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DeepStor-1 exploration well at KIT Campus North (Upper Rhine Graben, Germany)

Schill Eva¹, Florian Bauer¹, Ulrich Steiner¹, Bernd Frieg², and Thomas Kohl¹

¹Karlsruhe Institute of Technology, Karlsruhe, Germany (eva.schill@kit.edu)

²Nagra - National Cooperative for the Disposal of Radioactive Waste, Wettingen, Switzerland

DeepStor-1 is the exploration well to the Helmholtz research infrastructure "DeepStor". DeepStor focuses on the investigation of high-temperature heat storage at the rim of the former oil-field „Leopoldshafen“. It is located about 10 km north of the city of Karlsruhe (Germany). The DeepStor-1 well is planned to reach the Pechelbronn group at 1460 m, i.e. it includes nearly the entire Oligocene sediments at the site. Seismic investigation reveals a structurally undisturbed section that below 200 m depth covers the Landau, Bruchsal, Niederrödern and Froidefontaine Formations. Cores will be taken from the entire section below 820 m. In addition to coring, the logging program is planned to include besides technical logging, a caliper-, self-potential-, temperature-, dual latero-, natural gamma spectrometry-, neutron-gamma porosity-, sonic-, elemental capture spectroscopy-, as well as image-logs in the sections 215-820 m as well as 820-1460 m. Drilling of DeepStor-1 is planned between 2022 and 2023.