

The formation of the underground water in the upper part of hydrolithosphere in the vostochno-zakamsky region of tatarstan

Musin R., Kalkamanova Z.

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© Copyright 2016. The zone of active water exchange of the Vostochno-Zakamsky region of Tatarstan is characterized by thickness up to 350 m and it is the distribution area of the groundwater with various composition and widely varying mineralization (0.2-10 g /l). For a quantitative estimation of the contribution of different factors in the modern structure of hydrogeochemical field was studied watershed spaces. They are the areas of primary downlink filtration. The formation of groundwater occurs here exclusively through the interaction of precipitation and their derivatives with soil and rock. It was identified concentration gradients of the main components and integrated indicators of water composition appearing at a downlink filtration. It is revealed that the main factors determining the composition of groundwater are lithological features of aquifers as a ratio of sulfate, carbonate and clay. Identified values of the concentration gradient and the nature of their behavior allow to predict hydrogeochemical conditions prevailing in the areas downlink filtering of zone of active water exchange.

Keywords

Downlink filtration, Gradients of concentration, Oil fields, Underground water