

# 2023 Annual/Q4 Exploration Report

This report covers the Greenfields and Brownfields exploration programmes that support the sustainability and growth of our business. Greenfields exploration aims to discover large, high-value Mineral Resources, which may eventually lead to the development of new gold mines. Brownfields exploration focuses on delivering value through accretive additions at existing mines, as well as driving development of future mines at our advanced projects.

# **GREENFIELDS EXPLORATION**

In 2023, \$40.8 m was spent on Greenfields Exploration, with a total of \$9.8m spent during the fourth quarter of 2023 (Q4). Our Greenfields Exploration tenements cover over 12,400 km<sup>2</sup> of highly prospective ground in five countries: Australia, Argentina, Brazil, Tanzania, and the United States.

## **Africa**

In Tanzania, Greenfields Exploration restarted exploration during 2023 and commenced field activities at three projects located in the Shinyanga and Singida regions.

### **Americas**

In the USA, 6,608 m of diamond drilling was completed during 2023 at the Midnight Star and CR projects in Nevada with low-level results. Further targets remain to be tested at both projects. An additional project, Lucille, was added to the Greenfields Nevada portfolio during 2023.

Field exploration programmes in Nevada finished at the end of October due to weather conditions. Assay results were received during Q4 from two holes at Midnight Star and soil sampling was completed at CR. Plan of Operations permitting for Wagen, Birthday and Clipper projects were submitted to support drill testing.

In Brazil, stream sediment sampling through 2023 continued to define new prospective districts in the South Brasilia Belt ("SBB") terrane. Infill stream sediment and soil sampling at SBB defined targets at the Claro project, which are ready for drill testing. This work continued in the Unai District and at Claro during Q4.

In Argentina, a 3,500 km heliborne magnetic survey was completed at the Organullo project in Salta Province in Q4. Greenfields exploration at Organullo is managed by AGA under an option agreement with Latin Metals. At the El Cori project, which is held solely by AGA, environmental surveys were completed and drilling permits were submitted over four drill targets during 2023.

## Australia

In Australia, Greenfields Exploration was carried out in the Laverton district of Western Australia, in northern Queensland and in central New South Wales. The Laverton exploration focused on the Corvette project, with ground-based magnetic surveys completed during Q4 while waiting for regulatory drilling approvals.

In Queensland, 4,264m of diamond drilling was completed during 2023 and returned low-level anomalous results from Muldiva, with results under review. Reconnaissance mapping, rock chip sampling and soil sampling was completed at several early-stage targets in the Chillagoe district. Field reconnaissance took place on the Connors and Auburn Arc tenements in the New England terrane.

Mud-rotary and diamond drilling (30 holes for 5,143m of diamond drilling) was completed during 2023 at the Macquarie Arc project in NSW, which is under an option agreement with Inflection Resources to test for porphyry-related Cu-Au mineralisation. 2,709m of diamond drilling was completed during Q4. The drilling returned alteration assemblages indicative of a near-porphyry environment at the Duck Creek, Myallmundi and Trangie projects.

## **BROWNFIELDS EXPLORATION**

In 2023, our Brownfield exploration teams at our operations completed 558km of capital and 291km of expensed drilling at a total cost of \$82.8m and \$65.3m, respectively. Costs are attributable to AGA and inclusive of the Kibali JV, as well as Córrego do Sítio ("CdS"), which was placed on care and maintenance in August 2023.

Additionally, 129km of drilling was completed at the Nevada projects for a total exploration cost of \$73.9m, principally at the Merlin deposit of the Expanded Silicon Project. This has delivered exceptional results and supported the declaration of an initial 9.1Moz Inferred Mineral Resource.

For Q4, exploration at operations included 76km of capital and 70km expensed drilling for a total cost of \$10.3m and \$17.0m, respectively. Additionally, 23km of drilling was completed in Q4 at the Nevada projects for a total exploration cost of \$16.1m.

#### **Africa**

**Geita:** Exploration drilling programmes in 2023 totalled 147km.

Capitalised drilling to support development and definition of Mineral Resources took place across all operational areas and at the Geita Hill Underground project. Infill drilling generally confirmed existing models and at Geita Hill notably increased resolution of orebody characteristics and geometries within underground Blocks 1 and 2.

Expensed drilling included testing for extensions of the main deposits, as well as at exploration targets within the Nyamulilima region and the central district. Drilling to the southern margin of the Nyamulilima open pit supported expansion potential and showed underground potential at depth. The Kalondwa Hill programmes in the central district

included infill of the main orezones, as well as establishing mineralisation continuity along both western and northwestern trends.

