

GREENFIELDS

During Q4 2021, Generative Exploration took place in Australia, Brazil and the United States. 22,996m of drilling were completed globally with a total expenditure of \$14.3m for the period.

Australia

Laverton District – AGA (100%) and Butcher Well and Lake Carey JV (70%)
AC drilling (111 holes for 9,508m) at Argonaut and Triton prospects. Results received from Juno, Andromeda, Minerva, Argonaut (partial) and Triton (partial). Anomalous Au intercepts from Argonaut, Juno and Triton. No significant results were received from Andromeda and Minerva.

Bismarck (70% AGA)

4 DD holes completed for 1,031m on the central Dora trend. Drilling intersected narrow breccia units, which have to date returned narrow gold intercepts. Broader zones of alteration, veins and sulphides intersected on the Anton trend returned low-tenor Au results. The project has been downgraded.

Crimson Belle (70% AGA)

Preliminary pit optimisation study completed. Potential for a small Mineral Resource. Results were received from metallurgical test work. The results indicate good recoveries within oxide material (90-95%) and very poor recoveries in fresh material due to the presence of graphite and arsenopyrite. These results will be incorporated into a scoping study update for the broader Butcher Well project which is due for completion in Q1 2022.

North Queensland (100% AGA)

Soil sampling programmes were completed at Muldiva prospect in the Chillagoe District (2,010 samples). Results were received from Muldiva, and remaining assays were received from Georgetown (Catalina, Mt Clark & Mt Johnston).

Tenement applications (7,762 km²) were submitted over vacant ground in the New England Orogen (NEO) near Mackay. Applications are focussed on Early Permian volcanic succession which fertility indicators suggest are prospective for arc related magmatic-hydrothermal systems.

USA

Drilling restarted at Silicon (100% AGA) to reduce the average drill spacing at the project. A total of 7,043m were completed. At Merlin (100% AGA), drilling continued to define the extent of gold mineralisation with a total of 5,450m RC and DD completed.

Brazil

Field work recommenced in Brazil with 228 stream sediment and 146 rock samples collected as part of target generation activities.

Argentina

Advanced planning is in place for field work in the Salta Province targets.

West Africa

Exploration focused on target generation activities.

BROWNFIELDS

During Q4 2021, Brownfields exploration activities were undertaken across the globe. Brownfields Exploration completed 291.4km of drilling for a total expenditure for the quarter of US\$22.3m (capital) and US\$22.9m (expensed).

Tanzania: Capitalised (underground) and expensed (surface/underground) drilling programmes completed a total of 48.709m during Q4 at a cost of \$10.3m.

Exploration drilling was carried out from underground and surface at Star & Comet Cut 3 and Cut 5, Nyankanga Block 1, Nyankanga Block 2, Geita Hill, Lone Cone, Nyamulilima Cut 1 & 2 and Xanadu.

Mineral Resource development drilling occurred at Star & Comet Cut 3, to convert Mineral Resource to Indicated Mineral Resource and significant and economic intersections were returned that confirmed the mineralisation. Mineral Resource development drilling also continued at Nyankanga Underground Block 1 and results confirm the up-dip continuity of the mineralisation along Nyankanga shear.

Exploratory drilling was conducted at Star & Comet Cut 5 and 4 to delineate an Inferred Mineral Resource. The results at Cut 5 reported medium and high-grade intersections with limited thickness, confirming the mineralisation continuity in the Cut 3-Ridge 8 gap. At Cut 4, the results confirmed the mineralisation of the hanging wall and footwall structures.

At the Geita Hill underground and surface projects, Block 1 & 2 and Block 4 & 6, drilling was carried out and the results returned significant intersections that confirm the continuity of the mineralisation. While at Lone Cone, Mineral Resource development and exploratory drilling programmes were conducted, and the results confirm the downdip continuity of the host structure within and below the projected Mineral Resource model and increase the Mineral Resource confidence.

Mineral Resource delineation and development drilling occurred at Nyamulilima Cut 1 & 2 and significant intersections were reported for within and outside the modelled Mineral Resource.

