ANGLOGOLD ASHANTI LTD
Form 6-K
March 30, 2009
**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 27, 2009
Commission File Number 1-14846
AngloGold Ashanti Limited
(Translation of registrant's name into English)
76 Jeppe Street
Newtown
Johannesburg, 2001
(P.O. Box 62117, Marshalltown, 2107)
South Africa
(Address of principal executive offices)

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

Form 20-F X Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):
Yes No X
Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):
Yes No X
Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.
Yes No X

Enclosure: Press release ANGLOGOLD ASHANTI - 2008 MINERAL RESOURCES AND ORE RESERVES

Mineral Resource
and Ore Reserve Report 2008

Mineral Resources and Ore Reserves are reported in accordance with the minimum standards described by the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2004 Edition), and also conform to the standards set out in the South African Code for the Reporting of Mineral Resources and Mineral Reserves (SAMREC 2000 Code). Mineral Resources are inclusive of the Ore Reserve component unless otherwise stated.

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

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

This document, the Mineral Resource and Ore Reserve Report 2008, is a key component of the AngloGold Ashanti suite of 2008 annual reports produced to record the company's performance regarding its finances, operations, and sustainable development for the 12 months ended 31 December 2008. Other major documents in this suite of reports are the Annual Financial Statements 2008 and the Report to Society 2008, all of which together with the Country Reports are available on the corporate website, *www.anglogoldashanti.com*

The Annual Financial Statements 2008 contains a summary extract of AngloGold Ashanti's Mineral Resources and Ore Reserves.

of report

Scope

*Report to Society 2008*

*Annual Financial Statements 2008*

*Mineral Resource and Ore*

*Reserve Report 2008*

*Country Reports 2008*

*Online Report 2008*

Note:

Rounding of figures in this document may result in minor computational discrepancies.

Throughout this report, dollar or $ represents US dollar unless otherwise stated.

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Mponeng
Savuka
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97

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ANGLOGOLD ASHANTI - A LEADING GLOBAL PRODUCER OF GOLD

Headquartered in Johannesburg, South Africa, the company has 21 operations and a number of exploration programmes in both the established and new gold-producing regions of the world.

In 2008, AngloGold Ashanti produced 4.98 million ounces of gold from its operations – an estimated 7% of global production – making it the third largest producer in the world. The bulk of its production came from deep-level underground operations (41%) and surface operations (2%) in South Africa. Contributions from other countries were Ghana (11%), Mali (8%), Australia (9%), Brazil (8%), Tanzania (5%), USA (5%), Guinea (7%), Argentina (3%) and Namibia (1%). In South Africa, ramping up of production at Moab Khotsong continued and is expected to increase significantly in 2009, and to be at full production levels in 2012.

During 2008, AngloGold Ashanti's global exploration programme continued to gain momentum, either directly or in collaboration with exploration partnerships and joint ventures, in Colombia and the Democratic Republic of Congo (DRC), Australia, Russia, China and the Philippines.

As at 31 December 2008, AngloGold Ashanti employed 62,895 people, including contractors, had Proved and Probable Ore Reserves of 74.9 million ounces of gold and had incurred capital expenditure of $1,201 million for the year.

In response to an ever-changing socio-economic environment, AngloGold Ashanti has announced its intention to review its current structure and asset base. It remains a values-driven company and these values, the foremost of which is safety, and the group's business principles continue to guide the company, its managers and employees, and form the basis of the company's contract with all of its business – shareholders, employees, communities, business partners, governments and civil society organisations.

STOCK EXCHANGE INFORMATION

AngloGold Ashanti's primary stock exchange listing is on the JSE Limited (Johannesburg). It is also listed on the exchanges in New York, London, Australia and Ghana as well as on Euronext Paris and Euronext Brussels. AngloGold Ashanti had 353,483,410 ordinary shares in issue and a market capitalisation of $9.8 billion as at 31 December 2008 (31 December 2007: $11.9 billion).

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AngloGold Ashanti global operations and exploration: 2008
Cripple
Creek
& Victor
(CC&V)
USA
Brazil
Argentina
Navachab
Geita
Namibia
Tanzania
Republic of
South Africa
SA operations
Great Noligwa
Mponeng
Savuka
Kopanang
Tau Lekoa**
Moab Khotsong
TauTona
Mali
Guinea
Morila
Sadiola and Yatela
Siguiri
Obuasi
Iduapriem
Ghana
Sunrise Dam
Boddington*
Australia
Serra
Grande
Cerro Vanguardia
Brasil
Mineração
N
Operations
Greenfields exploration
and alliance areas
DRC
China
Russia
Philippines
Tropicana
Gramalote
La Colosa

Jinchanggou
Yili Yunlong
Mongbwalu
Anenskoye
Veduga
Aprelkovskoye
Sovromennie
Mapawa Area
Quebradona
Colombia
* sold early 2009
** sale transaction announced

Mineral Resources and Ore Reserves are reported in accordance with the minimum standards described by the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code, 2004 Edition), and also conform to the standards set out in the South African Code for the Reporting of Mineral Resources and Mineral Reserves (SAMREC 2000 Code). Mineral Resources are inclusive of the Ore Reserve component unless otherwise stated.

MINERAL RESOURCES

The 2008 Mineral Resource increased by 40.5 million ounces before the subtraction of depletion. After a depletion of 7.2 million ounces, the net increase is 33.4 million ounces to give a total Mineral Resource of 241.0 million ounces. Mineral Resources were estimated at a gold price of $1,000/oz (2007: $700/oz). The increased gold price resulted in 13.3 million ounces being added to the Mineral Resource while successful exploration and revised modelling resulted in a further increase of 27.5 million ounces. The remaining loss of 0.3 million ounces is the result of various other reasons.

Mineral Resource
Million oz
Mineral Resource as at
31 December 2007
207.6
Reductions
TauTona
Transfers to Mponeng
(1.9)
Great Noligwa
Transfer of SV4 to Moab Khotsong
(1.2)
Tau Lekoa
Significant structure and facies changes to the north of Tau Lekoa
(1.2)
Other
Total of non-significant changes
(1.4)
Additions
La Colosa
Successful greenfields exploration
12.3
Mponeng
Granting of WUDL’s licence and transfers from TauTona
7.9
Moab Khotsong
Transfer of SV4 to Moab Khotsong
4.4
Obuasi
Exploration below 50 Level
3.9
Savuka
Improved economic outlook as a result of an increase in the gold price
1.8
Boddington
Growth in Mineral Resources: successful near-mine exploration drilling and higher gold price
1.6
Iduapriem
Due to increase in Mineral Resource gold price and remodelling of Block 7 & 8

1.4
Cripple Creek & Victor
Successful exploration
1.2
Sadiola
Due to increase in Mineral Resource gold price, increase in deep sulphides project
1.2
Siguiri
Due to increase in Mineral Resource gold price and increases in the Mineral Resource at
Sintroko and Foulata
1.0
Other
Total of non-significant changes
2.4
Mineral Resource as at
31 December 2008
241.0
ORE RESERVES
The 2008 Ore Reserve increased by 7.7 million ounces before the subtraction of depletion. After a depletion of 5.9 million ounces, the net increase is 1.8 million ounces to give a total Ore Reserve of 74.9 million ounces. A gold price of $720/oz was used for Ore Reserve estimates (2007: $600/oz). The change in economic assumptions made from 2007 to 2008 resulted in the Ore Reserve increasing by 2.7 million ounces while exploration and modelling resulted in an additional increase of 5.0 million ounces.
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and Ore Reserves - group overview
Mineral Resources

Ore Reserve
Million oz
Ore Reserve as at
31 December 2007
73.1
Reductions
TauTona
Carbon Leader ground between 123-126 levels was transferred to Mponeng. With the change to scattered grid mining, lower value estimates resulting from increased sampling and drilling resulted in reductions. These were partially offset by a higher mine call factor and the inclusion the Carbon Leader eastern block.
(1.5)
Geita
Mineral Resource model changes and the application of grade factors to mitigate low model confidence; cost increases
(1.4)
Great Noligwa
Transfer of the SV4 section to Moab Khotsong
(1.3)
Other
Total of non-significant changes
(1.1)
Additions
Mponeng
Increased grades, the additional ground from TauTona 123-126 level and improved economics which allowed for the mining of Block 3 & 5
2.8
Obuasi
The increase is due to a revised mine design and schedule
1.3
Boddington
The growth in Ore Reserve is due to successful drilling and a higher gold price
1.1
Siguiri
The Seguelen NW and Sintroko deposits were upgraded from Inferred to Indicated and the mining efficiency increased
0.6
Other
Total of non-significant changes
1.3
Ore Reserve as at
31 December 2008
74.9
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BY-PRODUCTS

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

These include 0.19 million tonnes of uranium from the South African operations, 0.29 million tonnes of copper from Australia, 0.44 million tonnes of sulphur from Brazil and 35.7 million ounces of silver from Argentina.

EXTERNAL AUDIT OF MINERAL RESOURCE AND ORE RESERVE STATEMENT

During the course of the year and as part of the rolling audit programme, the AngloGold Ashanti's 2008 Mineral Resources and Ore Reserves for the following operations were submitted for external audit:

- Mponeng
- TauTona
- Vaal River Surface Sources
- Iduapriem
- Navachab
- Sadiola
- Yatela

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

COMPETENT PERSONS

The information in this report that relates to Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by the competent person. These individuals are identified in the report. The competent person consent to the inclusion of Exploration Results, Mineral Resources and Ore Reserves information in this report, in the form and context in which it appears.

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

Mineral Resource and Ore Reserve Report 2008
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Mineral Resources by country (attributable) inclusive of Ore Reserves
Contained
Contained
as at 31 December 2008
Resource
Tonnes
Grade
gold
gold
category
million
g/t
tonnes
Moz
South Africa
Measured
25.56
13.80
352.57
11.34
Indicated
739.87
3.27
2,416.79
77.70
Inferred
56.35
10.47
590.06
18.97
Total
821.77
4.09
3,359.42
108.01
Argentina
Measured
11.01
1.73
19.04
0.61
Indicated
22.00
3.48
76.49
2.46
Inferred
4.97
4.11

20.45
0.66
Total
37.99
3.05
115.98
3.73
Australia
Measured
101.25
1.19
120.77
3.88
Indicated
404.49
0.84
340.15
10.94
Inferred
154.79
0.89
138.43
4.45
Total
660.53
0.91
599.35
19.27
Brazil
Measured
11.11
7.01
77.80
2.50
Indicated
13.46
6.49
87.36
2.81
Inferred
28.51
6.76
192.59
6.19
Total
53.07
6.74
357.75
11.50
Colombia
Measured

–
–
–
–
Indicated
–
–
–
–
Inferred
409.77
1.01
415.45
13.36
Total
409.77
1.01
415.45
13.36
Democratic Republic
Measured
–
–
–
–
of Congo
Indicated
–
–
–
–
Inferred
29.25
2.69
78.53
2.52
Total
29.25
2.69
78.53
2.52
Ghana
Measured
94.21
5.21
490.68
15.78
Indicated
138.91
2.86
397.31

12.77
Inferred
100.10
4.25
425.27
13.67
Total
333.23
3.94
1,131.26
42.22
Guinea
Measured
33.53
0.63
21.25
0.68
Indicated
125.22
0.84
105.53
3.39
Inferred
64.08
0.90
57.85
1.86
Total
222.82
0.83
184.63
5.94
Mali
Measured
19.40
1.64
31.86
1.02
Indicated
26.39
2.48
65.32
2.10
Inferred
11.10
2.30
25.49
0.82
Total
56.89
2.16

122.68
3.94
Namibia
Measured
13.83
0.74
10.25
0.33
Indicated
61.94
1.26
78.05
2.51
Inferred
42.31
1.09
46.25
1.49
Total
118.08
1.14
134.55
4.33
Tanzania
Measured
–
–
–
–
Indicated
83.84
3.63
304.10
9.78
Inferred
25.12
3.81
95.77
3.08
Total
108.97
3.67
399.87
12.86
United States
Measured
255.90
0.87
223.31
7.18
Indicated

183.75
0.73
134.97
4.34
Inferred
83.61
0.66
55.60
1.79
Total
523.26
0.79
413.88
13.31
Total
Measured
565.80
2.38
1,347.53
43.32
Indicated
1,799.87
2.23
4,006.08
128.80
Inferred
1,009.96
2.12
2,141.75
68.86
Total
3,375.63
2.22
7,495.36
240.98

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Mineral Resources
and Ore Reserves *cont.*

Mineral Resources by country (attributable) exclusive of Ore Reserves

| Contained | Contained |
|---|---|
| as at 31 December 2008 | Resource | Tonnes | Grade | gold | gold |
| | category | million | g/t | tonnes | Moz |
| South Africa | Measured | 14.62 | 14.08 | 205.80 | 6.62 |
| | Indicated | 556.66 | 2.70 | 1,504.17 | 48.36 |
| | Inferred | 56.35 | 10.47 | 590.06 | 18.97 |
| | Total | 627.63 | 3.66 | 2,300.04 | 73.95 |
| Argentina | Measured | – | – | – | – |
| | Indicated | – | – | – | – |
| | Inferred | | | | |

–
–
–
–
Total
–
–
–
–
Australia
Measured
34.85
1.38
48.22
1.55
Indicated
189.99
0.78
147.58
4.74
Inferred
154.79
0.89
138.43
4.45
Total
379.63
0.88
334.22
10.75
Brazil
Measured
3.20
6.63
21.20
0.68
Indicated
6.63
6.29
41.74
1.34
Inferred
27.49
6.81
187.13
6.02
Total
37.32
6.70
250.06
8.04

Colombia
Measured
–
–
–
–
Indicated
–
–
–
–
Inferred
409.77
1.01
415.45
13.36
Total
409.77
1.01
415.45
13.36
Democratic Republic
Measured
–
–
–
–
of Congo
Indicated
–
–
–
–
Inferred
29.25
2.69
78.53
2.52
Total
29.25
2.69
78.53
2.52
Ghana
Measured
33.32
6.42
241.08
6.88
Indicated
73.90

2.48
183.06
5.89
Inferred
56.46
3.75
211.95
6.81
Total
163.69
3.72
609.09
19.58
Guinea
Measured
5.57
0.70
3.91
0.13
Indicated
37.13
0.79
29.51
0.95
Inferred
64.36
0.91
58.49
1.88
Total
107.06
0.86
91.91
2.95
Mali
Measured
4.34
0.81
3.50
0.11
Indicated
21.42
2.37
50.75
1.63
Inferred
11.10
2.30
25.49
0.82
Total

36.87
2.16
79.74
2.56
Namibia
Measured
6.63
0.56
3.71
0.12
Indicated
34.36
1.18
40.61
1.31
Inferred
42.31
1.09
46.25
1.49
Total
83.30
1.09
90.58
2.91
Tanzania
Measured
–
–
–
–
Indicated
35.95
3.32
119.38
3.84
Inferred
25.12
3.81
95.77
3.08
Total
61.07
3.52
215.15
6.92
United States
Measured
143.33
0.83
118.71

3.82
Indicated
128.04
0.67
86.38
2.78
Inferred
83.61
0.66
55.60
1.79
Total
354.99
0.73
260.69
8.38
Total
Measured
245.87
2.52
619.12
19.91
Indicated
1,084.10
2.03
2,203.18
70.83
Inferred
960.61
1.98
1,903.16
61.19
Total
2,290.58
2.06
4,725.46
151.93

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Ore Reserves by country (attributable)

| Contained | Contained |
|---|---|
| as at 31 December 2008 | Tonnes | Grade | gold | gold |
| Category | million | g/t | tonnes | Moz |
| South Africa | | | | |
| Proved | 13.72 | 7.81 | 107.13 | 3.44 |
| Probable | 215.10 | 4.37 | 939.79 | 30.21 |
| Total | 228.82 | 4.58 | 1,046.92 | 33.66 |
| Argentina | | | | |
| Proved | 9.99 | 1.39 | 13.90 | 0.45 |
| Probable | 12.29 | 3.52 | 43.24 | 1.39 |
| Total | 22.27 | 2.56 | 57.13 | 1.84 |
| Australia | | | | |
| Proved | 67.82 | 1.10 | | |

74.54
2.40
Probable
214.50
0.90
192.57
6.19
Total
282.33
0.95
267.11
8.59
Brazil
Proved
7.77
6.44
50.06
1.61
Probable
7.02
5.82
40.87
1.31
Total
14.79
6.15
90.93
2.92
Ghana
Proved
56.85
4.24
240.89
7.74
Probable
36.43
3.82
139.10
4.47
Total
93.28
4.07
379.98
12.22
Guinea
Proved
56.13
0.56
31.48
1.01
Probable

67.11
1.04
69.64
2.24
Total
123.24
0.82
101.12
3.25
Mali
Proved
9.29
1.87
17.33
0.56
Probable
6.65
2.26
15.02
0.48
Total
15.94
2.03
32.35
1.04
Namibia
Proved
7.21
0.89
6.39
0.21
Probable
27.58
1.28
35.19
1.13
Total
34.78
1.20
41.58
1.34
Tanzania
Proved
–
–
–
–
Probable
54.30
2.93
159.06

5.11
Total
54.30
2.93
159.06
5.11
United States
Proved
122.57
0.93
104.60
3.36
Probable
55.70
0.87
48.59
1.56
Total
168.27
0.91
153.19
4.93
Total
Proved
341.35
1.89
646.31
20.78
Probable
696.67
2.42
1,683.07
54.11
Total
1,038.02
2.24
2,329.38
74.89

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and Ore Reserves - by operation
Mineral Resources

Mineral Resource and Ore Reserve Report 2008
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Regional overview
South Africa
The South African operations comprise seven underground mines located in two geographical regions on the Witwatersrand Basin called the Vaal River and West Wits operations.
The Vaal River operations consist of the Great Noligwa, Kopanang, Moab Khotsong and Tau Lekoa mines. The primary reefs mined in this region are the Vaal Reef (VR) and the Ventersdorp Contact Reef (VCR) and the secondary reef mined is the Crystalkop Reef (C Reef).
The West Wits operations are made up of Mponeng, Savuka and TauTona, which are situated near the town of Carletonville. The primary reefs mined are the Carbon Leader Reef (CLR) and the VCR.
All seven operations are 100% owned by AngloGold Ashanti. In addition, the Vaal River Surface and West Wits Surface operations mine the waste rock dumps and tailings dams which result from the mining and processing of the primary and secondary reef horizons.
The South African operations are all located in the rocks of the famous Witwatersrand Basin, which is regarded as the greatest gold-bearing repository on Earth.
GEOLOGY OF THE WITWATERSRAND BASIN
The Witwatersrand Supergroup (deposited in area often described as the Witwatersrand Basin) comprises a six-kilometre thick sequence of predominantly argillaceous and arenaceous sediments that extend laterally for some 300 kilometres north-east/south-west and 100 kilometres north-west/south-east on the Kaapvaal Craton. The upper portion of the sequence contains the laterally extensive, gold-bearing quartz pebble conglomerate horizons (commonly referred to as “reefs”).
Further west, south and east the basin is overlain by up to 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 to 2.8 billion years old.
*Free State*
*North West*
West Wits operations
Savuka
TauTona
Mponeng
Vaal River operations
Great Noligwa
Kopanang
Tau Lekoa
Klerksdorp
Carletonville
Pretoria
Johannesburg
Durban
Port Elizabeth
East London
Bloemfontein
Cape Town
SOUTH AFRICA
0
400km
Operations
N
Moab Khotsong

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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 OPERATIONS

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

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 gold grades tend to be erratic.

VAAL RIVER OPERATIONS

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

•

The VR contains approximately 85% of the Ore Reserve tonnage with mining grades of between 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;

Carletonville
Fochville
Mponeng
TauTona
Savuka
Welverdiend
Location of West Wits operations
Province
Gold Fields
(Driefontein)
Gauteng
Orkney
Province
Tau
Lekoa
Weltevreden
Moab
Khotsong
Kopanang
Great
Noligwa

Location of Vaal River operations
Free State

Mineral Resource and Ore Reserve Report 2008
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Mineral Resource and Ore Reserve gold prices and exchange rates

| Units | 2008 | 2007 |
|---|---|---|
| Gold price – Mineral Resource | | |
| US$/oz | 1,000 | 700 |
| Gold price – Ore Reserve | | |
| US$/oz | 720 | 600 |
| Exchange rate – South Africa | | |
| ZAR/US$ | 8.67 | 7.70 |

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

MINERAL RESOURCE ESTIMATION

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

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

South Africa

*cont.*

Mineral Resource and Ore Reserve Report 2008
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Details of average drillhole spacing and type in relation to Mineral Resource classification

| Mine/Project | Category | Spacing | Diamond | Chip | Comments |
|---|---|---|---|---|---|
| | | m (- x -) | drilling | sampling | |
| South African mines | Measured | 5 x 5 | x | Based on constrained kriging variance, supported by chip sampling in stopes | |
| | Indicated | 2 x 200 | x | x | Supported by underground drillholes and chip sampling of reef development ends |
| | Inferred | 1,000 x 1,000 | x | | Supported by surface drillholes |
| Grade control | | 5 x 5 | x | Chipped channel samples | |

ORE RESERVE ESTIMATION

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

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Ore Reserve modifying factors
as at 31 December 2008

| Ore Reserve | Cut-off | Stoping | Mine call | Cut-off | | | |
|---|---|---|---|---|---|---|---|
| | value | width | Dilution | factor | Metallurgical | Mine | |
| | grade g/t Au | cmg/t Au | cm | % | (MFC) % | recovery % | |
| Great Noligwa | | | | | | | |
| Crystalkop Reef | 4.70 | 600 | 128 | 10.0 | 66.62 | 96.13 | |
| Vaal Reef | 3.74 | 600 | 160 | 34.0 | 66.62 | 96.13 | |
| Kopanang | | | | | | | |
| Crystalkop Reef | 4.90 | 500 | 102 | 23.0 | 68.49 | 97.81 | |
| VR Base | 4.90 | 500 | 102 | 23.0 | 68.49 | 97.81 | |

VR EDOM
4.90
500
102
18.0
68.49
97.81
Moab Khotsong
Middle Mine Area
4.70
700
149
49.0
79.11
97.20
PZ 2
5.03
700
139
25.0
78.00
96.67
Top Mine Area
4.17
700
168
28.0
67.00
97.20
Tau Lekoa
VCR Base
2.78
400
144
31.0
84.32
97.35
Mponeng
CL Below 120 Level
7.50
750
100
10.0
81.00
98.67
VCR 109 to 120 level
5.36
750
140
40.0
90.13

98.21
VCR Above 901 Level
5.36
750
140
39.0
90.13
98.21
VCR Below 120 level
5.36
750
140
36.0
90.13
98.21
Savuka
Carbon Leader Reef
7.96
900
113
81.0
62.70
97.50
Ventersdorp Contact Reef
7.96
900
113
54.0
62.70
97.50
TauTona
CLR Base
7.67
729
95
112.0
80.97
97.82
CLR Below 120
7.67
729
95
92.0
81.01
97.82
Remnant CLR Shaft Pillar
7.29
729
100
54.0
80.97

97.82
VCR Shaft Pillar
7.54
729
127
100.0
85.00
97.82
Vaal River Surface
SA Met – Rock Dump
0.32
–
–
–
100.00
91.00
SA Met – Tailings Dump
0.25
–
–
–
100.00
48.00
West Wits Surface
WWGO – Rock Dump
0.24
–
–
–
100.00
91.00
South Africa
*cont.*

Mineral Resource and Ore Reserve Report 2008
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Development sampling results – January to December 2008
Development values represent actual results of sampling, no allowances having been made for adjustments necessary in
estimating Ore Reserves.
Advanced
Average
Sampled gold
Uranium
metres
Sampled
channel
Average
Average
Average
Average
Statistics are shown in metric units
(total)
metres width (cm)
g/t
cm g/t
kg/t
cm kg/t
VAAL RIVER
Great Noligwa
Vaal Reef
4,825
404
124.3
29.34
3,647
1.60
199.35
Kopanang
Vaal Reef
24,818
2,564
18.4
79.62
1,465
5.25
96.09
Moab Khotsong
Vaal Reef
16,558
1,478
124.3
19.64
2,441
1.07

129.42
Tau Lekoa
Ventersdorp Contact Reef
7,509
546
86.2
13.07
1,127
–
–
WEST WITS
Mponeng
Ventersdorp Contact Reef
17,673
3,208
74.0
33.50
2,479
–
–
Savuka
Ventersdorp Contact Reef
–
–
–
–
–
–
–
Carbon Leader Reef
2,882
274
50.1
80.74
4,045
–
–
TauTona
Ventersdorp Contact Reef
315
–
–
–
–
–
–
Carbon Leader Reef
8,657
264
16.0
153.06

2,449
1.74
27.85

Mineral Resource and Ore Reserve Report 2008
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Reconciliation of Mineral Resource and Ore Reserve
as at 31 December 2008
Changes in gold contained
Moz
Deple-
Model
Scope
Net change
Mine
Category 2007
tion
(1)
change
(2)
change
(3)
2008
Diff
%
Comment
Great Noligwa
Resource
8.83
(0.49)
(0.25)
(0.45)
7.65
(1.19)
(13)
Transfer of the SV4 section from
Great Noligwa to Moab Khotsong
Reserve
3.90
(0.31)
(0.30)
(0.67)
2.63
(1.28)
(33)
Transfer of the SV4 section from
Great Noligwa to Moab Khotsong
Kopanang
Resource
9.35
(0.60)
(0.16)
0.89
9.49
0.14

1
Reserve
4.34
(0.36)
0.03
–
4.00
(0.34)
(8)
Favourable economics offset by depletions and grade reduction
Moab Khotsong
Resource 13.79
(0.38)
2.92
1.90 18.24
4.45
32
Transfer of the SV4 section from Great Noligwa to Moab Khotsong
Reserve
6.97
(0.21)
(0.01)
0.57
7.32
0.36
5
Transfer of the SV4 section from Great Noligwa to Moab Khotsong
Tau Lekoa
Resource
6.49
(0.18)
(0.68)
(0.32)
5.31
(1.18)
(18)
Significant geological structure and facies changes to the north of Tau Lekoa
Reserve
1.29
(0.15)
(0.22)
–
0.92
(0.37)
(29)

Lower average resource value (down by 53 cmg/t), geological losses and reclassification of Mineral Resources resulting from information gained from borehole G55
Mponeng
Resource 41.56
(0.76)
5.78
2.85 49.43
7.87
19
Granting of the WUDL's licence and transfers from TauTona
Reserve
10.15
(0.62)
1.41
2.06 12.99
2.84
28
Increasing in grade, additional ground from TauTona 123-126 level as well as Mponeng PASR blocks 3 & 5
Savuka
Resource
2.62
(0.12)
1.58
0.28
4.37
1.75
67
Improved economic outlook as result of an increase in gold price
Reserve
0.69
(0.07)
0.25
(0.10)
0.76
0.07
11
Grade increase of 13% and favourable economics extended LOM by one year
TauTona
Resource
9.04

(0.33)
(0.56)
(1.01)
7.14
(1.90)
(21)
Transfers to Mponeng
Reserve
4.61
(0.29)
–
(1.25)
3.08
(1.53)
(33)
TauTona 123-126 level ground transferred to Mponeng, reduction through changed mine design of scattered grid to bracket geological structure, lower value estimates due to increase sampling and drilling, slightly offset by higher MCF and inclusion of CLR Eastern block
South Africa
*cont.*

Mineral Resource and Ore Reserve Report 2008
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URANIUM
AngloGold Ashanti produces a uranium oxide concentrate ($U_3O_8$) as a by-product from its South African gold mining operations. AngloGold Ashanti currently produces between 550 and 650 tonnes of $U_3O_8$ 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, $U_3O_8$ was not considered a Mineral Resource until the year 2005. Due to the rapid increase in the $U_3O_8$ price over the last few years, renewed focus has been placed on the $U_3O_8$ content within the Witwatersrand reefs with the result that in 2005, uranium was reported for the first time as a fully SAMREC compliant Mineral Resource.
The AngloGold Ashanti mines in the Vaal River region that currently produce uranium oxide as a by-product are Great Noligwa, Kopanang, and Moab Khotsong. The uranium oxide is extracted from the VR, although Great Noligwa mine also produces some uranium oxide from the C Reef. The mines in the West Wits region that have uranium Mineral Resources are Mponeng, Savuka and TauTona and in this mining region the uranium is only present in the CLR.
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 of the Witwatersrand sediments.
Reconciliation of Mineral Resource and Ore Reserve (*cont.*)
as at 31 December 2008

| Mine | Category | 2007 | Changes in gold contained Moz | | | | Net change | Model | Scope | Deple-tion |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | |

(1)
change
(2)
change
(3)
2008
Diff
%
Comment
Vaal River
Resource
5.10
(0.12)
0.13
(0.10)
5.02
(0.08)
(2)
Surface (VRGO)
Reserve
1.92
(0.12)
0.02
0.09
1.91
(0.01)
(1)
Favourable economics
West Wits
Resource
1.44
(0.01)
0.03
(0.10)
1.37 (0.07)
(5)
Surface
Reserve
–
–
–
0.04
0.04
0.04
0
South Africa
Resource 98.21
(2.97)
8.81
3.96 108.01
9.79

10
Total
Reserve
33.88
(2.14)
1.17
0.74 33.66 (0.23)
(1)

*1. Depletion: reduction in Ore Reserve based on ore delivered to the plant and corresponding in situ reduction in the Mineral Resource.*
*2. Model change: difference between the Ore Reserve based on the start of year and end of year Mineral Resource models.*
*3. Scope change: difference resulting from change in cut-off grade, mine call factor, new project studies and any other factors influencing the*
*Mineral Resource and Ore Reserve estimations.*

Mineral Resource and Ore Reserve Report 2008
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South Africa
*cont.*
Mineral Resource – Uranium (U
3
0
8
)
Metric
Imperial
Contained
Resource
Tonnes
Grade
uranium oxide
Pounds
Mine/Project
category
million
(kg/t)
tonnes
millions
Great Noligwa
Measured
–
–
–
–
Indicated
17.71
0.50
8,844
19.50
Inferred
2.25
0.37
937
2.07
Total
20.23
0.48
9,780
21.56
Kopanang
Measured
–
–
–
–
Indicated

22.58
0.73
16,531
36.44
Inferred
1.79
0.63
1,133
2.50
Total
24.36
0.72
17,663
38.94
Moab Khotsong
Measured
2.64
0.75
1,982
4.37
Indicated
22.62
0.76
17,235
38.00
Inferred
12.44
0.63
7,864
17.34
Total
37.70
0.72
27,081
59.70
Mponeng
Measured
–
–
–
–
Indicated
27.08
0.19
5,130
11.31
Inferred
18.65
0.19
3,453
7.61

Total
45.72
0.19
8.583
18.92
Savuka
Measured
–
–
–
–
Indicated
6.15
0.22
1,328
2.93
Inferred
–
–
–
–
Total
6.15
0.22
1,328
2.93
TauTona
Measured
–
–
–
–
Indicated
8.81
0.30
2,602
5.74
Inferred
–
–
–
–
Total
8.81
0.30
2,602
5.74
Vaal River Surface
Measured
–
–

–
–
Indicated
55.52
0.10
5,363
11.82
Inferred
–
–
–
–
Total
55.52
0.10
5,363
11.82
West Wits Surface
Measured
–
–
–
–
Indicated
138.97
0.08
10,770
23.74
Inferred
–
–
–
–
Total
138.97
0.08
10,770
23.74
Total
Measured
2.64
0.75
1,982
4.37
Indicated
299.44
0.23
67,801
149.48
Inferred
35.39

0.38
13,386
29.51
Total
337.47
0.25
83,169
183.36

Mineral Resource and Ore Reserve Report 2008
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Ore Reserve – Uranium (U
3
0
8
)
Imperial
Contained
Resource
Tonnes
Grade
uranium oxide
Pounds
Mine/Project
category
million
(kg/t)
tonnes
millions
Great Noligwa
Proved
–
–
–
–
Probable
12.51
0.31
3,892
8.85
Total
12.51
0.31
3,892
8.85
Kopanang
Proved
–
–
–
–
Probable
9.41
0.36
3,432
7.57
Total
9.41
0.36
3,432

7.57
Moab Khotsong
Proved
–
–
–
–
Probable
25.28
0.47
11,877
26.18
Total
25.28
0.47
11,877
26.18
Total
Proved
–
–
–
–
Probable
47.21
0.41
19,201
42.33
Total
47.21
0.41
19,201
42.33

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LOCATION

Great Noligwa is located about 15km south-east of the town of Orkney, in the southern part of the Klerksdorp goldfield. The mine exploits the VR at depths varying between 1,500m and 2,600m below surface. Scattered mining methods are employed where access to the reef is from the footwall haulage and return airway development, with cross-cuts developed every 180m to the reef horizon. Raises are then developed on-reef to the level above, and the reef is stoped out on-strike. The Great Noligwa lease area is constrained to the north by Pamodzi Gold Mine, to the east by Buffelsfontein Gold Mine, to the south by the Jersey and Die Hoek faults, (which displace the reef down by approximately 1,000m and 900m respectively), and to the west by Kopanang Mine.

