Introduce of microfacies and sedimentary environment of the end of middle Permian deposits and Guadalupian-Lopingian boundary in the west of Tethys, Abadeh area, Iran

S. Shahinfar¹, B. Yousefi Yegane^{*2} and S. Arefifard³

1, 2-Dept., of Geology, Faculty of Sciences, University of Lorestan, Khorram Abad

* Bizhan-yegane@gmail.com

Recieved: 2019/2/23 Accepted: 2019/8/13

Abstract

In Iran, the Permian-Triassic sediments are located in the northeastern part of Hambast Mountain, 60 km south-east of Abadeh city. One of the unique features of these sediments is the existence of complete outcrops from the middle Permian to the Upper Permian rocks, which show the accidents happened at the end of middle Permian. The study area includes two stratigraphic sections in the Hambast valley, including unit 3 of Surmaq Formation (Capitanian), Abadeh Formation (Capitanian), including unit 4a, unit 4b and unit 5, and the primary part of the Hambast Formation (Wuchiapingian). Based on studies have been done on 380 microscopic thin sections, 10 sedimentary microfacies include bioclast wackestone, bioclast staffelid packstone, bioclast hemigordiopside wackestone, bioclast wackestone / packstone, bioclast algal wackestone, bioclast ostracod wackestone, fenestral bioclast wackestone, stromatolite wackestone, dolostone and mudstone, were identified. These microfacies have been deposited in a homoclinal ramp platform and related to unlimited lagoon and tidal environment.

Keywords: Garau Formation, West of Khorramabad, Rock-eval pyrolysis, Source rock, North-west of Kermanshah