

ABSTRACT

DEPOT REFILL DRINKING WATER PROFILE AND APPLICATION OF EXAMINATION TOC DRINKING WATER QUALITY BASED ON WATER RESOURCES USED IN BANDAR LAMPUNG

By

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This study aimed to get a profile depot refill drinking water in Bandar Lampung and determined the relationship between total organic carbon (TOC) with the parameters required to test drinking water. This study was consisted of two stages. The first stage was a survey, and the second stage was test of water samples in the laboratory. The survey form was direct observation in the field and filled a questionnaire which addressed to some places that produce refill drinking water in Bandar Lampung. Laboratory testing was consisted of a sample of the quality testing of physical, chemical, and microbiological. Physical quality testing included testing of odor, turbidity, taste, temperature, total dissolved solid (TDS), and color. Chemical quality testing included test of pH, total organic carbon (TOC), inorganic carbon (IC), and total carbon (TC). For the microbiological quality testing included test contamination of total plate count, and coliform contamination. Data were analyzed with SPSS program. The results showed

that 86% depot refill drinking water still using standard refining technology that used multiple microfilter and silica sand media filtration and activated carbon while 14% depot refill drinking water been using reverse osmosis technology. All samples of water from various sources on the using of raw water to the depot in the city of Bandar Lampung refill drinking water that showed all the samples tested have met the requirements of drinking water quality, but still acts committed irregularities refill drinking water depots in the city of Bandar Lampung. The high value of the parameter TOC will be followed by high TC and color parameters, because the parameters of color and TC were positively correlated with TOC parameter.

Keyword : drinking water, total organic carbon.