



Q1 2021 EXPLORATION UPDATE

GENERATIVE EXPLORATION

Generative exploration took place in Australia, Brazil and the United States during Q1 2021. 19,607m of drilling were completed globally with a total expenditure of \$12.23m for the period.

Australia

Exploration took place in Western Australia in the Laverton District (AGA 100%) and the Lake Carey JV (AGA 70%).

Drone (UAV) magnetic surveys were completed at several prospects. The surveys will provide detailed magnetic data which will improve geological interpretation and drill targeting.

At Cleveland (100% AGA), eight diamond holes for 2,238m were completed. The holes were designed to extend RC holes and to test for down-plunge extensions to an NNW-trending zone of gold mineralisation at Cleveland North.

At Butcher Well (70% AGA), five diamond holes for 3,281m were completed. The program was designed to infill areas and test for extensions to mineralisation in the Camp Zone.

At Cedar Island (100% AGA), diamond drilling commenced with 384m completed. Drilling is ongoing.

In North Queensland (100% AGA), field programmes have been postponed due to interstate travel restrictions implemented in response to the COVID-19 pandemic. Field programmes are scheduled to resume in Q2.

Argentina

Tenement maintenance work was completed during the quarter.

Brazil

In Brazil, a stream sampling programme commenced at the WBC project in Mato Grosso State.

United States

Nevada - Silicon (100% AGA)

10,701 meters of RC and diamond drilling were completed at the Silicon and Merlin targets. Drilling is ongoing.

Nevada - Transvaal (100% AGA)

3,003 meters of RC drilling were completed in the first phase of drilling at the project.

West Africa

Exploration was focused on target generation activities.

BROWNFIELDS

Brownfields exploration activities were undertaken across the globe during Q1 2021. Brownfields exploration completed 195.3km of drilling for a total expenditure of US\$18.7m (capital) and US\$11.0m (expensed) for the period.

Tanzania: Capitalised (underground) and expensed (surface/ underground) drilling programmes completed a total of 32,631m, during Q1, at a cost of \$8.1m.

At **Geita**, brownfields exploration drilling continued for underground and surface projects.

At Nyamulilima, underground drilling was carried out at Star & Comet Cut 4 to delineate the Mineral Resource and define an Inferred Mineral Resource between levels 925mRL and 750mRL. The results continued to confirm the footwall and hanging wall mineralisation.

At Star and Comet Cut 3, Mineral Resource definition drilling was carried out to convert the Mineral Resource model to Indicated. Exploratory drilling meanwhile is testing mineralisation continuity between Cut 3 and Ridge 8.

At Nyankanga, drilling at Block 1 and Block 5 were carried out to advance the targets to Inferred Mineral Resource and test the potential away from the known zones.

Three holes were completed at Block 1 to test the continuity of the mineralisation down-dip of the Nyankanga shear/fault that hosts the mineralisation. Block 1 results confirm anticipated continuity of mineralisation within Block 1 stopes.

At Block 5, intersections reported are hosted in dioritic intrusive characterised by moderate silica alteration. The mapping programme is ongoing to study the geometry of Nyankanga shear zone.

Mineral Resource conversion drilling at Nyamulilima Cut 1 & 2 continued and reported significant intersections that confirm the orebody envelopes and build more confidence in the Mineral Resource model within the optimised pit designs. Some of the infill holes continued to confirm high-grade zones where the Mineral Resource model was based on the projections. Drilling performance was affected by bad weather, equipment breakdowns and steep terrain.

Sterilisation drilling continued for the planned waste dump. No intersection of any significant mineralisation was obtained from the drilling. A surface drilling programme has commenced to sterilise the area designed for mine infrastructure.

Guinea: Capitalised and Expensed drilling programmes completed a total of 767m during Q1 at a total cost of \$1.0m.

At **Siguri**, drilling commenced with DD drilling at Bidini, completing one hole and another one in progress. The oxide part of the hole returned poor results.

Mapping was focused in Bidini, Kami and Kossise pits. The preliminary 3-D geological model of the SEK project suggests that the Sanu Tinti Breccia truncation extends below the Eureka East pit and there are sympathetic faults to the north of the Balato targets.

Between Kami and Kossise, mapping highlighted the need to review the drilling orientation and interpretation of the results from eastern part of Kami.

