

ABSTRACT

ANALYSIS OF CHEMICAL OXYGEN DEMAND (COD), BIOCHEMICAL OXYGEN DEMAND (BOD), AND TOTAL DISSOLVE SOLID (TDS) LEVEL OF SALINE IN THE LAMPUNG BAY

By

Kristi Arina

This research aimed to analyze the level of COD, BOD, and TDS in Lampung Bay. This analysis was conducted by using titrimetri method for COD, winkler method for BOD, and DHL meter to TDS. The result of the research showed COD concentration ranged from 1323.2 mg/L to 4631.2 mg/L. The result of COD testing showed that there was influence of water depth so the water in the surface has different COD concentration with the water in the depth. And the result of BOD testing showed the concentration was about 36 mg/L to 340 mg/L. All samples had BOD concentration above the threshold of sea water quality standard. BOD value based on State Environment Minister's decision No. 51 of 2004 about marine water quality standards for marine biota was 20 mg/L. Meanwhile the result of TDS testing showed the concentration was about mg/L to 9200 mg/L. The high of TDS did not always show the high of muddiness. This matter was appropriate with the experiment that was conducted by comparing TDS concentration through the color of samples. The color of water at Way Kuripan/ Pulau Pasaran (F) was green sludge, whereas the color of water at Pulau Pasaran was limpid but TDS concentration level at Pulau Pahawang was higher than concentration of Way Kuripan/ Pulau Pasaran.

Keywords: *COD, BOD, TDS*, Lampung Bay