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 30, 2010

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 X Form 40-F

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

Yes ___ No X

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 X

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 X

Enclosure: Press release

ANGLOGOLD ASHANTI MINERAL RESOURCE AND ORE RESERVE REPORT FOR THE YEAR ENDED DECEMBER 31, 2009,



Mineral Resource and Ore Reserve Report 2009







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.

Information is presented either by operating region, country, operation or exploration project. The regional or country overviews include the following tables: Mineral Resource and Ore Reserve gold price and exchange rates, details of average drill-hole spacing and type, Ore Reserve modifying factors, development sampling results, Mineral Resource and Ore Reserve comparison by operation and Mineral Resource and Ore Reserve by-products. Topics for discussion include Geology, Mineral Resource estimation, exclusive Mineral Resource, Ore Reserve estimation and Inferred Mineral Resource in business plan. All Mineral Resources and Ore Reserves listed in this document are attributable unless otherwise stated.

The operational reviews include the following: Geology, Mineral Resource, exclusive Mineral Resource, Mineral Resource and Ore Reserve reconciliation, Mineral Resource and Ore Reserve by-products, Ore Reserve, grade tonnage information and competent persons.

This document, the Mineral Resource and Ore Reserve Report 2009, is a key component of the AngloGold Ashanti suite of 2009 annual reports produced to record the company's performance regarding its finances, operations and sustainability activities for the 12 months ended 31 December 2009. Other major documents in this suite of reports are the Annual Financial Statements 2009 and the Sustainability Review 2009, both of which are available on the corporate website, *www.anglogoldashanti.com*.

The Annual Financial Statements 2009 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.

The suite of 2009 annual reports produced by AngloGold Ashanti Limited includes:



Annual Financial Statements 2009



Mineral Resource and Ore Reserve Report 2009



Sustainability Review 2009



Abridged Report 2009

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Disclaimer

The information in this report that relates to Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by the listed Competent Persons, who are, unless otherwise specified, full-time employees of AngloGold Ashanti Limited. The membership details for each of the Competent Persons of approved professional organisation are included in this report. The Competent Persons have sufficient experience relative to the type and style of mineral deposit under consideration and to the activity which has been undertaken, to qualify as a Competent Person (or Recognised Mining Professional) as defined in the 2004 Edition of the JORC Code and the SAMREC code (2007 Edition). The Competent Persons consent to the release of the Exploration Results, Mineral Resources and Ore Reserves in the form and context in which it appears.

Corporate profile

AngloGold Ashanti Limited is a leading global gold mining company, headquartered in Johannesburg, with a portfolio of 21 operations spanning 10 countries on four continents. For reporting purposes, operations are divided into five regions – Southern Africa, Continental Africa, Australasia, North America and South America. In the company's management structure, the African and American operations fall under the executive vice presidents for Africa and the Americas respectively. The Australasian region is similarly represented at executive level by a regional executive vice president.

As at 31 December 2009, AngloGold Ashanti had 362,240,669 ordinary shares in issue and a market capitalisation of \$14.6 billion (31 December 2008: \$9.8 billion). AngloGold Ashanti's primary listing is on the JSE Limited in Johannesburg. It is also listed on exchanges in New York, London, Paris, Brussels, Australia and Ghana.

At the end of 2009, the government of Ghana held approximately 3% of AngloGold Ashanti's shares. The balance of the identifiable free float was held in the Americas (49%), South Africa (26%), the United Kingdom (12%), Europe (4%) and Asia Pacific/the Middle East (3%).

In 2009, approximately 40% of AngloGold Ashanti's production came from Southern Africa, including Namibia. Production from the rest of Africa (Ghana, Tanzania, Guinea and Mali) made up a further 33%, South America (Brazil and Argentina) 13%, North America (USA) 5% and Australasia (Australia) 9%.

The bulk of AngloGold Ashanti's operations are under its own management. Typically contractors are used for mining activity as a means of leveraging industry expertise, particularly at open-pit operations. In 2009 AngloGold Ashanti employed 63,364 people around the world, comprising 49,908 employees and 13,456 contractors.



Key production statistics

	Productio	n (000 oz)	Gold sales	(\$ million)*	Total cash costs (\$/oz)		
	2009	2008	2009	2008	2009	2008	
Southern Africa	1,862	2,167	1,723	1,505	472	367	
Continental Africa	1,520	1,562	1,019	1,148	608	544	
Australasia	401	433	221	280	662	552	
North America	218	258	171	240	385	334	
South America	598	562	634	446	353	402	
Group	4,599	4,982	3,768	3,619	514	444	

Products and markets

In 2009 AngloGold Ashanti produced 4.599Moz (143,049kg) of gold, making the company one of the world's leading gold producers. To put this figure in perspective, total gold production in 2009 was estimated to be some 82.1Moz (2,533t).

AngloGold Ashanti's own customers are typically banks acting as intermediaries in the supply chain. Sales take place either directly to these customers or to Rand Refinery Limited, a South African-based refining company which buys gold from AngloGold Ashanti either on its own account or acts as an agent for the company.

The geographical distribution of sales shown below reflects these arrangements and is based on the domicile of our immediate customers. It does not necessarily reflect the location of the end-user of the product. The largest end-use markets for gold are India, the Middle East, China and the USA.

Geographical distribution of gold sales

for the year ended 31 December 2009



4,592,000 Total oz gold sold in 2009

\$3,768m Revenue from gold sales in 2009

Although the bulk of AngloGold Ashanti's revenue (96%) comes from gold, the company also produces uranium from its operations in South Africa, silver from its operations in Argentina and sulphuric acid from its operations in Brazil.

Exploration for future growth

The company is well positioned for future growth through substantial greenfields and brownfields exploration project pipelines. AngloGold Ashanti's track record of exploration discoveries compares favourably with its peer group: it has recorded five major finds since 2003, including in Colombia, Brazil, Australia and the Democratic Republic of the Congo (DRC). Currently, the company's largest greenfields exploration projects are based in Western Australia, Colombia and the DRC. At 31 December 2009, the group's Proved and Probable Ore Reserves amounted to 71.4Moz of gold (2008: 74.9Moz).

Group overview

Group overview



Ore Reserves and Mineral Resources 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 2008 Mineral Resource is restated to exclude the sale of Boddington (11.9Moz) and the purchase of Kibali (10.1Moz) the Mineral Resource is reduced from 241.0Moz to 239.2Moz. The total Mineral Resource decreased from 239.2Moz in 2008 to 226.7Moz in December 2009. A year-on-year decrease of 6.3Moz (-3%) occurred before the subtraction of depletion and a decrease of 12.5Moz (-5%) after the subtraction of depletion.

It should be noted that the changes in economic assumptions from 2008 to 2009 resulted in the Mineral Resource decreasing by 2.8Moz whilst exploration and modelling resulted in an increase of 3.5Moz. The remaining loss of 6.9Moz resulted from various other reasons. Depletions from the Mineral Resource for 2009 totalled 6.2Moz.

Mineral Resource		Moz
Mineral Resource as at 31 December 2008		241.0
Sale of Boddington		-11.9
Acquisition of Kibali		10.1
Restated 2008 Mineral Resource		239.2
Reductions		
Obuasi	Predominantly due to changes in the underground Mineral Resource model and a re-assessment of the surface Mineral Resource. This reduction does not impact on the	
	Ore Reserve.	-7.8
Vaal River Surface (VRGO)	Reductions due to lower uranium price	-3.2
Geita	Predominantly due to depletion, model updates and increase in costs	-1.4
Kibali	Conversion of Inferred to Indicated Mineral Resource resulted in losses	-1.2
West Wits Surface	Reductions due to lower uranium price	-1.2
Other	Total of non-significant changes	-4.0
Additions		
Moab Khotsong	Gains due to exploration resulting in increase in confidence and grades	2.2
Other	Total of non-significant changes	4.1
Mineral Resource as at 31 December 2009		226.7

Ore Reserve

When the 2008 Ore Reserve is restated to exclude the sale of Boddington (6.7Moz) and the purchase of Kibali (2.5Moz), the 2008 Ore Reserve is reduced from 74.9Moz to 70.7Moz. Using the restated figure, the total AngloGold Ashanti Ore Reserve increased from 70.7Moz in 2008 to 71.4Moz in December 2009. A year-on-year increase of 6.0Moz (8%) occurred before the subtraction of 5.2Moz for depletion, resulting in an increase of 0.8Moz (1%) after the subtraction of depletion.

It should be noted that the changes in the economic assumptions from 2008 to 2009 resulted in the Ore Reserve increasing 3.2Moz while exploration and modelling resulted in a further increase of 2.7Moz.

Ore Reserve		Moz
Ore Reserve as at 31 December 2008		74.9
Sale of Boddington		-6.7
Acquisition of Kibali		2.5
Restated 2008 Ore Reser	ve	70.7
Reductions Great Noligwa Kopanang	Northern portion of mine was removed from plan to ensure profitability Reduction due to mine design changes plus slightly lower MCE, also changes	-1.0
	in geological structure, facies and evaluation model	-0.7
Cripple Creek & Victor	Adjustment due to heap leach reconciliation issues	-0.6
Other	Total of non-significant changes	-2.3
Additions		
Tropicana	First Ore Reserve reported for Tropicana – based on enhanced pre-feasibility study and	
	owner mining	2.3
Kibali	Underground Ore Reserve additions (1.7Moz)	1.7
Sadiola	Deep Sulphides Ore Reserve included and ownership increased from 38% to 41%	1.0
Other	Total of non-significant changes	0.4
Ore Reserve as at 31 December 2009		71.4

By-products

Several by-products are recovered as a result of the processing of the gold Ore Reserves. These include 17,000t of uranium oxide from the South African operations, 409,000t of sulphur from Brazil and 34.9Moz of silver from Argentina. Details of the by-product Mineral Resource and Ore Reserve are given later in this report.

External audit of Mineral Resource and Ore Reserve statement

During the course of the year and as part of the rolling audit program, AngloGold Ashanti's 2009 Mineral Resource at the following operations was submitted for external audit by the Australian-based company Quantitative Group (QG):

- Carbon Leader at Mponeng, TauTona and Savuka mines
- Navachab Main Pit
- Geita Nyankanga
- Obuasi KMS Deep

- Siguiri Project Area 1
- Sadiola Deep Sulphides
- Sunrise Dam Underground
- Brasil Mineração Cuiabá

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

Competent persons

The information in this report that relates to Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by the competent persons. These individuals are identified in the report. The competent persons consent to the inclusion of Exploration Results, Mineral Resources and Ore Reserves 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 or 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)

				Contained	Contained
		Tonnes	Grade	gold	gold
as at 31 December 2009	Category	million	g/t	tonnes	Moz
South Africa	Measured	30.37	14.18	430.77	13.85
	Indicated	300.55	7.59	2,281.63	73.36
_	Inferred	42.24	13.51	570.45	18.34
	Total	373.16	8.80	3,282.85	105.55
Namibia	Measured	17.24	0.78	13.46	0.43
	Indicated	66.84	1.24	82.57	2.65
_	Inferred	18.53	1.07	19.92	0.64
	Total	102.60	1.13	115.95	3.73
Democratic Republic of the Congo	Measured	-	-	-	-
	Indicated	59.17	3.29	194.93	6.27
-	Interred	31.82	4.61	146.79	4.72
	Total	90.99	3.76	341.72	10.99
Ghana	Measured	80.21	4.98	399.77	12.85
	Indicated	72.39	3.86	279.66	8.99
-	Interred	98.44	3.88	382.02	12.28
	Total	251.04	4.23	1,061.45	34.13
Guinea	Measured	36.58	0.68	24.73	0.80
	Indicated	130.15	0.85	110.34	3.55
-		10.22	0.09	09.00	2.20
	Total	244.95	0.84	204.92	6.59
Mali	Measured	18.34	1.46	26.86	0.86
	Indicated	37.23	1.82	67.80 36.94	2.18
-	Tatal	20.09	1.77	101.54	1.19
	Iotai	70.40	1.72	131.59	4.23
lanzania	Measured	- 87 70	- 3.46	- 303.46	9.76
	Inferred	13.03	4.04	52.63	1.69
-	Total	100.73	3.54	356.10	11.45
Australia	Measured	34.10	1 87	63.60	2 04
	Indicated	38.83	2.88	111.97	3.60
	Inferred	15.34	3.01	46.13	1.48
	Total	88.26	2.51	221.69	7.13
United States	Measured	280.80	0.82	231.03	7.43
	Indicated	194.55	0.73	142.71	4.59
_	Inferred	73.12	0.73	53.58	1.72
	Total	548.46	0.78	427.31	13.74
Argentina	Measured	12.00	1.78	21.37	0.69
	Indicated	22.70	3.38	76.62	2.46
-	Inferred	6.16	3.71	22.82	0.73
	Total	40.85	2.96	120.81	3.88
Brazil	Measured	11.24	6.49	72.93	2.34
	Indicated	15.16	6.02	91.28	2.93
-	Interred	30.53	0.70	206.35	0.03
	Total	56.93	6.51	370.56	11.91
Colombia	Measured	_	_	-	-
	Indicated	15.16	0.93	14.18	0.46
-		402.51	1.00	401.40	12.91
	lotal	417.67	0.99	415.57	13.36
Total	Measured	520.88	2.47	1,284.51	41.30
	Indicated	1,040.43 820 81	3.61	3,757.14	120.79
-		000.01	2.42	2,000.07	04.09
	Total	2,392.12	2.95	7,050.53	226.68

Exclusive Mineral Resource* by country (attributable)

				Contained	Contained
		Tonnes	Grade	gold	gold
as at 31 December 2009	Category	million	g/t	tonnes	Moz
South Africa	Measured	22.89	14.34	328.17	10.55
	Indicated	100.15	11.48	1,149.86	36.97
-		21.11	10.70	0.02.07	10.00
	Iotal	144.15	12.56	1,810.10	58.20
Namibia	Measured	7.39	0.59	4.34	0.14
	Inferred	34.43 18.53	1.19	40.99	0.64
-	Total	60.35	1.08	65.24	2.10
Democratic Bepublic of the Congo	Measured				
	Indicated	30.46	2.18	66.28	2.13
	Inferred	31.82	4.61	146.79	4.72
	Total	62.28	3.42	213.07	6.85
Ghana	Measured	27.08	5.05	136.86	4.40
	Indicated	34.89 53.62	3.99	139.29	4.48
-		115.62	4.19	482.00	15.53
	Iotai	115.58	4.18	483.02	15.53
Guinea	Measured	3.75	0.78	2.93	0.09
	Inferred	78.22	0.89	69.85	2.25
-	Total	127.52	0.88	112.07	3.60
Mali	Measured	4 86	0.79	3.85	0.12
	Indicated	20.27	1.58	32.05	1.03
_	Inferred	20.89	1.77	36.94	1.19
	Total	46.02	1.58	72.84	2.34
Tanzania	Measured	-	-	-	-
	Indicated	43.22 13.03	3.21 4.04	138.72	4.46 1.69
-	Total	56 24	3 40	191.35	615
Australia	Moasurod	1.70	1.36	0.00	0.07
/ dottalia	Indicated	13.11	3.00	39.34	1.26
	Inferred	15.34	3.01	46.13	1.48
	Total	30.15	2.91	87.79	2.82
United States	Measured	180.98	0.77	138.73	4.46
	Indicated	148.15	0.69	101.53	3.26
-		00.00	0.74	001.04	1.03
	Iotal	397.78	0.73	291.04	9.36
Argentina	Measured	2.29	3.08	7.06	0.23
	Inferred	6.16	3.71	22.82	0.73
-	Total	24.49	2.64	64.68	2.08
Brazil	Measured	4.31	6 41	27.63	0.89
	Indicated	8.20	5.77	47.29	1.52
_	Inferred	29.45	6.81	200.66	6.45
	Total	41.96	6.57	275.57	8.86
Colombia	Measured		-	_ 	
	Inferred	402.51	0.93	401.40	0.46 12.91
-	Total	417.67	0.99	415.57	13.36
Total	Measured	255 24	2 55	651 88	90.00
	Indicated	509.64	3.62	1,843.61	59.27
	Inferred	759.32	2.09	1,586.84	51.02
	Total	1,524.20	2.68	4,082.34	131.25

* The Exclusive Mineral Resource excludes the Ore Reserve component

Ore Reserve by country (attributable)

				Contained	Contained
		Tonnes	Grade	gold	gold
as at 31 December 2009	Category	million	g/t	tonnes	Moz
South Africa	Proved	8.80	8.13	71.60	2.30
	Probable	213.96	4.16	890.80	28.64
	Total	222.76	4.32	962.40	30.94
Namibia	Proved	9.85	0.93	9.12	0.29
_	Probable	32.40	1.28	41.42	1.33
	Total	42.25	1.20	50.55	1.63
Democratic Republic of the Congo	Proved	-	-	-	-
_	Probable	28.71	4.48	128.65	4.14
	Total	28.71	4.48	128.65	4.14
Ghana	Proved	40.29	3.36	135.34	4.35
_	Probable	51.31	4.66	239.31	7.69
	Total	91.60	4.09	374.65	12.05
Guinea	Proved	30.83	0.64	19.59	0.63
_	Probable	87.85	0.86	75.99	2.44
	Total	118.67	0.81	95.58	3.07
Mali	Proved	9.24	1.99	18.35	0.59
_	Probable	18.96	2.02	38.32	1.23
	Total	28.21	2.01	56.67	1.82
Tanzania	Proved	-	-		_
-	Probable	47.36	3.33	157.57	5.07
	Total	47.36	3.33	157.57	5.07
Australia	Proved	23.63	2.24	53.00	1.70
-	Probable	25.72	2.82	72.63	2.34
	Total	49.35	2.55	125.63	4.04
United States	Proved	99.82	0.92	92.29	2.97
-	Probable	46.40	0.89	41.17	1.32
	Total	146.22	0.91	133.47	4.29
Argentina	Proved	10.76	1.37	14.78	0.48
-	Probable	9.64	4.53	43.66	1.40
	Total	20.40	2.86	58.44	1.88
Brazil	Proved	6.67	5.90	39.37	1.27
-	Probable	7.30	5.37	39.21	1.26
	Total	13.97	5.63	78.58	2.53
Total	Proved	239.89	1.89	453.45	14.58
-	Probable	569.61	3.11	1,768.73	56.87
	Total	809.50	2.75	2,222.19	71.44

Reconciliation of Mineral Resource and Ore Reserve

as at 31 Decen	nber 2009										
	Au Content (attributable) Moz										
			Deple-	Gold		Explo-	Metho-		Model	Scope	
Mine	Category	2008	tion ⁽¹⁾	price	Cost	ration	dology	Other	change ⁽²⁾	change ⁽³⁾	
Southern Africa	region										
Great Noligwa	Resource	7.65	-0.23	_	-0.49	0.02	_	_			
-	Reserve	2.63	-0.15					-	-0.07	-0.80	
Kopanang	Resource	9.49	-0.63	0.08	-	1.10	_	-			
	Reserve	4.00	-0.35					0.08	-0.30	-0.08	
Maala Klaataana	Deserves	10.04	0.00	0.01	0.01	0.00	0.00	0.00			
woab knotsong	Resource	7.00	-0.33	0.61	-0.01	2.23	-0.08	-0.22	0.00	0.00	
Tau Lokoa	Posouroo	5.21	-0.25	0.00	0.04	0.17	0.05	_	0.09	-0.02	
Tau Lekoa	nesource	0.01	-0.19	0.90	-0.04	0.17	0.05	-			
	Reserve	0.92	-0.19					_	_	0.07	
Vaal River	Resource	5.02	-0.17	_	-3.13	0.14	_	_			
Surface (VRGO)	Reserve	1.91	-0.18					_	0.01	-	
Mponeng	Resource	49.43	-0.67	-0.14	0.09	0.93	-	0.19			
	Reserve	12.99	-0.56					_	-0.47	0.75	
Savuka	Resource	4.37	-0.06	_	-0.26	-0.21	-	-			
	Reserve	0.76	-0.03					-	0.02	-0.07	
TauTona	Resource	7.14	-0.23	_	0.01	-0.54	_	-0.19			
	Reserve	3.08	-0.21					-	-0.11	-0.03	
West Wits	Resource	1.37	-0.01	-	-1.17	0.01	-	-			
Surface	Reserve	0.04	-0.01					-	0.15	-	
Navachab	Resource	4.33	-0.25	0.09	-0.40	0.34	0.01	-0.38			
	Reserve	1.34	-0.08					-	0.21	0.16	
Total	Resource	112.33	-2.77	1.54	-5.39	4.18	-0.01	-0.60	-	-	
	Reserve	35.00	-2.02	-	-	-	-	0.08	-0.46	-0.03	
Continental Afric	ca region										
Iduapriem	Resource	4.87	-0.24	0.24	-0.28	_	_	_			
	Reserve	2.55	-0.18					0.01	_	0.02	
Obuasi	Resource	37.35	-0.51	_	-0.13	0.01	-1.72	-5.47			
	Reserve	9.66	-0.65					-	-2.75	3.38	
Siguiri	Resource	5.94	-0.29	0.09	-0.43	0.46	0.90	-0.08			
	Reserve	3.25	-0.26					-0.30	0.18	0.20	
Morila	Resource	0.46	-0.14	0.01	_	-0.01	0.01	0.01			
	Reserve	0.46	-0.16	0.01					-0.01	0.02	
Sadiola	Resource	3.13	-0.15	0.08	0.29	-	0.57	-0.18			
	Reserve	0.42	-0.15					0.26	0.93	-	
Yatela	Resource	0.35	-0.13	0.01	-	-	-0.02	-0.06			
	Reserve	0.16	-0.13	0.0-		a :=		0.01		-	
Geita	Resource	12.86	-0.56	0.03	-0.32	0.17	-0.72	-0.02	0		
NA	Keserve	5.11	-0.31				0.01	-0.02	0.53	-0.25	
Mongbwalu	Resource	2.53	-	-	-0.21	-	-0.21	-			
	Reserve										
Kibali	Resource	_	_	_	_	_	-1 24	10.13			
. SIDCHI	Reserve	_					1.27	2.48	1 66	_	
Total	Resource	67,49	-2.01	0,46	-1.08	0.62	-2.43	4.33	-	_	
	Reserve	21.62	-1.82	-	-	-	-	2.44	0.55	3.37	
1											

1. Depletion: reduction in Ore Reserve based on ore delivered to the plant and corresponding in situ reduction in the Mineral Resource.

2. Model change: difference between the Ore Reserve based on the start of year and end of year Mineral Resource models.

3. Scope change: difference resulting from change in cut-off grade, mine call factor, new project studies and any other factors influencing the Ore Reserve estimations.

Au Content (attributable) Moz			
	Net		
2009	diff	%	Comment
6.94	-0.71	-9%	Removal of safety pillars from the Mineral Resource
1.60	-1.02	-39%	Northern portion of mine was removed from plan to ensure profitability
10.04	0.55	6%	Reclassification of the Mineral Resource, changes in structure and re-evaluation of macro
 3.35	-0.65	-16%	Due to mine design changes plus slightly lower MCF, also changes in geological structure, facies and evaluation models
20.45	2.21	12%	Gains due to areas being upgraded and also increase in confidence and value
 7.14	-0.19	-3%	
 6.20	0.89	17%	Area south-east of Jonkerskraal was re-instated due to economics, net change in value,
			stope width, dip and structure
0.80	-0.12	-13%	Only depletions were subtracted for 2009
1.86	-3.16	-63%	3.13Moz was removed from the Mineral Resource due to economics
1.74	-0.17	-9%	
49.83	0.40	1%	Depletion was offset by gains from exploration and inter-shaft transfers
12.72	-0.28	-2%	
3.84	-0.53	-12%	Net change in value and structure
0.69	-0.07	-10%	Extraction will return to normal levels from mid 2010
6.20	-0.95	-13%	Geological structure changes as well as a drop in grade, combined with transfers to and
			from Mponeng
2.73	-0.35	-11%	Mine was temporarily closed for refurbishing of shaft steelwork
0.20	-1.17	-86%	1.16Moz was removed from the Mineral Resource due to economics
0.18	0.14	326%	Gains due to the addition of the Mponeng waste rock dump
3.73	-0.60	-14%	Increase in operating costs and adjustment for various factors
1.63	0.29	22%	Remodelling added ounces to the North Pit plus re-design of the Western Pushback and Gecko
109.27	-3.06	-3%	
32.57	-2.43	-7%	
4.60	0.27	6%	Gaine from gold price were offect by increase in costs
2.40	-0.27	-0 /0	Gains norm gold price were onset by increase in costs
2.40	-0.10	-0 /0	Changes prodominantly due to clean out and modelling changes
29.00	-7.00	-21/0	Changes predominantly due to clean out and modelling changes
 9.00	-0.01	110/	Caina dua ta abanga in madalling mathad
 0.03	0.10	F 0/	Gains due to change in modelling method
3.07	-0.18	-5%	Observe and school at a local date
0.33	-0.13	-29%	Changes predominantly due to depletion
 0.32	-0.14	-30%	Changes predominantly due to depietion
 3.76	0.62	20%	Increase in attributable portion from 38% to 41%
 1.46	1.04	248%	Deep Sulphides included (929koz) and attributable portion increased from 38% to 41%
0.15	-0.20	-58%	Decrease due to stockpile and Mineral Resource shell adjustments, depletion and exclusion of hard material
0.04	-0.12	-73%	Changes predominantly due to depletion
11.45	-1.41	-11%	Changes predominantly due to depletion, model updates and increase in costs
5.07	-0.05	-1%	
2.10	-0.43	-17%	Decrease due to a more constrained geological model and a higher cut-off grade for underground mining
8.89	8.89		New acquisition plus reduction due to constraining Mineral Resource in pit shells
4.14	4.14		New acquisition plus increased underground Ore Reserve
 67.38	-0.10	0%	
26.14	4.52	21%	

Reconciliation of Mineral Resource and Ore Reserve cont.

as at 31 December 2009											
					Au	Content (attributable	e) Moz			
Mine	0.1	0000	Deple-	Gold	0	Explo-	Metho-		Model	Scope	
	Category	2008	tion	price	Cost	ration	dology	Other	change	change	
Australasia regi	JII										
Boddington	Resource	11.91	-	-	-	-	-	-11.91			
	Reserve	6.69	-					-6.69			
Sunrise Dam	Resource	3.85	-0.48	0.06	-	0.27	-	-0.08			
	Reserve	1.90	-0.45					-	0.13	0.15	
Tropicana	Resource	3.51	-	_	-	-	-	-			
	Reserve	-	-					-	2.31	_	
Total	Resource	19.27	-0.48	0.06	-	0.27	-	-11.99	-	-	
	Reserve	8.59	-0.45	-	-	-	-	-6.69	2.44	0.15	
North America r	region										
CC&V	Resource	13.31	-0.31	2.07	-0.49	0.60	-1.44	-			
	Reserve	4.93	-0.30					-	-0.02	-0.32	
Total	Resource	13.31	-0.31	2.07	-0.49	0.60	-1.44	-	-	-	
	Reserve	4.93	-0.30	-	-	-	-	-	-0.02	-0.32	
South America	region										
Cerro Vanguardia	Resource	3.73	-0.18	-	-	0.27	0.07	-			
	Reserve	1.84	-0.20					0.01	0.11	0.12	
Brasil Mineração	Resource	10.53	-0.39	-	-	0.29	0.46	-			
	Reserve	2.56	-0.35					0.08	-0.04	-0.08	
Serra Grande	Resource	0.98	-0.10	-	-	0.11	0.05	-			
	Reserve	0.36	-0.09					-	0.08	_	
Gramalote	Resource	1.04	-	-	-	0.46	-	-0.45			
	Reserve	0.00									
La Colosa	Resource	12.32	-	_	-	-	-	-			
	Reserve	0.00									
Total	Resource	28.59	-0.67	-	-	1.12	0.57	-0.45	-	-	
	Reserve	4.76	-0.64	-	-	-	-	0.09	0.15	0.04	
Grand total	Resource	240.98	-6.24	4.13	-6.96	6.79	-3.31	-8.71	-	-	
	Reserve	74.89	-5.24	-	-	-	-	-4.08	2.65	3.22	

1. Depletion: reduction in Ore Reserve based on ore delivered to the plant and corresponding in situ reduction in the Mineral Resource.

