A Study of the Quality Characteristics of Tube-well Water from the Environment of Yangon Institute of Education (YIOE)

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Abstract

This paper studies the quality of water samples from two tube-wells situated in YIOE, Kamayut Township,Yangon Division. Water samples were collected from two sites of YIOE campus. Tube-well (A) is situated near the Engineer Department and Tube- well (B) is located near the YIOE canteen. Assessments were conducted in October, 2006 and in March, 2007. Physico-chemical parameters of water samples such as pH, color, turbidity, total dissolved solids, total alkalinity, the content of chloride, sulphate and iron were conducted by conventional Titrimetric Methods and Atomic Absorption Spectrophotometric Method. Moreover microbiological examination such as coliform and E-coli were made by Multiple Tubes Method. The qualities of the water were found within the allowable limits according to the literature reports. However, Tube-well (A) was found to be unsatisfactory for drinking. Therefore, it needs prior treatment such as chlorination or boiling to control and prevent coliform and E.coli for drinking purposes.

Keywords: Atomic Absorption Spectrophotometric Method, Physico-chemical parameters, coliform, E.coli.

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