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Impact of Broadband Seismic on Quantitative Interpretation Workflows

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Abstract

New acquisition methods and technologies have been made available to interpreters and quantitative interpretation specialists with the aim of providing broader seismic frequency bandwidth. Various systems do exist at the moment in the market place, and the one referred to in this paper is based on the dual-sensor towed streamer. This seismic acquisition system was introduced in 2007, and recently further developments have been made with a time and depth distributed source finally allowing the removal of both the source and the receiver ghosts in a single seismic acquisition solution.

In this paper, we review some of the overall benefits offered by the broadband seismic from the end users point of view; seismic interpreters as well as reservoir geophysicist or quantitative interpretation specialist knowing that all of them are benefiting significantly from an extended bandwidth and improved signal to noise (S/N) across all the frequencies. The benefits are presented by means of a few case studies in different geological settings as well as at various stages of the Exploration and Production asset life.