ABSTRAK

Yuyan Maksud. 2015. *Analisis Parameter Fisik Air Kanal Di Lingkungan Universitas Negeri Gorontalo.* Skripsi, Program Studi S1 Pendidikan Fisika, Jurusan Fisika, Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Negeri Gorontalo. Pembimbing I Drs. Asri Arbie, M.Si dan Pembimbing II Abd. Wahidin Nuayi, S.Pd, M.Si.

Tujuan penelitian ini adalah untuk menganalisis parameter fisik air kanal di lingkungan Universitas Negeri Gorontalo. Sampel air diambil pada 5 titik lokasi yang masing-masing titik diambil 3 sampel, yaitu 1 titik sebelum kampus, 3 titik di dalam kampus, dan 1 titik setelah kampus, mengikuti arah aliran air dengan panjang ± 600 M. Sampel air itu sendiri diambil pada tanggal 5 April dan 8 Mei 2015. Penentuan lokasi sampel berdasarkan situasi dan kondisi pembuangan pada aliran air. Analisis parameter fisik air kanal dilakukan di Laboratorium Fisika FMIPA Universitas Negeri Gorontalo. Kisaran nilai masing-masing parameter yaitu suhu 29,23±0,057-30,8±0,099^{o}C, TDS 138,43 - 271,3 Mg/L, konduktivitas yaitu 276,67 – 525,67 µS/cm, salinitas yaitu 0,13 - 0,26 $^{0}/_{00}$, resistivitas yaitu 1,84 – 3,59 KΩ. Hasil menunjukan bahwa Kisaran nilai–nilai parameter ini masih sesuai dengan Peraturan Pemerintah Nomor 82 tahun 2001, meskipun terdapat peningkatan kisaran nilai-nilai parameter yang ada di dalam dan setelah lingkungan kampus..

Kata kunci : Parameter fisik, resistivitas, TDS, salinitas, konduktivitas, suhu

ABSTRACT

Yuyan Maksud. 2015. *An Analysis Physics Parameter of Canal Water in environment of State University of Gorontalo.* Skripsi, Study Program of S1 Physics Education, Departement of Physics, Faculty of Mathematics And Natural Sciences, State University of Gorontalo. The principal supervisor was Drs. Asri Arbie, M.Si and Co-supervisor was Abd. Wahidin Nuayi, S.Pd, M.Si.

The aim of this research is to analize Physics parameter of canal water in environment of State University of Gorontalo. The sampel of water were gained from 5 areas in which it was taken 3 samples in each area; 1 area was located before campus, 3 areas were located in the campus, and 1 area was located in the area after campus, following the water current with length ± 600 M. The water samples were gained in 5th April and 8th May 2015. The determination of location of sample was based on the situation and condition of the outlet of water current. The analysis of physics parametric of canal water was conducted at laboratory of physics of Faculty of Mathematics And Natural Siences, State University of Gorontalo. The value of each parameter can be observed as follows: temperatur 29,23±0,057-30,8±0,099^{o}C, TDS: 138,43 - 271,3 Mg/L, conductivity: 276,67 – 525,67 µS/cm, salinity: 0,13 - 0,26 $^{0}/_{00,}$ resistivity: 1,84 – 3,59 KΩ. The research result showed that the values of each parameter is still appropriate to the government regulation number 82 of 2001, even though there is an increase of the values of parameter in the area of campus.

Keywords: Physics Parameter, resistivity, TDS, salinity, conductivity, temperature