



E A R L Y E X P L O R A T I O N

KOSSOU PERMIT

## GEOLOGY

The Kossou Gold Project is located in the southern part of the West African Craton, which hosts many significant +1 moz gold deposits and is one of the most prolific gold belts in the world. Orogenic gold deposits are generally associated with brittle-ductile shear/fault systems showing pervasive alteration with disseminated sulfides and discontinuous quartz veins arrays and stockworks hosted within volcanic, sedimentary and intrusive rocks.

The project area lies along the south-eastern edge of the Bouafle greenstone belt that hosts the nearby Yaouré Gold Mine operated by Perseus Mining (M&I 55.6 Mt at 1.52 g/t Au and P&P 35.2 Mt at 1.53 g/t Au as per company website). Local geology consists of a series of massive and pillowed basalts with intercalated sediments and intrusive units. The Contact Zone Fault is believed to be a major sinistral strike slip structural break that separates the dominant volcanic package to the west and volcanoclastic sediments to the east and may represent a 1st order structure that may tap deep orogenic mineralising fluids.

Gold mineralisation is contained within a well-defined NNW to NS- striking fault bounded corridor that is +300 meters in width and over 3 km long and covers our key targets from the Road Cut Zone in the north, south to the Jagger Zone. Within this corridor numerous shear zones have been identified that host gold mineralisation. A series of quartz-carbonate style veins, termed "V2" cut the north trending major shear zones at high angle and bring significant high-grade gold into the system.

## **GEOCHEMISTRY**

Over 4,930 soil samples and over 925 rock samples have been collected across the Kossou Gold Project. The gold in soil geochemical anomalies, defined as greater than 50 ppb Au define our key target areas and have delineated over 9 kms of targeting that is being explored. These targets are supported by rock samples and/or evidence of artisanal mining, highlighting their importance. Along with trenching and surface mapping, these findings formed the basis of the 2023 reverse circulation drill program, supporting Kobo's strategy to fully unlock the property's potential.

## **GEOPHYSICS**

### **UAV Magnetic Drone Survey**

State-of-the-art drone surveys have provided detailed maps of the Kossou property, revealing key geological features that guide exploration.

From August 13-28, 2020, MWH Geo-Surveys conducted a 1,220 km UAV magnetic survey using a DJI M600 Pro drone and Geometrics MagArrow magnetometer. With 50-meter spacing and a ground clearance of 62.3 meters. This survey and subsequent processing and interpretation delivered valuable data to help refine exploration targets and better understand the geological setting..

### **Magnetic Data**

Processing of magnetic survey data has provided crucial insights into the geological setting of the Kossou Gold Project and provides critical information coupled with other geological data to the team to target the most promising areas for drilling.

## **GEOLOGICAL & STRUCTURE STUDY**

In March 2021, Kobo Resources contracted InnovExplo to conduct field mapping and a structural study, yielding highly positive results. The study identified a structural corridor connecting known gold showings, aligned with magnetic data and sampling results. A second corridor, linking the newly discovered Kilo and Shadow zones, was also proposed.

Gold mineralization is found in quartz veins and disseminated in volcanic rocks, associated with tension-driven fractures and shear networks.

## GEOLOGICAL & STRUCTURE STUDY CONT.

In October 2023, Dr. Ghislain Tourigny spent 13 days at the Kossou Gold Project reviewing geological maps, trench results and RC and diamond drilling from the Jagger and Road Cut zones.

The study made several key observations on the structural setting, geological units and controls to gold mineralisation.

Key findings included:

- Gold mineralisation is confined to a well-defined NNW to NS striking fault bounded corridor that is +300 m wide and greater than 3 kilometers in length. Gold-bearing high strain lenses straddle areas of the highest shear strain, pervasive hydrothermal alteration and brittle fracture.
- Two styles of gold mineralisation were noted. The Road Cut Zone represents replacement style type mesothermal mineralisation associated to a highly silicified protore that is obliquely crosscut by late tectonic gold-quartz veins and the second style observed consists of well developed gold-quartz vein set typical of orogenic gold deposits.
- "V1" quartz-carbonate veins are parallel to the dominant shear foliation and contain gold.
- "V2" veins obliquely crosscut the dominant shear direction and V1 veins and contain significant high-grade gold values.
- The current drill orientation was also revised based on this study.