

Genesis of hot springs in the central Kanto Plain

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Major and minor chemical constituents in twelve hot spring waters from the deep wells (depths between 1000 and 1500m) of the central Kanto Plain were analyzed. Based on the analytical data, we discuss genesis of the waters and water-rock interactions to make chemical properties of the waters. The hot spring waters are divided into Na-Cl and Na-Cl,HCO₃ types, suggesting that the waters were formed by mixing of fossil brine with meteoric water. It is inclined that brine fraction in the water and reservoir fluid temperature estimated by quartz geothermometer decrease from the east to the west. The hot spring waters seem to be formed by mixing of the deep seated fossil brine with the meteoric water flowing from the west Kanto mountainland to the east.