Farafina Gold Group SA

Mining activity report for January 2019-June 2020





Farafina Village, Préfecture Mandiana Kankan Région, Guinée

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1. Introduction

In accordance with the completed feasibility study, which served as the basis for the issuance of the semi-industrial mining license, Farafina Gold Group SA (FGG) commenced implementation of its business plan in January 2019.

The preliminary infrastructure required to enable the start of quartz production was completed in November 2019, upon overcoming the damages caused by an error in calculations committed by a former manager responsible for shaft construction, which was revealed in the course of the rainy season. A major part of the delay was caused by the damages wrought upon the licensed area by artisanal miners, who erected shafts and underground tunnels at the precise locations which the Company targeted for mining operations, thereby reducing the available resources and bringing about a nearly complete destruction of the license value. Management was able to overcome the significant challenges by launching a new exploration campaign comprised of extensive DD drilling, RC drilling, pit sampling, shaft sampling, and trench sampling within an initial secondary site identified in the feasibility study in order to better position the Company within new paradigm, and thereby enable it to start realizing the plans presented in the feasibility study and to eventually launch test production of gold in January 2020.

Preliminary strategic plans which were realized by the management and described in this document include:

- The enhancement of the electricity supply capacity, achieved vis-a-vis the acquisition and installation of three additional generators, with the capacity of 30kva, 80kva and 100kva respectively;
- The commissioning of a high-performance Sulzer submersible drainage pump, which ensures effective removal of water from the mine shaft within the entire range of projected depths, including during the rainy season;
- The installation of a drainage pipeline system, including primary and backup pump connection lines, an overflow piping system and a bypass system throughout the entire shaft;
- The expansion of living accommodations for personnel to support round-the-clock work schedule (a two-shift schedule has been introduced from 7am to 11pm, 7 days per week);
- The organization of adequate facilities for engineers to support continuous round-theclock monitoring and process control;
- The construction of stationary sanitary facilities;



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• The construction of a network of ground trenches for water drainage from mine to relief (in the future, the system will be expanded to a network of irrigation facilities to support water drainage during the rainy season).

The security protocols have been significantly upgraded, both in terms of staff discipline and sophistication of the communication systems. Regular English lessons are held for both French-speaking employees and locals conversant exclusively in Madingo and Susu dialects. At the same time, the Russian-speaking expatriate staff is continuously upgrading their command of the English language.

The management has introduced a logistics system for land and river transportation to carry ore from the mining site to production sites. To streamline production, the Company has added supporting infrastructure such as an inventory warehouse, a drying area and a processing line.



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1.1. Geological research

Exploration results which are presented in this section of the report also include a detailed implementation project in accordance with the recognized gold resources presented in feasibility studies presented at the end of 2017 and approved by the Ministry of Mining in March 2018. A major change observed after the Company returned to the licensed area was massive artisanal activity, which completely altered the start-up conditions and budget that was initially presented to the Ministry. These circumstances in turn influenced and affected the implementation of the project and therefore required additional exploration activities to identify a new starting point.

Pre-existing artisanal shafts discovered by the management on the licensed site were fixed, equipped by winches and water pumps and were used to collect pit samples to further expand geological intelligence. Extensive drilling and pit sampling furnished an opportunity to upgrade a part of the resources to a level of measured reserves and indicated a new position where mine construction was initiated.

A detailed model of the first targeted gold body is presented on the image below. New exploration results are presented in the Geological Report dated of 31st July 2020.

In the process of shaft construction, extracted soil was processed and gold concentration was measured to enhance the geological model and enable the management to determine the processing equipment required to achieve optimal output capacity.

As the management pursued the abovementioned objectives, exploration and mapping revealed promising new locations, with knowledge of site up to 40m depth, with multiple underground tunnels that were constructed by artisanal miners during December 2017 - December 2018 encircling the area. The management spent one year in Conakry to complete the administrative formalities required to obtain licenses.



