

Sedimentological characterization of subsurface training of the Tertiary-Quaternary of the Dabou region, south of Ivory Coast

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About 239 samples of cuttings from two drillings located in Dabou were the subject of sedimentological (lithological, granulometric and morphoscopic analyses) studies in this work. The aim is to identify the origin of these sediments and to specify the factors and phenomena involved in their transport and deposition during the Tertiary-Quaternary period. After a detailed lithological description of each sample, the sandy fractions were treated according to conventional particle size methods. The formations penetrated in the two wells consist of lateritic clays, yellow clays, clay sands and coarse sands. The analyzed sands are coarse and testify to the different variations in the energy of the stream that transported the sediments. These coarse sands represent the main aquifer. The hyperbolic granulometric facies is dominant in the study area, indicating a variation in streamflow during sedimentation. The predominantly rounded to sub-rounded quartz grains suggest a relatively distal supply source, while their blunted, blunted appearance suggests a stay in the aquatic environment. The sands of these two wells could be accumulated in a beach-type deposit and coastal dune area.

Keywords: Dabou, sedimentology, Tertiary, Quaternary, facies, aquifer
