



## Use of Swellable Elastomers to Enhance Cementation in Deep Water Applications

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### Abstract

A lot of time is invested in developing a truly integrated approach that can shorten the planning and study timeframe while reducing uncertainties for drilling in the deepwater arena. Few opportunities present themselves as candidates to implement new technology which provides assurances to these best laid plans. One such opportunity is in the area of cement or zonal isolation. Swellable elastomer packers can provide assurances for zonal isolation when primary cement jobs are difficult, or in critical areas of well construction to ensure long term well integrity.

The deepwater environment presents numerous challenges when it comes to cementing casing. One such challenge is at shallow depths, low temperatures, where small differences between pore and frac pressures require special cementing practices. Long openhole-highly deviated production intervals present problems with extreme temperature and pressure changes and hole cleaning when displacing primary cement jobs.

Too many times a poor primary cement job goes undetected by even the most advanced cement bond evaluation tools. Often it is only after a well is placed on production that data suggests a lack of zonal isolation. The cost of remedial intervention at this point is large compared to the cost of including swellable packers in the initial well completion design.

Contact TAM for the complete paper.