Scientific Abstract

THREE DIMENSIONAL MAGNETOTELLURIC SURVEY IN HUNGARY

Benoit Tournerie and Michel Chouteau, *Ecole Polytechnique de Montréal*, Leo Fox, *Phoenix Geophysics*, and Zoltán Nagy, *MOL Hungarian Oil & Gas Co*.

Resolution along some seismic lines recorded for petroleum exploration in sub basin in Hungary is limited because o a thick volcanic formation. In order to retrieve the deeper structures, 81 MT stations covering a large region (7x7km) were collected. Models computed from 2D inversion of the transverse magnetic (TM) data along seven lines define some vertical slices of the survey area. A visual tool based on finite element meshing and interpolators is used to stitch together those sections. A 3D forward modeling applied on the 3D resistivity model shows that observed MT data are well represented by this model. Interpretation and a comparison o the 3D resistivity distribution with other geophysical data (seismic, well logging, ...) are in progress.

For more information contact Phoenix Geophysics at :
www.phoenix-geophysics.com
mail@phoenix-geophysics.com
tel: 1-416-491-7340 fax: 1-416-491-7378