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## Abstracts



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## **Nature of the Mineral and Gel-Like Suspensions in Groundwater of Sulfate-Carbonate Karst Massifs**

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The condition of ground and surface waters in the regions of oil production requires special attention. Often, pollution of natural waters is recorded within the “old areas of oil production”, operated from the first half of the twentieth century, in the geological structure of which participate karst rocks. At the same time, pollution can be associated not only with oil, but also with the processes of destruction of karst massifs when changing hydrodynamic conditions. The waters of the small rivers in areas of sulfate-carbonate karst development, especially in the hollows of springs, from where small rivers originate, contain a large amounts of suspended particles of fine fraction and gel-like suspensions. In the flood, these suspensions are transferred to a relatively long distance - up to 2 km, accumulating at the bottom of the riverbed. At low water, the suspended matter, drying up, forms a thin crust of light gray aggregate mass with the inclusion of individual mineral grains on the surface of the earth and on vegetation in the riverbed. The carried researches allowed to establish the structure and chemical composition of secondary deposits, the mechanism of formation of mineral suspensions and the chemical nature of gel-like suspensions. Identification of suspended particles was performed using microprobe analysis on scanning electron microscope JSM 6390LV (Japan) with energy dispersive equipment INCA ENERGY 350 (UK).

**Keywords:** Karst massifs, Ground waters, Mineral suspensions, Gel-like suspensions



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