

STUDY ON PHYSICO-CHEMICAL CHARACTERISTICS OF GROUND WATER IN THE RURAL AREA OF JHUNSI, ALLAHABAD

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ABSTRACT

Ground water quality is one of the most important criterions to ascertain its suitability for human beings and irrigation. As water is the most important commodity, rigorous urban ground water monitoring is needed for tracking the water table depletion and deterioration in water quality on regular basis. A study on physico-chemical characteristics of ground water in the rural area of Jhunsi, Allahabad was carried out during March to June 2016. The ground water samples were collected from five different locations and analyzed for physico chemical characteristics such as Temperature, pH, Electrical Conductivity (EC), Total dissolved solids (TDS). Total Hardness (TH), Ca. Hardness, Mg. Hardness, Alkalinity, Chloride, Turbidity. The results were compared with the standards prescribed Bureau of Indian Standard (BIS). All the physic-chemical parameters were found within the prescribed permissible limit accept the total hardness. The total hardness varies in between 1300-1575mg/l, which indicates that water in the deep aquifer is moderately hard. Hence it is suggested to the villagers, who consume the water in the rural area of Jhunsi, Allahabad (UP) to soften the supply water before consumption.

KEYWORDS: Ground Water, Physico-Chemical Characteristics, Temperature, pH, Electrical Conductivity (EC), Total Dissolved Solids (TDS). Total Hardness (TH), Ca. Hardness, Mg. Hardness, Alkalinity, Chloride, Turbidity