

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 6-K

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

Report on Form 6-K dated May 08, 2017

Commission File Number 1-14846

AngloGold Ashanti Limited

(Name of registrant)

76 Rahima Moosa 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 **NEWS RELEASE – ANGLOGOLD ASHANTI LIMITED - MARKET UPDATE REPORT FOR THE QUARTER ENDED 31 MARCH 2017**

Market update report for the quarter ended 31 March 2017

Johannesburg, 8 May 2017 - AngloGold Ashanti is pleased to provide an operational update for the quarter ended 31 March 2017. Detailed financial and operational results are provided on a six-monthly basis i.e. at the end of June and December.

- ❖ Group safety milestone achieved with first ever fatality-free March quarter
- ❖ Group achieves two consecutive fatality-free quarters; South Africa region has operated for nine months without a fatality
- ❖ Gold production of 830,000oz at an average total cash cost of \$813/oz (up from \$702/oz in Q1 2016)
- ❖ All-in sustaining costs of \$1,060/oz up from \$860/oz in Q1 2016, impacted by strengthening currencies and planned higher capital investment
- ❖ Adjusted EBITDA of \$314m, down from \$378m in Q1 2016
- ❖ Free cash outflow of \$119m, reflecting higher costs, adverse working capital movements and planned higher capital expenditure
- ❖ Net debt to Adjusted EBITDA ratio of 1.38 times, down from 1.47 times at the end of Q1 2016
- ❖ Full year guidance remains unchanged

		ended Mar 2017	Quarter ended Dec 2016	ended Mar 2016	Year ended Dec 2016
US dollar / Imperial					
Operating review					
Gold					
Produced	- oz (000)	830	983	861	3,628
Sold	- oz (000)	877	945	876	3,590
Financial review					
Price received	- \$/oz	1,216	1,216	1,185	1,249
All-in sustaining costs	- \$/oz	1,060	1,047	860	986
All-in costs	- \$/oz	1,137	1,145	924	1,071
Total cash costs	- \$/oz	813	764	702	744
Gross profit	- \$m	135	176	193	841
Free cash (outflow) / inflow	- \$m	(119)	39	70	278
Net debt	- \$m	2,053	1,916	2,127	1,916
Capital expenditure	- \$m	216	282	128	811

\$ represents US dollar, unless otherwise stated.
Rounding of figures may result in computational discrepancies.

FINANCIAL AND CORPORATE REVIEW

First quarter overview

AngloGold Ashanti achieved key safety records, with its first ever fatality-free March quarter, and achieved two consecutive fatality-free quarters for the second time in its history. The South Africa region reached a new milestone of 247 fatality-free days (exceeding its previous record set in 2014 of 242 days). Moab Khotsong has passed 20 months without a fatality, a new record, whilst the region has exceeded five million fatality-free shifts. Given the challenging conditions of ultra-deep mining operations, the entire team, in cooperation with a broad group of stakeholders, must be commended for delivering this critical objective in line with AngloGold Ashanti's commitment to safe production.

The Company remains on track to deliver full-year production guidance. Production was 830,000oz at an average total cash cost of \$813/oz for the first quarter of 2017, compared to 861,000oz at \$702/oz for the first quarter of 2016, with the increase in costs per ounce driven largely by the stronger operating currencies in South Africa and Brazil (the Rand and the Brazilian Real gained 16% and 19% against the US dollar respectively), as well as lower volumes produced.

All-in sustaining costs (AiSC) for the period were \$1,060/oz, up from \$860/oz for the first quarter of 2016, with the increase being driven by the 16% rise in cash costs year-on-year, as well as the planned 71% increase in sustaining capital expenditure to reach \$186m during the first quarter of 2017, up from \$109m for the first quarter of 2016. The higher capital expenditure levels are reflective of a strategic inward investment programme which is focused on securing medium to long term operating improvements, principally at the International operations, while maintaining a disciplined approach to capital expenditure with the overall goal of delivering sustainable free cash flows through the cycle. The focus areas include a new power plant and underground development at Geita, increased underground development at Kibali and Cuiabá, with the latter aiming at improving flexibility related to geotechnical conditions, and capitalised stripping at Iduapriem and Tropicana. It is anticipated that the sustaining capital expenditure will peak in 2017 based current plans. All-in costs were \$1,137/oz for the first quarter of 2017, up from \$924/oz for the first quarter of 2016.

Production from the International operations was 632,000oz at a total cash cost of \$714/oz for the first quarter of 2017, up from 625,000oz at a total cash cost of \$674/oz in the corresponding period last year. This increase reflected solid performances across the portfolio, with exceptional performances from Siguirí, Iduapriem and Cerro Vanguardia. AiSC for the first quarter of 2017 was \$963/oz, up from \$822/oz for the first quarter of 2016, with the increase attributable to the impact of stronger local currencies, lower average grades and the planned increase in sustaining capital expenditure.

