

Revised Lithostratigraphy of the Late Paleocene- Early Oligocene Nisai Group, Pishin Belt, Pakistan

Aminullah Kakar and Akhtar M Kassi

Department of Geology, University of Balochistan, Pakistan

The Pishin Belt, Pakistan, comprises sedimentary successions of Late Paleocene through Pleistocene age. We define the Late Paleocene-Early Oligocene Nisai Group as the shallow marine succession that nonconformably overlies the Muslimbagh-Zhob Ophiolites and is conformably overlain by the Oligocene Khojak Formation. Based on our field observations, in four measured sections, we propose to subdivide the group into three distinct and mapable lithostratigraphic units of the formation rank, which, from base to top, are; Akhtar Nika Formation, Jabrai Formation and Nisai Formation.

The lower Akhtar Nika Formation comprises rhythmically interbedded limestone and shale succession possessing characters of turbidites. The limestone beds are composed of fragmented and recycled larger foraminifera, miliolids and red algae of Late Paleocene to Early Eocene age. The middle Jabrai Formation dominantly comprises of soft greenish to olive coloured mudstone with minor shale, calcareous sandstone, coquina limestone and thin coal seams. The upper Nisai Formation dominantly comprises thick bedded, nodular limestone with coral reefs and buildups in its uppermost part. The uppermost units of the Nisai Formation possess foraminifera of Early Oligocene age.

Although the Nisai Group is clearly divisible into three distinct, and mapable, lithostratigraphic units of formation rank and exposed throughout the Pishin Belt, the overall thickness of the group is highly variable and in places reaches up to 2170 meters.