GEOLOGY

The VR is the principal economic horizon at Great Noligwa, accounting for over 90% of the gold produced at the mine. The VR is part of the Witwatersrand Supergroup and is stratigraphically located near the middle of the Central Rand Group in the Johannesburg Subgroup on an unconformity below the Krugersdorp Formation. The VR unit can reach a maximum thickness of more than 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 high gold values in the VR are often associated with high uranium values. Uranium is a very important by-product of Great Noligwa.

The C Reef has been mined on a limited scale in the central part of Great Noligwa, where a high-grade, north-south orientated channel containing two economic horizons has been exposed. To the east and west of this channel the C Reef is poorly developed with relatively small areas of economic interest. High uranium values in the C Reef are also often associated with high gold values. To the north, the C Reef sub-crops against the Gold Estates Conglomerates and in the extreme south of the mine the C Reef has been eliminated by a deeply eroded Kimberley Channel and the Jersey fault.

Great Noligwa

South Africa

Mineral Resource and Ore Reserve Report 2008
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Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Great Noligwa
Category
million
g/t
tonnes
Moz
Crystalkop Reef
Measured
0.82
7.96
6.51
0.21
Indicated
6.87
9.13
62.74
2.02
Inferred
1.65
8.20
13.52
0.44
Total
9.34
8.86
82.76
2.66
Vaal Reef
Measured
6.64
14.20
94.23
3.03
Indicated
3.39
14.71
49.84
1.60
Inferred
0.87
12.61

10.98
0.35
Total
10.89
14.23
155.06
4.99
Great Noligwa
Total
20.23
11.76
237.82
7.65
Exclusive Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Great Noligwa
Category
million
g/t
tonnes
Moz
Measured
2.46
12.87
31.67
1.02
Indicated 6.10
9.69 59.10 1.90
Inferred 2.52
9.73 24.50 0.79
Great Noligwa
Total
11.08
10.41
115.28
3.71
The shaft pillar and the C Reef form potential mineable areas. Approximately 14% of the Exclusive Mineral Resource is expected to be taken up in safety and remnant pillars ahead of current mining.
GM SECTION
GREAT NOLIGWA MINE
MAIN-SUB VENT
GREAT NOLIGWA MINE
VENT MAIN-SUB
A.E.I MAN WINDER

BLAIR ROCK & SIEMENS
MAN WINDER
-522m
Below datum
Nx hole for
surface fridge
plant overflow
-1134,7m
CABLE POCKET
-1140,7m
PUMP STATION
-1134,7m
CABLE POCKET
-1451,6m
PUMP
STATION
DAM
-1756,5m
CABLE POCKET
-1756,5m
PUMP
STATION
64 level
70 level
76 level
Shaft
bottom
Datum - 2000m
Datum - 500m
MOAB KHOTSONG MINE MAIN
Datum - 500m
KERVAL ROAD
DYKE
MM shaft
JERSEY FAULT

Mineral Resource and Ore Reserve Report 2008
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South Africa
Great Noligwa *cont.*
Competent persons
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
F Putter
SACNASP
400052/95
25 years
Ore Reserve
A Kruger
PLATO
PMS0114
31 years
Ore Reserve
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Great Noligwa
Category
million
g/t
tonnes
Moz
Crystalkop Reef
Proved
0.72
5.97
4.32
0.14
Probable
2.67
5.92
15.80
0.51
Total
3.39
5.93

20.12
0.65
Vaal Reef
Proved
5.75
7.25
41.70
1.34
Probable
2.57
7.71
19.83
0.64
Total
8.33
7.39
61.53
1.98
Great Noligwa
Total
11.72
6.97
81.64
2.63
Great Noligwa
– Underground (Metric)
Tonnes above cut-of
f (millions)
0.00
Cut-off grade (g/t)
15.0
0.0
20.1
10.0
25.0
5.0
5.00
10.00
15.00
20.00
21.0
0.0
26.0
16.0
Average
grade
above
cut-of
f (g/t)
Tonnes above cut-off
Ave grade above cut-off

Great Noligwa:
Ore Reserve reconciliation
2007 vs 2008
Ounces (millions)
3.90
2007
-0.31
Depletion
-0.67
Scope
Change
2.62
2008
-0.30
Model
Change
2.3
1.3
3.3
Great Noligwa:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
8.83
2007
-0.49
Depletion
0.83
Gold price
-1.24
Other
-0.42
Explo-
ration
7.65
2008
-0.03
Cost
6.5
5.5
0.17
Metho-
dology
Change
8.5
7.5
Change

Mineral Resource and Ore Reserve Report 2008
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LOCATION

Kopanang Mine is located on the farms Pretoriuskraal 53 and Grootdraai 468 in the Free State province, just south of the Vaal River and about 10km south-east of the town of Orkney, which is itself located about 170km south-west of Johannesburg. The mine, in production since 1984, was originally known as Vaal Reef's 9 Shaft and forms part of the Klerksdorp goldfield. The mine is located immediately south of the Vaal River, is bound to the south by the Jersey Fault and to the east by Great Noligwa Mine, and incorporates an area of 35km 2 .

Dolomites of the Transvaal Supergroup outcrop on surface and these result in a very subdued topography with few rock exposures being present.

GEOLOGY

Gold-bearing conglomerates of the Central Rand Group of the Witwatersrand are exploited, the most important of which is known as the VR. These conglomerates are exposed via a twin-shaft system that reaches a maximum depth of 2,340m. The VR is exploited at depths of between 1,300m and 2,600m below surface. On Kopanang, almost all of the gold produced is from the VR, although minor amounts of gold are extracted from the secondary C Reef, which is stratigraphicaly located about 250m above the VR.

The VR is a medium- to high-grade reef consisting of a basal conglomerate called the Stilfontein Reef and an overlying reef called the Upper Vaal. Current terminology separates the reef into A, B and C Facies, where the C Facies is the basal Stilfontein, the A Facies, the Upper Vaal, and the B Facies an internal layer of quartzite. At Kopanang, the Upper VR, or A Facies, consists of a series of small pebble conglomerates and grits and contains very little gold. Further to the east at Great Noligwa, the A Facies becomes more robust and better developed and contains high gold values.

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

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

Kopanang
South Africa

Mineral Resource and Ore Reserve Report 2008

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

The VR and C Reef generally dip towards the south-east at dips of between 10° and 20°.

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

Shaft Section at Kopanang

Chuniespoort

Ventersdorp

Klerksdorp/Mondeor

G.E.C

Kimberley channels

MBA

MB1

MB2/3

Vaal Reef

MB5/6

MB7/10

44 level

47 level

50 level

53 level

56 level

59 level

62 level

64 level

68 level

70 level

73 level

75 level

0

200

400

600

800

V9

PK1

PK2

PK6 PK9

PK4 MZ2

MA1
Popeye II
Shaft flat fault
Shaft steep fault
Shaft flat fault
Popeye III
BW fault
Pillar fault
Pillar fault
PK17 Zuiping
Diagonal dyke
Zuiping A fault
Jersey fault
PK17
foult
Diag?
Shaft flat fault
Buf
fer dyke
MZ2 fault
South Africa
Kopanang *cont.*

Mineral Resource and Ore Reserve Report 2008
– 27 –
Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Kopanang
Category
million
g/t
tonnes
Moz
Crystalkop Reef
Measured
0.11
10.74
1.20
0.04
Indicated
0.31
12.58
3.89
0.13
Inferred
0.99
13.28
13.10
0.42
Total
1.41
12.93
18.19
0.59
VR Base
Measured
2.49
17.67
44.02
1.42
Indicated
17.81
11.28
200.88
6.46
Inferred
0.66
11.68

7.68
0.25
Total
20.96
12.05
252.58
8.12
VR EDOM
Measured
0.19
14.53
2.71
0.09
Indicated
1.67
12.06
20.12
0.65
Inferred
0.14
10.06
1.45
0.05
Total
2.00
12.15
24.28
0.78
Kopanang
Total
24.36
12.11
295.05
9.49
Kopanang:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
9.35
2007
-0.60
Depletion
0.89
Gold price
0.00
Other
-0.17
Explo-
ration
9.49
2008

0.00
Cost
8.6
0.01
Metho-
dology
Change
9.6
Kopanang:
Ore Reserve reconciliation
2007 vs 2008
Ounces (millions)
4.34
2007
-0.59
Depletion
0.00
Scope
Change
4.00
2008
0.25
Model
Change
3.6
Change
4.2
9.1
4.0
3.8
Exclusive Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Kopanang
Category
million
g/t
tonnes
Moz
Measured 1.66 19.76 32.88 1.06
Indicated
4.82 12.06 58.11
1.87
Inferred 1.79 12.43 22.24 0.71
Kopanang
Total 8.27

13.69
113.23
3.64
The VR in the western portion of the mine lease (Gencor 1E area) forms a potential mineable area. Approximately 44% of the exclusive Mineral Resource is expected to be taken up in safety and remnant pillars ahead of current mining.

Mineral Resource and Ore Reserve Report 2008
– 28 –
Ore Reserve
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Kopanang
Category
million
g/t
tonnes
Moz
Crystalkop Reef
Proved
0.01
4.51
0.05
–
Probable
0.02
4.89
0.09
–
Total
0.03
4.74
0.14
0.01
VR Base
Proved
0.98
9.42
9.25
0.30
Probable
13.32
7.71
102.71
3.30
Total
14.30
7.83
111.96
3.60
VR EDOM
Proved
0.13

7.58
1.00
0.03
Probable
1.73
6.61
11.41
0.37
Total
1.86
6.67
12.41
0.40
Kopanang
Total
16.19
7.69
124.51
4.00
Competent persons
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
A J Johnston
SACNASP
400055/01
20 years
Ore Reserve
W Kinnear
PLATO
PMS0198
18 years
Tonnes above cut-off (millions)
0.00
Cut-off grade (g/t)
15.0
0.0
20.0
10.0
25.0
5.0
5.00
10.00
15.00
20.00

22.0
12.0
27.0
17.0
Average
grade
above
cut-of
f (g/t)
Kopanang
– Underground (Metric)
Tonnes above cut-off
Ave grade above cut-off
South Africa
Kopanang *cont.*

Mineral Resource and Ore Reserve Report 2008
– 29 –

LOCATION

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

The orebody of interest in the Moab Khotsong lease area is the VR, the principal reef in the Klerksdorp goldfield. The VR has been extensively mined on the adjacent Kopanang and Great Noligwa mines. Stratigraphically, it is located within the Johannesburg Subgroup of the Central Rand Group (Witwatersrand Supergroup). It is a thin (up to 4m thick), persistent stratigraphic unit that marks the base of the Strathmore Formation. Over much of the Klerksdorp mining area, the VR unconformable overlies the Mapaiskraal Member of the Stilfontein Formation (MB5). Towards the south of Kopanang and Great Noligwa, the VR oversteps onto the Mizpah Member.

GEOLOGY

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.

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

Moab Khotsong
South Africa

Due to the magnitude of throw across the Die Hoek fault, more than 700m down to the south, geological structures encountered on the up-thrown side of the fault cannot be projected to the down-thrown side and vice versa. No information pertaining to the reef blocks being accessed can be gleaned from the mapping of the access development. Only once the development is through the Die Hoek fault, does mapping thereof have any bearing on the reef blocks, and even then a great amount of exploration drilling is required to accurately delineate these blocks.

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

*Project Zaaiplaats 2*

Project Zaaiplaats 2 (PZ2) is situated at Moab Khotsong in the Vaal River region of AngloGold Ashanti's South African operations. Moab Khotsong is the newest mine in the region and the PZ2 project is aimed at optimally extracting the deeper portion (lower mine) of the Vaal River at Moab Khotsong. The PZ2 project is planned to extend the life of Moab Khotsong for another 15 years until mid-2030s. The project also allows other opportunities (mining and metallurgical) to come to the fore that would otherwise have been uneconomic.

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

*Brownfields exploration*

Brownfields exploration is currently focused on improving geological confidence in the Vaal River area and six surface drilling sites were in operation during the year.

Surface drilling continued in the Project Zaaiplaats area (Moab Lower Mine), where the target is the very prospective VR.

A long deflection to the east is in progress in drillhole MZA9. The deflection is intended to raise the confidence of an Inferred block in the north-east portion of the Zaaiplaats project area and also to confirm the structure between the Middle and Lower mines. The target block lies at an expected in-hole depth of 3,395 metres.

In the north-west of the main Zaaiplaats block, MMB5 is drilling to test a proposed target block along the Jersey Fault cut-off. By year end the current long deflection had reached a depth of 3,173 metres.

The VR was not intersected due to faulting and it is planned to drill further deflections out of the original drillhole.

A new drillhole, MGR8, was started during the year and has currently penetrated to 1,596 metres in lavas and volcanoclastic sediments of the Kameeldoorns Formation of the Platberg Group (Ventersdorp Supergroup).

Two surface boreholes in the Moab North area continued drilling into 2008. The targets were proposed VR blocks in a poorly-defined, structurally complex area north of the Moab Middle Mine area.

Drillhole MCY5 was stopped at a depth of 3,130 metres. The VR was not intersected, but the geological information was used to revise and refine the structural model.

Re-opening of borehole MCY4 was aimed at proving a proposed block of VR just north of the Moab Upper Mine area. A faulted C Reef intersection was obtained at 2,823 metres, immediately adjacent to an intrusive. The drillhole was at a depth of 3,003m by year end and drilling is continuing.

South Africa
Moab Khotsong *cont.*

Mineral Resource and Ore Reserve Report 2008
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Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Moab Khotsong
Category
million
g/t
tonnes
Moz
C Reef – GNM Shaft Pillar
Measured
0.02
8.85
0.17
0.01
Indicated
0.46
13.05
6.00
0.19
Inferred
0.13
11.67
1.56
0.05
Total
0.61
12.61
7.72
0.25
C Reef – Middle Mine
Measured
–
–
–
–
Indicated
1.21
9.62
11.61
0.37
Inferred
2.52
7.96

20.02
0.64
Total
3.72
8.50
31.63
1.02
VR – GNM Shaft Pillar
Measured
0.11
16.95
1.83
0.06
Indicated
1.50
17.68
26.51
0.85
Inferred
–
15.19
0.02
–
Total
1.61
17.63
28.35
0.91
VR – Lower Mine
Measured
–
–
–
–
Indicated
13.91
14.06
195.59
6.29
Inferred
8.86
12.11
107.32
3.45
Total
22.77
13.30
302.91
9.74
VR – Middle Mine
Measured

1.84
13.97
25.67
0.83
Indicated
4.89
25.22
123.36
3.97
Inferred
0.52
23.87
12.31
0.40
Total
7.25
22.27
161.33
5.19
VR – Top Mine
Measured
0.81
21.60
17.40
0.56
Indicated
0.54
24.11
13.00
0.42
Inferred
0.41
12.00
4.96
0.16
Total
1.76
20.12
35.35
1.14
Moab Khotsong
Total
37.72
15.04
567.30
18.24
Exclusive Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes

Grade
gold
gold
Moab Khotsong
Category
million
g/t
tonnes
Moz
Measured 0.91 21.70 19.83 0.64
Indicated 5.21
20.72 107.92 3.47
Inferred 12.44 11.75
146.18 4.70
Moab
Khotsong
Total 18.56 14.76
273.92 8.81
Mineral Resource below infrastructure
as at 31 December 2008
Metric
Imperial
Contained
Contained
Tonnes
Grade
gold
gold
Moab Khotsong
Category
million
g/t
tonnes
Moz
VR – Project Zaaiplaats 2
Total
15.37
17.41
267.64
8.61
and Middle Mine

The Exclusive Mineral Resource consists of designed rock engineering bracket pillars and the shaft pillars on the VR and C Reef. The major portion (59%) of this Exclusive Mineral Resource is situated in the Lower Mine area, with minor amounts in the Middle Mine (12%), C Reef (12%) and shaft pillar (13%) areas. The bracket pillars are designed for safety reasons and will therefore not be mined, whereas the shaft pillars can only be safely extracted at the end of the mine life.

Mineral Resource and Ore Reserve Report 2008
– 32 –
Moab Khotsong:
Ore Reserve reconciliation
2007 vs 2008
Ounces (millions)
6.97
2007
-0.21
Depletion
0.57
Scope
Change
7.32
2008
-0.01
Model
Change
7.0
6.8
Change
7.2
Moab Khotsong:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
13.79
2007
-0.38
Depletion
2.00
Gold price
-0.10
Other
1.43
Explo-
ration
18.24
2008
0.00
Cost
13.0
1.49
Metho-
dology
Change
18.0
17.0
14.0
15.0
16.0

Ore Reserve
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Moab Khotsong
Category
million
g/t
tonnes
Moz
VR – Lower Mine
Proved
–
–
–
–
Probable
11.87
9.37
111.16
3.57
Total
11.87
9.37
111.16
3.57
VR – Middle Mine
Proved
1.26
9.80
12.36
0.40
Probable
6.44
13.83
89.10
2.87
Total
7.70
13.17
101.46
3.26
VR – Top Mine
Proved
0.60
10.82
6.44

0.21
Probable
0.82
10.68
8.75
0.28
Total
1.41
10.74
15.19
0.49
Moab Khotsong
Total
20.99
10.86
227.81
7.32
Ore Reserve below infrastructure
as at 31 December 2008
Metric
Imperial
Contained
Contained
Tonnes
Grade
gold
gold
Moab Khotsong
Category
million
g/t
tonnes
Moz
VR – Project Zaaiplaats 2
Total
11.87
9.37
111.16
3.57
South Africa
Moab Khotsong *cont.*

Mineral Resource and Ore Reserve Report 2008
– 33 –
Tonnes above cut-off (millions)
0.00
Cut-off grade (g/t)
30.0
0.0
20.0
40.0
10.0
5.00
10.00
15.00
20.00
15.0
20.0
Average
grade
above
cut-of
f (g/t)
Moab Khotsong
– Underground (Metric)
Tonnes above cut-off
Ave grade above cut-off
Competent persons
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
T Adam
GSSA
5532
30 years
Ore Reserve
J Wall
PLATO
PMS0164
26 years

Mineral Resource and Ore Reserve Report 2008

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LOCATION

Tau Lekoa is located about 8km west of the town of Orkney, at the western extreme of the Klerksdorp goldfields. The mine exploits the VCR at depths varying between 900m and 1,700m below surface. The VCR, the only reef exploited at Tau Lekoa, 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 north-east into Tau Lekoa, before turning sharply towards the west. The older middle and upper terraces contain more immature conglomerates with more erratic gold grades.

*New lease area*

The Goedgenoeg Lease Area is situated to the north-west of Tau Lekoa. The mineral rights were allowed to lapse in 2004, however, due to improvements in the gold price, AngloGold Ashanti re-applied for prospecting rights during 2008.

This area lies below the current mine infrastructure and does not currently form part of the Mineral Resource.

Tau Lekoa

South Africa

Mineral Resource and Ore Reserve Report 2008
– 35 –
Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Tau Lekoa
Category
million
g/t
tonnes
Moz
VCR Base
Measured
2.70
6.69
18.06
0.58
Indicated
4.19
5.50
23.07
0.13
Inferred
3.07
5.62
17.24
0.55
Total
9.96
5.86
58.37
1.88
VCR Jonkerskraal
Measured
0.70
5.97
4.16
0.13
Indicated
5.90
4.88
28.80
0.93
Inferred
0.01
2.79

0.04
–
Total
6.61
4.99
33.00
1.06
VCR Weltevreden
Measured
0.02
4.71
0.08
–
Indicated
17.35
4.17
72.35
2.33
Inferred
0.23
5.79
1.32
0.04
Total
17.60
4.19
73.76
2.37
Tau Lekoa
Total
34.18
4.83
165.13
5.31
Exclusive Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Tau Lekoa
Category
million
g/t
tonnes
Moz
Measured
2.39
6.86

16.36
0.53
Indicated
22.73
4.23
96.18
3.09
Inferred
3.31
5.62
18.60
0.60
Tau Lekoa
Total
28.42
4.61
131.13
4.22
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 33% of the Exclusive Mineral Resource is expected to occur in safety and remnant pillars ahead of current mining.
Tau Lekoa:
Ore Reserve reconciliation
2007 vs 2008
Ounces (millions)
1.29
2007
-0.15
Depletion
0.00
Scope
Change
0.92
2008
-0.22
Model
Change
0.7
0.5
Change
1.1
0.9
Tau Lekoa:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
6.49
2007
-0.18
Depletion
0.00

Gold price
0.00
Other
-0.67
Explo-
ration
5.31
2008
-0.32
Cost
5.1
4.1
-0.01
Metho-
dology
Change
6.1

Mineral Resource and Ore Reserve Report 2008
– 36 –
South Africa
Tau Lekoa *cont.*
Ore Reserve
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Tau Lekoa
Category
million
g/t
tonnes
Moz
VCR Base
Proved
0.95
3.70
3.50
0.11
Probable
2.42
4.24
10.29
0.33
Total
3.37
4.09
13.79
0.44
VCR Jonkerskraal
Proved
0.38
4.01
1.52
0.05
Probable
3.64
3.67
13.35
0.43
Total
4.02
3.70
14.87
0.48
Tau Lekoa

Total
7.39
3.88
28.66
0.92
Competent persons
Professional
Registration
Relevant
Type
Name
organisation
number
experience
Mineral Resource
F Fouche
GSSA
962596
14 years
Ore Reserve
R Brokken
PLATO
PMS0171
27 years
Tonnes above cut-off (millions)
0.00
Cut-off grade (g/t)
30.0
0.0
20.0
40.0
10.0
5.00
10.00
15.00
20.00
Average
grade
above
cut-of
f (g/t)
0.0
20.0
5.0
10.0
15.0
25.0
30.0
Tau Lekoa
– Underground (Metric)
Tonnes above cut-off

Ave grade above cut-off

Mineral Resource and Ore Reserve Report 2008
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LOCATION

Mponeng lies on the West Wits Line, close to Carletonville in the province of Gauteng, 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, and to the south only by the depth of the orebody, which is open-ended.

GEOLOGY

The VCR, the only reef currently being mined at Mponeng, comprises 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 Booysens 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 on average 900m deeper than the VCR and an exploration drilling programme is currently underway to improve resource confidence and confirm the geological structures that occur at the lower levels. Of the three economic units that exist within the CLR, the Mponeng CLR target area is dominated by Unit 3 with a smaller portion of Unit 2 towards the east. Unit 2 is a complex channel deposit, and Unit 3 is the oldest of the CLR channel deposits sitting at the base of the package.

*Mponeng Carbon Leader Reef Project*

Two economically viable reefs are mined in the West Wits area, the shallower VCR and the deeper CLR. Both have been extensively mined at AngloGold Ashanti’s TauTona and Savuka operations, while Mponeng has only mined the VCR. Both reefs can be accessed down to 120 level (3,645m below datum), but there is currently no infrastructure in place that can service stoping operations below 120 level.

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 began in the mid-1990s. 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.

Mponeng
South Africa

Mineral Resource and Ore Reserve Report 2008

– 38 –

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” to access the CLR via tertiary shafts from Mponeng, enabling the mine to extend its life, while maintaining production at current levels.

The mine has been designed according to the sequential grid mining method, a technique developed at Elandsrand and Mponeng in the 1990s. This method involves pre-developing stoping grids and extracting the reef between the dip-stabilising pillars. This method has proved successful in the management of seismicity, both in reducing seismic energy and increasing mining flexibility. The shafts and infrastructure have been designed to fit the existing shaft system at Mponeng, and have the capacity to sustain high levels of production.

The extension of Mponeng via the CLR Project provides a strong base from which several regional benefits can be realised, as well as enabling other smaller projects to be brought in to match the extended life of the asset and region.