During Q4, a total of 35km drilling was completed. Significant intercepts from underground were reported at Geita Hill Block 2, Star & Comet cuts 4, 5 and Ridge 8. Surface exploration delivered significant results from the Kalondwa Hill and Fikiri-Jumanne targets, and continued testing of Nyamulilima extensions.

**Kibali**: Drilling down-plunge of the Karagba, Chauffeur and Durba ("KCD") deposit continued, with results supporting potential extensions of the 5000, 9000 and 11000 lodes. Recent drilling to the northwest of KCD supports an emerging mineralised corridor parallel to KCD that has the potential for both underground and open pit targets.

At Agbarabo-Rhino, drilling of the high-grade Rhino oreshoot down-plunge and lateral continuity of Agbarabo lenses supports underground potential, with shallow mineralisation at Rhino showing open pit potential close to the Kibali plant.

Drilling at Oere supports extension of mineralisation down-plunge, highlighting an underground opportunity and raising the possibility for further blind high-grade shoots in the KZ North area, which forms part of the KZ structural trend. In KZ South, ongoing drill testing at Zambula has returned promising results that support the open pit potential of this target.

Work during Q4 was focused on the KCD NW follow-up drilling. The Oere framework drill programme was also completed during Q4 and the Zambula follow-up programme was initiated.

**Obuasi:** A total of 40km exploration drilling was completed in 2023. A total of 8km drilling took place during Q4, with underground drilling continuing at Blocks 8 and 10, as well as the completion of the surface exploration programme.

Underground drilling was focused on improving confidence in the Mineral Resource at Block 8 and Block 10 ahead of mining, as well as probing and extending the known mineralisation in these areas. Good continuity of the Obuasi fissure was noted from the Block 10 programmes and at Block 8; testing of the East Lode system refined the models and identified additional multi-splayed lodes east of the known system.

Surface drilling took place at CVS and Cote d'Or, with the Cote d'Or drilling aiming to test multiple lodes and infill the Mineral Resource to further assess potential to serve as an additional and independent underground mining area.

**Iduapriem**: 11km exploration drilling was completed, with a focus on capitalised infill at Block 3 west and Block 4 to support the mine plan and add operational flexibility. The drilling programmes delivered good results that supported definition and expansion of the Mineral Resource.

Exploration drilling was completed by August and through to end of Q4 activities focused on continued regional exploration across the mining lease, with reconnaissance mapping and soil geochemical sampling at several targets.

**Siguiri:** During 2023, exploration activities included 93km of drilling across Blocks 1, 2 and 3. In Block 1, infill continued at Kami and Bidini, with delineation of potential extensions at

Kami, Kozan, Seguelen and Balato pits. Good potential upside of the oxide in the Kami East area was demonstrated by several encouraging results. Reconnaissance drilling tested several targets within the block.

In Block 2, infill drilling at Saraya pit was accompanied by reconnaissance drill testing of several targets to identify potential for continued mining operations in the block. In Block 3, drilling at Kounkoun to infill the Mineral Resource and support the advancing project studies delivered several significant intersections that confirmed the robust and relatively high-grade mineralisation of this deposit. Drilling further supported geometallurgical studies and infrastructure planning.

In Q4, drilling across the Siguiri concession continued with 20km completed during the period and an emphasis on expensed drilling of reconnaissance targets in Block 1 and Block 2. Capital resource definition drilling was completed at Kami and Bidini, as well as drilling for infrastructure planning at the Kounkoun project.

## **Americas**

**Nevada Projects, USA**: Drilling in the eastern Beatty District took place at Silicon and Merlin with up to twelve rigs in operation. Drilling has been focused on the Mineral Resource delineation programme at Merlin, which has returned good results that support and enhance the modelled mineralisation and continue to show significant upside potential. Drilling also supported technical studies to inform the Expanded Silicon Project.

At the North Bullfrog Project in the western Beatty District, activities were mainly restricted to drilling support for hydrogeological and geotechnical studies. However, a risk amelioration drill programme to support a Measured Mineral Resource was completed within the Sierra Blanca pit design and informed an updated model.

During Q4, 23km of drilling was completed. The majority of this was at Merlin and included close-spaced drilling within the central domain of the orebody.

**Colombia Projects:** No exploration drilling took place at the projects. At Quebradona, a relogging programme was initiated to enhance geological models based on improved differentiation of certain lithologies, and is ongoing. Limited geotechnical drilling was completed and core sampling was further undertaken to support technical studies.

