GROUNDWATER QUALITY OF BOREHOLES USED FOR DOMESTIC CONSUMPTION IN PERLIS

INSTITUT PENGURUSAN PENYELIDIKAN
UNIVERSITI TEKNOLOGI MARA
40450 SHAH ALAM, SELANGOR
MALAYSIA

BY:

JAZURI ABDULLAH
AHMAD KAMAL MD ISA
AZURA AHMAD

APRIL 2009

TABLE OF CONTENTS

ABSTRACT

Toward 21st century, water demand keeps increasingly from time to time. Groundwater may be an alternative to fulfil the water demand especially at the dry area such as Perlis. To serve the population with the groundwater, the quality of the groundwater is a major factor to be consider as it contamination may be harmful to human health concern. In this study the quality of the groundwater is to be identified where groundwater from 4 different formation in Perlis which is Chuping Limestone formation, Setul Limestone fonnation, Tertiary Bukit Arang formation and Kubang Pasu formation is measured through onsite and laboratory test. From the test, the groundwater quality is found differed with each other. Iron, hardness, copper, chloride and COD concentration is found high at certain location. While several parameter is found has exceeded the Drinking Water Quality Standard where at all location the groundwater contain total coliform and faecal coliform. Several water treatment methods has been proposed to ensure the groundwater usage is safe for the consumer regarding to human health concern.

Key Words: GROUNDWATER QUALITY; CONSUMER CONSUMPTION;
PERLIS