

Q3 2017 - Exploration Update

GREENFIELDS

During the third quarter of 2017, greenfields exploration activities were undertaken in Australia, Colombia, Brazil, Argentina, USA, and Tanzania. Greenfields exploration completed 31,286m of drilling globally in this quarter. Total expenditure for the quarter was \$9.1m.

In **Australia**, exploration activity was focussed on the Butcher Well and Lake Carey farm-in (AGA earning 70%), within the Laverton district. RC and diamond drilling at Butcher Well started in late August with a focus on the newly defined Old Camp zone. A total of 4,434m of RC drilling was completed, including pre-collars. Fifteen RC holes tested the Old Camp zone between 50 and 150m depth. Results are generally low grade and patchy suggesting a marginal possibility of establishing a small open pit Mineral Resource at the Old Camp Zone. A total of 9 diamond drill holes were completed in the Old Camp Zone (4,037m). Hole BWD031, intersected a wide zone of very strong mineralisation over 150m between 503-732m downhole (assays pending). This interval is 100m south of the zone in BWD018 (for details on this, see the announcement dated 13 July 2017 on our website: www.anglogoldashanti.com). The wide intersection in hole BWD031 represents a considerable thickening of mineralisation and could improve the potential for a significant underground Mineral Resource.

Aircore drilling at Mt Minnie confirmed a zone of mineralisation over a 3km strike. This zone contains higher gold grade gold intersections, which suggest the potential for shallow economic mineralisation at Mt Minnie. A follow-up RC/DD program is planned for the fourth quarter.

At the Oak Dam project, within the Tropicana belt, where a geochemical sampling programme was completed in the second quarter of the year, two significant gold in soil anomalies were delineated. Both anomalies are situated along major structures. The northern anomaly extends over at least 1.2km and displays several anomalous samples over each line. The southern anomaly is continuous over at least 600m. A follow up aircore program is planned for 2018.

In the **United States of America**, AngloGold Ashanti has been awarded ~380km² of new exploration leases in Minnesota through the annual State Nonferrous Metallic Mineral Public Lease Sale. The new leases overlie a prospective geological setting within the Wawa Sub-province, as identified through interpretation of recently acquired regional aeromagnetic data. Passive seismic geophysical surveys were completed on existing leases to better constrain overburden thickness and depth to bedrock.

At the Silicon project in Nevada surface geochemical, geological and spectral mapping were completed with a total of 174 samples collected. Environmental permitting is well advanced for planned diamond drill testing. Silicon is an earn-in option agreement with Renaissance Gold.

In **Colombia**, the drilling program at Nuevo Guintar was completed with 1,478m drilled in six diamond drill holes, testing two targets. The target was a 500m by 300m, gold and multi-element soil geochemistry anomaly. NIV-03 and NIV-04 were drilled in opposite directions from the same platform and both intersected low grade mineralisation. However, the geometry is unclear. The target at Nuevo Guintar was a high grade epithermal deposit. Based on the results the project has been suspended and an exit strategy has been put in place.

In **Brazil**, work continued on the Tromai Project which covers a large (~2,000km²), highly prospective tenement package (with AngloGold Ashanti earning 70% from Trek Mining). RC and diamond drilling (2,572m RC and 1,705m DD) was completed over structures associated with artisanal mining and soil geochemistry. Best results to date are from the Onix target. Drill target definition work continues with interpretation of high resolution aeromagnetic and radiometric data and a Helitem electromagnetic airborne survey.

In **Argentina** AngloGold Ashanti received approval of its Environmental Impact Assessments over the core area on the Rio Grande target.

BROWNFIELDS

Brownfields exploration activities for the third quarter of 2017 were undertaken across the globe. Brownfields exploration completed 149,538m of drilling for a total expenditure of \$16.7m (capital) and \$16.8m (expensed), for the quarter.