2. Model change: difference between the Ore Reserve based on the start of year and end of year Mineral Resource models.

3. Scope change: difference resulting from change in cut-off grade, mine call factor, new project studies and any other factors influencing the Ore Reserve estimations.

Au	Au Content (attributable) Moz			
		Net		
	2009	diff	%	Comment
	-	-11.91	-100%	Sold
	-	-6.69	-100%	Sold
	3.62	-0.24	-6%	
	1.73	-0.17	-9%	Gains due to additional drilling, design change and economic factors were offset by depletion
	3.51	-	0%	No change
	2.31	2.31	0%	First Ore Reserve reported for Tropicana, based on enhanced pre-feasibility study and owner mining
	7.13	-12.14	-63%	
	4.04	-4.55	-53%	
	13.74	0.43	3%	Depletion was offset by the addition of the Cresson pushback
	4.29	-0.63	-13%	Decrease is due to recovery curve changes based on updated data and cut-off grade changes
				facilitated by equipment constraints
	13.74	0.43	3%	
	4.29	-0.63	-13%	
	3.88	0.16	4%	Gains due to exploration
	1.88	0.04	2%	Slight gain due to change in design and operative costs
	10.88	0.36	3%	Additions at CdS II, model changes at Cuiabá, Lamego and CdS I
	2.18	-0.38	-15%	
	1.03	0.05	5%	Change in mining method, reclassification and model
	0.35	-0.01	-4%	
	1.04	-	0%	Additional drilling resulted in upgrading of the Inferred Mineral Resource to Indicated Mineral Resource
	12.32	-	0%	No change
	29.16	0.57	2%	
	4.41	-0.36	-7%	
2	226.68	-14.30	-6%	
	71.44	-3.45	-5%	

Southern Africa

Southern Africa









Namibia Navachab

Mineral Resource 3.73Moz Ore Reserve 1.63Moz

Operations

South Africa Vaal River

Great Noligwa

Mineral Resource Ore Reserve **Kopanang** 6.94Moz

1.60Moz

10.04Moz

3.35Moz

20.45Moz

7.14Moz

6.20Moz

0.80Moz

1.86Moz

1.74Moz

Mineral Resource Ore Reserve Moab Khotsong

Mineral Resource Ore Reserve

Tau Lekoa Mineral Resource Ore Reserve

Surface operations Mineral Resource

Ore Reserve

West Wits

Mponeng

Mineral Resource	49.83Moz
Ore Reserve	12.72Moz
Savuka	
Mineral Resource	3.84Moz
Ore Reserve	0.69Moz
TauTona	
Mineral Resource	6.20Moz
Ore Reserve	2.73Moz
Surface operations	
Mineral Resource	0.20Moz
Ore Reserve	$0.18M_{07}$

Regional overview

AngloGold Ashanti's Southern Africa region includes the group operations in South Africa and Namibia.

In 2009, the Southern Africa region produced 1.862Moz (57,922kg) of gold, equivalent to 40% of group production, at a total cash cost of \$472/oz.

The Mineral Resource in Southern Africa, attributable to AngloGold Ashanti, totalled 109.27Moz at year-end and the attributable Ore Reserve, 32.57Moz.

Mineral Resource by region (attributable)

				Contained	Contained
		Tonnes	Grade	gold	gold
as at 31 December 2009	Category	million	g/t	tonnes	Moz
Southern Africa	Measured	47.61	9.33	444.23	14.28
	Inferred	60.77	6.44 9.72	2,364.20 590.37	18.98
	Total	475.76	6.97	3,398.80	109.27

Ore Reserve by region (attributable)

				Contained	Contained
		Tonnes	Grade	gold	gold
as at 31 December 2009	Category	million	g/t	tonnes	Moz
Southern Africa	Proved	18.65	4.33	80.73	2.60
	Probable	246.36	3.78	932.22	29.97
	Total	265.01	3.82	1,012.95	32.57



South Africa

Regional overview

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

The Vaal River operations consist of the Great Noligwa, Kopanang, Moab Khotsong and Tau Lekoa mines. The primary reefs mined in this region are the Vaal Reef (VR) and the Ventersdorp Contact Reef (VCR) and the secondary Crystalkop Reef (C Reef).

The **West Wits operations** are made up of Mponeng, Savuka and TauTona, which are situated near the town of Carletonville. The primary reefs mined are the Carbon Leader Reef (CLR) and the VCR.

All seven 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.

The South African operations are all located in the rocks of the famous Witwatersrand Basin, which is regarded as the greatest gold-bearing repository on Earth.

Geology of the Witwatersrand Basin

The Witwatersrand Supergroup (deposited in area often described as the Witwatersrand Basin) comprises a 6km-thick sequence of predominantly argillaceous and arenaceous sediments that extend laterally for some 300km north-east/south-west and 100km north-west/south-east on the Kaapvaal Craton. The upper portion of the sequence contains the laterally extensive, gold-bearing quartz pebble conglomerate horizons (commonly referred to as "reefs").

Further west, south and east the basin is overlain by up to 4km of Archaean, Proterozoic and Mesozoic volcanic and sedimentary rocks. The Witwatersrand Basin is late Archaean in age and is considered to be around 2.7 to 2.8 billion years old.

The reefs, which are generally less than 2m thick, are widely considered to represent laterally extensive braided fluvial deposits. Separate fan systems were developed at different entry points and these are preserved as distinct goldfields with local geological variations. AngloGold Ashanti operates in two of these goldfields, known as the Carletonville (West Wits) and Klerksdorp (Vaal River) goldfields.

There is still debate about the origin of the gold mineralisation in the Witwatersrand Basin. Gold was generally considered to have been deposited syngenetically with the conglomerates, but increasingly an epigenetic theory of origin is being supported. Nonetheless, the most fundamental determinant of gold distribution in the basin remains the sedimentary features, such as facies variations and channel directions. Gold generally occurs in native form often associated with pyrite and carbon, with quartz being the main gangue mineral.

West Wits operations

Two reef horizons are exploited at the West Wits operations: the VCR, located at the top of the Central Rand Group, and the CLR near the base. The separation between the two reefs increases from north to south, from 400 to 900m, owing to nonconformity of the VCR horizon. TauTona and Savuka exploit both reefs, while Mponeng currently only mines the VCR. The structure is relatively simple, with rare instances of faults greater than 70m.

The CLR consists of one or more conglomerate units and varies from several centimetres to more than 3m in thickness. Regionally, the VCR dips at approximately 21°, but may vary between 5° and 50°, accompanied by changes in thickness of the conglomerate units. Where the conglomerate has the attitude of the regional dip, it tends to be thick, well-developed and accompanied by higher gold accumulations. Where the attitude departs significantly from the regional dip, the reef is thin and gold grades tend to be erratic.



West Wits operations

Vaal River operation

In order of importance, the reefs mined at the Vaal River operations are the VR, the VCR and the C Reef:

• The VR contains approximately 85% of the Ore Reserve tonnage with mining grades of between 10 and 20g/t gold and comprises a series of oligomictic conglomerates and quartize packages developed on successive non-conformities. Several distinct facies have been identified, each with its own unique gold distribution and grade characteristic.



Vaal River operations

- The VCR has a lower gold grade than the VR, and contains approximately 15% of the estimated Ore Reserve. The economic portion is concentrated in the western part of the lease area and can take the form of a massive conglomerate, a pyritic sand unit with intermittent pebble layers, or a thin conglomerate horizon. The reef is located at the contact between the overlying Kliprivierberg Lavas of the Ventersdorp Super Group and the underlying sediments of the Witwatersrand Super Group, which creates a distinctive seismic reflector. The VCR is located up to 1km above the VR.
- The C Reef is a thin, small-pebble conglomerate with a carbon-rich basal contact, located approximately 270m above the VR. It has less than 1% of the estimated Ore Reserve with gold grades similar to those of the VR, but less continuity. The most significant structural features are the north-east striking normal faults which dip to the north-west and south-east, resulting in zones of fault loss.

Mineral Resource and Ore Reserve gold prices and exchange rates

	Units	2009	2008
Gold price – Mineral Resource	US\$/oz	1,025	1,000
Gold price – Ore Reserve	US\$/oz	800	720
Exchange rate – South Africa	ZAR/US\$	8.85	8.67

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.

Exclusive Mineral Resource

The Exclusive Mineral Resource is defined as the inclusive Mineral Resource minus the in-situ Ore Reserve before stoping width, dilution and mine call factors (MCF) are applied. Scoping studies are conducted on this Exclusive Mineral Resource, where capital requirements and current costs are used to test economic potential. If these studies show no reasonable economic potential at the Mineral Resource gold price then the material is excluded from the Mineral Resource. All planned pillars (ahead of current mining) form part of the Exclusive Mineral Resource.

Details of average drillhole spacing and type in relation to Mineral Resource classification

				Type of o	drilling	g	
Mine/		Spacing	Diamond	RC BI	ast-	Other	Comments
Project	Category	m (- x -)		ł	hole		
Great	Measured	5 x 5	_	_	-	\checkmark	Chip sampling of stope faces
Noligwa	Indicated	100 x 100	\checkmark	-	-	_	Diamond drilling from development ends
	Inferred	200 x 200	\checkmark	-	_	-	Diamond drilling from development ends
	Grade control		_	_	_	-	See Measured category
Kopanang	Measured	5 x 5	-	-	-	\checkmark	Chip sampling of stope faces
	Indicated	200 x 200	\checkmark	-	_	-	Diamond drilling from development ends
	Inferred	1,000 x 1,0)00 🗸	-	-	-	Surface drillholes
	Grade control		_	-	_	-	See Measured category

				Type of	drilling	g	
Mine/		Spacing I	Diamond	RC B	last-	Other	Comments
Project	Category	m (- x -)			hole		
Moab	Measured	5 x 5	_	_	-	\checkmark	Chip sampling of stope faces
Khotsong	Indicated	2 x 200	\checkmark	-	-	-	Diamond drilling from development ends
	Inferred	1,000 x 1,00	0 🗸	-	-	-	Surface drillholes
	Grade control		-	-	-	-	See Measured category
Mponeng	Measured	5 x 5	-	-	-	\checkmark	Chip sampling of stope faces
	Indicated	100 x 100	\checkmark	-	_	-	Diamond drilling from development ends
	Inferred	1,000 x 1,00	0 🗸	-	_	-	Surface drillholes
	Grade control		_	-	-	-	See Measured category
Savuka	Measured	5 x 5	_	-	_	\checkmark	Chip sampling of stope faces
	Indicated	100 x 100	\checkmark	-	-	-	Diamond drilling from development ends
	Inferred	1,000 x 1,00	0 🗸	-	_	-	Surface drillholes
	Grade control		_	-	-	-	See Measured category
Tau Lekoa	Measured	5 x 5	-	-	-	\checkmark	Chip sampling of stope faces
	Indicated	50 x 200	\checkmark	-	_	_	Diamond drilling from development ends
	Inferred	1,000 x 1,00	0 🗸	-	-	-	Surface drillholes
	Grade control		_	-	-	-	See Measured category
TauTona	Measured	5 x 5	_	-	-	\checkmark	Chip sampling of stope faces
	Indicated	2 x 200	_	-	-	\checkmark	Diamond drilling from development ends
	Inferred	1,000 x 1,00	0 🗸	-	_	-	Surface drillholes
	Grade control		-	-	_	-	See Measured category
Vaal River	Measured	-	-	-	-	\checkmark	Run of mine sampling
Surface	Indicated	-	_	-	-	\checkmark	Run of mine sampling
	Inferred	-	-	-	-	\checkmark	Run of mine sampling
	Grade control	-	_	-	-	\checkmark	Run of mine sampling
West Wits	Measured	-	_	-	_	\checkmark	Run of mine sampling
Surface	Indicated	_	_	_	_	\checkmark	Run of mine sampling
	Inferred	_	_	-	_	\checkmark	Run of mine sampling
	Grade control	-	_	_	_	1	Run of mine sampling

Details of average drillhole spacing and type in relation to Mineral Resource classification cont.

Ore Reserve estimation

All mine designs are undertaken using the Cadsmine[®] 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.

Inferred Mineral Resource in business plan

The LOM plans include a minimal Inferred Mineral Resource.

Ore Reserve modifying factors

as at 31 December 2009					Mine call	Metal-
	Cut-off	Cut-off	Stoping		factor	lurgical
Mino	weighted	grade	width	Dilution	(MCF)	recovery
Mine	g/t	cmg/t	cm	%	%	%
Great Noligwa						
Crystalkop Reef	9.20	1,200	129.9	1	63.20	96.34
Vaal Reef	7.10	1,200	169.1	33	63.20	96.34
Kopanang						
Crystalkop Reef	4.90	500	102.0	55	68.44	97.54
Vaal Reef Base	4.90	500	102.0	55	68.44	97.54
Vaal Reef EDOM	4.90	500	102.0	47	68.44	97.54
Moab Khotsong						
C Reef – Middle Mine area	4.57	750	164.0	24	62.90	94.57
Lower Mine – area PZ2	5.90	750	127.2	28	78.00	96.88
VR – Middle Mine area	5.06	750	148.2	43	80.05	97.13
VR – Top Mine area	4.57	750	164.0	44	68.82	96.95
Tau Lekoa						
Jonkerskraal	2.78	400	144.0	29	84.32	97.35
VCR Base	2.78	400	144.0	29	84.32	97.35
Vaal River Surface						
SA Met – rock dump	0.38	-	-	-	100.00	91.00
SA Met – tailings dump	0.28	-	-	-	100.00	48.00
Mponeng						
CLR below 120 level	6.41	750	117.0	20	81.00	98.45
TauTona CLR Eastern Block	7.89	750	95.0	76	81.00	98.45
VCR 109 to 120 level	5.36	750	140.0	40	86.27	98.00
VCR above 109 level	5.36	750	140.0	39	87.04	97.95
VCR below 120 level	5.36	750	140.0	32	91.96	98.24
Savuka						
Carbon Leader Reef	7.96	900	113.0	63	63.46	97.31
Ventersdorp Contact Reef	7.96	900	113.0	75	63.46	97.31
TauTona						
CLR – 1C11	7.89	947	120.0	57	81.51	97.78
CLR Base	9.97	947	95.0	149	81.51	97.78
CLR below 120	9.97	947	95.0	61	81.51	97.78
EOB between 100 & 112 levels	9.97	947	95.0	32	81.51	97.78
VCR shaft pillar	5.26	947	180.0	42	85.00	97.78
West Wits Surface						
WWGO – rock dump	0.51	_	_	-	100.00	91.00
WWGO – tailings dump	-	_	_	-	-	_

Development sampling results – January to December 2009

Development values represent actual results of sampling, no allowances having been made for adjustments necessary in estimating the Ore Reserve.

	Advanced		Average	Sampl	led gold	Ura	nium
Statistics are shown in	metres	Sampled	channel	Average	Average	Average	Average
metric units	(total)	metres	width (cm)	g/t	cm g/t	kg/t	cm kg/t
Vaal River							
Great Noligwa							
Vaal Reef	2,842	196	108.5	8.93	969	0.62	67.41
Kopanang							
Vaal Reef	25,653	2,606	25.2	67.66	1,705	3.55	93.00
Moab Khotsong							
Vaal Reef	17,644	1,488	130.8	22.13	2,895	1.12	146.69
Tau Lekoa							
Ventersdorp Contact Reef	8,084	1,116	91.5	8.30	759	0.02	2.17
West Wits							
TauTona							
Ventersdorp Contact Reef	720	64	147.7	14.43	2,132	0.11	15.69
Carbon Leader Reef	8,412	174	12.8	211.80	2,711	2.48	31.70
Savuka							
Ventersdorp Contact Reef	-	34	100.8	24.05	2,424	-	-
Carbon Leader Reef	1,350	36	100.3	53.18	5,334	-	_
Mponeng							
Ventersdorp Contact Reef	17,465	2,446	58.0	34.95	2,027	-	-



Uranium

AngloGold Ashanti produces a uranium oxide concentrate (U_3O_8) as a by-product from its South African gold mining operations. AngloGold Ashanti currently produces between 500 and 600t of U_3O_8 annually. Although mined as a by-product of gold for many years, U_3O_8 was not considered a Mineral Resource until 2005. Due to the rapid increase in the U_3O_8 price over the last few years, renewed focus has been placed on the U_3O_8 content within the Witwatersrand reefs.

The AngloGold Ashanti mines in the Vaal River region that currently produce uranium oxide as a by-product are Great Noligwa, Kopanang, and Moab Khotsong. The uranium oxide is extracted from the VR, although Great Noligwa mine also produces some uranium oxide from the C Reef. The mines in the West Wits region that have uranium Mineral Resources are Mponeng, Savuka and TauTona and in this mining region the uranium is only present in the CLR and is currently not being extracted.

The mineralised ore from Moab Khotsong, Great Noligwa and Kopanang 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 Nufcor where the material is calcined and packed for shipment to the converters.

The surface tailings storage facilities that have been classified as uranium Mineral Resources are the Kopanang Paydam and the tailings storage facilities in the West Wits region. Uraninite and brannerite are the most common uranium-bearing minerals, although uraniferous leucoxene and coffinite are also present. Uraninite was the original primary uranium-bearing mineral and was possibly introduced as detrital material during the deposition of the Witwatersrand sediments.

				Contained	
	Resource	Tonnes	Grade	uranium oxide	Pounds
Mine/Project	category	million	kg/t	tonnes	million
Great Noligwa	Measured	_	-	-	-
	Indicated	15.46	0.42	6 ,525	14.39
	Inferred	2.60	0.43	1,120	2.47
	Total	18.06	0.42	7,645	16.85
Kopanang	Measured	_	_	-	_
	Indicated	22.30	0.74	16,459	36.29
	Inferred	2.17	0.60	1,307	2.88
	Total	24.47	0.73	17,766	39.17
Moab Khotsong	Measured	2.27	0.77	1,755	3.87
	Indicated	17.34	0.97	16,825	37.09
	Inferred	9.99	0.88	8,764	19.32
	Total	29.61	0.92	27,344	60.28
Vaal River Surface	Measured	_	_	_	_
	Indicated	48.72	0.09	4,434	9.77
	Inferred	-	-	-	-
	Total	48.72	0.09	4,434	9.77
Mponeng	Measured	_	-	_	_
	Indicated	31.16	0.17	5,439	11.99
	Inferred	14.87	0.17	2,533	5.58
	Total	46.02	0.17	7,972	17.58

Mineral Resource – Uranium (U₃O₈)

				Contained	
	Resource	Tonnes	Grade	uranium oxide	Pounds
Mine/Project	category	million	kg/t	tonnes	million
Savuka	Measured	_	_	_	_
	Indicated	6.59	0.26	1,700	3.75
	Inferred	-	_	_	-
	Total	6.59	0.26	1,700	3.75
TauTona	Measured	_	_	_	-
	Indicated	8.26	0.28	2,317	5.11
	Inferred	-	-	-	-
	Total	8.26	0.28	2,317	5.11
Total	Measured	2.27	0.77	1,755	3.87
	Indicated	149.83	0.36	53,700	118.39
	Inferred	29.63	0.46	13,724	30.26
	Total	181.74	0.38	69,179	152.51

Mineral Resource – Uranium (U_3O_8) cont.

Ore Reserve – Uranium (U₃O₈)

					Contained
	Resource	Tonnes	Grade	uranium oxide	Pounds
Mine/Project	category	million	kg/t	tonnes	million
Great Noligwa	Proved	3.66	0.24	886	1.95
	Probable	3.04	0.28	849	1.87
	Total	6.70	0.26	1,735	3.82
Kopanang	Proved	1.00	0.19	187	0.41
	Probable	17.25	0.15	2,646	5.83
	Total	18.25	0.16	2,833	6.25
Moab Khotsong	Proved	1.17	0.36	421	0.93
	Probable	18.77	0.63	11,794	26.00
	Total	19.93	0.61	12,215	26.93
Vaal River Surface	Proved	_	_	-	-
	Probable	0.10	1.30	130	0.29
	Total	0.10	1.30	130	0.29
Total	Proved	5.83	0.26	1,493	3.29
	Probable	39.16	0.39	15,419	33.99
	Total	44.98	0.38	16,912	37.29



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 mine exploits the VR at depths varying between 1,500 and 2,600m below surface. Scattered mining methods are employed where access to the reef is from the footwall haulage and return airway development, with cross-cuts developed every 180m to the reef horizon. Raises are then developed on-reef to the level above, and the reef is stoped out on-strike. The Great Noligwa lease area is constrained to the north by Pamodzi gold mine, to the east by Buffelsfontein gold mine, to the south by the Jersey and Die Hoek faults, (which displace the reef down by approximately 1,000 and 900m respectively), and to the west by Kopanang.

Geology

The VR is the principal economic horizon at Great Noligwa, accounting for over 90% of the gold produced at the mine. The VR is part of the Witwatersrand Supergroup and is stratigraphically located near the middle of the Central Rand Group in the Johannesburg Subgroup on an unconformity below the Krugersdorp Formation. The VR unit can reach a maximum thickness of more than 2m and consists of a thin basal conglomerate (the C Facies) and a thicker sequence of upper conglomerates (the A Facies), separated by internal quartzite (the B Facies). Across most of the Great Noligwa lease area, the A Facies is the principal economic horizon within the VR, although sporadic remnants of C Facies may be preserved below the A Facies. The high gold values in the VR are often associated with high uranium values. 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 a high-grade, north-south orientated channel containing two economic horizons has been exposed. To the east and west of this channel the C Reef is poorly developed with relatively small areas of economic interest. High uranium values in the C Reef are also often associated with high gold values. 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 a deeply eroded Kimberley Channel and the Jersey fault.

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Great Noligwa	Category	million	g/t	tonnes	Moz
Crystalkop Reef	Measured	0.91	7.15	6.53	0.21
	Indicated	4.98	9.53	47.45	1.53
	Inferred	1.47	8.52	12.50	0.40
	Total	7.36	9.03	66.48	2.14
Vaal Reef	Measured	7.03	14.23	100.06	3.22
	Indicated	2.54	14.06	35.66	1.15
	Inferred	1.13	12.09	13.69	0.44
	Total	10.70	13.96	149.41	4.80
Great Noligwa	Total	18.06	11.95	215.89	6.94

Mineral Resource (attributable)

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Great Noligwa	Category	million	g/t	tonnes	Moz
	Measured	4.99	12.38	61.76	1.99
	Indicated	4.99	9.86	49.14	1.58
	Inferred	2.20	9.33	20.49	0.66
Great Noligwa	Total	12.17	10.79	131.39	4.22



Section through Great Noligwa and Moab Khotsong mines

Great Noligwa: Mineral Resource reconciliation 2008 vs 2009



Great Noligwa: Ore Reserve reconciliation 2008 vs 2009



Ore Reserve

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Great Noligwa	Category	million	g/t	tonnes	Moz
Crystalkop Reef	Proved	0.47	6.11	2.85	0.09
	Probable	1.37	6.10	8.33	0.27
	Total	1.83	6.10	11.18	0.36
Vaal Reef	Proved	3.19	7.98	25.48	0.82
	Probable	1.67	7.85	13.13	0.42
	Total	4.86	7.94	38.61	1.24
Great Noligwa	Total	6.70	7.44	49.80	1.60

Great Noligwa – underground (metric)



Competent persons

		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Mineral Resource	Frans Putter	SACNASP	400052/95	25 years
Ore Reserve	Andre Kruger	PLATO	PMS0114	31 years



South Africa – Kopanang

Location

Kopanang mine is located in the Free State province; roughly 170km south-west of Johannesburg and approximately 10km south-east of the town of Orkney on the farms Pretoriuskraal 53 and Grootdraai 468. The mine has been in production since 1984 and was originally known as Vaal Reef's 9 Shaft. Kopanang's current mine lease incorporates an area of 35km², 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 exploited, the most important of which is the VR. Gold is the primary commodity being extracted, with uranium oxide as a by-product. The economic VR and Crystalkop conglomerates are exposed via a twin-shaft system that reaches a depth of 2,340m. The VR is exploited at depths of between 1,300 and 2,600m below surface. Kopanang almost exclusively exploits the VR, although minor amounts of gold are also extracted from the C Reef, which is stratigraphically located about 250m above the VR.

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 and better developed and attains 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 a thickness of 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 Conglomerates Formation. To the south of this unconformity, the reef can be eliminated by either the Kimberley erosion channels or bedding parallel faulting.

The VR and C Reef generally dip towards the south-east at between 10° and 30°.

Kopanang is situated in a structurally complicated 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 effect the reef at Kopanang. The interaction of these structures can be very complicated as the relationship of different aged structures is made more difficult by many of these faults having been reactivated at latter stages, or been active over long periods of time. This 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 focused 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 will be explored by a combination of exploration drilling and development. An extensive C Reef exploration programme started during 2009 and will continue in 2010.

Geological section of Kopanang mine



Mineral Resource (attributable)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Kopanang	Category	million	g/t	tonnes	Moz
Crystalkop Reef	Measured	0.07	12.23	0.86	0.03
	Indicated	0.35	12.81	4.43	0.14
	Inferred	0.98	14.89	14.60	0.47
	Total	1.40	14.24	19.89	0.64
Vaal Reef Base	Measured	3.59	16.39	58.83	1.89
	Indicated	16.74	11.71	196.04	6.30
	Inferred	0.90	12.54	11.34	0.36
	Total	21.23	12.54	266.21	8.56
Vaal Reef EDOM	Measured	0.19	15.96	3.08	0.10
	Indicated	1.36	14.16	19.23	0.62
	Inferred	0.29	13.03	3.75	0.12
	Total	1.84	14.18	26.06	0.84
Kopanang	Total	24.47	12.76	312.16	10.04

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Kopanang	Category	million	g/t	tonnes	Moz
	Measured	3.15	16.80	52.97	1.70
	Indicated	6.43	12.09	77.76	2.50
	Inferred	1.90	14.05	26.65	0.86
Kopanang	Total	11.48	13.71	157.38	5.06

Exclusive Mineral Resource

Approximately 46% of the exclusive Mineral Resource is expected to be taken up in safety and remnant pillars, areas beyond window of opportunity, areas beyond infrastructure and due to design and schedule losses.



Kopanang: Mineral Resource reconciliation 2008 vs 2009





Ore Reserve

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Kopanang	Category	million	g/t	tonnes	Moz
Crystalkop Reef	Proved	0.00	5.70	0.01	0.00
	Probable	0.00	5.70	0.02	0.00
	Total	0.01	5.70	0.04	0.00
Vaal Reef Base	Proved	0.87	6.96	6.02	0.19
	Probable	15.23	5.61	85.50	2.75
	Total	16.10	5.69	91.52	2.94
Vaal Reef EDOM	Proved	0.13	6.27	0.83	0.03
	Probable	2.02	5.86	11.81	0.38
	Total	2.15	5.88	12.64	0.41
Kopanang	Total	18.25	5.71	104.20	3.35





Competent persons

		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Mineral Resource	Leanne Brenda Freese	GSSA	966602	13 years
Ore Reserve	Andre Johnson	SACNASP	400011/06	20 years

South Africa – Moab Khotsong

Location

The Moab Project was approved in 1997 to exploit two distinct portions of the Moab lease area, namely the Middle Mine (85 to 101 level) and the Lower Mine (101 to 118 level). During 2008, the SV4 section of Great Noligwa was incorporated into Moab Khotsong and this section is now termed the Top Mine.

