Title of article: Sequence stratigraphy study within a chronostratigraphic framework of ‘Ningning field’, Niger Delta

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Abstract

Sequence stratigraphy model developed for the Ningning field is based on the interpretation carried out on the different wells that penetrated the various subsurface lithologies. Basically three depositional sequences were delineated from the five wells studied. The Vail model used made out a third and forth order stratigraphic surfaces that all fall within the central swamp depobelt of the Basin. The five wells used show the presentation of the interpretation and the models. All the sequence tracts were appropriately represented starting from the Lowstand Transgressive and Highstand system tracts, except in well 005 where the Lowstand of the second sequence was missing. This is achieved by incorporating signature motifs from wireline logs coupled with biostratigraphy data and inferred paleobathymetry. This has revealed the field-wide reconstruction of a chronostratigraphically constrained biostratigraphy of subsurface lithological sequences with limited information.