

Exploration Update

for the first quarter ended 31 March 2019

GREENFIELDS

During for the quarter ended 31 March 2019, greenfields exploration activities were undertaken in Australia, Brazil, and the USA. Greenfields exploration completed 13,720m of drilling globally with a total expenditure of \$8.8m.

In **Australia**, 4,068m of AC drilling were completed during the quarter with exploration conducted in Western Australia at the Laverton District including the Butcher Well and Lake Carey JV (51% earning-in to 70%) to test targets identified following from the 2018 exploration programmes. Other work in the district included field mapping, rock chip sampling, completion of a gravity survey and an update of the regional geological interpretation map.

In Queensland (100% AngloGold Ashanti), drill programme planning was completed during the quarter to test targets identified after receipt of the Induced Polarization (IP) geophysical survey results from the work completed in late 2018.

In the **United States**, the RC and DD programmes continued at the Silicon project (Option Earn-In Agreement for 100%) with 8,034m completed in the quarter. These follow up on encouraging alteration observed in the Silicon-Thompson structural corridor drilling to date along with favourable litho-structural targets identified. An IP survey was completed to assist in defining targets at the project. This was followed late in the quarter by the start of a ground magnetic survey.

In Minnesota (100% AngloGold Ashanti), the winter roto-sonic drilling programme was completed totalling 1,620m. All samples collected have been submitted for analysis with results pending.

In **Colombia**, the divestment of AngloGold Ashanti's Generative Exploration assets to Royal Roads Minerals Limited was announced and is pending completion of the transaction.

In **Brazil**, target generation studies continued in concert with field verification campaigns focused on drainage sampling and regional geological mapping.

In **Argentina**, exploration properties remained on care and maintenance.

BROWNFIELDS

During for the quarter ended 31 March 2019, brownfields exploration activities were undertaken across the globe. Brownfields exploration completed 184,616m of drilling for a total expenditure of \$13.1m (capitalised) and \$10.6m (expensed) for the quarter.

South Africa: No advance was recorded in borehole UD61A. Major water loss occurred within the Eccles Formation and there were 3 attempts to seal the hole using plugs and various grout mixtures. On 28 February, the rod elevator failed and dropped rods down the hole. Fishing operations followed to recover the dropped rod string, during which the core barrel stuck on the wedge at 1,110m. Whilst drilling out the core barrel the bit started cutting a groove in the top portion of the wedge causing a deviation from the mother hole. The portion of the hole from 1,100m to end at 1,632m has been abandoned. A new wedge is required at 1,100m. This will delay progress on the hole by approximately 4 months.

The UD63A site will be rehabilitated on completion of UD61A.

Tanzania: Capitalised (underground) and expensed (surface and underground) drilling programmes completed a total of 21,667m during the first quarter.

Mineral Resource development drilling programmes for Nyankanga underground projects confirmed the presence of significant and economic mineralisation in the gap between Block 3 & 4 that are outside

the current stope designs and Mineral Resource model. Some high grades above 100g/t were intersected in these areas. The drilling programmes around Blocks 3 & 4 have also confirmed down-dip and down-plunge continuities of the mineralisation that warrants further drilling to the north-west to further test the continuity.

The drilling results from Nyankanga Cut 8 defined the up-dip continuity of the Nyankanga Block 2 mineralisation. While, results from Nyankanga Cut8B confirmed the mineralisation within the Block 1 mining area. The lower intersections of these holes delineated parallel mineralisation below the main ore zone in Block 1. The zone is thin and high grade.

Drilling at Star & Comet Cut 3 returned significant intercepts favouring the interpreted plunge of the Star & Comet Cut 3 high grade pay shoot. The results also confirmed the down-dip continuity of Star & Comet Cut 3 mineralisation as projected in the Mineral Resource model. The Mineral Resource development drilling at Star & Comet Cut 3 continued to push ahead of mining and will need an additional rig to continue progress as well as testing the Ridge 8 targets.

