

# EXPLORATION UPDATE SIX MONTHS ENDED 31 DECEMBER 2020

## GREENFIELDS

During the second half of 2020, Generative exploration activities were undertaken in Australia, Brazil and the USA. 57,193m of drilling was completed globally with a total expenditure of \$15.9m for the period.

### Australia

#### Laverton District – AGA (100%) and Butcher Well and Lake Carey JV (70%)

Aircore (AC), Reverse Circulation (RC) and Diamond Drilling (DD) was completed in the Laverton District, with a total of 47,826m drilled in the second half 2020.

At the Bismarck prospect (70% AGA), 6 DD holes were completed for 1,128m. The drilling intersected predominantly basaltic-andesite volcanic rocks with gold mineralisation hosted in narrow sulphidic breccias and associated stockwork quartz veins.

At the Turing prospect (100% AGA), 175 AC holes for 9,822m, 11 RC holes for 1,546m and 4 DD holes for 1,127m were completed. The AC drilling defined a greater than 2km long, NNW-trending zone of anomalous gold, which remains open along strike. Follow-up RC and DD returned mostly low-tenor gold intercepts, apart from isolated high-grade results associated with coarse visible gold in narrow quartz veins.

At the Cleveland prospect (100% AGA), 63 AC holes for 2,135m and 13 DD holes for 2,494m were completed. Several anomalous gold intercepts were received from AC drilling with results open from the southernmost drill line. The DD was designed to extend RC holes and test for down-plunge extensions to a 500m long, NNW-trending zone of gold mineralisation identified in the first half of 2020. Most of the DD holes intersected intervals of pyrite-chalcocopyrite mineralisation within quartz-sericite-pyrophyllite-chloritoid schist.

AC drilling was also completed at the Pioneer (1,239m), Seguin (558m), Triton (5,164m), Argonaut (1,011m), Juno (17,790m) and Kraken (3,144m) prospects.

#### North Queensland (100% AGA)

Field programmes consisting of mapping and soil sampling continue to be postponed due to travel restrictions related to the COVID-19 pandemic.

### USA

#### Silicon (100% AGA)

At Silicon, the Plan of Operations was approved during Q3 2020, and earthworks started for the construction of pads and roads throughout the central Silicon project area. Drilling was restarted in October, with a total of 9,728m of combined diamond and RC drilling completed during the second half in 2020. Core drilling also began at the Merlin target in the southern Silicon project area during the period.

#### Rhyolite – AGA (100% AGA)

Additional prospecting work was carried out at Rhyolite in second half of the second half.

#### Transvaal – AGA (100% AGA)

At Transvaal, drill target delineation was completed during the period based on detailed geological mapping and surface rock chip geochemical sampling from first half of 2020. IP lines were completed in the target area to refine drill targets developed in the first half of 2020. A Notice of Intent permit was submitted and received for drill pad and access construction for the first targets.

In **Brazil**, additional exploration licenses were granted at the WBC project.

In **Argentina** and **West Africa**, exploration focused on target generation activities.

## BROWNFIELDS

During the second half in 2020, Brownfields exploration activities were undertaken across the globe. Brownfields Exploration completed 505.7km of drilling at a total expenditure of \$34.4m (capital) and \$36.4m (expensed) for the second half of the 2020 year.

**Tanzania:** Capitalised (underground) and expensed (surface/ underground) drilling programmes completed a total of 64,140m during the second half at a cost of \$15.9m.

Mineral Resource development drilling continued at the Nyamulilima deposit. Results confirmed the continuity of the ore zones within the eastern and western mineralised domains and increased the Mineral Resource confidence within the optimised pit shells and allowed for the declaration of a maiden Ore Reserve. Results from the Mineral Resource development drilling at Star & Comet Cut 3 and at Cut 2 confirmed the Mineral Resource model interpretations.

Sterilisation drilling for the waste dump was carried out and show no significant intersections.

Mineral Resource definition drilling was carried out at Nyankanga Block 1, returning results that confirmed the down-dip continuity of mineralisation at Block 1.

