

UNIVERSITI TEKNOLOGI MARA

**MOISTURE/WATER CONTENT BY
THE OVEN-DRY METHOD IN
ENGINE LUBRICANT ON YAMAHA
OUTBOARD ENGINE
PERFORMANCE**

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ABSTARCT

Moisture's negative effects on lubricants, hydraulics, and transformer oils are discussed in this study. It explains how to calculate the moisture content of lubricating oils, hydraulic fluids, and transformer oils automatically. The effect of water content in a four-stroke engine lubricating oil in a fishing boat is the problem statement for this project. The main effect is that moisture contaminating hydraulic and lubricating oils causes the lubricant and the machine to degrade. Others are destroyed by water-induced chemical processes, while certain additives adsorb to the water and are removed when the water separates from the oil. Water also causes oxidation of the oil base stocks, rust and corrosion on machine surfaces, and a decrease in critical load-bearing film strength. Water, in general, poses a serious threat to equipment and should be aggressively handled. The objective for this project is determine the moisture content of Yamalube four stroke motor oil 10W-40 in Yamaha 115hp four stroke outboard engine using oven dry method.

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