NI 43-101 Technical Report for the Bonikro Gold Project, Republic of Côte d'Ivoire

Prepared for Allied Gold Corp and Mondavi Ventures Ltd (to be renamed Allied Gold Corporation) by Datamine Australia Pty Ltd (Snowden Optiro)

5 July 2023

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This Technical Report contains “forward-looking information” within the meaning of applicable Canadian securities legislation which involves a number of risks and uncertainties. Forward-looking information includes, but is not limited to: information with respect to the future prices of gold, information with respect to strategy, plans, expectations or future financial or operating performance, such as expectations and guidance regarding production outlook, including estimates of gold production, grades, recoveries and costs; estimates of Mineral Resources and Mineral Reserves; expansion plans; mining and recovery methods; mining and mineral processing and rates; tailings design and capacity; mine life; timing and success of exploration programs and project related risks as well as any other information that expresses plans and expectations or estimates of future performance. Often, but not always, forward-looking information can be identified by the use of words such as “plans”, “expects”, or “does not expect”, “is expected”, “budget”, “scheduled”, “estimates”, “forecasts”, “intends”, “anticipates”, or “does not anticipate”, or “believes”, or variations of such words and phrases or state that certain actions, events or results “may”, “could”, “would”, “might” or “will” be taken, occur or be achieved.

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Such factors and assumptions underlying the forward-looking information in this Technical Report include, but are not limited to: risks related to political and economic instability in Côte d’Ivoire; risks associated with community relationships; risks related to estimates of production, cashflows and costs; risks inherent to mining and exploration operations; shortages of critical supplies; the cost of non-compliance and compliance costs; volatility in the price of gold; risks related to compliance with environmental laws and liability for environmental contamination; security risks to Allied, its assets and its personnel; risks related to the ability to obtain, maintain or renew regulatory approvals, permits and licenses including renewing the mining conventions with the government of Côte d’Ivoire on favourable terms; uncertainty regarding and changes to the tax regime in Côte d’Ivoire; imprecision of Mineral Reserve and Mineral Resource estimates; deficient or vulnerable title to concessions, easements and surface rights; inherent safety hazards and risk to the health and safety of employees and contractors; risks related to Allied’s workforce and its labour relations; key talent recruitment and retention of key personnel; the adequacy of insurance; uncertainty as to reclamation and decommissioning; the uncertainty regarding risks posed by climate change; the potential for litigation; and risks due to conflicts of interest.

There may be other factors than those identified that could cause actual actions, events or results to differ materially from those described in forward-looking information, there may be other factors that cause actions, events or results not to be anticipated, estimated or intended. There can be no assurance that forward-looking information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers are cautioned not to place undue reliance on forward-looking information. Unless required by Canadian securities legislation, the authors, Mondavi and Allied undertake no obligation to update the forward-looking information if circumstances or opinions should change.

1 SUMMARY

This Technical Report was prepared for Allied Gold Corp (Allied) and Mondavi Ventures Ltd (to be renamed Allied Gold Corporation) (Mondavi) in accordance with NI 43-101. The Bonikro Gold Project (Bonikro or the Property) is a mineral exploration, development and production property located in the Gôh-Djiboua District, Côte d'Ivoire, west Africa.

This Technical Report was authored by Messrs Allan Earl, Michael Andrew, Gordon Cunningham and Peter Theron of Snowden Optiro, a business unit of Datamine Australia Pty Ltd (Snowden Optiro).

The effective date of this Technical Report is 5 July 2023.

Unless otherwise specified, all units of currency are in United States Dollars ($). All measurements are metric except for troy ounces (oz).

1.1 Property description and ownership

Bonikro is an operating gold mine in Côte d'Ivoire, which is comprised of the Bonikro and Hiré exploitation permits and the Dougbafla exploration permit. Bonikro has produced over 1.4 Moz of gold since production began in 2008 with Allied acquiring its interest in the operation during 2019. Mining is currently in progress at the Bonikro open pit and the Akissi-So and Chapelle open pits at Hiré.

Bonikro is located 100 km by road south of the capital Yamoussoukro, in the Gôh-Djiboua District of Côte d'Ivoire in West Africa. The commercial centre, Abidjan, lies on the coast 214 km by road to the southeast, a journey of about four hours. Most of the highway from Abidjan is excellent, as it is the road link to the capital at Yamoussoukro. From Divo to Hiré, the road surface has been re-sealed and upgraded.

Majority of the personnel are sourced from the local community with senior Ivorian staff typically travelling from Abidjan and expatriate staff flying in and out of Abidjan.

The site has a subequatorial climate characterized by four seasons: a long rainy season from April to July; a short dry season from August to September, a short rainy season from October to November, and a long dry season from December to March. The annual average rainfall is 1,249 mm, with annual totals between 900 mm and 1,600 mm. Bonikro operates year-round with limited disruption to open pit operations during short-term, high rainfall events. Average annual temperatures range from 24°C to 28°C, with slightly lower temperatures recorded during the wet season. Average annual relative humidity is 82%, with average monthly humidity fluctuating between 70% and 90%.

The Bonikro exploitation permit (PE32) contains the Bonikro pit, process plant, associated tailings and waste storage, administration, accommodation, workshops, and warehouses. PE32 encompasses an area of 37.12 km^2, is due for renewal on 16 January 2025 and is held by Bonikro Gold Mine SA (BGM) of which Allied owns 89.89%.

The Hiré exploitation permit (PE44) contains the Akissi-So and Chapelle pits, Agbale prospect, waste storage and mining infrastructure approximately 15 km to the southeast of Bonikro. PE44 encompasses an area of 195.5 km^2, is due for renewal on 18 December 2029 and is held by Hiré Gold Mine SA (HGM) of which Allied owns 89.80%.

Exploration is being undertaken on the Dougbafla (Oumé) exploration permits, specifically, PR843 (Dougbafla North) and PR847 (Dougbafla South), which are 100% owned by Allied's subsidiary, Afrique Gold Exploration SARL. PR847 is valid until 14 January 2024. PR843 is in the process of being renewed. Allied submitted the renewal application ahead of requirements, complied with the minimum expenditure requirements and is confident of timely renewal noting:

- The validity of the permit shall be automatically extended in the event a decision is not taken before the expiration of the current validity period

- That the permit is valid until the renewal order is issued by the Minister of Industry and Mines
- That it may continue exploration within the perimeter of PR843.

The Government of Côte d'Ivoire holds a 10% shareholding in BGM and HGM with a local minority shareholder owning 0.11% of BGM and 0.20% of HGM. BGM and HGM are collectively referred to as the Company.

The surface rights have been purchased and are sufficient for the extraction and processing of the Mineral Reserves. Economic development parameters are governed by Mining Conventions for the Bonikro and Hiré exploitation permits which are valid until 3 May 2027 and 7 April 2028, respectively.

The Government revenue royalty or ad valorem tax percentage in Côte d'Ivoire is based on a sliding scale depending on the gold price and is applied on the net revenue from mine sales less deduction of transport costs (free on board) and refining costs (e.g. 4% for $1,300 to $1,600/oz and 5% for $1,600 to $2,000/oz).

HGM has a royalty agreement with Gold Mining Consulting International Corp (GMC) for gold production at 1% of the gross smelter return from the Hiré exploitation permit.

A 4.5% net smelter return royalty applies to production of up to 560 koz from the majority of the Bonikro pit to Newcrest West Africa Holdings Pty Ltd, previous owners of Bonikro.

A gold stream was put in place in 2019 which applies to the gold production from the Bonikro and Hiré licences (including any future production from the Dougbafla exploration licence). For the first 650 oz of gold production, 6% will be purchased at $400/oz, which reduces to 3.5% for the next 650 koz of gold and 2% thereafter. As of 31 December 2022, 292,688 oz of gold had been produced while the Bonikro Stream has been in place.

1.2 History

Since commissioning, Bonikro has produced 1.47 Moz at an average rate of about 103,000 oz/a, as shown in Table 1.1.

Table 1.1 Bonikro historical production

Year	Tonnes milled (Mt)	Grade (g/t Au)	Contained gold (koz)	Gold produced (koz)
2008	0.75	1.02	25	23
2009	2.05	2.34	154	150
2010	1.71	1.62	89	79
2011	1.19	1.85	71	58
2012	1.91	1.63	100	89
2013	1.93	1.52	94	88
2014	1.96	1.72	109	101
2015	2.18	2.19	154	139
2016	2.76	1.60	142	130
2017	2.50	1.98	159	139
2018	2.42	1.73	135	117
2019	2.43	1.07	83	74
2020	2.45	1.66	131	110
2021	2.47	1.09	87	76
2022	2.51	1.27	103	93
Total	**31.23**	**1.63**	**1,635**	**1,466**

Source: Allied

Gold mineralization in the general area was historically exploited by artisanal miners. Exploration was intermittently conducted in the greater Hiré and Bonikro area by French, British and Canadian interests since the 1970s and by BHP Minerals from 1988 to 1994.

In August 1996, Equigold NL (Equigold) carried out a series of soil geochemistry and drilling programs which outlined numerous gold targets, most notably at Bonikro and Dougbafla. Tenure was subsequently secured over Hiré in 1999.

In 2006, Equigold completed a feasibility study on the Bonikro gold deposit. Construction of the mine commenced in May 2007 with first gold poured on 6 October 2008 following commissioning of the 2.0 Mt/a processing facility. Equigold merged with Lihir Gold Ltd (Lihir) in 2008 and Lihir was acquired by Newcrest Mining Ltd (Newcrest) in September 2010.

Debottlenecking and minor upgrades progressively increased the plant capacity to 2.5 Mt/a. Mine production at Hiré commenced in 2015. In 2017, Newcrest sold its 89.9% stake in the project to Forbes & Manhattan of Canada, who in turn sold 52% of its interest in the project to Allied in May 2019 and the remaining 48% interest in September 2019.

1.3 Geological setting, mineralization, and deposit types

Bonikro lies within the Birimian Baoulé-Mossi Domain of the West African Craton which is well known for gold mineralization.

The Bonikro gold deposit is located on the east-southeast striking short limb of an upright fold which deforms the regional northeast-striking structural grain of Birimian rocks. This limb is cut by a north to north-northeast striking shear zone that is also partly discordant to the regional structural grain. The Bonikro granitoid, which hosts the Bonikro deposit, was emplaced obliquely sub-parallel to this shear zone, and the style of the mineralization appears to be an intrusion-related gold system deposit subsequently overprinted by orogenic mineralization.

The Bonikro geological interpretation comprises a suite of sub-parallel quartz vein-filled structures that dip to the northeast which form a ‘ladder’ inside the body of the pluton, and a shallow west-dipping suite that are related to the flank of the north-trending through-going fault. This interpretation matches historical drill results as well as observed gold distribution in the Bonikro pit.

Hiré mineralization occurs as four widely separated brittle structures within a much older granitoid, the Kan River Gneiss. The gold mineralized structures at Akissi-So and Chapelle are narrow linear features in which the quartz component pinches and swells, as does the attendant muscovite-sericite-chlorite alteration. Akissi-So is 1 km long and comprises two discrete lodes that strike northeast and dip steeply northwest, extend down dip for 300 m and have three offsetting east-west faults along its length. Chapelle comprises two groups of sub-vertical structures at an acute angle to one another, over 2 km in length and variably up to 2–8 m in width. Strike is east-west or north-northeast. Mineralization is developed along the length of the structures.

The mineralization at Dougbafla consists of two zones of bedrock mineralization that occurs in northwesterly dipping veins within the Akaoka mafic-felsic extrusive suite. The first of these forms an up to 10 m wide steeply dipping zone over a trend of 1,500 m but is only known from 60 m below surface. The second zone lies 500 m to the east, appears to occur as a stacked vein system over a true width of 40 m, and is confirmed down dip to at least 180 m. Both sets of mineralization occur in an extrusive mafic volcano-sedimentary succession, with concordant intermediate extrusive rocks and intrusive granitoids.

1.4 Exploration

All deposits in the Hiré and Bonikro licences were known resources or prospects at the time Allied took control of the Property. Allied’s exploration initially focused on near-mine opportunities and is now expanding to the rest of the Property, mainly around the Dougbafla (Oumé) prospects.

1.4.1 Drilling

A total of 946 exploration holes have been drilled at Bonikro, comprising 141,849 m of drilling. Allied has drilled 212 and holes for 31,586 m, with 40% being diamond drill core (DD) holes. Allied's use of DD holes allowed appropriate orientations to be obtained that tested the central area beneath the mined out Bonikro pit.

A total of 13,816 exploration holes have been drilled at the Hiré deposits, comprising 584,744 m of drilling. Allied has drilled 354 exploration holes for 41,265 m, with 249 being reverse circulation (RC) and the remainder being RC with DD tails.

Significant historical drilling has taken place around the Dougbafla West and Dougbafla North prospects (50,000 m), but it was poorly documented by the previous owners in terms of collar locations and downhole surveys. Allied's drilling in 2022 (8,152 m in 40 drillholes) has largely validated the historical drilling.

1.4.2 Sampling, analysis and data verification

Dry RC sampling involves three-stage riffle splitting of the field samples which are collected over 1 m (for resource or resource infill drilling) or 2 m (for grade control drilling). A three-stage riffle split provides a representative 2.0 kg to 2.5 kg sample for laboratory submission and analysis. The cyclone is cleaned at the end of each rod and hole, and the splitter is thoroughly cleaned between samples.

The sampling of DD core follows the Allied protocol to preserve the orientation line on the half core that is not sampled; the same side of the core is taken for assay. Generally, 1 m samples were obtained though minimum and maximum sample intervals are 0.5 m and 1.5 m, respectively.

Samples are given sequential numbers down any given hole and placed in labelled bags. These are collected from the drill collars and delivered to the laboratory, with geology logs entered in the database.

The preparation process comprises drying, crushing and pulverizing to 85% passing (P_{85}) 75 µm. Allied continues to use the sample preparation protocol adopted at Bonikro and Hiré since 1999. Sample analysis uses a 50 g fire assay with atomic absorption spectroscopy (AAS) finish, with an appropriate certified reference material (CRM) samples for quality assurance/quality control (QAQC).

SGS Ghana Limited (SGS) was principally used for sample preparation and assaying up until 2002 with Transworld Laboratories Companies Inc. used from 2002 to 2004. SGS was then re-engaged until 2013 with Bureau Veritas Laboratories in Côte d'Ivoire used from 2013 to 2019. No umpire laboratory was nominated to undertake check assays over this period.

During 2019–2020, samples were delivered to MSA Laboratories in Yamoussoukro. Preparation was via a Boyd crusher-rotary split divider combination, pulverizing the subsample in an LM2 pulverizer and analysis by fire assay on 50 g charges with an AAS finish. From 2020, Allied changed laboratories from MSA to Bureau Veritas (ISO14001) in Abidjan.

Umpire analysis was reinstated from 2019 and samples were air freighted to ALS Global (ISO17025) in Perth.

Each of the laboratories used for sample analysis are independent of Allied.

Allied has maintained QAQC oversight of the laboratories and has not identified any material issues. Database managers review all assay results as they arrive from the laboratories to judge their suitability for addition to the database, and each month, assays received in the prior 30 days are output through Datashed's QAQC Reporter software that crystallizes the laboratories' performance for distribution to the field offices and Allied's Resource Manager in Perth. Data are quarantined until vetted for QAQC performance.

1.5 Mineral processing and metallurgical testing

Seven metallurgical testwork programs have been undertaken since the Bonikro process plant was operational. The results have been used to optimize operating conditions for current and future ores.

During 2014 and 2015, recoveries of 94.5% were being achieved from Bonikro at 2.0 Mt/a and a P_{80} 130 µm grind size. In 2017, the target grind size was increased to 190 µm to increase throughput to 2.5 Mt/a, with recoveries reducing to 87% with Hiré ores being the predominant feed.

Plant performance data was reviewed to assess the achieved recoveries and throughput for comparison with estimated parameters. The key observations are:

- Average throughput of 304 t/hr, equivalent to 2.43 Mt/a
- Grind size (P_{80}) averaged 190 µm with high variability in grind size until May 2021 when cyclone improvements were implemented
- Gold recoveries averaged 89%, with lead nitrate added for Chapelle ore and liquid oxygen supplementing the oxygen plant since November 2021.

1.6 Mineral Resource estimates

Allied undertook additional drilling in 2019 to 2021 to validate the resource models and extend the known Mineral Resources. Grade was estimated into the blocks using ordinary kriging (OK) for all lodes, with the parameters of the search determined by geological/geometrical domain.

Table 1.2 summarizes the Mineral Resource estimates at a 0.5 g/t Au cut-off grade within an $1,800 pit shell based on estimated operational costs and recovery assumptions using depleted open pit surfaces as of 31 December 2022.

Table 1.2 Bonikro Mineral Resource estimate as of 31 December 2022 (100% equity basis)

Area	Measured			Indicated			Total Measured and Indicated			Inferred		
	Mt	Grade (g/t Au)	Au (koz)	Mt	Grade (g/t Au)	Au (koz)	Mt	Grade (g/t Au)	Au (koz)	Mt	Grade (g/t Au)	Au (koz)
Bonikro	1.85	1.54	92	14.11	1.40	635	15.96	1.42	727	2.30	1.28	95
Chapelle	0.00	0.00	0	1.99	1.81	116	1.99	1.81	116	0.94	2.02	61
Akissi-So	0.58	2.19	41	1.43	2.26	104	2.01	2.24	145	0.92	2.24	66
Dougbafla	-	-	-	-	-	-	-	-	-	20.40	1.23	807
Stockpiles	4.78	0.67	104	-	-	-	4.78	0.67	104	-	-	-
Total	**7.21**	**1.02**	**236**	**17.53**	**1.52**	**855**	**24.74**	**1.37**	**1,091**	**24.56**	**1.30**	**1,029**

Notes:

- *Data is reported to significant figures to reflect appropriate precision and may not sum precisely due to rounding*
- *Mineral Resources are inclusive of Mineral Reserves*
- *Mineral Resources are not Mineral Reserves do not have demonstrated economic viability*
- *Mineral Resources are reported at a 0.5 g/t Au cut-off within an $1,800/oz Au optimum pit and depleted to 31 December 2022.*

1.7 Mining operations and Mineral Reserves

The Bonikro, Akissi-So and Chapelle pits are existing operations which are mined using conventional Caterpillar 6020 excavators (200-tonne class) and Caterpillar 777 haul trucks (90-tonne class). The mining operation converted from owner-operated and maintained fleet to contract mining in July 2022.

The open pit operating methodology used is mining on 10 m benches and flitched off in three passes. In some parts of the pit, selective mining is required with flitches reducing to 2.0–2.5 m dependent on the dip of the orebody.

The Mineral Resource block models were re-blocked by Orelogy to account for the geology and estimated dilution and ore loss from mining. Pit optimization software was used to identify the optimal ultimate pit limits and used Measured and Indicated Mineral Resources only.

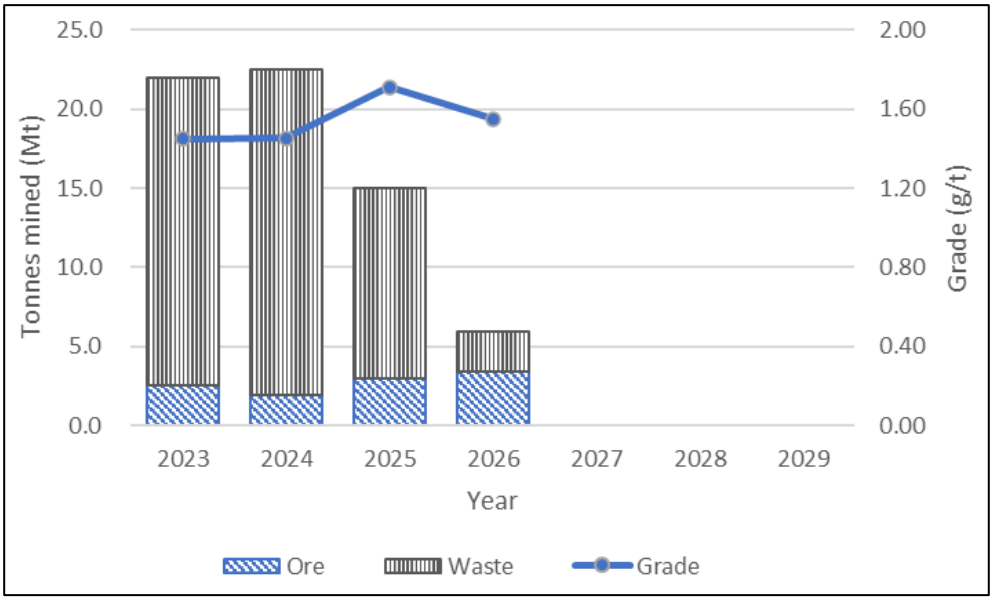
The pit optimization used a gold price of $1,500/oz, a discount factor of 5% and allowed for mining, processing, general and administration (G&A) costs, royalties and refining charges, as well as processing throughput and recoveries for each ore type.

The pit designs involve extending existing pits within stages. Bonikro hosts 94% of the future ounces and is to be developed in three stages to provide earlier access to ore, to a final depth of 350 m. The Akissi-So pit is being extended west. The Chapelle pit has two 'goodbye' cuts based on grade control completed. The Akissi-So and Chapelle pits are constrained on the western boundaries by the ESIA boundary (50 m free dig for oxides), power infrastructure (200 m blasting) and proximity to houses (250 m blasting).

Design pit slopes are based on geotechnical assessments by SRK, Allied and George Orr and Associates as well as historical pit slope behaviour. Haul roads widths are based on Caterpillar 777 trucks with 25 m provided for two-way ramps and 15 m for single-lane ramps.

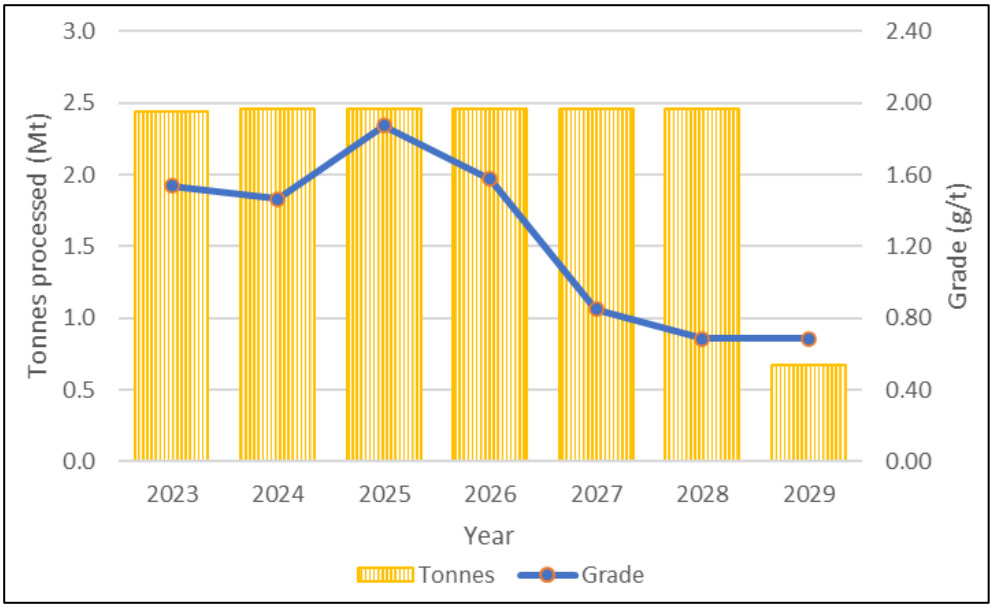
The production schedule is based on mining the Bonikro, Chapelle and Akissi-So pits supported with supplementary feed from the Bonikro low-grade stockpile. The life of mine (LOM) plan schedules a total material movement of 10.9 Mt of ore and 54.5 Mt of waste for a 65.4 Mt total material movement. The average strip ratio (waste tonnes to ore tonnes) is 5.0 over the LOM. Mining continues until Q2 2026, after which the process feed is sourced from low-grade stockpiles until Q2 2029. Overall, the LOM schedule mines about 23–24 Mt/a of rock in 2023–2024, reducing thereafter as sufficient ore is exposed to deliver 2.5 Mt/a of ore to the mill, as shown in Figure 1.1. The processing rate is maintained at 2.5 Mt/a until early 2029, with low-grade stockpiles supplementing open pit ore as shown in Figure 1.2.

Figure 1.1 Bonikro LOM mining schedule



Source: Allied, Bonikro 2023 FS

Figure 1.2 Bonikro LOM processing schedule



Source: Allied, Bonikro 2023 FS

The Proven and Probable Mineral Reserve as of 31 December 2022 is summarized by classification and mine area in Table 1.3.

Table 1.3 Bonikro Mineral Reserves as of 31 December 2022 (100% equity basis)

Area	Proven			Probable			Total		
	Mt	Grade (g/t Au)	Au (koz)	Mt	Grade (g/t Au)	Au (koz)	Mt	Grade (g/t Au)	Au (koz)
Bonikro				10.42	1.53	514	10.42	1.53	514
Akissi-So	0.26	2.00	17	0.22	1.95	14	0.48	1.98	31
Chapelle	0.02	1.10	1				0.02	1.10	1
Stockpiles	4.49	0.69	100				4.49	0.69	100
Total	**4.77**	**0.76**	**117**	**10.64**	**1.54**	**528**	**15.41**	**1.30**	**645**

Notes:

- *Data is reported to significant figures to reflect appropriate precision and may not sum precisely due to rounding*
- *Mineral Resources are reported inclusive of Mineral Reserves.*

The Bonikro Mineral Reserve:

- Reflects that portion of the Mineral Resource which can be economically extracted by open pit methods.
- Considers the modifying factors and other parameters including but not limited to the mining, metallurgical, social, environmental, statutory and financial aspects of the project.
- Contains a Proven Mineral Reserve estimate based on Measured Mineral Resources and the Probable Mineral Reserve is based on Indicated Mineral Resources.
- Includes a weight averaged allowance for mining dilution at 1.0% and ore loss at 3.1%.
- A base gold price of $1,500/oz was used for the pit optimization, with the selected pit shells using values of $1,388 (revenue factor 0.925), $1,440/oz (revenue factor 0.96) and $1,425/oz (revenue factor 0.95) for Bonikro, Akissi-So and Chapelle respectively, depleted to 31 December 2022.
- The cut-off grades used for Mineral Reserve reporting were informed by a $1,500/oz gold price and vary from 0.60 g/t to 0.85 g/t Au for different ore types due to differences in recoveries, costs for ore processing and ore haulage.

The Qualified Person (Mr Earl) is not aware of metallurgical, environmental, permitting, legal, title, taxation, socio-economic, marketing or political risks which would materially impact the estimate of Mineral Reserves.

1.8 Processing and recovery operations

The Bonikro process plant is a conventional carbon-in-leach (CIL) gold plant constructed in 2008 with a nameplate capacity of 2.0 Mt/a. Debottlenecking in 2017 resulted in an upgraded capacity to 2.5 Mt/a.

The Bonikro ore can be classed as free milling at a grind size of P_{80} 190 µm and a high free-gold content supporting the inclusion of gravity recovery within the flowsheet. The flowsheet consists of primary and secondary crushing, single stage semi-autogenous grinding (SAG), gravity recovery, primary leach followed by CIL and pumping of the tailings to the tailings storage facility (TSF). Gravity concentrate is intensively leached in a strong cyanide solution with electrowinning of gold. Loaded carbon is acid washed, eluted and regenerated with gold being electrowon prior to smelting into doré.

1.9 Infrastructure

The Bonikro Mine has been operating since 2008 and has sufficient support infrastructure to continue to operate at the current production level.

Mine infrastructure at Bonikro comprises the main office block, administration offices, security and medical building, process plant and vehicle workshops, storerooms, and assay laboratory.

Support facilities have also been established at Hiré to support the satellite mining operation. A 15 km haul road links Hiré to the Bonikro process plant.

Power is supplied to a substation at Hiré from the national grid via a 90 kV regional powerline from a hydroelectric power station at Taabo Dam, some 23 km to the east of Hiré. The Hiré substation, located adjacent to the Akissi-So Pit, has two outgoing feeders: a 90 kV supply to the Agbaou operation to the south and a 33 kV supply line to the Bonikro process plant running parallel to the Hiré-Bonikro haul road.

The existing TSF is a single cell, valley-fill facility that has been in operation since 2008 and is approximately 1 km from the Bonikro process plant. The TSF is formed by the main embankment on the north side and saddle dams on the east, west and south sides. Tailings are discharged into the TSF by sub-aerial deposition methods, using a combination of spigots at regularly spaced intervals from the north, east and west embankments, forming a supernatant pond at the south embankment. The TSF surface area is approximately 200 ha.

The unlined TSF has predominantly been built using downstream construction techniques. Knight Piésold was appointed Engineer of Record in July 2020. In 2021, Knight Piésold updated the dam break assessment which showed a dam failure consequence category of ‘HIGH C’, based on the Australian National Committee on Large Dams (ANCOLD) Consequence Category. The most recent annual audit was conducted in November 2022 by Knight Piésold, with no material items identified.

A review of tailings geochemistry from the Bonikro TSF was undertaken in 2016 by Graeme Campbell and Associates and confirmed that the tailings were non-acid forming. There were some elevations of molybdenum and fluoride in the decant waters, but these elevations have not been reflected in seepage water which is intercepted in trenches and pumped back to the TSF.

The Bonikro eastern waste dump will be expanded to the west and cover two of the existing water storage dams. A new dam will be constructed to divert excess water into an adjacent drainage system.

Waste geochemical testwork shows low risk of acid formation with the Bonikro waste potentially releasing molybdenum above guideline levels albeit that existing monitoring data shows that the risk is expected to be low.

1.10 Permitting and compliance

Permits are in place for the existing operation.

Key environmental and social management plans are implemented on site, which includes environmental and social management (including monitoring), waste management, local development (developed in collaboration with local development committees, or CDLMs), mine closure, emergency response, and stakeholder engagement. These plans are supported by various procedures which form part of the Health, Safety, Environment and Community management system.

The Company has established processes for land access or acquisition, and associated compensation. Two recent expansion projects required permanent land acquisition and compensation in 2022. Temporary access for exploration activities is addressed as and when required.

Company contributions to the CDLM are set by the respective Mining Conventions. In 2022, contributions at Bonikro and Hiré were $0.84 million. In addition to the CDLM contribution, Allied makes voluntary investments in kind and cash to support other socio-economic development projects. In 2022, total voluntary contributions across both Bonikro and Hiré equated to $0.19 million.

1.11 Costs and economic analysis

The capital cost estimate covers the activities required to enable the Bonikro operation to continue at a production rate of 2.5 Mt/a until the Mineral Reserves are depleted.

Total LOM capital costs for the seven-year mine life are estimated at $61 million (at ±15% accuracy), as summarized in Table 1.4. The main components of the capital costs cover $16 million for TSF raises, $15 million for general sustaining capital provisions and $27.7 million for mine closure and redundancy provisions. Exploration costs are excluded from the capital cost as they are to identify future growth and are not required to support the current Mineral Reserves and Mineral Resources.

Table 1.4 Bonikro LOM capital cost estimate

Capital item	Total ($ M)
TSF raise	16.00
External relations	0.50
Sustaining capital	15.00
Mining – PB5 dewatering	2.00
Closure and redundancy	27.70
Total	**61.20**

Source: Allied, Bonikro 2023 FS

Total operating costs for the seven-year mine life is estimated at $658 million (at ±15% accuracy), as summarized in Table 1.5.

Table 1.5 Bonikro LOM operating cost estimate

Operating cost item	Total ($ M)
Mining	275.47
Processing	180.41
G&A	107.67
Royalties	91.30
Selling	2.66
Total	**657.51**

Source: Allied, Bonikro 2023 FS

Mining costs represent 42% of the operating costs and are based on the existing mining contract. Load and haul and drill and blast costs were calculated for the range of materials encountered by bench. Mining costs at $4.21/t rock are relatively high due to the deeper mining stages of the Bonikro pit.

Processing costs represent 27% of the operating costs, with fixed costs at $13.4 million per annum and average variable costs at $5.36/t. At the target throughput of 2.5 Mt/a, the processing costs are estimated at $11.70/t, as compared to 2019 to 2022 costs which averaged $10.50/t.

The LOM G&A cost estimates are included at $17.0 million per annum based on historical performance, forecast manning, and includes regional G&A but excludes corporate allocations.

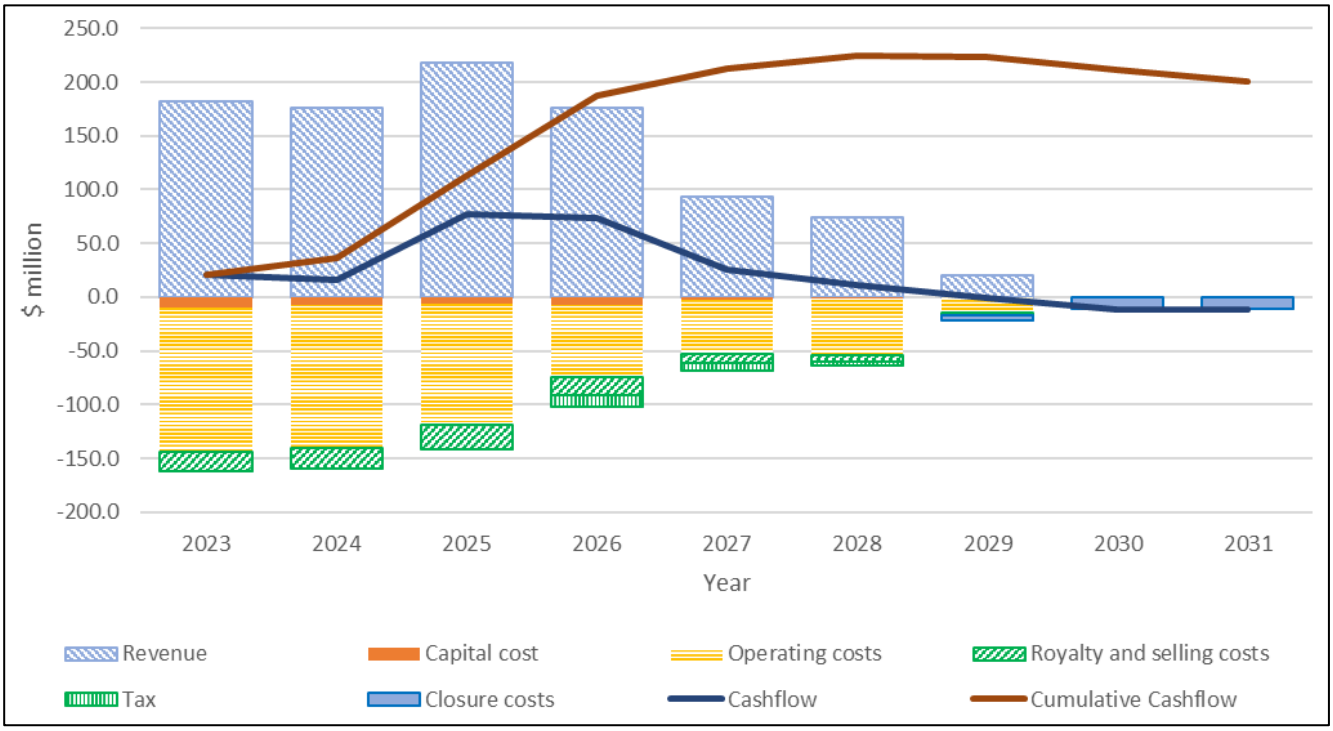
Royalty costs represent 14% of the operating costs based on existing agreements comprising:

- Variable Government royalty of 3.0% to 6.0% (dependent on gold price)
- Community development royalty of 0.5%
- Newcrest West Africa Holdings Bonikro royalty of 4.5%
- Bonikro Stream of 6% at $400/oz reducing to 3.5% at $400/oz in 2026
- Hiré royalty of 1.0%.

Selling costs are estimated at $4.50/oz based on current contracts.

