

INTEGRATED SEQUENCE STRATIGRAPHIC INTERPRETATION OF THE LATE CRETACEOUS KAWAGARH FORMATION, GANDAB SECTION, KALA-CHITTA RANGE, PAKISTAN

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Abstract

The Late Cretaceous Kawagarh Formation is well exposed in Gandab Section, Kala-Chitta Range, Pakistan. In the present study, the biostratigraphy and microfacies analysis have been carried out to reconstruct sequence stratigraphic framework of the stratigraphic unit. The biostratigraphic investigations revealed abundant planktonic foraminiferal species of *Globotruncana*, *Heterohelix* and *Globotruncanita*. Based on these species, a single local planktonic foraminiferal biozone i.e. *Globotruncana-Heterohelix-Globotruncanita* assemblage is established. The biozonal information is integrated with previous published literature and Lower Santonian to Middle Maastrichtian age is assigned to the Kawagarh Formation and interpreted to be deposited from 84 MYA to 71 MYA. The microfacies details of this stratigraphic unit indicate four microfacies, including Planktonic wackestone, Bioclastic wackestone, Planktonic mudstone and Bioclastic mudstone microfacies. Based on these microfacies, the Formation is interpreted to be deposited in the outer ramp platform settings. A total of six parasequences have been demarcated which are bounded by six marine flooding surfaces in retrogradational stacking pattern. The Kawagarh Formation shows an overall transgressive system tract (TST).