Rekaman Diagenesis Batugamping Berdasarkan Data Petrografi Studi Kasus Daerah Gunung Kapur, Kecamatan Ciampea, Kabupaten Bogor = Records of Limestone Diagenesis Based on Petrographic Data, Case Study of Gunung Kapur Area, Ciampea District, Bogor Regency

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Abstrak

Gunung Kapur merupakan bukit karbonat yang bersifat soliter berumur Miosen yang masuk ke dalam Anggota Batugamping Formasi Bojongmanik dengan litologi penyusun berupa batugamping. Gunung Kapur berlokasi di Kecamatan Ciampea, Kabupaten Bogor. Studi diagenesis dilakukan di lokasi ini dengan tujuan untuk mengetahui rezim diagenesis dan proses-proses diagenesis yang bekerja pada batuan beserta korelasinya terhadap porositas batuan. Hal yang akan dilakukan pada penelitian ini adalah pemetaan geologi, pengambilan sampel batugamping, analisis megaskopis batuan, dan analisis petrografi. Pada hasil kegiatan lapangan didapatkan 10 sampel yang dianalisis lebih lanjut menggunakan metode petrografi. Proses-proses diagenesis di daerah penelitian yang menambah porositas adalah disolusi, alterasi biogenik, dan kompaksi sedangkan yang mengurangi nilai porositas adalah sementasi, kompaksi, dan neomorfisme. Tipe-tipe porositas yang terbentuk adalah burrow, intrapartikel, interpartikel, interkristalin, fracture, channel, vuggy, dan moldic. Adapun nilai porositas yang didapatkan dari sampel adalah 1,71% hingga 18,38% berdasarkan perhitungan point counting sehingga disimpulkan bahwa kualitas porositas di daerah penelitian yaitu negligible sampai good. Berdasarkan bukti proses diagenesis yang ditemukan, rezim diagenesis di daerah penelitian adalah rezim laut, rezim bawah permukaan, dan rezim meteorik freatik.
.....Gunung Kapur is a solitary carbonate hill of Miocene age which included in the Anggota Batugamping Formasi Bojongmanik with the lithology consisting of limestone. Gunung Kapur located in Ciampea District, Bogor Regency. Diagenesis studies were carried out at this location to know the diagenesis regime and the diagenesis process's impact on rocks and their correlation to rock porosity. Research activities that will be used in this research are geological mapping, limestone sampling, rock megascopic analysis, and petrographic analysis. The results from field activities, 10 samples were obtained which were further analyzed using the petrographic method. Diagenesis processes in the research area that increase porosity are dissolution, biogenic alteration, and compaction, while those that reduce porosity are cementation, compaction, and neomorphism. The types of porosity formed are burrow, intraparticle, interparticle, intercrystalline, fracture, channel, vuggy, and moldic. The porosity values obtained from the samples are 1.71% to 18.38% based on point counting calculations so it can be concluded that the porosity quality in the research area is negligible to good. Based on diagenesis processes evidence, the diagenesis regime in study area are marine regime, burial regime, and meteoric phreatic regim