The economic evaluation of the Bonikro Mineral Reserves shows a post-tax free cashflow for the project estimated at $200 million or $178 million on a net present value (NPV) basis using a 5% (real) discount rate ($NPV_{5\%}$) as shown in Figure 1.3. Consensus gold price estimates were used to 2025 with a flat price of $1,568/oz from 2026 onwards.

Figure 1.3 Bonikro annual cashflow



Source: Allied, Bonikro 2023 FS

Sensitivity of the project was tested to key value drivers; in particular, gold price assumptions, recovery, capital costs, processing costs and mining costs. As expected, gold price and recovery represent the most significant drivers with a ±$80/oz gold price or ±5% recovery resulting in a ±$25 million change to $NPV_{5\%}$.

1.12 Other relevant data and information

Drilling is progressing at the Dougbafla prospect, adjacent to the town of Oumé, which is 15 km northwest of the Bonikro process plant. A scoping study was carried out in Q1 2023 for the Dougbafla West prospect which showed economic potential for the 4.1 Mt Inferred Mineral Resource at 1.3 g/t for 178 koz of contained gold.

Preliminary capital costs were estimated at $31.5 million including $10.0 million for drilling, $8.0 million for a haul road, $2.6 million for permitting, and a $5.0 million contingency.

Based on the scoping study, project development activities are justified for targeted mining and processing to possibly commence as soon as 2025.

Two high strip ratio Akissi-So pit stages 23 (hangingwall down dip) and 24 (southwest) have been excluded from the Mineral Reserves pending confirmatory infill drilling.

An underground conceptual study was carried out in 2020 for Akissi-So which showed economic potential for the 2.9 Mt Inferred Mineral Resource at 3.0 g/t for 280 koz of contained gold. About 10,000 m of drilling is required to increase the confidence levels of the potential underground inventory which currently comprises 76% Inferred Mineral Resource. The Akissi-So underground development is not currently part of Allied's development plans.

The Dougbafla West scoping study and Akissi-So underground conceptual studies are preliminary in nature and include Inferred Mineral Resources that are considered too speculative geologically to have economic considerations applied that would enable them to be categorized as Mineral Reserves, and there is no certainty that the preliminary economic assessment will be realized.

1.13 Conclusions and recommendations

Production commenced at Bonikro in 2008 with over 1.4 Moz produced to date. Allied has operated Bonikro since May 2019. The Bonikro licence comprises the Bonikro open pit, processing plant and infrastructure and the Hiré licence contains the Akissi-So and Chapelle open pits and the Agbalé prospect.

This Technical Report summarizes the LOM plan from 1 January 2023 comprising:

- An overall project life based on Mineral Reserves of seven years at 2.5 Mt/a to produce 591 koz gold. The Bonikro open pit contains about 80% of the LOM gold production.
- Extensions of the existing open pits using the current mining contractor.
- Mining costs at $4.21/t rock based on contracted rates.
- Capital costs estimated at $61.0 million inclusive of TSF raises ($16.0 million), $15.0 million for general sustaining capital provisions, and $27.7 million for mine closure and redundancy provisions.
- Economic analysis shows a post-tax project $NPV_{5\%}$ of $177 million with all-in sustaining cost (AISC) of $1,170 /oz over the LOM.

Further drilling and assessment of Dougbafla is warranted with a view to bring this area into production in 2025. Project development costs for Dougbafla are estimated at $31.5 million, including $10.0 million for drilling.

2 INTRODUCTION

This Technical Report was prepared for Allied Gold Corp (Allied) and Mondavi Ventures Ltd (to be renamed Allied Gold Corporation) (Mondavi) in accordance with the Canadian Securities Administrator's National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101). The Bonikro Gold Project (Bonikro or the Property) is an operating mine located in the Gôh-Djiboua District, Côte d'Ivoire, west Africa.

Upon completion of the reverse takeover (RTO), Allied will be a Canadian-based emerging senior gold producer with a portfolio of three operating gold mines, a significant development project and exploration properties throughout Africa, principally Mali, Côte d'Ivoire and Ethiopia.

This Technical Report is to support the disclosure of Exploration Results, Mineral Resources and Mineral Reserves for Bonikro, including the results of the 2023 feasibility study completed by Allied on the Property, and was authored by Messrs. Allan Earl, Michael Andrew, Gordon Cunningham and Peter Theron of Snowden Optiro, a business unit of Datamine Australia Pty Ltd (Snowden Optiro).

All of the Qualified Persons are eligible members in good standing of a recognized professional organization (RPO) within the mining industry and have at least five years of relevant experience in the type of mineralization and type of deposit under consideration and in the specific type of activity that each Qualified Person is undertaking as disclosed in Table 2.1 at the time this Technical Report was prepared.

Table 2.1 Responsibilities of each Qualified Person

Qualified Person	Employer	Qualifications and affiliation	Details of site inspection	Responsibility
Mr Allan Earl	Snowden Optiro	*FAusIMM, WASM*	3–4 May 2022	Project management and Snowden Optiro's Qualified Person responsible for this report. Items 1 to 6, 15, 16, 19, 21.1.4, 21.2.1, 21.2.3, 22 to 26.
Mr Michael Andrew	Snowden Optiro	*BSc. (Geology), Grad.Dip. (Geostatistics), FAusIMM*		Review of geology and Mineral Resources. Items 7 to 12 and 14.
Mr Gordon Cunningham	Snowden Optiro	*BEng. (Chemical), Pr.Eng, FSAIMM*		Review of metallurgy, processing, costs, and infrastructure. Items 13, 17, 18.3 - 5, 21.1.2 and 21.2.2.
Mr Peter Theron	Snowden Optiro	*Beng Civil, Pr.Eng. (ECSA), GDE (Hons), MSAIMM*		Review of environmental, permitting, TSF, waste dumps, water, and closure costs. Items 18.1, 18.2, 20, 21.1.1 and 21.1.3.

Mr Earl visited the site on 3 to 4 May 2022. The site visit included inspection of the historical samples stored in the core shed, geology, drilling and associated procedures, mining and grade control practices, process plant and infrastructure.

The information, conclusions, opinions and estimates contained in this Technical Report are based on the following parameters:

- Information made available to the Qualified Persons by Allied as at the effective date of this Technical Report.
- Assumptions, conditions and qualifications as set forth in this Technical Report.

The Qualified Persons have reviewed such information to verify it using their professional judgement and have no reasons to doubt its reliability and have determined it to be adequate for the purposes of this Technical Report. Except as specified below, the authors do not disclaim any responsibility for the information, conclusions and estimates contained in this Technical Report.

The Qualified Persons of this Technical Report reviewed information and documents provided by Allied via a virtual data room. The primary information source was the 'Bonikro Feasibility Study Report' and appendices (Bonikro 2023 FS), with an effective date of 31 December 2022, which included internal company reports, technical reports, diagrams and maps, spreadsheets and correspondence prepared by Allied's external consultants.

The Bonikro Mineral Resources and Mineral Reserves were initially classified using the 2012 Edition of the Australasian Joint Ore Reserves Committee Code (JORC Code, 2012). The confidence categories assigned under the JORC Code (2012) were reconciled to the confidence categories in the Canadian Institute of Mining and Metallurgy (CIM) Definition Standards for Mineral Resources and Mineral Reserves (the 2014 CIM Definition Standards). As the confidence category definitions are the same, no modifications to the confidence categories were required. Mineral Resources and Mineral Reserves in this Technical Report are reported in accordance with the 2014 CIM Definition Standards.

Further information was received from the Allied representatives listed in Table 2.2 via teleconference and email correspondence in response to queries submitted by Snowden Optiro.

Table 2.2 Allied information sources

Name	Position
Mr Matthew McInnes	Senior Vice President, Studies
Ms Neala Gillespie	Senior Vice President, HSE
Mr John Cooke	Vice President, Resources
Mr Jonathon Yelland	Senior Vice President, Mining
Ms Sarah Ross	Chief Legal, Operations
Mr Jordan Baechler	Senior Vice President, Corporate Finance
Mr Phillip Schiemer	Resource Manager
Ms Louise Westgate	EIA Manager

The Qualified Persons listed in Table 2.1 are responsible for this Technical Report and declare that they have taken all reasonable care to ensure that the information contained in this report is, to the best of their knowledge, in accordance with the facts and contains no material omissions.

In preparing this report, the Qualified Persons have extensively relied on information collated by other parties. Each of the Qualified Persons has critically examined this information, made their own enquiries, and applied their general mineral industry competence to conclude that the information presented in this Technical Report complies with the definitions and guidelines of the 2014 CIM Definition Standards.

Each of the Qualified Persons believes that their opinions must be considered as a whole, and that selection of portions of the analysis or factors considered by them, without considering all factors and analyses together, could create a misleading view of the process underlying the opinions presented in this Technical Report. The preparation of a Technical Report is a complex process and does not lend itself to partial analysis or summary.

Except for the purposes legislated under applicable securities laws, any use of this Technical Report by any third party is at that party's sole risk.

A draft copy of this Technical Report was provided to Allied for review on omission and factual accuracy. The Qualified Persons who have authored this Technical Report do not disclaim responsibility for the contents of this report.

The effective date of this Technical Report is 5 July 2023.

As at the effective date of this Technical Report, none of the Qualified Persons had an association with Allied or its individual employees, or any interest in the securities of Allied or any other interests that could reasonably be regarded as capable of affecting their ability to give an independent unbiased opinion in relation to Allied's assets.

Snowden Optiro will be paid a fee for the preparation by its Qualified Persons of this Technical Report based on a standard schedule of rates for professional services, plus any expenses incurred. This fee is not contingent on the outcome of the Technical Report, and neither Snowden Optiro nor the Qualified Persons will receive no other benefit for the preparation of this report.

Unless otherwise specified, all units of currency are in United States Dollars ($). All measurements are metric except for troy ounces (oz).

3 RELIANCE ON OTHER EXPERTS

The Qualified Persons have not performed an independent verification of the land title and mineral tenure information, as summarized in Item 4 of this Technical Report, nor have they verified the legality of any underlying agreement(s) that may exist concerning the permits or other agreement(s) between third parties, as summarized in Item 4 of this Technical Report. The Qualified Persons have relied on information provided by the legal department of Allied and disclosed in a title opinion by Hoegah, Ette and Associates dated 7 June 2023 in this regard. The mineral tenure information was also confirmed on the Côte d'Ivoire Mining Cadastre Portal of the Ministry of Mines and Geology.

The Qualified Persons have relied on the Allied personnel listed in Table 2.2 for guidance on applicable legal, political, environmental and tax matters for the Bonikro mining and processing operation, mine and country security, and other risks.

This Technical Report includes certain non-GAAP financial measures which the authors believe, together with measures determined in accordance with International Financial Reporting Standards (IFRS), provide investors with an improved ability to evaluate the underlying performance of Allied. Non-GAAP financial measures do not have any standardized meaning prescribed under IFRS, and therefore they may not be comparable to similar measures employed by other companies. The data is intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS. The non-GAAP financial measure included in this Technical Report include free cashflows and all-in sustaining costs (AISC).

4 PROPERTY DESCRIPTION AND LOCATION

Bonikro is an open pit gold mine, development and exploration property which has been in production since 2008 and has been operated by Allied since it acquired the Property in 2019. The Property comprises the Bonikro exploitation permit, the Hiré exploitation permit and the Dougbafla exploration permits.

The Bonikro permit (PE32) consists of the Bonikro open pit, process plant and additional infrastructure while the Hiré permit (PE44) contains the Akissi-So, Chapelle and Assondji-So open pits as well as the recently drilled Agbalé prospect. The Hiré permit is approximately 15 km to the southeast of the Bonikro permit.

The Dougbafla prospect lies to the 15 km north of the Bonikro process plant with the surrounding exploration permits (PR843 and PR847) contiguous with the Bonikro and Hiré exploitation permits.

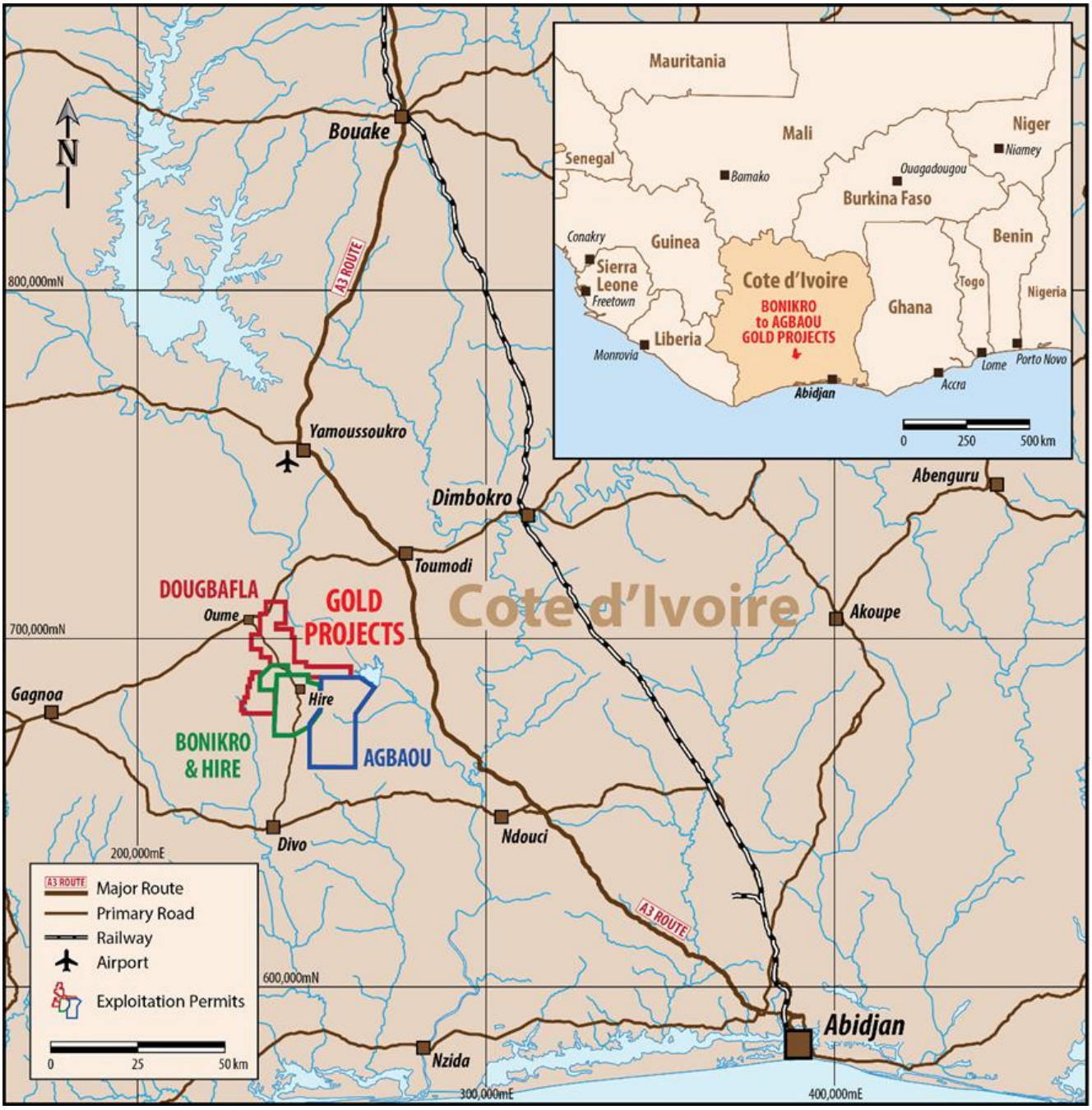
In December 2022, Allied completed the Bonikro 2023 FS to support the life of mine (LOM) plan producing 591 koz of gold using the 2.5 Mt/a carbon-in-leach (CIL) processing facility located at Bonikro over a seven-year mine life.

4.1 Location and area

Bonikro is located 100 km by road south of the capital Yamoussoukro, in the Gôh-Djiboua District of Côte d'Ivoire in West Africa (Figure 4.1). The commercial centre Abidjan lies on the coast 220 km by road to the southeast, a journey of four hours. Most of the highway is excellent, as it is the road link to the capital at Yamoussoukro. From Divo to Hiré, the secondary road has been re-sealed and upgraded.

Bonikro is approximately 40 km north of the regional capital Divo at approximately 225,000 mE 680,000 mN. The area of the Property is 232.62 km^2.

Figure 4.1 Bonikro-Hiré-Dougbafla Property location



Source: Bonikro 2023 FS

4.2 Type of mineral tenure

4.2.1 Legal framework

Mineral resources are vested in the State and the rights to exploration and mining in Côte d'Ivoire are regulated by the Mining Code which was established through the adoption of Law No. 2014-138 dated 24 March 2014.

The permit regime applicable to the exploration and exploitation of most minerals, as regulated by the Ministry of Mines, Petroleum Resources and Energy, includes:

- Exploration Permits (Permis de Recherche or PR): Exclusive right to explore within an area of up to 400 km^2 for a maximum of four years, renewable twice for successive periods of three years. After each renewal, the area must be reduced by 25%. The permit is granted by the Minister of Industry and Mines.
- Exploitation Permits (Permis d'Exploitation or PE): Exclusive right to exploit a deposit for a maximum duration of 20 years and renewable for successive periods of up to 10 years. The permit is granted by Presidential decree following submission of a FS.
- Furthermore:
  - A Mining Convention must be signed between the State and the PE holder, with the main purpose to stabilize the tax and customs regime applicable to the mining operations. The Mining Convention has an initial duration of 12 years, renewable for successive periods of a maximum of 10 years.
  - The State is allowed a 10% free-carry and non-dilutable participation in the share capital of the operating company. Any additional participation of the State in the company's operating share capital (which cannot exceed 15% of the share capital) may be negotiated at market conditions.
  - Mining activities also fall within the scope of the Environment Code, which require submission of an Environmental and Social Impact Assessment (ESIA) and Closure and Rehabilitation Plan. Upon commencement of mining operations, an escrow account for environmental rehabilitation must be opened with a first-ranked financial institution in Côte d'Ivoire, into which the permit holder must transfer the costs related to the rehabilitation plan as agreed with the Government in the Mining Convention.
  - A Community Development Plan must be formulated jointly with local communities and administrative authorities to increase their participation in the mining sector; a development fund must also be constituted and credited annually for the benefit of villages identified as 'affected localities' by the ESIA.
  - The Mining Code guarantees a right to a fair indemnity for the land's occupants and legal owners. Such indemnity will be paid following the signing of a memorandum of understanding by the mining/exploration companies, the occupants, and legal owners.

Obligations to retain tenure include:

- Paying a quarterly ad valorem tax in accordance with Mining Code
- Performing community development commitments
- Complying with environmental regulations and environmental rehabilitation.

4.2.2 Exploitation permits

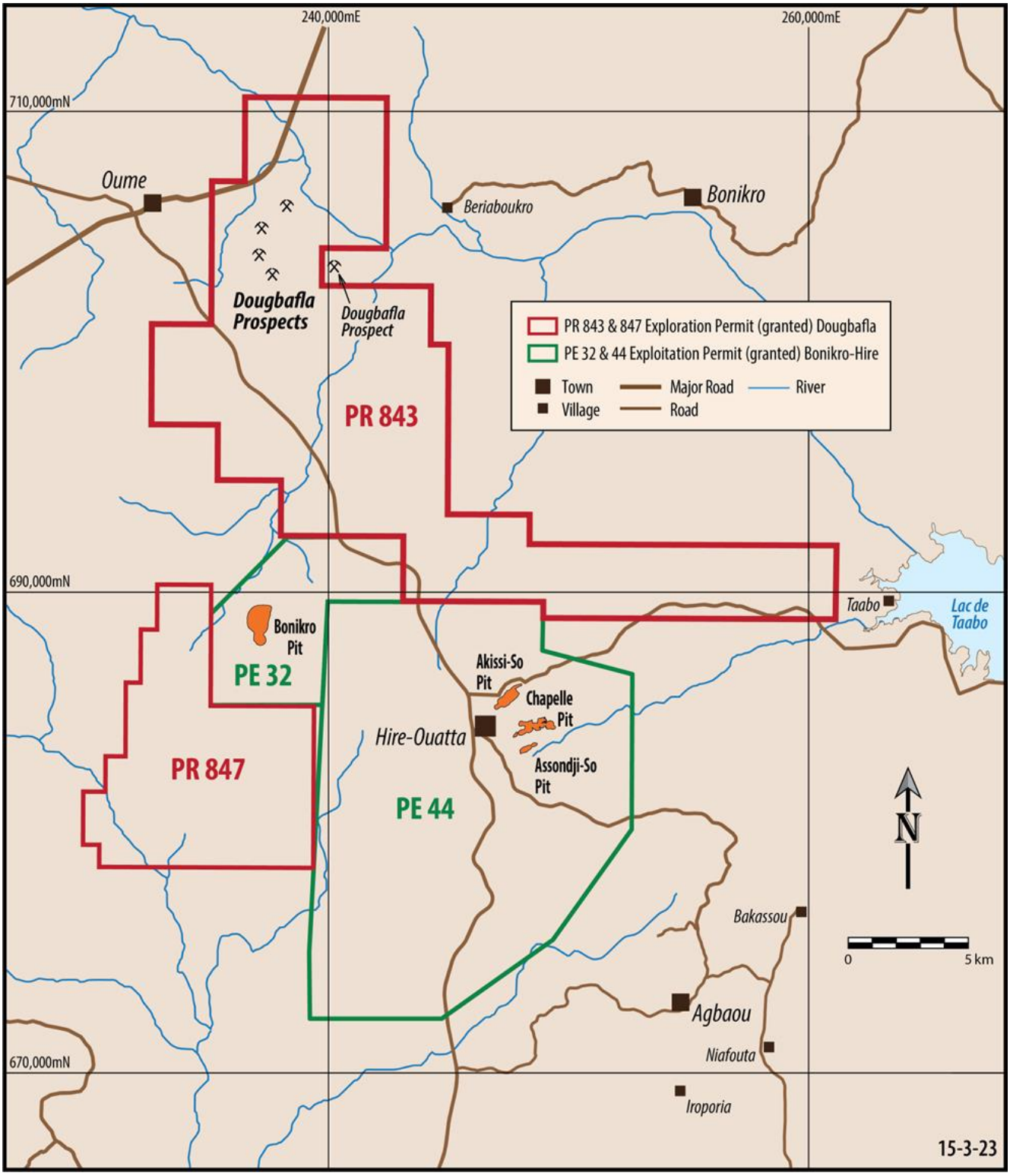
The mine areas are held under two exploitation permits. The Bonikro permit (PE32) and the Hiré permit (PE44) are shown in Figure 4.2. The exploitation permits include all infrastructure in the immediate vicinity of the mine sites, including the open pits, waste rock dumps, tailings storage facilities (TSFs), and infrastructure.

PE32 covers an area of 37.12 km^2 and is held by Bonikro Gold Mine SA (BGM), formerly known as LGL Mines CI SA, as transferred from Equigold Côte d'Ivoire SA. The permit was granted on 17 January 2007 and is valid through to 16 January 2025.

PE44 covers an area of 195.5 km^2 and is held by Hiré Gold Mine SA (HGM), formerly known as Newcrest Hiré CI SA, as transferred from LGL Resources Côte d'Ivoire SA. The permit was granted on 19 December 2013 and is valid through to 18 December 2029.

BGM and HGM are both Côte d'Ivoire registered public companies (Société Anonyme or SA).

Figure 4.2 Bonikro-Hiré-Dougbafla tenure



Source: Bonikro 2023 FS

4.2.3 Exploration permits

In addition to the exploitation permits, there are two exploration permits as shown on Figure 4.2:

- PR843 (Dougbafla North) encompasses an area of 207.28 km^2. The permit was granted on 24 July 2019 and is valid until 23 July 2023. The renewal process is underway. Allied submitted the renewal application ahead of requirements, complied with the minimum expenditure requirements and is confident of timely renewal. According to the Mining Code, the Dougbafla North licence shall be automatically extended, in the event a decision is not taken by the Government.
- PR847 (Dougbafla South) encompasses an area of 72.93 km^2 and was granted on 15 January 2020. The permit is valid until 14 January 2024. The renewal documents are required to be submitted three months ahead of expiry.

Both these permits are held by Afrique Gold Exploration SARL, an Allied exploration company registered in Côte d'Ivoire.

4.3 Issuer's interest

The ownership structures of BGM and HGM are summarized in Table 4.1. The Bonikro and Hiré gold operations are 89.89% and 89.80% owned by Allied, respectively. Afrique Gold Exploration SARL is a wholly owned subsidiary of BGM.

Table 4.1 BGM and HGM ownership structure

Shareholder	No. of shares	Equity interest (%)	Comments
BGM			
Afrique Gold (Mauritius)	35,956	89.89	Afrique Gold Mauritius is 100%-owned by Allied through various subsidiary companies
State of Côte d'Ivoire	4,000	10.00	Free carried interest in favour of the Government in accordance with the 2014 Mining Code and BGM Mining Convention
Local minority shareholder	44	0.11	
HGM			
Hiré Holdings Pte Ltd	53,880	89.80	Hiré Holdings Pte Ltd is 100%-owned by Allied through various subsidiary companies
State of Côte d'Ivoire	6,000	10.00	Free carried interest in favour of the Government in accordance with the 2014 Mining Code and HGM Mining Convention
Local minority shareholder	120	0.20	

Source: Bonikro 2023 FS

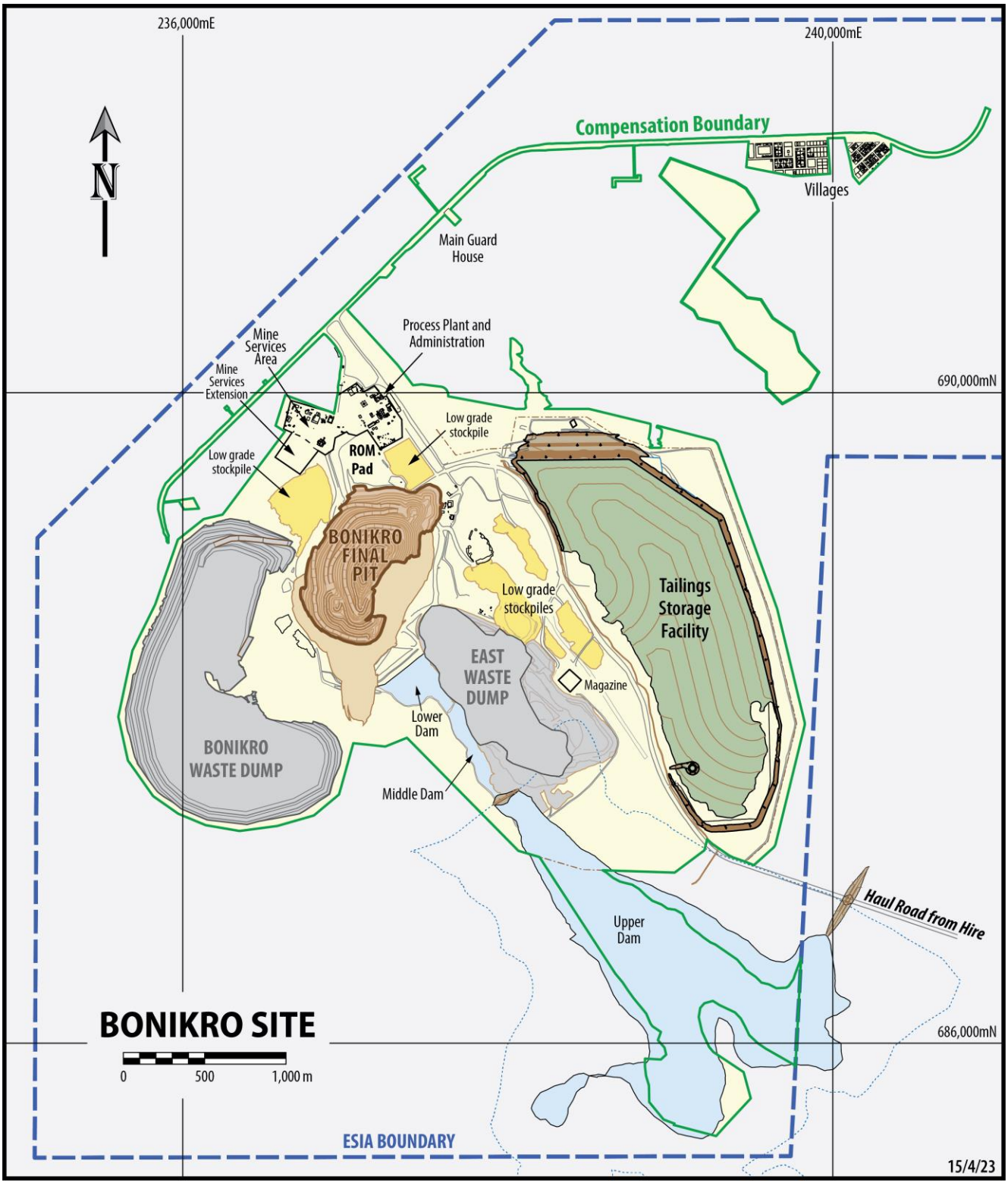
4.4 Surface rights

Land in Côte d'Ivoire is the property of the State. However, ownership is divided into two broad categories; land belonging to individuals holding legal or traditional title, and land declared as belonging to the State. Management of land in the private domain of the State falls under the Minister of Agriculture in rural areas and the Minister of Building and Town Planning in urban areas.

In rural areas, each village has a customary or traditional form of land tenure by which permanent use rights descend from the original inhabitants of the area. The land is managed as a collective resource for future generations by the village chief. In relation to the Property, there are two traditional landowner villages. The Bonikro mine site belongs to Gogobro village and the Hiré mine site to Bouakako village. Compensation is paid to land right holders periodically for land taken up by mining in terms of a compensation agreement which defines the boundaries of an agreed area (the Compensation Area).

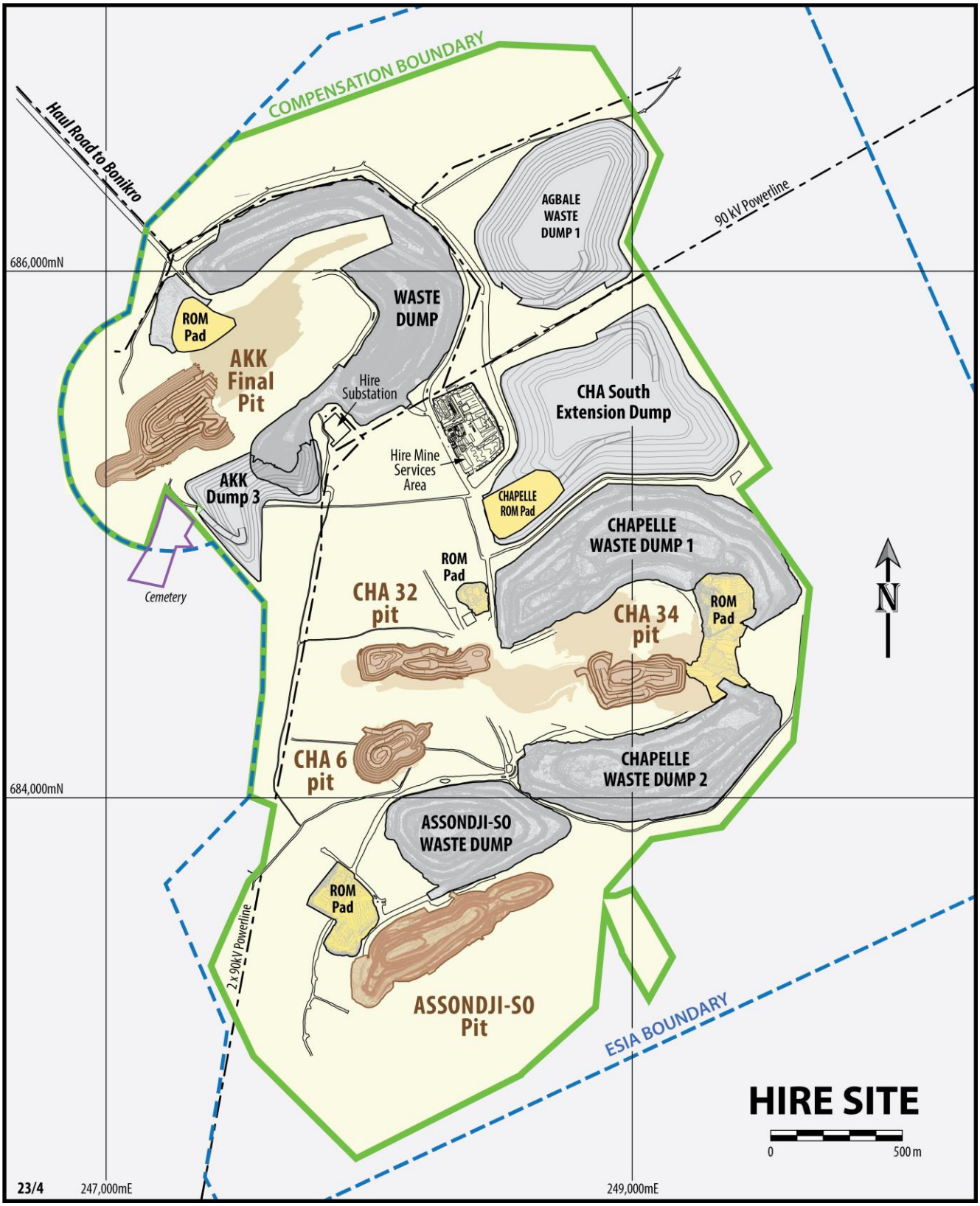
The surface rights have been secured for the required infrastructure as shown as the compensated area in Figure 4.3 and Figure 4.4. The Qualified Person (Mr Earl) is not aware of any other significant factors and risks that may affect access, title, or the right or ability to perform mining and exploration work on the property.

Figure 4.3 Bonikro layout



Source: Bonikro 2023 FS

Figure 4.4 Hiré layout



Source: Bonikro 2023 FS

4.5 Royalties, back-in rights, payments, agreements, encumbrances

4.5.1 Economic framework

The HGM Mining Convention was signed on 7 April 2016 for an initial term of 12 years. The validity of HGM Mining Convention runs until 7 April 2028. The BGM Mining Convention, initially signed on 3 May 2007 under the 1995 Mining Code, was renewed, and revised on 22 November 2017, in accordance with the provisions of the 192 of the Mining Code and is valid until 3 May 2027. Both BGM and HGM Mining Conventions are governed by the provisions of the 2014 Mining Code.

The BGM and HGM Mining Conventions grant fiscal and customs stability and both companies will not be penalized by any change in legislation or regulations that would result in a change to the financial parameters applicable to their respective mining operations. In accordance with the Mining Code and the respective Mining Conventions, BGM and HGM benefit from a number of provisions including exemptions for value-added tax (VAT) and customs duties on fuel and reagents, and concessions on dividend withholding tax.

BGM and HGM also benefited from a five-year corporate tax holiday which have expired. The current corporate tax rate payable is 25%.

4.5.2 Royalties

The holders of mining titles are required to pay annual surface royalties per square kilometre as per Order No. 2014-148 and ratified by Law No. 2014-845 dated 26 March 2014 and 22 December 2014, respectively. Surface royalties vary depending on the project phase (i.e. prospecting, exploration or exploitation) and range from 1,000 CFA Franc per square kilometre to 250,000 CFA Franc per square kilometre. Bonikro and Hiré are in the exploitation phase and hence an annual surface royalty of 250,000 CFA Franc (approximately $470) per square kilometre is payable.

The Government revenue royalty or ad valorem tax percentage in Côte d'Ivoire is based on a sliding scale depending on the gold price (Table 4.2) and is applied on the net revenue from mine sales less deductions for transport costs (free on board) and refining costs.

Table 4.2 Government gold royalty rates

Gold price from ($)	Gold price to ($)	Royalty payable (%)
0	1,000	3.0
1,001	1,300	3.5
1,301	1,600	4.0
1,601	2,000	5.0
2,001	+	6.0

Source: Bonikro 2023 FS

A community royalty of 0.5% of the annual revenue from mining sales is also applicable.

