

ANGLOGOLD ASHANTI LTD

Form 6-K

March 31, 2008

**SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, DC 20549**

**FORM 6-K**

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

Report on Form 6-K dated March 31, 2008

Commission File Number 1-14846

AngloGold Ashanti Limited

(Translation of registrant's name into English)

76 Jeppe Street

Newtown, 2001

(P.O. Box 62117, Marshalltown, 2107)

South Africa

(Address of principal executive offices)

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

Form 20-F  Form 40-F

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

Yes  No

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

Yes  No

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

Yes  No

Enclosure:

Press

release ANGLOGOLD ASHANTI – SUPPLEMENTARY INFORMATION:  
MINERAL RESOURCES AND ORE RESERVES 2007 – REPORTED IN  
ACCORDANCE AND CONFORMING TO THE JORC CODE (2004  
EDITION) AND SAMREC 2000 CODE

Supplementary  
Information:  
Mineral Resources  
and Ore Reserves  
07

Scope of report:

The country overview sections include a selection from 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.

The operation sections include a selection from the following discussion, tables and graphs: Geology, Mineral Resources, exclusive Mineral Resources, Mineral Resource and Ore Reserve reconciliation, Mineral Resource and Ore Reserve by-products, Ore Reserves, grade tonnage information and competent persons.

1	
Contents list*	
2	
Mineral Resources definitions	
5	
Mineral Resources and Ore Reserves	
8	
Mineral Resources by country (attributable)	
9	
Ore Reserves by country (attributable)	
10	
South Africa operations: overview	
18	
South Africa operations: Great Noligwa	
21	
South Africa operations: Kopanang	
24	
South Africa operations: Moab Khotsoeng	
29	
South Africa operations: Tau Lekoa	
32	
South Africa operations: Mponeng	
36	
South Africa operations: Savuka	
39	
South Africa operations: TauTona	
43	
South Africa operations: Surface	
46	
Argentina operations: overview	
48	
Argentina operations: Cerro Vanguardia	
51	
Australia operations: overview	
53	
Australia operations: Boddington	
56	
Australia operations: Sunrise Dam	
60	
Australia operations: Tropicana	
62	
Brazil operations: overview	
64	
Brazil operations: Brasil Mineraç~	
ao	
68	
Brazil operations: Serra Grande	
72	
Colombia exploration: Gramalote	
74	
Democratic Republic of Congo exploration:	

Mongbwalu

76

Ghana operations: overview

78

Ghana operations: Iduapriem

81

Ghana operations: Obuasi

86

Guinea operations: overview

88

Guinea operations: Siguiri

91

Mali operations: overview

93

Mali operations: Morila

96

Mali operations: Sadiola

100 Mali operations: Yatela

104 Namibia operations: overview

106 Namibia operations: Navachab

110 Tanzania operations: overview

112 Tanzania operations: Geita

116 United States operations: overview

118 United States operations: CC&V

*\*Rounding of figures in this document may result in minor computational discrepancies*

2

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007  
The SAMREC/JORC definition of a Mineral Resource is as follows:

A Mineral Resource is a concentration or occurrence of material of intrinsic economic interest in or on the earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are sub-divided, 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 a 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:

(i)

The Mineral Resource is quoted in situ and has not been corrected for dilution, mining losses or recovery.

(ii)

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.

(iii)

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 Resources definitions

Mineral Resource

3

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

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

Inferred Mineral Resource within the optimised shell;

Other Inferred Mineral Resource;

Measured and Indicated Mineral Resource that lies between the life of mine (LOM) pit shell/mine design and the Mineral Resource pit shell. This material will become economic if the gold price increases; and

Mineral Resource where the technical studies to engineer an Ore Reserve have not yet been completed.

Ore Reserve

The SAMREC/JORC definition of an Ore Reserve is as follows:

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

In the underground operations, Ore Reserves are based on a full mine design and in the case of open pits, on a pit optimisation followed by a final pit design. Ore Reserves are reported according to tonnage, mean grade(s), 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.



4  
AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007  
Only those Ore Reserves included for treatment in the business unit plan production schedule are considered in the Ore Reserve statement. These plans sometimes include marginal or sub-grade ores as well as Inferred Mineral Resources. These Inferred Mineral Resources are not included in the Ore Reserve statement.  
For new projects, an Ore Reserve is only reported if an auditable pre-feasibility or feasibility study has been completed that demonstrates the viability of the project and meets the company's investment requirements. There should also be intent on the part of the company to proceed to feasibility and ultimately a mining phase.  
Traditional sensitivity studies are not applied to the Ore Reserve. Instead, the cash flow for each operation is tested using gold prices near to the average gold price for the preceding three years. Gold prices of US\$577 and US\$600/oz were used. In all cases, except for Tau Lekoa, the operations remained cash flow positive albeit at a reduced margin. In the case of Tau Lekoa, the Ore Reserve dropped from 1.3 million ounces to 0.4 million ounces at US\$577/oz.  
Mineral Resources definitions continued

5

Mineral Resources and Ore Reserves

Mineral Resources

The 2007 Mineral Resource increased by 34.1 million ounces before the subtraction of depletion. After a depletion of 8.1 million ounces, the net increase is 26.1 million ounces to give a total Mineral Resource of 207.6 million ounces. Mineral Resources were estimated at a gold price of US\$700 per ounce in contrast to the US\$650 used in 2006. The increased gold price resulted in 17.5 million ounces of added Mineral Resource while successful exploration and revised modelling resulted in a further increase of 14.2 million ounces. The remaining change of 2.5 million ounces is the result of various other reasons. Mineral Resources and Ore Reserves are reported in accordance with the minimum standard described by the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2004 Edition), and also conform to the standards set out in the South African Code for the Reporting of Mineral Resources and Mineral Reserves (the SAMREC 2000 Code). Mineral Resources are inclusive of the Ore Reserve component unless otherwise stated.

Moz

December 2006 Mineral Resources  
181.6

Reductions

Geita  
Increase in cost (1.6Moz) and revision to estimation in methodology (0.6Moz)  
(2.3)

TauTona  
Transfer of the shaft pillar Mineral Resource to Mponeng  
(2.3)

Great Noligwa  
Transfer of the shaft pillar Mineral Resource to Moab Khotsong  
(1.8)

Kopanang  
Decrease in grade as a result of the modelling of new sampling and drilling information  
(1.6)

Sadiola  
Increase in costs (0.6Moz) and revisions to methodology (0.1Moz)  
(1.0)

Other  
Total of non-significant changes  
(2.3)

Additions

Gramalote  
Successful greenfields exploration  
1.6

Moab Khotsong  
Transfers in from Great Noligwa and improved economics  
2.3

Mongbwalu  
Successful greenfields exploration  
2.5

Tropicana

Successful greenfields exploration

2.8

Obuasi

Exploration below 50 level (1.3Moz) and completion of additional Mineral Resource modelling above 50 level

4.0

Cripple Creek & Victor

Primarily revisions to the methodology with contribution from improved economics and exploration

4.7

Mponeng

Improvement in economics increased the Ventersdorp Contact Reef Mineral Resource to the west, the Carbon Leader Reef down to 4,300mbd was included on the back of a technical and economic study, material was transferred in from TauTona and revised modelling of the Carbon Leader Reef

17.1

Other

Total of non-significant changes

2.3

December 2007 Mineral Resources

207.6

Ore Reserves

The 2007 Ore Reserve increased by 13.0 million ounces before the subtraction of depletion. After a depletion of 6.8 million ounces, the net increase is 6.2 million ounces to give a total Ore Reserve of 73.1 million ounces.

A gold price of US\$600 was used for Ore Reserve estimates in contrast to the US\$550 used in 2006. The change in economic assumptions made from 2006 to 2007 resulted in the Ore Reserve increasing by 6.3 million ounces while exploration and modelling resulted in an additional increase of 6.7 million ounces.

6  
AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007  
Moz

December 2006 Ore Reserves

66.9

Reductions

Geita

Reconciliation factors (0.8Moz), flattening of slopes (0.5Moz),  
modelling revisions (0.2Moz) and costs (0.1Moz)

(2.0)

Sadiola

Impact of economic factors on deep sulphides and stockpiles

(1.3)

Kopanang

Drop in face value due to the modelling of new drilling and sampling information

(0.5)

Other

Total of non-significant changes

(1.7)

Additions

Iduapriem

Purchase of an additional 15% of the operation from the Ghanaian Government and  
the IFC, to bring the ownership to 100%

0.2

Savuka

Improved economic factors increase the life-of-mine

0.5

Navachab

Improved economics have brought in an additional push back to the west of the main pit

0.8

Siguiri

Two new deposits (Kintinian and the spent heap) were proved up by drilling

0.8

Cripple Creek & Victor

Inclusion of the life extension project

1.0

Boddington

The upgrade of Inferred Mineral Resource within the pit shell by drilling

1.0

Mponeng

The inclusion of the Carbon Leader Reef Project below 120 level

3.4

Moab Khotsong

The inclusion of Project Zaaiplaats – a deepening of Moab Khotsong to access deeper Vaal Reef blocks to the South West of the current mine

3.8

Other

Total of non-significant changes

0.3

December 2007 Ore Reserves

73.1

Mineral Resources and Ore Reserves continued

7

#### By-products

A number of by-products are recovered as a result of the processing of gold Ore Reserves.

These include 19,500 tonnes of uranium from the South African operations, 0.23 million tonnes of copper from Australia, 0.47 million tonnes of sulphur from Brazil and 31.0 million ounces of silver from Argentina. Details of the by-product Mineral Resources and Ore Reserves are given in the by-product tables within each operational section.

#### Audit of 2006 Mineral Resource and Ore Reserve statement

During the course of the year, the AngloGold Ashanti 2006 Mineral Resources and Ore Reserves for the following operations were submitted for external audit:

Mponeng

Geita

Obuasi

Morila

Sadiola

Yatela

Cuiabá

Cripple Creek & Victor

The company has been informed that the audits identified no material shortcomings in the process by which AngloGold Ashanti's Ore Reserves and Mineral Resources were evaluated.

During 2007, it was resolved to audit the Mineral Resources and Ore Reserves prior to publication. As a result the 2007 Mineral Resources and Ore Reserves for the following operations were audited late in 2007:

Sunrise Dam

Cerro Vanguardia

Great Noligwa

Kopanang

Project Zaaipplaats (Moab deepening project)

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

#### Competent persons

The information in this report that relates to exploration results, Mineral Resources or Ore Reserves is based on information compiled by the competent persons listed below. They are either members of the Australian Institute of Mining and Metallurgy (AusIMM) or recognised overseas professional organisations. They are all full-time employees of the company.

*The competent person for AngloGold Ashanti exploration is:*

E Roth, PhD (Economic Geology), BSc (Hons) (Geology), MAusIMM, 17 years' experience.

*Competent persons for AngloGold Ashanti's Mineral Resources are:*

VA Chamberlain, MSc (Mining Engineering), BSc (Hons) (Geology), MAusIMM, 22 years' experience.

MF O'Brien, MSc (Mining Economics), BSc (Hons) (Geology), Dip Data, Pr.Sci.Nat., MAusIMM, 28 years' experience.

*Competent persons for AngloGold Ashanti's Ore Reserves are:*

CE Brechtel, MSc (Mining Engineering), MAusIMM, 32 years' experience.

D L Worrall, ACSM, MAusIMM, 27 years' experience.

J van Zyl Visser, MSc (Mining Engineering), BSc (Mineral Resource Management), PLATO, 21 years' experience.

The competent persons consent to the inclusion of the exploration, Mineral Resources and Ore Reserves information in this report, in the form and context in which it appears.

Note that the rounding of figures in this document may result in minor computational discrepancies.

Mineral Resources and Ore Reserves continued

8  
AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007  
Mineral Resources by country (attributable)  
Metric  
Imperial  
Contained  
Contained  
Resource  
Tonnes  
Grade  
gold  
Tons  
Grade  
gold  
as at 31 December 2007  
category  
million  
(g/t)  
tonnes  
million  
(oz/t)  
million oz  
South Africa  
Measured  
28.0  
13.98  
391.9  
30.9  
0.408  
12.6  
Indicated  
747.1  
3.01  
2,251.1  
823.5  
0.088  
72.4  
Inferred  
37.7  
10.92  
411.8  
41.6  
0.319  
13.2  
Total  
812.8  
3.76  
3,054.8  
896.0  
0.110



98.2  
Argentina  
Measured  
11.1  
1.71  
18.9  
12.2  
0.050  
0.6  
Indicated  
21.1  
3.73  
78.8  
23.3  
0.109  
2.5  
Inferred  
2.9  
3.85  
11.2  
3.2  
0.112  
0.4  
Total  
35.1  
3.10  
108.8  
38.7  
0.090  
3.5  
Australia  
Measured  
86.1  
1.01  
87.1  
94.9  
0.030  
2.8  
Indicated  
315.9  
0.87  
273.4  
348.3  
0.025  
8.8  
Inferred  
153.4  
0.93  
143.2  
169.1  
0.027

4.6  
Total  
555.5  
0.91  
503.7  
612.3  
0.026  
16.2  
Brazil  
Measured  
12.5  
7.48  
93.1  
13.7  
0.218  
3.0  
Indicated  
13.2  
6.32  
83.3  
14.5  
0.184  
2.7  
Inferred  
27.4  
6.98  
191.3  
30.2  
0.204  
6.2  
Total  
53.0  
6.94  
367.7  
58.4  
0.202  
11.8  
Colombia  
Measured  
—  
—  
—  
—  
—  
—  
Indicated  
—  
—  
—  
—  
—

–  
Inferred  
43.4  
1.14  
49.5  
47.8  
0.033  
1.6  
Total  
43.4  
1.14  
49.5  
47.8  
0.033  
1.6  
Democratic Republic  
Measured  
–  
–  
–  
–  
–  
–  
of Congo  
Indicated  
–  
–  
–  
–  
–  
–  
Inferred  
29.2  
2.68  
78.5  
32.2  
0.078  
2.5  
Total  
29.2  
2.68  
78.5  
32.2  
0.078  
2.5  
Ghana  
Measured  
95.3  
5.18  
493.7  
105.0

0.151  
15.9  
Indicated  
82.4  
3.91  
322.4  
90.8  
0.114  
10.4  
Inferred  
45.3  
7.34  
332.6  
49.9  
0.214  
10.7  
Total  
222.9  
5.15  
1,148.7  
245.7  
0.150  
36.9  
Guinea  
Measured  
38.7  
0.72  
27.7  
42.7  
0.021  
0.9  
Indicated  
92.7  
0.78  
72.5  
102.1  
0.023  
2.3  
Inferred  
58.1  
0.92  
53.6  
64.1  
0.027  
1.7  
Total  
189.5  
0.81  
153.8  
208.9  
0.024

4.9  
Mali  
Measured  
16.5  
1.66  
27.4  
18.2  
0.048  
0.9  
Indicated  
16.2  
3.09  
50.0  
17.8  
0.090  
1.6  
Inferred  
6.1  
2.36  
14.3  
6.7  
0.069  
0.5  
Total  
38.8  
2.37  
91.7  
42.7  
0.069  
3.0  
Namibia  
Measured  
11.7  
0.79  
9.2  
12.8  
0.023  
0.3  
Indicated  
59.3  
1.31  
77.5  
65.3  
0.038  
2.5  
Inferred  
45.2  
1.12  
50.9  
49.9  
0.033

1.6  
Total  
116.2  
1.18  
137.6  
128.1  
0.035  
4.4  
Tanzania  
Measured  
6.3  
1.20  
7.6  
7.0  
0.035  
0.2  
Indicated  
84.4  
3.72  
314.1  
93.1  
0.109  
10.1  
Inferred  
18.6  
3.54  
65.8  
20.5  
0.103  
2.1  
Total  
109.3  
3.54  
387.4  
120.5  
0.103  
12.5  
United States  
Measured  
250.1  
0.81  
203.3  
275.7  
0.024  
6.5  
Indicated  
173.5  
0.73  
126.1  
191.2  
0.021

4.1  
Inferred  
70.6  
0.65  
45.9  
77.8  
0.019  
1.5  
Total  
494.1  
0.76  
375.4  
544.7  
0.022  
12.1  
Total  
Measured  
556.3  
2.44  
1,360.0  
613.2  
0.071  
43.7  
Indicated  
1,605.7  
2.27  
3,649.0  
1,770.0  
0.066  
117.3  
Inferred  
537.9  
2.69  
1,448.6  
592.9  
0.079  
46.6  
Total  
2,699.9  
2.39  
6,457.5  
2,976.1  
0.070  
207.6

9

Ore Reserves by country (attributable)

Metric

Imperial

Contained

Contained

Reserve

Tonnes

Grade

gold

Tons

Grade

gold

as at 31 December 2007

category

million

(g/t)

tonnes

million

(oz/t)

million oz

South Africa

Proved

21.5

7.58

162.8

23.7

0.221

5.2

Probable

216.4

4.12

891.2

238.6

0.120

28.7

Total

237.9

4.43

1,054.0

262.3

0.129

33.9

Argentina

Proved

1.0

6.08

6.3

1.2

0.177

0.2



Probable

7.9

6.58

52.1

8.7

0.192

1.7

Total

9.0

6.52

58.4

9.9

0.190

1.9

Australia

Proved

68.6

1.14

78.5

75.7

0.033

2.5

Probable

164.8

0.88

144.7

181.7

0.026

4.7

Total

233.4

0.96

223.2

257.3

0.028

7.2

Brazil

Proved

8.9

6.75

60.1

9.8

0.197

1.9

Probable

4.9

5.99

29.1

5.4

0.175

0.9

Total

13.8

6.48

89.3

15.2

0.189

2.9

Ghana

Proved

68.8

2.96

203.7

75.8

0.086

6.6

Probable

28.3

4.62

130.5

31.2

0.135

4.2

Total

97.0

3.44

334.3

107.0

0.100

10.7

Guinea

Proved

21.3

0.59

12.6

23.5

0.017

0.4

Probable

89.6

0.77

69.2

98.7

0.023

2.2

Total

110.9

0.74

81.8

122.2

0.022

2.6

Mali

Proved

9.0

2.18

19.7

10.0

0.064

0.6

Probable

7.1

2.57

18.3

7.9

0.075

0.6

Total

16.2

2.35

38.1

17.8

0.069

1.2

Namibia

Proved

5.8

1.00

5.8

6.4

0.029

0.2

Probable

27.3

1.46

39.9

30.1

0.043

1.3

Total

33.1

1.38

45.6

36.5

0.040

1.5

Tanzania

Proved

5.6

1.01

5.7

6.2

0.030

0.2  
Probable  
62.4  
3.14  
195.9  
68.7  
0.092  
6.3  
Total  
68.0  
2.96  
201.6  
74.9  
0.086  
6.5  
United States  
Proved  
107.9  
0.96  
103.8  
118.9  
0.028  
3.3  
Probable  
47.6  
0.92  
44.0  
52.5  
0.027  
1.4  
Total  
155.5  
0.95  
147.8  
171.4  
0.028  
4.8  
Total  
Proved  
318.5  
2.07  
659.1  
351.0  
0.060  
21.2  
Probable  
656.3  
2.46  
1,614.9  
723.4  
0.072

51.9  
Total  
974.7  
2.33  
2,274.0  
1,074.4  
0.068  
73.1

10

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007  
South Africa operations: overview

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

The West Wits operations are made up of Mponeng, Savuka and TauTona and these mines are situated near the town of Carletonville. The primary reefs mined are the Carbon Leader Reef (CLR) and VCR. All seven operations are 100% owned by AngloGold Ashanti. In addition, the Vaal River Surface and West Wits Surface operations consist of the reprocessing of waste rock dumps and tailings dams resulting from the mining 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 the area often described as the Witwatersrand Basin) comprises a six-kilometre 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 or reefs.

Further west, south and east the basin is overlain by up to four kilometres 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 billion to 2.8 billion years old. The reefs, which are generally less than two metres 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 much 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 (Mponeng, Savuka and TauTona 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 east to west, from 400m to 900m, due to the non-conformity of the VCR with Vaal River Operations

Great Noligwa  
Kopanang  
Tau Lekoa  
Moab Khotsong  
West Wits Operations  
Savuka  
TauTona  
Mponeng  
Operations  
Johannesburg  
*North West*  
*Gauteng*  
*Free State*

*Eastern Cape*  
SOUTH AFRICA

Welkom  
Carletonville  
Klerksdorp  
Durban  
Cape  
Town  
Bloemfontein  
0

400km

Orkney

The South African operations  
comprise seven underground mines  
which are located in two  
geographical regions on the  
Witwatersrand Basin; known as the  
Vaal River and West Wits operations.

11

the underlying strata. TauTona and Savuka exploit both reefs, while currently Mponeng only mines the VCR. The CLR Project has been published as a reserve and Mponeng will eventually mine both reefs. The structure is relatively simple, with rare instances of faults displaying greater than 70m of displacement.

The CLR consists of one or more conglomerate units and varies from several centimetres to more than three metres 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 varies from several centimetres to more than three metres in thickness.

Vaal River (Great Nologwa, Kopanang, Moab Khotsong and Tau Lekoa operations and Vaal River Surface Rock Dumps)

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 reserve tonnage with mining grades of between 10g/t and 20g/t gold and comprises a series of oligomictic conglomerates and quartzite packages developed on successive non-conformities. Several distinct facies have been identified, each with its own unique gold distribution and grade characteristic;

the VCR has a lower gold grade than the VR, and contains approximately 15% of the estimated Ore Reserves. 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 one kilometre above the VR; and

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 Reserves 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.

Orkney

*West Wits locality plan*

*Vaal River locality plan*



12

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007  
South Africa operations: overview continued

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

Mine/Project

Category

Spacing

Diamond

Chip

Comments

m (- x -)

drilling

sampling

South African

Measured

5 x 5

Based on constrained kriging variance, supported  
mines

by chip sampling in stopes.

Indicated

2 x 200

Supported by underground drillholes and chip  
sampling of reef development ends.

Inferred

1000 x 1000

Supported by surface drillholes.

Grade/Ore

control

5 x 5

Chipped channel samples.

Mineral Resource estimation

A multi-disciplinary approach is adapted to Mineral Resource estimation whereby inputs are required from the geology, survey, mine planning and evaluation departments. A computerised system called the Mineral Resource Inventory System (MRIS) integrates all the input information to produce the final Mineral Resource per operation. The 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 and the micro blocks comprise of 30m x 30m blocks.

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 30 metre block sizes and these estimates are constrained by the kriging variance. The Mineral Resources are initially reported as inclusive of Ore Reserves 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 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.

Mineral Resource and Ore Reserve gold price and exchange rates

Units

**2007**

2006

Mineral Resource gold price

US\$/oz

700

650

Ore Reserve gold price

US\$/oz

600

550

Exchange rate – South Africa

ZAR/US\$

7.70

6.50

13

Ore Reserve estimation

All mine designs are undertaken using the Cadmine

®

software

package and include the delineation of mining or stoping areas for each mining level and section, usually leading from an extension to the existing mining sequence, and the definition of the necessary development layouts. The in-situ Mineral Resource is scheduled monthly for the full LOM plan. The value estimates for these schedules are derived directly from 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 Mine Call Factor (MCF).

Inferred Mineral Resource in business plan

The LOM plan includes minimal Inferred Mineral Resource.

Ore Reserve modifying factors (as at 31 December 2007)

Mineral Resource

Ore Reserve

Mine

Metal-

cut-off

cut-off

Cut-off

Stoping

Call

lurgical

grade

grade

value

width

Dilution

(1)

\*

Factor \*\* recovery

Other

Mine/Project

g/t (Au)

g/t (Au)

cmg/t (Au)

cm

%

%

%

factor

Great Noligwa

4.40

4.66

700

150

40%  
67%  
96%  
n/a  
Kopanang  
3.92  
6.86  
700  
102  
51%  
64%  
98%  
n/a  
Moab Khotsong  
4.40  
5.08  
750  
148  
57%  
78%  
97%  
n/a  
Tau Lekoa  
2.13  
7.09  
1,000  
141  
30%  
84%  
97%  
n/a  
Mponeng  
3.58  
5.96  
750  
126  
87%  
85%  
98%  
n/a  
Savuka  
5.45  
8.18  
900  
110  
56%  
70%  
97%  
n/a  
TauTona  
5.01

11.01

1,100

100

101%

78%

98%

n/a

SA MET

0.35

0.35

n/a

n/a

n/a

n/a

76%

n/a

*1. Where no dilution factor is indicated the dilution is inherent in the resource model estimate.*

*\* Dilution: The difference between the tonnage broken in stopes and the tonnage milled from underground sources.*

*For example, if 100 tonnes broken in*

*the stopes amounts to 132 tonnes milled, then the dilution is 32%.*

*\*\* Mine Call Factor (MCF): The ratio expressed as a percentage, which the specific product accounted for in the recovery, plus residues, bears to the corresponding product called for by the mine's measuring methods.*

South Africa operations: overview continued

14

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Development sampling results – January to December 2007

Development values represent actual results of sampling. No allowances having been made for adjustments necessary in estimating Ore Reserves.

Advanced

Average

Uranium

Statistics are shown

metres

Sampled

channel

Average

Average

Sampled

Average

Average

in metric units

(total)

metres

width (cm)

g/t

cm g/t

metres

kg/t

cm kg/t

Vaal River

Great Nologwa mine

Vaal Reef

9,119

1,120

101.1

29.81

3,014

556

1.32

127.03

Kopanang mine

Vaal Reef

25,532

2,330

16.8

119.29

2,004

322

5.07

90.26

Moab Khotsong mine

Vaal Reef

16,986

1,324  
131.6  
23.36  
3,074  
312  
1.07  
132.43  
Tau Lekoa mine  
Ventersdorp Contact Reef  
8,512  
1,420  
94.5  
8.57  
810  
42  
0.09  
11.84  
West Wits  
TauTona mine  
Ventersdorp Contact Reef  
904  
—  
—  
—  
—  
—  
—  
—  
Carbon Leader Reef  
10,711  
360  
16.4  
129.88  
2,130  
128  
1.58  
25.36  
Savuka mine  
Ventersdorp Contact Reef  
122  
—  
—  
—  
—  
—  
—  
Carbon Leader Reef  
1,979  
—  
—

-  
 -  
 -  
 -  
 -  
 Mponeng mine  
 Ventersdorp Contact Reef  
 17,017  
 2,826  
 89.0  
 26.53  
 2,361  
 -  
 -  
 -  
 Average  
 Advanced  
 channel  
 Uranium  
 Statistics are shown  
 feet  
 Sampled  
 width  
 Average  
 Average  
 Sampled  
 Average  
 Average  
 in imperial units  
 (total)  
 feet  
 (inches)  
 oz/t  
 ft g/t  
 feet  
 lb/t  
 ft lb/t  
 Vaal River  
 Great Nologwa mine  
 Vaal Reef  
 29,917  
 3,675  
 39.8  
 0.87  
 2.88  
 1,824  
 2.64  
 8.76  
 Kopanang mine  
 Vaal Reef  
 83,766



7,644  
6.6  
3.48  
1.92  
1,056  
10.14  
5.59  
Moab Khotsong mine  
Vaal Reef  
55,729  
4,344  
51.8  
0.68  
2.94  
1,024  
2.14  
9.24  
Tau Lekoa mine  
Ventersdorp Contact Reef  
27,927  
4,659  
37.2  
0.25  
0.77  
138  
0.18  
0.56  
West Wits  
TauTona mine  
Ventersdorp Contact Reef  
2,967  
—  
—  
—  
—  
—  
—  
—  
Carbon Leader Reef  
35,141  
1,181  
6.5  
3.79  
2.04  
420  
3.16  
1.70  
Savuka mine  
Ventersdorp Contact Reef  
399  
—

—  
—  
—  
—  
—  
—  
Carbon Leader Reef  
6,491

—  
—  
—  
—  
—  
—  
—  
Mponeng mine  
Ventersdorp Contact Reef  
55,830  
9,272  
35.0  
0.77  
2.26

—  
—  
—

15

Mineral Resource and Ore Reserve comparison by operation (attributable)

Gold content (million ounces)

% change

% change

from

from 2006

Net diff

2006

Percentage

Other

before

after

after

Mine/Project

attributable

Category

2006 Depletion(1)

change(2)

depletion 2007

depletion

depletion

Comments

Great Noligwa

100%

Resource

10.629

(0.738)

(1.057)

(10%)

8.834

(1.795)

(17%)

Transfer of the shaft pillar Mineral

Resource to Moab Khotsong

Reserve

4.034

(0.500)

0.368

9%

3.902

(0.132)

(3%)

The C Reef was included due to

improved economics

Kopanang

100%

Resource

10.977

(0.721)

(0.909)

(8%)  
 9.347  
 (1.630)  
 (15%)  
 Decrease in grade as a result of  
 the modelling of new sampling and  
 drilling information  
 Reserve  
 4.836  
 (0.426)  
 (0.069)  
 (1%)  
 4.341  
 (0.495)  
 (10%)  
 Drop in face value due to the  
 modelling of new drilling and  
 sampling information  
 Moab Khotsong  
 100%  
 Resource  
 11.528  
 (0.087)  
 2.349  
 20% 13.790  
 2.262  
 20%  
 Transfers in from Great Noligwa  
 mine and improved economics  
 Reserve  
 3.171  
 (0.074)  
 3.872  
 122%  
 6.969  
 3.798  
 120%  
 The inclusion of Project Zaaiplaats  
 – a deepening of Moab Khotsong to  
 access deeper Vaal Reef blocks to  
 the south-west of the current mine  
 Tau Lekoa  
 100%  
 Resource  
 7.149  
 (0.199)  
 (0.460)  
 (6%)  
 6.490  
 (0.659)  
 (9%)

There was a decrease in the  
Mineral Resource based on a  
scoping exercise

Reserve

1.331

(0.174)

0.137

10%

1.294

(0.037)

(3%)

Improved mining factors allowed  
the mine to offset the depletion

Mponeng

100%

Resource

24.422

(0.679)

17.812

73% 41.555

17.133

70%

Improvement in economics

increased the Ventersdorp Contact

Reef Mineral Resource to the west,

the Carbon Leader Reef down to

4,300mbd was included on the

back of a technical and economic

study, material was transferred in

from TauTona and revised modelling

of the Carbon Leader Reef

Reserve

6.778

(0.603)

3.979

59% 10.154

3.376

50%

The inclusion of the Carbon Leader

Reef Project below 120 level

Savuka

100%

Resource

2.170

(0.118)

0.563

26%

2.615

0.445

21%

Increase due to transfers in from  
Mponeng and improved economics  
Reserve

0.174

(0.075)

0.590

339%

0.689

0.515

296%

Improved economic factors  
increased the life-of-mine

TauTona

100%

Resource

11.314

(0.492)

(1.782)

(16%)

9.040

(2.274)

(20%)

Transfer of the shaft pillar Mineral  
Resource to Mponeng

Reserve

4.987

(0.410)

0.034

1%

4.611

(0.376)

(8%)

Decrease as a result of a 4% drop  
in grade

Vaal River Surface 100%

Resource

4.592

(0.153)

0.664

14%

5.103

0.511

11%

Improved economics brought  
additional material out of Inventory(3)

Reserve

1.912

(0.153)

0.165

9%

1.924

0.012

1%

The upgrade of some Inferred surface rock dumps offset the depletion

West Wits Surface 100%

Resource

0.686

(0.009)

0.762

111%

1.439

0.753

110%

Improved economics brought additional material out of Inventory(3)

Reserve

–

–

–

–

–

–

South Africa Totals

Resource

83.467 (3.196) 17.942 21% 98.213 14.746

18%

Reserve

27.223 (2.415) 9.076 33% 33.884

6.661

24%

1. Depletion: reduction in reserves based on ore delivered to the plant and corresponding reduction in resource.
2. Other change: combination of changes due to gold price, cost, exploration, methodology, model change and scope change.
3. Inventory: material that lies within the Mineral Resource but which will not be mined eg. abandoned pillars.