Mineral Resource

as at 31 December 2008

| Mponeng Category | Contained Tonnes million | Grade gold g/t | Contained gold tonnes | gold Moz |
|---|---|---|---|---|
| CLR Below 120 Level | | | | |
| Measured | – | – | – | – |
| Indicated | 25.57 | 18.88 | 482.69 | 15.52 |
| Inferred | 18.65 | 16.65 | 310.52 | 9.98 |
| Total | 44.22 | 17.94 | 793.21 | 25.50 |
| Mponeng WUDL | | | | |
| Measured | | | | |

–
–
–
–
Indicated
–
–
–
–
Inferred
4.47
13.33
59.61
1.92
Total
4.47
13.33
59.61
1.92
TauTona CLR Shaft Pillar
Measured
0.27
38.48
10.52
0.34
Indicated
1.23
43.20
53.33
1.72
Inferred
–
–
–
–
Total
1.51
42.34
63.85
2.05
TauTona VCR Shaft Pillar
Measured
0.13
14.49
1.86
0.06
Indicated
1.38
19.36
26.74
0.86

Inferred
–
–
–
–
Total
1.51
18.95
28.60
0.92
VCR 109 to 120 level
Measured
1.61
19.36
31.07
1.00
Indicated
7.91
16.51
130.51
4.20
Inferred
–
–
–
–
Total
9.51
16.99
161.58
5.20
VCR Above 109 Level
Measured
5.22
11.13
58.09
1.87
Indicated
12.11
8.00
96.95
3.12
Inferred
–
–
–
–
Total
17.33
8.94
155.05

4.99
VCR Below 120 level
Measured
0.01
22.52
0.32
0.01
Indicated
8.63
17.55
151.43
4.87
Inferred
–
–
–
–
Total
8.64
17.56
151.75
4.88
VCR Block 1
Measured
–
–
–
–
Indicated
2.99
4.42
13.24
0.43
Inferred
–
–
–
–
Total
2.99
4.42
13.24
0.43
South Africa
Mponeng *cont.*

Mineral Resource and Ore Reserve Report 2008

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Mineral Resource (*cont.*)

as at 31 December 2008

| Mine/Project | Category | Tonnes million | Grade gold g/t | Contained gold tonnes | Contained gold Moz |
|---|---|---|---|---|---|
| VCR Block 3 | Measured | – | – | – | – |
| | Indicated | 7.13 | 4.28 | 30.53 | 0.98 |
| | Inferred | – | – | – | – |
| | Total | 7.13 | 4.28 | 30.53 | 0.98 |
| VCR Block 5 | Measured | 0.01 | 1.78 | 0.02 | – |
| | Indicated | 6.04 | 6.77 | 40.92 | 1.32 |
| | Inferred | – | – | | |

–
–
Total
6.05
6.76
40.94
1.32
VCR Outside Project areas
Measured
0.01
2.00
0.02
–
Indicated
9.91
3.94
39.03
1.26
Inferred
–
–
–
–
Total
9.92
3.94
39.05
1.26
Mponeng
Total
113.29
13.57
1537.41
49.43
Exclusive Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Mponeng
Category
million
g/t
tonnes
Moz
Measured
5.57
13.79

76.76
2.47
Indicated
68.59
12.82
879.29
28.27
Inferred
23.12
16.01
370.14
11.90
Mponeng
Total
97.28
13.63
1,326.18
42.64
The CLR in the deeper portion of the orebody (below 126 level) and the VCR in the north of the mine lease are potentially mineable areas. Approximately 35 to 50% of the Exclusive Mineral Resource is expected to occur in safety and remnant pillars ahead of current mining.
Mineral Resource below infrastructure
as at 31 December 2008
Metric
Imperial
Contained
Contained
Tonnes
Grade
gold
gold
Mponeng
Category
million
g/t
tonnes
Moz
VCR below 120 level
Total
8.64
17.56
151.75
4.88
CLR below 120 level
Total
45.72
18.74
857.06
27.56
WUDLS
Total

4.47
13.33
59.61
1.92
Mponeng
Total
58.84
18.16
1,068.43
34.35

Mineral Resource and Ore Reserve Report 2008
– 40 –
Mponeng:
Ore Reserve reconciliation
2007 vs 2008
Ounces (millions)
10.15
2007
-0.62
Depletion
2.06
Scope
Change
13.00
2008
1.41
Model
Change
10.4
9.4
Change
12.4
Mponeng:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
41.56
2007
-0.76
Depletion
1.91
Gold price
0.93
Other
5.78
Explo-
ration
49.42
2008
0.00
Cost
40.8
0.00
Metho-
dology
Change
48.8
46.8
44.8
42.8
11.4

Ore Reserve
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Mponeng
Category
million
g/t
tonnes
Moz
CLR Below 120 Level
Proved
–
–
–
–
Probable
14.78
14.46
213.77
6.87
Total
14.78
14.46
213.77
6.87
VCR 109 to 120 Level
Proved
0.88
11.02
9.67
0.31
Probable
7.48
8.72
65.25
2.10
Total
8.36
8.96
74.92
2.41
VCR Above 109 Level
Proved
1.58
8.11
12.80

0.41
Probable
5.37
4.80
25.76
0.83
Total
6.94
5.55
38.56
1.24
VCR Below 120 Level
Proved
0.01
12.50
0.19
0.01
Probable
7.69
9.97
76.71
2.47
Total
7.71
9.98
76.90
2.47
Mponeng
Total
37.80
10.69
404.15
12.99
Ore Reserve below infrastructure
as at 31 December 2008
Metric
Imperial
Contained
Contained
Tonnes
Grade
gold
gold
Mponeng
Category
million
g/t
tonnes
Moz
VCR below 120 level
Total

7.71
9.98
76.90
2.47
CLR below 120 level
Total
14.78
14.46
213.77
6.87
Mponeng
Total
22.49
12.92
290.67
9.35
South Africa
Mponeng *cont.*

Mineral Resource and Ore Reserve Report 2008
– 41 –
Competent person
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
G Flitton
GSSA
964758
7 years
Ore Reserve
P Enslin
PLATO
PMS0183
25 years
Mponeng
– Underground (Metric)
Tonnes above cut-off (millions)
0.00
Cut-off grade (g/t)
100.0
0.0
50.0
150.0
5.00
10.00
15.00
20.00
Average
grade
above
cut-off
(g/t)
13.0
23.0
18.0
28.0
Tonnes above cut-off
Ave grade above cut-off

Mineral Resource and Ore Reserve Report 2008

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LOCATION

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 is Unit 1 which is present as a sheet-like deposit over the whole mine. Unit 2 is a complex channel deposit that is presently only being mined along the south and west at Savuka. The reef may be over 2m thick where Unit 2 is developed. Unit 3 is preserved below Unit 1 in the southern parts of Savuka and is the oldest of the CLR conglomerates.

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

Faulting of the orebody, in conjunction with the numerous intrusives that also intersect the orebody on the various levels, is responsible for most of the risk inherent with this type of deep-level gold mining. The Geoscience Department ensures that all information regarding these features is gathered ahead of the current workings so as to ensure the safe planning of the operation. Maximum levels of effort are spent on ensuring the accuracy and validity of the data.

Savuka

South Africa

Mineral Resource and Ore Reserve Report 2008
– 43 –
Savuka:
Ore Reserve reconciliation
2007 vs 2008
Ounces (millions)
0.69
2007
-0.10
Scope
Change
0.76
2008
0.25
Model
Change
0.7
0.5
Change
0.9
Savuka:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
2.62
2007
-0.12
Depletion
0.28
Gold price
0.00
Other
1.58
Explo-
ration
4.37
2008
0.00
Cost
2.5
0.00
Metho-
dology
Change
3.5
0.8
0.6
-0.07
Depletion
4.0
3.0

Exclusive Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Savuka
Category
million
g/t
tonnes
Moz
Measured
0.93
12.26
11.41
0.37
Indicated
3.92
22.13
86.66
2.79
Inferred
–
–
–
–
Savuka
Total
4.85
20.23
98.07
3.15

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 46% of the Exclusive Mineral Resource is expected to occur in safety and remnant pillars ahead of current mining.

Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Savuka
Category
million
g/t
tonnes

Moz
Carbon Leader Reef
Measured
0.54
16.98
9.13
0.29
Indicated
5.61
21.07
118.24
3.80
Inferred
–
–
–
–
Total
6.15
20.71
127.38
4.10
Ventersdorp Contact Reef
Measured
0.42
6.74
2.85
0.09
Indicated
0.40
14.25
5.66
0.18
Inferred
–
–
–
–
Total
0.82
10.38
8.51
0.27
Savuka
Total
6.97
19.50
135.89
4.37

Mineral Resource and Ore Reserve Report 2008
– 44 –
Competent persons
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
G Flitton
GSSA
964758
7 years
Ore Reserve
P Enslin
PLATO
PMS0183
25 years
Ore Reserve
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Savuka
Category
million
g/t
tonnes
Moz
Carbon Leader Reef
Proved
0.05
7.29
0.34
0.01
Probable
3.49
6.64
23.20
0.75
Total
3.54
6.65
23.54
0.76

Ventersdrop Contact Reef
Proved
0.01
2.17
0.02
–
Probable
0.05
3.27
0.15
0.01
Total
0.06
3.06
0.18
0.01
Savuka
Total
3.60
6.59
23.71
0.76
Savuka
– Underground (Metric)
Tonnes above cut-off (millions)
0.00
Cut-off grade (g/t)
5.00
10.00
15.00
20.00
Average
grade
above
cut-off
(g/t)
19.0
24.0
29.0
4.5
0.0
3.0
7.5
1.5
6.0
Tonnes above cut-off
Ave grade above cut-off
South Africa
Savuka *cont.*

Mineral Resource and Ore Reserve Report 2008

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LOCATION

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

GEOLOGY

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

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

TauTona

South Africa

Mineral Resource and Ore Reserve Report 2008
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TAUTONA SHAFT SYSTEM
Surface + 1829m amsl
sea level
66 Level -1 822m BC, +7m amsl
Main Shaft
Sub Vertical Shaft
Tertiary Vertical Shaft
Carbon Leader Reef
100 Level -2 859m BC, +1030m bmsl
120 Level -3 476m BC, +1647m bmsl
Ventersdorp Contact Reef
900m
Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
TauTona
Category
million
g/t
tonnes
Moz
CLR Base
Measured
0.68
26.20
17.82
0.57
Indicated
7.52
23.50
176.69
5.68
Inferred
–
–
–
–
Total
8.20
23.73
194.51
6.25
CLR Below 120
Measured

0.04
22.97
0.82
0.03
Indicated
0.49
33.87
16.66
0.54
Inferred
–
–
–
–
Total
0.53
33.13
17.48
0.56
Remnant CLR Shaft Pillar
Measured
0.06
34.74
1.92
0.06
Indicated
0.03
41.91
1.32
0.04
Inferred
–
–
–
–
Total
0.09
37.34
3.24
0.10
VCR Shaft Pillar
Measured
0.13
15.62
2.08
0.07
Indicated
0.24
20.14
4.90
0.16

Inferred
–
–
–
–
Total
0.38
18.54
6.98
0.22
TauTona
Total
9.19
24.18
222.22
7.14
South Africa
TauTona *cont.*

Mineral Resource and Ore Reserve Report 2008
– 47 –
TauTona:
Ore Reserve reconciliation
2007 vs 2008
Ounces (millions)
4.61
2007
-0.29
Depletion
-1.25
Scope
Change
3.08
2008
0.00
Model
Change
2.5
1.5
Change
4.5
3.5
TauTona:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
9.04
2007
-0.33
Depletion
0.00
Gold price
-1.01
Other
-0.90
Explo-
ration
7.14
2008
0.00
Cost
6.9
4.9
0.34
Metho-
dology
Change
8.9
7.9
5.9

Exclusive Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
TauTona
Category
million
g/t
tonnes
Moz
Measured 0.70
24.17 16.89 0.54
Indicated 3.68
23.76 87.44 2.81
Inferred –
–
–
–
TauTona
Total 4.38
23.82 104.34 3.35
Mineral Resource below infrastructure
as at 31 December 2008
Metric
Imperial
Contained
Contained
Tonnes
Grade
gold
gold
TauTona
Category
million
g/t
tonnes
Moz
CLR below 120 level
Total
0.53
33.13
17.48
0.56
The Exclusive Mineral Resource is dependant on mining strategy, but approximately 3.0Moz or 92% of the Exclusive Mineral Resource is expected to be taken up in safety and remnant pillars ahead of current mining.

Mineral Resource and Ore Reserve Report 2008
– 48 –
Competent persons
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
R Burnett
SACNASP
400133/03
23 years
Ore Reserve
M W Armstrong
PLATO
PMS0054
24 years
Ore Reserve below infrastructure
as at 31 December 2008
Metric
Imperial
Contained
Contained
Tonnes
Grade
gold
gold
TauTona
Category
million
g/t
tonnes
Moz
CLR below 120 level
Total
0.63
15.87
10.00
0.32
TauTona
– Underground (Metric)
Tonnes above cut-off (millions)
0.00
Cut-off grade (g/t)
5.00
10.00
15.00

20.00
Average
grade
above
cut-off
(g/t)
24.0
29.0
4.5
0.0
3.0
10.5
1.5
9.0
7.5
6.0
Tonnes above cut-off
Ave grade above cut-off
Ore Reserve
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
TauTona
Category
million
g/t
tonnes
Moz
CLR Base
Proved
0.33
10.10
3.34
0.11
Probable
8.56
8.99
76.88
2.47
Total
8.89
9.03
80.23
2.58
CLR Below 120
Proved
–

10.54
0.03
–
Probable
0.63
15.89
9.97
0.32
Total
0.63
15.87
10.00
0.32
Remnant CLR Shaft Pillar
Proved
–
10.55
0.04
–
Probable
–
–
–
–
Total
–
10.55
0.04
–
VCR Shaft Pillar
Proved
0.07
8.02
0.57
0.02
Probable
0.51
9.62
4.87
0.16
Total
0.58
9.43
5.44
0.18
TauTona
Total
10.10
9.48
95.70
3.08

South Africa
TauTona *cont.*

Mineral Resource and Ore Reserve Report 2008

– 49 –

Metallurgy as a business unit produces gold in addition to that derived from the primary reef sources by treating lower-grade surface sources of gold-bearing material. The strategy is the maximum utilisation of the treatment gap. The surface source operations comprise the Vaal River and West Wits surface sources operations.

The Vaal River Surface Operations are located immediately to the north and south of the Vaal River, close to the town of Orkney, North West Province, South Africa. These operations comprise waste rock dumps and tailings dams resulting from the mining and processing of the VR and VCR which are mined at the Vaal River underground mines in the Klerksdorp area.

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

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

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

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

RECLAMATION METHODOLOGY

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

Surface operations

South Africa

Mineral Resource and Ore Reserve Report 2008

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The West Gold Plant, Kopanang Gold Plant, Noligwa Gold Plant, Mispah Gold Plant and Savuka Gold Plant are fed from the waste rock dumps (WRD). Currently WRD 2, WRD 4 and Noligwa WRD are being reclaimed in the Vaal River area, while the Savuka WRD is being reclaimed in the West Wits area.

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

The Exclusive Mineral Resource largely comprises tailings storage facilities.

Mineral Resource
as at 31 December 2008

| Mine/Project | Category | Contained Tonnes million tonnes | Grade gold g/t | Contained gold Moz |
|---|---|---|---|---|
| Vaal River Surface | | | | |
| SA Met - Rock Dump | Measured | – | – | – |
| | Indicated | 63.57 | 0.62 | 1.27 |
| | Inferred | 5.02 | 0.69 | 0.11 |
| | Total | 68.59 | 0.62 | 1.38 |
| SA Met - Tailings Dump | Measured | – | – | – |

–
–
Indicated
355.03
0.32
113.36
3.65
Inferred
–
–
–
–
Total
355.03
0.32
113.36
3.65
Vaal River Surface
Total
423.62
0.37
156.15
5.02
West Wits Surface
WWGO - Rock Dump
Measured
–
–
–
–
Indicated
5.09
0.27
1.35
0.04
Inferred
8.16
0.61
4.96
0.16
Total
13.25
0.48
6.31
0.20
WWGO - Tailings Dump
Measured
–
–
–
–

Indicated
138.97
0.26
36.16
1.16
Inferred
–
–
–
–
Total
138.97
0.26
36.16
1.16
West Wits Surface
Total
152.22
0.28
42.47
1.37
Surface operations
Total
575.84
0.35
198.62
6.18
Exclusive Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Mine/Project
Category
million
g/t
tonnes
Moz
Vaal River Surface
Measured
–
–
–
–
Indicated 302.65
0.31
93.32
3.00

Inferred
5.02 0.69
3.45
0.11
Total
307.67 0.31
96.77
3.11
West Wits Surface
Measured
–
–
–
–
Indicated
138.97 0.26
36.16
1.16
Inferred
8.16 0.61
4.96
0.16
Total
147.13 0.28
41.12
1.32
Surface operations
Total
454.79
0.30
137.89
4.43
South Africa
Surface operations *cont.*

Mineral Resource and Ore Reserve Report 2008
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Vaal River Suface:
Ore Reserve reconciliation
2007 vs 2008
Ounces (thousands)
1.92
2007
-0.12
Depletion
0.09
Scope
Change
1.91
2008
0.01
Model
Change
1.8
Change
1.9
Vaal River Suface:
Mineral Resource reconciliation
2007 vs 2008
Ounces (thousands)
5.10
2007
-0.12
Depletion
0.00
Gold price
0.09
Other
0.13
Explo-
ration
5.02
2008
0.01
Cost
5.0
4.8
-0.00
Metho-
dology
Change
5.2
Ore Reserve
as at 31 December 2008
Contained
Contained

Tonnes
Grade
gold
gold
Mine/Project
Category
million
g/t
tonnes
Moz
Vaal River Surface
SA Met - Rock Dump
Proved
–
–
–
–
Probable
63.57
0.62
39.33
1.27
Total
63.57
0.62
39.33
1.27
SA Met - Tailings Dump
Proved
–
–
–
–
Probable
52.38
0.38
20.04
0.64
Total
52.38
0.38
20.04
0.64
Vaal River Surface
Total
115.95
0.51
59.38
1.91
West Wits Surface
WWGO - Rock Dump

Proved
–
–
–
–
Probable
5.09
0.27
1.35
0.04
Total
5.09
0.27
1.35
0.04
West Wits Surface
Total
5.09
0.27
1.35
0.04
West Wits Surface:
Ore Reserve reconciliation
2007 vs 2008
Ounces (millions)
0.00
2007
-0.00
Depletion
0.04
Scope
Change
0.04
2008
-0.00
Model
Change
0.01
0.00
Change
0.03
0.02
West Wits Surface:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
1.44
2007
-0.01
Depletion
0.05

Gold price
0.00
Other
0.03
Explo-
ration
1.37
2008
-0.15
Cost
1.2
0.00
Metho-
dology
Change
1.4
1.3
1.5

Mineral Resource and Ore Reserve Report 2008
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Competent persons
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
T Flitton
GSSA
964771
7 years
Ore Reserve
R Brokken
PLATO
PMS0171
27 years
South Africa
Surface operations *cont.*

Mineral Resource and Ore Reserve Report 2008
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Regional overview
Argentina
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 ESTIMATION
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 boreholes 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.
N
0
1000km
Buenos Aires
San Julian
Rio Gallegas
Bahia Blanca
Cordoba
Santa Fe
Cerro Vanguardia
ARGENTINA
Operations

Mineral Resource and Ore Reserve Report 2008
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Mineral Resource and Ore Reserve gold prices and exchange rate
Units
2008
2007
Gold price – Mineral Resource
US$/oz
1,000
700
Gold price – Ore Reserve
US$/oz
720
600
Exchange rate
AR/US$
3.10
3.15
Reconciliation of Mineral Resource and Ore Reserve
as at 31 December 2008
Changes in gold contained
Moz
Percentage
Deple-
Model
Scope
Net change
Mine
attributable Category
2007
tion
(1)
change
(2)
change
(3)
2008
diff
% Comment
Cerro 92.5% Resource
3.50
(0.16)
0.39
–
3.73
0.23
7
Exploration
additions
Vanguardia
Reserve

1.88
(0.18)
0.17
(0.03)
1.84
(0.04)
(2)
Scope change due to mining, lower grades and higher costs
Total Resource
3.50
(0.16)
0.39
–
3.73
0.23
7
Reserve
1.88
(0.18)
0.17
(0.03)
1.84
(0.04)
(2)

*1. Depletion: reduction in Ore Reserve based on ore delivered to the plant and corresponding in situ reduction in the Mineral Resource.*
*2. Model change: difference between the Ore Reserve based on the start of year and end of year Mineral Resource models.*
*3. Scope change: difference resulting from change in cut-off grade, mine call factor, new project studies and any other factors influencing the Mineral Resource and Ore Reserve estimations.*

Ore Reserve modifying factors as at 31 December 2008

| | Gold price | Cut-off grade | Cut-off value | Stoping width | Dilution factor | Mine call factor | Metal-lurgical recovery used |
|---|---|---|---|---|---|---|---|
| Cerro Vanguardia | US$/oz | g/t Au | cmg/t Au | cm | | | |

(MCF)
%
Comments
Heap leach
600
0.35
–
–
–
100.0
65.5
Stockpile full grade ore
–
–
–
–
–
–
–
Vein Mineral Resources
720
2.05
–
–
30
90.0
94
The average MCF over the
last two years
Details of average drillhole spacing and type in relation to the Mineral Resource classification
Type of drilling
Cerro
Category
Spacing
Diamond
RC
Blasthole Other
Comments
Vanguardia
m (- x -)
Cerro
Measured
12.5 x 12.5
–
x
–
–
–
Vanguardia
Indicated
40 x 40

x
x
–
–
–
Inferred
80 x 80
x
x
–
–
–
Grade control
5 x 10
–
x
–
–
–
Argentina
Regional overview *cont.*

Mineral Resource and Ore Reserve Report 2008

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LOCATION

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

GEOLOGY

The oldest rocks in this part of Patagonia are of Precambrian-Cambrian age which are overlain by Permian and Triassic continental clastic rocks which have been faulted into a series of 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.

Cerro Vanguardia

Argentina

Mineral Resource and Ore Reserve Report 2008
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Mineral Resource by-product: Silver (Ag)
Metric
Contained
Contained
Reserve
Tonnes
Grade
silver
silver
Cerro Vanguardia
category
Mt
kg/t
tonnes
Moz
Measured
11.01
26.86
295.73
9.51
Indicated
22.00
65.11
1,432.67
46.06
Inferred
4.97
83.46
414.81
13.34
Cerro Vanguardia
Total
37.99
56.42
2,143.21
68.91
Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Cerro Vanguardia
Category
million
g/t
tonnes

Moz
Heap leach
Measured
9.54
0.76
7.26
0.23
Indicated
12.61
0.61
7.71
0.25
Inferred
2.21
0.60
1.33
0.04
Total
24.36
0.67
16.30
0.52
Vein Mineral Resources
Measured
1.47
8.03
11.78
0.38
Indicated
9.40
7.32
68.78
2.21
Inferred
2.76
6.93
19.12
0.62
Total
13.62
7.32
99.68
3.21
Cerro Vanguardia
Total
37.99
3.05
115.98
3.73
Argentina
Cerro Vanguardia *cont.*

Cerro Vanguardia:
Ore Reserve reconciliation
2007 vs 2008
Ounces (millions)
1.88
2007
-0.18
Depletion
-0.03
Scope
Change
1.84
2008
0.17
Model
Change
1.6
Change
2.0
1.8
Cerro Vanguardia:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
3.50
2007
-0.16
Depletion
0.00
Gold price
0.00
Other
0.28
Explo-
ration
3.73
2008
0.00
Cost
3.5
3.3
0.11
Metho-
dology
Change
3.7

Mineral Resource and Ore Reserve Report 2008
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*Heap-Leach Ore Reserves (in situ and stockpiles)*
Ore reserves from heap leaching are included in this report this year. A successful feasibility study was completed and the company intends to continue with the project. The heap leach Ore Reserve has two components:

- stockpiles that have been drilled and surveyed in order to estimate the grade and to generate a block model, and
- future in situ production from the pit.

¨
/
4644000
2550000
2520000
2540000
2560000
2580000
CVSA Geological Map
2550000
2520000
2540000
2560000
2580000
4642000
4640000
4638000
4636000
4634000
4632000
4644000
4642000
4640000
4638000
4636000
4634000
4632000
Cerro Vanguardia
Planta
0
2km
Scale
0.5
1
1:50,000
¨
LEGEND
Planta
Filones
Cerro Vanguardia

Acceso Principal
Caminos
Escombreras
Pits Actuales
0
Angelita Basalt
La Avenida FM
Monte Leon FM
MLG4
MLF3
MLG3
MLF2
MLG2
MLF1
MLG1
Brechosa / Estratificada Superior
Granosa
Geologia

Mineral Resource and Ore Reserve Report 2008
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Argentina
Cerro Vanguardia *cont.*
Ore Reserve by-product: Silver (Ag)
Metric
Imperial
Contained
Reserve
Tonnes
Grade
silver
Silver
Cerro Vanguardia
category
(Mt)
(kg/t)
tonnes
(Moz)
Proved
9.99
23.51
234.87
7.55
Probable
12.29
71.19
874.57
28.12
Cerro Vanguardia
Total
22.27
49.81
1,109.43
35.67
Competent persons
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
V Scavuzzo
AusIMM
224834
9 years
Ore Reserve
AM Petermann

AusIMM
300299
8 years
Cerro Vanguardia
– Surface (Metric)
Tonnes above cut-off (millions)
0.00
Cut-off grade (g/t)
1.00
2.00
4.00
5.00
Average
grade
above
cut-off
(g/t)
0.0
5.0
15.0
10.0
7.0
10.0
8.0
9.0
11.0
3.00
Tonnes above cut-off
Ave grade above cut-off
Ore Reserve
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Cerro Vanguardia
Category
million
g/t
tonnes
Moz
Heap leach
Proved
8.87
0.70
6.23
0.20
Probable
5.60

0.56
3.16
0.10
Total
14.47
0.65
9.39
0.30
Vein Mineral Resources
Proved
1.12
6.86
7.66
0.25
Probable
6.68
6.00
40.08
1.29
Total
7.80
6.12
47.74
1.54
Cerro Vanguardia
Total
22.27
2.56
57.13
1.84

INFERRED MINERAL RESOURCE IN PIT OPTIMISATION

Inferred Mineral Resources were used in the pit optimisation process and 0.14 million ounces are present in the optimised pit.

Mineral Resource and Ore Reserve Report 2008
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Regional overview
Australia
The Australian assets (formerly Acacia Resources Ltd) were acquired at the end of 1999 and comprise the Sunrise Dam and Boddington gold mines, and more recently the Tropicana Project.
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. AngloGold Ashanti's interest in Boddington was sold to Newmont post the 2008 financial year-end.
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 the pre-feasibility stage.
Mineral Resource and Ore Reserve gold prices and exchange rates
Units
2008
2007
Sunrise Dam
Gold price – Mineral Resource
US$/oz
1,000
700
Gold price – Ore Reserve
US$/oz
720
600
Exchange rate
US$/Aus$
0.80
0.71
Boddington
Gold price – Mineral Resource
US$/oz
1,000
700
Gold price – Ore Reserve
US$/oz
725
575
Exchange rate
US$/Aus$
0.85
0.77
Darwin
Adelaide
Perth
Boddington
Sunrise Dam
Melbourne
Canberra
Sydney

Brisbane
Laverton
Kalgoorlie
N
Operations
0
800km
Tasmania
*Western*
*Australia*
AUSTRALIA
Tropicana

Mineral Resource and Ore Reserve Report 2008

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

| Type of drilling | | | | |
|---|---|---|---|---|
| Mine/ | | | | |
| Category | | | | |
| Spacing | | | | |
| Diamond | | | | |
| RC | | | | |
| Blasthole | Other | | | |
| Comments | | | | |
| Project | | | | |
| m (- x -) | | | | |
| Boddington | | | | |
| Measured | | | | |
| 40 x 35 | | | | |
| x | | | | |
| x | | | | |
| – | | | | |
| – | | | | |
| Categorisation heavily dependent on spacing. Also based on estimation quality – slope of regression and (average) weighted distance of data from block. | | | | |
| Indicated | | | | |
| 130 x 105 | | | | |
| x | | | | |
| x | | | | |
| – | | | | |
| – | | | | |
| Categorisation heavily dependent on spacing. Also based on estimation quality – slope of regression and (average) weighted distance of data from block. | | | | |
| Inferred | | | | |
| 160 x 225 | | | | |
| x | | | | |
| x | | | | |
| – | | | | |
| – | | | | |
| Categorisation heavily dependent on spacing. Also based on estimation quality – slope of regression and (average) weighted distance of data from block. | | | | |
| Grade control | | | | |
| – | | | | |
| – | | | | |
| – | | | | |

–
–
Sunrise Dam Measured
25 x 25
x
x
–
–
Indicated
40 x 40
x
x
–
–
Inferred
50 x 100
x
x
–
–
Grade control
6 x 8
–
x
–
–
Tropicana
Measured
25 x 25
x
x
–
–
Indicated
50 x 50
x
x
–
–
Inferred
100 x 100
x
x
–
–
Grade control
–
–
–
–
–

ORE RESERVE ESTIMATION

The Ore Reserve is estimated by Lerch's Grossman (LG) 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 (COG) is formulated on a net revenue basis (Net Smelter Return - NSR) taking into account gold and copper grade/metal price/recovery. The 0.40g/t COG approximates a life of mine cut-off grade. This represents diorite material and using unit gold/copper prices of A$850/oz and A$2.40/lb respectively. This NSR with gold leach and gravity contributions cut-off grade is A$9.33/t and includes stockpile rehandle mining cost of A$0.76/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.

Australia

Regional overview *cont.*

Mineral Resource and Ore Reserve Report 2008
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Ore Reserve modifying factors
as at 31 December 2008

| | Gold price | Cut-off | Cut-off | Stoping | Dilution | Mine call | Metal-lurgical |
|---|---|---|---|---|---|---|---|
| | recovery used | grade value | width factor | factor | Mine | | |
| | US$/oz | g/t Au | cmg/t Au | cm | (MCF) | % | Comments |
| Boddington | | | | | | | |
| Surface | 725 | 0.55 | – | – | – | – | 80.4 |
| Cu average recovery 82.3% | | | | | | | |
| Sunrise Dam | | | | | | | |
| Surface – Mega Pit | 720 | 1.0 | – | – | – | – | 83.5 |
| Surface – North Wall Cutback | – | – | – | – | – | – | – |

–
Total stockpiles
–
–
–
–
–
–
–
–
Underground
720
1-3.2
–
–
10-63%
100.0
76-94
Reconciliation of Mineral Resource and Ore Reserve
as at 31 December 2008
Changes in gold contained
Moz
Percentage
Deple-
Model
Scope
Net change
Mine
attributable Category
2007
tion
(1)
change
(2)
change
(3)
2008
Diff
% Comment
Boddington 33.33% Resource 10.28
(0.02)
0.29
1.36
11.91
1.63
16
Growth in Mineral Resource due to
successful near mine exploration
drilling and higher gold price
Reserve
5.54
(0.01)

–
1.15
6.69
1.14
21
Growth in Ore Reserve due to successful reserve conversion drilling and higher gold price
Sunrise Dam
100% Resource
3.08
(0.28)
0.99
0.06
3.85
0.78
25
Underground drilling exploration success and higher gold price
Reserve
1.63
(0.54)
0.62
0.18
1.90
0.27
16
Underground drilling exploration success and higher gold price
Tropicana
70% Resource
2.84
–
0.18
0.49
3.51
0.67
24
Exploration success and higher gold price
Reserve
–
–
–
–
–
–
–
Total Resource 16.19
(0.30)

1.47
1.90
19.27
3.08
19
Reserve
7.18
(0.54)
0.62
1.34
8.59
1.41
20

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

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

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

Boddington

Australia

The Boddington operation is situated approximately 130km south-east of Perth in Western Australia and is a joint venture between AngloGold Ashanti (33.33%) and Newmont (67.67%), with Newmont managing the operation. Construction of the 35.2Mt per annum basement treatment plant is well advanced and production is anticipated to commence in 2009.

GEOLOGY

Boddington is located in the Archaean Saddleback Greenstone Belt, a north-west trending, fault bounded sliver of greenstones approximately 50km long and 8km wide. The greenstone belt rocks mainly comprise Archaean volcanic and shallow-level intrusive rocks. The greenstones were intruded by a suite of dioritic intrusions and granodiorite-tonalite intrusions.

