



## **Biostratigraphy and microfacies of Asmari formation in both sides of "Balarud" flexure-South west of Iran**

N. Mousavi (1) and Iraj Momeni (2)

(1) (nmou@statoilhydro.com), (2) Shahid Beheshti University , Tehran , Iran

Asmari Formation (upper Oligocene - lower Miocene) is developed regionally through out south west of Iran. In Dezful embayment consists of carbonated rocks (limestone & Dolomite), shale, sandstone (in center and south of Dezful embayment) and evaporites (in north). This formation continues to Lurestan and Iraq. "Balarud" flexure is separated Dezful embayment and Lurestan areas.

In order to determine microfossils, biostratigraphy and microfacies of Asmari formation in both sides of "Balarud" fault, "Qalehnar" well No.2 in the northeast margin of Dezful embayment

(Footwall) and "Tange-Leilam" surface section in Chenareh anticline in Lurestan (Hangingwall) were studied.

In these two sections, 55 Species of 41 Genera of Foraminifera and 20 Genera of non-Foraminifera have been recognized and 11 biozones are introduced. According to index fossils, upper Oligocene (Chattian) to lower Miocene (Burdigalian) is proposed for Qalehnar section and lower Oligocene (Rupelian) to lower Miocene (Burdigalian) for Chenareh section. Microfacies changes from Rupelian to Aquitanian and absence of Chattian index fossils show a gap in this time.

Twelve distinct microfacies were identified from petrographic analysis of the samples correspond to different sedimentary environments:

- a) Mid-ramp environments: Proximal open marine, restricted marine environment and patch reef.
- b) Inner ramp environments: shelf lagoon, tidal flat and restricted lagoon