

SARI

Daerah penelitian berada di Kecamatan Laung Tuhup, Kabupaten Murungraya, Kalimantan Tengah. Formasi pembawa batubara pada daerah penelitian adalah Formasi Batuayau Eosen. Penelitian ini dilakukan untuk mengetahui kondisi geologi dan analisis lingkungan pengendapan batubara serta hubungannya terhadap kandungan sulfur pada daerah penelitian.

Metode yang digunakan dalam penelitian ini adalah pemetaan geologi dan *measuring section* (MS) pada daerah penelitian. Kemudian dilakukan analisis kandungan sulfur seperti analisis total sulfur dan analisis jenis sulfur pada sampel batubara. Nilai analisis total sulfur dan nilai jenis sulfur batubara digunakan untuk menganalisis dan menginterpretasi hubungannya terhadap lingkungan pengendapan batubara.

Geomorfologi daerah penelitian dibagi menjadi 1 (satu) bentuk asal dan 2 (dua) bentuk lahan. Bentuk asal antropogenik (A) dengan bentuk lahan hasil galian tambang (A1) dan bentuk lahan hasil timbunan tambang. Stratigrafi daerah penelitian dibagi menjadi 2 (dua) satuan yang di urutkan dari tua ke muda yaitu satuan batulempung batuayau dan satuan batupasir batuayau. Satuan batulempung batuayau dan satuan batupasir batuayau terendapkan pada lingkungan pengendapan transisi bagian *lower delta plain*. Selanjutnya, hasil analisis lingkungan pengendapan batubara pada *seam* 3 (3A,3B dan 3C) didapatkan kandungan sulfur pada daerah penelitian yaitu didapatkan kandungan total sulfur berkadar rendah yaitu 0,4% pada *seam* 3A dan 0,7% pada *seam* 3B dan didominasi oleh kehadiran sulfur organik dan pada *seam* 3A didapatkan kandungan sulfur berkadar tinggi dengan 3,02% dan didominasi kehadiran sulfur piritik.

Kata kunci: Formasi Batuayau, Laung Tuhup, Kualitas Batubara, Lingkungan pengendapan

ABSTRACT

The research area is in Laung Tuhup District, Murungraya Regency, Central Kalimantan. The coal-bearing formation in the research area is the Late Eocene batuayau Formation. This research was conducted to determine the geological conditions and analysis of the coal deposition environment and its relationship to the sulfur content in the research area.

The method used in this research is geological mapping and measuring sections (MS) in the research area. Then an analysis of the sulfur content is carried out, such as total sulfur analysis and analysis of the type of sulfur in the coal sample. Total sulfur analysis values and coal sulfur type values are used to analyze and interpret their relationship to the coal deposition environment.

The geomorphology of the research area is divided into 1 (one) original landform and 2 (two) landforms. Forms of anthropogenic origin (A) with land forms resulting from mining excavations (A1) and land forms resulting from mining dumps. The stratigraphy of the research area is divided into 2 (two) units which are sorted from old to young, namely the batuayau mudstone unit and the batuayau sandstone unit. The batuayau mudstone unit and the batuayau sandstone unit were deposited in the transitional depositional environment of the lower delta plain. Furthermore, the results of the analysis of the coal deposition environment in seam 3 (3A, 3B and 3C) showed that the sulfur content in the research area was found to be low in total sulfur content, namely 0.4% in seam 3A and 0.7% in seam 3B and dominated by the presence of organic sulfur and in seam 3A, a high level of sulfur content was obtained with 3.02% and the presence of pyritic sulfur was dominated.

Keywords: *Batuayau Formation, Coal Quality, Depositional Environment, Laung Tuhup, ,*