



Water chemistry of hot waters of Umut geothermal field (SW Turkey)

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Umut geothermal field is located on Menderes graben which is one of the most active geothermal regions of Turkey. In order to delineate the chemistry of the waters of Umut geothermal field, fourteen samples were taken from four wells and ten from hot springs. Discharge temperatures of the waters range from 20 to 120 °C. According to the results of chemical analyses, the waters are Na+K - HCO₃ type. Cation geothermometer calculations revealed a reservoir temperature greater than 200 °C for Umut geothermal field waters. Stable isotope analyses results indicates that the waters are meteoric in origin.