The main zone of gold mineralisation occurs reasonably continuously over a strike length of over 6km 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. The basement Mineral Resource, beneath the oxide pits, is hosted predominantly by andesitic volcanics and diorites, and contains both gold and copper mineralisation. There is a wide range of alteration intensity and distribution, with four alteration or deformation events having been identified (D1 to D4). The major structures controlling mineralisation are the late D4 biotite-altered west-southwest and northwest-trending strike slip faults. A variety of earlier D1, D2 and D3 shear zones are also important zones of structural preparation which become zones of high-grade mineralisation when interacted with D4 faults.

The alteration types that are associated with gold and copper mineralisation are clinozoisite-biotite-sulphide veins and late actinolite-sulphide veins. These vein types form the basis of the stockwork mineralisation of the Wandoo resource.

The bulk of the gold mineralisation is associated with the late-stage clinozoisite-biotite-sulphide alteration event with gold grades in this alteration being typically less than 3g/t Au and averaging about 1g/t Au. The second mineralising alteration style of late actinolite-sulphide veining contains generally higher levels of gold, averaging 5g/t Au to 8g/t Au, but ranging from 30g/t Au to 70g/t Au in the larger veins.

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MINERAL RESOURCE ESTIMATION

The Mineral Resources and Ore Reserves 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 drillhole information is validated for use in the models and the local geology of the orebody is used to classify the drillhole information into appropriate geostatistical domains. Detailed statistical analyses are conducted on each of these domains and this allows for the identification of high-grade outliers. If these values are anomalous to the general population characteristics then they are cut back to the appropriate upper limit of the population.

Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Boddington
Category
million
g/t
tonnes
Moz
Measured
67.82
0.83
56.29
1.81
Indicated
373.10
0.65
243.67
7.83
Inferred
129.87
0.54
70.39
2.26
Boddington
Total
570.79
0.65
370.35
11.91

Exclusive Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade

gold
gold
Boddington
Category
million
g/t
tonnes
Moz
Measured
10.89
0.44
4.84
0.16
Indicated
165.50
0.53
87.17
2.80
Inferred
129.87
0.54
70.39
2.26
Boddington
Total
306.26
0.53
162.40
5.22
Dacite
Diorite
Fragmental
Dolerite
Andesite
Wandoo North Pit
Wandoo South Pit
Boddington Geology

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Australia
Boddington *cont.*
Boddington:
Ore Reserve reconciliation
2007 vs 2008
Ounces (millions)
5.54
2007
-0.01
Depletion
1.15
Scope
Change
6.69
2008
0.00
Model
Change
5.5
Change
6.5
Boddington:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
10.28
2007
-0.02
Depletion
1.74
Gold price
0.01
Other
0.40
Explo-
ration
11.92
2008
-0.39
Cost
10.8
9.8
-0.11
Metho-
dology
Change
11.8
6.0
Mineral Resource by-products: Copper (Cu)

Metric
Contained Copper
Reserve
Tonnes
Grade
Tonnes
Pounds
Boddington
category
million
(ppm)
million
millions
Measured
67.82
1,043
0.07
155.93
Indicated
373.10
986
0.37
810.79
Inferred
129.87
912
0.11
261.13
Boddington
Total
570.79
976
0.56
1,227.85
Ore Reserve
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Boddington
Category
million
g/t
tonnes
Moz
Proved
56.93
0.90

51.45
1.65
Probable
207.60
0.75
156.50
5.03
Boddington
Total
264.53
0.79
207.95
6.69
Ore Reserve by-products: Copper (Cu)
Metric
Contained Copper
Reserve
Tonnes
Grade
Tonnes
Pounds
Boddington
category
million
(ppm)
million
millions
Proved
56.93
1,112
0.063
139.51
Probable
207.60
1,091
0.227
499.52
Boddington
Total
264.53
1,096
0.290
639.03

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Boddington
– Surface (Metric)
Tonnes above cut-off (millions)
Cut-off grade (g/t)
Average
grade
above
cut-off
(g/t)
0.0
2800
0.00
0.50
1.00
1.50
2.00
2400
2000
400
800
1200
1600
0.00
1.00
0.50
Tonnes above cut-off
Ave grade above cut-off
Competent persons
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
K Gleeson
AusIMM
202246
19 years
Ore Reserve
L Setiawan
AusIMM
991262
17 years

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Sunrise Dam

Australia

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

GEOLOGY

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

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

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

MINERAL RESOURCE ESTIMATION

Open-pit estimates are generated using a geostatistical method called multiple-indicator kriging. All available geological drillhole information is validated for use in the models and the local geology of the orebody is used to classify the drillhole information into appropriate geostatistical domains. Detailed statistical analyses are conducted on each of these domains and this allows for the identification of high-grade outliers. If these

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values are anomalous to the general population characteristics then they are cut back to the appropriate upper limit of the population.
Estimation of the underground Mineral Resource uses the geological model boundaries to subdivide all drillhole data into appropriate domains. Statistical analyses are performed on these domains and, in a similar manner to that of open-pit estimation, high-grade outliers are identified and appropriately cut back to the upper limit of the population. A geostatistical method called ordinary kriging is used to produce estimates of a pre-determined block size. These block sizes are 10m x 10m and 20m x 20m. The geostatistical technique of conditional simulation has been used to estimate the Cosmo ore zone.
50,050m
50,300m
50,550m
50,800m
2,400m
2,300m
2,200m
2,100m
2,000m
1,900m
1,800m
1,700m
Sunrise Dam Gold Mine - section 100500m N
Legend
Lake clay
Saprolite
Undifferentiated
Quartz-feldspar rhyolite
Coarsely
quartz-phyric rhyolite
Quartz diorite
Diorite / Dolerite
Basalt
Basaltic andesite
Andesite
Non-stratified monomictic
Breccia hyaloclastite
Stratified monomictic breccia
(resedimented hyaloclastite)
Polymictic-monomictic
conglomarate
Sandstone - siltstone
Siltstone
Magnetite shale (BIF)
Schist
Shear
Fault
Pit
Mineral Resource
as at 31 December 2008
Contained

Contained
Tonnes
Grade
gold
gold
Sunrise Dam
Category
million
g/t
tonnes
Moz
North Wall Cutback
Measured
2.76
3.32
9.17
0.30
Indicated
1.78
2.76
4.89
0.16
Inferred
–
–
–
–
Total
4.53
3.10
14.06
0.45
Golden Delicious
Measured
–
–
–
–
Indicated
1.04
1.84
1.91
0.06
Inferred
2.64
1.64
4.33
0.14
Total
3.68
1.70

6.24
0.20
Total stockpiles
Measured
16.72
1.32
22.06
0.71
Indicated
–
–
–
-
Inferred
–
–
–
–
Total
16.72
1.32
22.06
0.71
Underground
Measured
–
–
–
–
Indicated
6.84
6.57
44.92
1.44
Inferred
5.29
6.15
32.54
1.05
Total
12.13
6.39
77.47
2.50
Sunrise Dam
Total
37.06
3.23
119.83
3.85

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Australia
Sunrise Dam *cont.*
Sunrise Dam:
Ore Reserve reconciliation
2007 vs 2008
Ounces (millions)
1.63
2007
-0.53
Depletion
0.18
Scope
Change
1.90
2008
0.62
Model
Change
1.1
Change
2.1
1.6
Sunrise Dam:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
3.08
2007
-0.28
Depletion
0.06
Gold price
-0.01
Other
1.00
Explo-
ration
3.85
2008
0.01
Cost
3.3
2.8
-0.01
Metho-
dology
Change
3.8
Exclusive Mineral Resource

as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Sunrise Dam
Category
million
g/t
tonnes
Moz
Measured 10.01 1.01 10.13 0.33
Indicated 2.75 5.68
15.66 0.50
Inferred 7.93 4.65
36.88
1.19
Sunrise
Dam
Total 20.69 3.03 62.66 2.01
Ore Reserve
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Sunrise Dam
Category
million
g/t
tonnes
Moz
North Wall Cutback
Proved
2.42
3.68
8.90
0.29
Probable
1.48
3.12
4.62
0.15
Total
3.90
3.47
13.52

0.44
Total stockpiles
Proved
8.48
1.67
14.20
0.46
Probable
–
–
–
–
Total
8.48
1.67
14.20
0.46
Underground
Proved
–
–
–
–
Probable
5.42
5.80
31.45
1.01
Total
5.42
5.80
31.45
1.01
Sunrise Dam
Total
17.80
3.32
59.16
1.90
INFERRED MINERAL RESOURCE IN PIT OPTIMISATION
0.26 million ounces of Inferred Mineral Resources are included in the business plan.
The Exclusive Mineral Resource includes Inferred Mineral Resource and low-grade stockpiles that do not currently meet the Ore Reserve cut-off grade requirements.

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Sunrise Dam –
Surface (Metric)
Tonnes above cut-off (millions)
0.00
Cut-off grade (g/t)
5.00
Average
grade
above
cut-off
(g/t)
0.0
25.0
20.0
15.0
5.0
10.0
1.00
2.00
3.00
4.00
Tonnes above cut-off
Ave grade above cut-off
10.21
9.21
8.21
7.21
6.21
5.21
4.21
3.21
2.21
1.21
Competent persons
Professional
Registration
Relevant
Sunrise Dam
Type
Name
organisation
number
experience
Surface
Mineral Resource
J Biggam
AusIMM
112082
15 years

Ore Reserve
M Janas
AusIMM
210148
17 years
Underground
Mineral Resource
J Biggam
AusIMM
112082
15 years
Ore Reserve
S Tombs
AusIMM
105785
32 years

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Tropicana
Australia
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.
The 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 drillhole information is validated for use in the models and the local geology of the orebody is used to classify the drillhole information into appropriate geostatistical domains. Detailed statistical analyses are conducted on each of these domains and this allows for the identification of high-grade outliers. If these values are anomalous to the general population characteristics, then they are cut back to the appropriate upper limit of the population.
Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Tropicana
Category
million
g/t
tonnes
Moz
Measured
13.96
2.38
33.25
1.07
Indicated
21.73
2.06
44.75
1.44
Inferred
16.99
1.83
31.16
1.00
Tropicana
Total
52.68

2.07
109.16
3.51
LEGEND
Tropicana - prospect
Perth - Town
Tropicana JV
Granted tenure
Application tenure
Viking
Granted tenure
Application tenure
Bronco Plains JV
Perth
Laverton
Kalgoorlie
Esperance
WESTERN
AUSTRALIA
Esperance
Kalgoorlie
Laverton
WESTERN AUSTRALIA
Voodoo Child
Black Dragon
Tumbleweed
Rusty Nail
Kamikazi
Beachcomber
Tropicana
Havana
Screaming Lizard
Tropicana JV
Viking
Bronco
Plains JV
400
kilometers
0
200

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Tropicana:
Mineral Resources
2007 vs 2008
Ounces (millions)
2.83
2007
0.00
Depletion
0.89
Gold price
0.00
Other
0.57
Explo-
ration
3.51
2008
-0.37
Cost
3.1
2.1
-0.39
Metho-
dology
Change
4.1
Competent person
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
M Kent
AusIMM
203631
11 years
Tropicana
– Surface (Metric)
Tonnes above cut-off
(millions)
Cut-off grade (g/t)
2.00
Average grade above cut-off (g/t)
1.00
400.0

0.0
800.0
200.0
600.0
0.00
0.0
1.0
3.0
2.0
4.0
Tonnes above cut-off
Ave grade above cut-off
0
20
40
60
70
Metres
SAPRK
A
B
I
SW (local)
TFRC100
TFRC807
NE (local)
3gt
1gt
0.5gt
Schist
Gamet gneiss
Gamet
Gneiss
Boston Shaker
Shear
Longitudinal section of Tropicana
Surface

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Regional overview
Brazil
AngloGold Ashanti's operations in Brasil comprise the wholly-owned AngloGold Ashanti Brazil Mineração (formally Morrow Velho) and a 50% interest in the Mineração Serra Grande Mine.
Mineral Resource and Ore Reserve gold price and exchange rates
Units
2008
2007
Gold price – Mineral Resource
US$/oz
1,000
700
Gold price – Ore Reserve
US$/oz
720
600
Exchange rate – Brazil
R$/US$
1.94
1.95
Details of average drillhole spacing and type in relation to the Mineral Resource classification
Type of drilling
Mine/
Category
Spacing
Diamond
RC
Blasthole Other
Comments
Project
m (- x -)
Serra
Measured
10 x 10, 10 x 20
x
–
–
–
Grande
Indicated
10 x 20, 20 x 50
x
–
–
–
Inferred
50 x 100, 50 x 200
x
–

–
–
Grade control 2 x 2
–
–
–
x
Channel sample
N
Operations
0
1000km
Rio de Janeiro
Manaus
Recife
Brasilia
Crixas
Belo Horizonte
Sao Paulo
Salvador
Belem
Serra Grande
AngloGold
Ashanti
Brasil
Mineração
BRAZIL

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Ore Reserve modifying factors
as at 31 December 2008

| Mine/Project | Cut-off grade g/t Au | Stoping width metres | Mine call factor % | Metallurgical recovery (MCF) factor % | Dilution % | Comments |
|---|---|---|---|---|---|---|
| Brasil Mineração | | | | | | |
| Corrego Do Sitio Oxides | 1.35-1.44 | 3-4 | 28 | 92 | 88 | |
| Corrego Do Sitio Sulphides | 3.93 | 2.2-6.0 | 29 | 95 | 90 | |
| Cuiaba Sulphides – Main Area | 2.82 | 4-15 | 5 | 94.5 | 93 | |
| Lamego Sulphides | 4.27 | 3.4-15 | 5-87 | 95 | 93 | Mining recovery of 95% |
| Serra Grande | | | | | | |
| Mina Nova | | | | | | |

1.96
–
5
100
95
Open Pit
1.0
–
30
100
95
Serra Grande – Mina 3
2.97
–
5
100
95
Total stockpiles
5.15
–
5
100
95
Reconciliation of Mineral Resource and Ore Reserve
as at 31 December 2008
Changes in gold contained
Moz
Percentage
Deple-
Model
Scope
Net change
Mine
attributable Category
2007
tion
(1)
change
(2)
change
(3)
2008
Diff
% Comment
Brasil
100% Resource
10.92
(0.43)
0.04
–
10.53

(0.39)
(4)
Mineral Resource conversion
Mineração
process
Reserve
2.48
(0.34)
0.45
(0.03)
2.56
0.08
3
Mineral Resource converted into
Ore Reserves, mainly at Cuiaba
Mine
Serra Grande
50% Resource
0.91
(0.10)
0.20
(0.03)
0.98
0.07
8
Exploration process and new
orebody discovery Pequizao
Reserve
0.39
(0.09)
0.05
0.01
0.36
(0.03)
(8)
Lower grade or thickness in some
small areas
Total
Resource 11.82
(0.53)
0.24
(0.03)
11.50
(0.32)
(3)
Reserve
2.87
(0.43)
0.50
(0.02)
2.92

0.05
2
*1. Depletion: reduction in Ore Reserve based on ore delivered to the plant and corresponding in situ reduction in the Mineral Resource.*
*2. Model change: difference between the Ore Reserve based on the start of year and end of year Mineral Resource models.*
*3. Scope change: difference resulting from change in cut-off grade, mine call factor, new project studies and any other factors influencing the*
*Mineral Resource and Ore Reserve estimations.*

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Brasil Mineração
Brazil
GEOLOGY
AngloGold Ashanti Brasil Mineração (Brasil Mineração) has mining rights over 61,864ha in the state of Minas Gerais in south-eastern Brazil. The Brasil Mineração complex is located in the municipalities of Nova Lima, Sabará and Santa Bárbara, south and east of the city of Belo Horizonte and within the mining district referred to as the Iron 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.
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 20º to 30º and with a pitch angle to the north-east. 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 pyrrotite, pyrite and chalcopyrite.

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PROJECTS
The Córrego do Sítio Underground Sulphide Project is ongoing, with the target on exploiting the sulphide Mineral Resources of the Córrego do Sítio underground orebodies, namely Cachorro Bravo, Laranjeiras and Carvoaria Velha. The project is in the feasibility study phase. This project is expected to produce 90,000 ounces of gold annually.
The development of a ramp and the exposure of the Cachorro Bravo and Laranjeiras orebodies are continuing. The development of access drives to the Carvoaria Velha orebody is ongoing and exposure of the Laranjeira orebody to increase the extent of the mineable resource has begun. Trial mining on the Cachorro Bravo orebody is in progress as is confirming the operational mining parameters for the feasibility study. Two mine methods are being tested: sublevel stoping and cut and fill. The metallurgical process has been confirmed and pressure oxidation via autoclaves is the best option given the characteristics of the ore.
AngloGold Ashanti has bought the São Bento (SB) mine, a Brazilian gold operation wholly owned by Eldorado Gold Corporation (Eldorado) and held in São Bento Mineração S.A. (SBMSA) an indirect, wholly-owned subsidiary of Eldorado, located in the vicinity of the Córrego do Sítio mine, in the municipality of Santa Bárbara in the Iron Quadrangle region of the state of Minas Gerais. This acquisition will double the scale and enhance the feasibility of Córrego do Sítio Project and thereby increase the dominant position of AngloGold Ashanti as a gold producer in Brazil’s Iron Quadrangle.
The Lamego Project explores the orebodies on the Lamego property, close to the Cuiabá mine. This project is expected to produce approximately 345,000 ounces.
Given proximity of the Lamego Project to Cuiabá mine, there is the added benefit that ore from Lamego can be treated at the Cuiabá Plant, the expansion of which was designed to treat this additional ore.
**CUIABÁ GEOLOGY**
Balan o orebody
Galinheiro Sul orebody
Galinheiro Extension
orebody
Surucucu
orebody
Serrotinho orebody
Fonte Grande
Sul orebody
Canta Galo orebody
200m
Cuiabá Banded Iron Formation
Banded massive disseminated sulphides

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Brazil

Brasil Mineração *cont.*

Exclusive Mineral Resource

as at 31 December 2008

| Brasil Mineração Category | Contained gold million tonnes | Tonnes Moz | Grade g/t | Contained gold Moz |
|---|---|---|---|---|
| Measured | 3.16 | 6.68 | 21.08 | 0.68 |
| Indicated | 6.40 | 6.42 | 41.06 | 1.32 |
| Inferred | 24.78 | 6.90 | 171.10 | 5.50 |
| Brasil Mineração Total | 34.34 | 6.79 | 233.23 | 7.50 |

The Exclusive Mineral Resource is predominantly from the Lamego Sulphides and MMV. This Exclusive Mineral Resource has the potential to be mineable, depending on the gold price and the outcome of technical studies.

Mineral Resource

as at 31 December 2008

| Brasil Mineração Category | Contained gold million tonnes | Tonnes Moz | Grade g/t | Contained gold Moz |
|---|---|---|---|---|
| Corrego do Sitio | | | | |
| Measured | 1.50 | 6.43 | | |

9.65
0.31
Indicated
5.86
6.61
38.70
1.24
Inferred
5.69
6.60
37.51
1.21
Total
13.04
6.58
85.87
2.76
Cuiaba
Measured
6.24
8.21
51.24
1.65
Indicated
3.58
7.06
25.26
0.81
Inferred
11.92
7.75
92.41
2.97
Total
21.74
7.77
168.90
5.43
Lamego
Measured
0.55
6.20
3.38
0.11
Indicated
1.61
7.21
11.57
0.37
Inferred
5.04

5.05
25.44
0.82
Total
7.19
5.62
40.39
1.30
MMV - Morrow Da Gloria Sulphides
Measured
0.06
7.21
0.46
0.02
Indicated
0.05
5.92
0.29
0.01
Inferred
0.74
6.71
4.95
0.16
Total
0.85
6.70
5.70
0.18
MMV- Luzia Da Mota Oxides
Measured
0.19
3.23
0.63
0.02
Indicated
0.50
3.00
1.51
0.05
Inferred
0.23
2.97
0.70
0.02
Total
0.93
3.04
2.83
0.09
MMV- Raposos Sulphides

Measured
0.35
6.77
2.37
0.08
Indicated
0.86
6.65
5.74
0.19
Inferred
2.18
7.13
15.55
0.50
Total
3.39
6.97
23.66
0.76
Brasil Mineração
Total
47.15
6.94
327.36
10.53

MINERAL RESOURCE ESTIMATION

Three dimensional models of the BIF and sulphide orebodies are created from the drillhole 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 and Ore Reserve Report 2008
– 77 –
Mineral Resource by-products: Sulphur (S)
Metric
Imperial
Resource
Tonnes
Contained
Pounds
Brasil Mineração
category
million
Grade (%S)
Sulphur (Mt)
million
Measured
6.24
6.4
0.40
883
Indicated
3.58
6.7
0.24
528
Inferred
11.92
7.3
0.86
1,905
Brasil Mineração
Total
21.74
6.9
1.50
3,316
Brasil Mineraç~
ao:
Ore Reserve reconciliation
2007 vs 2008
Ounces (millions)
2.48
2007
-0.34
Depletion
-0.03
Scope
Change
2.56
2008
0.45

Model
Change
2.1
Change
2.9
Brasil Mineraç~
ao:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
10.91
2007
-0.43
Depletion
0.00
Gold price
0.00
Other
0.26
Explo-
ration
10.52
2008
0.00
Cost
9.9
-0.22
Metho-
dology
Change
10.9
2.3
2.5
2.0
10.4
Mineral Resources below infrastructure
as at 31 December 2008
Metric
Imperial
Contained
Contained
Tonnes
Grade
gold
gold
Brasil Mineração
Category
million
g/t
tonnes
Moz

Cuiaba
Total
13.84
7.82
108.32
3.48
Corrego do Sitio
Total
9.33
7.12
66.40
2.16
Lamego
Total
4.98
5.51
27.43
0.88
Brasil Mineração
Total
28.15
7.18
202.15
6.50

Mineral Resource and Ore Reserve Report 2008
– 78 –
Brazil
Brasil Mineração *cont.*
Ore Reserve by-products: Sulphur (S)
Metric
Imperial
Resource Tonnes
Contained
Pounds
Brasil Mineração
category
million
Grade (%S)
Sulphur (Mt)
million
Proved
4.92
5.3
0.26
577
Probable
3.26
5.5
0.18
398
Brasil Mineração
Total
8.19
5.4
0.44
974
Ore Reserve
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Brasil Mineração
Category
million
g/t
tonnes
Moz
Corrego do Sitio
Proved
0.57
6.67
3.79

0.12
Probable
2.12
5.96
12.62
0.41
Total
2.69
6.11
16.42
0.53
Cuiaba
Proved
4.92
7.50
36.93
1.19
Probable
3.26
6.14
20.04
0.64
Total
8.19
6.96
56.98
1.83
Lamego
Proved
0.22
5.36
1.18
0.04
Probable
0.88
5.77
5.10
0.16
Total
1.10
5.69
6.28
0.20
Brasil Mineração
Total
11.98
6.65
79.68
2.56

INFERRED MINERAL RESOURCE IN PIT OPTIMISATION

Inferred Mineral Resources were used in the optimisation process and 0.32Moz are present in the LOM plan.

ORE RESERVE ESTIMATION

Pit optimisation is done using Whittle ®, pit shells are calculated based on the dilution, MCF and the appropriate gold price. These are used to estimate the Ore Reserve.

For the underground operations (Cuiabá, Lamego and Córrego do Sítio Sulphides), the gold price and operational costs are taken into consideration in determining Ore Reserves. Ore Reserves are scheduled and designed using Mine2-4D ® computer software.

Mining parameters such as the mining method, minimum mining width, MCF, dilution and recovery are all applied in the process.

Mineral Resource and Ore Reserve Report 2008
– 79 –
Competent persons
Professional
Registration
Relevant
Brasil Mineração
Type
Name
organisation
number
experience
Corrégo do Sítio
Mineral Resource
P de Tarso Ferreira
AusIMM
224828
23 years
Ore Reserve
MG de Simoni
AusIMM
224826
16 years
Cuiabá
Mineral Resource
P de Tarso Ferreira
AusIMM
224828
23 years
Ore Reserve
S Botelho
AusIMM
224833
22 years
Lamego MMV
Mineral Resource
P de Tarso Ferreira
AusIMM
224828
23 years
Other Resources
Mineral Resource
P de Tarso Ferreira
AusIMM
224828
23 years
Ore Reserve
L Nunes Coelho
AusIMM
222679
6 years

Brasil Mineração
– Surface (Metric)
Tonnes above cut-off (millions)
Cut-off grade (g/t)
Average grade
above cut-off (g/t)
6.00
7.00
8.00
9.00
0.0
15.0
5.0
10.0
5.00
2.00
0.00
1.00
3.00
4.00
Tonnes above cut-off
Ave grade above cut-off
Brasil Mineração
– Underground (Metric)
Tonnes above
cut-off (millions)
Cut-off grade (g/t)
Average grade above cut-off (g/t)
20.00
0.00
5.00
10.00
15.00
0.0
40.0
10.0
30.0
20.0
7.00
12.00
17.00
22.00
Tonnes above cut-off
Ave grade above cut-off
Ore Reserves below infrastructure
as at 31 December 2008
Metric
Imperial
Contained
Contained
Tonnes

Grade
gold
gold
Brasil Mineração
Category
million
g/t
tonnes
Moz
Cuiaba
Total
1.95
6.28
12.27
0.39
Corrego do Sitio
Total
1.98
6.09
12.04
0.39
Lamego
Total
0.26
6.02
1.58
0.05
Brasil Mineração
Total
4.19
6.18
25.89
0.83

Mineral Resource and Ore Reserve Report 2008
– 80 –
Serra Grande
Brazil
GEOLOGY
The Serra Grande joint venture (50% attributable to AngloGold Ashanti) is co-owned with Kinross Gold Corporation. 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.
The operation comprises three underground mines, Mina III, Mina Nova and Mina Palmeiras, and one open pit mine in the outcrop of Mina III (between level 50 and surface). The processing circuit is equipped with grinding, leaching, filtration, precipitation and smelting facilities.
The gold deposits are hosted in a sequence of schists and volcanics occurring in a typical greenstone belt structural setting. The host rocks are of the Pilar de Goiás Group of the Upper Archaean located in the Crixás Greenstone Belt. Gold mineralisation is associated with quartz vein hosted in graphitic schists, massive and disseminated sulphides hosted in a sequence of hydrothermal schists and locally in dolomites. The ore shoots plunge downwards to the north-west and the dips varies between 6° and 35°. The deposits occur in the Rio Vermelho and Ribeirão das Antas formations.
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 siderite and ankerite veining having developed in the surrounding wallrock, usually associated with quartz veining. The basalts are relatively unaltered but do show pronounced stretching with the elongation of pillow structures evident. The ultra-basics

Mineral Resource and Ore Reserve Report 2008
– 81 –
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-north-west 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-north-west structural corridor, and up the main fault ramp/corner, to become dispersed to the east and north in 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-south-west to north-north-east 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 the layering in a westerly direction with dips of between 6° and 35°. The stratigraphy is overturned and thrust towards the east.
VII
III
I
IX
400
350
300
250
200
**PERPENDICULAR SECTION**
N-48 N-53 K-119
N-52
K-120
N-130
N-134
**LEGENDA**
S
N
N-185
K-61 N-161 N-109
N-108
N-100
N-19
K-119
Superfice
N-1
Vent shaft (P2)
N-5 N-47
N-18

Vent shaft (P3)
Vent shaft (P1)
N-27
N-55
I
X
III
VII
IX
XI
VI
V
XXII
Ramp
400
300
200
100
NW
SE

**LONGITUDINAL SECTION OF MINA NOVA**

Basalt
Altered basalt
Carbonates
Carbonate schist
Chlorite schist
Greywacke
Quartz vein
Mineralisation > 2.0ppm

Mineral Resource and Ore Reserve Report 2008
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Brazil
Serra Grande *cont.*
Serra Grande:
Ore Reserve reconciliation
2007 vs 2008
Ounces (millions)
0.39
2007
-0.09
Depletion
0.01
Scope
Change
0.36
2008
0.05
Model
Change
0.2
Change
0.3
Serra Grande:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
0.91
2007
-0.10
Depletion
0.00
Gold price
-0.03
Other
0.20
Explo-
ration
0.98
2008
0.00
Cost
0.8
0.00
Metho-
dology
Change
1.0
0.9
0.4
Mineral Resource

as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Serra Grande
Category
million
g/t
tonnes
Moz
Mina Nova
Measured
0.88
3.60
3.18
0.10
Indicated
0.27
3.10
0.83
0.03
Inferred
0.34
3.67
1.25
0.04
Total
1.49
3.53
5.26
0.17
Open pit
Measured
0.77
3.97
3.06
0.10
Indicated
0.25
2.86
0.72
0.02
Inferred
–
–
–
–
Total

1.02
3.70
3.78
0.12
Palmeiras
Measured
–
–
–
–
Indicated
–
–
–
–
Inferred
0.49
8.09
3.95
0.13
Total
0.49
8.09
3.95
0.13
Pequizao
Measured
–
–
–
–
Indicated
–
–
–
–
Inferred
0.92
6.77
6.23
0.20
Total
0.92
6.77
6.23
0.20
Total stockpiles
Measured
0.06
4.76
0.27

0.01
Indicated
–
–
–
–
Inferred
–
–
–
–
Total
0.06
4.76
0.27
0.01
Mina 3
Measured
0.50
7.11
3.55
0.11
Indicated
0.48
5.67
2.74
0.09
Inferred
0.96
4.79
4.60
0.15
Total
1.94
5.61
10.90
0.35
Serra Grande
Total
5.92
5.13
30.39
0.98
Exclusive Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold

| Serra Grande | | | | |
|---|---|---|---|---|
| Category | million tonnes | g/t | Moz | |
| Measured | 0.04 | 2.83 | 0.12 | – |
| Indicated | 0.23 | 2.91 | 0.68 | 0.02 |
| Inferred | 2.71 | 5.92 | 16.03 | 0.52 |
| Serra Grande Total | 2.99 | 5.64 | 16.83 | 0.54 |

Mineral Resource and Ore Reserve Report 2008
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Ore Reserve
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Serra Grande
Category
million
g/t
tonnes
Moz
Mina Nova
Proved
0.79
3.24
2.56
0.08
Probable
0.21
3.00
0.62
0.02
Total
1.00
3.19
3.19
0.10
Open pit
Proved
0.82
3.64
2.98
0.10
Probable
0.19
2.36
0.44
0.01
Total
1.01
3.40
3.42
0.11
Total stockpiles
Proved
0.06

4.76
0.27
0.01
Probable
–
–
–
–
Total
0.06
4.76
0.27
0.01
Mina 3
Proved
0.39
5.98
2.33
0.08
Probable
0.37
5.58
2.04
0.07
Total
0.76
5.79
4.37
0.14
Serra Grande
Total
2.82
3.99
11.25
0.36
Competent persons
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
EM de Araujo
AusIMM
224825
20 years
Ore Reserve
EM de Araujo

AusIMM
224825
20 years
Serra Grande
– Surface (Metric)
Tonnes above cut-off (millions)
Cut-off grade (g/t)
Average
grade
above
cut-off
(g/t)
0.0
0.5
1.0
1.5
2.0
2.5
5.00
0.00
1.00
3.00
4.00
2.00
3.0
4.0
5.0
6.0
7.0
8.0
Tonnes above cut-off
Ave grade above cut-off
INFERRED MINERAL RESOURCE IN PIT OPTIMISATION
Inferred Mineral Resources were used in the optimisation process and 0.21Moz from Mina 3 are present in the LOM plan.

