

Geotechnical Aspects Concerning Phenomena of Areas Instability Moinesti Petroliferous Area, Romania

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The petroliferous area Moinesti lies North-East of Romania and represents one of the oldest in Romania, the first rotary boring in the world being executed there in 1863.

Concerning the structure, the area belongs to some flysch formations with a Miocene genesis of tectonics: Tarcau Nappe, Marginal Fold Nappe that overlap successively from west to east. Tarcau bed is composed of lithologic formation with an r digitation degree with deposits of Cretacic, Paleogene and lower Miocene, age with different mechanical properties.

Concerning the geomorphology, the area belongs to the south of Gosman Mountains, that are crossed by Tazlaul Sarat River and it western arms. The cliffs are between 15 degrees and 25 degrees. The geological, morphological, climate, biological conditions allow the transformation that lead to the instability of the relief: areal and linear erosion, lowering movements, land slides.

Landslides in the inferior half affect Lucacioara Area that overlaps the Tarcau Nappe. Some headwaters with a different chemical composition: sulphurous, ferruginous and salted occurs at the top of the area. Because they flow over the bedrock, they cause landslide in a residential area.

Zemes Area overlaps the same area with pelitic nappe. The obstructing of a torrent led to the changing of the course of ground and surface water. The landslide caused by the searching of a new stability affect a residential area.

The complex geodetic studies and the studies carried out with drillings pointed out the existence of more sliding overlapped beds and the need of a map that shows the instability phenomena and the risk.