Physicochemical and radon analysis of drinking water available in Samtah-Jazan city Southwest of Saudi Arabia

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**ABSTRACT**

In order to understand the quality of drinking water (tap water, gallon water, and mineral water) supply in Samtah-Jazan city southwest of Saudi Arabia, physicochemical characteristics were studied and analyzed. Water samples were carefully collected for various physicochemical parameters, such as turbidity, water temperature, pH, conductivity, total alkalinity, total hardness, chloride, iron and radon had been analyzed using standard procedures and compared with World Health Organization Standards, Saudi Arabian Specification Standards, and United States Environmental Protection Agency water quality guidelines. The bacterial parameters were analyzed for total count of bacteria, \textit{E. Coli} bacteria and fecal coliform. It was approved that no bacterial contamination present in the water samples. The results revealed that all of the parameters were in normal range and indicated safety and suitability for drinking purposes.

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