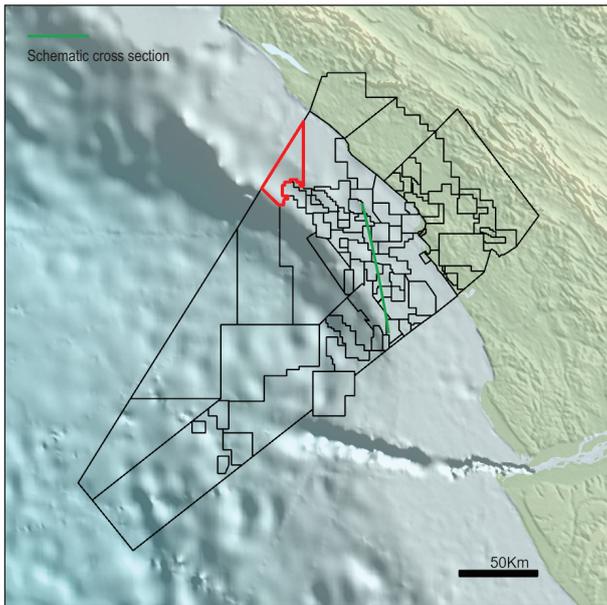
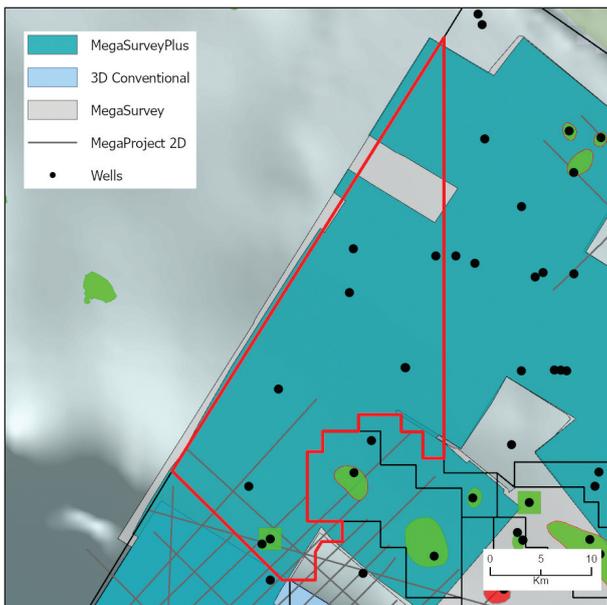


Permian Marine XXV



Congo Coastal Basin



Seismic available, Permian Marine XXV

Permian Marine XXV is located offshore in the Congo Coastal Basin. It has an area of 623.4 Km². The bathymetry ranges between <50 m to almost 300 m extending from the shelf to deep water.

Permian Marine XXV contains no commercial hydrocarbon discoveries. Nine wells have been drilled in this block from 1973-1988, five with oil shows and four which were dry. Heavy oil shows were encountered in Albian carbonates and Cenomanian sandstones. Litela Sud Marine-I was one of three wells targeting the Pre-salt and encountered oil shows in the Pre-salt Chela Formation (Fm) but the others drilled water-wet reservoirs. Typical plays expected in Permian Marine XXV include Cenomanian sandstones, Sendji carbonates and Pre-salt sandstones.

Cenomanian Sandstones

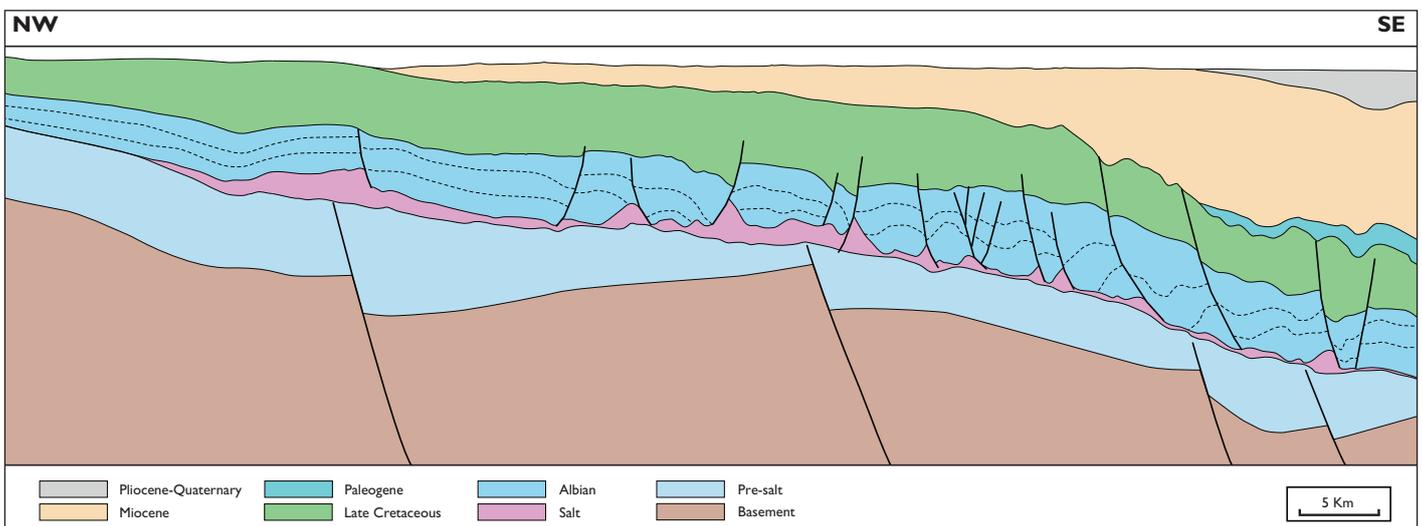
The Cenomanian Tchala Sandstone Fm is a reservoir for the nearby Yombo Field. Hydrocarbons are sourced from the Neocomian Noires Fm. Trapping structures are typically related to salt-induced rollover anticlines.