At Xanadu, exploratory drilling to delineate and convert the exploration target to Inferred Mineral Resource as well as to test the extensions of the Mineral Resource commenced. The results so far have not shown obvious geometry and consistency of the orezones in terms of down-dip continuity.

Guinea: Capitalised and Expensed drilling programmes completed a total of 14,065m during Q4 at a total cost of \$2.9m. The drilling contractor's three new rigs arrived in country on 22nd December and will be commissioned for drilling in January 2022.

Reconnaissance and Mineral Resource conversion drilling was conducted at Bidini, Kami, Kosise, Sokunu and Tubani. At Bidini and at Tubani, drilling results confirmed the mineralisation extension below the pits. Due to water ingress and ground conditions, many of the Bidini holes were tailed with DD to ensure sample representativity.

Mineral Resource conversion at Kami confirmed the presence of oxide and sulphide mineralisation at Kami East and South with a potential connection to Kosise in the south. While at Kosise and Sokunu, the drilling results confirmed the oxide mineralisation.

Geometallurgical test-work entailed XRF analysis (11,596 samples) and spectral analysis (22,121 samples). Leco results for Kami and Bidini were used to develop a Total Organic Carbon model. FTIR training was completed and the FTIR orientation programme was commenced.

Mapping continued during the quarter and results demonstrate the fault control on mineralisation at Bidini, Kami, Kosise, Kozan, Sokunu and Tubani. Channel sampling returned encouraging results from Kozan South.

Ghana: At Iduapriem, Q4 drilling totalled 11,340m at a cost of \$1.5m.

Drilling focused on the Block 3, Ajopa Cut 3 and Ajopa South projects. At Ajopa Cut 3, Mineral Resource conversion drilling commenced in the quarter, drilling twelve drillholes and returned significant intersections. Phase four drilling at Ajopa South continued and reported significant intersections.

At Block 3, drilling continued with seventeen drillholes and reported significant intersections. While regional exploration work continued with line cutting and soil sampling at Ajopa Southwest and Badukrom North. Infill Auger sampling continued as well at Mile 8.

Geometallurgical Equotip data was collected from drillholes from Block 7&8 and Ajopa Cut 3, and sample preparation for geochemical analysis is in progress.

At Obuasi, drilling continued in Q4 with a total of 6,835m drilled in the underground exploration programmes at a cost of \$1.5m.

Exploration and infill drilling activities were conducted at 21n1 and 26n3 levels in Sansu, 34 and 32 levels in Block 10 and 32 level 333 crosscut in Block 8.

Infill drilling from the 21n1 381E was completed in Q4 and results confirmed the down dip extension of the East Lode towards 22 level. Results from the infill drilling at 26n3 352 chamber showed the Obuasi Fissure tappers off south of 352 crosscut.

At the 34 L 261 chamber, drilling results show the down-plunge continuity of the Obuasi Fissure towards 38 Level. While from the 32L 286 chamber drilling, the results continue to show a continuous Obuasi Fissure below 32 level, albeit intercalated with waste bands.

Infill drilling commenced from the 26n3 355 chamber and results show that mineralisation occurs proximal to the margins of the metavolcanic contact in the area. At 30L 298 KRS chamber, infill drilling results have confirmed the Obuasi Fissure peters out further below 30 level.

Drilling was initiated at 32L 333 chamber in Block 8 and observations shows a continuous Obuasi Fissure below 32 level.

Democratic Republic of the Congo: Capitalised and Expensed drilling programmes completed a total of 3,535m during Q4 at a cost of \$2.2m.

At KCD, the deep directional drill programme continued with the third hole aiming to test, 500m down, the plunge extension of the BIF hosting the 9000 and 12000 lodes. The 5000 lode was intersected at the expected depth and is thicker than expected. At the 9000-lode targeted depth, Acsa altered meta-conglomerate was intersected, supporting the interpreted SE shift of the 9000 lode.

For KCD Area targeting project, drilling commenced to test down dip projection of the 3000 lode and new BIF at NW, and the results highlight the potential of the new BIF. Meanwhile, results of the optimisation on the conceptual model down plunge of Mengu Hill support an UG project.

