DETERMINATION OF THE EXTENT OF SALTWATER INTRUSION AND WATER QUALITY ASSESSMENT IN THE COASTAL AREA OF TANZA, CAVITE

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MICHAEL JORDEL M. MATUNDAN April 2014

ABSTRACT

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The study was conducted in the coastal strip of Tanza, Cavite from November 2013 until January 2014 to assess the extent of saltwater intrusion in the area and determine the factors affecting it. The study basically aimed to: 1. measure the amounts of salt content and other pollutants present in the aquifer through, salinity, conductivity, TDS, and temperature; 2. analyze the effect of temporal variations on the selected water parameters; and 3. provide saltwater intrusion spot maps of the coastal area of Tanza, cavite.

Actual field observations, informal interviews, and recording of significant environmental data present around the sampling wells were gathered to support the claims of the study.

The results of the study were based on the primary and secondary sampling techniques, wherein the former used 60 sites for raw data generation and the latter obtained only 20 sampling sites for temporal observations. Significant amounts of contaminants were seen in the study based on the tests conducted.