

Geochemical characteristics of hot spring water in Mt. Gassan area, Yamagata Prefecture

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Analyses of chemical and hydrogen and oxygen isotopic compositions were carried out for hot spring water in Mt. Gassan area, Yamagata Prefecture.

Chemical characteristics of the most hot spring water is neutral NaCl type. Hydrogen and oxygen isotopic compositions of hot spring water may be classified in two categories.

(1) hot springs whose hydrogen and oxygen isotopic compositions were distributed along the mixing line between local meteoric water and brine A whose hydrogen isotopic composition is -10 to -20permil, when oxygen isotopic composition is -3permil.

(2) hot springs whose isotopic compositions were distributed along the mixing line between local meteoric water and brine B whose hydrogen isotopic composition is -10 to -20permil, when oxygen isotopic composition is +3 to +4permil.