

## Underground water regime in the Samur-Davachi plain

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Increase of the world population number, constant development of the industry and agriculture areas rise the human's water need for the drinking-life and technical aims. This factor leads to the unfit state for use, water resource pollution and exhaustion as a result of the people's anthropogenic activity by having an influence on underground hydrosphere. Paying attention to such complex factors, we can evaluate an investigation of the changeable objective laws to the chemical composition, expenditure and level of the underground waters in the Samur-Davachi plain as an urgent task which assumes a scientific-practical importance. A complex influence of the natural and artificial factors on the underground waters regime is observed in the zone. To define the changes occurring in such waters regime the observation points were placed at 200m east from Shollar water-intake and at the same distance in the west from Khachmaz water-intake. The regime observations performed over the point in the east from Shollar water-intake show that an amplitude of the subsoil water level isn't more than 0,3m, but an increase of the subsoil water's level from 4,8-5,2m to 5,5m from the beginning of the year till april-may months in the other observation station in the west from Khachmaz water-intake is observed[1]. It was known from the long researches that a minimum value of the average yearly level in the subsoil waters was 0,23m in the observation well in 1990, a maximum value was 19,69m in 1980. At the same time a minimum expenditure of the subsoil waters was 0,60l/sec. in 1990, but a minimum expenditure was 464l/sec. in 2005[2]. It was known that the mineralization degree of the subsoil waters with a type of created in the Samur-Davachi plain changed till 0,5g/l, to 0,5-1,1g/l in the type of , 2-3g/l in . The spring waters are different from a qualitative point of view. So, their mineralization degree reaches 600mg/l in Guba, till 850mg/l in Khachmaz. The springs in which the sulphate quantity is little are found 115-160mg/l. A maximal quantity of chlorides in the water is 184mg/l in Gusar. It was known as a result of the carried out observations that reduction of hydrocarbonate and calcium quantity, increase of sulphate, chlorine natrium ions in composition of subsoil waters in the flow direction, expenditure change concerning the level change were observed.

### Источники и литература

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