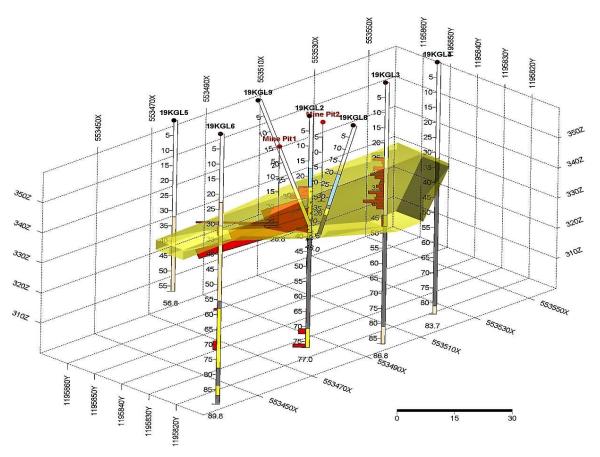


Figure 1.1 Gold body projection for site from drilling and shaft



Figure 1.2 Drilling holes (red stars) and pits (green and yellow) at the shaft #1 location





Figure 1.3 Security measures over sample collection from local mining pits



Figure 1.4 DD samples



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2. Production facilities development

2.1. Vertical shaft

A vertical shaft with the depth 37,5 m as well as all the required infrastructure including energy supply system, drainage system with triple reservation, air supply, lifting facility, residential quarters, security installation and explosive storage, was completed in March 2020. All professional personnel required to carry on primary operations was available and ready to go. Industrial security measures were implemented as one of absolute top priorities.

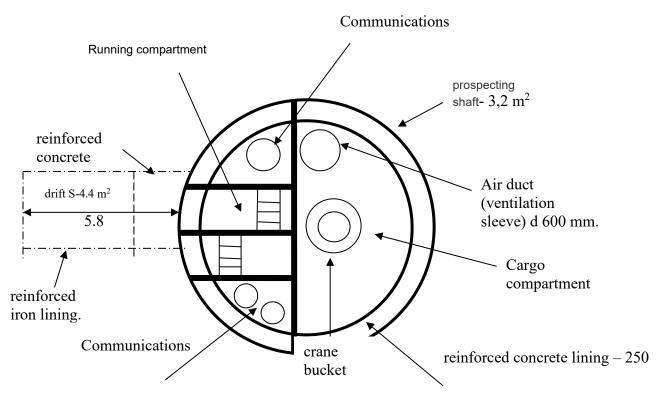
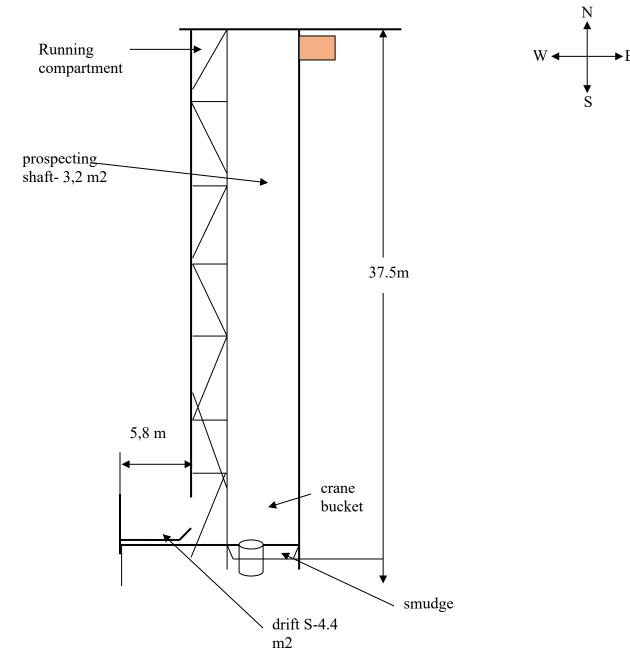


Figure 2.1 Shaft #1 - view from above





#	Name	L, mm	h1, mm	b1, mm	S, m ²
1	Prospecting shaft	2120		2120	3.2
2	Drift		2000	1800	4.4

Figure 2.2 Shaft #1 – side view



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In the course of April 2019 - March 2020, the following actions were taken in the process of implementation of the feasibility study:

- Construction of a shaft entrance;
- Shaft construction;
- Drainage preparation;
- Electricity supply installation;
- Construction of living quarters;
- Set-up of industrial infrastructure.

The vertical shaft features a cross-section of 3.2 m² with 37,6 m depth. On the prospecting shaft, construction and installation was completed using a metal-reinforced iron rod of 250 mm.

