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The Lusi mud eruption (Indonesia): A lookback on Banjarpanji 1 Drilling Data that Dismiss the Speculation on Drilling Triggers

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The Lusi mud eruption started the 29th of May 2006 simultaneously with other aligned eruption sites in the NE of Java, Indonesia. During the early phases of the eruption, the drilling data of the neighboring Banjarpanji 1 well remained unpublished. This lack of data led to many speculative theories regarding the triggering of the eruption sites. In 2009 Sawolo et al. (2009-2010) presented and discussed the drilling data of the Banjarpanji 1 well making these fully available to public domain. This allowed professional Drilling Engineers to perform their own analysis and come up with their own conclusions.

Here we present the full drilling data and highlight the chronology of the events welcoming inspections of the dataset. Experienced Drilling Engineers are aware about the vast amount of drilling data available. Any data to be used for analysis must be cross checked to ensure its reliability and full transparency of the interpretation. Biased analysis may run the risk of selecting suitable data only to explain hypothesis preset a-priori. As an example, one should give more weight to unbiased and solid evidence such as Mud Logger's Real Time Data, documented pump pressures, etc. before counting on less solid visual observations. Method of analysis is another area where field experience is crucial. When the full dataset is integrated and pressure analysis done on the Banjarpanji 1 well, as in Sawolo et al. (2010), it clearly points out to an intact casing shoe and no direct connection between the well and the ongoing mud eruption sites. This strongly suggests that the drilling trigger of the LUSI eruption is not a plausible theory.

The authors welcome further studies on the LUSI eruption site to help a better understanding of the origin and nature of this spectacular phenomenon. Future studies, however, should be done professionally based on one's specific expertise, an integrated dataset and proper application of a sound engineering drilling practice.

Sawolo, N., et al., 2009, The LUSI mud volcano triggering controversy: Was it caused by drilling? MPG, v. 26, p. 1766-1784.

Sawolo, N., et al., 2010, Was LUSI caused by drilling? Authors reply to discussion: MPG, v. 27, p. 1658-1675.