

## ABSTRACT

### FORMATION EVALUATION AND RESERVE CALCULATION ORIGINAL OIL (*ORIGINAL OIL IN PLACE*) BASED ON WELL DATA “TG” FIELD “RM”

by

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*Logging Methods can identified and predicted the rocks which surrounding the borehole. This method also give the information of depth of layer which contains hydrocarbon and the extent of the hydrocarbon spreading in the layer. Log's interpretation used to determineed fluid contents with qualitative to defined volume shale (Vshl), porosity ( ), resistivity water (Rw), dan saturation water (Sw) in 13 of “TG” well data “RM” field.*

*Furthermore, as a step to determine preoperti petrophysical well data to characterize that determine the shale volume used gamma ray index method, determine water resistivity with Rt correlation, determine the porosity used density and neutron log correlation and to determine water saturation used simmandoux approach.*

*Based on the analysis of 13 wells "TG" Field "RM" has a fluid filler such as oil and water. Porosity The mean on the ground "RM" is 18% with an average oil saturation is 42.15%, The thickness of the formation of the target field "RM" has a variation of between 300 meters to 550 meters, while the thickness of the reservoir ranging from 90 meters to 250 meter. Field "RM" has initial oil reserves amounted to 17.67 Million Barrels.*

**Keywords :** *Logging, Hydrocarbon, Porosity, Oil Saturation, Reserves.*