the Serra Grande joint venture, both in Brazil. The Americas represents one of the most important growth regions for AngloGold Ashanti.

Combined production from these operations increased by 3% to 842,000oz of gold in 2010.

The total Mineral Resource across the Americas, attributable to AngloGold Ashanti, was 43.87Moz at the end of 2010 and the attributable Ore Reserve was 10.11Moz. AngloGold Ashanti also conducts an extensive greenfield exploration programme across the Americas, most notably in Colombia, where it holds a significant land position and has made two greenfield exploration discoveries – Gramalote and La Colosa – which together account for 13.5Moz of the Americas' Mineral Resource.

All Mineral Resources and Ore Reserves listed are attributable unless otherwise stated.

### Mineral Resource by region

as at 31 December 2010	Category	Tonnes	Grade	Contained gold	
		million	g/t	Tonnes	Moz
Americas Region	Measured	305.34	1.01	309.82	9.96
	Indicated	268.77	1.29	346.77	11.15
	Inferred	534.68	1.32	707.99	22.76
	<b>Total</b>	<b>1,108.78</b>	<b>1.23</b>	<b>1,364.58</b>	<b>43.87</b>

### Ore Reserve by region

as at 31 December 2010	Category	Tonnes	Grade	Contained gold	
		million	g/t	Tonnes	Moz
Americas Region	Proved	163.64	1.05	171.06	5.50
	Probable	94.72	1.51	143.26	4.61
	<b>Total</b>	<b>258.36</b>	<b>1.22</b>	<b>314.32</b>	<b>10.11</b>



# Argentina

## Country overview

AngloGold Ashanti has a single operation in Argentina, the Cerro Vanguardia mine, which is a joint venture with Formicruz (the province of Santa Cruz). The province of Santa Cruz holds 7.5% and the remaining 92.5% belongs to AngloGold Ashanti.

## Mineral Resources estimation

The Mineral Resource estimates are computed using the relevant modules of the Datamine® software package. The geological model is a critical part of the Mineral Resource estimation process. The orebody boundaries for each geological entity (veins, stock work, wall rock) are defined from the detailed logging of all geological boreholes and after validation this information is used to create a three dimensional model. This model is subsequently overlain with a 5 x 25 x 5m (X by Y by Z) block model. The block sizes used are chosen to represent the dimensions in which the deposit is intended to be mined.

Volumetric measurements of the orebody are subsequently computed in the system using the relevant block dimensions. Ordinary kriging is used to perform the grade interpolation. Field tests are conducted to determine appropriate in-situ densities.

Stochastic simulations are performed in the main orebodies for uncertainty assessment and the Mineral Resource is then classified into the Measured, Indicated and Inferred Mineral Resource categories according to stringent rules.

## Ore Reserve estimation

The appropriate Mineral Resource models are used as the basis for the Ore Reserve. All relevant modifying factors such as mining dilution and costs are used in the Ore Reserve conversion process. This is based on the original block grades and tonnage and includes waste material (both internal and external). Appropriate Ore Reserve cut-off grades are applied and all blocks above this cut-off are reported. For the reserve optimisation, Whittle® software was used and Datamine® software was utilised to design the pits.

It is important to emphasise the importance of the silver during the optimisation of the pits, since silver is a significant by-product at Cerro Vanguardia. The ratio of silver to gold commonly ranges from 10 to 15g/t of silver per 1g/t of gold.

Cerro Vanguardia uses conventional open-pit mining with a doubled bench height of 20m. Mining is distributed between multiple operating pits, typically three to five at any one time; depending on the plant feed requirements. Waste dumps and heap-leach stockpiles are located adjacent to each pit. Plant grade ore feed is trucked to either the long-range or short-range stockpiles in order to smooth out the head grades and avoid recovery losses due to higher than planned silver grades. The average stripping ratio for the remaining 10 years of mine life is 26:1.

# Argentina

## Cerro Vanguardia

### Location

Cerro Vanguardia is located in the Santa Cruz Province, Southern Argentina, approximately 130km north-north-west of the coastal town of San Julián. The mining lease encompasses an area of approximately 520km<sup>2</sup>. Access to the area is by plane from Buenos Aires to Comodoro Rivadavia or Rio Gallegos and subsequently by road to the mine site.

### Geology

Cerro Vanguardia is located in the central portion of the 60,000km<sup>2</sup> Deseado Massif, the most extensive stratigraphic and structural unit in Southern Argentina. The Deseado Massif consists of Palaeozoic low-grade metamorphic basement rocks, unconformably overlain by a thick sequence of Lower to Upper Jurassic volcanic and volcanoclastic rocks of intermediary and acidic composition. These older rocks are exposed in erosional windows through overlying Cretaceous sediments and Tertiary to Quaternary basalts.

The Chon Aike Formation hosts a low sulphidation epithermal type gold and silver deposit. The true thickness of the ignimbrite sequence is estimated to have exceeded 535m but some lateral thickness variations have been identified across the district. Epithermal Au-Ag bearing structures cut across all units in the stratigraphy. The two main ignimbrite units, Masiva-Lajosa and Granosa, host the majority of mineralised veins. The Masiva-Lajosa ignimbrite occurs at the top of the sequence whilst the Granosa ignimbrite occurs towards the base. These two ignimbrites are separated by two thinner, polymict ignimbrite units (Brechosa and Brechosa Base) and a sequence of stratified crystal- to ash-rich tuffs. The base of the sequence is a mixed unit of stratified ignimbrite interspersed with fine-grained tuffs.

The mineralisation is concentrated in steeply dipping quartz veins that cut the flat lying ignimbrites and volcanoclastic rocks. From 1991, when exploration began at Cerro Vanguardia, until 2010, a total of 106 mineralised veins or structures have been discovered. The veins have a total lateral extent of 230km and 57 of these mineralised veins or structures have been included in the Mineral Resource.

### Exploration

The exploration programme in 2010 was focussed mainly in the central and southern portions of the Cerro Vanguardia mining lease area. Both these areas have stratigraphy and vein orientations that are favourable for mineralisation. A total of 23,602m of DD and 27,596m of RC drilling was completed during the year. The veins that were drilled were Atila 2, Fortuna Este, Loma del Muerto, Cuncuna, Lucy-Concepción Norte, El Lazo, Gésica, Paula 2, Liliana, Águila, Luciana 1 and Evelyn. The additional Mineral Resource that was generated was separated into vein Mineral Resources and heap leach Mineral Resources.

### Projects

Cerro Vanguardia currently mines from multiple open pits that are up to 200m deep. The highest grade and thickest veins were mined first to maximise the NPV. Mining costs and strip ratios have increased as grades have decreased over the years. Higher gold prices have extended the life of Cerro Vanguardia, but at higher stripping ratios and operating costs.

A feasibility study is currently being undertaken at Cerro Vanguardia that is intended to optimise the LOM through reduced stripping ratios (from 26:1 to 16:1), thereby reducing mining costs per tonne of ore mined. Plans are also in place to convert to underground mining in selected pits in order to maintain current production levels. The benefits of this optimisation are that, apart from reduced cash costs and waste material generation, additional ounces may be mined due to increased access and selectivity. It will also enable the mining of veins that are currently not mineable from open pits.

# Argentina

## Cerro Vanguardia

The underground mining proposed at Cerro Vanguardia will complement the current open-pit production. The tonnage from the open pits will decrease to an average of 700,000t per year as the highest stripping ratio open pits are replaced with underground operations. The underground mines are expected to increase their production to 300,000t per year. The only vein that is currently being mined from underground is Mangas, but underground development is taking place at Osvaldo Cb4 and Osvaldo Cb9 and there are several more projects in the pipeline, such as Cuncuna, Liliana, Zorro, Osvaldo Cb10 and Osvaldo Cb12.

### Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Cerro Vanguardia	Category	million	g/t	Tonnes	Moz
Vein Resources (open pit)	Measured	1.33	6.70	8.89	0.29
	Indicated	9.31	6.32	58.83	1.89
	Inferred	4.86	5.49	26.64	0.86
	<b>Total</b>	<b>15.49</b>	<b>6.09</b>	<b>94.36</b>	<b>3.03</b>
Heap leach	Measured	9.74	0.74	7.23	0.23
	Indicated	10.28	0.62	6.37	0.20
	Inferred	5.09	0.57	2.91	0.09
	<b>Total</b>	<b>25.11</b>	<b>0.66</b>	<b>16.51</b>	<b>0.53</b>
Vein Resources (underground)	Measured	0.06	8.70	0.50	0.02
	Indicated	1.27	11.46	14.50	0.47
	Inferred	0.25	11.82	2.99	0.10
	<b>Total</b>	<b>1.58</b>	<b>11.42</b>	<b>17.99</b>	<b>0.58</b>
<b>Cerro Vanguardia</b>	<b>Total</b>	<b>42.18</b>	<b>3.06</b>	<b>128.87</b>	<b>4.14</b>

### Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	RC	Blast-hole	Other	
Cerro Vanguardia	Measured	12.5 x 12.5	✓	✓	-	-	
	Indicated	40 x 40	✓	✓	-	-	
	Inferred	80 x 80	✓	✓	-	-	
	Grade control	5 x 10	✓	✓	-	-	

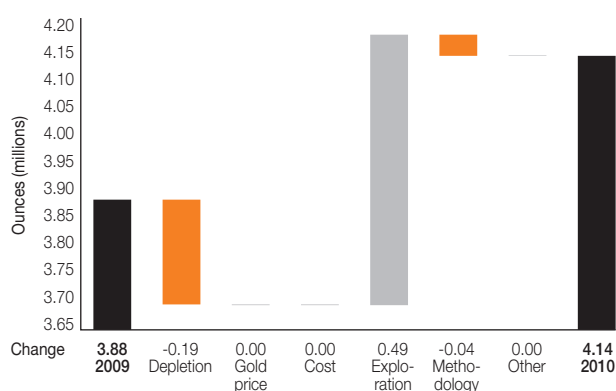
## Exclusive Mineral Resource

The Exclusive Mineral Resource is primarily located in the space generated between the pit design and the Mineral Resource shell and is due to the difference in the economic parameters that have been used. In very marginal deposits, where the grade of Au and Ag are above the Mineral Resource cut-off but below the Ore Reserve cut-off, significant zones of Exclusive Mineral Resource will be generated. Very deep Mineral Resource will also not be converted to Ore Reserve and is therefore listed as Exclusive Mineral Resource.

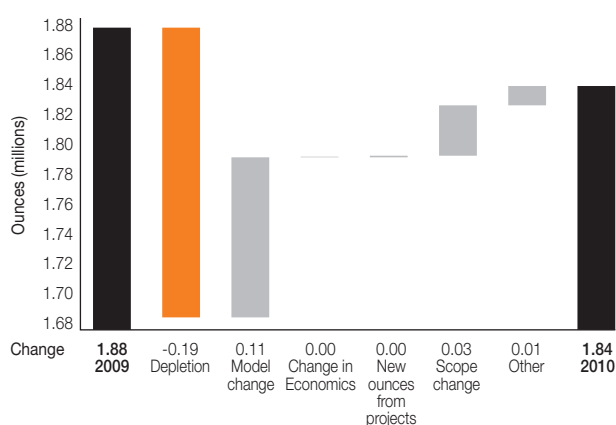
### Exclusive Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Cerro Vanguardia	Category	million	g/t	Tonnes	Moz
	Measured	1.36	3.61	4.91	0.16
	Indicated	16.70	2.20	36.72	1.18
	Inferred	9.95	2.97	29.56	0.95
<b>Cerro Vanguardia</b>	<b>Total</b>	<b>28.01</b>	<b>2.54</b>	<b>71.18</b>	<b>2.29</b>

**Cerro Vanguardia: Mineral Resource reconciliation**  
2009 vs 2010



**Cerro Vanguardia: Ore Reserve reconciliation**  
2009 vs 2010



### Mineral Resource by-product: Silver (Ag)

as at 31 December 2010		Tonnes	Grade	Contained silver	
Cerro Vanguardia	Category	million	g/t	Tonnes	Moz
	Measured	11.12	25.56	284.26	9.14
	Indicated	20.86	76.62	1,598.42	51.39
	Inferred	10.20	79.76	813.38	26.15
<b>Cerro Vanguardia</b>	<b>Total</b>	<b>42.18</b>	<b>63.92</b>	<b>2,696.06</b>	<b>86.68</b>

# Argentina

## Cerro Vanguardia

### Ore Reserve

as at 31 December 2010		Tonnes	Grade	Contained gold	
Cerro Vanguardia	Category	million	g/t	Tonnes	Moz
Vein Resources (open pit)	Proved	0.62	6.75	4.17	0.13
	Probable	4.60	6.54	30.10	0.97
	<b>Total</b>	<b>5.22</b>	<b>6.57</b>	<b>34.28</b>	<b>1.10</b>
Heap leach	Proved	8.70	0.71	6.15	0.20
	Probable	2.40	0.53	1.27	0.04
	<b>Total</b>	<b>11.11</b>	<b>0.67</b>	<b>7.43</b>	<b>0.24</b>
Vein Resources (underground)	Proved	0.12	7.51	0.90	0.03
	Probable	1.56	9.12	14.24	0.46
	<b>Total</b>	<b>1.68</b>	<b>9.01</b>	<b>15.14</b>	<b>0.49</b>
Total stockpiles	Proved	0.10	4.20	0.40	0.01
	Probable	–	–	–	–
	<b>Total</b>	<b>0.10</b>	<b>4.20</b>	<b>0.40</b>	<b>0.01</b>
<b>Cerro Vanguardia</b>	<b>Total</b>	<b>18.10</b>	<b>3.16</b>	<b>57.25</b>	<b>1.84</b>

### Inferred Mineral Resource in business plan

The Inferred Mineral Resource that has been included in the pit design is not included in the Ore Reserve statement. These resources are normally located in the deep and lateral zones of the Mineral Resource models. In order for ore from the Inferred Mineral Resource to be included in the production plan, it must be upgraded by in-fill drilling. At Cerro Vanguardia a total of 185,000oz was not declared as an Ore Reserve, and of this, 155,000oz are located in five pits.

