

STUDI BATUAN ASAL (*PROVENANCE*) DAN LINGKUNGAN PENGENDAPAN  
DENGAN PENDEKATAN PETROGRAFI DAN GRANULOMETRI PADA  
BATUPASIR ANGGOTA CAWANG FORMASI KIKIM DI DAERAH  
PEGUNUNGAN GUMAI, PROVINSI SUMATRA SELATAN

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SARI

Cekungan Sumatra Selatan merupakan cekungan hidrokarbon terbesar kedua di Pulau Sumatra. Formasi Lahat/Lemat merupakan Formasi sedimen tertua yang mengisi Cekungan Sumatra Selatan. Keberadaan batupasir Anggota Cawang Formasi Kikim di sisi selatan Pegunungan Gumai, serta adanya temuan baru batupasir di sisi utara (*Roadcut utara*) pegunungan menjadi fokus penelitian ini. Studi batuan asal (*provenance*) dan interpretasi lingkungan pengendapan dengan pendekatan petrografi dan granulometri dilakukan untuk memecahkan permasalahan. Lokasi penelitian dan pengambilan sampel mencakup sembilan jalur pengukuran stratigrafi di sekitar kawasan Pegunungan Gumai. Berdasarkan analisis granulometri metode grafis, batupasir ini mempunyai nilai *mean* 2,26 (pasir halus), nilai deviasi standar 1,15 (*poorly sorted*), nilai skewness 0,03 (*near symmetrical*), dan nilai kurtosis 1,21 (*leptokurtic*). Lingkungan pengendapan daerah penelitian menunjukkan lingkungan fluvial. Jenis batuan asal batupasir Anggota Cawang Formasi Kikim umumnya berasal tatanan tektonik *recycled orogen* subprovenan *foreland uplift*. Komposisi batupasirnya diperkirakan berasal dari batuan pra-Tersier yang berada pada Pegunungan Gumai itu sendiri.

**Kata kunci:** Formasi Kikim Anggota Cawang, granulometri, petrografi, studi batuan asal (*provenance*), lingkungan pengendapan.

STUDY OF PROVENANCE AND DEPOSITIONAL ENVIRONMENT USING  
PETROGRAPHY AND GRANULOMETRY APPROACH OF THE CAWANG  
MEMBER SANDSTONE OF KIKIM FORMATION IN GUMAI MOUNTAIN AREA,  
SOUTH SUMATRA PROVINCE

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*ABSTRACT*

*The South Sumatra Basin is the second largest hydrocarbon basin on Sumatra Island. Lahat / Lemat Formation is the oldest sedimentary Formation that fills the South Sumatra Basin. A new discovery of Cawang Member sandstones of Kikim Formation (Lahat Formation) on the north side of Gumai Mountains will become the focus of this study, while based on Geological map this sandstones only occur on the southern part of Gumai mountain. Study of provenance and interpretation of sedimentation environment with petrography and granulometry approach is done to solve the problem. The research and sampling sites include nine stratigraphic measurement paths around the Gumai Mountain area. Based on the graphic method of granulometry, this sandstone has a mean value 2,26 (fine sand), the standard deviation value of 1.15 (poorly sorted), skewness 0.03 (near symmetrical), and kurtosis value of 1.21 (leptokurtic). The depositional environment of the study area shows the fluvial environment. The Provenance types of Cawang Member Sandstone of The Kikim Formation is generally derived from the recycled orogen that is foreland uplift subprovenan. Its sandstone composition is derived from pre-Tertiary rocks from Gumai Mountains that became the basement on Sumatra Island.*

*Keywords: Cawang Member of Kikim Formation, granulometry, petrography, provenance, depositional environment.*