

ANGLOGOLD ASHANTI LTD

Form 6-K

January 23, 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 January 23, 2009

Commission File Number 1-14846

AngloGold Ashanti Limited

(Translation of registrant's name into English)

76 Jeppe Street

Newtown, 2001

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

South Africa

(Address of principal executive offices)

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

Form 20-F Form 40-F

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

Yes

No

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

Yes

No

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

Yes

No

Enclosure: Press release ANGLOGOLD ASHANTI ANNOUNCES MINERAL RESOURCE INCREASES
AT TROPICANA

news release

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23 January 2009

MINERAL RESOURCE INCREASES AT TROPICANA

AngloGold Ashanti Australia Ltd is pleased to announce a Mineral Resource increase for the Tropicana Gold Project in Western Australia.

The Tropicana Gold Project, located 330 kilometres east north-east of Kalgoorlie, is part of the Tropicana Joint Venture, which is 70% owned by AngloGold Ashanti Australia (the manager) and 30% by Independence Group NL.

The Measured, Indicated and Inferred Mineral Resource for the project is now 75.3 million tonnes grading 2.07 grams/tonne for 5.01 million ounces of gold.

This represents an increase of approximately 1 million ounces from the first Mineral Resource estimate released for the project in December 2007, and the new estimate is predominantly in the Measured and Indicated category, providing a higher level of confidence.

AngloGold Ashanti Australia's share of the upgraded resource is 3.51 Moz.

The Mineral Resource has been identified within a US\$1,000/oz optimisation shell at an AUD:USD exchange rate of 0.80. This is equivalent to an Australian dollar gold price of A\$1,250/oz. A cut-off grade of 0.6 g/t has been used for oxide and transitional material and 0.7 g/t for fresh material.

Tropicana Mineral Resource Statement (100%)

Classification

Tonnes (Mt)

Grade (g/t)

Contained Gold

(Moz)

Measured 19.9

2.38

1.53

Indicated 31.0

2.06

2.05

Inferred 24.3

1.83 1.43

Total 75.3 2.07 5.01

Drilling completed subsequent to the Mineral Resource estimate has resulted in high grade intersections outside of the Mineral Resource shell in the Havana South area, including 10.0 m @ 3.74 g/t Au from 101m and 5.0 m @ 22.5 g/t Au from 120m in TPRC990 and 10.0 m @ 10.1 g/t Au from 139m in TPRC991. Drilling scheduled for early 2009 is likely to result in further additions to the Mineral Resource in this area.

The Mineral Resource increase has been driven predominantly by extensions to mineralisation identified by ongoing drilling, particularly at Havana, and to a lesser extent by increases in the gold price.

Certain statements made in this communication, including, without limitation, those concerning AngloGold Ashanti's strategy to reduce its gold hedging position including the extent and effects of the reduction, the economic outlook for the gold mining industry, expectations regarding gold prices, production, cash costs and other operating results, growth prospects and outlook of AngloGold Ashanti's operations, individually or in the aggregate, including the completion and commencement of commercial operations of certain of AngloGold Ashanti's exploration and production projects and completion of acquisitions and dispositions, AngloGold Ashanti's liquidity and capital resources, including its intentions and ability to refinance its \$1 billion convertible bond, and expenditure and the outcome and consequences 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, among 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 management. For a discussion of such factors, refer to AngloGold Ashanti's annual report for the year ended 31 December 2007, which was distributed to shareholders on 31 March 2008, and report to shareholders for the quarter and nine months ended 30 September 2008, which was distributed to shareholders on 30 October 2008. AngloGold Ashanti undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date 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. AngloGold Ashanti posts information that is important to investors on the main page of its website at www.anglogoldashanti.com and under the "Investors" tab on the main page. This information is updated regularly. Investors should visit this website to obtain important information about AngloGold Ashanti.

A new mining plan and schedule is being developed to incorporate the increase in Mineral Resource. Pre-feasibility work at the project, based on mining the Tropicana and Havana deposits, is expected to be completed in the June quarter this year. This study is examining a range of treatment rates between 5.5-7.0 Mtpa, which would produce between 250,000 – 420,000 ozpa over a mine life of 10 -15 years.

ENDS

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The information in this report that relates to Mineral Resources is based on information compiled by Mark Kent, who is a full-

time employee of AngloGold Ashanti Limited, and a member of the Australasian Institute of Mining and Metallurgy.

Mark Kent

has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the

activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for

Reporting Exploration Results, Mineral Resources and Ore Reserves'. Mark Kent consents to the inclusion in the report of the

matters based on his information in the form and context in which it appears.

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: January 23, 2009

By:

/s/ L Eatwell

Name: L EATWELL

Title: Company Secretary