In addition to the Government and community royalties, a 1% gross smelter return royalty is payable to Gold Mining Consulting International Corporation (GMC) with respect to the Hiré exploitation permit (PE44) for any product recovered in excess of 375,000 ounces of gold. This threshold has been reached and HGM is paying the royalty.

A net smelter return royalty on up to 560,000 oz of gold production, as detailed in Table 4.3, is also payable to Newcrest West Africa Holdings Pty Ltd in relation to a specific area which covers the majority of the Bonikro open pit.

Table 4.3 Newcrest West Africa Holdings gold royalty rates

Gold price from (US$)	Gold price to (US$)	Net smelter return (%)
0	1,250	0.0
1,251	1,299	2.5
1,300	1,349	3.0
1,350	1,399	3.5
1,400	1,449	4.0
1,450	+	4.5

Source: Bonikro 2023 FS

4.5.3 Gold stream

On 7 October 2019, Afrique Gold (Mauritius), Newcrest Hiré Holdings Pte Ltd, BGM, HGM, and Afrique Gold Exploration SARL (collectively as sellers) entered into a perpetual gold streaming agreement (the Bonikro Stream) to sell 6% of the gold produced from the Bonikro and Hiré exploitation permits (including any future production from the Dougbafla permit area) until such time as the total gold produced from the Bonikro and Hiré project equals 650,000 oz, after which the gold interest will reduce to 3.5% until such time as the total gold produced from the Bonikro and Hiré project equals 1,300,000 oz after which the gold interest will reduce to 2%. The gold will be purchased at the lower of the prevailing market price or $400/oz. It is noted that as of 31 December 2022, 292,688 oz had been produced while the stream agreement was in place. On 15 August 2022, the rights of the purchaser under such gold streaming agreement were acquired by Sandstorm Gold Ltd.

4.5.4 Offtakes

On 7 October 2019, as most recently novated on 11 January 2022, the sellers entered into a gold offtake agreement, pursuant to which the sellers must deliver 50% of the gold produced from Bonikro after deducting the applicable percentage of gold required to be delivered under the Bonikro Stream, subject to certain exceptions. Bonikro is paid for the gold based on the LBMA PM Fix Price applicable during a quotational period. The difference between the realized price and the market price on the date the gold is delivered will vary depending on the LBMA price movement, with an average expected variance of 1% based on historical volatility trends.

4.6 Environmental liabilities

Allied and its independent consultant, Kewan Bond Pty Ltd, have updated the 2022 year-end annual rehabilitation obligation based on the current mine closure plan which indicate that the current LOM closure provision is $22.69 million.

Refer to Item 20.6 for further information.

4.7 Permits

Permits are in place for the existing operation. Refer to Item 20.1 for details of the relevant permits.

4.8 Other significant factors and risks

The Qualified Person (Mr Earl) is not aware of any significant factors and risks that may affect access, title or the right or ability to perform work on the Property. It is noted that the Dougbafla North exploration permit is being renewed at the time of reporting; however, this does not impact the Mineral Reserves.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE

5.1 Topography, elevation, and vegetation

The general topography of Côte d'Ivoire is undulating and vegetation in the south of the country consists of dense forest. As for most of this part of west Africa, laterite and saprolite are well developed with outcrops of fresh rock virtually non-existent. Vegetation cover is characterized by a mixture of natural rainforest, savanna and cultivated areas.

Local land use is dominated by subsistence farming with agriculture focused on perennial food crops, particularly coffee and cacao. Oil palm, rubber and teak were recently introduced and have contributed to areas of native vegetation being clear felled. Food and vegetable crops include plantain, cassava, rice, yams, corn, taro, potato, eggplant, okra, peanuts, chilli, and fruits. Cattle and goats are grazed along roadsides.

5.2 Access, proximity to population centre and transport

Bonikro is situated 40 km north of Divo, the regional capital, 15 km west of Hiré township and 21 km northwest of Allied's Agbaou process plant (Figure 4.1). The port city of Abidjan is approximately 200 km to the southeast. Most of the access is excellent with the road between Divo and Hiré re-sealed and upgraded.

Commercial airports are located at Yamoussoukro and Abidjan with a light plane airport at Taabo, 20 km west of Hiré. A 660 km railway line connecting Abidjan with Ouagadougou, the capital of Burkina Faso, lies 90 km east of the Property.

The majority of personnel are retained from the local community with senior Ivorian staff typically travelling from Abidjan and expatriate staff flying in and out of Abidjan.

5.3 Climate and length of operating season

The site has a subequatorial climate characterized by four seasons: a long rainy season from April to July; a short dry season from August to September, a short rainy season from October to November, and a long dry season from December to March. The annual average rainfall is 1,200 mm, with annual totals between 900 mm and 1,600 mm. Bonikro operates year-round with limited disruption to open pit operations during short-term high rainfall events. Average annual temperatures range from 24°C to 28°C, with slightly lower temperatures recorded during the wet season. Average annual relative humidity is 82%, with average monthly humidity fluctuating between 70% and 90%.

5.4 Infrastructure

The Bonikro process plant has been operating since October 2008 followed by mining commencement at the Hiré satellite pits in December 2014. Consequently, the mine has sufficient support infrastructure to continue to operate at the current production level.

Mine infrastructure at Bonikro comprises the main office block, administration offices, security and medical building, plant and vehicle workshops, storerooms, and an assay laboratory. Support facilities have also been established at Hiré to support the satellite mining operation. A 15 km haul road links Hiré to the Bonikro process plant.

Power is supplied to a substation at Hiré from the national grid via a 90 kV regional powerline from a hydroelectric power station at Taabo Dam, some 23 km to the east of Hiré. This substation, located adjacent to the Akissi-So pit, has two outgoing feeders, a 90 kV supply to the Agbaou operation to the south and a 33 kV supply line to the Bonikro process plant, running parallel to the Hiré-Bonikro haul road.

Refer to Item 18 for discussion on other infrastructure, including TSF and waste rock dumps.

6 HISTORY

Gold mineralization in the general area was historically exploited by artisanal miners which attracted the attention of the French colonists. From 1917 to 1947, licences were held by several entities that reportedly produced ~30,000 oz of gold.

A significant amount of exploration was intermittently conducted in the greater Hiré and Bonikro area by French, British and Canadian interests since the 1970s and by BHP Minerals from 1988 to 1994. In August 1996, Equigold NL (Equigold) secured tenure over the area and carried out a series of soil geochemistry and drilling programs which outlined numerous gold targets, most notably at Bonikro. Tenure was subsequently secured over Hiré in 1999.

In July 2006, Equigold announced completion of a feasibility study on Bonikro. Construction of the mine commenced in May 2007 with first gold poured on 6 October 2008 following commissioning of the 2 Mt/a processing facility. Detailed drilling was also carried out over the Hiré and Dougbafla areas between 2005 and 2007.

Equigold merged with Lihir Gold Ltd (Lihir) in June 2008. Further drilling was completed at Hiré in 2009 and 2010 which formed part of a feasibility study into the development of the satellite gold deposits. Follow-up drilling was also successful in outlining a zone of low-grade bedrock gold mineralization at Dougbafla East, ~15 km north of the Bonikro deposit (Figure 4.2). Lihir was acquired by Newcrest Mining Ltd (Newcrest) in September 2010.

Debottlenecking and minor upgrades progressively increased the plant capacity to 2.5 Mt/a. Mine production at Hiré commenced in 2015 following completion of Bonikro pushback 4 (PB4) in October 2015.

In 2017, Newcrest sold its 89.9% stake in the project to Forbes & Manhattan of Canada, who in turn sold 52% of its interest in the project to Allied on 16 May 2019 and the remaining 48% interest on 16 September 2019.

As shown in Table 6.1, the project has produced 1,466 koz since start up in 2008, at an average production of 103 koz/a.

Table 6.1 Bonikro historical production

Year	Tonnes milled (Mt)	Grade (g/t Au)	Contained gold (koz)	Gold produced (koz)
2008	0.75	1.02	25	23
2009	2.05	2.34	154	150
2010	1.71	1.62	89	79
2011	1.19	1.85	71	58
2012	1.91	1.63	100	89
2013	1.93	1.52	94	88
2014	1.96	1.72	109	101
2015	2.18	2.19	154	139
2016	2.76	1.60	142	130
2017	2.50	1.98	159	139
2018	2.42	1.73	135	117
2019	2.43	1.07	83	74
2020	2.45	1.66	131	110
2021	2.47	1.09	87	76
2022	2.51	1.27	103	93
Total	**31.23**	**1.63**	**1,635**	**1,466**

Source: Bonikro 2023 FS

Recent key performance results are summarized in Table 6.2.

Table 6.2 Bonikro recent key performance results

Item	Units	2019	2020	2021	2022
Waste tonnes mined	Mt	10.18	11.94	23.05	23.62
Ore tonnes mined	Mt	0.97	1.45	1.20	1.25
Strip ratio		10.5	8.2	19.2	18.9
Tonnes milled	Mt	2.43	2.45	2.47	2.51
Feed grade	g/t	1.07	1.66	1.09	1.27
Recovery	%	88.5	84.0	87.8	91.0
Gold production	koz	73.8	110	76.4	92.7
Mining costs	$ M	51.91	57.09	65.4	84.0
	$/t rock	4.65	4.26	2.70	3.38
Processing costs	$ M	26.14	24.26	26.9	25.0
	$/t ROM	10.76	9.92	10.92	9.95
G&A costs	$ M	13.55	16.92	18.0	18.3
	$/t ROM	5.58	6.92	7.31	7.27

Source: Bonikro 2023 FS

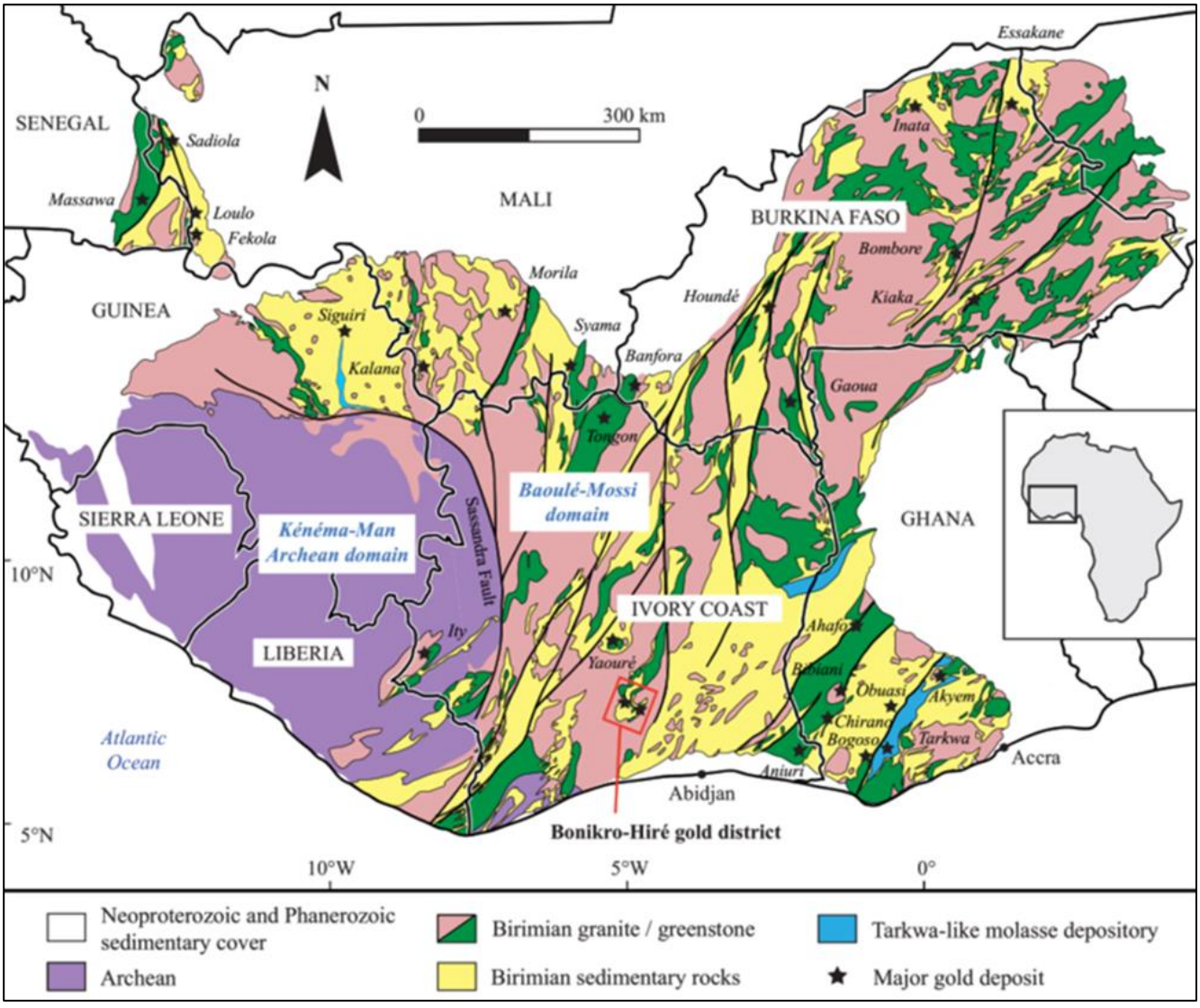
There have been numerous Mineral Resource estimates reported by the previous owners prior to 2019. These historic estimates are not considered material as they have been either superseded by the December 2022 Mineral Resource estimate or have been depleted by mining.

7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional geology

The Archean-Proterozoic Kénéma-Man Shield of the greater West African Craton underlies all of Côte d'Ivoire as well as significant areas of other west African countries. In terms of surface exposure, it is separated from the younger Birimian Baoulé-Mossi Domain to the east by the arcuate Sassandra Fault (Figure 7.1). The Paleoproterozoic Baoulé-Mossi Domain, in the southern part of the West African Craton, consists of linear to arcuate belts of volcano-sedimentary rocks, intra-orogenic sedimentary basins and intervening tonalite-trondjhemite-granodiorite (TTG) plutonic terranes.

Figure 7.1 Regional geology of Côte d'Ivoire



Source: Bonikro 2023 FS

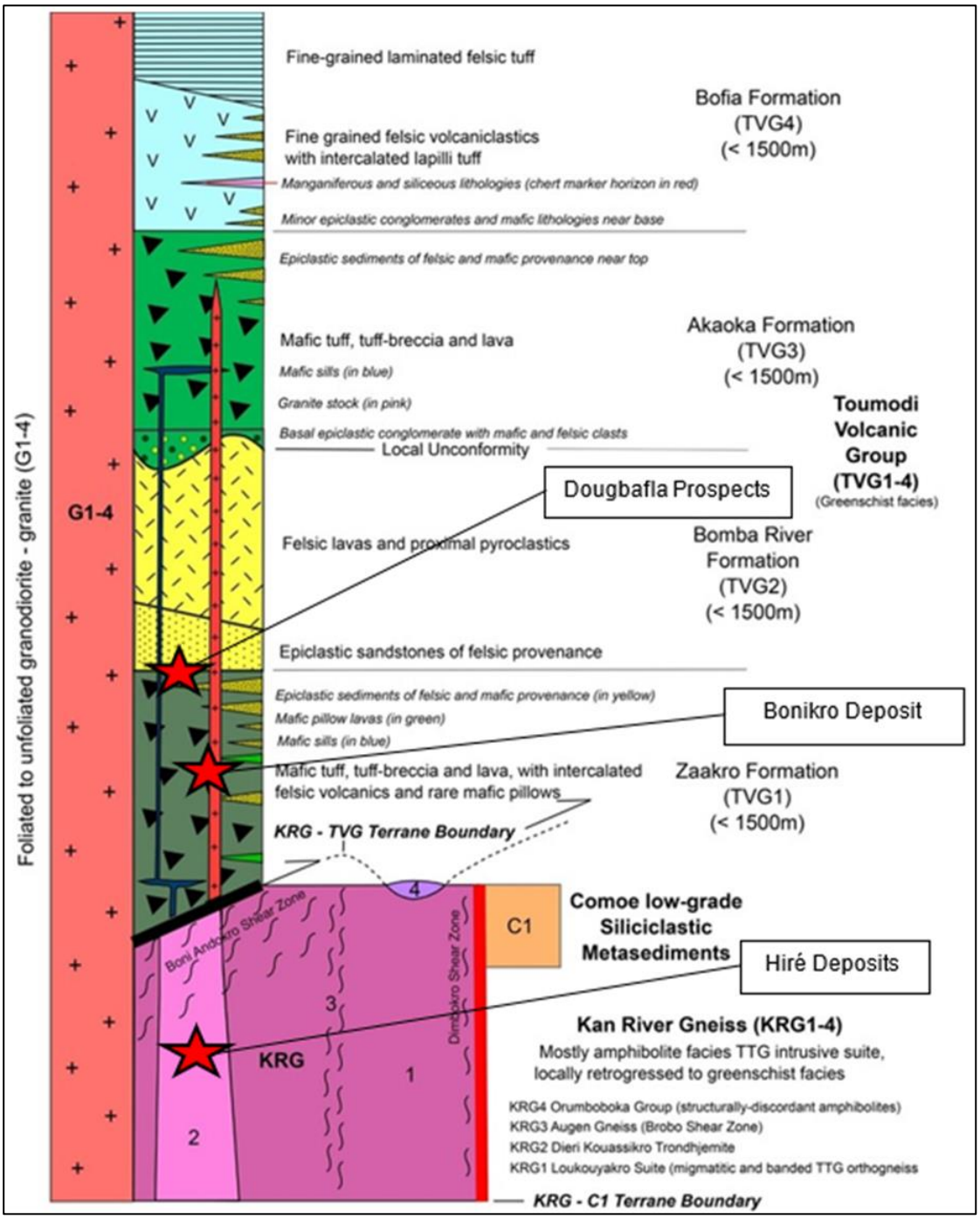
The Birimian greenstone lithologies, for which the West African Craton is well known for gold mineralization, are almost exclusively limited to the Baoulé-Mossi Domain. Archean and Birimian lithologies generally outcrop poorly, largely due to extensive vegetative cover and development of lateritic pediments which have resulted in limited understanding of the geological evolution.

7.2 Local geology

The Oumé-Féttékro greenstone belt is located in south-central Côte d'Ivoire (Figure 7.1). The greenstone belt extends ~300 km along strike, parallel to the north-northeast trending regional structural grain. The southern part of the greenstone belt hosts the Bonikro, Hiré and Dougbafla gold deposits.

The south-central part of the Oumé-Féttékro greenstone belt, in the Bonikro district, consists of Toumodi Group supracrustal rocks and the Kan River Plutonic Complex (Figure 7.2), which consists primarily of the Loukouyakro suite of TTG orthogneisses containing mafic enclaves and local migmatitic orthogneisses.

Figure 7.2 Rock relationships and stratigraphic column



Source: Bonikro 2023 FS

The Kan River Plutonic Complex is interpreted as the mid to lower crustal remnant of a volcanic arc, metamorphosed and unroofed during the assembly of Baoulé- Mossi Domain (Mortimer, 1990). Similar TTG-like plutonic rocks in the Dabakala area, in the northern part of the Oumé-Féttékro Greenstone Belt, were emplaced at ca. 2150 Ma.

The Toumodi Group is inferred to have been deposited in an evolving volcanic arc, with the basal Zaakro Formation representing its immature stage and the Bofia Formation its most evolved stage (Mortimer, 1990). The following four lithostratigraphic formations are less than 1,500 m thick:

- Basal Zaakro Formation, which comprises pillow basalts and mafic, lithic tuffs with subordinate rhyolite flows
- Bomba River Formation, which consists of epiclastic sandstones, flow-banded rhyolites and ignimbrites
- Akaoka Formation, which includes a basal epiclastic conglomerate overlain by mafic lithic tuffs and basalts with subordinate epiclastic sandstone horizons
- Bofia Formation, which comprises felsic volcaniclastic rocks, intercalated lapilli tuffs, laminated rhyolitic tuffs and minor discontinuous black shale, manganiferous and cherty horizons.

Stratigraphic correlations across the Oumé-Féttékro Greenstone Belt, and limited geochronological data, suggest that the Bofia Formation was deposited between ca. 2150 Ma and 2100 Ma (Mortimer, 1990; Leake, 1992).

Numerous elliptical to circular calc-alkaline plutons of various sizes and compositions, such as the Toumodi granite, intruded the Toumodi Group and Kan River Plutonic Complex after ca. 2100 Ma. The metamorphic mineral assemblages in the Toumodi Group generally include chlorite-epidote-sericite ± biotite-actinolite-calcite, indicative of regional greenschist-facies metamorphic conditions (Ouatarra, 2015).

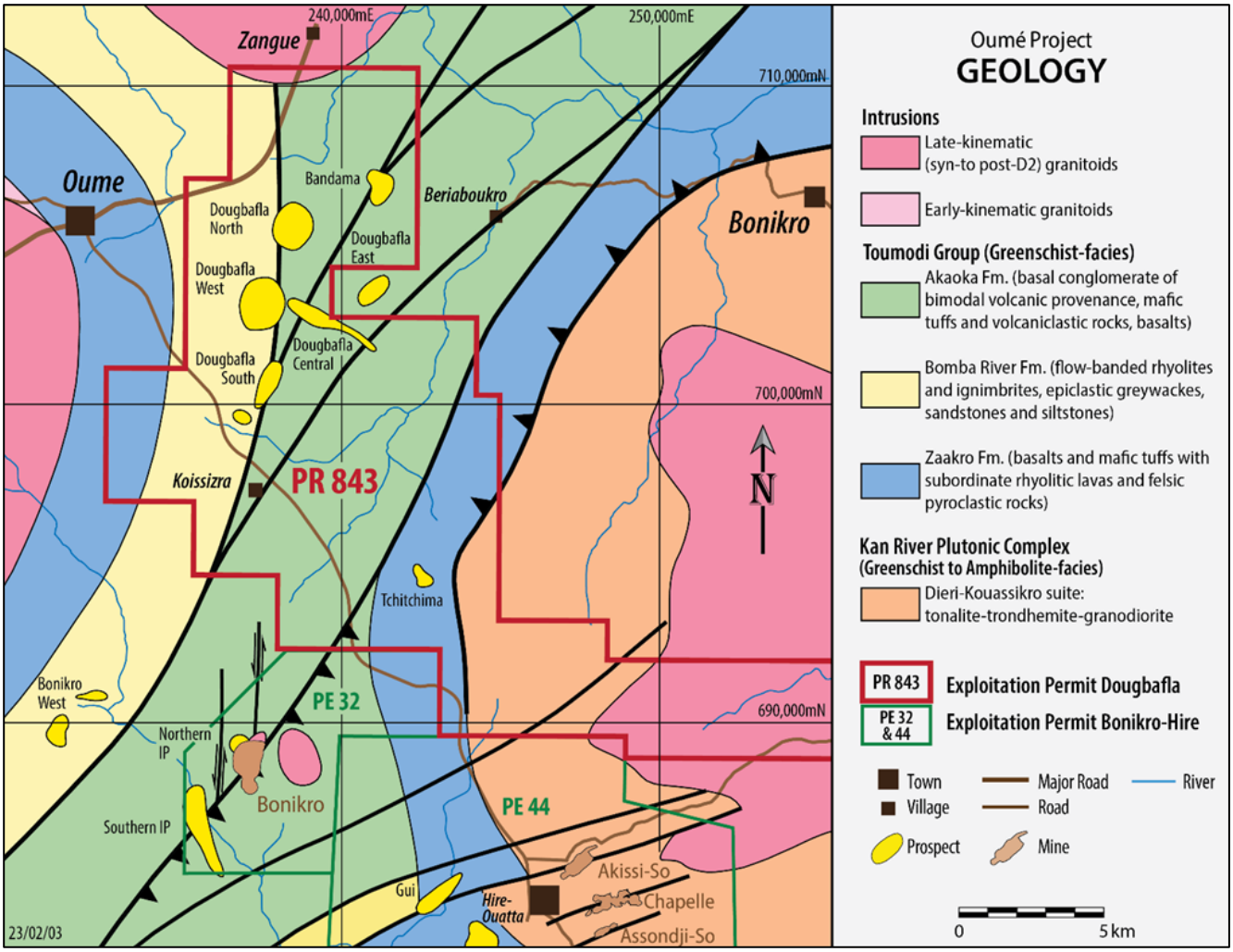
Amphibolite-facies mineral assemblages are locally present in the Toumodi Group adjacent to some granitoid plutons. Polyphase deformation has affected the south-central part of the Oumé-Féttékro greenstone belt (Ouatarra, 2015), relevant to Bonikro and Dougbafla.

The north-northeast trending structural grain of the Bonikro district is a result of D1 and D2 deformation. Early D1 west-northwest to east-southeast directed compression resulted in the formation of tight to isoclinal, north to north-northeast trending, gently plunging folds (F1), and a penetrative axial planar cleavage (S1). Incremental bulk deformation during D2 (west-northwest to east-southeast directed shortening) resulted in the formation of the regional-scale Boni-Andokro shear zone and eastwards directed thrusting of the Toumodi Group over the Kan River Plutonic Complex (Figure 7.2). Higher-order, steeply dipping shear zones and back-thrusts also formed during D2 shortening.

Most gold mineralization in the Bonikro district is interpreted to have occurred during D3 sinistral and/or sinistral-reverse displacement along high order north-northeast trending brittle-ductile shear zones (Houssou, 2013; Ouatarra, 2015). Gold mineralization is hosted in granitoids at Bonikro, Hiré and Dougbafla. In contrast, gold-(molybdenum) mineralization at Bonikro has been interpreted to have a magmatic affinity (Masurel et al., 2019).

Figure 7.3 summarizes the stratigraphic geological and structural interpretation of the southern section of the Oumé-Fétékro greenstone belt overlain with permit boundaries, prospects and mine locations (Masurel et al., 2019).

Figure 7.3 Bonikro local geology



Source: Bonikro 2023 FS

7.3 Mineralization

Bonikro mineralization comprises auriferous sheeted quartz veins within the Bonikro porphyritic granodiorite. The gold mineralization shares several characteristics with intrusion-related gold deposits, but this has likely been overprinted by orogenic-style gold mineralization unrelated to the granitoid host and much later in relative timing. Bonikro is 1,300 m along the shear and 1,500 m northeast-southwest in the felsic body, the termination of which has not yet been identified.

Gold mineralization at Hiré is hosted by fault-fill auriferous quartz veins, formed within solid plutonic host rocks during D3 transcurrent faulting. The fault-fill character of the mineralized veins at Chapelle and Akissi-So imply that the brittle rheology of the host granitoids was the critical feature that focused fluid flow.

The variably quartz-veined mineralized structures at Akissi-So are linear, dip to the northwest, strike for 1,200 m and extend down dip for greater than 100 m with widths up to several metres. Within Akissi-So, there are two lodes with mineralization stepping from the southeast lode to the northwest lode that extends beneath Hiré town. In Chapelle, there are several sub-parallel structures in close proximity, one group of which strikes east-west (1,600 m long), whereas the other curves to the west-southwest (1,800 m long). Mineralization pinches and swells along the lodes which can have various dip directions in the third dimension.

Gold mineralization at Dougbafla appears to be a blend of the two mine areas. There is certainly a pluton association, although mineralization appears to lie on its margins rather than disseminated throughout. Sheeted(?) granitoid bodies intrude the mafic-felsic host suite, and mineralization lies on lithology boundaries, possibly due to rheological contrasts. The difference in timing for the different styles of mineralization may reflect the changing tectonic regime from compression to transcurrent.

8 DEPOSIT TYPES

The Bonikro gold mineralization shares several characteristics with intrusion-related gold deposits, such as the:

- Relatively reduced, calc-alkaline to alkaline composition of the Bonikro granodiorite (Ouatarra, 2015)
- Presence of aplite and pegmatite dykes
- Sulphide-poor mineralogy of the sheeted veins
- Narrow 0.1–1 cm-wide alteration selvages around the sheeted veins implying a low fluid/rock ratio during vein formation
- Gold ± bismuth ± tellurium ± tungsten ± lead ± molybdenum metal association (Masurel et al., 2019).

Masurel (2019) suggested the granodiorite was emplaced along the Bonikro shear zone as this structure was a major structural break in the host sequence; whilst the structure provided an entry path, the pluton lies oblique to it and plunges southward. Generation of a volatile-rich final vapour phase during progressive crystallization of the pluton is the driver for aplite and pegmatite dykes emplacement during the final stages of D2 compression and then the mineralized sheeted quartz veins during the onset of D3 transpression.

Gold mineralization at Hiré is hosted by fault-fill auriferous quartz veins, formed within pre-existing plutonic rocks during D3 transcurrent faulting. Textural evidence for solid-state deformation prior to this later phase of mineralization at Bonikro is inconsistent with the porphyritic granodiorite acting as the source for fluids and metals in this instance.

The fault-fill character of the late mineralized veins at Bonikro and the auriferous veins at Chapelle and Akissi-So imply that the brittle rheology of the host granitoids, compared with the adjacent largely unmineralized supracrustal rocks, was the critical feature that focused fluid flow. The structural setting, mineralogy and metal association of the altered and mineralized rocks at Chapelle and Akissi-So are typical of orogenic gold deposits.

There is no outcrop exposure of the mineralized host at the Dougbafla targets, although Allied approached the area from the premise that historical drill core suggested a similarity with Bonikro. It is anticipated that future work on the Dougbafla prospect will likely show a late, orogenic overprint on the more voluminous granitoid-hosted mineralization.

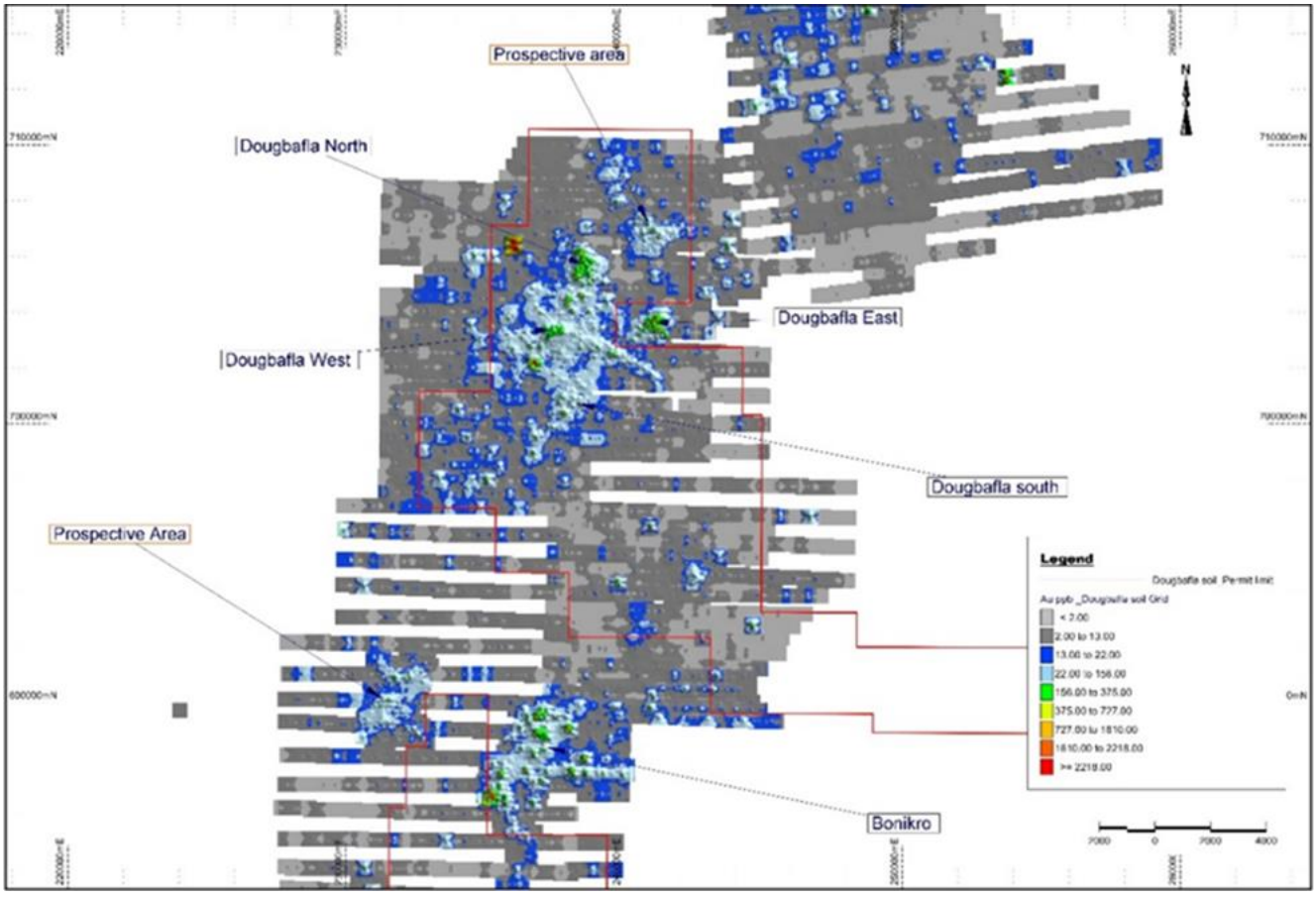
9 EXPLORATION

Exploration exclusive of drilling activity has not been undertaken by Allied in the Bonikro-Hiré-Dougbafla permits. Since taking control of the operation in 2019 Allied has focused on near-mine open pits, their resources, development of mill feed and a LOM plan for the next six years. Allied's exploration is now expanding to the rest of the Property mainly around the Dougbafla (Oumé) prospects to confirm the accuracy of the soil geochemistry and geophysics, as discussed below.

9.1 Soil geochemistry

The Dougbafla project has a comprehensive soil sampling data set which was acquired by Equigold with samples taken at a sample spacing of 100 m x 50 m and subsequent infill in areas of interest (Figure 9.1). A plot of the data indicates a solitary population. The data was log transformed to normalize the distribution and reduce the effect of high soil values. A log probability plot was used to analyse the data, with the contours showing the values above the 98th percentile.

