Studi perbedaan kondisi Zona Akuifer dan Water Table saat musim kemarau di Universitas Indonesia menggunakan metode geolistrik dengan konfigurasi Schlumberger = Study of differences in conditions of the Aquifer Zone and Water Table during the dry season at the University of Indonesia using geoelectric methods with Schlumberger configuration

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Abstrak

Air tanah dangkal dipengaruhi oleh kondisi lingkungan dimana air tanah dangkal dapat mengalami penurunan dan pengisian kembali saat pergantian musim. pada musim hujan terjadi kenaikan muka air tanah dangkal akibat pengisian kembali dan pada musim kemarau terjadi penurunan muka air tanah. Dalam penelitian ini akan dilakukan studi kasus perbedaan kondisi zona akuifer dan water table saat musim kemarau. penelitian ini menggunakan penelitian terdahulu yang dilakukan saat musim hujan sebagai acuan pembanding. Penelitian ini dilakukan dengan menggunakan tiga titik pengukuran, untuk setiap lintasan memiliki panjang 100 meter dengan posisi tiap lintasan sejajar menggunakan metode geolistrik kon g- urasi Schlumberger. Hasil dari penelitian ini dapat mengetahui perbedaan kondisi zona akuifer dan water table bawah permukaan saat musim kemarau dan musim hu- jan. Berdasarkan analisa yang telah dilakukan diketahui terjadi penurunan muka air sedalam 5.02 hingga 5.64 meter dengan nilai resistivitas 28.68 - 41.42 ohm meter serta terjadi penurunan akumulasi curah hujan sebesar 510 mm.

.....Shallow groundwater is in uenced by environmental conditions where shallow groundwater can experience a decrease and replenishment during the change of sea- sons. in the rainy season there is an increase in the shallow groundwater level due to replenishment and in the dry season there is a decrease in the groundwater level. In this research, a case study of the difference in the condition of the aquifer zone and water table during the dry season will be conducted. This research uses previous re- search conducted during the rainy season as a comparison reference. This research was conducted using three measurement points, for each track has a length of 100 meters with the position of each track parallel using the Schlumberger con gura- tion geoelectric method. The results of this study can determine the differences in the condition of the aquifer zone and subsurface water table during the dry season and the rainy season. Based on the analysis that has been done, it is known that there is a decrease in water level as deep as 5.02 to 5.64 meters with a resistivity value of 28.68 - 41.42 ohm meters and a decrease in rainfall accumulation of 510 mm.