

Tendrara Hydrocarbon Potential

Rabah Bouchta and Zouhair Taki

Maghreb Petroleum Exploration, Résidence Kays, Rue Toudgha, Agdal-Rabat, Morocco

zouhairtaki@yahoo.fr

rabouchta@gmail.com

Tendrara area is located in eastern Morocco on the northern foreland of the Eastern High Atlas. It is also a continuity of the Algerian Triassic province located northward of the Saharian platform of which Tendrara basin is a part.

Tendrara area shows the same tectono-sedimentary evolution as Algeria Basins.

Two wells were drilled on different structures (SBK-1 on Talssint structure and TE-5 on B structure) with gas discoveries.

The petroleum system in the Tendrara area is Palaeozoic-Triassic-Jurassic hybrid petroleum system which was proven by the SBK-1 and TE-5 discovery wells. It consists of Paleozoic source rocks, Triassic reservoirs (TAGI) and Triassic and Jurassic seals

The structural & sedimentological studies accompanied with amplitude anomalies analyses realized recently, show that much better reservoir rocks than those drilled ought to exist in more favorable sedimentary environments.

The RMS Extractions and amplitude anomalies studies at TAGI (Trias Argilo-gréseux Inférieur) level perfectly converge towards the same conclusions as those of the structural and sedimentological studies: these studies show that the reservoir quality in term of porosity and permeability improve in more favorable places.

New structures were identified in Tendrara licences which content a good hydrocarbon potential.