

ANALYSIS AND INTERPRETATION OF THE SEA-BOTTOM SAMPLE

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The aim of this work is to trace the age and paleoenvironment of the sea-bottom sample towards possible specification of the relative sea level at given time. Sea-bottom sample was taken in the Adriatic Sea, Channel Of Neretva, Dalmatia, Croatia, longitude 16°32'09", latitude 43°01'38", sampling depth from 60 to 65 cm. The mean grain size $\phi 2.40$ ($PHI = -\log_2 d$; d is grain size in mm) and the median grain size $\phi 50$ is shown by granulometric analysis. Bad sorting is shown by sorting index and the domination of fine fraction is shown by asymmetry index or skewness. The type of the sediment (sand), is shown by diffusion distribution or kurtosis line. The median size of overall carbonate, which is equal to 56.5%, was shown by calcimetric analysis. Minerals such as: Calcite, Quartz, Dolomite, Aragonite, Mg-Calcite, Illite, Chlorite, Feldspars and Smectite?, were shown by X-rays analysis. The wood remains were found as well, and their age is estimated on 18721 ± 384 years (Würm=Visconsin), using C-14 method. Well-rounded quartz grains (the most numerous) and well-rounded limestone clasts were found. Unspecified marine shell debris, as well as: Gastropoda - *Viviparus neumayri* (Pliocene-Rec.), *Melanopsis* sp. (Pliocene-Rec.); Lamellibranchiata – *Limnocardium meyeri*? (Pont-Rec.) were found after the examination of the fossil content. Connection with the land is unambiguously indicated by brackish fossils and wood remains. High energy water environment and bad sorting is indicated by well-rounded clasts and fossil remains of marine shells. Domination of one and fine fraction (sand), indicates deposition in transitional peritidal environment 17000 years ago.