### Inferred Mineral Resource

as at 31 December 2010	Tonnes	Grade	Contained gold	
Cerro Vanguardia	million	g/t	Tonnes	Moz
Vein Resources (open pit)	1.27	5.15	6.52	0.21
CVSA – Heap leach	1.56	0.46	0.72	0.02
Vein Resources (underground)	0.38	8.26	3.18	0.10
<b>Total</b>	<b>3.21</b>	<b>3.24</b>	<b>10.41</b>	<b>0.33</b>

## Ore Reserve modifying factors

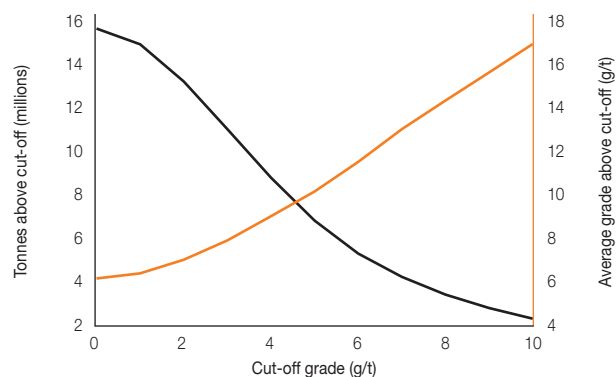
as at 31 December 2010	Gold price	Ex-change rate	Cut-off value g/t Au	Dilution (%)	% MRF (based on tonnes)	% MRF (based on g/t)	MCF%	MetRF%
Cerro Vanguardia								
Heap leach	850	4.00	0.35	–	–	–	–	–
Vein Resources (open pit)	850	4.00	2.26	45	97	96	93	95
Vein Resources (underground)	850	4.00	–	15	97	96	93	95

## Ore Reserve by-product: Silver (Ag)

as at 31 December 2010		Tonnes million	Grade g/t	Contained silver Tonnes	Moz
Cerro Vanguardia	Category				
	Proved	9.54	22.40	213.62	6.87
	Probable	8.57	100.82	864.00	27.78
Cerro Vanguardia	Total	18.10	59.52	1,077.62	34.65

## Cerro Vanguardia

– surface (metric)

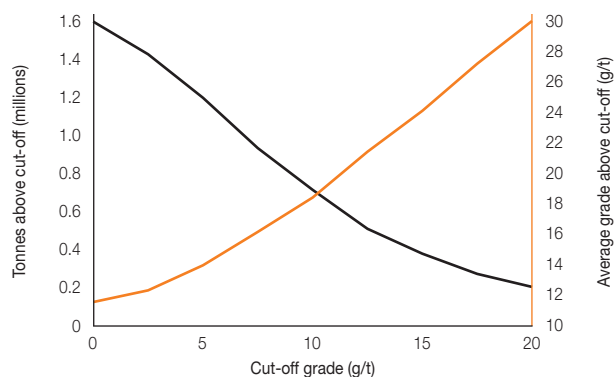


■ Tonnes above cut-off

■ Ave grade above cut-off

## Cerro Vanguardia

– underground (metric)



■ Tonnes above cut-off

■ Ave grade above cut-off

## Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Cesar Riveros	AusIMM	304416	25 years
Ore Reserve	Jorge Sanguin	AusIMM*		20 years

\* Application for membership has been submitted



# Brazil

## Country overview

AngloGold Ashanti's operations in Brazil comprise the wholly-owned AngloGold Ashanti Brazil Mineração (formerly Morro Velho assets) and a 50% interest in Mineração Serra Grande.

## Mineral Resources estimation

The Mineral Resource Estimation is updated as part of the annual evaluation process. The geostatistical method used for estimation is ordinary kriging using the lithology as the indicator. The Cuiabá mine dataset consists of channel samples and drill-hole samples. The 3D modelling and estimation is done with two domains: the thick orebodies, comprised by the Fonte Grande Sul and Serrotinho orebodies and the narrow vein domain of the Balancão, Galinheiro and Canta Galo orebodies. All channel and drill-hole samples are used in the 3D geological models and the lithological maps of the orebodies are used to identify the rock types. A simulation technique is used to determine the uncertainty in the orebody block-models. SGS (Sequential Gaussian Simulation) and SIS (Sequential Indicator Simulation) methods are used to simulate the rock types (SIS) and the grade (SGS) combining the results in an uncertainty analysis.

Raposos and Morro da Glória are estimated as the polygonal estimates (considering a weighted average of the samples over two drilled or open panels and an average is applied for the lower panels where no drilling information is available). Both Raposos and Morro da Glória have the information captured into datasets and preliminary estimation exercises confirm the current numbers in the statement (Raposos by uniform conditioning method and Morro da Glória by ordinary kriging). Luzia da Motta estimates come from ordinary kriging estimates for each target based on the available surface drilling which has a minimum pattern of 100 x 100m.

## Ore Reserve estimation

The gold price and operational costs are taken into consideration in determining the Ore Reserve. The Ore Reserve is scheduled and designed using Mine2-4D® computer software. Mining parameters such as the mining method, minimum mining width, MCF, dilution and recovery are all applied in the process.



# Brazil

## AGA Mineração

The wholly-owned AGA Mineração mining complex is located in south-eastern Brazil, in the state of Minas Gerais. It lies south and east of the city of Belo Horizonte and has operations in the municipalities of Nova Lima, Sabará and Santa Bárbara. It is located within the mining district referred to as the Iron Quadrangle (Quadrilátero Ferrífero) and this area hosts numerous historic and current gold mining operations, as well as a number of open-pit limestone and iron ore operations.

Reorganisation of AGA Mineração was completed during the first half of 2010 and the new company is called AngloGold Ashanti Córrego do Sítio Mineração (commonly referred to as AGA Mineração). The aim was to capture the operating and financial synergies of the numerous mining operations in this historical mining district. The company now encompasses the mining operations at Cuiabá, Lamego, Queiroz, Córrego do Sítio and São Bento.

AGA Mineração has mining rights over 61,864ha and ore is sourced from the Cuiabá and Lamego underground mines and processed at the Cuiabá and Queiroz plants, while the Córrego do Sítio open pit mine has a heap-leaching facility. A feasibility study on the Nova Lima Sul Project, which involves the restart of the mothballed Raposos mine, is being prepared for submission to the board in mid 2011. All these operations are primarily gold mines, but sulphur (for the production of sulphuric acid) is a by-product of the Cuiabá mining operation.

### Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
AGA Mineração	Category	million	g/t	Tonnes	Moz
	Measured	8.79	7.10	62.38	2.01
	Indicated	13.68	6.33	86.55	2.78
	Inferred	28.52	6.95	198.35	6.38
<b>AGA Mineração</b>	<b>Total</b>	<b>50.99</b>	<b>6.81</b>	<b>347.29</b>	<b>11.17</b>

### Exclusive Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
AGA Mineração	Category	million	g/t	Tonnes	Moz
	Measured	6.30	6.17	38.87	1.25
	Indicated	8.13	6.17	50.12	1.61
	Inferred	26.34	6.87	181.10	5.82
<b>AGA Mineração</b>	<b>Total</b>	<b>40.77</b>	<b>6.63</b>	<b>270.09</b>	<b>8.68</b>

### Mineral Resource below infrastructure

as at 31 December 2010		Tonnes	Grade	Contained gold	
AGA Mineração	Category	million	g/t	Tonnes	Moz
	Measured	1.05	4.60	4.82	0.15
	Indicated	7.59	6.33	48.09	1.55
	Inferred	23.50	7.33	172.11	5.53
<b>AGA Mineração</b>	<b>Total</b>	<b>32.13</b>	<b>7.00</b>	<b>225.02</b>	<b>7.23</b>

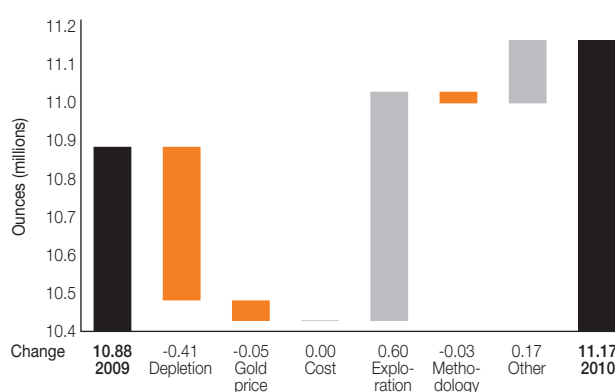
# Brazil

## AGA Mineração

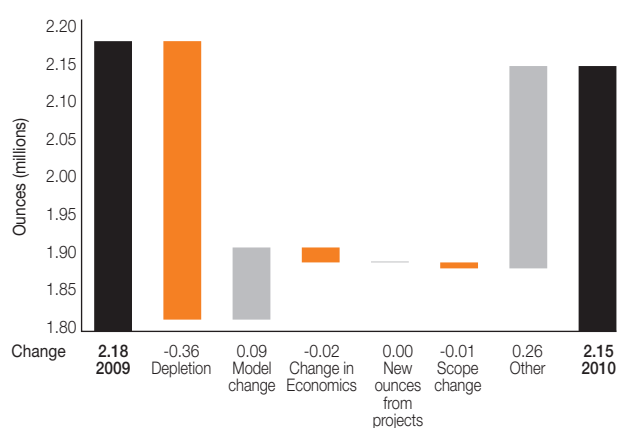
### Mineral Resource by-product: Sulphur (S)

as at 31 December 2010		Tonnes	Grade	Sulphur	Pounds
AGA Mineração	Category	Mt	%S	Mt	million
	Measured	6.19	6.9	0.42	937
	Indicated	6.39	6.3	0.40	881
	Inferred	14.46	7.0	1.01	2,232
AGA Mineração	<b>Total</b>	<b>27.05</b>	<b>6.8</b>	<b>1.84</b>	<b>4,050</b>

### AGA Mineração: Mineral Resource reconciliation 2009 vs 2010



### AGA Mineração: Ore Reserve reconciliation 2009 vs 2010



### Ore Reserve

as at 31 December 2010		Tonnes	Grade	Contained gold	
AGA Mineração	Category	million	g/t	Tonnes	Moz
	Proved	4.94	6.74	33.34	1.07
	Probable	6.08	5.50	33.41	1.07
AGA Mineração	<b>Total</b>	<b>11.02</b>	<b>6.06</b>	<b>66.76</b>	<b>2.15</b>

### Inferred Mineral Resource in business plan

#### Inferred Mineral Resource

as at 31 December 2010	Tonnes	Grade	Contained gold		
AGA Mineração	million	g/t	Tonnes	Moz	Comments
CdS I (oxides)	0.17	3.21	0.53	0.02	Inferred Mineral Resource in business plan
Lamego (Cabeça de Pedra)	0.43	3.88	1.65	0.05	
Lamego (Carruagem)	0.50	5.33	2.69	0.09	
Cuiabá (main orebodies)	0.33	6.31	2.08	0.07	Part of orebody FGS level 15 and orebody SER levels 14 and 15
Cuiabá (narrow veins)	0.33	5.53	1.80	0.06	Part of orebodies BAL and GAL levels 12 and 13
CdS I (Cachorro Bravo)	1.58	6.78	10.74	0.35	There are no Ore Reserves in secondary areas
CdS I (Laranjeiras)	2.15	6.16	13.23	0.43	This includes Inferred Mineral Resources from Carvoaria and Cachorro Bravo
<b>Total</b>	<b>5.48</b>	<b>5.97</b>	<b>32.73</b>	<b>1.05</b>	

### Ore Reserve below infrastructure

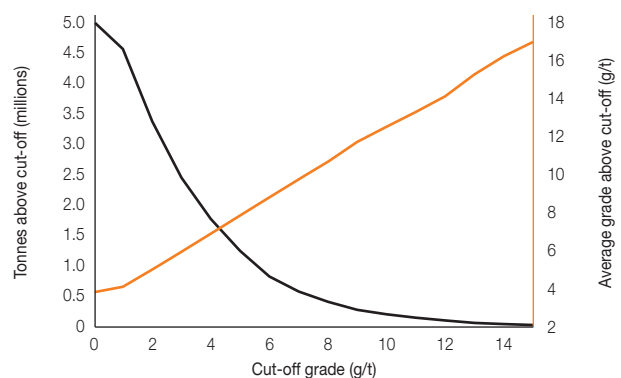
as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
AGA Mineração	Category			Tonnes	Moz
	Proved	0.49	6.40	3.15	0.10
	Probable	2.72	5.82	15.86	0.51
<b>AGA Mineração</b>	<b>Total</b>	<b>3.21</b>	<b>5.91</b>	<b>19.01</b>	<b>0.61</b>

### Ore Reserve by-product: Sulphur (S)

as at 31 December 2010		Tonnes Mt	Grade %S	Sulphur Mt	Pounds million
AGA Mineração	Category				
	Proved	4.18	5.7	0.24	527
	Probable	4.04	5.1	0.20	451
<b>AGA Mineração</b>	<b>Total</b>	<b>8.22</b>	<b>5.4</b>	<b>0.44</b>	<b>978</b>

### AGA Mineração

– surface (metric)

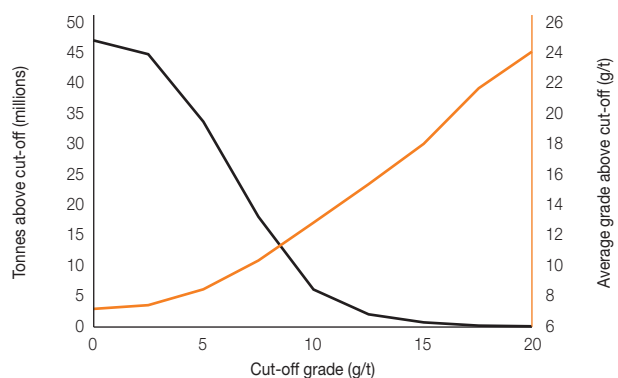


■ Tonnes above cut-off

Ave grade above cut-off ■

### AGA Mineração

– underground (metric)



■ Tonnes above cut-off

Ave grade above cut-off ■



# Brazil

## AGA Mineração – Córrego do Sítio

### Location

Córrego do Sítio is located 60km east of the city of Belo Horizonte, which is in the Minas Gerais State of Brazil. The southern portion of this mining complex is referred to as Córrego do Sítio I whilst the northern portion (formerly known as São Bento) has been re-named Córrego do Sítio II.

### Geology

Córrego do Sítio is located in the eastern part of the lower to middle greenschist facies Archaean Rio das Velhas greenstone belt. The Córrego do Sítio I and Córrego do Sítio II gold deposits and targets are located in a gold trend that extends for about 11.5km in a north-easterly direction, from Grota Funda (CdS I areas) in the south to Jambeiro (São Bento/CdS II areas) in the north. The main gold targets and deposits are distributed over three trends, namely the Córrego do Sítio trend, the Donana Trend and the Cristina Trend.

The Córrego do Sítio orebodies consist of narrow north-east/south-west elongated lenses of mineralisation dipping at 20° to 30°. Córrego do Sítio is an orogenic type deposit and comprises many hydrothermal lodes with quartz veins and low sulphide content disseminated in the wall rocks. The mineralised orebodies are narrow, elongated and folded. In general, the mineralised orebodies are sericitic zones and quartz veinlets. The gold occurs as microscopic or sub-microscopic inclusions in arsenopyrite and sometime berthierite. Other typical sulphide minerals in the orebodies are pyrrhotite, pyrite and chalcopyrite.

### Exploration

Exploration started at the site in the 1980s and focussed mainly on the oxides. The sulphide potential has been better appreciated since the start of the excavation of the underground exploration ramp in 2002. An extensive drilling campaign has been conducted, aiming to add and convert Mineral Resource from three sets of orebodies known as Cachorro Bravo, Laranjeiras, and Carvoaria. To date, over 21km of underground development has provided access and better understanding of these sets of orebodies.

Exploration of further targets is continuous, mainly by means of soil and channel samples, mapping and drilling.