South Africa operations: overview continued

16

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

AngloGold Ashanti produces uranium oxide concentrate (U<sub>3</sub>O<sub>8</sub>) as a by-product from its South African gold mining operations. AngloGold Ashanti currently produces between 550 and 650 tonnes of U<sub>3</sub>O<sub>8</sub> annually, with the potential to increase this to 1,000 tonnes by the year 2012.

Although mined as a by-product of gold for many years, U<sub>3</sub>O<sub>8</sub> was not considered a resource until the year 2005. Due to the rapid increase in the U<sub>3</sub>O<sub>8</sub> price over the last few years, renewed focus has been placed on the U<sub>3</sub>O<sub>8</sub> content within the Witwatersrand reefs with the result that in 2005 uranium was reported for the first time as a fully SAMREC compliant resource.

The AngloGold Ashanti mines in the Vaal River region that currently produce uranium oxide as a by-product are Great Nologwa, Kopanang and Moab Khotsong. The uranium oxide is extracted from the VR, although Great Nologwa mine also produces some uranium oxide from the C Reef. The mines in the West Wits region that have uranium resources are Mponeng, Savuka and TauTona and in this mining region the uranium is extracted from the CLR.

The surface tailings storage facilities that have been classified as uranium resources are the Kopanang Pay dam 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 process of the Witwatersrand sediments.

Uranium oxide



17

Mineral Resource by-products – Uranium oxide (U

3

0

8

)

Metric

Imperial

Contained

Contained

Resource

Tonnes

Grade

uranium

Tons

Grade

uranium

Mine/Project

category

million

(kg/t)

tonnes

million

(lb/t)

tons

Great Noligwa

Measured

–

–

–

–

–

-

Indicated

18.6

0.56

10,480

20.5

1.13

11,553

Inferred

1.8

0.41

741

2.0

0.83

817

Total

20.4

0.55

11,221

22.5  
1.10  
12,369  
Kopanang  
Measured  
—  
—  
—  
—  
—  
—  
Indicated  
17.0  
0.77  
13,202  
18.8  
1.55  
14,553  
Inferred  
0.8  
0.63  
524  
0.9  
1.25  
578  
Total  
17.9  
0.77  
13,726  
19.7  
1.54  
15,130  
Moab Khotsong  
Measured  
1.4  
0.79  
1,080  
1.5  
1.59  
1,191  
Indicated  
17.6  
0.73  
12,852  
19.4  
1.46  
14,167  
Inferred  
4.3  
0.88  
3,791

4.7  
1.77  
4,179  
Total  
23.2  
0.76  
17,723  
25.6  
1.53  
19,537  
Mponeng  
Measured  
-  
-  
-  
-  
-  
Indicated  
22.1  
0.24  
5,189  
24.3  
0.47  
5,720  
Inferred  
15.7  
0.24  
3,684  
17.3  
0.47  
4,060  
Total  
37.8  
0.24  
8,872  
41.6  
0.47  
9,780  
Savuka  
Measured  
-  
-  
-  
-  
-  
Indicated  
4.9  
0.20  
955

5.4  
0.39  
1,052  
Inferred  
-  
-  
-  
-  
-  
-  
-  
Total  
4.9  
0.20  
955  
5.4  
0.39  
1,052  
TauTona  
Measured  
-  
-  
-  
-  
-  
-  
Indicated  
9.8  
0.31  
3,026  
10.8  
0.62  
3,335  
Inferred  
-  
-  
-  
-  
-  
-  
Total  
9.8  
0.31  
3,026  
10.8  
0.62  
3,335  
Vaal River Surface  
Measured  
-  
-  
-

-  
-  
-  
Indicated  
0.9  
0.24  
225  
1.0  
0.48  
248  
Inferred  
-  
-  
-  
-  
-  
-  
Total  
0.9  
0.24  
225  
1.0  
0.48  
248  
West Wits Surface  
Measured  
-  
-  
-  
-  
-  
-  
Indicated  
161.5  
0.07  
11,607  
178.0  
0.14  
12,795  
Inferred  
-  
-  
-  
-  
-  
Total  
161.5  
0.07  
11,607  
178.0

0.14  
12,795  
Total  
Measured  
1.4  
0.79  
1,080  
1.5  
1.59  
1,191  
Indicated  
252.4  
0.23  
57,535  
278.2  
0.46  
63,422  
Inferred  
22.6  
0.39  
8,740  
24.9  
0.77  
9,634  
Total  
276.4  
0.24  
67,355  
304.6  
0.49  
74,247  
Ore Reserve by-products – Uranium oxide (U308)  
Metric  
Imperial  
Contained  
Contained  
Reserve  
Tonnes  
Grade  
uranium  
Tons  
Grade  
uranium  
Mine/Project  
category  
million  
(kg/t)  
tonnes  
million  
(lb/t)  
tons

Great Noligwa  
Proved  
9.9  
0.34  
3,382  
10.9  
0.68  
3,728  
Probable  
6.6  
0.32  
2,138  
7.3  
0.65  
2,357  
Total  
16.5  
0.33  
5,520  
18.2  
0.67  
6,084  
Kopanang  
Proved  
5.1  
0.34  
1,749  
5.6  
0.69  
1,928  
Probable  
11.2  
0.34  
3,864  
12.4  
0.69  
4,259  
Total  
16.3  
0.34  
5,614  
18.0  
0.69  
6,188  
Moab Khotsong  
Proved  
1.2  
0.31  
357  
1.3  
0.62

393  
Probable  
20.2  
0.40  
8,001  
22.3  
0.79  
8,820  
Total  
21.3  
0.39  
8,358  
23.5  
0.78  
9,213  
Total  
Proved  
16.1  
0.34  
5,488  
17.8  
0.68  
6,049  
Probable  
38.0  
0.37  
14,003  
41.9  
0.74  
15,436  
Total  
54.2  
0.36  
19,491  
59.7  
0.72  
21,485



18

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007  
Great Noligwa

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 1,500m and 2,800m 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 Harmony's Orkney 2 Shaft, to the east by Buffelsfontein Gold Mine, to the south by the Jersey and Die Hoek faults, (which displace the reef down by approximately 1,000m and 900m respectively), and to the west by Kopanang Mine.

Geology

The VR is the principal economic horizon at Great Noligwa Mine, 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 over two metres 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 C Reef has been mined on a limited scale in the central part of Great Noligwa mine, 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 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.

South Africa operations: Great Noligwa

19

Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Great Noligwa – Crystalkop Reef

Measured

874

9.19

8,034

964

0.268

258

Indicated

4,387

10.07

44,182

4,836

0.294

1,420

Inferred

780

9.08

7,081

859

0.265

228

Total

6,041

9.81

59,297

6,660

0.286

1,906

Great Noligwa – Vaal Reef

Measured

8,701  
14.84  
129,151  
9,591  
0.433  
4,152  
Indicated  
4,589  
16.60  
76,168  
5,059  
0.484  
2,449  
Inferred  
826  
12.28  
10,141  
910  
0.358  
326  
Total  
14,116  
15.26  
215,461  
15,560  
0.445  
6,927  
Great Noligwa –  
Measured  
9,575  
14.33  
137,186  
10,555  
0.418  
4,411  
Total Mineral Resource  
Indicated  
8,977  
13.41  
120,350  
9,895  
0.391  
3,869  
Inferred  
1,605  
10.73  
17,222  
1,770  
0.313  
554  
Total

20,157

13.63

274,758

22,220

0.398

8,834

Exclusive Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(Mt)

(g/t)

tonnes

(Mt)

(oz/t)

(Moz)

Great Noligwa

Measured

2.5

10.95

26.9

2.7

0.320

0.9

Indicated

4.2

11.68

49.5

4.7

0.341

1.6

Inferred

1.6

10.73

17.2

1.8

0.313

0.6

Total

8.3

11.28

93.6

9.1  
 0.329  
 3.0  
 The shaft pillar and the C Reef form potential mineable areas. Approximately 20% to 30% of the exclusive Mineral Resource is expected to be taken up in safety and remnant pillars ahead of current mining.  
 Great Noligwa: Mineral Resource reconciliation  
 2006 vs 2007  
 Ounces (millions)  
 9.8  
 10.6  
 2006  
 -7.4  
 Depletion  
 4.91  
 Gold price  
 -0.9  
 Other  
 0.3  
 Explo-  
 ration  
 8.8  
 2007  
 -1.4  
 Cost  
 10.8  
 8.8  
 7.8  
 6.8  
 5.8  
 0.4  
 Metho-  
 dology  
 Change  
 Great Noligwa: Ore Reserve reconciliation  
 2006 vs 2007  
 Ounces (millions)  
 4.0  
 2006  
 3.9  
 2007  
 0.7  
 Model  
 change  
 -0.5  
 Depletion  
 4.0  
 3.0  
 -0.4  
 Scope  
 change

Change

20

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

South Africa operations: Great Noligwa continued

Great Noligwa – Metric

Tonnes above  
cut-off (millions)

0.00

3.99

0.00

Cut-off grade (g/t)

17.95

Ave grade

above cut-off (g/t)

24.42

22.99

20.14

18.71

15.85

14.43

13.00

15.95

13.96

11.96

9.97

7.98

5.98

1.99

12.00

17.28

21.56

25.85

2.00

19.94

16.00

20.00

8.00

4.00

6.00

10.00

14.00

18.00

Tonnes above cut-off

Ave grade above cut-off

Tons above cut-off

Ave grade above cut-off

Great Noligwa – Imperial

Tons above

cut-off (millions)

0.00  
0.29  
0.41 0.47  
0.12  
0.35  
17.59  
0.00  
0.53  
Cut-off grade (oz/t)  
21.98  
19.78  
Ave grade  
above cut-off (oz/t)

0.80  
0.72  
0.64  
0.56  
0.48  
0.40  
0.32  
0.00  
0.24  
0.16  
0.08  
15.39  
13.19  
10.99  
8.79  
6.59  
4.40  
2.20  
0.06  
0.18 0.23  
0.58  
Ore Reserve  
Metric  
Imperial  
Au  
Reserve  
Tonnes  
Grade  
Au  
Tons  
Grade  
ounces  
Mine/Project  
category  
(000s)  
(g/t)  
(kg)



(000s)

(oz/t)

(000s)

Great Noligwa – Crystalkop Reef

Proved

610

5.24

3,194

672

0.153

103

Probable

2,489

6.03

15,014

2,744

0.176

483

Total

3,099

5.88

18,208

3,416

0.171

585

Great Noligwa – Vaal Reef

Proved

9,307

7.60

70,720

10,259

0.222

2,274

Probable

4,126

7.86

32,447

4,548

0.229

1,043

Total

13,433

7.68

103,167

14,807

0.224

3,317

Great Noligwa – Total Ore Reserve

Proved

9,916

7.45

73,914

10,931

0.217

2,376

Probable

6,615

7.17

47,461

7,292

0.209

1,526

Total

16,531

7.34

121,375

18,223

0.214

3,902

Competent persons

Professional

Registration

Relevant

Type

Name

organisation

number

experience

Mineral Resource

I Bisschoff

SACNASP

4001031/88

17 years

Ore Reserve

HA Kruger

PLATO

PMS0114

30 years

Grade tonnage information

21

South Africa operations: Kopanang

Kopanang

Kopanang mine is located about 10km south-east of the town of Orkney, in the southern part of the Klerksdorp Goldfield. The mine exploits the VR at depths varying between 1,300m and 2,200m below surface. The C Reef is a secondary reef that occupies a stratigraphic horizon about 260m above the VR. Scattered mining methods are employed.

Geology

The VR is the principal economic horizon on Kopanang, accounting for over 95% of the gold mined. 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 package can reach a maximum thickness of over two metres 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 Kopanang lease area only the basal C Facies is mined.

The C Reef has been mined on a limited scale in the central parts of Kopanang, where the gold and uranium values are generally lower than the VR. The C Reef sub-crops in the north against the Gold Estates Conglomerates, and is eliminated in the south by younger, deeply eroded Kimberley Channels. The C Reef also contains two economic conglomerates, although the lowermost conglomerate is only preserved as small remnants.

22

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Kopanang – Crystalkop Reef

Measured

144

10.65

1,529

158

0.311

49

Indicated

174

11.80

2,055

192

0.344

66

Inferred

878

13.78

12,104

968

0.402

389

Total

1,196

13.12

15,688

1,319

0.383

504

Kopanang – Vaal Reef

Measured

3,875

21.17

82,060

4,272

0.618

2,638

Indicated

13,170

13.80

181,687

14,518

0.402

5,841

Inferred

835

13.52

11,290

921

0.394

363

Total

17,881

15.38

275,037

19,710

0.449

8,843

Kopanang –

Measured

4,019

20.80

83,589

4,430

0.607

2,687

Total Mineral Resource

Indicated

13,345

13.77

183,743

14,710

0.402

5,907

Inferred

1,714

13.65

23,394

1.889

0.398

752

Total  
19,077  
15.24  
290,725  
21,029  
0.444  
9,347  
Exclusive Mineral Resource  
Metric  
Imperial  
Au  
Resource  
Tonnes  
Grade  
Au  
Tons  
Grade  
ounces  
Mine/Project  
category  
(Mt)  
(g/t)  
tonnes  
(Mt)  
(oz/t)  
(Moz)  
Kopanang  
Measured  
0.5  
30.41  
13.8  
0.5  
0.887  
0.4  
Indicated  
4.2  
11.12  
46.3  
4.6  
0.324  
1.5  
Inferred  
1.7  
13.65  
23.4  
1.9  
0.398  
0.8  
Total  
6.3  
13.19

83.5

7.0

0.385

2.7

The VR in the western portion of the mine lease (Gencor 1E area) forms a potential mineable area. Approximately 20% to 30% of the exclusive Mineral

Resource is expected to be taken up in safety and remnant pillars ahead of current mining.

0

200

400

600

800m

*Geological section of shaft pillar area*

South Africa operations: Kopanang continued

23

Kopanang: Mineral Resource reconciliation

2006 vs 2007

Ounces (millions)

9.9

11.0

2006

-0.7

Depletion

0.0

Gold price

0.0

Other

0.8

Explo-

ration

9.3

2007

-0.5

Cost

10.9

8.9

7.9

6.9

-1.3

Metho-

dology

Change

Kopanang: Ore Reserve reconciliation

2006 vs 2007

Ounces (millions)

4.8

2006

4.3

2007

-0.1

Model

change

-0.5

Depletion

4.4

3.8

0.0

Scope

change

Change

4.6

4.2

4.0

Kopanang – Metric



Tonnes above  
cut-off (millions)

0.00  
3.81  
0.00  
Cut-off grade (g/t)  
17.16  
Ave grade  
above cut-off (g/t)

27.21  
25.69  
22.63  
21.11  
18.05  
16.53  
15.00  
15.26  
13.35  
11.44  
9.53  
7.63  
5.72  
1.91  
12.00  
19.58  
24.16  
28.74  
2.00  
19.07  
16.00  
20.00  
8.00  
4.00  
6.00  
10.00  
14.00  
18.00  
30.27

Tonnes above cut-off  
Ave grade above cut-off  
Tons above cut-off  
Ave grade above cut-off  
Kopanang – Imperial  
Tons above  
cut-off (millions)

0.00  
0.29  
0.41 0.47

0.12  
0.35  
16.82  
0.00  
0.53  
Cut-off grade (oz/t)  
21.02  
18.92  
Ave grade  
above cut-off (oz/t)

0.88  
0.79  
0.71  
0.62  
0.53  
0.44  
0.35  
0.00  
0.26  
0.18  
0.09  
14.71  
12.61  
10.51  
8.41  
6.31  
4.20  
2.10  
0.06  
0.18 0.23  
0.58  
Ore Reserve  
Metric  
Imperial  
Au  
Reserve  
Tonnes  
Grade  
Au  
Tons  
Grade  
ounces  
Mine/Project  
category  
(000s)  
(g/t)  
(kg)  
(000s)  
(oz/t)  
(000s)

Kopanang – Crystalkop Reef

Proved

108

4.23

458

119

0.124

15

Probable

167

4.74

791

184

0.138

25

Total

275

4.54

1,249

303

0.132

40

Kopanang – Vaal Reef

Proved

5,263

8.43

44,375

5,802

0.246

1,427

Probable

13,499

6.62

89,403

14,880

0.193

2,874

Total

18,762

7.13

133,778

20,681

0.208

4,301

Kopanang – Total Ore Reserve

Proved

5,371

8.35

44,833

5,921

0.243

1,441  
Probable  
13,665  
6.60  
90,193  
15,064  
0.193  
2,900  
Total  
19,037  
7.09  
135,027  
20,984  
0.207  
4,341  
Competent persons  
Professional  
Registration  
Relevant  
Type  
Name  
organisation  
number  
experience  
Mineral Resource  
S Kelly  
PLATO  
MS0095  
23 years  
Ore Reserve  
J vZ Visser  
PLATO  
PMS0119  
21 years  
Grade tonnage information

24

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007  
Moab Khotsong

Moab Khotsong, which is still in development, lies to the south of and is contiguous with the lease area of Great Noligwa. The Mineral Resource at Moab Khotsong is structurally complex and highly faulted, with large fault-loss areas. Mining is based on a backfill 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 four metres of the advancing stope faces and 75% of the total area extracted is likely to be backfilled.

#### Geology

The Mineral Resource lies between 2,100m and 3,700m below surface, with only limited quantities of ore lying above 2,300m. The principal reef is the VR, as a down-dip extension to the south and south-east of the orebody mined at Kopanang and Great Noligwa mines. The reef is represented by an oligomictic conglomerate and the gold mineralisation is associated with carbon. The VR package can reach a maximum thickness of over two metres 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). 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.

South Africa operations: Moab Khotsong

25

## 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.

Investigations into extracting this block of ground have been underway for several years but unfavourable market conditions have delayed the initiation of mining in this deeper block of ground (up to 3,500m below surface). The PZ2 project is planned to extend the life of Moab Khotsong for another 25 years until the mid 2030's. The project also allows other opportunities (mining and metallurgical) to come to the fore that would otherwise have been uneconomic.

The orebody is accessed through 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 provide 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 situated at 4,027m below datum (3,509m below collar).

It is estimated that there are currently 3.5 million ounces of Ore Reserves within the orebody of the lower mine area. Further opportunities exist around the main block, but additional exploration will be required before these reserves can be published.

## Brownfields exploration

Brownfields exploration is currently focused on improving geological confidence in:

the eastern, western and northern boundaries of the upper mine block;

the internal structure of the upper mine block; and

the lower mine block (Project Zaaiplaats 2).

Surface borehole MGR7 was completed during the year and the original cluster had a value of 715 cm.g/t over 46.4 cm whilst the long deflection cluster had a value of 1,474 cm.g/t over 79.2 cm. A long deflection was drilled from LIB13 and confirmed the location of both the cut-off and MKF1 faults and also indicated the presence of a large block of ground between 95 and 101 levels. LIB 9 commenced drilling from 92 level to test the structure interpretation between surface boreholes CY1 and MCY2 and is currently still in progress. The four surface boreholes and one LIB hole (MCY4, MCY5, MZA9, MMB5 and LIB9) are currently in progress and it is planned to commence with two further LIB holes (LIB4 and LIB10) in the new year.

-2950m  
-3300m  
-3050m  
-3100m  
-3150m  
-3200m  
-3250m  
-3300m  
-3350m  
-3400m  
-3450m  
-3500m  
-3550m  
-3600m  
-3650m  
-3700m  
-3750m  
-3800m  
-3850m

-3900m  
88 Level  
87 Level  
92 Level  
95 Level  
98 Level  
101 Level  
102 Level  
Die Hoek Fault  
Cut Off Fault  
GE8 Fault  
Buffels East Fault  
January 2007  
Section  
103 Line  
CY1 Fult  
Vaal Reef  
85 Level Reef Target  
Mineral Resource  
Metric  
Imperial  
Au  
Resource  
Tonnes  
Grade  
Au  
Tons  
Grade  
ounces  
Mine/Project  
category  
(000s)  
(g/t)  
(kg)  
(000s)  
(oz/t)  
(000s)  
Moab Khotsong – Vaal Reef  
Measured  
1,448  
14.28  
20,688  
1,597  
0.417  
665  
Indicated  
16,999  
19.08  
324,284  
18,738  
0.556



10,426  
Inferred  
4,288  
19.58  
83,960  
4,727  
0.571  
2,699  
Total  
22,735  
18.87  
428,932  
25,062  
0.550  
13,790  
Exclusive Mineral Resource  
Metric  
Imperial  
Au  
Resource  
Tonnes  
Grade  
Au  
Tons  
Grade  
ounces  
Mine/Project  
category  
(Mt)  
(g/t)  
tonnes  
(Mt)  
(oz/t)  
(Moz)  
Moab Khotsong  
Measured  
0.4  
19.56  
8.0  
0.5  
0.571  
0.3  
Indicated  
2.9  
14.37  
41.3  
3.2  
0.419  
1.3  
Inferred  
4.3

19.58

84.0

4.7

0.571

2.7

Total

7.6

17.60

133.3

8.3

0.513

4.3

*Geological section through 103 line*

South Africa operations: Moab Khotsong continued

27

Moab Khotsong: Mineral Resource reconciliation

2006 vs 2007

Ounces (millions)

11.5

2006

-0.1

Depletion

0.4

Gold price

1.9

Other

0.0

Explo-

ration

13.8

2007

0.0

Cost

13.4

12.4

11.4

0.0

Metho-

dology

Change

Mineral Resource below infrastructure

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Moab Khotsong

Total

13,562

18.01

244,304

14,950

0.525

7,855

Moab Khotsong: Ore Reserve reconciliation

2006 vs 2007

Ounces (millions)

3.2

2006

7.0

2007

3.8

Model

change

-0.1

Depletion

5.1

3.1

0.1

Scope

change

Change

6.1

4.1

South Africa operations: Moab Khotsong continued

28

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Ore Reserve

Metric

Imperial

Au

Reserve

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Moab Khotsong – Vaal Reef

Proved

1,153

7.86

9,056

1,271

0.229

291

Probable

20,189

10.29

207,705

22,254

0.300

6,678

Total

21,341

10.16

216,761

23,525

0.296

6,969

Ore Reserve below infrastructure

Metric

Imperial

Au

Reserve

Tonnes

Grade

Au  
 Tons  
 Grade  
 ounces  
 Mine/Project  
 category  
 (000s)  
 (g/t)  
 (kg)  
 (000s)  
 (oz/t)  
 (000s)  
 Moab Khotsong  
 Total  
 12,357  
 8.98  
 110,924  
 13,621  
 0.262  
 3,566  
 Tonnes above cut-off  
 Ave grade above cut-off  
 Moab Khotsong – Metric  
 Tonnes above  
 cut-off (millions)  
  
 0.0  
 0.0  
 Cut-off grade (g/t)  
 20.0  
 Ave grade  
 above cut-off (g/t)  
 20.5  
 19.5  
 18.5  
 15.0  
 10.0  
 5.0  
 12.0  
 19.0  
 20.0  
 21.0  
 2.0  
 25.0  
 16.0  
 20.0  
 8.0  
 4.0  
 6.0  
 10.0  
 14.0

18.0  
21.5  
Tons above cut-off  
Ave grade above cut-off  
Moab Khotsong – Imperial  
Tons above  
cut-off (millions)

0.00  
0.3  
0.4  
0.1  
20.00  
0.00  
0.5  
Cut-off grade (oz/t)  
25.00  
Ave grade  
above cut-off (oz/t)

0.62  
0.61  
0.60  
0.59  
0.58  
0.57  
0.55  
0.56  
15.00  
10.00  
5.00  
0.2  
0.6  
Competent persons  
Professional  
Registration  
Relevant  
Type  
Name  
organisation  
number  
experience  
Mineral Resource  
AC Barnard  
PLATO  
MTS0077  
12 years  
Ore Reserve  
J Wall  
PLATO  
PMS0164

26 years

Grade tonnage information



29

#### South Africa operations: Tau Lekoa

Tau Lekoa mine 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 900m and 1,700m below surface. The VCR is the only reef exploited at Tau Lekoa and dips towards the west at an average angle of 30°. Tau Lekoa has a twin shaft system and mines to a depth of 1,650m. Tau Lekoa uses hydropower which 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 northeast into Tau Lekoa, before turning sharply towards the west. The older middle and upper terraces contain more immature conglomerates with more erratic gold grades.

Tau Lekoa

30

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Tau Lekoa –

Measured

5,507

5.30

29,166

6,071

0.154

938

Ventersdorp Contact Reef

Indicated

32,266

4.88

157,353

35,567

0.142

5,059

Inferred

2,568

5.98

15,356

2,830

0.174

494

Total

40,341

5.00

201,875

44,468

0.146

6,490

Exclusive Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(Mt)

(g/t)

tonnes

(Mt)

(oz/t)

(Moz)

Tau Lekoa

Measured

3.7

4.97

18.4

4.1

0.145

0.6

Indicated

25.3

4.74

120.0

27.9

0.138

3.9

Inferred

2.6

5.98

15.4

2.8

0.174

0.5

Total

31.6

4.86

153.8

34.9

0.142

4.9

The Exclusive Mineral Resource is sensitive to the gold price and a large portion of this Mineral Resource is due to the difference in

Mineral Resource and Ore Reserve gold prices. Approximately 20 to 25% of the exclusive Mineral Resource is expected to occur in safety and remnant pillars ahead of current mining.

