ABSTRACT

Subsurface mapping and calculation of hydrocarbon reserve has been conducted at “Kyrani” field based on volumetric method. The methodology of this research is to determine the lithology based on log data that used as the basic for correlation between wells and calculate the value of water saturation and porosity by Archie's equation that used to calculate the volume of reservoir based on volumetric method, while the hydrocarbon reserves calculated using the IOIP equation. From the data analysis and discussion can be interpreted that layer "R" is a layer that produces oil from the limestone reservoir in the Top Cibulakan Formation. The Limestone are consist of coral limestone that spreading at the direction of Northwest-Southeast. Reservoir characterization has been done with wells and seismic data, reservoir generally has a porosity value of 19% and 20% water saturation. The result of calculation hydrocarbon reserve using volumetric method at “Kyrani” Field are 179.034.949.96 STB.

Keyword: petrofisik, volume bulk, IOIP