

Production Optimization through Ejector Installation at ESA Platform Offshore North West Java Field

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Abstract : The offshore facilities condition of Pertamina Hulu Energi Offshore North West Java (PHE ONWJ) varies greatly from place to place, depending on the characteristics of the presently installed facilities. In some locations, such as ESA platform, gas trap is mainly caused by the occurrence of flash gas phenomenon which is known as mechanical-physical separation process of multiphase flow. Consequently, the presence of gas trap at main oil line would accumulate on certain areas result in a reduced oil stream throughout the pipeline. Any presence of discrete gaseous along continuous oil flow represents a unique flow condition under certain specific volume fraction and velocity field. From gas lift source, a benefit line is used as a motive flow for ejector which is designed to generate a syphon effect to minimize the gas trap phenomenon. Therefore, the ejector's exhaust stream will flow to the designated point without interfering other systems.

Keywords : diffuser, ejector, flow, fluent

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