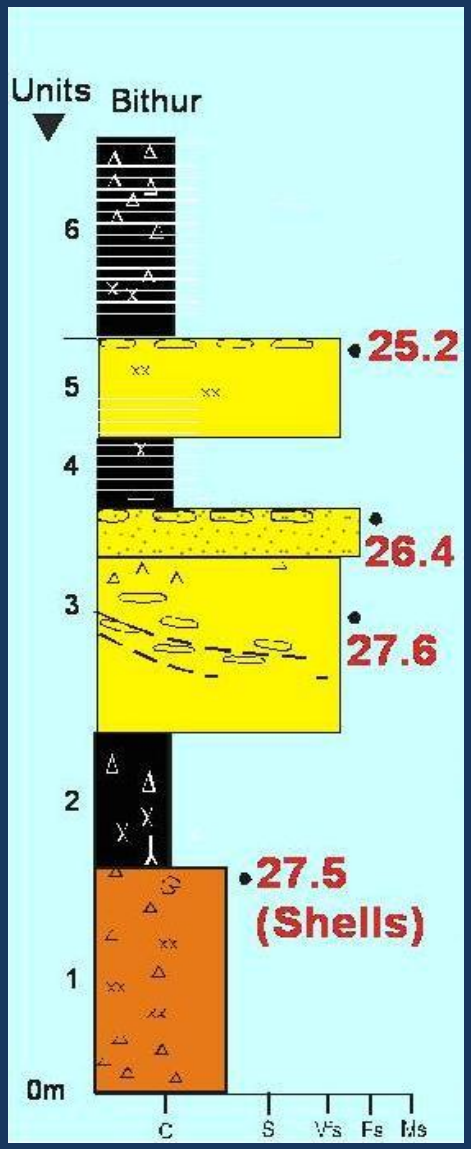
BITHUR CLIFF SECTION



Unit 1 is about 4 m thick and consists of structureless yellow–brown floodplain mud (facies F1), with gray and darker mottles and rhizoconcretions indicating a moderate degree of pedogenesis. The upper part has a higher frequency of red–brown mottles. Kankar constitutes about 20% of the sediment by volume, but becomes sparse in the upper part, with vertical drab mottles and clusters of gastropod shells in the top 30 cm. The base of Unit 2 corresponds to a major change from floodplain deposits to interbedded lacustrine and eolian deposits. The unit commences abruptly with dark silty clay (lacustrine facies L1) with minor kankar, red– brown and yellow mottles. The unit is laminated and maintains its thickness (~1 m) along 1.3 km of cliff section. Units 4 and 6 are also lacustrine (facies L1), with clayey and thinly laminated sediments with some mottling and kankar in the upper parts of the units. Hizoconcretions are also present locally. Unit 3 comprises eolian facies E1, and is massive yellowish silt with some fine-grained sand, becoming whitish above. Unit 5 is also eolian (facies E1) and consists of yellowish-white silt with minor mottling; it lacks kankar and is not stratified. The thickness of both units is highly variable. Quartz is the predominant constituent throughout the section, showing highest abundance (N65%) in Units 2 and 5. Feldspar is abundant in Units 1, 3, 4 (~20%) but low in Unit 2 (~5%).

Ref: Sinha, R., Bhattacharjee, P., Sangode, S.J., Gibling, M.R. and Tandon, S.K., Jain, M. Godfrey, D. (2007). Valley and interfluve sediments in the southern Ganga plains, India: exploring facies and magnetic signatures. Sedimentary Geology, 201, 386-411.