

DETERMINATION OF SOUND VELOCITY CHANGES IN RELATION WITH
SPRING TIDE AND NEAP TIDE IN LUMUT, PERAK

Dissertation/ Project

Delivered to meet the Award of Terms
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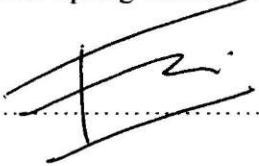
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ABSTRACT

Determination of actual water depth often having an error. Sound velocity is important in hydrography survey in order to determine the depth of water. This study is aimed to identify the changes of sound velocity between Spring Tide and Neap Tide on High Tide and Low Tide. The objectives of this research is to analyze the salinity, temperature and pressure during Spring Tide, during Neap Tide and between Spring Tide and Neap Tide on High Tide and Low Tide. In this study, the sound velocity are collected on High Tide and Low Tide during Spring Tide and Neap Tide on October 2017 in Lumut, Perak. The range of the average for sound velocity observed between Spring Tide and Neap Tide on High Tide are from 1542.377 meter per second (m/s) to 1543.139 meter per second (m/s). The changes between them is at the range from 0.008 meter per second (m/s) to 0.779 meter per second (m/s). Next is on Low Tide, the range of sound velocity are from 1543.423 meter per second (m/s) to 1545.332 meter per second (m/s). The difference between them is from 0.765 meter per second (m/s) to 3.406 meter per second (m/s). By doing this comparison, it can be conclude that the changes of the sound velocity are affected by the changes of the salinity, temperature and pressure during Spring and Neap Tide in Lumut, Perak on High Tide and Low Tide.

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