

ABSTRAK

POLA PENYEBARAN DAN KETEBALAN LAPISAN BATUBARA BERDASARKAN ANALISA DATA *WELL LOGGING* DI DAERAH “X” DESA BUKIT HARAPAN KECAMATAN TENGGARONG KABUPATEN KUTAI KERTANEGARA KALIMANTAN TIMUR

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Telah dilakukan penelitian pola penyebaran dan ketebalan lapisan batubara pada daerah dengan menggunakan metode geofisika *well logging*. Penelitian dilakukan di Desa Bukit Harapan, Kecamatan Tenggarong, Kabupaten Kutai Kertanegara, Provinsi Kalimantan Timur.

Penelitian menggunakan data *well logging* yaitu *gamma ray log* dan *density log* dari hasil pemboran sebanyak Delapan belas titik bor. Penelitian dilakukan dengan menganalisa defleksi kurva *well logging* serta menghitung volume *shale* dan mengetahui nilai densitas batubara serta dilakukan korelasi antar sumur bor berdasarkan data *well logging*.

Pada daerah penelitian pola penyebaran lapisan batubara dari Timur Laut kearah Barat Daya, dengan arah kemenerusan lapisan N40°E/30°. Pada lapisan batubara B untuk pola penyebarannya semakin kearah Barat Daya semakin dalam dan lapisan batubaranya semakin menebal dan mengalami *splitting* yaitu lapisan batubara terbagi menjadi dua bagian, bagian *upper* batubara dan bagian *lower* batubara. Pada lapisan batubara A pola penyebaran semakin kearah Barat Daya semakin dalam namun untuk ketebalannya relatif berbeda. Lapisan batubara yang paling tebal terdapat pada sumur CS 13 dengan lapisan batubaranya 2meter. Ketebalan lapisan batubara yang paling tipis terdapat pada sumur CS 15 dan CS 12 dengan ketebalan lapisan batubaranya 0,65 meter.

Kata kunci : *Well logging, gamma ray log, density log, V shale*

ABSTRACT

*COATING THICKNESS DISTRIBUTION PATTERNS AND COAL BASED DATA
ANALYSIS WELL LOGGING IN REGION X BUKIT HARAPAN VILLAGE
KECAMATAN TENGGARONG KABUPATEN KUTAI KERTANEGARA
EAST KALIMANTAN*

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Has done research dispersal patterns and thickness of the coal seam in the area using geophysical well logging. The study was conducted in the village of Mount Hope, District Tenggarong, Kertanegara Kutai regency, East Kalimantan province.

Research using well logging data is the gamma ray logs and density logs from the drilling drill as many as eight teen points. The study was conducted by analyzing the deflection of well logging curve and calculate shale volume and determine the density value of coal. This study was also conducted on the correlation between boreholes based on data from well logging. In the study area the pattern of spread of coal seams from the Northeast toward the Southwest, with a layer direction $N40^{\circ} E/30^{\circ}$ and there are two layers of coal that the coal seams A and B where the coal seam coal seam B consists of upper and lower layers of coal B.

On coal seam pattern B to spread the Southwest towards deeper and coal layers thicken and experienced splitting the coal seam is divided into two parts, the upper part of the lower coal and coal. A coal seam pattern on the spread in the direction of the Southwest, but for different relative thickness. The thickness of the coal seam at the thickest area of research contained in CS 13 wells with 2 meter. Coal layer thickness coal seam at the thinnest area of research found in wells CS 15 and CS 12 with a coal layer thickness of 0.65 meters.

Keyword : Well logging, gamma ray log, density log, Vshale