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.

Due to the magnitude of throw 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. No information pertaining to the reef blocks being accessed can be gleaned from the mapping of the access development. Only once the development is through the Die Hoek fault does mapping have any bearing on the reef blocks, and even then a great amount of exploration drilling is required to accurately delineate these blocks.

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.

Project Zaaiplaats 2

Project Zaaiplaats 2 (PZ2) is situated at Moab Khotsong in the Vaal River region of AngloGold Ashanti's South African operations. Moab Khotsong is the newest mine in the region and the PZ2 project is aimed at optimally extracting the deeper portion (lower mine) of the VR at Moab Khotsong. The PZ2 project is planned to extend the life of Moab Khotsong another 27 years until the mid-2030s. The project also allows other opportunities (mining and metallurgical) to come to the fore that would otherwise have been uneconomic.

The Lower Mine orebody will be accessed via twin double-declines angled at 8°, the upper and lower declines, from which five production levels will originate. These will allow two attacking points into the orebody, as well as providing sufficient ventilation capacity. One of the lower declines will be a dedicated ore-handling system via a conveyor belt; each of the decline sets will have a dedicated men and material decline (using chairlifts and a monorail) and the remaining upper decline will carry the majority of the services into the orebody. Shaft bottom will be 4,027m below datum (3,509m below collar).

Brownfields exploration

Brownfields exploration is currently focused on improving geological confidence and four surface drilling machines, targeting the Project Zaaiplaats Mineral Resource, were in operation during the year.

Surface drilling continued in the Project Zaaiplaats area (Moab Lower Mine), where the target is the prospective VR. Progress is behind schedule due to in-hole problems.

Progress in the MZA9 long deflection to the east, intended to raise the confidence of an Inferred block in the north-east portion of the Zaaiplaats project area and also to confirm the structure between the Middle and Lower mines, was delayed due to caving problems. MHH2 is scheduled to commence on completion of MZA9.

In the north-west of the main Zaaiplaats block, MMB5 is drilling to test a proposed target block along the Jersey Fault cut-off. Progress in Deflection 5, currently at a depth of 3,362m, was delayed by caving in the Kimberley Channel. The first VR intersection is now expected during the first quarter of 2010.

Progress in MGR8, currently at a depth of 3,070m, was delayed by caving. The first VR intersection is now expected during during the first quarter of 2010.

The long deflection of MGR6 was advanced to a depth of 2,152m in Ventersdorp lavas. The programme is currently ahead of schedule and the first VR intersection is now expected in the first quarter of 2010.

Currently four LIB (long inclined boreholes) drilling machines are deployed at Moab Khotsong. The Moab Khotsong LIB drilling programme can be subdivided into five primary categories:

- upgrading the confidence in the level 1 structure to optimise the placement of the primary haulage systems;
- proving up postulated reef blocks;
- upgrading the confidence of the MKF1 Inferred Mineral Resource blocks of the Middle Mine below 101;
- confirming the presence of the Project Zaaiplaats early gold block; and
- confirming the presence of Inferred C Reef Mineral Resource in the Moab Khotsong area and upgrading the postulated C Reef blue sky blocks to an Inferred Mineral Resource.

Mineral Resource (attributable)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Moab Khotsong	Category	million	g/t	tonnes	Moz
C Beef – Middle Mine area	Measured	_	_	_	_
	Indicated	_	_	_	_
	Inferred	0.91	9.47	8.63	0.28
	Total	0.91	9 47	8.63	0.28
		0101	0111	0.00	0120
Lower Mine – area A	Measured	-	-	-	-
	Indicated	0.15	25.09	3.83	0.12
		1.00	23.73	23.71	0.76
	Total	1.15	23.91	27.54	0.89
Lower Mine – area B	Measured	_	_	-	-
	Indicated	2.15	11.86	25.48	0.82
	Inferred	0.92	11.95	11.05	0.36
	Total	3.07	11.89	36.53	1.17
Lower Mine – area C	Measured	_	_	_	_
	Indicated	0.04	12.38	0.44	0.01
	Inferred	2.33	13.38	31.14	1.00
	Total	2.36	13.36	31.58	1.02
Lower Mine – area PZ2	Ivieasured	-	-	100 50	-
	Indicated	7.90	24.18	192.52	0.19
		2.15	27.47	75.50	2.43
	Total	10.71	25.03	268.08	8.62
VR – GNM shaft pillar	Measured	0.11	16.95	1.83	0.06
	Indicated	1.50	16.15	24.16	0.78
	Inferred	-	-	-	-
	Total	1.60	16.20	25.98	0.84
VR – Middle Mine	Measured	1.46	15.10	22.05	0.71
	Indicated	4.76	27.09	128.98	4.15
	Inferred	1.75	25.79	45.06	1.45
	Total	7.97	24.61	196.09	6.30
VR – Top Mine	Measured	0.71	24.88	17.58	0.57
	Indicated	0.79	25.68	20.24	0.65
	Inferred	0.33	11.62	3.88	0.12
	Total	1.83	22.80	41.69	1.34
Moab Khotsong	Total	29.61	21.48	636.12	20.45

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Moab Khotsong	Category	million	g/t	tonnes	Moz
	Measured	1.11	22.70	25.10	0.81
	Indicated	3.83	33.33	127.74	4.11
	Inferred	9.99	19.91	199.03	6.40
Moab Khotsong	Total	14.93	23.56	351.88	11.31

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.

Mineral Resource below infrastructure

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Moab Khotsong	Category	million	g/t	tonnes	Moz
C Reef – Middle Mine	Total	0.91	9.47	8.63	0.28
VR – Top Mine	Total	0.20	14.92	2.97	0.10
VR – Middle Mine	Total	1.37	27.63	37.86	1.22
VR – Bottom Mine	Total	17.30	21.03	363.72	11.69
Moab Khotsong	Total	19.78	20.89	413.19	13.28

Moab Khotsong: Mineral Resource reconciliation 2008 vs 2009







as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Moab Khotsong	Category	million	g/t	tonnes	Moz
C Reef – Middle Mine	Proved	_	_	-	_
	Probable	0.16	1.50	0.23	0.01
	Total	0.16	1.50	0.23	0.01
VR – Bottom Mine	Proved	_	_	-	_
	Probable	11.84	10.35	122.56	3.94
	Total	11.84	10.35	122.56	3.94
VR – Middle Mine	Proved	0.67	10.18	6.77	0.22
	Probable	5.86	13.09	76.78	2.47
	Total	6.53	12.80	83.55	2.69
VR – Top Mine	Proved	0.50	10.79	5.43	0.17
	Probable	0.91	11.22	10.22	0.33
	Total	1.41	11.07	15.65	0.50
Moab Khotsong	Total	19.93	11.14	221.99	7.14

Ore Reserve

Ore Reserve below infrastructure

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Moab Khotsong	Category	million	g/t	tonnes	Moz
VR – Bottom Mine	Total	11.84	10.35	122.56	3.94

Moab Khotsong – underground (metric)



Competent persons

		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Mineral Resource	Terry Adam	GSSA	5532	32 years
Ore Reserve	Johan Wall	PLATO	PMS0164	26 years
South Africa – Tau Lekoa*

Location

Tau Lekoa is located about 8km west of the town of Orkney, at the western extreme of the Klerksdorp goldfields. The mine exploits the VCR at depths varying between 900 and 1,700m below surface. The VCR, the only reef exploited at Tau Lekoa, dips towards the west at an average angle of 28°. Tau Lekoa has a twin shaft system and mines to a depth of 1,650m. Tau Lekoa uses hydropower and has a centralised electro-hydraulic system as its primary source of energy production. Hydropower has been instrumental in improving labour productivity, which has played a vital role in assisting the mine to achieve its business objectives.

Geology

The VCR is a gold-bearing quartz pebble conglomerate (up to 5m thick) capping the uppermost 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 VCR is deposited over a number of terraces that are separated by slope material. Typically the terrace reef is a thicker, more robust conglomerate unit than the slope material, where hangingwall-footwall conditions may occur. The deepest terraces are the youngest, whereas the oldest terrace occupies a topographical horizon 28m above the youngest terrace. Generally the younger the terrace, the more mature the channel fill. The main channel is the youngest, most mature VCR facies at Tau Lekoa, and extends from the north-east into Tau Lekoa, before turning sharply towards the west. The older middle and upper terraces contain more immature conglomerates with more erratic gold grades.

The Tau Lekoa orebody is disrupted by a number of dykes and faults. The major faults present tend to be normal, trending northeast, and are of post-Ventersdorp age. Flats dipping normal and reverse faults of minor throw are also common. The majority of major faults strike in a north-north-east to south-south-west direction and these include the Schoonspruit and Nooitgedacht faults, both of which have displacements of over 100m. Low angle flat faulting affects the reef in the northern and southern parts of the mine. In addition to this, there are also a number of intrusives present, which vary in age from pre-Ventersdorp through to Karoo in age. These include the east-west striking Pickavance Dyke, which is associated with lateral movement and the north-north-west to south-south-east striking incompetent running dykes.

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Tau Lekoa	Category	million	g/t	tonnes	Moz
Jonkerskraal	Measured	0.21	13.44	2.86	0.09
	Indicated	14.95	3.81	57.00	1.83
	Inferred	0.01	1.89	0.02	0.00
	Total	15.17	3.95	59.87	1.92
VCR Base	Measured	2.83	5.83	16.48	0.53
	Indicated	4.50	5.06	22.76	0.73
	Inferred	3.13	6.07	18.97	0.61
	Total	10.46	5.57	58.21	1.87
Weltevreden	Measured	_	_	_	_
	Indicated	20.59	3.62	74.43	2.39
	Inferred	0.03	5.10	0.17	0.01
	Total	20.62	3.62	74.60	2.40
Tau Lekoa	Total	46.25	4.17	192.68	6.19

Mineral Resource (attributable)

* Tau Lekoa is currently held for sale, and once all conditions for a sale have been met, the asset will be transferred to the buyer. This is expected to take place during 2010, whereafter AngloGold Ashanti will restate its South African Mineral Resource and Ore Reserve.

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Tau Lekoa	Category	million	g/t	tonnes	Moz
	Measured	3.04	6.36	19.33	0.62
	Indicated	40.04	3.85	154.19	4.96
	Inferred	3.17	6.05	19.15	0.62
Tau Lekoa	Total	46.25	4.17	192.68	6.19

Tau Lekoa: Mineral Resource reconciliation 2008 vs 2009



Tau Lekoa: Ore Reserve reconciliation 2008 vs 2009





Ore Reserve

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Tau Lekoa	Category	million	g/t	tonnes	Moz
Jonkerskraal	Proved	0.06	5.26	0.30	0.01
	Probable	3.64	3.67	13.35	0.43
	Total	3.70	3.70	13.66	0.44
VCR Base	Proved	0.23	3.66	0.86	0.03
	Probable	2.42	4.24	10.29	0.33
	Total	2.66	4.19	11.15	0.36
Tau Lekoa	Total	6.36	3.90	24.81	0.80

Tau Lekoa – underground (metric)



		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Mineral Resource	Geo Steyn	SACNASP	400312/05	10 years
Ore Reserve	JC Oberholzer	PLATO	PMS0216	25 years

South Africa – Mponeng

Location

Mponeng lies on the West Wits Line, close to Carletonville in the province of Gauteng, 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 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, increasing the potential Mineral Resource.

Geology

The VCR is the only reef currently being mined at Mponeng. The VCR comprises of a quartz pebble conglomerate (up to 3m thick) capping the topmost 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 comprises of a series of argillaceous to proto-quartzites, 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 deposited on these different Witwatersrand footwalls. The age of the footwall Witwatersrand rocks increases from west to east. Most of the VCR mined lies on footwall strata of the Kimberley Formation, which is relatively argillaceous proto quartzite. The VCR is dominated by a series of channel terraces at different elevations, separated by slopes where the reef channel 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 shales and siltsones of the Booysens Formation. The hardness of the footwall units influences the development of the terraces.



Mponeng is also planning to mine the CLR. The CLR at Mponeng is on average a 20cm thick, tabular, auriferous quartz pebble conglomerate formed near the base of the Central Rand Group. The CLR is on average 900m deeper than the VCR. Major exploration drilling started in early 2008 in order to improve Mineral Resource confidence and confirm the geological structures that occur at the deep levels at which mining is planned. Of the three economic units that exist within the CLR, the Mponeng CLR target area is dominated by 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 orebodies are influenced by faulting as well as a series of intrusives of various ages that cross-cut the reefs. At these depths there is a large amount of inherent risk in mining through these structural features. The Geoscience department's primary role is to identify these features ahead of the face so that the correct mining approach can be applied to minimise the risk.

CLR Project

Two economically viable reefs are mined in the West Wits area, the shallower VCR and the deeper CLR. Both have been extensively mined at AngloGold Ashanti's TauTona and Savuka operations, while Mponeng has only mined the VCR. Both reefs 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 this represents a significant opportunity for Mponeng and for AngloGold Ashanti. A series of exploration holes collared underground have drilled sub-vertical holes from current VCR development towards the CLR to improve the confidence in the orebody. Information gained has been used to confirm the geological structures at depth that may affect a proposed new shaft system as well as generate more confidence in the current mineralisation and estimation models.

A project team has been set up to design a "new mine" to access the CLR via tertiary shafts from Mponeng, enabling the mine to extend its life, while maintaining production at current levels. The mine has been designed according to the sequential grid mining method, a technique developed at Elandsrand and Mponeng in the 1990s. This method involves pre-developing stoping grids and extracting the reef between the dip-stabilising pillars. This method has proved successful in the management of seismicity, both in reducing seismic energy and increasing mining flexibility. The shafts and infrastructure have been designed to fit the existing shaft system at Mponeng, and have the capacity to sustain high levels of production.

The extension of Mponeng via the CLR project provides 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 region. The approval of a CLR project will compliment further exploration and development of the WUDLS mine plan.

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.

During the year, surface drilling commenced in the WUDLS extension to the Mponeng mining rights area. Drillhole UD51 was re-opened for deepening to test the VCR. By year end the drillhole had reached a depth of 2,692m.



Mineral Resource (attributable)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Mponeng	Category	million	g/t	tonnes	Moz
CLR below 120 level	Measured	-	_	_	-
	Indicated	29.57	16.27	480.98	15.46
	Inferred	14.87	16.05	238.67	7.67
	Total	44.43	16.20	719.66	23.14
Mponeng WUDLS	Measured	-	-	-	_
	Indicated	-	-	-	- 1 74
		4.00	12.59	04.22	1.74
	Total	4.38	12.39	54.22	1.74
TauTona VCR shaft pillar	Measured	0.23	17.41	3.98	0.13
	Indicated	1.19	18.35	21.88	0.70
		-	-	-	
	Iotal	1.42	18.20	25.86	0.83
TauTona CLR shaft pillar	Measured	0.28	42.94	12.03	0.39
	Indicated	1.31	40.24	00.08	1.95
	Tatal	1.50	45.00	70.61	0.00
	Iotal	1.59	45.00	72.01	2.33
VCR 109 to 120 level	Measured	3.01	20.08	60.40	1.94
	Indicated	1.31	15.51	- 114.30	3.00
		10.00	10.04	171.70	5.00
	Iotal	10.38	16.84	1/4./8	5.62
VCR above 109 level	Measured	7.26	10.90	79.20	2.55
	Indicated	7.30	8.21	59.90	1.93
	Total	14.56	9.55	139.10	4.47
VCR below 120 level	Measured	0.09	22.65	2.02	0.07
	Indicated	8.92	10.84	150.13	4.83
	Total	9.01	16.90	152 15	1 89
	Management	5.01	10.90	152.15	4.09
VCR DIOCK I	Indicated	2 99	- 5 20	- 15 56	- 0.50
	Inferred	-	-	-	-
	Total	2.99	5.20	15.56	0.50
VCR block 3	Measured	0.08	15.46	1.16	0.04
	Indicated	7.70	10.95	84.37	2.71
	Inferred	-	_	-	-
	Total	7.78	10.99	85.53	2.75
VCR block 5	Measured	0.01	2.59	0.03	0.00
	Indicated	5.99	6.03	36.14	1.16
	Inferred	-	_	-	-
	Total	6.00	6.02	36.16	1.16
VCR outside project areas	Measured	0.04	4.01	0.16	0.01
	Indicated	9.85	7.52	74.02	2.38
					-
	Total	9.89	7.50	74.18	2.38
Mponeng	Total	112.44	13.78	1,549.82	49.83

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Mponeng	Category	million	g/t	tonnes	Moz
	Measured	8.77	15.70	137.73	4.43
	Indicated	40.89	15.59	637.50	20.50
	Inferred	3.85	17.33	66.74	2.15
Mponeng	Total	53.51	15.73	841.97	27.07

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 remaining ore will be mined by Mponeng from the VCR and CLR.

Mineral Resource below infrastructure

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Mponeng	Category	million	g/t	tonnes	Moz
VCR below 120 level	Total	9.01	16.90	152.15	4.89
CLR below 120 level	Total	44.43	16.20	719.66	23.14
WUDLS	Total	4.38	12.39	54.22	1.74
Mponeng	Total	57.81	16.02	926.03	29.77





Mponeng: Mineral Resource reconciliation 2008 vs 2009





Ore Reserve

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Mponeng	Category	million	g/t	tonnes	Moz
CLR below 120 level	Proved	_	_	_	_
	Probable	17.59	12.37	217.63	7.00
	Total	17.59	12.37	217.63	7.00
TauTona CLR eastern block	Proved	_	_	_	_
	Probable	0.50	8.34	4.14	0.13
	Total	0.50	8.34	4.14	0.13
VCR 109 to 120 level	Proved	1.20	10.91	13.13	0.42
	Probable	7.11	8.85	62.89	2.02
	Total	8.31	9.15	76.01	2.44
VCR above 109 level	Proved	1.00	5.07	5.07	0.16
	Probable	3.19	4.38	13.98	0.45
	Total	4.19	4.54	19.05	0.61
VCR below 120 level	Proved	0.02	9.88	0.20	0.01
	Probable	7.41	10.59	78.47	2.52
	Total	7.43	10.59	78.67	2.53
Mponeng	Total	38.02	10.40	395.51	12.72

Ore Reserve below infrastructure

as at 31 December 2009					
				Contained	contained
		Tonnes	Grade	gold	gold
Mponeng	Category	million	g/t	tonnes	Moz
VCR below 120 level	Total	7.43	10.59	78.67	2.53
CLR below 120 level	Total	17.59	12.37	217.63	7.00
Mponeng	Total	25.02	11.84	296.30	9.53

Mponeng – underground (metric)



		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Mineral Resource	Gareth Flitton	GSSA	9647581	7 years
Ore Reserve	Piet Enslin	PLATO	PMS0183	26 years



South Africa – Savuka

Location

The 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 between 2,600 and 3,500m below surface as well as the VCR in smaller proportions. The VCR, which is on average about 700m above the CLR has nearly been mined out. Currently operations are attempting to extract remnant pillars that are above the current pay limit.

Savuka has converted into a sequential grid mine. CLR and VCR panels are mined accordingly.

Geology

The CLR is a thin, on average 20cm thick, tabular, auriferous quartz pebble conglomerate formed near the base of the Central Rand Group. The CLR 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 along the south and west at 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 CLR conglomerates. The CLR has not been mined since 22 May 2009 due to a seismic event that left the lower levels inaccessible through the main shaft system. Production has since been focused on extracting pillars of VCR.

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 base of the Ventersdorp Lava strikes in a direction across the north-western part of the lease area.

The orebody is cross cut by geological features that displace the reef horizon. The faulting, in conjunction with the numerous intrusives that also intersect the orebody on the various levels, is responsible for most of the risk inherent with this type of deep-level gold mining. There is also a high level of seismicity associated with these features.

Exploration

The Middelvlei Reef is another Witwatersrand auriferous placer mined in the West Wits. It is located approximately 90m above the CLR stratigraphically. This reef comprises interbeds of quartz-pebble conglomerates, quartz wackes and thin siltstones. The channel thickness varies up to a thickness of 1.6m, and the Middelvlei Reef is highly channelled with gold pay chutes most likely occurring at the base of the channels. These trends are similar in direction to the palaeo-current directions of the underlying footwall sequence. Middelvlei Reef has been mined at Blyvooruitzicht mine to the north of Savuka as well as at Gold Fields' Driefontein gold mine, but not at Savuka.

Exploration for these channels will be done by drilling from diamond drilling platforms developed at the end of each cross cut at the CLR intersection. The series of exploration holes hopes to delineate the existence of a high-grade channel.

Three exploration LIB holes are planned to be drilled from 113 level towards the west. The targets will gain much needed geological information on CLR to improve the geological confidence in the mine plan in that area. The holes will also be extended to Middelvlei Reef.

Mineral Resource (attributable)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Savuka	Category	million	g/t	tonnes	Moz
Carbon Leader Reef	Measured	0.58	14.40	8.42	0.27
	Indicated	6.01	17.16	103.10	3.31
	Inferred	-	-	-	-
	Total	6.59	16.92	111.52	3.59
Ventersdorp Contact Reef	Measured	0.39	6.24	2.41	0.08
	Indicated	0.35	15.99	5.60	0.18
	Inferred	-	-	-	-
	Total	0.74	10.88	8.00	0.26
Savuka	Total	7.33	16.31	119.52	3.84

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Savuka	Category	million	g/t	tonnes	Moz
	Measured	0.88	10.81	9.52	0.31
	Indicated	0.48	74.88	36.18	1.16
	Inferred	-	_	_	-
Savuka	Total	1.36	33.50	45.70	1.47





Change

Savuka: Ore Reserve reconciliation 2008 vs 2009



Ore Reserve

as at 31 December 2009

				Contained	Contained
		Tonnes	Grade	gold	gold
Savuka	Category	million	g/t	tonnes	Moz
Carbon Leader Reef	Proved	0.07	6.50	0.47	0.01
	Probable	3.14	6.30	19.78	0.64
	Total	3.21	6.30	20.25	0.65
Ventersdorp Contact Reef	Proved	0.05	3.73	0.19	0.01
	Probable	0.21	4.70	0.97	0.03
	Total	0.26	4.51	1.16	0.04
Savuka	Total	3.47	6.17	21.40	0.69

Savuka - underground (metric)



		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Mineral Resource	Gareth Flitton	GSSA	9647581	7 years
Ore Reserve	Piet Enslin	PLATO	PMS0183	26 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 formed 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, contributing 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.

The Exclusive Mineral Resource is dependent on mining strategy, but approximately 3.0Moz or 92% of the Exclusive Mineral Resource is expected to be taken up in safety and remnant pillars ahead of current mining.

Exploration

Three projects will continue at TauTona during 2010; the CLR below 120 area, the area east of the Bank Dyke and the area east of the mine. The aim is to increase the structural confidence and updating the facies model within these areas.



TauTona schematic east-west section

CLR facies map



Mineral Resource (attributable)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
TauTona	Category	million	g/t	tonnes	Moz
CLR – 1C11	Measured Indicated Inferred	0.06 0.49 -	28.05 30.58 -	1.78 14.91 –	0.06 0.48 -
	Total	0.55	30.29	16.69	0.54
CLR base	Measured	0.81	23.41	18.96	0.61
	Indicated	4.37	20.96	91.66	2.95
	Inferred	-	-	-	-
	Total	5.18	21.34	110.62	3.56
CLR below 120	Measured	0.02	28.99	0.52	0.02
	Indicated	0.53	28.15	15.00	0.48
	Inferred	-	_	-	-
	Total	0.55	28.18	15.53	0.50

Mineral Resource (attributable) cont.

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
TauTona	Category	million	g/t	tonnes	Moz
EOB between 100 & 112 levels	Measured	0.19	26.06	4.98	0.16
	Indicated	1.78	20.64	36.75	1.18
	Inferred	_	-	-	-
	Total	1.97	21.16	41.74	1.34
VCR shaft pillar	Measured	0.21	21.63	4.58	0.15
	Indicated	0.19	19.18	3.57	0.11
	Inferred	-	-	-	-
	Total	0.40	20.48	8.15	0.26
TauTona	Total	8.65	22.27	192.72	6.20

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
TauTona	Category	million	g/t	tonnes	Moz
	Measured	0.95	22.95	21.75	0.70
	Indicated	3.20	20.91	66.96	2.15
	Inferred	_	_	-	-
TauTona	Total	4.15	21.38	88.71	2.85

Mineral Resource below infrastructure

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
TauTona	Category	million	g/t	tonnes	Moz
CLR below 120	Total	0.40	28.88	11.51	0.37





TauTona: Ore Reserve reconciliation 2008 vs 2009



as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
TauTona	Category	million	g/t	tonnes	Moz
CLR – 1C11	Proved	_	13.61	0.06	_
	Probable	0.68	10.67	7.21	0.23
	Total	0.68	10.68	7.26	0.23
CLR base	Proved	0.17	6.89	1.15	0.04
	Probable	5.44	7.53	41.00	1.32
	Total	5.61	7.51	42.15	1.36
CLR below 120	Proved	0.01	11.55	0.15	-
	Probable	0.47	14.00	6.55	0.21
	Total	0.48	13.93	6.70	0.22
EOB between 100 & 112 levels	Proved	0.11	21.10	2.31	0.07
	Probable	1.68	12.90	21.68	0.70
	Total	1.79	13.40	23.99	0.77
VCR shaft pillar	Proved	0.04	7.42	0.33	0.01
	Probable	0.42	10.76	4.54	0.15
	Total	0.47	10.44	4.87	0.16
TauTona	Total	9.03	9.41	84.98	2.73

Ore Reserve

Ore Reserve below infrastructure

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
TauTona	Category	million	g/t	tonnes	Moz
CLR below 120	Total	0.48	13.93	6.70	0.22

TauTona – underground (metric)



		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Mineral Resource	Katarien Deysel	SACNASP	400093/05	9 years
Ore Reserve	Michael Wayne Armstrong	PLATO	MS0054	25 years

South Africa – Surface operations

The Metallurgy Department, as a business unit, produces gold in addition to that derived from the primary reef sources by treating lower-grade surface sources of gold-bearing material. The strategy is the maximum utilisation of the treatment gap.

The surface source operations comprise the Vaal River and West Wits Surface sources 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, North West Province, South Africa. These operations comprise waste rock dumps and tailings dams resulting from the mining and processing of the VR and VCR which were mined at the Vaal River underground mines in the Klerksdorp area.

The West Wits Surface operations are located on the West Wits Line, near the town of Carletonville, straddling the border between the North West Province and Gauteng. These operations comprise waste rock dumps and tailings dams sourced from the mining and processing of CLR and VCR which were mined at the West Wits underground mines in the Carletonville/Fochville area.

Gold is mainly produced by the reclamation of waste rock dumps and the Sulphur Paydam (SPD).

The waste rock dumps 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:

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

The tailings storage facilities store the residue product from the gold plants. These tailings were pumped in a slurry form onto tailings dams and have been built up over a period of years.

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 to create a degree of homogenisation. The material is then loaded onto rail hoppers and transported to the metallurgical plants.

The SPD is being reclaimed by means of remote controlled high-pressure hydraulic monitors. 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 and Acid Flotation (EGAF) plant for processing.



