

Q3 2015 EXPLORATION UPDATE

EXPLORATION UPDATE

Total expensed exploration and evaluation costs (including technology) during the third quarter, inclusive of expenditure at equity accounted joint ventures, were \$35m (\$15m on Brownfields exploration, \$4m for Technology, \$5m on Greenfields exploration and \$11m on pre-feasibility studies), compared to \$39m for the same quarter last year.

GREENFIELDS EXPLORATION

During the third quarter of 2015, greenfields exploration activities were undertaken in Australia, Colombia and Brazil. Greenfields exploration completed 5,661m of reverse circulation (RC) and diamond drilling (DD). Total expenditure for the quarter was \$5m.

In **Colombia**, drilling was initiated on the Guntar project (100% AGA) which is situated 40km west of Medellin. 166m of diamond drilling was completed in the first hole of an 8-hole, 3,000m diamond drill program. GUI-001 was collared in gravels and at 14m intersected hornfelsed sediments and breccias with significant pyrrhotite and pyrite in fractures, stringers and fine stockworks. This is associated with minor disseminated chalcopyrite and molybdenite. Assay results are awaited.

In **Australia**, at the Tropicana JV (AGA 70%) a total of 16,685m of aircore (AC), 1,909m of reverse circulation (RC) and 1,313m of diamond drilling was completed across the Madras, Masala and other Tropicana Belt prospects within 25km to 50km of the Tropicana Gold Mine. Assays returned in the third quarter for Madras and Masala were disappointing.

At the Mullion Project in New South Wales (AGA 100%), a total of 2,273m of diamond drilling was completed to follow up bedrock targets identified from the previous ground geophysical surveys. At the Strawbridge and Pindabunna Projects in Western Australia (both AGA 100%) planned regional aeromagnetic geophysical surveys were completed in the third quarter. Target generation and first pass field work is continuing.

In **Brazil**, the Pe Quente Project (Graben JV, 51% AGA) has been downgraded and the joint venture has been exited. Project generation activities in Brazil are ongoing.

BROWNFIELDS EXPLORATION

A total of 148,721m of diamond and reverse circulation drilling was completed. Capitalised Brownfields exploration during the third quarter, inclusive of capital expenditure at equity accounted joint ventures, was \$15m.

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).

MZA10 is now completed. The hole has been plugged and rehabilitation is planned. The Vaal Reef was intersected at a depth of 3,259m in the long deflection (D4).

UD59 advanced 347m to 3,559m depth, despite regular delays due to the inner tube becoming stuck inside the rods. UD60 reached a maximum depth of 3,117m before caving conditions resulted in re drilling from 2704m. The 350m advance for the quarter puts the hole at a depth of 2,928m. UD58A had reached a depth of 1,863m, when re-drilling started from 1,066m in order to recover the hole following caving ground. The drilling advanced 563m during the quarter to 1,629m. Caving conditions have again been intersected and a decision has been made to leave the stuck rods in the hole to act as casing and to downsize to NQ drilling.

In **Tanzania**, drilling focused on Mineral Resource delineation drilling at Matandani North and Geita Hill Underground, Vertical Seismic Profile (VSP) drilling at Nyankanga and Geita Hill, metallurgical drilling at Matandani and sterilisation drilling for the proposed WD1 extension. At total of 16 holes (4,844m) were drilled.

The Mineral Resource delineation drilling program for Matandani North was continued to test the continuity of gold mineralisation towards the NNW of Matandani pit, with emphasis on the oxide ore potential. Two DD holes (488m) were tailed during the quarter. Also at Matandani, a second phase of metallurgical diamond drilling was initiated to collect additional core samples, with one DD hole (168m) ongoing. Geita Hill Underground drilling continued with a total of 3 RC pre collar holes (476m) and 1 DD hole (629m) drilled.

A sterilisation drilling program at WD1 was completed during the month and was supported by the exploration team. A total of 8 RC holes (1,447m were drilled). Assay results were received with 2 isolated low grade intersections. The overall results support the proposed extension of the waste dump.

DD drilling of the 2 VSP holes (1,635m) at Geita Hill and Nyankanga were completed in support of the 2D seismic survey. The 2D seismic survey was completed along two lines across the Nyankanga and Geita Hill pits. Preliminary results over Nyankanga have been received (both residual stack and migrated products) and show positive down-dip reflectivity up to 2.5-3km depths. The processing of the Geita Hill section is close to completion.

An updated Star and Comet geological model was developed and used to support the upcoming underground drilling program. A total of 15 geological sections were defined, on the back of relogging of over 100 holes, and used to develop the 3D model.

In **Guinea**, at Siguiri Gold mine, a total of 6,852m of RC and DD was completed. The drilling focused on the fresh rock infill drilling program and oxide reconnaissance drilling in Block 1.

The fresh rock infill drilling continued at Bidini, with 4,520m RC and 948m DD completed in the North and South pits. The drilling is progressing slowly and is on hold due to poor ground conditions and flooding of pit bottom. Two RC holes (260m) were completed in the central portion of the pit at Kami and a further 4 RC holes (660m) were completed at Toubani.

