

## **GEOCHEMICAL STUDIES OF GROUNDWATER IN AND AROUND MIRYALAGUDA AREA, NALGONDA DISTRICT, A.P.**

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### **Abstract**

Geochemical studies were conducted on 58 representative ground water samples which were collected and analyzed for various parameters like pH, EC and TH. Estimation of various cations & anions like  $\text{SO}_4^{2-}$ ,  $\text{Ca}^{+2}$ ,  $\text{Mg}^{+2}$ ,  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Cl}^-$ ,  $\text{HCO}_3^-$ ,  $\text{CO}_3^{2-}$  and  $\text{F}^-$  were also estimated. The result shows that the concentration of these ions are more than the permissible limit for drinking purpose. The hydro geochemistry of the area investigated is dominated by alkaline and weak acids, which indicate that the ground water in this area is partially suitable for drinking and can be made healthy after remedial measures.

*Keywords:* Groundwater, geochemistry, major ions and quality studies.