Conducting hydro-geological surveys from the viewpoint of regulation: an example of Kanamaru research site

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Establishing the comprehensive knowledge of applicability of the methods for investigating hydraulic properties of low-permeability geologic strata is an urgent issue for supporting regulation of geological disposal of nuclear waste in the near future. As a beginning of this work, a systematic examination of various kinds of techniques for hydro-geological surveys has been started in Kanamaru Research Site. The survey techniques include borehole excavation, borehole imaging, gamma-ray, caliper, acoustic, electrical resistivity and density loggings, permeability tests and flow direction measurement using a single borehole, permeability tests and flow direction measurement using multi boreholes, etc. This paper briefly introduces the research plan and preliminary results obtained from the first year of investigation.