10 metre running dyke

5 metre running dyke

GoedenFault

Buffeldoorn Fault

VCR

VCR

Nooitgedacht Fault

Schoonspruit Fault

Ventersdorp

Lavas

Witwatersrand

quartzites and

conglomerates

W

E

300 Level

600 Level

900 Level

1050 Level

1200 Level

1350 Level

1500 Level

1650 Level

1704 Level

0

150

300m

*W-E section through Tau Lekoa Shaft*

South Africa operations: Tau Lekoa continued

31

Tau Leko: Mineral Resource reconciliation

2006 vs 2007

Ounces (millions)

7.1

2006

-0.2

Depletion

0.3

Gold price

0.0

Other

-0.2

Explo-

ration

6.5

2007

-0.6

Cost

6.6

5.6

0.0

Metho-

dology

Change

Tau Leko: Ore Reserve reconciliation

2006 vs 2007

Ounces (millions)

1.3

2006

1.3

2007

0.1

Model

change

-0.2

Depletion

1.1

0.0

Scope

change

Change

1.3

Tonnes above cut-off

Ave grade above cut-off

Tau Leko – Metric

Tonnes above

cut-off (millions)

0.00

11.00

15.40 17.60

4.40

13.20

32.27

0.00

19.80

Cut-off grade (g/t)

40.34

36.30

Ave grade

above cut-off (g/t)

20.32

18.62

16.92

15.21

13.51

11.81

5.00

10.11

8.40

6.70

28.24

24.20

20.17

16.14

12.10

8.07

4.03

2.20

6.60 8.80

Tau Lekoa – Imperial

Tons above

cut-off (millions)

0.00

0.29

0.41 0.47

0.12

0.35

35.57

0.00

0.53

Cut-off grade (oz/t)

44.46

40.02

Ave grade

above cut-off (oz/t)

0.64

0.58

0.51  
0.45  
0.39  
0.32  
0.26  
0.00  
0.19  
0.13  
0.06  
31.13  
26.68  
22.23  
17.79  
13.34  
8.89  
4.45  
0.06  
0.18 0.23  
0.58  
Tons above cut-off  
Ave grade above cut-off  
Ore Reserve  
Metric  
Imperial  
Au  
Reserve  
Tonnes  
Grade  
Au  
Tons  
Grade  
ounces  
Mine/Project  
category  
(000s)  
(g/t)  
(kg)  
(000s)  
(oz/t)  
(000s)  
Tau Lekoa –  
Proved  
2,362  
3.81  
8,999  
2,603  
0.111  
289  
Ventersdorp Contact Reef  
Probable  
9,075

3.45  
31,263  
10,003  
0.100  
1,005  
Total  
11,436  
3.52  
40,262  
12,606  
0.103  
1,294  
Competent persons  
Professional  
Registration  
Relevant  
Type  
Name  
organisation  
number  
experience  
Mineral Resource  
R Peattie  
SACNASP  
400097/01  
12 years  
Ore Reserve  
J vZ Visser  
PLATO  
PMS0119  
21 years  
Grade tonnage information



32

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Mponeng lies on the West Wits Line, close to Carletonville in the Gauteng Province and about 65km south-west of Johannesburg.

Mining at Mponeng is conducted at an average depth of 2,800m. The mine operates two vertical hoisting shafts, a sub-shaft and two service shafts. The Mponeng lease area is constrained to the north by TauTona and Savuka, but is constrained only by the depth of the ore-body, which is open-ended, towards the south.

#### Geology

The VCR is the only reef that is 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 footwall stratigraphy partially controls the reef type. Most of the VCR mined lies on footwall strata of the Kimberley Formation, which is relatively argillaceous. More durable quartzites of the Elsburg Formation lie to the west, while the eastern side of the mine is dominated by the Booyens Shale.

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 deeper than the VCR and currently there is an exploration programme drilling to improve resource confidence and confirm geological structures that occur at the lower levels. Of the three economic units that exist for 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.

South Africa operations: Mponeng

Mponeng

33

Upper Unit

Middle Unit

Lower Unit

Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Mponeng – Carbon Leader Reef

Measured

348

46.59

16,217

384

1.359

521

Indicated

21,731

19.70

428,004

23,954

0.574

13,761

Inferred

15,674

16.85

264,185

17,278

0.492

8,494

Total

37,753

18.76

708,407

41,616

0.547

22,776  
 Mponeng – Ventersdorp  
 Measured  
 5,400  
 13.94  
 75,269  
 5,952  
 0.407  
 2,420  
 Contact Reef  
 Indicated  
 59,801  
 8.51  
 508,831  
 65,920  
 0.248  
 16,359  
 Inferred  
 –  
 –  
 –  
 –  
 –  
 –  
 Total  
 65,201  
 8.96  
 584,100  
 71,872  
 0.261  
 18,779  
 Mponeng –  
 Measured  
 5,748  
 15.92  
 91,486  
 6,336  
 0.464  
 2,941  
 Total Mineral Resource  
 Indicated  
 81,532  
 11.49  
 936,835  
 89,874  
 0.335  
 30,120  
 Inferred  
 15,674  
 16.85  
 264,185

17,278  
 0.492  
 8,494  
 Total  
 102,955  
 12.55  
 1,292,506  
 113,488  
 0.366  
 41,555

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 Mines, whilst 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.

Mponeng is in a prime position to exploit the CLR, and had in fact originally been designed with this in mind via its sub-shaft deepening project which commenced in the mid-1990's. Due to economic factors at the time, this sub-shaft was stopped at 120 level in 2000 and is now being used to service the VCR mining operations.

The high-grade CLR below 120 level has remained inaccessible and this represents an enormous opportunity for Mponeng and for AngloGold Ashanti. A project team has been set up to design a "new mine" with the ability to access the CLR via tertiary shafts from Mponeng, enabling the mine to extend its life until at least 2040, and producing gold at its current levels.

The mine has been designed according to the Sequential Grid mining method, a technique developed at Elandsrand and Mponeng in the 1990's whereby stoping grids are pre-developed and reef extracted between dip-stabilising pillars. This method has proved successful in the management of seismicity, both from an overall reduction in seismic energy perspective, as well as from an increased mining flexibility view point. The shafts and infrastructure have been designed to fit the existing shaft system at Mponeng, and have the ability to sustain high levels of production.

The extension of Mponeng via the Carbon Leader Reef Project provides a strong base on 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.

Mponeng Carbon Leader Reef Project

34

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Exclusive Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(Mt)

(g/t)

tonnes

(Mt)

(oz/t)

(Moz)

Mponeng

Measured

4.3

16.20

69.7

4.7

0.472

2.2

Indicated

59.8

9.77

584.3

65.9

0.285

18.8

Inferred

15.7

16.85

264.2

17.3

0.492

8.5

Total

79.8

11.51

918.1

88.0

0.336

29.5

Edgar Filing: ANGLOGOLD ASHANTI LTD - Form 6-K

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

Approximately 35% to 40% of the exclusive Mineral Resource is expected to occur in safety and remnant pillars ahead of current mining.

Mineral Resource below infrastructure

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Mponeng – VCR

below 120 level

Total

8,678

14.23

123,518

9,565

0.415

3,971

Mponeng – CLR

below 120 level

Total

34,553

17.89

618,051

38,088

0.522

19,871

Mponeng

Total

43,231

17.15

741,570

47,654

0.500

23,842

Mponeng: Mineral Resource reconciliation

2006 vs 2007

Ounces (millions)

24.4

2006

-0.7

Depletion

0.0

Explo-

ration

41.6

2007

4.4

Other

45.0

30.0

20.0

Change

10.6

Gold price

40.0

35.0

4.9

Cost

25.0

-2.4

Metho-

dology

Mponeng: Ore Reserve reconciliation

2006 vs 2007

Ounces (millions)

6.82006

10.1

2007

-0.7

Model

change

-0.6

Depletion

8.5

5.5

4.7

Scope

change

Change

9.5

7.5

6.5

South Africa operations: Mponeng continued

35

Tonnes above cut-off  
 Ave grade above cut-off  
 Mponeng – Metric  
 Tonnes above  
 cut-off (millions)

0.00

20.59

0.00

Cut-off grade (g/t)

92.66

Ave grade

above cut-off (g/t)

24.99

23.37

2012

18.50

15.25

13.62

12.00

82.36

72.07

61.77

51.48

41.18

30.89

10.30

12.00

16.87

21.75

26.62

102.95

16.00

20.00

8.00

2.00

28.24

4.00

6.00

10.00

14.00

18.00

Tons above cut-off

Ave grade above cut-off

Mponeng – Imperial

Tons above

cut-off (millions)

0.00



0.29  
0.41 0.47  
0.12  
0.35  
90.79  
0.00  
0.53  
Cut-off grade (oz/t)  
113.49  
102.14  
Ave grade  
above cut-off (oz/t)

0.82  
0.74  
0.66  
0.58  
0.49  
0.41  
0.33  
0.00  
0.25  
0.16  
0.08  
79.44  
68.09  
56.74  
45.40  
34.05  
22.70  
11.35  
0.06  
0.18 0.23  
0.58  
Ore Reserve  
Metric  
Imperial  
Au  
Reserve  
Tonnes  
Grade  
Au  
Tons  
Grade  
ounces  
Mine/Project  
category  
(000s)  
(g/t)  
(kg)  
(000s)

(oz/t)

(000s)

Mponeng – Carbon Leader Reef

Proved

–

–

–

–

–

–

Probable

10,212

12.30

125,622

11,257

0.359

4,039

Total

10,212

12.30

125,622

11,257

0.359

4,039

Mponeng – Ventersdorp

Proved

2,063

9.85

20,320

2,274

0.287

653

Contact Reef

Probable

22,081

7.69

169,882

24,340

0.224

5,462

Total

24,144

7.88

190,202

26,614

0.230

6,115

Mponeng – Total

Proved

2,063

9.85

20,320

2,274

0.287

653

Probable

32,293

9.15

295,504

35,597

0.267

9,501

Total

34,356

9.19

315,824

37,871

0.268

10,154

Ore Reserve below infrastructure

Metric

Imperial

Au

Reserve

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Mponeng – VCR below 120 level

Total

7,162

9.70

69,447

7,895

0.283

2,233

Mponeng – CLR below 120 level

Total

10,211

12.30

125,622

11,256

0.359

4,039

Mponeng

Total

17,374

11.07

195,070

19,152

0.327

6,272

Competent persons

Professional

Registration

Relevant

Type

Name

organisation

number

experience

Mineral Resource

RK Lavery

SACNASP

144/89

26 years

Ore Reserve

R Brokken

PLATO

PMS0171

26 years

Grade tonnage information

36

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007  
South Africa operations: Savuka

Savuka

The Savuka mine is located about 18km south of the town of Carletonville, in the West Wits Goldfields. The mine exploits the CLR at depths varying between 2,600m and 3,500m below surface. The VCR, which on average is about 700m above the CLR is also exploited at Savuka, but to a lesser extent than the CLR. A combination of mining methods is used: longwall, conventional and sequential 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 stratigraphic units. Economically the most important unit is Unit 1 which is present as a sheet-like deposit over the whole mine. Unit 2 is a complex channel deposit that is only present along the western most limit of the current mining at Savuka. The reef may be over two metres 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. Production levels on the VCR at Savuka are not as high as on the CLR, with about 15% to 20% of the tonnage coming from the VCR. The VCR comprises of 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. It sub-outcrops against the base of the Ventersdorp Lavas in a direction parallel to strike across the north-western part of the lease area.

37  
 Mineral Resource  
 Metric  
 Imperial  
 Au  
 Resource  
 Tonnes  
 Grade  
 Au  
 Tons  
 Grade  
 ounces  
 Mine/Project  
 category  
 (000s)  
 (g/t)  
 (kg)  
 (000s)  
 (oz/t)  
 (000s)  
 Savuka –  
 Measured  
 467  
 15.09  
 7,054  
 515  
 0.440  
 227  
 Carbon Leader Reef  
 Indicated  
 4,408  
 15.36  
 67,719  
 4,859  
 0.448  
 2,177  
 Inferred  
 –  
 –  
 –  
 –  
 –  
 –  
 Total  
 4,875  
 15.34  
 74,773  
 5,374  
 0.447  
 2,404  
 Savuka –

Measured
183
15.49
2,839
202
0.452
91
Ventersdorp Contact Reef
Indicated
269
13.87
3,733
297
0.405
120
Inferred
–
–
–
–
–
–
Total
452
14.53
6,572
499
0.424
211
Savuka –
Measured
651
15.20
9,893
717
0.443
318
Total Mineral Resource
Indicated
4,677
15.28
71,452
5,155
0.446
2,297
Inferred
–
–
–
–
–

–  
 Total  
 5,328  
 15.27  
 81,345  
 5,873  
 0.445  
 2,615  
 Exclusive Mineral Resource  
 Metric  
 Imperial  
 Au  
 Resource  
 Tonnes  
 Grade  
 Au  
 Tons  
 Grade  
 ounces  
 Mine/Project  
 category  
 (Mt)  
 (g/t)  
 tonnes  
 (Mt)  
 (oz/t)  
 (Moz)  
 Savuka  
 Measured  
 0.6  
 15.09  
 9.2  
 0.7  
 0.440  
 0.3  
 Indicated  
 2.6  
 15.69  
 41.5  
 2.9  
 0.458  
 1.3  
 Inferred  
 –  
 –  
 –  
 –  
 –  
 –  
 Total  
 3.3



15.58

50.7

3.6

0.454

1.6

The exclusive Mineral Resource is sensitive to the gold price and a large portion of this Mineral Resource is due to the difference in Mineral Resource

and Ore Reserve gold prices. Approximately 40% of the exclusive Mineral Resource is expected to occur in safety and remnant pillars ahead of current mining.

Savuka: Mineral Resource reconciliation

2006 vs 2007

Ounces (millions)

2.2

2006

-0.1

Depletion

0.2

Gold price

0.4

Other

0.2

Explo-

ration

2.6

2007

-0.2

Cost

2.5

1.9

0.0

Metho-

dology

Change

2.3

2.1

Savuka Ore Reserve Reconciliation

2006 vs 2007

Ounces (millions)

0.2

2006

0.7

2007

0

Model

change

-0.1

Depletion

0.5

0.1

0.6

Scope  
change  
Change  
0.6  
0.4  
0.3  
0.7  
0.2

38

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Savuka – Metric

Tonnes above  
cut-off (millions)

0.00

1.05

0.00

Cut-off grade (g/t)

4.70

Ave grade

above cut-off (g/t)

23.77

22.67

20.48

19.38

17.19

16.10

15.0

4.18

3.66

3.14

2.61

2.09

1.57

0.52

18.29

21.58

24.87

5.23

16.00

8.00

2.00

4.00 6.00

10.00 12.00 14.00

18.00 20.00

Tonnes above cut-off

Ave grade above cut-off

Savuka – Imperial

Tons above

cut-off (millions)

0.00

0.29

0.41 0.47

0.12

0.35

4.61

0.00

0.53  
Cut-off grade (oz/t)  
5.76  
5.18  
Ave grade  
above cut-off (oz/t)  
  
0.76  
0.68  
0.61  
0.53  
0.45  
0.38  
0.30  
0.00  
0.23  
0.15  
0.08  
4.03  
3.46  
2.88  
2.30  
1.73  
1.15  
0.58  
0.06  
0.18 0.23  
0.58  
Tons above cut-off  
Ave grade above cut-off  
Ore Reserve  
Metric  
Imperial  
Au  
Reserve  
Tonnes  
Grade  
Au  
Tons  
Grade  
ounces  
Mine/Project  
category  
(000s)  
(g/t)  
(kg)  
(000s)  
(oz/t)  
(000s)  
Savuka –  
Proved

31  
5.86  
180  
34  
0.171  
6  
Carbon Leader Reef  
Probable  
3,130  
6.61  
20,683  
3,450  
0.193  
665  
Total  
3,161  
6.60  
20,862  
3,484  
0.193  
671  
Savuka –  
Proved  
34  
9.12  
310  
37  
0.266  
10  
Ventersdorp Contact Reef  
Probable  
33  
7.83  
256  
36  
0.228  
8  
Total  
67  
8.48  
565  
73  
0.247  
18  
Savuka –  
Proved  
65  
7.57  
489  
71  
0.221

16

Total Ore Reserve

Probable

3,163

6.62

20,938

3,486

0.193

673

Total

3,227

6.64

21,428

3,558

0.194

689

Competent persons

Professional

Registration

Relevant

Type

Name

organisation

number

experience

Mineral Resource

RK Lavery

SACNASP

144/89

26 years

Ore Reserve

R Brokken

PLATO

PMS0171

26 years

Grade tonnage information

South Africa operations: Savuka continued

39

South Africa operations: TauTona

TauTona lies on the West Wits Line, close to Carletonville in Gauteng and about 70km south-west of Johannesburg. Mining at TauTona takes place at depths ranging from 1,800m to 3,500m, where the world's deepest stoping section is found. The mine has a main shaft system as well as a secondary and a tertiary shaft. It is predominantly a long-wall operation.

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 unit is Unit 1, which is present as a sheet-like deposit over the whole mine, although the 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 easternmost limit of the current mining at TauTona mine. The reef may be over two metres thick where Unit 2 is developed. Unit 3 is preserved below Unit 1 in the southern parts of TauTona and is the oldest of the CLR conglomerates.

Production levels on the VCR at TauTona are currently limited, amounting to less than 10% of total production volumes. The VCR comprises of 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.

TauTona

40

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Surface +1829m arial

Ventersdorp Contact Reef

Lower Carbon Leader

Upper carbon leader

Main shaft

Sub vertical shaft

Tertiary vertical shaft

66 level -1822m BC. +7m arial

Carbon Leader Reef

100 level -2869m BC. +1030m arial

120 level 3476m BC. -1647m arial

sea level

N

S

*Schematic section through TauTona shaft system*

Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

TauTona –

Measured

673

23.59

15,875

742

0.688

510

Carbon Leader Reef

Indicated

9,143

27.58

252,116

10,078

0.804



8,106  
 Inferred  
 –  
 –  
 –  
 –  
 –  
 –  
 Total  
 9,815  
 27.30  
 267,990  
 10,820  
 0.796  
 8,616  
 TauTona –  
 Measured  
 417  
 9.73  
 4,061  
 460  
 0.284  
 131  
 Ventersdorp Contact Reef  
 Indicated  
 773  
 11.80  
 9,113  
 852  
 0.344  
 293  
 Inferred  
 –  
 –  
 –  
 –  
 –  
 –  
 Total  
 1,190  
 11.07  
 13,175  
 1,312  
 0.323  
 424  
 TauTona –  
 Measured  
 1,090  
 18.29  
 19,936  
 1,202

0.533

641

Total Mineral Resource

Indicated

9,915

26.35

26,229

10,930

0.768

8,399

Inferred

—

—

—

—

—

—

Total

11,005

25.55

281,165

12,131

0.745

9,040

South Africa operations: TauTona continued

41

Exclusive Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(Mt)

(g/t)

tonnes

(Mt)

(oz/t)

(Moz)

TauTona

Measured

0.8

17.49

13.4

0.8

0.510

0.4

Indicated

3.7

22.58

83.9

4.1

0.659

2.7

Inferred

–

–

–

–

–

–

Total

4.5

21.71

97.3

4.9

0.633

3.1

Approximately 40% of the exclusive Mineral Resource is expected to occur in safety and remnant pillars ahead of current mining.

Mineral Resource below infrastructure

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

TauTona –

Below infrastructure

Total

3,572

33.60

120,001

3,937

0.980

3,858

TauTona: Mineral Resource reconciliation

2006 vs 2007

Ounces (millions)

11.3

2006

-0.5

Depletion

0.0

Gold price

0.0

Other

0.3

Explo-

ration

9.0

2007

0.0

Cost

9.5

6.5

-2.1

Metho-

dology

Change

11.5

10.5

8.5

7.5

TauTona: Ore Reserve reconciliation

2006 vs 2007

Ounces (millions)

5.0

2006

4.6

2007

0.0

Model

change

-0.4

Depletion

1.1

0.0

Scope

change

Change

4.6

4.8

4.4

South Africa operations: TauTona continued

42

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Ore Reserve

Metric

Imperial

Au

Reserve

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

TauTona –

Proved

201

12.51

2,512

221

0.365

81

Carbon Leader Reef

Probable

11,971

11.07

132,494

13,196

0.323

4,260

Total

12,172

11.09

135,007

13,417

0.324

4,341

TauTona –

Proved

357

7.44

2,654

393

0.217  
85  
Ventersdorp Contact Reef  
Probable  
758  
7.61  
5,771  
836  
0.222  
186  
Total  
1,115  
7.56  
8,425  
1,229  
0.220  
271  
TauTona –  
Proved  
557  
9.27  
5,166  
614  
0.270  
166  
Total Ore Reserve  
Probable  
12,729  
1086  
138,265  
14,032  
0.317  
4,445  
Total  
13,287  
10.80  
143,432  
14,646  
0.315  
4,611  
Ore Reserve below infrastructure  
Metric  
Imperial  
Au  
Reserve  
Tonnes  
Grade  
Au  
Tons  
Grade  
ounces

Mine/Project  
category  
(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

TauTona

Total

4,542

13.71

62,267

5,007

0.400

2,002

Tonnes above cut-off

Ave grade above cut-off

TauTona – Metric

Tonnes above

cut-off (millions)

0.00

10.00

14.00 16.00

4.00

12.00

8.74

0.00

18.00

Cut-off grade (g/t)

10.93

9.83

Ave grade

above cut-off (g/t)

38.33

36.85

35.37

33.89

32.41

30.92

29.44

26.48

25.00

7.65

6.56

5.46

4.37

3.28

2.19



1.09  
 2.00  
 6.00 8.00  
 20.00  
 TauTona – Imperial  
 Tons above  
 cut-off (millions)  
  
 0.00  
 0.29  
 0.41 0.47  
 0.12  
 0.35  
 9.64  
 0.00  
 0.53  
 Cut-off grade (oz/t)  
 12.04  
 10.84  
 Ave grade  
 above cut-off (oz/t)  
  
 1.16  
 1.05  
 0.93  
 0.81  
 0.70  
 0.58  
 0.46  
 0.00  
 0.35  
 0.23  
 0.12  
 8.43  
 7.23  
 6.02  
 4.82  
 3.61  
 2.41  
 1.20  
 0.06  
 0.18 0.23  
 0.58  
 Tons above cut-off  
 Ave grade above cut-off  
 Competent persons  
 Professional  
 Registration  
 Relevant  
 Type  
 Name

organisation

number

experience

Mineral Resource

R Orton

PLATO

MS0096

23 years

Ore Reserve

MW Armstrong

PLATO

MS0054

22 years

Grade tonnage information

43

South Africa operations: Surface

Surface

Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Vaal River Surface

Measured

–

–

–

–

–

–

Indicated

417,886

0.37

155,277

460,640

0.011

4,992

Inferred

5,017

0.69

3,454

5,531

0.020

111

Total

422,903

0.38

158,730

466,171

0.011

5,103

West Wits Surface

Measured

—  
—  
—  
—  
—  
—

Indicated

161,500  
0.25  
40,538  
178,023  
0.007

1,303

Inferred

6,830  
0.62  
4,208  
7,528  
0.018

135

Total

168,329  
0.27  
44,746  
185,551  
0.008

1,439

Total Mineral Resource

Measured

—  
—  
—  
—  
—  
—

Indicated

579,385  
0.34  
195,814  
638,663  
0.010

6,296

Inferred

11,847  
0.65  
7,661  
13,059  
0.090

246

Total  
591,232  
0.34  
203,476  
651,722  
0.010  
6,542

44

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Vaal River Surface: Mineral Resource reconciliation

2006 vs 2007

Ounces (millions)

4.6

2006

0.2

Depletion

0.5

Gold price

0.1

Other

0.1

Explo-

ration

5.1

2007

0.0

Cost

4.5

3.5

0.0

Metho-

dology

Change

5.5

5.0

4

West Wits Surface: Mineral Resource reconciliation

2006 vs 2007

Ounces (millions)

0.7

2006

0.0

Depletion

0.9

Gold price

0.0

Other

-0.1

Explo-

ration

1.4

2007

0.0

Cost

1.0

0.6

0.0

Metho-

dology  
 Change  
 1.4  
 1.2  
 0.8  
 Exclusive Mineral Resource  
 Metric  
 Imperial  
 Au  
 Resource  
 Tonnes  
 Grade  
 Au  
 Tons  
 Grade  
 ounces  
 Mine/Project  
 category  
 (Mt)  
 (g/t)  
 tonnes  
 (Mt)  
 (oz/t)  
 (Moz)  
 Vaal River Surface  
 Measured  
 –  
 –  
 –  
 –  
 –  
 –  
 Indicated  
 298.2  
 0.29  
 87.5  
 328.7  
 0.009  
 2.8  
 Inferred  
 5.0  
 0.69  
 3.5  
 5.5  
 0.020  
 0.1  
 Total  
 303.2  
 0.30  
 91.0  
 334.2

0.009

2.9

West Wits

Measured

—

—

—

—

—

—

Indicated

161.5

0.25

40.5

178.0

0.007

1.3

Inferred

6.8

0.62

4.2

7.5

0.018

0.1

Total

168.3

0.27

44.7

185.6

0.008

1.4

Total Exclusive

Measured

—

—

—

—

—

—

Mineral Resource

Indicated

459.7

0.54

128.0

506.7

0.016

4.1

Inferred

11.8

1.31

7.7



13.0  
 0.038  
 0.3  
 Total  
 471.5  
 0.57  
 135.7  
 519.8  
 0.017  
 4.4

The exclusive Mineral Resource comprises largely of tailings storage facilities.

Ore Reserve

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Vaal River Surface

Proved

–

–

–

–

–

–

Probable

118,715

0.50

59,858

130,861

0.015

1,924

Total

118,715

0.50

59,858

130,861

0.015

1,924

South Africa operations: Surface continued

45

Vaal River Surface: Ore Reserve reconciliation

2006 vs 2007

Ounces (millions)

1.9

2006

1.9

2007

0.1

Model

change

-0.1

Depletion

1.8

0.0

Scope

change

Change

2.0

1.5

Competent persons

Professional

Registration

Relevant

Type

Name

organisation

number

experience

Mineral Resource

T Flitton

SACNASP

400277/06

6 years

Ore Reserve

J vZ Visser

PLATO

PMS0119

21 years

46

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Argentina operations: overview

Operations

ARGENTINA

Buenos Aires

Bahia Blanca

Cerro Vanguardia

Puerto San Julián

Santa Fe

Cordoba

Rio Gallegos

0

1000km

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 price and exchange rates

Units

2007

2006

Mineral Resource gold price

US\$/oz

700

650

Ore Reserve gold price

US\$/oz

600

550

Exchange rate – Argentina

AR/US\$

3.04

6.50

Mineral Resource and Ore Reserve comparison by operation (attributable)

Gold content (million ounces)

% change

% change

from

from 2006

Net diff

2006

Percentage

Other

before

after

after

Mine/Project

attributable

Category  
 2006 Depletion(1)  
 change(2)  
 depletion 2007  
 depletion  
 depletion  
 Comments  
 Cerro Vanguardia  
 92.5%  
 Resource  
 3.689  
 (0.193)  
 0.003  
 0% 3.499  
 (0.190)  
 (5%)  
 Depletion  
 Reserve  
 1.568  
 (0.232)  
 0.543  
 35% 1.879  
 0.311  
 20%  
 Additional pits plus the effects of a  
 higher gold price offset the depletion  
 Argentina Totals  
 Resource  
 3.689 (0.193)  
 0.003 0% 3.499 (0.190) (5%)  
 Reserve  
 1.568 (0.232)  
 0.543 35% 1.879 0.311 20%

1. Depletion: reduction in reserves based on ore delivered to the plant and corresponding reduction in resource.
2. Other change: combination of changes due to gold price, cost, exploration, methodology, model change and scope change.

47

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

Type of Drilling

Mine/Project

Category

Spacing

Diamond

RC

Other

Comments

m (- x -)

Cerro

Measured

12.5 x 5

Vanguardia

Indicated

25 x 10

Inferred

40 x 15

Grade/ore

control

12.5 x 5

The Mineral Resource estimates are computed using the relevant computer modules of Datamine® software package. The geological model is a critical input to 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 bore holes and after validation this information is used in the system to create a three dimensional model. This model is subsequently populated 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. The mining of a specific area of the orebody is surveyed and an accurate measurement of the corresponding mass associated with the mining area is recorded. The in-situ density is then computed by dividing the mass by the surveyed volume. Using the volume, grade and density information, the Mineral Resource estimates are computed for the individual orebodies.

Ore Reserve estimation

The appropriate Mineral Resource models are used as the basis for Ore Reserves. 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.

Ore Reserve modifying factors (as at 31 December 2007)

Mineral Resource

Ore Reserve

cut-off

cut-off

Metal-

grade

grade

Dilution

(1)

lurgical

Other

Mine/Project

g/t (Au)

g/t (Au)

%

recovery

factor

Cerro Vanguardia

1.89

2.1

95.02

n/a

*1. There is 50cm of dilution on each side of the quartz vein.*

Mineral Resource estimation

48

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Argentina operations: Cerro Vanguardia

Cerro Vanguardia

The Cerro Vanguardia property is located 160km north-west of Puerto San Julian. The property is situated within the southern Deseado Masive.

