

Republic of Equatorial Guinea

Mineral Potential



Rio Muni continental area of Equatorial Guinea offers a rare opportunity to explore green rock terrain with a high mineral potential to discover deposits of: gold, PGE, columbo-tantalite, base metals, diamonds, bauxites & iron ore.

GEOLOGY

- Rio Muni contains four geological terrains: the Ntem, Monts De Cristal (MDC,) the Noya Series and the coastal strip. Ntem & MDC are Archean terrains at the northwest margin of the Congo Craton. The Noya series comprises Neoproterozoic metasediments. Youngest rocks are found in sediments from the Cretaceous coastal belt.
- The largest structural feature in Rio Muni is the Northeasttrending Benito Rift, parallel to the main structural fabric. A Pan-African transpressional structure and an extensional rift reactivated during the Cretaceous opening of the Atlantic.
- This trending Pan-African structures occur throughout Rio Muni, but they are more common in the West, and are often filled with pegmatitic and intrusives granitic dikes.
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- West bordering is the Ntem Complex, subdivided into: an eastern area like MDC region, with lower density of intrusions; a central zone within Benito Rift & a Northwest zone that includes the gneissic basement & Paleoproterozoic metasediments.
- Noya series sediments, Southwest Rio Muni, were deposited as the Pan-African basin filled and lay dissatisfied at the bottom. The narrow Cretaceous coastal belt consists of sands, shale & carbonates.

MINERALISATION

- The Ntem and MDC terrains are typical green rocks with first order shear and are prospective for mesothermal gold deposits. Coarse-grained alluvial gold, thick and angular, is produced traditionally in Coro, Aconibe and Mongomo in association with vein quartz and lateritic material indicating a proximal source.
- Large ultramafic dikes occur within Northeast trend structures in the Southeast of the MDC terrain and are assumed to be a continuation of the Kinguele complex in Gabon, which contains a remarkable mineralisation of PGE and Ni.
- The proportions of orthopyroxene over clinopyroxene, and the high content of MgO, Cr and Ni, is like that of important PGE regions such as the Great Dam of Zimbabwe.
- In the Nsork area, kimberlite indicator minerals have been identified showing that diamond potential is moving from neighbouring Gabon, where the diamond kimberlite Mitzic is located just 40 km from the border.