Reconnaissance drilling programmes into the footwall of the Nyankanga underground project returned low grade, erratic mineralisation hosted within these deep-seated structures. Reconnaissance drilling carried out at Star & Comet Cut 2 returned results that confirmed the presence of the footwall structure.

**Guinea:** Capitalised and Expensed drilling programmes completed a total of 31,388m during the second half at a total cost of \$5.4m.

At Block 1 infill drilling occurred at Bidini, Bidini North, Sorofe-Tubani, Kami and Seguelen PB2. Reconnaissance drilling occurred at Seguelen PB2, Sorofe-Tubani, Kossise, Carbonate Hills, Balato NW.

In Block 2, Saraya infill drilling occurred and sterilisation drilling was carried out at Foulata. At Saraya West E.L. reconnaissance drilling was completed.

Assays results were received for Sokunu NW infill drilling, Sintroko West reconnaissance drilling, Sintroko West infill drilling and Komatiguiya South East reconnaissance drilling.

Mapping focused on improving the understanding of the geology of the Bidini, Sanu Tinti, Kalamagna, Kami and Tubani pits.

Geometallurgical proxy data collection and interpretation were performed and samples have been analysed respectively for pXRF, Terraspec and Equotip.

**Ghana:** At Iduapriem, the second half drilling totalled 28,211m at a cost of \$3.3m.

During the second half of the year, exploration drilling principally focussed on Block 1 East and West, Badukrom and the Block 5 Extension projects.

The Block 1 exploration project involved mapping and Mineral Resource conversion drilling at Block 1 Central, Block 1 East and Block 1 West. Significant intersections were reported for Block 1 East.

At Efuanta drilling was wrapped up with significant intersections reported. While at Badukrom, drilling commenced in Q4 and reported significant intersections.

One hole was drilled at Block 3 West to ascertain the weathering profile down dip of the pit as part of the return water dam feasibility studies.

Block 5 extension drilling via RC and DD returned significant intersections.

Sampling of the Auger drilling project was completed, and results have been received and narrowed down the anomalous targets. Outcrop mapping was carried out at Block 1 East and an 8m thick conglomerate outcrop was observed.

At Obuasi, drilling continued in the second half with a total of 30,394m drilled in the underground exploration programmes at a cost of \$3.6m.

Exploration and infill drilling activities continued in the second half of the year on 41 level in Block 10, and in stockpiles 13 and 14 along the ODD 32 level in Block 8.

Grade control drilling continued in Block 8, 27 and 29 Level, Sansu 18 Level and 26 Level and 28 KRS in Block 10.

Results from 41 Level north and south drilling confirmed the Mineral Resource models.

Results from the reconnaissance drilling from stockpiles 12, 13 and 14 along the ODD showed continuity in grade and structure within the Obuasi fissure.

Grade control drilling results at 27 L 312, at 28 L KRS 295 and at 26 L in Sansu 3 shows continuity of the Obuasi fissure but variability in width.

**Democratic Republic of the Congo:** Capitalised and Expensed drilling programmes completed a total of 6,146m during for the second half at a cost of \$2.0m. The focus of exploration was on Mineral Resource replacement/addition and underground projects.

Drilling at KCD is in progress, with additional deep holes planned as the initial deep hole results were not encouraging, possibly clipping the edge of the payshoots. Results returned from the Ikamva East and Kombokolo confirm the models. Two identified targets are to be tested with proposed drilling in 2021 Q1 at Ikamva area.

At Madungu, the target shows some upside with possible plunge extent to the mineralisation and further holes are planned.

At KZ South, field activities were completed and identified 6 sub-targets interpreted to potentially host higher grade mineralisation.

**Republic of Mali:** No exploration.

In **Argentina**, a total of 18,009m of drilling was completed at a cost of \$2.9m.

Drilling was carried out to test downdip extension of vein mineralisation at the Northern zone (Cuncuna, Vanguardia 1, Vanguardia 2, Vanguardia 3 veins), Central zone (Atila, Gesica, Loma del Muerto veins) and Southern zone (Carmela, El Lazo, Teresa veins).

Drilling was also carried out to test the extension of mineralisation in less well-defined veins outside the main district at Dora, El Trío, Oveja and Trinidad.