Geology

The oldest rocks in this part of Patagonia are of Precambrian-Cambrian age. These are overlain by Permian and Triassic continental clastic rocks which have been faulted into a series of horsts and grabens, and are associated with both limited basaltic sills and dykes and with calc-alkaline granite and granodiorite intrusions. Thick andesite flows of Lower Jurassic age occur above these sedimentary units. A large volume of rhyolitic ignimbrites was emplaced during the Middle and Upper Jurassic age over an area of approximately 100,000km

2

. These volcanic rocks include the Chon Aike formation ignimbrite units that host the gold-bearing veins at Cerro Vanguardia. Post-mineral units include Cretaceous and Tertiary rocks of both marine and continental origin, the Quaternary La Avenida formation, the Patagonia gravel and the overlying La Angelita basalt flows. These flows do not cover the area of the Cerro Vanguardia veins.

Gold and silver mineralisation at Cerro Vanguardia occurs within a vertical range of about 150m 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. They are typical of epithermal, low-temperature, adularia-sericite character and consist primarily of quartz in several forms 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.



49

Inferred Mineral Resource in pit optimisation

Inferred Mineral Resources were used in the pit optimisation process and 0.085 million ounces are present in the optimised pit.

Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Cerro Vanguardia –

Measured

9,638

0.76

7,347

10,624

0.022

236

Stockpile Full Grade

Indicated

12,161

0.60

7,356

13,405

0.018

237

Inferred

1,451

0.61

878

1,599

0.018

28

Total

23,249

0.67

15,581

25,628

0.020  
501  
Cerro Vanguardia –  
Measured  
1,434  
8.04  
11,535  
1,580  
0.235  
371  
Vein Mineral Resources  
Indicated  
8,984  
7.95  
71,439  
9,903  
0.232  
2,297  
Inferred  
1,452  
7.09  
10,290  
1,601  
0.207  
331  
Total  
11,870  
7.86  
93,263  
13,084  
0.229  
2,998  
Cerro Vanguardia –  
Measured  
11,071  
1.71  
18,882  
12,214  
0.050  
607  
Total Mineral Resource  
Indicated  
21,145  
3.73  
78,795  
23,308  
0.109  
2,533  
Inferred  
2,903  
3.85

11,168  
3,200  
0.112  
359  
Total  
35,119  
3.10  
108,845  
38,712  
0.090  
3,499  
Mineral Resource by-product: Silver (Ag)  
Metric  
Imperial  
Resource  
Tonnes  
Grade  
Ag  
Tons  
Grade  
Ag  
Mine/Project  
category  
(Mt)  
(g/t)  
tonnes  
(Mt)  
(oz/t)  
(Moz)  
Cerro Vanguardia  
Measured  
11.1  
27.15  
300.5  
12.2  
0.792  
9.7  
Indicated  
21.1  
67.94  
1,436.6  
23.3  
1.982  
46.2  
Inferred  
2.9  
65.77  
190.9  
3.2  
1.918  
6.1

Total  
35.1  
54.90  
1,928.1  
38.7  
1.601  
62.0  
Ore Reserve  
Metric  
Imperial  
Au  
Resource  
Tonnes  
Grade  
Au  
Tons  
Grade  
ounces  
Mine/Project  
category  
(000s)  
(g/t)  
(kg)  
(000s)  
(oz/t)  
(000s)  
Cerro Vanguardia –  
Proved  
46  
4.32  
197  
50  
0.126  
6  
Stockpile Full Grade Ore  
Probable  
–  
–  
–  
–  
–  
–  
Total  
46  
4.32  
197  
50  
0.126  
6  
Cerro Vanguardia –  
Proved

998  
6.17  
6,153  
1,100  
0.180  
198  
Vein Mineral Resources  
Probable  
7,917  
6.58  
52,082  
8,727  
0.192  
1,674  
Total  
8,915  
6.53  
58,235  
9,828  
0.191  
1,872  
Cerro Vanguardia –  
Proved  
1,044  
6.08  
6,349  
1,150  
0.177  
204  
Total Ore Reserves  
Probable  
7,917  
6.58  
52,082  
8,727  
0.192  
1,674  
Total  
8,961  
6.52  
58,432  
9,878  
0.190  
1,879

50

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Argentina operations: Cerro Vanguardia continued

Cerro Vanguardia: Mineral Resource reconciliation

2006 vs 2007

Ounces (millions)

3.7

2006

-0.2

Depletion

0

Gold price

-0.2

Other

0.3

Explo-  
ration

3.5

2007

0

Cost

3.4

3.0

0

Metho-  
dology

Change

3.8

3.6

3.2

Cerro Vanguardia: Ore Reserve reconciliation

2006 vs 2007

Ounces (millions)

1.6

2006

1.9

2007

0.2

Model  
change

-0.2

Depletion

1.3

0.3

Scope  
change

Change

1.7

1.5

Cerro Vanguardia – Metric

Tonnes above  
cut-off (millions)

0.00  
6.59  
0.00  
Cut-off grade (g/t)  
29.67  
Ave grade  
above cut-off (g/t)

15.84  
14.74  
12.53  
11.42  
9.21  
8.11  
7.00  
26.37  
23.08  
19.78  
16.48  
13.19  
9.89  
3.30  
4.00  
8.00  
10.32  
13.63  
16.95  
1.00  
2.00 3.00  
6.00  
7.00  
9.00  
32.97  
5.00  
10.00

Tonnes above cut-off  
Ave grade above cut-off  
Tons above cut-off  
Ave grade above cut-off  
Cerro Vanguardia – Imperial  
Tons above  
cut-off (millions)

0.00  
0.15  
0.20 0.23  
0.06  
0.18

29.07

0.00

0.26

Cut-off grade (oz/t)

36.34

32.71

Ave grade

above cut-off (oz/t)

0.53

0.47

0.42

0.37

0.32

0.26

0.21

0.00

0.16

0.11

0.05

25.44

21.80

18.17

14.54

10.90

7.27

3.63

0.03

0.09 0.12

0.29

Competent persons

Professional

Registration

Relevant

Type

Name

organisation

number

experience

Mineral Resource

AHM Silva

AusIMM

224831

9 years

Ore Reserve

ER Lopez

PLATO

CPG2353

13 years

Ore Reserve by-product: Silver (Ag)

Reserve



Tonnes  
Grade  
Ag  
Tons  
Grade  
Ag  
Mine/Project  
category  
(Mt)  
(g/t)  
tonnes  
(Mt)  
(oz/t)  
(Moz)  
Cerro Vanguardia  
Proved  
1.0  
71.37  
74.5  
1.2  
2.081  
2.4  
Probable  
7.9  
112.25  
888.7  
8.7  
3.274  
28.6  
Total  
9.0  
107.49  
936.2  
9.9  
3.135  
31.0  
Grade tonnage information

51

AngloGold Ashanti owns 100% of Sunrise Dam gold mine. AngloGold Ashanti has a 33.33% interest in Boddington with joint venture partner Newmont Mining Corporation holding 66.67%. Boddington gold mine is managed by the BGM Management Company Pty Ltd (BGMMCo), which is now 100% owned by Newmont. The management of the company reports to a joint venture executive committee, which controls the joint venture.

The Tropicana Project is a joint venture with Independence Group NL (IGO) in which AngloGold Ashanti Australia Limited (AGAA) holds 70% and free carries IGO to the end of pre-feasibility.

Operations/projects

AUSTRALIA

Sunrise

Dam

Boddington

Canberra

Darwin

*Western*

*Australia*

Brisbane

Sydney

Melbourne

Adelaide

Perth

Kalgoorlie

Laverton

*Tasmania*

Tropicana

0

800km

The Australian assets (formerly Acacia Resources Ltd) were acquired at the end of 1999 and comprise of Sunrise Dam and Boddington gold mines and now the Tropicana Project.

Mineral Resource and Ore Reserve gold price and exchange rates

Sunrise Dam Gold Mine

Units

2007

2006

Mineral Resource gold price

US\$/oz

700

650

Ore Reserve gold price

US\$/oz

600

550

Exchange rate – Australia

US\$/Aus\$

0.71

0.73

Boddington Gold Mine

Units

2007

2006

Mineral Resource gold price

US\$/oz

700

650

Ore Reserve gold price

US\$/oz

575

500

Exchange rate – Australia

US\$/Aus\$

0.77

0.74

Australia operations: overview

Ore Reserve modifying factors (as at 31 December 2007)

Cut-off

Metallurgical

grade

Dilution

(1)

recovery

Other

Mine/Project

g/t (Au)

%

factor

factor

Boddington

0.32

(2)

n/a

81.6%

(3)

n/a

Sunrise Dam –

open pit

1.0

n/a

83.5%

n/a

Sunrise Dam –

underground

1.5

(4)

19.5

(5)

91%

(5)

n/a

1. *Where no dilution factor is indicated the dilution is inherent in the resource model estimate.*
2. *Cut-off is based on a net smelter return of A\$8.28/t which approximates to 0.4g/t Au over LOM.*
3. *LOM average metallurgical recovery for copper is 82.7%.*
4. *Targeting average grade.*
5. *Average across pit designs.*

52

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

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

Type of Drilling

Mine/Project

Category

Spacing

Diamond

RC

Other

Comments

m (- x -)

Boddington

Measured

25 x 25

Mineral Resources were classified using a combination of drill-hole spacing, number of samples in estimate and average distance to samples.

Indicated

50 x 50

Inferred

100 x 200

Grade/ore

control

Not applicable.

Sunrise Dam

Measured

10 x 10 and

Mineral Resources were classified using a 25 x 25

combination of drill-hole spacing, number of samples in estimate, average distance to samples and confidence in geological interpretation/estimate.

Indicated

20 x 20 and

40 x 40

Inferred

50 x 100

Grade/ore  
6 x 6 and

Blastholes were historically used for  
control  
10 x 10

grade control in Sunrise Pit by Placer.

Ore Reserve estimation

The Ore Reserve is estimated by Lerch-Grossman pit optimisation 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 selective mining unit (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 Boddington cut-off grade is formulated on a net revenue basis (Net Smelter Return (NSR)) taking into account gold and copper grade/metal price/recovery. The 0.32g/t COG approximates a life of mine cut-off grade. This represents diorite material and using unit gold/copper prices of A\$750/oz and A\$2.00/lb respectively. This NSR with gold leach and gravity contributions cut-off grade is A\$8.28/t and includes stockpile rehandle mining cost of A\$0.91/t thereby allowing for an elevated cut-off grade strategy over the life of mine and inclusive of an end of mine life rehandle cost.

Mineral Resource and Ore Reserve comparison by operation (attributable)

Gold content (million ounces)

% change

% change

from

from 2006

Net diff

2006

Percentage

Other

before

after

after

Mine/Project

attributable

Category

2006 Depletion(1)

change(2)

depletion 2007

depletion

depletion

Comments

Boddington

33.33%

Resource

10.290

0.000

(0.011)

0%

10.279

(0.011)

0%

No change. Gains were offset by increased costs

Reserve

4.544

0.000

0.998

22%

5.542

0.998

22%

The upgrade of Inferred Mineral Resource within the pit shell by drilling

Sunrise Dam

100%

Resource

3.637

(0.845)

0.286

8%

3.078

(0.559)

(15%)

Depletion was partly offset by gains due to successful exploration

Reserve

1.889

(0.665)

0.410

22%

1.634

(0.255)

(13%)

Gains made by the drilling results at Cosmo did not manage to offset depletion

Tropicana

70%

Resource

0.000      0.000

2.837	–	
2.837	2.837	0%
Successful greenfields exploration		
Reserve		

–  
–  
–  
–  
–  
–  
–

Australia Totals

Resource

13.927 (0.845)

3.112

22%

16.194 2.267 16%

Reserve

6.433 (0.665)

1.408

22%

7.176 0.743 12%

1. Depletion: reduction in reserves based on ore delivered to the plant and corresponding reduction in resource.

2. Other change: combination of changes due to gold price, cost, exploration, methodology, model change and scope change.

Australia operations: overview continued



53

Australia operations: Boddington

Boddington

The operation is situated approximately 120km south-east of Perth in Western Australia.

Geology

Boddington is located in the Archaean Saddleback greenstone belt in the south-west of Western Australia. The main zone of gold mineralisation occurs reasonably continuously over a strike length of over 5km and a width of about 1km. The previous oxide operation, which closed in 2001, produced approximately 6.1 million ounces over a mine life of 15 years from a lateritic deposit developed over a large basement Mineral Resource. This basement Mineral Resource, beneath the oxide pits, is hosted predominantly by andesitic volcanics and diorites, and contains both gold and copper mineralisation. Construction of the 35.2 Mtpa basement treatment plant is well advanced, with production anticipated to commence late 2008-early 2009.

Mineral Resource estimation

The Mineral Resource and Ore Reserve of the Boddington expansion project have been updated as part of the annual evaluation process by BGMMCo personnel. The geostatistical method of Uniform Conditioning Is used to estimate the Mineral Resource. All available geological drill-hole information is validated for use in the models and the local geology of the ore body is used to classify the drill-hole information into appropriate geostatistical domains. Detailed statistical analyses are conducted on each of these domains and this allows for the identification of high grade outliers. If these values are anomalous to the general population characteristics then they are cut back to the appropriate upper limit of the population.

Australia operations: Boddington continued

54

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Boddington – Open pit

Measured

66,035

0.83

54,479

72,791

0.024

1,752

Indicated

284,781

0.67

191,997

313,917

0.020

6,173

Inferred

126,513

0.58

73,125

139,457

0.017

2,351

Total

477,329

0.67

319,600

526,165

0.020

10,275

Boddington – Stockpile

Measured

–  
–  
–  
–  
–  
–

Indicated

146  
0.81  
118  
161  
0.024  
4

Inferred

–  
–  
–  
–  
–  
–

Total

146  
0.81  
118  
161  
0.024  
4

Boddington –

Measured

66,035  
0.83  
54,479  
72,791  
0.024  
1,752

Total Mineral Resources

Indicated

284,927  
0.67  
192,115  
314,078  
0.020  
6,177

Inferred

126,513  
0.58  
73,125  
139,457  
0.017

2,351  
Total  
477,475  
0.67  
319,718  
526,326  
0.020  
10,279  
Exclusive Mineral Resource  
Metric  
Imperial  
Au  
Mine/Project  
Resource  
Tonnes  
Grade  
Au  
Tons  
Grade  
ounces  
category  
(Mt)  
(g/t)  
tonnes  
(Mt)  
(oz/t)  
(Moz)  
Boddington  
Measured  
9.4  
0.44  
4.1  
10.4  
0.013  
0.1  
Indicated  
125.1  
0.56  
70.0  
137.9  
0.016  
2.2  
Inferred  
126.5  
0.58  
73.1  
139.5  
0.017  
2.4  
Total  
261.1

0.56  
 147.2  
 287.8  
 0.016  
 4.7  
 Mineral Resource by-products: Copper (Cu)  
 Mine  
 Mineral Resource category  
 Tonnage (Mt)  
 Grade (ppm)  
 Copper (Mt)  
 Boddington  
 Measured  
 66.0  
 1,043  
 0.069  
 Indicated  
 284.9  
 986  
 0.281  
 Inferred  
 126.5  
 967  
 0.122  
 Total  
 477.5  
 989  
 0.472  
 Boddington: Mineral Resource reconciliation  
 2006 vs 2007  
 Ounces (millions)  
 10.3  
 2006  
 0.0  
 Depletion  
 -0.3  
 Gold price  
 0.001  
 Other  
 0.8  
 Explo-  
 ration  
 10.3  
 2007  
 -0.6  
 Cost  
 9.5  
 9.0  
 0.001  
 Metho-  
 dology

Change

10.5

10.0

Boddington: Ore Reserve reconciliation

2006 vs 2007

Ounces (millions)

4.5

2006

5.5

2007

0.1

Model

change

0.0

Depletion

4.3

0.9

Scope

change

Change

4.9

5.1

4.7

5.3

4.5

55  
 Ore Reserve  
 Metric  
 Imperial  
 Au  
 Reserve  
 Tonnes  
 Grade  
 Au  
 Tons  
 Grade  
 ounces  
 Mine/Project  
 category  
 (000s)  
 (g/t)  
 (kg)  
 (000s)  
 (oz/t)  
 (000s)  
 Boddington –  
 Proved  
 56,631  
 0.89  
 50,338  
 62,425  
 0.026  
 1,618  
 Open pit  
 Probable  
 159,495  
 0.76  
 121,927  
 175,814  
 0.022  
 3,920  
 Total  
 216,127  
 0.80  
 172,265  
 238,239  
 0.023  
 5,538  
 Boddington –  
 Proved  
 –  
 –  
 –  
 –  
 –  
 –

Stockpile

Probable

146

0.81

118

161

0.024

4

Total

146

0.81

118

161

0.024

4

Boddington –

Proved

56,631

0.89

50,338

62,425

0.026

1,618

Total Ore Reserves

Probable

159,641

0.76

122,045

175,974

0.022

3,924

Total

216,273

0.80

172,383

238,400

0.023

5,542

Ore Reserve by-products: Copper (Cu)

Mine/Project

Mineral Resource category

Tonnage (Mt)

Grade (ppm)

Copper (Mt)

Boddington

Proved

56.6

1,105

0.063

Probable

159.5



1,061  
 0.169  
 Total  
 216.1  
 1,073  
 0.232  
 Boddington – Metric  
 Tonnes above  
 cut-off (millions)  
  
 0.00  
 134.49  
 0.00  
 Cut-off grade (g/t)  
 605.22  
 Ave grade  
 above cut-off (g/t)  
  
 1.27  
 1.11  
 0.79  
 0.64  
 0.32  
 0.16  
 0.00  
 537.97  
 470.72  
 403.48  
 336.23  
 268.99  
 201.74  
 67.25  
 0.48  
 0.84  
 0.48  
 0.95  
 1.43  
 1.59  
 0.12  
 0.24  
 0.36  
 0.60  
 0.72  
 0.96  
 672.46  
 Tonnes above cut-off  
 Ave grade above cut-off  
 Boddington – Imperial  
 Tons above  
 cut-off (millions)  
 0.00

0.02  
0.02  
0.03  
0.01  
0.02  
593.01  
0.00  
Cut-off grade (oz/t)  
741.26  
667.14  
Ave grade  
above cut-off (oz/t)  
0.05  
0.04  
0.04  
0.03  
0.03  
0.02  
0.02  
0.00  
0.01  
0.01  
0.00  
518.89  
444.76  
370.63  
296.51  
222.38  
148.25  
74.13  
0.00  
0.01  
0.01  
Tons above cut-off  
Ave grade above cut-off  
Competent persons  
Professional  
Registration  
Relevant  
Type  
Name  
organisation  
number  
experience  
Mineral Resource  
K Gleeson  
AusIMM  
202246  
Newmont Geology Manager  
Ore Reserve  
S Williams

AusIMM

204071

Newmont Engineering Manager

Grade tonnage information

56

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Australia operations: Sunrise Dam

Sunrise Dam lies some 220km north-northeast of Kalgoorlie and 55km south of Laverton in Western Australia. The mine is 100% owned by AngloGold Ashanti. The mine comprises a large open-pit operation and an underground project. Mining is carried out by contractors and ore is treated in a conventional gravity and leach process plant.

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:

(i)

Shear-related and high strain – e.g. Sunrise Shear Zone,

(ii)

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

(iii)

Placer-style mineralisation hosted within the fluvial sediments.

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

Sunrise Dam

57

## Mineral Resource estimation

open-pit estimates are generated using a geostatistical method called multiple indicator kriging. All available geological drill-hole information is validated for use in the models and the local geology of the ore body is used to classify the drill-hole information into appropriate geostatistical domains. Detailed statistical analyses are conducted on each of these domains and this allows for the identification of high grade outliers. If these values are anomalous to the general population characteristics then they are cut back to the appropriate upper limit of the population. Estimation for the underground Mineral Resources uses the geological model boundaries to subdivide all drill-hole data into appropriate domains. Statistical analyses are performed on these domains and in a similar manner to that of open-pit estimation, high grade outliers are identified and appropriately cut back to the upper limit of the population. A geostatistical method called ordinary kriging is used to produce estimates of a pre-determined block size. These block sizes are 10m x 10m and 20m x 20m. The geostatistical technique of Conditional Simulation has been used to estimate the Cosmo ore zone.

## Legend

Sandstone / Siltstone

Magnetite Shale

Dolerite / Basalt

Zones of Alteration

Andesite

Volcaniclastic – conglomerate

Coarse – Porphyritic

Intermed. Intrusive

Mineralised Zones

Approx. Generalised Pit shell

Lamprophyre Dykes

*Schematic geological section of Sunrise Dam (looking North). Field of view is approximately 2km West to East.*

Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Sunrise Dam –  
Measured

–  
–  
–  
–  
–  
–

Golden Delicious  
Indicated

1,038  
1.84  
1,910  
1,144  
0.054  
61

Inferred

2,643  
1.64  
4,335  
2,913  
0.048  
139

Total

3,681  
1.70  
6,244  
4,058  
0.049  
201

Sunrise Dam –  
Measured

20,055  
1.63  
32,634  
22,106  
0.047  
1,049

Open pit  
Indicated

2,403  
2.67  
6,422  
2,648  
0.078  
206

Inferred

15  
3.67  
56  
17

0.107  
 2  
 Total  
 22,472  
 1.74  
 39,112  
 24,772  
 0.051  
 1,257  
 Sunrise Dam –  
 Measured  
 –  
 –  
 –  
 –  
 –  
 Underground  
 Indicated  
 5,790  
 4.73  
 27,363  
 6,382  
 0.138  
 880  
 Inferred  
 2,076  
 11.09  
 23,018  
 2,288  
 0.323  
 740  
 Total  
 7,866  
 6.41  
 50,381  
 8,670  
 0.187  
 1,620  
 Sunrise Dam –  
 Measured  
 20,055  
 1.63  
 32,634  
 22,106  
 0.047  
 1,049  
 Total Mineral Resource  
 Indicated  
 9,230  
 3.87

35,695  
10,175  
0.113  
1,148  
Inferred  
4,734  
5.79  
27,409  
5,219  
0.169  
881  
Total  
34,019  
2.81  
95,738  
37,500  
0.082  
3,078



Australia operations: Sunrise Dam continued

58

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Exclusive Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(Mt)

(g/t)

tonnes

(Mt)

(oz/t)

(Moz)

Sunrise Dam

Measured

8.1

2.52

20.4

8.9

0.074

0.7

Indicated

4.3

2.99

12.9

4.7

0.087

0.4

Inferred

4.7

5.79

27.4

5.2

0.169

0.9

Total

17.1

3.55

60.6

18.9

0.103

2.0

Sunrise Dam: Mineral Resource reconciliation

2006 vs 2007

Ounces (millions)

3.6

2006

-0.9

Depletion

0.0

Gold price

0.1

Other

0.0

Explo-

ration

3.1

2007

0.0

Cost

3.0

2.5

0.2

Metho-

dology

Change

4.0

3.5

Sunrise Dam: Ore Reserve reconciliation

2006 vs 2007

Ounces (millions)

1.9

2006

1.6

2007

0.3

Model

change

-0.7

Depletion

1.0

0.1

Scope

change

Change

1.5

2.0

Inferred Mineral Resource in pit optimisation

Inferred Mineral Resources were used in the pit optimisation process and 0.017 million ounces are present in the optimised pit.

Ore Reserve

Metric

Imperial

Au  
 Reserve  
 Tonnes  
 Grade  
 Au  
 Tons  
 Grade  
 ounces  
 Mine/Project  
 category  
 (000s)  
 (g/t)  
 (kg)  
 (000s)  
 (oz/t)  
 (000s)  
 Sunrise Dam – Open pit  
 Proved  
 11,982  
 2.33  
 27,902  
 13,208  
 0.068  
 897  
 Probable  
 1,850  
 3.11  
 5,762  
 2,040  
 0.091  
 185  
 Total  
 13,832  
 2.43  
 33,664  
 15,247  
 0.071  
 1,082  
 Sunrise Dam – Underground  
 Proved  
 31  
 8.20  
 251  
 34  
 0.239  
 8  
 Probable  
 3,310  
 5.11  
 16,912  
 3,648

0.149

544

Total

3,340

5.14

17,163

3,682

0.150

552

Sunrise Dam – Total Ore Reserve

Proved

12,013

2.34

28,153

13,242

0.068

905

Probable

5,160

4.39

22,674

5,688

0.128

729

Total

17,173

2.96

50,827

18,929

0.086

1,634

59

Sunrise Dam Surface – Metric

Tonnes above

cut-off (millions)

0.00

11.24

0.00

4.50

Cut-off grade (g/t)

Ave grade

above cut-off (g/t)

9.44

6.61

4.72

3.78

1.89

0.94

0.00

37.47

33.73

29.98

26.23

7.49

3.75

0.50

1.00

1.50

2.00

2.50

3.00

3.50

4.00

2.83

5.66

14.99

18.74

22.48

5.00

7.55

8.50

Tonnes above cut-off

Ave grade above cut-off

Sunrise Dam Surface – Imperial

Tons above

cut-off (millions)

0.00

12.39

0.00

0.13

Cut-off grade (g/t)

Ave grade  
above cut-off (g/t)  
0.28  
0.19  
0.14  
0.11  
0.06  
0.03  
0.00  
41.31  
37.18  
33.05  
28.91  
8.26  
4.13  
0.01  
0.03  
0.04  
0.06  
0.07  
0.09  
0.10  
0.12  
0.08  
0.17  
16.52  
20.65  
24.78  
0.15  
0.22  
0.25  
Tons above cut-off  
Ave grade above cut-off  
Competent persons  
Professional  
Registration  
Relevant  
Operation  
Type  
Name  
organisation  
number  
experience  
Sunrise Dam –  
Mineral Resource  
B Catto  
AusIMM  
202721  
12 years  
Surface  
Ore Reserve

P Christians

AusIMM

221754

23 years

Sunrise Dam –

Mineral Resource

J Biggam

AusIMM

112082

14 years

Underground

Ore Reserve

S Tombs

AusIMM

105785

30 years

Grade tonnage information

Australia operations: Tropicana

60

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Tropicana

The Tropicana gold deposit is located approximately 350km north-east of Kalgoorlie within the Great Victoria Desert, Western Australia.

Tropicana is the first deposit discovered in this remote greenfields exploration area.

Geology

The Tropicana deposit comprises two known mineralised zones, the Tropicana zone to the north and Havana zone to the south. Together the known mineralised zones define a system that extends over a 4km strike length. The lenses have been tested to a vertical depth of 350m to 400m, and are open down dip. The Tropicana and Havana zones are grossly “stratiform” within the preferred gneissic host sequence. Havana zone consists of multiple stacked lenses, whereas Tropicana comprises one main mineralised lens.

Mineral Resource estimation

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



61  
 Mineral Resource  
 Metric  
 Imperial  
 Au  
 Resource  
 Tonnes  
 Grade  
 Au  
 Tons  
 Grade  
 ounces  
 Mine/Project  
 category  
 (000s)  
 (g/t)  
 (kg)  
 (000s)  
 (oz/t)  
 (000s)  
 Tropicana – Open pit  
 Measured  
 –  
 –  
 –  
 –  
 –  
 –  
 Indicated  
 21,788  
 2.09  
 45,559  
 24,018  
 0.061  
 1,465  
 Inferred  
 22,174  
 1.93  
 42,688  
 24,443  
 0.056  
 1,372  
 Total  
 43,963  
 2.01  
 88,247  
 48,460  
 0.059  
 2,837  
 Tropicana – Metric

Tonnes above  
cut-off (millions)  
0.00  
93.04  
0.00  
1.80  
Cut-off grade (g/t)  
Ave grade  
above cut-off (g/t)  
3.55  
2.48  
1.77  
1.42  
0.71  
0.35  
0.00  
310.14  
279.13  
248.11  
217.10  
62.03  
31.01  
0.20  
0.40  
0.60  
0.80  
1.00  
1.20  
1.40  
1.60  
1.06  
2.13  
124.06  
155.07  
186.08  
2.00  
2.84  
3.19  
Tonnes above cut-off  
Ave grade above cut-off  
Tropicana – Imperial  
Tonnes above  
cut-off (millions)  
0.00  
102.56  
0.00  
0.05  
Cut-off grade (g/t)  
Ave grade  
above cut-off (g/t)  
0.07

0.05  
0.04  
0.02  
0.01  
0.00  
341.87  
307.68  
273.50  
239.31  
68.37  
34.19  
0.01  
0.01  
0.02  
0.02  
0.03  
0.04  
0.04  
0.05  
0.03  
0.06  
136.75  
170.93  
205.12  
0.06  
0.08  
0.09  
Tonnes above cut-off  
Ave grade above cut-off  
Grade tonnage information  
Tropicana: Mineral Resource reconciliation  
2006 vs 2007  
Ounces (millions)  
0  
2006  
0  
Depletion  
0  
Gold price  
0  
Other  
2.8  
Explo-  
ration  
2.8  
2007  
0  
Cost  
1.0  
0  
0.0

Metho-  
dology  
Change  
2.0  
Competent persons  
Professional  
Registration  
Relevant  
Operation  
Type  
Name  
organisation  
number  
experience  
Tropicana  
Mineral Resource  
M Kent  
AusIMM  
203631  
10 years

62

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Operations

Brasil

Mineraç

~

ao

BRAZIL

Belem

Manaus

Salvador

Rio de Janeiro

Sao Paulo

Crixas

Belo Horizonte

Brasilia

Serra Grande

0

1000km

AngloGold Ashanti's operations in

Brazil comprise the wholly owned

Brasil Mineração (formerly Morro

Velho) and a 50% interest in the

Mineração Serra Grande mines.