Geometallurgical work provided Leco results for the Bidini holes which confirmed that the high Carbon results are confined to discrete horizons with up to 2 % C in some cases. A new XRF machine was received and was setup to commence data collection. Terraspec data collection continued for all available recent drill holes.

At Saraya, geotechnical core samples were sent to determine the rock quality for pit slope stability of Saraya hanging wall intrusion and results returned were poor as holes were within the late mafic dyke.

A virtual targeting workshop was held where specialist team presented geophysical and spectral methods that can be integrated into exploration models. The site team presented exploration plan for the SEK targets comprising Bidini, Sanu Tinti and Tubani.

Ghana: At **Iduapriem**, Q1 drilling totalled 8,501m at a cost of \$1.0m.

The exploration programme continued with Mineral Resource conversion drilling at Block 5 Extension, Ajopa, Block 1 and reconnaissance drilling at Badukrom.

Block 2 was completed in the month and drilled one hole. 24 samples were dispatched to SGS laboratory and results were received. Block 5 Extension drilled two holes and submitted samples from DD holes to the laboratory.

At Badukrom, phase 1 was completed with three holes drilled and one abandoned. Preliminary interpretation of the drillhole data suggests that Au mineralisation is not constrained by lithology but structurally controlled within highly deformed zones or by favourable alteration halos.

Mineral Resource conversion drilling at Ajopa South completed seven holes (RC and DD). Submitted samples and results have been returned. Block 1 Central Mineral Resource conversion drilling commenced, completing five holes, and submitting samples for which results have been reported.

Significant intersections were reported for Block 5 Extension, Ajopa South and Block 1 Central drilling programmes.

In the regional exploration, line cutting and sampling (soil and channel) continued at Ajopa SW for the month as part of soil sampling programme. Samples were submitted and results have been received.

At **Obuasi**, drilling continued in Q1 with a total of 13,081m drilled in the underground exploration programmes at a cost of \$1.8m.

Exploration and infill drilling continued on 32 level in Block 8, SP 15 along the decline and 29 level KRS. Grade control drilling continued at 27L 348 and 26 Level in Sansu 3.

Grade control drilling continued on 27L 348 chamber in Block 8. Significant intersections were recorded from 10 holes. Results from the drilling showed a continuous Obuasi Fissure further south beyond 342 crosscut position with appreciable grade. Obuasi Fissure begins to taper off down plunge below 27 Level north of 342 crosscut position.

Grade control drilling at 26L in Sansu 3 continued and results from the drilling supports the model interpretation of the Obuasi Fissure tapering off between 26 and 24 level in the Sansu area. There is also intersection of footwall splays from the Obuasi Fissure with appreciable thickness and grade.

The infill drilling continued at 29L KRS and the results are consistent with the model interpretation in the area of a narrow Obuasi Fissure.

The drilling at SP 15 to define the Obuasi Fissure along the decline continued, the results show a weak Obuasi Fissure, also intersecting the associated Hanging wall and Footwall Fissures with good grades.

The results from the exploration drilling on 32 Level show continuous Obuasi shear down dip below 32 Level but taper off at about 30m below the level.

Democratic Republic of the Congo: Capitalised and expensed drilling programmes completed a total of 3,400m during Q1 at a cost of \$0.8m. At **Kibali**, the focus of exploration was on Mineral Resource replacement/addition and underground projects.

At KCD, with use of directional drilling equipment to control the second hole, the 3000 lode extension was intersected, and the hole is currently in a BIF interpreted to be the 5000 lode. The assay results are pending.

At Kalimva, drilling was completed last month, and results reported of 6 holes out of 7 holes confirm the down plunge continuity of the high-grade shoots. Long section analysis was done, and the review highlighted the geological key controls per shoot. Scout drilling is being motivated to test continuity and tenor of these shoots.

At Tete Bakangwe, overall results support thicker mineralisation and show extension down plunge for over 480m. The system remains open down plunge with localised high grade from scout drilling, reinforcing underground potential when taken together with Pakaka lenses.

At the Madungu Memekazi Renzi trend a geological model review was completed. The mapping and sectional review included the identification of additional outcrops, collecting further vergence indicators and structural measurements, resulted in three NE trending structural domains being revealed. Structural corridor is supported by soil anomalism, sericite alteration and density of high-grade drilling intercepts, which have been sparsely tested down plunge. A drill programme is being motivated and planned to be executed next quarter.

In **Argentina**, a total of 1,318m of drilling was completed at a cost of \$0.5m.

