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Evaluation of Groundwater Quality by Using Water Quality Index Near Magnesite Mines, Salem District, Tamilnadu, India

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***Abstract*:** The present investigation meant to assess the water quality for the groundwater of around Magnesite Mines in Salem District. For ascertaining the WQI, the parameter considered were pH, total hardness, calcium, magnesium, chloride, sulfate, total dissolved solids, sodium, total alkalinity. All the physic-chemical parameters of groundwater samples were within the highest desirable limit as per WHO. The WQI varied from 55.45 to 81.29.In Sengaradu, Gollapatti, Vinayakampatti the WQI was higher due to convergence of magnesium, sulphate and chloride in the groundwater. A significant negative correlation was observed between calcium and sulphate, sodium and total alkalinity.

***Keywords*:** Groundwater, Magnesite mines, Chemical characteristics, Water quality index, Correlation