Sendji Carbonates

The Albian Sendji Fm is the primary reservoir for the nearby Masseko and Yombo fields. Hydrocarbons are sourced from the Neocomian Noires. Trapping structures are typically related to salt withdrawal turtle features and salt-induced rollover anticlines.

Pre-salt Sandstones

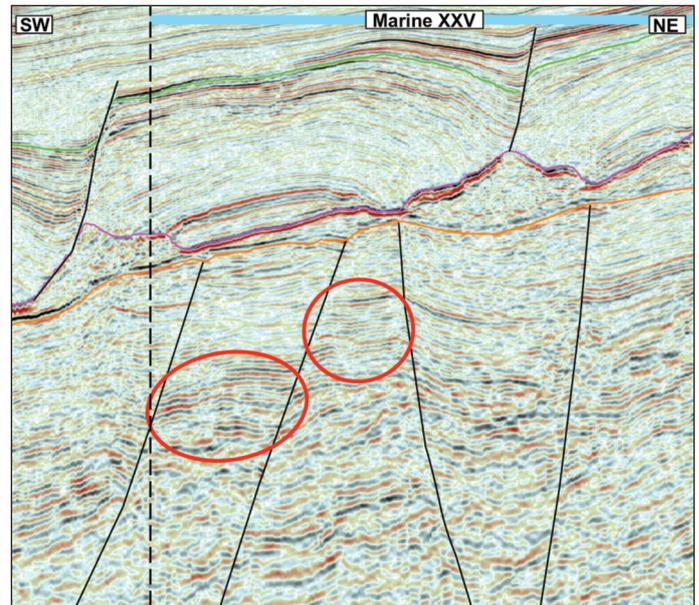
Pre-salt reservoirs include the Chela, Djeno and Vandji formations. The nearby Vandji Marine Field encountered hydrocarbons in sandstone reservoirs within the Pre-salt Chela and Lucula formations.



Schematic cross section

Lead 1 – Pre-salt

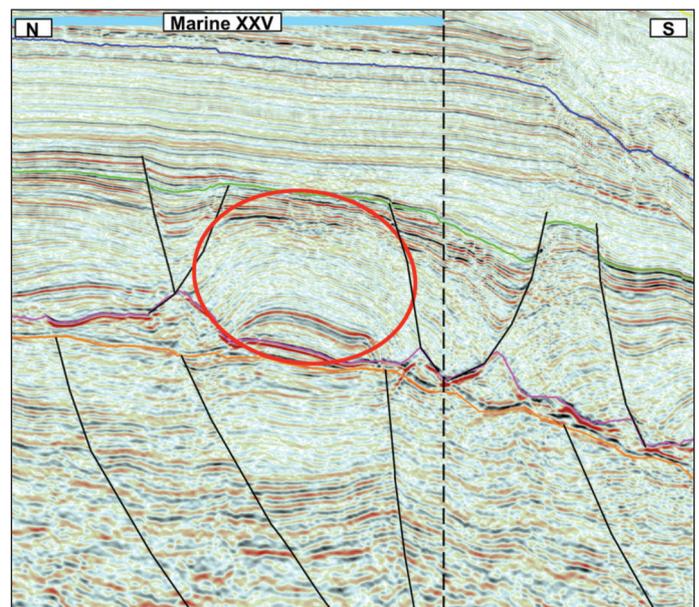
This lead is a faulted high-amplitude reflector package beneath the salt. This is likely to be sandstones of the Djeno and Vandji formations within a tilted fault block trap. The Pointe Noire Marl and lacustrine shales of the Djeno Sandstone provide effective source rocks and seals.



Lead 2 – Sendji Carbonates

This lead is a rafted block of Sendji carbonates. These carbonates consist of dolomites, oolitic limestones and interbedded sandstone units, deposited in tidal channels in the lower part and as offshore bars and shore face units in the upper part.

Hydrocarbons are sourced from the Neocomian Sialivakou shales migrating up faults. The nearby Masseko and Yombo fields have working reservoirs within the Sendji Fm.



Lead 3 – Pre-salt

This lead is a change in reflection coherency in a package beneath the salt. This is likely to be the Chela Fm sandstones sealing against the basement. The Pointe Noire Marl and lacustrine shales of the Djeno Sandstone Fm provide effective source rocks.

