APPLICATION OF ATTRIBUTE ANALYSIS TO ENHANCE THE RESERVOIR INFORMATION OF MARI GAS FIELD

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Seismic amplitude attributes have been calculated on gas reservoir of the Mari Gas Field. In this article a method is developed to estimate sonic log values from seismic amplitudes. Relationship has been established between sonic log values and amplitudes on 20 wells. Established relationship has also been tested on six wells, the predicted sonic log values from the seismic amplitudes are comparable with the actual log values. Seismic amplitudes have been extracted along a horizon marked at reservoir level for 2d data. Extracted amplitudes were gridded and contoured and sonic log values were calculated for whole of the region using the established relationship. Low sonic values and high amplitude values are observed in south-eastern part of the area. This is in comparison with geological data, which indicates low porosity in southern part of the area.