Mineral Resource and Ore Reserve Report 2008
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Regional overview
Colombia
In 2003, AngloGold Ashanti was the first company to instigate a systematic grassroots exploration program in Colombia. Since the start of exploration, AngloGold Ashanti has staked a total of 13.9 million hectares of exploration claims countrywide. Of these, 11.2 million hectares have been explored with systematic stream sediment sampling, prospecting and in some areas, airborne geophysics. As a result of this work 423 mineral contracts covering 825,025 ha are active with follow up work from drill target definition through pre-feasibility studies either operated 100% by AngloGold Ashanti or in joint ventures with partners, B2Gold, Mineros S.A, Mega Uranium and Glencore. AngloGold Ashanti has thus far relinquished 10.4 million hectares and plans to complete first stage exploration on the remaining 2.7 million hectares in 2009. To date the program has generated 42 drill targets of which 24 have been drilled with two resulting in significant discoveries, Gramalote and La Colosa.
Cartagena
COLOMBIA
Bogotá
La Colosa
Gramalote
Quebradona
500
kilometers
0
250
SOUTH
AMERICA
Segovia
Antioquia
LEGEND
La Colosa - Prospect
Bogotá
JV Areas
Mineros SA - AGA
Glencore
B2Gold
Tenure
Granted
Free Area
Applications
Details of average drillhole spacing and type in relation to Mineral Resource classification
Type of drilling
Mine/
Category
Spacing
Diamond
RC
Blasthole Other
Comments
Project
m (- x -)
Gramalote
Measured

–
–
–
–
–
Indicated
–
–
–
–
–
Inferred
70 x 100
x
–
–
–
Approximate drillhole spacing
Grade control
–
–
–
–
–
La Colosa
Measured
–
–
–
–
–
Indicated
–
–
–
–
–
Inferred
100 x 100
x
–
–
–
Additional geological holes were drilled at different spacings and angles, HQ to NQ size
Grade control
–
–
–
–

–

Mineral Resource and Ore Reserve Report 2008
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Reconciliation of Mineral Resource and Ore Reserve
as at 31 December 2008
Changes in gold contained
Moz
Percentage
Deple-
Model
Scope
Net change
Mine
attributable Category
2007
tion
(1)
change
(2)
change
(3)
2008
Diff
% Comment
Gramalote
49% Resource
1.59
–
–
(0.55)
1.04
(0.55)
(35)
Reduced ownership from 75%
to 49%
Reserve
–
–
–
–
–
–
–
La Colosa
100% Resource
–
–
12.32
–
12.32
12.32
–

Conceptual study was completed
in 2008 and project has now
advanced to pre-feasibility stage
Reserve
–
–
–
–
–
–
–
Total
Resource
1.59
–
12.32
(0.55)
13.36
11.77
740
Reserve
–
–
–
–
–
–
–

*1. Depletion: reduction in Ore Reserve based on ore delivered to the plant and corresponding in situ reduction in the Mineral Resource.*
*2. Model change: difference between the Ore Reserve based on the start of year and end of year Mineral Resource models.*
*3. Scope change: difference resulting from change in cut-off grade, mine call factor, new project studies and any other factors influencing the*
*Mineral Resource and Ore Reserve estimations.*

Mineral Resource and Ore Reserve Report 2008
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Gramalote
Colombia
BACKGROUND
The Gramalote project is located 120 road kilometres west-north-west 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 former subsidiary now called AngloGold Ashanti Colombia SA) 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.
During 2008, B2Gold drilled 30,131m on the global Gramalote project, including drill investigations at Gramalote Ridge (mostly Mineral Resource infill work), La Trinidad (7,019m in 20 holes), El Balzal, La Reina, El Topazio and La Malasia.
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 adit 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 south-east 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° to 80° south-west. Gold grades of more than 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 north-south 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.

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 reactivated 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 an Inferred Mineral Resource.

The Inferred Mineral Resource estimate was generated using an indicator kriging method. All available geological drillhole, surface and underground mapping information has been validated for use in the modelling process.

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– 88 –
Competent person
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
R Jahoda
AusIMM
990544
20 years
Gramalote:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
1.59
2007
0.00
Depletion
0.00
Gold price
-0.55
Other
0.00
Explo-
ration
1.04
2008
0.00
Cost
0.0
0.00
Metho-
dology
Change
1.0
1.5
0.5
Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold

Gramalote
Category
million
g/t
tonnes
Moz
Measured
–
–
–
–
Indicated
–
–
–
–
Inferred
28.35
1.14
32.33
1.04
Gramalote
Total
28.35
1.14
32.33
1.04
Colombia
Gramalote *cont.*

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La Colosa

Colombia

La Colosa is a significant ‘in-house’ greenfields project discovered by AngloGold Ashanti’s Colombian greenfields exploration team during 2006. The project is 100% owned by AngloGold Ashanti Ltd. and located 150km west of Colombia’s capital city, Bogota and 30km west of the major town, Ibague, in the department of Tolima.

GEOLOGY

The La Colosa copper-poor porphyry gold system is genetically associated with Miocene porphyritic intrusive centres intruded into Paleozoic schists. The highest grade gold mineralisation is closely associated with a suite of early porphyry intrusions/breccias with potassic and sodic-calcic alteration, 5% pyrite and traces of chalcopyrite and molybdenite. The coherent body suffered little dilution by intermineral/postmineral phases or fault propagation. Late stage alteration causing removal of gold is virtually absent.

The early porphyry stage is divided into three phases. The earliest is crowded diorite porphyry (E1) and is volumetrically minor. The two principal early diorite porphyries, both later than the crowded phase, comprise coarse grained (E2) and fine-grained (E3) varieties. The coarse-grained phase is characterised by prominent plagioclase phenocrysts about 0.5cm across, whereas the fine-grained phase contains homogeneously distributed, millimetre-sized plagioclases.

The inter-mineral-stage diorite porphyry intrusions are divided into two phases: coarse-grained (I1) and fine-grained (I2), both of which are texturally similar to the two main early-stage phases.

The late-mineral dacite porphyry is typified by rounded quartz phenocrysts, locally up to 1cm across.

Contacts between porphyry phases are commonly characterised by broad zones of intrusion breccias, i.e. a concentration of xenoliths of earlier porphyry in a later one. The texture of the breccias is commonly diffuse implying varied degrees of assimilations of the earlier by later phases.

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The most abundant intrusion breccia logged comprises clasts of the early, coarse-grained porphyry (E2) in a matrix of fine-grained porphyry (E3) and is called EBX2. The intrusion breccia may occur either as vertically continuous bodies along the contacts between the two porphyry phases or internally between within the fine-grained variety. Similar intrusion breccia was also formed at the inter-mineral porphyry stage, where the fine-grained phase cements clasts of the coarse-grained phase (IBX breccias).
A distinctive intrusion breccia occurs as a 5m to >15m wide rind to the porphyry stock, where it consists of variously orientated schist, hornfels and intrusive clasts in an early, fine-grained porphyry matrix (SBX breccias).
The early porphyry intrusion is elliptical in shape with a known maximum axis of at least 1,200m and a minimum east-west axis of 400m. The early porphyry intrusion is more abundant at shallow depths and is intruded by the inter-mineral porphyry intrusion. The early porphyry, therefore, caps and flanks the deeper inter-mineral porphyry.
The late-mineral dacite porphyry occurs as a series of dykes, all more than 40m thick but showing continuity over at least 600 vertical metres. These dykes are assumed to be lateral offshoots of a ~1-km
2
mapped body
of dacite porphyry.
ALTERATION AND MINERALISATION
The paragenesis of the main alteration/mineralisation mineral assemblage observed at Colosa starts with pervasive sodic-calcic alteration overprinted by potassic alteration and in turn cut by a sodic-calcic event. The two dominant alteration types are the potassic and second sodic-calcic. Potassic alteration, biotite and subordinate K-feldspar, occurs mainly as a pervasive replacement of the porphyries, especially the early phases. Early hydrothermal biotite is fine grained and commonly pale brown, suggesting the addition of phlogopitic (magnesium-rich) biotite. The second sodic-calcic alteration clearly overprints the potassic assemblage and is largely confined to irregular, centimetre-scale patches and well defined veinlets.
The patches and veinlets contain epidote, actinolite and chlorite, typically with white, ‘albite-rich’ haloes. Intermediate argillic and sericitic alteration are only weakly developed and only form mappable zones in the dacite and in the northern limit of the deposit.
The three early porphyries – crowded, coarse-grained and fine-grained – and their associated intrusion breccias appear to have been altered and mineralised at the same time. There is scant evidence for veinlet introduction between the three intrusive events. Crowded and coarse-grained porphyry clasts making up the intrusion breccias do not appear to have confined veinlets. The gold content of the three early porphyry phases is similar.
The veinlets at Colosa appear to span the potassic to sodic-calcic alteration events. The earliest veinlets are composed of only biotite. However, most early veinlet generations are composed of quartz, magnetite, pyrite, pyrrhotite plus minor chalcopyrite and molybdenite. The veinlets may be either quartz or magnetite dominated. The quartz-rich veinlets have the characteristics of both A- and B-types in porphyry copper systems. Where molybdenite is present, it commonly occurs along both edges of the veinlets, a widely observed B-type feature.
The main control of gold grade in the diorite/dacite intrusive stock is the intrusive phase where the mineralisation is hosted. Early intrusive phases present the highest and more consistent gold grade (average: >1.1 ppm). The inter-mineral diorite has average gold grades of less than 0.7 ppm, the late dacite phase generally only has >300ppb gold, grades close to the contact with early diorite phases.
Within the gold grade variation that characterise each intrusive phase, gold grades presents a second order correlation with the alteration assemblage. The Ca-Na and K alteration with or without chloritic alteration have the best gold grades. Areas with intense illite alteration generally have average gold grades less than 0.3 ppm.
The contact breccias and hornfels developed at the contact between porphyritic rock and schist present a mineralised haloe of at least 60m with an average gold grade of >1 ppm.
Colombia

La Colosa *cont.*

Mineral Resource and Ore Reserve Report 2008

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GOLD DEPORTMENT

Gold grains vary from almost pure gold to a lesser amount of gold-silver telluride. The chemical composition of Au-Ag-Te grains is variable. The gold grains are generally fine grained around 15 microns. Coarse grained gold (116 microns) was found in samples from metamorphic rocks. Gold grains occur both liberated and 'locked' in sulphides and silicates. The percentage is not clearly established, but a significant amount of gold is associated with silicates such as K-feldspar and plagioclase. Sulphide minerals associated with gold are dominantly pyrite and, in a much lesser amount, pyrrhotite and arsenopyrite.

MINERAL RESOURCE ESTIMATION

At La Colosa, some 17,039m of diamond drilling (59 holes) has been used to support the estimation of an Inferred Mineral Resource. A mineralised envelope was prepared from composites >0.5 ppm Au and confirmed by indicator kriging and boundary analysis.

Gold grades were estimated using ordinary block Kriging methodology. Kriging was performed on a parent block sized 50m (X) by 50m (Y) by 10m (Z) for lithological domains (wireframes) in the mineralised envelope and for the waste surrounding mineralisation. Quantitative Kriging neighbourhood analysis (QKNA) was used to optimise search range and block discretisation. All available geological drillhole, surface sampling and mapping information has been validated for use in the modelling process.

La Colosa:

Mineral Resource reconciliation

2007 vs 2008

Ounces (millions)

0.00

2007

0.00

Depletion

0.00

Gold price

0.00

Other

12.32

Explo-
ration

12.32

2008

0.00

Cost

4.0

0.0

0.00

Metho-
dology

Change

12.0

2.0

6.0

8.0

10.0

Mineral Resource exclusive of Ore Reserve

as at 31 December 2008

Contained

Contained
Tonnes
Grade
gold
gold
La Colosa
Category
million
g/t
tonnes
Moz
Measured
–
–
–
–
Indicated
–
–
–
–
Inferred
381.42
1.00
383.12
12.32
La Colosa
Total
381.42
1.00
383.12
12.32
Competent person
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
R Jahoda
AusIMM
990544
20 years

Mineral Resource and Ore Reserve Report 2008
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The Mongbwalu Project is one of AngloGold Ashanti's most important exploration projects and is situated within the 10,000km
2
covered by Concession 40 in the Ituri Province of north-eastern Democratic Republic of Congo (DRC). Concession 40 has a rich history of gold occurrences and cover the entire Kilo Archaean granite-greenstone belt that extends approximately 850km west-northwest of Lake Albert.
Details of average drillhole spacing and type in relation to the Mineral Resource classification
Type of drilling
Mine/Project
Category
Spacing
Diamond
RC
Blasthole Other
Comments
m (- x -)
Mongbwalu
Measured
–
–
–
–
–
Indicated
–
–
–
–
–
Inferred
50 x 50
x
x
–
–
Grade control
–
–
–
–
–
Regional overview
Democratic Republic of Congo
Uganda
**Lake Albert**
Lake Albert
Mongbwalu

DRC
0
30
60
kilometers
Mount Tsi
Bunia West
Petsi
Lodjo
Bunia
**Sudan**
Kinshasa
Democratic
Republic
of Congo
LEGEND
Bunia - Town
Lodjo - Prospect

Mineral Resource and Ore Reserve Report 2008
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Reconciliation of Mineral Resource and Ore Reserve
as at 31 December 2008
Changes in gold contained
Moz
Percentage
Deple-
Model
Scope
Net change
Mine
attributable Category
2007
tion
(1)
change
(2)
change
(3)
2008
Diff
% Comment
Mongbwalu
86.2% Resource
2.52
–
–
–
2.53
–
–
Reserve
–
– –
– –
–
–
Total
Resource
2.52
–
–
–
2.53
–
–
Reserve
–
–
–

–
–
–
–

*1. Depletion: reduction in Ore Reserve based on ore delivered to the plant and corresponding in situ reduction in the Mineral Resource.*
*2. Model change: difference between the Ore Reserve based on the start of year and end of year Mineral Resource models.*
*3. Scope change: difference resulting from change in cut-off grade, mine call factor, new project studies and any other factors influencing the*
*Mineral Resource and Ore Reserve estimations.*

MONGBWALU

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. The findings of the DRC Minerals Review Commission have resulted in AngloGold Ashanti and the AGAK joint venture engaging the DRC government to seek resolution and secure the rights to Concession 40.

Exploration activities over the Concession 40 licence were suspended in November 2008 following the deteriorating security situation which led to the precautionary withdrawal of most non-essential staff from the concession.

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

The most prospective parts of the greenstone belt have been covered by a total of 5,575km 2 of airborne magnetic and radiometric surveys. Three fly camps have been established as bases for the regional field work.

GEOLOGY

Granitoids are the predominant rock type within the Kilo granite-greenstone belt. The granitoids contain rafts of Kibalian amphibolites and basic talc carbonate schists that have been intruded by diorite-tonalite-granodiorite assemblages. The Mongbwalu resource mineralisation is hosted in multiple, shallow dipping mylonite bodies that average 25m in width. Within the mylonite zones, the gold is primarily concentrated in boudinaged quartz

Mongbwalu
Democratic Republic
of Congo

veins that appear to be orientated sub-parallel to the mylonite zones and their immediate wall-rock.
The alteration assemblage consists of chlorite-biotite-quartz-sericite and mineralisation occurs as pyrite-pyrrhotite (<2%) and free gold.
The easterly dipping mylonite zones are continuous throughout the area drilled, with the most prospective zone located close to the old Adidi Mine. Two north-south trending faults have offset the mineralisation and kept the mineralisation within 150m to 200m of the surface. The mylonite can be traced along a strike length of approximately 7km and given its shallow dip there is good potential to find additional ounces close to surface.
MINERAL RESOURCE ESTIMATION
AngloGold Ashanti began drill testing of the Mineral Resource potential of the Mongbwalu area in mid-2005 and by the end of 2006, the broader Mongbwalu area (Nzebi-Adidi-Kanga-Pluto 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 those areas of maximum potential to host near surface open-pit extractable or shallow underground extractable mineralisation. The aim was to define an initial Inferred Mineral Resource by the end of 2007. Data obtained from a total of 87,933m of drilling was used for Mineral Resource modelling and estimation.
The principle Mongbwalu Mylonite horizons and other important geological units defined by drillhole logging and interpretation were modelled using conventional 3D wireframing techniques and Datamine
®
software.
To define the Inferred Mineral Resource, ore envelopes were created using manual wireframing in Datamine
®
at cut-off grades of 0.5g/t Au and 3.0g/t Au. Following geostatistical evaluation of the drillhole assay database, gold grades were interpolated into a 3D block-model incorporating the principle geological units and ore envelopes using ordinary Kriging to define the Inferred Mineral Resource, at a cut-off grade of 0.5g/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 Mineral Resource estimate.
Mineral Resource and Ore Reserve Report 2008
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Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Mongbwalu
Category
million
g/t
tonnes
Moz
Measured
–
–
–
–
Indicated

–
–
–
–
Inferred
29.25
2.69
78.53
2.52
Mongbwalu
Total
29.25 2.69
78.53
2.52

Mineral Resource and Ore Reserve Report 2008
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Democratic Republic of Congo
Mongbwalu *cont.*
Competent person
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
M O’Brien
AusIMM
206669
29 years
Mongbwalu:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
2.52
2007
0.00
Depletion
0.00
Gold price
0.00
Other
0.00
Explo-
ration
2.53
2008
0.00
Cost
0.0
0.00
Metho-
dology
Change
1.5
0.5
1.0
2.0
2.5
3.0

Mineral Resource and Ore Reserve Report 2008
– 97 –
Regional overview
Ghana
AngloGold Ashanti has two mines in Ghana, Obuasi which has both surface and underground operations and Iduapriem, an open pit mine. Obuasi and Iduapriem are both wholly owned by AngloGold Ashanti.
Mineral Resource and Ore Reserve gold price
Units
2008
2007
Gold price – Mineral Resource
US$/oz
1,000
700
Gold price – Ore Reserve
US$/oz
720
600
Accra
Sekondi Takoradi
Tarkwa
Kumasi
Tamale
Bolgatanga
*Lake*
*Volta*
GHANA
Obuasi
Iduapriem
N
Operations
0
300km
Details of average drillhole spacing and type in relation to Mineral Resource classification
Type of drilling
Mine/
Category
Spacing
Diamond
RC
Blasthole Other
Comments
Project
m (- x -)
Iduapriem
Measured
50 x 50 and
x
x
–
–

100 x 50
Indicated
50 x 75 and
x
x
–
–
100 x 75
Inferred
50 x 100 and
x
x
–
–
100 x 100
Grade control

Mineral Resource and Ore Reserve Report 2008
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Ore Reserve modifying factors
as at 31 December 2008

| Metal-lurgical factor % | Gold price used USD$/oz | Cut-off grade g/t Au | Stoping width cm | Mine call Dilution factor % | Recovery (MCF) | Mine call factor % | Comments |
|---|---|---|---|---|---|---|---|
| Iduapriem | | | | | | | |
| Ajopa 600 | 600 | 0.6-0.71 | – | 7-8 | 100 | 94.5-97 | |
| Block 3W | 600 | 0.6-0.71 | – | 7-8 | 100 | 94.5-97 | |
| Block 5 | 600 | 0.6-0.71 | – | 7-8 | 100 | 94.5-97 | |
| Blocks 7 and 8 | 720 | 0.6-0.71 | – | 7-8 | 100 | | |

94.5-97
Full Grade Ore stockpile
720
0.6-0.71
–
7-8
100
94.5-97
Obuasi
KMS 50-60
720
2.2-4.0
–
12
88
83
Sansu Low
720
2.2-4.0
–
12
88
83
Grade Sulphides
Upper Mine
720
2.2-4.0
–
12
88
83
Above 50 Base
720
2.2-4.0
–
12
88
83
Other Surface Resources
720
–
–
–
100 47
Tailings – Kokoteasua
720
–
–
–
100
25

Heap Leach
720
–
–
–
100
47
Surface Oxides
720
–
–
–
100
47
Surface Sulphides
720
–
–
–
100
47
Ghana
Regional overview *cont.*
Details of average drillhole spacing and type in relation to Mineral Resource classification (cont.)
Type of drilling
Mine/
Category
Spacing
Diamond
RC
Blasthole Other
Comments
Project
m (- x -)
Obuasi
Measured
20 x 0,
x
x
–
–
20 x 20 and
50 x 50
Indicated
30 x 0,
x
x
–
x
Both air core and RC, are drilled on
30 x 30 and

offset patterns
50 x 50,
60 x 0,
60 x 60
Inferred
90 x 0,
x
x
–
x
Air core and RC and some diamond
90 x 90 and
holes. Both air core and RC, are
120 x 0
drilled on offset patterns.
Grade control
–
–
–
–

Mineral Resource and Ore Reserve Report 2008
– 99 –
Reconciliation of Mineral Resource and Ore Reserve
as at 31 December 2008
Changes in gold contained
Moz
Percentage
Deple-
Model
Scope
Net change
Mine
attributable Category
2007
tion
(1)
change
(2)
change
(3)
2008
Diff
% Comment
Iduapriem
100% Resource
3.50 (0.23)
(0.58)
1.02
4.87
1.37
39
Increase due to higher resource
gold price and remodelling of
block 7&8
Reserve
2.42
(0.21) 0.34 0.01 2.55 0.14 6
Pit expansion due to higher gold price
Obuasi
100% Resource
33.43
(0.66) 2.18 2.40
37.35 3.92 12
Exploration
below
50
level
Reserve
8.33 (0.60)
2.06
(0.13)

9.66
1.33
16
Increase due to changed mine
design and schedule
Total
Resource 36.93
(0.89) 2.76 3.42
42.22 5.29 14
Reserve
10.75
(0.81) 2.39
(0.11)
12.22 1.47 14

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

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

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

Mineral Resource and Ore Reserve Report 2008
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Iduapriem
Ghana

GEOLOGY

The Iduapriem mine is situated in the western region of Ghana, some 85km north of the coastal city of Takoradi, and 10km south-west of Tarkwa. Iduapriem is an open-pit mine which commenced mining operations in 1992. Its processing facilities include a carbon-in-pulp (CIP) plant.

The Iduapriem gold mine is located along the southern end of the Tarkwa basin. The mineralisation is contained in the Proterozoic Banket Series conglomerates 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 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 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 ordinary kriging and inverse distance squared (ID2) methods.

Mineral Resource and Ore Reserve Report 2008
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Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Iduapriem
Category
million
g/t
tonnes
Moz
Ajopa
Measured
3.65
2.18
7.96
0.26
Indicated
1.81
2.07
3.74
0.12
Inferred
2.04
2.09
4.26
0.14
Total
7.50
2.13 15.97 0.51
Block 3W
Measured
–
–
–
–
Indicated
3.12
1.38
4.31
0.14
Inferred
1.76
1.18
2.07
0.07

Total
4.88 1.31 6.38
0.21
Block 5
Measured
6.59
1.22
8.03
0.26
Indicated
1.95
1.27
2.48
0.08
Inferred
2.77
1.29
3.57
0.12
Total
11.31
1.25
14.09
0.45
Blocks 7 and 8
Measured
20.96
1.41
29.55
0.95
Indicated
37.87
1.74
65.73
2.11
Inferred
4.66
1.59
7.40
0.24
Total
63.48
1.62
102.69
3.30
Total stockpiles
Measured
2.66
1.17
3.11
0.10

Indicated
–
–
–
–
Inferred
16.50
0.56
9.32
0.30
Total
19.16
0.65
12.43
0.40
Iduapriem
Total
106.32
1.43
151.55
4.87
Mineral Resource exclusive of Ore Reserve
Contained
Contained
Tonnes
Grade
gold
gold
Iduapriem
Category
million
g/t
tonnes
Moz
Measured
3.64
1.23
4.47
0.14
Indicated
21.62
1.63
35.26
1.13
Inferred
27.72
0.96
26.63
0.86
Iduapriem
Total

52.98
1.25
66.36
2.13

The Exclusive Mineral Resource is derived predominately from Blocks 3W, 5, 7 & 8 and Ajopa. It is partly due to Inferred Mineral Resources within the optimised Ore Reserve pit shell. It is also due to Mineral Resources being located outside the Ore Reserve pit shell but within the optimised Mineral Resource pit shell (mainly down-dip extensions of the ore zones).

A resource conversion drilling programme will be carried out in 2010 and 2011 to convert the Inferred Mineral Resources to the Indicated and Measured categories in order to qualify them to be included in the Ore Reserve.

Mineral Resource and Ore Reserve Report 2008
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Ore Reserve
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Iduapriem
Category
million
g/t
tonnes
Moz
Ajopa
Proved
3.09
2.13
6.57
0.21
Probable
0.94
1.85
1.75
0.06
Total
4.03
2.06
8.32
0.27
Block 3W
Proved
–
–
–
–
Probable
1.63
1.49
2.42
0.08
Total
1.63
1.49
2.42
0.08
Block 5
Proved
6.09

1.17
7.15
0.23
Probable
1.82
1.19
2.16
0.07
Total
7.91
1.18
9.31
0.30
Blocks 7 and 8
Proved
18.37
1.33
24.48
0.79
Probable
18.75
1.70
31.81
1.02
Total
37.12
1.52
56.30
1.81
Total stockpiles
Proved
2.68
1.16
3.11
0.10
Probable
–
–
–
–
Total
2.68
1.16
3.11
0.10
Iduapriem
Total
53.37
1.49
79.45
2.55

Ghana
Iduapriem *cont.*
Iduapriem:
Ore Reserve reconciliation
2007 vs 2008
Ounces (millions)
2.42
2007
-0.21
Depletion
0.01
Scope
Change
2.55
2008
0.34
Model
Change
2.3
Change
2.4
Iduapriem:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
3.50
2007
-0.23
Depletion
1.92
Gold price
0.28
Other
0.00
Explo-
ration
4.87
2008
-1.18
Cost
3.5
0.0
0.58
Metho-
dology
Change
5.5
2.5
2.5
4.5
1.5

0.5

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 based on optimal criteria. The subsequent pit design is done using Datamine® software, which forms the basis for the Ore Reserve.

