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Distinguishing Offshore Drilling Safety Improvement through Engineered New Technologies versus Mandates & BAST – MPD Example

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Abstract

Offshore drilling processes (personnel, methods & equipment) increase in complexity, yet improve continually by implementing new technology that brings enhanced safety via wellbore management. MPD – managed pressure drilling technology is one set of new techniques that provides multiple benefits, including measurement, detection, and mitigation of small wellbore influxes, and discrimination of these influxes from well kicks that require standard BOP well control practices (early kick detection). While quite applicable to some wells, and beneficial in certain portions of a well, MPD, similar to other new technologies, should not be mandated or considered BAST for every well or hole size. Using MPD as an example, this paper will discuss how offshore drilling safety is enhanced by a new technology, while distinguishing how mandated methods and technologies may reduce safety effectiveness.

Keywords: Integration with Operations, Process Design, Operations, Instrumentation, Risk Management, Matrix