### Projects

The main projects at Córrego do Sítio are geared towards Mineral Resource conversion. Córrego do Sítio currently has 411,000oz of Probable and Proved Ore Reserve. This value represents around 38% of the 1.1Moz of Mineral Resource declared in 2009, and around 19% of the 2.1Moz of the current Mineral Resource. In 2010 a total of 60,000oz of additional Mineral Resource was added, mainly from the Laranjeiras and Carvoaria orebodies. The strategy to convert the additional 664,000oz of Inferred Mineral Resource to Indicated Mineral Resource is based on a large drilling programme of around 69,000m, to be drilled from 2010 to 2014 at Cachorro Bravo, Laranjeiras and Carvoaria Velha orebodies. For 2011, the immediate strategy is to add Ore Reserve at panel 4 of the Cachorro Bravo orebody system.

## Mineral Resource

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Córrego do Sítio	Category			Tonnes	Moz
CdS I (Cachorro Bravo)	Measured	0.86	8.31	7.15	0.23
	Indicated	1.37	7.27	9.93	0.32
	Inferred	0.62	7.61	4.73	0.15
	<b>Total</b>	<b>2.85</b>	<b>7.66</b>	<b>21.81</b>	<b>0.70</b>
CdS I (Carvoaria)	Measured	–	–	–	–
	Indicated	0.58	10.18	5.95	0.19
	Inferred	0.64	8.50	5.41	0.17
	<b>Total</b>	<b>1.22</b>	<b>9.30</b>	<b>11.36</b>	<b>0.37</b>
CdS I (secondary orebodies)	Measured	0.00	10.70	0.05	0.00
	Indicated	0.50	5.29	2.64	0.08
	Inferred	0.93	5.11	4.76	0.15
	<b>Total</b>	<b>1.43</b>	<b>5.19</b>	<b>7.44</b>	<b>0.24</b>
CdS I (Laranjeiras)	Measured	–	–	–	–
	Indicated	2.22	6.00	13.34	0.43
	Inferred	2.22	7.73	17.17	0.55
	<b>Total</b>	<b>4.45</b>	<b>6.86</b>	<b>30.51</b>	<b>0.98</b>
CdS I (transitional)	Measured	0.05	6.93	0.37	0.01
	Indicated	0.53	7.43	3.94	0.13
	Inferred	0.22	6.62	1.49	0.05
	<b>Total</b>	<b>0.81</b>	<b>7.17</b>	<b>5.80</b>	<b>0.19</b>
CdS I (oxides)	Measured	0.99	4.81	4.78	0.15
	Indicated	0.84	5.19	4.37	0.14
	Inferred	1.26	3.94	4.96	0.16
	<b>Total</b>	<b>3.09</b>	<b>4.56</b>	<b>14.11</b>	<b>0.45</b>
CdS II (Pinta Bem)	Measured	–	–	–	–
	Indicated	–	–	–	–
	Inferred	0.16	4.88	0.77	0.02
	<b>Total</b>	<b>0.16</b>	<b>4.88</b>	<b>0.77</b>	<b>0.02</b>



# Brazil

## AGA Mineração – Córrego do Sítio

### Mineral Resource continued

as at 31 December 2010		Tonnes	Grade	Contained gold	
Córrego do Sítio	Category	million	g/t	Tonnes	Moz
CdS II (Sangue de Boi)	Measured	–	–	–	–
	Indicated	–	–	–	–
	Inferred	1.39	5.89	8.18	0.26
	<b>Total</b>	<b>1.39</b>	<b>5.89</b>	<b>8.18</b>	<b>0.26</b>
CdS II (São Bento mine)	Measured	–	–	–	–
	Indicated	–	–	–	–
	Inferred	2.04	8.00	16.32	0.52
	<b>Total</b>	<b>2.04</b>	<b>8.00</b>	<b>16.32</b>	<b>0.52</b>
CdS II (secondary orebodies)	Measured	–	–	–	–
	Indicated	0.02	4.60	0.08	–
	Inferred	0.19	4.89	0.95	0.03
	<b>Total</b>	<b>0.21</b>	<b>4.87</b>	<b>1.03</b>	<b>0.03</b>
CdS II (transitional)	Measured	–	–	–	–
	Indicated	0.02	5.52	0.13	0.00
	Inferred	0.09	3.30	0.30	0.01
	<b>Total</b>	<b>0.12</b>	<b>3.77</b>	<b>0.43</b>	<b>0.01</b>
CdS II (oxides)	Measured	–	–	–	–
	Indicated	0.20	3.37	0.67	0.02
	Inferred	0.27	5.88	1.60	0.05
	<b>Total</b>	<b>0.47</b>	<b>4.82</b>	<b>2.27</b>	<b>0.07</b>
<b>Córrego do Sítio</b>	<b>Total</b>	<b>18.24</b>	<b>6.58</b>	<b>120.04</b>	<b>3.86</b>

### Exclusive Mineral Resource

The Exclusive Mineral Resource includes all of the Córrego do Sítio II areas. It also includes the Cachorro Bravo, Laranjeiras and Carvoaria underground orebodies, where there is no accessible underground development. The Inferred Mineral Resource that has been included in the pit shells of the oxidised orebodies is also part of the Exclusive Mineral Resource.

### Exclusive Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Córrego do Sítio	Category	million	g/t	Tonnes	Moz
	Measured	3.60	6.12	22.00	0.71
	Indicated	4.73	6.44	30.45	0.98
	Inferred	8.75	6.20	54.24	1.74
<b>Córrego do Sítio</b>	<b>Total</b>	<b>17.08</b>	<b>6.25</b>	<b>106.68</b>	<b>3.43</b>

### Mineral Resource below infrastructure

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Córrego do Sítio	Category			Tonnes	Moz
	Measured	0.05	6.93	0.37	0.01
	Indicated	2.40	7.41	17.78	0.57
	Inferred	6.68	7.47	49.88	1.60
<b>Córrego do Sítio</b>	<b>Total</b>	<b>9.13</b>	<b>7.45</b>	<b>68.03</b>	<b>2.19</b>

### Ore Reserve

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Córrego do Sítio	Category			Tonnes	Moz
CdS I (oxides)	Proved	0.40	3.22	1.27	0.04
	Probable	0.31	2.97	0.93	0.03
	<b>Total</b>	<b>0.71</b>	<b>3.11</b>	<b>2.20</b>	<b>0.07</b>
CdS I (Cachorro Bravo)	Proved	0.37	6.42	2.37	0.08
	Probable	1.14	5.54	6.31	0.20
	<b>Total</b>	<b>1.51</b>	<b>5.76</b>	<b>8.68</b>	<b>0.28</b>
CdS I (Laranjeiras)	Proved	–	–	–	–
	Probable	0.59	5.06	2.98	0.10
	<b>Total</b>	<b>0.59</b>	<b>5.06</b>	<b>2.98</b>	<b>0.10</b>
<b>Córrego do Sítio</b>	<b>Total</b>	<b>2.80</b>	<b>4.94</b>	<b>13.87</b>	<b>0.45</b>



# Brazil

## AGA Mineração – Córrego do Sítio

### Inferred Mineral Resource in business plan

The Inferred Mineral Resource that has been included in the mine design is the mining panels in the lower areas of some sulphide orebodies such as Cachorro Bravo, Laranjeiras and Carvoaria orebodies low panes. Some of the new orebodies are also included in this category.

#### Inferred Mineral Resource

as at 31 December 2010	Tonnes	Grade	Contained gold		Comments
Córrego do Sítio	million	g/t	Tonnes	Moz	
CdS I (oxides)	0.17	3.21	0.53	0.02	Inferred Mineral Resource included in business plan
CdS I (Cachorro Bravo)	1.58	6.78	10.74	0.35	Inferred Mineral Resource included
CdS I (Laranjeiras)	2.15	6.16	13.23	0.43	
<b>Total</b>	<b>3.90</b>	<b>6.29</b>	<b>24.50</b>	<b>0.78</b>	

#### Ore Reserve modifying factors

as at 31 December 2010	Ex-		Cut-off	Stoping	Dilution (%)	Dilution (g/t)	MCF%	MetRF%
Córrego do Sítio	Gold price	change rate	value g/t Au	width (cm)				
CdS I oxides	850	1.85	1.06	–	28	0.20	92	88.00
CdS I sulphides	850	1.93	3.92	220	29	–	95	88.98

#### Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Paulo de Tarso Ferreira	AusIMM	224828	25 years
Ore Reserve	Marcos Geraldo Simoni	AusIMM	224826	18 years



# Brazil

## AGA Mineração – Cuiabá

### Location

Cuiabá is located near Sabará, south-east of the city of Belo Horizonte and within the mining district referred to as the Iron Quadrilateral.

### Geology

Cuiabá mine has gold mineralisation associated with sulphides and quartz veins in Banded Iron Formation (BIF) and volcanic sequences. The ore appears strongly stratiform due to the selective sulphidation of the iron-rich layers. Steeply plunging shear zones tend to control the ore shoots, which commonly plunge parallel to intersections between the shears and other structures. The controlling mineralisation structures are the apparent intersection of thrust faults with tight isoclinal folds in a ductile environment. The host rocks are BIF and secondarily in mafic volcanics (mainly basaltic). Mineralisation is believed to be due to the interaction of low salinity, carbon dioxide rich gold-bearing fluids with the high-iron BIF, basalts and carbonaceous graphitic schists. Sulphide mineralisation consists of pyrite and pyrrhotite with subordinate arsenopyrite and chalcopyrite; the latter tends to occur as a late-stage fracture fill and is not associated with gold mineralisation. Wallrock alteration is typically carbonate, potassic and silicic, showing clear zonation in the underground environment. The ore is mainly concentrated in the silicic and sulphidation zones, inside the BIF or in potassic (and sericitic) zones near the basalts. The main orebodies are Cuiabá are as follows:

- normal limb: Fonte Grande Sul and Serrotinho; and
- overturned limb: Balancão, Galinheiro and Canta Galo.

### Exploration

The Cuiabá mine has four satellites orebodies: Surucucu, Dom Domingos, Galinheiro-FW and Viana. The first two orebodies are located in the BIF structure and the other two in a schists in the footwall and hangingwall respectively. During 2010 a drilling programme proved that the mineralisation at the Serrotinho orebody extended towards the Surucucu orebody. A budget for 2011 has been approved to drill out the Dom Domingos orebody between levels 15 to 16 to identify extensions to the mineralisation.



# Brazil

## AGA Mineração – Cuiabá

### Projects

A conceptual study of the Cuiabá future mine began in 2009. The strategy is to optimise future Cuiabá production and to exploit the narrow vein orebodies before the end of the mine life. The main focus is on alternative underground transport logistics for ore or waste, alternative mining methods, simulations for optimised ventilation and other studies.

### Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Cuiabá	Category	million	g/t	Tonnes	Moz
Cuiabá (main orebodies)	Measured	2.85	9.57	27.23	0.88
	Indicated	0.81	10.10	8.21	0.26
	Inferred	6.01	9.84	59.17	1.90
	<b>Total</b>	<b>9.67</b>	<b>9.78</b>	<b>94.61</b>	<b>3.04</b>
Cuiabá (narrow veins)	Measured	2.14	6.15	13.15	0.42
	Indicated	2.86	5.43	15.52	0.50
	Inferred	4.87	5.99	29.19	0.94
	<b>Total</b>	<b>9.87</b>	<b>5.86</b>	<b>57.86</b>	<b>1.86</b>
Cuiabá (secondary areas)	Measured	0.84	6.10	5.13	0.16
	Indicated	0.17	6.78	1.15	0.04
	Inferred	0.32	6.08	1.92	0.06
	<b>Total</b>	<b>1.33</b>	<b>6.18</b>	<b>8.19</b>	<b>0.26</b>
<b>Cuiabá</b>	<b>Total</b>	<b>20.87</b>	<b>7.70</b>	<b>160.66</b>	<b>5.17</b>

### Exclusive Mineral Resource

At Cuiabá the main Exclusive Mineral Resource (0.32Moz) comes from the current production orebodies. This Exclusive Mineral Resource is basically Inferred Mineral Resource that is in the process of being upgraded with a conversion drilling programme. These Mineral Resources are located below infrastructure, starting on level 16 (at Fonte Grande Sul and Serrotonho) and level 14 (at Balancão, Galinheiro and Santa Galo). In addition, secondary areas consisting of old stoping panels and satellite orebodies are also considered Exclusive Mineral Resource (0.03Moz).

### Exclusive Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Cuiabá	Category	million	g/t	Tonnes	Moz
	Measured	1.85	7.34	13.59	0.44
	Indicated	0.76	6.91	5.23	0.17
	Inferred	11.20	8.06	90.28	2.90
<b>Cuiabá</b>	<b>Total</b>	<b>13.81</b>	<b>7.90</b>	<b>109.10</b>	<b>3.51</b>



### Mineral Resource below infrastructure

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Cuiabá	Category			Tonnes	Moz
	Measured	0.48	7.52	3.58	0.12
	Indicated	2.94	6.55	19.26	0.62
	Inferred	10.48	8.20	85.98	2.76
<b>Cuiabá</b>	<b>Total</b>	<b>13.90</b>	<b>7.83</b>	<b>108.82</b>	<b>3.50</b>

### Ore Reserve

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Cuiabá	Category			Tonnes	Moz
Main orebodies	Proved	2.13	8.90	18.94	0.61
	Probable	0.50	10.81	5.37	0.17
	<b>Total</b>	<b>2.63</b>	<b>9.26</b>	<b>24.31</b>	<b>0.78</b>
Narrow veins	Proved	1.83	5.30	9.71	0.31
	Probable	2.58	4.76	12.27	0.39
	<b>Total</b>	<b>4.41</b>	<b>4.98</b>	<b>21.98</b>	<b>0.71</b>
<b>Cuiabá</b>	<b>Total</b>	<b>7.04</b>	<b>6.58</b>	<b>46.29</b>	<b>1.49</b>

### Inferred Mineral Resource in business plan

There are some areas of Inferred Mineral Resource representing 8% (125,000oz) of the total gold planned to be exploited.

### Inferred Mineral Resource

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold		Comments
Cuiabá				Tonnes	Moz	
Cuiabá (main orebodies)	0.33	6.31	2.08	0.07		Part of orebody FGS level 15 and orebody SER levels 14 and 15
Cuiabá (narrow veins)	0.33	5.53	1.80	0.06		Part of orebodies BAL and GAL level 12 and 13
<b>Total</b>	<b>0.66</b>	<b>5.92</b>	<b>3.88</b>	<b>0.12</b>		

### Ore Reserve below infrastructure

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Cuiabá	Category			Tonnes	Moz
	Proved	0.49	6.43	3.15	0.10
	Probable	2.51	5.82	14.61	0.47
<b>Cuiabá</b>	<b>Total</b>	<b>3.00</b>	<b>5.92</b>	<b>17.75</b>	<b>0.57</b>



# Brazil

AGA Mineração – Cuiabá

## Ore Reserve modifying factors

as at 31 December 2010							
	Gold price	Ex-change rate	Cut-off value g/t Au	Stopping width (cm)	Dilution (%)	MCF%	MetRF%
Cuiabá							
Cuiabá (main orebodies)	850	1.93	5.52	1,000	5	94.50	93.00
Cuiabá (narrow veins)	850	1.93	3.64	400	5	94.50	93.00

## Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Paulo de Tarso Ferreira	AusIMM	224828	25 years
Ore Reserve	Silsomar Botelho	AusIMM	224833	24 years



# Brazil

## AGA Mineração – Lamego

### Location

Lamego is located in the northwestern part of the Iron Quadrangle metallogenetic province, close to Cuiabá gold mine. The mine is located to the east of the city of Belo Horizonte City, which is in the Minas Gerais State in the south-eastern region of Brazil.

