

RINGKASAN

CV. Central Stone Perkasa (CV. CSP) merupakan salah satu perusahaan penambangan Batu Andesit di wilayah Kabupaten Kulon Progo, yang beroperasi di Dusun Gunung Kukusan, Desa Hargorejo, Kecamatan Kokap, Kabupaten Kulonprogo, Daerah Istimewa Yogyakarta. Seiring dengan pertumbuhan pembangunan di kawasan Daerah Istimewa Yogyakarta maka untuk mencukupi kebutuhan bahan material bangunan CV. CSP berupaya untuk membuka suatu *quarry* batu andesit.

Minimnya data potensi bahan galian Mineral Batuan di wilayah Kabupaten Kulon Progo tentang jumlah sumberdaya dan cadangan batu andesit sehingga perlu dilakukan perhitungan sumberdaya untuk mengetahui informasi terkait sumberdaya bahan galian batu andesit. Berdasarkan keadaan topografi, geologi, dan genesa pada daerah penelitian maka estimasi sumberdaya dan cadangan di lokasi penelitian dilakukan menggunakan metode *Cross Section* dan metode *Contour* dengan pedoman *Rule of Gradual Change*. Dasar lain pertimbangan penggunaan kedua metode tersebut karena batu andesit mempunyai homogenitas yang tinggi, mudah dilaksanakan, cepat dan hasil penaksiran cukup akurat.

Berdasarkan pada penelitian didapatkan tebal lapisan penutup 1,5 meter dengan elevasi terendah 168 mdpl dan elevasi tertinggi tertinggi 306 mdpl. Selanjutnya dilakukan perhitungan dengan Metode Cross Section pembuatan sayatan dengan memotong topografi rata-rata pada jarak sayatan 20-25m Selatan – Utara dan jarak sayatan 15-30m Barat – Timur diperoleh tonase sebesar 29.981.864,93 ton. Perhitungan estimasi Sumberdaya batu Andesit dengan metode *contour* diperoleh tonase sebesar 29.747.796,57 ton dan volume sumberdaya batu andesit sebesar 12.089.461,65 m³ sedangkan dengan metode *Contour* dengan pedoman perubahan bertahap (*rule of gradual change*) diperoleh volume sumberdaya batu andesit sebesar 11.995.079,26 m³. Terdapat perbedaan volume sumberdaya batu andesit metode *Cross Section* dengan metode *Contour* sebesar 94.382,4 m³ lebih besar perhitungan metode *Cross Section* dan sumberdaya batu andesit di lokasi penelitian diklasifikasikan sumberdaya mineral teunjuk (*indicated mineral resources*).

ABSTRACT

CV. Central Stone Perkasa (CV CSP) is one of the Andesite Stone mining company in Kulon Progo Regency, which operates in Gunung Kukusan Hamlet, Hargorejo Village, Kokap District, Kulonprogo Regency, Special Province of Yogyakarta. Yogyakarta's development growth become a trigger for CV. CSP opens a andesite stone quarry to meet materials needs.

The lack of data on the mineral mining materials potential in Kulon Progo Regency about the number of resources and reserves of andesite rocks, so it is necessary to calculate the resources to find out information related to the mineral resources of andesite stone. Based on the topography, geology, and genesis of the research area, the resource and reserve estimation at the research location has done, using Cross Section method and Contour method with Rule of Gradual Change guideline. Other basic consideration of using both methods are because andesite rocks have high homogeneity, easy to implement, fast and accurate assessment results.

Based on the research, it has found that the thickness of the cover layer is 1.5 meters with the lowest elevation of 168 mdpl and the highest elevation is 306 mdpl. That has calculated by Cross Section method of making the incision by cutting the average topography at 20-25m South-North incision spacing and the distance of 15-30m West-East incision is obtained tonnage of 29,981,864.93 tons. Calculation of estimation Andesite stone resource with contour method obtained tonnage of 29,747,796,57 ton and volume of andesite stone resource equal to 12,089,461,65 m³. On the other hand, using Contour method with gradual change guidance (rule of gradual change), obtained the volume of andesite stone resources of 11.995.079,26 m³. There is difference of volume of rock resource of Andesite Cross Section method with Contour method equal to 94.382,4 m³ bigger calculation of Cross Section method and Andesite stone resource in research location classified (indicated mineral resources).