Mineral Resource and Ore Reserve gold price and exchange rates

Units

**2007**

2006

Mineral Resource gold price

US\$/oz

700

650

Ore Reserve gold price

US\$/oz

600

550

Exchange rate – Brazil

R\$/US\$

1.95

2.30

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

Type of Drilling

Mine/Project

Category

Spacing

Diamond

RC

Other

Comments

m (- x -)

Brasil Mineraçã

~  
o Measured  
20 x 40 and

(Corrégo do Sítio)  
25 x 25  
Indicated  
50 x 50

Channel samples  
Inferred  
150 x 150

Channel samples  
Grade  
2 x 2 and

Channel samples  
control  
5 x 5  
Brasil Mineração

~  
o Measured  
5 x 5 and

(Cuiabá)  
20 x 40  
Indicated  
20 x 60

Inferred  
80 x 500

Grade  
5 x 5

Channel sampling  
control  
Serra Grande  
Measured  
10 x 10 and

20 x 10  
Indicated  
10 x 20 and

20 x 50

Inferred  
50 x 100

Grade  
2 x 2 and

Channel sampling  
control  
2.5 x 1

Brazil operations: overview

63

Ore Reserve modifying factors (as at 31 December 2007)

Cut-off

Metallurgical  
grade

Dilution

(1)

\*

recovery

Other

Mine/Project

g/t (Au)

%

factor

(2)

factor

Brasil Mineração

~

o – Corrêgo do Sítio Oxides

1.83

34%

87%

n/a

Brasil Mineração

~

o – Corrêgo do Sítio Sulphides

4.00

n/a

94%

n/a

Brasil Mineração

~

~

o – Cuiabá

3.34

5%

93%

n/a

Serra Grande

1.0 – 2.8

5% – 30%

97%

n/a

1. Where no dilution factor is indicated the dilution is inherent in the resource model estimate

2. A range of plant recoveries indicates variable ore types

\* Dilution: The difference between the tonnage broken in stopes and the tonnage milled from underground sources.

For example, if 100 tonnes broken in the stopes

amounts to 132 tonnes milled, then the dilution is 32%.

Mineral Resource and Ore Reserve comparison by operation (attributable)

Gold content (million ounces)

% change



% change  
 from  
 from 2006  
 Net diff  
 2006  
 Percentage  
 Other  
 before  
 after  
 after  
 Mine/Project  
 attributable  
 Category  
 2006 Depletion(1)  
 change(2)  
 depletion 2007  
 depletion  
 depletion  
 Comments  
 Brasil Mineraçao  
 100%  
 Resource  
 11.031  
 (0.376)  
 0.260  
 2%  
 10.915  
 (0.116)  
 (1%)  
 Depletion was offset by additions from  
 gold price and exploration  
 Reserve  
 2.689  
 (0.341)  
 0.130  
 5%  
 2.478  
 (0.211)  
 (8%)  
 Depletion was partly offset by model  
 changes  
 Serra Grande  
 50%  
 Resource  
 0.922  
 (0.098)  
 0.084  
 9%  
 0.908  
 -  
 -

Depletion was offset by additions from  
the Corpo Sul and Palmeiras pits

Reserve

0.433

(0.098)

0.057

13%

0.392

(0.041)

(9%)

Depletion was partly offset by model  
changes

Brazil Totals

Resource

11.953 (0.474)

0.344 3%

11.823 (0.116) (1%)

Reserve

3.122 (0.439)

0.187 6%

2.870 (0.252) (8%)

1. Depletion: reduction in reserves based on ore delivered to the plant and corresponding reduction in resource.

2. Other change: combination of changes due to gold price, cost, exploration, methodology, model change and scope change.

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Brazil operations: Brasil Mineração

Brasil Mineração has mining rights over 30,698ha 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 Quadrilateral (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.

Geology

Cuiabá mine, located in the municipality of Sabará, has gold mineralisation associated with sulphides and quartz veins in Banded Iron Formation (BIF) and volcanic sequences. Where 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 plunge parallel to intersections between the shears and other structures. The controlling mineralisation structures are the apparent intersection of thrust faults with tight isoclinal folds in a ductile environment. The host rocks at Brasil Mineração are BIF, and mafic volcanics (principally basaltic). 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. The Lamego deposit is close to Cuiabá and the style of mineralisation is similar. Some 30km to the south-east, the mineralised orebodies at Córrego do Sítio are narrow NE-SW elongated lenses dipping at 20° to 30° and with a pitch angle to the northeast. In general, the mineralised orebodies comprise sericitic zones and quartz veinlets. The gold occurs as inclusions (microscopic or sub-microscopic) in millimetre-size acicular crystals of arsenopyrite, and also as intergrowths on the margins of the sulphide. Other typical minerals in the orebodies are pyrrhotite, pyrite and chalcopyrite.

Brasil Mineração

65

Mineral Resource estimation

Three dimensional models of the BIF and sulphide orebodies are created from the drill-hole data. Prototype block models of 10m x 10m x 10m are used to quantify the volume of the orebody and ordinary kriging is used as the geostatistical technique to interpolate grade estimates for all blocks. Other geostatistical techniques such as uniform conditioning and indicator kriging are also used to quantify the proportion of economic ore. This is reported according to the dimensions of the smallest mining unit.

Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Brasil Mineração

~

o –

Measured

1,295

6.86

8,876

1,427

0.200

285

Corrégo do Sítio

Indicated

5,756

6.40

36,822

6,345

0.187

1,184

Inferred

5,498

6.86

37,696

6,061  
 0.200  
 1,212  
 Total  
 12,549  
 6.65  
 83,394  
 13,833  
 0.194  
 2,681  
 Brasil Mineração  
 ~  
 o –  
 Measured  
 7,289  
 8.67  
 63,211  
 8,035  
 0.253  
 2,032  
 Cuiabá  
 Indicated  
 2,744  
 7.20  
 19,765  
 3,024  
 0.210  
 635  
 Inferred  
 12,498  
 8.00  
 99,963  
 13,777  
 0.233  
 3,214  
 Total  
 22,531  
 8.12  
 182,939  
 24,837  
 0.237  
 5,882  
 Brasil Mineração  
 ~  
 o – Measured  
 765  
 7.40  
 5,661  
 843  
 0.216  
 182

Lamego  
Indicated

2,340

6.34

14,843

2,579

0.185

477

Inferred

4,142

4.94

20,461

4,566

0.144

658

Total

7,247

5.65

40,965

7,988

0.165

1,317

Brasil Mineraça

~

o –

Measured

607

5.69

3,456

670

0.166

111

MMV Other Resources

Indicated

1,415

5.33

7,541

1,560

0.155

242

Inferred

3,154

6.72

21,200

3,477

0.196

682

Total

5,176

6.22

32,197

5,706  
 0.181  
 1,035  
 Brasil Mineraça  
 ~  
 0 –  
 Measured  
 9,956  
 8.16  
 81,205  
 10,974  
 0.238  
 2,611  
 Total Mineral Resource  
 Indicated  
 12,255  
 6.44  
 78,971  
 13,508  
 0.188  
 2,539  
 Inferred  
 25,293  
 7.07  
 179,319  
 27,881  
 0.207  
 5,765  
 Total  
 47,503  
 7.15  
 339,495  
 52,364  
 0.208  
 10,915  
 Exclusive Mineral Resource  
 Metric  
 Imperial  
 Au  
 Resource  
 Tonnes  
 Grade  
 Au  
 Tons  
 Grade  
 ounces  
 Mine/Project  
 category  
 (Mt)  
 (g/t)  
 tonnes

(Mt)

(oz/t)

(Moz)

Brasil Mineração

Measured

2.7

7.89

21.4

3.0

0.230

0.7

Indicated

6.6

6.63

43.6

7.2

0.193

1.4

Inferred

22.1

5.71

126.4

24.4

0.167

4.1

Total

31.4

6.09

191.3

34.6

0.178

6.2

The Lamego Sulphides and MMV Resources form potentially mineable areas depending on the gold price and technical studies.



Brazil operations: Brasil Mineração continued

66

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Mineral Resource by-products: Sulphur

Mine/Project

Mineral Resource category

Tonnes (Mt)

Grade (%S)

Sulphur (Mt)

Brasil Mineração

~

o

Measured

7.3

7.0

0.510

Indicated

2.7

7.3

0.199

Inferred

12.5

7.5

0.939

Total

22.5

7.3

1.648

AGA Mineração~

ao: Mineral Resource reconciliation

2006 vs 2007

Ounces (millions)

11.0

2006

-0.4

Depletion

0.7

Gold price

-0.7

Other

0.3

Explo-

ration

11.0

2007

0.0

Cost

10.5

10.0

-0.1

Metho-

dology

Change

11.5

11.0

Ore Reserve estimation

Pit optimisation is done using Whittle® pit shells corresponding to the Ore Reserve gold price and operational costs. For the underground sulphide orebody (Cuiabá mine and Corrêgo do Sítio Sulphides) all mining parameters such as mining method, minimum mining width, dilution, MCF and the appropriate gold price are considered in determining the Ore Reserves. The Ore Reserves are scheduled and designed using Mine2-4D® computer software.

Ore Reserve

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Brasil Mineraça

~

o –

Proved

546

6.14

3,353

602

0.179

108

Corrêgo do Sítio

Probable

1,779

5.95

10,583

1,961

0.174

340

Total

2,325

5.99  
 13,936  
 2,563  
 0.175  
 448  
 Brasil Mineração  
 ~  
 0 –  
 Proved  
 6,079  
 7.83  
 47,618  
 6,701  
 0.228  
 1,531  
 Cuiabá  
 Probable  
 2,485  
 6.25  
 15,523  
 2,739  
 0.182  
 499  
 Total  
 8,564  
 7.37  
 63,141  
 9,440  
 0.215  
 2,030  
 Brasil Mineração  
 ~  
 0 –  
 Proved  
 6,625  
 7.69  
 50,972  
 7,303  
 0.224  
 1,639  
 Total Ore Reserve  
 Probable  
 4,263  
 6.12  
 26.106  
 4,699  
 0.179  
 839  
 Total  
 10,888  
 7.08

77,078

12,002

0.206

2,478

AGA Mineraç~

ao: Ore Reserve reconciliation

2006 vs 2007

Ounces (millions)

2.7

2006

0.5

2007

0.2

Model

change

-0.3

Depletion

2.6

2.0

-0.1

Scope

change

Change

2.8

2.4

2.2

67

Tonnes above cut-off  
Ave grade above cut-off

AGA Mineraç~  
ao Surface – Metric

Tonnes above  
cut-off (millions)

0.00  
6.00  
0.00  
18.00  
Cut-off grade (g/t)  
Ave grade  
above cut-off (g/t)  
22.00  
20.00  
16.00  
14.00  
10.00  
8.00  
6.00  
14.00  
12.00  
10.00  
8.00  
4.00  
2.00  
2.00 4.00 6.00 8.00 10.00 12.00 14.00 16.00  
12.00  
18.00

Tonnes above cut-off  
Ave grade above cut-off  
AGA Mineraç~  
ao Underground – Metric

Tonnes above  
cut-off (millions)

0.00  
0.00  
Cut-off grade (oz/t)  
Ave grade  
above cut-off (oz/t)

7.00  
11.00  
35.00  
30.00  
25.00  
20.00  
15.00  
10.00  
5.00  
9.00

13.00

15.00

17.00

19.00

21.00

23.00

25.00

4.00

8.00

12.00

16.00

20.00

Tons above cut-off

Ave grade above cut-off

AGA Minerac~

ao Surface – Imperial

Tons above

cut-off (millions)

0.00

16.00

0.00

Cut-off grade (oz/t)

Ave grade

above cut-off (oz/t)

0.40

0.35

0.15

0.30

0.25

0.20

14.00

12.00

10.00

8.00

6.00

4.00

2.00

0.10

0.20

0.30

0.40

0.50

0.45

0.50

0.55

0.60

0.65

Tons above cut-off

Ave grade above cut-off

AGA Minerac~

ao Underground – Imperial

Tons above  
 cut-off (millions)  
 0.00  
 40.00  
 0.00  
 Cut-off grade (oz/t)  
 Ave grade  
 above cut-off (oz/t)  
 0.70  
 0.60  
 0.20  
 0.50  
 0.40  
 0.30  
 35.00  
 30.00  
 25.00  
 20.00  
 15.00  
 10.00  
 5.00  
 0.10  
 0.20  
 0.30  
 0.40  
 0.50  
 0.60  
 Ore Reserve by-products: Sulphur  
 Mine/Project  
 Mineral Resource category  
 Tonnes (Mt)  
 Grade (%S)  
 Sulphur (Mt)  
 Brasil Mineraça  
 ~  
 ~  
 ~  
 ~  
 ~  
 ~  
 ~  
 o  
 Proved  
 6.1  
 5.5  
 0.331  
 Probable  
 2.5  
 5.7  
 0.141  
 Total  
 8.6

5.5  
0.473  
Grade tonnage information  
Competent persons  
Professional  
Registration  
Relevant  
Operation  
Type  
Name  
organisation  
number  
experience  
Brasil Mineraçao –  
Mineral Resource  
AHM Silva  
AusIMM  
224831  
9 years  
Corrégo do Sítio  
Ore Reserve  
MG de Simoni  
AusIMM  
224826  
15 years  
Brasil Mineraçao –  
Mineral Resource  
AHM Silva  
AusIMM  
224831  
9 years  
Cuiabá  
Ore Reserve  
LH De Souza  
AusIMM  
224827  
23 years  
Brasil Mineraçao –  
Mineral Resource  
P de Tarso Ferreira  
AusIMM  
224828  
22 years  
Cuiabá Sulphides U/G  
Ore Reserve  
LH De Souza  
AusIMM  
224827  
23 years  
Brasil Mineraçao –  
Mineral Resource



AHM Silva  
AusIMM  
224831  
7 years  
Lamego  
Ore Reserve  
LH De Souza  
AusIMM  
224827  
23 years  
Brasil Mineraçao –  
Mineral Resource  
AHM Silva  
AusIMM  
224831  
9 years  
MMV Other Resources

68

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Brazil operations: Serra Grande

Serra Grande

The Serra Grande joint venture (50% attributable to AngloGold Ashanti) is co-owned with Kinross Gold Corporation. The operation comprises two underground mines, Mina III and Mina Nova, and a new open pit. The processing circuit is equipped with grinding, leaching, filtration, precipitation and smelting facilities.

Serra Grande controls, or has an interest in, approximately 21,068ha in and around the Crixás mining district in the north-western areas of the Goiás State in central Brazil. Serra Grande is located 5km from the city of Crixás.

Geology

The gold deposits are hosted in a sequence of schists, volcanics and carbonates occurring in a typical greenstone belt structural setting. The host rocks are of the Pilar de Goiás Group of the Upper Archaean. Gold mineralisation is associated with massive sulphides and vein quartz material associated with graphitic, sericitic schists and dolomites. The ore shoots plunge downwards to the north. The deposits occur in the Rio Vermelho and Ribeirão das Antas formations of the Archaean Pilar de Goiás Group, which together account for a large proportion of the Crixás Greenstone Belt in central Brazil. The stratigraphy of the belt is dominated by basics and ultra-basics in the lower sequences with volcano sedimentary units forming the upper successions.

The gold deposits are hosted in a sequence of schists, volcanics and carbonates occurring in a typical greenstone belt structural setting. The host rocks are of the Pilar de Goiás Group of the Upper Archaean. Gold mineralisation is associated with massive sulphides and vein quartz material occurs with graphitic and sericitic schists and dolomites. The ore shoots plunge to the north-west with dips of between 6° and 35°.

The greenstone belt lithologies are surrounded by Archaean tonalitic gneiss and granodiorite. The metamorphosed sediments are primarily composed of quartz, chlorite, sericite, graphitic and garnetiferous schists. The carbonates have been metamorphosed to ferroan dolomite marble with development of siderite and ankerite veining in the surrounding wallrock, usually associated with quartz veining. The

69

basalts are relatively unaltered but do show pronounced stretching with elongation of pillow structures evident. The ultra-basics form the western edge of the belt and the basic volcanics and sediments form the core of the unit. The northern edge of the belt is in contact with a series of laminated quartzites and quartz sericite schists of the Lower Proterozoic Araxa Group and a narrow band of graphitic schists and intermediate to ultra-basic volcanics.

The Crixás greenstone belt comprises a series of Archaean to Palaeoproterozoic metavolcanics, metasediments and basement granitoids stacked within a series of north to north-east transported thrust sheet. Thrusting (D1) was accompanied by significant F1 folding/foliation development and progressive alteration in a brittle-ductile regime. D1 thrusting developed with irregular thrust ramp geometry, in part controlled by concealed early basin faults. The main Crixás orebodies are adjacent to a major north-northwest basement fault, and an inferred major east-west to south-east flexure in the original volcano-sedimentary basin. Early D1 alteration fluids were focused from south to north, adjacent to the north-northwest structural corridor, and up the main fault ramp/corner, to become dispersed to the east and north in of foreland thrust fault zones.

Fluid alteration also diminished to the west away from the main fault flexure. A series of concealed east-west to north-west-south-east basement block faults may have provided secondary fluid migration, and development of early anti-formal warps in the thrust sheets; these structures probably define the quasi-regular spacing of significant mineralisation within the belt. The D1 thrust stack was gently folded by non-cylindrical folds. Gold mineralising fluids probably migrated during this event, with similar south-southwest to north-northeast migration, and focusing by bedding slip during folding. Gold mineralisation became minor and dispersed to the north and east along the frontal thrust flat zone. Concentrations of gold along the base of quartz vein may be due to the damming of fluids migrating upward along layering west with dips of between 6° and 35°. The stratigraphy is overturned and thrust towards the east.

Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)  
(oz/t)  
(000s)  
Serra Grande –  
Measured  
793  
4.34  
3,440  
874  
0.127  
111  
Surface  
Indicated  
277  
2.88  
797  
305  
0.084  
26  
Inferred  
–  
–  
–  
–  
–  
–  
Total  
1,069  
3.96  
4,236  
1,178  
0.116  
136  
Serra Grande –  
Measured  
1,702  
4.97  
8,456  
1,877  
0.145  
272  
Underground  
Indicated  
649  
5.49  
3,562  
715  
0.160  
115  
Inferred  
2,098

5.71  
11,981  
2,313  
0.167  
385  
Total  
4,449  
5.39  
23,999  
4,905  
0.157  
772  
Serra Grande –  
Measured  
2,495  
4.77  
11,895  
2,750  
0.139  
382  
Total Mineral Resource  
Indicated  
925  
4.71  
4,358  
1,020  
0.137  
140  
Inferred  
2,098  
5.12  
11,981  
2,313  
0.167  
385  
Total  
5,518  
5.12  
28,235  
6,083  
0.149  
908  
Exclusive Mineral Resource  
Metric  
Imperial  
Au  
Resource  
Tonnes  
Grade  
Au  
Tons

Grade  
ounces  
Mine/Project  
category  
(Mt)  
(g/t)  
tonnes  
(Mt)  
(oz/t)  
(Moz)  
Serra Grande

Measured

0.1  
5.44  
0.6  
0.1  
0.159  
0.0

Indicated

0.3  
2.95  
0.9  
0.4  
0.086  
0.0

Inferred

1.1  
6.40  
7.2  
1.2  
0.187  
0.2

Total

1.6  
5.63  
8.8  
1.7  
0.164  
0.3

Inferred Mineral Resource in pit optimisation

No Inferred Mineral Resources were used in the pit optimisation process.

Brazil operations: Serra Grande continued

70

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Serra Grande Surface – Metric

Tonnes above

cut-off (millions)

0.00

0.00

Cut-off grade (g/t)

0.80

Ave grade

above cut-off (g/t)

3.00

0.60

0.40

0.20

6.00

5.00

1.00

1.10

4.00

2.00

3.00

5.00

12.00

0.10

0.30

0.50

0.70

0.90

1.00

4.00

6.00

7.00

8.00

9.00

10.00

11.00

Tonnes above cut-off

Ave grade above cut-off

Serra Grande Surface – Imperial

Tons above

cut-off (millions)

0.00

0.00

Cut-off grade (oz/t)

Ave grade

above cut-off (oz/t)

0.35

0.30

0.10

0.25  
0.20  
0.15  
1.20  
1.00  
0.80  
0.60  
0.40  
0.20  
0.02  
0.04  
0.06  
0.08  
0.10  
0.12  
0.14  
0.16  
0.18  
Tons above cut-off  
Ave grade above cut-off  
Serra Grande: Mineral Resource reconciliation  
2006 vs 2007  
Ounces (millions)  
0.9  
2006  
-0.1  
Depletion  
0.0  
Gold price  
0.1  
Other  
0.0  
Explo-  
ration  
0.9  
2007  
0.0  
Cost  
0.80  
0.70  
0.0  
Metho-  
dology  
Change  
1.0  
0.90  
0.95  
0.85  
0.75  
Serra Grande Ore Reserve reconciliation  
2006 vs 2007



Ounces (millions)  
0.4  
2006  
0.4  
2007  
0.1  
Model  
change  
-0.1  
Depletion  
0.3  
0.0  
Scope  
change  
Change  
0.4  
Ore Reserve  
Metric  
Imperial  
Au  
Reserve  
Tonnes  
Grade  
tonnes  
Tons  
Grade  
ounces  
Mine/Project  
category  
(000s)  
(g/t)  
(000s)  
(000s)  
(oz/t)  
(000s)  
Serra Grande –  
Proved  
864  
3.66  
3,163  
953  
0.107  
102  
Surface  
Probable  
162  
2.43  
393  
178  
0.071  
13

Total

1,026

3.47

3,556

1,131

0.101

114

Surface Proved

1,416

4.24

6,007

1,561

0.124

193

Underground

Probable

439

6.00

2,636

484

0.175

85

Total

1,855

4.66

8,643

2,045

0.136

278

Serra Grande –

Proved

2,280

4.02

9,170

2,513

0.117

295

Total Ore Reserve

Probable

601

5.04

3,029

663

0.147

97

Total

2,881

4.23

12,199

3,176

0.123

392

Grade tonnage information

71

Competent persons

Professional

Registration

Relevant

Type

Name

organisation

number

experience

Mineral Resource

EM de Araujo

AusIMM

224825

20 years

Ore Reserve

EM de Araujo

AusIMM

224825

20 years

Serra Grande Underground – Metric

Tonnes above

cut-off (millions)

0.00

0.00

Cut-off grade (g/t)

2.00

Ave grade

above cut-off (g/t)

25.00

15.00

5.00

1.50

1.00

0.50

12.00

10.00

20.00

30.00

2.50

16.00

20.00

8.00

4.00

45.00

3.00

3.50

4.00

4.50

24.00

35.00

40.00

Tonnes above cut-off

Ave grade above cut-off

Serra Grande Underground – Imperial

Tons above

cut-off (millions)

0.00

0.40

0.10

4.00

0.00

0.50

Cut-off grade (oz/t)

5.00

Ave grade

above cut-off (oz/t)

1.40

1.20

1.00

0.80

0.60

0.20

0.40

2.00

0.50

0.20

1.00

1.50

2.50

3.00

3.50

4.50

0.30

0.60

0.70

Tons above cut-off

Ave grade above cut-off

72

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007  
Colombia exploration: Gramalote

Since the commencement of exploration, AngloGold Ashanti has staked a total of 10.8 million hectares of exploration claims countrywide. Of these, 6.5 million hectares have been reviewed and either relinquished or farmed-out, leaving 4.3 million hectares in AngloGold Ashanti's current tenement portfolio. Further rationalisation of this vast property holding (through both in-house exploration and farm-outs) continued as a priority in 2007.

The Gramalote project is located 120 road kilometres west-northwest of Medellin, the capital of the Antioquia department. Site access is by paved road from Medellin (2.5 hours) and from Bogota (7 hours).

The Gramalote project presently is a joint venture with Vancouver-based B2Gold Corp. In 2005, Sociedad Kedahda (AngloGold Ashanti's subsidiary in Colombia) entered into a joint venture agreement with the Colombian-based Grupo Nus. As part of the Joint Venture Agreement, Sociedad Kedahda could earn a 75% interest in the Gramalote property by completing cash payments, complying with specific work expenditures and presenting a feasibility study on or before July 2010. In August 2007, Vancouver-based B2Gold Corp. purchased the rights to the Grupo Nus option agreement, including the remaining 25% interest in the Gramalote property from the Grupo Nus. In November 2007, AngloGold Ashanti in turn decided to reduce its interest in the Gramalote property to 49% and offered B2Gold the opportunity to become the project operator with overall responsibility for taking the project through feasibility.

#### Geology

The Gramalote area is underlain by medium to coarse-grained biotite +/- hornblende tonalite and granodiorite of the Paleocene to Cretaceous Antioquian batholith. Tonalite from the Gramalote exploration audit gave zircon ages of 59±1.2ma. Magmatism, structural events and mineralisation are intimately related.

The location of drill targets is controlled by N70-75E striking steeply SE dipping transfer zones developed between two sub-regional faults (Rio Nus, Quebrada Socorro).

On the local prospect scale extensional domains with quartz veinlets and compressional domains with shear zones have formed.

There are two principal mineralised sectors at Gramalote are Las Torres and Cerro Gramalote. Both occur in extensional domains striking N20-30W and dipping 75-80°SW. Gold grades >1g/t often correlate with increased fracturing (>9 fractures/veinlets per metre) and the dominant alteration is potassic K-feldspar. Quartz-sericite overprints and quartz-pyrite-chalcopyrite-molybdenite+gold veinlets follow subsidiary structures.

Shear zone domains strike N50-60E and dip 75-80SE. Individual shears zones are often up to 40m apart and N-S veins follow extension fractures between them. These veins have been targets for small scale mining at Los Mangos. Alteration in shear zone domains is dominantly (quartz-) sericite with remnant potassic K-feldspar alteration. Veinlets

are quartz-molybdenite-chalcopyrite-pyrite+sphalerite+gold.

Bucaramanga

200km

Colombia

Bogotá

Ibagué

Cali

Mocoa

Medellin

Neiva

B2 Gold jv area

of interest

B2 Gold

Glencore jv

AngloGold Ashanti

drill projects

Gramalote

In 2003 AngloGold Ashanti was the first company

to instigate a systematic grassroots exploration

program in Colombia. The Gramalote project is

located 120 road kilometres west-northwest of

Medellin, the capital of the Antioquia department.

Gramalote

73

In summary, three styles of alteration-mineralisation are distinguished at Gramalote:

Potassic K-feldspar alteration with associated veinlets and sporadically veins;

(Overprinting) quartz-sericite alteration with veins and syn-deformation veinlets; and

Sericite/chlorite-quartz-calcite/illite-smectite alteration on re-activated fault planes.

Gold grades are attractive, especially in areas characterised by potassic K-feldspar dominated alteration and quartz-pyrite-chalcopyrite veinlets. Las Torres and Cerro Gramalote have been drilled on 100m lines. El Barzal has been partially drill tested and the La Concha prospect remains undrilled.

Mineral Resource estimation

At Gramalote, some 12,551m of diamond drilling (43 holes) has been used to support the calculation of a compliant Inferred Mineral Resource.

The Inferred Mineral Resource estimate tabulated below was generated using the Indicator Kriging method. All available geological drill-hole, surface and underground mapping information has been validated for use in the modelling process.

73

Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Gramalote

Measured

–

–

–

–

–

–

Indicated



—  
—  
—  
—  
—  
—  
Inferred  
43,394  
1.14  
49,491  
47,833  
0.033  
1,591  
Total  
43,394  
1.14  
49,491  
47,833  
0.033  
1,591  
Competent persons  
Professional  
Registration  
Relevant  
Type  
Name  
organisation  
number  
experience  
Mineral Resource  
LH De Souza  
AusIMM  
224827  
23 years

74

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

The concession area encompasses the entire Kilo greenstone belt, which has a rich history of gold occurrences. Concession 40 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 100% owned by AngloGold Ashanti Ltd.

