Requirement of asphalt for conservancy and development of road which increase continually is not balanced with the production of oil asphalt in Indonesia. Whereas in Buton Island, South-East Sulawesi, there are asphalt rock named asbuton. Unfortunately, asbuton in Indonesia has not been exploited optimally. Nowadays, the technology that has been used for processing of asbuton became an asphalt mixture with high quality is not efficient and is difficult in its application. Because of that various researches was developed to separate asphalt bitumen from asbuton by extraction process.

Asbuton in the form of layer consist of the asphalt and mineral that has been integrated. To get the pure asphalt from asbuton, can be done by extraction. The principal of purification of asbuton is asbuton extraction by using specified solvent and then the mineral can be separated from asphalt. Furthermore solution that still contain the solvent was evaporated so that the liquid remained is just asphalt (bitumen).

Extraction of asbuton experiment used kerosene solvent in leaching tank. Periodically a sample was taken to analyze the bitumen content and to determine density and viscosity of liquid and density of particle. The mass transfer coefficient can be determined from this data. In this research extraction time was varied 10,20,30, 40, 50, 60 minutes, particle diameter was varied -8+16, -30+50, mixed(without...
screeing) mesh, and the speed of turbine was varied 250, 450, 600 and 700 rpm.

The results obtained showed that the more solvent kerosene mixed with rock asbuton the yield obtained higher bitumen. The longer time of extraction, the bitumen yield rises, and at a certain time will be approximately constant. Mass transfer coefficient \( (K_L) \) will increasingly rise and the greater size of the particles then the mass transfer coefficient \( (K_L) \) progressively increases. Mass transfer coefficient when the ratio of kerosene volume to asbuton mesh is 4lt/3kg, correlation of mass transfer coefficient is as follows \( k_L = 0,000003 \ D_p^{0,0921} \ N^{0,280807} \) while the ratio value is 3lt/3kg, correlation of mass transfer coefficient is as follows \( k_L = 0,000092 \ D_p^{0,14482} \ N^{0,239766} \).

**Keyword : asbuton, mass transfer coefficient, extraction**