Analisis Kasus Kecelakaan Pemboran pada Industri Migas di PT.X Berdasarkan Faktor Manusia Tahun 2022 = Analysis of Drilling Accident Cases in the Oil and Gas Industry at PT.X Based on Human Factors for in 2022

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Abstrak

Kegiatan hulu migas memiliki risiko tinggi terkait K3 dan kegiatan pemboran menjadi risiko paling tinggi. 80% penyebab kecelakaan pemboran disebabkan oleh human performance. Tahun 2020, aktivitas pemboran di PT. X menyumbang kecelakaan sebesar 3 dari 8 kecelakaan dan penyebab umum kecelakaan yang terjadi karena faktor manusia. Unsafe acts dianggap menjadi penyebab utama dalam kecelakaan pemboran di industri migas. Maka, penelitian ini membahas mengenai analisis kasus kecelakaan pemboran pada industri migas di PT.X dari sudut pandang faktor manusia. Tujuan dari penelitian ini yaitu menganalisis faktor kontribusi dari kegagalan aktif dan laten dan menganalisis kasus kecelakaan kerja dari sudut pandang faktor manusia pada aktivitas pemboran yang terjadi di PT. X tahun 2022, serta menentukan rekomendasi untuk perbaikan kedepannya dari kegiatan pengeboran di PT. X. Metode penelitian ini menggunakan deskriptif analitik dari data sekunder dan hasil wawancara. Didapatkan hasil bahwa kondisi laten yang berkontribusi terhadap kecelakaan pemboran yang terjadi di PT. X pada tahun 2022 yaitu gagal mengupdate regulasi terbaru, pengendalian yang dilakukan masih bersifat administratif, kegagalan otoritas penerbit dalam mengecek kelengkapan berkas, tidak adanya pemeriksaan berkala yang terjadwal pada peralatan, gagal memastikan serah terima sumur dilakukan secara keseluruhan, penyusunan JSA kurang baik, gagal menyampaikan bahaya dan risiko secara detail, kegagalan koordinasi di internal kontraktor, gagal mengomunikasikan bahaya dan risiko yang sudah ada di risk assessment, dan kondisi jalan yang seharusnya sempit sehingga memilih permukaan yang miring. Sedangkan kegagalan aktif yang berkontribusi yaitu gagal menginterpretasikan peralatan yang rusak dan kondisi jalan yang berbahaya, tidak melalukan pengecekan kondisi sumur ketika hujan deras, dan pelanggaran SOP. Sehingga ditemukan bahwa kondisi laten lebih banyak berkontribusi sehingga menimbulkan kegagalan aktif atau unsafe acts. Kegagalan yang paling berkontribusi pada tiap layer HGACS-OGI yaitu organizational influences (organizational process), unsafe supervision (supervision violations), preconditions for unsafe acts (environmental factors - physical environment), dan unsafe acts (errors - perceptual errors). Sintesa dari hasil analisis didapat bahwa safety value belum tertanam di PT. X. Hal ini dapat dilihat dari pelaksanaan K3 belum dilakukan secara menyeluruh di lapangan, sehingga safety belum terintegrasi di dalam kegiatan operasi. Sehingga rekomendasi yang diberikan penulis yaitu menjadikan K3 sebagai safety of work.

......Upstream oil and gas activities have a high risk related to K3 and drilling activities are the highest risk. 80% of the causes of drilling accidents are caused by human performance. In 2020, drilling activities at PT. X accounts for 3 out of 8 accidents and common cause of accidents that occur due to human factors. Unsafe acts are the main cause of drilling accidents in the oil and gas industry. So, this study discusses the analysis of drilling accident cases in the oil and gas industry at PT.X from the point of view of human factors. The purpose of this study is to analyze the contributing factors of active and latent failure and analyze cases of work accidents from the point of view of human factors in drilling activities that occur at PT.X year 2022

and determine recommendations for future improvements from drilling activities at PT. X. This research method uses descriptive-analytical from secondary data and interview results. It was found that the latent condition contributed to the drilling accident that occurred at PT. X in 2022, namely the failure to update the latest regulations, the control carried out is still administrative in nature, the failure of the issuing authority to check the completeness of the files, the absence of scheduled periodic checks on the equipment, failing to ensure that the handover of the wells is carried out in its entirety, the preparation of the JSA is not good, failing to submit hazards and risks in detail, failure of internal coordination of contractors, failure to communicate the hazards and risks already in the risk assessment, and road conditions that should be narrow so that they choose a sloping surface. Meanwhile, active failures that contributed were failing to interpret damaged equipment and dangerous road conditions, not checking the condition of wells when it rained heavily, and violating SOPs. So, it was found that latent conditions contributed more to causing active failure or unsafe acts. The failures that contributed the most to each layer of HGACS-OGI were organizational influences (organizational process), unsafe supervision (supervision violations), preconditions for unsafe acts (environmental factors - physical environment), and unsafe acts (errors - perceptual errors). The synthesis of the analysis results obtained that the safety value has not been embedded in PT. X. This can be seen from the implementation of OHS that has not been carried out thoroughly in the field so safety has not been integrated into operational activities. The recommendation given by the author is to make OHS a safety of work.