South Africa had a difficult production quarter, as an added focus on a safe start-up contributed to an unusually slow ramp-up after the year-end break. This was compounded by: continued recovery from last year's interruptions, particularly in the fourth quarter; a poor mining mix, whereby lower-grade areas dominated volumes at some operations; more fractured ground than previously anticipated in areas currently being mined at TauTona and Moab Khotsong; and unwarranted deviations from mining plans, particularly in the first half of the quarter. Steps have been taken to address the poor adherence to mining plans and management work routines, to improve productivity. These steps have already resulted in an improvement in mineable face length, leading to volume recoveries in the second half of the quarter, and into the current quarter. These improvements will also contribute to our forecast for an overall increase in production rates over the remainder of the year.

During the seasonally weaker first quarter of 2017, the Company maintained good balance sheet flexibility with net debt to adjusted earnings before interest, tax, depreciation and amortisation (Adjusted EBITDA) ratio at 1.38 times. Net debt at 31 March 2017 was \$2.05bn, down from \$2.13bn at 31 March 2016, and remained at comfortable levels despite the planned increase in capital expenditure, which was \$216m for the first quarter of 2017, up from \$128m for the first quarter of 2016. This decrease in net debt was due to the redemption of the high yield bond using a combination of the group's USD Revolving Credit Facility and free cash flow generated during 2016. Subsequent to 31 December 2016, net debt increased by \$137m from \$1.92bn to \$2.05bn due mainly to the free cash outflow for the quarter of \$119m.

Cash inflow from operating activities during the first quarter of 2017 was \$93m, down from \$227m for the first quarter of 2016, with the decrease mainly due to adverse movements in working capital (\$76m), and the dual impact of lower production and increased cash costs (\$60m). This was partly offset by the higher gold price received.

Free cash outflow was \$119m, compared to the \$70m free cash inflow reported in the first quarter of 2016, reflecting higher costs, the negative impact of working capital movements and the planned increase in sustaining capital expenditure levels. This was only partially offset by a reduction in taxes paid and a slightly higher price received during the quarter.

"Our International operations have again delivered a strong result, with our brownfields investments proceeding to plan," Srinivasan Venkatakrishnan, Chief Executive Officer of AngloGold Ashanti, said. "On the back of the strong safety result, we are reviewing our South African operations to restore their margin and ensure they recover from a difficult start to the year."

Total capital expenditure (including equity accounted entities) during the first quarter of 2017 was \$216m, up from \$128m for the first quarter of 2016. Total capital expenditure included \$186m of sustaining capital expenditure and \$30m of project capital expenditure. Capital expenditure is expected to increase in the remaining three quarters of the year, in line with historical seasonal trends.

Adjusted EBITDA was \$314m for the first quarter of 2017, down from \$378m for the first quarter of 2016. The outlook for the full year remains unchanged as follows:

- Production between 3.6Moz and 3.75Moz;
- Capital expenditure between \$950m and \$1,050m;
- Total cash costs between \$750/oz and \$800/oz; and
- AiSC between \$1,050/oz and \$1,100/oz, assuming average exchange rates against the US dollar of 14.25ZAR (Rand), 3.40BRL (Brazil Real), 0.75AUD (Aus\$) and 16.50ARS (Argentina Peso), with oil at \$58/bl on average for the year.

Both production and cost estimates assume neither labour interruptions or power disruptions, nor changes to asset portfolio and/or operating mines and have not been reviewed by our external auditors. Other unknown or unpredictable factors could also have material adverse effects on our future results and no assurance can be given that any expectations expressed by AngloGold Ashanti will prove to have been correct. Please refer to the Risk Factors section in AngloGold Ashanti's annual report on Form 20-F for the year ended 31 December 2016, filed with the United States Securities and Exchange Commission.

FINANCIAL AND OPERATING REPORT

SAFETY UPDATE

AngloGold Ashanti recorded its first ever March quarter without a fatal accident. This achievement comes as the Company delivered two, consecutive fatality-free quarters at its operations, including the ultra-deep South African mines, which reached a new milestone of 247 days without a fatality. All of the South African operations, with the exception of Kopanang, have now achieved one million fatality-free shifts, with the region as a whole now exceeding five million shifts.

Sadiola, Yatela, Siguiri, Iduapriem, Obuasi, Sunrise Dam, the projects of Gramalote and Quebradona, and also the Greenfields Exploration unit recorded an injury free quarter. The All-Injury Frequency Rate for the International operations improved by 5%, whilst the Group saw a regression to 8.85 injuries per million hours worked during the first quarter of 2017, from 8.44 for the first quarter of 2016.

