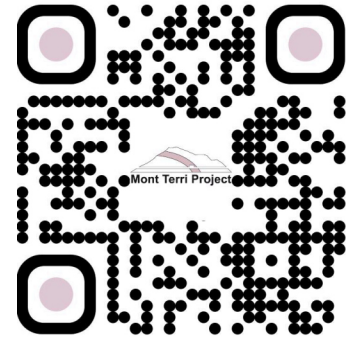


Mont Terri Project Underground Rock Laboratory

Report period: January 27, 2025 – February 2, 2025

Assembled and edited by swisstopo, St-Ursanne



Spotlight of the week: After 10 years of continuous heating at the FE (Full-scale emplacement experiment) the former PI Herwig Müller invited the core team to celebrate. The FE experiment is a landmark experiment at Mont Terri and for the Swiss and international nuclear waste programs. The effort to finally install the three heaters was huge but the scientific output, the experience gained with the installation and backfilling are indispensable. Some of the the greatest project results were presented by the actual PI Raphael Schneeberger (nagra). The celebration ended in the FE-A niche, where everything has started 15 years ago with the excavation of this pre-niche.

CL (CO2LPIE-CO2 Long-Term Periodic Injection) experiment

- From Monday to Wednesday, January 27–29, M. Abdelouhabi, S. Schefer and M. Ziegler (swisstopo) conducted XRF, natural gamma and gamma density measurements with the MSCL on 10 m of BCL-10 core material.
- On Tuesday, January 28, J. Gisiger (Solexperts) filled all intervals of the hydraulic multi-packer systems in BCL-09 and BCL-10 with artificial pore water.
- On Wednesday, January 29, D. Jaeggi (swisstopo) reconnected the pressure distributor for constant hydraulic head injection on the intervals of boreholes BCL-5 to BCL-8. The pressure was set to 10 bar and the flowrate is monitored over an APW tank on a balance. This setup will be kept for the four MMMS boreholes until the final installation of the surface equipment at BCL-9 and BCL-10 end of February.
- From Thursday to Friday, January 30–31, M. Abdelouhabi and M. Ziegler sampled 20 pieces of rock materials from BCL-10 for organic matter analyses.
- On Friday, January 31, M. Abdelouhabi measured the mass of 14 samples from BCL-09 and BCL-10 drying in the oven.

CS-E (Mini-Fracturing and Sealing) experiment

- On Monday, January 27, S. Schefer (swisstopo) exchanged the empty bottle of CO₂ and Krypton with a pure CO₂ bottle and continued the injection at 10 bar.

DR-E (Long-Term Diffusion Experiment in the Main Fault-Zone) experiment

- On Thursday, January 30, S. Schefer (swisstopo) took samples #11 from the injection fluid on both boreholes BDR-E1 and BDR-E2.

GT (Gas Transport Models and the Behavior of OPA to Gas Pressure) experiment

- On Tuesday, January 28, J. Gisiger (Solexperts) performed maintenance on the injection pump.

SW-A (Large-Scale Sandwich Seal in Opalinus Clay) experiment

- On Tuesday, January 28, S. Schefer (swisstopo) refilled the HPT of shaft 2.
- On Thursday, January 30, S. Schefer (swisstopo) prepared the shipment of 4 boxes of calcigel for transport to KIT.

Visits

Day	Date	Group Name	Group Size	Visitors Guide
Tue	28.1.2025	Ecole De Culture Générale, Fribourg	22	R. Nicol (swisstopo)
Thu	30.1.2025	Amberg Engineering	12	R. Nicol (swisstopo) S. Schefer (swisstopo)
Fri	31.1.2025	10 Years FE Heating Meeting	15	C. Nussbaum (swisstopo) H. Müller (swisstopo)

Figures