

ABSTRAK

IDENTIFIKASI ZONA AKUIFER BERDASARKAN DATA GEOLISTRIK *VERTICAL ELECTRICAL SOUNDING (VES)* KONFIGURASI SCHLUMBERGER DENGAN PEMODELAN 2D, KAB. DOMPU, NUSA TENGGARA BARAT

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Pemenuhan kebutuhan air di Kabupaten Dompu. Untuk kebutuhan sehari-hari, seperti untuk minum, masak, mandi, mencuci pakaian, mencuci piring dan segala kegiatan rumah tangga lainnya. Saat ini menunjukkan indikasi sangat memprihatinkan. Pada penelitian ini, telah dilakukan identifikasi akuifer air tanah dengan menggunakan metode geolistrik *Vertical Electrical Sounding (VES)* konfigurasi *Schlumberger* di Kabupaten Dompu, Nusa Tenggara Barat yang terdiri dari 18 titik sounding, yang kemudian terbagi menjadi 6 lintasan dengan Panjang bentangan sekitar 250-300 meter. Metode resistivitas digunakan untuk menentukan mengkaji potensi air tanah, berdasarkan sifat tahanan jenis lapisan batuan. Berdasarkan hasil pengolahan 1D, nilai resistivitas akuifer berkisar antara 0,5-100 Ωm diidentifikasi sebagai batupasir tufan. Dan berdasarkan pemodelan 2D terdapat kemenerusan akuifer air tanah pada Line 1 dan Line 4.

Kata kunci: Resistivitas, Konfigurasi *Schlumberger*, Interpolasi, Akuifer, *VES*.

ABSTRACT

IDENTIFICATION OF AQUIFER ZONE BASED ON VERTICAL ELECTRICAL SOUNDING (VES) GEO-ELECTRICAL DATA SCHLUMBERGER CONFIGURATION WITH 2D MODELING, DOMPU REGENCY, WEST NUSA TENGGARA

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Fulfillment of water needs in Dompu Regency. For daily needs such as drinking, cooking, bathing, laundry, dishwashing, and all other household activities, the current situation shows extremely concerning indications. In this research, the identification of groundwater aquifers has been conducted using the geoelectric method, specifically Vertical Electrical Sounding (VES) with Schlumberger configuration in Dompu Regency, West Nusa Tenggara, consisting of 18 sounding points, which were then divided into 6 profiles with a length ranging from approximately 250 to 300 meters. The resistivity method was employed to assess the groundwater potential, based on the resistivity properties of rock layers. Based on the 1D processing results, the resistivity values of the aquifer range from 0.5 to 100 Ωm , identified as tuffaceous sandstone. Furthermore, based on the 2D modeling, a continuity of the groundwater aquifer is found in line 1 and 4.

Keywords: Resistivity, Schlumberger configuration, Interpolation, VES.