South Africa: Mineral Resource conversion drilling from surface continued at Mponeng. Piloting of surface drill hole UD63 commenced. Percussion drilling reached a depth of 302m where a survey indicated a dogleg in the vertical hole at a depth of 261m. The severity of the dogleg was such that future diamond drilling was considered high risk and following an extensive investigation it was decided to abandon the hole. A replacement pilot hole, UD63A, was started and drilling reached 300m. The percussion drilling of UD61 is scheduled to begin after completion of piloting at UD63. The site is fenced and access roads are in place.

Tanzania: Exploration drilling activities this quarter consisted of underground drilling at Star & Comet Cuts 2 & 3 and Nyankanga Block 5, surface infill drilling of GH Underground blocks 1 & 2, completion of the Matandani Mineral Resource delineation drilling program, and drilling testing of 3D Seismic Target 5 at Nyankanga. 80 drillholes totalling 13,937m were completed for the combined surface and underground exploration drilling programmes.

Underground development exploration activities at Star & Comet focused on advancing the ore drives and their associated cross cuts. Seven headings at Star & Comet Cut 2 and six headings at Star & Comet Cut 3 were advanced.

Infill (Indicated & Inferred) and expansion drilling programs were carried out at Star & Comet Cuts 2 and 3. A total of 6,250m were drilled and comprised 4,854m of infill and 1,396m of extension drilling from Star & Comet Cuts 2 & 3. Both Star & Comet Cut2 and Cut3 drilling programmes intersected significant ore zones confirming the current geological interpretation and Mineral Resource models.

Underground drilling took place at Nyankanga Block 5, with two DD holes completed to test the potential down dip continuity of mineralisation in Block 5 Upper. The programme was suspended to allow mining development to proceed; however, the results confirmed potential extension of mineralisation below the Block 5 Upper stopes. A subsequent infill drilling programme to convert the 1180 Block to an Indicated Mineral Resource commenced near the end of the quarter.

Diamond drilling totalling 453m was completed from surface at Nyankanga to test the 3D Seismic Target T5. The overall geological setting of the target suggests a down-plunge extension or repetition of the Nyankanga Block 5 mineralisation. The observed geology supported the target model near the planned depths and sample assay returned several broad mineralised intercepts that largely coincide with the predicted zones, with associated narrower intervals of high grade.

An infill drilling programme commenced in the Geita Hill West - Lone Cone gap area to convert the early Mineral Resource to Indicated as risk mitigation ahead of underground mining. A total of 6,029m were completed (5,002m RC and 1,027m DD). Partial results have been received to date, with significant assay results and Block 1 returning more positive intersections than Block 2.

The Matandani Mineral Resource delineation drilling programme was completed during the quarter. It was designed to test the extensions below the known mineralisation in the eastern limb and the relatively untested western limb. The drilling also tested the interpreted down-plunge continuity of the ore shoots, which was supported by the results. Three DD drillholes totalling 671m were completed along the western limb, with a total of 11 drillholes completed for the programme.

Guinea: Exploration activities consisted of infill and reconnaissance drilling in Block 1, soil sampling in the Saraya West license area and the collection of geometallurgical measurements. A total of 4,252m expensed and 264m capitalised drilling was completed. Drilled meters were low due to issues relating to mobilization of the new drilling contractor and seasonal rains impacting access to drill locations.

As part of an investigation into the fresh rock potential of the Seguelen orebody, 3,512m of reconnaissance drilling took place in and around Seguelen PB2 pit, comprising 19 RC holes, 6 RC pre-collars and 1 DD tail. Several significant intersections were reported confirming the extension of mineralisation below the pit.

Infill drilling started during the latter part of this third quarter, within Area 1 at Seguelen. To date a total of 156m RC and 180m DD tail drilling have been completed from two borehole positions. No assay results have yet been received.

Reconnaissance drilling was started at Sokunu targeting the below-pit fresh rock potential of the orebody. Of 7 planned RCDD holes only 3 RC pre-collar holes (492m) have been completed.

During the quarter 1270 samples were collected from Saraya West as continuation of the geochemical soil sampling program. A total of 2,662 from a planned 3,000 samples have been collected to date, with sample collection now on hold due to access issues resulting from the rainy season.

