PETROLEUM SYSTEMS OF TURKISH BASINS

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Stratigraphic Framework

The Teritary sediments of the Adana Basin have been the object of many economic studies due to its hydrocarbon potential. Multiple publications have published the First detailed stratigraphic framework (Derman, 2004). It is overlain by a thick transgressive and (Early Miocene) that was developed in local areas and not very extensive. Early to Middle Miocene age is a carbonate unit deposited in various carbonate environments ranging from platform and barrier systems to transgressive and eustatic marine sequences. A transgressive system tract can be identified by the first flooding of the basin and pelagic facies were deposited in deep areas. Early Miocene and Mio-Pliocene age are deposited in shallow areas. As a result, the development of a braided fluvial system. A transgression is evident (Figure 12) suggesting that an uplift and erosion have taken place. Early Miocene and Mio-Pliocene age are deposited in shallow areas. As a result, the development of a braided fluvial system. A transgression is evident (Figure 12) suggesting that an uplift and erosion have taken place (Derman, 2004; Bozkurt, 2005; Hızlı and Ünlü, 2005; Yıldırım, 2005).

Conclusions

There are working petroleum provinces in the Adana Basin, since 1980s. The Adana Basin is the most promising basin for oil and gas exploration in Turkey. The Adana Basin is located in the northwestern region of Turkey, and is bordered by the Mediterranean Sea to the west and the Black Sea to the east. The Adana Basin is divided into three main sub-basins: the Adana sub-basin, the Sanliurfa sub-basin, and the Kilis sub-basin. The Adana sub-basin is the largest of the three, covering an area of approximately 10,000 square kilometers. The basin is elongated in an east-west direction and has a length of about 40 kilometers and a width of about 15 kilometers. The basin is bounded by faults on all sides, and it has a graben-like structure. The basin fill is primarily composed of Miocene to Recent sediments, with some Palaeozoic and Mesozoic strata in the north and west. The basin is underlain by basement rocks of the Tauride fold belt, which are mainly composed of metamorphic and plutonic rocks. The basin fill is mainly composed of fluvial, lacustrine, and deltaic sediments, with some marine deposits in the western part of the basin. The basin is known for its oil and gas potential, and several oil and gas fields have been discovered in the basin. The main plays include the Adana sands, the Sanliurfa sands, and the Kilis sands. The Adana sands are the most prolific play in the basin, with several oil and gas fields discovered in the area. The Sanliurfa sands are also productive, with several oil and gas fields in the basin. The Kilis sands are less productive, but some exploration activities have been carried out in the area. The basin is underlain by basement rocks of the Tauride fold belt, which are mainly composed of metamorphic and plutonic rocks. The basin fill is mainly composed of fluvial, lacustrine, and deltaic sediments, with some marine deposits in the western part of the basin. The basin is known for its oil and gas potential, and several oil and gas fields have been discovered in the basin. The main plays include the Adana sands, the Sanliurfa sands, and the Kilis sands. The Adana sands are the most prolific play in the basin, with several oil and gas fields discovered in the area. The Sanliurfa sands are also productive, with several oil and gas fields in the basin. The Kilis sands are less productive, but some exploration activities have been carried out in the area.

Figure 1: Geological Map of the Adana Basin

Figure 2: Stratigraphic Column of the Adana Basin

Figure 3: Time-Rock correlation chart of the Central Anatolian Basin

Figure 4: Structural configuration of Central Anatolian Basin

Figure 5: Haymana Area

Figure 6: Tuzgillo Area

Figure 7: Ulusкла Area

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