### Geology

The gold mineralisation at Lamego is characterised by orebodies associated both with two horizons of chemical rocks, such as banded iron formations (BIF) and metachert (MCH) and also with shear zones containing abundant quartz veinlets. The proportions of these lithotypes vary substantially from one body to another. In the BIF, sulphide mineralisation is associated with the gold, whilst in the metachert and quartz veins the gold occurs either as native gold or in sulphides. The orebodies are characterised by sulphidation in the form of disseminated sulphide bands or as fracture filling, rarely as compact sulphide, hosted in BIF/MCH. sulphide bands are rare in metachert. The plunge coincides both with the fold axis of the first two events and with the mineral stretching lineation.

The Arco da Velha orebody is located on the eastern side of a large fold and extends approximately 250m along the strike. In the northeastern portion of the orebody, the mineralisation is concentrated in the metachert, whilst in the southwestern portion it is concentrated in the banded iron formation. Carbonaceous phillite and clorite/sericite schists occur in the hanging wall contact, while the hydrothermal alteration zone marked by the meta-andesite occurs in the footwall.

The Cabeça de Pedra orebody is located in the hinge region of the large Lamego structure. The area which has shown the best economic potential contains banded iron formations and metacherts (80% of the area is occupied by banded iron formation and the remaining 20% by metacherts). The presence of faultings makes the stratigraphy complex in some areas. The carbonaceous phillite and clorite/sericite schists normally occur in the hanging wall and meta-andesites in the footwall.

Carruagemis is the main orebody that opened the way for the Lamego project resumption. Structurally, it is located in the junction zone or in the proximity of two fold limbs in the north-east portion of the major structure. It is a boudinaged ore body with two large disruptions in the structure (pinch and swell), followed by eastward displacement. The gold mineralisation is mainly associated with hydrothermal zones within the banded iron formations.

### Projects

The Lamego mine project was approved in September 2009 and work to date has mainly involved the implementation and ramping up required to start mining. This phase is expected to be completed by December 2011.



# Brazil

## AGA Mineração – Lamego

### Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Lamego	Category	million	g/t	Tonnes	Moz
Arco da Velha	Measured	0.20	4.97	0.99	0.03
	Indicated	0.12	4.90	0.57	0.02
	Inferred	0.48	3.77	1.81	0.06
	<b>Total</b>	<b>0.79</b>	<b>4.23</b>	<b>3.36</b>	<b>0.11</b>
Cabeça de Pedra	Measured	0.07	6.14	0.41	0.01
	Indicated	0.87	4.80	4.17	0.13
	Inferred	0.87	4.86	4.24	0.14
	<b>Total</b>	<b>1.81</b>	<b>4.88</b>	<b>8.82</b>	<b>0.28</b>
Carruagem	Measured	0.04	13.65	0.52	0.02
	Indicated	1.52	7.64	11.62	0.37
	Inferred	1.22	5.98	7.30	0.23
	<b>Total</b>	<b>2.78</b>	<b>6.99</b>	<b>19.44</b>	<b>0.62</b>
Secondary areas	Measured	0.06	7.86	0.51	0.02
	Indicated	0.05	8.28	0.40	0.01
	Inferred	0.68	5.58	3.81	0.12
	<b>Total</b>	<b>0.80</b>	<b>5.93</b>	<b>4.72</b>	<b>0.15</b>
<b>Lamego</b>	<b>Total</b>	<b>6.18</b>	<b>5.88</b>	<b>36.34</b>	<b>1.17</b>

### Exclusive Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Lamego	Category	million	g/t	Tonnes	Moz
	Measured	0.16	7.31	1.17	0.04
	Indicated	1.63	6.46	10.58	0.34
	Inferred	2.37	5.20	12.32	0.40
<b>Lamego</b>	<b>Total</b>	<b>4.17</b>	<b>5.78</b>	<b>24.06</b>	<b>0.77</b>

### Mineral Resource below infrastructure

as at 31 December 2010		Tonnes	Grade	Contained gold	
Lamego	Category	million	g/t	Tonnes	Moz
	Measured	0.00	4.40	0.02	0.00
	Indicated	1.44	5.92	8.52	0.27
	Inferred	2.32	5.17	11.99	0.39
<b>Lamego</b>	<b>Total</b>	<b>3.76</b>	<b>5.46</b>	<b>20.53</b>	<b>0.66</b>

## Ore Reserve

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Lamego	Category			Tonnes	Moz
Arco da Velha	Proved	0.13	3.55	0.46	0.01
	Probable	0.07	3.88	0.28	0.01
	<b>Total</b>	<b>0.20</b>	<b>3.67</b>	<b>0.74</b>	<b>0.02</b>
Cabeça de Pedra	Proved	0.05	4.11	0.20	0.01
	Probable	0.04	3.92	0.17	0.01
	<b>Total</b>	<b>0.09</b>	<b>4.02</b>	<b>0.37</b>	<b>0.01</b>
Carruagem	Proved	0.04	9.88	0.38	0.01
	Probable	0.85	6.04	5.11	0.16
	<b>Total</b>	<b>0.88</b>	<b>6.21</b>	<b>5.49</b>	<b>0.18</b>
<b>Lamego</b>	<b>Total</b>	<b>1.18</b>	<b>5.60</b>	<b>6.60</b>	<b>0.21</b>

## Inferred Mineral Resource in business plan

### Inferred Mineral Resource

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold		Comments
Lamego				Tonnes	Moz	
Lamego (Cabeça de Pedra)	0.43	3.88	1.65	0.05		
Lamego (Carruagem)	0.50	5.33	2.69	0.09		
<b>Total</b>	<b>0.93</b>	<b>4.67</b>	<b>4.34</b>	<b>0.14</b>		





# Brazil

## AGA Mineração – Lamego

### Ore Reserve below infrastructure

as at 31 December 2010		Tonnes	Grade	Contained gold	
Lamego	Category	million	g/t	Tonnes	Moz
	Proved	–	–	–	–
	Probable	0.21	5.85	1.25	0.04
<b>Lamego</b>	<b>Total</b>	<b>0.21</b>	<b>5.85</b>	<b>1.25</b>	<b>0.04</b>

### Ore Reserve modifying factors

as at 31 December 2010		Ex-	Cut-off	Stoping			
Lamego	Gold	change	value	width	Dilution	MCF%	MetRF%
	price	rate	g/t Au	(cm)	(%)		
Lamego	850	1.93	3.42	3,500	5	94.50	93.00

### Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Paulo de Tarso Ferreira	AusIMM	224828	25 years
Ore Reserve	Leonardo Nunes Coelho	AusIMM	222679	9 years



# Brazil

## AGA Mineração – Nova Lima Sul

### Location

Nova Lima Sul project is located in the western portion of the Rio das Velhas greenstone belt, and all the targets are within a 16km radius the Queiroz metallurgical plant. The project comprises mothballed operations (Raposos underground mine), old mines (Mina Grande, Morro da Glória, Bicalho, Faria, Bela Fama), as well as old prospects (Luzia da Mota, Limoeiro) and several old surface workings (Saboeiro Rasgão, Urubu and Luzia's Mina Grande). The main project goal is to add and convert the Mineral Resource in order to fill the current Queiroz plant's spare capacity. For this reason, the project was split in three phases, according to areas of best potential:

- Phase I: Raposos + Luzia da Mota oxide
- Phase II: Morro da Glória + Luzia da Mota Sulphide
- Phase III: Urubu + Bicalho + Limoeiro + Saboeiro Rasgão

### Geology

The Nova Lima Sul projects are situated in the south-western portion of the Iron Quadrangle (QF) in the Minas Gerais State of Brazil. The area is located in the volcanic sedimentary sequence of the Nova Lima Group (Rio das Velhas Supergroup) which hosts the main gold mines and mineral occurrences in the Iron Quadrangle.

The most common orebodies are massive, banded and disseminated sulphides hosted in banded iron formation and lapa seca (albite hydrothermal rocks). The sulphidated orebodies hosted in BIFs and lapa seca are divided in two types, namely:

- type 1, which consist of disseminated pyrrhotite, subordinate pyrite and arsenopyrite occurring in shear zones sub-parallel to the bedding, with quartz veins parallel to the shear and in tension gashes; and
- type 2, which is composed of pyrite and arsenopyrite, which replace the iron mineral-rich bedding, including quartz veins and shear zones, which cut the layering at a high angle.

Mapped orebody dimensions are around 0.5 to 20m in thickness and the length (along plunge direction) can be more than 5,000m. The orebody's plunge is defined by the stretching lineation and it is parallel to the fold axis of the first two deformation regional events.

#### Geology of Raposos

The Raposos sequence is interpreted as a ductile thrust of the first deformative event. The main mineralised area is associated with an anticline of the same event, in the position of the lateral ramp. The stratigraphic sequence, repeated by folds, has ultramafics at the base, overlain by komatiitic basalts, basalts and andesites with layers of BIF. Pelites and metavolcaniclastic occur at the top of the sequence. The BIF is oxide facies (magnetite and quartz), with carbonatisation in the mineralised areas.

The mineralisation is primarily located in the in BIF. The orebodies are surrounding by concentric hydrothermal alteration zones consisting of sericitisation, carbonatisation and chloritisation that extend from the orebody outwards.

#### Geology of Morro da Gloria

In the Morro da Gloria area the rocks consist of komatiitic ultramafics, graphite phyllite, felsic metavolcaniclastic associated with metapelites and several layers of banded iron formation.

The macro structures at Raposos and Morro da Gloria are anticlines and the mineralisation is associated with folds and shear zones, surrounding by concentric hydrothermal alteration zones consisting of sericitization, carbonatisation and chloritisation. BIF is oxide facies (magnetite and quartz), with carbonatisation in the mineralised areas. The gold is associated with sulphides and quartz veins in the BIF and the altered schists.



# Brazil

## AGA Mineração – Nova Lima Sul

### Geology of Luzia da Mota

The Luzia da Motta targets are mainly associated with two types of mineralisation, hydrothermal alteration zones (mainly quartz, carbonate and sericite) and sulphides hosted in metavolcanoclastic schists (Luzia Belt). The sequence is also associated with meta-basic/meta-ultrabasic rocks from komatiitic compositions with sulphides in a context very similar to Raposos Mine (Santana Belt). The mineralisation occurs over 12 targets in a north-south orientation and the most important Mineral Resource delineated in the zone is at the Santana Sul and Santana 0, 1 and 2 deposits.

### Exploration

Plans to explore the Raposos mine and Morro da Glória by underground drilling and the Luzia da Motta targets by surface drilling are underway. Morro da Glória will need to be dewatered before the orebodies can be accessed. The aim of the exploration programme is to confirm and convert the Inferred Mineral Resource to the Indicated Mineral Resource category at drilling patterns of 60m along the plunge direction and 30m along the orebody's strike. A full exploration campaign, anticipated to be completed in 2014, will involve 76,800m of drilling, of which 24,000m will be underground drilling at Morro da Gloria; 37,500m surface drilling at Luzia da Motta and 15,300m underground drilling at Raposos.

### Raposos

The underground drilling programmes at Morro da Gloria and Raposos will only be able to begin once dewatering and mine refurbishment has taken place and it is safe to access these mines. It is expected that that it will take two years before underground drilling can commence. One deep drill-hole (reaching 1,459m) is being drilled at Raposos surface to confirm mineralisation in depth, specifically for the Espirito Santo and EW orebodies. The aim is to be able to mine down to level 40, which represents a reasonable payback for further studies and risk amelioration drilling.

### Luzia da Mota

Between the years 1993 and 2005 a total of 27,100m of DD and RC drilling was completed in the Luzia da Motta area. The Santana 0,1 and 2 deposits had the largest amount of geological information and were therefore chosen as the preferred target areas and in 2010 a total of 8,232m of follow-up drilling was completed on these targets. An environmental licence has been applied for and needs to be approved before the 2011 drilling campaign of 12,300m can commence on the other mineralised trends.

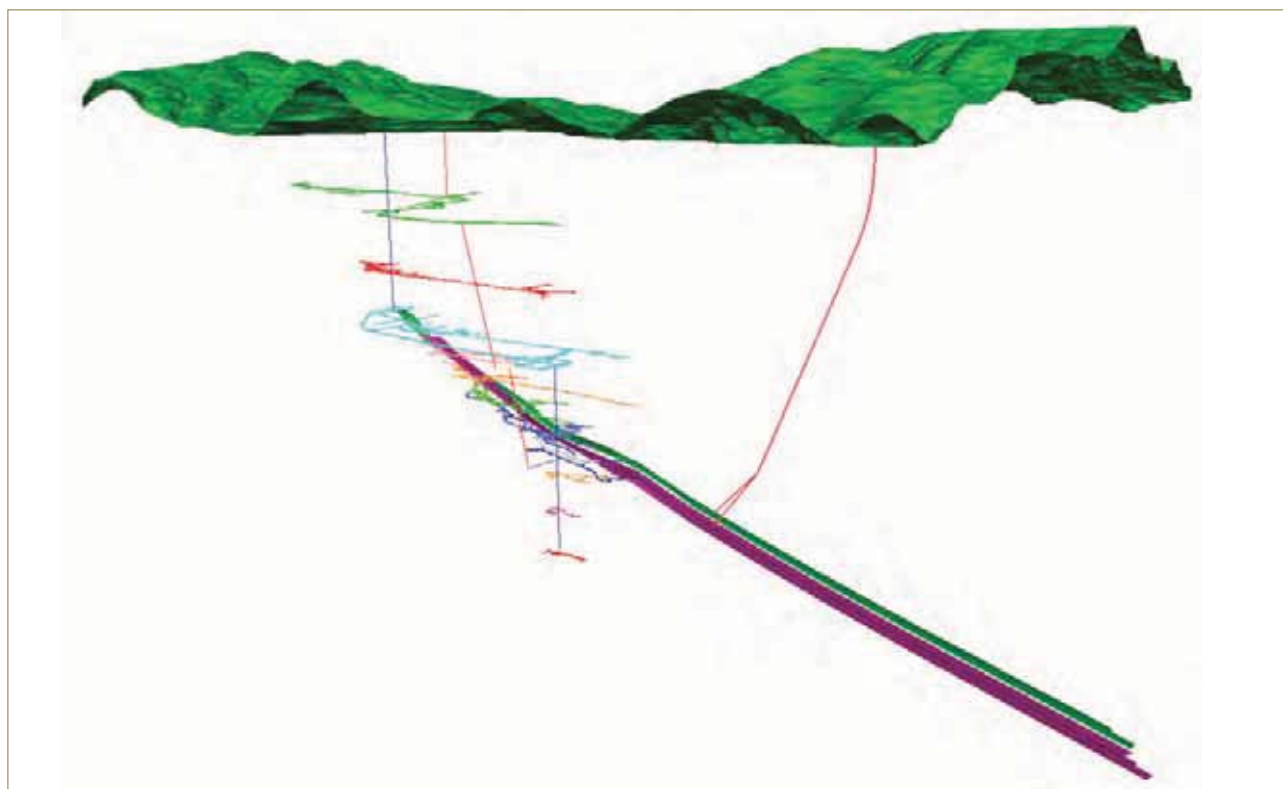
### Projects

The whole set of orebodies and disused mines in the southern region of Nova Lima is part of the project. This project comprises the exploration and mine re-opening in areas such as Raposos and Morro da Gloria and new enterprises such as Luzia da Motta (open pit for oxide ore and sulphide mineralisation potential down to a depth of 300m). For the last two years, AngloGold Ashanti has been busy with conceptual, pre-feasibility and feasibility studies for the project and during that past year exploration and in-fill was completed at Luzia da Motta to increase the confidence in the Mineral Resource. The main driving force of this project is to take advantage of the current infrastructure (like the Raposos operating shaft and mining infrastructure) and current spare capacity in the Queiroz plant (Raposos circuit for non-refractory ore) to improve the production of the region by between 60,000 and 100,000oz per annum.