At Star & Comet Cut 2, the drilling on 1000mRL was completed during the quarter and a new drilling programme commenced from level 980mRL. Most of the assay results from Cut2 are still pending. However, the assays received from the 1000mRL drilling have confirmed the southern limit of Cut2 mineralisation and no economic ore zones are expected beyond this limit.

The overall assay results from Geita Hill Block 1 define low grade mineralised zones that are consistent with the Mineral Resource model.

The assay results reported during the quarter at Selous identified narrow low, medium and high grade ore zones defining the up-dip and down-dip continuities of the previously delineated mineralisation. Geological interpretation is ongoing to determine potential mineralisation both down-dip, along strike and possible plunges. Gram-metre plots show a strong NE-SW mineralisation trend which increases in intensity.

Guinea: Exploration drilling programmes completed a total of 28,540m during the first quarter.

At Foulata, the advance grade control programme being drilled as part of the prefeasibility study is now 49% complete. While the Saraya advanced grade control programme now 68% complete with the best intersection confirming the Mineral Resource model.

At Kami, 3 infill holes were completed and the programme is now 43% completed. The mineralisation has been extended within the \$1,400 Mineral Resource shell below the pit design in the fresh rock. At Tubani South, in the infill programme 17 drillholes were completed. The mineralisation has been extending in the oxide. Meanwhile, at Saraya North, the infill programme is now 96% complete. Assay results received confirm the mineralisation in the oxide within the pit shell. The infill and reconnaissance programme at Saraya South is complete. The data indicates an extension of the hard rock mineralisation to the south west of the deposit. At Bidini, the infill drill programme is now 90% complete. The mineralisation seems to extend to the east of the pit in oxide.

At Silakoro West, 1,050m of infill RC were drilled, twelve holes were not accessible due to ground access and compensation issues. The drilling indicates that the mineralised breccio-conglomerates layers thin to the south which is dominated by barren marbles. The infill programme at Silakoro continue.

The Silakoro North Reconnaissance drill programme is 76% complete and continues to intersect high grades. At Kossise, the fresh rock reconnaissance drilling was completed last year but assays were returned this quarter. They confirm extension of the mineralisation below Kossise pit in the fresh rock close to main faults.

The Saraya West reconnaissance drilling was completed with 2,906m of RC. No significant intersections were reported this quarter. At Foulata NW, the reconnaissance programme is 74% complete and no significant intersections were reported. Finally, at Doko, the reconnaissance drilling is 48% completed and 5,052m AC were drilled and some significant intersections were achieved.

Ghana: Drilling totalled 370m. Samples from the Ajopa drilling were submitted for analysis and significant results were returned with two boreholes indicating high grade zones. A few significant intercepts were returned from Mile 5W where gold is associated with quartz-tourmaline veins within a quartzite unit.

Regional mapping at Nkyemea commenced in the middle of the quarter with the focus on the conglomerate reef outcrops observed in the area. The geological modelling has started and a drill programme designed. Mapping at Efuanta began with the focus on gaining a detailed understanding of the conglomerate reef in the area.

Geological modelling for the block 5 extension is currently ongoing. This will be combined with the main block 5 geological model to aid in drill planning.

Democratic Republic of the Congo: Exploration drilling programmes completed a total of 2,764m during the quarter.

Observations from the drill core highlight the Gorumbwa lithological sequence as intersected in the up plunge and a possible shift of the mineralisation down plunge toward the southeast (KCD) which is supported by an increase in silica alteration and structural complexity towards the southeast from the historical DDD536 making the gap Gorumbwa–KCD an exploration opportunity. Assay results received also supported the opportunity toward the southeast.

For the Madungu-Memekazi-Renzi trend, a data review is underway and five targets were generated along the trend and field work started with the priority being the Mandungu Memekazi gap, Renzi and the buffer of the contact of the mafic complex with the meta-sediment to the south of the trend.

