ABSTRACT

DESIGN OF SQUEEZE CEMENTING IN 9 5/8" CASING OF "AN-1" WELL OF "PAS" FIELD AS PART OF RE-WORK PROGRAM OF MOVING LINING

By

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Based on the Proposed Well Intervention, the AN-1 well shows low gas production performance compared to the surrounding wells, requiring a squeeze cementing operation as part of the relining program. The squeeze cementing program will be carried out as part of the relining activity to seal the 4575-4595 ft production interval layer.

The method used in this study is the technical calculation of squeeze cementing operations which includes the calculation of cement slurry volume, additive volume, estimated cement column height, maximum pump pressure (MASP), and squeeze pressure. The calculation results obtained are used as the basis for making the squeeze cementing program design.

The squeeze cementing operation at the AN-1 well utilized tubing and hesitation pumping technique, at a depth of 4575-4595 ft MD. The total volume of cement pumped was 13.2 bbl with an applied squeeze pressure of 2034 psi, which did not exceed the formation fracture pressure of 2881 psi, thus not causing the formation to fracture.

Keywords: production performance, squeeze cementing