Mineral Resource and Ore Reserve Report 2008
– 103 –
Competent persons
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
K Osei
AusIMM
112723
14 years
Ore Reserve
EB Boakye
AusIMM
222459
22 years
Iduapriem
– Surface (Metric)
Tonnes above cut-off (millions)
Cut-off grade (g/t)
Average
grade
above
cut-off
(g/t)
1.0
1.5
2.0
2.5
3.0
3.5
4.0
0.0
20.0
40.0
60.0
80.0
100.0
3.00
0.00
1.00
2.00
Tonnes above cut-off
Ave grade above cut-off

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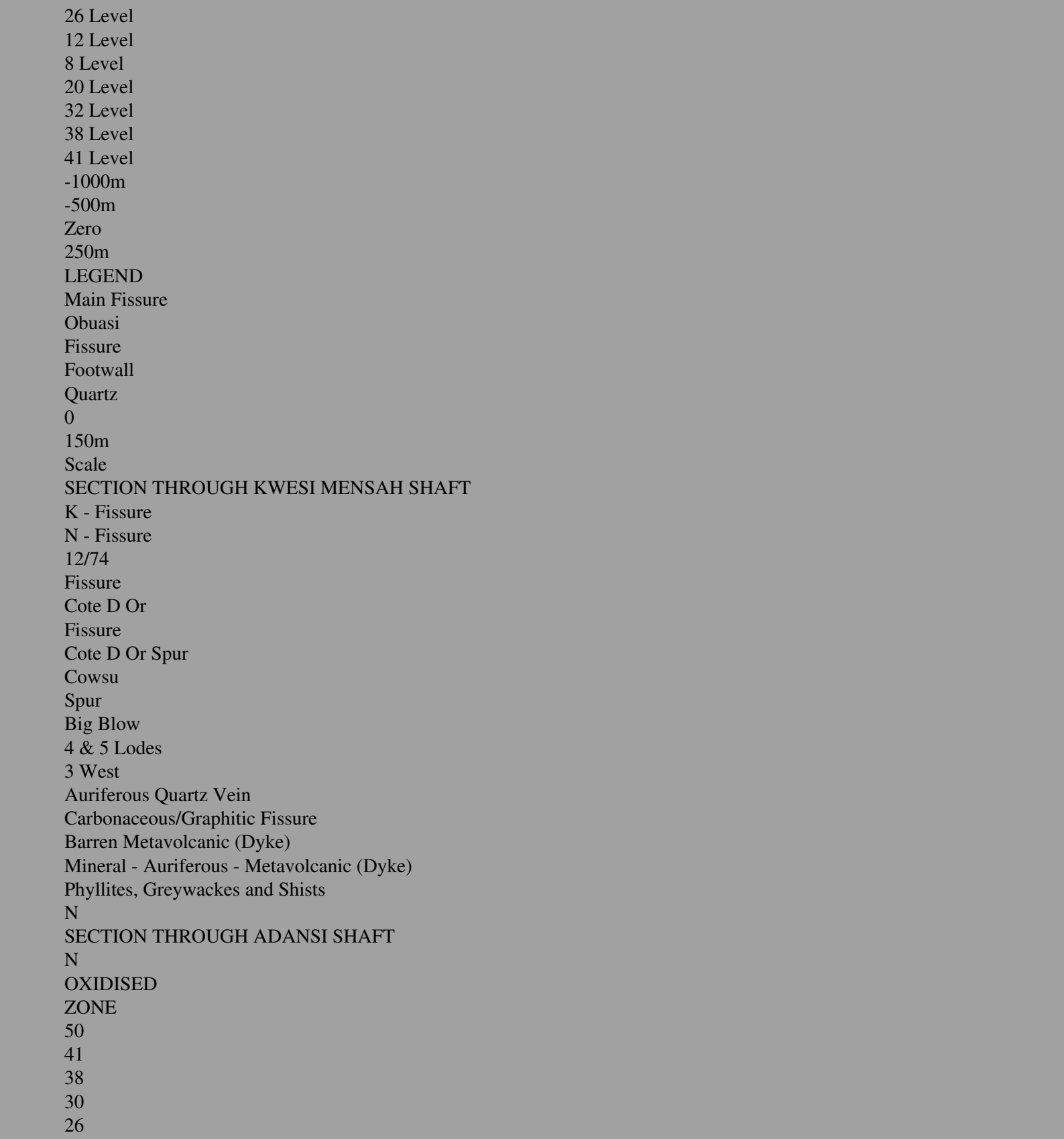
– 104 –
Obuasi
Ghana
LOCATION
The Obuasi mine is located in the Ashanti region of Ghana, some 80km from Kumasi. It is an underground mine extending over 9km on strike and mining to a depth of 1,500m below surface. Large-scale open-pit mining took place between the years 1990 and 2000. The mine has three active treatment plants: the sulphide treatment plant to process underground ore, the tailings treatment plant to handle tailings reclamation operations and an oxide treatment plant to treat other small volumes from surface sources.
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 namely the Obuasi trend, the Gyabunsu trend and the Binsere trend.
The underground mine is situated on the Obuasi trend.
Two main ore types are mined, namely quartz veins and sulphide ore. The quartz vein type consists mainly of quartz with free gold in association with lesser amounts of various metal sulphides containing iron, zinc, lead and copper. The gold particles are generally fine-grained and are occasionally visible to the naked eye. This ore type is generally non-refractory.
Sulphide ore is characterised by the inclusion of gold in the crystal structure of a sulphide mineral. 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.


26 Level
12 Level
8 Level
20 Level
32 Level
38 Level
41 Level
-1000m
-500m
Zero
250m
LEGEND
Main Fissure
Obuasi
Fissure
Footwall
Quartz
0
150m
Scale
SECTION THROUGH KWESI MENSAH SHAFT
K - Fissure
N - Fissure
12/74
Fissure
Cote D Or
Fissure
Cote D Or Spur
Cowsu
Spur
Big Blow
4 & 5 Lodes
3 West
Auriferous Quartz Vein
Carbonaceous/Graphitic Fissure
Barren Metavolcanic (Dyke)
Mineral - Auriferous - Metavolcanic (Dyke)
Phyllites, Greywackes and Shists
N
SECTION THROUGH ADANSI SHAFT
N
OXIDISED
ZONE
50
41
38
30
26
20

16
12
8
100m
0
-100m
-200m
-300m
-400m
-500m
-600m
-700m
S.V.S
ORE BODY folded
phyllite
and
sitstone
granulated
phyllite
folded phyllites
siltstones and
greywackers
Ashanti
fissure
schist
greywacker
phyllite
Insintsiam reef
ADANSI
SHAFT
Obuasi
Fissure
Cote d'or
fissure
0
120m
Scale
LEGEND
Auriferous Quartz Vein
Carbonaceous/Graphitic Fissure
Barren Metavolcanic (Dyke)
Phyllites, Greywackes and Shists

MINERAL RESOURCE ESTIMATION

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

The underground Mineral Resource is estimated using block models within the delineated mineralised ore zones. The geological interpretation is based on diamond drill and cross-cut sampling information. A prototype block model of 20m x 5m x 15m representing the minimum mining unit was used and estimates are based on ordinary kriging. The block models are optimised and flagged either as a Mineral Resource or inventory. Although no open-pit mining has taken place since 2005, three pits still contain a Mineral Resource.

The 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 by the geological model and ordinary kriging as the primary estimation methodology.
Surface stockpiles volumes are based on surveyed figures and grades based on historical sampling. Tailings are part of the Mineral Resource with tonnes and grades based on combinations of 3D block models of some dams and historical metallurgical discharge data.

Mineral Resource and Ore Reserve Report 2008
– 106 –
Ghana
Obuasi *cont.*
Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Obuasi
Category
million
g/t
tonnes
Moz
Adansi 50-60
Measured
1.69
5.66
9.59
0.31
Indicated
1.27
4.68
5.94
0.19
Inferred
2.82
5.55
15.63
0.50
Total
5.78
5.39
31.16
1.00
Adansi 60-70
Measured
0.26
5.21
1.34
0.04
Indicated
0.31
5.31
1.63
0.05
Inferred

1.68
7.14
11.97
0.39
Total
2.24
6.67
14.93
0.48
KMS 50-60
Measured
0.87
18.38
15.90
0.51
Indicated
1.62
18.75
30.29
0.97
Inferred
3.51
11.77
41.36
1.33
Total
5.99
14.61
87.56
2.82
KMS 60-70
Measured
0.32
26.67
8.56
0.28
Indicated
0.43
25.58
10.88
0.35
Inferred
3.13
18.01
56.34
1.81
Total
3.87
19.56
75.78
2.44

Total stockpiles
Measured
0.91
1.53
1.40
0.05
Indicated
–
–
–
–
Inferred
–
–
–
–
Total
0.91
1.53
1.40
0.05
Upper Mine
Measured
3.48
10.25
35.65
1.15
Indicated
1.70
8.83
15.03
0.48
Inferred
1.63
10.39
16.96
0.55
Total
6.81
9.93
67.64
2.18
Above 50 Base
Measured
45.52
7.62
347.11
11.16
Indicated
19.28
7.55

145.65
4.68
Inferred
24.01
8.41
201.92
6.49
Total
88.81
7.82
694.69
22.34
Open-Pit - Anyankyirem
Measured
0.56
2.18
1.23
0.04
Indicated
4.01
2.35
9.40
0.30
Inferred
1.09
2.25
2.44
0.08
Total
5.66
2.31
13.07
0.42
Open-Pit - Anyinam
Measured
–
2.11
–
–
Indicated
0.52
2.86
1.48
0.05
Inferred
1.42
3.35
4.74
0.15
Total
1.93

3.22
6.23
0.20
Open-Pit - Gyabunsu-Sibi
Measured
0.01
1.68
0.01
–
Indicated
0.86
2.29
1.96
0.06
Inferred
0.74
2.28
1.69
0.05
Total
1.60
2.28
3.66
0.12
Other surface resources
Measured
–
–
–
–
Indicated
0.18
2.70
0.49
0.02
Inferred
–
–
–
–
Total
0.18
2.70
0.49
0.02
Kokoteasua (Tailings Dam)
Measured
3.44
1.67
5.73
0.18

Indicated
2.54
1.70
4.32
0.14
Inferred
–
–
–
–
Total
5.98
1.68
10.05
0.32
Pompora (Tailings Dam)
Measured
–
–
–
–
Indicated
30.21
1.60
48.18
1.55
Inferred
–
–
–
–
Total
30.21
1.60
48.18
1.55

Mineral Resource and Ore Reserve Report 2008
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Mineral Resource (*cont.*)
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Obuasi
Category
million
g/t
tonnes
Moz
Sansu
Measured
–
–
–
–
Indicated
28.28
1.15
32.52
1.05
Inferred
30.34
1.18
35.69
1.15
Total
58.62
1.16
68.22
2.19
Sansu low-grade sulphides
Measured
3.30
4.70
15.49
0.50
Indicated
2.97
4.46
13.27
0.43
Inferred
2.02
4.90

9.90
0.32
Total
8.29
4.66
38.65
1.24
Obuasi
Total
226.90
5.12
1161.71
37.35
Exclusive Mineral Resource
Contained
Contained
Tonnes
Grade
gold
gold
Obuasi
Category
million
g/t
tonnes
Moz
Measured
29.68
7.06
209.61
6.74
Indicated
52.29
2.83
147.80
4.75
Inferred
28.74
6.45
185.32
5.96
Obuasi
Total
110.71
4.90
542.73
17.45
The Obuasi Exclusive Mineral Resource is made up of Mineral Resources from underground, open pit and tailings. The bulk of the Exclusive Mineral Resource (84%) is from underground and of this Mineral Resource, 36% are locked up in Mineral Resource blocks and remnants in historical mined out areas in the north of the mine. This Mineral Resource cannot be accessed due to old infrastructure and currently there are no plans to bring it to Ore

Reserve. The remainder of the underground Exclusive Mineral Resource is mineable between Mineral Resource and Ore Reserve cut-offs, below 50 level and in areas where more investigation is required. Some of these Exclusive Mineral Resources will be brought into the Ore Reserves as mining development is put into place to access these areas, and also as the economic criteria change.

Approximately 11% of the Exclusive Mineral Resource is from tailings and will be brought into the Ore Reserves as infrastructure is developed and capacity is increased in the tailings treatment plant. Two of the tailings dams are also active and an Exclusive Mineral Resource margin will be maintained.

Not one of the three open pits in the Mineral Resource is currently included in the Ore Reserve. This represents 4% of the Exclusive Mineral Resource. To bring open pits into the Ore Reserve will require more geotechnical investigation, optimisation and mine design. However, there are currently no plans to engage in large scale open-pit mining at Obuasi.

Mineral Resource below infrastructure

as at 31 December 2008

Metric

Imperial

Contained

Contained

Tonnes

Grade

gold

gold

Obuasi

Category

million

g/t

tonnes

Moz

KMS 50-60 level

Total

5.99

14.61

87.56

2.82

KMS 60-70 level

Total

3.87

19.56

75.78

2.44

Adansi 50-60 level

Total

5.78

5.39

31.16

1.00

Adansi 60-70 level

Total

2.24

6.67

14.93

0.48

Obuasi
Total
17.89
11.71
209.43
6.73

Mineral Resource and Ore Reserve Report 2008
– 108 –
Ghana
Obuasi *cont.*
Ore Reserve
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Obuasi
Category
million
g/t
tonnes
Moz
KMS 50-60
Proved
2.86
14.14
40.39
1.30
Probable
1.43
14.14
20.17
0.65
Total
4.28
14.14
60.56
1.95
Total stockpiles
Proved
0.74
1.35
1.00
0.03
Probable
–
–
–
–
Total
0.74
1.35
1.00
0.03
Above 50 Base

Proved
19.95
7.64
152.50
4.90
Probable
9.96
7.74
77.12
2.48
Total
29.91
7.68
229.62
7.38
Other surface resources
Proved
–
–
–
–
Probable
0.18
2.66
0.48
0.02
Total
0.18
2.66
0.48
0.02
Tailings – Kokoteasua
Proved
3.07
1.85
5.68
0.18
Probable
1.73
1.85
3.20
0.10
Total
4.80
1.85
8.88
0.29
Obuasi
Total
39.92
7.53

300.53
9.66
Obuasi:
Ore Reserve reconciliation
2007 vs 2008
Ounces (millions)
8.33
2007
-0.60
Depletion
-0.12
Scope
Change
9.66
2008
2.06
Model
Change
7.6
Change
9.6
8.6
Obuasi:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
33.4
2007
-0.66
Depletion
0.00
Gold price
2.40
Other
2.87
Explo-
ration
37.35
2008
0.00
Cost
34.0
30.0
-0.69
Metho-
dology
Change
40.0
38.0
36.0
32.0

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.

Mineral Resource and Ore Reserve Report 2008
– 109 –
Competent persons
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
H Eybers
AusIMM
229471
22 years
Ore Reserve
R Downing
AusIMM
229889
22 years
Obuasi
– Underground (Metric)
Tonnes above cut-off (millions)
Cut-off grade (g/t)
Average grade
above cut-off (g/t)
0.0
8.0
13.0
18.0
23.0
28.0
33.0
50.0
100.0
150.0
20.00
0.00
5.00
10.00
15.00
Tonnes above cut-off
Ave grade above cut-off
Obuasi
– Surface (Metric)
Tonnes above
cut-off (millions)
Cut-off grade (g/t)
Average grade above cut-off (g/t)
5.00

0.00
1.00
2.00
2.00
4.00
0.0
1.5
3.0
4.5
6.0
7.5
9.0
10.5
2.0
3.0
4.0
5.0
6.0
7.0
Tonnes above cut-off
Ave grade above cut-off
Ore Reserves below infrastructure
as at 31 December 2008
Metric
Imperial
Contained
Contained
Tonnes
Grade
gold
gold
Obuasi
Category
million
g/t
tonnes
Moz
KMS 50-60 level
Total
4.28
14.14
60.56
1.95

Mineral Resource and Ore Reserve Report 2008
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Mineral Resource and Ore Reserve gold prices
Units
2008
2007
Gold price – Mineral Resource
US$/oz
1,000
700
Gold price – Ore Reserve
US$/oz
720
600
Regional overview
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.
MINERAL RESOURCE ESTIMATION
Mineral Resource definition drilling consists of Air Core (AC), Reverse Circulation (RC) and Diamond Drilling (DD) boreholes. All available geological drillhole information is validated for usage in the models and the local geology of the orebody is used to classify the drillhole information into appropriate geostatistical domains. Detailed statistical analyses are conducted on each of these domains and this allows for the identification of high grade outliers. If these values are anomalous to the general population characteristics then they are cut back to the appropriate upper limit of the population.
The Mineral 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 Ore body is used within the Geological model outlines. Ordinary and indicator kriging are used to estimate gold grades and a limiting pit shell at $1,000/oz is used to quantify the total Mineral Resources.
N
Operations
0
200km
Conakry
Labe
Dabola
Kankan
Siguiri
GUINEA

Mineral Resource and Ore Reserve Report 2008
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Ore Reserve modifying factors
as at 31 December 2008

| Mine call factor | Cut-off grade g/t Au | Dilution % | Metallurgical (MCF) % | Siguiri recovery % |
|---|---|---|---|---|
| Siguiri Spent heap leach | 0.35-0.55 | – | 100 | 93 |
| Full Grade Ore | 0.35-0.55 | – | 100 | 96 |
| Marginal Ore | 0.35-0.55 | – | 100 | 93 |
| Siguiri Oxides | | | | |
| Bidini | 0.35-0.55 | – | 100 | 96 |
| Eureka East | 0.35-0.55 | – | 100 | 96 |
| Kalamagna | 0.35-0.55 | – | 100 | 96 |
| Kami | 0.35-0.55 | – | 100 | 96 |

Kosise
0.35-0.55
–
100
96
Kozan North
0.35-0.55
–
100
96
Kozan South
0.35-0.55
–
100
96
Seguelen
0.37-0.57
–
100
96
Sintroko South
0.4-0.60
–
100
96
Sokunu
0.35-0.55
–
100
96
Soloni
0.35-0.55
–
100
96
Sorofe
0.35-0.55
–
100
96

ORE RESERVE ESTIMATION

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

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

Type of drilling
Mine/
Category

Spacing
Diamond
RC
Blasthole Other
Comments
Project
m (- x -)
Siguiri
Measured
5 x 10
–
x
–
–
Indicated
20 x 40
–
x
–
–
Both AC and RC, drilled in an
25 x 25
offset pattern
25 x 50
Inferred
20 x 40
–
x
–
–
AC and RC and some DD holes,
25 x 50
drilled in an offset pattern
50 x 50
Grade control
5 x 12.5
–
x
–
–

Mineral Resource and Ore Reserve Report 2008
– 112 –
Reconciliation of Mineral Resource and Ore Reserve
as at 31 December 2008
Changes in gold contained
Moz
Percentage
Deple-
Model
Scope
Net change
Mine
attributable Category
2007
tion
(1)
change
(2)
change
(3)
2008
Diff
% Comment
Siguiri
100% Resource
4.95
(0.48)
0.83
0.64
5.94
0.99
20
Increase due to higher resource
gold price and increases in the
resource at Sintroko and Foulata
Reserve
2.63
(0.46)
0.04 1.04
3.25
0.62
24
Seguelen NW and Sintroko upgraded
from Inferred to Indicated, coupled
with mining efficiency increase
Total
Resource
4.95
(0.48)
0.83
0.64

5.94
0.99
20
Reserve
2.63
(0.46) 0.04
1.04
3.25
0.62
24

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

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

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

Guinea
Regional overview *cont.*

Mineral Resource and Ore Reserve Report 2008
– 113 –
Siguiri
Guinea
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 Carbon-In-Pulp (CIP) plant.
GEOLOGY
This concession is dominated by Proterozoic Birimian rocks which consist of turbidite facies sedimentary sequences and volcaniclastic sequences. The mineralisation at Siguiri is structurally controlled and occurs either as sheeted veins or within shear zones. There are two main types of oxide mineralisation in the Siguiri basin: eluvial- or alluvial-hosted laterite mineralisation and primary quartz-vein-related or shear hosted mineralisation. The laterite mineralisation occurs as aprons of colluvial or as palaeo-channels of alluvial lateritic gravel adjacent to and immediately above the in situ vein-related or shear zone mineralisation. The 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. Whereas the shearzone related mineralisation can cross cut both sedimentary and volcaniclastic lithologies. Mineralisation at Siguiri has been deeply weathered to a vertical depth of up to 100m, and the mineralised saprolite provides the primary oxide feedstock for the CIP plant. Fresh hard mineralisation is not processed in the current plant. The practice at Siguiri was to blend the laterite and saprolite ore types and to process these using the heap-leach method. With the percentage of available laterite ore decreasing, however, a CIP plant was brought on stream during 2005 to treat predominantly saprolite oxide ore.
MINERAL RESOURCE: SEGUELEN
The Mineral Resource as published for Seguelen does not reflect the full potential of the orebody. An additional 10 million tonnes grading at 1.2 grams per tonne (380 thousand ounces) have been delineated by a 50m x 50m drill pattern. This mineralisation is currently not accessible due to its proximity to the Kintinian village and hence cannot be considered at this stage to have a reasonable and realistic prospect for eventual economic extraction. Based on mineralised trends there may even be further untested potential beneath the Kintinian village. Negotiations with the local authorities are underway in an effort to secure access.

Mineral Resource and Ore Reserve Report 2008
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Guinea
Siguiri *cont.*
Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Siguiri
Category
million
g/t
tonnes
Moz
Total stockpiles
Measured
24.18
0.59
14.19
0.46
Indicated
31.95
0.54
17.29
0.56
Inferred
13.40
0.57
7.61
0.25
Total
69.53
0.56
39.09
1.26
Bidini
Measured
0.90
0.75
0.67
0.02
Indicated
5.20
0.97
5.05
0.16
Inferred

5.22
1.01
5.27
0.17
Total
11.33
0.97
11.00
0.35
Eureka East
Measured
–
–
–
–
Indicated
0.57
0.70
0.40
0.01
Inferred
0.07
1.76
0.12
–
Total
0.64
0.82
0.52
0.02
Eureka North
Measured
0.45
0.70
0.31
0.01
Indicated
0.35
1.18
0.41
0.01
Inferred
0.41
1.10
0.45
0.01
Total
1.20
0.97
1.17
0.04

Foulata
Measured
–
–
–
–
Indicated
–
–
–
–
Inferred
5.04
1.32
6.65
0.21
Total
5.04
1.32
6.65
0.21
Kalamagna
Measured
–
–
–
–
Indicated
7.60
0.69
5.24
0.17
Inferred
1.10
0.64
0.70
0.02
Total
8.69
0.68
5.94
0.19
Kami
Measured
7.59
0.76
5.77
0.19
Indicated
6.45
0.80

5.16
0.17
Inferred
6.04
0.69
4.17
0.13
Total
20.08
0.75
15.10
0.49
Kosise
Measured
0.41
0.74
0.31
0.01
Indicated
9.18
0.81
7.46
0.24
Inferred
3.21
0.94
3.01
0.10
Total
12.80
0.84
10.77
0.35
Kozan North
Measured
–
–
–
–
Indicated
6.50
0.73
4.74
0.15
Inferred
6.99
0.79
5.52
0.18
Total
13.49

0.76
10.27
0.33
Kozan South
Measured
–
–
–
–
Indicated
3.18
0.68
2.16
0.07
Inferred
1.15
0.63
0.73
0.02
Total
4.33
0.67
2.89
0.09
Seguelen
Measured
–
–
–
–
Indicated
17.73
1.09
19.27
0.62
Inferred
11.59
1.14
13.16
0.42
Total
29.32
1.11
32.43
1.04
Sintroko South
Measured
–
–
–
–

Indicated
23.67
1.21
28.55
0.92
Inferred
2.00
2.38
4.75
0.15
Total
25.67
1.30
33.30
1.07

Mineral Resource and Ore Reserve Report 2008
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Mineral Resource (*cont.*)
as at 31 December 2008

| Siguiri | Contained gold | Tonnes | Grade | Contained gold |
|---|---|---|---|---|
| Category | million | g/t | tonnes | Moz |
| Sokunu | | | | |
| Measured | – | – | – | – |
| Indicated | 3.15 | 0.76 | 2.40 | 0.08 |
| Inferred | 1.16 | 0.77 | 0.89 | 0.03 |
| Total | 4.31 | 0.76 | 3.29 | 0.11 |
| Soloni | | | | |
| Measured | – | – | – | – |
| Indicated | 6.37 | 0.76 | 4.84 | 0.16 |
| Inferred | 3.82 | 0.77 | | |

2.94
0.10
Total
10.20
0.76
7.79
0.25
Sorofe
Measured
–
–
–
–
Indicated
3.31
0.77
2.55
0.08
Inferred
2.88
0.65
1.87
0.06
Total
6.19
0.71
4.42
0.14
Siguiri
Total
222.82
0.83
184.63
5.94
Siguiri:
Ore Reserve reconciliation
2007 vs 2008
Ounces (millions)
2.63
2007
-0.46
Depletion
1.04
Scope
Change
3.25
2008
0.04
Model
Change
2.2

Change
3.2
Siguiri:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
4.95
2007
-0.48
Depletion
1.58
Gold price
0.06
Other
0.83
Explo-
ration
5.94
2008
-1.00
Cost
5.5
3.5
0.00
Metho-
dology
Change
6.5
4.5
2.7
Exclusive Mineral Resource
Contained
Contained
Tonnes
Grade
gold
gold
Siguiri
Category
million
(g/t)
tonnes
Moz
Measured
5.57
0.70
3.91
0.13
Indicated
37.13
0.79

29.51
0.95
Inferred
64.36
0.91
58.49
1.88
Siguiri
Total
107.06
0.86
91.91
2.95

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

- material that is economic at the Mineral Resource gold price of US$1,000 per ounce, but not at the Ore Reserve price of US$720 per ounce (67% of the Exclusive Mineral Resource);
- new deposits currently at the Inferred level of confidence. These areas will be in-fill drilled in the future (22% of the Exclusive Mineral Resource); and
- from Inferred Mineral Resources within the current pit designs (12% of the Exclusive Resource).

Mineral Resource and Ore Reserve Report 2008
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Guinea
Siguiri *cont.*
Ore Reserve
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Siguiri
Category
million
g/t
tonnes
Moz
Total stockpiles
Proved
56.13
0.56
31.48
1.01
Probable
–
–
–
–
Total
56.13
0.56
31.48
1.01
Bidini
Proved
–
–
–
–
Probable
1.15
1.16
1.34
0.04
Total
1.15
1.16
1.34
0.04
Eureka East

Proved
–
–
–
–
Probable
0.30
0.81
0.24
0.01
Total
0.30
0.81
0.24
0.01
Kalamagna
Proved
–
–
–
–
Probable
4.91
0.76
3.73
0.12
Total
4.91
0.76
3.73
0.12
Kami
Proved
–
–
–
–
Probable
10.58
0.86
9.05
0.29
Total
10.58
0.86
9.05
0.29
Kosise
Proved
–
–

–
–
Probable
7.08
0.78
5.50
0.18
Total
7.08
0.78
5.50
0.18
Kozan North
Proved
–
–
–
–
Probable
4.02
0.84
3.37
0.11
Total
4.02
0.84
3.37
0.11
Kozan South
Proved
–
–
–
–
Probable
1.13
0.79
0.89
0.03
Total
1.13
0.79
0.89
0.03
Seguelen
Proved
–
–
–
–
Probable

14.12
1.30
18.35
0.59
Total
14.12
1.30
18.35
0.59
Sintroko South
Proved
–
–
–
–
Probable
14.09
1.36
19.18
0.62
Total
14.09
1.36
19.18
0.62
Sokunu
Proved
–
–
–
–
Probable
3.05
0.78
2.40
0.08
Total
3.05
0.78
2.40
0.08
Soloni
Proved
–
–
–
–
Probable
4.84
0.84
4.06

0.13
Total
4.84
0.84
4.06
0.13
Sorofe
Proved
–
–
–
–
Probable
1.84
0.84
1.55
0.05
Total
1.84
0.84
1.55
0.05
Siguiri
Total
123.24
0.82
101.12
3.25

INFERRED MINERAL RESOURCE IN BUSINESS PLAN

Inferred Mineral Resources were used in the pit optimisation process if their total percentage amounted to less than 15% of the total Ore Reserve. If the Inferred Mineral Resource was greater than 15%, the optimisation was redone excluding the Inferred Mineral Resource. The Inferred Mineral Resource within an optimised shell and subsequent design was used for scheduling. The final schedule included 366,000 ounces of Inferred Mineral Resource in the final designs, which represents 12% of the scheduled ounces.

Mineral Resource and Ore Reserve Report 2008
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Competent persons
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
P Winkler
AusIMM
220329
25 years
Ore Reserve
T Mushi
SAIMM
702438
9 years
Siguiri
– Surface (Metric)
Tonnes above cut-off (millions)
Cut-off grade (g/t)
Average
grade
above
cut-off
(g/t)
0.0
2500
0.50
1.00
2.50
3.00
4.00
2000
1500
500
1000
0.00
2.00
1.00
Tonnes above cut-off
Ave grade above cut-off
3.50
2.00
1.50

Mineral Resource and Ore Reserve gold prices

| Units | 2008 | 2007 |
|---|---|---|
| Gold price – Mineral Resource | US$/oz | 1,000 | 700 |
| Gold price – Ore Reserve | US$/oz | 720-870 | 600 |

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

MINERAL RESOURCE ESTIMATION

The Mineral Resource is taken as the material that falls within the $1,000/oz economic shell optimised for each individual deposit. 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 are 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 5.0m. 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.

Sadiola
Yatela
Kayes
Gao
Ségou
Nioro
Tombouctou
MALI
Bamako
Sikasso
Morila
Operations
N
0
500km

Mineral Resource and Ore Reserve Report 2008
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Ore Reserve modifying factors
as at 31 December 2008

| Gold price | Cut-off | Mine call | Metallurgical | Dilution | Recovery | |
|---|---|---|---|---|---|---|
| Mine | used | grade | factor | | | |
| USD$/oz | g/t Au | % | (MCF) | factor % | Comments | |
| Morila | | | | | | |
| Main Pit | | | | | | |
| 720 | 1.0 | 10 | 100 | 89-91.5 | 5% ore loss | |
| Stockpile FGO | | | | | | |
| 720 | 1.4 | – | 100 | 89-91.5 | No factors applied | |
| Stockpile Marginal | | | | | | |
| 720 | 1.0 | – | 100 | 89 | | |

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.

