INTISARI

Kegiatan konversi sumur *Coal Bed Methane (CBM)* menjadi sumur konvensional ini dimulai dengan berbagai kendala yang sangat kompleks akibat banyak risiko – risiko proses alih kelola hingga pelaksanaan kegiatan operasi konversi ini dilakukan belum teridentifikasi pemetaan risiko-risiko atas seluruh tahapan kegiatan operasi konversi karena merupakan kegiatan yang pertama kali dilakukan di Indonesia. Kegiatan operasi konversi sumur CBM menjadi sumur konvensional tidak memiliki panduan yang spesifik terhadap pemetaan risiko-risiko, oleh karena itu peneliti perlu melakukan mengenai analisa atas potensi semua risiko-risiko yang mungkin terjadi dan memberikan langkah – langkah mitigasi yang tepat saat pelaksanaan dan akhir kegiatan operasi konversi ini dapat mencapai hasil maksimal yang mendasari penulis untuk melaksanakan penelitian ini. Metode penelitian yang digunakan dalam penelitian ini menggunakan *House of Risk (HOR)* yang merupakan perpaduan metoda dari *Failure Mode Effect Analysis (FMEA)* dengan *House of Quality (HOQ)* dimana menilai risiko secara kuantitatif yang kemudian menentukan prioritas agen risiko serta pemilihan tindakan mitigasi untuk mengurangi risiko-risiko yang timbul secara efektifKonversi sumur *Coal Bed Methane (CBM)* menjadi sumur konvensional memiliki beberapa tahap yaitu persiapan, konversi dan produksi. Dalam proses identifikasi risiko ditemukan bahwa terdapat 47 sumber risiko dan 75 kejadian risiko yang bisa memicu risiko pada kegiatan konversi tersebut.pada proses analisa HOR level 1 ditemukan prioritas 23 sumber risiko yang sangat berpengaruh dalam kegiatan konversi tersebut dan pada analisa HOR level 2 ditemukan 8 prioritas usulan mitigasi risiko.

Kata kunci : Analisa HOR, Manajemen risiko, FMEA, Analisa PARETO

ABSTRACT

The conversion of *Coal Bed Methane (CBM)* wells into conventional wells began with various very complex obstacles due to the many risks of the management transfer process until the implementation of this conversion operation was carried out, the mapping of risks for all stages of the conversion operation activity was not identified because it was an activity the first time in Indonesia. The operation of converting *CBM* wells into conventional wells does not have specific guidelines for risk mapping, therefore researchers need to conduct an analysis of all potential risks that may occur and provide appropriate mitigation measures during implementation and at the end of operations. This conversion can achieve maximum results that underlies the author to carry out this research. The research method used in this study uses the *House of Risk (HOR)* which is a combination of methods from *Failure Mode Effect Analysis (FMEA)* with *House of Quality (HOQ)* which assesses risk quantitatively which then determines the priority of risk agents and the selection of mitigation actions to reduce risk. risks that arise effectively The conversion of *Coal Bed Methane (CBM)* wells into conventional wells has several stages, namely preparation, conversion and production. In the risk identification process, it was found that there were 47 risk sources and 75 risk events that could trigger risk in the conversion activity. In the *HOR* level 1 analysis process, 23 priority sources of risk were found that were very influential in the conversion activity and in the *HOR* level 2 analysis, 8 priorities were found. risk mitigation proposals.

Keywords : HOR analysis, risk management, FMEA, PARETO analysis