



FORAMINIFERAL EVIDENCE FOR THE EOCENE FAULTING IN THE SUB SURFACE SECTION NEAR SAM, JAISALMER BASIN, RAJASTHAN

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ABSTRACT

The cores from the subsurface section located in the Kanoi fault zone near Sam village (27°30':70°30'), Jaisalmer district, record a sequence of carbonaceous shale and lignite at the base overlain by the pale carbonate and bentonitic clay units. These core samples contain well - preserved planktic and benthic foraminifers in the carbonaceous shale and bentonitic clay units. The carbonaceous shale consists of an assemblage of planktic foraminifera indicative of Zones P7-P8 (early Eocene), while the overlying bentonitic clay unit contains the assemblage characteristic of Zone P2 (Early Palaeocene). These age assessments are further supported by the occurrence of *Assilina granulosa* (d'Archiac, 1857) and *A. subdaviesi* Gill, 1953 in the carbonaceous shale and *Laffitteina bibensis* Marie, 1946 (index species of SBZ1) in the overlying bentonitic claystone. The ages indicated by the planktic and the larger foraminiferal species confirm the stratigraphic inversion due to fault in the subcrops.

Keywords: Foraminifera, Subsurface Section, Sam-6 (Jaisalmer), Kanoi Fault zone