

Cyclostratigraphic Analysis of Pienaarsfontein se Berg Deltaic Sequence, Tanqua Sub-basin, SW Karoo Basin, South Africa

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Many stratigraphic successions display repetitions of strata that reflect a succession of depositional processes. In this study of the cyclostratigraphic analysis of Pienaarsfontein Se Berg Deltaic Sequence, Tanqua Subbasin, SW Karoo Basin, South Africa, sedimentological logging was undertaken at cm to m scale and thicknesses of cycles, bedsets, beds and facies were obtained with a tape measure. An excel spread sheet was used to capture the recorded data. The data was then analysed with fishers plot excel spreadsheet model in order to graphically describe the thicknesses of the bedsets, beds and facie. Grapher software version 6 was used to analyze the frequency distribution of the thicknesses of the beds, bedsets and facies.

The study found that the thicknesses of the beds, bedsets and facies in vertical section 2 were more than the thicknesses of the beds, bedsets and facies in vertical section 1. Autogenetic and allogenic processes were observed to be possible causes of cyclicity.