Penentuan lokasi dan target sumur panas bumi pada wilayah kerja Panas Bumi Jaboi menggunakan aplikasi metode CSAMT dengan pemodelan 2D dengan data pendukung metode gravity = Determination of location and geothermal wells targeting in Jaboi Geothermal working area using CSAMT method application with 2D modeling of gravity method supporting data

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Abstrak

[ABSTRAK
PT. Sabang Geothermal Energi (PT. SGE) akan melakukan pemboran 2 sumur panas bumi pada WKP Jaboi untuk pembangkitan energi listrik 2 x 5 MW sehingga diperlukan penentuan lokasi sumur dan target pemboran yang diperkirakan dapat menghasilkan output uap yang maksimal. Dengan metode CSAMT yang ditunjang metode Gaya Berat akan dilakukan penelitian untuk mencari lokasi zona-zona produksi pada WKP Jaboi. Pemodelan terhadap data resistivitas batuan dari pengukuran dengan metode CSAMT yang dikombinasikan dengan pemodelan Gaya Berat, geologi dan hidrologi akan memberikan gambaran zona-zona produksi tersebut. Pemodelan dilakukan dengan model 2D menggunakan software WinGlinkTM. Penentuan lokasi dan target pemboran yang tepat dapat mengurangi investasi yang diperlukan oleh PT. SGE secara signifikan sehingga memberikan tingkat pengembalian investasi yang lebih baik untuk proyek panas bumi pada WKP Jaboi.
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ABSTRACT
PT Sabang Geothermal Energi (PT SGE) is planning to drill 2 geothermal wells in Jaboi Geothermal Working Area for 2 x 5 MW generation electricity, so it is required to determination of the well location and drilling targets which is expected to produce maximum steam output. CSAMT method that is supported by gravity method will be conducted to located the production zones in Jaboi Geothermal Working Area. Modeling of rock resistivity data from CSAMT method measurements which is combined with gravity modeling, geology, and hydrology will provide an overview of the production zones. Modeling was performed with a 2D model using WinGlinkTM software. Precise determination of location and drilling targets will reduce the necessary investment by PT SGE significantly, so as to provide the return on investment that is better for the geothermal project in Jaboi Geothermal Working Area.;PT Sabang Geothermal Energi (PT SGE) is planning to drill 2 geothermal wells in Jaboi
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