

ABSTRAK

KARAKTERISTIK DAN PENYEBARAN LAPISAN BATUBARA SEAM W100 BERDASARKAN DATA *WELL LOGGING* PADA FORMASI WARUKIN, DAERAH WARA, KECAMATAN TANJUNG, KABUPATEN TABALONG, KALIMANTAN SELATAN

Oleh :
Ari Andiri Prasetio
115.080.052

Telah dilakukan penelitian karakteristik dan penyebaran lapisan batubara pada Formasi Warukin dengan menggunakan metode geofisika *well logging*. Penelitian dilakukan di Wara, Kecamatan Tanjung, Kabupaten Tabalong, Provinsi Kalimantan Selatan.

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

Pada daerah penelitian secara umum karakteristik lapisan batubara berupa lempungan. Dengan setiap sumur mempunyai nilai *Vshale* dan densitas yang berbeda-beda.

1. Sumur WT056 nilai *Vshale* berkisar antara 0.09 – 1.38 % dan densitas 5052.45 – 5416.39 cps.
2. Sumur WT062 nilai *Vshale* berkisar antara 0 – 2.38 % dan densitas 5297.75 – 5514.17 cps.
3. Sumur WT065 nilai *Vshale* berkisar antara 0 – 2.87 % dan densitas 5314.23 – 5499.41 cps.
4. Sumur WT068 nilai *Vshale* berkisar antara 0 – 6.10 % dan densitas 4889.48 – 5511.37 cps.
5. Sumur WT0109 nilai *Vshale* berkisar antara 0.09 – 3.08 % dan densitas 2187.80 – 2355.61 cps.

Berdasarkan hasil korelasi antar sumur bor diketahui bahwa penyebaran lapisan batubara dengan arah *strike* N 35° E mengarah ke Timurlaut – Baratdaya dan *dip* 45° mengarah ke Tenggara.

Kata kunci : *Well logging, gamma ray log, density log, Vshale*

ABSTRACT

*CHARAKTERISTICS AND DEPLOYMENT OF THE COAL LAYER SEAM W100 BASED ON
WELL LOGGING DATA AT WARUKIN FORMASION, AREA WARA, KECAMATAN
TANJUNG, KABUPATEN TABALONG, SOUTH KALIMANTAN*

By :
Ari Andiri Prasetio
115.080.052

A research has been done to get the characteristic and distribution of coal bed in Warukin Formation using well logging as geophysics method. Research was held in Wara, Sub-District Lawang Tanjung, District Tabalong, South Kalimantan Province for two months long.

The well logging data used in research are gamma ray log and density log acquired from five drilling spot. Research was conducted by analyzed the deflection curve of well logging, calculated the volume of shale and the value of coal density . Correlation from one bore hole to another was done also based on well logging data.

At the survey area, generally the coal layer consist of clays, with every well has different value of Vshale and density.

- 1. WT056 well has value of Vshale between 0.09 – 1.38 % and density 5052.45 – 5416.39 cps.*
- 2. WT062 well has value of Vshale between 0 – 2.38 % and density 5297.75 – 5514.17 cps.*
- 3. WT065 well has value of Vshale between 0 – 2.87 % and density 5314.23 – 5499.41 cps.*
- 4. WT068 well has value of Vshale between 0 – 6.10 % and density 4889.48 – 5511.37 cps.*
- 5. WT109 well has value of Vshale between 0.09 – 3.08 % and density 2187.80 – 2355.61 cps.*

Based on the result of the wells correlation, it's known that the distribution of coal layer with strike N 35° E direction leads to northeast – southwest and the dip 45° is southeast.

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