

## ***ABSTRACT***

Gumai Formation "Bekti" Field has proven to become a field and hydrocarbon prospects in the development stage. Gumai Formation consists of clay with inserts sandstone. Gumai Formation in this field is a layer of sand gas content, known from Drill Stem Test (DST) in the wells of N-1, the value of its AI overlap between sand gas content with shale. In this research, multiattribut linear regression performed using neutron porosity logs to predict the distribution of lithology hydrocarbon reservoir.

Determination of the target zone on Gumai Formation for the other wells refers to the well log curve respon N-1 aim to know the distribution of lithology hydrocarbon reservoir that is sand gas content layer . Based on multiattribut regression linear analysis found a correlation between the predicted value of the neutron porosity and neutron porosity actual value of 0.811283 to 0.0239889 error while validating the value of 0.786917 to 0.0253422 error value from the value of the pseudo slicing results of neutron porosity can be said quite well in predicting distribution lithology of the gas sand content is the neutron porosity values from 0.055 to 0.085. Distribution of lithology hydrocarbon reservoir that is sand gas content in the northeast - southwest.

***Keywords :*** *Gumai Formation, Multiattribut regression linear, Drill Stem Test, Neutron Porosity, Sand Gas Content*