Most of AngloGold Ashanti's exploration activities in Concession 40 have focused on the delineation of resources in the vicinity of the redundant Adidi-Kanga, Nzebi, and Senzere gold mines. These old mines are collectively centred around the village of Mongbwalu, some 48km north-west of the regional town of Bunia and 320km south-east of Kampala in neighbouring Uganda.

The improved security situation throughout the remainder of Concession 40 has allowed for the commencement of a regional exploration program, including the flying of airborne geophysics over key parts of the concession.

#### Geology

The Mongbwalu Project is located within the Kilo Archaean granite-greenstone belt that extends approximately 850km west-northwest of Lake Albert. Granitoids are the predominant rock type and they contain rafts of Kibalian amphibolites and basic talc carbonate schists that have been intruded by diorite-tonalite-granodiorite assemblages. The mineralisation is hosted in multiple, shallow dipping mylonite bodies that average 30m in width. Within the mylonite zones, the gold is primarily concentrated in boudinaged quartz veins that are orientated sub-parallel to the mylonite zones and their immediate wall-rock. The mineral assemblage is simple and contains free gold and minor (< 2%) sulphides.

The easterly dipping mylonite zones are continuous throughout the area drilled to date with the most prospective zone located close to the old Adidi Mine. Two north-south trending faults have offset the mineralisation and have kept the potential resource area within 150m to 200m of the surface. Potential remains at depth, both down plunge on the known mylonite horizons and within subsidiary structures still to be targeted by drilling.

Democratic  
Republic  
of Congo  
Mongbwalu  
Kinshasa  
0

400km

One of AngloGold Ashanti's most important exploration projects is situated within the 10,000km

2

Concession 40 in the Ituri Province of north-eastern Democratic Republic of Congo (DRC). The Mongbwalu Project, situated within Concession 40, is located on the Kilo Archaean

granite-greenstone belt that extends approximately  
850km west-northwest of Lake Albert.  
Democratic Republic of Congo exploration: Mongbwalu  
Mongbwalu

75

AngloGold Ashanti commenced drill testing of the resource potential of the Mongbwalu area in mid-2005 and by the end of 2006, the broader Mongbwalu area (Nzebi-Adidi-Kanga-Pluto sectors) had been diamond drilled on a 200m x 200m grid. The program covered an area 2.2km by 2.7km centred over the southern part of the Adidi mine.

From this drilling, distinct zones with potentially economic grades of gold in quartz-veins were delineated. Infill RC and diamond drilling on 50m x 50m centres was undertaken during 2007 to cover these areas of maximum potential to host near surface open-pit extractable or shallow underground extractable mineralisation with the view to defining an initial inferred resource by the end of 2007. Data obtained from a total of 87,933m of drilling has been used for resource modelling and estimation.

The principle Mongbwalu Mylonite horizons and other important geological units defined by drill-hole logging and interpretation were modelled using conventional 3D wireframing techniques and Datamine Software®. To define the Inferred Mineral Resource, resource envelopes were created using manual wireframing in Datamine® at cut-off grades of 0.5g/t Au and 3.0 g/t Au. Following geostatistical evaluation of the drill-hole assay database, gold grades were interpolated into a 3D block-model incorporating the principle geological units and resource envelopes using Ordinary Kriging to define the Inferred Mineral Resource, at a cut-off grade of 0.5 g/t. Initial scoping level mining metallurgical, geotechnical, hydrogeological, environmental, socio-political and infrastructural engineering studies were undertaken in parallel with the drilling to support the resource estimate in anticipation of the project moving towards pre-feasibility during 2008.

Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Mongbwalu Measured

—

—  
—  
—  
—  
—

Indicated

—  
—  
—  
—  
—  
—

Inferred

29.2  
2.68  
78.5  
32.2  
0.078  
2,523  
Total  
29.2  
2.68  
78.5  
32.2  
0.078  
2,523

Mineral Resource estimation

76

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Ghana operations: overview

Operations

Bolgatanga

Tamale

Kumasi

Tarkwa

Sekondi

Takoradi

Obuasi

Iduapriem

Teberebi

0

300km

Accra

*Lake*

*Volta*

GHANA

AngloGold Ashanti has two mines in

Ghana: Obuasi (which comprises

both surface and underground

operations) and Iduapriem (open-pit).

Obuasi is wholly owned and on the

1st September 2007 the company

increased its stake in Iduapriem gold

mine from 85% to 100%.

Mineral Resource and Ore Reserve gold price

Units

**2007**

2006

Mineral Resource gold price

US\$/oz

700

650

Ore Reserve gold price

US\$/oz

600

550

Mineral Resource and Ore Reserve comparison by operation (attributable)

Gold content (million ounces)

% change

% change

from

from 2006

Net diff

2006

Percentage

Other

before

after

after  
 Mine/Project  
 attributable  
 Category  
 2006 Depletion(1)  
 change(2)  
 depletion 2007  
 depletion  
 depletion  
 Comments  
 Iduapriem  
 100%  
 Resource  
 3.514  
 (0.195)  
 0.184  
 5%  
 3.503  
 (0.011)  
 0%  
 Purchase of an additional 15% of  
 the operation from the Ghanaian  
 Government and the IFC, to bring  
 the ownership to 100%  
 Reserve  
 2.210  
 (0.206)  
 0.414  
 19%  
 2.418  
 0.208  
 9%  
 Purchase of an additional 15% of  
 the operation from the Ghanaian  
 Government and the IFC, to bring  
 the ownership to 100%  
 Obuasi  
 100%  
 Resource  
 29.452  
 (0.672)  
 4.647  
 16%  
 33.427  
 3.975  
 13%  
 Exploration below 50 level (1.3Moz)  
 and completion of additional  
 Mineral Resource modelling above  
 50 level  
 Reserve

8.705  
 (0.582)  
 0.206  
 2%  
 8.329  
 (0.376)  
 -4%

A lower tailings throughput was offset by an increase in ore from underground

Ghana Totals

Resource

32.966 (0.867)

4.831

15%

36.930 3.964 12%

Reserve

10.915 (0.788)

0.620 6%

10.747 (0.168)

-2%

1. Depletion: reduction in reserves based on ore delivered to the plant and corresponding reduction in resource.

2. Other change: combination of changes due to gold price, cost, exploration, methodology, model change and scope change.

Details of average drill-hole spacing



77

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

Type of drilling

Mine/Project

Category

Spacing

Diamond

RC

Other

Comments

m (- x -)

Iduapriem

Measured

50 x 50

Indicated

50 x 75

50m x 100m spacing in some areas.

Inferred

100 x 100

Grade/Ore control

15 x 10

RC drilling only. Occasionally

20m x 10m spacing.

Obuasi –

surface

Measured

20 X 20

Indicated

30 X 30

Inferred

90 X 90

Grade/Ore control

10 X 10

Obuasi –

underground

Measured

20 X 20

Channel sampling.  
Indicated  
60 X 60

Channel sampling.  
Inferred  
120 X 120

Channel sampling.  
Ore Reserve modifying factors (as at 31 December 2007)

Cut-off

Metallurgical  
grade

Dilution

(1)

recovery

Other

Mine/Project

g/t (Au)

%

factor

factor

Iduapriem

0.66 – 0.75

8%

94%

n/a

Obuasi – pit

n/a

10%

75%

n/a

Obuasi – underground

4.50

18%

81%

n/a

Obuasi – tailings

n/a

n/a

25 – 41%

n/a

*1. Where no dilution factor is indicated the dilution is inherent in the resource model estimate.*

78

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007  
Ghana operations: Iduapriem

#### Iduapriem

Iduapriem mine is situated in the western region of Ghana, some 70km north of the coastal city of Takoradi, and 10km south-west of Tarkwa.

Iduapriem is an open-pit mine. Its processing facilities include a carbon-in-pulp (CIP) plant.

#### Geology

The Iduapriem and Teberebie gold mines are located along the southern end of the Tarkwa basin. The mineralisation is contained in the Proterozoic Banket Series, conglomerate within the Tarkwaian System. The outcropping Banket Series in the mine area form prominent arcuate ridges extending southwards from Tarkwa, westwards through Iduapriem and northwards towards Teberebie. The gold is fine-grained, particulate and free milling. Mineralogical studies indicate that the grain size of native gold particles ranges between 2 microns and 500 microns (0.002 to 0.5mm) and averages 130 microns (0.13mm). Sulphide minerals are present only at trace levels and are not associated with the gold.

#### Mineral Resource estimation

All geological interpretations are used to produce a three dimensional wire frame model of the orebody using Datamine® software. A prototype block model comprising of 25m x 5m x 6m blocks is used within the geological model outlines and where appropriate, selective sub-celling is used for definition on the geological and mineralisation boundaries. The geostatistical techniques used for grade interpolation into the blocks include Multiple Indicator Kriging (MIK), ordinary kriging and inverse distance squared (ID2) methods.

79  
Mineral Resource  
Metric  
Imperial  
Au  
Resource  
Tonnes  
Grade  
Au  
Tons  
Grade  
ounces  
Mine/Project  
category  
(000s)  
(g/t)  
(kg)  
(000s)  
(oz/t)  
(000s)  
Iduapriem –  
Measured  
1,902  
1.30  
2,469  
2,096  
0.038  
79  
Full Grade Ore Stockpile  
Indicated  
–  
–  
–  
–  
–  
–  
–  
Inferred  
–  
–  
–  
–  
–  
–  
Total  
1,902  
1.30  
2,469  
2,096  
0.038  
79  
Iduapriem –

Measured

35,908

1.60

57,590

39,581

0.047

1,852

Iduapriem Surface

Indicated

19,339

1.70

32,888

21,318

0.050

1,057

Inferred

8,722

1.70

14,805

9,614

0.050

476

Total

63,969

1.65

105,283

70,513

0.048

3,385

Iduapriem –

Measured

–

–

–

–

–

–

Other Stockpile

Indicated

–

–

–

–

–

Inferred

2,000

0.60

1,200

2,205

0.018

39  
 Total  
 2,000  
 0.60  
 1,200  
 2,205  
 0.018  
 39  
 Iduapriem –  
 Measured  
 37,809  
 1.59  
 60,059  
 41,677  
 0.046  
 1,931  
 Total Mineral Resource  
 Indicated  
 19,339  
 1.70  
 32,888  
 21,318  
 0.050  
 1,057  
 Inferred  
 10,722  
 1.49  
 16,005  
 11,819  
 0.044  
 515  
 Total  
 67,870  
 1.61  
 108,952  
 74,814  
 0.047  
 3,503  
 Exclusive Mineral Resource  
 Metric  
 Imperial  
 Au  
 Resource  
 Tonnes  
 Grade  
 Au  
 Tons  
 Grade  
 ounces  
 Mine/Project  
 category

(Mt)  
 (g/t)  
 tonnes  
 (Mt)  
 (oz/t)  
 (Moz)  
 Iduapriem  
 Measured

1.2  
 1.73  
 2.1  
 1.3  
 0.050  
 0.1

Indicated

6.2  
 1.51  
 9.3  
 6.8  
 0.044  
 0.3

Inferred

10.7  
 1.49  
 16.0  
 11.8  
 0.044  
 0.5

Total

18.1  
 1.51  
 27.4  
 20.0  
 0.044  
 0.9

Inferred Mineral Resource in business plan

Inferred Mineral Resources were used in the pit optimisation process and 0.17 million ounces are present in the optimised pit of which 0.16 million ounces are included in the final production scheduling.

Iduapriem: Mineral Resource reconciliation

2006 vs 2007

Ounces (millions)

3.5  
 2006  
 -0.2

Depletion

0.4

Gold price

0.6

Other

0.0

Explo-  
ration

3.5

2007

-0.8

Cost

3.0

2.5

0.0

Metho-  
dology

Change

4.0

3.5

Iduapriem: Ore Reserve reconciliation

2006 vs 2007

Ounces (millions)

2.2

2006

2.4

2007

0.0

Model

change

-0.2

Depletion

1.5

0.4

Scope

change

Change

2.0

2.5



80

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Ghana operations: Iduapriem continued

Ore Reserve estimation

Pit optimisation is done using the relevant economic assumptions, geotechnical parameters and mining assumptions. Iduapriem uses NPV scheduler and the ultimate pit shell is selected based on optimal criteria. The subsequent pit design is done using Datamine® software, which forms the basis for the Ore Reserve.

Ore Reserve

Metric

Imperial

Au

Reserve

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Iduapriem –

Proved

1,902

1.30

2,469

2,096

0.038

79

Full Grade Ore Stockpile

Probable

–

–

–

–

–

–

Total

1,902

1.30

2,469

2,096

0.038

79

Iduapriem –  
 Proved  
 34,687  
 1.47  
 51,042  
 38,236  
 0.043  
 1,641  
 Iduapriem Surface  
 Probable  
 13,163  
 1.65  
 21,695  
 14,509  
 0.048  
 698  
 Total  
 47,850  
 1.52  
 72,737  
 52,745  
 0.044  
 2,339  
 Iduapriem –  
 Proved  
 36,589  
 1.46  
 53,511  
 40,332  
 0.043  
 1,720  
 Total Ore Reserve  
 Probable  
 13,163  
 1.65  
 21,695  
 14,509  
 0.048  
 698  
 Total  
 49,752  
 1.51  
 75,206  
 54,841  
 0.044  
 2,418  
 Tonnes above cut-off  
 Ave grade above cut-off  
 Iduapriem – Metric  
 Tonnes above  
 cut-off (millions)

0.00  
 15.07  
 0.00  
 Cut-off grade (g/t)  
 67.83  
 Ave grade  
 above cut-off (g/t)  
 3.11  
 2.85  
 2.32  
 2.05  
 1.53  
 1.26  
 1.00  
 60.29  
 52.76  
 45.22  
 37.68  
 30.15  
 22.61  
 7.54  
 1.80  
 1.79  
 2.58  
 3.37  
 0.30  
 75.36  
 2.40  
 3.00  
 1.20  
 0.60  
 0.90  
 1.50  
 2.10  
 2.70  
 3.64  
 Tons above cut-off  
 Ave grade above cut-off  
 Iduapriem – Imperial  
 Tons above  
 cut-off (millions)  
 0.00  
 0.04  
 0.06 0.07  
 0.02  
 0.05  
 66.46  
 0.00  
 0.08  
 Cut-off grade (oz/t)  
 83.08

74.77

Ave grade

above cut-off (oz/t)

0.10

0.08

0.07

0.06

0.06

0.05

0.04

0.00

0.03

0.02

0.01

58.15

49.85

41.54

33.23

24.92

16.62

8.31

0.01

0.03 0.04

Competent persons

Professional

Registration

Relevant

Type

Name

organisation

number

experience

Mineral Resource

K Osei

AusIMM

112723

13 years

Ore Reserve

EB Boakey

AusIMM

222459

21 years

Grade tonnage information

81

Ghana operations: Obuasi

Obuasi

The Obuasi mine is located in the Ashanti region of Ghana, some 80km from Kumasi. Historically, Obuasi has been an underground mine, although there was large-scale open-pit mining between 1990 and 2000. The mine has 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 mineralisation is shear-zone-related and there are three main structural trends hosting gold mineralisation: the Obuasi trend, the Gyabunsu trend and the Binsere trend.

Two main ore types are mined:

quartz veins which consist mainly of quartz with free gold in association with lesser amounts of various metal sulphides containing iron, zinc, lead and copper. The gold particles are generally fine-grained and are occasionally visible to the naked eye.

This ore type is generally non-refractory; and sulphide ore which is characterised by the inclusion of gold in the crystal structure of a sulphide material. The gold in these ores is fine-grained and often locked in arsenopyrite. 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.

82

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Mineral Resource estimates are derived from interpretations of information about the location, shape, continuity and grade of the individual ore bodies. The open-pit Mineral Resource was estimated using three dimensional computer block models constructed using the Datamine

®

software. Geological interpretation was based on trench and reverse circulation and or diamond drilling data. A prototype block model of 30m x 30m x 10m was used within the Geological Model envelope. Ordinary kriging was used as the primary estimation methodology.

97% of the underground Mineral Resource was estimated using block models within the delineated ore zones. A prototype block model of 20m x 5m x 15m representing the Minimum Mining Unit was used and estimates are based on ordinary kriging. The remaining 3% of the resource are global estimates.

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

Phyllites, Greywackes and Shists

Mineralised - Auriferous -

Barren Metavolcanic (Dyke)

Carbonaceous/Graphitic Fissure

Auriferous Quartz Vein

41 Level

38 Level

v

v

32 Level

v

v

26 Level

LEGEND

Main

Fissure

Fissure

Obuasi

N-Fissure

20 Level

12 Level

8 Level

EAST

Cote D'Or Spur

Cowsu

Spur

Fissure

12/74

Cote D'Or

Fissure  
Zero  
Quartz  
Footwall  
4 & 5 Lodes  
Big Blow  
K-Fissure  
WEST  
3 West  
Metavolcanic (Dyke)  
0  
150  
Metres  
-500m  
-1000m  
250m  
S. V. S.  
M  
AIN  
R  
EEF FIS  
SU  
RE  
OBUASI  
FISSURE  
ASHANTI  
INSINTSIAM REEF  
OXIDISED  
ZONE  
folded  
siltstone  
granulated  
phyllite  
siltstones and  
folded phyllites  
greywackes  
phyllite  
greywacke  
schist  
50  
41  
38  
30  
26  
20  
16  
12  
8  
0  
120  
ORE BODY

and  
phyllite  
ADANSI  
SHAFT  
Metres  
FISSURE  
FISSURE  
COTE D'OR

0  
-100m  
-200m  
-300m  
-500m  
100m  
-600m  
-700m  
-400m

Phyllites, Greywackes and Shists  
Barren Metavolcanic (Dyke)  
Carbonaceous/Graphitic Fissure  
Auriferous Quartz Vein

LEGEND

*EW Section through Adansi (AA)*

*EW Section through KMS (AA)*

Mineral Resource estimation

Ghana operations: Obuasi continued



83  
 Mineral Resource  
 Metric  
 Imperial  
 Au  
 Resource  
 Tonnes  
 Grade  
 Au  
 Tons  
 Grade  
 ounces  
 Mine/Project  
 category  
 (000s)  
 (g/t)  
 (kg)  
 (000s)  
 (oz/t)  
 (000s)  
 Obuasi –  
 Measured  
 8,474  
 1.62  
 13,703  
 9,341  
 0.047  
 441  
 Surface  
 Indicated  
 35,652  
 1.74  
 61,967  
 39,299  
 0.051  
 1,992  
 Inferred  
 3,243  
 2.74  
 8,872  
 3,575  
 0.080  
 285  
 Total  
 47,369  
 1.78  
 84,542  
 52,215  
 0.052  
 2,718  
 Obuasi –

Measured

48,974

8.57

419,909

53,984

0.250

13,500

Underground

Indicated

27,381

8.31

227,549

30,182

0.242

7,316

Inferred

31,343

9.82

307,707

34,550

0.286

9,893

Total

107,698

8.87

955,165

118,717

0.259

30,709

Obuasi –

Measured

57,448

7.55

466,612

63,326

0.220

13,941

Total Mineral Resource

Indicated

63,033

4.59

289,516

69,482

0.134

9,308

Inferred

34,586

9.15

316,579

38,326

0.267

10,178  
Total  
155,067  
6.70  
1,039,707  
170,932  
0.196  
33,427  
Exclusive Mineral Resource  
Metric  
Imperial  
Au  
Resource  
Tonnes  
Grade  
Au  
Tons  
Grade  
ounces  
Mine/Project  
category  
(Mt)  
(g/t)  
tonnes  
(Mt)  
(oz/t)  
(Moz)  
Obuasi  
Measured  
26.7  
8.97  
239.6  
29.5  
2.262  
7.7  
Indicated  
47.8  
3.63  
173.2  
52.6  
0.106  
5.6  
Inferred  
24.2  
8.91  
215.5  
26.7  
0.260  
6.9  
Total  
98.7

6.37  
 628.3  
 108.8  
 0.186  
 20.2  
 Mineral Resource below infrastructure  
 Metric  
 Imperial  
 Au  
 Resource  
 Tonnes  
 Grade  
 Au  
 Tons  
 Grade  
 ounces  
 Mine/Project  
 category  
 (000s)  
 (g/t)  
 (kg)  
 (000s)  
 (oz/t)  
 (000s)  
 Obuasi –  
 Below 50 level  
 Total  
 14,800  
 15.18  
 224,700  
 16,300  
 0.443  
 7,224  
 Obuasi  
 :  
 Mineral Resource reconciliation  
 2006 vs 2007  
 Ounces (millions)  
 29.5  
 2006  
 -0.7  
 Depletion  
 0.0  
 Gold price  
 -1.5  
 Other  
 4.3  
 Explo-  
 ration  
 33.4  
 2007

0.0  
Cost  
25  
20  
1.9  
Metho-  
dology  
Change  
35  
30  
Obuasi  
:  
Ore Reserve reconciliation  
2006 vs 2007  
Ounces (millions)  
7.1  
Change  
9.1  
8.1  
8.7  
2006  
8.3  
2007  
0.8  
Model  
change  
-0.6  
Depletion  
-0.6  
Scope  
change

84

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Ghana operations: Obuasi continued

Ore Reserve estimation

The three dimensional Mineral Resource models are used as the basis for the Ore Reserves. 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.

Ore Reserve

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Obuasi – Surface

Proved

8,982

1.70

15,290

9,901

0.050

492

Probable

–

–

–

–

–

–

Total

8,982

1.70

15,290

9,901

0.050

492  
 Obuasi – Underground  
 Proved  
 23,203  
 5.81  
 134,926  
 25,577  
 0.170  
 4,338  
 Probable  
 15,104  
 7.21  
 108,832  
 16,649  
 0.210  
 3,499  
 Total  
 38,307  
 6.36  
 243,758  
 42,226  
 0.186  
 7,837  
 Obuasi – Total Ore Reserve  
 Proved  
 32,185  
 4.67  
 150,216  
 35,478  
 0.136  
 4,830  
 Probable  
 15,104  
 7.21  
 108,832  
 16,649  
 0.210  
 3,449  
 Total  
 47,289  
 5.48  
 259,048  
 52,127  
 0.160  
 8,329  
 Ore Reserve below infrastructure  
 Metric  
 Imperial  
 Au  
 Resource  
 Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Obuasi –

Below 50 level

Total

3,900

11.05

42,900

4,280

0.322

1,379

Obuasi Underground – Metric

Tonnes above

cut-off (millions)

0.00

20.94

0.00

Cut-off grade (g/t)

94.25

Ave grade

above cut-off (g/t)

27.10

24.71

19.94

17.55

12.77

10.39

8.00

83.78

73.31

62.83

52.36

41.89

31.42

10.47

12.00

15.16

22.32

29.48

104.72



16.00

20.00

8.00

2.00

4.00

6.00

10.00

14.00

18.00

31.87

Tonnes above cut-off

Ave grade above cut-off

Obuasi Underground – Imperial

Tons above

cut-off (millions)

0.00

0.29

0.41 0.47

0.12

0.35

92.35

0.00

0.53

Cut-off grade (oz/t)

115.44

103.89

Ave grade

above cut-off (oz/t)

0.93

0.84

0.74

0.65

0.56

0.46

0.37

0.00

0.28

0.19

0.09

80.80

69.26

57.72

46.17

34.63

23.09

11.54

0.06

0.18 0.23

0.58

Tons above cut-off

Ave grade above cut-off

Grade tonnage information

85

Obuasi Surface – Imperial

Tons above

cut-off (millions)

0.00

0.60

0.00

Cut-off grade (g/t)

Ave grade

above cut-off (g/t)

0.090

0.085

0.075

0.070

0.065

1.80

1.60

1.40

0.40

0.20

0.01

0.02

0.03

0.04

0.05

0.06

0.080

0.80

1.00

1.20

0.07

0.08

0.09

Tons above cut-off

Ave grade above cut-off

Obuasi Surface – Metric

Tonnes above

cut-off (millions)

0.00

0.60

0.00

Cut-off grade (g/t)

Ave grade above

cut-off (g/t)

3.20

3.00

2.60

2.40

2.20

1.80

1.60

1.40  
0.40  
0.20  
0.50  
1.00  
1.50  
2.00  
2.50  
3.00  
2.80  
0.80  
1.00  
1.20  
Tonnes above cut-off  
Ave grade above cut-off  
Competent persons  
Professional  
Registration  
Relevant  
Type  
Name  
organisation  
number  
experience  
Mineral Resource  
H Eybers  
SACNASP  
400098/99  
20 years  
Ore Reserve  
J vZ Visser  
PLATO  
PMS0119  
21 years

86

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Operations

Kankan

Dabola

Labe

Siguiri

Conakry

0

200km

GUINEA

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.

Guinea operations: overview

Mineral Resource and Ore Reserve gold price

Units

2007

2006

Mineral Resource gold price

US\$/oz

700

650

Ore Reserve gold price

US\$/oz

600

550

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

The Mineral Resources are estimated using three dimensional 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 is used within the Geological model outlines. Ordinary and indicator kriging are used to estimate gold grades and a limiting pit shell at \$650/oz is used to quantify the total Mineral Resources.

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

Type of Drilling

Mine/Project

Category

Spacing  
Diamond  
RC  
Other  
Comments  
m (- x -)  
Iduapriem  
Measured  
50 x 50

Siguiri  
Measured  
5 x 10

Indicated  
25 x 25 and

AC  
Includes air core drilling.  
50 x 50  
Inferred  
50 x 50 and

AC  
Includes air core drilling.  
80 x 25  
Grade/Ore control  
5 x 10

Mineral Resource estimation

87

Ore Reserve estimation

The Mineral Resource models for each pit are combined with waste blocks and 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 Earthworks® NPV Scheduler software. The relevant metallurgical recoveries, geotechnical parameters, cut-off grades and economics are applied to generate the final Ore Reserve.

Mineral Resource and Ore Reserve comparison by operation (attributable)

Gold content (million ounces)

% change

% change

from

from 2006

Net diff

2006

Percentage

Other

before

after

after

Mine/Project

attributable

Category

2006 Depletion(1)

change(2)

depletion 2007

depletion

depletion

Comments

Siguiri

85%

Resource

5.118

(0.336)

0.163

3% 4.945

(0.173

(3%)

Significant focus on converting

Inferred to Indicated during 2007

Reserve

1.796

(0.302)

1.135

63% 2.629

0.833

46%

Two new deposits (Kintinian and the spent heap) were proved up by drilling

Guinea Totals

Resource

5.118 (0.336)

0.163

3% 4.945 (0.173 (3%))

Reserve

1.796 (0.302)

1.135 63% 2.629 0.833 46%

1. Depletion: reduction in reserves based on ore delivered to the plant and corresponding reduction in resource.

2. Other change: combination of changes due to gold price, cost, exploration, methodology, model change and scope change.

Ore Reserve modifying factors (as at 31 December 2007)

Cut-off

(1)

Mine Call

Metallurgical

grade

Dilution

Factor

recovery

Mine/Project

g/t (Au)

%

(MCF) %

factor

(2)

Siguiri

0.35 - 0.50

4%

96%

93.0 - 97.5%

1. A range of cut-offs indicate variable ore types.

2. A range of plant recoveries indicates variable ore types.



88

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Guinea operations: Siguiri

Siguiri

Société Ashanti Goldfields (SAG) 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 SAG concession consists of four blocks totalling 1,494.58km

2

. 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 Proterozoic Birimian rocks which consist of turbidite facies sedimentary sequences. There are two main types of gold deposits that occur in the Siguiri basin: laterite mineralisation (CAP) and in situ quartz-vein-related 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 mineralisation. The vein-related mineralisation is hosted in meta-sediments with the better mineralisation associated with vein stockworks, that occur preferentially in the coarser, brittle siltstones and sandstones. The mineralised rocks have been deeply weathered to below 100m in places to form saprolite (SAP) mineralisation. The practice at Siguiri has been to blend the CAP and SAP ore types and to process these using the heap-leach method. With the percentage of available CAP ore decreasing, however, a CIP plant was brought on stream during 2005 to treat predominantly SAP ore.

89

Siguiri: Mineral Resource reconciliation

2006 vs 2007

Ounces (millions)

5.1

2006

-0.3

Depletion

0.3

Gold price

-0.1

Other

0.7

Explo-

ration

4.9

2007

-0.7

Cost

4.8

3.8

0

Metho-

dology

Change

5.8

Siguiri: Ore Reserve reconciliation

2006 vs 2007

Ounces (millions)

1.8

2006

2.6

2007

0.1

Model

change

-0.3

Depletion

2.5

1.5

1.1

Scope

change

Change

Inferred Mineral Resource in business plan

Inferred Mineral Resources were used in the pit optimisation process and 0.08 million ounces are present in the optimised pit of which 0.08 million

ounces are included in the final production scheduling.

