

ABSTRACT

RESERVOIR CHARACTERIZATION OF TALANG AKAR FORMATION, “RAJAWALI” FIELD, SOUTH SUMATERA BASIN USING SEISMIC MULTIATTRIBUTE FOR SANDSTONE AND POROSITY DISTRIBUTION MAPPING

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"Rajawali" field is a field that is being developed. "Rajawali" field is in the South Sumatra basin, one of oil and gas production in western Indonesia. Reservoir area of research is on intermittent zone sandstone with shale.

In order to increase production, reservoir characterization needs to be done to determine the distribution and porosity sandstone reservoir area of research. The data used is data 3D seismic post-stack time migration, the well data (logs), data marker, and data checkshot. The method used to map which is distribution of sandstone and porosity of the reservoir area of research is seismic multiattribute to predict the spread of gamma ray, neutron porosity, and density.

Crossplot analysis refer the acoustic impedance value of the sandstones and shale overlap, then the acoustic impedance inversion that has be done is not effectively used to characterize the reservoir. Multiattribute of seismic results obtained prediction results were good enough to map the distribution of sandstone and porosity of the reservoir area of research. From this analysis, its recommendation RJ_04 and RJ_05 wells located in the southwest and south "Rajawali" field for further development.

Keywords: acoustic impedance inversion, seismic multiattribute, gamma ray, neutron porosity, density