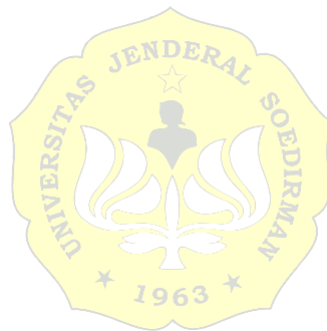


ABSTRAK

Penelitian tentang pengujian alat ukur *Resistivity Meter Single Channel* yang diproduksi oleh Laboratorium Instrumentasi dan Elektronika Geofisika Fisika MIPA UNSOED. Alat telah berhasil di uji dengan pembandingan standart ukur yaitu *Resistivity Meter* Naniura NRD 22S. Kedua alat dilakukan pengujian skala lapangan dengan konfigurasi *Schlumberger*. Pengujian dilakukan di 4 titik lintasan dengan panjang 400 meter. Hasil dari data pengujian didapatkan akurasi, presisi, dan nilai *error* resistivitas semu (ρ_a). Alat ukur *Resistivity Meter Single Channel* bekerja dengan baik dengan hasil yang mendekati sama dengan pembandingnya. Nilai akurasi dan presisi yang didapatkan dari pengukuran pada lintasan 1 Kelurahan Kramat yaitu 88,2% dan 13%. Lintasan 2 Kelurahan Manduraga yaitu 71% dan 4%. Lintasan 1 Kelurahan Karangcegak yaitu 56% dan 107%. Lintasan 2 Kelurahan Karangcegak yaitu 79% dan 32%.

Kata Kunci: *Alat Ukur, Resistivity Meter, Schlumberger, resistivitas.*



ABSTRACT

Research on the testing of a Single Channel Resistivity Meter produced by the Instrumentation and Geophysics Electronics Laboratory, Physics Department, Faculty of Mathematics and Natural Sciences, Jenderal Soedirman University (UNSOED). The instrument has been successfully tested using a standard reference instrument, the Naniura NRD 22S Resistivity Meter. Both instruments were tested in field-scale measurements using the Schlumberger configuration. The testing was conducted on 4 survey lines, each with a length of 400 meters. The results of the testing provided values of accuracy, precision, and error of apparent resistivity (ρ_a). The Single Channel Resistivity Meter operated well, with results that were close to those of the reference instrument. The accuracy and precision values obtained from the measurements on Line 1 in Kramat Village were 88,2% and 13%. For Line 2 in Manduraga Village, the values were 71% and 4%. For Line 1 in Karangcegak Village, the values were 56% and 107%. For Line 2 in Karangcegak Village, the values were 79% and 32%.

Keywords: Measurement, Resistivity Meter, Schlumberger, resistivity