The lifting technology system was improved by an industrial winch with maximum carrying weight of 5 t.

The construction of a vertical shaft and ore mining capacity were executed simultaneously up to one meter beyond the shaft side wall to the ore body, with contemporaneous analysis of the orientation of the ore body with plans to develop a processing technology system. Along with production, exploratory drilling is underway to identify high-potential areas of production sites and increase mineralized assets of existing sites.



Figure 2.3 Shaft entrance





Figure 2.4 Montage of industrial winch



Figure 2.5 Air supply system





Figure 2.6 Shaft #1 – overview



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2.2. Horizontal drift

After reaching the projected depth, the direction of horizontal drift was verified on the north, east, south and west direction. Initial direction selected for the first drift was north-west.

The horizontal drift 5,8 m in length, 2 m in height and ,8 m in width was completed by mid-May. The drift is coupling by reinforced concrete.

Farafina Gold Group completed the construction of the first experimental industrial mine ever launched in the Republic of Guinea. The mine was developed under severe conditions, nevertheless eventually yielding 1.5 kg of gold per month.

Data obtained during exploration and ore body modeling were confirmed on the ground. Unfortunately, at the same time, some of the reserves were displaced due to activities conducted by local artisanal miners.

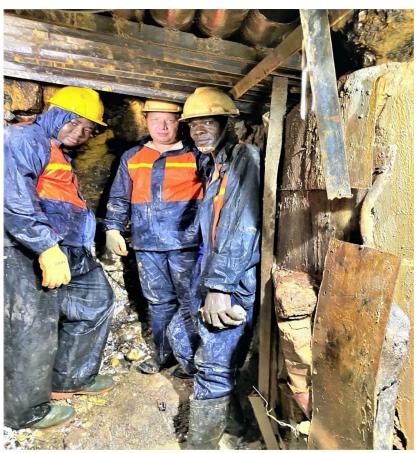


Figure 2.7 Inside of a horizontal drift



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3. Infrastructure

3.1. Mining Infrastructure

- Air supply system is based on twin fans blowing air through an 1,5 sq.m. air duct providing fresh air for a shaft;
- Drainage system based on a Sulzer drainage pump J-405 HD high head backed by two pumps of the same caliber, providing sustainable drainage of up to 80 m.

Power supply system as shown below:

- Generator set Caterpillar 30.0 KVA
- Model DE33E0.CAE soundproof type
- Three-phase 400 / 230V 50Hz
- Power output: 30.0kVA





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CAT 100 kVA

• GROUPE ELECTROGENE DE110E2 INSO

• "Model DE110E2 soundproof type

• Three-phase - 400 / 230V - 50Hz

• Production power: 100.0 kVA

• Emergency power: 110.0 kVA

• Caterpillar C4.4 Engine - Alternator LC3114F



SDMO Generator set

• 80 kva generator

• Fuel: Diesel

• Starter: Electric

• KVA: 88.0, Phase: 3-Phase





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The management equipped a room for rest and sleep for management staff on the Kanguela site and improved resting and sleeping conditions for line workers; residential quarters are currently under construction.

Living and office facilities are equipped with round-the-clock water and electricity supply. They are comprised of four buildings, includes three sleeping rooms, office space, warehouse, shower rooms and toilets.

Explosives storage warehouses were erected in full compliance with security requirements two kilometers from the site.

Land planning includes water surface, water drainage, concrete trench, ground irrigation trenches and waterproof embankments.



Figure 3.1Mining area





Figure 3.2 Residential quarters

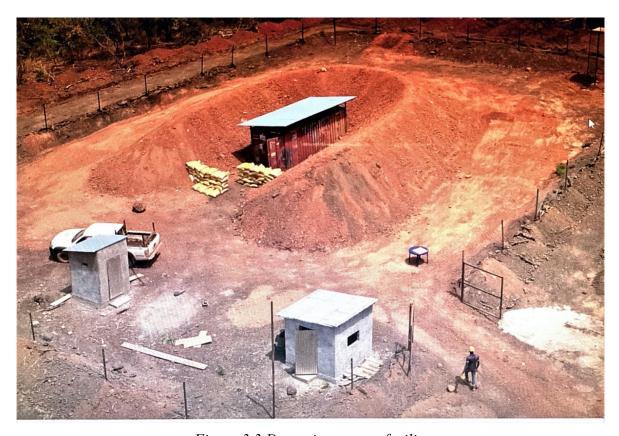


Figure 3.3 Dynamite storage facility





Figure 3.4 Drainage system



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3.2. Experimental processing:

Processing facility are located in a secure area of the Farafina Village



Figure 3.5 Farafina Village overview

In addition to residential facilities, the camp is equipped with an industrial zone, laboratory, warehouse, electric and mechanic shops.