Geomet work for the quarter focused on comparative studies of the Reflex Press and set-up of a new pXRF machine. pXRF data collection was done on new Seguelen drill chip samples received from the fresh rock reconnaissance drill programme.

Ghana: Exploration at Iduapriem focused on drilling at the Block 1W/ Nueng target, with the aim of improving the confidence in the near-surface potential and testing the conceptual fold model. A total of 3,125m drilling was completed, consisting of 2,468m DD and 657m RC drilling.

The near-surface drilling confirmed the continuity of the single truncated A reef and will help to constrain the structural sub-blocks identified within this area. Drilling to test the fold model is indicating support for the model down-dip and interpretation of the results is ongoing.

Mapping activities in the area immediately north of Block 5 show potential for extension of the conglomerate reef package, albeit with a change in strike towards the east relative to the broadly N-S striking main Block 5 pit.

Field mapping also continued at Nkyemia, south-east of Ajopa to further delineate the conglomerate reef outcrop identified earlier in the year.

Democratic Republic of the Congo: During the quarter, exploration drilling took place at Agbarabo-Rhino-Kombokolo, Aerodrome-Pamao-Megi, KCD and Kalimva-Ikamva.

Results from the two holes drilled at Kombokolo support the down-plunge potential, although the high grade is narrower compared to the mineralisation intersected in up-plunge holes.

A second phase of drilling took place at the Rhino – Agbarabo area. Analysis of the results show seven mineralised lenses with five having potential for follow up work.

A 1,491m deep hole was drilled at KCD to test the model projected up to 600m down-plunge beyond the known model. The mineralised package identified is thought to be part of a new lode located in the inner part of the fold lower limb with considerable upside potential. A follow up programme from underground will test this further.

RC drilling to confirm the mineralisation potential took place at Makoke. Results show a decrease in both thickness and grade down dip for all mineralised lenses compared to the model.

Assay results from two trenches in the Aerodrome North to Pamao gap area reported mineralisation similar to the adjacent deposits, supporting the link between the two. Modelling is ongoing in preparation for planned drill testing.

At Kalimva a second phase of RC drilling is ongoing to test the high-grade shoots identified in the first phase and assess upside potential. Ten fences totaling 43 holes are planned. Nineteen holes have been completed, with results from five holes received that to date support the ore shoots as projected.

Republic of Mali – Exploration drilling totaling 4,737m was completed during the quarter. RC drilling focused on oxide targets at Sadiola South, Dogofile South and Lakanfla that were identified in the June 2017 Targeting Workshop. The DD drilling targeted the deeper sulphide potential below FE3 and Tambali.

At FE3, the DD drilling tested the shallow sulphide mineralisation below the pit, especially in the zones where high grades were previously mined. Four holes were completed, and all intersected the metapelite/carbonate contact and narrow zones of sulphide mineralisation. Assay results have only been received for one hole to date.

Diamond drilling took place at Tambali to investigate the sulphide mineralisation below the northern and southern pits that has been modelled as steeply dipping towards the east. Two of the three planned core drill holes were completed. Partial assay results for one hole have been returned with encouraging gold grades associated with narrow zones of pyrite-arsenopyrite mineralisation.

At the Dogofile South oxide target, four RC holes of a planned 13 hole program were drilled targeting a NW-SE trending deeply weathered zone interpreted as a carbonate-metagreywacke/sandstone contact. Partial results received have returned poor but anomalous gold results over about 90m in one hole.

Two RC holes were drilled at the Lakanfla oxide target to test for mineralisation along a lithological contact. No assay results were received and drilling will continue.

The Sadiola South target is located on the south-east extension of Sadiola pit and this area is also being considered for the SSP waste dump. A total of 1,612m was completed in 11 RC holes. Assay results were generally poor but confirmed the up-dip projection of the Sadiola mineralisation, with flat dips consistent with the antiformal fold model interpreted for this southern part of the Sadiola deposit.

Sampling of the drillcore from the FE4 sterilisation program was completed during the quarter. Results for the remaining holes were received and showed that the targeted western mineralisation extends away from the pit down-dip towards the north.