In 2011 exploration work will continue at Luzia da Motta plus 13,200m of drilling on other targets such as Cabaças, Casa Velha and Morro das Cinzas. Underground chip sampling and drilling at Raposos will commence, depending on the progress of the dewatering and refurbishment of the old mine workings.

## Mineral Resource

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Nova Lima Sul	Category			Tonnes	Moz
Morro da Gloria	Measured	–	–	–	–
	Indicated	–	–	–	–
	Inferred	1.24	6.60	8.18	0.26
	<b>Total</b>	<b>1.24</b>	<b>6.60</b>	<b>8.18</b>	<b>0.26</b>
Raposos	Measured	0.18	7.19	1.26	0.04
	Indicated	0.39	7.03	2.74	0.09
	Inferred	2.15	6.61	14.20	0.46
	<b>Total</b>	<b>2.71</b>	<b>6.70</b>	<b>18.19</b>	<b>0.58</b>
Luzia da Mota	Measured	0.51	1.66	0.85	0.03
	Indicated	0.61	1.85	1.14	0.04
	Inferred	0.63	2.99	1.89	0.06
	<b>Total</b>	<b>1.76</b>	<b>2.20</b>	<b>3.88</b>	<b>0.12</b>
<b>Nova Lima Sul</b>	<b>Total</b>	<b>5.71</b>	<b>5.30</b>	<b>30.25</b>	<b>0.97</b>



Nova Lima Sul  
Deep drilling Raposos

# Brazil

## AGA Mineração – Nova Lima Sul

### Exclusive Mineral Resource

The Nova Lima Sul project currently does not have any declared Ore Reserve and only a Measured, Indicated or Inferred Mineral Resource for Luzia da Motta, Raposos and Morro da Gloria. The present Mineral Resource statement has classified the Mineral Resource for old Morro da Glória old mine as Inferred.

#### Exclusive Mineral Resource

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Nova Lima Sul	Category			Tonnes	Moz
	Measured	0.69	3.07	2.11	0.07
	Indicated	1.00	3.86	3.88	0.12
	Inferred	4.02	6.03	24.26	0.78
Nova Lima Sul	<b>Total</b>	<b>5.71</b>	<b>5.30</b>	<b>30.25</b>	<b>0.97</b>

#### Mineral Resource below infrastructure

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
Nova Lima Sul	Category			Tonnes	Moz
	Measured	0.51	1.66	0.85	0.03
	Indicated	0.81	3.11	2.53	0.08
	Inferred	4.02	6.03	24.26	0.78
Nova Lima Sul	<b>Total</b>	<b>5.35</b>	<b>5.17</b>	<b>27.64</b>	<b>0.89</b>

### Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Paulo de Tarso Ferreira	AusIMM	224828	25 years



# Brazil

## Serra Grande

### Location

Serra Grande is co-owned with Kinross Gold Corporation, with 50% of this joint venture attributable to AngloGold Ashanti. Serra Grande controls, or has an interest in, approximately 55,000ha in and around the Crixás mining district in the north-western areas of the Goiás State in central Brazil. Serra Grande is located 5km from the city of Crixás and is 420km from Brasília, the capital of Brazil.

Serra Grande comprises three underground mines, namely Mina III, Mina Nova and Mina Palmeiras, and one open-pit mine on the outcrop of Mina III (between surface and 50 level). The processing circuit is equipped with grinding, leaching, filtration, precipitation and smelting facilities.

### Geology

The Serra Grande gold deposits are hosted in a typical greenstone belt sequence. The host rocks belong to Crixás Group of the Upper Archaean located in the Crixas greenstone belt. Gold mineralisation is associated with metasediments and metavolcanics from the Ribeirão das Antas and Rio Vermelho formations respectively. The Crixas greenstone belt is surrounded by granitic gneiss terrains from the Anta and Caiamar complexes and metasedimentary rocks from the Santa Terezinha Group.

Two main deformational events have been identified in the region. The first event is a thrusting event (D1 from west to east) developed with irregular thrust ramp geometry. This event was responsible for stacking and inverting the stratigraphic sequences. The second event (D2) was the thrusting of the Santa Terezinha sequence over the Crixas greenstone belt, folding the rocks (F2) and generating the structural controls of the gold mineralisation.

The mineralised zones at Serra Grande have been separated into three main domains called Structure III, IV and Palmeiras. In Structure III the mineralisation is located in quartz veins that are hosted in graphitic schists. It is also associated with massive and disseminated sulphides (mainly pyrrhotite and arsenopyrite) that occur in a sequence of hydrothermally altered schists. The mineralisation of Structure IV comprises quartz veinlets and disseminated sulphide (pyrrhotite) hosted in graphite schists. The mineralised zones in the Palmeiras structure are hosted in sericite and chlorite schists with massive and disseminated sulphide concentrated in folded zones. The ore shoots plunge downwards to the north-west and the dips vary between 6° and 35°.

### Exploration

During the past four years Serra Grande has invested heavily in exploration to identify new orebodies and to improve the level of information around the mining site. During this period 130,000m of drilling was completed along the main geological structures in the area. The main result of this exploration programme was the discovery of the Pequizão orebody, located between Mina III and Mina Nova. To date Pequizão has added 0.5Moz to the Inferred Mineral Resource and is open ended down plunge and along strike. Recent drilling intersections have shown that the mineralisation extends below a depth of 500m and follow up drilling will continue.

A fast-track exploration programme, planned for the next two years, aims to define and evaluate the full potential of the known orebodies such as Pequizão, Palmeiras, Orebody IV and Mina Nova. It is also intended to generate new targets in the north-west structure and the region. This exploration programme will include 150,000m of drilling and also involve new geochemical and geophysical surveys over the main geological structures within the 55,000ha mining lease area.

# Brazil

## Serra Grande

### Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Serra Grande	Category	million	g/t	Tonnes	Moz
Mina Nova	Measured	1.23	3.48	4.28	0.14
	Indicated	0.34	3.00	1.02	0.03
	Inferred	0.34	3.67	1.25	0.04
	<b>Total</b>	<b>1.91</b>	<b>3.43</b>	<b>6.55</b>	<b>0.21</b>
Mina III	Measured	0.59	4.57	2.68	0.09
	Indicated	0.56	4.42	2.49	0.08
	Inferred	0.38	4.11	1.58	0.05
	<b>Total</b>	<b>1.53</b>	<b>4.40</b>	<b>6.74</b>	<b>0.22</b>
Palmeiras	Measured	0.06	7.13	0.40	0.01
	Indicated	0.25	5.18	1.31	0.04
	Inferred	0.48	6.04	2.87	0.09
	<b>Total</b>	<b>0.78</b>	<b>5.84</b>	<b>4.58</b>	<b>0.15</b>
Pequizaó	Measured	–	–	–	–
	Indicated	0.41	6.71	2.72	0.09
	Inferred	1.08	5.27	5.68	0.18
	<b>Total</b>	<b>1.48</b>	<b>5.66</b>	<b>8.40</b>	<b>0.27</b>
Open pit	Measured	0.48	3.33	1.61	0.05
	Indicated	0.35	2.97	1.05	0.03
	Inferred	–	–	–	–
	<b>Total</b>	<b>0.84</b>	<b>3.18</b>	<b>2.67</b>	<b>0.09</b>
Total stockpiles	Measured	0.03	2.83	0.08	0.00
	Indicated	–	–	–	–
	Inferred	–	–	–	–
	<b>Total</b>	<b>0.03</b>	<b>2.83</b>	<b>0.08</b>	<b>0.00</b>
<b>Serra Grande</b>	<b>Total</b>	<b>6.58</b>	<b>4.41</b>	<b>29.02</b>	<b>0.93</b>

### Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	RC	hole	Other	
Serra Grande	Measured	10 x 10, 10 x 20	✓	–	–	–	
	Indicated	10 x 20,	✓	–	–	–	
		20 x 50, and	✓	–	–	–	
		25 x 100	✓	–	–	–	
	Inferred	50 x 50, 50 x 100	✓	–	–	–	
	Grade control	2 x 2	–	–	–	✓	Chip sampling

## Exclusive Mineral Resource

The Exclusive Mineral Resource is located below the infrastructure and mine development level.

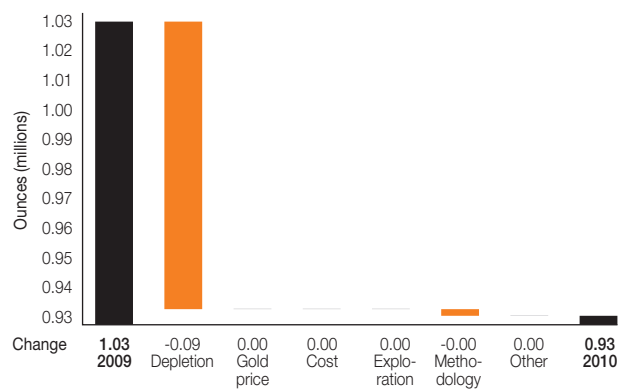
### Exclusive Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Serra Grande	Category	million	g/t	Tonnes	Moz
	Measured	0.11	4.04	0.44	0.01
	Indicated	0.33	3.63	1.19	0.04
	Inferred	2.28	5.00	11.39	0.37
<b>Serra Grande</b>	<b>Total</b>	<b>2.71</b>	<b>4.80</b>	<b>13.01</b>	<b>0.42</b>

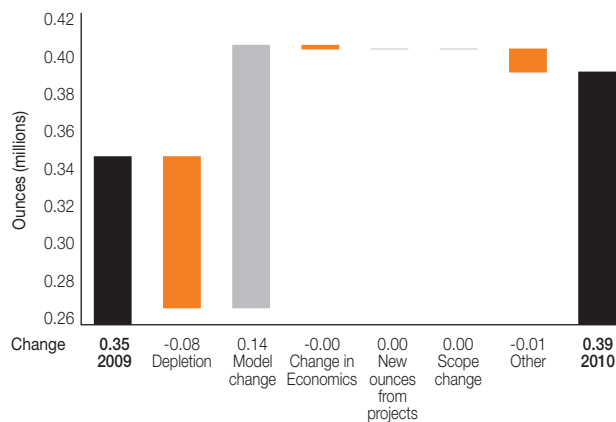
### Mineral Resource below infrastructure

as at 31 December 2010		Tonnes	Grade	Contained gold	
Serra Grande	Category	million	g/t	Tonnes	Moz
	Measured	–	–	–	–
	Indicated	–	–	–	–
	Inferred	4.56	5.00	22.76	0.73
<b>Serra Grande</b>	<b>Total</b>	<b>4.56</b>	<b>5.00</b>	<b>22.76</b>	<b>0.73</b>

### Serra Grande: Mineral Resource reconciliation 2009 vs 2010



### Serra Grande: Ore Reserve reconciliation 2009 vs 2010





# Brazil

## Serra Grande

### Ore Reserve

as at 31 December 2010		Tonnes	Grade	Contained gold	
Serra Grande	Category	million	g/t	Tonnes	Moz
Mina Nova	Proved	0.94	3.19	3.00	0.10
	Probable	0.21	2.80	0.60	0.02
	<b>Total</b>	<b>1.16</b>	<b>3.12</b>	<b>3.60</b>	<b>0.12</b>
Mina III	Proved	0.49	3.84	1.88	0.06
	Probable	0.43	4.01	1.74	0.06
	<b>Total</b>	<b>0.92</b>	<b>3.92</b>	<b>3.62</b>	<b>0.12</b>
Palmeiras	Proved	0.04	2.51	0.11	0.00
	Probable	0.14	4.58	0.66	0.02
	<b>Total</b>	<b>0.19</b>	<b>4.10</b>	<b>0.77</b>	<b>0.02</b>
Pequizaó	Proved	–	–	–	–
	Probable	0.26	6.74	1.74	0.06
	<b>Total</b>	<b>0.26</b>	<b>6.74</b>	<b>1.74</b>	<b>0.06</b>
Open pit	Proved	0.46	3.56	1.65	0.05
	Probable	0.27	2.71	0.73	0.02
	<b>Total</b>	<b>0.73</b>	<b>3.25</b>	<b>2.37</b>	<b>0.08</b>
Total stockpiles	Proved	0.03	2.83	0.08	0.00
	Probable	–	–	–	–
	<b>Total</b>	<b>0.03</b>	<b>2.83</b>	<b>0.08</b>	<b>0.00</b>
<b>Serra Grande</b>	<b>Total</b>	<b>3.28</b>	<b>3.71</b>	<b>12.18</b>	<b>0.39</b>

### Inferred Mineral Resource in business plan

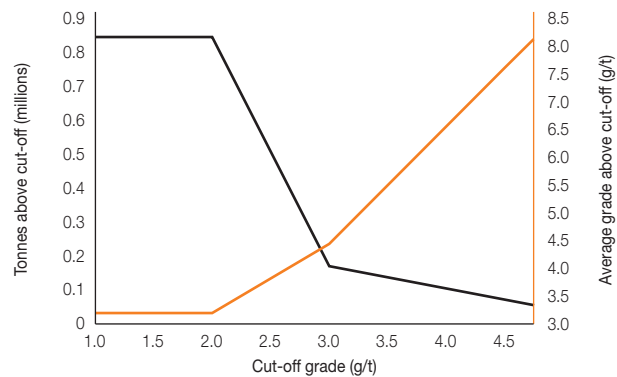
The Inferred Mineral Resources was used in the optimisation process with LOM level 3, but there are no Inferred Mineral Resources in levels 1 and 2a.

