

Fluorides Concentration in Groundwater Samples of Sailu City Parbhani District

D. U. Thombal
L. B. S. Sr. Collage Partur
Dist. Jalna

Abstract

Determination of fluorides concentration of Fifteen ground water samples from different sites in Sailu city of Parbhani district was carried out using ion selective electrode. The out come of the results were discussed in the light of pollution status of the study area.

Keywords: Fluoride ion concentration, ground water Sailu city

Introduction:

Sailu is considered to be the oldest and religious city in Parbhani district of Marathwada region. In Maharashtra, Sailu city situated near Dudhana river. A famous Temple of "Keshavraj Babasaheb Maharaj" is situated in the middle of Sailu city, who was Guru of Shirdi's Saibaba. The residents of Sailu city usually use water from bore-well for drinking and domestic purposes. There is a huge variation in the concentration of different species due to factors like depth, different land, under groundwater conditions, rain conditions etc. The present work attempts to evaluate the quality of ground water in Sailu city of Parbhani district for potability.

Material used:

In the present study Fifteen groundwater [bore-well] samples were collected from different sites of Sailu city in brown glass bottles with necessary precautions and preserved as per the recommended procedures¹. All the chemicals used were of AR grade, glass ware used were of 'A' grade. Double distilled Water was used through out the work to prepare standard solution².

Method:

Fluoride concentration in aqueous samples was determined with Fluoride-Ion Electrode [IRON] and ORION 407 A Ion meter. 25 ml of Aliquot was taken in polythene beaker and 25 ml of [TISAB-III] Total Ionic Strength Adjuster Buffer, ORION Application Solution was added. Ion meter was standardized against solution of known Fluoride concentration in the standard sample and read directly on the meter scale. The scale was calibrated in ppm of fluoride concentration in water.

New for CAS

Concentration of Heavy Metals in Groundwater Samples of Selu, Parbhani District (M. S.)

D. U. Thombal
L. B. S. Sr. College, Partur
Dist. Jalna

Abstract

Determination of heavy metal concentration of selected fifteen sites from Selu City of Parbhani district was carried out. Heavy metals were estimated by Atomic Absorption spectrophotometer, and out come of the results were discussed in the light of pollution status of the study area.

Keywords: Heavy Metals Groundwater; Selu

Introduction

Sailu is considered to be the oldest and religious city in Parbhani district of Marathwada region in Maharashtra, Sailu city is situated near Dudhana river. A Famous Temple of "Keshavraj Babasaheb Maharaj" is situated in middle of Selu. Who was Guru of Shirdi's Sai baba. The residents of Sailu tehsil usually use water from bore-well for drinking and domestic purposes. There is a huge variation in the concentration of different species due to factors like depth, different land, under groundwater conditions, rain conditions etc. The present work attempts to evaluate the quality of groundwater in selu of Parbhani district for potability.

Material Used

In the Present study Fifteen groundwater (borewell) samples were collected from different sites of Selu tehsil in brown glass bottles with necessary precautions and preserved as per the recommended procedures. All the Chemicals used were of AR grade, Glass ware used were of 'A' grade. Double distilled water was used through out the work to prepare standard solution.²

Methods

Exactly 500 ml of each water sample was taken in clean, dry separating funnel. Exactly 25

ml of Isobutylmethylketone (IBMK) and 2 ml of Ammoniumpyrolidinedithiocarbamate (APDC3) were added. The solution was shaken well, for 20 minutes and allowed for separation of organic and aqueous layer. Aqueous layer was discarded out. To the organic layer, 1ml of