

Estimation of hydrochemical changes during the construction of Mizunami Underground laboratory

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The hydrochemical changes during the construction of Mizunami Underground research laboratory (URL) were analyzed based on the previous chemical data of groundwaters. Thermodynamic calculation and borehole observation suggest that the degas of dissolved gases such as carbon dioxide and hydrogen sulphide, and the precipitation of iron hydroxides may be important reactions to change initial chemical conditions during URL construction.