Figure 9.1 Dougbafla gold geochemistry



Source: Allied

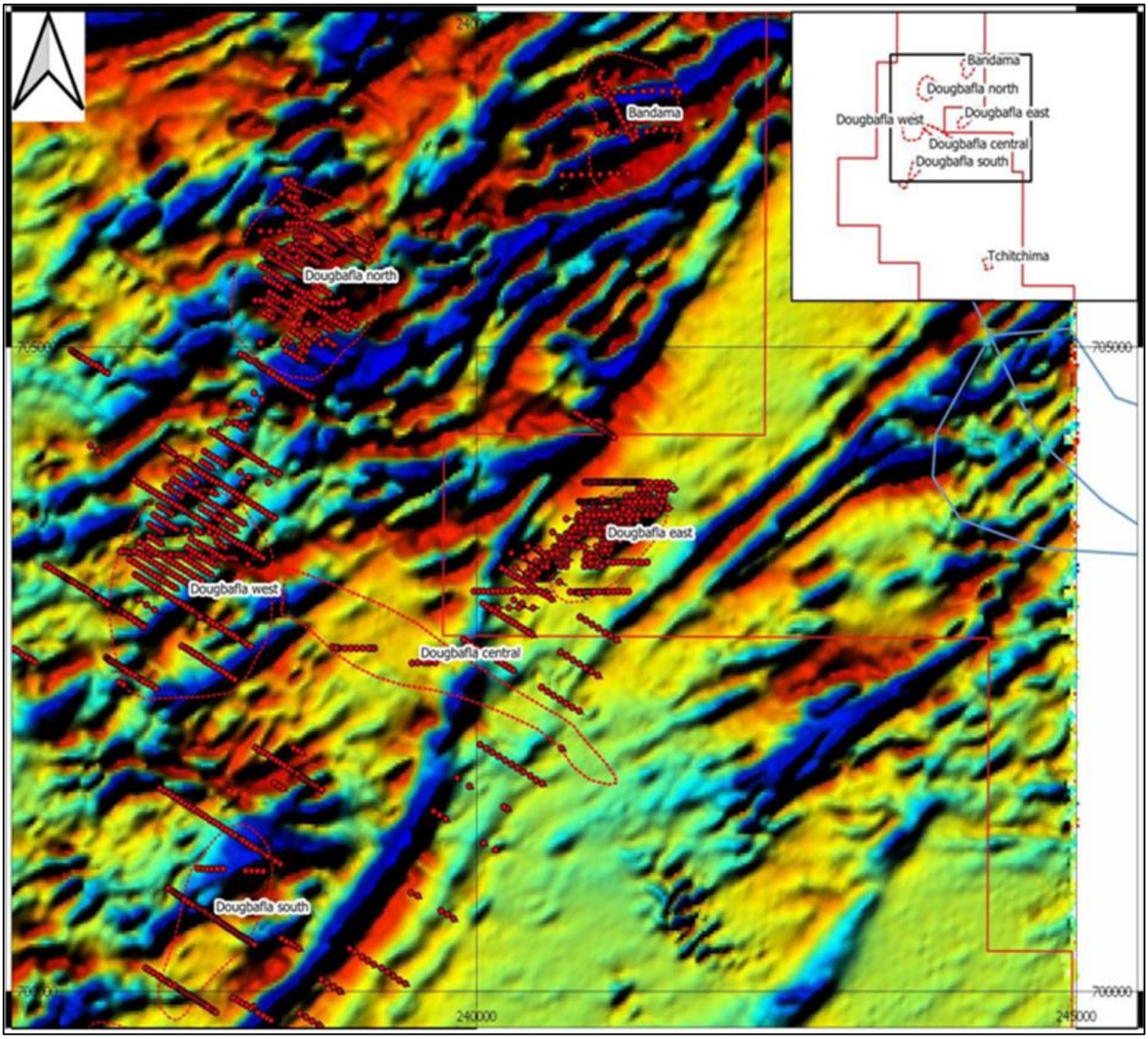
Dougbafla West consists of a consistent 1,000 m x 500 m area (at >100 ppm Au) following a north-northeast trend. A more sporadic 1,500 m x 1,300 m soil anomaly at a 50 ppm cut-off surrounds the higher grade contour. There is a clear soil trend to Dougbafla North, potentially indicating consistent bedrock mineralization between the North and West soil anomalies. Elsewhere within the permit, the Bandama target appears highly prospective (east of Dougbafla North), and it sits isolated from Dougbafla North only because the Tene River lies between them. Equally, Dougbafla East is also an elevated, coherent anomaly.

9.2 Geophysics

Three airborne magnetic surveys were completed between 1974 and 2007. The 2007 magnetic survey was conducted by UTS Aeroquest, now a subsidiary of Geotech Airborne, based in Malaga, Perth, Western Australia. The survey lines are spaced 100 m apart on bearing 135° to 315° with 50 m flight height and tie lines orthogonal each kilometre along the belt.

Figure 9.2 presents the gradient-enhanced total magnetic intensity data from the aerial magnetic survey flown in 2007, showing prospects and historical drilling within the Dougbafla permit.

Figure 9.2 Dougbafla magnetic intensity



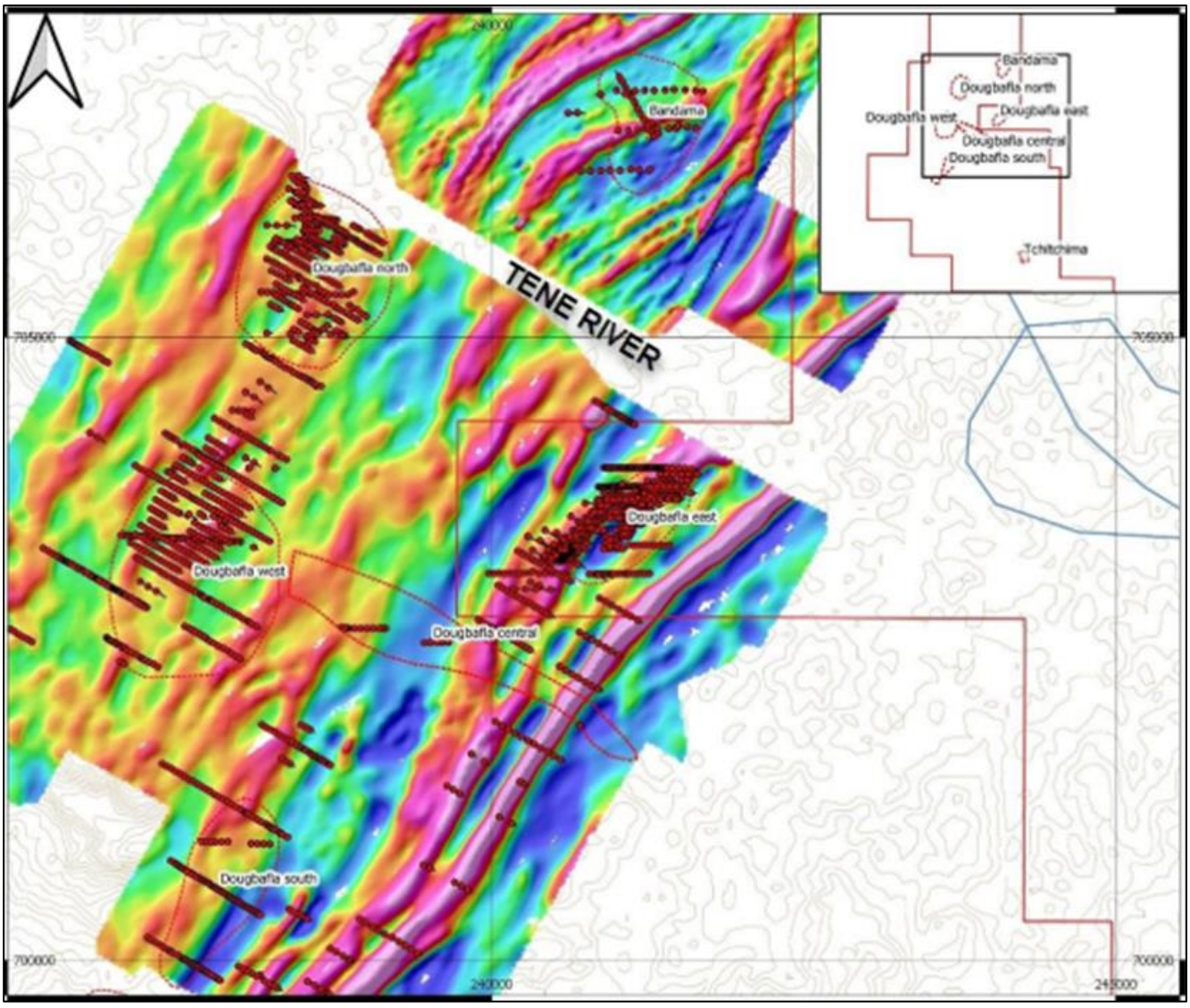
Source: Allied

The caesium vapour fluxgate magnetometer was mounted in a stinger with a read time of 0.1 second. A ground-based GR-856 magnetometer was used for diurnal correction. The radiometric data were collected at the same time using an Exploranium GR-820 (32 litre) spectrometer.

Extensive dipole induced polarization (IP) electromagnetic surveying was carried out in 2009, but no methodological information exists. However, the stations were spaced 25 m and 50 m along 100 m separated lines running northwest-southeast, as with the lines of drilling and essentially perpendicular to the major geological fabric.

The apparent geological coherence of the IP results (Figure 9.3) suggests the magnetic interpretation by Southern Geoscience is overly driven by the perception of extensive faulting. With additional drilling available and the opportunity to undertake petrophysical measurements on well-located drill core, Allied's geological team intends to revise the magnetic interpretation.

Figure 9.3 Dougbafla chargeability from 2009 IP survey



Source: Allied

10 DRILLING

10.1 Type and extent

10.1.1 Bonikro

Table 10.1 summarizes the drilling at Bonikro used in the Mineral Resource estimate and shows 1,049 drillholes for 150,394 m. For resource estimation, only reverse circulation (RC) and diamond core drilling (DD) methods were used. PQ and HQ core were historically used to drill the oxide and transitional zones, thereafter NQ core was drilled to the end of hole. RC drilling was undertaken with 4.5" (114 mm) and 5" (127 mm) face sampling hammers. Table 10.1 excludes the RC sterilization holes for waste dump footprint clearance (42 holes for 4,123 m).

Table 10.1 Exploration drilling at Bonikro

From	To	Holes	Metres	Operator
1999	2007	432	52,304	Equigold
2008	2009	60	10,544	Lihir
2010	2013	283	51,463	Newcrest
2016	2017	104	8,620	Newcrest
2019	2021	170	27,463	Allied
Total		**1,049**	**150,394**	

Source: Bonikro 2023 FS

Historically, drilling at Bonikro included a combination of rotary air blast (RAB), DD and RC drilling. Drilling for Mineral Resource delineation was conducted by Equigold from 1999 to 2002 utilizing a significant amount of diamond drilling, some RC drilling and minimal RAB drilling. Equigold continued with infill drilling from 2003 through to 2005 and continued with target extension programs up until the takeover by Lihir.

Lihir focused on extending and upgrading the Mineral Resources until the takeover by Newcrest. Newcrest focused drilling on the high-grade depth extensions of the Bonikro deposit as well as grade control.

Majority of the drilling was completed on 25 m spaced sections (north-south) with holes spaced approximately 25 m apart on each section. Drill spacing typically increases with depth depending on declination of the adjacent collars. Many of the DD holes were drilled as a tail to the initial RC pre-collars to an average depth of approximately 100 m. Shallow drillholes that targeted oxidized material and shallow fresh material generally utilized RC drilling (Dunham, 2017).

Between October 2016 and March 2017, Newcrest targeted a 25 m spacing on 20 m sections coverage for Bonikro PB5. Drilling was predominantly from the pit ramp as the pit was flooded. The completed program consisted of 104 RC holes for an advance of 8,620 m, sampled every 2 m and seven DD holes (for 836 m) sampled at 1 m intervals.

Allied's drilling in 2020 to 2021 was predominantly from the ramp as the pit was still flooded, using PQ and HQ core and RC with HQ core tails to infill gaps in the geological model.

The Allied drilling identified untested near-surface targets as well as the subsurface extent of the Bonikro PB5 pluton mineralization from a newly interpreted perspective. Rather than considering the Bonikro ladder veins as restricted, a view was taken that the veins may extend to depth. Although there were no drillholes to quantify the interpretation, this volume was tested using RC pre-collars and diamond core.

The near-surface targets map out a cross structure that extends outside of the initial Bonikro pit volume to the south and north that contained two historical intercepts of 20 m at 3.2 g/t Au and 23 m at 0.98 g/t Au. This area was drilled using RC.

10.1.2 Hiré

Table 10.2 summarizes the Hiré exploration drilling used in the Mineral Resource estimate and shows 13,816 drillholes for 584,744 m. Resource definition drilling at the Hiré operations comprised only RC and DD drilling with the majority on 50 m spaced sections (west-east) with holes spaced approximately 40 m along each line. This ensured orthogonal interception of the lodes.

Table 10.2 Exploration drilling at Hiré

From	To	Holes	Metres	Operator
1999	2007	819	31,998	Equigold
2008	2009	1,672	150,033	Lihir
2010	2017	6,722	275,603	Newcrest
2018	2018	3,168	60,431	Forbes & Manhattan
2019	2021	1,435	66,679	Allied
Total		**13,816**	**584,744**	

Source: Bonikro 2023 FS

Drilling was conducted by Equigold from 1999 to 2007 utilizing mostly RC drilling, with some RAB drilling and DD drilling. From 2008, Lihir was focused on extending and upgrading the Mineral Resources until the takeover by Newcrest. Newcrest focused drilling on the high-grade depth extensions of the Hiré deposits and included grade control in its drilling programs.

Allied's drilling from 2019 to 2021 was focused on validating the historical interpretations of the Akissi-So, Chapelle and Assondji-So mineralization as well as the Agbale prospect. Refer to Item 14 for an interpretation of the results.

10.1.3 Dougbafla

Table 10.3 summarizes the exploration drilling at Dougbafla West and Dougbafla North used in the Mineral Resource estimate and shows 716 drillholes for 57,622 m, with 23% DD drilling.

Table 10.3 Dougbafla West and Dougbafla North drilling

Company	Time	Type	No. of holes	Drill metres
Equigold	1996 to 2008	AC	176	7,784
		RC	88	6,495
Lihir	2008 to 2010	RC	347	26,397
		DD	38	4,420
Newcrest	2010 to 2013	RC	25	3,788
		DD	2	586
Allied	2021 to 2023	DD	40	8,152
Total			**716**	**57,622**

Source: Bonikro 2023 FS

After completion of the soil sampling grids in 1998, ground-truthing of anomalism was undertaken with RAB drilling in 1999 by Equigold. Much of the drilling was shallow (<50 m) on east-west lines oriented to the west with a 60° dip.

After 2000, the orientation of drilling at Dougbafla North was rotated clockwise 30° to be perpendicular to the stratigraphy. In 2006, drilling recommenced at Dougbafla. Drillhole collar surveys and downhole surveys were not routinely collected.

Lihir undertook extensive QAQC of Equigold work to capture missing data, in conjunction with additional drilling. From 2010, Newcrest started an infill drilling at Dougbafla North, but stopped the program due to grade inconsistency.

Allied's programs have focused on confirming historical information and interpretation and thereafter extending mineralization both down dip and along strike. The most important geological factors from the Dougbafla deposits comprise host rock, alteration, silicification, quartz-veining and sulphide content. Allied has striven to standardize geologist's logging of these elements by implementing strict coding choices for the drill logs.

10.2 Procedures

10.2.1 Surveying

Drillhole collar locations were surveyed via a range of different methods including real-time kinematic survey tools (RTK) and global positioning systems (GPS). Allied has used only differential GPS (RTK).

Newcrest, Forbes & Manhattan and Allied used a drone system for site layout and pit movement volumes.

From 2004, single or multi-shot electronic cameras were used for down-hole surveys at Bonikro. Holes were surveyed using Reflex EZ-shot single shot instrument for Newcrest's PB5 drilling completed in 2017. Allied has used the Reflex ACT III system with readings each 30 m downhole.

Downhole surveys in both historical and recent drilling show rapid azimuth and dip swings including limited intervals in excess of 0.5° per metre. The consistency of hole swing and the common occurrence of increasing dip with depth appears to be a normal response during drilling at Bonikro and these holes are included in the resource model.

The basis of the surface topography at Bonikro was the PB4 final survey and the latest dump and surface survey as of 31 December 2022. The end-of-pit survey was added to the drone aerial survey to capture the surface that is currently under water.

Drillhole collars were acquired by differential GPS to pin the surface more accurately where drilling was undertaken.

The Dougbafla West topographic surface was also a combination of prior surveys, namely a composite of drillhole collar surveys and a drone aerial survey. The collars were verified by independent surveyor Nile Surveys acquiring both historical and recently drilled collar positions and RL. Five metre spaced contours were used where there was no coverage of any other kind.

10.2.2 Logging

10.2.3 Historical logging procedure

For the historical diamond drilling, the core was placed into treated, wooden core boxes at the drill site with wooden blocks, indicating the meterage, placed into the core boxes at the end of each run (normally every 3 m). Geologists and technicians collected measurements of core recovery, produced a geological log, and photographed the core. The core was oriented in an angle iron jig on a per run basis with an orientation line based on a spear orientation mark and a sample cut line marked approximately 1 cm away from the orientation line.

The core was then returned to the core tray, fitted together where possible, and marked every metre for core recovery measurements. Structural measurements collected from oriented core comprised veins, faults, shears, joint sets, bedding and foliation by measuring alpha and beta angles. These were then converted to dips and dip directions in a calculated field.

RC chips were collected from every metre from the bulk split, sieved and washed, and placed in a labelled chip tray for the geologist to log at the drill rig. The RC chip trays were photographed, and the chip trays stored in the site core shed facility for later reference.

10.2.4 Allied logging procedure

Allied's drill core is placed in plastic trays at the drill rig, with the driller placing a depth marker at the end of each core run. Orientation of the core is marked on the lowermost side of the core when in the hole. Sampling follows a stepwise process as outlined in the company-wide protocol as follows:

- Once the core is collected and returned to the logging area, place on the logging racks
- Clean, check orientation, orientate core and bottom of hole, and mark the cut line on the core
- Confirm end-of-run depths on core and identify whether there is loss, and if so, calculate core loss
- Metre mark-up the core based on validated core blocks depths, allowing for core loss
- Geotechnically classify the breaks and take rock quality designation measurements
- Measure rock hardness with a Leeb Hardness Tester
- Measure the magnetic susceptibility
- Geologically log core
- Take representative structural measurements on elements of the core
- Compile the sample register
- Photograph the core both dry and wet
- Collect density measurements with the Archimedes cradle arrangement
- Cut core offset from the orientation line
- Sample the core from the portion that does not show the orientation line
- Validate the data
- Email all hole and sample data to the database team.

10.2.5 Sampling

Drill core sampling procedure

The geologist logging the core defines all sample intervals such that intervals do not cross the boundaries of mineralization or important lithological contacts. The intervals to be sampled are cut in half along the cut line by a brick saw with a diamond-impregnated blade. The half of the core without the orientation line is removed and placed into consecutively numbered sample bags with the same numbered ticket inside for dispatch to the analytical laboratory. The second half of core with the orientation line is returned to its position in the core tray and the core stored in a covered core shed. Standards, duplicates, and blanks are inserted into each sample batch at a rate better than or equal to 1:20 for each quality assurance/quality control (QAQC) sample type.

Most DD core is sampled as half-core, except for geotechnical samples, which are sampled as whole core. Generally 1.0 m samples were obtained, though Newcrest used minimum and maximum sample intervals of 0.2 m to 3.0 m as compared to Allied's protocol of 0.5 m to 1.5 m.

Newcrest reported that average core recovery was 97.7%. Typically, recovery is lower in weathered zones. Allied's core drilling comprised DD and RC-DD holes to access the deeper Bonikro mineralization. Core recovery was excellent at 98 to 100%.

RC sampling procedure

Historical documentation shows that the RC chip samples were collected from the drill rig cyclone at 1 m or 2 m for the entire length of each hole.

The chip samples were split into representative portions using a 75:25 Jones riffle splitter to produce a 2.5 kg subsample for assay and placed into consecutively numbered sample bags for dispatch to the assay laboratory. Newcrest reported that wet samples were sampled with a PVC spear but noted that they *"do not represent a significant portion of the total samples".* Equigold reported that at Hiré from 2001 to 2007 wet samples comprised 28% of the RC samples. It is noted that any historical wet holes would have already been mined and processed.

Recoveries for historical RC drilling were not documented.

Standards, blanks, and duplicates were inserted into the sample number sequence at 1:20 (four QAQC samples and 16 regular samples within 20 samples). Sieved reference rock chip samples were collected in chip trays for logging, photographed and retained in the core shed facility.

Allied has a comparable protocol for sampling RC drillholes. Samples are taken each metre, and holes are terminated if they become wet and are completed by diamond core. The QAQC insertions are identical.

Density

Density data was not historically recorded in the database for Akissi-So, but that is now corrected. Allied has collected just under 1,200 density readings from holes drilled at Akissi-So alone, and these were used to estimate density where data was available. Refer to Table 10.4 for densities used in the Mineral Resource estimate.

Table 10.4 Densities by rock type

Lithology	Oxidation	Bonikro	Chapelle	Akissi-So	Dougbafla
Felsic	Oxide	1.88	1.83	1.83	*
	Transition	2.56	2.12	2.12	*
	Fresh	2.72	2.71	2.71	*
Mafic	Oxide	1.84			1.92
	Transition	2.37			2.76
	Fresh	2.83			2.84

**No separation of Felsic and Mafic at Dougbafla due to insufficient information.*

Source: Bonikro 2023 FS

10.2.6 Data management

Newcrest used a logging system where key aspects of geology, style of mineralization, alteration, and structure were entered directly into one of four database forms set up for RC and diamond core logging, and these were subsequently input to an AcQuire database by a database manager. Data recorded included collar, down-hole survey, structural logging and core recovery data.

In 2020 Allied migrated the AcQuire database to a Datashed structured query language system for Allied's Mineral Resource estimation. The database records drillhole coordinates, drillhole ID, maximum depth and collar coordinates in the DH Collar table; drilling method in the DH Metadata table; lithology and structural fabric in DH Geology table; gold grades and sample ID in Assay Flat and Assay tables; sample ID depth metres in DH Sample table; and dip, relative level, azimuth and drillhole surveys in the DH Survey table. The DH Sample and Assay Flat tables are joined in a view to give the Hole ID, sample ID, metreage and assay values.

Initially, Allied geologists recorded core logging data into Microsoft Excel spreadsheets and the database manager enters the data into the database. This process was improved in late 2020 by rolling out Logchief, to enable direct logging into the database, which reduces transcription errors.

The Logchief drop-down lists are maintained and controlled by the database team and are tailored for each site so that inappropriate rock types are not presented as a possible choice. If a new lithology or alteration is identified, these are first created by the database manager.

The Qualified Person (Mr Andrew) is not aware of any drilling, sampling or recovery factors that could materially impact the accuracy and reliability of the Mineral Resource estimates.

11 SAMPLE PREPARATION, ANALYSIS AND SECURITY

11.1 Historical sample preparation and analysis

Equigold and Lihir compiled a pictorial flowchart that demonstrated the treatment of samples in the laboratory, which resulted in 80% passing (P_{80}) 75 µm prior to fire assay of a 50 g charge.

Newcrest increased the volume of sample crushed in the laboratory from 2.5 kg to 5.0 kg. The crushed sample was reduced to 0.5 kg in one step via a riffle splitter post-crusher. Final pulverization of the pulp was to 106 µm, from which a 50 g charge was then fire assayed with an atomic absorption spectroscopy (AAS) finish.

Majority of the historical sample preparation and assaying was completed by independent laboratories, SGS Laboratory (ISO/IEC17025) and TWL (ISO/IEC17025), both located in Tarkwa, Ghana. SGS was principally used until 2002 with TWL used from 2002 to 2004 and SGS again from 2004 to 2015. The assays for the Bonikro PB5 drilling program in 2016–2017 was undertaken by independent laboratory ALS with preparation in Yamoussoukro (ISO9001) and assaying in Kumasi, Ghana (ISO17025).

For grade control assaying, 2 m RC samples were analysed by the Bonikro site laboratory using the Leachwell cyanidation method (bulk cyanide leach with Leachwell tablet, di-isobutyl ketone (DIBK) extraction and AAS determination) on 500 g pulps. This method is not directly comparable with the fire assay method because the Leachwell method is a 'partial' not 'total' extraction.

11.2 Allied sample preparation and analysis

Samples are collected by Allied from the drill rig and transported to the core logging areas at both Bonikro and Dougbafla, stored in bags with the sample number on the outside of the bag and stapled shut with a sample tag inside. To maintain the chain of custody, samples are delivered by Allied personnel to an independent laboratory for sample preparation and analysis.

In 2019-20 Bonikro samples were delivered to the independent MSA Laboratory at Yamoussoukro (ISO9001, ISO14001, and ISO45001), with sample preparation using a Boyd jaw crusher-rotary split divider combination, pulverizing the subsample and analysis by fire assay on 50 g charges with an AAS finish. A 10% subset of umpire samples was selected for dispatch from MSA to ALS Yamoussoukro for transhipment by DHL to ALS Perth (ISO/IEC17025).

From 2021, Dougbafla samples were delivered to independent laboratory Bureau Veritas (ISO45001) in Abidjan. Sample preparation comprised crushing to 3 mm to reduce the sample volume to approximately 800 g for pulverizing. The resultant P_{85} 75 µm product is then mat rolled for mixing and a 120 g sample is taken for a 50 g fire assay with an AAS finish. A 10% subset of mineralized umpire samples were selected for despatch to ALS Perth.

11.3 Quality assurance/quality control programs

All owners have utilized an industry standard approach to monitor the analytical process through the use of certified reference materials (CRMs), blanks and pulp duplicates. For RC drilling, field duplicates were taken as a second split through the riffle splitter. Pulp duplicates were taken as a second sample from the pulverizer fines.

11.3.1 Historical QAQC

Historical data since the discovery of the Dougbafla, Hiré and Bonikro deposits were reported by Newcrest in 2017. QAQC results up to November 2010 are summarized in Newcrest's November 2010 Mineral Resource internal report (Ryan and Cox, 2011) which did not identify any significant issues with data quality. QAQC data between November 2010 and November 2013 were reviewed again by Cox (2013) as part of

the November 2013 Mineral Resource estimate. CRM bias and blank statistics were summarized and again no significant QAQC issues were reported.

The Newcrest drilling and assay results for PB5 are used in the Bonikro resource model, with validatory drilling and assaying carried out by Allied. Newcrest's drilling was primarily by RC with a small number of DD holes. Analyses by Newcrest were carried out by ALS at Kumasi in Ghana after preparation at the ALS facility at Yamoussoukro.

The independent ALS Kumasi laboratory showed no significant bias in the CRMs (median value -0.7%). Jones (2017) noted that an insufficient range of CRM grades was added to submissions during the early portion of the program.

Field splits (duplicate samples)

Total set precision of the 165 field splits was 45%, which worsened slightly to 48% when low grade pairs were removed. Empirically, worsening precision when low grade pairs are removed is often an indication of the presence of coarse gold. Eliminating four pairs with a relative difference worse than 60% improved precision to 41%, while 30% of pairs with average of 0.1 g/t Au or better had a relative difference worse than 60%. The high percentage suggests that the poor duplicate match is an inherent property, likely related to gold grain size, rather than human error. Field evidence of coarse gold is plentiful. The relatively small size of the milled sub-sample (500 g) may have contributed to the worse than expected precision. There is no bias between the original sample and the field split.

Blanks

The Newcrest blanks were not certified and were prepared from sand which did not require crushing before being pulverized. The maximum result obtained for a blank was 0.07 g/t Au as compared to the expected value of 0.01 g/t Au. The data showed that there have been no prolonged episodes of contamination.

Certified reference materials

Newcrest used a limited suite of CRMs obtained from Rocklabs and OREAS (Bayswater North, Victoria, Australia). Rocklabs CRMs are fabricated from barren rock with the addition of particulate gold to achieve the desired grade. The CRMs are not matrix matched. The selection of four CRMs ranged in value from 0.334 g/t Au, 0.848 g/t Au, 1.834 g/t Au to 4.13 g/t Au.

Of the 4,700 samples assayed by Newcrest, 198 were CRMs. Graphing the results against time, Newcrest's Mineral Resource report (August 2017) noted that the moving 21-point average was initially slightly negative but then settled just above zero; however, it was the individual instances that decided whether the CRM was performing well, not the average. There were seven instances of the CRM breaching the three standard deviation line which suggests re-assay of some jobs should have occurred, but as the QAQC review happened as an 'after event' (i.e. not immediately when the assay results were received from the laboratory), this was not done. Newcrest accepted the data as fit for purpose based on a long-term basis.

Umpire assaying

Umpire laboratory comparison of samples indicated a 12% bias low in the primary laboratory despite the acceptable CRM performance.

11.3.2 Allied QAQC

Allied's QAQC protocol requires insertion of a CRM, a blank, a coarse duplicate and a pulp duplicate at a rate of 1:20 samples. Results are reviewed by the database personnel immediately upon receipt of assays and if issues are identified with a batch, it is quarantined until the issue is rectified. This may include re-assay of the batch due to poor CRM results.

Field duplicates

Field duplicates are taken from the RC drill rig product after the cyclone, and a second sample is taken from the primary sample. The duplicate is taken as a separate split of the primary sample through the riffle splitter and typically occurs every 20 samples.

At Bonikro, samples were generated from resource drilling of the mineralized extensions to the north and south of the excavated Bonikro pit. The sample points trend on the 1:1 line reasonably well.

At Hiré, the drilling was designed to test previously unexplored lode extensions to the west. Drilling used a mix of RC and DD to trace the lodes to the limit of drill rig access. Assays of field duplicates indicate good repeatability up to significant grades, despite the restricted data set.

It became apparent during core logging at Dougbafla that coarse gold grains were observable which has resulted in scatter along the 1:1 line of original vs duplicate assays, as would be expected with the presence of coarse gold. To help assess the variability between samples, a trial was run using 500 g of sample (from one metre) crushed to 2 mm and assayed using a Photon Analyser at MSA Laboratory in Yamoussoukro. At the time of reporting, the results from the 50 g fire assay and 500 g photon analyser comparison were pending.

Blanks

Blanks inserted by Allied were not certified but comprised natural rock that were assayed as a batch of 20 samples through a certified laboratory with all values less than 0.01 g/t Au. Allied takes the position that the assay should be 0.01 g/t Au but allows a value up to 0.03 g/t Au (three standard deviations) to still be considered blank. For values higher than this, the assay batch is reviewed to ascertain whether it is due to contamination during sample preparation. Three blanks did not pass between February 2020 and December 2022, with one at 0.5 ppm from a standard inadvertently swapped for the blank QAQC sample.

Certified reference materials

For its CRM suite, Allied utilizes naturally occurring mineralized, matrix-matched rock samples from OREAS and Geostats. Assays of all CRMs showed that 1% of the assays exceeded the permissible three standard deviation setpoint (Table 11.1).

Table 11.1 Summary of Allied CRM

Standard ID	Count	Value (Au g/t)	<3σ (Au g/t)	>3σ (Au g/t)	Minimum assay (Au g/t)	Maximum assay (Au g/t)	Average assay (Au g/t)	Diff.	Outside 3σ
G398-6_AGC	15	2.940	2.460	3.420	2.856	3.128	2.968	1%	0
G905-1_AGC	20	1.160	1.010	1.310	1.081	1.170	1.137	-2%	0
G913-9_AGC	3	4.910	4.400	5.420	4.918	5.044	4.978	1%	0
OREAS 153a_AGC	83	0.311	0.275	0.347	0.286	0.351	0.315	1%	1
OREAS 153b_AGC	36	0.313	0.286	0.340	0.292	0.345	0.315	1%	2
OREAS 211_AGC	39	0.768	0.687	0.849	0.716	0.819	0.765	0%	0
OREAS 219_AGC	41	0.760	0.688	0.832	0.547	0.922	0.751	-1%	2
OREAS 223_AGC	66	1.780	1.645	1.915	1.700	1.907	1.787	0%	0
OREAS 226_AGC	17	5.450	5.072	5.828	5.247	5.663	5.459	0%	0
OREAS 231_AGC	139	0.542	0.497	0.587	0.297	0.579	0.537	-1%	3
OREAS 232_AGC	80	0.902	0.833	0.971	0.840	0.963	0.901	0%	0
OREAS 240_AGC	28	5.510	5.093	5.927	5.121	5.643	5.439	-1%	0
OREAS 242_AGC	1	8.670	8.025	9.315	8.615	8.615	8.615	-1%	0
OREAS 250_AGC	11	0.309	0.270	0.348	0.299	0.334	0.315	2%	0
OREAS 250b_AGC	64	0.332	0.299	0.365	0.296	0.353	0.324	-2%	1
OREAS 251_AGC	74	0.504	0.459	0.549	0.486	0.547	0.517	3%	0
OREAS 253_AGC	21	1.220	1.088	1.352	1.138	1.293	1.222	0%	0
Total	**738**								**9**

Source: Allied

Field splits

Both field splits and duplicate pulps conducted by Allied on Allied drill samples at Bonikro gave a spread of data along the 1:1 line, indicating good assay precision by the laboratory, although there were several notable outliers (<10%).

Umpire

Samples assayed by two separate laboratories, with one operating as a check on the primary assay results, resulted in a broad correspondence of results along the 1:1 line on the scatter plot. However, the duplicate laboratory produced significant assays (<10% of the total number) between 3 ppm and 6 ppm where the primary laboratory assayed 2–4 ppm Au. Whilst it is known that there is significant coarse gold in the Bonikro mineralized system, the results are positively biased to the duplicate assay.

11.3.3 Sample security

Newcrest reported in January 2017 that the sample security was controlled by tracking samples from the drill rig to database. Samples were stored on site at the Oumé or Yamoussoukro exploration office and then dispatched for sample preparation at the laboratory.

Sample dispatch sheets were in place to monitor the tracking of samples with the laboratory. Sample dispatches were reconciled against laboratory samples received and discrepancies investigated by geology staff. Details of all sample movements were recorded in a database table. Dates, drillhole identification, sample ranges, and the required analytical suite were recorded with the dispatch of samples to the laboratory. Any discrepancies identified on receipt of samples by the analytical services provider were validated.

Allied follows similar protocols. Samples are dispatched with tamper-evident packaging and secure courier transfer from site to the receiving analytical facility.

11.3.4 Qualified Person's opinion

In the Qualified Person's (Mr Andrew) opinion, the cleaned historical data and Allied's sample preparation, security and analytical procedures are fit for the purpose of resource estimation across the Bonikro sites.

12 DATA VERIFICATION

12.1 Historical verification

To verify and validate the data and to ensure integrity of the total resource database, Newcrest carried out the following:

- Ensure compatibility of total hole depth in the collar, survey, assay and geology database files
- Check of drillhole survey data for unusual or suspect down-hole deviations
- Ensure sequential down-hole depth and interval data in the survey, assay and geology files
- Check of lithology and alteration codes
- Verify assaying for the Bonikro PB5 program (2017) with check pulp assaying conducted in the Newcrest Laboratory (AOL) Orange, Australia, although confusion over the samples dispatch meant this was not satisfactorily achieved
- An annual review of the laboratories by a Newcrest geostatistician in 2017 stated that the QAQC studies were reliable, especially when considering the coarse gold component.

The following detailed data review was carried out by Newcrest for the 2017 Mineral Resource estimate:

- Validation between the fresh exported dataset and the raw data files used in the 2015 model
- Validation of collar surveys against the pit digital terrain model
- Downhole survey consistency of hole path
- Missing or overlapping intervals
- Negative values
- Depth of the assayed holes compared to the hole depth stored with the collar details.

All corrections were completed in the database before final data extraction for input into the 2017 Mineral Resource estimation.

Minxcon prepared an NI 43-101 Technical Report for Forbes & Manhattan in July 2018. Minxcon's verification process included:

- Collars positions
- Azimuths between 0° and 360°
- Sample interval overlap
- Sample duplication
- Assay and density data within acceptable ranges
- Downhole survey.

Allied migrated Newcrest's historical AcQuire database in 2020, which included the historical verification and validation of data. The Qualified Person (Mr Andrew) undertook a review of the AcQuire database to confirm its integrity for the Mineral Resource estimate.

12.2 Survey

No verification was undertaken by Mr Earl during the site visit on the drillholes, albeit that the majority of the historical drillholes have been mined out.

Surveys for collars are conducted by mine personnel with differential GPS grade equipment. Downhole surveys are conducted by the drillers and verified by Allied personnel. A visual inspection of drillholes by Allied showed deviations but not to any degree to cause concern regards the resource estimation.

Several topographic surfaces were reviewed by the Qualified Person (Mr Andrew) for each deposit:

- The original topographic surface prior to mining
- The current topography used for limiting Mineral Resources
- The base of full oxidation surface
- The top of fresh rock
- The optimized pit based on Measured, Indicated and Inferred Mineral Resources at a $1,800/oz gold price.

The topographic surfaces were reviewed in Leapfrog for consistency. The original surface was mainly used to check drillhole collars where the surface had not been altered by mining and other activities. These were found to be reasonably situated. The topography has been used to limit the Mineral Resources as reviewed in this report. No issues were found with these surfaces.

The oxidation surfaces were visually reviewed in Leapfrog, and there were no obvious issues. The surfaces are horizontal, planar and irregular, consistent with the oxidative nature of the formation of these surfaces.

12.3 Drilling and sampling

Allied advised that a qualified geologist is used to set the drill rig up on its correct azimuth and declination as well as supervise the drilling process, sampling activity and consecutive number use for the sample bags.

During the site visit, drilling and sampling procedures were observed at Bonikro. Mr Earl considers that the observed activities are in line with industry standard practice.

