



Comparison of 1-Dimensional and 2- Dimensional Vertical Electrical Sounding (VES) Results in Geothermal Area

Olcay akmak and Osman Uyanık

Suleyman Demirel University, Isparta, Turkey (olcay.cakmak@gmail.com)

ABSTRACT

This study was performed in a geothermal area in Denizli-Turkey. All measures were taken in 2013 along to three months. VES measurements were taken throughout 3 profiles of parallel to each other in geothermal area. Distance of between profiles was selected as 500m. Each of the VES point lengths were taken as between 3-4km in a total of taken 90 number VES measurements. Also distance between the VES points was selected as 250m. Extensional direction of VES point of inside the same profile was designed to be suitable for two-dimensional. Measurements were evaluated as one-dimensional (1D) and after this two-dimensional (2D) then evaluation results were discussed. The geothermal reservoir depth was investigated and was tried to identify potential mechanical borehole locations depending on 1D and 2D evaluation results.

Keywords: Geothermal Area, Vertical Electrical Sounding, 1D-2D resistivity results