OPERATING HIGHLIGHTS

The **South African operations** produced 198,000oz at a total cash cost of \$1,158/oz for the quarter ended 31 March 2017 compared to 236,000oz at a total cash cost of \$786/oz for the quarter ended 31 March 2016. AiSC for the first quarter of 2017 ended at \$1,327/oz, up from \$919/oz, for the first quarter of 2016.

As detailed above, production in the region was lower year-on-year, hindered by an unusually slow start up after the Christmas holidays, lower recovered grades across all its operations and efficiency constraints encountered in obtaining sufficient face time at key operations. Costs were heavily impacted by the lower production volumes and by the strengthening of the Rand against the U.S. dollar, with an average appreciation of 16% of the Rand against the dollar compared to the first quarter of 2016.

At the West Wits Operations, production was 77,000oz, down from 97,000oz during the first quarter of 2016 due to an anticipated reduction in grades (11% lower at Mponeng) and also poor equipment availability. Ground conditions were also more fractured than originally anticipated at TauTona, causing increased dilution and necessitating additional off-reef mining and underground support. A 3.2 magnitude seismic event at the 85 cross-cut on 115 Level at TauTona also caused mining to halt to allow rehabilitation of the area. TauTona saw inadequate face-length availability caused by poor adherence to mining plans. Remedial steps have been taken (see First quarter overview).

At the Vaal River Operations, production was 74,000oz, down from 90,000oz for the first quarter of 2016. Kopanang and Moab experienced sub-optimal grade-mix and both struggled to build production volumes after the year-end break, given the deviation from operating plans, which resulted in poor face-length availability. At Moab, off-reef mining was higher than planned in order to ensure greater geological stability, in addition to ore-pass lock-up and channel sequencing challenges. At Kopanang, clearing of waste tonnes in the ore pass contributed to a 35% reduction in yields. To mitigate the lack of face length build-up, primarily due to safety stoppages experienced in 2016, a revised service work strategy and schedule has been established to help increase immediate mineable face length.

At Surface operations, despite higher tailings throughput, production volumes from the marginal ore dumps were below plant capacity given low availability at the Kopanang Gold Plant, and logistical challenges getting material into the plant. Remedial steps have been identified to recover plant throughput.

Mine Waste Solutions' (MWS) performance was hampered by unusually heavy rains during the first quarter, which had caused periodic suspension of operations. This was compounded by a significant fall-off in gold reclaimed through the two circuits servicing the flotation plant. Grades, recoveries and consequently gold production are expected to improve given a recent upgrade to the sulphur pay dam pump station.

In the **Continental Africa** region, production increased to 314,000oz at a total cash cost of \$759/oz for the quarter ended 31 March 2017, up from 305,000oz at a total cash cost of \$719/oz for the quarter ended 31 March 2016. AiSC for the first quarter of 2017 was \$939/oz, up from \$815/oz for the first quarter of 2016.

At Kibali, in the **DRC**, production of 63,000oz was 7% higher than the first quarter of 2016, when the operation experienced lower recoveries while commissioning the sulphide circuit. Total cash costs at \$881/oz was up \$107/oz, or 14%, from \$774/oz for the first quarter of 2016, as a result of higher fuel costs due to increased open-pit mining during the period.

In **Tanzania**, production from Geita decreased by 7% to 105,000oz following a planned 6% drop in recovered grade as a result of mining different benches in Nyankanga. Total cash costs increased by 12% or \$67/oz, to \$615/oz, primarily due to the lower production, stockpile and gold in process movements and higher fuel prices relative to the previous period.

In **Ghana**, Iduapriem's production increased by 7% to 49,000oz as a result of a 23% increase in recovered grades which, was partially offset by the lower tonnes treated. Total cash costs decreased by 7% to \$920/oz, mainly due to the higher gold production, lower cost of grid power and fuel compared to the corresponding period last year. Obuasi remained in care and maintenance with no production anticipated for 2017, with partial rehabilitation activities undertaken during the quarter while future operational options for the mine are being evaluated.

In **Guinea**, production at Siguiri increased by 13,000oz or 21% to 75,000oz as a result of access to higher grade ore sources at the Area 1 mining zone secured in the third quarter of last year. Total cash costs at \$695/oz were 7% lower than the first quarter of last year as a result of the higher production, partly offset by higher mining costs.

In **Mali**, production from Sadiola decreased by 16% to 16,000oz as operational flexibility becomes limited due to the depletion of oxide operations. This had a negative impact on recoveries, though this was partly offset by a 5% increase in tonnes treated. Total cash costs increased by 26% or \$199/oz to \$971/oz, due to the lower production together with a relatively high fixed cost base.

In the **Americas**, production was 191,000oz at a total cash cost of \$631/oz for the quarter ended 31 March 2017 compared to 196,000oz at a total cash cost of \$516/oz for the same quarter in 2016. AiSC for the first quarter of 2017 ended at \$954/oz, compared to \$723/oz, for the first quarter of 2016.