12.4 Sample analysis

Data import from the laboratories is handled through Datashed software. Data integrity is validated by Allied's database manager using Datashed QAQC report software.

Allied has maintained QAQC oversight of the assay data from both the Bureau Veritas and MSA laboratories. The database manager reviews all assays as they arrive from the laboratories to judge their suitability for addition to the database, and each month, assays received in the prior 30 days are output through Datashed's QAQC Reporter software that captures the laboratories' QAQC performance for distribution to the field offices and Allied's Resource Manager in Perth. Data are quarantined until vetted for QAQC.

To provide oversight, Allied has engaged Rock Solid Data Consultancy Pty Ltd to provide periodic external data review. Identified errors were rectified.

Allied engaged a former general manager of commercial assay laboratories in Zimbabwe and Côte d'Ivoire and now based in Belgium to undertake audits of the Bureau Veritas laboratory in Abidjan and the MSA Laboratory in Yamoussoukro to ensure compliance with Allied's analytical requirements:

- While the MSA facility is a quality laboratory in terms of layout and organization, it lacked sufficiently qualified chemists to mentor staff during the COVID pandemic
- The audit report on the Bureau Veritas facility (Fis, 2023) was complimentary of the cleanliness and organization of the workflow, with the timely production of results despite their high-volume throughput.

Mr Earl did not undertake a review of the laboratories during his site visit.

12.5 Qualified Person's opinion on adequacy of the data

The Qualified Person (Mr Andrew) considers that the data quality is adequate to support the estimation of the Bonikro Mineral Resources. This opinion is based on the review of the QAQC data supplied by Allied, the production history of Bonikro and observations made by Mr Earl during the site visit with respect to drilling, sampling, and sample preparation.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

The Bonikro process plant is a conventional CIL gold plant constructed in 2008 with a nameplate capacity of 2.0 Mt/a. Debottlenecking has resulted in an upgraded capacity to 2.5 Mt/a, including coarsening the grind for processing of mainly fresh ores.

Significant testwork has been completed on the different future ore zones to predict the gold recovery parameters relevant to the different pits and lithologies within the orebodies, namely oxide, transition or fresh. The source of the ores will be Bonikro, and Chapelle and Akissi-So at Hiré, each of which displays different metallurgical characteristics, hardness, reagent consumption and overall gold extraction.

Additional testwork has also been carried out on the Abale and Dougbafla prospects.

13.1 Metallurgical testwork

A large body of historical metallurgical testwork has been completed on the Bonikro and Hiré ores. Testwork commenced in 2003 and was progressed in 2008 by Ammtec on Bonikro, with Hiré ores evaluated in 2010, 2011 and 2017 by Ammtec/ALS/AMML, with additional Bonikro testwork completed in 2018. During 2020, additional testwork was carried out at ALS Metallurgy (Perth) on samples from Chapelle, Akissi-So and Bonikro. During 2021 and 2022, testwork was carried out at ALS Metallurgy (Perth) on samples from the Dougbafla West deposit. All the laboratories used for metallurgical testwork were independent of Allied.

This testwork was directed at comminution parameters, gravity and leach recovery at various grind sizes and leaching times. The outcomes of these testwork programs are summarized below for the orebodies evaluated.

13.1.1 Bonikro (historical)

The design of the original Bonikro process plant was based on a blend of oxide and fresh ores from the Bonikro pit.

Physical characteristics:

- Granodiorite, which is the main ore rock host, exhibits high rock strength and produces highly competent media
- The lack of fines generation precluded the use of conventional semi-autogenous grinding (SAG) milling, hence the choice of a flowsheet that incorporates closed circuit secondary crushing
- The ore contains a high percentage of quartz and is highly abrasive, with a fresh ore abrasion index of 0.595
- Grinding energy requirements for the fresh ore are average, with a Bond Ball Mill Work index (BBWi) of 15.9 kWh/t
- The power requirement for oxide ore is less than 10 kWh/t.

Metallurgical characteristics:

- The ore can be classified as free milling, with no obvious metallurgical problems
- Recovery by cyanidation is very high (96%) at a grind of P_{80} 125 µm and 92% at P_{80} 190 µm
- The ores contain significant coarse gold, with gravity recoveries ranging between 35% and 50% of total gold
- Average cyanide and lime consumption from the testwork was 0.22 kg/t and 0.50 kg/t, respectively.

13.1.2 Hiré (historical)

Hiré ore comprises the Akissi-So, Chapelle and Assondji-So mining operations.

Physical characteristics:

- Hiré primary ore displays similar comminution characteristics to the Bonikro ore, with similar operational performance expected
- Fresh ore is competent, confirming the requirement for two-stage crushing ahead of grinding
- Fresh ore has medium abrasiveness, and high liner and media consumption are expected as a result
- The power requirement for oxide ore is less than 10 kWh/t.

Metallurgical characteristics:

- The ores contain significant coarse gold, with gravity recoveries in the range of 20% to 60% of total gold
- Fresh ore gold extraction is sensitive to grind size below P_{80} 106 µm
- Leaching of gravity tailings is rapid, requiring approximately 20 hours residence time in the CIL circuit
- Cyanide and lime consumption are in line with current plant performance as predicted for Bonikro ores.

13.1.3 2020 testwork – Bonikro and Hiré

The LOM plan for Bonikro continues to treat predominantly fresh ore. Additional testwork was initiated in 2020 when fresh ore samples were drilled from the three open pits delivering ore during the forecast LOM. The program focused on confirming the comminution and cyanidation characteristics of the Bonikro, Akissi-So and Chapelle pit extensions, predominantly into fresh ore zones. The evaluation was completed at ALS in Perth under the supervision of Allied.

The sample selection for the 2020 program was based upon samples below the level of the current pits and in the walls of the cutbacks. The number of samples selected from each deposit were as follows:

- Bonikro – eight variability samples with six fresh samples, one transition and one waste.
- Akissi-So – five fresh variability samples:
  - A fresh composite was generated from the five variability samples.
- Chapelle – six variability samples with four fresh samples, one oxide and one waste:
  - A fresh composite was generated from the four fresh variability samples.

The comminution testwork is summarized in Table 13.1 as an average of the variability evaluations and indicates that the future ores should be compatible with the Bonikro plant design.

Table 13.1 Comminution results – 2020 program

Ore source	Ore type	Density	DWi (kWh/m³)	Axb	BBWi (kWh/t)	Ai
Bonikro	Transition	2.74	5.70	48.3	10.4	0.042
	Fresh	2.71	7.50	36.1	15.5	0.405
Akissi-So	Fresh	2.74	7.34	37.4	16.9	0.267
Chapelle	Fresh	2.69	6.64	40.5	16.3	0.339
Bonikro plant design		**2.7**	**8.23**	**32.8**	**15.9**	**0.60**

Source: Bonikro 2023 FS

Grind sensitivity testing was completed on the variability samples and, following an economic assessment and comparative analysis with plant performance, the optimal grind size for the metallurgical testwork was selected as P_{80} 150 µm.

The average performance from the gravity and CIL leaching evaluation is presented in Table 13.2.

Table 13.2 Gravity and leaching performance – 2020 testwork

Ore source	Ore type	Gravity extraction (%)	% Au extraction		Au grade (g/t)		
			24 hours	36 hours	Assayed head	Calculated head	Leach residue
Bonikro	Transition	57.1	96.9	97.6	1.89	2.09	0.05
	Fresh	62.6	94.8	95.4	2.20	2.28	0.08
Akissi-So	Fresh	37.0	81.4	82.0	2.72	2.81	0.50
Chapelle	Oxide	41.7	88.3	89.1	2.27	2.10	0.23
	Fresh	34.6	82.0	82.7	3.37	3.34	0.58

Source: Bonikro 2023 FS

Lead nitrate addition to the leach was evaluated and an improvement at Chapelle was evident with subsequent plant trials demonstrating increased recoveries when treating Chapelle ores.

The Hiré fresh ore was further evaluated by bulk leaching of the Akissi-So and Chapelle composite samples:

- Duplicate gold head assays were reasonably consistent, indicating finely disseminated gold (note the reduced gravity extraction in Table 13.2 for Chapelle and Akissi-So).
- 1.6 g/t tellurium (Te) was detected in the Chapelle composite. This was consistent with mineralogical assessment indicating the presence of calaverite and petzite in the Chapelle samples.
- Pyrite is the dominant sulphide mineral detected and makes up approximately 1% by mass of the ore and accounts for approximately 22% of the gravity concentrate mass for each composite sample.
- The gold in Akissi-So and Chapelle is fine-grained, ranging from 2 µm to 30 µm for the grains detected. Most unliberated gold grains are locked in pyrite and make up majority of the gold leach residue.
- On average, increasing the leach residence time from 24 hours to 36 hours increases recovery by less than 1% for the Akissi-So and Chapelle ore.
- Cyanide consumption was low at less than 0.15 kg/t for both composites consistent with plant performance.
- Chapelle composite lime consumption in the demonstration leaches (average of 0.55 kg/t) was consistent with the variability leaches; however, consumption was more than double in the bulk leach at 1.15 kg/t. Akissi-So composite lime consumption was higher in the demonstration leaches than the variability leaches at 0.65 kg/t and was comparable with the bulk leach consumption of 0.57 kg/t.
- Lead nitrate testwork showed 4–5% recovery increase for the Chapelle samples. Lead nitrate has subsequently been used in the process plant with 50 g/t included in the operating cost estimates.
- The oxygen testwork highlighted the importance of high dissolved oxygen levels. The oxygen plant is supplemented with liquid oxygen to increase recovery.
- Carbon adsorption tests indicated typical equilibrium loadings and adsorption kinetics for the gold head grades. There was no evidence of deleterious elements competing with gold adsorption.
- Rheology tests on bulk leach tailings indicated medium viscosity slurry at the solids concentration the Bonikro plant operates (45–55% w/w).

In the Qualified Person's (Mr Cunningham) opinion, the testwork completed is expected to be representative of the ores to be treated during the forecast LOM period.

13.1.4 2021 Dougbafla testwork

Comminution testwork on Dougbafla samples showed:

- The Axb results ranged from 29.3 to 56.9 indicating more competent ore
- The ball mill work indices were 14.2 kWh/t for Fresh, 12.0 kWh/t for transitional and 6.8 kWh/t for oxides, which are all lower than plant design
- Moderate abrasion indices with averages of 0.03 and 0.21.

As shown in Table 13.3, Dougbafla West fresh samples are more competent, but less hard, than Bonikro fresh.

Table 13.3 Comminution results – Dougbafla

Ore source	Ore type	SG	DWi (kWh/m³)	Axb	BBWi (kWh/t)	Ai
Dougbafla	Fresh	2.79	8.65	32.8	14.2	0.21
	Transition	2.90	5.1	56.9	12.0	0.03
	Oxide	2.82			6.8	
Bonikro plant design		**2.7**	**8.23**	**32.8**	**15.9**	**0.60**

Source: Bonikro 2023 FS

Leaching testwork on Dougbafla samples showed:

- Some grind sensitivity in the oxide and transitional zones with 5% extraction improvement at grinding to 75 µm, as compared to 150 µm. Fresh samples showed 2% extraction improvement at the finer grind size.
- Cyanide consumption ranged from 0.05 kg/t to 0.24 kg/t, similar to current plant performance. Lime consumption ranged from 0.34 kg/t to 2.80 kg/t with higher consumptions on the oxide samples.
- Gravity gold recovery ranged from 11% on oxides to 50% on the transition and fresh samples. The lower oxide gravity recovery is supported by the mineralogical testwork which showed that the gold was fine at less than 20 µm in the oxide sample.

13.2 Plant performance

During 2014–2015, recoveries of 94.5% were being achieved from Bonikro PB4 at 2.0 Mt/a throughput rate and 130 µm grind size. In 2017, the target grind size was changed to 190 µm to increase throughput to 2.5 Mt/a, with recoveries reducing to 87% with the Hiré ores becoming the predominant feed.

During 2021, Allied carried out a grind size optimization study which confirmed that, while recovery from the Akissi-So and Chapelle ores is partially improved by finer grinds, the throughput reductions associated with finer grinds result in lower gold production and net revenue. The Bonikro ore does exhibit some grind sensitivity in the range tested (57–190 µm), but much less than the Hiré ores. For fresh ore, a grind size of P_{80} 190 µm is considered to be optimal by Allied and is the basis of the throughput and recovery estimates for the LOM plan.

Plant performance data on blended feed from July 2020 to December 2021 was reviewed to assess the achieved recoveries and throughput for comparison with estimated parameters. The key observations for this period are:

- Average throughput was 304 t/h, equivalent to 2.43 Mt/a
- Grind size P_{80} averaged 190 µm with high variability in grind size until May 2021 when cyclone improvements were implemented
- Gold recoveries averaged 89%, with lead nitrate added for Chapelle ores and liquid oxygen supplementing the oxygen plant since November 2021.

Recovery and throughput estimates for the treatment of the Bonikro, Akissi-So and Chapelle ores in the plant to inform pit optimizations and LOM forecasting are summarized in Table 13.4:

- Recovery estimates were calculated from average testwork results, including solution losses and fine carbon losses, and recent plant performance against the recent plant blended feed
- Throughput estimates were calculated using power-based modelling, validated against plant performance with blended feed and are based on 8,060 h/a or 92% operating time.

Table 13.4 Ore type recovery and throughput estimates

Ore source	Ore type	Recovery	Throughput (Mt/a)
Bonikro	Oxide	94.7%	2.70
	Transitional	93.4%	2.58
	Fresh	92.2%	2.46
Bonikro (PB4)	Fresh LG	90.0%	2.46
Chapelle	Oxide	93.2%	2.70
	Transitional	87.0%	2.45
	Fresh	87.0%	2.19
Akissi-So	Oxide	94.0%	2.70
	Transitional	88.0%	2.51
	Fresh	85.0%	2.33
Dougbafla West	Oxide	88.0%	2.62
	Transitional	89.0%	2.47
	Fresh	92.0%	2.33

Source: Bonikro 2023 FS

It is noted that using the parameters from Table 13.4 resulted in under-estimation of 2022 throughput by 2.8% and gold produced by 1.0%.

Additional Dougbafla testwork is required to confirm grind size, throughput, and recovery. It may be justified to treat the Dougbafla oxide and transition at Allied's Agbaou process plant at 75 µm which would require an additional 20 km of ore haulage at approximately $2.50/t.

13.3 Product quality

Doré quality going forward is expected to be maintained and not significantly different from the historical quality of between 82% and 88% gold. The silver content is likely to remain comparable as is the base metal content. No deleterious substances of consequence or processing factors are expected to report to the doré or impact the economic extraction of materials.

14 MINERAL RESOURCE ESTIMATES

The Mineral Resource estimates are based on four block models (Table 14.1) generated using Surpac modelling and Micromine geological interpretation software and the Newcrest drill database migrated to Datashed format with additional resource drilling by Allied.

Table 14.1 Original resource models used to derive the 2022 Mineral Resource estimate

Area/Pit	Model date
Bonikro	September 2021
Akissi-So	July 2020
Chapelle	August 2020
Dougbafla	January 2023

Source: Bonikro 2023 FS

Similar evaluation methodologies were used for each of the four areas for which Mineral Resource estimation was undertaken (Bonikro, Akissi-So, Chapelle and Dougbafla) as follows:

- Database compilation into a useable and verifiable format
- Geological modelling and wireframing
- Interpretation, definition and wireframing of mineralized domains
- Geostatistical analysis and variography, by domain
- Block modelling, grade and bulk density estimation
- Model validation.

14.1 Geological interpretation and modelling

14.1.1 Mineralization interpretation – Bonikro

The core of gold mineralization at Bonikro lies in a felsic body, which was originally modelled by previous owners in Leapfrog software from lithological logging and gold assay values. The lode orientations inside the main shear zone (the Felsic Shear) within the host granodiorite were established by digitizing the structural features on section, snapping points to drillholes and then wireframing. Three main shear-hosted lodes were established and extrapolated south to the contact with the mafic host rocks to include the mineralization as three separate domains.

The volume between the main shears is considered a separate domain to the country rock, being within the main Bonikro Shear structure. This was further divided into domains based on lithology, resulting in a Felsic Shear domain and a Non-Felsic Shear domain.

Outside of the Felsic Shear, the gold mineralization becomes more dispersed and its orientation is not easily defined. The method of interpretation was to separate the samples to the east (shallow, uplifted) of the Felsic Shear and to the west (downthrown) Felsic Deeps, run the statistics and optimize the search parameters, then do a full model fill, slice the resulting blocks, and use those as a guide for wireframing. This approach was supported by the orientation of veining in the diamond core holes (where recorded).

The wireframing resulted in nine ore domains and two waste domains for the entire deposit.

Statistics were then optimized within the volumes of those wireframes, which were clipped to the edge of the Felsic Shear volume.

Whilst the approach appears to be quite complicated, it makes sense geologically. However, the statistical analysis of the drillhole composites indicates that further refinement of the domaining should be undertaken in future Mineral Resource estimates. The Qualified Person for Item 14 (Mr Andrew) agrees that the domaining should be revisited after the proposed program of core re-logging.

The base of complete oxidation and top of fresh rock surfaces were created in section for all RC and DD drilling. RAB holes were specifically excluded as they are rarely collar surveyed, resulting in incorrect depths of weathering. A further check was made using the ditch-witch locations, as these rarely cut below the weathered material.

14.1.2 Mineralization interpretation – Akissi-So and Chapelle

At Akissi-So, the structural fabric is typically linear along the pit and the grades from drilling enabled the interpretation to be predictive with regards to future drill intercepts.

Chapelle is more structurally complex than the other Hiré deposits. This is highlighted by the presence of a large flat area of mineralization at depth in the centre of the final planned pit that is substantially thicker than most of the other narrow zones that are formed by sub-vertical shears in the host granodiorite.

Geological modelling at Chapelle was undertaken in a similar manner to Akissi-So using the main structural trends derived from earlier models and pit mapping to guide an indicator-based grade interpolant at a lower cut-off grade of 0.5 g/t Au. The geological model used a combination of both exploration and grade control drillholes.

The Qualified Person's (Mr Andrew) review concluded that the mineralization and structural fabric at Akissi-So and Chapelle have been appropriately modelled.

14.2 Exploratory data analysis

14.2.1 Boundary analysis – Akissi-So and Chapelle

Allied used contact analyses to assess the grade distribution in the vicinity of the domain contacts. If the grade change was sharp or rapid across the contact, then the domains were modelled independently even if the domain statistics were similar. Contact analyses were completed by SRK Consulting (SRK) in Leapfrog and results displayed as grade by distance from the contact. The results of the contact analyses indicated that there were no significant changes in gold grade across internal felsic domain contacts, and these were modelled as 'soft' contacts.

Clear changes in grade magnitude between certain domains were apparent and these were modelled as 'hard' contacts. In addition, the outer contacts of the felsic domains against the surrounding mafics were treated as 'hard'/sharp grade boundaries. The two structural domains (the 'high grade vein' and 'mafic shear' domains) were also modelled with hard contacts.

The Qualified Person (Mr Andrew) reviewed the contact analysis, and the results and modelling approach were confirmed.

14.3 Compositing of assay intervals

The bulk of the drillholes and all grade control samples in the database were collected at 1 m intervals for all the deposits. Drill core samples were sometimes collected at intervals at more, or less than, 1 m. As a result of this, drillhole data excluding RAB holes, ditch witch and blast holes in the database were composited downhole on an interval of 1 m, with a requirement that 67% or more of the sample be present to create the composite. Secondary intervals of shorter length than this restriction were discarded (0.1%) to avoid skewing the statistics.

Composites were checked at Akissi-So and Chapelle and found to be consistent with the mineralization wireframes.

14.4 Top cuts

For Bonikro, after discarding all composites of less than 0.67 m length, statistical data from the domain populations were analysed in Supervisor software. Log histograms and log probability plots were produced for each of the 11 spatial domains to assess the occurrence of grade outliers. The breakdown of the probability plot was considered dominantly, along with the coefficient of variation and the number of composites excluded.

The top cut grade varies from 5.00 g/t Au to 42.5 g/t Au in the 11 domains modelled.

A similar procedure was followed at the Hiré deposits.

14.5 Variogram analysis

14.5.1 Bonikro

The nine geometric mineralization domains and two waste domains each had variogram families generated. The variography was carried out in Supervisor from firstly the horizontal plane, a plane across strike, and then a plane in the dip orientation.

Ranges are significant, with the maximum value being 262 m for Domain 2 in the Main Shear lodes, and the shortest being 50 m in the non-lode (non-felsic waste) domain. Maximum sample number limits in the estimation effectively restricted this for the bulk of the resource as drilling is closely spaced in many of these domains, and for the waste domains nearby values are close to zero so no inordinate smearing occurred in the estimate. Some of the domains show a high degree of anisotropy.

Kriging neighbourhood analysis (KNA) was carried out for each domain and the estimation orientation validated before any model calculation was carried out. A process of iteration to find the best results was worked through.

The variograms showed extreme anisotropy in some of the domains, consistent with the geological interpretation. Some of the variogram parameters have been estimated to a level of accuracy (two decimal places) which is not supported by the underlying data and should be reviewed but is not considered material.

14.5.2 Hiré

The comments above on KNA and variographic analysis apply to Chappelle and Akissi-So.

14.6 Block modelling

14.6.1 Bonikro

A parent block size of 20 m x 25 m x 5 m was selected as the drill spacing in the deeper portions of the deposit was significant, but the estimation was into blocks of dimensions 10 mE x 12.5 mN x 5 mRL because the drill spacing within the bulk of the mineralized volume was at 25 m x 25 m. Sub-celling down to a block size of 5.00 m x 6.25 m x 1.25 m was used to best define the wireframes.

The block size used is appropriate and supported by the KNA. Similarly, the kriging search parameters used in the estimation are justified and have been checked in the Qualified Person's (Mr Andrew) review.

The ratio of the major to the minimum range (max/min) gives an indication of the anisotropy, with a value of 1 being equivalent to no anisotropy. The geological elongation of the shear zones is well reflected in the anisotropic ratios, particularly in Domains 2 (Main shear), 5 (Felsic East shear), and 8 (Felsic Oxide).

The wireframes, associated composites and variograms were reviewed by the Qualified Person (Mr Andrew) and found to be broadly consistent with the report descriptions. Minor differences exist in the Supervisor parameters versus those in the report.

14.6.2 Grade interpolation and boundary conditions

The model was coded for estimation domain, grade, oxidation state, rock type, and density. Density is an assigned field based on lithology and oxidation. Gold was estimated by ordinary kriging (OK).

14.6.3 Density

Allied collected about 1,200 density readings from holes drilled at Akissi-So alone, and these were used to estimate density where data was available. The method used was an inverse distance squared estimation on a 100 m spherical search constrained by oxidation state. No values were available for oxide material, there are a small number for the transition zone with the bulk in the primary zone. The average densities used at Bonikro are shown in Table 14.2.

Table 14.2 Bonikro model average densities

Zone	Average density
Oxide	1.83
Transition	2.12
Primary	2.71
Fill/Dump material	1.59

Source: Bonikro 2023 FS

These densities appear reasonable for the lithologies, alteration, weathering and mineralization encountered in the Bonikro deposit.

14.6.4 Model validation

Allied undertook visual validation of composite grades vs block grades section-by-section through the model. Sectional and elevation validation profiles were generated for each lode. The profiles compared the volume-weighted average of the block grades to the length-weighted mean of the input composite grades for northing, easting and elevation slices through the block model, and assisted in the assessment of the reproduction of local mean grades to validate grade trends in the model.

Bonikro has been re-interpreted using Micromine generated sections to build an understanding of the quartz veins, alteration and the gold distribution in the host granitoid. The process comprised an Allied regeneration of the historical geological model, using re-blocking and smaller sized selective mining units (SMUs) to lift the grade and avoid use of the localized uniform conditioning. Additional diamond drilling has been undertaken where the model revision identified data gaps.

For Bonikro, which represents 76% of the current Measured and Indicated Mineral Resources, Allied's Bonikro geological model was cut with the PB4 wireframes and the contained resource compared against the Newcrest production data (Table 14.3). Reconciliation by Allied of the Mineral Resource estimate against production showed that Allied's model produced 0.4% less tonnes for 1.8% more contained gold. This comparison provides confidence that the geological interpretation and the resource estimation methodology are appropriate for the Bonikro mineralization.

Table 14.3 Bonikro deposit resource model reconciliation

Source	Tonnes	Grade (g/t Au)	Contained gold (Moz)
Actual production	23.5	1.44	1.09
Allied geological model	23.4	1.48	1.11

Source: Bonikro 2023 FS

Visual validation by the Qualified Person (Mr Andrew) confirmed that the block model grades corresponded reasonably well with the drillhole sample composite grades.

Peer review of the Mineral Resource estimate was undertaken by Cube Consulting Pty Ltd, and discrepancies with methodologies employed by Allied at Akissi-So and Chapelle were addressed and rectified (SMU blocks were originally too small, smoothing the gold grade block data).

14.7 Classification

Bonikro's Mineral Resources and Mineral Reserves were initially classified in the Bonikro 2023 FS in accordance with the guidelines of the JORC Code (2012). The confidence categories assigned under the JORC Code (2012) were reconciled to the confidence categories in the 2014 CIM Definition Standards. As the confidence category definitions are the same, no modifications to the confidence categories were required. Mineral Resources and Mineral Reserves in this Technical Report are reported in accordance with the 2014 CIM Definition Standards.

Mineral Resource categories were assigned using a combination of geological, grade and geostatistical criteria and the Qualified Person (Mr Andrew) considers this to be a valid approach. The Mineral Resource was classified on the following basis:

- Measured Mineral Resource is based on:
  - Areas of 20 m x 10 m (YX) spaced RC grade control
  - Informed on first pass of estimation
  - Informed by at least 80% of the maximum number of samples
  - Slope of regression 0.8 or greater.
- Indicated Mineral Resource is based on:
  - Informed on first or second pass of estimation
  - Informed by at least 50% of the maximum number of samples
  - Slope of regression 0.5 or greater.
- An area is classified as Inferred Mineral Resource where the data density is sufficient to imply but too sparse to confirm geological and grade continuity.

14.8 Mineral Resource estimate

The Mineral Resource estimate was reported above a 0.5 g/t Au cut-off for the four gold deposits within the Property (Table 14.4) and are contained within optimized Lerchs-Grossmann pit shells based on estimated operating costs at a gold price of $1,800/oz.

Table 14.4 Bonikro Mineral Resources as of 31 December 2022 (100% equity basis)

Area	Measured			Indicated			Total Measured and Indicated			Inferred		
	Mt	Grade (g/t Au)	Au (koz)	Mt	Grade (g/t Au)	Au (koz)	Mt	Grade (g/t Au)	Au (koz)	Mt	Grade (g/t Au)	Au (koz)
Bonikro	1.85	1.54	92	14.11	1.40	635	15.96	1.42	727	2.30	1.28	95
Chapelle	0.00	0.00	0	1.99	1.81	116	1.99	1.81	116	0.94	2.02	61
Akissi-So	0.58	2.19	41	1.43	2.26	104	2.01	2.24	145	0.92	2.24	66
Dougbafla										20.40	1.23	807
Stockpiles	4.78	0.67	104				4.78	0.67	104			
Total	**7.21**	**1.02**	**236**	**17.53**	**1.52**	**855**	**24.74**	**1.37**	**1,091**	**24.56**	**1.30**	**1,029**

Notes:

- *Data is reported to significant figures to reflect appropriate precision and may not sum precisely due to rounding*
- *Mineral Resources are inclusive of Mineral Reserves*
- *Mineral Resources are reported within a $1,800/oz optimum pit at a 0.5 g/t Au cut-off and depleted to 31 December 2022*
- *Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.*

The information in this Technical Report that relates to Bonikro Mineral Resource estimation is based on information compiled by Mr John Cooke and Mr Phillip Schiemer and fairly represents this information. Mr Cooke is a Fellow and Mr Schiemer is a Member of the Australian Institute of Geoscientists (AIG). Mr Cooke is employed by Allied through Chiron Exploration Pty Ltd and Mr Schiemer is a consultant to Allied.

Messrs. Cooke and Schiemer have sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which they undertook to qualify as Qualified Persons as defined in the 2014 CIM Definition Standards. Messrs. Cooke and Schiemer consent to the inclusion in this Technical Report of the matters based on this information in the form and context in which it appears.

The Qualified Person for Item 14 (Mr Andrew) considers the reported Mineral Resource to be a fair reflection of the exploration activity and modelling processes undertaken.

To the best of the Qualified Person's (Mr Andrew) knowledge, at the time of estimation there were no known environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant issues that could materially impact the eventual extraction of the Mineral Resource.

14.9 Reasonable prospects for eventual economic extraction

The Mineral Resource estimate satisfies the 2014 CIM Definition Standards criteria of 'reasonable prospects for eventual economic extraction'. The Mineral Resource estimate was reported within an optimized pit shell based at an $1,800/oz gold price and mining and processing parameters including costs and recoveries in Table 15.1. A 0.5 g/t Au cut-off grade was used to report the Mineral Resource estimate within the optimized pit shell, the cut-off grade being below the Bonikro Mineral Reserve cut-off grade of 0.65 g/t Au using a $1,500/oz gold price.

14.10 Comparison with previous Mineral Resource estimates

Several Mineral Resource estimates were previously reported for Chapelle, Akissi-So and Bonikro. Allied's previous 2021 Mineral Resource estimate as summarized in Table 14.5 shows the main difference was due to depletion.

Table 14.5 2021 Allied Mineral Resource estimates at 0.5 g/t Au cut-off

Deposit	Indicated			Inferred		
	Mt	Au g/t	koz	Mt	Au g/t	koz
Bonikro	18.9	1.4	855	3.7	1.2	140
Akissi-So	3.2	2.6	262	3.3	3.0	316
Chapelle	2.9	1.9	182	0.8	2.1	52

Source: Bonikro 2023 FS

15 MINERAL RESERVE ESTIMATES

In 2008, mining commenced at the Bonikro pit and from the satellite pits at Hiré in 2014. The current mine plan requires the progression of Bonikro PB5 and extensions to the Akissi-So and Chapelle pits with supplementary ore being supplied from the Bonikro PB4 low-grade stockpile.

For the calculation of Mineral Reserves, a gold price of $1,500/oz was utilized. The mining plan involves creating new cutbacks to the existing Bonikro and Akissi-So pits.

The mining operating methodology used is open cut mining on 10.0 m benches in three passes. In some parts of the pit, selective mining is required with flitches reducing to 2.0–2.5 m dependent on the dip of the orebody.

The waste material is transported to the designated waste dumps located near each pit stage.

15.1 Key assumptions and parameters

Whittle was used to optimize pit shells on net present value (NPV), based on Measured and Indicated Mineral Resources and key input parameters and modifying factors. the resource model was re-blocked to account for the geology and estimated dilution and ore loss from mining. As a result of these modifications, the calculated dilution was included at a rate of 13.0% for Akissi-So, 18.1% for Chapelle and 1.1% for Bonikro, while ore loss was estimated at 0.4% for Akissi-So, 2.1% for Chapelle and 4.5% for Bonikro.

Cut-off grades were applied to the ore types as shown in Table 15.1, which presents a summary of the inputs for the fresh rock types used to guide the pit optimization process. These inputs encompass current operating costs, throughputs and recoveries specific to each ore type. The long-term gold price used for the analysis is $1,500/oz. Load and haul as well as drill and blast metrics are derived from the existing mining contract per bench for all deposits, accounting for the diverse range of materials encountered.

Refer to Item 4.5 for background on the royalties and gold stream which include the Newcrest purchase royalty over the majority of the Bonikro pit (4.5%), the GMC purchase royalty for Hiré (1%), a gold stream (6% gold at $400/oz) as well as the Government royalty and community development fund (4.5%).

Table 15.1 Pit optimization parameters for fresh rock by pit

	Units	Bonikro	Akissi-So	Chapelle
Base Case mining and processing parameters				
Cut-off grade	g/t	0.65	0.85	0.82
Processing recovery	%	92.2	85.0	87.0
Processing capacity	Mt/a	2.46	2.33	2.33
Contractor fixed cost	$/t	2.82	2.97	2.97
Owner mining overheads (OM G&A)	$/t	2.03	2.15	2.15
Ore costs				
Ore haulage cost	$/t ore	0.0	5.50	5.50
Grade control cost	$/t ore		0.45	
ROM crusher feed	%		40	
ROM crusher Feed cost	$/t ore		1.08	
Site G&A and processing economic parameters				
Site G&A	$M/a		17.0	
Processing fixed costs	$M/a		13.9	
Processing variable costs	$/t ore	6.03	6.19	6.19
Total mining overheads, ore, site G&A and processing costs	**$/t ore**	24.74	31.13	30.97
Revenue parameters				
Selling price	$/oz		1,500	
Transport and refining cost	$/oz		4.50	
Gold stream	%		4.4	
Purchase royalty	%	5.0	1.0	1.0
Government royalty and community development fund	%		4.5	
Total royalty	%	9.5	5.5	5.5
Net gold price	$/oz	1,288	1,347	1,347

Source: Bonikro 2023 FS

Mr Earl (the Qualified Person for Item 15) considers the key input assumptions used in the pit optimization process reasonable and consistent with other similar producing gold mines, particularly with regards to cut-off grades and unit costs. Recovery assumptions are based on current mine performance and are reasonable. The use of Whittle software for the purposes of Mineral Reserve estimation is considered appropriate and acceptable in the industry.

The Bonikro sensitivity analysis shows that the NPV is sensitive to the pit slope, recovery, and gold price. It is noted that an overall 2.5° (5%) change in wall angle has a -26% impact on NPV. The current Bonikro PB5 geotechnical design is based on extensive data collection by SRK from historical mining and further assessment by Allied during current mining. To reduce the risks, ongoing design reconciliations are undertaken to ensure the geotechnical design is achieved and remains stable through pre-split wall control blasting, adequate scaling, and de-pressurization drilling. As discussed in Item 16.2.1, steeper walls are being assessed.

The ultimate revenue factor of the base gold price of $1,500/oz determined for the optimal NPV in the pit optimization process was 0.925 or $1,388/oz for Bonikro, 0.96 or $1,440/oz for Akissi-So and 0.95 or $1,425/oz for Chapelle as shown in the summary of pit optimization results in Table 15.2. This indicates that there is a reasonable balance between waste stripping required and ore availability to optimally maximize cashflow.

Table 15.2 Pit optimization results

	Units	Bonikro	Akissi-So	Chapelle
Revenue factor		0.925	0.94	0.95
Ore tonnes	Mt	9.7	0.9	0.6
Grade	g/t	1.56	2.59	2.21
Contained gold	koz	483	73	40
Waste tonnes	Mt	48.9	6.2	2.3
Strip ratio		5.1	7.0	4.4

Source: Bonikro 2023 FS

Two high strip ratio Akissi-So pit stages 23 (hangingwall down dip) and 24 (southwest) have been excluded from the Mineral Reserve pending confirmatory infill drilling.

15.2 Mine design and layout

The relative positions of the mining area, process plant and the support infrastructure at Bonikro and Hiré are shown in Figure 4.3 and Figure 4.4.

The Akissi-So and Chapelle pits at Hiré are constrained on the western boundaries by the SEIA boundary (50 m free dig for oxides), power infrastructure (200 m blasting) and proximity to houses (250 m blasting).

Mining will continue in the oxide and fresh ore zones, with majority of the future inventory (95.7%) being Bonikro Fresh.

Key material aspects of the mine planning and mine design include:

- Mining will occur in all three existing pits during 2023 and Bonikro thereafter.
- No new expansion capital is required for the remainder of the current LOM plan.
- Waste dump facilities are adequate for the current LOM plan; however, TSFs require additional raises. Additional waste and tailings facilities would need to be expanded should additional reserves be identified.

Given the maturity of the Bonikro mine, the future mine design and layout proposed is informed by optimal pit shells derived from Whittle optimization scenarios as well as current pit designs, boundaries and constraints. Equipment choice and selection is based on that currently deployed at the mine. No major changes are anticipated going forward. The ultimate pit depths for each asset are summarized in Table 15.3.

