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Hydrogeologic behavior of Groundwater Chemistry

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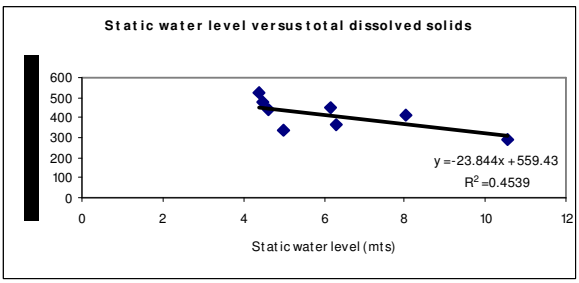
Static water level data of ten open wells were compared with the chemical analysis data of ground water samples collected from the same wells. Appreciable quantitative relation existing between the static water level and chemical parameters such as total hardness(TH), total dissolved solids(TDS), carbonate(CO3), Calcium carbonate(CaCo3), Sodium(Na), Calcium(Ca), and Magnesium(Mg) is demonstrated. Concept for the relation between the hydrogeologic and chemical parameter is explained. Significance of such relation in the exploration and management of ground water is illustrated. Total dissolved solids(TDS) and Total hardness(TH) are the important chemical parameters, that decide the potability of ground water. Hence, correlation figures between water level and these two parameters, (TH) and TDS) are shown. Illustrations and discussions are dealt in detail.

Key words: static water level, Groundwater quality



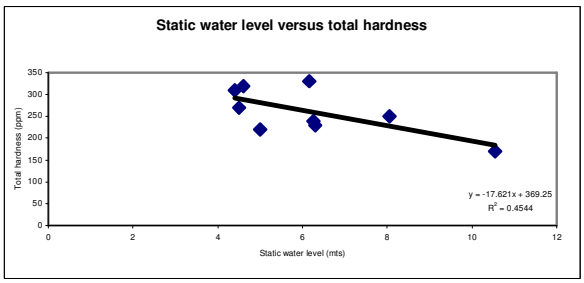


Figure 1 & 2: Correlation of static water level with total dissolved solids and total hardness