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MOSS BLUFF CAVERN 1 BLOWOUT

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Abstract

In August 2004 a well control incident occurred at the Moss Bluff Hub Partners salt storage facility in Liberty County, Texas. This incident resulted in the loss of the wellhead, and an uncontrolled gas release and fire at storage Cavern 1. Over a period of six and a half days, approximately 6 billion cubic feet of natural gas in the cavern was released through the 20-inch well casing, and burned. The fire self-extinguished and a blowout preventer was installed on the well casing on the 7th day after the initial breach. This paper will review the incident, post incident analysis/testing of the cavern and casing, and the current status of Moss Bluff Cavern 1. The paper also reviews the design modifications made to the wellhead and surface piping in order to mitigate the probability of a similar event reoccurring.

Key words: Caverns for Gas Storage, Cavern Testing, Instrumentation and Monitoring, Rock Mechanics, Regulations, Cavern Depressurization, Geomechanical

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