In **Argentina**, exploration continued at Cerro Vanguardia using drilling and geophysical surveys. Most of the drilling meters were focused on extensions to known ore zones as well as new targets. During the quarter, 1,308m of RC and 8,449m of diamond drilling was drilled within the Cerro Vanguardia tenements and some 11.35km of ground magnetic surveys completed in areas around existing anomalies.

In **Brazil**, exploration continued at the Cuiaba, Lamego and CdS production centers for AGABM with 35,840m drilled during the quarter from the combined surface and underground drilling programmes. Targets included ore body extension and Mineral Resource conversion at Cuiaba, Lamego and CdS. Follow up infill drilling to support mine planning and Mineral Resource conversion was also completed.

At Serra Grande, exploration focused on extensions and infill of known orebodies related to the mining areas, this included drilling at Orebody IV, Structure III, Inga, Pequizao, Palmeiras and Mangaba. In total 11,670m of diamond drilling was completed. Field work continued on regional leases and CA's were signed with interested parties.

In **Colombia**, the Gramalote JV field based exploration focussed on rock chip sampling at the San Javier and Santa Barbara targets and geological mapping at the La Florida and La Mora targets. Structural mapping and modelling was completed at the Gramalote Central target.

At La Colosa, no exploration occurred during the quarter.

The Quebradona JV programme no drilling took place during the quarter and work mainly focused on supporting the PFS with field activities, core geological relogging and geotechnical logging.

In **Australia**, at Sunrise Dam a total of 23,528m were drilled during the third quarter. Drilling of Vogue continued, with two diamond rigs assigned to drilling Indicated and

Inferred Mineral Resource drill patterns throughout the 1600 Block (1600mRL-1400mRL), Western Area, Panels 1 and 2. Results continue to be encouraging with visible gold logged in multiple holes.

Delineation drilling targeting down dip Cosmo East, Cosmo and Dolly Porphyry from the north was completed this quarter with three significant intercepts returned, confirming a down dip extension to the Cosmo East and Cosmo ore body.

Extension drilling targeting the same three ore bodies in the south continued throughout the third quarter, from stockpiles off the Cosmo East Decline. However, further extension drilling of this area is planned for the fourth quarter when more drilling platforms become available.

Assay results from extension drilling to test northern extensions to Cosmo and Cosmo East from the COS 1760 DDD were returned this quarter. Two significant intercepts were received indicating Cosmo East continues to the north, albeit as narrow intercepts. However, due to the lack of mineralization observed on the northern most drill fan no further drilling has been planned.

Early stage drilling of Carey Shear commenced from a drill platform in the COS1630. Visible gold has been logged in two holes but assays results have not yet been returned. Drilling of this target will continue through to end of the year.

Delineation drilling of the Elle target commenced with some holes also designed to test the Sunrise Shear and Midway shears. Elle mineralisation has been logged in multiple holes with visible gold present but no assay results were returned during this quarter.

At Cosmo East, 43 significant intercepts were returned in the third quarter; 38 from Vogue infill drilling, two from the Cosmo East north extensions, two from Cosmo East down dip and one from Cosmo down dip.

Exploration at Tropicana and on the surrounding brownfields tenement package completed a total of 30,679m drilling. This consisted of 10,888m RC, 4,718m DD and 15,073m of AC drilling. Drilling targeted the Boston Shaker Deeps (DD); Crouching Tiger (RC/DD); Beetlejuice (RC/DD); Iceberg (RC/DD); Caprioska (AC); Charmander (AC); Angel Eyes West (AC); Northern Traverses (AC) and Chocolatini (AC) prospects.

Standout results in the quarter were generated from the Boston Shaker Deeps drilling, targeting down-dip extensions to the existing Boston Shaker mineralisation. Thick high grades were intercepted in five separate drillholes from the main Boston Shaker ore lode from along the entire strike length of the Boston Shaker domain. Other encouraging results in the quarter were received from Crouching Tiger and Iceberg. Only a small proportion of aircore results were returned by quarters end with no significant results to date.