Table 15.3 Bonikro mining stages and pit depth summary

Asset	Mining stages	Ultimate depth of pit below surface (m)
Bonikro	1, 3, 5	~380
Akissi-So	22	~200
Chapelle	32, 342	~130

Source: Bonikro 2023 FS

Table 15.4 provides a summary of the mine plan by year.

Table 15.4 Bonikro LOM mining summary

Pit	Period	Units	Total	2023	2024	2025	2026
Total	Total tonnes	Mt	65.4	23.8	24.1	14.2	3.3
	Waste tonnes	Mt	54.5	20.8	22.0	10.3	1.3
	Ore tonnes	Mt	10.9	2.9	2.1	3.9	2.0
	Au ounces	koz	546	135	106	199	106
	Au grade	g/t	1.55	1.42	1.60	1.58	1.64
	Strip ratio	t:t	5.0	7.1	10.7	2.6	0.7
Bonikro	Total tonnes	Mt	60.2	18.6	24.1	14.2	3.3
	Waste tonnes	Mt	49.8	16.2	22.0	10.3	1.3
	Ore tonnes	Mt	10.4	2.4	2.1	3.9	2.0
	Au ounces	koz	514	103	106	199	106
	Au grade	g/t	1.54	1.32	1.60	1.58	1.64
	Strip ratio	t:t	4.8	6.7	10.7	2.6	0.7
Akiss-So	Total tonnes	Mt	5.0	5.0	0.0	0.0	0.0
	Waste tonnes	Mt	4.5	4.5	0.0	0.0	0.0
	Ore tonnes	Mt	0.5	0.5	0.0	0.0	0.0
	Au ounces	koz	30.6	30.6	0.0	0.0	0.0
	Au grade	g/t	1.98	1.98	0.00	0.00	0.00
	Strip ratio	t:t	9.4	9.4	0.0	0.0	0.0
Chapelle	Total tonnes	Mt	0.2	0.2	0.0	0.0	0.0
	Waste tonnes	Mt	0.2	0.2	0.0	0.0	0.0
	Ore tonnes	Mt	0.0	0.0	0.0	0.0	0.0
	Au ounces	koz	1.1	1.1	0.0	0.0	0.0
	Au grade	g/t	1.09	1.09	0.00	0.00	0.00
	Strip ratio	t:t	5.3	5.3	0.0	0.0	0.0

Source: Bonikro 2023 FS

15.3 Mineral Reserves

Table 15.5 summarizes the Mineral Reserves at 31 December 2022.

Table 15.5 Bonikro Mineral Reserve as of 31 December 2022 (100% equity basis)

Area	Proven			Probable			Proven + Probable		
	Mt	Grade (g/t Au)	Au koz	Mt	Grade (g/t Au)	Au koz	Mt	Grade (g/t Au)	Au koz
Bonikro	0.0	0.00	0.0	10.4	1.53	514	10.4	1.54	514
Akissi-So	0.3	2.00	17	0.2	1.95	14	0.5	1.98	31
Chappelle	0.0	1.10	1	0.0	0.00	0.0	0.0	1.10	1
Hiré stockpiles	0.1	1.02	2	0.0	0.00	0.0	0.1	1.02	2
Bonikro stockpiles	4.4	0.69	98	0.0	0.00	0.0	4.4	0.69	98
Total	**4.8**	**0.76**	**117**	**10.6**	**1.54**	**528**	**15.4**	**1.30**	**645**

Notes:

- *Data is reported to significant figures to reflect appropriate precision and may not sum precisely due to rounding*
- *Mineral Resources are reported inclusive of Mineral Reserves.*

The Mineral Reserve:

- Reflects that portion of the Mineral Resource which can be economically extracted by open pit methods.

- Considers the modifying factors and other parameters including but not limited to the mining, metallurgical, social, environmental, statutory and financial aspects of the project.
- The Proven Mineral Reserve estimate is based on Measured Mineral Resources and the Probable Mineral Reserve is based on Indicated Mineral Resources.
- Includes allowance for mining dilution.
- A base gold price of $1,500/oz was used for the pit optimization, with the selected pit shells using values of $1,388 (revenue factor 0.925), $1,440/oz (revenue factor 0.96) and $1,425/oz (revenue factor 0.95) for Bonikro, Akissi-So and Chapelle respectively, depleted to 31 December 2022.
- The cut-off grades used for Mineral Reserves reporting were informed by a $1,500/oz gold price and vary from 0.60 g/t Au to 0.85 g/t Au for different ore types due to differences in recoveries, costs for ore processing and ore haulage.
- The Mineral Reserve financial model is cashflow positive.

The Bonikro pit design has 45 koz of in-pit Inferred Mineral Resource material which is excluded from the Mineral Reserves and mine schedule and is treated as waste. The Mineral Reserve includes reconciliation adjustments based on grade control and previous performance for Akissi-so and Chapelle Stages 32 and 33.

The information in this Technical Report that relates to the Mineral Reserve estimation is based on information compiled by Mr Jonathon Yelland and fairly represents this information. Mr Yelland is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM) and is employed by Allied. Mr Yelland has sufficient experience which is relevant to the style of mineralization and type of deposit under consideration and to the activity which he is undertaking to qualify as a Qualified Person as defined in the 2014 CIM Definition Standards. Mr Yelland consents to the inclusion in this Technical Report of the matters based on this information in the form and context in which it appears.

The Qualified Person of Item 15, Mr Earl, has not identified any material issues in regard to the modifying factors that would materially impede the progress of the Bonikro project or the conversion of Mineral Resources to Mineral Reserves.

16 MINING METHODS

16.1 Mining methods

The Bonikro, Akissi-So and Chapelle pits are existing operations. In July 2022, the mining operation converted from owner-operated to contract mining by PW Mining. Equipment being used includes Caterpillar 6020 excavators and Caterpillar 777 haul trucks.

Mining in 2023 is being carried out at Akissi-so, Chapelle and Bonikro PB5, with process plant feed supplemented by the low-grade stockpile from Bonikro PB4 which was mined out in October 2015. From 2024 to 2026, mining is undertaken in Bonikro PB5, with the process plant feed supplemented by the low-grade stockpile until 2029.

The mining operating methodology used is open cut mining on 10.0 m benches with flitches of 3.0–4.0 m increments. In some parts of the pits, selective mining is required with flitches reducing to 2.0–2.5 m dependant on the dip of the orebody.

Waste is taken to the designated waste dumps adjacent to each of the pit stages.

16.2 Geotechnical parameters

Design pit slopes are based on historical recommendations with alterations made based on new information and observed performance of the slopes by Dr Matt Tonkins (Allied's Geotechnical Manager) in conjunction with Chris Orr (independent geotechnical consultant).

Geotechnical risk management processes are in place providing prism monitoring and visual inspections to keep track of wall deformations, allowing timely responses to any emerging failures. In addition, radar has been installed to monitor wall slopes and drone technology is being used for mapping to optimize slope design.

Drill and blast in the transition and fresh zones is carried out by the contractor using production blast hole drilling and grade control using RC drill rigs. All transitional ore is assumed to require drilling and blasting.

16.2.1 Bonikro

The Bonikro pit has a long history, and the current pit is at the fifth pushback stage (PB5). A slope feasibility review for PB5 was undertaken in 2017 by SRK which included data collection, analysis, and slope design recommendations.

The pit contains two lithological domains (felsic and mafic), each of which are separated into three separate weathering domains. The country rock is a range of bedded volcano-sedimentary lithologies comprising meta-basalts, gabbros, volcanic tuffs, chlorite schist to the west and predominantly basalts along the east wall separated by the Bonikro Shear.

The bedding within the western wall strikes approximately northeast-southwest, dipping at a relatively high angle to the north. Within the eastern domain, there is a fault with a fold axis striking east-west. Mineralization is confined to the granodioritic (felsic) intrusion, which appears to intrude along, to some extent, north-south trending shear zones and associated splays, bounded to the east by the Bonikro Shear.

Table 16.1 shows the recommended slope parameters for the Bonikro pit based on the 2017 SRK evaluation as well as in-pit mapping.

The excavation of PB5 will be undertaken in three stages which presents an opportunity to add to the current geotechnical database and allow a review of ongoing slope and excavation performance. Stages 1 and 3 are currently being mined.

The final pit slope may be steepened based on slope deformation monitoring using prisms, slope stability radar, geotechnical drilling and testwork as well as on going geotechnical mapping.

Table 16.1 Bonikro pit design slope angles

Rock type	Parameter	Units	North	East	South	West
Oxide	Slope height	m	60	20	N/A	20
	Bench height	m	10	10	N/A	10
	Batter angle	°	50	50	N/A	50
	Berm width	m	6	6	N/A	6
	Inter-ramp slope angle	°	35	35	N/A	35
	Overall slope angle	°	37	32	N/A	19
Transition	Slope height	m	10	10	N/A	10
	Bench height	m	10	10	N/A	10
	Batter angle	°	60	60	N/A	60
	Berm width	m	5	5	N/A	5
	Inter-ramp slope angle	°	43	43	N/A	43
	Overall slope angle	°	43	30	N/A	43
Fresh (mafic)	Slope height	m	N/A	325	100	220
	Bench height	m	N/A	20	20	20
	Batter angle	°	N/A	80	80	80
	Berm width	m	N/A	8.5	8.5	10.5
	Inter-ramp slope angle	°	N/A	59	59	55
	Overall slope angle	°	N/A	50	41	50
Fresh (felsic)	Slope height	m	308	N/A	163	N/A
	Bench height	m	20	N/A	20	N/A
	Batter angle	°	80	N/A	80	N/A
	Berm width	m	8.5	N/A	8.5	N/A
	Inter-ramp slope angle	°	59	N/A	59	N/A
	Overall slope angle	°	47	N/A	53	N/A

Source: Bonikro 2023 FS

16.2.2 Akissi-So

The first full slope design review for Akissi-So was carried out by Golder Associates (Ghana) (Golder) in 2015. During this review, data was collected from mapping and dedicated geotechnical drillholes. In 2017, Golder provided a revised slope design review based on data collected by Newcrest and from observed slope performance. Some minor changes were included based on ongoing performance reviews.

The geology of the pits contains a single, granodioritic rock mass. For domaining purposes, a vertical weathering sequence of completely to highly weathered granodiorite (oxide) and moderately to highly (transition) into slight to no weathering (fresh) has been established.

The Akissi-So geotechnical parameters are listed in Table 16.2.

Table 16.2 Akissi-So pit design slope angles

Rock type	Parameter	Units	North	East	South	West
Oxide	Slope height	m	35	25	20	30
	Bench height	m	8	8	8	8
	Batter angle	°	55	55	55	55
	Berm width	m	4	4	4	4
	No. of benched stacked	#	5	4	3	4
	Inter-ramp slope angle	°	40	40	40	40
	Overall slope angle	°	42	43	44	30
Transition	Slope height	m	10	10	30	15
	Bench height	m	8	8	8	8
	Batter angle	°	60	60	60	60
	Berm width	m	4	4	4	4
	No. of benched stacked	#	2	2	4	2
	Inter-ramp slope angle	°	43	43	43	43
	Overall slope angle	°	50	50	46	50
Fresh	Slope height	m	160	180	140	160
	Bench height	m	20	20	20	20
	Batter angle	°	80	75	80	80
	Berm width	m	8.5	8.5	8.5	8.5
	No. of benched stacked	#	8	9	7	8
	Inter-ramp slope angle	°	59	55	59	59
	Overall slope angle	°	61	57	62	52

Source: Bonikro 2023 FS

16.2.3 Chapelle

Golder undertook the initial slope design in 2015 with an updated review in 2017. The pit contains a single granodioritic host rock which is completely weathered at surface with three separate weathering domains: oxide, transition and fresh.

Table 16.3 lists the Chapelle pit design parameters. The oxide is split into ‘red’ and ‘yellow’. While the lower ‘yellow’ oxide appears in the other Hiré pits, it is only in Chapelle that the low cohesion state has been identified, related to felsic intrusives.

Table 16.3 Chapelle pit design slope angles

Rock type	Parameter	Units	North	East	South	West
Oxide (red)	Slope height	m	25	25	25	25
	Bench height	m	8	8	8	8
	Batter angle	°	50	50	50	50
	Berm width	m	3	3	3	3
	No. of benched stacked	#	5	4	3	4
	Inter-ramp slope angle	°	39	39	39	39
	Overall slope angle	°	30	42	42	42
Oxide (yellow)	Slope height	m	25	25	25	25
	Bench height	m	8	8	8	8
	Batter angle	°	50	50	50	50
	Berm width	m	5	5	5	5
	No. of benched stacked	#	5	4	3	4
	Inter-ramp slope angle	°	34	34	34	34
	Overall slope angle	°	30	42	42	42
Transition	Slope height	m	20	20	20	20
	Bench height	m	10	10	10	10
	Batter angle	°	60	60	60	60
	Berm width	m	5.5	5.5	5.5	5.5
	No. of benched stacked	#	3	3	3	3
	Inter-ramp slope angle	°	42	42	42	42
	Overall slope angle	°	42	42	42	42
Fresh	Slope height	m	160	180	140	160
	Bench height	m	20	20	20	20
	Batter angle	°	65	75	75	80
	Berm width	m	7.5	7.5	7.5	7.5
	No. of benched stacked	#	8	9	7	8
	Inter-ramp slope angle	°	50	57	57	61
	Overall slope angle	°	61	57	62	52

Source: Bonikro 2023 FS

16.3 Hydrological parameters

A diversion channel is planned during H2 2023 to convey excess water upstream of the Bonikro pit to the east of the TSF, while maintaining sufficient raw water storage for the process plant.

Vibrating wire piezometers have been installed to monitor water pressures within the Bonikro pit walls which shows a reduction in pressure rates have started to appear in response to dewatering.

Future work in 2023 will focus on the establishment of monitoring wells around the perimeter of the final PB5. Establishment of horizontal de-pressurization holes into the pit slopes are planned as the stages are excavated. The water level in the Bonikro pit is estimated to be 3.1 Mm^3 with targeted removal by Q3 2023.

Surface water management facilities are established for Akissi-So and Chapelle. Internally the pits use in-pit sumps on each bench to dewater one to two benches ahead of the mining activity. As the pit deepens, staging systems will be set up in both Chapelle and Akissi-So. In severe rainfall events, additional pump capacity is on site to assist dewatering activities.

16.4 Mining fleet and machinery requirements

Table 16.4 summarizes the key contract mining equipment being used. Additional ancillary equipment includes cranes, forklifts, buses, light vehicles, light trucks, water pumps, lighting plants, gensets, and compressors.

Table 16.4 Bonikro mining fleet

Type	Model	Fleet
Dump truck	Caterpillar 777D 90-tonne Dump Truck	2
	Caterpillar 777F 90-tonne Dump Truck	10
	Caterpillar 777G 90-tonne Dump Truck	3
	Caterpillar 777E 90-tonne Dump Truck	27
Water cart	Caterpillar 773D Water Cart	1
Haulage trucks	MAN Ore Haulage Tipper Trucks	6
Excavator	Caterpillar 6020 Excavator	3
	Caterpillar 6015B Excavator	2
	Caterpillar 390F Excavator	2
	Caterpillar 336D Excavator	2
Wheel dozer	Caterpillar 824H Wheel Dozer	1
	Caterpillar 834H Wheel Dozer	1
Track dozer	Caterpillar D9R Track Dozer	4
	Caterpillar D9G Track Dozer	1
	Caterpillar D7R Track Dozer	2
Grader	Caterpillar 16M Grader	2
	Caterpillar 16H Grader	1
Wheel loader	Caterpillar Wheel Loader – 988K	2
	Caterpillar Wheel Loader – 988H	2
	Caterpillar Wheel Loader – 980L	1
	Caterpillar Wheel Loader – 950H	1
	Caterpillar Wheel Loader – 972G	1
Drill rig	Production Drill Rigs – Sandvik 1500i	10
	GC Drill Rig – Austex X300-HC	1

Source: Bonikro 2023 FS

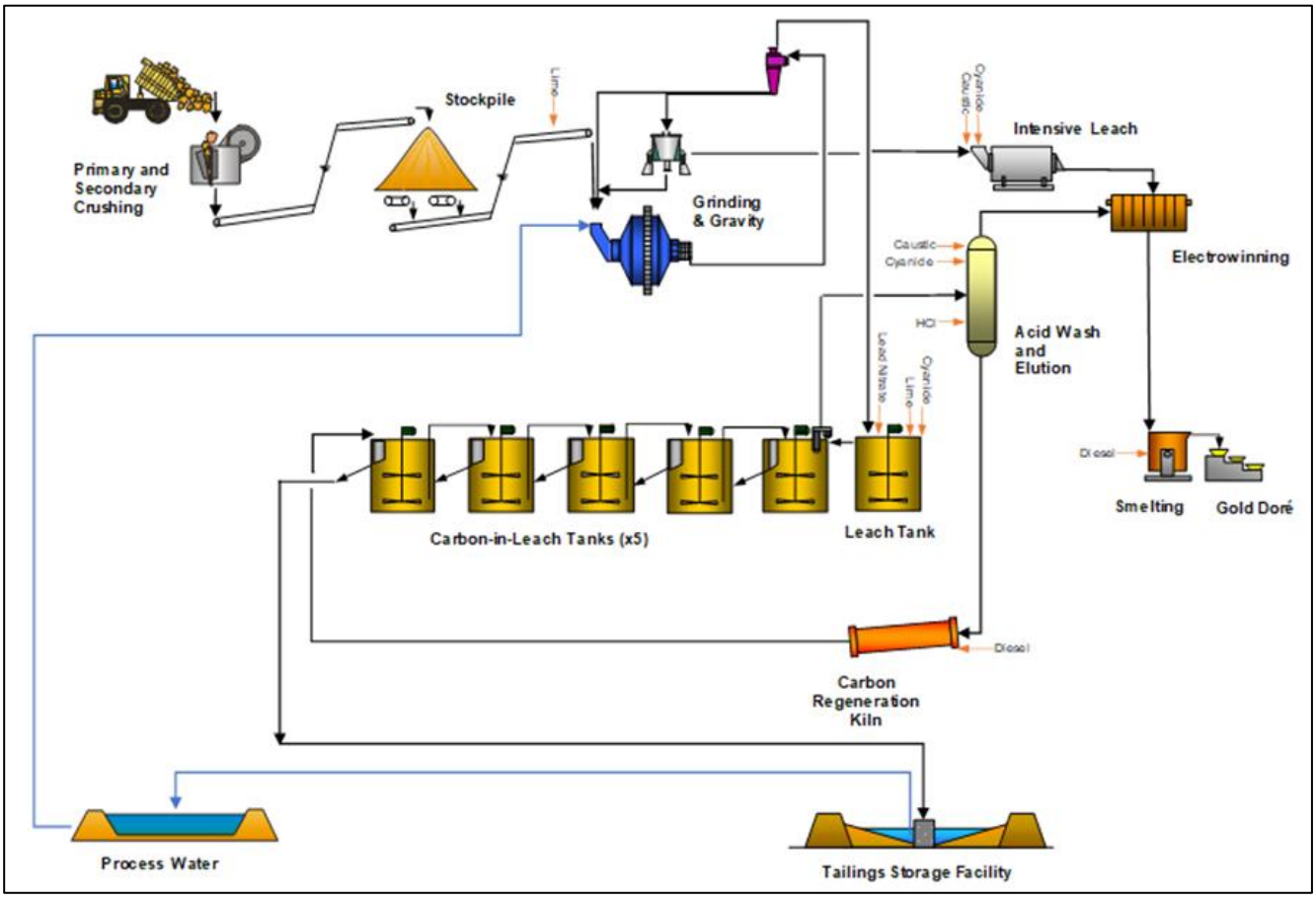
17 RECOVERY METHODS

17.1 Flowsheet

The process employed at Bonikro is a conventional free milling cyanide leaching flowsheet with primary and secondary crushing, single stage milling, gravity recovery, followed by CIL. Gravity recovered gold is leached with the dissolved gold being electrowon prior to smelting. Carbon is acid washed, eluted and regenerated with gold being electrowon prior to smelting into doré. Tailings are disposed of to the TSF without cyanide detoxification.

Figure 17.1 shows the Bonikro plant flowsheet which is typical of a free milling conventional gold plant.

Figure 17.1 Bonikro process plant flowsheet



Source: Bonikro 2023 FS

17.2 Processing schedule

The production schedule is expected to remain at about 2.5 Mt/a for the life of the project and thus no expansion capital is required for increased throughput. The plant will need to treat an average of between 310 t/h and 315 t/h to achieve 2.5 Mt/a and provided that the correct blend is maintained, the milling of fresh ores is expected to achieve the target. The LOM plant production is presented in Table 17.1 and has been developed based on the mining and processing schedule and associated inputs.

Table 17.1 LOM Bonikro plant production estimates

Process	Units	LOM	2023	2024	2025	2026	2027	2028	2029
Tonnes	Mt	**15.42**	2.44	2.46	2.46	2.46	2.46	2.46	0.68
Au grade	g/t	**1.30**	1.54	1.46	1.87	1.58	0.85	0.69	0.69
Contained Au	koz	**646**	121	116	148	125	67	54	15
Recovered Au	koz	**591**	109	107	137	115	61	49	13
Recovery	%	**91.5**	90.2	92.2	92.2	92.2	91.5	90.0	90.0

Source: Bonikro 2023 FS

Provided that the plant is maintained to a high standard, the target throughput should be achieved as the 2.5 Mt/a is based upon a runtime of 92% or about 8,060 hours per annum.

The LOM production schedule assumes approximately 99% fresh ores will be treated during the forecast period. The appropriate gold recovery values from each pit and oxidation state have been used in the production schedule and financial model.

17.3 Analytical laboratory

An onsite analytical laboratory analyses samples for grade control and plant control with aqua regia digestion for plant samples and Leachwell for grade control. Fire assay techniques are not employed. Leachwell provides a more rapid turnaround for mining, although this only reports soluble gold and not total gold. Allied has stated that a portion of the grade control samples are independently analysed by fire assay.

17.4 Energy, water and process consumables

17.4.1 Energy

Power supply is discussed in Item 18.4.

The average power demand for the Bonikro-Hiré operation is estimated at 8 MW and is dependent on the amount of softer oxide and transitional material being treated. Power loads for milling are influenced by the ore fragmentation, oxide and fresh ore characteristics, processing rate and throughput capacity.

17.4.2 Water

Site water demand is approximately 220 m^3/h based on the site water balance developed by Knight Piésold in 2021. The site wide water balance accounts for a series of rainfall scenarios including average, dry, wet and design storm sequences. The water balance model assessed the response of the TSF, the process plant, and the pit diversion dam to each of the rainfall scenarios, with the following conclusions:

- TSF:
  - Sufficient storage capacity is available to the contain scheduled tailings deposition, plus the design rainfall storm event/rainfall sequence.
- Pit diversion dam:
  - A range of assumed basin permeability values (1 x 10-8 m/s to 1 x 10-7 m/s) was used in the water balance modelling.
  - The water balance was found to be sensitive to the permeability of the pit diversion dam (PDD).
  - The results indicated that a permeability of maximum 5 x 10^{-8} m/s is required to avoid shortfall during average climatic conditions, and a maximum of 1 x 10^{-8} m/s is required to avoid a shortfall during dry conditions.
  - The permeability of the PDD basin is to be confirmed with a geotechnical investigation, after which the water balance model will be updated.

- Process plant:
  - Process water decant return shortfall is expected to occur under average and dry climatic conditions.
  - All the process water make-up requirements can be met with supply from the PDD under average climatic conditions.
  - An additional supply capacity of 240 m^3/h will be required under dry climatic conditions. A shortfall of supply from the PDD may therefore expected under these conditions and would require supplementing with the production bores and pit dewatering.

17.4.3 Reagents and consumables

Table 17.2 summarizes the consumption of reagents and consumables based on historical performance. The operating cost estimate also includes consumptions and costs for other minor reagents and consumables such as mill liners, lead nitrate, oxygen, hydrogen peroxide, natural gas, caustic soda, hydrochloric acid and smelting fluxes.

Table 17.2 Consumption of key reagents and consumables

Reagents and consumables	Consumption (kg/t)
Lime	1.02
Sodium cyanide	0.36
Carbon	0.03
Grinding media	0.18

Source: Bonikro 2023 FS

18 PROJECT INFRASTRUCTURE

18.1 General infrastructure

The Bonikro process plant has been operating since October 2008 followed by mining commencement of the Hiré satellite pits in December 2014. Consequently, the mine has sufficient support infrastructure to continue to operate at the current production level.

At the Bonikro site, the infrastructure comprises the main office block, administration offices, security and medical building, plant and vehicle workshops, storerooms, and an assay laboratory. Primary mining infrastructure includes maintenance workshops, process plant, administration buildings and a warehouse.

Support facilities have also been established at Hiré for the satellite operation. A 15 km haul road links Hiré to the Bonikro process plant.

The Bonikro camp is situated close to Hiré village and has the capacity to accommodate 90 staff, mostly expatriate personnel, visitors, and senior contractors. The camp is within a walled compound for security.

Majority of the Ivorian staff live in Hiré village, bordering the western boundary of Hiré operations at the Akissi-So pit. The village has a population of approximately 50,000 people. Personnel also reside in Oumé, 15 km north of Bonikro.

18.1.1 Tailings storage facility

The Bonikro TSF is an existing facility located approximately 1 km from the process plant. The TSF was commissioned in 2008 and comprises a valley-fill facility with a surface area of approximately 200 ha.

The TSF was originally designed and constructed with a central clay core. Over the life of the facility, various designers were involved with the embankment raises being constructed predominantly using downstream construction techniques. A summary of the TSF embankment construction stages is presented in Table 18.1.

Table 18.1 Summary of TSF embankment stages

Stage	Designer	Year of construction	Method	Elevation
1	Allen Watson	2008	Central clay core	RL 211 m
2	Knight Piésold	2010	Centreline	RL 216 m
3	Golder	2013	Downstream	RL 221 m
4	Golder	2016	Upstream	RL 225 m
5	Knight Piésold	2020	Centreline	RL 227.6 m
6	Knight Piésold	2021	Downstream	RL 229.0 m
7	Knight Piésold	2023	Downstream	RL 230.4m

Source: Bonikro 2023 FS

Bonikro has been under Allied's control since May 2019 with Knight Piésold appointed as the Engineer of Record in July 2020, in accordance with Allied's Tailings Management Framework and the International Council of Mining & Metals Global Industry Standard on Tailings Management of August 2020 (GISTM).

- In February 2021, Phillip Steenkamp (consultant) carried out an independent gap analysis of GISTM to identify areas of improvement in the management of the TSF, resulting in updates to documentation and training including the operating manual, emergency preparedness plan and a Trigger Action Response Plan (TARP).
- In 2021, Knight Piésold updated the dam break assessment based on Stage 6 as constructed and the Final Stage of the TSF which showed a dam failure consequence category of 'HIGH C', based on ANCOLD Consequence Category.

- The most recent annual audit was conducted in November 2022 by Knight Piésold, with no material items identified.
- In 2023, Phillip Steenkamp is scheduled to carry out a Dam Safety Review as per the GISTM requirements.
- In July 2022, Knight Piésold completed a stability review which showed that the Stage 6 and Stage 7 embankments have adequate factors of safety for all loading conditions as per ANCOLD guidelines (2019).

As of December 2022, the TSF contained 31.2 Mt of tailings, as compared to the Knight Piésold LOM design which is based on a 52.9 Mt storage capacity at RL 237 m. It is noted that the remaining capacity of the TSF is 21.7 Mt, as compared to the 15.4 Mt of Mineral Reserves, which provides additional capacity for targeted exploration success at the Dougbafla prospect.

Design is progressing for Stage 8 to include relocation of the haul road, diversion channel and modify the lined tailings trench so that it is located within the TSF footprint. A new ESIA will be conducted and submitted to the regulator for the approval of future raises after Stage 7.

18.1.2 Tailings deposition and water management

Tailings slurry material is pumped at a solids percentage of 52%, via a high-density polyethylene (HDPE) pipeline from the process plant to the TSF and up onto the main embankment where it is deposited onto the beach via multiple spigots. The pipeline is contained in an HDPE-lined trench to contain spillages. The rotation of the deposition points is undertaken such that supernatant water is directed to the southern extent of the TSF from where the water is decanted via a decant barge and submersible pump system to the process plant.

During December 2021 to October 2022, 76% of the deposited water was recovered and varies dependent on the climatic conditions.

18.1.3 TSF seepage management

The TSF was designed and constructed without any under-drainage measures. The drainage of the TSF is reliant on the seepage through the valley basin, which is passively collected in an unlined seepage collection pond located north of the TSF. The readings at all vibrating wire piezometers have either remained stable since the 2021 Knight Piésold audit or trended downwards.

18.2 Waste rock dumps

Waste dumps are established in close proximity to the existing pits. New waste dump locations have been identified with additional sterilization drilling required to confirm future locations. Refer to Item 20.4 for details on the waste rock geochemistry.

18.3 Water supply

The main sources of water at Bonikro include the water storage dams which store a total of 18.2 gigalitres (GL). Additional water is sourced from pit dewatering (Bonikro pit), nine production bores, the TSF and precipitation runoff. A raw water tank of 1.0 million litres (ML) and a process water pond of 10.0 ML capacity are situated at the process plant.

Surface water runoff from the catchment upstream of the Bonikro pit area and TSF is collected in a series of unlined earth-fill embankment dams located south of the Bonikro east waste rock dump. Water collected in the dams is utilized in the process plant.

To mitigate the risk of water flowing into the Bonikro pit, the existing three dams will be combined upstream to form the Upper Dam of the PDD. This will allow for water diversion into the adjacent valley to the east of the Bonikro TSF in the case of extreme rainfall events.

Groundwater from Bonikro pit dewatering is used for dust suppression, process water or released to the environment. Production boreholes are used to supplement the water balance when required.

Dewatering of the Bonikro pit is ongoing with some of the water used in the process plant.

18.4 Power supply and distribution

Power generation, transmission and distribution is managed and controlled by Compagnie Ivoirienne d'Électricité.

Hydro-electric power produced at Taabo Dam is fed via a 23 km 90 kV transmission line which supplies the Hiré substation, located adjacent to the Akissi-So pit (Figure 4.4). The Hiré substation has a 90/33 kV (18 MVA) transformer. The substation is located in close proximity to the Akissi-So waste dump area. A second transformer was installed as a duty/standby unit at the Bonikro process plant.

Two outgoing 90 kV feeders supply Allied's Agbaou operation to the south of the Bonikro-Hiré project, and the Bonikro process plant via a 33 kV supply line running parallel to the Hiré-Bonikro haul road.

Power reliability is estimated at >95.0% and therefore a diesel back-up power supply has not been justified at this time. Two 800 kVA standby generators power emergency loads, including security lighting, agitators, gold room and offices. Both generators are located behind the mill motor control centres.

The comminution circuit is not on emergency power.

Diesel-generated power is used for the remote operating areas, at water storage points and in the location of the distribution pumps.

18.5 Logistics

The Félix-Houphouët-Boigny International Airport, 16 km southeast of Abidjan, is the main air gateway to the country with flight routes to several African and Middle Eastern centres, and Europe.

Equipment for the mine is imported via the port at Abidjan or the International Airport and is trucked to Bonikro-Hiré.

Doré is typically flown from site using a chartered helicopter.

19 MARKET STUDIES AND CONTRACTS

Bonikro produces gold doré comprising approximately 90% gold. The doré is readily marketable on an 'ex-works' or 'delivered' basis to several refineries and off-takers internationally, particularly in Europe and South Africa where Allied has contractual arrangements in place for its other operations. Currently the doré is refined at Metalor in Switzerland.

The refiner is responsible for producing gold and silver bars that satisfy the London Bullion Market Association (LBMA) good-delivery standards. To satisfy these standards, the refiner must comply with LBMA regulations and operating practices. If the refiner under contract fails to meet these standards, a new refinery can be engaged in a reasonable timeframe. Allied does not take physical delivery of the refined gold and silver bars.

Gold was one of the best performing major assets of 2020–2021 driven by a combination of high risk compounded by the COVID-19 pandemic, low interest rates and positive price momentum. By early August 2021, the LBMA Gold Price PM reached a historical high of $2,067/oz. During H2 2022, the gold price decreased to $1,650/oz due to a strengthening US Dollar but has since recovered to over $1,900/oz during Q1 2023 as shown in Figure 19.1.

Figure 19.1 Five-year gold spot gold price

Source: S&P Capital IQ

The Bonikro Mineral Reserve estimate is based on a long-term gold price of $1,500/oz and the 2023 FS economic analysis is based on a long-term gold price of $1,568/oz based on consensus estimates published by J.P. Morgan. The assumption represents the lower of the three-year trailing average price of $1,650/oz, the current spot and 2023 long-term consensus gold price of $1,686/oz.

Refining and bullion transport costs are based on current contracts with Brinks Transport and Metalor Refinery.

Since 2022, mining has been undertaken by PW Mining under contract. The mining costs used in the Bonikro 2023 FS are based on the contract rates from PW Mining.

20 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

The overarching environmental law in Côte d'Ivoire is the Environmental Code (Law 96-766). The Code requires an ESIA process be completed for all projects anticipated to impact the environment. Decree 96-894 of November 1996 includes extraction of mineral resources as being automatically subject to an ESIA process. The National Agency for the Environment (ANDE) is responsible for implementation of Decree 96-894 and subsequent monitoring of compliance with the Environmental and Social Management Plan (ESMP).

Most ESMP measures have either been implemented or have been amended by subsequent ESIAs. This is typical for an operational site as an ESMP is considered a live document, that is regularly updated to reflect continuous improvement across the site. Côte d'Ivoire legislation does not require submission of ESMP updates for approval.

20.1 Approvals and permitting

The status of existing approvals relevant to the current operations are provided in Table 20.1. As and when future approvals are sought and granted, the ESMP will be updated to incorporate additional management measures as required.

Table 20.1 Status of existing approvals

Type	Number	Issue date	Expiry date
Environmental permit	Arrêté 023 – Continuation at Bonikro	11 May 2012	n/a
Environmental permit	Arrêté 145 – TSF Stage 5, 6 and 7	31 May 2019	n/a
Environmental permit	Arrêté 671 – Bonikro	2 Aug 2006	n/a
Environmental permit	Arrêté 048 – Hiré	23 Jul 2013	n/a
Environmental permit	Arrêté 012 – Hiré Extension	13 Jan 2021	n/a
Other	Arrêté N°89 – Extension of PE44 protection zone	20 July 2020	n/a
Other	Courrier N° 00226MMG/CAB – Akissi-So Special Blast	7 Apr 2022	7 Apr 2030
Other	Arrêté N°52-MIM-DGMG – Operation of explosives magazine	7 Feb 2022	7 Feb 2025
Other[1]	2020-070/ARSN/CI-Aut – Radiation Protection, Nuclear Safety and Security Authority	23 Sep 2020	22 Sep 2023
Other	Decree 617/MINEDD/CIAPOL/SDIIC/fpm to collect, transport, and store hazardous and non-hazardous materials (except waste oils)	23 Dec 2021	n/a
Other	0089/MINEDD/C permission to discharge pit water to the environment	5 July 2021	n/a

Source: Bonikro 2023 FS

Note 1: The site no longer has any radiation gauges in use. The existing gauges have been decommissioned and are stored in a concrete bunker on site. Work is underway to identify a contractor to remove these radiation sources.

Operational activities triggered the prior relocation of Bonikro (2008), Bandamakro (2010) and Konankro (2018) villages.

In 2021, Allied received approval of the ESIA for the Hiré Expansion Project which required the relocation of houses. The majority of 363 households adjacent to the Akissi-So pit chose to relocate to a new urban lot in the west of the Hiré township with a new house built for them by the Company.

To provide sufficient area for waste dumps, a 441 ha expansion (951 farms or plots) is required into an agricultural area. So far, 315 ha of land within this zone (involving 39 landowners) has been formally acquired and compensated. There is agreement with the affected parties to acquire and compensate the land only, and to defer economic displacement until absolutely required.

