RINGKASAN

PERENCANAAN CEMENTING *PLUG* AND *TEMPORARY ABANDONMENT* DENGAN MENGGUNAKAN *RIG* PADA SUMUR "ADN" LAPANGAN "SYF"

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Sumur "ADN" adalah sumur eksplorasi yang dibor secara vertikal dengan kedalaman total 4048,55 ft. Sumur "ADN" memiliki problem *high pressure* dimana tekanan *existing* dalam lubang sumur tergolong tinggi yang berpengaruh terhadap produktifitas minyak serta keekonomisan sumur. Maka dari itu, diputuskan untuk melakukan *plug and temporary abandonment* untuk dilakukan perbaikan kondisi sumur supaya sumur dapat diproduksikan kembali.

Perencanaan *plug and temporary abandonment* pada Sumur "ADN" dilakukan dengan membuat *work program* perancangan *slurry* dengan menentukan kedalaman sumur, menentukan volume *cement slurry*, volume aditif dan metode yang digunakan dalam proses *p&a* yakni metode rig. Perencanaan *plug & temporary abandonment* sumur "ADN" mengikuti regulasi SNI 13-6910-2002.

Hasil dari perencanaan *plug & temporary abandonment* sumur "ADN" semen yang diperlukan adalah sebesar 469 *sack*. Densitas dari *cement slurry* yang digunakan yakni 17,5 ppg. Lalu, komposisi dari *cement slurry* terdiri dari campuran aditif yakni *hematite* sebanyak 433 *lbs* ; *defoamer* sebanyak 23,45 *galls; dispersant* sebanyak 70,35 *galls*; *fluid loss control liquid* sebanyak 140,70 *galls* dan *bonding agent* sebanyak 140,70 *galls.*

Kata kunci: *plug and temporary abandonment*, metode *rig*, sumur

ABSTRACT

PLANNING OF CEMENTING PLUG AND TEMPORARY ABANDONMENT USING THE RIG IN THE WELL "ADN" FIELD "SYF"

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The "ADN" well is an exploration well drilled vertically with a total depth of 4048,55 ft. The "ADN" well has a high pressure problem where the existing pressure in the wellbore is relatively high which affects oil productivity and the economics of the well. Therefore, it was decided to carry out a plug and temporary abandonment to improve the condition of the well so that the well could be produced again.

Plug and temporary abandonment planning for the "ADN" Well is carried out by creating a slurry design work program by determining the depth of the well, determining the cement slurry volume, additive volume and the method used in the p&a process, namely the rig method. Planning for plug & temporary abandonment of "ADN" wells follows SNI 13-6910-2002 regulations.

The results of planning the plug & temporary abandonment of the "ADN" well, the cement required is 469 sacks. The density of the cement slurry used is 17,5 ppg. Then, the composition of the cement slurry consists of a mixture of additives, namely hematite amounting to 433 lbs; defoamer as much as 23,45 galls; dispersant as much as 70,35 galls; fluid loss control liquid as much as 140,70 galls and bonding agent as much as 140,70 galls.

Keywords: plug and temporary abandonment, rig method, well