

UNIVERSITI TEKNOLOGI MARA

**EFFECT OF OXIDATION IN ENGINE
OIL LUBRICANT ON MERCURY
OUTBOARD ENGINE
PERFORMANCE**

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Abstract

A boat is a small vessel for traveling over water, propelled by oars, sails, or engines. It gives humans many benefits such as can go fishing, vacation, and can move from one place to another by waterway. However, the condition of the boat must always be in good condition to prevent accidents. An important part of a boat is the engine. There are many types of engines for the boat. The main types are outboard, inboard and jet drive. The crucial part of the boat is the engine. In this project, these issues are discussed and studied. Boats have served as transportation since long ago. Boats have been used from prehistoric times, as evidenced by the early settlement of Australia over 40,000 years ago, 130,000-year-old finds in Crete, and 900,000-year-old findings in Flores. Dugouts are supposed to have been the first boats, and the oldest boats discovered by archaeological investigation date from 7,000 to 10,000 years ago. There are 3 main types of boats namely human-powered boat, sailboats, and Motorboats. Human-powered boats are maritime vehicles that are propelled by human power and are commonly employed for leisure purposes. Row boats, paddle boats, pedal boats, canoes, kayaks, surf skis, and rowing shells are examples of humanpowered watercraft. [1] This project aims to measure the oxidation of Quicksilver engine oil in outboard engine. Several methods that can be used to detect the oxidation in engine oil. In this project, FTIR method was selected.

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