At Oere, optimisation results on the conceptual model were positive. However, the conceptual block model highlights a gap area in the continuity of the high-grade shoot, negatively effecting the pit optimisation. A second phase of drilling is planned for the coming quarter and is also designed to cover the potential gap between Kalimva and Oere.

In the Mofu-Oere gap, a recent review highlights the continuity of the Oere lithology. Results from the mapping conducted in the target area identified old artisanal pits and confirm a continuous mineralisation system of two lenses with high grade zones, supporting the potential of a 1.6 km strike length.

In the Aindi area, a data review was conducted including auger, trenches, diamond holes and grab results leading to identification of four zones of interest with multiple lenses interpreted. Assay results from the twelve pits excavated in the first block did not return anomalies except from 2 pits and some artisanal pits identified during the mapping which returned significant grades. In the third block, rock samples collected within the pits returned significant results from smoky quartz veins and from the host mafic rock aureole of the veins. A soil sampling programme is ongoing.

The programme at Zakitoko made slow progress and it is currently on hold due to technical issues and will resume in the coming quarter. Overall, observations highlighted a similar lithological sequence as in the trenches and support a boudinaged system. A wide zone of alteration was observed averaging 50m and widening up to 95m. A review and update of the model is being done. The results of five composite samples collected in the low, medium and high-grade mineralisation for bottle roll tests were received indicating a good recovery: averaging 96.4%.

Republic of Mali: No exploration was done.

In **Argentina**, the infill drilling programme achieved 2,079m in the first quarter. A total of 89 channels for a total of 8,010 m were cut during the quarter. A total of 21km² were mapped and sampled in the north of the mining lease area.

In **Brazil**, at Cuiabá, the drilling campaign targeting the Galinheiro Footwall secondary target, on level 10, was completed and showed positive results. While on level 11, the VQZ returned positive results along strike with high grades. The Viana orebody on level 13 returned good results with grades around 5g/t and thicknesses close to 1m. Two main shear zones associated with sulphide-rich schists were

also identified. The Canta Galo and Balancão targets on levels 15 and 16 demonstrate high grades and continuity.

The FGS on levels 18-21 showed high grades (from 4 to 60g/t) in the vicinity of the metavolcanics. This will be an important contributor to both Mineral Resource and Ore Reserve additions in 2019. On level 18, the FG extension drilling continued to confirm previous intersections (from 4 to 19 g/t). The first assays for the Fonte Grande South target on level 19 returned positive results. LIB Drilling achieved an advance of 847m but struggled with direction despite using CWT orientation tools. The hole was once again replanned.

On the regional targets, channel sampling at Matarelli returned very positive results. Surface geological mapping, mag-drone survey and IP is planned. The Cuiaba SW geological map was finished and the decision to drill will be based on the outcome of the IP geophysics interpretation and channel sampling results.

At Descoberto drill logging and structural surveys finished. The drill sample rejects of the most important geological zones and the rest of the drill holes were sent to ALS lab for ICP analysis and check assay work. Some significant intercepts have been returned. The surface drilling preparation at Descoberto is in progress. The first field visit was not promising, and some adjustments will be necessary as fuel supply and drill rig movement will need to be made by labourers and no quadbikes will be allowed.

At Lamego, the drilling campaign at Cabeça de Pedra was finished with initial samples returning high grades associated with the normal limb of the fold. Further assay results are awaited. A drill rig was mobilized to investigate CAR SW on level 4. Work on the Arco da Velha oxidised (AVOX) target started in February and is ongoing. Cutting lines and surveys are in progress with drilling expected to commence in April 2019.

At Córrego Do Sítio, underground conversion drilling focused on important Inferred Mineral Resource areas in CDS I. The quality of downhole drillhole surveying was improved by the drilling contractors allowing more accurate drilling. Assay results returned indicate mineralisation with good grades and expected thickness. The exploration drives are ongoing, and achieved good advance rates at Laranjeiras but the accessing of Carvoaria is still delayed.

The surface drilling campaign as CDS 1 is in progress and aims to convert Inferred Mineral Resource into Indicated and will continue until June. The results returned confirm the continuity of the main orebodies and some of the secondary bodies. As a result, the geological model is being updated.

