



## **Preliminary results of geological-geophysical study of Cerro Prieto valley, NE Mexico**

V.V.Yutsis, H. de León, D. Masuch and F.M. Izaguirre

Earth Science Faculty, Autonomous University of Nuevo Leon, Mexico  
(vyutsis@ccr.dsi.uanl.mx / Fax: +52 0049 821 2142020)

Cerro Prieto valley is situated in NE Mexico. Central part of the valley is occupied by water reservoir which is an important source of fresh water for Monterrey city, a capital of Nuevo León state. Geological-geophysical study of this area is carried out with the goal of environment monitoring and water resource management. Fault system of SW-NE trend changes here their direction to near W-E accordingly to Valley of Pabillo River. Geologically this area is constructed of sedimentary rocks of Fm. San Felipe: clay, sandstone, conglomerate, shale, limestone, etc. The recent deposits here exposed are river terrace gravels and clays. Gravity, magnetic and gamma ray studies on the basis of geological – hydro-geological investigation were carried out here in the last year. Preliminary results of their interpretation show existence of new faults and fractures in the subsurface layers and besides the possibility of soil pollution.