In **Argentina**, Cerro Vanguardia's production was 67,000oz, up 3% year-on-year, mainly due to higher tonnes treated at the plant driven by operational and metallurgical improvements, partially offset by lower grades. Silver production increased by 16% compared to the first quarter of 2016 in accordance with plans. Total cash costs were higher in the first quarter of 2017 compared to the same period last year, mainly as a result of the elimination of Patagonia ports rebates by the end of December 2016. These negative effects were partially attenuated by favourable stockpile movements due to higher volumes of stockpile inventory derived from higher tonnes mined.

In **Brazil**, at AGA Mineração, production was 95,000oz, down 3% compared to the first quarter of 2016, due to planned lower grades. Serra Grande was affected by lower feed grade consistent with plan, partially off-set by higher tonnes treated. Total cash costs in Brazil were impacted by the stronger Brazilian Real relative to the U.S. dollar, lower production volumes, and inflationary pressures including higher costs for labour, materials and services. Costs were also impacted by stockpile and gold in process movements at Serra Grande.

The **Australia** region produced 127,000oz at a total cash cost of \$734/oz for the first quarter of 2017, up from 124,000oz at a total cash cost of \$814/oz for the first quarter of 2016. AiSC for the first quarter was \$1,045/oz, compared to \$994/oz in the same quarter a year ago.

At Sunrise Dam, production was slightly higher than the corresponding quarter last year with a 4% increase in mill feed grade and a 4% increase in metallurgical recovery offsetting slightly lower mill throughput. Sunrise Dam achieved its first injury-free quarter on record in the March quarter. At Tropicana, production was similar to the first quarter of 2016, with the lower head grade - due to the end of grade streaming - offset by 16% higher mill throughput.

Total cash costs at Sunrise Dam of \$885/oz were 5% higher than total cash costs for the first quarter of 2016. This was mostly due to the AUD/USD exchange rate, with cash costs in Australian dollar terms less than 1% above the corresponding quarter last year. At Tropicana, total cash costs were 24% lower at \$550/oz, compared to \$728/oz for the first quarter of 2016. The first quarter of 2017 included a larger amount of capitalised mining costs, related to mining the early stages of the Havana 3 and Tropicana 2 pits.

UPDATE ON CAPITAL PROJECTS

Kibali

The ultra-fine grind (UFG) capacity increased during the quarter, with commissioning of four new UFG mills. This enables the processing of increased floatation concentrate volumes, improving grind and recoveries, as well as providing flexibility in ore treatment.

Ambarau, the second hydropower station, was also completed and commissioned during the first quarter, taking Kibali's total hydro generation capacity to 32MW.

The underground produced 323kt (100%) of ore from the declines during the quarter. In addition, Kibali completed 3.2km of development from the declines during the quarter. The shaft material handling system progressed during the quarter with the first ore bins completed and the underground crusher installed, while 617m of development from the shaft was completed, 6% ahead of plan.

Siguiri Combination Plant

The project remains on schedule. All major equipment for the new combination plant has been ordered, whilst orders for the power plant will be completed during the second quarter. The owner's team has been established on site and the EPCM team is expected to be at full strength before mid-year, in parallel with site mobilisation of the civils and earthwork contract, which has also been awarded. Hard rock mining is planned to commence in December 2017.

Mponeng Phase 1 and 2

The Phase 1 project continued ahead of schedule during the first quarter, as construction of ore and water handling infrastructure remain ahead of schedule for completion this year. Activities related to secondary support are also progressing according to plan. The 126 level ramp-up to steady state ore reserve development, and subsequent gold delivery, are expected to commence during the third quarter of 2017, once the ore handling infrastructure is commissioned.

During the quarter, work undertaken included the inter level ice hole equipping, the construction of the 116 level substation as well as the water handling infrastructure complex on 121 level. The electrical and water reticulation infrastructure construction remains behind schedule, though none of these activities directly affects the critical path of the project.

Colombia update

Following the outcome of the plebiscite held on 26 March 2017 in the Colombian Municipality of Cajamarca, which hosts the company's La Colosa exploration site, we have taken the decision to pause much of the current fieldwork around the project whilst we study the impact of the decision on future investment. We will, in the meantime, continue the necessary engagement with all stakeholders to build consensus around the creation of a modern, environmentally responsible gold-mining industry in Colombia. This will unfortunately result in significantly reduced expenditure related to the project, with a consequent impact on employment and our investment in the Tolima region, whilst this process is underway.

*For more details on work done during the quarter, see the **Exploration Update document** on the company website: www.anglogoldashanti.com*

The financial information, including any forward-looking information, set out in this market update report has not been reviewed and reported on by the Company's external auditors. Outlook data is forward-looking information which is further discussed on the back cover of this document.

