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**RAJASTHAN**

Title: **PHYSICO-CHEMICAL AND MICROBIOLOGICAL ANALYSIS OF UNDERGROUND WATER OF CHAPRA SADAR BLOCK OF SARAN DISTRICT OF BIHAR**

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**ABSTRACT**

Ground water samples were collected from different locations of Chapra Sadar block of Saran district of Bihar for physico-chemical and microbial studies. Analysis of samples for PH, TDS, conductivity, turbidity, odour, nitrate, sulphate, phosphate, dissolved oxygen, hardness, chlorides, fluorides, sodium, potassium, arsenic and chemical oxygen demand(COD), biological oxygen demand(BOD), alkalinity, Free NH4+, Fe+2, Cu, Zn along with EC and Coli form organism indicate towards major health concerns of living beings. On comparing results with drinking water quality standards laid down by WHO, it was found that most of the water samples were non potable for human beings due high concentration of one parameters or the other. Most of the samples have EC, free NH4+, Coli form Organism much higher than the maximum permissible levels set up by WHO. The high values of these parameters have health implications require adequate time bound remedial measures.

**KEY WORDS:** Ground water; physico-chemical analysis; drinking water quality

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