OIL TO SOURCE CORRELATION OF OIL SEEP IN CIPARI AREA, CILACAP, CENTRAL JAVA PROVINCE

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ABSTRACT

Petroleum is one of resources in the Banyumas Basin, especially in Cipari, Cilacap, that have oil seepage. Cipari is part of the Banyumas basin, which is part of the Java South Fore Arc Basin. Oil seepage in this area indicate that there is an active hydrocarbon systems. One well had drilled in this area, named Jati-1 with 14,747 feet total depth, but this well is not succeed then plugged and abandoned. So oil system in this area still a mystery. One big question for this area, is there economically reserves in this area, this question lead to 2(two) hypothetical answer for oil to source rock correlation. First hypothetic is, oil comes from Halang Formation that mature by igneous rock intrusion and second hypothetic is oil comes from Pemali Formation that mature by overburden geothermal. First hypothetic is not prospect for hydrocarbon accumulation, and second hypothetic is a good condition for prospecting hydrocarbon in this area.

Geochemical study of oil to source rock correlation will give a clue to answer the question and lead to next exploration. Chromatogram pattern of oil seep, shale of Halang Formation and shale of Pemali Formation expected will answer which formation is act as source rock in this area.

Keywords: Oil-source rock correlation, Halang Formation, Pemali Formation, Banyumas Basin, Cipari.