Mineral Resource (attributable)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Mine/Project	Category	million	g/t	tonnes	Moz
Vaal River Surface					
SA Met – rock dump	Measured	-	-	-	_
	Indicated	59.53	0.60	35.73	1.15
	Inferred	5.06	0.69	3.48	0.11
	Total	64.60	0.61	39.22	1.26
SA Met – tailings dump	Measured	_	-	_	_
	Indicated	48.72	0.38	18.64	0.60
	Inferred	-	-	-	-
	Total	48.72	0.38	18.64	0.60
Vaal River Surface	Total	113.32	0.51	57.86	1.86
West Wits Surface					
WWGO – rock dump	Measured	_	_	_	_
	Indicated	13.04	0.47	6.08	0.20
	Inferred	-	-	-	-
	Total	13.04	0.47	6.08	0.20
West Wits Surface	Total	13.04	0.47	6.08	0.20
Surface operations	Total	126.36	0.51	63.94	2.06

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Mine/Project	Category	million	g/t	tonnes	Moz
	Measured	_	_	_	_
	Indicated	-	-	_	-
	Inferred	-	-	-	-
Vaal River Surface	Total	-	-	-	-
	Measured	-	-	-	-
	Indicated	0.29	1.30	0.38	0.01
	Inferred	-	-	-	-
West Wits Surface	Total	0.29	1.30	0.38	0.01
Surface operations	Total	0.29	1.30	0.38	0.01

Vaal River: Surface Mineral Resource reconciliation 2008 vs 2009



Vaal River: Surface Ore Reserve reconciliation 2008 vs 2009



West Wits: Surface Mineral Resource reconciliation 2008 vs 2009



West Wits: Surface Ore Reserve reconciliation 2008 vs 2009



Ore Reserve

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Vaal River Surface	Category	million	g/t	tonnes	Moz
Vaal River Surface					
SA Met – rock dump	Proved	-	-	-	-
	Probable	59.53	0.59	35.37	1.14
	Total	59.53	0.59	35.37	1.14
SA Met – tailings dump	Proved	_	_	_	_
	Probable	48.72	0.38	18.64	0.60
	Total	48.72	0.38	18.64	0.60
Vaal River Surface	Total	108.26	0.50	54.02	1.74
West Wits Surface					
WWGO – rock dump	Proved	_	_	_	_
	Probable	12.75	0.45	5.70	0.18
	Total	12.75	0.45	5.70	0.18
WWGO – rock dump	Total	12.75	0.45	5.70	0.18
Surface operations	Total	121.01	0.49	59.72	1.92

		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Vaal River Surface				
Mineral Resource	Raymond Orton	PLATO	MS0096	23 years
Ore Reserve	Richard Brokken	PLATO	MS0171	28 years
West Wits Surface				
Mineral Resource	Raymond Orton	PLATO	MS0096	23 years
Ore Reserve	Richard Brokken	PLATO	MS0171	28 years

Namibia

Regional 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).

Mineral Resource and Ore Reserve gold prices and exchange rate

	Units	2009	2008
Gold price – Mineral Resource	US\$/oz	1,025	1,000
Gold price – Ore Reserve	US\$/oz	800	720
Exchange rate – South Africa	ZAR/US\$	8.85	8.67

Details of average drillhole spacing and type in relation to Mineral Resource classification

		Type of drilling					
Mine/		Spacing	Diamond	RC	Blast-	Other	Comments
Project	Category	m (- x -)			hole		
Navachab	Measured	10 x 10	-	\checkmark	-	_	
	Indicated	25 x 25	\checkmark	\checkmark	-	_	
	Inferred	50 x 50	1	~	-	_	
	Grade control	5 x 10 and	_	\checkmark	_	_	
		10 x 10	-	\checkmark	_	-	

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.

as at 31 December 20	009			Mine call	Metal-	
	Cut-off			factor	lurgical	
	weighted	RRF	MRF	(MCF)	recovery	
Mine	g/t	%	%	%	%	Comments
Navachab Anomaly 16	0.50	100	100	100	88.01	CIP metallurgical recovery – average for the mine. DMS recovery average 73.33%.
Gecko	0.50	100	100	100	88.01	As above
Grid A	0.50	100	100	100	88.01	As above
Main Pit (Anomaly 13)	0.40	100	100	100	88.01	As above
Stockpile (full grade ore)	0.40	100	100	100	88.01	As above

Ore Reserve modifying factors

Namibia – Navachab

Location

Navachab gold mine is located 10km south-west of Karibib and 170km west-north-west of Windhoek, the capital of Namibia. Navachab is mined as an open-pit mine. The current carbon-in-pulp (CIP) plant, with a production capacity of 120,000 tonnes per month, includes mills, CIP and electro-winning facilities. In future, it is planned that a portion of the CIP feed will come from a pre-concentration plant (DMS plant) with a 200t/h capacity.

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 north-west. 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 north-east to south-west 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 (Au₂Bi). Silver is also present with a gold to silver ratio of approximately 15 to 1.

Exploration

The exploration strategy at Navachab is to evaluate the shallow north pit 2 mineralisation (located near the main pit) down plunge to 250m below surface. Drilling during the year has confirmed the down plunge extension of this ore shoot with intersection ranging from 1.5 to 2.5g/t over 15 to 20m. This near surface mineralisation assists in unlocking deeper hangingwall and footwall mineralisation for further exploitation to 350m below surface. Drilling during the next five years will focus on growing the Mineral Resource base by 2Moz and increasing the confidence level of the mineralisation at Navachab.

Exploration of the satellite deposits will continue to identify near-surface, high-grade "Grid A" type mineralisation to displace low-grade ounces 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 0.05Moz. This mineralisation can be used to supplement the low production years. Exploration of Anomaly 16 target, which is approximately 7km from the plant, has produced a lower-grade Mineral Resource of approximately 0.135Moz with the potential to grow significantly.



An east-west section through the Navachab Main Pit

Mineral Resource (attributable) as at 31 December 2009

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Navachab	Category	million	g/t	tonnes	Moz
Anomaly 16	Measured	_	_	_	_
	Indicated	1.96	1.20	2.36	0.08
	Inferred	1.52	1.21	1.84	0.06
	Total	3.48	1.21	4.20	0.14
Gecko	Measured	_		_	_
	Indicated	0.57	1.60	0.90	0.03
	Inferred	0.32	1.42	0.45	0.01
	Total	0.88	1.53	1.35	0.04
Grid A	Measured	0.08	2.16	0.18	0.01
	Indicated	0.16	1.65	0.26	0.01
	Inferred	0.01	1.01	0.01	0.00
	Total	0.25	1.78	0.45	0.01
Main pit (anomaly 13)	Measured	3.87	1.19	4.60	0.15
	Indicated	64.15	1.23	79.04	2.54
	Inferred	16.68	1.06	17.61	0.57
	Total	84.70	1.20	101.25	3.26
Stockpile (full grade ore)	Measured	6.87	0.77	5.28	0.17
	Indicated	-	-	-	-
	Inferred	-	-	-	-
	Total	6.87	0.77	5.28	0.17
Stockpile (marginal ore)	Measured	6.41	0.53	3.41	0.11
	Indicated	-	-	-	-
	Inferred	-	-	-	-
	Total	6.41	0.53	3.41	0.11
Navachab	Total	102.60	1.13	115.95	3.73

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Navachab	Category	million	g/t	tonnes	Moz
	Measured	7.39	0.59	4.34	0.14
	Indicated	34.43	1.19	40.99	1.32
	Inferred	18.53	1.07	19.92	0.64
Navachab	Total	60.35	1.08	65.24	2.10

Exclusive Mineral Resource

The main pit contains the largest portion (1.88Moz) of the Exclusive Mineral Resource. Of this, approximate 0.75Moz are in a conceptual pit plan and further optimisation is continuing to bring this Exclusive Mineral Resource to account. Approximately 0.11Moz of the Exclusive Mineral Resource are hosted in the marginal ore stockpiles at a grade of 0.53g/t and the intention is to test this for economic viability through pre-concentration during 2010.

The remainder of the Exclusive Mineral Resource is from Anomaly 16 (0.079Moz), Gecko (0.03Moz) and Grid A (0.002Moz).





Navachab: Ore Reserve reconciliation 2008 vs 2009



Ore Reserve

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Navachab	Category	million	g/t	tonnes	Moz
Anomaly 16	Proved	_	_	-	_
	Probable	1.13	1.55	1.75	0.06
	Total	1.13	1.55	1.75	0.06
Gecko	Proved	_	_	_	_
	Probable	0.22	1.76	0.39	0.01
	Total	0.22	1.76	0.39	0.01
Grid A	Proved	0.08	2.08	0.16	0.01
	Probable	0.14	1.71	0.24	0.01
	Total	0.22	1.84	0.40	0.01
Main pit (anomaly 13)	Proved	2.90	1.27	3.68	0.12
	Probable	30.92	1.26	39.05	1.26
	Total	33.82	1.26	42.73	1.37
Stockpile (full grade ore)	Proved	6.87	0.77	5.28	0.17
	Probable	_	_	_	-
	Total	6.87	0.77	5.28	0.17
Navachab	Total	42.25	1.20	50.55	1.63

Inferred Mineral Resource in business plan

The Inferred Mineral Resource was used in the pit optimisation process and 0.10Moz are present in the designed pits and a further 0.16Moz are included in future conceptual designed pits.

Navachab - surface (metric)



		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Mineral Resource	Frederik Badenhorst	AusIMM	211026	18 years
Ore Reserve	George Botshiwe	AusIMM	229475	9 years



Continental Africa









Regional overview

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

- Iduapriem and Obuasi in Ghana
- Siguiri in Guinea
- Morila, Sadiola and Yatela in Mali
- Geita in Tanzania

Combined production from these operations declined by 3% to 1.52Moz of gold in 2009, equivalent to 33% of group production. In addition, AngloGold Ashanti has an active greenfields exploration programme in the Democratic Republic of the Congo (DRC), with Mongbwalu currently undergoing a pre-feasibility study, whilst the Kibali joint venture with Randgold Resources and the DRC government is in the process of optimising the feasibility study. This is in addition to the brownfields exploration being conducted in and around its existing operations.

The Mineral Resource in Continental Africa, attributable to AngloGold Ashanti, totalled 67.38Moz at year-end, including an attributable Ore Reserve of 26.14Moz.

Mineral Resource by region (attributable)

				Contained	Contained
		Tonnes	Grade	gold	gold
as at 31 December 2009	Category	million	g/t	tonnes	Moz
Continental Africa	Measured	135.14	3.34	451.36	14.51
	Indicated	386.64	2.47	956.19	30.74
	Inferred	242.39	2.84	688.23	22.13
	Total	764.17	2.74	2,095.78	67.38

Ore Reserve by region (attributable)

				Contained	Contained
		Tonnes	Grade	gold	gold
as at 31 December 2009	Category	million	g/t	tonnes	Moz
Continental Africa	Proved	80.36	2.16	173.28	5.57
	Probable	234.20	2.73	639.84	20.57
	Total	314.56	2.58	813.12	26.14



Democratic Republic of the Congo (DRC)

Regional overview

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

Kibali

On 15 October 2009 Randgold acquired a 50% indirect interest in Moto Goldmines Ltd through a joint venture with AngloGold Ashanti. On 21 December 2009, Randgold and AngloGold increased their joint venture interest 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-focused 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 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 10,000km² covered by Concession 40 in the Ituri Province of north-eastern DRC. Concession 40 has a rich history of gold occurrences and cover 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 and Ore Reserve gold prices and exchange rates

	Units	2009	2008
Gold price – Mineral Resource	US\$/oz	1,000/1,025*	1,000
Gold price – Ore Reserve	US\$/oz	700	720

* Kibali uses \$1,000/oz and Mongbwalu uses \$1,025/oz

Details of average drillhole spacing and type in relation to Mineral Resource classification

			Type of drilling				
Mine/		Spacing	Diamond	RC	Blast-	Other	Comments
Project	Category	m (- x -)			hole		
Kibali	Measured	-	-	-	_	-	
	Indicated	40 x 40	\checkmark	\checkmark	_	-	
	Inferred	40 x 80, 80 x 80	1	\checkmark	_	-	
	Grade control	-	-	-	_	_	
Mongbwalu	Measured	-	-	-	_	-	
	Indicated	-	-	_	_	-	
	Inferred	50 x 50	\checkmark	\checkmark	_	-	
	Grade control	-	_	_	_	_	

Ore Reserve modifying factors

as at 31 December 2009							Mine call	Metal-
	Cut-off	Stoping					factor	lurgical
	weighted	width	Dilution	Dilution	RRF	MRF	(MCF)	recovery
Mine	g/t	cm	%	g/t	%	%	%	%
Kibali								
Surface	0.89	n/a	n/a	n/a	n/a	n/a	n/a	84.5
Underground	2.30	1,700	7.7	2.50	74.1	99.9	n/a	91.3

DRC – Kibali

Location

The Kibali gold project is located in the north-eastern part of the DRC near the international borders with Uganda and Sudan. The 1,841km² project area is centrally located around the village of Doko, approximately 180km by road from Arua on the Ugandan border and immediately north of the town of Watsa. 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 project is located within the Moto greenstone belt, which is comprised of the Archaean Kibalian 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 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 rock is unrecognisable.

Exploration

Exploration focused on the delineation drilling of the Mineral Resource at the main KCD deposit. The structural and lithological controls of the KCD deposit were reviewed as well as a possible lateral link with the Gorungwa deposit.

A robust structural-alteration model is in place:

- Mineralisation is controlled by zones of texturally destructive albite-carbonate-silica alteration (syn D1) along faults with a similar orientation as S1. S1 is a regional shear fabric and in general strike north-west with a low dip to the north-east. D1 is interpreted as shortening from the north-east, West Nile block over the basalt-volcanoclastic sequences, causing south-west verging folds and thrusts.
- 2. Gold mineralisation was introduced late D1 to D2 due to preferential fracturing of the albite-carbonate-silica alteration zones. S2 is an axial plane cleavage and in general strikes north-east with a moderate to steep dip north-west, explaining the north-east trending mineralised corridors. D2 also causes the folding of S1, creating double plunging folds, as observed in KCD mineralised zones. A prominent stretch lineation, L1, was also observed. It has in general a shallow plunge towards north-east.
- 3. Post-mineralisation D3 produced a pervasive crenulation cleavage that in general strikes south-east with a low dip south-west.

Mineral Resource and Ore Reserve update

Cube Consulting completed an updated Mineral Resource estimation on KCD based on all drilling completed to August 2009. New Mineral Resource numbers were generated and are reflected overleaf.



Main changes in the Mineral Resource from the previous declaration include:

- The open-pit Mineral Resource has been constrained within the US\$1,000/oz Whittle pit shell at a 0.5g/t gold cut-off.
- In the case of the KCD deposit, the underground Mineral Resource is reported as that material between the base of the pit to underground interface (5,685m RL), at a 2g/t gold cutoff.
- The net result is a slightly lower total Mineral Resource than previously reported but a significant increase in the Indicated Mineral Resource, with 70% of the total Mineral Resource now being classified as an Indicated Mineral Resource.

Main changes in the Ore Reserve from the previous declaration include:

 Cube Consulting completed the open-pit Ore Reserve estimation from the updated Mineral Resource numbers, while SRK Consulting completed an update of the underground Ore Reserve based on a \$700 gold price. New Ore Reserve numbers are presented below and reflect a significant increase in the underground Ore Reserve to almost 6Moz, bringing the total Ore Reserve number to 9.2Moz, a 67% increase from the previous declaration.

Mineral Resource (attributable)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Kibali	Category	million	g/t	tonnes	Moz
Surface	Measured	-	_	_	_
	Indicated	41.51	2.11	87.53	2.81
	Inferred	14.77	3.09	45.57	1.47
	Total	56.27	2.37	133.10	4.28
Underground	Measured	_	_	_	-
	Indicated	17.67	6.08	107.40	3.45
	Inferred	8.21	4.38	35.96	1.16
	Total	25.88	5.54	143.36	4.61
Kibali	Total	82.15	3.37	276.46	8.89

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Kibali	Category	million	g/t	tonnes	Moz
	Measured	-	_	_	_
	Indicated	30.46	2.18	66.28	2.13
	Inferred	22.98	3.55	81.53	2.62
Kibali	Total	53.44	2.77	147.81	4.75





Kibali: Ore Reserve reconciliation 2009



as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Kibali	Category	million	g/t	tonnes	Moz
Surface	Proved	_	_	-	_
	Probable	15.10	3.02	45.66	1.47
	Total	15.10	3.02	45.66	1.47
Underground	Proved	-	-	-	-
	Probable	13.61	6.10	82.99	2.67
	Total	13.61	6.10	82.99	2.67
Kibali	Total	28.71	4.48	128.65	4.14

Ore Reserve



Kibali – underground (metric)



		Pi	rofessional	Registration	Relevant
Category	Туре	Name or	rganisation	number	experience
Surface	Mineral Resource	Patrick Adams	AusIMM	112739	25 years
	Ore Reserve	Quinton de Klerk	AusIMM	210114	15 years
Underground	Mineral Resource	Patrick Adams	AusIMM	112739	25 years
	Ore Reserve	Paul Kerr	AusIMM	230539	13 years



DRC – Mongbwalu

Location

The Mongbwalu project is located in Concession 40 (C40) in the north-east of the DRC. It is situated next to the village of Mongbwalu which is 84km north-west of the regional town of Bunia and 320km north-west of Kampala in neighbouring Uganda. An area of 7,443km² within C40 is held in a joint venture under an ammodiation agreement between AngloGold Ashanti and OKIMO, which currently holds a 13.8% non-contributory share. The joint venture company is called Ashanti Goldfields Kilo Ltd (AGK). The DRC Minerals Review Commission and negotiations with the Government led to an agreement to transfer the mining rights of an area of 6,007km² in C40 from OKIMO to the joint venture. The area to be transferred contains approximately 19 permits. The process of transferring the mining rights from OKIMO to AGK is expected to be concluded early in 2010. As one of the conditions of the title transfer, AGK will be required to complete a feasibility study within 12 months.

Geology

Granitoids are the predominant rock type within the Kilo granite-greenstone belt. The granitoids contain rafts of Kibalian amphibolites and talc carbonate schists that have been intruded by diorite-tonalite-granodiorite assemblages. The Mongbwalu mineralisation is hosted in multiple, shallow dipping mylonite bodies that average 25m in width. Within the mylonite zones, the gold is primarily concentrated in boudinaged quartz veins that appear to be orientated sub-parallel to the mylonite zones and their immediate wall-rock. The alteration assemblage consists of chlorite-biotite-quartz-sericite and mineralisation occurs in a pyrite-pyrrhotite assemblage (<2%) and in pyrite-pyrrhotite (<2%) and as free gold.

The easterly dipping mylonite zones are continuous throughout the area drilled, with the most prospective zone located close to the old Adidi underground mine. Two north-south trending faults have offset the mineralisation and kept the mineralisation within 300m of the surface. The mylonite can be traced along a strike length of approximately 8km through historical mining, artisinal mining and recent geological mapping.

Exploration

All field-based exploration activities over the licence area were suspended in November 2008 following the deteriorating security situation which led to the precautionary withdrawal of most non-essential staff from the concession. Interpretation work of existing data continued through 2009, and field activities recommenced in November 2009, including drilling in the Mongbwalu area.



Mongbwalu 3D mineralisation model

The majority of AGK's exploration activities in C40 have focused on the delineation of the Mineral Resource in the vicinity of the abandoned underground Adidi-Kanga and Nzebi gold mines.

The most prospective parts of the greenstone belt have been covered by a total of 5,575km² of airborne magnetic and radiometric surveys and a detailed geological interpretation map has been completed of the same area. The numerous gold occurrences throughout the concession occur in geologically distinct belts and can efficiently be explored with soil sampling programs. The stripped regolith profile makes soil sampling a very effective sampling strategy. Three fly camps have been established as bases for the regional field work.

Project

At the conclusion of the joint venture agreement negotiations, a detailed feasibility study will commence on the Mongbwalu Mineral Resource. This 12-month study is aimed at developing a financially viable mine that has the potential to generate rapid cash flows with a payback period of less than seven years. The mining operations are planned to feed a plant with approximately 60,000tpm. A high level conceptual study of the various mining options shows an underground mining method will generate the highest cash flow.

The feasibility study will be focused on developing an underground mine centred around the old Adidi underground workings that will potentially use some of the existing development to access ore as soon as possible.

Mineral Resource Estimation

AGK began drill testing of the Mineral Resource potential of the Mongbwalu area in mid-2005 and by the end of 2006, the broader Mongbwalu area (Nzebi-Adidi-Kanga-Pluto) had been diamond drilled on a 200m x 200m grid. The programme covered an area 2.2 by 2.7km centred over the southern part of the old Adidi mine.

From this drilling, distinct zones with potentially economic grades of gold in quartz-veins and mylonite were delineated. Infill RC and DD on 50m x 50m centres was undertaken during 2007 to cover the areas of maximum potential hosting near-surface open pit or shallow underground extractable mineralisation. The aim was to define an initial Inferred Mineral Resource by the end of 2007. Data obtained from a total of 87,933m of drilling was used for Mineral Resource modelling and estimation which was completed in late 2007. Resource drilling continued into 2008 with a single diamond rig and 8,824m of additional drilling was completed.

In September 2009 a second Mineral Resource estimation was completed. The principal Mongbwalu mylonite horizons and other important geological units defined by drillhole logging and interpretation were modelled using conventional 3D wireframing techniques. To define the Inferred Mineral Resource, ore envelopes were created using a combination of grades greater than 3.0g/t and the presence of quartz veining. Following geostatistical evaluation of the drillhole assay database, gold grades were interpolated into a 3D block-model incorporating the principal geological units and ore envelopes using ordinary kriging to define the Inferred Mineral Resource.

Initial scoping level mining, metallurgical, geotechnical, hydrogeological, environmental, socio-political and infrastructural engineering studies were undertaken in parallel with the drilling to support the Mineral Resource estimate.



Mineral Resource (attributable)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Mongbwalu	Category	million	g/t	tonnes	Moz
Underground	Measured	_	_	_	_
	Indicated	-	-	-	-
	Inferred	8.84	7.38	65.26	2.10
Mongbwalu	Total	8.84	7.38	65.26	2.10

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Mongbwalu	Category	million	g/t	tonnes	Moz
	Measured	_	_	_	-
	Indicated	-	-	-	-
	Inferred	8.84	7.38	65.26	2.10
Mongbwalu	Total	8.84	7.38	65.26	2.10

Mongbwalu: Mineral Resource reconciliation 2008 vs 2009



Mongbwalu – underground (metric)



		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Mineral Resource	Mike O`Brien	AusIMM	206669	29 years

Ghana

Regional 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 sulphidehosted 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 the Datamine[®] software. Geological interpretation was based on trench and RC and/or DD 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[®] software called Mineral Resource Optimizer is used to generate the ore envelope. An appropriate mining layout is designed that incorporates mining extraction losses, dilution factors and MCF.



Mineral Resource and Ore Reserve gold prices and exchange rates

	Units	2009	2008
Gold price – Mineral Resource	US\$/oz	1,025	1,000
Gold price – Ore Reserve	US\$/oz	850	720

Details of average drillhole spacing and type in relation to Mineral Resource classification

				Туре	of drillir	ng	
Mine/		Spacing	Diamond	RC	Blast-	Other	Comments
Project	Category	m (- x -)			hole		
Iduapriem	Measured	50 x 50 and	1	1	_	_	
		50 x 100	\checkmark	\checkmark	-	_	
	Indicated	50 x 75 and	1	~	-	_	
		75 x 100	1	\checkmark	-	-	
	Inferred	50 x 100, and	\checkmark	\checkmark	-	-	
		100 x 100	1	\checkmark	-	-	
	Grade control	10 x 15	-	\checkmark	-	-	
Obuasi:	Measured	20 x 20,	1	\checkmark	_	1	Auger drilling, historical information.
surface		50 x 50	1	\checkmark	-	\checkmark	No current exploration or production.
	Indicated	30 x 0,	1	\checkmark	_	\checkmark	Auger drilling, historical information.
		30 x 30,	\checkmark	\checkmark	-	\checkmark	No current exploration or production.
		50 x 50,	\checkmark	\checkmark	-	\checkmark	
		60 x 0, and	\checkmark	\checkmark	-	\checkmark	
		60 x 60	1	\checkmark	-	\checkmark	
	Inferred	90 x 0,	1	1	-	1	Auger drilling, historical information.
		90 x 90,	1	\checkmark	-	\checkmark	No current exploration or production.
	Grade control	10 x 10	-	\checkmark	_	-	
Obuasi:	Measured	20 x 20	\checkmark	-	-	_	
underground	Indicated	60 × 60	\checkmark	_	-	_	
	Inferred	120 x 120	\checkmark	_	-	_	
	Grade control	1.5 x 25	_	_	-	1	Chip sampling of development ends

Ore Reserve modifying factors

as at 31 December 2009	Cut-off			Mine call factor	Metallurgical
	weighted	RRF	MRF	(MCF)	recovery
Mine	g/t	%	%	%	%
Iduapriem					
Ajopa	1.00	_	93	100	95
Block 3W	1.00	_	93	100	95
Block 5	1.00	_	93	100	95
Blocks 7 and 8	1.00	_	93	100	95
Stockpile (full grade ore)	1.00	_	93	100	95
Stockpile (marginal ore)	_	_	93	100	95
Stockpile (other)	-	-	93	100	95
Obuasi					
Above 50 Base	5.00	-	-	88	83
KMS 50-60	5.00	-	-	88	83
Stockpile (surface sulphides)	-	-	-	-	70
Tailings (Kokoteasua)	_	_	-	-	42
Tailings (Pompora)	-	-	-	-	33

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 Tarkwa. Iduapriem is an open-pit mine which began mining operations in 1992. Its processing facilities include a 4.4Mt per annum CIP plant with a gravity circuit that recovers about 30% total gold.

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 to south-west trending volcanic belts separated by basins and the Tarkwa Group was deposited in these basins as shallow water deltaic sedimentation. The gold mineralisation is contained in the Proterozoic Banket Series conglomerates.

The Banket Reef Zone comprises a sequence of individual beds of quartz pebble conglomerates (Banket beds), breccia conglomerates, meta-sandstones (also called quartzites) and grits. The outcropping Banket Series in the mine area form prominent arcuate ridges extending southwards from Tarkwa, westwards through Iduapriem and northwards towards Teberebie.

All known gold mineralisation within the Banket Series is associated with the conglomerates and is found within the matrix that binds the pebbles together. Gold content is a function of the size and amount (packing) of quartz pebbles present within a conglomeratic unit. At Iduapriem, the gold mineralisation is unrelated to metamorphic or hydrothermal alteration events and the gold is particulate and free milling. Mineralogical studies indicate that the grain size of native gold particles ranges between 2 and 500 microns (0.002 to 0.5mm) and averages 130 microns (0.13mm). Sulphide mineralisation is present only at trace levels and is not associated with the gold.

Exploration

The leases of the mine have been extensively explored for their near surface Mineral Resource. However, limited work has been done to assess the underground potential of these lease holdings. Hence, the opportunity to increase the Mineral Resource of the mine lies predominantly in the under-explored underground area. Studies are currently underway to determine if an economic Mineral Resource to support an underground mining proposition could be defined.

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Iduapriem	Category	million	g/t	tonnes	Moz
Aiopa	Measured	3.37	2.29	7.71	0.25
	Indicated	1.56	2.21	3.45	0.11
	Inferred	1.36	2.22	3.02	0.10
	Total	6.29	2.26	14.18	0.46
Block 3W	Measured	_	_	-	-
	Indicated	2.76	1.44	3.98	0.13
	Inferred	1.03	1.31	1.36	0.04
	Total	3.80	1.40	5.33	0.17
Block 5	Measured	6.41	1.24	7.95	0.26
	Indicated	1.91	1.28	2.44	0.08
	Inferred	2.44	1.33	3.24	0.10
	Total	10.75	1.27	13.63	0.44

Mineral Resource (attributable)
Mineral Resource (attributable) cont.

