BACTERIOLOGICAL ANALYSIS OF SELECTED DEEP WELL WATER IN SAN PEDRO, LAGUNA

A Research Presented to the
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ABSTRACT

The study was carried out to determine the bacteriological quality of selected deep well water samples in San Pedro, Laguna. Presence of total and fecal coliform was determined using Multiple tube fermentation technique and Heterotrophic plate counting. The results showed that deep well water samples in Barangay Narra, Laram, Langgam, Calendola and Magsaysay were found to be contaminated with fecal coliforms ranging from 1.1 to > 8.8 MPN/100 mL and the microbial load averages from 242 to > 5700 cfu/mL. *Escherichia coli* serves as bacterial indicator for fecal contamination. Conclusively, it was established that absence of fecal coliform does not indicate the potability of water since all samples from the eight barangays were contaminated with coliforms and this indicated water pollution. The findings further showed that the deep well water in these covered areas for this study did not meet the qualifications of the Philippine National Standard for Drinking Water and should be treated before consumption.

Keywords: Bacteriological Analysis, Coliforms, Deep Well Water, Waterborne Disease

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