

SARI

Penelitian Lapangan “HOF” berada pada Cekungan Sumatera Tengah, Formasi Duri. Lapangan ini merupakan lapangan minyak dan gas bumi yang dimiliki oleh PT. Pertamina Hulu Rokan. Penelitian ini dilakukan dengan menganalisa data *log* sumur, biostratigrafi, dan *core description*. Lapangan HOF ini memiliki 8 sumur yaitu HOF-1, HOF-2, HOF-3, HOF-4, HOF-5, HOF-6, HOF-7, dan HOF-8 berupa data *wireline log* yang berfokus pada Formasi Duri. Berdasarkan hasil dari interpretasi sumur *log*, litologi penyusun Lapangan “HOF” berupa batupasir, batuserpih, dan batulempung. Terdapat 3 jenis elektrofases yaitu *bell shape*, *funnel shape*, dan *cylindrical shape*. Terdapat 3 jenis sytem tract yaitu *highstand system tract* (HST), *lowstand system tract* (LST), dan *transgressive system tract* (TST), yang menunjukkan adanya fase transgresi dan regresi pada Lapangan “HOF”. Pada analisis fasies, terdapat 4 fasies berupa *mud flat*, *mixed flat*, *sand flat*, dan *tidal bar* yang merupakan lingkungan pengendapan *tide-dominated estuary*. Marker sikuen stratigrafi yang didapatkan yaitu *sequence boundary* (SB), *transgressive surface* (TS), *maximum flooding surface* (MFS) yang dibagi lagi menjadi SB 1, TS 1, MFS 1, SB 2, dan MFS 2. Pada peta *Isochore*, terlihat ketebalan batuan yang memperlihatkan variasi ketebalan batuan pada setiap sikuen dan pada peta fasies menunjukkan fasies yang terbentuk pada setiap sikuen pada lingkungan *tide-dominated estuary*.

Kata Kunci : Cekungan Sumatera Tengah, Fasies, Formasi Duri, Lingkungan Pengendapan.

ABSTRACT

The research area of “HOF” lies in the Central Sumatera Basin, Duri Formation. This Field is an oil and gas field that are owned by PT. Pertamina Hulu Rokan. This Research is conducted by using from well log data, Biostratigraphy, and core description. This field consist of 8 wells namely HOF-1, HOF-2, HOF-3, HOF-4, HOF-5, HOF-6, HOF-7, and HOF-8 in a form of wireline log data in Duri formation. Based on the observation results, the interpreted lithology of HOF field are sandstone, shale, and claystone. There are 3 types of electrofacies that is bell shape, funnel shape, and cylindrical shape. There are also 3 types of system tract that is highstand system tract (HST), lowstand system tract (LST), and transgressive system tract (TST), that shown that there is a transgression and regression phase in the HOF field. From the data analysist there are 4 facies in the form of mud flat, mixed flat, sand flat, and tidal bar in the depositional environment of tide-dominated estuary. The identified sequence stratigraphy marker consists of sequence boundary (SB), transgressive surface (TS), maximum flooding surface (MFS) that are divided again into SB 1, TS 1, MFS 1, SB 2, TS 2 and MFS 2. On the Isochore map, it shows the variety of the rock thickness of every sequence, and the facies map shows the variety of the facies in every sequence within tide-dominated estuary environment.

Keywords : Central Sumatera Basin, Facies, Duri Formation, Depositional Environment.