In **Brazil**, at Cuiabá and Lamego a total 40,889m were drilled at a cost of \$4.8m.

At Cuiabá, Mineral Resource Conversion drilling on Levels 20 and 21 was completed at the beginning of Q4. The L20 FGS/SER (main orebodies) drilling campaign continue and excellent results reported.

The intensive drilling/ mapping campaign within the VQZ was completed and the model has been updated. Several significant intercepts were also reported.

Drilling at the secondary orebodies: Serrotonho (SER) and Galinheiro (GAL) Extensions (Level 04 and 05) returned good results confirming the orebodies potential to create mining flexibility at shallower levels.

In the regional programmes, at Descoberto a 2nd drill rig commenced drilling and good results continue to be reported. At Tinguá various exploration activities progressed well including mapping, soil sampling, and resulted in positive outcomes. The historical surface galleries surrounding or associated with Cuiabá Mine were scanned.

At the Lamego Sul Target the soil sample campaign was completed and the soil survey to cover most of the region started.

At Lamego, underground and surface drilling continued.

Results from exploratory drilling campaign from Queimada orebodies level 5 confirmed potential in lower levels of the mine and show strike extension potential.

Surface drilling returned positive gold results for AVOX (oxide programme). The Arco da Velha Sulphide drilling campaign is currently on hold due to landlord issues.

At Córrego Do Sítio (CdS), capitalised and expensed drilling programmes completed a total of 80,167m at a cost of \$6.1m during the second half.

At CdS I, underground drilling focused on Cachorro Bravo, Laranjeiras and Carvoaria with positive results from all targets. Surface drilling was carried out at Rosalino, Campinas and Mutuca and returned positive results.

CdS II drilling was carried out at São Bento, Sangue de Boi and Pinta Bem Sul with positive results. Results are still pending for Pinta Bem Sul.

CdS III drilling continued at Jambeiro target and Anomalia as well as sterilisation drilling for the CdS III mining project. Most results are pending.

At Serra Grande, capitalised and expensed drilling programmes completed a total of 45,933m at a cost of \$3.5m during the second half.

Drilling focused on completing the drilling programme at Ingá, Angicão (D Tereza), Mangaba, Palmeiras South Mine, Superior Zone (Mine III), VQZ (deep mine) and Pequizão.

The Mineral Resource evaluation process has been finished with Mineral Resource additions of 482 koz and Ore Reserve additions of 343koz.

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

At the Quebradona project, drilling to cover the vent shafts and the planned ore passes was completed, and all results have been reported.

Grade control schedule activities were reviewed for the Quebradona Advanced Geology project. Operational Readiness final adjustments and FS chapters are expected to include the summary of these activities up the end of January 2021.

The 2020 geotechnical drilling programme for infrastructure sites has been concluded. The geotechnical soils testing programme and rock test work is currently in progress.

In **Australia**, at Sunrise Dam capitalised and expensed drilling programmes completed a total of 98,441m at a cost of \$15.5m during the second half.

Eleven underground rigs were utilised during the period, for infill, and reconnaissance drilling at Frankie, Frankie Extensions, Carey Shear, Porphyry Steeps, Cosmo East, Vogue South, Vogue East, Vogue Deeps, Elle, Western Ramps and Flamingo.

The regional surface exploration team utilised one rig at Orchard. Significant intercepts were reported for Vogue, Frankie, Carey, Hammerhead South, Elle, Cosmo East, Western ramps and Porphyry Steeps.

At Tropicana, drilling in the second half completed 58,874m at a cost of \$6.1m.

Mine Mineral Resource development drilling in the second half comprised of in-pit Mineral Resource Confidence drilling at BS03; Mineral Resource confidence drilling at Crouching Tiger as part of the TSF options study; Indicated drilling at Madras and Measured underground diamond drilling at Tropicana underground.

Regional exploration AC drilling was carried out at Phoenix North, Bushwacker and Snowball. RC and diamond drilling was completed at Highball, Hat Trick, Phoenix, Voodoo Child, Wild Thing, Angel Eyes and Sazerac. The best assay results were returned from Tropicana underground and the Sazerac regional target.