At CDS II, 139m were drilled to test the modular drilling system at Pinta Bem. The CDS II underground continues to be evaluated and a surface drilling campaign will commence in April to target selected areas.

For CDS III, 200m were drilled between February and March in order to test the modular drilling system at Anomalia I.

At Serra Grande, a significant intersection was returned from the corridor between Inga Mine and Mina Nova down plunge. At Inga results confirmed the continuity of Orebody 9i4 and 9i2a. While at Pequizão, positive results confirmed the continuity of Orebody G down plunge.

The surface drilling, soil sampling and ground magnetics programme returned positive results at the Palmeiras with good grades seen in the old pit region. Some significant results were obtained from Palmeiras South.

Positive results to the south of the Mangaba orebody confirmed the continuity and possible extension of mineralisation. Drilling at Orebody 4 confirmed the continuity of the down plunge extensions while drilling at the Limoeiro and the 3.5 orebodies returned positive results and indicate the possibility of another mineralised zone.

In **Colombia**, at Gramalote, a drilling programme for the main and satellite deposits has been designed with the intention of addressing areas of risk in these deposits. Once the budget has been approved further planning and prioritising of drilling will be undertaken.

At La Colosa, no exploration occurred.

At the Quebradona, the FS pre-work drilling campaign for the TSF has been completed and achieved 1,368 m. The FS test pits for the TSF area were finished with 16 pits completed. Drilling for plant infrastructure completed 1,243 m. Test pits for plant infrastructure were also completed.

Thirteen EIA drilling requirements were received in February. Multi-area field inspection has been completed and work started on the construction of platforms with all platforms expected to be completed by mid-May. Professionals from the geotechnical and hydrogeological teams are fully engaged in completing the EIA chapter.

Water level measurements on active piezometers (30) and gauging station maintenance (8) continues on a monthly basis. The isotopic and hydrogeochemical analysis for surface, groundwater and rain water continues. The conceptual hydrogeological model was completed.

Structural data from core (2015 to 2017 veinlet's and structures) has been re-interpreted. The Mineral Resource model update has been completed and will be reviewed in April.

In **Australia**, at Sunrise Dam, multiple significant intercepts were reported in the first quarter with results indicating the following:

- A group of significant intercepts were returned that extends the Vogue mineralisation south from the current Indicated Mineral Resource over an 80m strike length.
- There is a potential southerly extension to Cosmo East ~140m south of the current ore domain as well as a local improvement in the definition of the mineralisation down-dip.
- There is a likely ~80m southerly extension to the Midway Shear Steep ore domains.
- Significant continuity associated with a low angle mineralised structure between Vogue and Carey Shear Zone.

Drilling for the quarter consisted of the drilling of two Exploration Incentive Scheme (EIS) holes aimed at testing the southern extensions of the Sunrise Dam deposit. Drilling of 250m HQ pilot holes into the underground workings for new electrical cables. Drilling and constructing new water monitoring bores outside of the expanded Sunrise Dam Centrally Thickened Discharge (CTD) TSF.

The regional gravity survey covering all tenements within the Sunrise Dam Combined Reporting Group was undertaken in the first quarter. The 3D Architecture model is in progress and is initially focused on developing a detailed model for the southern end of the mine, where the 2019 underground and surface exploration drilling is focused.

At Tropicana, drilling concentrated on extensions, specifically scoping underground potential at Boston Shaker, Tropicana, Havana North and South as well as in-pit Mineral Resource definition at Boston Shaker, Havana and Havana South for BP2020 Mineral Resource model purposes.

7,344m of RC and 11,584m of diamond core were drilled for a total of 18,927m. The remaining Boston Shaker Feasibility Study results were reported. Four mineralised intercepts (<20 G*M) were returned in the quarter from this drilling. Several holes intercepted the ore-body and show very good potential for significant intercepts. These holes are awaiting assay and results are expected in the second quarter.