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TOP KILL ON A NATURAL GAS STORAGE CAVERN

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Abstract

A top kill is an oilfield term for the use of a fluid to suppress formation pressure. The term “top kill” left the oil patch and entered the common vernacular during the reporting of the Deepwater Horizon incident in the Gulf of Mexico in May 2010. BP’s attempted top kill operation to stop the flow of oil into the Gulf of Mexico was widely reported as was the failure of the procedure to work.

The purpose of this paper is to discuss a natural gas storage cavern workover in which a top kill was required as a contingency for maintaining well control during a planned workover. The decision to top kill the well was not made lightly given the risk of losing well control. After careful planning and a test run, the top kill was successful in suppressing cavern pressure, maintaining well control and allowing the continuation of the workover.

Key words: Top Kill, Well Control, Storage Cavern

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