

HYDROGEOCHEMICAL APPROACH ON HIGHLY MINERALIZED GROUNDWATERS IN CENTRAL CUBA

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In order to ensure a better knowledge of Cuba's mineral and thermal water resources, i.e. highly mineralized groundwaters, a bilateral Cuban-Brazilian Project (FAPESP No 94/3224-4) is being carried out since 1996. The research area is located in the central part of the largest Caribbean island, Cuba, namely in the Provinces of Ciego de Avila, Camaguey and Las Tunas. Based on the results of hydrogeochemical analyses and data interpretation, the relatively high content of total dissolved solids, over 1000 mg/L, correlates significantly only with the chlorine content, independently of its origin, either being associated with oil deposits, sea water intrusion or deep circulation. Comparing the results with those from literature, a tendency is observed, that correlates higher amounts of total dissolved solids to higher chlorine contents. The reaching of sea water composition represents only an intermediary stages. Furthermore it is shown how hydrogeochemistry is a useful tool for the economical survey of mineral and thermal waters.