Operations at a glance

for the quarters ended March 2017, December 2016 and March 2016

	Production oz (000)			Underground milled / treated 000 tonnes			Surface milled / treated 000 tonnes			Open-pit treated 000 tonnes			Underground Recovered grade g/tonne			Surface Recovered grade g/tonne			Open-pit Recovered grade g/tonne		
	Mar-17	Dec-16	Mar-16	Mar-17	Dec-16	Mar-16	Mar-17	Dec-16	Mar-16	Mar-17	Dec-16	Mar-16	Mar-17	Dec-16	Mar-16	Mar-17	Dec-16	Mar-16	Mar-17	Dec-16	Mar-16
SOUTH AFRICA	198	246	236	758	791	769	8,879	8,689	9,173	-	-	-	6.23	7.74	7.56	0.15	0.16	0.16	-	-	-
Vaal River Operations	74	98	90	382	385	360	-	-	-	-	-	-	6.06	7.93	7.76	-	-	-	-	-	-
Kopanang	14	19	22	132	121	133	-	-	-	-	-	-	3.37	4.92	5.22	-	-	-	-	-	-
Moab Khotsong	60	79	68	250	264	227	-	-	-	-	-	-	7.49	9.32	9.25	-	-	-	-	-	-
West Wits Operations	77	99	97	368	392	385	-	-	-	-	-	-	6.55	7.83	7.82	-	-	-	-	-	-
Mponeng	48	67	59	223	249	243	-	-	-	-	-	-	6.66	8.38	7.47	-	-	-	-	-	-
TauTona	30	31	38	144	143	142	-	-	-	-	-	-	6.36	6.86	8.43	-	-	-	-	-	-
TauTona	43	46	47	-	-	-	8,879	8,689	9,173	-	-	-	-	-	-	0.15	0.16	0.16	-	-	-
Total Surface Operations	23	23	24	-	-	-	6,375	6,202	6,747	-	-	-	-	-	-	0.11	0.12	0.11	-	-	-
First Uranium SA	20	23	23	-	-	-	2,503	2,487	2,427	-	-	-	-	-	-	0.25	0.28	0.29	-	-	-
Surface Operations	4	3	2	8	14	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	632	738	625	1,922	2,051	1,724	-	-	-	8,084	9,069	8,011	3.49	3.81	3.71	-	-	-	1.56	1.60	1.57
INTERNATIONAL OPERATIONS	314	369	305	229	202	157	-	-	-	6,311	7,351	6,314	4.77	5.22	5.10	-	-	-	1.37	1.39	1.37
CONTINENTAL AFRICA																					
DRC	63	82	59	149	202	157	-	-	-	715	709	581	5.24	5.22	5.10	-	-	-	1.67	2.11	1.77
Kibali - Attr. 45%																					
Ghana	49	60	46	-	-	-	-	-	-	1,054	1,459	1,217	-	-	-	-	-	-	1.44	1.28	1.16
Iduapriem	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Obuasi																					
Guinea	75	71	62	-	-	-	-	-	-	2,282	2,691	2,460	-	-	-	-	-	-	1.02	0.82	0.78
Siguirii - Attr. 85%																					
Mali	5	5	6	-	-	-	-	-	-	573	504	308	-	-	-	-	-	-	0.29	0.33	0.65
Morila - Attr. 40%	16	17	19	-	-	-	-	-	-	504	559	482	-	-	-	-	-	-	0.99	0.94	1.23
Sadiola - Attr. 41%																					
Tanzania	105	134	113	79	-	-	-	-	-	1,183	1,428	1,267	3.89	-	-	-	-	-	2.51	2.76	2.76
Geita																					
Non-controlling interests, exploration and other																					
Non-controlling interests, exploration and other	127	149	124	774	894	670	-	-	-	1,511	1,463	1,494	1.96	2.05	1.89	-	-	-	1.60	1.90	1.74
AUSTRALASIA																					
Australia	57	64	54	774	894	670	-	-	-	189	136	353	1.96	2.05	1.89	-	-	-	1.30	1.11	1.15
Sunrise Dam	70	85	70	-	-	-	-	-	-	1,322	1,327	1,141	-	-	-	-	-	-	1.65	1.98	1.92
Tropicana - Attr. 70%																					
Exploration and other	191	220	196	919	955	897	-	-	-	262	254	203	4.46	5.15	4.83	-	-	-	5.75	6.05	6.45
AMERICAS																					
Argentina	67	74	65	60	67	80	-	-	-	217	222	168	7.68	8.49	7.15	-	-	-	6.62	6.52	7.33
Cerro Vanguardia - Attr. 92.50%																					
Brazil	95	112	98	562	600	526	-	-	-	-	-	-	4.98	5.61	5.37	-	-	-	-	-	-
AngloGold Ashanti Mineração Serra Grande	29	34	33	297	288	291	-	-	-	45	32	35	2.83	3.41	3.20	-	-	-	1.53	2.79	2.24
Non-controlling interests, exploration and other																					
Total	830	983	861	2,680	2,842	2,493	8,879	8,689	9,173	8,084	9,069	8,011	4.27	4.90	4.90	0.15	0.16	0.16	1.56	1.60	1.57

Rounding of figures may result in computational discrepancies.

