

SARI

GEOLOGI DAN STUDI KARAKTERISTIK BATUGAMPING SEBAGAI BAHAN BAKU SEMEN PADA KUARI SIJEBI, DAERAH KLAPANUNGGAL, KABUPATEN BOGOR, PROVINSI JAWA BARAT.

Oleh
Nila Mailatul Khotijah

Daerah Klapanunggal dan sekitarnya, Kabupaten Bogor, Jawa Barat, memiliki ketersediaan batugamping cukup melimpah untuk dijadikan sebagai bahan baku semen. Namun, tidak semua batugamping memiliki kandungan kualitas yang bagus untuk dijadikan semen. Analisis karakteristik batugamping khususnya di daerah tambang batugamping Sijebi perlu dilakukan untuk mengetahui kualitas batugamping sehingga dapat diketahui kelayakannya sebagai bahan baku semen atau sebagai pertimbangan *mix raw material* semen. Penelitian dikaji melalui pengamatan dan pengambilan sampel batuan yang kemudian dikelompokkan secara karakteristik fisik dan petrografi. Analisis Kimia menggunakan *X-Ray Fluorescence* (XRF). Hasil penelitian daerah penelitian menunjukkan pada kuari Sijebi terdiri dari batugamping klastik dan kristalin. Lithofasies berupa *mudstone*, *wackestone*, *packstone*, *floatstone*, *rudstone* dan *crystalline*. Kandungan kimia daerah penelitian mempunyai nilai kisaran CaO 27,98%-54,4%, MgO 0,38%-3,38%, dan SO₃ 0%-2,61%. Nilai komposisi kimia menunjukkan daerah penelitian terdiri dari kualitas tinggi, rendah, dan menengah berdasarkan standar kualitas perusahaan.

Kata Kunci : Batugamping, karakteristik, lithofasies, kimia, kualitas.



ABSTRACT

GEOLOGY AND STUDY OF THE CHARACTERISTICS OF LIMESTONE AS A RAW MATERIAL FOR CEMENT IN THE QUARRY SIJEBI, KLAPANUNGGAL REGION, BOGOR DISTRICT, WEST JAVA PROVINCE

By

Nila Mailatul Khotijah

The Klapanunggal area and its surroundings, Bogor Regency, West Java, have sufficient availability of limestone to be used as raw material for cement. However, not all limestone has good quality content to be used as cement. Analysis of the characteristics of limestone, especially in the Sijebi limestone mining area, needs to be carried out to determine the quality of the limestone so that it can determine its suitability as a raw material for cement or as a consideration for mixing raw cement materials. Research is studied through observation and taking rock samples which are then grouped according to physical and petrographic characteristics. Chemical Analysis using X-Ray Fluorescenc (XRF). The results of research in the research area show that the Sijebi quarry consists of clastic and crystalline rock. Lithofacies include mudstone, wackestone, packstone, floatstone, rudstone and crystalline. The chemical content of the research area has values ranging from CaO 27.98%-54.4%, MgO 0.38%-3.38%, and SO₃ 0%-2.61%. The chemical composition value shows that the research area consists of high, low and medium quality based on company quality standards.

Keywords: *Limestone, characteristics, lithofacies, chemistry, quality.*

