

# **Analysis of hydrocarbon trap and Talangakar formation porosity in the Well "Eat-1", the Region "X", South Sumatra Basin, Based on Seismic Interpretation 2d And Data Log**

Cahyadi, Adityo. 2009. *Analysis of hydrocarbon trap and Talangakar formation porosity in the Well "Eat-1", the Region "X", South Sumatra Basin, Based on Seismic Interpretation 2d And Data Log*. Undergraduate thesis, Diponegoro University, Semarang.

## **Abstract**

Seismic exploration have been used for subsurface structural mapping by Petroleum and Gas Company to looking for possibility presence of hydrocarbon trap based on seismic line interpretation. Hydrocarbon exploration until this time concerned a research of trap so we can know a kind of reservoir trap which be found on the exploration area.

The goals of the research are for knowing a type of hydrocarbon trap in the Talangakar Formations Reservoir based on seismic interpretation and rock porosity quality of Talangakar Formation based on wireline log. The research uses two kinds of methods, there are description method and analysis method, which uses Microsoft Office, Corel Draw, Geographix Discovery, Map Info and GS 4.1. The research uses well data and seismic data.

Based on data analysis of the result, the primary reservoir targets on "X" Area of Sumatera Selatan Basin is sandstone of Talangakar Formation. The trap which found on "X" area is structural trap, there are anticline and fault. In anticline trap which can called as a trap is closure. It is formed on 1307,78m – 1386,47 m width. The thickness of maximum high hydrocarbon column is 78,69m. The type of anticline which formed in research area is symmetrical and has North West – South East orientation. Other trap which found is normal fault which has North East – South West. The quality of porosity are calculated from the neutron and density log. The porosity's values of gas hydrocarbon between 4 – 24 % is showing "neglected – very good quality". The porosity's values of oil hydrocarbon between 3 – 22 % is showing "neglected – very good quality".

**Keywords :** South Sumatera Basin, Closure, Trap