

## ABSTRACT

Sedimentation is the process of deposition of rock material carried by sea water currents. Sedimentation can result in shallowing which disrupts the comfort and safety of the exit route for boats. To maintain sedimentation in waters (PPI), accurate sedimentation rate data is needed to determine shallowing. Therefore, it is important to carry out an analysis to determine the value of the sedimentation rate, including sediment characteristics and oceanographic factors for the sedimentation process. This research was conducted using a survey method by determining sampling points using purposive sampling. Sediment data collection was carried out using sediment traps. Sediment traps were placed at 4 stations. Current and tidal data are taken every day. Based on the research results, the sedimentation rate was between 3.21-9.21 gr/cm<sup>3</sup>/day with the dominant sediment characteristics at each station being different, stations 4 and 1 were dominated by very fine sand, station 2 was dominated by silt, station 3 was dominated by rather coarse sand. and station 4 is dominated by medium sand. The average current speed ranges from 0.13-0.19 m/s. The highest tide occurred on the fifth day at 08.00 WIB with a water height of 160 cm, while the lowest low tide occurred on the third day at 16.00 WIB with a water height of 40 cm.

**Keywords : PPI Krueng Mane, *Purposive Sampling*, Sedimen, Sedimentation Rate sediment characteristics, tides**