The expansion of the Bonikro pit affected four landowners and 20 farmers and the discharge of pit water affected 27 land users. This land acquisition and compensation has been completed.

20.1.1 Dougbafla

Ongoing evaluation work at Dougbafla, adjacent to the Oumé town, is expected by Allied to result in this area becoming a future mining target. A previously proposed development at Dougbafla was approved in July 2013 but has since expired. Any proposed development in this area will be subject to a further ESIA process with updated baseline data. Terms of reference have been submitted with baseline monitoring underway.

In 2022, access was required around two prospects in the Oumé area for exploration activities. This required compensation to 113 land users for impacts on crops.

20.2 Environmental and social baseline conditions

Allied undertakes regular environmental monitoring of air quality, noise, blasting and water quality. In addition to environmental monitoring, Allied has implemented programs to evaluate the efficiency of resource use and pollution prevention based on data such as annual water and energy consumption, greenhouse gas emissions and volumes of waste generated.

The HSEC department undertakes regular audits of the ESMP implementation to identify corrective measures required. The Company is also subject to external audits mandated by the regulatory authorities and lender agreements.

20.2.1 Air quality

Air quality studies (ERM, 2020a) for the Hiré area determined the airshed to be degraded with regular exceedances of PM10 standards (i.e. inhalable particulate matter with a particle size of less than 10 µm), particularly during the Harmattan. However, directional analysis indicates windblown dust from the mining area is not a significant source of PM10. PM2.5 and total particulates are also being recorded.

20.2.2 Noise

Noise studies (ERM, 2020b) undertaken at four locations in the Hiré town established that all locations comply with daytime limits of 60 decibels A (dBA). Exceedances are recorded for the evening limit (55 dBA) at three locations, and the night-time limit (45 dBA) at all locations. Monitoring reports attribute the exceedances to domestic activities, traffic, and other non-mining sources.

20.2.3 Hydrology

The Bonikro exploration and exploitation permits traverse two river basins: the Bandama basin and the Boubobasin. Current exploitation activities are within the Bandama basin, which is one of the main river basins in Côte d'Ivoire. Two hydro-electric dams, the Kossou and Taabo dams, are situated on the main Bandama River.

The Bonikro mining area is drained by the Téné River and its tributaries, with drainage in a northeasterly direction, joining the Bandama River near the Bériaboukro village. The Hiré mining area is drained by the Brôhô River and its tributaries, with drainage in an easterly direction, joining Lake Taabo. These river valleys are wide and flat bottomed, often with no distinguishable channel.

There are no Ivorian standards for surface water quality and surface water is not used for domestic purposes by local communities. Allied presents water quality data in comparison with the International Finance Corporation (IFC) EHS Effluent Guidelines (2007) and notes that the area surrounding the mine is heavily mineralized. Consequently, baseline data, as well as ongoing monitoring upstream, confirm naturally elevated levels of minerals in the surrounding surface water.

There do not appear to be any noticeable trends in water quality deterioration as a result of mining activities.

Surface water sampling across the site generally illustrates that:

- pH levels range from 6.0 to 8.31
- Chemical oxygen demand and biological oxygen demand generally exceed the IFC EHS effluent guidelines in February and March (dry season)
- Concentrations of iron regularly exceed the IFC EHS effluent guidelines
- Concentrations of cadmium occasionally exceed the IFC EHS effluent guidelines
- Concentrations of arsenic, zinc and copper exceed the IFC EHS effluent guidelines once or twice a year
- All other reported heavy metals and cyanide are within the IFC EHS effluent guidelines at all sites.

20.2.4 Geohydrology

The geohydrology of the site is controlled by an oxide zone overlying granodiorite (fresh, crystalline rock).

Groundwater quality is compared to World Health Organization (WHO) drinking water standards, since the local community makes use of groundwater for domestic purposes.

Groundwater sampling across the site in 2022 indicates that groundwaters in the Bonikro area (excluding the TSF) are slightly acidic (average pH 5.6, ranging from 4.2 to 6.5 pH) with slightly acidic to neutral pH levels around the TSF (average pH 6.7, ranging from 5.6 to 7.3). At Hiré, groundwaters are slightly acidic to neutral (average pH 6.55, ranging from 6.0 to 7.1).

The 2022 data shows all reported heavy metals and cyanide concentrations are within applicable limits at all sites, except for one exceedance of the applicable cadmium guideline. This is an improvement on 2021 data, where concentrations of lead exceeded the regulatory compliance limit (0.01 mg/L) in 22 out of 72 samples and concentrations of arsenic exceeded the applicable guideline (0.01 mg/L) in 12 out of 61 samples.

20.2.5 Biodiversity and land use

Habitat-type mapping has been undertaken across an area covering the existing exploration and exploitation permits as well as a 10 km buffer. Within the wider area mapped, there are five classified forests, Taabo, Sangoué, Doka, Téné and Oumé; however, these are subject to significant illegal deforestation associated with the establishment of agricultural crops.

None of the studies undertaken to date have identified any species of conservation concern or sensitive environmental areas.

20.2.6 Archaeology and cultural heritage

Allied maintains a database of archaeological and cultural sites in the area and is updating its map with coordinates of each cultural asset. Previously identified archaeological and cultural sites include cemeteries and sacred sites.

20.2.7 Community

Current mining at Bonikro is active across the Hiré and Oumé sub-prefectures, with six villages and 16 encampments (project communities) considered affected by ongoing activities. The estimated combined population of these project communities is 120,000.

Project communities comprise three main ethnic/cultural groups:

- The Dida, a community local to the area. Villages are primarily populated by the Dida.

- The Baoulé and Malinké, comprising Ivorian ethnic groups who migrated from the centre and north of Côte d'Ivoire. The Baoulé are estimated to be the largest ethnic group in the area and make up approximately half of the total population. Encampments are primarily populated by the Baoulé.
- The Economic Community of West African States, comprising non-Ivorians who emigrated from Burkina Faso, Mali, Guinea, Benin, Senegal, and Nigeria.

All local communities are characterized by a lack of formal employment and a mixed livelihood, consisting of subsistence and income-generating activities largely reliant on the surrounding natural resources. Historically, agriculture was the main livelihood activity with all seasonal food production used for family consumption, with only the surplus being sold. Livestock rearing was another important livelihood activity, with most households having chickens, goats or sheep for personal consumption. Since the commencement of mining operations in 2007, there has been a progressive shift in livelihood activities towards more formal employment associated with the mine and artisanal mining activities. This shift has been associated with a large influx of non-native and non-national people into the region.

Water supply for communities is typically sourced from modern or traditional wells, or temporary sumps created in the lowlands. In Hiré town, closest to the Akissi-So, Chapelle and Assondji-So pits, 248 village wells are used for water supply for domestic needs. This water is not treated prior to use.

Allied reports that monitoring results show that dewatering of the pits at Hiré is causing localized groundwater drawdown around Hiré. HGM has drilled two deep boreholes to supply additional water to the town water supply system.

A land acquisition and resettlement committee (CSPAR) has been established to maintain effective communication between Allied and people and groups potentially affected by future mining extension. This provides a forum for discussion on aspects of resettlement planning, monitoring and implementation.

20.3 Tailings geochemical characterization

A review of the geochemical properties of the Bonikro TSF tailings was undertaken in 2016 by Graeme Campbell and Associates with further analyses of feed ore composites in 2017 (Graeme Campbell and Associates, 2018).

At the time of the 2016 study, the bulk of the plant feed was from the Hiré pits. According to the Bonikro 2023 FS, it was confirmed that for the initial Hiré feed, the tailings material was non-acid forming (NAF). Acid potential was attributed to trace sulphide minerals and neutralizing potential attributed to the presence of trace carbonate abundances. Major and minor elemental analyses noted the enrichment of bismuth and molybdenum. Water samples from the TSF were found to be of neutral to alkaline pH with total dissolved solids of below 1,000 mg/L. The water samples had elevated concentrations of fluoride (F-) and molybdenum, which exceeded WHO drinking water and freshwater-aquatic ecosystem guidelines. The source of the soluble molybdenum was attributed to the oxidation of molybdenite (MoS_2) found in parts of the Bonikro orebody.

Further assessment of geochemistry was undertaken in 2017, assessing ore feed composites considered to be representative of Bonikro PB5, with most of the samples classified as NAF. Molybdenum enrichment was within similar ranges to that noted in the 2016 geochemical assessment. Testing of a representative sample of the ex-mill slurry of process tailings for PB5 will likely contain metal elevations geochemically similar to the previous stages.

While the decant water from the TSF has been noted to have elevated concentrations of molybdenum and fluoride, these elevated concentrations have not been noted in the seepage water. The bulk of the tailings contained in the Bonikro TSF are sourced from Bonikro pit stages 1 to 4, which is geologically similar to PB5, with the Hiré tailings forming a minority of tailings in the upper layers. Seepage water quality is a useful indication of likely elevated metals from the tailings (Graeme Campbell and Associates, 2018). The analysed seepage water quality was similar to that which would be generated from PB5.

20.4 Waste rock characterization

As part of the 2013 ESIA amendment, 88 ore, mineralized waste and waste rock samples were collected from surface to 300 m depth in 42 holes drilled over the Akissi-So, Assondji-So and Chapelle deposits. The 88 samples were all subjected to a series of static geochemical tests designed to assess the level of risk in terms of potential acid generation as well as the presence and potential leaching of soluble metals and salts.

After receipt and review of the static tests results, 13 composite samples were prepared from the original samples with the selection of samples based on the type, location, lithology and geochemical characteristics. The composite samples were subjected to tests on both the solid and the soluble fraction. The interpretation of the results of the geochemical and mineralogical evaluation of the representative ore, mineralized waste and waste rock collected in the Property area led to the conclusion that the ore, mineralized waste and waste rock from Hiré will probably not be acid forming.

In 2009, SRK completed preliminary geochemical characterization testwork on 11 samples from the Bonikro pit. The results of the testwork indicated that the waste rock was NAF, with a minority of samples classified as 'Uncertain'. This conclusion was later confirmed in 2013 when Terrenus Earth Sciences undertook a geochemical assessment of waste rock from the Bonikro pit using in-pit and drill core samples. The focus of the assessment was the kinetic leaching program, as it was expected that the materials were NAF.

20.5 Community development

Two local development committees (CDLM) have been established (Bonikro and Hiré) and will remain in place throughout the life of mine as required under the Mining Conventions. Both the Hiré and Bonikro Local Mining Development Plans (2021–2023) were approved in 2020. In 2022, the CDLM contributions totalled $0.84 million.

In 2022 the CDLM projects focused on provision of social infrastructure, services and agricultural development. This included the construction of the upgrade and extension of the market, provision of equipment for a water tower in the main town, construction of water towers in two villages, provision of medical equipment, supply of pesticides and seedlings to three cooperatives, extension of the electricity network in three villages (including installation of transformers at two of these villages) and construction of a water irrigation system to support the existing low-land rice development project.

In addition to the CDLM contribution, Allied made voluntary investments of $0.19 million to support other socio-economic development projects for the communities which included two existing agricultural projects.

20.6 Closure

Environmental protection and rehabilitation for mining in Côte d'Ivoire is governed by the Mining Code, which requires that an operator undertakes the approved environmental rehabilitation program in full and provide appropriate funds for rehabilitation as a guarantee.

The Mine Closure Plans for Hiré and Bonikro will be updated and submitted in line with regulatory expectations.

An estimate of the anticipated mine closure costs at 31 December 2022 was developed by independent consultant Kewan Bond Pty Ltd to cover future liabilities for disturbed areas, infrastructure and mine closure as shown in Table 20.2, inclusive of contingency.

Table 20.2 Bonikro LOM closure liability (as of December 2022)

Cost item	LOM liability ($ M)		
	Bonikro	Hiré	Total
TSF	2.21	0.00	2.21
Waste rock dumps	1.61	4.56	6.17
Dams and ponds	0.22	0.00	0.22
Low-grade stockpiles and ROM pads	0.47	0.00	0.47
Infrastructure demolition	4.59	0.10	4.69
Equipment resale and salvage	-1.96	-0.08	-2.04
Open pit mines	0.28	0.31	0.59
Roads and service corridors	0.19	0.39	0.59
Water management	0.59	0.44	1.03
Monitoring	0.20	0.16	0.36
Closure studies and reports	0.20	0.16	0.36
Land tenure and stakeholders	0.43	0.24	0.67
Project management	1.58	1.28	2.86
Mobilization and demobilization	0.12	0.09	0.21
Contractor profit and overheads	0.85	0.69	1.54
Contingency	1.53	1.25	2.78
Total	**13.10**	**9.60**	**22.70**

Source: Bonikro 2023 FS

21 CAPITAL AND OPERATING COSTS

21.1 Capital costs

The capital cost estimate was developed to cover the activities required to enable the Bonikro operation to continue at a production rate of 2.5 Mt/a until the Mineral Reserves are depleted.

The estimate is presented in US dollars and has a base date of Q4 2022. No allowance has been included in the estimate for escalation from this date.

The estimate accuracy for the capital cost estimate is ±15%. The total outstanding capital is listed in Table 21.1.

Table 21.1 Outstanding capital costs

Activity	Cost ($ M)
TSF raise	16.00
External relations	0.50
Sustaining capital	15.00
Mining – PB5 dewatering	2.00
Closure and redundancy	27.70
Total	**61.20**

Source: Bonikro 2023 FS

21.1.1 TSF raise

Additional lifts of the TSF are required to provide sufficient capacity to store tailings for the LOM plan. The Stage 7 lift is currently under construction and a further two lifts will be required. The quantities used in the estimate have been developed by Knight Piésold and rates assigned to these quantities based on current costs. The Stage 7 cost estimate is based on a civil contractor operation for both engineered fill (Zones A and B) and buttress (Zone C) placement. It is noted that the mining contractor is placing waste at the buttress as part of PB5 mining to reduce costs and represents upside.

21.1.2 Sustaining capital

Every operation requires ongoing capital expenditure to maintain/replace equipment and for ongoing process improvement opportunities. Sustaining capital was estimated at $3.0 million per annum until 2026, then reducing to $2.1 million (2027) and $1.0 million in the last two years of operation.

21.1.3 Closure and redundancy

The site closure costs have been estimated at $27.7 million based on:

- $5.0 million allowance for redundancies estimated from the 2021 redundancies of mining personnel when converting from owner to contractor mining
- $22.7 million for the closure cost provision outlined in Table 20.2.

21.1.4 Exploration

Exploration drilling at Agbale and Dougbafla is estimated at $10 million over 2023 to 2024 for resource definition and reserve conversion. Exploration costs are not required for the current Mineral Reserves and are excluded from the financial model.

21.2 Operating costs

The operating cost uses prices obtained from the fourth quarter of 2022 (Q4 2022). The operating cost estimate is based on existing contracts and costs covering all site-related costs associated with the mining of ore to produce doré. The estimate accuracy for the operating cost estimate is ±15%.

21.2.1 Mining

Bonikro was previously run with an owner-operated mining fleet supplemented by contractors for drilling and ore haulage. In July 2022, PW Mining was awarded the Bonikro mining contract which included PW Mining buying the existing fleet. PW Mining also employed the majority of the former Allied operators.

Mining operating costs were split between oxide, transition and fresh rock. Current contract rates have been used as part of the forecast mining. Mining costs are based on detailed material movement schedules as well as first-principles costing.

Table 21.2 summarizes the costs of the mining activities over the life of mine. The mining costs are relatively high at $4.21/t rock due to the increasing depth of mining at the Bonikro pit.

Table 21.2 Bonikro project unit mining costs

Activity	Cost ($/t rock)
Mining variable operations	3.11
ROM crusher feed	0.10
Ore haulage	0.05
Owner fixed costs	0.24
Rehandling costs (all areas)	0.14
Contractor monthly management fees	0.38
Dewatering	0.06
RC drilling	0.08
Mobilizations and establishment	0.05
Total	**4.21**

Source: Bonikro 2023 FS

The mining operating costs comprise:

- Variable mining costs, which are sourced from the established mining contractor's schedule of rates, the individual bench levels, the oxidation state and the location of the pit and associated waste dumps. Production drilling costs are based on the existing contract rates with a provision for fuel consumption. Explosives and accessories are supplied at existing contract rates.
- A fuel cost of $0.90/L which is consistent with the 2022 average price of $0.89/L. Consumption of fuel is governed by the volume of material moved, the mining and dump locations and the nature of the haul route.
- Mine dewatering which allows for removal of water from the Bonikro pit as well as horizontal depressurization holes.
- Fixed mining costs for the owner's team including mining office overheads and external contractors.
- Grade control drilling costs based on the existing contract rates with a provision for fuel consumption. Assay costs are also included.
- Contract management costs including management fees incurred by the mining contractor for its supervision and management, labour and equipment maintenance activities and associated office support.

Given that the project is at an operational stage using contracted rates, the overall cost assumptions appear reasonable to the Qualified Person (Mr Earl).

21.2.2 Processing

Processing costs have been estimated by Allied for each ore type based on a review of existing unit costs. To develop the processing cost estimate, the mining schedule assigned the operating costs for each ore type based on the integrated mining and processing schedule. Table 21.3 summarizes the LOM processing operating costs for each ore type split with fixed costs estimated at $13.9 million per annum and average variable costs of $6.04/t. At the target throughput of about 2.45 Mt/a, the processing costs are estimated at $11.72/t, as compared to 2019 to 2022 costs which averaged $10.50/t.

Table 21.3 Bonikro process plant operating costs

Category	Annual cost ($ M/a)	Unit cost ($/t ROM)	Percentage of total cost
Labour	6.08	2.48	21
Maintenance materials	6.28	2.56	22
Processing G&A	1.57	0.64	5
Total fixed costs	**13.92**	**5.69**	**48**
Reagents and consumables	7.69	3.14	27
Power	7.11	2.90	25
Total average variable cost	**14.78**	**6.04**	**52**
Total processing costs	**28.72**	**11.72**	**100**

Source: Bonikro 2023 FS

It is noted that applying 2022 tonnes milled to the cost estimates by ore type shows that the LOM forecasts overestimate the operating costs by approximately 4%.

The key processing costs are:

- Labour – based on current labour costs with synergies between Agbaou and Bonikro yet to realized.
- Maintenance materials – based on the 2022 budget at $6.28 million per annum, which is similar to the average of 2020 and 2021 actual costs.
- Power – based on the current power price of $0.108/kWh.
- Reagents and consumables:
  - Grinding media at $1.24/t ROM. A long-term price of $1,350/t has been used, which is higher than recently received pricing at $1,200/t.
  - Sodium cyanide at $0.77/t ROM. A long-term price of $2,950/t has been used based on historical pricing, which is lower than recently received pricing at $3,200/t.

21.2.3 General and administration

The G&A operating cost estimate is based on historical performance, forecast manning, maintenance schedules and excludes corporate allocations. Table 21.4 provides the breakdown of the G&A operating cost estimate by each area. The LOM estimates are based on Bonikro G&A costs at $17.0 million per annum, which includes the regional G&A for Bonikro and Agbaou at $3 million per annum.

Table 21.4 also compares the 2020 to 2022 actual costs with the LOM estimate.

Table 21.4 Bonikro G&A operating costs

Area	2020 actuals ($ M)	2021 actuals ($ M)	2022 actuals ($ M)	LOM ($ M)
G&A labour	5.96	6.46	6.84	6.24
External affairs and social performance	1.78	2.15	1.86	1.76
Commercial – accounting	0.32	1.14	1.50	0.93
Commercial – IT	0.65	0.64	0.73	0.73
Commercial – supply	0.06	0.07	0.49	0.12
Health, safety and environment	0.67	1.19	1.75	1.55
Human resources	1.39	2.50	2.14	1.85
Asset protection	2.16	2.00	1.57	2.01
Insurances	0.79	2.34	2.36	1.81
Total G&A	**13.79**	**18.48**	**19.27**	**17.00**

Source: Bonikro 2023 FS

The increase in G&A costs between 2020 and 2022 is due predominantly to changes in the labour structure and an increase in company insurances. The LOM estimates are based on current forecasts:

- Allied's employee numbers have reduced as a result of changing from owner to contract mining in 2022, which reduces human resource, labour and insurance costs. The redundancy costs were included in the 2022 costs.
- Reduced future mining activity at Hiré and close proximity to the town, which will reduce LOM external affairs costs.

The synergies of the combined management of Bonikro and Agbaou are being implemented and represent additional upside.

22 ECONOMIC ANALYSIS

22.1 Basis of analysis

The Bonikro financial model (the Financial Model), is based on the 2023 FS including detailed mine planning, technical studies, testwork and feasibility study level design and costing information.

The Financial Model takes into consideration Proven and Probable Mineral Reserves from Bonikro, Akissi-So and Chapelle plus existing stockpiled low-grade ore. Ore production is scheduled from the open pits from 2023 to 2026, with low-grade stockpiles used to supplement the process plant feed until 2029.

22.2 Macro-economics and project fundamentals

The Financial Model is based on real dollar terms, which is considered appropriate for a project of this nature. While certain costs such as labour, power, water, and other in-country costs are in local currency, it is recognized that a substantial portion of costs will either be directly US dollar denominated or inherently linked.

The Financial Model excludes any funding, debt, transaction or shareholder costs and thus represents the standalone, ungeared operational value of Bonikro on a 100% equity basis. The government of Côte d'Ivoire holds a 10% shareholding in BGM and HGM with a local minority shareholder owning 0.11% of BGM and 0.20% of HGM. Distributions made to shareholders are made from positive free cashflows.

The operation was evaluated using a forward gold price curve (Table 22.1) derived from J.P. Morgan broker consensus price estimates in 2022. Beyond 2025, a flat gold price of $1,568/oz was used over the long-term, which represents a price approximately 20% below the current spot gold price. It is noted that at the time of reporting, the consensus long term gold price has increased to $1,686/oz.

Table 22.1 Allied's consensus gold price forecast used in the Financial Model

Unit	2023	2024	2025	2026+
$/oz (real)	1,750	1,730	1675	1,568

Source: Bonikro 2023 FS

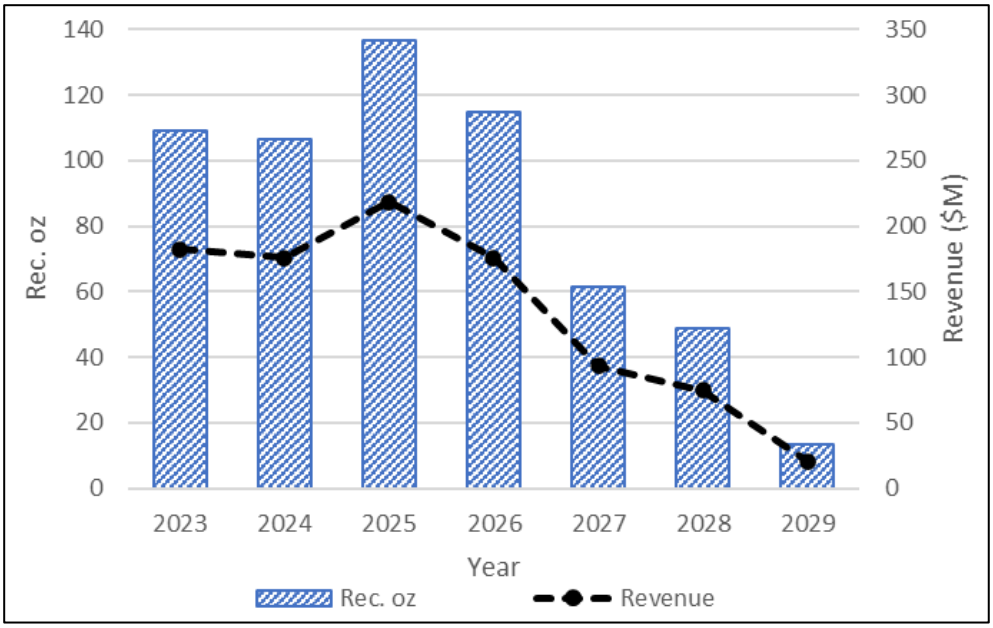
The gold price forecast applied for Bonikro is consistent with that used for Allied's other properties and appears reasonable to the Qualified Person (Mr Earl). The base date of all input assumptions in the Financial Model is 1 January 2023.

22.3 Key financial metrics

Processing of ore is forecast to continue at Bonikro until 2029. There is a decreasing trend in grade and revenue from 2026 when the open pits are depleted and low-grade stockpiles are treated. Annual revenue ranges from $170 million to $220 million until 2026 due to grade variability and metal price assumptions. There is a reduction in revenue from 2027 as the low-grade stockpile is treated. Recoveries are estimated to average 91.5% of the LOM plan.

The annual recovered ounces and revenue profile are shown in Figure 22.1.

Figure 22.1 Bonikro annual recovered ounces and revenue



Source: Bonikro 2023 FS

22.4 Capital costs

Capital cost inputs are discussed in Item 21.1.

22.5 Operating costs

Operating cost inputs are discussed in Item 21.2.

22.6 Taxes and royalties

Bonikro is subject to various taxes and royalties which have been included in the Financial Model, as summarized in Table 22.2.

Table 22.2 Bonikro LOM taxes and royalties

Item	Rate	Amount $ M (LOM)
Government royalty	4.0%	45.2
Community development fund	0.5%	4.9
Bonikro purchase royalty	4.5%	40.5
Hiré purchase royalty	1.0%	0.5
Taxation	25%	21.2
Total		**112.3**

Source: Bonikro 2023 FS

The economic development parameters are based on:

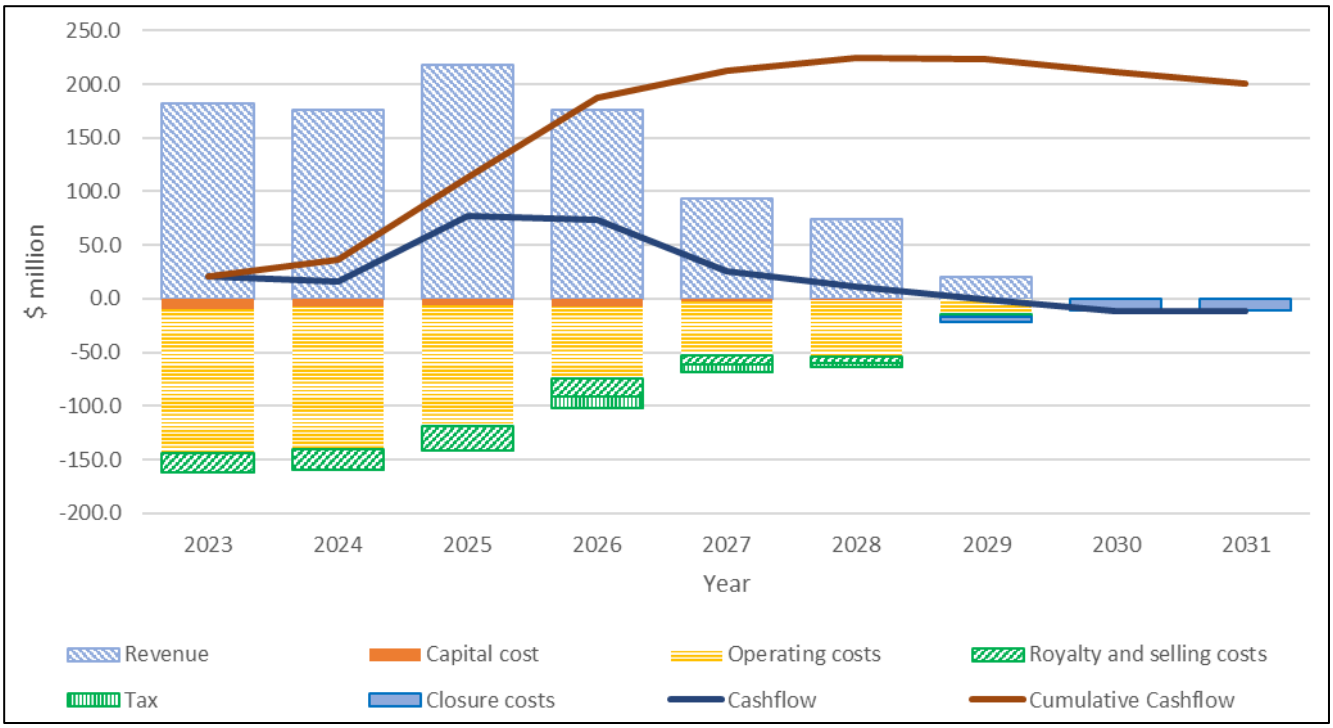
- A variable Government royalty on net revenue from mine sales less deductions for transport costs (free on board) and refining costs; 4.0% at gold prices between $1,301/oz and $1,600/oz and 5.0% at gold prices above $1,600/oz
- A community development fund of 0.5% of the annual revenue from mining sales
- Bonikro purchase royalty which is 4.5% of net smelter return for gold prices above $1,450/oz

- Hiré purchase royalty which is 1.0% of gross smelter return
- A corporate tax rate of 25% on net profits.

22.7 Cashflow analysis

Figure 22.2 presents a summary of the cashflow for the LOM plan based on the Mineral Reserves. The net free cashflow is forecast to increase from $20 million per annum in 2023–2024 to $75 million per annum in 2025–2026, decreasing in 2027–2029 to $20 million per annum prior to mine closure.

Figure 22.2 Bonikro LOM cashflow summary



Source: Bonikro 2023 FS

Details of the annual cashflows for the LOM plan are presented in Table 22.3.

The LOM net cashflow of the Bonikro Project (100% basis, post-tax) is estimated at $200 million. The NPV of Bonikro (100% basis, post-tax) is estimated at $178 million. The discount rate applied was 5% (real) with a long-term gold price assumption of $1,568/oz. At 89.89% ownership, Allied's share of the $NPV_{5\%}$ is $159 million. Given the Property is at an operational stage, internal rate of return and payback period are not relevant.

Table 22.3 Bonikro LOM cashflow model (2023–2031)

Item	Unit	Total	2023	2024	2025	2026	2027	2028	2029	2030	2031
Processed	Mt	**15.42**	2.44	2.46	2.46	2.46	2.46	2.46	0.68	0.00	0.00
Processed grade	g/t	**1.30**	1.54	1.46	1.87	1.58	0.85	0.69	0.69	-	-
Contained gold	koz	**646**	121	116	148	125	67	54	15	0	0
Recovered gold	koz	**591**	109	107	137	115	61	49	13	0	0
Recovery	%	**91.5**	90.4	92.2	92.2	92.2	91.5	90.0	90.0	0.0	0.0
Gold price	$/oz	**1,656**	1,649	1,648	1,646	1,643	1,641	1,639	1,636	1,634	1,633
Financials											
[+] Revenue	$ M	**940.8**	182.1	175.9	218.4	175.6	93.6	74.6	20.5	0.0	0.0
[-] Royalties	$ M	**91.1**	17.4	18.4	22.9	16.2	8.7	6.6	0.9	0.0	0.0
[-] Mining costs	$ M	**275.5**	88.4	87.5	66.5	21.6	3.7	6.7	1.0	0.0	0.0
[-] Processing costs	$ M	**180.4**	28.7	28.8	28.8	28.8	28.8	28.8	7.9	0.0	0.0
[-] G&A	$ M	**107.7**	17.0	17.0	17.0	17.0	17.0	17.0	5.7	0.0	0.0
[-] Selling costs	$ M	**2.7**	0.5	0.5	0.6	0.5	0.3	0.2	0.1	0.0	0.0
[-] Sustaining capex	$ M	**34.0**	9.5	7.5	6.0	7.0	3.0	1.0	0.0	0.0	0.0
[-] Closure	$ M	**27.7**	0.0	0.0	0.0	0.0	0.0	0.0	5.0	11.3	11.3
[-] Corporate tax	$ M	**21.2**	0.0	0.0	0.0	10.6	6.6	2.8	1.1	0.0	0.0
[=] Net cashflow	$ M	**200.6**	**20.7**	**16.3**	**76.6**	**73.8**	**25.6**	**11.5**	**-1.2**	**-11.3**	**-11.3**
Cumulative cashflow	$ M		**20.7**	**36.9**	**113.6**	**187.4**	**213.0**	**224.5**	**223.3**	**211.9**	**200.6**

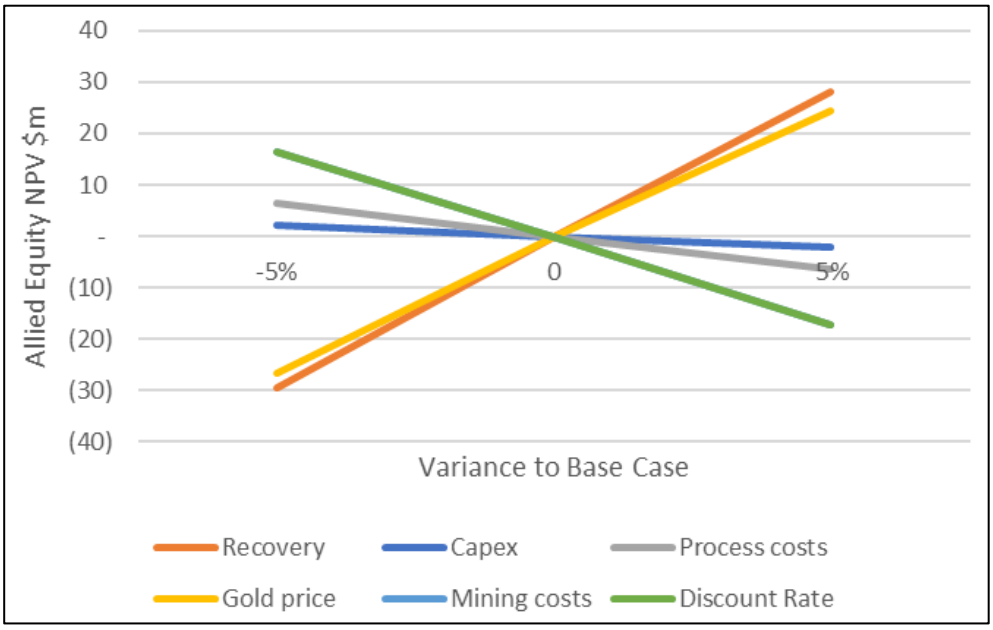
Source: Bonikro 2023 FS

22.8 Sensitivity analysis

A sensitivity analysis was carried out on macro-economic factors such as gold pricing. There are several other key factors that could impact the project, including changes in operating costs, recoveries, plant performance and capital costs.

The Qualified Person (Mr Earl) tested the sensitivity of the project to key value drivers; gold price assumptions, grade, operating costs and capital costs. The most significant and material drivers for the project are not generally within the control of Allied but influenced by markets. These include gold price and discount rate which are shown in Figure 22.3. The other key value drivers relate to operating and capital costs, which are more controllable aspects of the project.

Figure 22.3 Bonikro Project $NPV_{5\%}$ sensitivity (89% basis)



The outcome of the sensitivity analysis demonstrated that gold price and recovery represent the most significant drivers of value and risk relating to the project.

23 ADJACENT PROPERTIES

Allied owns the nearby Agbaou Gold Mine which is located 20 km southeast of the Bonikro process plant, with synergies being implemented to reduce costs and enhance performance across both projects.

There are no exploration or exploitation permits in the immediate vicinity of or along strike from Bonikro-Hiré-Dougbafla in the Oumé-Fétékro belt. Two projects on the Oumé-Fétékro greenstone belt are:

- Yaouré gold project: 90 km north of Bonikro. In December 2020, Perseus Mining produced first gold from Yaouré with Mineral Reserves in 2022 of 30 Mt at 1.70 g/t Au (Perseus Group Ore Reserves as at 30 June 2022).
- Lafigué gold project: 200 km north of Bonikro, in the far north of the Fétékro Belt. Endeavour Mining has recently initiated construction of Lafigué with Mineral Reserves in 2022 of 50 Mt at 1.69 g/t Au (Lafigué Project, Côte d'Ivoire, NI 43-101 Technical Report, Definitive Feasibility Study (DFS) 30 November 2022).

All other gold mines in Côte d'Ivoire are found on other sub-parallel greenstone belts to the Oumé-Fétékro belt.

