West Africa is one of the fastest growing gold districts in the world. This is evident from the 8 mines that have been built and have been brought to production in the last 3 years and the five currently under construction. Its potential is further underscored by the 13 projects that are either in feasibility or resource drilling stage.
YANFOLILA BELT IN MALI

PART OF SIGUIRI BASIN – GOLD ENDOWMENT > 44 MILLION OUNCES

3 ADVANCED DRILLING PROJECTS ALONG YANFOLILA BELT

It is against this backdrop that makes the Yanfolila project in Mali, which Gold Fields owns 100% such an exciting prospect. It is located along the Siguiri basin which has about 44 million ounces of mostly shallow deposits of which Gold Fields has about 2500km² under its control. In addition, it includes the Morilla mine as well as the Loulo project, which has a resource of 13 million ounces. Gold Fields has 3 advanced stage drilling targets within the Yanfolila project, namely Bagama, Kobada and Komana, which is the flagship target.
Gold Fields acquired Glencar in December 2009 for £28 million. Through this acquisition, it has gained control of two deposits and exploration rights for 5 licenses. We have consolidated a significant land position in the area having filed 11 applications with 2 licenses already granted. We have also negotiated and signed agreements relating to third party ground.
The Yanfolila belt extends for 200 x 100km and hosts favourable rock and fundamental structures known to be the best ingredients for gold deposits in Africa. It has a deep weathering profile down to between 80m and 100m vertical depth. This provides great potential for low cost, economic mining as it can be dug out without the expense of explosives and drilling. This discovery was as a result of modern exploration techniques which used conservative methods first applied in the mid-90s and were particularly successful in the context of rock masked by lateritic cover which would not allow a direct “read-through” of the signature.
The main camp of the flagship target Komana, is located about 250km from Bamako, the capital of Mali, and is accessed by a 195km tarred road and a 55km all-weather gravel track. Hydro-electrical power is available from a nearby dam, which has the potential to generate about 35MW, with water available from the Niger and/or Sankarani rivers.
Upon acquiring Glencar, Gold Fields embarked on aligning the Yanfolila project with the strategic goal and value of “if we cannot mine safely, we will not mine”. This entailed the rollout of our Health and Safety management system, which ultimately allows for a robust operation without lost-time injuries. The management system is further underpinned by visibly felt leadership, development and counseling. Focus is also being placed on the environment and ensuring global best practice.
Further alignment is taking place in terms of Gold Fields’ commitment to sustainable community relations. We are therefore meeting existing commitments and maintaining a participative sustainable programme.

**KOMANA CAMP HOST 70-90 PEOPLE AT SITE**

- Camp under expansion with additional office, core shed and accommodations.

- Reliable communication and IT network with domain control link to Denver, Accra, Bamako, Perth.

- Completion of a clinic, and acquisition of an ambulance with dedicated expatriate paramedic on site.

The Komana camp currently hosts up to 90 people and its infrastructure is being expanded with an additional office, a core shed and accommodation. It has reliable information and communication technology with links to other exploration offices within the Group. We are in the process of completing the construction of a clinic as well as acquiring an ambulance and have appointed a dedicated expatriate paramedic on site.
SOIL SAMPLING: 7,660 samples collected

- Regional Soil sampling grids completed on 5 areas.
- Survey covers a cumulative strike length of 111 over 10 km width.
- Outcrop and Regolith mapping

Ground geophysical surveys:

- Induced Polarisation survey over an area 22 x 1 km
- Regional Gravity survey over an area of 120 x 20 km
DRILLING: 87,500 m drilled from October 1st 2009

- 90% of drilling at Komana East (KE) & West (KW).
- Scoping study commences with Environmental and baseline studies Stakeholders mapping
- 17 targets drilled and Definition of 44 new areas
- 7-8 rigs in use since November 09

WORK COMPLETED (2)

RESULTS

KOMANA ADVANCED DRILLING
The Komana project, which consists of Komana East and West has an inferred and indicated resource of 1.25 million ounces. There is currently 1 advanced drilling target, 6 initial drilling areas and 28 areas at definition stage.

