

Biostratigraphy, facies and sequence stratigraphy of the Sarvak Formation in the Rashtalu and Khartu sections, sub-coastal Fars, Zagros, Iran

B. Parnian¹, V. Ahmadi^{*2}, H. Saroii³, M. Bahrami⁴

1- Ph. D. student, Dept. of Geology, Islamic-Azad University, Shiraz Branch, Estahban, Shiraz

2, 3- Assist. Prof., Dept. of Geology, Islamic-Azad University, Shiraz Branch, Estahban, Shiraz

4- Assist. Prof., Dept. of Geology, Islamic-Azad University, Shiraz Branch, Shiraz

* v_ahmadi_geo@yahoo.com

Received: 2020/7/11

Accepted: 2021/1/18

Abstract

The outcrops of the Sarvak Formation of the Khartu and Rashtalu anticline in southeastern Zagros have been studied on the basis of biostratigraphy, paleoenvironment and sequence stratigraphy. Six biozones were identified in Sarvak Formation in studied area (middle Albian to upper Cenomanian). Based on field observations, three stratigraphic units can be distinguished in both sections. Five facies were identified in ten microfacies in four facies belts. Carbonate sequence of the Sarvak Formation in the sections in a ramp (inner, middle and outer ramp) that includes lagoon, barrier, front barrier and open marine belts. Tectonic processes and the location of the sedimentary basin and the rate of entry from outside the basin on the ramp have been affected. Three third-order sequences have been identified, which have decreased to the upper basin depth. So that the diversity of habitats in the environment of Sarvak Formation was higher in Rashtalu section, while the fossil diversity in Khartu section was less.

Keywords: Sedimentary environment, Biozone, Facies, Sequence stratigraphy.