Operations at a glance (continued)

for the quarters ended March 2017, December 2016 and March 2016

	Total cash costs \$/oz			All-in sustaining costs \$/oz			ORD / Stripping capex \$m			Other sustaining capex \$m			Non sustaining capex \$m			Gross profit (loss) \$m		
	Mar-17	Dec-16	Mar-16	Mar-17	Dec-16	Mar-16	Mar-17	Dec-16	Mar-16	Mar-17	Dec-16	Mar-16	Mar-17	Dec-16	Mar-16	Mar-17	Dec-16	Mar-16
SOUTH AFRICA	1,158	971	786	1,327	1,199	919	26	26	22	6	21	5	6	7	5	(42)	33	25
Vaal River Operations	1,120	917	786	1,301	1,095	925	11	11	9	2	6	1	-	-	-	(8)	12	15
Kopanang	2,081	1,712	1,205	2,399	2,057	1,387	3	3	3	1	2	-	-	-	-	(16)	(16)	(7)
Moab Khotsong	891	724	647	1,042	862	772	8	8	6	1	4	1	-	-	-	9	27	21
West Wits Operations	1,283	1,023	813	1,513	1,289	984	15	15	13	2	6	2	6	6	5	(24)	(7)	15
Mponeng	1,134	857	726	1,376	1,113	930	10	10	9	2	4	2	6	6	5	(8)	6	13
TauTona	1,524	1,376	947	1,737	1,666	1,066	6	6	3	1	2	1	-	-	-	(16)	(13)	2
Total Surface Operations	999	978	730	1,021	1,183	750	-	-	-	1	6	1	-	-	-	(11)	29	(4)
First Uranium SA	846	828	609	868	1,107	643	-	-	-	-	3	1	-	-	-	(12)	27	(11)
Surface Operations	1,174	1,130	857	1,199	1,260	862	-	-	-	1	3	-	-	-	-	-	1	7
Other	-	-	-	-	-	-	-	-	-	1	2	1	-	-	-	-	-	-
INTERNATIONAL OPERATIONS	714	692	674	963	969	822	104	75	42	48	112	40	24	40	14	169	150	175
CONTINENTAL AFRICA	759	725	719	939	968	815	43	19	16	22	62	15	24	39	14	69	65	75
DRC																		
Kibali - Attr. 45%	881	640	774	994	825	830	4	4	4	6	4	1	19	19	9	(7)	12	4
Ghana																		
Iduapriem	920	863	992	1,007	896	981	11	-	-	1	4	-	-	-	-	18	14	6
Obuasi	-	-	443	-	-	715	-	-	-	-	-	-	-	-	4	3	1	(3)
Guinea																		
Siguiri - Attr. 85%	695	876	746	785	1,068	819	-	-	-	3	12	6	5	13	1	31	17	23
Mali																		
Morila - Attr. 40%	1,027	1,259	926	1,343	1,732	1,056	-	-	-	1	1	-	-	-	-	-	(4)	-
Sadiola - Attr. 41%	971	1,271	772	1,056	1,379	805	-	-	-	1	1	-	-	3	-	1	(4)	5
Tanzania																		
Geita	615	535	548	986	942	722	28	15	12	9	39	7	-	-	-	18	25	38
Non-controlling interests, exploration and other	-	-	-	-	-	-	-	-	-	1	2	1	-	2	-	5	2	4
AUSTRALASIA																		
Australia	734	713	814	1,045	1,007	994	24	21	4	12	12	13	-	-	-	40	30	25
Sunrise Dam	885	886	840	1,023	1,009	985	4	4	4	4	5	3	-	-	-	13	13	12
Tropicana - Attr. 70%	550	524	728	974	920	900	20	17	-	8	7	11	-	-	-	33	24	19
Exploration and other	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	(6)	(6)	(5)
AMERICAS																		
Argentina	631	619	516	954	930	723	38	35	22	15	37	11	-	1	-	59	57	75
Cerro Vanguardia - Attr. 92.50%	533	633	509	837	939	650	10	13	5	2	10	(0)	-	-	-	26	17	30
Brazil																		
AngloGold Ashanti Mineração Serra Grande	628	570	485	951	871	702	21	16	11	10	19	7	-	1	-	32	34	36
Non-controlling interests, exploration and other	891	731	565	1,274	1,076	874	6	5	6	3	6	4	-	-	-	(2)	5	9
							1	1	0	1	2	(0)	-	-	-	3	1	-
Continuing operations	813	764	702	1,060	1,047	860	131	101	64	55	134	45	30	46	19			
OTHER																4	(4)	1
Total							131	101	64	55	134	45	30	46	19	129	181	201
Equity accounted investments included above																6	(5)	(8)
AngloGold Ashanti																135	176	193

Rounding of figures may result in computational discrepancies.