### Ore Reserve modifying factors

as at 31 December 2010		Ex-	Cut-off			
Serra Grande	Gold price	change rate	value g/t Au	Dilution (%)	MCF%	MetRF%
Mina III	850	1.70	1.79	9	95	94.90
Mina Nova	850	1.70	1.79	5	95	90.90
Palmeiras	850	1.70	1.79	6	95	94.60
Pequizaó	850	1.70	1.79	12	95	94.60
Open pit	850	1.70	1.00	5	95	92.90
Total stockpiles	850	1.70	1.00	–	–	–

## Serra Grande

– surface (metric)

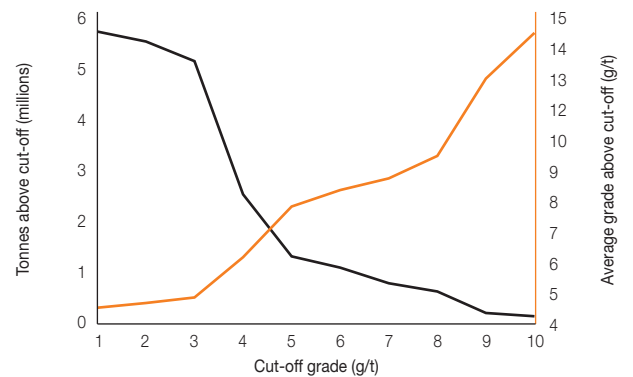


■ Tonnes above cut-off

■ Ave grade above cut-off

## Serra Grande

– underground (metric)



■ Tonnes above cut-off

■ Ave grade above cut-off

## Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Edijarbas Martins Araujo	AusIMM	224825	30 years
Ore Reserve	Edijarbas Martins Araujo	AusIMM	224825	30 years



# Colombia

## Country overview

Systematic regional greenfield exploration was undertaken by AngloGold Ashanti and its joint venture partners B2Gold, Glencore International and Mineros S.A. in Colombia. AngloGold Ashanti has consolidated the tenement position from roughly 100,000km<sup>2</sup> in 2009 to 15,815km<sup>2</sup> at the end of 2010 through a variety of structures, including joint ventures and the relinquishment of non-prospective areas.

At the wholly-owned La Colosa project, brownfield-exploration-led drilling and pre-feasibility development resumed during the third quarter of 2010. AngloGold Ashanti secured regional opportunities surrounding La Colosa and exploration of the greater La Colosa area is continuing with the objective of discovering and quantifying similar gold-rich porphyry mineralisation styles.

At Gramalote (51% AngloGold Ashanti, 49% B2Gold), the joint venture partners renegotiated their agreement, resulting in AngloGold Ashanti assuming management of the project via a designated brownfield-exploration-led project feasibility study team. Feasibility drilling began during the last quarter of 2010, after a hiatus of more than 12 months.

## Mineral Resource estimation

### Gramalote

At Gramalote, some 12,551m of drilling (43 holes) have been used to support the calculation of an Inferred and Indicated Mineral Resource. The Mineral Resource estimate was generated using an indicator kriging method. All available geological drill-hole, surface and underground mapping information has been validated for use in the modelling process.

### La Colosa

At La Colosa, some 17,039m of drilling (59 holes) have been used to support the calculation of an Inferred Mineral Resource. Gold grades were estimated using ordinary block kriging methodology. Kriging was performed into a parent block size of 50m by 50m by 10m for lithological domains (wireframes) in the mineralised envelope and for the waste surrounding mineralisation. All available geological drill-hole, surface sampling and mapping information has been validated for use in the modelling process.



# Colombia

## Gramalote

### Location

The Gramalote project is located in Colombia on the eastern side of the Central Cordillera, some 80km northeast of Medellin and 230km northwest of Bogota.

The Gramalote project is a joint venture with Vancouver-based B2Gold, in which AngloGold Ashanti owns 51% and B2Gold owns 49%. B2Gold is required to take the project to feasibility to obtain an additional 2%. In November 2010 AngloGold Ashanti realised net proceeds of C\$70 million from the sale of its 10.17% shareholding in B2Gold. Proceeds from the sale will be used to fund AngloGold Ashanti's exploration activities in Colombia, including the Gramalote project.

### Geology

Mineralisation is hosted in the Antioquia batholith and bears a strong relationship to Cretaceous–Palaeocene magmatic-hydrothermal pulses. Hornblende granodiorites (87Ma) and porphyritic dykes (74Ma) constitute the older sub-regional host. Biotitic tonalites and granodiorites (60Ma) are intimately associated with Gramalote-style mineralisation.

The sub-regional control of drill targets is defined by several dextral extensional shear zones that are orientated north-west to south-east to north-north-west to south-east-east. Hydrothermal alteration is restricted to structurally controlled veins and veinlets. The four principal alteration styles are potassic K-feldspar, quartz-sericite, sericite-carbonate and carbonate-epidote-chlorite. The integration of borehole results with mapped hydrothermal alteration domains confirms the strong relationship between the K-feldspar alteration, gold grades and preferred structural orientation.

The alteration envelope forms an area of some 600 x 200m along a north 65° east axis made up by structurally controlled alteration domains. Consistent gold grades of >0.7 g/t gold have been located within an area of 400 x 150m.

### Exploration

The upside potential of Gramalote is considered to be in the order of 1Moz. Several satellite orebodies are under investigation and the grade of these is similar to the main Gramalote deposit.

The Trinidad satellite deposit is located some 4km west-north-west of the main Gramalote area. The prospect is related to a set of sub-vertical, north-east/south-west striking structural corridors. The hydrothermal domains are 7 to 50m wide and separated by between 40 and over 70m. They are dominantly quartz-sericite (less Potassic Feldspar) zones of alterations and occur over lengths of more than 200m.

The Guadalejo mineral occurrence is located some 34km north-west-west of the main Gramalote prospect. The structural corridor is some 900m long by 200m wide. The central core (200 x 130m) averages 3.5g/t gold in surface sampling. Lithology and alteration domains are similar to the main Gramalote area. Mineralisation is hosted in potassically altered biotite-rich tonalites. North-east to south-west striking veins and veinlets are developed in extension zones of north-east-east to south-west-west lineaments.

The Las Monjas deposit occurs some 2.5km west-south-west of the main Gramalote area. This geochemically anomalous area covers an area of some 600 x 400m. Partially exposed but coherent quartz-sericite alteration is exposed an area of some 125 x 170m and transition to a K-feldspar core is possible at depth. The structural corridors strike north-north-west to south-south-east.

# Colombia

## Gramalote

### Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
Gramalote	Category	million	g/t	Tonnes	Moz
Main zone	Measured	–	–	–	–
	Indicated	15.78	0.93	14.75	0.47
	Inferred	21.95	0.87	19.03	0.61
	<b>Total</b>	<b>37.73</b>	<b>0.90</b>	<b>33.78</b>	<b>1.09</b>
<b>Gramalote</b>	<b>Total</b>	<b>37.73</b>	<b>0.90</b>	<b>33.78</b>	<b>1.09</b>

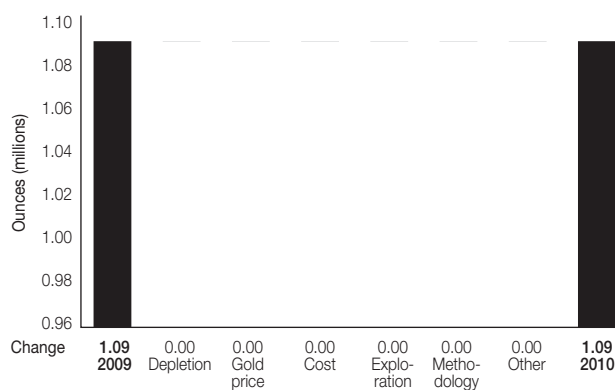
### Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	Blast- RC	hole	Other	
Gramalote	Measured	–	–	–	–	–	
	Indicated	30 x 30	✓	–	–	–	2 different drill directions: W-E, SW-NE
	Inferred	50 x 50	✓	–	–	–	2 different drill directions: W-E, SW-NE

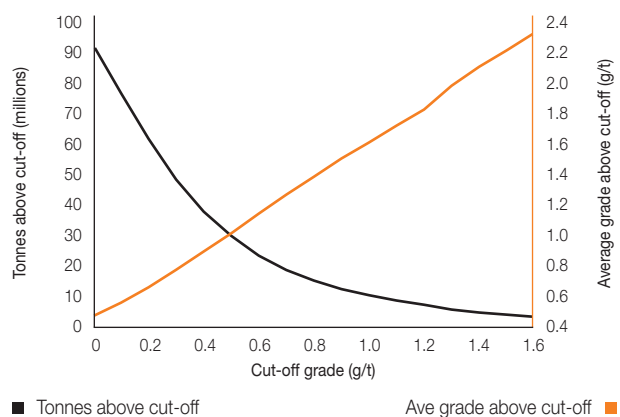
### Exclusive Mineral Resource

The Exclusive and Inclusive Mineral Resource numbers are currently identical due to the absence of Ore Reserves.

### Gramalote: Mineral Resource reconciliation 2009 vs 2010



### Gramalote – surface (metric)



### Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Rudolf Jahoda	AusIMM	990544	21 years

# Colombia

## La Colosa

### Locality

La Colosa was discovered by AngloGold Ashanti's Colombian greenfields exploration team in 2006. The project is 100% owned by AngloGold Ashanti and located 150km west of Colombia's capital city, Bogota, and 30km west of the major town, Ibagué, in the department of Tolima.

### Geology

The La Colosa copper-poor porphyry gold system is genetically associated with Miocene (8Ma) porphyritic intrusive centres intruded into Paleozoic schists. The highest grade gold mineralisation is closely associated with a suite of early porphyry intrusions/breccias with potassic and sodic-calcic alteration, 5% pyrite and traces of chalcopyrite and molybdenite.

The early porphyry stage can be divided into three phases and is elliptical in shape with a known maximum axis of at least 1,200m and a minimum east-west axis of 400m.

The late-mineral dacite porphyry occurs as a series of dykes, all <40m in thickness but showing continuity over at least 600 vertical metres. These dykes are assumed to be lateral offshoots of a ~1km<sup>2</sup> mapped body of dacite porphyry occurring in the north-eastern corner.

### Alteration and mineralisation

The paragenesis of the main alteration or mineralisation mineral assemblage starts with pervasive sodic-calcic alteration overprinted by potassic alteration and in turn, cut by a sodic-calcic event. Potassic alteration, biotite and subordinate K-feldspar, occurs mainly as a pervasive replacement of the porphyries, especially the early phases. Early hydrothermal biotite is fine grained and commonly pale brown suggesting the addition of phlogopitic (magnesium-rich) biotite. The second sodic-calcic alteration clearly overprints the potassic assemblage and is largely confined to irregular, centimetre-scale patches and well defined veinlets. The patches and veinlets contain epidote, actinolite and chlorite, typically with white, "albite-rich" haloes. Intermediate argillic and sericitic alteration are only weakly developed and only form mappable zones in the dacite and in the northern limit of the deposit.

The three early porphyries appear to have been altered and mineralised at the same time. There is scant evidence for veinlet introduction between the three intrusive events. The gold content of the three early porphyry phases is similar.

The veinlets at Colosa appear to span the potassic to sodic-calcic alteration events. The earliest veinlets are composed of only biotite. However, most early veinlet generations are composed of quartz, magnetite, pyrite, pyrrhotite plus minor chalcopyrite and molybdenite. The veinlets may be either quartz or magnetite dominated.

The main control of gold grade in the diorite or dacite intrusive stock is the intrusive phase where the mineralisation is hosted. Early intrusive phases present the highest and more consistent gold grade (average >1.1g/t). The inter-mineral diorite has average gold grades less than 0.7g/t, the late dacite phase generally only has >0.3g/t gold grades close to the contact with early diorite phases.

The Ca-Na and K alteration with or without chloritic alteration have the best gold grades. Areas with intense illite alteration generally have average gold grades less than 0.3ppm. The contact breccias and hornfels developed at the contact between porphyritic rock and schist present a mineralised halo of at least 60m with an average gold grade of >1g/t.



# Colombia

## La Colosa

### Gold deportment

Gold grains vary from almost pure gold to a much lesser amount of gold-silver telluride. The chemical composition of Au-Ag-Te grains is variable. The gold grains are generally fine grained around 15µm. Coarse grained gold (116µm) was found in samples from metamorphic rocks. Gold grains occur both liberated and 'locked' in sulphides and silicates. A significant amount of gold is associated with silicates such as K-feldspar and plagioclase. Sulphide minerals associated with gold are dominantly pyrite and contain lesser amounts of pyrrhotite and arsenopyrite.

### Mineral Resource Estimation

At La Colosa, some 17,039m of drilling (59 holes) has been used to support the estimation of the Inferred Mineral Resource.

Gold grades were estimated using ordinary block kriging methodology. Kriging was performed into a parent block size of 50m (X) by 50m (Y) by 10m (Z) for lithological domains (wireframes) in the mineralised envelope and for the waste surrounding mineralisation. All available geological drill-hole, surface sampling and mapping information has been validated for use in the modelling process.

### Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
La Colosa	Category	million	g/t	Tonnes	Moz
Open pit	Measured	–	–	–	–
	Indicated	–	–	–	–
	Inferred	392.11	0.99	387.03	12.44
	<b>Total</b>	<b>392.11</b>	<b>0.99</b>	<b>387.03</b>	<b>12.44</b>
<b>La Colosa</b>	<b>Total</b>	<b>392.11</b>	<b>0.99</b>	<b>387.03</b>	<b>12.44</b>

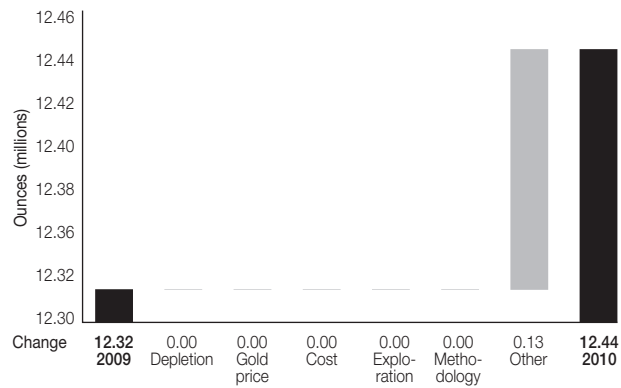
### Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	RC	Blast-hole	Other	
La Colosa	Measured	–	–	–	–	–	
	Indicated	–	–	–	–	–	
	Inferred	100 x 100	✓	–	–	–	Plus additional geological drill-holes at different spacing and different angles, HQ-NQ

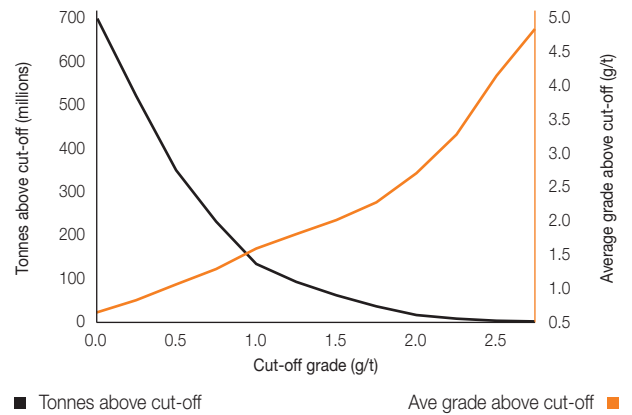
### Exclusive Mineral Resource

The Exclusive and Inclusive Mineral Resource numbers are currently identical due to the absence of Ore Reserves.