Figure 3.6 New industrial building under construction



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Figure 3.7 Processing area

A Falcongravity separation device (manufactured by SeproSystems) is deployed for the extraction of gold from processed ore.



Figure 3.8 Operator of the Falcon extraction system



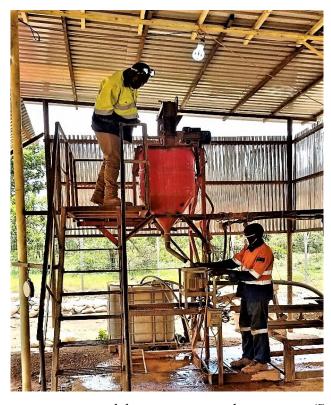


Figure 3.9 Extraction processing model on experimental equipment (SeproSystem, Canada)



Figure 3.10 Electric crushing machine



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Initial internal tests conducted by Lions Head Resources SARL provided the management precise knowledge about equipment that must be used to process quartz. As quartz is harder than saprolite, the management has deemed necessary to implement a double-shift production schedule to optimize productivity.

To facilitate raw ore processing during the rainy season, a project for the chemical processing of "tailings" containing mainly chemically bound gold is under development.

Electric crushing machines were tested and brought into operation, which radically improved the reliability of equipment and enabled an increase in processing.

Thanks to the modernization and upgrade of basic crushing equipment from diesel engine to electrical engine (a prototype that was deployed exclusively by Farafina Gold Group SA personnel), as well as the gradual transition to a three-shift schedule, it became possible to increase the processing volume of quartz enormously by reducing the ore size to about 0.2 mm for better extraction. The final phase of extraction from pre-processed gold ore is performed using a *laboratory* Falcon centrifuge.



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4. Human resources and public relations:

The three principal problems in establishing operations was the set-up of a communications protocol, enhancement of technical knowledge and professional skillsets in all facets of operations, and implementation of strict discipline.

Farafina Gold Group employees speak five different languages, including three local dialects. Some employees were possessed rudimentary or non-existing reading and writing skills and did not speak French or English. All technical documentation as well as almost all external communications and documents are in English.

To resolve the language issues, the company hired two Kankan University English language teacher' postgraduates and set up learning facilities with regular lessons for all line employees and management staff. The professional learning program includes preparation of mechanics, electricians, operators of sample preparation laboratory, operators of drilling rig, miners, Falcon operators, generator and compressor service operators, welding workers etc.

Special attention was dedicated to the management personnel. Lessons and training included computer and internet literacy, accounting basics, operational management, and industrial security.

As a result of such efforts most position in the Group are filled by Guinean nationals, primarily from the Mandiana region.



Figure 4.1Personnel in training





Figure 4.2 Electrician



Figure 4.3 Special equipment (high pressure compressor Atlas Copco)





Figure 4.4 Mandiana-based employees before starting work with the Company - 17.02.2019



Figure 4.5 Nessa Giro (The same person) 24.03.2019



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In addition to providing jobs and educational programs, FGG sponsors local sports activities to encourage youth health education. The Company also provided bulldozers to assist in the construction of a local hospital, drilled water wells to facilitate the development of the water supply system for the village and made several contributions to village activities. The general project of constructing some building in the village is in progress.



Figure 4.6 Opening a football championship sponsored by Farafina Gold Group SA



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5. Conclusion

Taking into account all challenges, Farafina Gold Group was able to complete mine construction, build a six-meter horizontal drift, hit its initial gold production target, build living quarters for both management and miners, build a warehouse to stock inventory, build a production line, build a dynamite warehouse and participate in local development plans.