

IDENTIFIKASI SEBARAN INTRUSI AIR LAUT MELALUI PROFIL KUALITAS AIR SUMUR DI PANTAI BAROMBONG

IDENTIFICATION OF SEA WATER INTRUSION DISTRIBUTION THROUGH WELL WATER QUALITY PROFILE ON BAROMBONG BEACH

Nurnawaty¹, M.Agusalim², Muh.Nurul Fitrah S³, Ranum Indah Putri⁴

(^{1,2,3}) Universitas Muhammadiyah Makassar

Abstrak

Pantai Barombong berada di Kecamatan Tamalate, Kota Makassar. Secara astronomis, kecamatan ini berada pada koordinat 5°12'33.90" Lintang Selatan dan 119°23'15.10" Bujur Timur. Di kecamatan ini terdapat 5.010 rumah dan 247 rumah toko. Wilayah Kecamatan Barombong memiliki luas sekitar 1,54 km² dan dihuni oleh 5.500 kepala keluarga. Jumlah penduduknya mencapai 13.370 jiwa, yang terdiri dari 7.491 laki-laki dan 5.879 perempuan. Tujuan dari penelitian ini adalah untuk menganalisis dan mengidentifikasi pengukuran dan nilai salinitas akibat air laut terhadap kualitas air tanah di Pantai Barombong. Dalam penelitian ini dilakukan survei lokasi penelitian, tahap pengambilan sampel, tahap pengujian sampel, tahap pengolahan data, tahap wawancara masyarakat. Air sumur di Pantai Barombong memiliki salinitas yang masih tergolong tawar hingga payau. Air sumur yang memiliki kadar salinitas < 0,5% maka air tersebut dikategorikan air tawar, > 0,5-30% maka air tersebut dikategorikan air payau dan apabila kadar salinitas air > 40% maka air tersebut terdeteksi air asin. Dari hasil perhitungan penelitian ini, kadar salinitas tertinggi terdapat pada sumur 15 yaitu 5% pada jarak 858,76 dari bibir pantai dan terendah terletak pada sumur 1 dan 2 yaitu 0,2% yang terletak pada jarak 165,98 m dan 201,06 m dari bibir pantai.

Kata Kunci: Intrusi Air Laut, Kualitas Air Sumur, Salinitas

Abstract

Barombong Beach is in Tamalate subdistrict, Makassar City. Astronomically, this sub-district is at coordinates 5°12'33.90" South Latitude and 119°23'15.10" East Longitude. In this sub-district there are 5,010 houses and 247 shophouses. The Barombong sub-district area has an area of around 1.54 km² and is inhabited by 5,500 families. The population reaches 13,370 people, consisting of 7,491 men and 5,879 women. The aim of this research is to analyze and identify measurements and values of salinity due to sea water on ground water quality at Barombong Beach. In this research, a research location survey was carried out, sampling stage, sample testing stage, data processing stage, community interview stage. The well water at Barombong Beach has a salinity that is still categorized as fresh to brackish. Well water that has a salinity of <0.5% then the water is categorized as fresh, >0.5-30%, then the water is categorized as brackish and if the water salinity is >40% then the water is detected as salty. From the results of this research calculation, the highest salinity is found in well 15, namely 5% at a distance of 858.76 from the shoreline and the lowest is located at wells 1 and 2, namely 0.2% which is located at a distance of 165.98 m and 201.06 m from the shoreline.

Keywords: Sea Water Intrusion, Well water quality, Salinity