

ABSTRACT

This diploma thesis presents a synthesis of fieldwork and well-log data of the Upper-Turonian sandstone bodies in the northwestern part of the Bohemian Cretaceous Basin. There was no previous research based on method of the sequence stratigraphy and correlation well-logs. I made 13 measured sedimentological cross-sections that were correlated to stratigraphical cross section along depositional dip and strike. Structures of the Upper Turonian sandstones (genetic sequences TUR 5 – 7) are dominated by trough cross bedding that migrate on a slightly inclined delta slope (1 – 5°). The main direction of paleocurrents is towards SE or E. The analysis of thicknesses of parasequences (for TUR 4 – TUR 7) gives trend of thinning parasequences through time. Increasing content of the potassium is evident within sequences TUR 4 to TUR 7. It is independent on the grain-size, but indicates rapid transport from the source area.