Mineral Resource

Metric

Imperial

Au  
 Resource  
 Tonnes  
 Grade  
 Au  
 Tons  
 Grade  
 ounces  
 Mine/Project  
 category  
 (000s)  
 (g/t)  
 (kg)  
 (000s)  
 (oz/t)  
 (000s)  
 Siguiiri – Oxides  
 Measured  
 17,406  
 0.87  
 15,121  
 19,187  
 0.025  
 486  
 Indicated  
 60,715  
 0.91  
 55,180  
 66,927  
 0.027  
 1,774  
 Inferred  
 44,723  
 1.03  
 46,028  
 49,299  
 0.030  
 1,480  
 Total  
 122,844  
 0.95  
 116,328  
 135,412  
 0.028  
 3,740  
 Siguiiri – Surface Resource  
 Measured  
 21,320  
 0.59  
 12,585  
 23,501

0.017  
405  
Indicated  
31,954  
0.54  
17,293  
35,223  
0.016  
556  
Inferred  
13,401  
0.57  
7,607  
14,772  
0.017  
245  
Total  
66,675  
0.56  
37,485  
73,497  
0.016  
1,205  
Siguiiri – Total Mineral Resource  
Measured  
38,726  
0.72  
27,705  
42,688  
0.021  
891  
Indicated  
92,669  
0.78  
72,472  
102,150  
0.023  
2,330  
Inferred  
58,124  
0.92  
53,635  
64,071  
0.027  
1,724  
Total  
189,519  
0.81  
153,813  
208,909  
0.024

4,945  
Exclusive Mineral Resource  
Metric  
Imperial  
Au  
Resource  
Tonnes  
Grade  
Au  
Tons  
Grade  
ounces  
Mine/Project  
category  
(Mt)  
(g/t)  
tonnes  
(Mt)  
(oz/t)  
(Moz)  
Siguri  
Measured  
1.0  
0.71  
0.7  
1.1  
0.021  
0.0  
Indicated  
18.7  
0.93  
17.4  
20.7  
0.027  
0.6  
Inferred  
57.7  
0.92  
53.2  
63.6  
0.027  
1.7  
Total  
77.4  
0.92  
71.3  
85.3  
0.027  
2.3

90

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Guinea operations: Siguiri continued

Ore Reserve

Metric

Imperial

Au

Reserve

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Siguiri – Oxides

Proved

–

–

–

–

–

–

Probable

57,603

0.90

51,903

63,497

0.026

1,669

Total

57,603

0.90

51,903

63,497

0.026

1,669

Siguiri – Surface Reserve

Proved

21,320

0.59

12,585

23,501

0.017

405  
 Probable  
 31,954  
 0.54  
 17,293  
 35,223  
 0.016  
 556  
 Total  
 53,274  
 0.56  
 29,878  
 58,724  
 0.016  
 961  
 Siguiiri – Total Ore Reserve  
 Proved  
 21,320  
 0.59  
 12,585  
 23,501  
 0.017  
 405  
 Probable  
 89,557  
 0.77  
 69,196  
 98,720  
 0.023  
 2,225  
 Total  
 110,877  
 0.74  
 81,781  
 122,221  
 0.022  
 2,629  
 Siguiiri – Metric  
 Tonnes above  
 cut-off (millions)  
 0.00  
 42.13  
 0.00  
 Cut-off grade (g/t)  
 189.59  
 Ave grade  
 above cut-off (g/t)  
 7.45  
 6.52  
 4.66  
 3.73

1.86  
 0.93  
 0.00  
 168.52  
 147.46  
 126.39  
 105.33  
 84.26  
 63.20  
 21.07  
 2.80  
 5.59  
 8.39  
 210.65  
 2.50  
 5.00  
 9.32  
 0.50 1.00  
 2.00  
 3.00  
 3.50  
 4.50  
 1.50  
 4.00  
 Tonnes above cut-off  
 Ave grade above cut-off  
 Siguirí – Imperial  
 Tons above  
 cut-off (millions)  
 0.00  
 0.07  
 0.10 0.12  
 0.03  
 0.09  
 185.76  
 0.00  
 0.13  
 Cut-off grade (oz/t)  
 232.20  
 208.98  
 Ave grade  
 above cut-off (oz/t)  
 0.27  
 0.24  
 0.22  
 0.19  
 0.16  
 0.14  
 0.11  
 0.00  
 0.08



0.05  
0.03  
162.54  
139.32  
116.10  
92.88  
69.66  
46.44  
23.22  
0.01  
0.04 0.06  
0.15  
Tons above cut-off  
Ave grade above cut-off  
Competent persons  
Professional  
Registration  
Relevant  
Type  
Name  
organisation  
number  
experience  
Mineral Resource  
P Winkler  
AusIMM  
220329  
25 years  
Ore Reserve  
A Netherwood  
AusIMM  
100463  
18 years  
Grade tonnage information

91

## Mineral Resource estimation

The Mineral Resource is taken as the material that falls within the \$700/oz economic shell optimised for each individual deposit except for Morila and Alamoutala (Yatela). The pits at these operations are reaching the end of their lives and the Mineral Resource is quoted within the life of mine design. A three dimensional 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 between 25m x 25m x 10m and 30m x 30m x 10m (X Y Z) and where appropriate selective sub-celling is used for definition on the geological and mineralisation boundaries. The dimensions of these sub cells are 12.5m x 12.5m x 3.33m and 10m x 10m x 5m. 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 occur above the Mineral Resource cut-off and this is reported according to the dimensions of the practical mining unit.

Mali operations: overview

Mineral Resource and Ore Reserve gold price

Units

**2007**

2006

Mineral Resource gold price

US\$/oz

700

650

Ore Reserve gold price

US\$/oz

600

550

Operations

MALI

Tombouctou

Gao

Ségou

Nioro

Kayes

Sikasso

Morila

Yatela

Sadiola

0

500km

AngloGold Ashanti has interests in three operations in the West African country of Mali – Sadiola (38%), Yatela (40%) and Morila (40%). All three operations are managed by AngloGold Ashanti.

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

Type of Drilling  
Mine/Project  
Category  
Spacing  
Diamond  
RC  
Other  
Comments  
m (- x -)  
Morila  
Measured  
10 x 10

Indicated  
30 x 30

Inferred  
50 x 50

Grade/Ore control  
10 x 10 and

Blastholes were only used for  
50 x 50  
sampling when there was insufficient  
RC coverage.  
Sadiola  
Measured  
20 x 20 and  
25 x 25

Indicated  
25 x 50

Inferred  
>25 x 50

Grade/Ore control  
5 x 10

Yatela  
Measured  
10 x 10 and  
25 x 25

Indicated

25 x 25 and

35 x 45

Inferred

>25 x 25 and

> 35 x 45

Grade/Ore control

5 x 10

92

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Ore Reserve estimation

The Mineral Resource models are used as the basis for the Ore Reserves. 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 Resources and Measured, Indicated and Inferred Mineral Resources. All appropriate costs, metallurgical recovery factors and geotechnical parameters are applied to generate the final Ore Reserves.

Ore Reserve modifying factors (as at 31 December 2007)

Cut-off

(1)

Metallurgical

grade

Dilution

(2)

recovery

Other

Mine/Project

g/t (Au)

%

factor

(3)

factor

Morila – Pit

1.0

10%

89 – 91.5%

n/a

Morila – Stockpiles

n/a

n/a

60 – 91.5%

n/a

Sadiola – Pit

0.57 – 1.78

5%

80 – 93%

n/a

Yatela – Pit

0.52 – 1.30

13%

75 – 85%

n/a

1. A range of cut-offs indicate variable ore types.

2. Where no dilution factor is indicated the dilution is inherent in the resource model estimate.

3. A range of plant recoveries indicates variable ore types.

Mali operations: overview continued

Mineral Resource and Ore Reserve comparison by operation (attributable)

Gold content (million ounces)

% change  
 % change  
 from  
 from 2006  
 Net diff  
 2006  
 Percentage  
 Other  
 before  
 after  
 after  
 Mine/Project  
 attributable  
 Category  
 2006 Depletion(1)  
 change(2)  
 depletion 2007  
 depletion  
 depletion  
 Comments  
 Morila  
 40%  
 Resource  
 1.137  
 (0.293)  
 (0.165)  
 (15%)  
 0.679  
 (0.458)  
 (40%)  
 Resource now quoted in LOM  
 design shell  
 Reserve  
 0.854  
 (0.222)  
 (0.002)  
 0%  
 0.630  
 (0.224)  
 (26%)  
 Depletion. Despite some drilling, no  
 reserve conversion materialised  
 Sadiola  
 38%  
 Resource  
 2.957  
 (0.308)  
 (0.715)  
 (24%)  
 1.934  
 (1.023)

(35%)

Increase in costs (0.6Moz) and  
revisions to methodology (0.1Moz)

Reserve

1.673

(0.436)

(0.843)

(50%)

0.394

(1.279)

(76%)

Impact of economic factors on deep  
sulphides and stockpiles

Yatela

40%

Resource

0.497

(0.141)

(0.019)

(4%)

0.337

(0.160)

(32%)

Increases due to gold price and  
exploration were offset by  
decreases due to costs and  
removal of KW18

Reserve

0.275

(0.144)

0.069

25%

0.200

(0.075)

(27%)

Depletion offset by additions from  
Cut 5E and Cut 7

Mali Totals

Resource

4.591 (0.742)

(0.899)

(20%)

2.950 (1.641) (36%)

1. Depletion: reduction in reserves based on ore delivered to the plant and corresponding reduction in resource.
2. Other change: combination of changes due to gold price, cost, exploration, methodology, model change and scope change.

93

Mali operations: Morila

This mine is situated some 280km by road southeast of Bamako, the capital city of Mali, which is 600km south-east of Sadiola mine. Mining is from a single open-pit operation, utilising conventional truck and shovel methods.

Geology

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

Morila



94

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Morila – Main Pit

Measured

609

3.68

2,241

672

0.107

72

Indicated

1,600

3.57

5,704

1,763

0.104

183

Inferred

333

3.05

1,017

367

0.089

33

Total

2,542

3.53

8,962

2,802

0.103

288

Morila – Stockpiles

Measured

6,955

1.74

12,109

7,666

0.051

389

Indicated

—

—

—

—

—

—

Inferred

—

—

—

—

—

—

Total

6,955

1.74

12,109

7,666

0.051

389

Morila – TSF

Measured

17

2.91

48

18

0.085

2

Indicated

—

—

—

—

—

—

Inferred

—

—

—

—

—

Total

17  
2.91  
48  
18  
0.085  
2  
Morila – Total Mineral Resource  
Measured  
7,581  
1.90  
14,399  
8,356  
0.055  
463  
Indicated  
1,600  
3.57  
5,704  
1,763  
0.104  
183  
Inferred  
333  
3.05  
1,017  
367  
0.089  
33  
Total  
9,514  
2.22  
21,120  
10,487  
0.065  
679  
Exclusive Mineral Resource  
Metric  
Imperial  
Au  
Resource  
Tonnes  
Grade  
Au  
Tons  
Grade  
ounces  
Mine/Project  
category  
(Mt)  
(g/t)  
tonnes

(Mt)  
(oz/t)  
(Moz)  
Morila  
Measured

-  
-  
-  
-  
-  
-

Indicated

-  
-  
-  
-  
-

Inferred

-  
-  
-  
-  
-

Total

-  
-  
-  
-  
-

Mineral Resource is contained in the LOM pit design.

Morila: Mineral Resource reconciliation

2006 vs 2007

Ounces (millions)

1.1

2006

-0.3

Depletion

0

Gold price

-0.2

Other

0.0

Explo-  
ration

0.7

2007

0

Cost

1.2  
0.2  
0  
Metho-  
dology  
Change  
Morila: Ore Reserve reconciliation  
2006 vs 2007  
Ounces (millions)  
0.8  
0.6  
2007  
0  
Model  
change  
-0.2  
Depletion  
0.7  
0.4  
0  
Scope  
change  
Change  
0.8  
0.6  
0.5  
Mali operations: Morila continued

95  
Ore Reserve  
Metric  
Imperial  
Au  
Reserve  
Tonnes  
Grade  
Au  
Tons  
Grade  
ounces  
Mine/Project  
category  
(000s)  
(g/t)  
(kg)  
(000s)  
(oz/t)  
(000s)  
Morila – Main Pit  
Proved  
575  
3.64  
2,094  
634  
0.106  
67  
Probable  
1,676  
3.19  
5,351  
1,848  
0.093  
172  
Total  
2,251  
3.31  
7,445  
2,482  
0.096  
239  
Morila – Stockpiles  
Proved  
4,669  
2.04  
9,506  
5,146  
0.059  
306  
Probable

2,286

1.14

2,603

2,520

0.033

84

Total

6,955

1.74

12,109

7,666

0.051

389

Morila – TSF

Proved

–

–

–

–

–

–

Probable

17

2.91

48

18

0.085

2

Total

17

2.91

48

18

0.085

2

Morila – Total Ore Reserve

Proved

5,244

2.21

11,600

5,780

0.065

373

Probable

3,979

2.01

8,003

4,386

0.059

257

Total

9,223

2.13

19,603

10,166

0.062

630

Morila – Metric

Tonnes above

cut-off (millions)

0.00

1.80

0.00

Cut-off grade (g/t)

8.08

Ave grade

above cut-off (g/t)

7.95

7.08

5.34

4.47

2.74

1.87

1.00

7.18

6.28

5.39

4.49

3.59

2.69

0.90

3.00

3.61

6.21

8.82

8.98

4.00

5.00

2.00

1.00

9.69

Tonnes above cut-off

Ave grade above cut-off

Morilla – Imperial

Tons above

cut-off (millions)

0.00

0.12

0.03

0.09

7.92

0.00



Cut-off grade (oz/t)

9.89

8.91

Ave grade

above cut-off (oz/t)

0.28

0.25

0.23

0.20

0.17

0.14

0.11

0.00

0.08

0.05

0.03

6.93

5.94

4.95

3.96

2.97

1.98

0.99

0.06

Tons above cut-off

Ave grade above cut-off

Competent persons

Professional

Registration

Relevant

Type

Name

organisation

number

experience

Mineral Resource

TD Gell

AusIMM

211795

16 years

Ore Reserve

SK Ndele

AusIMM

201772

18 years

Grade tonnage information

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Mali operations: Sadiola

Sadiola

Sadiola is situated in the north-west of Mali, 77km to the south of the regional capital of Kayes. Mining takes place in an open pit at Sadiola. Ore is treated in a 435,000-tonne-per-month gold plant.

Geology

The Sadiola deposit is located within the Malian portion of the Keniéba- Kedougou window, a major early proterozoic – Birimian outlier along the NE margin of the Kenema – Man shield. The deposit is confined in the north of the window and the mineralised zone occurs along the Sadiola Fracture Zone (SFZ), over a drilled strike length of approximately 2,500m and remains open to the north and south. The observed alteration assemblages in the primary mineralisation point to a mesothermal origin for the gold deposit at Sadiola. The specific rocks that host the mineralisation are marbles and greywackes which have been intensely weathered to a maximum depth of 200m. A series of north-south trending faults occur that feed the Sadiola mineralisation. As a result of an east-west regional compression event, deformation occurs along a north-south striking marble-greywacke contact, increasing the porosity of this zone. North-east striking structures, which intersect the north-south contact, have introduced mineralisation, mainly within the marble where the porosity was greatest.

The Sadiola Hill deposit generally consists 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 reserves.

97  
Mineral Resource  
Metric  
Imperial  
Au  
Au  
Resource  
Tonnes  
Grade  
tonnes  
Tons  
Grade  
ounces  
Mine/Project  
category  
(000s)  
(g/t)  
(kg)  
(000s)  
(oz/t)  
(000s)  
Sadiola – FE2  
Measured  
–  
–  
–  
–  
–  
–  
–  
Indicated  
–  
–  
–  
–  
–  
–  
Inferred  
318  
1.53  
487  
351  
0.045  
16  
Total  
318  
1.53  
487  
351  
0.045  
16  
Sadiola – FE3

Measured

—  
—  
—  
—  
—  
—

Indicated

513  
2.45  
1,257  
566  
0.071  
40

Inferred

239  
2.45  
587  
264  
0.072  
19

Total

753  
2.45  
1,844  
830  
0.071  
59

Sadiola – FE3S

Measured

—  
—  
—  
—  
—  
—

Indicated

1,374  
2.45  
3,360  
1,514  
0.071  
108

Inferred

63  
2.80  
177  
70  
0.082  
6

Total

1,437

2.46

3,537

1,584

0.072

114

Sadiola – FE4

Measured

–

–

–

–

–

–

Indicated

1,507

2.44

3,683

1,662

0.071

118

Inferred

428

2.46

1,054

472

0.072

34

Total

1,935

2.45

4,737

2,133

0.071

152

Sadiola – FN2

Measured

–

–

–

–

–

–

Indicated

34

2.05

70

38

0.060

2

Inferred

144  
0.69  
99  
158  
0.020  
3  
Total  
178  
0.95  
169  
196  
0.028  
5  
Sadiola – FN3  
Measured  
–  
–  
–  
–  
–  
–  
Indicated  
–  
–  
–  
–  
–  
Inferred  
83  
1.64  
135  
91  
0.048  
4  
Total  
83  
1.64  
135  
91  
0.048  
4  
Sadiola – Main Pit  
Measured  
180  
3.94  
710  
199  
0.115  
23  
Indicated

10,139

3.19

32,380

11,177

0.093

1,041

Inferred

1,382

3.03

4,189

1,523

0.088

135

Total

11,701

3.19

37,279

12,898

0.093

1,199

Sadiola – Sekokoto

Measured

–

–

–

–

–

–

Indicated

–

–

–

–

–

Inferred

395

1.55

612

435

0.045

20

Total

395

1.55

612

435

0.045

20

Sadiola – Stockpile

Measured

6,641

1.29

8,578

7,320

0.038

276

Indicated

—

—

—

—

—

—

Inferred

—

—

—

—

—

—

Total

6,641

1.29

8,578

7,320

0.038

276

Sadiola – Tambali South

Measured

—

—

—

—

—

—

Indicated

—

—

—

—

—

—

Inferred

1,625

1.70

2,770

1,791

0.050

89

Total

1,625



1.70  
2,770  
1,791  
0.050  
89  
Sadiola – Total Mineral Resource  
Measured  
10,071  
1.47  
14,828  
11,101  
0.043  
477  
Indicated  
26,889  
2.27  
61,118  
29,640  
0.066  
1,965  
Inferred  
44,886  
2.04  
91,598  
49,479  
0.060  
2,945  
Total  
108,537  
2.12  
230,463  
119,642  
0.062  
7,410

Mali operations: Sadiola continued

98

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Exclusive Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(Mt)

(g/t)

tonnes

(Mt)

(oz/t)

(Moz)

Sadiola

Measured

5.0

0.84

4.2

5.5

0.025

0.1

Indicated

10.4

2.98

31.1

11.5

0.087

1.0

Inferred

4.6

2.15

9.9

5.1

0.063

0.3

Total

20.0

2.26

45.2

22.1

0.066

1.5

Sadiola

:

Mineral Resource reconciliation

2006 vs 2007

Ounces (millions)

3.0

2006

-0.3

Depletion

0.2

Gold price

-0.2

Other

0

Explo-

ration

1.9

2007

-0.6

Cost

0

-0.1

Metho-

dology

Change

2.7

1.7

Sadiola: Ore Reserve reconciliation

2006 vs 2007

Ounces (millions)

1.7

2006

0.4

2007

0

Model

change

-0.4

Depletion

0

-0.9

Scope

change

Change

1.0

Inferred Mineral Resource in pit optimisation

Inferred Mineral Resource was used in the pit optimisation process and 0.11 million ounces are present in the optimised pit, of which 0.06 million

ounces are included in the final production schedule.

99

Ore Reserve

Metric

Imperial

Au

Reserve

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Sadiola – FE3

Proved

–

–

–

–

–

–

Probable

675

2.40

1,620

744

0.070

52

Total

675

2.40

1,620

744

0.070

52

Sadiola – FE4

Proved

–

–

–

–

–

–

Probable

710  
3.12  
2,216  
782  
0.091  
71  
Total  
710  
3.12  
2,216  
782  
0.091  
71  
Sadiola – Main Pit  
Proved  
73  
4.65  
338  
80  
0.136  
11  
Probable  
956  
3.64  
3,477  
1,054  
0.106  
112  
Total  
1,029  
3.71  
3,815  
1,134  
0.108  
123  
Sadiola – Stockpile  
Proved  
1,719  
2.67  
4,598  
1,895  
0.078  
148  
Probable  
0  
0  
0  
0.000  
0  
Total  
1,719

2.67  
 4,598  
 1,895  
 0.078  
 148  
 Sadiola – Total Ore Reserve  
 Proved  
 1,792  
 2.75  
 4,936  
 1,975  
 0.080  
 159  
 Probable  
 2,340  
 3.13  
 7,134  
 2,580  
 0.091  
 235  
 Total  
 4,132  
 2.96  
 12,250  
 4,555  
 0.086  
 394  
 Sadiola – Metric  
 Tonnes above  
 cut-off (millions)  
 0.00  
 19.71  
 0.00  
 Cut-off grade (g/t)  
 88.71  
 Ave grade  
 above cut-off (g/t)  
 6.03  
 5.27  
 3.77  
 3.01  
 1.51  
 0.75  
 0.00  
 78.86  
 69.00  
 59.14  
 49.28  
 39.43  
 29.57  
 9.86

2.26  
4.52  
6.78  
98.57  
4.00  
2.00  
0.50  
1.00 1.50  
2.50 3.00  
3.50  
4.50 5.00  
7.53  
Tonnes above cut-off  
Ave grade above cut-off  
Sadiola – Imperial  
Tons above  
cut-off (millions)  
0.00  
0.07  
0.10 0.12  
0.03  
0.09  
86.92  
0.00  
0.13  
Cut-off grade (oz/t)  
108.65  
97.79  
Ave grade  
above cut-off (oz/t)  
0.22  
0.20  
0.18  
0.15  
0.13  
0.11  
0.09  
0.00  
0.07  
0.04  
0.02  
76.06  
65.19  
54.33  
43.46  
32.60  
21.73  
10.87  
0.01  
0.04 0.06  
0.15

Tons above cut-off  
Ave grade above cut-off  
Competent persons  
Professional  
Registration  
Relevant  
Type  
Name  
organisation  
number  
experience  
Mineral Resource  
S Robins  
AusIMM  
222533  
12 years  
Ore Reserve  
H Fourie  
SAIMM  
19598  
24 years  
Grade tonnage information



100

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Mali operations: Yatela

Yatela

Yatela is situated some 25km north of Sadiola and approximately 50km south-southwest of Kayes. Mining takes place in an open pit.

Geology

Yatela mineralisation occurs as a keel-shaped body in Birimian metacarbonates. The 'keel' is centred on a fault which was the feeder for the original mesothermal mineralisation, with an associated weakly mineralised diorite intrusion. This primary mineralisation was concentrated to economic grades through dissolution of carbonate-rich rocks by supergene processes. Gold is disseminated in the unconsolidated ferruginous, sandy, locally clayed layer that lines the bottom of a deep trough (max 220m deep) with steep margins. The ore dips almost vertically on the west limb and more gently towards the west on the east limb, with tight closure to the south.

101  
Metagreywacke  
Overburden  
Fine Sandstone  
Oxide Footwall  
Dolomite  
Diorite (Micro)  
Main mineralised unit  
(Orebody)  
Coarse Sandstone  
Pebble Zone  
Mineral Resource  
Metric  
Imperial  
Au  
Resource  
Tonnes  
Grade  
Au  
Tons  
Grade  
ounces  
Mine/Project  
category  
(000s)  
(g/t)  
(kg)  
(000s)  
(oz/t)  
(000s)  
Yatela – Alamoutala Pit  
Measured  
3  
0.91  
2  
3  
0.026  
0  
Indicated  
207  
1.70  
351  
228  
0.050  
11  
Inferred  
6  
1.38  
8  
7  
0.040

0  
Total  
215  
1.68  
362  
237  
0.049  
12  
Yatela – Main Pit  
Measured  
468  
4.25  
1,987  
516  
0.124  
64  
Indicated  
797  
3.98  
3,171  
879  
0.116  
102  
Inferred  
1,048  
3.05  
3,196  
1,155  
0.089  
103  
Total  
2,313  
3.61  
8,353  
2,550  
0.105  
269  
Yatela – Stockpile  
Measured  
1,673  
1.05  
1,762  
1,844  
0.031  
57  
Indicated  
–  
–  
–  
–  
–

–  
Inferred  
–  
–  
–  
–  
–  
–  
Total  
1,673  
1.05  
1,762  
1,844  
0.031  
57  
Yatela – Total Mineral Resource  
Measured  
2,144  
1.75  
3,751  
2,363  
0.051  
121  
Indicated  
1,004  
3.51  
3,523  
1,106  
0.102  
113  
Inferred  
1,054  
2.49  
3,204  
1,162  
0.089  
103  
Total  
4,201  
2.49  
10,478  
4,631  
0.073  
337  
*Geological cross-section 58500 (looking North).*

Mali operations: Yatela continued

102

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Inferred Mineral Resource in pit optimisation

Inferred Mineral Resource were used in the pit optimisation process and 0.04 million ounces are present in the optimised pit.

Exclusive Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(Mt)

(g/t)

tonnes

(Mt)

(oz/t)

(Moz)

Yatela

Measured

0.1

2.15

0.3

0.2

0.063

0.0

Indicated

0.2

1.82

0.4

0.2

0.053

0.0

Inferred

1.1

3.04

3.2

1.2

0.089

0.1

Total

1.4

2.76

3.9

1.6  
 0.080  
 0.1  
 Yatela: Mineral Resource reconciliation  
 2006 vs 2007  
 Ounces (millions)  
 0.5  
 2006  
 -0.1  
 Depletion  
 0  
 Gold price  
 0  
 Other  
 0  
 Explo-  
 ration  
 0.3  
 2007  
 0  
 Cost  
 0.2  
 0.1  
 0  
 Metho-  
 dology  
 Change  
 0.4  
 0.3  
 0.5  
 Yatela: Ore Reserve reconciliation  
 2006 vs 2007  
 Ounces (millions)  
 0.3  
 2006  
 0.2  
 2007  
 0  
 Model  
 change  
 -0.1  
 Depletion  
 0  
 0.1  
 Scope  
 change  
 Change  
 0.2  
 0.3

103  
 Ore Reserve  
 Metric  
 Imperial  
 Au  
 Resource  
 Tonnes  
 Grade  
 Au  
 Tons  
 Grade  
 ounces  
 Mine/Project  
 category  
 (000s)  
 (g/t)  
 (kg)  
 (000s)  
 (oz/t)  
 (000s)  
 Yatela – Alamoutala Pit  
 Proved  
 –  
 –  
 –  
 –  
 –  
 –  
 Probable  
 122  
 1.75  
 214  
 135  
 0.051  
 7  
 Total  
 122  
 1.75  
 214  
 135  
 0.051  
 7  
 Yatela – Main Pit  
 Proved  
 321  
 4.43  
 1,420  
 353  
 0.129  
 46  
 Probable

702  
 4.01  
 2,815  
 774  
 0.117  
 91  
**Total**  
 1,022  
 4.14  
 4,235  
 1,127  
 0.121  
 136  
**Yatela – Stockpile**  
**Proved**  
 1,673  
 1.05  
 1,762  
 1,844  
 0.031  
 57  
**Probable**  
 –  
 –  
 –  
 –  
 –  
**Total**  
 1,673  
 1.05  
 1,762  
 1,844  
 0.031  
 57  
**Yatela – Total Ore Reserve**  
**Proved**  
 1,994  
 1.60  
 3,183  
 2,198  
 0.047  
 102  
**Probable**  
 824  
 3.68  
 3,029  
 908  
 0.107  
 97  
**Total**



2,817

2.20

6,211

3,106

0.064

200

Tonnes above cut-off

Ave grade above cut-off

Yatela – Metric

Tonnes above

cut-off (millions)

0.00

2.35

0.00

Cut-off grade (g/t)

10.57

Ave grade

above cut-off (g/t)

10.14

8.87

6.33

5.07

2.53

1.27

0.00

9.40

8.22

7.05

5.87

4.70

3.52

1.17

3.80

7.60

11.40

11.74

2.50

5.00

12.67

0.50

1.00

2.00

3.00

3.50

4.50

1.50

4.00

Yatela – Imperial

Tons above

cut-off (millions)

0.00

0.07  
0.10 0.12  
0.03  
0.09  
10.36  
0.00  
0.13  
Cut-off grade (oz/t)  
12.95  
11.65  
Ave grade  
above cut-off (oz/t)  
0.33  
0.30  
0.26  
0.22  
0.18  
0.15  
0.11  
0.00  
0.07  
0.04  
9.06  
7.77  
6.47  
5.18  
3.88  
2.59  
1.29  
0.01  
0.04 0.06  
0.15  
Tons above cut-off  
Ave grade above cut-off  
Competent persons  
Professional  
Registration  
Relevant  
Type  
Name  
organisation  
number  
experience  
Mineral Resource  
S Robins  
AusIMM  
222533  
12 years  
Ore Reserve  
K Bartsch  
AusIMM

107390

20 years

Grade tonnage information

104

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Namibia operations: overview

Mineral Resource estimation

Mineral Resource estimation is performed using Datamine® Software.