Exploration diamond drilling started at **CVSA** in March using one rig at the Trinidad vein and targeting downdip and lateral extension of mineralisation around the vein. Two holes left incomplete in November 2020 were re-entered and completed.

Channel sampling continued, with six channels cut at the Tres Patas vein and samples sent to the CVSA laboratory.

Infill drilling at the Oveja vein was completed and nine holes were drilled at the Vanguardia 2 vein. Five holes were also drilled at the Cuncuna vein.

Channel sample assays were received from the CVSA laboratory for the Dora and Tres Patas veins and preliminary assays were received for the Oveja and Vanguardia vein infill holes.

In **Brazil**, at **Cuiabá** and **Lamego** a total of 26,216m were drilled at a cost of \$2.4m.

Drilling infrastructure development continued with development of the 9 SER 2° drill pad in preparation for Mineral Resource conversion drilling at the Serrotinho Extension on level 19. Mineral Resource conversion drilling will resume in Q2 on the Serrotinho and Fonte Grande Sul orebodies.

On the major orebodies – FGS and SER, the level 20/21 FGS/SER drilling campaign is still in progress with no intercepts inside the BIF layer available this month.

On level 6/7 drilling intersected mineralisation in sulphides as well as sericite and carbonate schist. All intercepts so far have returned average gold grades which are consistent with estimated exploration potential.

Satellite orebodies drilling continued on levels 20 and 3/14. On level 6 to 8 the GAL EXT drilling is in progress with results pending.

Drilling on level 20 targeting the VQZ has temporarily been stopped to focus on the Mineral Resource conversion drilling of the main orebodies' targets. Drillholes intercepted positive gold results confirming the VQZ orebody continuity down plunge.

On level 20 the FG LE target was intercepted and corresponds to quartz carbonate veins and sericite schist, with low amounts of sulphide.

On Level 13/14, GFW target intercepts correspond mainly to quartz carbonate veins and sericite schist with low sulphide.

The VQZ modelling update is in progress and is aimed at delivering a more continuous model along strike and plunge

The 2021 remaining ounces project was designed to help the 2021 production plan. The main component of these potential Ore Reserve are currently classified as Inferred Mineral Resource and conversion drilling to Indicated Mineral Resource will be required to decrease geological risk before mining.

On the regional targets, no drilling occurred at Descoberto, pending final conclusion of the drilling contract. Results were reported for the DESBSD0013 and DESBSD0014, with DESBSD0014 reporting significant mineralisation over a broad zone.

At Tinguá, Carrapato and in the Tamanduá region, a conceptual model was generated for Tinguá aiming to create a conceptual pit for drill targeting.

A 2.5D Airborne EM inversion using existing Dighem and Spectrem data is being conducted over the Caeté Project, which includes Tinguá, Matarelli and Morro Vermelho.

A soil geochemistry study was conducted on the Tinguá-Carrapato data which demonstrated the use of traditional and unsupervised multivariate techniques, such as K-means clustering and Robust Principal Component Analysis, is appropriate to analysis the soil geochemistry dataset.

Drilling continued at the Lamego Sul target. LMSBSD0001 intersected carbonate-quartz-sericite schist intervals veined with quartz and sulphides, and quartz-sericite schist intervals with disseminated sulphides.

149 soil samples were collected as part of the Mine extensions project.

At **Lamego**, the Queimada orebody was drilled from levels 5 and 6 targeting continuity in the SW direction and Queimada NE.

At Arco da Velha Oxide Target (AVOX), landowner issues are being addressed by the Legal Team. The new agreement is delayed due to ongoing COVID issues and is planned to be completed next month. Six samples were sent for geometallurgical analysis to help understand the ore type in AVOX and processing requirements

At **Córrego Do Sítio**, capitalised and expensed drilling programmes completed a total of 26,620m at a cost of \$1.8m during Q12.

At CdSI, development of the exploration drive has commenced, with 200 meters of UG development planned at Carvoaria North completed.

At Mutuca, Mineral Resource definition drilling results confirm sulphide potential, with grade concentrated in highly folded D2 hinge zones. At Rosalino, infill drilling results confirm oxide potential and support CdSI open pit expansion.

At Candeias-Cristina infill drilling results confirm hanging wall lenses characterized by low values. While at Cachorro Bravo, Carvoaria and Laranjeiras mineralization along the main strike has been confirmed and intersections in hanging wall and footwall are as expected.