Details of average drillhole 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
x
x
Indicated
30 x 30
x
x
Inferred
50 x 50
x
x
Grade control
10 x 10,
x
x
Blastholes were only used for
50 x 50
sampling when there was
insufficient RC coverage.
Sadiola
Measured
20 x 20 and
25 x 25
x
x
x
Indicated
25 x 50
x
x
x
Inferred
>25 x 50
x
x
Grade control
5 x 10
x
x
Yatela
Measured
10 x 10 and
25 x 25

x
x
Indicated
25 x 25 and
35 x 45
x
x
Inferred
>25 x 25 and
> 35 x 45
x
Grade control
5 x 10
x
x

Mineral Resource and Ore Reserve Report 2008
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Mali
Regional overview *cont.*
Ore Reserve modifying factors (*cont.*)
as at 31 December 2008

| | Gold price | Cut-off | Mine call | Metallurgical | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | used | | | | |
| | | | | grade | Dilution | | | |
| | | | | | factor | Recovery | | |
| | Mine | | | | | | | |
| | US$/oz | g/t Au | % | (MCF) | factor % | Comments | | |
| Sadiola | | | | | | | | |
| FE3 | 870 | 1.09 | – | 100 | 78-93 | 123 tonnes and 109 metal | | |
| | | | | | | Factor; COG is for FGO only | | |
| FE4 | 870 | 1.12 | – | 100 | 78-93 | 130 tonnes and 120 metal | | |
| | | | | | | Factor; COG is for FGO only | | |
| Main Pit – Oxide | 870 | 1.26 | – | 100 | 78-93 | 100 tonnes and 100 metal | | |
| | | | | | | Factor; COG is is for FGO only | | |
| Total stockpiles | 870 | 1.20 | – | | | | | |

100
78-93
No factors are applied
on stockpile
Yatela
Alamoutala Pit
–
–
–
–
–
Main Pit
870
0.54
–
100
75-85
96% - MRF on metal
Total stockpiles
870
0.54
–
100
75-85
100% - MRF on metal
Reconciliation of Mineral Resource and Ore Reserve
as at 31 December 2008
Changes in gold contained
Moz
Percentage
Deple-
Model
Scope
Net change
Mine
attributable Category
2007
tion
(1)
change
(2)
change
(3)
2008
Diff
% Comment
Morila
40% Resource
0.68
(0.22)
0.01

–
0.46
(0.22)
(32)
Reserve
0.63
(0.19)
0.02
–
0.46
(0.17)
(27)
Depletion
Sadiola
38% Resource
1.93
(0.42)
0.47
1.15
3.13
1.20
62
Higher Mineral Resource gold price resulted in increased Mineral Resources, specifically from the deep sulphides
Reserve
0.39
(0.20)
–
0.23
0.42
0.03
6
Positive RRF for FE3 and FE4, removal of MCF for sulphides, and positive effect of economics on FE3 and FE4 reserves
Yatela
40% Resource
0.34
(0.08)
0.03
0.07
0.35
0.01
3
Reserve
0.20
(0.08)
0.02

0.02
0.16
(0.04)
(18)
Depletion
Total
Resource
2.95
(0.72)
0.50
1.22
3.95
0.10
34
Reserve
1.22
(0.47)
0.04
0.25
1.04
(0.18)
(15)

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

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

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

Mineral Resource and Ore Reserve Report 2008

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Morila

Mali

OVERVIEW

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

MINING

Mining at Morila is from a single open-pit operation employing conventional truck and shovel methods. The mining method used is standard open-cut mining, involving a fleet of 10 drill rigs to drill and blast the ore and waste rock, prior to loading by four hydraulic shovels/excavators into a fleet of 18 Caterpillar 777 dump trucks. In 2007, the mine began dumping waste into the previously mined pushbacks. The pit mining operations will end in April 2009 after which the mine will treat low-grade stockpiles.

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).

PROCESSING

Ore is processed at a rate of 4.2Mtpa via a conventional carbon-in-leach (CIL) plant after passing through primary and secondary crushing processes followed by further comminution via a semi-autogenous grinding (SAG)

Mali

Morila *cont.*

Morila:
Ore Reserve reconciliation
2007 vs 2008
Ounces (millions)
0.63
2007
-0.19
Depletion
0.00
Scope
Change
0.46
2008
0.02
Model
Change
0.3
Change
0.6

Morila:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
0.67
2007
-0.22
Depletion
0.00
Gold price
0.00
Other
0.01
Explo-
ration
0.46
2008
0.00
Cost
0.3
0.2
0.00
Metho-
dology
Change
0.6
0.5
0.4

0.5
0.4
Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Morila
Category
million
g/t
tonnes
Moz
Main Pit
Measured
0.82
2.69
2.19
0.07
Indicated
–
–
–
–
Inferred
–
–
–
–
Total
0.82
2.69
2.19
0.07
Total stockpiles
Measured
7.44
1.65
12.25
0.39
Indicated
–
–
–
–
Inferred
–
–

–
–
Total
7.44
1.65
12.25
0.39
Morila
Total
8.25
1.75
14.44
0.46
Exclusive Mineral Resource
Contained
Contained
Tonnes
Grade
gold
gold
Morila
Category
million
g/t
tonnes
Moz
Morila
Measured
–
–
–
–
Indicated
–
–
–
–
Inferred
–
–
–
–
Morila
Total
–
–
–
–

mill and ball mill. After crushing and milling, the slurried ore passes through the cyanide leach circuit for gold extraction after which the leached ore is pumped and deposited into the tailings storage facility (TSF). Supernatant water from the TSF is reclaimed and collected in the return water dam before being returned to

the mill for re-use.
The entire Mineral Resource is contained in the LOM pit design.

Mineral Resource and Ore Reserve Report 2008
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Ore Reserve
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Morila
Category
million
g/t
tonne
Moz
Main
Pit
Proved
0.67 2.74 1.82
0.06
Probable
0.14
1.09 0.16
0.01
Total
0.81 2.45 1.98
0.06
Total
stockpiles
Proved
4.83 1.92 9.28
0.30
Probable
2.61 1.14 2.97
0.10
Total
7.44 1.65
12.25
0.39
Morila
Total
8.25
1.72
14.23
0.46
Competent persons
Professional
Registration
Relevant
Category

Name
organisation
number
experience
Mineral Resource
A Kone
AusIMM
222568
16 years
Ore Reserve
S Ndede
AusIMM
201772
19 years
Morila
– Surface (Metric)
Tonnes above cut-off (millions)
Cut-off grade (g/t)
Average
grade
above
cut-off
(g/t)
0.0
0.5
1.0
1.5
2.5
3.5
2.0
3.0
4.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
5.00
0.00
4.00
3.00
2.00
1.00
Tonnes above cut-off
Ave grade above cut-off

Mineral Resource and Ore Reserve Report 2008
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Sadiola
Mali
Sadiola is situated in the north-west of Mali, 77km to the south of the regional capital of Kayes. The mining operations take place in five open pits, the Sadiola Main Pit and four satellite pits, namely FE3 Pits 1 to 3 and pit FE4. Ore is treated in a 4.8Mt/year CIP processing plant. The plant was originally designed to treat soft oxide ore, but has been progressively adapted to receive soft sulphide ores and even some types of hard oxide ores.
The down dip extension of the mineralisation mined in the Sadiola Main Pit has been named the Deep Sulphides Project (DSP), in which the gold ore occurs in the underlying fresh rock. A full feasibility study of the DSP is scheduled for completion in 2009. The project may substantially extend the life of Sadiola's operations and leverage exploration efforts and further discoveries of hard-rock gold deposits in the district.
GEOLOGY
The Sadiola deposits are located within the Malian portion of the Keniéba-Kedougou window, a major early Proterozoic-Birimian outlier along the north-east margin of the Kenema-Man shield. The deposits are confined to the north portion of the window.
The Sadiola Hill deposit is underlain by the north-trending Sadiola Fracture Zone (SFZ), over a drilled strike length of approximately 2,500m, running along the contact of marbles and greywackes and intruded by bodies of diorite and quart-feldspar porphyries. North-east trending structures, often intruded by quartz-feldspar porphyries, extending to the east of the SFZ, also carry gold and have been adding ounces to the overall production from the Sadiola Main Pit. The mineralised zones have been intensely weathered to a maximum depth of 200m.
The Sadiola Hill deposit originally consisted of two zones, an upper oxidised cap and an underlying sulphide zone. From 1996 until 2002, shallow saprolite oxide ore was the primary ore source. Since 2002, the deeper saprolitic sulphide ore has been mined, progressively replacing the depleted oxide Ore Reserve.
The satellite pits are located to south-east of the Sadiola Hill mine and are underlain by a different type of ore. The mineralised zones straddle the contact between marbles to the west and carbon-rich pelites to the east, following a NNW-trend in the FE3 Pits 1 and 2, NNE at Pit 3, and a NE-strike in FE4 pit, due to regional folding. Gold mineralisation is mostly associated with lens-shaped breccia zones running broadly parallel to the enclosing metasediments and folded accordingly.

Mineral Resource and Ore Reserve Report 2008

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At this stage all the gold is recovered from mostly soft, oxidised ore. Some gold-rich, hard oxide nodes have been also treated in the Sadiola plant, after first stage crushing. The sulphide potential underneath the current satellite pits is targeted for investigation in 2009.

Mineral Resource

as at 31 December 2008

Contained

Contained

Tonnes

Grade

gold

gold

Sadiola

Category

million

g/t

tonnes

Moz

FE2

Measured

–

–

–

–

Indicated

–

–

–

–

Inferred

0.77

1.36

1.05

0.03

Total

0.77

1.36

1.05

0.03

FE3

Measured

–

–

–

–

Indicated

1.66

1.91

3.18

0.10

Inferred
–
–
–
–
Total
1.66
1.91
3.18
0.10
FE3S
Measured
–
–
–
–
Indicated
1.72
2.15
3.69
0.12
Inferred
0.17
2.88
0.48
0.02
Total
1.88
2.21
4.17
0.13
FE4
Measured
–
–
–
–
Indicated
1.24
2.24
2.77
0.09
Inferred
0.45
1.75
0.78
0.03
Total
1.68
2.11
3.55

0.11
FN2
Measured
–
–
–
–
Indicated
0.21
1.51
0.32
0.01
Inferred
0.26
4.01
1.03
0.03
Total
0.47
2.89
1.35
0.04
FN3
Measured
–
–
–
–
Indicated
0.04
1.71
0.07
–
Inferred
0.60
1.30
0.77
0.03
Total
0.64
1.32
0.84
0.03
Main Pit
Measured
–
–
–
–
Indicated
4.99

1.90
9.46
0.30
Inferred
0.49
1.52
0.75
0.02
Total
5.48
1.86
10.21
0.33
Sekokoto
Measured
–
–
–
–
Indicated
–
–
–
–
Inferred
0.55
1.50
0.82
0.03
Total
0.55
1.50
0.82
0.03
Tambali South
Measured
–
–
–
–
Indicated
2.15
1.30
2.79
0.09
Inferred
1.57
1.57
2.46
0.08
Total

3.72
1.41
5.25
0.17
Total stockpiles
Measured
9.37
1.56
14.59
0.47
Indicated
–
–
–
–
Inferred
–
–
–
–
Total
9.37
1.56
14.59
0.47
Deep Sulphides
Measured
–
–
–
–
Indicated
12.80
2.83
36.15
1.16
Inferred
5.96
2.74
16.30
0.52
Total
18.75
2.80
52.45
1.69
Sadiola
Total
44.98
2.17
97.46

3.13

Mali

Sadiola *cont.*

Sadiola:
Ore Reserve reconciliation
2007 vs 2008
Ounces (millions)
0.39
2007
-0.20
Depletion
0.22
Scope
Change
0.42
2008
0.00
Model
Change
0.2
Change
0.4
0.3

Sadiola:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
1.93
2007
-0.42
Depletion
1.15
Gold price
-0.49
Other
0.05
Explo-
ration
3.13
2008
0.49
Cost
2.0
1.0
0.41
Metho-
dology
Change
3.0
Exclusive Mineral Resource

Contained
Contained
Tonnes
Grade
gold
gold
Sadiola
Category
million
g/t
tonnes
Moz
Measured
4.12
0.75
3.11
0.10
Indicated
20.72
2.36
48.90
1.57
Inferred
10.80
2.26
24.45
0.79
Sadiola
Total
35.65
2.14
76.45
2.46

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

FE3 Pit 1 has no Inferred Mineral Resource in the published Mineral Resource and therefore the only possibility for converting the Exclusive Mineral Resource to the Proved Ore Reserve is through favourable gold price and cost changes. The FE3S Pit has 5% of Inferred Mineral Resource within the design shell and FE4 has 22%.

The FE3S Inferred Mineral Resources can be upgraded into Ore Reserve by normal grade control drilling.

For FE4 infill drilling has been completed and the FE4 Mineral Resource model will be revised in the first quarter of 2009. This should lead to an increase in Ore Reserve. For the Main Pit, only 4% of the Exclusive Mineral Resource is within the design pit.

These will be converted to Ore Reserve in 2009 through grade control drilling. The rest of the Main Pit Exclusive Mineral Resource can only be converted to Ore Reserve if the Deep Sulphides Project is successful.

Mineral Resource and Ore Reserve Report 2008
– 127 –
Ore Reserve
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Sadiola
Category
million
g/t
tonnes
Moz
FE3
Proved
–
–
–
–
Probable
1.64
2.47
4.05
0.13
Total
1.64
2.47
4.05
0.13
FE4
Proved
–
–
–
–
Probable
1.04
2.53
2.63
0.09
Total
1.04
2.53
2.63
0.09
Main Pit
Proved
–

2.31
0.01
–
Probable
0.43
3.14
1.36
0.04
Total
0.44
3.13
1.37
0.04
Total stockpiles
Proved
2.42
2.06
4.99
0.16
Probable
–
–
–
–
Total
2.42
2.06
4.99
0.16
Sadiola
Total
5.54
2.35
13.04
0.42

3D model of the FE3 pits at Sadiola

INFERRED MINERAL RESOURCE IN PIT OPTIMISATION

The 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.

Mineral Resource and Ore Reserve Report 2008
– 128 –
Competent persons
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
A Ngilazi
AusIMM
229909
16 years
Ore Reserve
K Bartsch
AusIMM
107390
20 years
Sadiola
– Surface (Metric)
Tonnes above cut-off (millions)
Cut-off grade (g/t)
Average
grade
above
cut-off
(g/t)
5.00
0.00
4.00
3.00
2.00
1.00
0.0
200.0
400.0
600.0
Tonnes above cut-off
Ave grade above cut-off
0.56
1.56
2.56
3.56
4.56
5.56
6.56
7.56

Mineral Resource and Ore Reserve Report 2008

– 129 –

Yatela

Mali

The Yatela Mine is situated some 25km north of Sadiola and approximately 50km south-west of Kayes. The Yatela operation is currently mining from two open pits, the Yatela Main Pit and the satellite Alamoutala pits. The Yatela Main Pit is currently mining Pushback 7, toward the western end of the pit. The mine is approaching the end of its life.

Ore is processed through a 3.0Mtpa heap leach plant, commissioned in 1998. The pregnant liquor pond for gold recovery uses the carbon in solution process. Loaded carbon is sent to the Sadiola Mine for elution, regeneration, electro-winning and smelting.

GEOLOGY

The Yatela deposit is located within the Malian portion of the Keniéba-Kedougou window, a major Early Proterozoic-Birimian outlier along the north-east margin of the Kenema-Man shield.

The Yatela deposit is located in the north of the window and is hosted by sediments of the Kofi Formation, which have been intruded by numerous felsic intrusives. The sediments consist of fine-grained greywacke and pelites, which are locally carbon-rich, and impure limestones with minor tuffs and acid volcanics.

The primary gold mineralisation at Yatela is associated with a sheared contact between predominantly dolomitic rocks of the Kofi Formation to the west and a large, weakly mineralised, dioritic intrusion to the east. This primary mineralisation was concentrated to economic grades through dissolution of carbonate-rich rocks by supergene processes. Karsting of carbonate rocks has resulted in the development of deep, coalescent pot holes, collectively named the Yatela Basin, which were gradually filled by sandstones and conglomerates during peneplanation of the Proterozoic rocks. The chaotic collapse during karsting, coupled with the infill sediments resulted in the orebody being hosted in a melange-type of rocks made up of sedimentary rocks and dissolution residues. Gold is disseminated in the unconsolidated ferruginous, sandy-clayed layer that lines the bottom and walls of a deep trough with steep margins. The ore zone dips steeply on the west wall and more gently to the west on the east wall, following a keel-like geometry with tight closure towards the south. The supergenie enrichment of low-grade primary gold mineralisation, associated with the karst forming process, is the most important geological feature to the economics of the Yatela deposit.

Mineral Resource and Ore Reserve Report 2008

– 130 –

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

Mineral Resource

as at 31 December 2008

Contained

Contained

Tonnes

Grade

gold

gold

Yatela

Category

million

g/t

tonnes

Moz

Alamoutala Pit

Measured

0.04

1.03

0.04

–

Indicated

–

1.65

–

–

Inferred

–

1.00

–

–

Total

0.04

1.05

0.05

–

Main Pit

Measured

0.43

4.41

1.89

0.06

Indicated

1.58
4.35
6.89
0.22
Inferred
0.30
3.51
1.05
0.03
Total
2.31
4.25
9.83
0.32
Total stockpile
Measured
1.30
0.70
0.91
0.03
Indicated
–
–
–
–
Inferred
–
–
–
–
Total
1.30
0.70
0.91
0.03
Yatela
Total
3.65
2.95
10.78
0.35
Mali
Yatela *cont.*
3D model of the Main Pit at Yatela

Mineral Resource and Ore Reserve Report 2008
– 131 –
Yatela:
Ore Reserve reconciliation
2007 vs 2008
Ounces (millions)
0.20
2007
-0.08
Depletion
0.02
Scope
Change
0.16
2008
0.02
Model
Change
0.0
Change
0.2
Yatela:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
0.34
2007
-0.08
Depletion
0.00
Gold price
0.07
Other
0.02
Explo-
ration
0.35
2008
0.00
Cost
0.2
0.01
Metho-
dology
Change
0.3
Exclusive Mineral Resource
Contained
Contained
Tonnes
Grade

gold
gold
Yatela
Category
million
g/t
tonnes
Moz
Measured
0.22
1.80
0.39
0.01
Indicated
0.70
2.63
1.85
0.06
Inferred
0.30
3.51
1.05
0.03
Yatela
Total
1.22
2.70
3.29
0.11
Ore Reserve
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Yatela
Category
million
g/t
tonnes
Moz
Main Pit
Proved
0.07
4.86
0.32
0.01
Probable
0.79

4.86
3.86
0.12
Total
0.86
4.86
4.18
0.13
Total stockpile
Proved
1.30
0.70
0.91
0.03
Probable
–
–
–
–
Total
1.30
0.70
0.91
0.03
Yatela
Total
2.16
2.36
5.09
0.16

The Exclusive Mineral Resources for Yatela are those Mineral Resources that fall outside the current life of mine (LOM) but inside the Mineral Resource shells for the Yatela Main and Alamoutala pits. Any Inferred Mineral Resources within the LOM shell are also considered Exclusive. Currently only Inferred Mineral Resources within the LOM shell at the Yatela Main Pit are convertible to Ore Reserves and this will be done through grade control drilling. In addition the Yatela Main Pit will also be optimised in order to ensure that all recoverable material is mined before the envisaged closure.

The Alamoutala Mineral Resources have been depleted to LOM design and are therefore exhausted. However, whilst the satellite pits were mined and exhausted in 2008, the Alamoutala Main Pit stopped mining in 2005. There is therefore a possibility of reviving the Alamoutala Main Pit under the prevailing gold price and cost regime. Some drilling has been carried out to the south and some further drillholes are planned across the existing pit to accurately determine the hard/soft boundary to see whether it is possible to mine the pit deeper.

Mineral Resource and Ore Reserve Report 2008
– 132 –
Yatela
– Surface (Metric)
Tonnes above cut-off (millions)
Cut-off grade (g/t)
Average
grade
above
cut-off
(g/t)
0.82
1.82
2.82
3.82
4.82
5.82
6.82
0.0
10.0
20.0
30.0
40.0
2.00
0.00
1.00
Tonnes above cut-off
Ave grade above cut-off
Competent persons
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
A Ngilazi
AusIMM
229909
16 years
Ore Reserve
K Bartsch
AusIMM
107390
20 years
Mali
Yatela *cont.*

Mineral Resource and Ore Reserve Report 2008
– 133 –
Regional overview
Namibia
Navachab Gold Mine, AngloGold Ashanti's sole operation in Namibia, is wholly owned by the Company.
MINERAL RESOURCE ESTIMATION
Mineral Resource estimation is performed using Datamine
®
software. Block dimensions of 25m x 25m x 5m
(X Y Z) are used as the prototype model. Grade interpolation is done into these blocks using Ordinary and Indicator Kriging methods. A geostatistical technique called Uniform Conditioning is then used to estimate the proportion of economic ore that occur above the Mineral Resource cut-off and this is reported according to the selective mining unit (SMU).
Mineral Resource and Ore Reserve gold prices and exchange rate
Units
2008
2007
Gold price – Mineral Resource
US$/oz
1,000
700
Gold price – Ore Reserve
US$/oz
720
600
Exchange rate – South Africa
ZAR/US$
8.07
7.70
N
Operations
0
300km
Okahandja
Walvis Bay
Luderitz
Keetmanshoop
Karibib
Tsumeb
Windhoek
Navachab
NAMIBIA
Details of average drillhole spacing and type in relation to Mineral Resource classification
Type of drilling
Category
Spacing
Diamond
RC
Blasthole Other
Comments
Navachab

m (- x -)
Navachab
Measured
10 x 10
–
x
–
–
Indicated
25 x 25
x
x
–
–
Inferred
50 x 50
x
x
–
–
Grade control
5 x 10 and 10 x 10
–
x
–
–

Mineral Resource and Ore Reserve Report 2008
– 134 –
Reconciliation of Mineral Resource and Ore Reserve
as at 31 December 2008
Changes in gold contained
Moz
Percentage
Deple-
Model
Scope
Net change
Mine
attributable Category
2007
tion
(1)
change
(2)
change
(3)
2008
Diff
% Comment
Navachab
100% Resource
4.42
(0.19)
(0.15)
0.25
4.33
(0.10)
(2)
Reserve
1.47
(0.08)
0.01
(0.06)
1.34
(0.13)
(9)
Depletion and application of a 6%
grade adjustment
Total
Resource
4.42
(0.19)
(0.15)
0.25
4.33
(0.10)
(2)

Reserve
1.47
(0.08)
0.01
(0.06)
1.34
(0.13)
(9)

*1. Depletion: reduction in Ore Reserve based on ore delivered to the plant and corresponding in situ reduction in the Mineral Resource.*
*2. Model change: difference between the Ore Reserve based on the start of year and end of year Mineral Resource models.*
*3. Scope change: difference resulting from change in cut-off grade, mine call factor, new project studies and any other factors influencing the*
*Mineral Resource and Ore Reserve estimations.*

Ore Reserve modifying factors
as at 31 December 2008

| | Metallurgical recovery factor | Cut-off grade | Mine call factor | |
|---|---|---|---|---|
| | Navachab | g/t Au | (MCF) | % |
| Comments | | | | |
| Gecko | 0.5 | 100 | 72-94 | 94% Grade adjustment factor applied – a combination of RRF and MRF |
| Grid A | 0.5 | 100 | 72-94 | 94% Grade adjustment factor applied – a combination of RRF and MRF |
| Main Pit | 0.5 | 100 | 72-94 | 94% Grade adjustment factor applied – a combination of RRF and MRF |
| Stockpile - full grade ore | | | | |

0.5
100
72-94
94% Grade adjustment factor
applied – a combination of
RRF and MRF
Namibia
Regional overview *cont.*
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.

Mineral Resource and Ore Reserve Report 2008

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Navachab

Namibia

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 120,000 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 greenschist-amphibolite facies calc-silicates, marbles and volcano-clastic rocks. The rocks have been intruded by granite, pegmatite and aplitic dykes and have also been deformed into a series of alternating dome and basin-like structures. The 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 (±60%) and a replacement skarn body (±40%). The mineralisation in the main pit is hosted by a NE-SW striking metamorphosed sequence of greenschist-amphibolite facies, calc-silicates, marbles and volcano-clastic rocks that dip at 70° to the west. The gold is very fine-grained and associated with pyrrhotite and minor amounts of pyrite, chalcopyrite, arsenopyrite, sphalerite, maldonite and bismuthinite. An estimated 90% of the gold occurs as free gold and the remainder is present in minerals such as maldonite ($Au_2Bi$). Approximately 80% of the gold is free milling. Silver is also present and the gold to silver ratio is approximately 15 to 1.

Mineral Resource and Ore Reserve Report 2008
– 136 –
Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Navachab
Category
million
g/t
tonnes
Moz
Anomaly 16
Measured
–
–
–
–
Indicated
1.28
1.28
1.64
0.05
Inferred
5.91
0.80
4.72
0.15
Total
7.19
0.89
6.37
0.21
Gecko
Measured
–
–
–
–
Indicated
0.33
1.43
0.47
0.02
Inferred
0.88
1.21

1.07
0.03
Total
1.21
1.27
1.54
0.05
Grid A
Measured
0.40
1.99
0.79
0.03
Indicated
0.31
1.62
0.50
0.02
Inferred
0.10
1.17
0.11
–
Total
0.81
1.75
1.41
0.05
Main Pit
Measured
1.56
1.35
2.10
0.07
Indicated
60.02
1.26
75.43
2.43
Inferred
35.42
1.14
40.34
1.30
Total
97.00
1.22
117.88
3.79
Total stockpiles
Measured

11.88
0.62
7.36
0.24
Indicated
–
–
–
–
Inferred
–
–
–
–
Total
11.88
0.62
7.36
0.24
Navachab
Total
118.08
1.14
134.55
4.33
W
E
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 Navachab Main Pit
Namibia
Navachab *cont.*
Exclusive Mineral Resource
Contained
Contained
Tonnes

Grade
gold
gold
Navachab
Category
million
g/t
tonnes
Moz
Measured
6.63
0.56
3.71
0.12
Indicated
34.36
1.18
40.61
1.31
Inferred
42.31
1.09
46.25
1.49
Navachab
Total
83.30
1.09
90.58
2.91

Mineral Resource and Ore Reserve Report 2008
– 137 –
Navachab:
Ore Reserve reconciliation
2007 vs 2008
Ounces (millions)
1.47
2007
-0.08
Depletion
-0.06
Scope
Change
1.34
2008
0.01
Model
Change
1.2
Change
1.4
Navachab:
Mineral Resource reconciliation
2007 vs 2008
Ounces (millions)
4.42
2007
-0.19
Depletion
1.24
Gold price
-0.57
Other
-0.02
Explo-
ration
4.33
2008
-0.42
Cost
0.0
-0.14
Metho-
dology
Change
3.0
1.3
5.0
4.0
2.0
1.0

| Ore Reserve as at 31 December 2008 | Contained Tonnes | Contained Grade | gold | gold |
|---|---|---|---|---|
| Navachab | Category | million | g/t | tonnes | Moz |
| Gecko | Proved | – | – | – | – |
| | Probable | 0.16 | 1.54 | 0.25 | 0.01 |
| | Total | 0.16 | 1.54 | 0.25 | 0.01 |
| Grid A | Proved | 0.38 | 1.92 | 0.72 | 0.02 |
| | Probable | 0.22 | 1.64 | 0.36 | 0.01 |
| | Total | 0.59 | 1.82 | 1.08 | 0.04 |
| Main Pit | Proved | 1.18 | 1.35 | 1.60 | 0.05 |
| | Probable | 27.20 | 1.27 | 34.58 | 1.11 |
| | Total | 28.38 | 1.27 | 36.18 | 1.16 |
| Total | | | | | |

stockpile
Proved
5.65 0.72 4.07
0.13
Probable
– –
–
–
Total
5.65 0.72 4.07
0.13
Navachab
Total
34.78
1.20
41.58
1.34

The largest portion (2.55Moz) of the Exclusive Mineral Resource is to be found in the Main Pit. A pre-feasibility study on the expansion of operations at Navachab is in progress and may bring approximately 1.02Moz into Ore Reserve. A five year drilling program has been developed to increase confidence and to follow the extent of the mineralisation at Navachab. Approximately 0.11Moz is tied up in the marginal ore stockpiles at a grade of 0.53g/t and the intention is to test this for economic viability through the DMS project (dense medium separation) during 2009. If the gold recoveries through the DMS process prove to be as designed then the marginal ore stockpiles will be included in the Ore Reserve by 2011.

Further minor amounts of Exclusive Mineral Resources are at the satellite ore bodies, such as Anomaly 16 (0.21Moz), Gecko (0.04Moz) and Grid A (0.01Moz). Drilling to improve the confidence in the ounces at Gecko has commenced and it is expected that all the Exclusive Mineral Resource ounces at Gecko will be included in the Ore Reserve by the end of 2009.

INFERRED MINERAL RESOURCE IN BUSINESS PLAN

The Inferred Mineral Resource was used in the pit optimisation process and 0.14 million ounces are present in the optimised pit but 0.18 million ounces are included in the final production scheduling as the pit is designed beyond the optimised shell because of mining width constraints.

