COMPARISON OF PASSIVE SEISMIC DATA IN JATI-1 WELL, CIPARI AND MANGANTI PROSPECT IN BANYUMAS BASIN

Eko Bayu Purwasatriya*, Sachrul Iswahyudi, Fadlin
Department of Geological Engineering, Faculty of Engineering, Universitas Jenderal Soedirman, Purwokerto, Indonesia

*Email: eko.purwasatriya@unsoed.ac.id

Abstract. Recently, a passive seismic method was used widely worldwide to complement the prediction of hydrocarbon occurrence in the subsurface. Banyumas basin is a sedimentary basin in the southern part of Central Java, extending from the Karangbolong area to the Ciamis area with prolific oil and gas seeps. Jati-1 well is one of the dry hole wells in the Cipari area. It was drilled in 2006 with a total depth of 14747 feet and became the deepest onshore well in Java. Although this well is very deep, oil and gas have still not been found in the Banyumas Basin. Manganti prospect is one of the proposed prospects in the Banyumas basin in the Ciamis area, which is expected to be drilled, discovered, and produce economic hydrocarbon. So, in this research, we will compare the response of passive seismic data in the Jati-1 well Cipari to the Manganti prospect in the Ciamis area. The results will show us whether passive seismic data is effective or not to predict the occurrence of hydrocarbon in the subsurface.

Keywords: passive seismic, Banyumas basin, Cipari, Manganti, Jati-1