

## Q2 2015 EXPLORATION UPDATE

Total expensed exploration and evaluation costs (including technology) during the second quarter, inclusive of expenditure at equity accounted joint ventures, were \$34m (\$10m on Brownfields exploration, \$4m for Technology, \$6m on Greenfields exploration and \$14m on pre-feasibility studies), compared to \$36m for the same quarter last year.

This section contains only highlights from the exploration programmes conducted during the quarter. Detailed information on the exploration activities and studies both for Brownfields and Greenfields is available on the AngloGold Ashanti website [www.anglogoldashanti.com](http://www.anglogoldashanti.com), in the quarterly reports section.

### BROWNFIELDS EXPLORATION

Capitalised Brownfield exploration during the second quarter, inclusive of capital expenditure at equity accounted joint ventures, was \$16m, compared to \$17m for the same quarter last year.

A total of 140,454m of diamond and RC drilling was completed.

In **South Africa**, four deep surface drilling sites were in operation during the quarter, one on the Moab Khotsong Mine and three at Mponeng (WUDLs).

In **Tanzania**, a total of 3330m of exploration drilling was completed and was focused on infill drilling at Nyankanga Cut 8, Mineral Resource delineation at Matandani North and Geita Hill UG, as well as metallurgical drilling at Matandani pit and the initiation of a Vertical Seismic Profiling (VSP) hole at Geita Hill. Exploration also supported 977m of sterilisation drilling at WD12.

Mineral Resource amelioration infill drilling was conducted at Nyankanga Cut 8 when mining activities and floor availability permitted. A total of 3 RC holes (201m) and 7 DD holes (1,015m) were completed. Mineral Resource delineation drilling commenced at Geita Hill, aiming at delineating down dip extensions of the Geita Hill ore body for potential underground mining. The first hole was completed (517m). Assay results confirmed the continuation of a high grade zone in the down-dip projection of the ore zone.

In **Guinea**, at Siguri Gold Mine, 165 holes were drilled (18,061m). This drilling comprised AC, RC and DD holes drilled in fresh rock infill of Block 1 pits and oxide reconnaissance in Blocks 1, 2 and 3. An additional 958m of sterilisation drilling was completed at Boukaria.

The fresh rock infill drilling was focused on northern portion of the Bidini pit (2,045m RC and 2,260m DD). Progress was affected by drill pad availability, which requires extensive backfilling and dewatering. Assay results returned to date support the current block model with several intersections better than predicted. Limited Toubani (389m) and Kami (861m) below-pit infill was also completed and also returned a number of positive intersections. Infill drilling was also completed in some of the deeper portions of Seguelen PB2 (1,809m). At Sokunu, 2 of the remaining 4 planned holes were completed to infill the southwest margin. Reconnaissance field mapping continued in Block 1 at Seguelen East and Silakoro, and at the Dragon Target in the west of Block 3. The Foulata drilling program in Block 2 was completed (953m).

In **Ghana**, at Obuasi Gold Mine, no exploration work was conducted. At Iduapriem, auger drilling on the north heap leach pad was completed and all results have been received. Geological mapping in Bankyem Line (Block 1 Extension) continued this quarter.

In the **Democratic Republic of Congo** at Kibali, Mineral Resource conversion drilling was conducted at Gorumbwa, Mengu Hill and Megi. Subsequent to the phase 1 drilling completed in last quarter, a revised Mineral Resource estimate was completed for Megi. Follow up exploration programs will be required. At Durba Hill, immediately west of the KCD pit, anomalous trench results were drill tested. The results were positive and further drilling is planned.

Regionally, the team identified 7 higher-priority ranked targets along the KZ structure, based on the potential to host a new multi-million ounce standalone deposit or an economic satellite deposit. Three of these targets, Kanga Sud, Ikamva-Kalimva, and Mengu Hill, were drill tested for evidence of combined F2 and F3 folds considered as highly prospective by analogy to KCD.

In **Argentina**, drilling activities continued in the quarter at Cerro Vanguardia with 20,290m completed. Field work with trenching and channel sampling to advance targets to drill stage continued.

