

FAULT ANALYSIS USING MODEL SYNTHETIC A CASE STUDY OF PANJANG FAULT LAMPUNG BY USING GRAVITY DATA

By

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ABSTRAK

The research on the application of gravity methods to identify the presence of Panjang fault Lampung has done. In this study made several synthetic fault models using Grav 3D software for normal fault and reverse fault then look at the response of gravity, FHD, SHD, and Kurtosis test the synthetic models in the laboratory. Then performed in 3D inversion modeling of gravity data acquisition results in Tanjung Karang sheet, from 3D modeling results that determined the trajectory two slices from Panjang fault Lampung, then analyze the response of gravity, FHD, SHD, and Kurtosis test of the two slice trajectory, the results of the analysis were then compared with the results of the analysis of the gravity response, FHD, SHD, and Kurtosis test of synthetic models of the laboratory. From the analysis of the trajectory of the first slice of a fault can be determined normal fault with dip 50° . In accordance with the FHD and SHD analysis on synthetic models, FHD maximum value is at a positive value and the value of SHD is zero indicates the normal fault. While the kurtosis analysis, the synthetic models of normal fault 50° worth 0.0027 and the first slice trajectory measurement data is worth 0.002. In the second slice trajectory can be determined a normal fault with dip 70° . In accordance with the FHD and SHD analysis on synthetic models FHD maximum value is at a positive value and SHD on the zero value indicates a normal fault. While from Kurtosis analysis the synthetic models normal fault 70° worth 0.003 and 0.004 worth of measurement data. The Conclusion of Kurtosis analysis is the normal fault on the second slice of this trajectory is normal fault with dip 70° .

Keyword : gravity, Panjang Fault, synthetic modelling