**AGA Mineração:** At Cuiabá-Lamego, a total of 158km exploration drilling was completed. Drilling at Cuiabá took place between levels 21 and 23 for the Fonte Grande Sul and Serrotinho orebodies, with significant intercepts supporting improvements and additions to the mineralisation model. Drilling of the Narrow Veins between level 17 and 21 also delivered good results, particularly down-plunge at Balancão.

The secondary orebodies (VQZ, Galinheiro Footwall, and Viana) continued to show promising results from drilling between levels 15 and 21, most notably from the high-grade quartz vein lenses of the VQZ, both within the core of the Cuiabá fold and in the footwall of the Serrotinho orebody.

Drilling at Lamego focused on Carruagem, with numerous results that refined and extended the modelled mineralisation. Drilling also took place at the Queimada and Arco da Velha orebodies.

At the Descoberto regional prospect, a surface drilling programme was completed, and an Induced Polarisation geophysical programme is ongoing. Surface channel sampling was completed at the Lamego AVOx prospect.

Drilling at Cuiabá in Q4 continued in the main and narrow orebodies, with encouraging results from testing extensions of secondary orebodies, notably at the Viana down-plunge. Drilling of the Carruagem hinge zone returned several high-grade intercepts. A total of 32km was drilled in Q4.

CdS was placed on care and maintenance in August 2023. Prior to this, a total of 46km drilling was completed at across several surface and underground areas of CdS I and II. Subsequent work focused on ensuring that exploration activities to date are well documented.

**Serra Grande:** Capitalised and Expensed drilling programmes completed a total of 71km drilling with a strong focus on infill and confirmatory drilling to support the mine plan, notably at Inga, Mangaba, Pequizão, and Limoeiro. Several of these programmes also served to target infill and testing of upside potential in adjacent orebodies close to mine infrastructure.

Drilling in Q4 continued with a focus on the main areas in the mine plan, as well as testing continuity of the Inga orebody up-dip, with a total of 15km drilled.

**Cerro Vanguardia:** A total of 78km of exploration drilling was completed at Cerro Vanguardia ("CVSA") in Argentina, with drilling mainly directed at Mineral Resource delineation and testing extensions of veins within the CVSA mining lease.

Promising assays results were returned from partially covered and/or blind veins at Dora, Doriana, Jani and El Lazo targets.

A reconnaissance programme at the Cóndor tenement drilled several target structures, whilst drilling at the Claudia JV was completed over the lo vein and successfully defined extensions under cover.

Drilling in Q4 was limited to 379m to complete the lo vein programme, accompanied by reconnaissance mapping and sampling activities across several areas of the Claudia JV area. With no drilling on lease during the period, an extensive trenching and channel sampling campaign was undertaken across numerous veins to support 2024 drill targeting.

#### Australia

**Tropicana:** Brownfields exploration at Tropicana Gold Mine ("TGM") executed a total of 98kms of drilling.

Capitalised exploration programmes focused on Boston Shaker, Havana and Tropicana underground drilling, with results that generally confirmed and enhanced existing models. Near-mine expensed drill programmes delivered significant results from targets testing

depth extensions and high-grade plunges to underground lodes at Boston Shaker and Havana South.

Regional expensed exploration drilling yielded significant results along the TGM northern corridor. Drilling south of TGM at Bushwacker also returned encouraging intercepts. Drone-based geophysical surveys were also completed to support exploration targeting along the Angel Eyes-Double Vision (northern corridor), Madras and Sanpan-Sazerac trends.

During Q4, 15 km of exploration drilling was completed, with the majority taking place at Boston Shaker. Limited regional drilling was re-started at the Rosetta target.

**Sunrise Dam**: Exploration drilling programmes completed a total of 92km during 2023. Drilling was primarily concentrated in Frankie, Astro-Flamingo, and Vogue, with the objective of bolstering Mineral Resource to support mining operations. These areas returned numerous significant intercepts and contributed to ounce additions across several categories. The Frankie programme notably led to a major improvement in the modelling of high-grade ore shoots.

Surface drilling mainly tested near-surface targets at Pink Lady and Wilga West, as well as drilling to support an upgrade of the planned Neville open pit to Indicated Mineral Resource.

A total of 22km exploration drilling was performed during Q4, all from underground areas. Significant intercepts supported down-dip extensions of Vogue and Astro Steep domains, as well as down-plunge extensions of Frankie SSZ and refinements to Frankie 2 and Astro domains.