### La Colosa: Mineral Resource reconciliation 2009 vs 2010



### La Colosa - surface (metric)



### Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Rudolf Jahoda	AusIMM	990544	21 years



# United States of America

## Country overview

In March 1999 AngloGold Ashanti acquired the Pikes Peak Mining Company, and its interests in the Cripple Creek & Victor Gold Mining Company (CC&V) and the Jerritt Canyon joint ventures. Due to the merger of Golden Cycle Gold Corporation into a wholly-owned subsidiary of AngloGold Ashanti effective July 1, 2008, CC&V became an indirect, wholly-owned joint venture of AngloGold Ashanti Limited.

CC&V currently controls over 85% of the patented claims within the district and 100% of the land containing the 2010 Mineral Resource. The Ore Reserve and Mineral Resource are stated at 100% ownership basis, although portions of the Ore Reserve are subject to third party royalties that vary according to individual agreements with the underlying property owner.

## Mineral Resource estimation

A single unified Mineral Resource model has been developed for the entire district. The unified model encompasses all known deposits and drilling within the CC&V property. The estimation method is multiple indicator kriging and the primary variable estimated is the recoverable gold.

An estimated iron and oxide model is utilised to interpolate block specific coefficients for input into the metallurgical recovery function. The method for calculating nominal shake leach values is a regression technique using geologically logged categorical variables. The modelling software used is MineSight® and updated drill-hole information is used throughout. The drill-hole database is thoroughly reviewed before each Mineral Resource estimation and the estimation domains are based on lithology and structural domains for each deposit.

## Ore Reserve estimation

The Ore Reserve pit designs were based on LG optimisations of the Mineral Resource model. The LG algorithm applies economic values to individual blocks and then generates a pit shell based on geotechnical constraints. Successive nested shells are generated until the economic limits of the pit are established. These shells are then used as a template for final mine design. Pit slope designs for all deposits were based on geotechnical studies and range between 32° and 57°. All pits were designed using a 10.7m bench height except South Cresson, which utilises 6.1m.



# United States of America

CC&V

## Location

The Cripple Creek and Victor (CC&V) located in central Colorado in the USA, approximately 25km east of Colorado Springs. The mining district is located between the communities of Cripple Creek, to the northwest, and Victor, in the south. CC&V currently controls over 85% of the patented claims within the district and 100% of the land within the year-end 2010 Mineral Resource.

## Geology

The dominant geological feature of the district is a 32Ma to 28Ma diatreme-intrusive complex hosted in Precambrian rocks located between the towns of Cripple Creek and Victor. The diatreme-intrusive complex is 6.4km long, 3.2km wide and consists of diatremal breccia that has been intruded by stocks, dykes and discordant breccias. Diatremal breccia lithologies include breccias composed exclusively of volcanic, Precambrian or sedimentary material or any combination of the three. Early intrusions are predominantly within these alkaline phonolite-phonotephrite series of rocks and were followed by later lamprophyres. All rocks have undergone a complex history of structural deformation and hydrothermal alteration. Gold mineralisation, dated between 27.8Ma and 26.6Ma, is hosted in all rock types as veins. The mineralisation can also be disseminated or can occur in structurally-controlled orebodies. Primary ore minerals include microscopic native gold, native gold with pyrite and gold tellurides. Silver is present but has minimal economic importance.

## Exploration

The 2010 exploration programme was divided into two programmes as follows:

- converting low-grade tonnes from Inferred Mineral Resource into Measured and Indicated Mineral Resource by increasing the level of confidence in Mineral Resource tonnes focussed on the north-end of the district in the WHEX and Globe Hill areas; and
- testing and defining high-grade zones that, if they could be selectively mined through open pit mining operations, might support a plant scenario. The drilling for the high-grade targets took place in several areas, including South Cresson, Cresson, WHEX and North Cresson.

## Projects

The largest project at CC&V is the Mine Life Extension-2 project (MLE-2), designed to extend the mine life from 2016 to 2026. The project is looking at the possibility of an additional 190t leach pad with a plant that would process higher-grade material selectively mined from the open pit operations.

## Mineral Resource

as at 31 December 2010		Tonnes million	Grade g/t	Contained gold	
CC&V	Category			Tonnes	Moz
CC&V	Measured	283.04	0.78	221.76	7.13
	Indicated	216.53	0.73	157.18	5.05
	Inferred	79.61	0.75	59.66	1.92
CC&V	Total	579.18	0.76	438.60	14.10

# United States of America

CC&V

## Details of average drill-hole spacing and type in relation to Mineral Resource classification

Mine/ Project	Category	Spacing m (- x -)	Type of drilling				Comments
			Diamond	RC	Blast-hole	Other	
CC&V	Measured	30 x 30	✓	✓	–	–	
	Indicated	45 x 45	✓	✓	–	–	
	Inferred	75 x 75	✓	✓	–	–	
	Grade control	5 x 5, 5 x 6	–	–	✓	–	

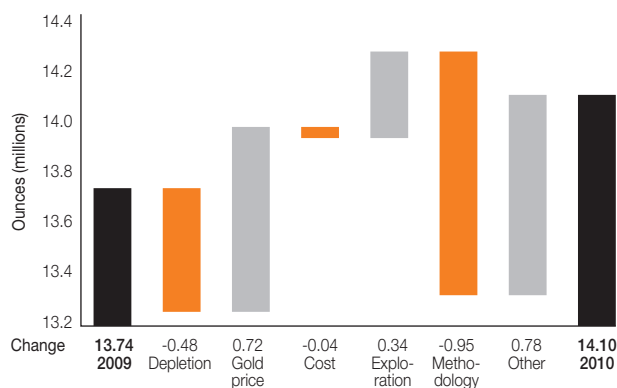
## Exclusive Mineral Resource

The Exclusive Mineral Resource at CC&V totals 343Mt, containing 8.20Moz of gold. This material lies immediately outside the designed pit shells that hold the Ore Reserve. The ore zones are generally extensions of those seen in the Ore Reserve shells and some of these tonnes will convert to Ore Reserve with infill drilling.

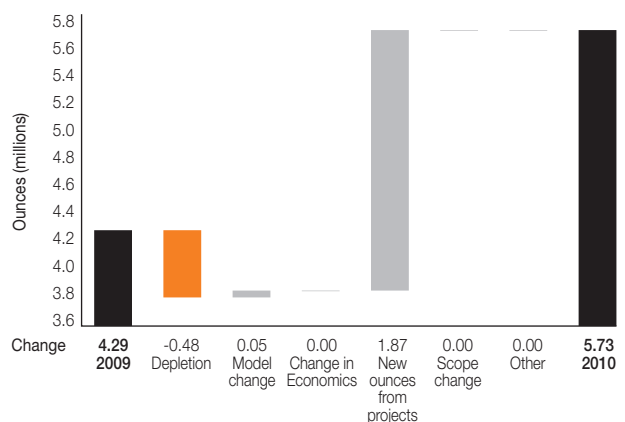
## Exclusive Mineral Resource

as at 31 December 2010		Tonnes	Grade	Contained gold	
CC&V	Category	million	g/t	Tonnes	Moz
	Measured	135.85	0.75	102.38	3.29
	Indicated	137.77	0.71	98.42	3.16
	Inferred	69.52	0.77	53.85	1.73
<b>CC&amp;V</b>	<b>Total</b>	<b>343.14</b>	<b>0.74</b>	<b>254.66</b>	<b>8.19</b>

### CC&V: Mineral Resource reconciliation 2009 vs 2010



### CC&V: Ore Reserve reconciliation 2009 vs 2010



## Ore Reserve

as at 31 December 2010		Tonnes	Grade	Contained gold	
CC&V	Category	million	g/t	Tonnes	Moz
Cresson	Proved	75.87	0.80	60.35	1.94
	Probable	41.99	0.77	32.39	1.04
	<b>Total</b>	<b>117.86</b>	<b>0.79</b>	<b>92.74</b>	<b>2.98</b>
South Cresson	Proved	14.74	0.91	13.45	0.43
	Probable	4.61	0.92	4.22	0.14
	<b>Total</b>	<b>19.35</b>	<b>0.91</b>	<b>17.66</b>	<b>0.57</b>
Wild Horse Extension	Proved	18.58	1.30	24.08	0.77
	Probable	9.94	1.08	10.74	0.35
	<b>Total</b>	<b>28.52</b>	<b>1.22</b>	<b>34.82</b>	<b>1.12</b>
Globe Hill	Proved	26.46	0.53	14.06	0.45
	Probable	18.95	0.50	9.55	0.31
	<b>Total</b>	<b>45.41</b>	<b>0.52</b>	<b>23.61</b>	<b>0.76</b>
Schist Island	Proved	11.54	0.64	7.44	0.24
	Probable	3.27	0.57	1.86	0.06
	<b>Total</b>	<b>14.81</b>	<b>0.63</b>	<b>9.30</b>	<b>0.30</b>
<b>CC&amp;V</b>	<b>Total</b>	<b>225.95</b>	<b>0.79</b>	<b>178.13</b>	<b>5.73</b>

## Inferred Mineral Resource in business plan

The total amount of Inferred Mineral Resource within the Ore Reserve design is 10Mt, containing 0.19Moz of gold. This is approximately 4.5% of the Proved and Probable Ore Reserve tonnes and 3.3% of the Proved and Probable Ore Reserve of gold.

The Inferred Mineral Resource is not used in the optimisation process for the Ore Reserve shells. The Inferred Mineral Resource tonnes are generally located near the surface of pits that have not yet been mined. Some of this material is also found at the bottom of the Ore Reserve pits where the drill density is not as quite as uniform as it is in other areas.

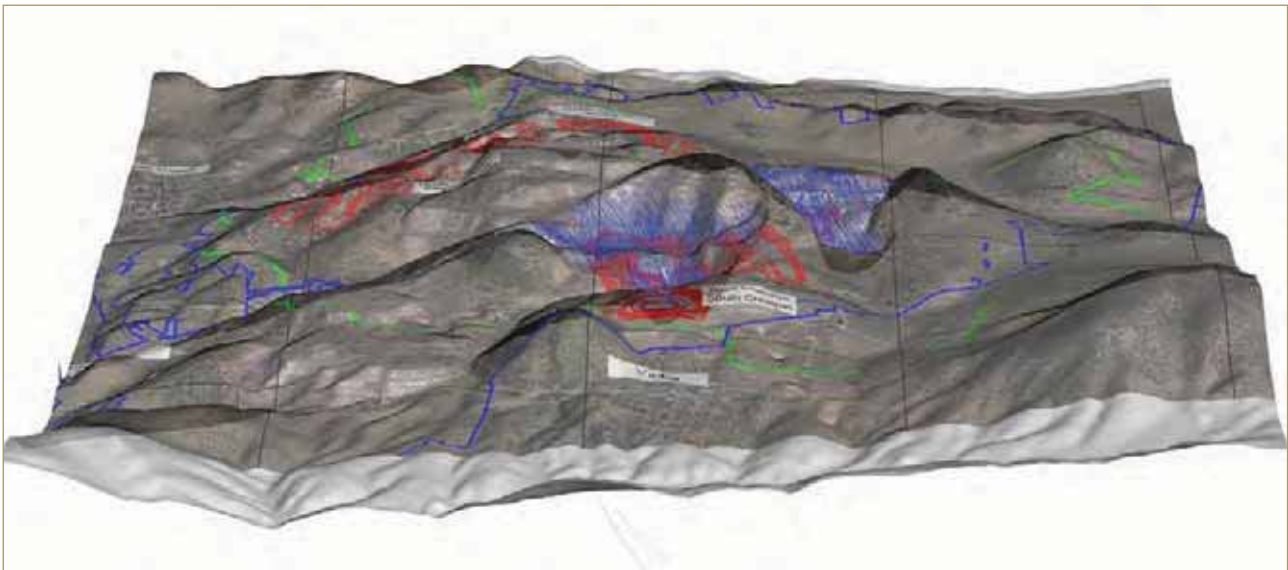
## Inferred Mineral Resource

as at 31 December 2010	Tonnes	Grade	Contained gold		
CC&V	million	g/t	Tonnes	Moz	Comments
Cresson	3.77	0.63	2.37	0.08	
South Cresson	0.48	0.94	0.45	0.01	
Wild Horse Extension	1.23	0.56	0.68	0.02	
Globe Hill	4.39	0.50	2.21	0.07	
Schist Island	0.22	0.45	0.10	0.00	
<b>Total</b>	<b>10.09</b>	<b>0.58</b>	<b>5.81</b>	<b>0.19</b>	



# United States of America

CC&V

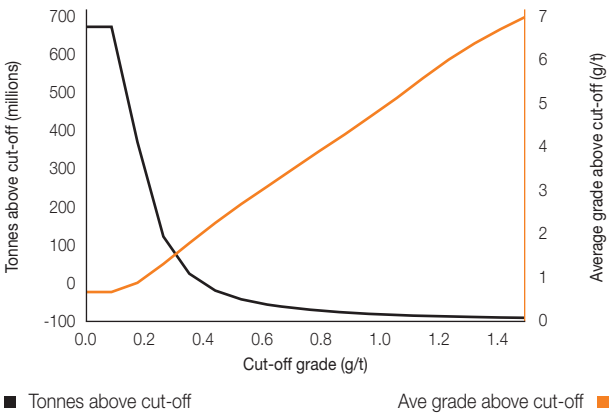


## Ore Reserve modifying factors

as at 31 December 2010		Ex-	Cut-off	% RRF	% RRF	% MRF	% MRF
	Gold	change	value	(based on	(based	(based on	(based
Serra Grande	price	rate	g/t Au	tonnes)	on g/t)	tonnes)	on g/t)
CC&V – stockpiles	–	–	–	–	–	–	–
Pits	850	1.00	0.17	100	99	101	101

## CC&V

– surface (metric)



### Competent persons

Category	Name	Professional organisation	Registration number	Relevant experience
Mineral Resource	Tim Brown	AusIMM	226857	25 years
Ore Reserve	Jesse Gage	AusIMM	Former member	23 years



# Definitions

## Mineral Resource

The JORC definition of a Mineral Resource is as follows:

**A 'Mineral Resource' is a concentration or occurrence of material of intrinsic economic interest in or on the earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are subdivided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.**

The Mineral Resource is estimated using all drilling and sampling information along with a detailed geological model. The geological models are based on core logging, mapping, geophysics, geochemistry and geological understanding that have been developed for each deposit. Most of the AngloGold Ashanti deposits have been the subject of research by world experts in the class of gold deposit.

The grade estimation for each deposit has been developed over the life of the mine and is constantly reviewed in terms of grade control information and reconciliation with the metallurgical plant. In general, the deep South African mines utilise a process of compound log normal macro kriging for the estimation of the Mineral Resource, while the open pits and shallow underground mines generally use recoverable Mineral Resource models, estimated using uniform conditioning or multiple indicator kriging.

