

Chemical Characterization of Water from Saraj Spring in Kosova

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Abstract: Saraj spring is located in south part of Kosova. In this research work we have analyzed 12 metals in the water of Saraj spring. We used ICP-OES for the analysis. Also some physico-chemical parameters are determined: water temperature, pH, conductivity (EC), turbidity, total hardness, consumption of KMnO_4 , chlorides, sulphates, phosphate, ammonia, nitrates and nitrites. From our results we have seen that this water is acidic and has low hardness. From the results, we found that all metals are under maximum level of WHO standards for drinking water, except chromium (0.06 mg dm^{-3}) and nickel (0.022 mg dm^{-3}). Also we have classified this water according to the level of metals. In Kosova we don't have standards yet, so we decided to use the Croatian Standards. The Saraj Water based on concentration of Cu, Pb and Cd is classified in first class, but based on the concentration of Zn it can classify in fifth class. From these results we can conclude that this water can be used for drinking but first it should treat to remove Cr and Ni.

Key words: Saraj Spring, water, eco-toxic metals, physico-chemical parameters, ICP/OES.

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