

ABSTRACT

STRUCTURE ANALYSIS USING SEISMIC ATTRIBUTES SPECTRAL DECOMPOSITION AND AMPLITUDE IN THE FIELD " SAMAS " FORMATION BEKASAP CENTRAL SUMATRA BASIN

Oleh :

Aslama

115.090.041

The research area is located in the Field "SAMAS" Central Sumatra Basin Formation Bekasap. This research area is one of area that operated by the PT. Chevron Pacific Indonesia (CPI), which showed signs of the largest hydrocarbon reserves, mainly located in the eastern area of Central Sumatra Basin. Hydrocarbons can accumulate in the reservoir caused by faults in the rock layers. Fault will be the migration path of hydrocarbons to accumulate in a reservoir so it is important to detect further. Fault in the study area is a major and minor faults trending north-south and northwest- southeast. To be able to detect faults of the data seismic study area in the Field " SAMAS " located in Minas Oil Field areas, can use some methods of seismic attributes is Decomposition Spectral and Amplitude Attributes.

Spectral Decomposition Based on the analysis on the map slice horizon top and bottom horizon Formation Bekasap produce more good quality data, it is evidenced in the presence of faults and appearance of closures in the area of research. Results from Decomposition Spectral methods can be demonstrated in four slice frequency is 40 Hz to 55 Hz to 5 Hz range. The method amplitude attribute, map slice horizon top and bottom Formasi Bekasap only the presence of fault. Determination of the time window 70 ms in value can map layers on the map slice horizon top and bottom Formation Bekasap, so it can display the distribution of fault structures in the map slice horizon.

Key word: *Spectral Decomposition, Amplitude Attribute, analysis fault, closure*