The Qualified Person (Mr Earl) has been unable to verify the information disclosed in this Item and cautions that the information is not necessarily indicative of the mineralization on the Property that is the subject of this Technical Report.

24 OTHER RELEVANT DATA AND INFORMATION

24.1 Dougbafla

Drilling is progressing at the Dougbafla prospect, adjacent to the town of Oumé, which is 15 km north of the Bonikro process plant. A scoping study was carried out in Q1 2023 for the Dougbafla prospect which showed economic potential for 4.1 Mt of Inferred Mineral Resource at 1.3 g/t for 178 koz of contained gold.

Table 24.1 summarizes pit optimizations based on the resource model and using the following assumptions:

- A base gold price of $1,500/oz
- Akissi-So pit angles and contract mining costs
- Inferred Mineral Resources: 75% to 90% mining recovery
- 25% dilution.

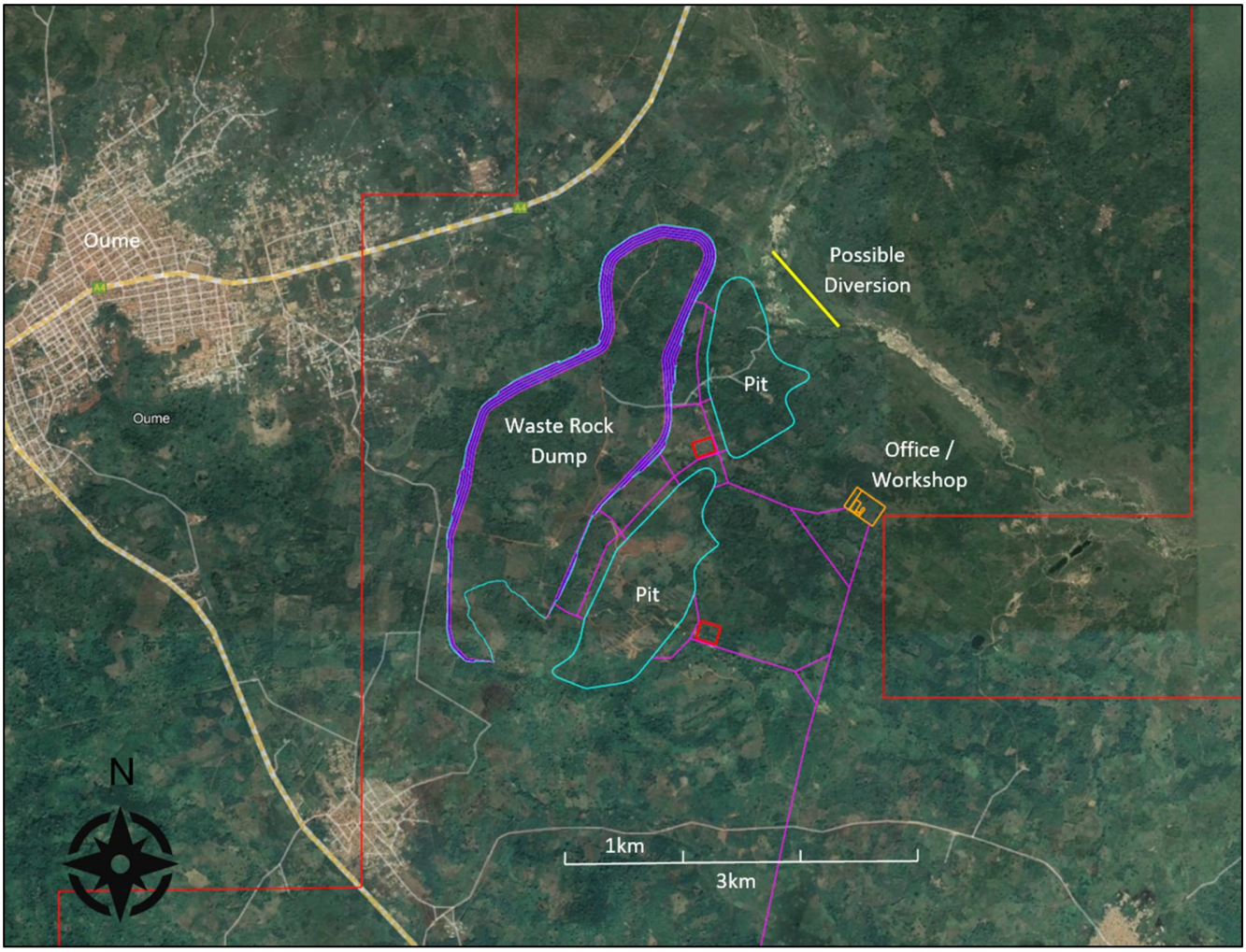
Table 24.1 Dougbafla preliminary pit optimization results

Inferred Mineral Resources within shell			Waste (kt)	Strip ratio
Mt	Au (g/t)	koz		
2.83	1.42	129	25,689	6.2

Source: Allied

Figure 24.1 shows preliminary outlines of the waste dump (purple), pit outlines (light blue), roads and mining infrastructure. The preliminary plan is being used to develop the Terms of Reference of an ESIA and to progress engineering in parallel with exploration drilling.

Figure 24.1 Dougbafla preliminary layout



Source: Allied

Preliminary capital costs for Dougbafla were estimated at $31.5 million including $10.0 million for drilling, $8.0 million for a haul road, $2.6 million for permitting, and a $5.0 million contingency.

Based on the scoping study, project development activities are justified for targeted mining and processing to possibly commence in 2025.

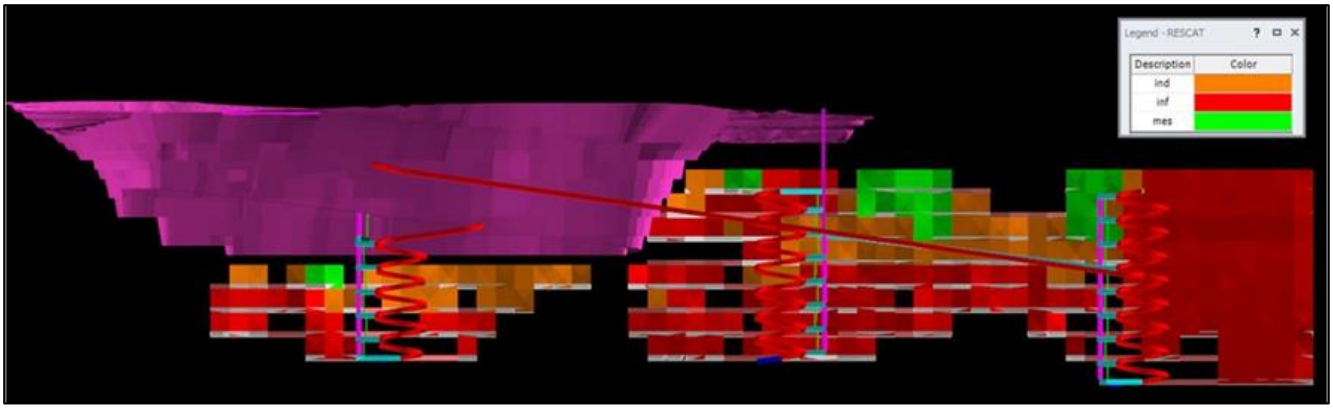
The Dougbafla scoping study is preliminary in nature and includes Inferred Mineral Resources that are considered too speculative geologically to have economic considerations applied that would enable them to be categorized as Mineral Reserves, and there is no certainty that the preliminary economic assessment will be realized.

24.2 Akissi-So underground potential

An underground conceptual study was carried out in 2020 for Akissi-So which showed economic potential of 2.9 Mt of Inferred Mineral Resource at 3.0 g/t for 280 koz of contained gold.

Figure 24.2 shows the conceptual underground design and highlights the significant proportion of Inferred Mineral Resource. Only 6% of the scheduled tonnes were classified as Measured Mineral Resources and 27% as Indicated Mineral Resources, with 67% classified as Inferred Mineral Resources. Additionally, most of the higher grades and tonnes are in the southwestern Inferred Mineral Resource section.

Figure 24.2 Akissi-So underground conceptual design



Source: Bonikro 2023 FS

Based on the deposit characteristics, an open stoping mining method was identified. For this method, stope voids are unfilled and stability is maintained by leaving island pillars between stopes. However, due to the potential risk of subsidence while mining underneath Hiré town, rock backfill was allowed for.

Approximately 10,000 m drilling and assaying is required at an indicative cost of $3.0 million. The Akissi-So underground development is not currently part of Allied's development plans.

The Akissi-So underground conceptual study is preliminary in nature and includes Inferred Mineral Resources that are considered too speculative geologically to have economic considerations applied that would enable them to be categorized as Mineral Reserves, and there is no certainty that the preliminary economic assessment will be realized.

25 INTERPRETATION AND CONCLUSIONS

Bonikro is an operating mine which has produced over 1.47 Moz of gold since commissioning in 2008. After taking operational control in May 2019, Allied refocused stripping of the open pits back to design and has progressively updated the LOM development plan in the 2021 feasibility study and the Bonikro 2023 FS.

Bonikro comprises two exploitation permits:

- The Bonikro exploitation permit (PE32), encompassing an area of 37.12 km^2, due for renewal on 16 January 2025 and held by BGM of which Allied owns 89.89%
- The Hiré exploitation permit (PE44), encompassing an area of 195.5 km^2, due for renewal on 18 December 2029 and held by HGM of which Allied owns 89.80%.

The Government of Côte d'Ivoire holds a 10% shareholding in BGM and HGM with a local minority shareholder owning 0.11% of BGM and 0.20% of HGM.

This Technical Report summarizes the seven-year LOM plan, which will deplete the 31 December 2022 Mineral Reserves by 2029. The Proven and Probable Mineral Reserves are estimated at 15.41 Mt at 1.30 g/t Au for 645 koz of contained gold. The Mineral Reserves are reported on a 100% basis.

A conventional truck and excavator mining method is used at Bonikro. Pit optimizations were conducted to determine the optimal shape of the open pits based on current and forecast costs and recoveries at a gold price of $1,500/oz. The slope design criteria for the pits were established based on current slopes in oxide and transition zones and geotechnical investigations since 2015 on the deeper fresh rock zones. The current mining contractor uses three fleets of Caterpillar 6020 excavators, two Caterpillar 6015 excavators and Caterpillar 777 trucks.

The existing process plant can treat oxide and transitional ores at 2.5 Mt/a. The process employed at Bonikro is a conventional free milling, cyanide leaching flowsheet with primary and secondary crushing, single-stage milling, gravity recovery, followed by CIL. Gravity recovered gold is leached with the dissolved gold being electrowon prior to smelting. Carbon is acid washed, eluted and regenerated with gold being electrowon prior to smelting into doré. The recovery, which is forecast to average 91.5%, is based on testwork and historical performance of the ores.

Plant tailings are pumped to the existing TSF about 1 km from the process plant. The existing TSF is a single cell, valley-fill facility that has been in operation since 2008 and is formed by the main embankment on the north side and saddle dams on the east, west and south sides. Tailings are discharged into the TSF by sub-aerial deposition methods, using a combination of spigots at regularly spaced intervals from the north, east and west embankments, forming a supernatant pond at the south embankment.

The unlined TSF has predominantly been built using downstream construction techniques. Knight Piésold was appointed Engineer of Record in July 2020. In 2021, Knight Piésold updated the dam break assessment which showed a dam failure consequence category of 'HIGH C', based on ANCOLD Consequence Category. The most recent annual audit was conducted in November 2022 by Knight Piésold with no material items identified.

Existing infrastructure includes an accommodation village, laboratory, offices, warehouse, maintenance workshop, water supply dams and grid power connection.

Permits are in place for the existing operation.

Total LOM capital costs for the seven-year mine life are estimated at $61.0 million (at ±15% accuracy). The main components of the capital costs cover $16.0 million for TSF raises, $15.0 million for general sustaining capital provisions and $27.7 million for mine closure and redundancy provisions.

Total operating costs for the seven-year mine life is estimated at $658 million (estimated to a ±15% accuracy):

- Mining costs total $4.21/t rock mined (ore plus waste)
- Processing costs and administration costs total $11.70/t ore processed
- The AISC over the LOM is approximately $1,170/oz.

The LOM net cashflow of the Bonikro Project (100% basis, post-tax) is estimated at $200 million based on consensus gold price forecasts provided by Allied. The NPV of Bonikro at a 5% discount rate (100% basis, post-tax) is estimated at $178 million. The discount rate applied was 5% (real) with a long-term gold price assumption of $1,568/oz. At 89.89% ownership, Allied's share of the $NPV_{5\%}$ is $159 million.

No significant project related risks have been identified by the Qualified Person (Mr Earl) that would materially impact the economic evaluation.

Drilling is progressing at the Dougbafla prospect, adjacent to the town of Oumé, which is 15 km northwest of the Bonikro process plant. A scoping study was carried out in Q1 2023 for the Dougbafla prospect, which showed economic potential for 4.1 Mt of Inferred Mineral Resource at 1.3 g/t for 178 koz of contained gold.

Preliminary capital costs were estimated at $31.5 million including $10.0 million for drilling, $8.0 million for a haul road, $2.6 million for permitting, and a $5.0 million contingency.

Based on the scoping study, project development activities are justified for targeted mining and processing to possibly commence in 2025.

The Dougbafla scoping study is preliminary in nature and includes Inferred Mineral Resources that are considered too speculative geologically to have economic considerations applied that would enable them to be categorized as Mineral Reserves, and there is no certainty that the preliminary economic assessment will be realized.

26 RECOMMENDATIONS

Bonikro has been operating successfully since 2008. Based on the current Mineral Reserves, Bonikro will continue to process ore until 2029. The Qualified Person recommends that Allied complete the following work to extend the mine life:

- Continue infill drilling at Dougbafla to upgrade the Inferred Mineral Resources to Indicated Mineral Resource and Measured Mineral Resource status
- Further drilling and assessment of Dougbafla is warranted with a view to bring this area into production in 2025. Project development costs for Dougbafla are estimated at $31.5 million, including $10.0 million for drilling.

27 REFERENCES

Author	Title
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Allied Gold Corp	Bonikro 2023 FS: Appendix 3.2 Agbaou Resource Peer Review
Allied Gold Corp	Bonikro 2023 FS: Appendix 4.5 JORC Table 1 Agbaou Project Mining
Allied Gold Corp	Bonikro 2023 FS: Appendix 4.5 JORC Table 1 Agbaou Project Mining
Allied Gold Corp	Bonikro 2023 FS: Appendix 4.6 - Agbaou Pre 2022 EDV Reconciliations
Allied Gold Corp	Bonikro 2023 FS: Appendix 6.2 - 1794-PDC-001_as built
Allied Gold Corp	Bonikro 2023 FS: Appendix 8.1 - TSF Expansion Review
Allied Gold Corp	Bonikro 2023 FS: Appendix 8.1 - TSF Expansion Review
Allied Gold Corp	Bonikro 2023 FS: Appendix 10.1 - Agbaou Mining Permit
Allied Gold Corp	Bonikro 2023 FS: Appendix 10.2 - Mining Law Review (2020 Edition) - Ivory Coast
Allied Gold Corp	Bonikro 2023 FS: Appendix 10.3 - AGO Mining Convention
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Knight Piésold Pty Ltd, 2022	Bonikro 2023 FS: Appendix 8.4 - 2021 Agbaou GISTM Gap Analysis
Knight Piésold Pty Ltd, 2022	Bonikro 2023 FS: Appendix 8.5 - Stage 9 TSF Stability
Knight Piésold Pty Ltd, 2022	Bonikro 2023 FS: Appendix 8.6 - 2022 Dam Break Assessment
Oreway Mineral Consultants, 2020	Bonikro Gold Mine, Throughput Evaluation

28 GLOSSARY, ABBREVIATIONS AND UNITS

28.1 Glossary

Term	Explanation
adsorption	Adsorption is a process that occurs when a gas or liquid solute accumulates on the surface of a solid or a liquid (adsorbent), forming a molecular or atomic film (adsorbate).
amphibolite	A granular metamorphic rock consisting mainly of hornblende and plagioclase.
amphibolite facies	Moderate to high temperature and low pressure regional metamorphic facies. Characterized by the presence of amphibole.
antimony	Antimony is a chemical element with the symbol Sb (from Latin: stibium) and atomic number 51. A lustrous grey metalloid, it is found in nature mainly as the sulphide mineral stibnite (Sb_2S_3).
arenite	A sedimentary rock consisting primarily of sand size particles.
batter	The incline section of the wall in an open pit mine is called the 'batter', an excavator digs to a 'batter angle' to achieve a dig wall to the design batter angle.
bench	A bench may be defined as a ledge that forms a single level of operation above which mineral or waste materials are mined back to a bench face. The mineral or waste is removed in successive layers, each of which is a bench.
breccia	Fractured or broken rocks, cemented or formed into a solid layer.
brecciated	Converted into or resembling a breccia.
brecciated siltstone	A siltstone containing small fragments of breccia.
brecciation	Converted into or resembling a breccia.
carbonate	A class of sedimentary rocks composed primarily of carbonate minerals. The two major types are limestone and dolomite.
carbonate rock	A sedimentary rock generally formed in shallow marine conditions which is characterized by the presence of varying amounts of calcium carbonate or magnesium carbonate. Coral reefs and/or marine creatures may contribute to the constituents in the rock.
Carboniferous	A geological period comprising rocks aged between 345 and 280 million years before the present day.
chlorite	A group of mostly green minerals of varying composition often found as alteration products of ferromagnesian minerals.
comminution	Reduction in the particle size of crushed rock in a process plant.
composite	A sample comprised of a number of smaller samples.
craton	An old stable portion of the Earth's crust, generally of Archaean age.
cyanidation	A metallurgical technique for extracting gold by converting the gold to a water soluble complex. It is the most commonly used process for gold extraction. One common process for the recovery of the solubilized gold from the solution is carbon in leach.
Datamine	A software package used to create 3D geological models.
diorite	A speckled, coarse-grained igneous rock consisting essentially of plagioclase, feldspar, and hornblende or other mafic minerals.
dolomite	A carbonate rock consisting of calcium magnesium carbonate.
electrowinning	Electrowinning, also called electroextraction, is the electrodeposition of metals from their ores that have been put in solution via a process commonly referred to as leaching.
elution	In analytical and organic chemistry, elution is the process of extracting one material from another by washing with a solvent.
feldspar	An important group of rock-forming minerals which make approximately 60% of the Earth's crust. Feldspars crystallize from magma in both intrusive and extrusive rocks.

Term	Explanation
felsic	Silicate minerals, magmas, and rocks which are enriched in the lighter elements such as silica, oxygen, aluminium, sodium, and potassium.
ferricrete	Ferricrete is a hard, erosion-resistant layer of sedimentary rock, usually conglomerate or breccia, that has been cemented into a duricrust by iron oxides.
flotation	A metallurgical concentration method whereby bubbles of air are used to separate crushed sulphide particles from waste rock of a different density or different physical characteristics.
footwall	The underlying side of a fault, orebody or mine workings.
fragmentation	The process or state of breaking or being broken into fragments.
geology	Geology is a science which is concerned with the solid Earth, the rocks of which it is composed, and the processes by which they change over time.
granite	A coarse grained intrusive felsic igneous rock.
granite-gneiss	Metamorphosed igneous rocks or their equivalent.
graphite	A mineralized form of carbon.
graphitic	Pertaining to rocks containing graphite. Graphite is carbon derived from carbonaceous material of organic origin. Common in metamorphic rocks such as gneisses, marbles, and schists.
greenschist facies	Assemblage of minerals formed during regional metamorphism. The rocks of the greenschist facies form under the lowest temperatures (300–450°C) and pressure (1–4 kilobars) conditions usually produced regional metamorphism.
hangingwall	The overlying side of a fault, orebody or mine workings.
hydrogeology	The branch of geology concerned with water occurring underground or on the surface of the Earth.
hydrology	The branch of science concerned with the properties of the earth's water, and especially its movement in relation to land.
intrusion	The action or process of forcing a body of igneous rock between or through existing formations, without reaching the surface.
intrusive rock	Intrusive rock, also called plutonic rock is an igneous rock formed when magma is forced into older rocks at depths within the Earth's crust, which then slowly solidifies. It may later be exposed at the surface by erosion. Examples include granite, gabbro, diorite and dunite.
leach or leaching	The action of a chemical on a mineral or substance where the substance becomes soluble is removed from the host material.
lithological	The study of the general physical characteristics of rocks.
lithology	The study and description of rocks, including their mineral composition and texture.
mafic igneous rocks	Silicate minerals, magmas, and volcanic and intrusive igneous rocks that have relatively high concentrations of the heavier and darker minerals.
magma	Hot molten or semi-fluid rock below which originates from within the Earth's crust from which igneous rock is formed on cooling. When magma cools and solidifies beneath the Earth's surface, it forms what are known as intrusive rocks. When it reaches the Earth's surface, it flows out as lava and forms extrusive (or volcanic) rocks.
mesothermal	A hydrothermal mineral deposit formed at considerable depth.
metamorphism or metamorphic	Alteration of the minerals, texture and composition of a rock caused by exposure to heat, pressure and chemical actions.
mineralization (mineralized)	The process by which a mineral or minerals are introduced into a rock, resulting in a valuable deposit.
mineralogy or mineralogical	The study of minerals: formation, occurrence, properties, composition and classification.
Neoproterozoic	The Neoproterozoic Era is the unit of geologic time from 1 billion to 541 million years ago.
ore	Mineralized material which is economically mineable at the time of extraction and processing.

Term	Explanation
ore zone/orebody	Zone of mineralized material.
oxidation, oxidized	The addition of oxygen to the metal ion, generally as a result of weathering.
oxide	A binary compound of oxygen with another element or group.
Paleoproterozoic	The first of the three subdivisions (eras) of the Proterozoic occurring between 2500 Ma and 1600 Ma (million years ago).
pelitic	Pertaining to or derived from pelite (mudstone).
piezometers	A device used to measure liquid pressure in a system by measuring the height to which a column of the liquid rises against gravity, or a device which measures the pressure (more precisely, the piezometric head) of groundwater at a specific point.
prospect	Search for mineral deposits, especially by drilling and excavation.
pyrite	Iron disulphide, (FeS_2).
pyrrhotite	An iron sulphide mineral (FeS).
reconciliation	Measured assessment of the forecast and review of its correctness.
rheology	Rheology is the study of flow and deformation of materials under applied forces.
savannah	A grassy plain in tropical and subtropical regions, with few trees.
silicates	Minerals consisting of silica combined with metal oxides, forming a major component of the rocks of the Earth's crust.
siltstone	A type of sedimentary rock where the individual particles are predominantly between <0.05 mm in size.
sinistral	Refers to the horizontal component of movement of blocks on either side of a fault or the sense of movement within a shear zone.
spectrometry	An instrumental method for identifying the chemical constitution of a substance by means of the separation of gaseous ions according to their differing mass and charge. — called also mass spectroscopy.
spectroscopy	Spectroscopy is the study of the interaction between matter and electromagnetic radiation.
stibnite	Stibnite, sometimes called antimonite, is a sulphide mineral with the formula Sb_2S_3. This soft grey material crystallizes in an orthorhombic space group. It is the most important source for the metalloid antimony.
stockpile	A stockpile is a pile or temporary storage location used during mining operations for storing large quantities of material.
strike	Geological measurement – the direction of bearing of bedding or structure in the horizontal plane.
sulphate	A sulphate is a salt of sulphuric acid, containing the anion $SO4_{2-}$ or the divalent group — OSO_2O.
sulphide	Economic minerals comprising a metal (such as lead, iron, zinc) and sulphur.
supernatant	The supernatant is the clear liquid that lies above the solid residue after centrifugation, precipitation, crystallization or settling.
Supervisor	A geostatistical software package used for geospatially analysing data.
Surpac	A software package used to create 3D geological models.
tails/tailings	The residue from a mineral processing plant, generally pulverized waste rock.
topography	Topography is the study and description of the physical features of an area (e.g. its hills, valleys, or rivers), or the representation of these features on maps.
variography	Definition of the 3D grade continuity of drillhole samples by estimating and modelling the relationship between grade similarity and distance in every direction and at every sample spacing.
wireframe	A surface or 3D volume formed by linking points together to form triangles. Wireframes are used in the construction of block models.

28.2 Abbreviations and units

Abbreviation	Description
$	United States dollars
°	degree(s)
°C	degree(s) Celsius
%	percent
µm	micrometre or micron
3D	three-dimensional
a	annum
AAS	atomic absorption spectroscopy
Ai	Abrasion Index
AIG	Australian Institute of Geoscientists
AISC	all-in sustaining cost
ANCOLD	Australian National Committee on Large Dams
Au	gold
AusIMM	Australasian Institute of Mining and Metallurgy
BBWi	Bond Ball Mill Work Index
BGM	Bonikro Gold Mines SA
ca.	circa
CIL	carbon-in-leach
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CRM	certified reference material
Cube	Cube Consulting Pty Ltd
CY	calendar year
DD	diamond drill core
DIBK	di-isobutyl ketone
EIA	Environmental Impact Assessment
Equigold	Equigold Ltd
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
FS	feasibility study
FY	financial year
g, g/t	gram(s), grams per tonne
G&A	general and administration
GMC	Gold Mining Consulting International Corporation
Golder	Golder Associates (Ghana)
GPS	global positioning system
ha	hectare(s)
h	hour(s)
HDPE	high-density polyethylene
HGM	Hiré Gold Mines SA
HSEC	health, safety, environment and community
IFC	International Finance Corporation
IFRS	International Financial Reporting Standards
IP	induced polarization

Abbreviation	Description
JORC Code	Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2012 Edition)
kg, kg/t	kilogram(s), kilograms per tonne
km, km^2	kilometres, square kilometres
KNA	kriging neighbourhood analysis
koz, koz/a	thousand ounces, thousand ounces per annum
kt, kt/a	thousand tonnes, thousand tonnes per annum
kV	kilovolts
kVA	kilovolts ampere
kW	kilowatts
kWh, kWh/m^3, kWh/t	kilowatt hours, kilowatt hours per cubic metre, kilowatt hours per tonne
L	litre(s)
LBMA	London Bullion Market Association
Lihir	Lihir Gold Ltd
LOM	life of mine
M	million(s) or Mega
m, m^2, m^3, m/s	metre(s), square metres, cubic metres, metres per second
Ma	million years before present
mg/L	milligrams per litre
ML	million litres
mm	millimetres
Mm^3	million cubic metres
Moz	million ounce(s)
Mt, Mt/a	million tonnes, million tonnes per annum
MVA	megavolt ampere (million volt-ampere)
MW	megawatt (million watts)
NAF	non-acid forming
Newcrest	Newcrest Mining Ltd
NI 43-101	(Canadian Securities Administrator's) National Instrument 43-101
NPV	net present value
OK	ordinary kriging
oz, oz/a	troy ounce(s), troy ounces per annum
PB4	pushback 4
PDD	pit diversion dam
PE	Permis d'Exploitation (Exploitation Permit)
ppm	parts per million
PR	Permis de Recherche (Exploration Permit)
QAQC	quality assurance/quality control
RAB	rotary air blast
RC	reverse circulation
ROM	run of mine
RPO	recognized professional organization
RTK	real-time kinematic
SAG	semi autogenous grinding
SGS	SGS Ghana Limited
SMU	selective mining unit

Abbreviation	Description
SRK	SRK Consulting
t, t/a, t/h	tonne(s), tonnes per annum, tonnes per hour
t:t	tonnes to tonnes
TSF	tailings storage facility
TTG	tonalite-trondhjemite-granodiorite
VAT	value-added tax
WHO	World Health Organization
wt:ot	waste tonnes to ore tonnes

29 CERTIFICATES

CERTIFICATE of QUALIFIED PERSON

I, Allan Earl, Executive Consultant of Snowden Optiro, Level 19/140 St Georges Terrace, Perth, Western Australia, do hereby certify that:

a) I am the co-author of the technical report titled **NI 43-101 Technical Report for the Bonikro Gold Project, Republic of Côte d'Ivoire** with an effective date of 5 July 2023 (the 'Technical Report') prepared for Allied Gold Corp (Allied) and Mondavi Ventures Ltd (to be renamed Allied Gold Corporation) (Mondavi).

b) I graduated with an Associateship in Mining Engineering from the Western Australian School of Mines in 1977.

c) I am a Fellow in good standing with the AusIMM- Membership number 110247.

d) I have worked as a mining engineer continuously for 45 years since 1977. I have been involved as a mining and resource evaluation consultant for over 20 years, and have been directly involved with scoping studies, prefeasibility studies, feasibility studies; and reserve estimation for open pit and underground gold mines for at least five years of these years. I have particular experience with authored technical reports on **gold and base metals deposits** located in **Africa, Australia and South America.**

e) I have read the definition of 'qualified person' set out in National Instrument 43-101 – *Standards for Disclosure for Mineral Projects* ('the Instrument') and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfil the requirements of a 'qualified person' for the purposes of the Instrument.

f) I completed a personal inspection of the Bonikro Gold Mine on 3 to 4 May 2022.

g) I am responsible for the preparation of Items Items 1 to 6, 15, 16, 19, 21.1.4, 21.2.1, 21.2.3, 22 to 26 of the Technical Report.

h) I am independent of Allied and Mondavi as defined in section 1.5 of the Instrument.

i) I have had prior involvement with the property that is the subject of the Technical Report having reviewed the 2021 Bonikro gold mine prefeasibility study.

j) I have read the Instrument and Form 43-101F1 – *Technical Report*, and the Technical Report has been prepared in compliance with the instrument and such form.

k) As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Perth, Western Australia this 5 July 2023

"Signed"

Allan Earl AWASM, FAusIMM
Executive Consultant

CERTIFICATE of QUALIFIED PERSON

I, Peter Jonathan Theron, Director and Principal Consultant of Prime Resources (Pty) Ltd, The Workshop, 70-7th Avenue, Parktown North, Johannesburg, South Africa, do hereby certify that:

a) I am the co-author of the technical report titled **NI 43-101 Technical Report for the Bonikro Gold Project, Republic of Côte d'Ivoire** with an effective date of 5 July 2023 (the 'Technical Report') prepared for Allied Gold Corp (Allied) and Mondavi Ventures Ltd (to be renamed Allied Gold Corporation) (Mondavi).

b) I graduated from the University of Pretoria with a B. Eng. (Civil) in 1985 and from the Witwatersrand University with a Graduate Diploma in Engineering (GDE) in 1995.

c) I am a member in good standing with the Engineering Council of South Africa and am registered as a Professional Engineer – Registration No. 950329. I am a Member in good standing with the South African Institute of Mining and Metallurgy – Membership No. 703496.

d) I have worked as a civil and environmental engineer continuously since 1986. My relevant experience for the purpose of the Technical Report is over 35 years of direct involvement in the fields of tailings design, waste management and environmental studies. I have particular experience with authored technical reports on **gold deposits** located in **Africa**.

e) I have read the definition of 'qualified person' set out in National Instrument 43-101 – *Standards for Disclosure for Mineral Projects* ('the Instrument') and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfil the requirements of a 'qualified person' for the purposes of the Instrument.

f) I have not completed a personal inspection ofthe Bonikro Gold Mine.

g) I am responsible for the preparation of Items 18.1, 18.2, 20, 21.1.1 and 21.1.3 of the Technical Report.

h) I am independent of Allied and Mondavi as defined in section 1.5 of the Instrument.

i) I have had prior involvement with the property that is the subject of the Technical Report having reviewed the 2021 Bonikro Project prefeasibility study.

j) I have read the Instrument and Form 43-101F1 – *Technical Report*, and the Technical Report has been prepared in compliance with the instrument and such form.

k) As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Hermanus, South Africa this 5 July 2023

"Signed"

Peter J Theron B. Eng. (Civil), GDE, Pr. Eng. (ECSA), MSAIMM
Associate Principal Consultant

CERTIFICATE of QUALIFIED PERSON

I, Michael Andrew, Executive Consultant of Snowden Optiro, Level 19/140 St Georges Terrace, Perth, Western Australia, do hereby certify that:

a) I am the co-author of the technical report titled **NI 43-101 Technical Report for the Bonikro Gold Project, Republic of Côte d'Ivoire** with an effective date of 5 July 2023 (the 'Technical Report') prepared for Allied Gold Corp (Allied) and Mondavi Ventures Ltd (to be renamed Allied Gold Corporation) (Mondavi).

b) I graduated with a BSc. (Geology), Australian National University, 1982; Graduate Diploma (Geostatistics), Edith Cowan University, 2005.

c) I am a Fellow in good standing with the AusIMM – Membership number 111172.

d) I have worked as a geologist with over 30 years of technical and operational experience in the mining industry since 1982 working in roles in exploration and mining throughout Australia and overseas. I have been directly involved in geostatistical resource estimation, optimization of resources, grade control and risk assessment, technical audits, due diligence studies and mine valuation studies, technical training and mentoring. I have particular experience with authored technical reports on **gold deposits** located in **Africa, Australia, North and South America, Russia, Kazakhstan, Saudi Arabia and Asia.**

e) I have read the definition of 'qualified person' set out in National Instrument 43-101 – *Standards for Disclosure for Mineral Projects* ('the Instrument') and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfil the requirements of a 'qualified person' for the purposes of the Instrument.

f) I have not completed a personal inspection ofthe Bonikro Gold Mine.

g) I am responsible for the preparation of Items 7 to 12 and 14 of the Technical Report.

h) I am independent of Allied and Mondavi as defined in section 1.5 of the Instrument.

i) I have had prior involvement with the property that is the subject of the Technical Report having reviewed the 2021 Bonikro Project prefeasibility study.

j) I have read the Instrument and Form 43-101F1 – *Technical Report*, and the Technical Report has been prepared in compliance with the instrument and such form.

k) As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Sydney, New South Wales, Australia this 5 July 2023

"Signed"

Michael Andrew BSc. (Geology), Grad.Dip. (Geostatistics), FAusIMM
Executive Consultant

CERTIFICATE of QUALIFIED PERSON

I, Gordon Cunningham, Associate Principal Consultant of Snowden Optiro, Level 19/140 St Georges Terrace, Perth, Western Australia, do hereby certify that:

a) I am the co-author of the technical report titled **NI 43-101 Technical Report for the Bonikro Gold Project, Republic of Côte d'Ivoire** with an effective date of 5 July 2023 (the 'Technical Report') prepared for Allied Gold Corp (Allied) and Mondavi Ventures Ltd (to be renamed Allied Gold Corporation) (Mondavi).

b) I graduated from the University of Queensland with a B. Eng. (Chemical) in 1975.

c) I am a Member in good standing with the Engineering Council of South Africa and am registered as a Professional Engineer – Registration No. 920082. I am a Fellow in good standing with the South African Institute of Mining and Metallurgy – Membership No. 19584.

d) I have worked as a metallurgist in production for more than 20 years since 1975. I have worked as a corporate Consulting Metallurgist for five years, an independent metallurgical consultant for two years and for Turnberry Projects for 21 years as a Project and Principal Engineer and Director, and have been directly involved with mining and metallurgy projects. I have particular experience with authored technical reports on **gold, other precious metals and base metals deposits** located in **Africa**.

e) I have read the definition of 'qualified person' set out in National Instrument 43-101 – *Standards for Disclosure for Mineral Projects* ('the Instrument') and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfil the requirements of a 'qualified person' for the purposes of the Instrument.

f) I have not completed a personal inspection ofthe Bonikro Project.

g) I am responsible for the preparation of Items 13, 17, 18.3 - 5, 21.1.2 and 21.2.2 of the Technical Report.

h) I am independent of Allied and Mondavi as defined in section 1.5 of the Instrument.

i) I have had prior involvement with the property that is the subject of the Technical Report having reviewed the 2021 Bonikro Project prefeasibility study.

j) I have read the Instrument and Form 43-101F1 – *Technical Report*, and the Technical Report has been prepared in compliance with the instrument and such form.

k) As of the effective date of this Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Hilton, South Africa this 5 July 2023

"Signed"

Gordon Cunningham BEng (Chemical), Pr.Eng (ECSA), FSAIMM
Executive Consultant