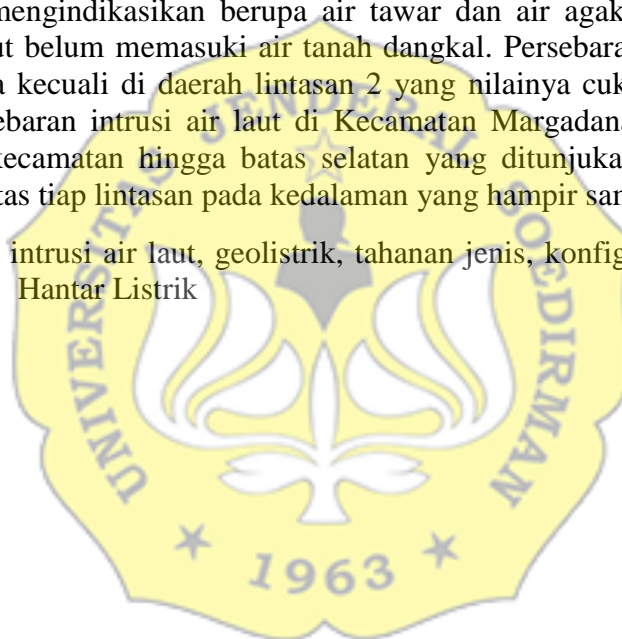


## ABSTRAK

Kecamatan Margadana adalah salah satu daerah yang terkena dampak intrusi air laut, peristiwa menyusupnya air laut ke dalam air tanah. Penelitian ini bertujuan untuk menganalisis sebaran intrusi air laut berdasarkan nilai resistivitas, nilai Daya Hantar Listrik (DHL) air tanah dan korelasi antarlintasan. Akuisisi data geolistrik tahanan jenis menggunakan konfigurasi *Wenner*. Intrusi air laut sudah terjadi di semua lokasi penelitian dengan nilai resistivitas lapisan lempung yang terkandung air sangat asin  $<2,0 \Omega\text{m}$  dan air asin  $2,0-4,5 \Omega\text{m}$  pada kedalaman  $1,25-28,00$  pada lintasan 1, lintasan 2, dan lintasan 3, serta kedalaman  $4,00-28,00$  meter pada lintasan 4. Nilai DHL beberapa sampel air sumur di Kecamatan Margadana mengindikasikan berupa air tawar dan air agak payau dikarenakan intrusi air laut belum memasuki air tanah dangkal. Persebaran nilai DHL sendiri cukup merata kecuali di daerah lintasan 2 yang nilainya cukup tinggi dibanding yang lain. Sebaran intrusi air laut di Kecamatan Margadana sudah merata dari batas utara kecamatan hingga batas selatan yang ditunjukkan dengan kesamaan nilai resistivitas tiap lintasan pada kedalaman yang hampir sama.

**Kata Kunci:** intrusi air laut, geolistrik, tahanan jenis, konfigurasi *Wenner*, Daya Hantar Listrik



## ABSTRACT

*Margadana district is one of the areas affected by seawater intrusion, the event of sea water seeping into groundwater. This study aims to analyze the distribution of seawater intrusion based on resistivity values, electrical conductivity value (DHL) of groundwater and correlation of each line. Geoelectrical resistivity data acquisition using Wenner configuration. Seawater intrusion has occurred in all research locations with the resistivity value of clay layers containing very saline water is  $<2 \Omega m$  and saline water is  $2-6 \Omega m$  with depths  $1,25-28,00$  meters on line 1, line 2, and line 3 and depths  $4,00-28,00$  meters on line 4. The electrical conductivity value of some well waters samples in Margadana district indicates fresh water and slightly brackish water due seawater intrusion not yet entering shallow groundwater. The distribution of the electrical conductivity value itself is quite even except in line 2 which is quite high compared to the others. The spread of sea water intrusion in Margadana district is evenly from the northern boundary of the district to the southern boundary, which is indicated by the similarity of the resistivity value of each line at a slightly equal depth.*

**Keywords:** *seawater intrusion, geoelectrical, resistivity, Wenner configuration, electrical conductivity.*