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Iduapriem	Category	million	g/t	tonnes	Moz
Blocks 7 and 8	Measured	17.35	1.36	23.60	0.76
	Indicated	37.97	1.76	66.76	2.15
	Inferred	4.24	1.72	7.30	0.23
	Total	59.56	1.64	97.65	3.14
Stockpile (full grade ore)	Measured	2.77	1.08	2.99	0.10
	Indicated	-	-	-	-
	Inferred	-	-	-	-
	Total	2.77	1.08	2.99	0.10
Stockpile (other)	Measured	_	_	_	_
	Indicated	-	-	-	-
	Inferred	16.50	0.56	9.32	0.30
	Total	16.50	0.56	9.32	0.30
Iduapriem	Total	99.68	1.44	143.11	4.60

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Iduapriem	Category	million	g/t	tonnes	Moz
	Measured	3.54	1.05	3.72	0.12
	Indicated	20.98	1.68	35.21	1.13
	Inferred	25.57	0.95	24.23	0.78
Iduapriem	Total	50.09	1.26	63.17	2.03

Exclusive Mineral Resource

Iduapriem: Mineral Resource reconciliation

Most of the Exclusive Mineral Resource quoted is in the down-dip extensions of the ore zones beyond the optimised pit shells and the Inferred Resource within the pits. Thus, most of this Mineral Resource would be mineable at an upside gold price.



Iduapriem: Ore Reserve reconciliation 2008 vs 2009



as at 51 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Iduapriem	Category	million	g/t	tonnes	Moz
Ajopa	Proved	3.07	2.13	6.54	0.21
	Probable	1.03	2.03	2.09	0.07
	Total	4.09	2.11	8.62	0.28
Block 3W	Proved	_	_	_	_
	Probable	1.63	1.50	2.44	0.08
	Total	1.63	1.50	2.44	0.08
Block 5	Proved	6.09	1.17	7.15	0.23
	Probable	1.82	1.20	2.18	0.07
	Total	7.91	1.18	9.33	0.30
Blocks 7 and 8	Proved	14.43	1.34	19.35	0.62
	Probable	18.75	1.70	31.81	1.02
	Total	33.18	1.54	51.17	1.65
Stockpile (full grade ore)	Proved	2.77	1.08	2.99	0.10
	Probable	-	-	_	-
	Total	2.77	1.08	2.99	0.10
Iduapriem	Total	49.58	1.50	74.56	2.40

Ore Reserve





Competent persons

		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Mineral Resource	Kwasi Osei	AusIMM	112723	15 years
Ore Reserve	Emmanuel Baffour Boakye	AusIMM	222459	22 years

Ghana – Obuasi

Location

The Obuasi mine is located in the Ashanti region of Ghana, some 80km south of Kumasi. It is an underground mine extending over 9km on strike and mining to a depth of 1,500m below surface. Large-scale open-pit mining took place between the years 1990 and 2000 and the contribution from open-pit mining is currently less than 1% of annual production. There are two active treatment plants: the sulphide treatment plant to process underground ore and the tailings treatment plant to handle tailings reclamation operations.

Geology

The gold deposits at Obuasi are part of a prominent gold belt of Proterozoic (Birimian) volcano-sedimentary and igneous formations. These deposits extend for a distance of approximately 300km, in a north-east/south-west trend, in south-western Ghana. Obuasi gold mineralisation is shear-zone-related and there are three main structural trends within the Obuasi concession; namely the Main trend, the Gyabunsu trend and the Binsere trend. The underground mine is situated on the Main trend which is a graphite-chlorite-sericite fault zone associated with silica, carbonate and sulphide hydrothermal alteration.

Deformation of the main shear resulted in an anastomosing structural pattern of secondary mineralised shears with pinch and swell structures. This is more evident where more resistant metavolcanics occur as lenses within the system.

Two main ore types are mined, namely quartz veins and sulphide ore. The quartz vein type consists mainly of quartz with free gold in association with lesser amounts of various metal sulphides containing iron, zinc, lead and copper. This ore type is generally non-refractory.

Sulphide ore is characterised by the inclusion of gold in the crystal structure of sulphide minerals. Higher gold grades tend to be associated with finer grained arsenopyrite crystals. Other prominent minerals include quartz, chlorite and sericite. Sulphide ore is generally refractory.



Section through Kwesi Mensah shaft

ADANSI SHAFT 100m Obuas Fissure Insintsiam ree 0 Cote d'or fissure Ashanti fissure -100m -200m FISSUIRE 26 MAIN REEFE -300m SVS OREBODY folded phyllite and sitstone -400m granulatec phyllite Â 120m -500m folded phyllites siltstones and arevwackers Legend -600m Auriferous Quartz Veir \bigcirc Carbonaceous/Graphitic Fissure 0 Barren Metavolcanic (Dyke) hiet Phyllites, Greywackes and Shists \bigcirc greywad -700m phyllite

Section through Adansi shaft 5

Exploration

Exploration on the Obuasi concession is currently limited to underground drilling to explore the Obuasi Deeps below 50 level and southern extensions of the current mining areas above 50 level. Drilling from 50 level was suspended in July 2009 as a result of torrential rain which flooded the level. Exploration activities will re-commence in early 2010.

Exploration drilling above 50 level recommenced in August 2009 and the first ore zone intersection is expected early in 2010.

Projects

Mining method

Obuasi has embarked on a conversion of mining method over the next two years from current transverse and longitudinal open stoping, to a full longitudinal retreat method (LRM). The conversion will take place in mining blocks where it is suitable to do so. In 2008, 20% of the mine was designed for LRM; in 2009 up to 70% above 50 level and 100% below 50 level had been designed with the new method and 100% below 50 level. Stope production is scheduled to start in mid 2010.

The major advantage of this method is the up to 50% reduction in waste development; reducing capital expenditure along with additional reef drive exposure.

The change in mining method has been coupled with the introduction of fully mechanised development from the second quarter of 2010 with up to 65% of all development being mechanised by 2012.

Pompora reclamation project

The objective of the project is to construct a reclamation station and pipeline to enable the reclamation of Kokoteasua and Pompora tailing storage facilities and pump the reclaimed material to the tailings treatment plant (TSP) to extract the gold. The feasibility study is based on the utilisation of the TSP float circuit and redundant capacity in the Biox[®] and Biox[®] CIL circuit at the sulphide treatment plant.

KMS 50-60 level mining block 11

The intention is to complete the feasibility for this project late in 2010. Initial development is scheduled for the first quarter of 2011. The project is designed to be fully LRM with 100% mechanised development. First gold from the project is scheduled for 2013.

Mineral Resource (attributable)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Obuasi	Category	million	g/t	tonnes	Moz
Above 50 base	Measured	36.52	7.58	276.84	8.90
	Indicated	15.59	7.52	117.29	3.77
	Inferred	24.17	6.81	164.52	5.29
	Total	76.28	7,32	558.65	17.96
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
	Total	5.78	5.39	31.16	1.00
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
	Total	2.24	6.67	14.93	0.48

Mineral Resource (attributable) cont.

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	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
	Total	4.04	2.56	10.35	0.33
Anyinam	Measured	0.00	2.35	0.00	0.00
	Indicated	0.04	3.20	0.14	-
	Inferred	0.12	3.74	0.44	0.01
	Total	0.16	2.59	0.58	0.02
Gyabunsu-Sibi	Measured	-	3.50	0.01	-
	Indicated	0.24	4.79	1.14	0.04
	Inferred	0.21	4.76	0.98	0.03
	Total	0.45	4.77	2.13	0.07
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
	Total	5.97	14.57	87.01	2.80
KMS 60-70	Measured	-	12.48	-	-
	Indicated	0.18	14.16	2.62	0.08
	Inferred	2.76	17.62	48.70	1.57
	Total	2.95	17.40	51.32	1.65
Other surface resources	Measured	-	-	-	-
	Indicated	-	-	-	-
	Inferred	0.07	2.98	0.21	0.01
	Total	0.07	2.98	0.21	0.01
Sansu (low grade sulphides)	Measured	3.26	4.61	15.02	0.48
	Indicated	2.19	4.12	9.03	0.29
	Inferred	3.05	4.52	13.80	0.44
	Total	8.51	4.45	37.85	1.22
Stockpile (heap leach)	Measured	0.47	0.50	0.23	0.01
	Indicated	-	-	-	-
	Inferred	-	-	-	-
	Total	0.47	0.50	0.23	0.01
Stockpile (surface oxides)	Measured	0.03	1.72	0.05	_
	Indicated	-	-	-	-
	Inferred	-	-	-	-
	Total	0.03	1.72	0.05	-
Stockpile (surface sulphides)	Measured	0.30	2.63	0.80	0.03
	Indicated	-	-	-	-
	Inferred	_	-	-	-
	Total	0.30	2.63	0.80	0.03
Tailings (Kokoteasua)	Measured	3.36	1.96	6.58	0.21
	Indicated	1.65	1.96	3.24	0.10
	Inferred	-	-	-	-
	Total	5.01	1.96	9.83	0.32

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Obuasi	Category	million	g/t	tonnes	Moz
Tailings (Pompora)	Measured	_	_	-	_
	Indicated	-	-	-	-
	Inferred	32.78	1.58	51.79	1.67
	Total	32.78	1.58	51.79	1.67
Upper Mine	Measured	3.32	10.06	33.42	1.07
	Indicated	1.64	8.39	13.76	0.44
	Inferred	1.36	10.48	14.26	0.46
	Total	6.32	9.71	61.44	1.98
Obuasi	Total	151.36	6.07	918.34	29.53

Mineral Resource (attributable) cont.

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Obuasi	Category	million	g/t	tonnes	Moz
	Measured	23.54	5.66	133.13	4.28
	Indicated	13.91	7.48	104.08	3.35
	Inferred	28.04	6.51	182.64	5.87
Obuasi	Total	65.49	6.41	419.86	13.50

Exclusive Mineral Resource

The Obuasi Exclusive Mineral Resource is made up of Mineral Resource from underground, open pit and tailings. The bulk of the Exclusive Mineral Resource (71%) is from underground and of this Mineral Resource, 52% is locked up in Mineral Resource blocks and remnants in historical mined out areas in the north of the mine. This Mineral Resource cannot be accessed due to old infrastructure. The remainder of the underground Exclusive Mineral Resource is mineable between Mineral Resource and Ore Reserve cut-offs (11%), below 50 level (18%) and in areas where more investigation is required (6%). 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 change.

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 tailings treatment plant. Two of the tailings dams are also active and an Exclusive Mineral Resource margin will be maintained.

None of the three open pits in the Mineral Resource is currently included in the Ore Reserve. This represents 4% of the Exclusive Mineral Resource. To bring open pits into the Ore Reserve will require more geotechnical investigation, optimisation and mine design.

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Obuasi	Category	million	g/t	tonnes	Moz
KMS 50 – 60 level	Total	5.97	14.57	87.01	2.80
KMS 60 – 70 level	Total	2.95	17.40	51.32	1.65
Adansi 50 – 60 level	Total	5.78	5.39	31.16	1.00
Adansi 60 – 70 level	Total	2.24	6.67	14.93	0.48
Obuasi	Total	16.94	10.89	184.43	5.93

Mineral Resource below infrastructure







Ore Reserve

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Obuasi	Category	million	g/t	tonnes	Moz
Above 50 base	Proved	11.09	7.33	81.33	2.61
	Probable	22.52	7.33	165.12	5.31
	Total	33.62	7.33	246.45	7.92
KMS 50-60	Proved	1.09	13.14	14.33	0.46
	Probable	2.21	13.14	29.09	0.94
	Total	3.30	13.14	43.41	1.40
Stockpile (surface sulphides)	Proved	0.09	4.50	0.41	0.01
	Probable	-	_	-	-
	Total	0.09	4.50	0.41	0.01
Tailings (Kokoteasua)	Proved	1.65	1.96	3.24	0.10
	Probable	3.36	1.96	6.58	0.21
	Total	5.01	1.96	9.83	0.32
Obuasi	Total	42.02	7.14	300.10	9.65

Ore Reserve below infrastructure

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Obuasi	Category	million	g/t	tonnes	Moz
KMS 50 – 60 level	Total	3.30	13.14	43.41	1.40







Competent persons

		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Mineral Resource	Heinrich Eybers	AusIMM	229471	23 years
Ore Reserve	Richard Downing	AusIMM	229889	23 years

Obuasi – Block 9 3D



Guinea

Regional 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 the Republic of Guinea, West Africa. 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 focused 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 Mineral Resource potential.

Mineral Resource estimation

Mineral Resource definition drilling consists of air core (AC), reverse circulation (RC) and diamond drilling (DD) boreholes. All available geological drillhole information is validated for usage in the models and the local geology of the orebody is used to classify the drillhole 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 are used to estimate gold grades and a limiting pit shell at \$1,025/oz is used to quantify the total Mineral Resource.

Mineral Resource and Ore Reserve gold prices and exchange rates

	Units	2009	2008
Gold price – Mineral Resource	US\$/oz	1,025	1,000
Gold price – Ore Reserve	US\$/oz	800	720

Details of average drillhole spacing and type in relation to Mineral Resource classification

		Type of drilling						
Mine/		Spacing	Diamond	RC	Blast-	Other	Comments	
Project	Category	m (- x -)			hole			
Siguiri	Measured	5 x 10,10 x 5	_	\checkmark	-	\checkmark		
	Indicated	20 x 40,	_	\checkmark	_	\checkmark	Mainly RC, but AC is used in the	
		25 x 25, and	_	\checkmark	-	\checkmark	early stages and some DD holes	
		25 x 50	_	\checkmark	-	\checkmark	are drilled for geology	
	Inferred	20 x 40,	_	1	-	1	Mainly RC, but AC is used in the	
		25 x 50, and	_	\checkmark	-	\checkmark	early stages and some DD holes	
		50 x 50	-	\checkmark	-	\checkmark	are drilled for geology	
	Grade control	5 x 10, and	_	\checkmark	_	_		
		5 x 12.5	-	\checkmark	-	-		

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.

Ore Reserve modifying factors

as at 31 December 20	009			Mine call	Metal-	
	Cut-off			factor	lurgical	
	weighted	RRF	MRF	(MCF)	recovery	
Mine	g/t	%	%	%	%	Comments
Siguiri Bidini	0.35	100	100	100	93	Average recovery (96% oxides, 55% transitional, 88% marginal ore)
Eureka East	0.35	100	100	100	92	As above
Eureka North	0.35	100	100	100	93	As above
Foulata	0.35	100	100	100	94	As above
Kalamagna	0.35	100	100	100	93	As above
Kami	0.35	100	100	100	92	As above
Kosise	0.35	100	100	100	93	As above
Kozan North	0.35	100	100	100	92	As above
Kozan South	0.35	100	100	100	93	As above
Seguelen	0.35	100	100	100	93	As above
Sintroko South	0.35	100	100	100	94	As above
Sokunu	0.35	100	100	100	92	As above
Soloni	0.35	100	100	100	93	As above
Sorofe	0.35	100	100	100	94	As above
Stockpile (full grade ore)	0.35	100	100	100	94	As above
Stockpile (marginal ore)	0.35	100	100	100	88	As above
Stockpile (spent heap leach)	0.35	100	100	100	88	As above



Guinea – Siguiri

Location

Société Ashanti Goldfields De Guinée

Siguiri gold mine is situated in the Siguiri district in the north-east of the Republic of Guinea, West Africa, about 850km from the capital city of Conakry. The mining concession consists of four blocks totalling 1,494.58km². It is a multi open-pit oxide gold mining operation. The current LOM plan entails the mining of eleven individual pits, several of which are multi-stage. All ore and waste is mined by a mining contractor in a conventional open-pit mining operation. Processing is done via a CIP plant.

Geology

This concession is dominated by Neoproterozoic Birimian rocks which consist of turbidite facies sequences and lesser volcanoclastic sequences. The mineralisation is structurally controlled and occurs either as sheeted veins or within shear zones. There are two main types of oxide mineralisation in the Siguiri basin: elluvial- 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 to, and immediately above, the in situ vein-related or shear zone 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 hosted style appears to be a slightly older event related to the development of a number of north-south striking shear zones that may cut different lithologies. This phase of mineralisation is usually associated with silicification, brecciation and quartz-albite-pyrite veining, with magnetite being present at some localities. The vein-related mineralisation occurs as north-east to south-east to east-west striking, discontinuous sheeted veins. The better mineralised areas are associated with vein stockworks that occur preferentially in the coarser, brittle siltstones and sandstones. The sheeted veins appear to be related to a younger folding event and appear to be developed on fold axial planes. Mineralisation is associated with white quartz veins, with grey selvages and scattered large arsenopyrite crystals proximal to these veins. Mineralisation at Siguiri has been deeply weathered to an average vertical depth of 100m, and the mineralised saprolite provides the primary oxide feedstock for the CIP plant. Fresh hard mineralisation is not processed in the current plant. The 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, however, a CIP plant was brought on stream during 2005 to treat predominantly saprolite oxide ore.

The Siguiri mineralisation is characterised by coarse gold with low average grade and highly skewed distributions. This is the main geological feature taken into account during data collection and estimation.

Exploration

The primary objective of the exploration initiative at Siguiri is to discover or upgrade prospective areas, enhancing the value of the concession. Exploration is focused on finding and upgrading oxide style mineralisation in the saprolite, using drillhole sampling, geophysics, and soil geochemistry in the context of the regional and pit-scale geological models. Almost 190,000m were drilled during the year, and consisted of 156,700m brownfield exploration, 21,195m sterilisation, 7,032m Sintroko test work and 5,071m for metallurgical testing.

The areas around the current pits were the focus of this year's drilling, investigating potential extensions to the current pits. The principal targets that were explored include Sintroko South and West, Kosise South, Kami South, Kami Saddle, Kozan Northwest, Toubani Extension, Eureka East and Komatiguia. Extension drilling was undertaken at Sintroko South and to the north-west of Seguélén pits. The Seguélén north-west extension drilling (Komatiguia project) was done after completion of a detailed gravity survey and the identification of a geochemical soil anomaly. The fresh rock potential below a number of pits

was also investigated, with particular emphasis on the Kami, Sintroko and Bidini pits. Metallurgical drilling was completed under these pits with the aim of obtaining samples to be used for gold deportment and extraction studies. One gravity survey was completed in the Kintinian area and geochemical sampling of block 1 continued through the year with approximately 70% of block 1 being sampled on a 200m x 50m grid by year end.



Siguiri: drillholes within the P1 area

Siguiri: 3D model of the P1 area



Mineral Resource

Mineral Resource growth during the year was mainly due to exploration infill drilling and updated Mineral Resource modelling in which the main mining area, consisting of 12 deposits, was modelled in an integrated approach. Previously the deposits were modelled, optimised, designed and scheduled independently. The impact of the integrated approach is that some of the individual pits have merged, highlighting opportunities between the current pits.

Seguélén

The Mineral Resource as published for Seguélén does not reflect the full potential of the deposit. An additional 10Mt grading at 1.2g/t (380,000oz) have been delineated by a 50m x 50m drill pattern. This mineralisation is currently not accessible due to its proximity to the Kintinian village and hence cannot be considered, at this stage, to have a reasonable and realistic prospect for eventual economic extraction. Based on mineralised trends there may be further untested potential beneath the Kintinian village. Negotiations with the local authorities are underway in an effort to secure access.

Sintroko

A bulk sampling project was initiated during the year at the Sintroko Pit after discrepancies were noted in the initial reconciliations between grade control and the Mineral Resource model. The project involved drilling a volume of ground with both exploration and grade control drill rigs and sampling protocols. The material was then mined and processed. The preliminary results show good correlation between the new exploration and grade control drilling. The project is still in progress with results expected during the first quarter of 2010. The project is expected to provide valuable insight into maximising the overall value of Siguiri.

Mineral Resource (attributable)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Siguiri	Category	million	g/t	tonnes	Moz
Bidini	Measured	_	_	_	_
	Indicated	6.31	1.12	7.09	0.23
	Inferred	12.29	0.96	11.76	0.38
	Total	18.60	1.01	18.85	0.61
Eureka East	Measured	_	_	_	_
	Indicated	0.63	0.76	0.48	0.02
	Inferred	0.12	0.70	0.08	0.00
	Total	0.74	0.75	0.56	0.02
Eureka North	Measured	_	_	_	_
	Indicated	1.48	0.79	1.16	0.04
	Inferred	0.45	0.80	0.36	0.01
	Total	1.93	0.79	1.52	0.05
Foulata	Measured	_	_	_	_
	Indicated	-	-	-	-
	Inferred	2.77	1.46	4.04	0.13
	Total	2.77	1.46	4.04	0.13
Kalamagna	Measured	_	_	_	_
	Indicated	6.42	0.72	4.63	0.15
	Inferred	7.04	0.86	6.06	0.19
	Total	13.46	0.79	10.69	0.34
Kami	Measured	9.70	0.95	9.19	0.30
	Indicated	4.62	0.90	4.16	0.13
	Inferred	6.41	0.93	5.97	0.19
	Total	20.72	0.93	19.32	0.62

Mineral Resource (attributable) cont.

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Siguiri	Category	million	g/t	tonnes	Moz
Kosise	Measured	_	-	_	-
	Indicated	13.30	0.74	9.89	0.32
	Inferred	7.85	0.84	6.58	0.21
	Total	21.15	0.78	16.48	0.53
Kazan Narth	Maggiurgal				
Kozan North	Indicated	- 7 07	-	_ 5 //	- 0.17
	Indicated	5.54	0.09	5.44 4.69	0.17
	—	10.01	0.00	10.10	0.10
	Iotal	13.41	0.76	10.13	0.33
Kozan South	Measured	-	-	-	-
	Indicated	1.78	0.78	1.39	0.04
	Inferred	1.69	0.79	1.33	0.04
	Total	3.47	0.78	2.72	0.09
Sequélén	Measured	_	_	_	_
	Indicated	15.08	1.08	16.34	0.53
	Inferred	10.18	1.18	11.97	0.38
	Total	25.26	1.12	28.31	0.91
Sintroko South	Moonurod				
SILLOKO SOULT	Indicated	20.25	1.01	24.60	0.70
	Indicated	20.00	1.21	24.00	0.79
		0.00	2.00	1.00	0.05
	Total	21.01	1.24	26.14	0.84
Sokunu	Measured	-	-	-	-
	Indicated	2.43	0.82	1.99	0.06
	Inferred	0.60	0.84	0.50	0.02
	Total	3.03	0.82	2.50	0.08
Soloni	Measured	-	_	_	_
	Indicated	6.04	0.95	5.71	0.18
	Inferred	5.25	0.80	4.21	0.14
	Total	11.29	0.88	9.92	0.32
Sorofe	Measured				
301016	Indicated	11 80	0.86	10.18	0.33
	Inferred	3.97	0.79	3.13	0.10
	Total	15.86	0.84	13 31	0.43
	Iotai	10.00	0.04	10.01	0.40
Stockpile (full grade ore)	Measured	8.33	0.84	7.00	0.23
	Indicated	-	-	-	-
	Total	8.33	0.84	7.00	0.23
Stockpile (marginal ore)	Measured	18.55	0.46	8.53	0.27
	Indicated	-	-	-	-
	Inferred	_	_	_	_
	Total	18.55	0.46	8.53	0.27
Stockpile (spent heap leach)	Measured	_	_	_	_
	Indicated	31.95	0.54	17.29	0.56
	Inferred	13.40	0.57	7.61	0.24
	Total	45.35	0.55	24.90	0.80
Siguiri	Total	244.95	0.84	204.92	6.59

Exclusive Mineral Resource

as at 31 December 2009								
				Contained	Contained			
		Tonnes	Grade	gold	gold			
Siguiri	Category	million	g/t	tonnes	Moz			
	Measured	3.75	0.78	2.93	0.09			
	Indicated	45.56	0.86	39.30	1.26			
	Inferred	78.22	0.89	69.85	2.25			
Siguiri	Total	127.52	0.88	112.07	3.60			

Exclusive Mineral Resource

Siguiri: Mineral Resource reconciliation

The Exclusive Mineral Resource represents the future potential at Siguiri and comes from three areas:

- material that is economic at the Mineral Resource gold price of US\$1,025 per ounce, but not at the Ore Reserve price of US\$800 per ounce (67% of the Exclusive Mineral Resource);
- new deposits that are currently at the Inferred level of confidence. These areas will be in-fill drilled in the future (26% of the Exclusive Mineral Resource); and
- the Inferred Mineral Resource within the current pit designs (7% of the Exclusive Mineral Resource).

Inferred Mineral Resource in business plan

The Inferred Mineral Resource is used in the pit optimisation process if its total percentage amounts to 10% or less of the total Ore Reserve. If the Inferred Mineral Resource was greater than 15%, the optimisation was redone excluding the Inferred resultant ounces. The Inferred Mineral Resource within an optimised shell and subsequent design was used for scheduling. The final schedule included 283,364oz of Inferred Mineral Resource in the final designs, which represents 7% of the scheduled ounces.



Change

Siguiri: Ore Reserve reconciliation 2008 vs 2009





as at 31 December 2009					
				Contained	Contained
Ciquiri	Cotogon	Tonnes	Grade	gold	gold
Siguiri	Category	million	g/t	tonnes	MOZ
Bidini	Proved	-	- 1 02	- 1.62	-
		0.04	1.92	1.02	0.05
	Iotal	0.84	1.92	1.62	0.05
Eureka East	Proved	- 0.25	-	-	-
		0.00	0.09	0.24	0.01
	Iotal	0.35	0.69	0.24	0.01
Kalamagna	Proved	- 2 70	- 0.76	- 2.90	-
	Probable	3.70	0.78	2.00	0.09
	Total	3.70	0.76	2.80	0.09
Kami	Proved	3.94	1.03	4.06	0.13
	Probable	1.28	0.84	1.08	0.03
	Total	5.22	0.98	5.13	0.16
Kosise	Proved	-	-	-	-
	Probable	5.28	0.79	4.18	0.13
	Total	5.28	0.79	4.18	0.13
Kozan North	Proved	_	_	_	-
	Probable	2.56	0.76	1.95	0.06
	Total	2.56	0.76	1.95	0.06
Kozan South	Proved	-	_	-	-
	Probable	0.71	1.05	0.75	0.02
	Total	0.71	1.05	0.75	0.02
Seguélén	Proved	_	_	-	-
	Probable	12.84	1.15	14.80	0.48
	Total	12.84	1.15	14.80	0.48
Sintroko South	Proved	_	_	-	_
	Probable	14.74	1.26	18.53	0.60
	Total	14.74	1.26	18.53	0.60
Sokunu	Proved	_	_	_	_
	Probable	2.01	0.84	1.69	0.05
	Total	2.01	0.84	1.69	0.05
Soloni	Proved	-	_	-	-
	Probable	3.67	1.10	4.04	0.13
	Total	3.67	1.10	4.04	0.13
Sorofe	Proved	_	_	-	_
	Probable	7.91	0.89	7.02	0.23
	Total	7.91	0.89	7.02	0.23
Stockpile (full grade ore)	Proved	8.33	0.84	7.00	0.23
	Probable	-	-	-	-
	Total	8.33	0.84	7.00	0.23

Ore Reserve

Ore Reserve cont.

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Siguiri	Category	million	g/t	tonnes	Moz
Stockpile (marginal ore)	Proved	18.55	0.46	8.53	0.27
	Probable	-	-	-	-
	Total	18.55	0.46	8.53	0.27
Stockpile (spent heap leach)	Proved	_	-	_	-
	Probable	31.95	0.54	17.29	0.56
	Total	31.95	0.54	17.29	0.56
Siguiri	Total	118.67	0.81	95.58	3.07

Siguiri – surface (metric)



Competent persons

		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Mineral Resource	Peter Winkler	AusIMM	220329	25 years
Ore Reserve	Tebogo Mushi	SAIMM	702438	9 years



Mali

Regional 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 and Ore Reserve gold price

	Units	2009	2008
Gold price – Mineral Resource	US\$/oz	1,025	1,000
Gold price – Ore Reserve	US\$/oz	700-880	720-870

Mineral Resource estimation

The Mineral Resource is taken as the material that falls within the 1,025/02 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 $25m \times 25m \times 10m$ and $30m \times 30m \times 10m$ (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.

