

## **ABSTRAK**

### **PENENTUAN KUALITAS MUTU AIR MUARA SUNGAI WAY KURIPAN MENGGUNAKAN INDEKS PENCEMARAN**

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Telah dilakukan penentuan kualitas mutu air muara sungai way kuripan menggunakan indeks pencemaran dengan parameter fisika yaitu DO (*Dissolved Oxygen*), TDS (*Total Dissolved Solid*), Temperatur dan parameter kimia yaitu pH, BOD (*Biological Oxygen Demand*), COD (*Chemical Oxygen Demand*), fosfat, nitrat. Pengukuran parameter fisika dilakukan secara insitu. Hasil penelitian menunjukkan kualitas air di muara sungai way kuripan dalam kondisi baik, sesuai dengan baku mutu yang ditetapkan. Berdasarkan pengujian dengan parameter fisika temperatur tertinggi yaitu 28,6 °C pada sampel T6, *Dissolved Oxygen* (DO) tertinggi yaitu 3,79 pada sampel T8, *Total Dissolve Solid* (TDS) tertinggi yaitu 1022 mg/L pada sampel T8, pH tertinggi yaitu 7,57 pada sampel T8. parameter kimia konsentrasi *Biological Oxygen Demand* (BOD) tertinggi yaitu 1,35 pada sampel T7, Konsentrasi *Chemical Oxygen Demand* (COD) tertinggi yaitu 24,25 pada sampel T6, Konsentrasi fosfat tertinggi yaitu 0,515 mg/L pada sampel T4, Konsentrasi nitrat tertinggi yaitu 1 pada sampel T7, Berdasarkan penelitian yang telah dilakukan hasil indeks pencemaran di Muara Sungai Way Kuripan berada pada rentang 0-1 dengan kondisi baik. Hasil yang didapatkan pada penelitian ini digambarkan menggunakan sebaran peta kontur yaitu Surfer .

Kata Kunci : penentuan kualitas mutu air muara sungai way kuripan, indeks pencemaran

## **ABSTRACT**

### **DETERMINATION OF THE WATER QUALITY OF THE WAY KURIPAN RIVER Estuary USING POLLUTION INDEX**

By

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The quality of the water quality of the Way Kuripan estuary has been determined using a pollution index with physical parameters, namely DO (Dissolved Oxygen), TDS (Total Dissolved Solid), Temperature and chemical parameters, namely pH, BOD (Biological Oxygen Demand), COD (Chemical Oxygen Demand). , phosphate, nitrate. Measurement of physical parameters is carried out in situ. The results showed that the water quality at the Way Kuripan estuary was in good condition, in accordance with the established quality standards. Based on tests with physical parameters, the highest temperature was 28.6 0C in sample T6, and the highest Dissolved Oxygen (DO) was 3.79 in sample T8. , The highest Total Dissolve Solid (TDS) was 1022 mg/L in sample T8, the highest pH was 7.57 in sample T8. chemical parameters the highest concentration of Biological Oxygen Demand (BOD) is 1.35 in sample T7, the highest concentration of Chemical Oxygen Demand (COD) is 24.25 in sample T6, the highest phosphate concentration is 0.515 mg/L in sample T4, the highest concentration of nitrate is 1 on sample T7, Based on research that has been done the results of the pollution index in the Way Kuripan River Estuary are in the range 0-1 with good conditions. The results obtained in this study are described using a contour map distribution, namely Surfer 8.

**Keywords:** Determination of water quality in the Way Kuripan estuary, pollution index