Development Sampling for the quarter ended 31 March 2017

Development values represent actual results of sampling, no allowances having been made for adjustments necessary in estimating Ore Reserves.							
Statistics are shown in metric units	Advanced metres (total)*	Sampled metres	Avg. ore body thickness (cm)	Sampled			
				gold		uranium	
				Avg. g/t	Avg. cm.g/t	Avg. kg/t	Avg. cm.kg/t
SOUTH AFRICA							
VAAL RIVER							
Kopanang							
Vaal reef	888	74	13.2	183.56	2,423	7.26	94.00
Moab Khotsong							
Moab Khotsong Vaal reef	2,371	418	92.5	51.45	4,759	0.94	84.00
Great Noligwa Vaal reef	292	86	106.5	37.21	3,963	0.94	101.00
WEST WITS							
Mponeng							
Ventersdorp Contact reef	1,305	238	64.3	22.95	1,476	-	-
TauTona							
TauTona Carbon Leader reef	1,086	58	20.3	186.45	3,785	0.47	9.00
AUSTRALASIA							
Sunrise Dam							
Sunrise Dam	1,983	-	-	1.68	-	-	-
AMERICAS							
AngloGold Ashanti Mineração							
Mina de Cuiabá	2,431	1,351	63.0	5.33	-	-	-
Lamego	950	432	60.0	2.94	-	-	-
Córrego do Sítio Mina I	2,173	556	-	4.37	-	-	-
Serra Grande							
Mina III	2,176	4,098	-	2.50	-	-	-
Mina Nova	1,239	3,325	-	2.62	-	-	-
CVSA							
Cerro Vanguardia	2,347	810	400.0	8.71	-	-	-
Statistics are shown in imperial units	Advanced feet (total)*	Sampled feet	Avg. ore body thickness (inches)	Sampled			
				gold		uranium	
				Avg. oz/t	Avg. ft.oz/t	Avg. lb/t	Avg. ft.lb/t
SOUTH AFRICA							
VAAL RIVER							
Kopanang							
Vaal reef	2,914	243	5.20	5.35	2.32	14.52	6.29
Moab Khotsong							
Moab Khotsong Vaal reef	7,780	1,371	36.42	1.50	4.55	1.88	5.71
Great Noligwa Vaal reef	958	282	41.93	1.09	3.79	1.88	6.57
WEST WITS							
Mponeng							
Ventersdorp Contact reef	4,281	781	25.31	0.67	1.41	-	-
TauTona							
TauTona Carbon Leader reef	3,564	190	7.99	5.44	3.62	0.94	0.63
AUSTRALASIA							
Sunrise Dam							
Sunrise Dam	6,506	-	-	0.05	-	-	-
AMERICAS							
AngloGold Ashanti Mineração							
Mina de Cuiabá	7,976	4,433	24.80	0.16	-	-	-
Lamego	3,117	1,417	23.62	0.09	-	-	-
Córrego do Sítio Mina I	7,128	1,826	-	0.13	-	-	-
Serra Grande							
Mina III	7,140	13,445	-	0.07	-	-	-
Mina Nova	4,065	10,909	-	0.08	-	-	-
CVSA							
Cerro Vanguardia	7,700	2,656	157.48	0.25	-	-	-

* This includes total "on-reef" and "off-reef" development metres

Administration and corporate information

ANGLOGOLD ASHANTI LIMITED

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

Share codes:

ISIN:	ZAE000043485
JSE:	ANG
NYSE:	AU
ASX:	AGG
GhSE: (Shares)	AGA
GhSE: (GhDS)	AAD

JSE Sponsor:

Deutsche Securities (SA) Proprietary Limited

Auditors: Ernst & Young Inc.

Offices

Registered and Corporate

76 Rahima Moosa Street
Newtown 2001
(PO Box 62117, Marshalltown 2107)
South Africa
Telephone: +27 11 637 6000
Fax: +27 11 637 6624

Australia

Level 13, St Martins Tower
44 St George's Terrace
Perth, WA 6000
(PO Box Z5046, Perth WA 6831)
Australia
Telephone: +61 8 9425 4602
Fax: +61 8 9425 4662

Ghana

Gold House
Patrice Lumumba Road
(PO Box 2665)
Accra
Ghana
Telephone: +233 302 773400
Fax: +233 303 778155

Directors

Executive

S Venkatakrishnan^{*§} (Chief Executive Officer)
KC Ramon[^] (Chief Financial Officer)

