

# The Horonobe Underground Research Laboratory project - Geological characteristic of fracture in the Neogene sedimentary rocks -

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Japan Nuclear Cycle Development Institute is advancing research of the technique of investigating and modeling systematically geological environment from surface of the earth to the underground depths for a sedimentary rock in Hokkaido Horonobe-cho. Among these, since a fracture may serve as a groundwater flow channel even if it is a sedimentary rock, construction of a hydrogeological structure model needs to estimate the relation between the distribution of a fracture, and the hydraulic permeability of a rock mass. In this study, a geological characteristic about the fracture in a sedimentary rock was considered from the result of borehole observation or core description.

Consequently, it is suggested that minor fault in this rock mass is classified into two types. One is a bedding fault which is incident to fold structure formed by strike-slip of the Omagari fault. Another is a Riedel shear formed by strike-slip of the Omagari fault, whose strike is changed by shear modification (level rotation).