In **Brazil**, exploration continued at the Cuiaba, Lamego and CdS production centers for AGABM with 15,740m drilled collectively in the surface and underground drilling programmes during the quarter. Drilling production was impacted by mechanical availability of the underground drills. The focus remains on Mineral Resource conversion. Geological modelling continued for near mine target generation.

At **Serra Grande**, 15,630m of drilling were completed as infill drilling programs continued in the Mineral Resource conversion programs. Mapping and sampling was in progress for target delineation.

In **Colombia**, drilling started to test targets generated from soil sampling within the Gramalote JV tenements and infill drilling in the saprolite horizon. 1,460m were completed during the quarter.

At La Colosa, 1,810m were drilled during the quarter as the site investigation, hydrology and geotechnical programmes for the year continued.

The Quebradona JV program continued with 3,090m drilled during the quarter. The focus remains on infill and delineation drilling for the higher grade copper-gold mineralisation in the upper part of the deposit.

In the **United States**, 17,525m were drilled as part of the ongoing programmes to add new tonnage for the VLF facilities and confirm high grade targets outside and below the current open pit designs.

At Sunrise Dam in **Australia**, exploration was focussed on Mineral Resource extension and infill for the underground Mineral Resource utilising diamond coring (12,686m). Drilling targeted Vogue, GQ South, Carey Shear Zone, Hammerhead (HMH) East, Cosmo North and Cosmo East and Dolly Corridor.

Testing of the geological and mineralisation models in the Carey Shear and Hammerhead East areas proved successful with some of the significant intercepts in these areas proving the previous work. GQ South shows some potential to the south and down-dip.

No substantial development mapping was done in the Vogue area due to active development and establishment of the Vogue ventilation circuit.

Aircore drilling (6,456m) commenced at the Kraken Project, situated over the western extents of the Lake Carey playa salt lake system, approximately 10km east. Several target areas comprising favourable geological and structural positions are being drill tested beneath lake cover sequences.

At Tropicana, drilling continued in the immediate mine environs, with diamond holes testing targets at the Havana North, Tropicana Extensions and Havanan South / Crouching Tiger areas. A total of 3,870m of RC and 8,024m of DD drilling were completed. Work continues to test down dip extensions to known mineralisation at the Havana and Tropicana pits and also to follow up new results in the Havana South-Crouching Tiger area to the south of the mine.

## **GREENFIELDS EXPLORATION**

Greenfields exploration activities during the second quarter were undertaken in Australia, Colombia and Brazil. Greenfields Exploration completed 6,530m of diamond and RC drilling. Total expenditure for the quarter was \$6m.

In **Colombia**, work focused on the Guintar project in Colombia which is situated 40km west of Medellin. Mapping has outlined an extensive alteration system in sediments overlaying a dioritic porphyry intrusion. The intrusion is associated with both porphyry Cu/Au and epithermal gold occurrences. Surface sampling has produced +0.5g/t Au to +10g/t Au rock samples. Drill permitting activities are currently underway with drilling planned for the third quarter.

In **Australia**, at the Tropicana JV (AGA 70%) a total of 10,907m of aircore (AC), 4,333m of reverse circulation (RC) and 833m of diamond drilling (DDH) was completed across the Madras, Masala and southern Tropicana Belt prospects located 25 km to 40 km south of the Tropicana Gold Mine. Drilling at Madras aimed to follow up encouraging results received during the first quarter this year with additional RC and diamond drilling. Results reported in the previous quarter are predominantly hosted within the supergene zone above a broad shear zone in the bedrock. At the Mullion Project in New South Wales, pole-dipole Induced Polarisation (IP) ground geophysical surveying was completed over six target areas for a total of 23line km's. Several subtle chargeable anomalies were identified during the survey and will be diamond drill tested during the third quarter of the year.

In **Brazil**, 1,364m of diamond drilling was completed at Pe Quente (Graben JV, 51% AGA). Assay results have been received, with relatively widespread, anomalous but sub-economic, gold values associated with phyllic (sericite – pyrite) alteration or zones of silicification over variable widths returned. This drilling did not provide any new intersections comprising the more intense – chlorite dominated, chlorite > sericite alteration associated with the higher grade mineralization targeted by the programme. A full review of the project is in progress which will incorporate all historical and recent gold and multi-element analytical results prior to defining the next steps.