Non-Executive

SM Pityana[^] (Chairman)
Prof LW Nkuhlu[^] (Deputy Chairman)
A Garner[#]
R Gasant[^]
DL Hodgson[^]
NP January-Bardill[^]
MJ Kirkwood^{*}
M Richter[#]
RJ Ruston⁻
SV Zilwa[^]

^{*} British [§] Indian [#] American
⁻ Australian [^] South African

Officers

Executive Vice President – Legal, Commercial and
Governance and Company Secretary:
ME Sanz Perez

Investor Relations Contacts

Stewart Bailey

Telephone: +27 11 637 6031
Mobile: +27 81 032 2563
E-mail: sbailey@anglogoldashanti.com

Fundisa Mgidi

Telephone: +27 11 637 6763
Mobile: +27 82 821 5322
E-mail: fmgidi@anglogoldashanti.com

Sabrina Brockman

Telephone: +1 646 880 4526
Mobile: +1 646 379 2555
E-mail: sbrockman@anglogoldashantina.com

General e-mail enquiries

Investors@anglogoldashanti.com

AngloGold Ashanti website

www.anglogoldashanti.com

Company secretarial e-mail

Companysecretary@anglogoldashanti.com

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.

PUBLISHED BY ANGLOGOLD ASHANTI

Share Registrars

South Africa

Computershare Investor Services (Pty) Limited
Rosebank Towers, 15 Biermann Avenue,
Rosebank, 2196
(PO Box 61051, Marshalltown 2107)
South Africa
Telephone: 0861 100 950 (in SA)
Fax: +27 11 688 5218
Web.Queries@computershare.co.za

Australia

Computershare Investor Services Pty Limited
Level 11, 172 St George's Terrace
Perth, WA 6000
(GPO Box D182 Perth, WA 6840)
Australia
Telephone: +61 8 9323 2000
Telephone: 1300 55 2949 (Australia only)
Fax: +61 8 9323 2033

Ghana

NTHC Limited
Martco House
Off Kwame Nkrumah Avenue
PO Box K1A 9563 Airport
Accra
Ghana
Telephone: +233 302 235814/6
Fax: +233 302 229975

ADR Depository

BNY Mellon (BoNY)
BNY Shareowner Services
PO Box 30170
College Station, TX 77842-3170
United States of America
Telephone: +1 866-244-4140 (Toll free in USA) or
+1 201 680 6825 (outside USA)
E-mail: shrrelations@cpushareowner-services.com
Website: www.mybnymdr.com

Global BuyDIRECTSM

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

Forward-looking statements

Certain statements contained in this document, other than statements of historical fact, including, without limitation, those concerning the economic outlook for the gold mining industry, expectations regarding gold prices, production, total cash costs, all-in sustaining costs, all-in costs, cost savings and other operating results, productivity improvements, growth prospects and outlook of AngloGold Ashanti's operations, individually or in the aggregate, including the achievement of project milestones, commencement and completion of commercial operations of certain of AngloGold Ashanti's exploration and production projects and the completion of acquisitions, dispositions or joint venture transactions, AngloGold Ashanti's liquidity and capital resources and capital expenditures and the outcome and consequence of any potential or pending litigation or regulatory proceedings or environmental health and safety issues, are forward-looking statements regarding AngloGold Ashanti's operations, economic performance and financial condition. These forward-looking statements or forecasts involve known and unknown risks, uncertainties and other factors that may cause AngloGold Ashanti's actual results, performance or achievements to differ materially from the anticipated results, performance or achievements expressed or implied in these forward-looking statements. 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, social and political and market conditions, the success of business and operating initiatives, changes in the regulatory environment and other government actions, including environmental approvals, fluctuations in gold prices and exchange rates, the outcome of pending or future litigation proceedings, and business and operational risk management. For a discussion of such risk factors, refer to AngloGold Ashanti's annual reports on Form 20-F filed with the United States Securities and Exchange Commission. These factors are not necessarily all of the important factors that could cause AngloGold Ashanti's actual results to differ materially from those expressed in any forward-looking statements. Other unknown or unpredictable factors could also have material adverse effects on future results. Consequently, readers are cautioned not to place undue reliance on forward-looking 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 hereof or to reflect the occurrence of unanticipated events, except to the extent required by applicable law. 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.

Non-GAAP financial measures

This communication may contain certain "Non-GAAP" financial measures. AngloGold Ashanti utilises certain Non-GAAP performance measures and ratios in managing its business. Non-GAAP financial measures should be viewed in addition to, and not as an alternative for, the reported operating results or cash flow from operations or any other measures of performance prepared in accordance with IFRS. In addition, the presentation of these measures may not be comparable to similarly titled measures other companies may use. 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.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: May 08, 2017

AngloGold Ashanti Limited

By: /s/ M E SANZ PEREZ

Name: M E Sanz Perez

Title: EVP: Group Legal, Commercial & Governance