Details of average drillhole spacing and type in relation to Mineral Resource classification

			Type of drilling				
Mine/		Spacing	Diamond	RC	Blast-	Other	Comments
Project	Category	m (- x -)			hole		
Morila	Measured	-	-	-	-	-	Processing stockpiles – grades
	Indicated	-	-	-	-	-	are based on historic drilling
	Inferred	_	-	-	-	-	
	Grade control	-	_	-	-	_	
Sadiola	Measured	25 x 25	1	~	-	_	
	Indicated	25 x 25,	1	\checkmark	-	-	
		30 x 30,	\checkmark	\checkmark	-	-	
		35 x 35, and	\checkmark	\checkmark	-	-	
		25 x 50	\checkmark	\checkmark	-	-	
	Inferred	25 x 50,	1	\checkmark	-	_	
		25 x 50, and	\checkmark	\checkmark	-	-	
		50 x 50	\checkmark	\checkmark	-	-	
	Grade control	5 x 10	-	~	-	-	
Yatela	Measured	10 x 10, and	\checkmark	\checkmark	-	_	
		25 x 25	\checkmark	\checkmark	-	_	
	Indicated	25 x 25, and	\checkmark	\checkmark	_	_	
		35 x 45	1	\checkmark	-	_	
	Inferred	50 x 50	1	~	-	_	
	Grade control	5 x 10, and	-	\checkmark	-	_	
		10 x 10	-	~	-	-	

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 Measured and Indicated Mineral Resource and Measured, Indicated and Inferred Mineral Resource. All appropriate costs, metallurgical recovery factors and geotechnical parameters are applied to generate the final Ore Reserve.

Ore Reserve modifying factors

as at 31 December 200	09			Mine call	Metal-	
	Cut-off			factor	lurgical	
	weighted	RRF	MRF	(MCF)	recovery	
Mine	g/t	%	%	%	%	Comments
Morila	1 40			100	00.0	
(full grade ore)	1.40	_	_	100	89.0	used for stockpiling
Stockpile (marginal ore)	1.00	-	-	100	88.8	Cut-off grades based on cut-off grade used for stockpiling
Sadiola						
Deep Sulphides (oxides)	0.72	100	100	100	93.0	Hard oxide COG 0.82g/t Saprolite oxide COG 0.63g/t
Deep Sulphides (sulphides)	0.98	100	100	100	80.0	Hard sulphide COG 1.02g/t Saprolite sulphide COG 0.95g/t
FE3	1.00	99	99	101.5	95.0	Metal factors shown here
FE4	1.00	99	99	101.5	95.0	Metal factors shown here
Main Pit (oxide)	1.00	100	100	95	100.0	Small remnants remain to be mined in early 2010
Total stockpiles	-	100	100	102	88.3	Metal factors shown here
Yatela						
Alamoutala Pit	0.75	100	100	100	84.8	Factors were not applied to Alamoutala
Main Pit	0.60	93	100	100	84.8	Factors applicable to the metal
Total stockpiles	0.65	_	-	-	84.8	Factors are not applied to the stockpile material



Mali – Morila

Location

The Morila mine is situated some 280km by road south-east of Bamako, the capital city of Mali. The mine is operated by Morila SA, a joint venture company incorporating Randgold Resources Ltd (40%), Anglogold Ashanti Ltd (40%), and the Government of Mali (20%). Randgold Resources took over the operation of Morila mine from Anglogold Ashanti Ltd 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 rehandling 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 north-north-west-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 meta-sediments. 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 tailings storage facility (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 (attributable)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Morila	Category	million	g/t	tonnes	Moz
Stockpile (full grade ore)	Measured	3.94	1.74	6.85	0.22
	Indicated	-	-	_	-
	Inferred	-	_	-	-
	Total	3.94	1.74	6.85	0.22
Stockpile (marginal ore)	Measured	2.76	1.14	3.14	0.10
	Indicated	-	-	_	-
	Inferred	0.38	0.81	0.31	0.01
	Total	3.14	1.10	3.44	0.11
Morila	Total	7.08	1.45	10.29	0.33

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Morila	Category	million	g/t	tonnes	Moz
	Measured	-	-	_	-
	Indicated	-	-	-	-
	Inferred	0.38	0.81	0.31	0.01
Morila	Total	0.38	0.81	0.31	0.01

Exclusive Mineral Resource

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



Morila: Ore Reserve reconciliation 2008 vs 2009



Ore Reserve

as at 31 December 2009 gold gold Morila Stockpile (full grade ore) Proved 3.94 1.74 6.85 0.22 Probable Total 3.94 1.74 0.22 6.85 Proved Stockpile (marginal ore) Probable 2.76 1.14 3.14 0.10 Total 2.76 1.14 3.14 0.10 Total 6.70 1.49 9.99 0.32 Morila

Competent persons

		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Mineral Resource	A Kone	AusIMM	222568	17 years
Ore Reserve	S Ndede	AusIMM	201772	20 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 five open pits, the Sadiola main pit and four satellite pits, namely FE3 pits 1 to 3 and pit FE4.

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 2010. The project may substantially 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 window, a major early Proterozoic-Birimian outlier along the north-east margin of the Kenema-Man shield. The deposits are confined to the north portion of the window.

The Sadiola Hill deposit is underlain by the north-trending Sadiola Fracture Zone (SFZ), over a drilled strike length of approximately 2,500m, running along the contact of marbles and greywackes and intruded by bodies of diorite and quart-feldspar porphyries. North-east trending structures, often intruded by quartz-feldspar porphyries, extending to the east of the SFZ, also carry gold. The mineralised zones have been intensely weathered to a maximum depth of 200m.

The Sadiola Hill 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 satellite pits are located to south-east of the Sadiola Hill mine and are underlain by different lithologies. The mineralised zones straddle the contact between marbles to the west and carbon-rich pelites to the east, following a north-north-west-trend in the FE3 pits 1 and 2, north-north-east at pit 3, and a north-east-strike in FE4 pit, due to regional folding. Gold mineralisation is mostly associated with lens-shaped breccia zones running broadly parallel to the enclosing metasediments and folded accordingly.

At this stage all the gold is recovered from mostly soft, oxidised ore from the satellite pits. Some gold-rich, hard oxide nodes have been also treated in the Sadiola plant, after first stage crushing.

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Sadiola	Category	million	g/t	tonnes	Moz
Deep Sulphides	Measured	0.03	2.26	0.06	0.00
	Indicated	24.48	1.89	46.15	1.48
	Inferred	14.96	1.80	26.97	0.87
	Total	39.46	1.85	73.19	2.35
FE2	Measured	_	_	_	_
	Indicated	-	_	-	-
	Inferred	0.83	1.36	1.13	0.04
	Total	0.83	1.36	1.13	0.04

Mineral Resource (attributable)

Mineral Resource (attributable) cont.

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Sadiola	Category	million	g/t	tonnes	Moz
FE3	Measured	-	_	_	-
	Indicated	2.90	1.99	5.76	0.19
	Inferred	0.18	2.88	0.52	0.02
	Total	3.08	2.04	6.28	0.20
FE4	Measured	-	-	_	_
	Indicated	1.16	2.18	2.53	0.08
	Inferred	0.64	2.09	1.34	0.04
	Total	1.80	2.14	3.87	0.12
FN2	Measured	-	-	_	_
	Indicated	0.23	1.51	0.34	0.01
	Inferred	0.28	4.01	1.12	0.04
	Total	0.50	2.89	1.46	0.05
FN3	Measured	_	_	_	_
	Indicated	0.04	1.71	0.07	0.00
	Inferred	0.64	1.30	0.84	0.03
	Total	0.69	1.32	0.91	0.03
Main pit (oxide)	Measured	0.03	1.97	0.06	0.00
	Indicated	3.89	1.31	5.10	0.16
	Inferred	0.38	1.21	0.46	0.01
	Total	4.30	1.30	5.61	0.18
Main pit (transitional)	Measured	0.01	3.28	0.02	0.00
	Indicated	1.34	1.92	2.59	0.08
	Inferred	0.09	1.71	0.15	0.00
	Total	1.44	1.92	2.76	0.09
Sadiola – total stockpiles	Measured	10.15	1.47	14.97	0.48
	Indicated	_	_	_	_
	Inferred	-	-	_	-
	Total	10.15	1.47	14.97	0.48
Sekokoto	Measured	_	_	_	_
	Indicated	-	-	-	-
	Inferred	0.59	1.50	0.89	0.03
	Total	0.59	1.50	0.89	0.03
Tambali South	Measured				
	Indicated	2.38	1.30	3.09	0.10
	Inferred	1.73	1.53	2.64	0.08
	Total	4.11	1.39	5.73	0.18
Sadiola	Total	66.97	1.74	116.80	3.76

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Sadiola	Category	million	g/t	tonnes	Moz
	Measured	4.64	0.75	3.46	0.11
	Indicated	19.47	1.53	29.88	0.96
	Inferred	20.32	1.77	36.06	1.16
Sadiola	Total	44.44	1.56	69.40	2.23

Sadiola - total mag intensity 2009 data



Exclusive Mineral Resource

The Exclusive Mineral Resource for the Sadiola pits is the Mineral Resource that is outside the current Ore Reserve designs but inside the Mineral Resource shells. Any Inferred Mineral Resource within the design shells is also reported in the Exclusive Mineral Resource. Unless the gold price increases and the costs are favourable, only the Inferred Mineral Resource portion of the Mineral Resource within the LOM shell will be converted to the Ore Reserve through grade control drilling.

FE3 has Inferred Mineral Resource in the published Mineral Resource and therefore the only possibility for converting the Exclusive Mineral Resource to the Proved Ore Reserve is through favourable gold price and cost changes. The FE3 pit has 27% of Inferred Mineral Resource within the design shell and FE4 has 86%.

The FE3 Inferred Mineral Resource can be upgraded into Ore Reserve by normal grade control drilling. For FE4, infill drilling has been completed and the FE4 Mineral Resource model will be revised in the first quarter of 2010. Updating the models for FE4 may lead to an increase in Ore Reserve. For the Main Pit, the feasibility study of the DSP will be completed in the 4th quarter of 2010.





Sadiola: Ore Reserve reconciliation 2008 vs 2009





as at 51 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Sadiola	Category	million	g/t	tonnes	Moz
Deep sulphides (oxides)	Proved	_	_	-	_
	Probable	1.51	1.45	2.20	0.07
	Total	1.51	1.45	2.20	0.07
Deep sulphides (sulphides)	Proved	-	_	_	_
	Probable	12.14	2.20	26.69	0.86
	Total	12.14	2.20	26.69	0.86
FE3	Proved	_	_	_	_
	Probable	1.73	2.47	4.27	0.14
	Total	1.73	2.47	4.27	0.14
FE4	Proved	_	_	_	_
	Probable	0.80	2.46	1.98	0.06
	Total	0.80	2.46	1.98	0.06
Main pit (oxide)	Proved	_	_	-	_
	Probable	0.01	2.67	0.04	0.00
	Total	0.01	2.67	0.04	0.00
Total stockpiles	Proved	4.10	2.47	10.14	0.33
	Probable	-	-	-	-
	Total	4.10	2.47	10.14	0.33
Sadiola	Total	20.30	2.23	45.32	1.46

Ore Reserve

Inferred Mineral Resource in pit optimisation

The Inferred Mineral Resource was used in the pit optimisation process and 0.95Moz are present in the optimised pit, of which 0.23Moz are included in the final production schedule. This includes the DSP and satellite pits.

Exploration

The philosophy underpinning the future programme is that at mine closure, the full potential of the two leases will have been exploited.

The exploration strategy is twofold:

- there was a narrow window of opportunity of 18 months for a focused exploration programme on oxide material from March 2009 to July 2010 to fit into the current LOM estimate; and
- testing sulphide targets as a complementary strategy, aimed at adding soft sulphide ounces to the Sadiola plant and hard sulphide Mineral Resource to the DSP.

Projects:

There are currently two projects under consideration:

- The DSP is the most advanced, with a board-approved feasibility study due for completion in September 2010.
- Low-grade project: if costs can be decreased by up to 20%, it will allow the Sadiola plant to treat lower grade ore, with the result that the ore can be mined at a lower cut-off with a higher throughput.

Sadiola - surface (metric)



Competent persons

		Professional	Registration	Relevant
Category	Name	organisation	number	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 south-west of Kayes. The Yatela operation is currently mining from two open pits, the Yatela main pit and the satellite Alamoutala pits. The Yatela main pit is currently mining Pushback 7, toward the western end of the pit and the mine is approaching the end of its life.

Ore is processed through a 3.0Mtpa heap leach plant, 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 deposit is located within the Malian portion of the Keniéba-Kedougou window, a major Early Proterozoic-Birimian outlier 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 at Yatela is associated with a sheared contact between predominantly dolomitic 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 carbonate-rich rocks by supergene processes. Karsting of carbonate rocks has resulted in the development of deep, coalescent pot holes, collectively named the Yatela Basin, which were gradually filled by sandstones and conglomerates during peneplanation of the Proterozoic rocks. The chaotic collapse during karsting, 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 karst forming process, is the most important geological feature to the economics of the Yatela deposit.

In the Alamoutala pits, the gold mineralisation is mined from the saprolitised marbles and karstic rocks in the south, and from weathered Birimian rocks to the north. The Alamoutala area is underlain by north-trending Birimian clastic metasediments and calcitic marbles, which are intruded by a coarse grained granodiorite body. Gold mineralisation is found along an intermittently sheared and fractured contact, named the Alamoutala Fracture Zone, between the metaclastics and the 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 key philosophy underpinning the programme is one of 'no regrets'; at mine closure the full potential of the lease will have had an opportunity to have been exploited. The exploration strategy has a narrow window of opportunity due to the limited life of mine. An 18-month focused exploration programme, which started in March 2009, is currently underway, with the aim of:

- focusing on oxide targets;
- drill testing the gravity lows on top of marbles for Yatela-type deposits; and
- testing sulphide targets as a complementary strategy, aimed at adding soft sulphide ounces to the Sadiola plant and hard sulphide resources to the DSP.

Projects

The ongoing exploration programme as well as possible partnerships with nearby lease holders may result in additional Ore Reserves.

In August 2009, mining in the Yatela pit was suspended for a month due to geotechnical issues. In light of the mining suspension, the economics of reopening the Alamoutala pit were reviewed. The Alamoutala \$880/oz pit shell showed a profitable return, and mining began during August. Additional drilling within and adjacent to the Alamoutala pit highlighted a likely area south of the existing pit to continue mining to January 2010.

Additional drilling both within and south-east of the existing Yatela pit shows similar promise. Both areas were evaluated during December and final decisions will be made in 2010.

Mineral Resource (attributable)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Yatela	Category	million	g/t	tonnes	Moz
Alamoutala pit	Measured	0.04	1.03	0.04	0.00
	Indicated	0.00	1.65	0.00	0.00
	Inferred	0.00	1.00	0.00	0.00
	Total	0.04	1.05	0.05	0.00
Main pit	Measured	0.18	1.97	0.35	0.01
	Indicated	0.80	2.71	2.16	0.07
	Inferred	0.19	3.10	0.57	0.02
	Total	1.16	2.66	3.09	0.10
Total stockpiles	Measured	1.20	1.14	1.37	0.04
	Indicated	-	-	-	-
	Inferred	-	-	-	-
	Total	1.20	1.14	1.37	0.04
Yatela	Total	2.41	1.85	4.50	0.14

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Yatela	Category	million	g/t	tonnes	Moz
	Measured	0.22	1.79	0.39	0.01
	Indicated	0.80	2.71	2.17	0.07
	Inferred	0.19	3.10	0.57	0.02
Yatela	Total	1.20	2.60	3.13	0.10

Exclusive Mineral Resource

The Exclusive Mineral Resource for Yatela is that Mineral Resource that falls outside the current LOM but inside the Mineral Resource shells for the Yatela main and Alamoutala pits. Any Inferred Mineral Resource within the LOM shell is also considered Exclusive. Currently, only the Inferred Mineral Resource within the LOM shell at the Yatela main pit is convertible to Ore Reserve and this will be done through grade control drilling. In addition, the Yatela main pit will also be optimised in order to ensure that all recoverable material is mined before the envisaged closure.

The Alamoutala Mineral Resource was depleted to the LOM shell in 2005. However, considering the increase in the gold price since then, there is a realistic possibility that additional mining will be conducted here in 2010.



Yatela: Mineral Resource reconciliation 2008 vs 2009



Ore Reserve

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Yatela	Category	million	g/t	tonnes	Moz
Total stockpiles	Proved Probable	1.20	1.14	1.37	0.04
Yatela	Total	1.20	1.14	1.37	0.04





Competent persons

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

Tanzania

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 now a wholly-owned subsidiary.

Mineral Resource estimation

As with any estimation techniques the results are very 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 three dimensional 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.

Mineral Resource and Ore Reserve gold price

	Units	2009	2008
Gold price – Mineral Resource	US\$/oz	1,025	1,000
Gold price – Ore Reserve	US\$/oz	800	720

		Type of drilling					
Mine/		Spacing	Diamond	RC	Blast-	Other	Comments
Project	Category	m (- x -)			hole		
Geita	Measured	-	_	\checkmark	-	_	
	Indicated	20 x 20, and	1	1	_	-	40 X 40m is the lower limit of the
		40 x 40	\checkmark	\checkmark	-	-	Indicated category. Infill drilling at
							20 X 20m is done to increase the
							confidence in the Mineral Resource.
	Inferred	50 x 50, and	1	1	_	_	
		50 x 80	\checkmark	\checkmark	-	-	
	Grade control	5 x10	_	1	_	-	
		10 x 10	-	\checkmark	_	-	

Details of average drillhole spacing and type in relation to Mineral Resource classification

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.



as at 31 December 20			Mine call	Metal-		
	Cut-off			factor	lurgical	
	weighted	RRF	MRF	(MCF)	recovery	
Mine	g/t	%	%	%	%	Comments
Geita	4 07	00	00	05	00.0	
Area 3 West (non-refractory ore)	1.67	96	96	95	80.6	tonnage factors – MRF 102%, RRF 102%
Area 3 West (refractory ore)	2.33	96	96	95	58.7	As above
Chipaka	1.85	96	96	95	78.1	As above
Geita Hill (open pit)	1.39	100	90	95	81.1	RRF and MRF grade factors shown; tonnage factors – MRF 100%, RRF 110%
Kukuluma (non-refractory ore)	1.76	96	96	95	75.2	RRF and MRF grade factors shown; tonnage factors – MRF 102%, RRF 102%
Kukuluma (refractory ore)	3.09	96	96	95	46.2	As above
Lone Cone	1.32	96	96	95	86.1	As above
Matandani (non-refractory ore)	1.58	96	96	95	82.5	As above
Matandani (refractory ore)	2.44	96	96	95	57.8	As above
Nyankanga (open pit)	1.29	93	95	95	89.3	RRF and MRF grade factors shown; tonnage factors – MRF 101%, RRF 105%
Ridge 8 (open pit)	1.53	96	96	95	85.1	As above
Roberts	1.53	96	96	95	89.0	As above
Star and Comet	1.54	95	90	95	84.4	RRF and MRF grade factors shown; tonnage factors – MRF 105%, RRF 110%
Stockpile	1.50	100	100	95	85.0	RRF and MRF grade factors shown; tonnage factors – MRF 102%, RRF 102%
Stockpile (marginal ore)	0.80	100	100	95	85.0	
Stockpile (refractory ore)	2.40	100	100	95	52.0	

Ore Reserve modifying factors

Geita – aeromagnetics 2009 total field



Tanzania – Geita

Location

The Geita gold mine is located approximately 910km west of Dar es Salaam in the Lake Zone of northern Tanzania. The tenement is 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; it strikes east-west, is 60km long and up to 15km wide. The terrain is made up of upper to mid-Nyanzian greenstone facies rocks, mainly clastic sediments, intermediate to felsic volcanoclastics and Banded Iron Formation (BIF) that forms a sedimentary sequence up to 1,000m thick.

In the mine lease area, north-west trending deformation corridors separate the Geita Greenstone trend into three distinct sub-terrains. Namely, 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 83% of this Mineral Resource is situated in the Geita Sub-Terrain, with 13% in the Nuyamulilima Sub-Terrain, and 4% in the Kukuluma Sub-Terrain.

Late dextral faults have utilised these corridors, reactivating 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

As part of the risk mitigation strategy, securing Mineral Resource ounces for the period 2011 to 2013 is the primary focus of Geita's exploration drilling programmes. To this end, infill drilling, leading to Mineral Resource model revisions in 2009, has occurred at Star and Comet and Nyankanga Cuts 5 and 6. Infill drilling began at Nyankanga Cut 7 and Geita Hill Cut 1 in the fourth quarter of 2009 and the Mineral Resource models for these deposits will be revised in the first quarter of 2010.



The focus of the mine's regional exploration program in 2009 and 2010 is relatively low level work involving mostly ground geophysics, structural analysis, and preliminary drilling to follow up on the targets identified during the 2008 airborne geophysics surveys. The result of these surveys will be the development of drill targets for 2011 onward.

Projects

With approximately 58% of the Kukuluma Sub-Terrain Mineral Resource comprising refractory ore, currently not economically treatable in the Geita treatment plant, a metallurgical project has been initiated to determine a treatment method for this material. Success in this regard could significantly increase the potential of the Mineral Resource extension below the Kukuluma and Matandani open pits.

With 3.6Moz of Mineral Resource potentially exploitable by underground mining methods, Geita has begun an underground mining project to convert this Mineral Resource to Ore Reserve. In 2009, the focus of this project has been the Nyankanga underground area, which is the most economically viable. The strategy has been to evaluate the eastern, "near surface" portion of the project area and investigate whether it would support a pilot underground mining implementation aimed at paying for additional underground exploration development, proving up the predominantly Inferred underground Mineral Resource and firming up on the eventual mining method to be employed. This project, known as "Block 1", has been shown to be economically viable and will be infilled in the first quarter of 2010 to increase the confidence in the current Mineral Resource prior to implementation of the pilot study.

To facilitate the underground mining project, the mine has generated a 3D geological model of the Geita Trend that will amalgamate structure and mineralogy so as to optimise the definition of underground Mineral Resource extensions. The diamond drill core from the Nyankanga Cut 7 and Block 1 infill programmes will be used to enhance this model, which is expected to be completed by the end of 2010.



Nyankanga – east section

Mineral Resource (attributable)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Geita	Category	million	g/t	tonnes	Moz
Area 3 West (oxide)	Measured	_	_	-	-
	Indicated	0.86	2.45	2.10	0.07
	Inferred	0.00	2.02	0.01	0.00
	Total	0.86	2.45	2.10	0.07
Area 3 West (sulphide)	Measured	_	_	-	_
	Indicated	0.08	3.22	0.27	0.01
	Inferred	-	-	-	-
	Total	0.08	3.22	0.27	0.01
Chipaka	Measured	_	_	_	_
	Indicated	1.71	2.69	4.60	0.15
	Inferred	_	_	-	_
	Total	1.71	2.69	4.60	0.15
Geita Hill (open pit)	Measured	_	_	_	_
	Indicated	17.64	2.88	50.79	1.63
	Inferred	0.14	2.64	0.37	0.01
	Total	17.78	2.88	51.15	1.64
Geita Hill (underground)	Measured		_		_
	Indicated	6.36	4.90	31.17	1.00
	Inferred	3.27	5.19	16.96	0.55
	Total	9.63	5.00	48.13	1.55
Kalondwa hill	Mossured				
Raionawa min	Indicated		_	_	
	Inferred	1 08	3 69	4 00	0.13
		1.00	0.00	1.00	0.10
	Total	1.08	3.69	4.00	0.13
Lone Cone	Measured	-	-	-	-
	Indicated	0.71	2.59	1.84	0.06
	Interred	0.24	2.24	0.54	0.02
	Total	0.95	2.50	2.38	0.08
Matandani (non-refractory ore)	Measured	-	-	-	-
	Indicated	1.23	2.26	2.77	0.09
	Inferred	0.00	9.12	0.03	0.00
	Total	1.23	2.28	2.80	0.09
Matandani (refractory ore)	Measured	-	-	-	-
	Indicated	1.69	4.64	7.85	0.25
	Inferred	0.05	5.46	0.27	0.01
	Total	1.74	4.66	8.12	0.26

Mineral Resource (attributable) cont.

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Geita	Category	million	g/t	tonnes	Moz
Nyankanga (open pit)	Measured	-	_	_	-
	Indicated	30.35	4.05	122.93	3.95
	Inferred	2.54	1.68	4.25	0.14
	Total	32.89	3.87	127.18	4.09
Nyankanga (underground)	Measured	_	_	_	_
	Indicated	6.62	5.28	34.96	1.12
	Inferred	1.37	5.15	7.05	0.23
	Total	7.99	5.26	42.01	1.35
Bidge 8 (open pit)	Measured	_	_	_	_
	Indicated	1.59	2.12	3.38	0.11
	Inferred	0.01	1.23	0.01	0.00
	Total	1.61	2.11	3.40	0.11
Ridge 8 (underground)	Measured				
	Indicated	0.98	4 97	4 84	0.16
	Inferred	1.82	6.04	10.98	0.35
	Total	2.79	5.67	15.83	0.51
Pohorta	Moogurad				
RODELS	Indicated	- 6.60	1.64	10.94	- 0.25
	Indicated	0.02	1.04	10.04	0.33
		0.50	4.19	1.27	0.04
	Total	6.93	1.75	12.11	0.39
Star and Comet	Measured	-	-	-	-
	Indicated	3.72	4.16	15.47	0.50
	Inferred	2.19	3.14	6.88	0.22
	Total	5.92	3.78	22.35	0.72
Stockpile (full grade ore)	Measured	-	_	_	-
	Indicated	1.67	2.03	3.38	0.11
	Inferred	-	-	-	-
	Total	1.67	2.03	3.38	0.11
Stockpile (marginal ore)	Measured	-	_	_	-
	Indicated	4.62	0.85	3.94	0.13
	Inferred	-	-	-	-
	Total	4.62	0.85	3.94	0.13
Stockpile (refractory ore)	Measured	_	_	_	_
	Indicated	1.26	1.85	2.33	0.08
	Inferred	_	-	_	-
	Total	1.26	1.85	2.33	0.08
Geita	Total	100.73	3.54	356.10	11.45
Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Geita	Category	million	g/t	tonnes	Moz
	Measured	_	_	-	-
	Indicated	43.22	3.21	138.72	4.46
	Inferred	13.03	4.04	52.63	1.69
Geita	Total	56.24	3.40	191.35	6.15

Exclusive Mineral Resource

The Exclusive Mineral Resource at Geita totals 6.15Moz and comprises predominantly Mineral Resource that occurs between the Ore Reserve pit shell and the Mineral Resource pit shell. This material is sub economic to mine at the current Ore Reserve gold price and forms potential extensions to the LOM in an elevated gold price environment. A significant portion of this material is in the Inferred Mineral Resource category and infill drilling programs are planned to upgrade potentially economic areas to Indicated Mineral Resource.

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 0.067Moz from Inferred 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 category of 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.

