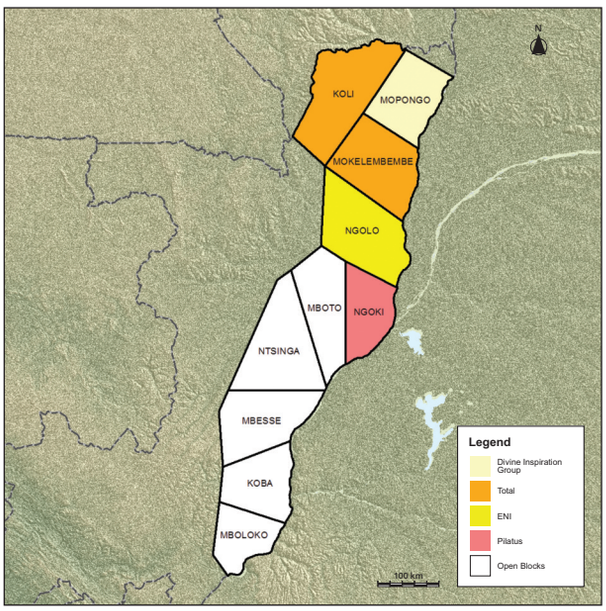
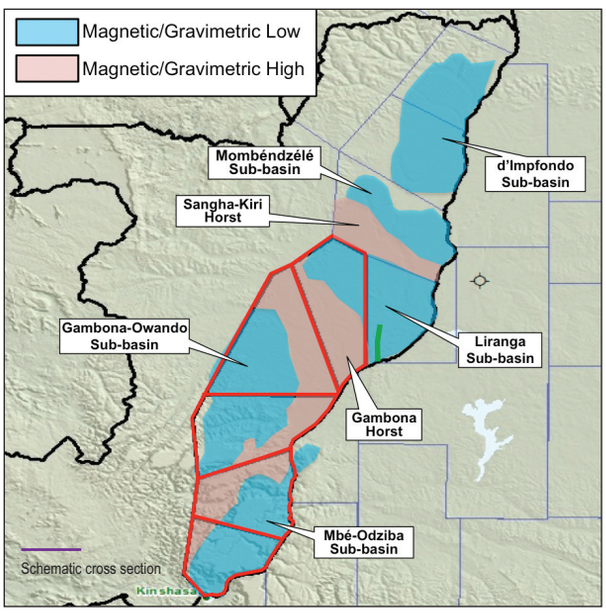
Ministère des Hydrocarbures
République du Congo

SNPC

Cuvette Basin



Onshore Cuvette Basin



Delineation of sub-basins and horsts based on Magnetic and Gravimetric data (after SNPC, 2013)

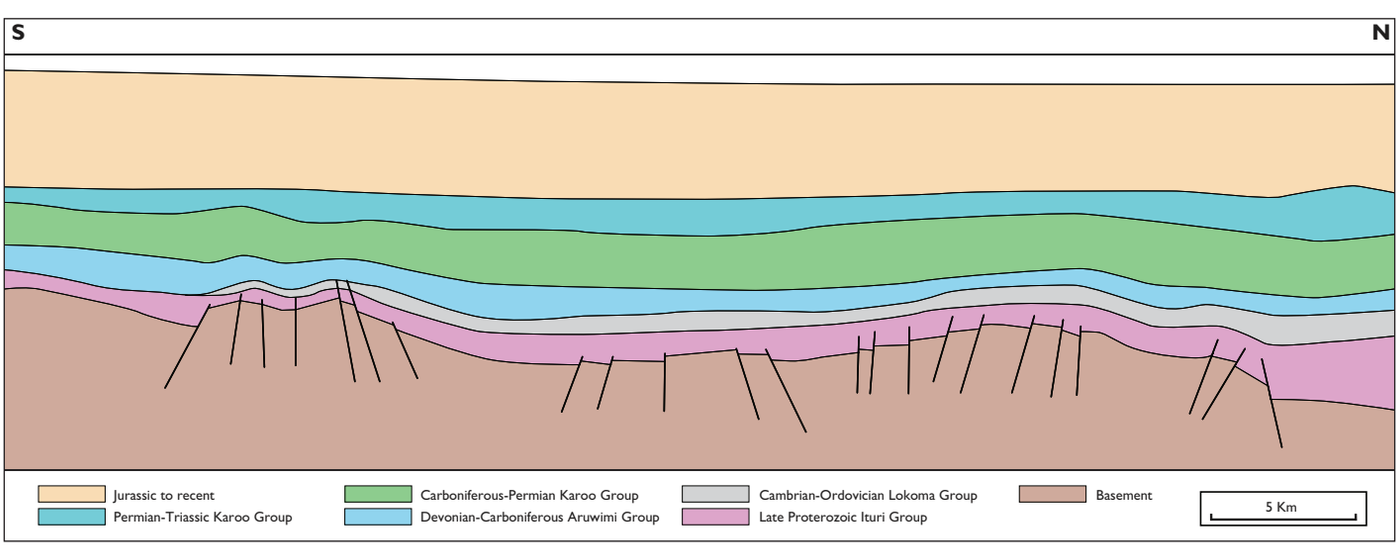
Permis Koba, Mbesse, Mboloko, Mboto and Ntsinga are located within the Cuvette Basin, onshore Republic of Congo. These blocks border the Democratic Republic of Congo (DRC) to the west, along the Congo River.

No wells have been drilled in the Cuvette Basin within the Republic of Congo, only 4 dry wells have been drilled in the entire basin. Gilson-1, drilled 440 Km to the east of the blocks is reported to have contained oil shows. These are speculated to be sourced from the Devonian Alolo Shales. There are currently no discoveries in the Cuvette Basin and no wells have been drilled since the 1980s.

Potential source rocks include the Neoproterozoic Ituri Formation (stromatolitic reefs, 1.1% TOC and Type I kerogen), the Cambrian-Ordovician Mamungi Shale Formation (1.7% TOC), the Silurian-Devonian Alolo Shale Formation (up to 3.85% TOC in Gilson-1, Type II/III kerogen) and the Jurassic-Cretaceous Stanleyville Group (8-20% TOC). Source rocks are expected to be best developed within the syn-rift depocentres and in synclines generated by compression.

Numerous potential reservoirs are present representing a wide range of depositional environments. These include Upper Proterozoic reefal build-ups, Cambrian-Ordovician alluvial fan sandstones, Silurian-Devonian deltaic sandstones, Carboniferous-Jurassic Karoo Supergroup glacial and alluvial sandstones and Jurassic-Cretaceous fluvial-lacustrine sandstones.

Several periods of tectonic activity have resulted in the inversion of previous extensional half-grabens, creating a wide range of structural traps. Stratigraphic and combination traps are also likely to be present. There are several sealing intervals present in the basin, the post-rift intervals are expected to provide the most widespread and effective seals.



Schematic cross section