

CYCLICITY IN THE OF THE DEVONIAN SEQUENCE OF THE PARNÁIBA BASIN IN THE STATE OF PIAUÍ, BRAZIL.

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The Devonian sequence of the Parnaíba Basin in the state of Piauí, Brazil was studied as part of the MS dissertation of the first author. The analysis of the sedimentary record revealed a conspicuous recurrent component in the depositional control. Two wells (RB-1-MA and MA-1-PI) were chosen for a more detailed analysis

On these wells there were determined the existence of nine 3rd order sequences limited by flood surfaces. In base of the cicloestratigraphy for each sequence it was determined the time of deposition in (M.a) and the sedimentation rate (cm/1000 years). The correlation among the analyzed wells showed that equivalent sequences presented similar time of deposition, being the different sedimentation rates attributed to its geographical positioning. The smallest values found in the well MA-1-PI, are due its position more distal in relation to the well RB-1-MA.

The estimated time for both wells as a whole (34 M.a. for RB-1-MA and (38.2 M.a. for MA-1-PI), are superior to the obtained for the addition of the results for each sequence of 3rd order calculated separately, respectively (32.9 M.A. and 34.7 M.A.). The found difference implies in the existence of a loss of equivalent section to 1.1 M.A. for the well RB-1-MA and 3.5 M.A. for the well MA-1-PI. The medium time lost in each sequence (0.13 M.A and 0.39 M.A., wells RB-1-MA and MA-1-PI, respectively) it can be attributed to erosion cycles, or events of non deposition associates to the effects of the orbital eccentricity.