Block dimensions of 25m x 25m x 5m (X Y Z) and 25m x 125m 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 smallest mining

unit (SMU).

Operations

NAMIBIA

Windhoek

Navachab

Tsumeb

Karibib

Walvis Bay

Luderitz

Keetmanshoop

Okahandja

Navachab gold mine is

wholly owned by

AngloGold Ashanti.

Mineral Resource and Ore Reserve gold price

Units

**2007**

2006

Mineral Resource gold price

US\$/oz

700

650

Ore Reserve gold price

US\$/oz

600

450

Exchange rate – South Africa

ZAR/US\$

7.70

6.50

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

Type of Drilling

Mine/Project

Category

Spacing

Diamond

RC

Other

Comments

m (- x -)

Navachab  
Measured  
10 x 10

Drill-hole spacing is reduced to 5m x  
5m in complex ore.  
Indicated  
25 x 25

Inferred  
50 x 50

Grade/Ore control  
5 x 10

105

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.

Ore Reserve modifying factors (as at 31 December 2007)

Cut-off

Metallurgical

grade

Dilution

(1)

Recovery

Other

Mine/Project

g/t (Au)

%

Factor

Factor

Navachab

0.60

n/a

87 – 94%

N/A

*1. Where no dilution factor is indicated the dilution is inherent in the resource model estimate.*

Reserves are estimated using recovery percentage specific to rock-types. The West Pushback expansion is included in the reserve.

Mineral Resource and Ore Reserve comparison by operation (attributable)

Gold content (million ounces)

% change

% change

from

from 2006

Net diff

2006

Percentage

Other

before

after

after

Mine/Project

attributable

Category

2006 Depletion(1)

change(2)

depletion 2007

depletion

depletion

Comments

Navachab

100%

Resource

3.771

(0.115)

0.767

20%

4.423

0.652

17%

Depletion was offset by increases due to improved gold price, costs and exploration

Reserve

0.716

(0.091)

0.842

118%

1.467

0.751

105%

Improved economics have brought in an additional push back to the west of the main pit

Namibia Totals

Resource

3.771 (0.115)

0.767

20%

4.423 0.652 17%

Reserve

0.716 (0.091)

0.842

118%

1.467 0.751 105%

1. Depletion: reduction in reserves based on ore delivered to the plant and corresponding reduction in resource.

2. Other change: combination of changes due to gold price, cost, exploration, methodology, model change and scope change.

106

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Namibia operations: Navachab

Navachab

Navachab gold mine is located 10km south-west of Karibib and 170km north-west of Windhoek, the capital of Namibia. Navachab mine is an open-pit mine. Its processing plant, with a production capacity of 110,000 tonnes per month, includes mills, CIP and electro-winning facilities.

Geology

The Navachab gold deposit is located in the Pan-African Damara Orogen and is hosted by Damaran greenschist-amphibolite facies, calc-silicates, marbles and volcano-clastics. The rocks have been intruded by granites, pegmatites and (quartz-porphyry dykes) aplite and have also been deformed into a series of alternating dome and basin structures. The mineralised zone 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 vein set ( $\pm 60\%$ ) and a replacement skarn body ( $\pm 40\%$ ). The mineralisation in the Main Pit is hosted by a NE-SW striking metamorphosed sequence of greenschist-amphibolite facies, calc-silicates, marbles and volcanoclastics rocks that dip at 70° to the west. The gold is very fine-grained and associated with pyrrhotite and minor amounts of pyrite, chalcopyrite, maldonite and bismuthinite. An estimated 90% of the gold occurs as free gold and the remainder is present in minerals such as maldonite ( $\text{Au}_2\text{Bi}$ ).

Approximately 80% of the gold is free milling. Silver is also present and the gold to silver ratio is approximately 15 to 1.



107

W

Karibib FM

Oberwasser FM

Oxide

(MDMV)

Okawayo FM

MC

Zone

SC

LS

LSC

LS

Etusis FM

Chuos FM

Oxide

Calcrete

Spes Bona FM

35m

*An E-W section through the valley hosting the Navachab mineralisation. LS refers to mainly quartzbiotite schist (BISH) rock type and LSC refers to calc-silicate bearing rock (CS or BSC).*

Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Navachab – Anomaly 16

Measured

–

–

–

–

–

–

Indicated

1,179

1.31

1,539  
1,299  
0.038  
49  
Inferred  
1,362  
1.09  
1,482  
1,501  
0.032  
48  
Total  
2,540  
1.19  
3,021  
2,800  
0.035  
97  
Navachab – Gecko  
Measured  
–  
–  
–  
–  
–  
Indicated  
377  
2.02  
760  
415  
0.059  
24  
Inferred  
25  
1.09  
27  
28  
0.032  
1  
Total  
402  
1.96  
787  
443  
0.057  
25  
Navachab – Grid A  
Measured  
485  
2.53

1,229  
535  
0.074  
40  
Indicated  
263  
1.96  
515  
290  
0.057  
17  
Inferred  
86  
1.23  
106  
95  
0.036  
3  
Total  
834  
2.22  
1,851  
919  
0.065  
59  
Navachab – Main Pit  
Measured  
1,170  
1.61  
1,883  
1,289  
0.047  
61  
Indicated  
57,464  
1.30  
74,644  
63,343  
0.038  
2,400  
Inferred  
43,768  
1.13  
49,273  
48,246  
0.033  
1,584  
Total  
102,402  
1.23  
125,800

112,878  
 0.036  
 4,045  
 Navachab – Total Stockpiles  
 Measured  
 9,997  
 0.61  
 6,113  
 11,020  
 0.018  
 197  
 Indicated  
 –  
 –  
 –  
 –  
 –  
 –  
 Inferred  
 –  
 –  
 –  
 –  
 –  
 Total  
 9,997  
 0.61  
 6,113  
 11,020  
 0.018  
 197  
 Navachab –  
 Measured  
 11,652  
 0.79  
 9,226  
 12,844  
 0.023  
 297  
 Total Mineral Resource  
 Indicated  
 59,282  
 1.31  
 77,458  
 65,347  
 0.038  
 2,490  
 Inferred  
 45,241  
 1.12

50,889  
49,870  
0.033  
1,636  
Total  
116,176  
1.18  
137,573  
128,062  
0.035  
4,423

Namibia operations: Navachab continued

108

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Exclusive Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(Mt)

(g/t)

tonnes

(Mt)

(oz/t)

(Moz)

Navachab

Measured

5.9

0.58

3.4

6.5

0.017

0.1

Indicated

32.0

1.18

37.6

35.2

0.034

1.2

Inferred

45.2

1.12

50.9

49.9

0.033

1.6

Total

83.1

1.11

91.9

91.6

0.032

3.0

Edgar Filing: ANGLOGOLD ASHANTI LTD - Form 6-K

This exclusive Mineral Resource comprises largely main pit and to a lesser extent anomaly 16 and the gecko orebodies which form

potentially future Ore Reserves dependant on the gold price and completion of technical studies.

Inferred Mineral Resource in business plan

Inferred Mineral Resource was used in the pit optimisation process and 0.13 million ounces are present in the optimised pit of which 0.10 million

ounces are included in the final production scheduling.

Navachab: Mineral Resource reconciliation

2006 vs 2007

Ounces (millions)

3.8

3.8

2006

-0.1

Depletion

0.6

Gold price

0.0

Other

0.1

Explo-

ration

4.4

2007

0.1

Cost

4.2

3.6

3.4

-0.2

Metho-

dology

Change

4.0

Navachab: Ore Reserve reconciliation

2006 vs 2007

Ounces (millions)

0.7

2006

1.5

2007

0.1

Model

change

-0.1

Depletion

0.6

0.7

Scope

change

Change

0.8  
1.0  
1.2  
1.4



109  
Ore Reserve  
Metric  
Imperial  
Au  
Reserve  
Tonnes  
Grade  
Au  
Tons  
Grade  
ounces  
Mine/Project  
category  
(000s)  
(g/t)  
(kg)  
(000s)  
(oz/t)  
(000s)  
Navachab – Grid A  
Proved  
460  
2.64  
1,215  
507  
0.077  
39  
Probable  
202  
1.21  
244  
222  
0.035  
8  
Total  
662  
2.21  
1,460  
729  
0.064  
47  
Navachab – Main Pit  
Proved  
789  
1.79  
1,412  
870  
0.052  
45  
Probable

27,110  
 1.46  
 39,612  
 29,883  
 0.043  
 1,274  
 Total  
 27,899  
 1.47  
 41,024  
 30,753  
 0.043  
 1,319  
 Navachab – Total Stockpiles  
 Proved  
 4,515  
 0.70  
 3,160  
 4,977  
 0.020  
 102  
 Probable  
 –  
 –  
 –  
 –  
 –  
 –  
 Total  
 4,515  
 0.70  
 3,160  
 4,977  
 0.020  
 102  
 Navachab – Total Ore Reserve  
 Proved  
 5,764  
 1.00  
 5,787  
 6,354  
 0.029  
 186  
 Probable  
 27,311  
 1.46  
 39,856  
 30,106  
 0.043  
 1,281  
 Total

33,075  
 1.38  
 45,643  
 36,459  
 0.040  
 1,467  
 Navachab – Metric  
 Tonnes above  
 cut-off (millions)  
 0.00  
 71.11  
 0.00  
 Cut-off grade (g/t)  
 320.00  
 Ave grade  
 above cut-off (g/t)  
 5.27  
 4.61  
 3.29  
 2.63  
 1.32  
 0.66  
 0.00  
 284.44  
 248.89  
 213.33  
 177.78  
 142.22  
 106.67  
 35.56  
 3.00  
 1.98  
 3.95  
 5.93  
 355.55  
 4.00  
 5.00  
 2.00  
 0.50  
 1.00  
 1.50  
 2.50  
 3.50  
 4.50  
 Tonnes above cut-off  
 Ave grade above cut-off  
 Navachab – Imperial  
 Tons above  
 cut-off (millions)  
 0.00  
 0.07

0.10 0.12  
0.03  
0.09  
313.54  
0.00  
0.13  
Cut-off grade (oz/t)  
391.93  
352.74  
Ave grade  
above cut-off (oz/t)  
0.19  
0.17  
0.15  
0.13  
0.12  
0.10  
0.08  
0.00  
0.06  
0.04  
0.02  
274.35  
235.16  
195.96  
156.77  
117.58  
78.39  
39.19  
0.01  
0.04 0.06  
0.15  
Tons above cut-off  
Ave grade above cut-off  
Competent persons  
Professional  
Registration  
Relevant  
Type  
Name  
organisation  
number  
experience  
Mineral Resource  
FP Badenhorst  
AusIMM  
211026  
15 years  
Ore Reserve  
R Schommarz  
AusIMM

222570

17 years

Grade tonnage information

110

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Mineral Resource and Ore Reserve gold price

Units

2007

2006

Mineral Resource gold price

US\$/oz

700

650

Ore Reserve gold price

US\$/oz

600

550

Operations

TANZANIA

Geita

Dar es Salaam

Arusha

Mwanza

Kigoma

Tabora

Dodoma

Tanga

*Lake*

*Nyasa*

*Lake*

*Tanganyika*

*Lake*

*Victoria*

0

800km

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. After the merger of the two companies, Geita is now a wholly owned subsidiary.

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. (40m x 40m x 5m) 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 selective mining unit (SMU).

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

Type of Drilling

Mine/Project

Category

Spacing

Diamond

RC

Other

Comments

m (- x -)

Geita

Measured

10 x 10

Indicated

40 x 40

Inferred

50 x 50

Tanzania operations: overview

Mineral Resource estimation

111

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 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.

Ore Reserve modifying factors (as at 31 December 2007)

Cut-off

Metallurgical  
grade

Dilution

(1)

recovery

Other

Mine/Project

g/t (Au)

%

factor

factor

Comments

Geita

0.8 – 3.0

4% – 12%

66% – 95%

n/a

Recovery and cut-off grade vary

with pit and ore type.

*1. Where no dilution factor is indicated the dilution is inherent in the resource model estimate.*

Mineral Resource and Ore Reserve comparison by operation (attributable)

Gold content (million ounces)

% change

% change

from

from 2006

Net diff

2006

Percentage

Other

before

after

after

Mine/Project

attributable

Category

2006 Depletion(1)

change(2)

depletion 2007



depletion  
depletion  
Comments

Geita

100%

Resource

14.736

(0.726)

(1.556)

(11%) 12.454

(2.282)

(15%)

Increase in cost (1.6Moz) and revision  
to estimation methodology (0.6Moz)

Reserve

8.474

(0.477)

(1.516)

(18%)

6.481

(1.993)

(24%)

Reconciliation factors (0.8Moz),  
flattening of slopes (0.5Moz), modelling  
revisions (0.2 Moz) and costs (0.1Moz)

Tanzania Totals

Resource

14.736 (0.726)

(1.556)

(11%) 12.454 (2.282) (15%)

Reserve

8.474 (0.477)

(1.516)

(18%)

6.481 (1.993) (24%)

1. Depletion: reduction in reserves based on ore delivered to the plant and corresponding reduction in resource.

2. Other change: combination of changes due to gold price, cost, exploration, methodology, model change and scope change.

112

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Tanzania operations: Geita

Geita

Geita gold mine is located approximately 910km from Dar es Salaam in the Lake Zone of Northern Tanzania; the tenement is geologically 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 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, which have been named Nyamulilima in the west, Geita in the central part and Kukuluma to the north-east. 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.

113

NYRC 126

36m@6.2g/t

NYRC 223

37m@7.1g/t

NYRC 228

24m@5.1g/t

NYRC 327

27m@5.3g/t

NYRC 355

15m@9.1g/t

NYRC 536

17m@7.1g/t

NYDD 32

19m@4.6g/t

NYDD 31

26m@3.9g/t

NYRC 133

30m@10.2g/t

SE

NW

1000m RL

500m RL

Nyankanga

section 50 120m E

500m

Ferricrete

Quartz porphyry

Felsic porphyry

Plagioclase-porphyrific diorite

Mineralisation

Diorite (shown in boreholes only)

BIF (shown in boreholes only)

Current

pitshell

LOM

pitshell

*Nyankanga section showing the ore body geometry*

Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

Geita – Surface

Measured

6,308

1.20

7,555

6,954

0.035

243

Indicated

76,140

3.48

265,033

83,930

0.102

8,521

Inferred

13,377

2.76

36,943

14,746

0.081

1,188

Total

95,825

3.23

309,531

105,629

0.094

9,952

Geita – Underground

Measured

–

–

–

–

–

–

Indicated

8,283

5.92

49,026

9,130

0.173

1,576

Inferred

5,182  
5.56  
28,810  
5,712  
0.162  
926  
Total  
13,465  
5.78  
77,837  
14,842  
0.169  
2,503  
Geita –  
Measured  
6,308  
1.20  
7,555  
6,954  
0.035  
243  
Total Mineral Resource  
Indicated  
84,423  
3.72  
314,059  
93,061  
0.109  
10,097  
Inferred  
18,559  
3.54  
65,753  
20,458  
0.103  
2,114  
Total  
109,290  
3.54  
387,367  
120,472  
0.103  
12,454

Tanzania operations: Geita continued

114

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Exclusive Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(Mt)

(g/t)

tonnes

(Mt)

(oz/t)

(Moz)

Geita

Measured

–

–

–

–

–

–

Indicated

30.1

3.70

111.4

33.2

0.108

3.6

Inferred

18.6

3.54

65.8

20.5

0.103

2.1

Total

48.6

3.64

177.1

53.6

0.106

5.7

Inferred Mineral Resources in business plan

Inferred Mineral Resource is used in the pit optimisation process and 0.6 million ounces are present in the optimised pit of which 0.13 million ounces are included in the final production scheduling.

Geita: Mineral Resource reconciliation

2006 vs 2007

Ounces (millions)

14.7

2006

-0.7

Depletion

0.6

Gold price

0

Other

0.2

Explo-

ration

12.4

2007

-1.7

Cost

11.4

9.4

-0.6

Metho-

dology

Change

15.4

13.4

12.4

14.4

10.4

Geita: Ore Reserve reconciliation

2006 vs 2007

Ounces (millions)

8.5

2006

6.5

2007

-0.3

Model

change

-0.5

Depletion

4.5

-1.3

Scope

change

Change

5.5

7.5  
6.5  
Ore Reserves  
Metric  
Imperial  
Au  
Resource  
Tonnes  
Grade  
Au  
Tons  
Grade  
ounces  
Mine/Project  
category  
(000s)  
(g/t)  
(kg)  
(000s)  
(oz/t)  
(000s)  
Geita – Surface  
Proved  
5,621  
1.01  
5,701  
6,196  
0.030  
183  
Probable  
62,368  
3.14  
195,881  
68,749  
0.092  
6,298  
Total  
67,989  
2.96  
201,582  
74,945  
0.086  
6,481



115

Tonnes above cut-off  
 Ave grade above cut-off  
 Geita Surface – Metric  
 Tonnes above  
 cut-off (millions)

0.00

41.81

0.00

Cut-off grade (g/t)

Ave grade  
 above cut-off (g/t)

9.07

7.86

5.43

4.21

3.00

125.42

111.49

97.55

27.87

13.94

1.00

2.00

3.00

4.00

5.00

6.64

55.74

69.68

83.61

139.36

3.61

4.82

6.04

7.25

8.47

Geita Surface – Imperial

Tons above  
 cut-off (millions)

0.00

46.08

0.00

Cut-off grade (g/t)

Ave grade

above cut-off (g/t)

0.26

0.21

0.11

0.05

0.00

138.25  
122.89  
107.53  
30.72  
15.36  
0.03  
0.06  
0.09  
0.12  
0.16  
61.45  
76.81  
92.17  
153.61  
0.03  
0.08  
0.13  
0.19  
0.24  
Tons above cut-off  
Ave grade above cut-off  
Geita Underground – Metric  
Tonnes above  
cut-off (millions)  
0.00  
27.87  
0.00  
Cut-off grade (g/t)  
125.42  
Ave grade  
above cut-off (g/t)  
13.17  
11.90  
9.35  
8.08  
5.54  
4.27  
3.00  
111.49  
97.55  
83.61  
69.68  
55.74  
41.81  
13.94  
3.00  
8.00  
6.81  
10.62  
14.44  
1.00

2.00  
6.00 7.00  
9.00  
139.36  
4.00  
15.71  
5.00  
10.00  
Tonnes above cut-off  
Ave grade above cut-off  
Geita Underground – Imperial  
Tons above  
cut-off (millions)  
0.00  
0.15  
0.20 0.23  
0.06  
0.18  
122.89  
0.00  
0.26  
Cut-off grade (oz/t)  
153.61  
138.25  
Ave grade  
above cut-off (oz/t)  
0.46  
0.41  
0.37  
0.32  
0.27  
0.23  
0.18  
0.00  
0.14  
0.09  
0.05  
107.53  
92.17  
76.81  
61.45  
45.08  
30.72  
15.36  
0.03  
0.09 0.12  
0.29  
Tons above cut-off  
Ave grade above cut-off  
Competent persons  
Professional

Registration

Relevant

Type

Name

organisation

number

experience

Mineral Resource

J Gaunt

AusIMM

220840

12 years

Ore Reserve

E Smuts

AusIMM

211798

12 years

Grade tonnage information

116

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Mineral Resource and Ore Reserve gold price

Units

2007

2006

Mineral Resource Gold Price

US\$/oz

700

650

Ore Reserve Gold Price

US\$/oz

600

550

Operations

U n i t e d S t a t e s

Cripple Creek

& Victor

Washington

DC

New York

Chicago

Denver

Colorado

San

Francisco

Los

Angeles

0

1000km

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. The stake in the Jerritt Canyon joint venture was sold to Queenstake in mid-2003. AngloGold Ashanti (Colorado) Corporation holds a 67% interest in CC&V with a 100% interest in gold produced until loans extended to the joint venture are repaid.

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. Smaller sub-models are maintained for Altman and Wild Horse to accommodate the vertical shift in the mining benches. The estimation method is MIK and the primary variable estimated is the recoverable gold (not contained 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 (SLV) is a robust regression technique using geologically logged categorical variables. Modelling software is MineSight® and updated drill hole

information is used throughout. The drill-hole database is thoroughly reviewed before each Mineral Resource estimation and the estimation domains are based primarily on lithology for each deposit.

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

Type of Drilling

Mine/Project

Category

Spacing

Diamond

RC

Other

Comments

m (- x -)

CC&V

Measured

<30 x 30

Indicated

>30 x 30

Use probability field to delineate

Measured and Indicated Resource.

Inferred

>30 x 30

Double search range.

Grade/Ore

5 x 6

Blastholes are used.

Control

United States operations: overview

117

Inferred Mineral Resource in business plan

Inferred Mineral Resource is not used in the pit optimisation.

Ore Reserve estimation

The Ore Reserve pit designs were based on Lerch-Grossman (LG) optimisations of the geological 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 fell into two categories of overall angles (60° and 45°). All deposits were designed using a 10.7m (35 feet) bench height.

Ore Reserve modifying factors (as at 31 December 2007)

Cut-off

Metallurgical

grade

Dilution

(1)

Recovery

Other

Mine/Project

g/t (Au)

%

Factor

Factor

CC&V

0.24

n/a

62%

n/a

*1. Where no dilution factor is indicated the dilution is inherent in the resource model estimate.*

Mineral Resource and Ore Reserve comparison by operation (attributable)

Gold content (million ounces)

% change

% change

from

from 2006

Net diff

2006

Percentage

Other

before

after

after

Mine/Project

attributable

Category

2006 Depletion(1)

change(2)

depletion

2007 depletion  
depletion

Comments

CC&V

100%

Resource

7.333

(0.560)

5.295

72% 12.068

4.735

65%

Primarily revisions to the  
methodology with contribution from  
improved economics and  
exploration

Reserve

3.842

(0.560)

1.471

38%

4.753

0.911

24%

Extension to mine life

USA Totals

Resource

7.333 (0.560)

5.295 72% 12.068 4.735 65%

Reserve

3.842 (0.560)

1.471 38% 4.753 0.911 24%

1. Depletion: reduction in reserves based on ore delivered to the plant and corresponding reduction in resource.

2. Other change: combination of changes due to gold price, cost, exploration, methodology, model change and scope change.



118

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

United States operations: Cripple Creek and Victor (CC&V)

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, open-pit operation. The ore is treated using a valley-type, heap-leach process with activated carbon used to recover the gold. The resulting doré buttons are shipped to a refinery for final processing.

#### Geology

The dominant geological feature of the District is an intensely-altered, alkaline Tertiary-aged, diatreme-intrusive complex hosted in Precambrian rocks located between the towns of Cripple Creek and Victor. The Precambrian rocks consist of biotite gneiss, granodiorite, quartz monzonite and granite. The diatreme intrusive complex is 6.4km long, 3.2km wide and consists of diatremal breccia that has been intruded by stocks, dykes and discordant breccias. Diatremal breccia lithologies include breccias composed exclusively of volcanic, Precambrian or sedimentary material to any combination of the three. Early intrusions are predominantly within the alkaline phonolite-phonotephrite petrographic series and were followed by later lamprophyres. All rocks have undergone a complex history of structural deformation and hydrothermal activity. Gold mineralisation, dated between 27.8 Ma and 26.6 Ma is hosted in all rock types as veins and disseminated and/or structurally-controlled orebodies.

The majority of the complex is filled with the eruptive phase Cripple Creek Breccia host rock. This complex was subsequently intruded by a series of Tertiary-aged intrusive dykes and sills that included syenites, phonolites, phonotephrites and lamprophyres. These intrusives occupy all of the dominant district structural orientations as do laccoliths and cryptodomes. District structures are generally near vertical and strike north-northwest to north-east. These structures are commonly intruded by phonolite dykes which appear to have also acted as primary conduits for the late-stage, gold mineralising solutions. Higher grade pods of mineralisation occur at structural intersections and/or as sheeted vein zones along zones of strike deflection. High-grade gold mineralisation is 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 and occur as native gold with pyrite or native gold after gold-silver tellurides. Gold occurs within hydrous iron and manganese oxides and as gold-silver tellurides. Silver is present but is economically unimportant. Gold mineralisation can be encapsulated by iron and manganese oxides, pyrite, K-feldspar

alteration and quartz.

Cripple Creek and Victor (CC&V)

119

Mineral Resource

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

CC&V – Main Pit

Measured

250,115

0.81

203,326

275,704

0.024

6,537

Indicated

173,457

0.73

126,091

191,204

0.021

4,054

Inferred

70,552

0.65

45,948

77,770

0.019

1,477

Total

494,124

0.76

375,364

544,678

0.022

12,068

CC&V Total

Measured

250,115  
0.81  
203,326  
275,704  
0.024  
6,537  
Indicated  
173,457  
0.73  
126,091  
191,204  
0.021  
4,054  
Inferred  
70,552  
0.65  
45,948  
77,770  
0.019  
1,477  
Total  
494,124  
0.76  
375,364  
544,678  
0.022  
12,068  
Exclusive Mineral Resource  
Metric  
Imperial  
Au  
Resource  
Tonnes  
Grade  
Au  
Tons  
Grade  
ounces  
Mine/Project  
category  
(Mt)  
(g/t)  
tonnes  
(Mt)  
(oz/t)  
(Moz)  
CC&V  
Measured  
142.2  
0.70  
99.5

156.8

0.020

3.2

Indicated

125.9

0.65

82.1

138.7

0.019

2.6

Inferred

70.6

0.65

45.9

77.8

0.019

1.5

Total

338.7

0.67

227.5

373.3

0.020

7.3

CC&V: Mineral Resource reconciliation

2006 vs 2007

Ounces (millions)

7.3

2006

-0.6

Depletion

1.6

Gold price

0.0

Other

1.2

Explo-

ration

12.0

2007

0.0

Cost

6.8

2.5

Metho-

dology

Change

7.8

8.8

9.8

11.8

10.8  
Cripple Creek and Victor: Ore Reserve reconciliation  
2006 vs 2007  
Ounces (millions)  
3.8  
2006  
2.6  
2007  
0.7  
Model  
change  
-0.6  
Depletion  
3.7  
0.7  
-1.3  
Scope  
change  
Change  
1.7  
2.7

United States operations: CC&V continued

120

AngloGold Ashanti Supplementary Information: Mineral Resources and Ore Reserves 2007

Ore Reserve

Metric

Imperial

Au

Resource

Tonnes

Grade

Au

Tons

Grade

ounces

Mine/Project

category

(000s)

(g/t)

(kg)

(000s)

(oz/t)

(000s)

CC&V – Main Pit

Proved

107,868

0.96

103,848

118,904

0.028

3,339

Probable

47,586

0.92

43,988

52,455

0.027

1,414

Total

155,454

0.95

147,836

171,359

0.028

4,753

CC&V Total

Proved

107,868

0.96

103,848

118,904

0.028

3,339  
Probable  
47,586  
0.92  
43,988  
52,455  
0.027  
1,414  
Total  
155,454  
0.95  
147,836  
171,359  
0.028  
4,753  
Cripple Creek & Victor – Metric  
Tonnes above  
cut-off (millions)  
0.40  
30.00  
0.00  
Cut-off grade (g/t)  
Ave grade  
above cut-off (g/t)  
8.00  
7.00  
4.00  
2.00  
0.00  
Tonnes above cut-off  
Ave grade above cut-off  
80.00  
70.00  
20.00  
10.00  
0.60  
0.80  
1.00  
1.20  
1.40  
1.60  
6.00  
40.00  
50.00  
60.00  
1.80  
1.00  
3.00  
5.00  
Cripple Creek & Victor – Imperial



Tons above  
cut-off (millions)  
0.005  
300.00  
0.00  
Cut-off grade (g/t)  
Ave grade  
above cut-off (g/t)  
0.14  
0.08  
0.04  
0.00  
100.00  
0.010  
0.015  
0.020  
0.025  
0.030  
0.12  
400.00  
500.00  
0.02  
0.06  
0.10  
200.00  
Tons above cut-off  
Ave grade above cut-off  
Competent persons  
Professional  
Registration  
Relevant  
Type  
Name  
organisation  
number  
experience  
Mineral Resource  
L Billingsley  
AusIMM  
224930  
18 years  
Ore Reserve  
L Billingsley  
AusIMM  
224930  
18 years  
Grade tonnage information

Russell and Associates

[www.anglogoldashanti.com](http://www.anglogoldashanti.com)

**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.

AngloGold Ashanti Limited

Date: March 31, 2008

By:

/s/ L Eatwell\_\_\_\_\_

Name: L EATWELL

Title: Company Secretary