Inferred Mineral Resource in pit optimisation

No Inferred Mineral Resource is included in the pit optimisation exercise. Although it does not contribute to the economic assessment of the optimised pit, because it is "switched-off" during the optimisation runs, it is present within the final pit shell as Exclusive Resource. The magnitude of this Inferred material is quantified below:

Inferred material in \$800 pitshell

Geita: Mineral Resource reconciliation

Deposit	Gold (Moz)
Nyankanga	0.059
Geita Hill	0.005
Star and Comet	0.002
Area 3 West	0.000
Total	0.066







as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Geita	Category	million	g/t	tonnes	Moz
Area 3 West (non-refractory ore)	Proved	-	-	-	-
	Probable	0.48	2.40	1.15	0.04
	Total	0.48	2.40	1.15	0.04
Geita Hill (open pit)	Proved	_	_	_	-
	Probable	15.24	2.65	40.39	1.30
	Total	15.24	2.65	40.39	1.30
Nyankanga (open pit)	Proved	_	_	_	-
	Probable	23.49	4.07	95.54	3.07
	Total	23.49	4.07	95.54	3.07
Ridge 8 (open pit)	Proved	_	_	_	_
	Probable	0.71	2.55	1.82	0.06
	Total	0.71	2.55	1.82	0.06
Roberts	Proved	_	_	_	-
	Probable	2.26	1.71	3.88	0.12
	Total	2.26	1.71	3.88	0.12
Star and Comet	Proved	_	_	_	_
	Probable	2.50	4.17	10.44	0.34
	Total	2.50	4.17	10.44	0.34
Stockpile (full grade ore)	Proved	_	_	_	-
	Probable	1.67	2.03	3.38	0.11
	Total	1.67	2.03	3.38	0.11
Stockpile (marginal ore)	Proved	_	_	_	-
	Probable	1.00	0.96	0.97	0.03
	Total	1.00	0.96	0.97	0.03
Geita	Total	47.36	3.33	157.57	5.07

Ore Reserve





Geita – underground (metric)



Competent persons

		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Mineral Resource	Steven Robins	AusIMM	222533	14 years
Ore Reserve	Jasper Musadaidzwa	AusIMM	991333	12 years

Australasia

Australasia









Regional overview

AngloGold Ashanti's sole operating asset in Australasia is Sunrise Dam. The group also has an extensive exploration programme under way in Australasia, the most advanced of which is Tropicana, the focus of the group's exploration activities in Australasia. The Australasian operation produced 401,000oz of gold in 2009, equivalent to 9% of total group production.

The Mineral Resource in Australasia, attributable to AngloGold Ashanti, totalled 7.13Moz at year-end, including an attributable Ore Reserve of 4.04Moz.

Mineral Resources by region (attributable)

				Contained	Contained
		Tonnes	Grade	gold	gold
as at 31 December 2009	Category	million	g/t	tonnes	Moz
Australasia	Measured	34.10	1.87	63.60	2.04
	Indicated	38.83	2.88	111.97	3.60
	Inferred	15.34	3.01	46.13	1.48
	Total	88.26	2.51	221.69	7.13

Ore Reserves by region (attributable)

				Contained	Contained
		Tonnes	Grade	gold	gold
as at 31 December 2009	Category	million	g/t	tonnes	Moz
Australasia	Proved	23.63	2.24	53.00	1.70
	Probable	25.72	2.82	72.63	2.34
	Total	49.35	2.55	125.63	4.04



Australia

The Australian assets were acquired at the end of 1999 and comprise 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%. AngloGold Ashanti sold its 33.33% interest in Boddington gold mine to joint venture partner Newmont Mining Corporation, with the sale completed in June 2009.

The Tropicana deposit represents a discovery in a new gold province in which the joint venture partners have a dominant land position and 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 and Ore Reserve gold prices and exchange rates

	Units	2009	2008
Gold price – Mineral Resource	US\$/oz	1,025	1,000
Gold price – Ore Reserve	US\$/oz	800/900*	720
Exchange rate	US\$/A\$	0.80/0.85*	0.80

* Tropicana

Details of average drillhole spacing and type in relation to Mineral Resource classification

		Type of drilling					
Mine/		Spacing	Diamond	RC	Blast-	Other	Comments
Project	Category	m (- x -)			hole		
Tropicana	Measured	25 x 25	\checkmark	1	-	_	
	Indicated	50 x 50	\checkmark	\checkmark	-	_	
	Inferred	100 x 100	\checkmark	~	_	-	
	Grade contro	_	_	-	-	-	

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.

Modifying factors

The Ore Reserve cut-off grade for the Sunrise Dam open pit is based on a US\$800/oz gold price at an US\$/A\$ exchange rate of 0.8, with an average metallurgical recovery of 85.5%.

The Ore Reserve cut-off grade for Sunrise Dam underground is based on a US\$800/oz gold price at an US\$/A\$ exchange rate of 0.8, with an average metallurgical recovery of 85.5%.

The Ore Reserve cut-off grade for Tropicana is based on a US\$900/oz gold price at an US\$/A\$ exchange rate of 0.85, with an average metallurgical recovery of 91.2%. The economic parameters used for Tropicana ore reserve estimation are sourced from the Tropicana joint venture enhanced pre-feasibility study.

Ore Reserve modifying factors

as at 31 December 20	009					Metal-	
	Cut-off	Stoping				lurgical	
	weighted	width	Dilution	RRF	MRF	recovery	
Mine	g/t	cm	%	%	%	%	Comments
Sunrise Dam Surface – North Wall Cutback	0.90	_	_	_	-	85.5	0.90g/t cut-off is used. Operationally 1.2g/t is used. Therefore, 0.9 – 1.2g/t ore is mixed with marginal ore to ensure maximum plant throughput.
Surface – stockpile (open pit)	0.90	_	_	_	_	85.5	0.9g/t cut-off grade is used, except the LG10, which is excluded due to negative cash flow
Underground	3.50	3,500	45	55	95	85.5	Several different stoping methods used
Tropicana Surface	0.7	_	_	_	_	91.2	0.7g/t cut-off for oxide material and 0.8g/t cut-off for fresh material. Cut-offs are based on the economic parameters used in the Tropicana joint venture enhanced pre-feasibility study.



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 mine. 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 still 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 recognised:

- 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 palaeo-channels and horizontal blankets of mineralisation related to iron redox fronts and associated water tables.

Exploration

Near-mine exploration at Sunrise Dam is specifically focused on a two-stage strategy of developing and advancing proximal opportunities to the open pit and underground operations, whilst determining long-term opportunities that exist up to 1.5km below the mine. In 2010, \$10 million will be spent on the initial stage of near-mine exploration with a strategy of growing the Mineral Resource base to 20Mt by December 2011, whilst ensuring that Sunrise Dam can always deliver on its business promises. This is achievable with a secure tenement holding, comprising in excess of 200km² within the central Laverton Greenstone Belt and high-quality targets immediately proximal to and below the mine area.

In addition to projects within the AGAA-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.



Sunrise Dam gold mine - section 100,500m N

Projects

The underground project seeks to delineate the deep Mineral Resource 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.

Mineral Resource Estimation

Open-pit estimates are generated using a geostatistical method called multiple indicator kriging. All available geological drillhole information is validated for use in the models and the local geology of the orebody is used to classify the drillhole 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 drillhole 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.

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Sunrise Dam	Category	million	g/t	tonnes	Moz
Golden Delicious	Measured	_	_	_	_
	Indicated	1.04	1.84	1.91	0.06
	Inferred	2.64	1.64	4.33	0.14
	Total	3.68	1.70	6.24	0.20
North Wall Cutback	Measured	1.68	3.44	5.77	0.19
	Indicated	1.22	2.66	3.25	0.10
	Inferred	_	_	_	-
	Total	2.90	3.11	9.02	0.29
Stockpile (open pit)	Measured	15.46	1.20	18.60	0.60
	Indicated	-	-	-	-
	Inferred	-	-	-	-
	Total	15.46	1.20	18.60	0.60
Stockpile (underground)	Measured	0.04	4.03	0.16	0.01
	Indicated	-	-	-	-
	Inferred	_	-	_	-
	Total	0.04	4.03	0.16	0.01
Underground	Measured	_	_	_	_
	Indicated	8.71	5.82	50.68	1.63
	Inferred	4.78	5.82	27.85	0.90
	Total	13.50	5.82	78.52	2.52
Sunrise Dam	Total	35.58	3.16	112.53	3.62

Mineral Resource (attributable)

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Sunrise Dam	Category	million	g/t	tonnes	Moz
	Measured	0.10	0.82	0.09	0.00
	Indicated	1.68	10.86	18.24	0.59
	Inferred	7.43	4.33	32.18	1.03
Sunrise Dam	Total	9.21	5.48	50.51	1.62

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.



Change

Sunrise Dam: Ore Reserve reconciliation 2008 vs 2009



Ore Reserve

				Contained	Contained
		Tonnes	Grade	gold	gold
Sunrise Dam	Category	million	g/t	tonnes	Moz
North Wall Cutback	Proved	1.58	3.61	5.68	0.18
	Probable	1.10	2.76	3.03	0.10
	Total	2.68	3.26	8.72	0.28
Stockpile (open pit)	Proved	6.70	1.54	10.32	0.33
	Probable	-	-	-	-
	Total	6.70	1.54	10.32	0.33
Stockpile (underground)	Proved	0.04	4.03	0.16	0.01
	Probable	-	-	-	-
	Total	0.04	4.03	0.16	0.01
Underground	Proved	_	_	_	_
	Probable	8.19	4.22	34.55	1.11
	Total	8.19	4.22	34.55	1.11
Sunrise Dam	Total	17.60	3.05	53.75	1.73

Inferred Mineral Resource in pit optimisation

Inferred material is included in the pit optimisation, but makes up only a small proportion (~13%) of the total Mineral Resource ounces. Further drilling will increase the confidence in the estimation of this material with a view to bring the material into the Ore Reserve in the near future.



Sunrise Dam – underground (metric)



Competent persons

			Professional	Registration	Relevant
Category	Туре	Name o	organisation	number	experience
Surface	Mineral Resource	James Biggam	AusIMM	112082	16 years
	Ore Reserve	Salih Ramazan	AusIMM	22870	8 years
Underground	Mineral Resource	James Biggam	AusIMM	112082	16 years
	Ore Reserve	Andrew Gasmier	AusIMM	211557	14 years



Australia – Tropicana



Location

The Tropicana gold project is located 330km east north-east of Kalgoorlie, Western Australia. The mineral deposit is hosted in tectonically-reworked Archaean rocks that form 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 and Havana deposits define a north-east trending mineralised corridor ~1.2km wide and ~5km long that has been tested to vertical depth of 400m. The Mineral Resource remains open down-dip for both the Tropicana and Havana deposits, and along strike to the north of the Tropicana deposit and south of the Havana deposit. Neither the immediate metamorphic host rocks nor mineralised zones are exposed at surface due to the presence of widespread cover sequences (0.5–15m thick).

Geology

The Tropicana deposit comprises one main ore zone (2-50m thick) and subordinate thin (3-5m), discontinuous mineralised lenses that typically return intercepts <0.5g/t gold. The Havana deposit comprises a lower, laterally continuous higher-grade lode (2-50m thick) that is overlain, in central and southern parts of the proposed pit, by stacked, typically lower-grade and thinner (5-25m) ore zones dominantly hosted in quartzo-feldspathic gneiss.

Models of the mineralised envelope (≥ 0.3g/t) define a wavy, asymmetric foliation that is broadly sub-parallel to dominantly east to south-east dipping gneissic banding and local stratigraphic divisions. The foliation is deflected approaching discrete high-strain sericite-biotite-chlorite±graphite shears that are anomalous in gold. Three distinct structural domains can be identified: Tropicana, Havana North and Havana South. The northern margin of the Tropicana domain is defined by the east-northeast-striking and southerly-dipping Boston Shaker Shear Zone. The Tropicana and Havana domains are separated by north-east to east-striking, variably-dipping structural discontinuities defined by the Muddler, Swizzler and Cobbler Shears. At Havana, the boundary between the northern and southern structural domains is coincident with an east-west-striking steep fault (Don Lino Shear).

In detail, single lodes comprise multiple stacked higher-grade (\geq 3g/t) lenses within a lower grade (\geq 0.3g/t) envelope. Single high-grade lenses and their medium grade halos locally converge to form thicker, composite mineralised zones. The geometry is interpreted as a linked shear system that in drill core manifests as discontinuous biotite-pyrite shears which are developed on a mm to cm scale.

Sulphides within the ore zones are dominated by pyrite (2-8%, <0.2mm) with accessory pyrrhotite, chalcopyrite, electrum and telluride minerals, and trace minerals including, but not limited to, sphalerite, galena and bornite. Free gold occurs as fine-grained (typically 10-30 microns) inclusions within pyrite and less commonly along biotite-sericite fractures cutting silicate minerals. Mineralisation was strongly influenced by the character of precursor metamorphic facies at scales ranging from single grains and crystal-clusters (mm to cm scale) to preferential concentration of gold in rheologically and/or chemically favourable K-feldspar-rich facies of the quartzo-feldspathic gneiss association (deposit scale).

Gold mineralisation is temporally related to shear planes that post-date the main gneissic fabric developed during, peak (granulite facies) metamorphism. Permeability created during brittle fragmentation was accompanied by synchronous partitioning of strain into pervasively biotite-sericite-pyrite-altered dissolution and shear planes that envelop more competent lithons. Sulphide and gold mineralisation formed from higher temperature (>350°C) silica-undersaturated fluids that were buffered by the wall rock at variable oxidation states.

Exploration

The Tropicana joint venture has assembled a dominant land-holding within an emerging greenfields belt. Maximising the value of the known Mineral Resource and capitalising on the strategic ground holding is dependent on timely application of exploration expenditure. Progressive focusing of expenditure in tenure shown to be more prospective and relinquishment of less prospective parts of the portfolio will heighten the probability of discovery. This approach will best be achieved through sustained investment in systematic exploration.

Capitalising on the joint venture first mover advantage is dependent on systematic exploration of regional targets (>60km from Tropicana), near resource targets (<60km), and extensions of the known Mineral Resource that may form part of an 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 2010 can be summarised as:

- defining additional higher value ounces to maximise the value of the Tropicana gold project;
- identifying the potential scale of the underground Mineral Resource at Tropicana and Havana that can complement conceptual open-pit mining and extend the conceptual 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 greenfield discoveries.

Projects

The Tropicana gold project is currently the focus of a bankable feasibility study into the viability of open-pit mining. The study is due for completion in the second half of 2010.

Mineral Resource estimation

The geostatistical method of uniform conditioning is used to estimate the Mineral Resource. All available geological drillhole information is validated for use in the models and the local geology of the orebody is used to classify the drillhole 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.

Mineral Resource has been reported above a marginal (break-even) cut-off grade of 0.6g/t for oxide and transitional material and 0.7g/t for fresh material, within a US\$1,000 optimisation at an US\$/A\$ exchange rate of 0.8.

Mineral Resource (attributable)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Tropicana	Category	million	g/t	tonnes	Moz
Surface	Measured	16.91	2.31	39.07	1.26
	Indicated	27.86	2.02	56.14	1.80
	Inferred	7.91	1.76	13.95	0.45
	Total	52.68	2.07	109.16	3.51

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Tropicana	Category	million	g/t	tonnes	Moz
	Measured	1.60	1.40	2.24	0.07
	Indicated	11.43	1.85	21.10	0.68
	Inferred	7.91	1.76	13.95	0.45
Tropicana	Total	20.94	1.78	37.28	1.20

Longitudinal section of Tropicana



Exclusive Mineral Resource

The Exclusive Resource consists of a small amount of Inferred material within the Tropicana joint venture. Enhanced prefeasibility study pit designs have been generated at depth in the Havana pit and in Havana South. Further drilling will increase the confidence in the estimation of this material with a view to bring the material into the Ore Reserve in the near future.

2008 vs 2009

Tropicana: Mineral Resource reconciliation



Ore Reserve

as at 31 December 2009								
				Contained	Contained			
		Tonnes	Grade	gold	gold			
Tropicana	Category	million	g/t	tonnes	Moz			
Surface	Proved Probable	15.31 16.43	2.41 2.13	36.84 35.04	1.18 1.13			
	Total	31.74	2.26	71.88	2.31			

Inferred Mineral Resource in pit optimisation

Inferred material is included in the pit optimisation, but makes up only a small proportion (~15%) of the total Mineral Resource ounces. Further drilling will increase the confidence in the estimation of this material with a view to bring the material into the Ore Reserve in the near future.



Tropicana - surface (metric)

Competent persons

		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Mineral Resource	Mark Kent	AusIMM	203631	12 years
Ore Reserve	Marek Janas	AusIMM	210148	18 years

North America

North America









P120

Regional overview

AngloGold Ashanti has one mining operation in North America, Cripple Creek & Victor (CC&V) in the state of Colorado in the United States. In 2009, CC&V produced 218,000oz of gold, equivalent to 5% of group production.

The Mineral Resource in North America attributable to AngloGold Ashanti totalled 13.74Moz at year-end, and attributable Ore Reserve, 4.29Moz.

Mineral Resource by region (attributable)

				Contained	Contained
		Tonnes	Grade	gold	gold
as at 31 December 2009	Category	million	g/t	tonnes	Moz
North America	Measured	280.80	0.82	231.03	7.43
	Indicated	194.55	0.73	142.71	4.59
	Inferred	73.12	0.73	53.58	1.72
	Total	548.46	0.78	427.31	13.74

Ore Reserve by region (attributable)

				Contained	Contained
		Tonnes	Grade	gold	gold
as at 31 December 2009	Category	million	g/t	tonnes	Moz
North America	Proved	99.82	0.92	92.29	2.97
	Probable	46.40	0.89	41.17	1.32
	Total	146.22	0.91	133.47	4.29



United States

Regional overview

In March 1999 AngloGold Ashanti acquired the Pikes Peak Mining Company, and 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 within the 2009 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. Modelling software is MineSight[®] and updated drillhole information is used throughout. The drillhole database is thoroughly reviewed before each Mineral Resource estimation and the estimation domains are based on lithology and structural domains for each deposit.

Mineral Resource and Ore Reserve gold price

	Units	2009	2008
Gold price – Mineral Resource	US\$/oz	1,025	1,000
Gold price – Ore Reserve	US\$/oz	800	720

Mineral Resources (attributable)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
United States	Category	million	g/t	tonnes	Moz
CC&V	Measured	280.80	0.82	231.03	7.43
	Indicated	194.55	0.73	142.71	4.59
	Inferred	73.12	0.73	53.58	1.72
	Total	548.46	1.78	427.31	13.74

Details of average drillhole spacing and type in relation to Mineral Resource classification

	Type of drilling							
Mine/		Spacing	Diamond	RC	Blast-	Other	Comments	
Project	Category	m (- x -)			hole			
CC&V	Measured	30 x 30	\checkmark	\checkmark	-	-		
	Indicated	45 x 45	\checkmark	\checkmark	-	_		
	Inferred	75 x 75	\checkmark	~	-	-		
	Grade control	5 x 6	_	_	1	-		

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 (35 feet) bench height except the South Cresson which utilises 6.1m (20 feet).

Inferred Mineral Resource in business plan

Inferred Mineral Resource is not used in the pit optimisation.

Ore Reserve

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
United States	Category	million	g/t	tonnes	Moz
CC&V	Proved	99.82	0.92	92.29	2.97
	Probable	46.40	0.89	41.17	1.32
	Total	146.22	0.91	133.47	4.29

Ore Reserve modifying factors

as at 31 December 2009						Mine call	Metal-
	Cut-off	Stoping				factor	lurgical
	weighted	width	Dilution	RRF	MRF	(MCF)	recovery
Mine	g/t	cm	%	%	%	%	%
CC&V							
Cresson	0.16	_	-	-	-	_	_
Globe Hill	0.16	_	-	-	_	_	-
South Cresson	0.16	-	_	-	-	-	-
Wild Horse Extension	0.16	-	-	-	-	-	-



United States – CC&V

Background

CC&V is located south-west of Colorado Springs in the state of Colorado in the United States. Large-scale surface mining began in 1991 and grew with the start of production at the CC&V Cresson project in 1994. Today, CC&V is a low-grade, openpit operation. The ore is treated using a valley leach facility (VLF) with activated carbon used to recover the gold. The resulting doré buttons are shipped to a refinery for final processing.

Geology

The mining district is located between the towns of Cripple Creek and Victor. The dominant geological feature is a Tertiaryaged, diatreme intrusive complex 6.4km long and 3.2km wide. The diatreme-intrusive complex is hosted in Precambrian age rocks including biotite gneiss, granodiorite, quartz monzonite and granite.

The diatreme is primarily composed of highly variable breccias and volcanoclastics that have been intruded by stocks, dykes, sills and discordant breccias. These rocks, primarily phonolitic in composition, were followed by late lamprophyre dikes and breccia pipes. The host rocks have undergone a complex history of structural deformation and hydrothermal activity and alteration. Gold mineralisation post-dates volcanic activity, and is hosted in all rock types as veins and disseminated and/or structurally-controlled orebodies. The gold mineralisation has been dated between 27.8 and 26.6Ma. District structures are generally near vertical and strike north-north-west to north-east. These structures commonly controlled the intrusions and acted as primary conduits for late-stage, gold mineralising solutions.

Higher grade pods of mineralisation occur at structural intersections and/or as sheeted veins along zones of strike deflection. High-grade gold mineralisation is also associated with K-feldspar + pyrite +/- carbonate alteration and occurs adjacent to the major structural and intrusive dyke zones. The broader zones of disseminated mineralisation occur primarily as micro-fracture halos around the stronger alteration zones in the more permeable Cripple Creek breccia wall rocks. The average depth of oxidation is 120m and is also developed along major structural zones to even greater depths. Individual orebodies can be tabular, pipe-like, irregular or massive. Individual gold particles are generally less than 20 microns in size. Gold occurs as native gold with pyrite, native gold and gold-silver tellurides. In the oxide zone, gold occurs with hydrous iron and manganese oxides. Silver is present but is economically unimportant. Iron and manganese oxides, pyrite, K-feldspar alteration and quartz can encapsulate gold mineralisation locally.



Mine life extension project

CC&V has implemented a mine life extension (MLE) project that extends the LOM. The MLE mining area utilises a lower cutoff grade from four of the design pits (Cresson, South Cresson, Wild Horse Extension and Globe Hill) to generate the ore tonnage needed. Processing and recovery of the additional gold will be completed through a phase 5 extension of the existing VLF. Overburden resulting from mining in these extension areas will be placed into portions of the existing main Cresson mine, east Cresson mine, and north Cresson mine as mine backfill or placed for storage in the existing Squaw Gulch Overburden storage area. Approximately 113Mt of additional ore and 231Mt of additional overburden will be mined within the proposed MLE areas for a total of 344Mt over the additional five years of mining in the MLE area. The ore will be crushed and processed using the existing crushing and conveying facilities. Ore will be processed on the existing VLF and the phase 5 extension, and recovered in the existing process facility.

Mineral Resource (attributable)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
CC&V	Category	million	g/t	tonnes	Moz
Cresson	Measured	280.80	0.82	231.03	7.43
	Indicated	194.55	0.73	142.71	4.59
	Inferred	73.12	0.73	53.58	1.72
CC&V	Total	548.46	0.78	427.31	13.74

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
CC&V	Category	million	g/t	tonnes	Moz
	Measured	180.98	0.77	138.73	4.46
	Indicated	148.15	0.69	101.53	3.26
	Inferred	68.65	0.74	50.77	1.63
CC&V	Total	397.78	0.73	291.04	9.36



Exclusive Mineral Resource

The Exclusive Mineral Resource at CC&V lies peripheral to, and along, mineralised strike extensions in the current pit designs. None of this material was brought into the Ore Reserve during 2009 as CC&V is currently engaged in a MLE pre-feasibility study. The study will be completed during 2010 and a portion of the material is then expected to be brought into the Ore Reserve in 2010.



CC&V: Ore Reserve reconciliation 2008 vs 2009



Ore Reserve

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
CC&V	Category	million	g/t	tonnes	Moz
Cresson	Proved	62.36	0.88	55.16	1.77
	Probable	29.55	0.88	26.04	0.84
	Total	91.91	0.88	81.20	2.61
Globe Hill	Proved	7.40	0.47	3.45	0.11
	Probable	4.46	0.45	2.02	0.06
	Total	11.86	0.46	5.47	0.18
South Cresson	Proved	12.28	0.85	10.40	0.33
	Probable	2.48	0.89	2.21	0.07
	Total	14.77	0.85	12.62	0.41
Wild Horse Extension	Proved	17.77	1.31	23.28	0.75
	Probable	9.91	1.10	10.91	0.35
	Total	27.68	1.23	34.18	1.10
CC&V	Total	146.22	0.91	133.47	4.29

CC&V – surface (metric)



Competent persons

		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Mineral Resource	Tim Brown	AusIMM	226857	24 years
Ore Reserve	Jesse Gage	SME	1094700	23 years



South America









Regional overview

AngloGold Ashanti has three operations in South America – Cerro Vanguardia in Argentina, and AngloGold Ashanti Brasil Mineração (Brasil Mineração) and Serra Grande in Brazil. Combined, these operations produced 598,000oz of gold in 2009, equivalent to 13% of group production and 6% more than in 2008. In addition, AngloGold Ashanti has had an active exploration programme in Colombia for some years, with the most favourable of the prospects being in the La Colosa district. The exploration programmes in Argentina and Brazil were recently expanded.

The Mineral Resource in South America attributable to AngloGold Ashanti, including the Colombia Mineral Resource, totalled 29.16Moz at year-end, and the attributable Ore Reserve, 4.41Moz.

Mineral Resource estimation

The Mineral Resource estimates are computed using the relevant computer modules of 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, Inferred and Indicated categories according to stringent rules.

				Contained	Contained
		Tonnes	Grade	gold	gold
as at 31 December 2009	Category	million	g/t	tonnes	Moz
South America	Measured	23.24	4.06	94.30	3.03
	Inferred	439.19	3.43 1.44	630.56	20.27
	Total	515.46	1.76	906.94	29.16

Mineral Resource by region (attributable)

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 23:1.

Ore Reserve by region (attributable)

				Contained	Contained
		Tonnes	Grade	gold	gold
as at 31 December 2009	Category	million	g/t	tonnes	Moz
South America	Proved	17.43	3.11	54.15	1.74
	Probable	16.94	4.89	82.87	2.66
	Total	34.37	3.99	137.02	4.41

Argentina

Regional 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 Resource and Ore Reserve gold prices and exchange rates

	Units	2009	2008
Gold price – Mineral Resource	US\$/oz	1,025	1,000
Gold price – Ore Reserve	US\$/oz	750	720
Exchange rate	ARS/US\$	3.80	3.10

Details of average drillhole spacing and type in relation to Mineral Resource classification

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

Ore Reserve modifying factors

as at 31 December 20	009			Mine call	Metal-	
	Cut-off			factor	lurgical	
	weighted	Dilution	MRF	(MCF)	recovery	
Mine	g/t	%	%	%	%	Comments
Cerro Vanguardia Heap Leach	0.35	_	-	100	_	
Stockpile (full grade ore)	_	_	_	_	_	
Vein Mineral Resource	2.35	49	100	93	94.99	



Argentina – Cerro Vanguardia

Location

The Cerro Vanguardia property is located in the Santa Cruz Province, southern Argentina, approximately 120km north-northwest of San Julián, and 195km west-south-west of Puerto Deseado. Access to the area is by plane from Buenos Aires to Comodoro Rivadavia (Chubut), or Río Gallegos (Santa Cruz), and subsequently by road to the mine site. The mine is approximately 650km from Comodoro Rivadavia and 540km from Río Gallegos.

Cerro Vanguardia geological map



Geology

Cerro Vanguardia is located in the central portion of the 60,000km² Deseado Massif, the most extensive morphological and stratigraphical 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 oldest rocks in this part of Patagonia are of Precambrian-Cambrian age which are overlain by Permian and Triassic continental clastic rocks which have been faulted into a series of horst and graben structures, and are associated with both limited basaltic sills and dykes and with calc-alkaline granite and granodiorite intrusions.

Gold and silver mineralisation at Cerro Vanguardia occurs within a vertical range of about 150 to 200m, in a series of narrow, banded quartz veins that occupy structures within the Chon Aike ignimbrites. These veins form a typical structural pattern related to major north-south (Concepcion) and east-west (Vanguardia) shears. Two sets of veins have formed in response to this shearing: one set strikes about N40W and generally dips 65° to 90° to the east while the other set strikes about N75W and the veins dip 60° to 80° to the south.