At Pneu, infill drilling results confirm the continuity of ore along plunge near mine infrastructure.

At CdS II, Sangue De Boi infill drilling confirmed the high-grade orebody zone with visible gold observed.

At CdSIII, Jambeiro delineation drilling extended the high-grade orebody plunge, with mineralisation in brecciated highly deformed BIF.

At **Serra Grande**, capitalised and expensed drilling programmes completed a total of 21,975m at a cost of \$1.5m during Q1.

Two surface rigs are targeting the down plunge continuity of the Mangaba and Pequizado Corp K orebodies and 1 rig targeting the NW target.

Underground drilling is targeting Inga Deep.

Reconnaissance drilling at Corpo IV is targeting a possible connection between Mangaba and Corpo IV orebodies, as well as extensions to Corpo IV C. Several holes in this area returned significant positive results.

Drilling for Inga Deep targets have returned positive results in the Superior Zone and Inferior Zones showing potential for additional Mineral Resource in this area.

Drilling at Pequizão Corpo K – Mangaba continued with four drillholes completed and one in progress. The main results reported were inside the conceptual target on the Corpo K orebody.

Conversion drilling continued at Structure III with positive results confirming Structure III next to Mine III, with significant results returned for the Inferior Zone. At Structure IV, positive results confirm Corpo IV ore drive strike continuity.

In **Colombia**, at **La Colosa**, no exploration occurred.

At the **Quebradona**, there was no drilling for the quarter.

Core shed activities conducted included structural data collection (subparallel veinlets of core), point load tests (PLT) data collection, geotechnical logging and manual inspection of tools. Geology project work was initiated to use of geochemical data to predict geological units. Data collection continued to understand subparallel veinlets to the core in the top of mine drillholes.

Hydrogeology work continued, including groundwater level measuring in the Chaquiro and Cauca areas and collecting data from flow stations and rain stations. Geotechnical work consisted of transcribing the soils laboratory tests to be uploaded to the database and is about 75% completed.

Kenometer information was completed for boreholes. The soil testing program for 2021 is ongoing, and currently 92.7% complete.

In **Australia**, at **Sunrise Dam** capitalised and expensed drilling programmes completed a total of 45,519m at a cost of \$8,0m during Q1.

On surface, rehabilitation of existing drill pads and tracks is ongoing, and scarifying tracks is scheduled for completion in Q1 2021.

57 underground holes were returned with 42 significant intercepts. Issues relating to COVID and technical difficulties with new software at SGS in Perth have resulted in a significant increase in assay turnaround time.

Two rigs were used at Vogue South to test southern extensions at an Indicated and Inferred drill spacing and confirmed the southern extensions. The Vogue Deeps drilling continued to test the lower extent of Vogue. No significant intersections reported. Significant intersections were returned for the Vogue East Mineral Resource delineation drilling which was targeting the eastern extensions and confirmed the model.

At Frankie, exploration of the northern extensions and Mineral Resource delineation drilling continued with two rigs. Significant intercepts reported in the month broadened the footprint of BIF-hosted Frankie northern extension mineralisation.

Three rigs were utilised on the Carey Shear southern extensions target. Three significant intercepts within Carey Main domain were returned from 7 holes. Down plunge Cosmo East drilling returned no significant assay results.

At Astro, the potential of down plunge extension of the main orebody was targeted by two rigs to define an Inferred Mineral Resource. At Flamingo drilling continued with one rig and returned assay results from five holes with one significant intercept.

At **Tropicana**, drilling in Q1 completed 17,277m at a cost of \$2.5m.

Capitalised Mineral Resource development drilling was carried out at Boston Shaker Underground, Havana UG and BS04. 12 Significant intercepts and 7 mineralised intercepts were reported from underground drilling at Havana UG, BS03 UG, BS04 in pit and Crouching Tiger drilling.

At Havana UG, three holes were drilled, and assay results reported support the model. At Boston Shaker (BS03/BS04 UG), three holes were drilled and one returned significant assay results. The BS03 in-pit drilling was completed with the drilling of the remaining six holes. Assay results were returned for one hole.

Expensed exploration drilling was conducted at Seahorse in the last week of March, completing 36 AC holes. No assays were reported for the month.

The project to remove the overburden effect from the recently completed Angel Eyes gravity data continued. The review of the four-acid multi-element database by an external consultant is ongoing. A site visit was conducted and core as well as geochemical data were reviewed. Results from the study are being finalised.