In order to comply with the economic requirement of the definition of Mineral Resource, all AngloGold Ashanti Mineral Resources are constrained at an upside gold price, with all other parameters being kept the same as used for estimation of the Ore Reserve. In the underground gold mines, scoping studies are conducted on all coherent blocks of ground that lie above the calculated Mineral Resource cut-off. These studies include all cost and capital requirements to access the block. In the case of open pit operations, pit optimisations are conducted at the Mineral Resource gold price and all material outside these shells is excluded from the Mineral Resource, unless it is potentially mineable from underground.

It is the opinion of AngloGold Ashanti that the Mineral Resource represents a realistic view of an upside potential to the Ore Reserve. In interpreting the Mineral Resource it is critical to factor in the following:

- The Mineral Resource is quoted in situ and has not been corrected for dilution, mining losses or recovery.
- The Mineral Resource includes a high percentage of Inferred material, which, following further exploration drilling may be converted to an Indicated or Measured Mineral Resource.
- Many of the areas lying in the exclusive Mineral Resource are currently being actively drilled and are the subject of economic and technical studies. It can, however, not be assumed at this stage that the company has intent to mine these areas.

Mineral Resource classification is based on the '15% Rule'. A Measured Mineral Resource should be expected to be within 15% of the quarterly metal estimate at least 90% of the time, while for an Indicated Mineral Resource estimate the annual metal estimate should be within 15% of the metal estimated at least 90% of the time. For an Inferred Mineral Resource the annual error may for 90% of the time, be greater than 15%.

The process and methodology of classification are at the discretion of the competent person and involves expressing the '15% Rule' as a required level of information, in tangible terms the spacing of the drill-hole or tunnel spacing in a particular deposit. Techniques such as conditional simulation or even an empirical reconciliation-based approach are employed. However, all operations are responsible for demonstrating, through reconciliation, that their classification system conforms to the 15% rule set out above.

AngloGold Ashanti quotes its Mineral Resource as inclusive of the Ore Reserve. However, in this document the exclusive Mineral Resource is also quoted. The exclusive Mineral Resource is defined as the inclusive Mineral Resource less the Ore Reserve before dilution and other factors are applied.

The exclusive Mineral Resource consists of the following components:

- Inferred Mineral Resource within the optimised shell;
- Other Inferred Mineral Resource;
- Measured and Indicated Mineral Resource that lies between the life of mine (LOM) pit shell/mine design and the Mineral Resource pit shell. This material will become economic if the gold price increases; and
- Mineral Resource where the technical studies to engineer an Ore Reserve have not yet been completed.

## Ore Reserve

The JORC definition of an Ore Reserve is as follows:

**An 'Ore Reserve' is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Ore Reserves are sub-divided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves.**

In the underground operations, the Ore Reserve is based on a full mine design and in the case of open pits on a pit optimisation followed by a final pit design. The Ore Reserve is reported according to tonnage, mean grade(s), and contained metal inclusive of mining dilution, mining ore losses and mine call factors. These modifying factors are based on measurements, rather than estimates. Tonnage and grade estimates for surface stockpile materials that meet Ore Reserve criteria are itemised separately.

Only the Ore Reserve included for treatment in the business unit plan production schedule is considered in the Ore Reserve statement. These sometimes include marginal or sub-grade ores as well as the Inferred Mineral Resource. This Inferred Mineral Resource is not included in the Ore Reserve statement.

For all new projects, an audited pre-feasibility (as a minimum requirement) must have been completed that demonstrates the viability of the project and meets the company's investment requirements. This study must be signed off at the appropriate executive level in order to demonstrate an intent on the part of the company to proceed to feasibility and ultimately to implement the project.

# Glossary of terms

## All terms

### BIF

Banded Ironstone Formation. A chemically formed iron-rich sedimentary rock.

### By-products

Any products that emanate from the core process of producing gold, including silver, uranium and sulphuric acid.

### Calc-silicate rock

A metamorphic rock consisting mainly of calcium-bearing silicates such as diopside and wollastonite, and formed by metamorphism of impure limestone or dolomite.

### Capital expenditure

Total capital expenditure on tangible assets which includes stay-in-business and project capital.

### Carbon-in-leach (CIL)

Gold is leached from a slurry of gold ore with cyanide in agitated tanks and adsorbed on to carbon granules in the same circuit. The carbon granules are separated from the slurry and treated in an elution circuit to remove the gold.

### Carbon-in-pulp (CIP)

Gold is leached conventionally from a slurry of gold ore with cyanide in agitated tanks. The leached slurry then passes into the CIP circuit where carbon granules are mixed with the slurry and gold is adsorbed on to the carbon. The granules are separated from the slurry and treated in an elution circuit to remove the gold.

### Comminution

Comminution is the crushing and grinding of ore to make gold available for treatment. (See also “Milling”).

### Contained gold

The total gold content (tons multiplied by grade) of the material being described.

### Cut-off grade – surface mines (COG)

The minimum grade at which a unit of ore will be mined to achieve the desired economic outcome.

### Dense media separation (DMS)

Dense media separation (using high density liquids to separate ore).

### Depletion

The decrease in quantity of ore in a deposit or property resulting from extraction or production.

### Development

The process of accessing an orebody through shafts and/or tunnelling in underground mining operations.

### Discontinued operation

A component of an entity that, pursuant to a single plan, has been disposed of or abandoned or is classified as held-for-sale until conditions precedent to the sale have been fulfilled.

**Doré**

Impure alloy of gold and silver produced at a mine to be refined to a higher purity, usually consisting of 85% gold on average.

**Electro-winning**

A process of recovering gold from solution by means of electrolytic chemical reaction into a form that can be smelted easily into gold bars.

**Elution**

Recovery of the gold from the activated carbon into solution before zinc precipitation or electro-winning.

**Full grade ore (FGO)**

FGO is ore material with sufficient grade to carry the full operating cost. FGO cut-off is the break-even grade where cost is representative of all costs to carry the full operation excluding direct mining cost.

**Gold produced**

Refined gold in a saleable form derived from the mining process.

**Grade**

The quantity of gold contained within a unit weight of gold-bearing material generally expressed in ounces per short ton of ore (oz/t), or grams per metric tonne (g/t).

**Leaching**

Dissolution of gold from crushed or milled material, including reclaimed slime, prior to adsorption on to activated carbon.

**Life of mine (LOM)**

Number of years that the operation is planning to mine and treat ore, and is taken from the current mine plan.

**Marginal ore (MO)**

MO is ore material with grade below the FGO cut-off that can be economically treated at the end of mine life when overhead and mining costs are reduced. MO cut-off is the break-even grade where cost is representative of the reduced cost that will be experienced after mining has ended.

**Metallurgical plant**

A processing plant erected to treat ore and extract gold.

**Milling**

A process of reducing broken ore to a size at which concentrating can be undertaken. (See also "Comminution")

**Mine call factor (MCF)**

The ratio, expressed as a percentage, of the total quantity of recovered and unrecovered mineral product after processing with the amount estimated in the ore based on sampling. The ratio of contained gold delivered to the metallurgical plant divided by the estimated contained gold of ore mined based on sampling.

**Metallurgical recovery factor (MetRF)**

A measure of the efficiency in extracting gold from the ore deposit.



# Glossary of terms

## **Mineral deposit**

A mineral deposit is a concentration (or occurrence) of material of possible economic interest in or on the Earth's crust.

## **Mining reconciliation factor (MRF)**

This is the variance between the gold called for as defined by the ore perimeters and what the processing plant receives. It is expressed in both a grade and tonnage number.

## **Ounce (oz) (troy)**

Used in imperial statistics. A kilogram is equal to 32.1507 ounces. A troy ounce is equal to 31.1035 grams.

## **Pay limit**

The grade of a unit of ore at which the revenue from the recovered mineral content of the ore is equal to the total cash cost including Ore Reserve Development and stay-in-business capital. This grade is expressed as an in-situ value in grams per tonne or ounces per short ton (before dilution and mineral losses).

## **Precipitate**

The solid product of chemical reaction by fluids such as the zinc precipitation referred to below.

## **Price received (\$/oz and R/kg)**

Attributable gold income including realised non-hedge derivatives divided by attributable ounces or kilograms sold.

## **Productivity**

An expression of labour productivity based on the ratio of grams of gold produced per month to the total number of employees in underground mining operations.

## **Reclamation**

In the South African context, reclamation describes the process of reclaiming slimes (tailings) dumps using high-pressure water cannons to form a slurry which is pumped back to the metallurgical plants for processing.

## **Recovered grade**

The recovered mineral content per unit of ore treated.

## **Reef**

A gold-bearing sedimentary horizon, normally a conglomerate band that may contain economic levels of gold.

## **Refining**

The final purification process of a metal or mineral.

## **Region**

Defines the operational management divisions within AngloGold Ashanti, namely South Africa, Argentina, Australia, Brazil, Ghana, Guinea, Mali, Namibia, Tanzania and United States of America.

## **Rehabilitation**

The process of reclaiming land disturbed by mining to allow an appropriate post-mining use. Rehabilitation standards are defined by country-specific laws including, but not limited to the South African Department of Mineral Resources, the US Bureau of Land Management, the US Forest Service, and the relevant Australian mining authorities, and address among other issues, ground and surface water, topsoil, final slope gradient, waste handling and re-vegetation issues.

**Resource to Reserve reconciliation factor (RRF)**

This is the variance between the resource model and the ore perimeters.

**Seismic event**

A sudden inelastic deformation within a given volume of rock that radiates detectable seismic energy.

**Shaft**

A vertical or subvertical excavation used for accessing an underground mine; for transporting personnel, equipment and supplies; for hoisting ore and waste; for ventilation and utilities; and/or as an auxiliary exit.

**Smelting**

A pyro-metallurgical operation in which gold is further separated from impurities.

**Stay-in-business capital**

Capital expenditure to maintain existing production assets. This includes replacement of vehicles, plant and machinery, ore reserve development and capital expenditure related to safety, health and the environment.

**Stope**

Underground excavation where the orebody is extracted.

**Stoping**

The process of excavating ore underground.

**Stripping ratio**

The ratio of waste tonnes to ore tonnes mined calculated as total tonnes mined less ore tonnes mined divided by ore tonnes mined.

**Tailings**

Finely ground rock of low residual value from which valuable minerals have been extracted.

**Tailings dam (slimes dam)**

Dam facilities designed to store discarded tailings.

**Tonne**

Used in metric statistics. Equal to 1,000 kilograms.

**Ton**

Used in imperial statistics. Equal to 2,000 pounds. Referred to as a short ton.

**Tonnage**

Quantity of material measured in tonnes or tons.

**Waste**

Material that contains insufficient mineralisation for consideration for future treatment and, as such, is discarded.

# Abbreviations

°	Degrees
\$	United States dollars
ARS	Argentinean peso
A\$ or AUD	Australian dollars
ADS	American Depositary Share
ADR	American Depositary Receipt
ASX	Australian Securities Exchange
Au	Contained gold
BRL	Brazilian real
capex	Capital expenditure
CLR	Carbon Leader Reef
DRC	Democratic Republic of the Congo
g	Grams
g/t	Grams per tonne
g/TEC	Grams per total employee costed
JORC	Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves
JSE	JSE Limited
kg	Kilograms
km	Kilometres
LIB	Long inclined borehole
LOM	Life of mine
LVB	Long vertical borehole
M or m	Metre or million, depending on the context
MCF	Mine Call Factor
MetRF	Metallurgical Recovery Factor
Moz	Million ounces
MRF	Mining Reconciliation Factor
Mt	Million tonnes or tons
Mtpa	Million tonnes/tons per annum
NPV	Net present value
oz	Ounces (troy)
oz/t	Ounces per ton
R or ZAR	South African rands
RRF	Resource to Reserve reconciliation factor
SAMREC	The South African Code for the Reporting of Exploration Results, Mineral Resources and Mineral Reserves (the SAMREC Code)
t	Tons (short) or tonnes (metric)
tpm	Tonnes/tons per month
tpa	Tonnes/tons per annum
tpd	Tonnes/tons per day
VCR	Ventersdorp Contact Reef
VR	Vaal Reef

# Administrative information

## AngloGold Ashanti Limited

Registration No. 1944/017354/06  
Incorporated in the Republic of South Africa

ISIN: ZAE000043485

### Share codes:

JSE:	ANG
LSE:	AGD
NYSE:	AU
ASX:	AGG
GhSE (Shares):	AGA
GhSE (GhDS):	AAD
Euronext Paris:	VA
Euronext Brussels:	ANG

**JSE Sponsor:** UBS

**Auditors:** Ernst & Young Inc.

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## Directors

### Executive

M Cutifani\*\* (Chief Executive Officer)  
S Venkatakrishnan\* (Chief Financial Officer)

### Non-executive

TT Mboweni <sup>†</sup> (Chairman)  
R Gasant <sup>†</sup>  
FB Arisman <sup>#</sup>  
WA Nairn <sup>†</sup>  
Prof LW Nkuhlu <sup>†</sup>  
F Ohene-Kena <sup>†</sup>  
SM Pityana <sup>†</sup>  
<sup>†</sup> South African    <sup>\*</sup> British  
<sup>#</sup> American    <sup>\*\*</sup> Australian    + Ghanaian

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or +1 201 680 6578 (outside USA)  
E-mail: shrrelations@mellon.com  
Website:  
www.bnymellon.com.com\shareowner

## Global BuyDIRECTSM

BoNY maintains a direct share purchase  
and dividend reinvestment plan for  
AngloGold Ashanti.  
Telephone: +1-888-BNY-ADRS

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## AngloGold Ashanti website

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AngloGold Ashanti posts information that is important to investors on the main page of its website at [www.AngloGoldAshanti.com](http://www.AngloGoldAshanti.com) and under the "Investors" tab on the main page. This information is updated regularly. Investors should visit this website to obtain important information about AngloGold Ashanti.

## Forward-looking statements

Certain statements contained in this document, including, without limitation, those concerning AngloGold Ashanti Limited's (AngloGold Ashanti) strategy to reduce its gold hedging position, including the extent and effect of the hedge reduction, the economic outlook for the gold mining industry, expectations regarding gold prices, production, cash costs and other operating results, growth prospects and outlook of AngloGold Ashanti's operations, individually or in the aggregate, including the completion and commencement of commercial operations of certain of AngloGold Ashanti's exploration and production projects and completion of acquisitions and dispositions, AngloGold Ashanti's liquidity and capital resources and capital expenditure, and the outcome and consequence of any pending litigation proceedings, contain certain forward-looking statements regarding AngloGold Ashanti's operations, economic performance and financial condition. Although AngloGold Ashanti believes that the expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, amongst other factors, changes in economic and market conditions, success of business and operating initiatives, changes in the regulatory environment and other government actions, fluctuations in gold prices and exchange rates, and business and operational risk managements. For a discussion of such risk factors, refer to the section titled "Risk management and internal controls" in the annual financial statements. AngloGold Ashanti undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after the date of the annual financial statements or to reflect the occurrence of unanticipated events. All subsequent written or oral forward-looking statements attributable to AngloGold Ashanti or any person acting on its behalf are qualified by the cautionary statements herein.







## **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.

Date: March 31, 2011

AngloGold Ashanti Limited

By: /s/ L Eatwell  
Name: L EATWELL  
Title: Company Secretary