The veins are typical of epithermal, low-temperature, adularia-sericite character and consist primarily of quartz in several forms such as massive quartz, banded chalcedonic quartz and quartz-cemented breccias. Dark bands in the quartz are due to finely disseminated pyrite, now oxidised to limonite. The veins show sharp contacts with the surrounding ignimbrite, which hosts narrow stockwork zones that are weakly mineralised, and appear to have been cut by a sequence of north-east trending faults that have southerly movement with no appreciable lateral displacement.

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Cerro Vanguardia	Category	million	g/t	tonnes	Moz
Heap leach	Measured	10.22	0.77	7.87	0.25
	Indicated	12.57	0.62	7.79	0.25
	Inferred	2.86	0.63	1.81	0.06
	Total	25.66	0.68	17.48	0.56
Vein Mineral Resources	Measured	1.78	7.59	13.50	0.43
	Indicated	10.12	6.80	68.83	2.21
	Inferred	3.29	6.38	21.01	0.68
	Total	15.19	6.80	103.34	3.32
Cerro Vanguardia	Total	40.85	2.96	120.81	3.88

Mineral Resource (attributable)

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Cerro Vanguardia	Category	million	g/t	tonnes	Moz
	Measured	2.29	3.08	7.06	0.23
	Indicated	16.04	2.17	34.80	1.12
	Inferred	6.16	3.71	22.82	0.73
Cerro Vanguardia	Total	24.49	2.64	64.68	2.08

Mineral Resource by-product: Silver (Ag)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	silver	silver
Cerro Vanguardia	Category	Mt	Kg/t	tonnes	Moz
	Measured	12.00	28.60	343.16	11.03
	Indicated	22.70	66.94	1,519.31	48.85
	Inferred	6.16	82.75	509.40	16.38
Cerro Vanguardia	Total	40.85	58.06	2,371.87	76.26

Cerro Vanguardia: Mineral Resource reconciliation 2008 vs 2009



Cerro Vanguardia: Ore Reserve reconciliation 2008 vs 2009



Ore Reserve

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Cerro Vanguardia	Category	million	g/t	tonnes	Moz
Heap leach	Proved	9.60	0.69	6.59	0.21
	Probable	3.50	0.44	1.55	0.05
	Total	13.11	0.62	8.14	0.26
Vein Mineral Resources	Proved	1.16	7.08	8.19	0.26
	Probable	6.14	6.86	42.11	1.35
	Total	7.30	6.89	50.30	1.62
Cerro Vanguardia	Total	20.40	2.86	58.44	1.88

Ore Reserve by-product: Silver (Ag)

as at 31 December 2009								
				Contained				
		Tonnes	Grade	silver	Silver			
Cerro Vanguardia	Category	Mt	Kg/t	tonnes	Moz			
	Proved	10.76	22.59	243.10	7.82			
	Probable	9.64	87.50	843.60	27.12			
Cerro Vanguardia	Total	20.40	53.27	1,086.71	34.94			

Cerro Vanguardia – surface (metric)



Competent persons

		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Mineral Resource	AHM Silva	AusIMM	224831	11 years
Ore Reserve	Miguel Fuentealba	AusIMM	226663	15 years



Brazil

Regional overview

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

Mineral Resource and Ore Reserve gold prices and exchange rates

	Units	2009	2008
Gold price – Mineral Resource	US\$/oz	1,025	1,000
Gold price – Ore Reserve	US\$/oz	800	720
Exchange rate – Brazil	BRL/US\$	2.00	1.94

Brazil mine locations



Details of	average	drillhole	spacing	and	type	in	relation	to	Mineral	Resource	classification
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	Type of drilling								
Mine/		Spacing	Diamond	RC	Blast-	Other	Comments		
Project	Category	m (- x -)			hole				
Serra Grande	Measured	10 x 10, and	\checkmark	_	_	_			
		10 x 20	\checkmark	-	-	-			
	Indicated	10 x 20, and	✓	-	_	_			
		20 x 50	1	-	-	-			
	Inferred	50 x 100, and	✓	-	_	_			
		50 x 200	1	-	-	-			
	Grade control	2 x 2	-	-	-	~	Channel sampling		

Section across the Ćachorro Bravo orebody at Córrego do Sítio



Ore Reserve modifying factors

as at 31 December 2009						Mine call	Metal-
	Cut-off	Stoping				factor	lurgical
	weighted	width	Dilution	RRF	MRF	(MCF)	recovery
Mine	g/t	cm	%	%	%	%	%
Brasil Mineração							
Cuiabá (main area)	3.53	800	5	-	-	94.5	93.0
Lamego (sulphides)	3.38	3,500	5	-	-	95.0	93.0
Córrego do Sítio							
CdS oxides (south area)	1.18	-	28	-	-	92.0	88.0
CdS sulphides (south area)	3.60	200	31	-	-	95.0	88.0
Serra Grande							
Mina 3	2.37	_	5	94	95	95.0	94.6
Mina Nova	1.87	-	5	94	95	95.0	90.9
Open pit	1.00	-	5	94	95	95.0	92.9
Palmeiras	2.37	_	5	94	95	95.0	95.9
Pequizao	2.37	_	5	94	95	95.0	94.7
Total stockpiles	3.20	-	-	_	-	-	-



Brazil – Brasil Mineração

Brasil Mineração

Brasil Mineração has mining rights over 61,864ha in the state of Minas Gerais in south-eastern Brazil. The Brasil Mineração complex is located in the municipalities of Nova Lima, Sabará and Santa Bárbara, south and east of the city of Belo Horizonte and within the mining district referred to as the Iron Quadrangle (Quadrilátero Ferrífero). This area hosts numerous historic and current gold mining operations, as well as a number of open-pit limestone and iron ore operations. Currently AngloGold Ashanti mines gold-bearing ore at the Cuiabá underground mine and from the Córrego do Sítio heap-leach mine.

Cuiabá

The gold mineralisation at Cuiabá mine is associated with sulphides and quartz veins in BIF and volcanic sequences. Where the BIF is mineralised, 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 trend parallel to intersections between the shears and other structures. The controlling mineralisation structures are the intersection of thrust faults with tight isoclinal folds in a ductile environment. Mineralisation is due to the interaction of low salinity carbon dioxide rich 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.

Cuiabá mine – orebodies



Córrego do Sítio

The Córrego do Sítio orebodies are situated about 30km to the south-east of Cuiabá mine and consist of narrow northeast/south-west elongated lenses 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 sometimes in berthierite. Other typical sulphide minerals in the orebodies are pyrrhotite, pyrite and chalcopyrite.



Section across the Sangue de Boi orebody at Córrego do Sítio

Lamego

The Lamego mine is located in the northwestern part of the Iron Quadrangle metallogenetic province, close to the Cuiabá gold mine. Mineralisation in Lamego's deposit is characterised by orebodies associated with shear zones in both BIF and metacherts. The proportion of these lithotypes varies substantially from one orebody to another. In the BIF, sulphide mineralisation occurs, while in the metachert and the 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. The plunge of the orebodies both with the fold axis of the first two structural events and with stretches in the same direction as the local mineral lineation.

São Bento Mine



MMV Other

The MMV Other Mineral Resource comprises the Mineral Resource from the currently closed underground mines of Raposos and Morro da Gloria, together with the Luzia da Motta open pit. All of these operations are located within a radius of 4km to the Queiroz plant and Nova Lima city. The Raposos sequence is interpreted as a ductile thrust event and the main mineralised area is associated with an anticlinal (isoclinal) fold of the same structural event. The stratigraphy sequence is repeated by folds and consists of ultramafics, komatilitic basalts, basalts and andesites with layers of BIF. Pelites and metavolcanoclastic occur at the top of the sequence. The mineralisation is located in folds and shear zones and occurs essentially in the BIF layers. The orebodies are characteristically surrounded by concentric zones of hydrothermal alteration consisting of sericitisation, carbonatisation and chloritisation. In the oxidised ore the gold tends to be finer (10 to 30 microns) and occurs in limonite.

Exploration

The Raposos mine is currently being explored with underground drilling, whilst Morro da Gloria Mine and Luzia da Motta are targeted with surface drillholes. A dewatering program at Morro da Gloria is also in progress in order to access the orebodies. The programme is intended to confirm and convert an Inferred Mineral Resource to the Indicated Mineral Resource category by drilling patterns of drillholes at 60m along the plunge and 30m along the strike of the orebodies.

Projects

A conceptual study on the Cuiabá future mine was started in 2009. The strategy is to optimise Cuiabá future mine production, without abandoning the narrow vein orebodies at the end of the mine life.

The project which comprises the MMV Other Mineral Resource at Brasil Mineração is named Nova Lima Sul (Nova Lima South). The objective of this project is to set up a system of production that will generate sufficient ore to feed the current spare capacity at the Queiroz plant.

Mineral Resource 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 drillhole 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 drillhole 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 use 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.

Mineral Resource (attributable)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Brasil Mineração	Category	million	g/t	tonnes	Moz
CdS oxides	Measured	_	_	_	_
(north area/Sao Bento)	Indicated	-	_	_	-
	Inferred	0.68	3.19	2.17	0.07
	Total	0.68	3.19	2.17	0.07
CdS oxides (south area)	Measured	1.12	4.58	5.12	0.16
	Indicated	0.86	3.88	3.32	0.11
	Inferred	1.02	4.03	4.11	0.13
	Total	3.00	4.19	12.56	0.40
CdS sulphides	Measured	-	_	_	_
(north area/Sao Bento)	Indicated	-	-	-	-
	Inferred	3.43	7.14	24.50	0.79
	Total	3.43	7.14	24.50	0.79
CdS sulphides (south area)	Measured	1.14	8.24	9.38	0.30
	Indicated	4.10	6.71	27.53	0.89
	Inferred	4.57	7.07	32.31	1.04
	Total	9.81	7.05	69.21	2.23
CdS transition	Measured	_	_	_	_
(north area/Sao Bento)	Indicated	-	-	-	-
	Inferred	0.04	2.31	0.10	0.00
	Total	0.04	2.31	0.10	0.00
CdS transition (south area)	Measured	0.08	8.69	0.71	0.02
	Indicated	0.39	7.60	2.94	0.09
	Inferred	0.30	6.03	1.79	0.06
	Total	0.76	7.11	5.44	0.17
Cuiabá (main area)	Measured	4.50	8.16	36.72	1.18
	Indicated	3.91	6.42	25.10	0.81
	Inferred	10.71	8.05	86.22	2.77
	Total	19.12	7.74	148.04	4.76
Cuiabá (secondary area)	Measured	0.84	6.11	5.12	0.16
	Indicated	0.17	6.78	1.15	0.04
	Inferred	0.32	6.08	1.92	0.06
	Total	1.32	6.19	8.19	0.26
Mineral Resource (attributable) cont.

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Brasil Mineração	Category	million	g/t	tonnes	Moz
Lamego (sulphides)	Measured	0.44	5.68	2.47	0.08
	Indicated	3.17	5.92	18.78	0.60
	Inferred	3.02	4.92	14.88	0.48
	Total	6.63	5.45	36.14	1.16
Luzia Da Motta oxides	Measured	0.19	3.23	0.63	0.02
	Indicated	0.50	3.00	1.51	0.05
	Inferred	0.23	2.97	0.70	0.02
	Total	0.93	3.04	2.83	0.09
Morro Da Gloria sulphides	Measured	0.06	7.21	0.46	0.01
	Indicated	0.05	5.92	0.29	0.01
	Inferred	0.74	6.71	4.95	0.16
	Total	0.85	6.70	5.70	0.18
Raposos sulphides	Measured	0.35	6.77	2.37	0.08
	Indicated	0.86	6.65	5.74	0.18
	Inferred	2.18	7.13	15.55	0.50
	Total	3.39	6.97	23.66	0.76
Brasil Mineração	Total	49.97	6.77	338.54	10.88

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Brasil Mineração	Category	million	g/t	tonnes	Moz
	Measured	4.21	6.49	27.30	0.88
	Indicated	8.00	5.82	46.58	1.50
	Inferred	26.17	7.01	183.50	5.90
Brasil Mineração	Total	38.38	6.71	257.39	8.28

Exclusive Mineral Resource

The Exclusive Mineral Resource is defined as the inclusive Mineral Resource less the Ore Reserve before dilution and other factors are applied. At Cuiabá the main Exclusive Mineral Resource (0.30Moz) comes from the main area (current production orebodies). This Exclusive Mineral Resource is basically an Inferred Mineral Resource that will be drilled according to the conversion plan and is located below level L15 (FGS-SER) and L13 (BAL-GAL-CGA). The secondary area comprises old panels and satellite orebodies and is considered an Exclusive Mineral Resource (0.026Moz) until the satellites orebodies are drilled out.

Mineral Resource below infrastructure

as at 31 December 2009						
				Contained	Contained	
		Tonnes	Grade	gold	gold	
Brasil Mineração	Category	million	g/t	tonnes	Moz	
Cuiabá	Total	12.80	7.76	99.34	3.19	
Córrego do Sítio	Total	8.33	6.99	58.22	1.87	
Lamego	Total	3.49	5.30	18.50	0.59	
Brasil Mineração	Total	24.63	7.15	176.05	5.66	

Mineral Resource by-products: Sulphur (S)

as at 31 December 2009					
		Tonnes	Grade	Sulphur	Pounds
Brasil Mineração	Category	million	(%S)	(Mt)	million
	Measured	5.77	6.0	0.35	768
	Indicated	7.25	5.8	0.42	934
	Inferred	14.05	6.7	0.94	2,081
Brasil Mineração	Total	27.07	6.3	1.72	3,783

Brasil Mineração: Mineral Resource reconciliation 2008 vs 2009



Brasil Mineração: Ore Reserve reconciliation 2008 vs 2009



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.

Ore Reserve

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Brasil Mineração	Category	million	g/t	tonnes	Moz
CdS oxides (south area)	Proved	0.17	5.66	0.95	0.03
	Probable	0.08	4.10	0.33	0.01
	Total	0.25	5.15	1.29	0.04
CdS sulphides (south area)	Proved	0.33	6.47	2.13	0.07
	Probable	1.90	5.61	10.66	0.34
	Total	2.23	5.74	12.79	0.41
Cuiabá (main area)	Proved	3.95	7.12	28.16	0.91
	Probable	3.46	5.73	19.83	0.64
	Total	7.42	6.47	47.99	1.54
Lamego (sulphides)	Proved	0.16	4.73	0.75	0.02
	Probable	0.99	4.98	4.95	0.16
	Total	1.15	4.95	5.70	0.18
Brasil Mineração	Total	11.05	6.14	67.77	2.18

Ore Reserve by-products: Sulphur (S)

as at 31 December 2009					
		Tonnes	Grade	Contained	Pounds
Brasil Mineração	Category	million	(%S)	sulphur (Mt)	million
	Proved Inferred	4.11 4.46	4.9 4.7	0.20 0.21	440 462
Brasil Mineração	Total	8.57	4.8	0.41	902

Ore Reserve below infrastructure

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Brasil Mineração	Category	million	g/t	tonnes	Moz
Cuiabá	Total	1.83	5.83	10.66	0.34
Córrego do Sítio	Total	1.90	5.61	10.66	0.34
Lamego	Total	0.46	4.71	2.17	0.07
Brasil Mineração	Total	4.19	5.60	23.49	0.76





Brasil Mineração - underground (metric)



Competent persons

		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Córrego do Sítio				
Mineral Resource	P de Tarso Ferreira	AusIMM	224828	24 years
Ore Reserve	MG Simoni	AusIMM	224826	17 years
Cuiabá				
Mineral Resource	P de Tarso Ferreira	AusIMM	224828	24 years
Ore Reserve	S Botelho	AusIMM	224833	23 years
Lamego				
Mineral Resource	P de Tarso Ferreira	AusIMM	224828	24 years
Ore Reserve	L Nunes Coelho	AusIMM	222679	8 years
MMV Other				
Mineral Resource	P de Tarso Ferreira	AusIMM	224828	24 years

Brazil – Serra Grande

Location

Serra Grande is situated approximately 3km south of the city of Crixás in the Goiás State of Central Brazil. This location is approximately 260km northwest of Brasilia, the country's capital.

History

The area was first exploited by garimpeiros as open-pit workings. In 1973, Inco Limited (Inco) began reconnaissance work including mapping, magnetic surveys, and diamond drilling. In 1976, Inco discovered gold mineralisation in the mine area. In April 1983, Kennecott Corporation signed an option agreement to gain a 50% interest in the project. In 1986, Kennecott Corporation sold its participation in the project to an affiliate of Anglo American plc, which continued underground development and exploration and completed a feasibility study in 1987.

Mining started in 1987, with ore being stockpiled. The first gold bullion was produced on November 14, 1989. TVX Gold Inc. (TVX Gold) acquired its interest in the property on January 7, 1991, through a merger with Inco. TVX Gold was acquired by Kinross in early 2003, giving Kinross 50% ownership of the property.

Currently, Serra Grande is equally owned by AngloGold Ashanti Limited and Kinross. AngloGold Ashanti is the mine operator.

Geology

The deposits occur within the Crixás Greenstone Belt, Rio Vermelho and Ribeirão das Antes formations, of the Upper Archaean Pilar de Goia's Group (~2.7Ga). The stratigraphy of the belt is dominated by basic and ultrabasic rocks in the lower sequences, with volcano-sedimentary units forming the upper successions. The gold deposits are hosted by a sequence of schist, volcanic, and carbonate rocks, which occur in a greenstone belt structural setting. Gold is mostly associated with quartz veins and locally with more massive sulphides. The ore shoots plunge to the northwest at between 6° and 35°. The current understanding of the regional geology indicates that the stratigraphy in the area of the mine has been overturned and thrust to the east.



Longitudinal section Mina 3

Mineral Resource (attributable)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Serra Grande	Category	million	g/t	tonnes	Moz
Mina 3	Measured	0.43	4.91	2.09	0.07
	Indicated	0.45	5.47	2.48	0.08
	Inferred	0.78	4.87	3.77	0.12
	Total	1.65	5.04	8.35	0.27
Mina Nova	Measured	1.24	3.55	4.41	0.14
	Indicated	0.21	2.94	0.60	0.02
	Inferred	0.34	3.67	1.25	0.04
	Total	1.79	3.50	6.27	0.20
Open pit	Measured	0.70	3.83	2.68	0.09
	Indicated	0.38	2.99	1.12	0.04
	Inferred	-	-	-	-
	Total	1.08	3.54	3.80	0.12
Palmeiras	Measured	0.12	5.40	0.63	0.02
	Indicated	0.12	5.90	0.70	0.02
	Inferred	0.59	5.82	3.42	0.11
	Total	0.82	5.77	4.75	0.15
Pequizao	Measured	-	_	_	_
	Indicated	-	-	-	-
	Inferred	1.58	5.52	8.71	0.28
	Total	1.58	5.52	8.71	0.28
Total stockpiles	Measured	0.04	3.20	0.14	0.00
	Indicated	-	-	-	-
	Inferred	-	-	_	-
	Total	0.04	3.20	0.14	0.00
Serra Grande	Total	6.96	4.60	32.01	1.03

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Serra Grande	Category	million	g/t	tonnes	Moz
	Measured	0.10	3.13	0.32	0.01
	Indicated	0.20	3.53	0.71	0.02
	Inferred	3.28	5.23	17.15	0.55
Serra Grande	Total	3.58	5.07	18.18	0.58





Serra Grande: Ore Reserve reconciliation 2008 vs 2009



				Contained	Contained
		Tonnes	Grade	gold	gold
Serra Grande	Category	million	g/t	tonnes	Moz
Mina 3	Proved	0.34	4.55	1.56	0.05
	Probable	0.30	5.45	1.64	0.05
	Total	0.64	4.97	3.20	0.10
Mina Nova	Proved	0.86	3.19	2.75	0.09
	Probable	0.12	3.12	0.38	0.01
	Total	0.98	3.18	3.13	0.10
Open pit	Proved	0.69	3.52	2.43	0.08
	Probable	0.29	2.66	0.77	0.02
	Total	0.98	3.27	3.20	0.10
Palmeiras	Proved	0.12	4.07	0.51	0.02
	Probable	0.15	4.33	0.64	0.02
	Total	0.27	4.21	1.15	0.04
Total stockpiles	Proved	0.04	3.20	0.14	0.00
	Probable	_	-	_	-
	Total	0.04	3.20	0.14	0.00
Serra Grande	Total	2.92	3.70	10.81	0.35

Ore Reserve

Serra Grande - surface (metric)



Serra Grande – underground (metric)



Competent persons

		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Mineral Resource	Edijarbas Martins Araujo	AusIMM	224825	20 years
Ore Reserve	Edijarbas Martins Araujo	AusIMM	224825	20 years

Colombia



Regional overview

In 2003, AngloGold Ashanti was the first company to start a systematic grassroots exploration program in Colombia. Since the start of exploration, AngloGold Ashanti has staked a total of 13.9 million hectares of exploration claims countrywide. Of these, 11.2 million hectares have been explored with systematic stream sediment sampling, prospecting and in some areas, airborne geophysics. As a result of this work, 423 mineral contracts covering 825,025 ha are active with follow-up work from drill target definition through pre-feasibility studies either operated 100% by AngloGold Ashanti or in joint ventures with partners B2Gold Corp. (B2Gold), Mineros S.A, Mega Uranium and Glencore. AngloGold Ashanti has thus far relinquished 10.4 million hectares and plans to complete first stage exploration on the remaining 2.7 million hectares. To date the programme has generated 42 drill targets of which 24 have been drilled with two resulting in significant discoveries, Gramalote and La Colosa.

Mineral Resource and Ore Reserve gold prices and exchange rates

	Units	2009	2008
Gold price – Mineral Resource	US\$/oz	1,025	1,000

				Туре	of drillin	Ig	
Mine/		Spacing	Diamond	RC	Blast-	Other	Comments
Project	Category	m (- x -)			hole		
Gramalote	Measured	-	-	-	_	-	
	Indicated	30 x 30	\checkmark	_	-	_	2 different drill directions: W-E, SW-NE
	Inferred	50 x 50	\checkmark	-	-	-	2 different drill directions: W-E, SW-NE
	Grade control	-	-	-	-	_	Not applicable
La Colosa	Measured	-	-	-	-	-	
	Indicated	-	-	-	-	-	
	Inferred	100 x 100	\checkmark	_	-	-	Additional geological drillholes (HQ, NQ) were drilled at different spacings and different angles
	Grade control	-	-	-	-	-	Not applicable

Details of average drillhole spacing and type in relation to Mineral Resource classification



Colombia – Gramalote

Location

The Gramalote prospect is located 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 who is the operator of the project. B2Gold holds 49% and is required to take the project to feasibility to obtain an additional 2%.

Geology

Mineralisation is hosted in the Antioquia batholith and bears a strong relationship to Cretaceous-Palaeocene magmatichydrothermal pulses. Hornblende granodiorites and porphyritic dykes constitute the older sub-regional host. Biotitic tonalites and granodiorites are intimately associated with Gramalote-style mineralisation.

The sub-regional control of targets is defined by dextral extensional shear zones orientated north-west/south-east to north-north-west/south-east-east. The four principal controls on a local scale are:

- 1. Extensional Steps and Tension Gashes
- 2. Main Damage and Transfer Zones
- 3. Extensive tectonic syntaxes
- 4. Deflections of sub-regional shear zones

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.

Mineral Resource estimation

At Gramalote, some 12,551m of diamond 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 drillhole, surface and underground mapping information has been validated for use in the modelling process.

Mineral Resource (attributable)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Gramalote	Category	million	g/t	tonnes	Moz
Main zone	Measured	_	_	_	_
	Indicated	15.16	0.93	14.18	0.46
	Inferred	21.09	0.87	18.28	0.59
Gramalote	Total	36.25	0.90	32.46	1.04

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
Gramalote	Category	million	g/t	tonnes	Moz
	Measured	_	_	_	_
	Indicated	15.16	0.93	14.18	0.46
	Inferred	21.09	0.87	18.28	0.59
Gramalote	Total	36.25	0.90	32.46	1.04







Competent person

		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Mineral Resource	Rudolf Jahoda	AusIMM	990544	20 years



Colombia – La Colosa

La Colosa is a significant "in-house" greenfields project discovered by AngloGold Ashanti's Colombia greenfields exploration team during 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, Ibague, in the department of Tolima.

Geology

The La Colosa copper-poor porphyry gold system is genetically associated with Miocene 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 coherent body suffered little dilution by intermineral/postmineral phases or fault propagation.

The early porphyry stage is divided into three phases. The earliest is a crowded diorite porphyry and the late-mineral dacite porphyry is typified by rounded quartz phenocrysts, locally up to 1 cm across.

Contacts between porphyry phases are commonly characterised by broad zones of intrusion breccias. The texture of the breccias is commonly diffuse implying varied degrees of assimilations of the earlier by later phases.

Alteration and mineralisation

The paragenesis of the main alteration/mineralisation mineral assemblage observed at Colosa starts with pervasive sodic-calcic alteration overprinted by potassic alteration and in turn cut by a sodic-calcic event. The two dominant alteration types are the potassic and second sodic-calcic.

The three early porphyries, and their associated intrusion breccias 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 main control of gold grade in the diorite/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 >300ppb gold grades close to the contact with early diorite phases. Within the gold grade variation that characterises each intrusive phase, gold grades present a second order correlation with the alteration assemblage. 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 0.3g/t. The contact breccias and hornfels developed at the contact between porphyritic rock and schist present a mineralised haloe of at least 60m with an average gold grade of >1g/t.

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 15 microns. Coarse grained gold (116 microns) was found in samples from metamorphic rocks. Gold grains occur both liberated and "locked" in sulphides and silicates. The percentage is not clearly established, but a significant amount of gold is associated with silicates such as K-feldspar and plagioclase. Sulphide minerals associated with gold are dominantly pyrite and in a much lesser amount pyrrhotite and arsenopyrite.

Mineral Resource estimation

At La Colosa, some 17,039m of diamond 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.

Mineral Resource (attributable)

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
La Colosa	Category	million	g/t	tonnes	Moz
Surface	Measured	-	_	-	_
	Indicated	-	-	-	-
	Inferred	381.42	1.00	383.12	12.32
La Colosa	Total	381.42	1.00	383.12	12.32

Exclusive Mineral Resource

as at 31 December 2009					
				Contained	Contained
		Tonnes	Grade	gold	gold
La Colosa	Category	million	g/t	tonnes	Moz
	Measured	_	-	_	_
	Indicated	-	-	-	-
	Inferred	381.42	1.00	383.12	12.32
La Colosa	Total	381.42	1.00	383.12	12.32

La Colosa: Mineral Resource reconciliation 2008 vs 2009



La Colosa – surface (metric)



Competent person

		Professional	Registration	Relevant
Category	Name	organisation	number	experience
Mineral Resource	Rudolf Jahoda	AusIMM	990544	20 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. The Mineral Resource is 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 drillhole 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. The Ore Reserve is sub-divided, in order of increasing confidence, into the Probable Ore Reserve and the Proved Ore Reserve.

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.

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 Minerals and Energy, 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 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

0	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
LOM	Life of mine
M or m	Metre or million, depending on the context
Moz	Million ounces
Mt	Million tonnes or tons
Mtpa	Million tonnes/tons per annum
oz	Ounces (troy)
oz/t	Ounces per ton
R or ZAR	South African rands
SAMREC	The South African Mineral Resource Committee
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

Share codes:

ISIN: ZAE000043485

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

JSE Sponsor:

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Officers Company Secretary: Ms L Eatwell

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AngloGold Ashanti posts information that is important to investors on the main page of its website at 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.

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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 30, 2010

AngloGold Ashanti Limited

By: <u>/s/ L Eatwell</u> Name: L EATWELL Title: Company Secretary