Access issues are now resolved at Kalimva, with drilling expected to resume early next quarter. At Renzi, consolidation of the geological model is ongoing to motivate the next steps to test the target. At Kolapi, drilling commenced to test an open pit opportunity and the results confirm the expected zones. Access was regained to Makoro this quarter, allowing the completion of a soil sampling campaign over the BLEG anomaly target.

A mineralisation vectoring pilot study was started at KCD, Gorumbwa and Kalimva, aiming to define the multi-element and hyperspectral footprint of the differing styles of mineralisation in the district, and ultimately to assist with exploring for blind targets or narrow plunging shoots.

In **Argentina**, a total of 20,333m of drilling was completed at a cost of \$3.8m.

Trenches were excavated on the Gesica-Oveja trend and the Aguilla, Cuncuna and Potrero veins.

Diamond drilling was successfully conducted to extend mineralisation at Cuncuna and Vanguardia 3, as well as at the Loma del Muerta, Mangas, Potrero, Serena Sur, Zorro, Gesica and Teresa veins.

Other work included reconnaissance, mapping, chip sampling, ground magnetics and diamond drilling, targeting potential extension of mineralisation outside the district boundaries.

In **Brazil**, at Cuiabá and Lamego a total 45,203m were drilled at a cost of \$4.2m.

At Cuiabá, drilling focused on plunge extensions of Fonte Grande Sul target from L21 to L22 as well as drilling from L19. Drilling has identified positive zones of mineralisation in the western extensions of Serrotinho. The Viana target was intersected on L21, showing down plunge continuity.

On L06/L08, the shallow portion of the Galinheiro orebodies were targeted, with positive results received, which have added Mineral Resource and will create flexibility in the mine plan.

On the Regional Targets, Descoberto drilling focused on converting Mineral Resource in the central portion of the target and adding Mineral Resource along strike. Results from soil sampling for the Near-Mine Extension project identified anomalies suggesting a possible extension of the Descoberto trend

The acquisition of the Geriza Farm in the Tinguá region was concluded and drilling should start in Q1 2022.

Additional drilling in Lamego Open Pit returned positive results in the mineralised gaps between AVNE and CAR, which show the potential to extend oxide/transitional Mineral Resource in this area.

An airborne EM 2.5D inversion process was completed, covering all the Cuiabá and Lamego brownfields tenements. The 2D conductivity sections identified steeply dipping targets, deep anomalies and improved the resolution of near surface targets.

At Lamego, underground and surface drilling continued.

The exploration campaign at Carruagem SW orebody was drilled from L4 and L6 with positive gold grade received. The results were used to delineate a high-grade ore lens in the normal limb of Lamego structure. For the Queimada and Arco da Velha orebodies, Mineral Resource conversion drilling programmes were carried out.

At Córrego Do Sítio, capitalised and expensed drilling programmes completed a total of 19,199m at a cost of \$3.8m during Q4.

At CDS I, the down dip extension of mineralisation in Carvoaria and Laranjeiras was confirmed. Directional drilling was performed in the Carvoaria orebody extension campaign from level 457 and four holes were completed.

At Rosalino Mineral Resource delineation and extension drilling continued with 14 DD holes drilled and Mutuca the extension campaign completed 4 DD holes. Exploratory drilling was conducted at Donana and results are pending.

Geometallurgical test work was conducted on two composite Mutuca samples and preliminary behaviour is classified as “poor” for gravimetric recovery and “very good” for flotation.

At CDSII, the underground drilling campaign continued and ten drillholes were completed and focusing on the Sangue de Boi and São Bento targets. The surface drilling campaign was focused on the Pinta Bem and Sangue de Boi targets.

For CDS III, drilling was carried out on the oxides of Anomalia and Anomalia II targets and twenty-two drillholes were completed. Twenty-three interceptions were reported in CDSIII with most results still pending.

An IP survey was conducted by Fugro at CDSI Open targeting extension opportunities to CDSII,

Sampling results from Sangue de Boi SW oxide and CDSII Pinta Bem old galleries in the central pit; are pending.

