HYDROCARBON POTENTIAL OF OLIGOCENE-MIOCENE RESERVOIRS IN THE GULF OF HAMMAMET BASIN (TUNISIA)

R..S. JEDDI, E.T.A.P :Tunis , TUNISIAd'Activités Pétrolières, Tunis,TUNISIA.

The siliciclastic deposits of Oligocene-Miocene have proven petroleum reservoirs in Tunisia. Main fields discovered in the NE of Tunisia are associated with :-The Birsa sandstones Formation shallow marine facies (Lower Serravallian), in the Gulf of Hammamet, is a good reservoir (10 to 33% of porosity) which is producing Oil in some fields.The limestones attributed to the Nilde Formation (lower Serravallian), is a proven good reservoir in Sicily.-The Ain Grab Formation (Langhian), in the Gulf of Hammamet, exhibits good petrophysical characteristics (15 to 30% of porosity and 150 md of Permeability). This reservoir is bioclastic limestones facies which varies laterally and shows shallow marine, upper to middle foreshore, environments .-The Ketatna Formation marine carbonates platform (Oligocene-Aquitanian) is largely developed in the East of the Gulf of Hammamet. Its good potential is proven in the center of this area. The lateral equivalent of the Ketatna facies is the Fortuna sandstones (deltaïc) and the Numidian (turbiditic deposits).

The main source rocks in Hammamet basin are : the Albian Fahdene black shales, the upper Cenomanian Bahloul limestones, the Lower Eocene Bou Dabbous limestones.. The Zouza Formation may constitute a source rock for the Numidian reservoir. Sturctural setting'is charcterized by : -Pliocene extension features trending NE -SW. -the presence of Grabens associated with wrench faulting NW-SE oriented,These tectonic phases have generated both stuctural and or stratigraphic traps.