

ABSTRAK

ANALISIS INVERSI MODEL PANASBUMI MENGGUNAKAN DATA *MAGNETOTELLURIC* (MT) PADA LAPANGAN “YOGI”

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Daerah prospek panasbumi memiliki Manifestasi berupa fumarol yang terletak di puncak gunung, serta mata air yang berada disebelah barat daerah penelitian. Untuk mengetahui informasi bawah permukaan daerah prospek panasbumi daerah penelitian, dilakukan survei magnetotellurik. Survei magnetotellurik diolah dari *time series* hingga mendapat kurva resistivitas, frekuensi, dan fase. Koreksi statik untuk mendapatkan kurva yang lebih representatif. Selanjutnya dilakukan inversi 1 Dimensi dan inversi 2D. Didapatkan lapisan dengan nilai resistivitas <15 Ohm.m dengan ketebalan 2 km, diindikasikan sebagai *caprock*. Lapisan dengan nilai resistivitas 10-60 Ohm.m, diindikasikan sebagai reservoir.

Kata kunci : *Caprock*, Reservoir, Inversi 1D, Inversi 2D

ABSTRACT

ANALYSIS INVERSION OF GEOTHERMAL MODEL USING MAGNETOTELLURIC (MT) DATA IN FIELD “YOGI”

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Geothermal prospect area has manifestations in the form of fumaroles which are located on the top of a mountain, as well as a spring located west of the research area. To find out subsurface information on the geothermal prospect area of the study area, a magnetotelluric survey was conducted. The magnetotelluric survey was processed from time series to obtain resistivity, frequency, and phase curves. Static correction to get a more representative curve. Then 1-dimensional inversion and 2D inversion are performed. Obtained a layer with a resistivity value <15 Ohm.m with a thickness of 2 km, indicated as a caprock. Layer with a resistivity value of 10-60 Ohm.m, indicated as a reservoir.

Keywords: Caprock, Reservoir, 1D Inversion, 2D Inversion