

## **ABSTRACT**

### **MIXED PERFORMANCE LATASTON (HRS-WC) ASBUTON WITH ADDITION USED OIL OF MARSHALL TEST**

**by**

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Along with the soaring price of petroleum asphalt and limited availability of the amount it needs to look for another alternative binder pavement. Alternatives that can be done is to use natural asphalt located in Buton island of Sulawesi in Indonesia known as Asbuton. Economically the use of used oil as a modifier in asphalt mix used oil because the flash point value equivalent asphalt so volatile and high viscosity grades to soften the minerals contained in Asbuton.

The research was carried in the Core Road Laboratory of the Faculty Engineering of Lampung University using the method of Marshall test for hot mix asphalt with specimen immersion for 30 minutes and 3x8 hours for the mix characteristic known as VMA, VIM, VFA, stability, flow and Marshall Quotient. Specimen using a mixture of 15% petroleum asphalt and 85% Asbuton were brooded with used oil content variation 0%, 10%, 20%, and 30%. Specimen made 3 pieces on each of the various levels of used oil.

The results showed that the mixture properties are eligible VMA and flow while VIM obtained a higher value than the provisions established, and VFA obtained a lower value of the provision. Levels addition used oil to Asbuton that produces stability and Marshall Quotient value of eligible used oil levels are 0% and 10%. Overall the addition of used oil levels to Asbuton not recommended for use in mixed Lataston (HRS-WC).

**Keywords:** HRS - WC, Asbuton, Used Oil, Parameter Marshall