ABSTRACT

CHARACTERISTICS AND SEAM GEOMETRY KARANGAN AREA, DISTRICT SANGKULIRANG, EAST KUTAI REGENCY, EAST KALIMANTAN PROVINCE

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The research area is located in the Karangan area, Sangkulirang District, East Kutai Regency, East Kalimantan Province. This study used well logging method with 30 wells drilling. The purpose of this study is to investigate the characteristics and seam geometry of research area.

Well logging method which is used in coal exploration using three log ie: gamma ray log, desity log and caliper log. Gamma ray log and density log are used for interpretation lithologi and thickness. In this study the gamma ray log is also used in the analysis elektrofacies. Futhermore process is 3D model. 3D model is used to find geometry factor at seam of research area

From this research, characteristics of coal is gotten, there are shale volume value range between (0,19-8,99) % with an average value is 2,19 % and density values range between (1,34-2,21) gr/cc with an average value is 1,61 gr/cc. Elektrofasies pattern is dominate by cylindrical pattern. Futhermore seam geometry, seams thickness values start from 0.60 to 11.90 m with an average thickness is 3.90 m. Declivity values start from 24.4° to 38° with an average declivity $31,2^{\circ}$ Continuously values start from 1.438 to 2.927 m with an average continuously 2.212 m. Position pattern of seam can be said well-regulated relative.

Keywords: well logging, shale volume, density, analysis elektrofasies, 3D model, geometry