Gold Fields expects the internal scoping study to be completed by December 2010 and there are various streams of work focused on delivering the required output. The green blocks depict internal sources.
and expertise allocated to the project, while the yellow shows work that has been outsourced. The black blocks show the various ancillary areas that will also form part of the scoping study.

MULTIPLE 22 km LONG FERTILE TRENDS NEVER DRILLED!

Lithostructural maps are generated from regional gravity survey and high-resolution airborne geophysical surveys. These have paved the way for new search space and will contribute towards firming up existing deposits such as Komana East and West.
160 x 80 m core drilling completed over 2,400 m strike

**KOMANA EAST DEPOSIT**

The Komana East deposit is a large land position of about 180km by 60km and we have completed 160m x 80m core drilling over a 2,400m strike. It is a 1,800km long deposit, with artisanal workings covering 90% of the area.
The first geological map produced with mafic volcanics and sediments created a contrast generally permissive to gold mineralization. High grade shoots indicate that it is open ended from 150m-200m vertical depth.

A ground geophysical survey was applied to measure chargeability and resistivity of Komana East and the results identified that Komana East is a resistive body and a similar response was attained from 3 other areas of similar size.
KOMANA WEST IS LOCATED 7 KM WEST OF KOMANA EAST

- 0.57 million ounces @ 1.6g/t declared by Glencar.
- Resources outlined on 1.8 km strike

A 2km long artisanal working with a potential pit down to 80m depth has also been identified at Komana West, which is 7km west of Komana East.

ASSAY RESULTS PENDING

Framework drilling at Komana West is in progress. In terms of the legend on the left hand side of the slide, the red stars indicated drill holes for which results have already been received while the blue stars...
indicate pending assays. The general results indicate a series of parallel zones and visible gold is common as indicated in the picture to the right of the slide.

Drilling at Komana West has only tested 50% of trends. The scoping of the Northern extension and parallel wrenches is in progress while regional bedrock sampling is being conducted to outline new search space.
REGIONAL EXPLORATION -

AGRESSSIVE GREENFIELD PROGRAM

- 17 Initial drilling targets 44 areas a target definition stage
- Initial drilling carried out on 8 targets outside Komana lease.
- Encouraging results on Sanioumale, Bokoro, Faliko and Fougan.
- Pending assay on Badogo & Niechelila

In terms of the region, we have commenced early stage exploration work over 1,000 km² in terms of initial drilling and soil sampling.

The drilling results received so far are encouraging and early stage projects have been outlined.
4km long corridor with gold in oxide.

- Gold mineralisation in oxide over 3.5 km long strike from surface to >100 m
- Open ended along strike and parallel wrenches not tested

A case in point is the Bokoro Main target, which is a sub-cropping mineralisation masked by 2m to 5m thick laterite. The drill results so far indicate modest grade with >4 km long extension with gold in oxide.

2 km mineralisation at Sanioumale West

- 7 km North of Komana East
- 60 m vertical depth of oxide material
- 400 m High grade from near surface

Another target is Sanioumale West, which is a 2km mineralisation. Drill results indicate high grade intervals from surface as shown in this section.
FOUNDATION FOR DEVELOPING CAMP SCALE OPERATION IN PLACE

- Komana advanced project on tract for preliminary scoping study by end of December 2010
- Replenishment of exploration portfolio with initial drilling targets to be promoted to next value chain.
- Acquisition of new prospective licenses around Komana anchor project.
- Developing an EHS & C awareness to ensure cultural changes in day to day activities and ensure zero LTI

CLOSING REMARKS

The Yanfolila project is located along an under explored belt and has laid the foundation for a camp scale opportunity in this highly prospective country. As mentioned before, the scoping study is on track to be completed on Komana East and West deposits by end December 2010.

The camp scale is further underpinned by the potential exhibited to bring new “Komana’s” into the portfolio through aggressive testing of targets and ground consolidation as shown by Sanioumale West and Bokoro Main.

Finally, “If we cannot explore safely, we will not explore”.