Level of Correlation in the Depth of Groundwater Wells: Iron and Chloride

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Abstract:

Groundwater quality in each region is not always the same, this influenced by climate factors, lithology, time, human activities. The purpose of the research that conducted was to see the relationship among the depth of groundwater wells in two different study locations on the concentration of iron (Fe) and Chloride (Cl) levels in each sample. This research located in Mattiro Baji Village, Pangkep Regency, South Sulawesi and Sindulang Satu Urban Village, Manado City, North Sulawesi. The research sample amounted to 18 in the form of bottles of groundwater well samples which evenly taken at the study site. TDS Meter is used to quantity iron (Fe) concentration, and Chlorine Meter is chloride (Cl) levels in samples with mg/L. The outcomes of the study showed that there was no noteworthy relationship between the depth of groundwater wells and the levels of concentration of iron (Fe) and Chloride (Cl). Conditions that are still not contaminated by changes caused by the environment, industrial waste and seawater intrusion.

Keywords: Dug Well, Contamination, Groundwater, Water Quality.

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