

## INTERPRETATION OF SEISMIC PROFILES OF THE TERTIARY SEDIMENTS IN THE RAMSAR REGION, SOUTHERN CASPIAN SEA

Khodabakhsh, S.1; Farzadi, P.2; and Zadeh Mohammadi, M.A.3

1 Geology Dept., Bu.Ali Sina University, Hamedan, Iran

2 National Iranian Oil Company (Exploration Dept.), Tehran, Iran

This study is based on the analysis of sixteen seismic-reflection profiles from the Ramsar region in the southern Caspian Sea. The maximum penetration of the profiles was the upper Cretaceous sediments.

Five seismic facies were identified: 1- reflection-free facies, 2- parallel layered facies, 3- mounded facies, 4- prograding facies and 5- chaotic facies. The reflection free facies may indicate seismically transparent and homogeneous sediments. The parallel-layered facies is predominant in most parts indicating uniform deposition of sediments in a stable condition. Their reflection patterns vary from continuous and high amplitude to discontinuous and low amplitude. The prograding facies is characterized by sigmoid configuration which may be related to deltaic processes. The mounded facies consist of sub-parallel reflectors which shows features similar to depositional lobes of deep-sea fans. The chaotic facies were formed by mass flows, littoral processes or shale diapirism.

Preliminary results indicate the potential reservoirs may have been formed in the mounded, prograding facies and shoal sands.