Mineral Resource and Ore Reserve Report 2008
– 138 –
Namibia
Navachab *cont.*
Competent persons
Professional
Registration
Relevant
Type
Name
organisation
number
experience
Mineral Resource
F Badenhorst
AusIMM
211026
17 years
Ore Reserve
G Botshiwe
AusIMM
229475
9 years
Navachab
– Surface (Metric)
Tonnes above cut-off (millions)
Cut-off grade (g/t)
Average
grade
above
cut-off
(g/t)
5.00
0.00
1.00
2.00
3.00
4.00
0.0
1.0
2.0
3.0
4.0
5.0
6.0
7.0
0.0
100.0
150.0
200.0
250.0

300.0
350.0
400.0
50.0
Tonnes above cut-off
Ave grade above cut-off

Mineral Resource and Ore Reserve Report 2008
– 139 –
Regional overview
Tanzania
Geita is the largest of AngloGold Ashanti's seven open-pit mines in Africa. Prior to April 2004, Geita was managed under the joint venture agreement between Ashanti and AngloGold. Since the merger of the two companies, Geita is now a wholly-owned subsidiary.
MINERAL RESOURCE ESTIMATION
As with any estimation techniques the results are very dependent upon the data quality and availability. The geological model is a critical input to the Mineral Resource estimation process. The orebody boundaries for the individual deposits are defined from the detailed logging of all geological boreholes and after validation this information is used to create a three dimensional model. This model is subsequently populated with an appropriately dimensioned block model. The size of this block model is determined by analysing different block sizes in relation to the variance of the blocks. A block size which gives an optimal variance is then chosen. Ordinary kriging is used to interpolate values into the blocks. A geostatistical technique called Uniform Conditioning is then used to estimate the proportion of economic ore that occur above the Mineral Resource cut-off and this is reported according to the selective mining unit (SMU).
Mineral Resource and Ore Reserve gold price
Units
2008
2007
Gold price – Mineral Resource
US$/oz
1,000
700
Gold price – Ore Reserve
US$/oz
720
600
N
Operations
0
800km
Dar-es-
Salaam
Arusha
Mwanza
*Lake*
*Victoria*
*Lake*
*Tanganyika*
Tanga
Dodoma
Tabora
Kigoma
TANZANIA
Geita

Mineral Resource and Ore Reserve Report 2008
– 140 –
Ore Reserve modifying factors
as at 31 December 2008

| Cut-off | Mine call | Metallurgical | Dilution | | |
|---|---|---|---|---|---|
| grade | factor | recovery | | | |
| Geita | g/t Au | % | (MCF) | factor % | Comments |
| Area 3 West | 1.25-2.66 | – | 93.3 | 51.5-80.6 | MCF reflects reconciliation concerns in first 5 years of the BP |
| Chipaka | 1.23-2.23 | – | 93.3 | 58.6-87.8 | MCF reflects reconciliation concerns in first 5 years of the BP |
| Full Grade stockpile | 0.91-3.07 | – | 100 | 75.2-92.8 | Used either $720/oz or $900/oz, depending on source |
| Geita Hill Open Pit | 0.72-1.17 | – | 90.2 | 78.6-87.8 | 12% reduction in tonnes over LOM, 23.5% drop in metal (2009), and 14.5% over rest of LOM |
| Marginal stockpile | 0.83-1.09 | – | 100 | 75.2-92.8 | |

Used either $720/oz or $900/oz,
depending on source
Matandani
1.14-1.57
–
93.3
82.5
Only oxides considered for
conversion to Ore Reserves
Nyankanga Open Pit
0.7-1.05
–
90.2
88.2-91.6
4% reduction in tonnes over LOM,
22.7% drop in metal (2009-2010),
and 17.2% over rest of LOM
Ridge 8
1.14-2.01
–
93.3
66.4-85.1
MCF reflects reconciliation concerns
in first 5 years of the BP
Roberts
1.12-1.63
–
93.3
84.5-92.0
MCF reflects reconciliation concerns
in first 5 years of the BP
Star and Comet
0.78-1.25
–
90.2
84.4-92.8
4% reduction in tonnes and 12.6%
drop in metal contained over LOM
Details of average drillhole spacing and type in relation to Mineral Resource classification
Type of drilling
Category
Spacing
Diamond
RC
Blasthole Other
Comments
Geita
m (- x -)
Measured
–
–

x
–
–
–
–
10 x 10
Indicated
40 x 40
x
x
–
–
–
Inferred
50 x 50
x
x
–
–
–
50 x 80
Grade control
5 x 10 and 10 x 10
–
x
–
–
–
Tanzania
Regional overview *cont.*
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.

Mineral Resource and Ore Reserve Report 2008
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Reconciliation of Mineral Resource and Ore Reserve
as at 31 December 2008
Changes in gold contained
Moz
Deple-
Model
Scope
Net change
Mine
Category
2007
tion
(1)
change
(2)
change
(3)
2008
Diff
%
Comment
Geita
Resource
12.45
(0.43)
0.37
0.46
12.86
0.40
3
Increase in underground potential due to lower cut-off and charges in Open Pit/UG interface (predominantly at Geita Hill). This offset the decrease due to model changes at Nyankanga.
Reserve
6.48
(0.33)
(0.12)
(0.92)
5.11 (1.37)
(21)
Decrease due to Mineral Resource model changes and the application of grade factors to mitigate low model confidence. Cost increases also contributed to the decrease in Ore Reserves.

Total
Resource
12.45
(0.43)
0.37
0.46
12.86
0.40
3
Reserve
6.48
(0.33)
(0.12)
(0.92)
5.11 (1.37)
(21)

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

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

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

Mineral Resource and Ore Reserve Report 2008
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Geita
Tanzania
The Geita gold mine is located approximately 910km from Dar es Salaam in the Lake Zone of northern Tanzania; the tenement is situated within the Sukumaland Greenstone Belt of the Lake Victoria goldfields which host 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 volcaniclastics 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. Namely, Nyamulilima in the west (hosting the Star and Comet, Ridge 8, and Roberts deposits), Geita in the central part (hosting the Nyankanga, Geita Hill, Lone Cone, and Chipaka deposits) and Kukuluma to the north-east (hosting the Matandani, Kukuluma, and Area 3 West deposits). Approximately 83% of this resource is situated in the Geita Sub-Terrain, with 13% in the Nuyamulilima Sub-Terrain, and 4% in the Kukuluma Sub-Terrain.
Late dextral faults have utilised these corridors, reactivating the pre-existing fault systems. Gold mineralisation and hydrothermal alteration of the host lithologies, on all scales, is associated with late stage ductile to brittle-ductile deformation.
*Projects*
With approximately 58% of the Kukuluma Sub-Terrain Mineral Resource comprising refractory ore, currently not economically treatable in the Geita treatment plant, a metallurgical project has been initiated to determine a treatment method for this material. Success in this regard could increase the potential of the underground Mineral Resource extension significantly below the Kukuluma and Matandani open pits.

Mineral Resource and Ore Reserve Report 2008

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With 3.6 million Mineral Resource ounces potentially exploitable by underground mining methods, Geita gold mine has begun an underground mining project to bring these Mineral Resources to Ore Reserves. To facilitate these projects the mine has initiated a 3D geological model of the Geita Trend that will amalgamate structure and mineralogy so as to optimise the definition of underground Mineral Resource extensions.

Mineral Resource

as at 31 December 2008

| Contained | Contained | Tonnes | Grade | gold | gold |
|---|---|---|---|---|---|
| Geita | Category | million | (g/t) | tonnes | Moz |
| Area 3 West | Measured | – | – | – | – |
| | Indicated | 1.01 | 2.49 | 2.53 | 0.08 |
| | Inferred | 0.01 | 4.65 | 0.02 | – |
| | Total | 1.02 | 2.50 | 2.55 | 0.08 |
| Chipaka | Measured | – | – | – | – |
| | Indicated | 2.50 | 2.28 | 5.71 | |

0.18
Inferred
–
–
–
–
Total
2.50
2.28
5.71
0.18
Geita Hill Open Pit
Measured
–
–
–
–
Indicated
18.07
2.99
54.09
1.74
Inferred
0.12
2.42
0.29
0.01
Total
18.19
2.99
54.37
1.75
Geita Hill Underground
Measured
–
–
–
–
Indicated
6.27
4.99
31.31
1.01
Inferred
3.13
5.30
16.59
0.53
Total
9.40
5.10

47.90
1.54
Kalondwa Hill
Measured
–
–
–
–
Indicated
–
–
–
–
Inferred
1.05
3.67
3.84
0.12
Total
1.05
3.67
3.84
0.12
Lone Cone
Measured
–
–
–
–
Indicated
2.75
2.45
6.74
0.22
Inferred
1.69
2.40
4.05
0.13
Total
4.44
2.43
10.78
0.35
Lithologies
Mbuga
Conglomerate
Quartz Vein
Gabbro dyke
Felsic dyke

Porphyries
Lamphrophyre
Dolerite dyke
Dolerite Sills
Dolerite
Black Shale
Mafic Tuff
Tuffs
BIF
Granite
Legend
(
Interpreted thrust zones
Regional Structures
Pits Design
**GEITA TREND**
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Geita Hill
Matandani Kuhuluma
Area 3
**KUKULUMA SUB -TERRAIN**
395000
400000
405000
410000
415000
420000
425000
9700000
9695000
9690000
9685000
9680000
9675000
1:150,000
±

Mineral Resource and Ore Reserve Report 2008
– 144 –
Tanzania
Geita *cont.*
Mineral Resource *(cont.)*
as at 31 December 2008

| Contained gold | Contained gold | Tonnes | Grade | Geita Category |
|---|---|---|---|---|
| million tonnes | Moz | million | (g/t) | |
| Matandani | | | | |
| Measured | – | – | – | – |
| Indicated | 3.34 | 3.24 | 10.80 | 0.35 |
| Inferred | 0.03 | 4.74 | 0.13 | – |
| Total | 3.37 | 3.25 | 10.94 | 0.35 |
| Nyankanga Open Pit | | | | |
| Measured | – | – | – | – |
| Indicated | 26.13 | 4.80 | 125.29 | 4.03 |
| Inferred | | | | |

10.77
2.68
28.81
0.93
Total
36.89
4.18
154.10
4.95
Nyankanga Underground
Measured
–
–
–
–
Indicated
3.21
5.91
18.99
0.61
Inferred
5.48
5.26
28.85
0.93
Total
8.69
5.50
47.83
1.54
Ridge 8
Measured
–
–
–
–
Indicated
1.60
2.14
3.41
0.11
Inferred
0.03
1.20
0.04
–
Total
1.62
2.12
3.44
0.11

Ridge 8 Underground
Measured
–
–
–
–
Indicated
1.10
8.17
9.03
0.29
Inferred
2.13
5.26
11.17
0.36
Total
3.23
6.25
20.20
0.65
Roberts
Measured
–
–
–
–
Indicated
6.47
1.61
10.41
0.34
Inferred
0.25
4.12
1.04
0.03
Total
6.72
1.70
11.45
0.37
Star and Comet
Measured
–
–
–
–
Indicated
3.36
4.96

16.66
0.54
Inferred
0.45
2.09
0.94
0.03
Total
3.81
4.62
17.60
0.57
Total stockpiles
Measured
–
–
–
–
Indicated
8.02
1.14
9.15
0.29
Inferred
–
–
–
–
Total
8.02
1.14
9.15
0.29
Geita
Total
108.97
3.67
399.87
12.86
Exclusive Mineral Resource
Contained
Contained
Tonnes
Grade
gold
gold
Geita
Category
million
g/t
tonnes

Moz
Measured
–
–
–
–
Indicated
35.95
3.32
119.38
3.84
Inferred
25.12
3.81
95.77
3.08
Geita
Total
61.07
3.52
215.15
6.92

Mineral Resource and Ore Reserve Report 2008

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The Exclusive Mineral Resource at Geita consists of the Mineral Resource that occurs between the Ore Reserve pit shell ($720) and the Mineral Resource pit shell ($1000). This material is sub economic to mine at the current Ore Reserve gold price and forms potential extensions to current life of mine (LOM) in an elevated gold price environment. A significant portion of this material is in the Inferred Mineral Resource category and infill drilling programs are planned to upgrade potentially economic areas to Indicated Mineral Resources.

In instances where the ore body extends down dip to below the current LOM design pit shell, a 35 m crown pillar below the bottom of the pit shell forms part of the Exclusive Mineral Resource. This material is not planned to be mined.

A large portion of the Exclusive Mineral Resources also occurs as underground extensions to the current open pit design shells. Scoping and pre-feasibility studies are currently in progress to determine the economic viability of this material. As part of these studies, exploration drives and infill drilling are planned to upgrade the confidence category of the Mineral Resource.

Geita:

Ore Reserve reconciliation

2007 vs 2008

Ounces (millions)

6.48

2007

-0.33

Depletion

-0.92

Scope

Change

5.11

2008

-0.12

Model

Change

3.7

Change

4.7

Geita:

Mineral Resource reconciliation

2007 vs 2008

Ounces (millions)

12.45

2007

-0.43

Depletion

1.33

Gold price

-0.02

Other

0.00

Explo-

ration

12.86

2008

-0.85

Cost
12.2
11.2
0.37
Metho-
dology
Change
5.7

Mineral Resource and Ore Reserve Report 2008
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Geita
– Underground (Metric)
Tonnes above cut-off
Ave grade above cut-off
Tonnes above cut-off (millions)
Cut-off grade (g/t)
0.00
5.00
10.00
Average grade
above cut-off (g/t)
0.0
10.0
5.0
15.0
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
Geita
– Surface (Metric)
Tonnes above cut-off
Ave grade above cut-off
Tonnes above
cut-off (millions)
Cut-off grade (g/t)
Average grade above
cut-off (g/t)
0.0
10.0
20.0
30.0
40.0
50.0
60.0
70.0
80.0
90.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0

10.0
0.00
3.00
5.00
1.00
2.00
4.00
Ore Reserve
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
Geita
Category
million
g/t
tonnes
Moz
Area 3 West
Proved
–
–
–
–
Probable
0.63
2.44
1.54
0.05
Total
0.63
2.44
1.54
0.05
Chipaka
Proved
–
–
–
–
Probable
1.19
2.40
2.84
0.09
Total
1.19
2.40

2.84
0.09
Geita Hill Open Pit
Proved
–
–
–
–
Probable
16.44
2.59
42.62
1.37
Total
16.44
2.59
42.62
1.37
Matandani
Proved
–
–
–
–
Probable
0.49
2.96
1.44
0.05
Total
0.49
2.96
1.44
0.05
Nyankanga Open Pit
Proved
–
–
–
–
Probable
21.92
3.80
83.34
2.68
Total
21.92
3.80
83.34
2.68
Ridge 8

Proved
–
–
–
–
Probable
0.68
2.62
1.78
0.06
Total
0.68
2.62
1.78
0.06
Roberts
Proved
–
–
–
–
Probable
2.23
1.65
3.68
0.12
Total
2.23
1.65
3.68
0.12
Star and Comet
Proved
–
–
–
–
Probable
3.18
4.41
14.01
0.45
Total
3.18
4.41
14.01
0.45
Total stockpiles
Proved
–
–

–
–
Probable
7.54
1.03
7.80
0.25
Total
7.54
1.03
7.80
0.25
Geita
Total
54.30
2.93
159.06
5.14
Tanzania
Geita *cont.*

Mineral Resource and Ore Reserve Report 2008
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Competent persons
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
S Robins
AusIMM
222533
13 years
Ore Reserve
A Murray
AusIMM
208304
20 years
Chipaka deposit
Geita hill deposit
Conceptual Nyankanga
position
A
B

Mineral Resource and Ore Reserve Report 2008

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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.

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 multiple indicator kriging (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 drillhole information is used

throughout. The drillhole database is thoroughly reviewed before each Mineral Resource estimation and the estimation domains are based primarily on lithology for each deposit.

Regional overview

United States

N

Operations

0

1000km

Cripple Creek

& Victor

New York

Philadelphia

Denver

Chicago

Los Angeles

San Francisco

Washington DC

UNITED STATES OF AMERICA

*Colorado*

Mineral Resource and Ore Reserve gold price

| Units | 2008 | 2007 |
|---|---|---|
| Gold price – Mineral Resource | | |
| US$/oz | 1,000 | 700 |
| Gold price – Ore Reserve | | |
| US$/oz | 720 | 600 |

Mineral Resource and Ore Reserve Report 2008
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Ore Reserve modifying factors
as at 31 December 2008
Cut-off
Mine call
Metallurgical
grade
factor
recovery
CC&V
g/t Au
(MCF)
factor %
Comments
Altman
0.36
100
50
Cresson
0.35
100
54
Globe Hill
0.21
100
77
Schist Island
0.24
100
61
South Cresson
0.26
100
50
Wild Horse Extension
0.26
100
50
Wildhorse
0.34
100
60
Details of average drillhole spacing and type in relation to Mineral Resource classification
Type of drilling
Category
Spacing
Diamond
RC
Blasthole Other
Comments

CC&V
m (- x -)
Measured
30 x 30
x
x
–
–
Indicated
45 x 45
x
x
–
–
Inferred
75 x 75
x
x
–
–
Grade control
5 x 6
–
–
x
–

ORE RESERVE ESTIMATION

The Ore Reserve pit designs were based on 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.

INFERRED MINERAL RESOURCE IN BUSINESS PLAN

Inferred Mineral Resource is not used in the pit optimisation.

Mineral Resource and Ore Reserve Report 2008
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Reconciliation of Mineral Resource and Ore Reserve
as at 31 December 2008
Changes in gold contained
Moz
Percentage
Deple-
Model
Scope
Net change
Mine
attributable Category
2007
tion
(1)
change
(2)
change
(3)
2008
Diff
% Comment
CC&V
100% Resource
12.07
(0.48)
–
1.72
13.31
1.24
10
Successful exploration of
completion of conceptual studies
for MLE2 and MLE3
Reserve
4.75
(0.48)
0.20
0.45
4.93
0.17
4
Stated reserves fill current leach
pad capacity, including the addition
of MLE1 (phase 5 extension).
Reserve is constrained by leach
pad capacity until the pre-feasibility
study of MLE2 is completed.
Total
Resource 12.07

(0.48)
–
1.72
13.31
1.24
10
Reserve
4.75
(0.48)
0.20
0.45
4.93
0.17
4

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

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

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

United States
Regional overview *cont.*

Mineral Resource and Ore Reserve Report 2008
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Cripple Creek and Victor
United States

BACKGROUND

Cripple Creek & Victor (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.

MINE LIFE EXTENSION PROJECT

CC&V has completed a feasibility study for a mine life extension (MLE) project that would extend its LOM. The MLE would extend mining slightly in two areas of the existing Main Cresson Mine, extend mining to the north into the Wild Horse Extension of the East Cresson Mine, and extend mining to the north and south of the Schist Island Mine in the areas of the prior Globe Hill Mine. Processing and recovery of the additional gold will be completed through a Phase 5 extension of the existing VLF. Overburden resulting from mining in these extension areas will be placed into portions of the existing Main Cresson Mine, East Cresson Mine, and North Cresson Mine as mine backfill or placed for storage in the existing Squaw Gulch Overburden Storage Area. Approximately 103 million tonnes of additional ore and 250 million tonnes of additional overburden will be mined within the proposed MLE areas for a total of 353 million tonnes over the additional four years of mining in the MLE area. The ore will be crushed and processed using the existing crushing and conveying facilities. Ore will be processed on the existing VLF and the Phase 5 extension, and recovered in the existing process facility.

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GEOLOGY
The mining district is located between the towns of Cripple Creek and Victor. The dominant geological feature is a Tertiary-aged, diatreme intrusive complex 6.4km long, 3.2km wide. The diatreme-intrusive complex is hosted in Precambrian age rocks including biotite gneiss, granodiorite, quartz monzonite and granite.
The diatreme is primarily composed of highly variable eruptive phase Cripple Creek Breccias, and volcaniclastics, intruded by stocks, dykes, sills and discordant breccias, composed of alkaline phonolite-phonotephrite petrographic series rock types followed by late lamprophyre dikes and breccia pipes. The host rocks have undergone a complex history of structural deformation and hydrothermal activity and alteration.
Gold mineralisation post dates volcanic activity, and is hosted in all rock types as veins and disseminated and/or structurally controlled orebodies. The gold mineralisation has been dated between 27.8Ma and 26.6Ma.
District structures are generally near vertical and strike north-north-west to north-east. These structures commonly controlled the intrusions and acted as primary conduits for late-stage, gold mineralising solutions. Higher grade pods of mineralisation occur at structural intersections and/or as sheeted 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. Gold occurs as native gold with pyrite, native gold and gold-silver tellurides.
In the oxide zone, gold occurs with hydrous iron and manganese oxides. Silver is present but is economically unimportant. Iron and manganese oxides, pyrite, K-feldspar alteration and quartz can encapsulate gold mineralisation locally.
Mineral Resource
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
CC&V
Category
million
g/t
tonnes
Moz
Cresson
Measured
255.90
0.87
223.31
7.18
Indicated
183.75
0.73
134.97
4.34
Inferred

83.61
0.66
55.60
1.79
Total
523.26
0.79
413.88
13.31
CC&V
Total
523.26
0.79
413.88
13.31
Exclusive Mineral Resource
Contained
Contained
Tonnes
Grade
gold
gold
CC&V
Category
million
g/t
tonnes
Moz
Measured
143.33
0.83
118.71
3.82
Indicated
128.04
0.67
86.38
2.78
Inferred
83.61
0.66
55.60
1.79
CC&V
Total
354.99
0.73
260.69
8.38
United States
Cripple Creek and Victor *cont.*

The Exclusive Mineral Resources at CC&V lie peripheral to, and along mineralised strike extensions in the current pit designs. None of this material will be brought into the Ore Reserves during 2009 as CC&V is currently engaged in a Mine Life Extension (MLE-2) Pre-Feasibility Study. The study will be completed at the end of 2009 and a portion of the material is then expected to be brought into the Ore Reserves in 2010.

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Cripple Creek and Victor:

Ore Reserve reconciliaton 2007 vs 2008

Ounces (millions)

4.75

2006

-0.48

Depletion

0.45

Scope Change

4.93

2008

0.19

Model Change

4.3

Change

4.9

Cripple Creek and Victor:

Mineral Resource reconciliaton 2007 vs 2008

Ounces (millions)

12.07

2007

-0.48

Depletion

2.81

Gold price

0.09

Other

0.00

Explo-ration

13.31

2008

-1.19

Cost

10.4

0.00

Metho-dology Change

13.4
12.4
11.4
4.7
4.5
Ore Reserve
as at 31 December 2008
Contained
Contained
Tonnes
Grade
gold
gold
CC&V
Category
million
g/t
tonnes
Moz
Altman
Proved
0.73 0.87 0.63
0.02
Probable
0.08 0.59 0.04 –
Total
0.80 0.84 0.68
0.02
Cresson
Proved
63.07 0.93
58.41
1.88
Probable
31.98 0.89
28.49
0.92
Total
95.05 0.91
86.90
2.79
Globe
Hill
Proved
7.11 0.51 3.66
0.12
Probable
4.30 0.45 1.94
0.06
Total
11.41 0.49 5.60

0.18
Schist
Island
Proved
12.42 0.74 9.24
0.30
Probable
7.78
0.75
5.87
0.19
Total
20.20
0.75
15.11
0.49
South Cresson
Proved
12.02
0.85
10.22
0.33
Probable
2.48
0.89
2.21
0.07
Total
14.50
0.86
12.43
0.40
Wild Horse Extension
Proved
16.55
1.32
21.78
0.70
Probable
8.98
1.11
9.95
0.32
Total
25.53
1.24
31.73
1.02
Wildhorse
Proved
0.67

0.97
0.65
0.02
Probable
0.11
0.79
0.09
–
Total
0.78
0.94
0.74
0.02
CC&V
Total
168.27
0.91
153.19
4.93

Mineral Resource and Ore Reserve Report 2008
– 154 –
Competent persons
Professional
Registration
Relevant
Category
Name
organisation
number
experience
Mineral Resource
T Brown
AusIMM
226857
24 years
Ore Reserve
A Keith
SME
1689600
27 years
CC&V
– Surface (Metric)
Tonnes above cut-off
Ave grade above cut-off
Tonnes above cut-off (millions)
Cut-off grade (g/t)
Average
grade
above
cut-off
(g/t)
0.5
4.5
5.5
6.5
0.0
200.0
400.0
800.0
0.0
5.00
0.4
1.2
3.5
1.5
2.5
600.0
0.8
1.6
United States

Cripple Creek and Victor *cont.*

Definitions

MINERAL RESOURCE

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

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

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

Mineral Resource classification is based on the '15% Rule'. A Measured Mineral Resource should be expected to be within 15% of the quarterly metal estimate at least 90% of the time, while for an Indicated Mineral Resource estimate the annual metal estimate should be within 15% of the metal estimated at least 90% of the time. For an Inferred Mineral Resource the annual error may for 90% of the time, be greater than 15%. The process and methodology of classification are at the discretion of the competent person and involves expressing the '15% Rule' as a required level of information, in tangible terms the spacing of the drillhole or tunnel spacing in a particular deposit. Techniques such as conditional simulation or even an empirical reconciliation-based approach are employed. However, all operations are responsible for demonstrating, through reconciliation, that their classification system conforms to the 15% rule set out above.

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

The exclusive Mineral Resource consists of the following components:

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

ORE RESERVE

The 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), and contained metal inclusive of mining dilution, mining ore losses and mine call factors. These modifying factors are based on measurements, rather than estimates. Tonnage and grade estimates for surface stockpile materials that meet Ore Reserve criteria are itemised separately.

Only those Ore Reserves included for treatment in the business unit plan production schedule are considered in the Ore Reserve statement. These sometimes include marginal or sub-grade ores as well as Inferred Mineral Resource. 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.

Definitions

c*ont.*

Mineral Resource and Ore Reserve Report 2008
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ALL TERMS

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

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

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

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

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

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

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

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

*Cut-off grade – surface mines (COG)*
The minimum grade at which a unit of ore will be mined to achieve the desired economic outcome.

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

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

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

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

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

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

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

of terms
Glossary

*Gold produced*

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

*Grade*

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

*Leaching*

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

*Life of mine (LOM)*

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

*Marginal ore (MO)*

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

*Metallurgical plant*

A processing plant erected to treat ore and extract gold.

*Milling*

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

*Mine call factor (MCF)*

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

*Mineral deposit*

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

*Mining reconciliation factor (MRF)*

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

*Ounce (oz) (troy)*

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

*Pay limit*

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

*Precipitate*

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

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

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

*Productivity*

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

*Reclamation*

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

*Recovered grade*
The recovered mineral content per unit of ore treated.

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

*Refining*
The final purification process of a metal or mineral.

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

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

*Resource reconciliation factor (RRF)*
This is the variance between the resource model and the ore perimeters.

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

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

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

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

*Stope*
Underground excavation where the orebody is extracted.

*Stoping*
The process of excavating ore underground.

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

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

*Tailings dam (slimes dam)*
Dam facilities designed to store discarded tailings.

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

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

Glossary
of terms c*ont.*

*Tonnage*
Quantity of material measured in tonnes or tons.

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

ABBREVIATIONS

*$*
United States dollars

*A$ or AUD*
Australian dollars

*ADS*
American Depositary Share

*ADR*
American Depositary Receipt

*ARS*
Argentinean peso

*ASX*
Australian Stock Exchange

*Au*
Contained gold

*BCM*
Bank cubic metres, ie ore in the ground

*BIF*
Banded iron formation

*BRL*
Brazilian real

*capex*
Capital expenditure

*CIL*
Carbon-in-leach

*CIP*
Carbon-in-pulp

*CLR*
Carbon Leader Reef

*FGO*
Full grade ore

*g*
Grams

*g/t*
Grams per tonne

*g/TEC*
Grams per total employee costed

*JORC*
Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves

*JSE*
JSE Limited

*kg*
Kilograms

*LOM*
Life of mine

*m2/TEC*
Square metres per total employee costed
*M or m*
Metre or million, depending on the context
*Moz*
Million ounces
*Mt*
Million tonnes or tons
*Mtpa*
Million tonnes/tons per annum
*oz*
Ounces (troy)
*oz/t*
Ounces per ton
*R or ZAR*
South African rands
*SAMREC*
South African Code for the Reporting of Mineral Resources and Mineral Reserves
*t*
Tons (short) or tonnes (metric)
*tpm*
Tonnes/tons per month
*tpa*
Tonnes/tons per annum
*tpd*
Tonnes/tons per day
*VCR*
Ventersdorp Contact Reef
*VR*
Vaal Reef
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Certain statements contained in this document, including, without limitation, those concerning AngloGold Ashanti's strategy to reduce its gold hedging position, including the extent and effect of the hedge reduction, the economic outlook for the gold mining industry, expectations regarding gold prices, production, cash costs and other operating results, growth prospects and outlook of AngloGold Ashanti's operations, individually or in the aggregate, including the completion and commencement of commercial operations of certain of AngloGold Ashanti's exploration and production projects and completion of acquisitions and dispositions, including the disposition of AngloGold Ashanti's interest in the Boddington Project, AngloGold Ashanti's liquidity and capital resources and capital expenditure, and the outcome and consequence of any pending litigation proceedings, contain certain forward-looking statements regarding AngloGold Ashanti's operations, economic performance and financial condition. Although AngloGold Ashanti believes that the expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, amongst other factors, changes in economic and market conditions, success of business and operating initiatives, changes in the regulatory environment and other government actions, fluctuations in gold prices and exchange rates, and business and operational risk managements. For a discussion of such risk factors, refer to the section titled "Risk management and internal controls" in these annual financial statements. AngloGold Ashanti undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after the date of these annual financial statements or to reflect the occurrence of unanticipated events. All subsequent written or oral forward-looking statements attributable to AngloGold Ashanti or any person acting on its behalf are qualified by the cautionary statements herein.

Forward-looking
statements

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Administrative
information
ANGLOGOLD ASHANTI
LIMITED
Registration No.
1944/017354/06
Incorporated in the Republic of
South Africa
Share codes:
ISIN: ZAE000043485
JSE:
ANG
LSE:
AGD
NYSE:
AU
ASX:
AGG
GhSE (Shares):
AGA
GhSE (GhDS):
AADA
Euronext Paris:
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Dr TJ Motlatsi (Deputy Chairman)
FB Arisman #
RE Bannerman ‡
JH Mensah ‡
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AngloGold Ashanti posts information that is important to investors on the main page of its website at www.anglgoldashanti.com and under the "Investors" tab on the main page. This information is updated regularly. Investors should visit this website to obtain important information about AngloGold Ashanti.

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International Calls: +1 201 680 6578
E-mail:
shrrelations@mellon.com
Website:
www.bnymellon.com\shareowner
Global BuyDIRECTSM
BoNY maintains a direct share
purchase and dividend reinvest-
ment plan for AngloGold Ashanti.
Telephone: +1-888-BNY-ADRS
The Annual Financial Statements 2008 is available in printed or CD format from the contacts whose details appear above or on the Internet
at the above-mentioned website address. In addition, AngloGold Ashanti must by no later than 30 June 2009, produce a Form 20-F (a report
required by the Securities and Exchange Commission in the United States), copies of which will be available free of charge on EDGAR
at www.sec.gov, or from the contacts detailed above. A signed copy of the Annual Financial Statements 2008 may be viewed at the
company's registered address.
Supplementary information on Mineral Resources, Ore Reserves and development, prepared on a business unit basis, is obtainable from the
above sources as well as in PDF format on the AngloGold Ashanti website. Plans of the South Africa region underground workings are also
available on request.
Russell and Associates

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 27, 2009
By:
/s/ L Eatwell
Name: L Eatwell
Title: Company Secretary