The Sintroko reconnaissance drill program aims to test the fresh rock potential below the planned pit shells. A total of 264m RC has been completed to date. The oxide reconnaissance drilling at Silakoro aimed to provide information on the ore body geometry and potential. 340 meters of DD was drilled with no positive results returned.

Geometallurgical data collection at Bidini and Kami also took place during the quarter, as part of ongoing work and in support of the combination plant Feasibility Study.

In **Ghana**, at Obuasi Gold Mine, no exploration work was conducted.

At Iduapriem, a total of RC (1,553m) and DD (2,123m) was drilled at Block 5. A number of encouraging intercepts were returned and a Mineral Resource model update is ongoing. The Bankyem (Block 1 East) target was covered by a geochemical survey. Outcrop mapping was also undertaken over the area, mainly along the sampling lines. Analytical results from the soil sampling, as well as information from pre-existing holes were interpreted as showing clear extensions of anomalous areas towards Block 1. Soil sampling was also conducted at Mile 5 (505 samples) and at Ajopa NW (830 samples).

In the **Democratic Republic of Congo** at Kibali, exploration along the KZ trend focused on seven higher priority targets from the first quarter data review: Kalimva- Ikamva, Mengu Hill, Sessenge SW, Oere – Libala, Tete, Bakangwe and Megi.

Four Targets with potential for delivering small higher grade oxide ounces were examined. Trench samples from Tete Bakangwe returned significant results and these will be followed up. At Megi, three holes were drilled to evaluate a 100m wide higher grade zone in the 1001 lode. The drilling returned slightly higher results than anticipated visually from core. The results are being incorporated into the model to evaluate the potential.

The Sessenge SW target was advanced with a program of infill trenching, hand auger to saprock, and ground magnetic survey. Full interpretations are pending. At Ndala Village, two short trenches were excavated either side of a 2014 trench that returned good results. Rebuilding of lithologic, alteration and mineralisation wireframes to support super pit optimisations were completed. Optimisations are in progress and results will guide further drilling.

At Bakangwe Aval, a program of 15 close spaced RC holes failed to return the high grade mineralisation, which has downgraded this as a stand-alone target and called into question the historic Barrick results. At Kanga Sud zone 1, surface mapping and old artisanal pit sampling conducted returned high grade grab samples. Shallow down-plunge mineralisation supported by historic RC holes supports potential for a small deposit.

At Mengu Village, two trenches were excavated to test the NW extension of mineralisation within the gap between Mengu Village and Mengu Hill. Results are outstanding but visual indications are positive.

In **Mali**, at Sadiola RC drilling (2,998m) was completed at Sadiola North and Tabakoto to test for and to upgrade oxide Mineral Resources. At Sadiola North, the drilling followed up on intersections from the first phase of drilling mainly outside the planned pit. Results from this confirmed the northern continuity of the shallow SE dipping mineralisation. Geological modelling of Sadiola North was completed and Mineral Resource modelling is now in progress.

The drilling at Tabakoto was aimed at improving the confidence in the Mineral Resource. A review of the Tabakoto geology model suggests that the mineralisation is controlled by steep northwest trending structures above which the laterite mineralisation is located. There is a possibility of NNE to NE cross-cutting structures consistent with the regional cleavage observed on the FE3/4 pits. This change from the initial flat orientation is likely to reduce the Mineral Resource.

In **Argentina**, drilling activities continued in the quarter at Cerro Vanguardia with 16,940m 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 centres for AGABM with 17,260m drilled collectively in the surface and underground drilling programs during the quarter. The 2015 program remains focused on Mineral Resource conversion. Geological modelling continued for near mine target generation.

At Serra Grande, 15,540m 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. 2,550m were completed during the quarter.

At La Colosa, 1,510m were drilled during the quarter as the site investigation, hydrology and geotechnical programs for the year continued.

The Quebradona JV program continued with 2,850m 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.

At Sunrise Dam in **Australia**, exploration was focussed on Mineral Resource extension for the underground Mineral Resource. Drilling (15,631m) targeted Vogue South extensions; Cosmo North and Cosmo East extensions and Dolly Corridor extensions.

Encouraging significant intercepts in the Cosmo North and Cosmo East domains have been seen with regular instances of visible gold being seen in the Cosmo zone drillcore particularly. Intercepts in both these areas are entirely extensional. High grade results seen in Vogue South continue to extend Vogue down plunge to the south with a number of holes exhibiting mineralised zones but awaiting assay return. Dolly Corridor drilling has shown encouraging intercepts around the folded southern limb of the felsic porphyry and has shown interesting alteration intensities and lithological complexity in the porphyry.

The lake aircore drilling programme was completed at the Kraken Project, situated over the western extents of the Lake Carey playa salt lake system, approximately 10km east of Sunrise Dam. Several target areas were drill tested for gold mineralisation. All targets are beneath lake cover sequences. A total of 9,123m of drilling was completed.

At Tropicana, drilling continued in the immediate mine environs, with diamond holes testing targets at the Tropicana Pit Extensions, Swizzler and Crouching Tiger areas. A total of 18,173m of reverse circulation and 18,270m of diamond drilling were completed. Work continues to test down dip extensions to known mineralisation at the Tropicana pit and system extensions to the south of the Havana pit at Havana South and Crouching Tiger.