Geological model revisions are being conducted, especially for the Mutuca target applying structural data and using new modelling methods.

At Serra Grande, capitalised and expensed drilling programmes completed a total of 28,950m at a cost of \$2,2m during Q4.

Mineral Resource extension drilling from surface occurred at Ingá and Corpo IV and underground at NW, Mangaba – Corpo K, Corpo IV, Structure II, NW and Angicão. While Mineral Resource conversion drilling targeted Structure III and IV, Angicão, Pequizão, Ingá, Mina Nova and VQZ-N.

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

At Quebradona, the Chaquiro drillholes are being relogged and this is now 35% complete. Logging and interpretation aimed at delineating the variation of the tuffs along the tunnel trace has been completed. Core samples were delivered for thin section, fluid inclusion and dating work.

Hydrogeology work continued, including data collection from flow stations and rain stations, as well as measurement of groundwater levels in Chaquiro and Cauca areas and updating the database of groundwater levels. Meanwhile, geotechnical and hydrogeological work is ongoing on technical documents related to the licensing process.

In **Australia**, at Sunrise Dam capitalised and expensed drilling programmes completed a total of 48,718m at a cost of \$8.3m during Q4. Ten underground diamond drill rigs were utilised over the quarter.

At Frankie, drilling to support Inferred & Indicated Mineral Resource continued from multiple locations in the FRA 1700 DDN and continued to define the core Frankie domains. While at Carey Shear exploratory drilling targeted the Carey Shear Zone northern extensions from the VOG 1490 POD 840.

At Porphyry Steeps, delineation drilling targeted the margins of the mega-porphyry for mineralisation from the CAR 1395 ACC and the VOG 1490 POD 840. For the MWS Steeps, Mineral Resource definition drilling from VOG 1814 17S targeted southern and down-dip extensions to Elle.

On the Vogue Deeps & Vogue 12 (formerly Vogue East) targets, Mineral Resource delineation drilling from the VSD 1350 ACC SP to test the lower extents of Vogue continued while from the WED 1369 SP, VOG 1350 ACC, VOG 1575 21S 04E and WED 1410 ACC drilling targeted down-dip, east and west extensions to Vogue 12.

At Jaguar, delineation drilling from the VOG1490 44E targeted down-dip extensions to Jaguar and further information on T34 (Vogue to COE N-E Steep). Exploratory drilling on the Eastern Ramps from the NED 2087 SP tested for steep mineralisation in the north-east area of the mine.

On the Flamingo (formally Sunrise North) target, Mineral Resource delineation drilling from the AST 1835 SP, AST 1845 SP and WEI 1815 SP targeted Astro mineralisation. For the BIF Fold Axial Plane target Mineral Resource delineation drilling continued from the HMM 1970 DDD to follow up on significant intercepts and define a mineralisation shape at a BIF fold in the upper mine.

At Upper Hammerhead, Mineral Resource delineation drilling from the GQ 2000 SP1 tested up-dip extensions.

Surface drilling continued, targeting Neville down-plunge, Golden Delicious and Cider mineralisation with a combination of DD and RC drillholes.

Significant intercepts were reported from Frankie, Vogue, Upper Hammerhead, Carey Main extension, Flamingo, Cosmo East, Steeps at Porphyry Contact and MWS Steeps.

At Tropicana, drilling in Q4 completed 44,517m at a cost of \$4.1m.

Mineral Resource development drilling focused on Tropicana UG, Havana UG HD1 with RC drilling at Crouching Tiger and Havana UG HN1 (pre-collars). Expensed near-mine exploration drilling (DD) was conducted at the Boston Shaker and Tropicana exploration targets.

Regional exploration drilling occurred at Hidden Dragon (RC/DD), Southern Smash (RC), Angel Eyes (RC/DD) and Voodoo Child/Wild Thing (RC).

Significant intersections from Mineral Resource development drilling were reported from Tropicana UG, Havana UG, Havana OP and Crouching Tiger drilling. While significant expensed exploration intersections were reported from Boston Shaker, Tropicana and Angel Eyes.