

# **GEOLOGI DAN FASIES BATUAN KARBONAT DAERAH SIDOHARJO DAN SEKITARNYA, KECAMATAN TEPUS, KABUPATEN GUNUNGKIDUL PROVINSI DAERAH ISTIMEWA YOGYAKARTA**

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## **SARI**

Studi penyebaran litofasies batugamping formasi Wonosari ini berada di daerah Sidoharjo dan sekitarnya, Kecamatan Tepus, Kabupaten Gunung Kidul, Provinsi D.I. Yogyakarta. Studi ini menggunakan metode analisis petrografi sayatan tipis batugamping untuk mengetahui mikrofasiesnya dengan mengacu kepada *standard microfacies types* (SMF) menurut Wilson (1975). Satuan geomorfologi daerah penelitian terdiri dari satuan perbukitan karst Giripanggung, satuan dataran karst Tepus, dan satuan lembah karst Purwodadi. Satuan geologi daerah penelitian terdiri dari Satuan Batugamping Klastik dan Satuan Batugamping Fragmental yang diindikasikan terbentuk pada miosen tengah-miosen akhir. Lingkungan pengendapan kedua satuan ini berada pada lingkungan *restricted-marine - open-marine* dan saling melensa. Mikrofasies batugamping di daerah penelitian terdiri dari SMF 23: *Non-laminated homogeneous micrite and microsparite without fossils*, SMF 18: *Bioclastic grainstones or packstones with abundant benthic foraminifera or calcareous green algae*, dan SMF 10: *Bioclastic packstones and grainstones with coated and abraded skeletal grains*. Mikrofasies ini diinterpretasikan terendapkan pada *Facies Zones (FZ) 8 : Restricted-marine platform (Platform interior-restricted/lagoon)* dan *Facies Zones (FZ) 7 : Open-marine platform (Platform interior-normal marine)*. Asosiasi litofasies batugamping di daerah penelitian terdiri dari *Lower Mudstone, Wackestone, Lower Packstone, Upper Mudstone, dan Upper Packstone*.

**Kata Kunci : Litofasies, Mikrofasies, batugamping, Wonosari**

## **GEOLOGY AND CARBONATE ROCK FACIES IN SIDOHARJO AND SURROUNDING AREA, TEPUS SUBDISTRICT, GUNUNGKIDUL REGENCY, SPECIAL REGION OF YOGYAKARTA PROVINCE**

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### **ABSTRACT**

Study of limestone lithofacies distribution at Wonosari Formation in Sidoharjo Area and the surrounding, Tepus District, Gunung Kidul Regency, Special Region of Yogyakarta Province. This study using petrographic analysis method of limestone thin section to determine the microfacies by referring to standard microfacies types (SMF) by Wilson (1975). Geomorphology unit of research area consists of Kasrt hills unit of Giripanggung, Karst Plain unit of Tepus, and Purwodadi Valley unit. Geological unit of research area consists of Clastic limestone unit and fragmental limestones unit formed in Middle miocene-late Miocene. Depositional environments of these two units are in restricted marine environment - open-marine environment and lenses each other. Limestones microfacies in the research area consist of SMF 23: Non-laminated homogeneous micrite and microsparite without fossils, SMF 18: Bioclastic grainstones or packstones with abundant benthic foraminifera or calcareous green algae, and SMF 10: Bioclastic packstones and grainstones with coated and abraded skeletal grains. These facies interpreted deposited on Facies Facies Zones (FZ) 8 : Restricted-marine platform (Platform interior-restricted/lagoon) dan Facies Zones (FZ) 7 : Open-marine platform (Platform interior-normal marine). Limestones lithofacies association of research area limestones are Lower Mudstone, Wackestone, Lower Packstone, Upper Mudstone, and Upper Packstone.

**Keywords:** Lithofacies, microfacies, limestone, Wonosari